Subject: [FIXED] Pandaroot installation on scietific linux 5.7
Posted by Andreas Pitka on Mon, 06 May 2013 15:52:41 GMT
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Hi,

i am trying to install Pandaroot on our local Gießen cluster.

The external packages installation completes successful the make of pandaroot fails with the error:

```
Scanning dependencies of target svnheader
-- Found Subversion: /usr/bin/svn (found version "1.6.11")
-- FairRoot Revision - 19599 Branch -
https://subversion.gsi.de/fairroot/pandaroot/release/apr13
[  0%] Built target svnheader
[  0%] Generating G__FairToolsDict.cxx
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.11'
not found (required by /home/gd1696/fairroot/apr13/bin/rootcint)
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.9'
not found (required by /home/gd1696/fairroot/apr13/bin/rootcint)
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.15'
not found (required by /home/gd1696/fairroot/apr13/bin/rootcint)
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.11'
not found (required by /home/gd1696/fairroot/apr13_src/../apr13/lib/root/libCint.so.5.34)
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.15'
not found (required by /home/gd1696/fairroot/apr13_src/../apr13/lib/root/libCint.so.5.34)
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.9'
not found (required by /home/gd1696/fairroot/apr13_src/../apr13/lib/root/libCint.so.5.34)
make[2]: *** [fairtools/G__FairToolsDict.cxx] Error 1
make[1]: *** [fairtools/CMakeFiles/FairTools.dir/all] Error 2
make: *** [all] Error 2
```

The external packages were compiled with gcc 4.7, with libstdc++.so in the folder /cm/shared/apps/gcc/4.7.0/lib64.

Somehow cmake seems to find the too old version of libstdc++.so in /usr/lib64 first.

Has someone a idea how to fix this?

ldd /home/gd1696/fairroot/apr13/bin/rootcint gives:

```
 libCint.so.5.34 => not found
 libstdc++.so.6 => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6 (0x00002aaaaacc9000)
 libgcc_s.so.1 => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1 (0x00002aaaaafd1000)
 libc.so.6 => /lib64/libc.so.6 (0x00002aaaab1e7000)
 libm.so.6 => /lib64/libm.so.6 (0x00002aaaab53f000)
 /lib64/ld-linux-x86-64.so.2 (0x00002aaaaaaab000)
```

Thanks a lot

Andreas

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by StefanoSpataro on Tue, 07 May 2013 06:52:39 GMT
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Which external packages? Is this your first time trying to install the software, or before with earlier versions it was working?
Is it possible that in your lib paths there is already some other version of root/geant?

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by Mohammad Al-Turany on Tue, 07 May 2013 07:00:02 GMT
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HI,

Cmake takes the first compiler it found in your $PATH variable, you have to add the path to your new compiler before the "/usr/bin/" in your $PATH variable.

Mohammad

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by Andreas Pitka on Tue, 07 May 2013 08:05:53 GMT
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the correct g++ is already in PATH, for example

g++ -v gives:

gcc version 4.7.0 (GCC)

also the gcc library directory is added to LD_LIBRARY_PATH

I have installed the external packages apr13 and i am trying to install the apr13 Pandaroot release.

There is already a root installation present in PATH and LD_LIBRARY_PATH.

Its the first time i am trying to install it on this machine and also with older versions (of external packages and/or Pandaroot) its not compiling.

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by StefanoSpataro on Tue, 07 May 2013 08:24:54 GMT
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Most probably you have to remove from the paths all the old root parts.

