
Subject: Compilation problems with DpmEvtGen
Posted by [Ralf Kliemt](#) on Wed, 16 Apr 2008 09:11:20 GMT
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Hi all,

The dashboard website is offline....

I have problems with compiling DpmEvtGen. I get many warnings like
In file /home/ralfk/Pandaroot/Dart-src/pgenerators/DpmEvtGen/init.f:619

```
*8HXU++GA ,8HXD+GAM ,8HXS+GAM ,8HA+AKPI ,8HT02PI+ ,8HC1++2K ,  
1
```

Warning: Extension: Conversion from HOLLERITH to REAL(8) at (1)

And then at the end there is probably the serious message:

```
/home/ralfk/Pandaroot/Dart-src/pgenerators/DpmEvtGen/main.cc:26: warning: non-local  
variable '<anonymous struct> lujets_' uses anonymous type  
Linking CXX executable DPMGen  
CMakeFiles/DpmEvtGen_exe.dir/main.o: In function `main':  
/home/ralfk/Pandaroot/Dart-src/pgenerators/DpmEvtGen/main.cc:112: undefined reference to  
`dpm_gen__'  
collect2: ld returned 1 exit status
```

My Workaround: I keep the pandaroot/pgenerators directory and pandaroot/CMakesLists.txt
before rev.2525.

Kind regards, Ralf.

File Attachments

1) [LastBuild_20080416-0842.log](#), downloaded 603 times

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Wed, 16 Apr 2008 09:19:43 GMT
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This morning I had the same error, I went back to release 2524.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Wed, 16 Apr 2008 09:53:18 GMT
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Hi Ralf

The warnings you can forget about.

The problem about the "undefined reference to `dpm_gen__'"
i know from Mac OS X.

Which compiler do you use on your computer g77 or gfortran?

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Wed, 16 Apr 2008 10:08:12 GMT
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Quote: The warnings you can forget about.

Well, when I compile DPM "stand-alone" I have only one warning message.

Quote: The problem about the "undefined reference to `dpm_gen__'"
i know from Mac OS X.

Which compiler do you use on your computer g77 or gfortran?

In my system I have both g77 and gfortran. In general, when I compile DPM "stand-alone", it
uses g77. Now I don't know which compiler is it taking.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Wed, 16 Apr 2008 10:16:37 GMT
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Hi Stefano

I thought the problem is related to Mac OS X, but now it looks more like a problem with
gfortran.

Can you try to compile the standalone version with gfortran.

I am nearly shure that you will see all the warnings and you will
crash in the end.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Wed, 16 Apr 2008 10:22:36 GMT

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You are right,
I have changed the file common.mk using "gfortran" instead of "g77" and I have the same behaviour.

Maybe with cmake we should fix that only "g77" is used, if present.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Wed, 16 Apr 2008 11:16:51 GMT
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Hi Ralf, hi Stefano

I think i solved the problem. For me it compiles now with g77 and gfortran. Please update to rev 2540 and try again.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Wed, 16 Apr 2008 20:03:28 GMT
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Hi Florian,
now with the make it compiles (even with the gfortran warnings), but at the "make install" I have the following error:

Install the project...

```
-- Install configuration: "Debug"
-- Installing /home/spataro/dev/cmar08/lib/libBase.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libGeoBase.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libParBase.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libMCStack.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libPassive.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libField.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libGen.so.0.0.0
-- Installing /home/spataro/dev/cmar08/lib/libPGen.so.0.0.0
```

```
CMake Error: Error in cmake code at
/home/spataro/dev/cmar08/pgenerators/DpmEvtGen/cmake_install.cmake:30:
FILE INSTALL cannot find "
/home/spataro/dev/cmar08/pgenerators/DpmEvtGen/CMakeFiles/CMakeRelink.d
r/libDpmEvtGen.so.0.0.0 " to install.
```

Current CMake stack:

```
/home/spataro/dev/cmar08/cmake_install.cmake;/home/spataro/dev/cmar08/pg
enerators/DpmEvtGen/cmake_install.cmake
make: *** [install] Error 255
```

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Thu, 17 Apr 2008 05:19:43 GMT
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Hi Stefano

I can not confirm this problem. Did you start with a clean DpmEvtGen directory? If not please try it with a clean one.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Thu, 17 Apr 2008 06:53:25 GMT
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Hi,

