

Ruby - Bug #20783

--enable-shared and the rpath/runpath are broken on Linux on CRuby master

10/04/2024 09:20 AM - Eregon (Benoit Daloze)

Status:	Closed	Backport: 3.1: DONTNEED, 3.2: DONTNEED, 3.3: DONTNEED
Priority:	Normal	
Assignee:	nobu (Nobuyoshi Nakada)	
Target version:		
ruby -v:		

Description

<https://github.com/ruby/ruby-dev-builder/actions/runs/11095200420>

```
$ ruby test_files/cli_test.rb
ruby: error while loading shared libraries: libruby.so.3.4: cannot open shared object file: No such file or directory
```

And indeed locally I can confirm it's broken (I use ruby-build for convenience, as you can see it just does a bunch of regular build commands):

```
$ RUBY_CONFIGURE_OPTS=--enable-shared ruby-build ruby-dev -d ~/.rubies
==> Cloning https://github.com/ruby/ruby.git...
-> git clone --depth 1 --branch master https://github.com/ruby/ruby.git ruby-master
...
==> Installing ruby-master...
-> autoreconf -i
-> ./configure "--prefix=$HOME/.rubies/ruby-dev" --enable-shared
-> make -j 16
-> make update-gems extract-gems install
==> Installed ruby-master to /home/eregon/.rubies/ruby-dev
```

And that build with --enable-shared is not working, same as on GitHub Actions:

```
$ /home/eregon/.rubies/ruby-dev/bin/ruby -v
/home/eregon/.rubies/ruby-dev/bin/ruby: error while loading shared libraries: libruby.so.3.4: cannot open shared object file: No such file or directory
```

```
$ ldd /home/eregon/.rubies/ruby-dev/bin/ruby
linux-vdso.so.1 (0x00007fff9018c000)
libruby.so.3.4 => not found
libz.so.1 => /lib64/libz.so.1 (0x00007f4c8d928000)
libcrypt.so.2 => /lib64/libcrypt.so.2 (0x00007f4c8d8ef000)
libm.so.6 => /lib64/libm.so.6 (0x00007f4c8d80e000)
libc.so.6 => /lib64/libc.so.6 (0x00007f4c8d62c000)
/lib64/ld-linux-x86-64.so.2 (0x00007f4c8d95e000)
```

```
$ readelf -d /home/eregon/.rubies/ruby-dev/bin/ruby
```

Dynamic section at offset 0x2db8 contains 29 entries:

Tag	Type	Name/Value
0x0000000000000001	(NEEDED)	Shared library: [libruby.so.3.4]
0x0000000000000001	(NEEDED)	Shared library: [libz.so.1]
0x0000000000000001	(NEEDED)	Shared library: [libcrypt.so.2]
0x0000000000000001	(NEEDED)	Shared library: [libm.so.6]
0x0000000000000001	(NEEDED)	Shared library: [libc.so.6]
0x000000000000001d	(RUNPATH)	Library runpath: [/home/eregon/.rubies/ruby-dev/lib-L/home/eregon/.rubies/ruby-dev/lib]
...		

[@hsbt \(Hiroshi SHIBATA\)](https://github.com/ruby/ruby/commit/1f6d2e77d9be9a5a829e60908d21d621f4e1ceb0) said he remembers <https://github.com/ruby/ruby/commit/1f6d2e77d9be9a5a829e60908d21d621f4e1ceb0> changed something in this area which might be the cause.

Once this is fixed we should also revert <https://github.com/ruby/docker-images/pull/107>.

Associated revisions

Revision 79a8750ade3e332c1ab78aa9cbc6ca7fd823dec2 - 10/04/2024 09:49 AM - nobu (Nobuyoshi Nakada)

[Bug #20783] Insert a space between RPATHFLAG and LIBPATHFLAG

Revision 79a8750ade3e332c1ab78aa9cbc6ca7fd823dec2 - 10/04/2024 09:49 AM - nobu (Nobuyoshi Nakada)

[Bug #20783] Insert a space between RPATHFLAG and LIBPATHFLAG

Revision 79a8750a - 10/04/2024 09:49 AM - nobu (Nobuyoshi Nakada)

[Bug #20783] Insert a space between RPATHFLAG and LIBPATHFLAG

History

#1 - 10/04/2024 09:21 AM - Eregon (Benoit Daloze)

- *Description updated*

#2 - 10/04/2024 09:40 AM - Eregon (Benoit Daloze)

BTW this also shows the ruby/ruby CI does not currently test an installed ruby with --enable-shared.
It seems important to add a test to avoid such regressions.

#3 - 10/04/2024 09:57 AM - nobu (Nobuyoshi Nakada)

<https://github.com/ruby/ruby/pull/11797>

#4 - 10/04/2024 10:08 AM - hsbt (Hiroshi SHIBATA)

- *Status changed from Open to Assigned*

- *Assignee set to nobu (Nobuyoshi Nakada)*

#5 - 10/04/2024 11:06 AM - nobu (Nobuyoshi Nakada)

- *Backport changed from 3.1: UNKNOWN, 3.2: UNKNOWN, 3.3: UNKNOWN to 3.1: DONTNEED, 3.2: DONTNEED, 3.3: DONTNEED*

#6 - 10/08/2024 06:50 AM - hsbt (Hiroshi SHIBATA)

- *Status changed from Assigned to Closed*

Fixed at <https://bugs.ruby-lang.org/projects/ruby-master/repository/git/revisions/79a8750ade3e332c1ab78aa9cbc6ca7fd823dec2>