

## Exiv2 - Feature #976

### Include Run-Time Search Path for Cmake Builds in exiv2 binary

02 Aug 2014 06:17 - Nehal J Wani

<b>Status:</b>	Closed	<b>Start date:</b>	02 Aug 2014
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Nehal J Wani	<b>% Done:</b>	0%
<b>Category:</b>	build	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	0.25		

#### Description

When exiv2 is built using: make config; ./configure; sudo make install:

```
❑ build objdump -x $(which exiv2) | grep RPATH
RPATH          /usr/local/lib
```

When exiv2 is built using: mkdir build; cd build; cmake ../; sudo make install:

```
❑ build objdump -x $(which exiv2) | grep RPATH
❑ build
```

On operating systems like Fedora, the default search path for libraries doesn't include /usr/local/lib and hence, on executing the binary compiled using cmake, once gets:

```
❑ build exiv2
```

exiv2: error while loading shared libraries: libexiv2.so.13: cannot open shared object file: No such file or directory

```
❑ build ldd $(which exiv2)
linux-vdso.so.1 => (0x00007fff0ffdf000)
libexiv2.so.13 => not found
libdl.so.2 => /lib64/libdl.so.2 (0x0000003b51800000)
libexpat.so.1 => /lib64/libexpat.so.1 (0x0000003b56c00000)
libz.so.1 => /lib64/libz.so.1 (0x0000003b51c00000)
libstdc++.so.6 => /lib64/libstdc++.so.6 (0x0000003672200000)
libm.so.6 => /lib64/libm.so.6 (0x0000003b51000000)
libgcc_s.so.1 => /lib64/libgcc_s.so.1 (0x0000003671a00000)
libc.so.6 => /lib64/libc.so.6 (0x0000003b50c00000)
/lib64/ld-linux-x86-64.so.2 (0x0000003b50400000)
```

#### Associated revisions

Revision 3287 - 06 Aug 2014 01:32 - Robin Mills

#976 <http://dev.exiv2.org/issues/976> Thank You, Nehal for both finding and fixing this.

#### History

#1 - 02 Aug 2014 07:14 - Robin Mills

- Category set to build
- Status changed from New to Assigned
- Assignee set to Nehal J Wani
- Target version set to 0.25

Good find, Nehal. If you could submit a fix, I will test your fix on Mac/Cygwin/Ubuntu.

#2 - 02 Aug 2014 07:17 - Gilles Caulier

==> make config

This is not cmake config rule, but standard automake.

To configure Exiv2 with cmake, take a look to README-CMAKE file for details...

Gilles Caulier

**#3 - 02 Aug 2014 07:18 - Gilles Caulier**

- *Subject changed from Include Run-Time Search Path for CMake Builds in exiv2 binary to Include Run-Time Search Path for Automake Builds in exiv2 binary*

**#4 - 02 Aug 2014 07:22 - Nehal J Wani**

@Gilles

I think you misunderstood my problem description. I was saying that standard make config included RPATH in the binary. We need to do the same for CMake builds.

The simple solution for this is to add:

```
SET(CMAKE_INSTALL_RPATH "${CMAKE_INSTALL_PREFIX}/lib")
```

to the file

```
trunk/CMakeLists.txt
```

**#5 - 02 Aug 2014 07:27 - Robin Mills**

Thanks for speaking about this, Gilles. I believe Nehal is saying that the automake process is fine ( \$ make config ; ./configure ; make etc).

However CMake on Fedora isn't linking correctly and requires some RPATH magic to be added. I think this is a Fedora/CMake issue. I've never seen this on the Mac or Ubuntu.

So, I think Nehal's original title is correct by associating this issue to CMake and not automate. As always, I could be wrong!

**#6 - 02 Aug 2014 07:32 - Gilles Caulier**

- *Subject changed from Include Run-Time Search Path for Automake Builds in exiv2 binary to Include Run-Time Search Path for Cmake Builds in exiv2 binary*

**#7 - 02 Aug 2014 07:37 - Gilles Caulier**

Right i read too fast...

But i never seen this kind of error under Linux, OSX and Windows using CMake (i always use CMake everywhere)

Gilles Caulier

**#8 - 02 Aug 2014 07:38 - Gilles Caulier**

Sound like the solution is given here :

<http://www.cmake.org/pipermail/cmake/2010-February/035157.html>

Gilles Caulier

**#9 - 06 Aug 2014 01:33 - Robin Mills**

- *Status changed from Assigned to Resolved*

Fix submitted r3285. Thank You, Nehal for finding and fixing this.

**#10 - 21 Jun 2015 16:41 - Andreas Huggel**

- *Status changed from Resolved to Closed*