I have removed everything (rm -rf pandaroot/ cbuild/) and restarted from the checkout, and I have still the same error message after the "make install" (the simple "make" gives only the warning):

```
Toggle SpoilerLinking CXX shared library CMakeFiles/CMakeRelink.dir/libBase.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libGeoBase.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libParBase.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libMCStack.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libPassive.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libField.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libGen.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libPGen.so
Linking Fortran shared library CMakeFiles/CMakeRelink.dir/libDpmEvtGen.so
Linking CXX executable CMakeFiles/CMakeRelink.dir/DPMGen
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libStt.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libtpc.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libtpcreco.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libMvd.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libMvdReco.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libMuo.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libEmc.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libDrc.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libDrcProp.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libHyp.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libgenfit.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/librecotasks.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libDch.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libTof.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libLHETrack.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libTrkBase.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libtrackrep.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libcharmtask.so
```

```
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libfsim.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libRho.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libRpc.so
Linking CXX shared library CMakeFiles/CMakeRelink.dir/libCbmG4.so
Install the project...
-- Install configuration: "Debug"
-- Installing /home/spataro/test/cbuild/lib/libBase.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libGeoBase.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libParBase.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libMCStack.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libPassive.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libField.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libGen.so.0.0.0
-- Installing /home/spataro/test/cbuild/lib/libPGen.so.0.0.0
CMake Error: Error in cmake code at
/home/spataro/test/cbuild/pgenerators/DpmEvtGen/cmake_install.cmake:30:
FILE INSTALL cannot find file "
/home/spataro/test/cbuild/pgenerators/DpmEvtGen/CMakeFiles/CMakeRelink.d
ir/libDpmEvtGen.so.0.0.0 " to install.
Current CMake stack:
/home/spataro/test/cbuild/cmake_install.cmake;/home/spataro/test/cbuild/
pgenerators/DpmEvtGen/cmake_install.cmake
make: *** [install] Error 255
```

Then I went into the directory pgenerators/DpmEvtGen, did a "make" there (just to be sure) and I went back to my cbuild directory. I have the same error message.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Thu, 17 Apr 2008 07:53:40 GMT
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Hi Stefano

Can you check that the library exist in

/home/spataro/test/cbuild/pgenerators/DpmEvtGen/libDpmEvtGen.so.0.0.0

and

/home/spataro/test/cbuild/pgenerators/DpmEvtGen/CMakeFiles/CMakeRelink.d
ir/libDpmEvtGen.so.0.0.0

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Thu, 17 Apr 2008 07:57:50 GMT
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Hi,
I have only libDpmEvtGen.so, no libDpmEvtGen.so.0.0.0

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Thu, 17 Apr 2008 10:08:22 GMT
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Hi Stefano

Can you please check if your CMakeLists.txt in the main directory is up to date and if the CBM_LIBRARY_PROPERTIES is set correctly.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Thu, 17 Apr 2008 10:37:49 GMT
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I repeat,
I have checked out the code entirely from svn and recompiled pandaroot from scratch. So my CMakeLists.txt is the most updated.

I did a: "grep -r CBM_LIBRARY_PROPERTIES *" but I did not find this string in the whole pandaroot and cbuilder directory.
Where should it be set?

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Thu, 17 Apr 2008 11:54:30 GMT
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Hi Stefano

Here I wonder. I looked into my CMakeLists.txt and there are the following lines

```
# Set the library version in the main CMakeLists.txt
SET(CBMROOT_MAJOR_VERSION 0)
SET(CBMROOT_MINOR_VERSION 0)
SET(CBMROOT_PATCH_VERSION 0)
SET(CBMROOT_VERSION
```

```
"${CBMROOT_MAJOR_VERSION}.${CBMROOT_MINOR_VERSION}.${CBMROOT_PATCH_VERSION}
SET(CBMROOT_LIBRARY_PROPERTIES ${CBMROOT_LIBRARY_PROPERTIES}
    VERSION "${CBMROOT_VERSION}"
    SOVERSION "${CBMROOT_MAJOR_VERSION}"
    SUFFIX ".so"
)
```

which came in with revision 890 from 06/14/07.

Can you check again??

