Ruby master - Bug #5147

mkmf should not require static library when ruby is built with --enable-shared

08/02/2011 08:47 PM - vo.x (Vit Ondruch)

| Status: | Closed |
| Priority: | Normal |
| Assignee: | nobu (Nobuyoshi Nakada) |
| Target version: | 1.9.3 |
| Backport: | |

Ruby master - Bug #5147

mkmf should not require static library when ruby is built with --enable-shared

08/02/2011 08:47 PM - vo.x (Vit Ondruch)

If libruby-static.a library is not present on the system, the following simple mkmf example fails:

```
$ ruby -r mkmf -e 'exit(have_func("rb_hash_foreach") ? 0 : 1)'
```

```
checking for rb_hash_foreach()... /usr/lib64/ruby/1.9.1/mkmf.rb:381:in try_do': The compiler failed to generate an executable file. (RuntimeError)
You have to install development tools first.
```

I omitted the static library since it was never needed on Fedora for Ruby 1.8 and never included in default installation. Inclusion of static library is against Fedora guidelines [1]. I would be very happy if this could be fixed prior Ruby 1.9.3 release.


Associated revisions

Revision 32f8e989 - 08/03/2011 05:21 PM - nobu (Nobuyoshi Nakada)

- lib/mkmf.rb (link_command): use static library only for bundled extensions. [Bug #5147]

```
git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_1_9_3@32833 b2dd03c8-39d4-4d8f-98f8-823fe69b080e
```

Revision ae513241 - 08/03/2011 05:21 PM - nobu (Nobuyoshi Nakada)

- lib/mkmf.rb (link_command): use static library only for bundled extensions. [Bug #5147]

```
git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@32833 b2dd03c8-39d4-4d8f-98f8-823fe69b080e
```

Revision 32833 - 08/03/2011 05:21 PM - nobu (Nobuyoshi Nakada)

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Revision 32833 - 08/03/2011 05:21 PM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (link_command): use static library only for bundled extensions. [Bug #5147]

Revision 6bf7dd72 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@32902 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 6a1bb351 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_1_9_3@32902 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 32902 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

Revision 32902 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

Revision 32902 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

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Revision 32902 - 08/10/2011 05:11 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

Revision efb32375 - 08/11/2011 06:07 AM - nobu (Nobuyoshi Nakada)
- lib/mkmf.rb (link_command): use LIBRUBYARG in rbconfig for unbundled extensions. [ruby-core:38802] [Bug #5147]
- lib/mkmf.rb (init_mkmf): revert r32902. [ruby-core:38903]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_1_9_3@32927 b2dd03c8-39d4-4d8f-98ff-823fe69b080e
Revision 0eb903aa - 08/11/2011 06:07 AM - nobu (Nobuyoshi Nakada)

- lib/mkmf.rb (link_command): use LIBRUBYARG in rbconfig for unbundled extensions. [ruby-core:38802] [Bug #5147] [ruby-core:38903]
- lib/mkmf.rb (init_mkmf): revert r32902. [ruby-core:38903]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@32927 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 32927 - 08/11/2011 06:07 AM - nobu (Nobuyoshi Nakada)

- lib/mkmf.rb (link_command): use LIBRUBYARG in rbconfig for unbundled extensions. [ruby-core:38802] [Bug #5147] [ruby-core:38903]
- lib/mkmf.rb (init_mkmf): revert r32902. [ruby-core:38903]

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Revision 32927 - 08/11/2011 06:07 AM - nobu (Nobuyoshi Nakada)

- lib/mkmf.rb (link_command): use static library only for bundled extensions. [Bug #5147]

History

#1 - 08/04/2011 02:21 AM - nobu (Nobuyoshi Nakada)
- Status changed from Open to Closed
- % Done changed from 0 to 100

This issue was solved with changeset r32833.
Vit, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

- lib/mkmf.rb (link_command): use static library only for bundled extensions. [Bug #5147]

#2 - 08/05/2011 08:26 AM - normalperson (Eric Wong)
I've bisected r32833 to breaking many of my external C extension builds:

$ ruby -rmkmf -e 'p have_func("rb_str_set_len")'
checking for rb_str_set_len()... no
false

#3 - 08/05/2011 08:33 AM - kosaki (Motohiro KOSAKI)
- Status changed from Closed to Assigned
- Assignee set to nobu (Nobuyoshi Nakada)
- Target version set to 1.9.3
I've bisected r32833 to breaking many of my external C extension builds:

```
$ ruby -rmkmf -e 'p have_func("rb_str_set_len")'
checking for rb_str_set_len()... no
false
```

Nobu? please answer this.

---

**#4 - 08/05/2011 12:23 PM - nobu (Nobuyoshi Nakada)**

- ruby -v changed from ruby 1.9.3dev (2011-07-31 revision 32789) [x86_64-linux] to -

Hi,

At Fri, 5 Aug 2011 08:26:59 +0900,
Eric Wong wrote in [ruby-core:38802]:

```
I've bisected r32833 to breaking many of my external C extension builds:

$ ruby -rmkmf -e 'p have_func("rb_str_set_len")'
checking for rb_str_set_len()... no
false
```

$ ruby -v -rmkmf -e 'p have_func("rb_str_set_len")'
ruby 1.9.4dev (2011-08-05 trunk 32854) [x86_64-linux]
checking for rb_str_set_len()... yes
true

Can't you show mkmf.log file?

