Ruby trunk - Bug #9760

mkmf does not allow for linking against custom libraries when a system library is present

04/19/2014 10:15 PM - zanegray (Andrew DeMaria)

Status:	Open			
Priority:	Normal			
Assignee:				
Target version:				
ruby -v:	ruby 2.1.1p76 (2014-02-24 revision 45161) [x86_64-linux]		**Backport:**	2.0.0: UNKNOWN, 2.1: REQUIRED, 2.2: REQUIRED

Description
Hi,   Hopefully the title is not confusing, but the short story is that mkmf outputs a makefile that first searches the default lib path before searching any user provided lib paths. This is not an issue until one tries to link against an included library whose version is different than a preexisting system library.   The issue cropped up while trying to install the rugged gem (libgit2 wrapper) and a full dialog on the issue can be found on github https://github.com/libgit2/rugged/issues/351.   I was able to fix the issue with the attached patch (https://github.com/muff1nman/ruby/commit/a0c8bc32cfc11e61c5b9703bff243934c6509210)

Associated revisions

Revision 69ce2b70 - 04/19/2014 11:41 PM - nobu (Nobuyoshi Nakada)

mkmf.rb: prefer $LIBPATH than $DEFLIBPATH

- lib/mkmf.rb (link_command, libpathflag, create_makefile): prefer user specified $LIBPATH than $DEFLIBPATH. [ruby-core:62100] [ruby-trunk - Bug #9760]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@45640 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

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Bug #9760]

Revision d9bf31cc - 10/24/2015 12:10 PM - sorah (Sorah Fukumori)

- lib/mkmf.rb: Revert r45640 because it may lead to link with different libruby. [Bug #9760]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@52267 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 52267 - 10/24/2015 12:10 PM - sorah (Sorah Fukumori)

- lib/mkmf.rb: Revert r45640 because it may lead to link with different libruby. [Bug #9760]

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History

#1 - 04/19/2014 11:41 PM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Closed

- % Done changed from 0 to 100

Applied in changeset r45640.

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mkmf.rb: prefer $LIBPATH than $DEFLIBPATH

- lib/mkmf.rb (link_command, libpathflag, create_makefile): prefer user specified $LIBPATH than $DEFLIBPATH.   [ruby-trunk - Bug #9760]

#2 - 05/07/2014 10:58 AM - knu (Akinori MUSHA)

In the meantime, third parties can work around this problem by a monkey patch like this:

https://github.com/sparklemotion/nokogiri/commit/c98745d9098487c51685a732f1c5a21d8d07cdad

#3 - 05/19/2014 06:01 AM - knu (Akinori MUSHA)

The monkey patch I mentioned above was backed out due to a serious problem found, that is, if an instance of libruby.so (of the same soname as the running ruby) is found in a user-given path that is different from the one for the running ruby used for build, it will be picked by the linker and the resulted extension will cause a SEGV in run time.

So, it turned out DEFLIBPATH took precedence over LIBPATH for a good reason and I'm afraid it should not have been simply changed this way.

#4 - 06/12/2014 11:30 AM - nagachika (Tomoyuki Chikanaga)

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

Does this issue exist in 2.0.0 too?

#5 - 06/12/2014 12:23 PM - knu (Akinori MUSHA)

Please do not backport this yet; I'm suggesting backing out the commit made in trunk for the reason I gave above.

#6 - 06/12/2014 12:24 PM - knu (Akinori MUSHA)

- Status changed from Closed to Open

#7 - 08/27/2015 04:37 PM - sorah (Sorah Fukumori)

Hit a problem as knu (Akinori MUSHA) said: https://github.com/brianmario/mysql2/issues/657

#8 - 08/27/2015 05:19 PM - sorah (Sorah Fukumori)

- File early-libdir.patch added

attached diff (early-libdir.patch) works well for my case... but I can't determine this is correct fix. If it's okay I'll commit into trunk.

#9 - 08/28/2015 12:09 AM - usa (Usaku NAKAMURA)

- Backport changed from 2.0.0: UNKNOWN, 2.1: REQUIRED to 2.0.0: UNKNOWN, 2.1: REQUIRED, 2.2: REQUIRED

#10 - 08/28/2015 04:17 AM - sorah (Sorah Fukumori)

Assume /usr/lib has librubyA and libfooB, and /home/someone/local/lib has libfooA. I think early-libdir.patch makes mkmf.rb can't link to libfooA never..

#11 - 08/28/2015 07:19 AM - sorah (Sorah Fukumori)

I'm positive to revert the change at r45640.

#12 - 10/24/2015 12:11 PM - sorah (Sorah Fukumori)

- Status changed from Open to Closed

Applied in changeset r52267.

- lib/mkmf.rb: Revert r45640 because it may lead to link with different libruby. [Bug #9760]

#13 - 10/24/2015 12:14 PM - sorah (Sorah Fukumori)

- Status changed from Closed to Open

Reverted r45640 at r52267. Hmm...

#14 - 05/24/2016 08:11 AM - onur (Onur Küçük)

We have a system where

- Ruby 1.8.7-p374 is installed system wide from distribution packages
- There is a user setup with RVM to run Ruby 2.x running Redmine with Mysql

During Redmine bundle install, mysql2 gem is linking against the system Ruby, leading to issues like missing symbols etc. for the generated SO. The issue is happening with 2.2.3, 2.2.4 and 2.3.0 but it seems it is fixed in 2.3.1. I did not bisect but r52267 is probably what fixed it, thank you !

Files

fix_default_libpath.diff	1.2 KB	04/19/2014	zanegray (Andrew DeMaria)
early-libdir.patch	1.24 KB	08/27/2015	sorah (Sorah Fukumori)