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Thu, 17 Apr 2008 14:36:44 GMT
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Ah ok,
it was CBMROOT_LIBRARY_PROPERTIES, not CBM_LIBRARY_PROPERTIES. This I have:

```
# Set the library version in the main CMakeLists.txt
SET(CBMROOT_MAJOR_VERSION 0)
SET(CBMROOT_MINOR_VERSION 0)
SET(CBMROOT_PATCH_VERSION 0)
SET(CBMROOT_VERSION "
${CBMROOT_MAJOR_VERSION}.${CBMROOT_MINOR_VERSION}.${CBMROOT_PATCH_
VERSIO N} ")
SET(CBMROOT_LIBRARY_PROPERTIES ${CBMROOT_LIBRARY_PROPERTIES}
    VERSION "${CBMROOT_VERSION}"
    SOVERSION "${CBMROOT_MAJOR_VERSION}"
    SUFFIX ".so"
)
```

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Stefano Spataro](#) on Mon, 21 Apr 2008 08:36:17 GMT
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Ahem,
I have still this problem, what should I do?
Copy the so.0.0.0 from GSI to Gießen?

Subject: Re: Compilation problems with DpmEvtGen

Posted by [Florian Uhlig](#) on Mon, 21 Apr 2008 09:35:57 GMT

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Hi Stefano

How did you do the installation? Did you only use CMake or did you use somehow the Makefile in DpmEvtGen?
I cannot reproduce your problem on any of my machines so it's hard to come up with a good answer.

What you can do as workaround is to exclude DpmEvtGen from the list of directories and to copy the library to the lib directory.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen

Posted by [Stefano Spataro](#) on Mon, 21 Apr 2008 10:20:00 GMT

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I have tried to "make" with and without compilation of pgenerators/DpmEvtGen, but without any succes.

I have bypassed the problem with a simple trick:

```
spataro@cca04
/home/spataro/test/cbuild/pgenerators/DpmEvtGen/CMakeFiles/CMakeRelink.d ir $ mv
libDpmEvtGen.so libDpmEvtGen.so.0.0.0
```

In this case the make install works (hopefully even the code).

Subject: Re: Compilation problems with DpmEvtGen

Posted by [Aleksandra Biegun](#) on Fri, 25 Apr 2008 15:30:58 GMT

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Hi,

I have the same problem like Stefano, that I do not have libGen.so.0.0.0, only I have libGen.so

```
-- Installing /home/biegun/PANDA/fair/pandaroot.dart/buildDart/lib/libGen.so.0.0.0
-- Installing /home/biegun/PANDA/fair/pandaroot.dart/buildDart/lib/libPGen.so.0.0.0
CMake Error: Error in cmake code at
/home/biegun/PANDA/fair/pandaroot.dart/buildDart/pgenerators/DpmEvtGen/c
make_install.cmake:30:
FILE INSTALL cannot find "
/home/biegun/PANDA/fair/pandaroot.dart/buildDart/pgenerators/DpmEvtGen/C
MakeFiles/CMakeRelink.dir/libDpmEvtGen.so.0.0.0 " to install.
```


Current CMake stack:

/home/biegun/PANDA/fair/pandaroot.dart/buildDart/cmake_install.cmake;/home/biegun/PANDA/fair/pandaroot.dart/buildDart/pgenerators/DpmEvtGen/cmake_install.cmake

when I changed the name of the library libDpmEvtGen.so into libDpmEvtGen.so.0.0.0 (like Stefano did) installation of libraries finished successfully.

After that, I run Dashboard script Dart.sh Experimental , and if someone could look at it there is 2 times kviq41.kvi.nl - one seems to be ok, but the second one looks 'empty' (no time, no tests passed). This 'empty' case is also for Nightly run of Dart.sh script.

Because pandaroot does not compile automatically for me (actually it compiles, libraries are linked but the error is during installation of libraries) and I had to change by hand name of the libDpmEvtGen.so into libDpmEvtGen.so.0.0.0 library, I thought that maybe the 'empty' case for my computer at Dashboard (kviq41.kvi.nl) appeared.

Am I right or it's something else?

Is there any solution for installing libDpmEvtGen.so.0.0.0 automatically?