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by Andreas Pitka on Tue, 07 May 2013 16:44:50 GMT
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I removed the second ROOT installation from PATH and LD_LIBRARY_PATH, and its still the same error.

i am also quite shure i am using the newer g++ version because cmake tells me:

-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /cm/shared/apps/gcc/4.7.0/bin/gcc
-- Check for working C compiler: /cm/shared/apps/gcc/4.7.0/bin/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /cm/shared/apps/gcc/4.7.0/bin/g++
-- Check for working CXX compiler: /cm/shared/apps/gcc/4.7.0/bin/g++ -- works

Also the root seems to be linked to the correct libstdc++ since
ldd -v /home/gd1696/fairroot/apr13/bin/rootcint gives

```
 libCint.so.5.34 => /home/gd1696/fairroot/apr13_src/../apr13/lib/root/libCint.so.5.34
(0x00002aaaaacc9000)
 libstdc++.so.6 => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6 (0x00002aaaab646000)
 libgcc_s.so.1 => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1 (0x00002aaaab94e000)
 libc.so.6 => /lib64/libc.so.6 (0x00002aaaabb75000)
 libdl.so.2 => /lib64/libdl.so.2 (0x00002aaaabecd000)
 libm.so.6 => /lib64/libm.so.6 (0x00002aaaac0d1000)
 /lib64/ld-linux-x86-64.so.2 (0x00002aaaaaaab000)

 Version information:
 /home/gd1696/fairroot/apr13/bin/rootcint:
  libgcc_s.so.1 (GCC_3.0) => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1
  libstdc++.so.6 (GLIBCXX_3.4.11) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (CXXABI_1.3) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4.9) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4.15) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libc.so.6 (GLIBC_2.3) => /lib64/libc.so.6
  libc.so.6 (GLIBC_2.2.5) => /lib64/libc.so.6
 /home/gd1696/fairroot/apr13_src/../apr13/lib/root/libCint.so.5.34:
  libgcc_s.so.1 (GCC_3.0) => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1
  libdl.so.2 (GLIBC_2.2.5) => /lib64/libdl.so.2
  libm.so.6 (GLIBC_2.2.5) => /lib64/libm.so.6
  libstdc++.so.6 (CXXABI_1.3.1) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4.5) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4.11) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (CXXABI_1.3) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
  libstdc++.so.6 (GLIBCXX_3.4.15) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
```

libstdc++.so.6 (GLIBCXX_3.4.9) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
libstdc++.so.6 (GLIBCXX_3.4) => /cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6
libc.so.6 (GLIBC_2.3) => /lib64/libc.so.6
libc.so.6 (GLIBC_2.3.4) => /lib64/libc.so.6
libc.so.6 (GLIBC_2.2.5) => /lib64/libc.so.6
/cm/shared/apps/gcc/4.7.0/lib64/libstdc++.so.6:
libm.so.6 (GLIBC_2.2.5) => /lib64/libm.so.6
ld-linux-x86-64.so.2 (GLIBC_2.3) => /lib64/ld-linux-x86-64.so.2
libgcc_s.so.1 (GCC_4.2.0) => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1
libgcc_s.so.1 (GCC_3.3) => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1
libgcc_s.so.1 (GCC_3.0) => /cm/shared/apps/gcc/4.7.0/lib64/libgcc_s.so.1
libc.so.6 (GLIBC_2.3) => /lib64/libc.so.6
libc.so.6 (GLIBC_2.3.2) => /lib64/libc.so.6
libc.so.6 (GLIBC_2.2.5) => /lib64/libc.so.6

But still i get errors of the kind
[0%] Built target svnheader
[0%] Generating G__FairToolsDict.cxx
/home/gd1696/fairroot/apr13/bin/rootcint: /usr/lib64/libstdc++.so.6: version `GLIBCXX_3.4.11' not found (required by /home/gd1696/fairroot/apr13/bin/rootcint)

when i do make.

Subject: Re: Pandaroot installation on scietific linux 5.7
Posted by Andreas Pitka on Thu, 16 May 2013 10:11:56 GMT
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Ok i figured it out.

If the are multiple gcc installations one has to set:

export CXX=/path/to/g++
export CC=/path/to/gcc

And especially what caused my problem:

libstdc++ has to be in the LD_RUN_PATH

(what i still don t understand is, why the LD_LIBRARY_PATH is not sufficient since cmake first searches there and only afterwards in the system paths)

Now everything works fine.