---

Nobu Nakada

**#5 - 08/05/2011 04:23 PM - normalperson (Eric Wong)**

Nobuyoshi Nakada nobu@ruby-lang.org wrote:

```
Eric Wong wrote in [ruby-core:38802]:

I've bisected r32833 to breaking many of my external C extension builds:

$ ruby -rmkmf -e 'p have_func("rb_str_set_len")'
checking for rb_str_set_len()... no
false
```

$ ruby -v -rmkmf -e 'p have_func("rb_str_set_len")'
ruby 1.9.4dev (2011-08-05 trunk 32854) [x86_64-linux]
checking for rb_str_set_len()... yes
true

Hi, I've noticed passing --enable-shared to ./configure works around this issue. Only the default static libruby fails.

Can't you show mkmf.log file?

This is my mkmf.log with only --prefix=$HOME/r/trunk passed to ./configure, I see no attempts to link libruby-static at all:

```
have_func: checking for rb_str_set_len()... ........................ no
```

"gcc -o conftest /home/ew/r/trunk/include/ruby-1.9.1/x86_64-linux -/home/ew/r/trunk/include/ruby-1.9.1/ruby/backward
-i/./home/ew/r/trunk/include/ruby-1.9.1 -l. -O3 -g -gdb -Wextra -Wno-unused-parameter -Wno-parentheses -Wno-long-long
-Wno-missing-field-initializers -Wpointer-arithmetic -Wwrite-strings -Wdeclaration-after-statement -Wimplicit-function-declaration conftest.c -L.
"/
```
1: #include "ruby.h"
2:

```
03/29/2020
3: int main() {return 0;}
/* end */

"gcc -o conftest -I/home/ew/r/trunk/include/ruby-1.9.1/x86_64-linux -l/home/ew/r/trunk/include/ruby-1.9.1/ruby/backward
-1/home/ew/r/trunk/include/ruby-1.9.1-1. -O3 -ggdb -Wextra -Wno-unused-parameter -Wno-parentheses -Wno-long-long
-Wno-missing-field-initializers -Wpointer-arith -Wwrite-strings -Wdeclaration-after-statement -Wimplicit-function-declaration conftest.c -L
/tmp/cc0KSG3Y.o: In function 't':
/home/ew/ruby/conftest.c:5: undefined reference to 'rb_str_set_len'
collect2: ld returned 1 exit status

checked program was:
"*/ begin /
1: #include "ruby.h"
2: 
3: /*top*/
4: int main() {return 0;}
5: int t() { void ((volatile p)()); p = (void (((((void))))))rb_str_set_len; return 0; }
/* end */

"gcc -o conftest -I/home/ew/r/trunk/include/ruby-1.9.1/x86_64-linux -l/home/ew/r/trunk/include/ruby-1.9.1/ruby/backward
-1/home/ew/r/trunk/include/ruby-1.9.1-1. -O3 -ggdb -Wextra -Wno-unused-parameter -Wno-parentheses -Wno-long-long
-Wno-missing-field-initializers -Wpointer-arith -Wwrite-strings -Wdeclaration-after-statement -Wimplicit-function-declaration conftest.c -L
conftest.c: In function 't':
conftest.c:5: error: too few arguments to function ‘rb_str_set_len’
cHECKED program was:
"*/ begin /
1: #include "ruby.h"
2: 
3: /*top*/
4: int main() {return 0;}
5: int t() { rb_str_set_len(); return 0; }
/* end */

--
Eric Wong

#6 - 08/10/2011 02:11 PM - nobu (Nobuyoshi Nakada)
  - Status changed from Assigned to Closed

This issue was solved with changeset r32902.
Vit, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

• lib/mkmf.rb (init_mkmf): set $LIBRUBYARG regardless of shared option. [ruby-core:38802] [Bug #5147]

#7 - 08/11/2011 12:44 AM - ngoto (Naohisa Goto)

After r32902, in sparc64-solaris2.10, when configuring with no --enable-shared, linker error occurred during linking shared object
ext/-test/-array/resize.so.

linking shared-object -test/-array/resize.so
Id: fatal: relocation error: R_SPARC_H44: file .././././libruby-static.a(array.o): symbol rb_cFixnum: relocations based on the ABS44 coding model can
not be used in building a shared object
make[2]: *** [../../../../.ext/sparc64-solaris2.10/-test/-array/resize.so] Error 1

In IRC #ruby-ja, k_tsj reported similar error occurred on Ubuntu 10.4 x86_64.

/usr/bin/ld: ../././libruby-static.a(class.o): relocation R_X86_64_32 against `.rodata' can not be used when making a shared object; recompile with
-PIC
../././libruby-static.a: could not read symbols: Bad value

Please revert r32902.
Related changeset is r3138.

#8 - 08/11/2011 03:53 AM - normalperson (Eric Wong)
Naohisa Goto ngotogenome@gmail.com wrote:

In IRC #ruby-ja, k_tsj reported similar error occurred on Ubuntu 10.4 x86_64.
Yes, there needs to be a better fix than r32902; it's even more broken than before.

I get the same error on Debian as Ubuntu without --enable-shared.
--enable-shared continues to work fine.

#9 - 08/11/2011 09:29 AM - kosaki (Motohiro KOSAKI)
- Status changed from Closed to Assigned
- Priority changed from Normal to 5

Reopened.

#10 - 08/11/2011 03:07 PM - nobu (Nobuyoshi Nakada)
- Status changed from Assigned to Closed

This issue was solved with changeset r32927.
Vit, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

- lib/mkmf.rb (link_command): use LIBRUBYARG in rbconfig for unbundled extensions. [ruby-core:38802] [Bug #5147]
- lib/mkmf.rb (init_mkmf): revert r32902. [ruby-core:38903]

#11 - 08/12/2011 04:59 AM - normalperson (Eric Wong)

Eric Wong normalperson@yhbt.net wrote:

Yes, there needs to be a better fix than r32902; it's even more broken than before.

r32927 seems good with and without --enable-shared on Debian x86_64.
Thanks!