Cheers,
Ola.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Mon, 28 Apr 2008 15:10:36 GMT
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Hi

With help of Stefano, allowing me to play with his computer, I found the problem. His version of cmake (2.4.3.) was too old. The support for Fortran in cmake is rather new and there were many changes in recent versions. It looks like the support for library versioning was introduced after cmake 2.4.3. The solution of the problem is to update your cmake to a newer version. The latest release is 2.4.8 which works without any problems. Also cmake 2.4.7 is fine. If other versions between 2.4.3 and 2.4.7 work I cannot test.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Aleksandra Biegun](#) on Mon, 28 Apr 2008 23:40:01 GMT

Hi Florian!

Thanks a lot for that message.

I had cmake version 2.4.3. and now, from the latest external package from 14.03.08 (fairsoft) I have 2.4.7 (not 2.4.8 as you claim)

<http://fairroot.gsi.de/installation/External%20Packages.htm>

Anyway, it seems to work, let's see tomorrow.

Ciao,
Ola.

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Tobias Stockmanns](#) on Tue, 29 Apr 2008 09:32:37 GMT
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Hi PandaRooters,

I have the same problems with compiling DPMGen as Ralf after I have updated to the latest revision 2619. Before I have installed cmake 2.4.8.

Here comes the error message:

```
Scanning dependencies of target DpmEvtGen
[ 21%] Building Fortran object
pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/common.o
[ 21%] Building Fortran object pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/decay.o
[ 21%] Building Fortran object
pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/dpm_gen.o
ifort: command line warning #10006: ignoring unknown option '-fsecond-underscore'
[ 21%] Building Fortran object pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/init.o
[ 22%] Building Fortran object pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/rndmget.o
[ 22%] Building Fortran object pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen.dir/string.o
Linking Fortran shared library libDpmEvtGen.so
[ 22%] Built target DpmEvtGen
Scanning dependencies of target DpmEvtGen_exe
[ 22%] Building CXX object pgenerators/DpmEvtGen/CMakeFiles/DpmEvtGen_exe.dir/main.o
/home/stockman/fairroot/cbmsoft/pandaroot/pgenerators/DpmEvtGen/main.cc: 26: warning:
non-local variable '<anonymous struct> lujets_' uses anonymous type
Linking CXX executable DPMGen
CMakeFiles/DpmEvtGen_exe.dir/main.o: In function `main':
/home/stockman/fairroot/cbmsoft/pandaroot/pgenerators/DpmEvtGen/main.cc: 104: undefined
reference to `dpm_gen__'
collect2: ld returned 1 exit status
```

I hope somebody can help me solving this problem.

Cheers,

Tobias

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Tue, 29 Apr 2008 12:18:56 GMT
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Hi Tobias

As i can see you're using ifort. There the problem comes in, because ifort don't know the flag -fsecond-underscore. Somehow different compilers (g77, gfortran) somehow create different names in the library dpm_gen_ vs. dpm_gen__ . For g77 and gfortran this can be adjusted with the above flag.

I have to look for the right flag and change the CMakeLists.txt.

I assume ifort creates dpm_gen_ which you can check with

```
nm libDpmEvtGen.so | grep dpm_gen
```

I will look for that problem if i can connect again to GSI.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Anonymous Poster](#) on Wed, 30 Apr 2008 11:57:29 GMT
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Hello everybody!

I solved the problem with the DpmEvtGen compilation just by removing the second underscore at the end of the dpm_gen_ function name in the main.cc file. After that it compiles and links without problems. I am wonder why do we need this second underscore at all?

Andrey

Subject: Re: Compilation problems with DpmEvtGen
Posted by [Florian Uhlig](#) on Wed, 30 Apr 2008 13:04:16 GMT
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Hi Andrey

Because some other compiler decorate it with a second underscore.

So the name in the library is compiler specific. So your change will not work with another compiler.

To overcome this the CMakeLists.txt was changed and up to now it worked with all compilers i tested. There is still a change i have to commit which is needed if you use ifort, but beside of that it works with all tested compilers. I committed

this one minute ago

Which compiler do you use? Please test if this CMakeLists.txt works for you. If not please let me know.

Ciao

Florian

Subject: Re: Compilation problems with DpmEvtGen

Posted by [Anonymous Poster](#) on Wed, 30 Apr 2008 14:11:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Florian,

it still doesn't work.

Best regards,

Andrey

Subject: Re: Compilation problems with DpmEvtGen

Posted by [Florian Uhlig](#) on Wed, 30 Apr 2008 14:13:47 GMT

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Hi Andrey

Thanks for your help, but with this error message i can't do anything.

Ciao

Florian
