
Subject: miscellaneous

Posted by [George Serbanut](#) on Wed, 23 May 2007 01:34:39 GMT

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Hi everyone,

Trying to understand why the PANDA software had a problem in compilation in Glasgow, I found an interesting issue which might be of a help for PANDA software users.

If the dynamic part of your institute/university web site, you might be in a surprise of not having PATH and LD_LIBRARY_PATH environment variables set accordingly. That's because hackers can make use of them to enter your computer. Otherwise, you should have in your PATH:

```
/bin:/usr/bin:/usr/local/bin:/sbin:/opt/bin:/usr/X11R6/bin
```

or something like that, and in your LD_LIBRARY_PATH

```
/lib:/usr/lib:/usr/local/lib:/usr/X11R6/lib
```

or something like that.

Before adding them into your shell rc file, ask you system administrator for the permission, or put them into a .sh file which you should load it by hand at the beginning of any session.

On the other hand, on SL3, by default, you won't have libXm.so installed and the configuration file provided with the PANDA software external packages (I mean g4env.sh) has the environment variables set to use this library. To get rid of this problem, there are two options:

1. compile and install LessTif (this software is generating libXm.so);
2. erase all related environment variables such as:

```
G4UI_BUILD_XM_SESSION  
G4UI_USE_XM  
G4VIS_BUILD_OPENGLXM_DRIVER  
G4VIS_USE_OPENGLXM
```

before starting the compilation of the external packages. Don't worry, if you don't have any other error, your compilation should work perfectly with Geant4 and Geant3.

And, finally, I have few questions for the developers:

1. Does anyone know if VMC supports ghost worlds (parallel worlds)?
2. Why is the cbmsim.m4 from the repository configured ONLY for GSI and Giessen sites and not for general installation purpose?
3. Has anyone experienced any crash from ROOT when he/she tried to simulate a large number of events? If yes, is that our problem or ROOT developers problem?

I hope you haven't fallen asleep while reading this post.

Cheers,
George

Subject: Re: miscellaneous
Posted by [Mohammad Al-Turany](#) on Wed, 23 May 2007 08:22:51 GMT
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Hallo George,

1. Does anyone know if VMC supports ghost worlds (parallel worlds)?
if you mean parallel processing then yes, one can use proof, I try it one year ago and it is working, there are some special configuration for proof which one has to do but in principle it is possible because every thing runs events wise.

2. Why is the cbmsim.m4 from the repository configured ONLY for GSI and Giessen sites and not for general installation purpose?

There is a special handling of the GSI cluster (because it is not standard) but not for Giessen, we assume that either you are at GSI or not! any way Cmake is running now and at some point we will through away the autoconf/automake completely.

3. Has anyone experienced any crash from ROOT when he/she tried to simulate a large number of events? If yes, is that our problem or ROOT developers problem?

up to now we did not see any crash which is related to large number of events, and in CBM we made three large data productions in the last two years without any problem, but if anybody see such a thing it would be nice to report it to us or in the forum, with the error massegs.

regards

Mohammad

Subject: Re: miscellaneous
Posted by [George Serbanut](#) on Wed, 23 May 2007 09:04:05 GMT
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Hi Mohammad,

1. Well, it wasn't exactly what I asked, but it is also a way to use parallel threads. I was referring to what GEANT4 is calling parallel worlds in its documentation. I don't know if the concept is introduced from 8.12 patch 01, but in 8.13 there is such a concept.

2. Maybe I'm missing the path toward PANDARoot CMake file. Can you tell me where exactly is located? I see for the moment only old autotools stuff.

3. That's a good news. I hope it will be the same for PANDARoot.

Just a small comment:

You said is GSI or whatever else. Then why the environment variables are pointed toward

/opt? Shouldn't be pointing toward local directory? Or it's up to everybody to set them up as he/she likes. Also, starting with version 8.12 patch01, Geant4 has no more a separated directory for the hadronic physics lists (they are compiled together with the rest of the packages being now located in sources directory).

Cheers,
George

Subject: Re: miscellaneous
Posted by [Mohammad Al-Turany](#) on Wed, 23 May 2007 09:56:31 GMT
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Hi,

1. Well, it wasn't exactly what I asked, but it is also a way to use parallel threads. I was referring to what GEANT4 is calling parallel worlds in its documentation. I don't know if the concept is introduced from 8.12 patch 01, but in 8.13 there is such a concept.

Ok, I have no idea about this concept in G4, I have to read more to understand what you mean. But proof is not only threads it is parrallel proccessing distributing the jobs to different CPUs and we are planning to make a Proof cluster for CBM. which will enable the people to do parrallel proccessing interactively.

2. Maybe I'm missing the path toward PANDARoot CMake file. Can you tell me where exactly is located? I see for the moment only old autotools stuff.

In pandaroot there is a directory cmake, also in each subdirectory there CMakeLists.txt.

To use this you have to define a SIMPATH variable to your external packages installation then create a build directory and from this directory call:

```
build> cmake (PATH TO PANDAROOT SRC)
build> . config.sh
build> make install
```

Just a small comment:

You said is GSI or whatever else. Then why the environment variables are pointed toward /opt? Shouldn't be pointing toward local directory? Or it's up to everybody to set them up as he/she likes.

As I said we will get rid of this

Also, starting with version 8.12 patch01, Geant4 has no more a separated directory for the hadronic physics lists (they are compiled together with the rest of the packages being now located in sources directory)

Yes, and the VMC can use this it is not a problem, we are testing now the newest G4 and VMC at the GSI, and when we finish we will post a mail.

regards

Mohammad