
Subject: New External packages

Posted by [Mohammad Al-Turany](#) on Thu, 13 Mar 2008 12:14:28 GMT

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Hallo,

The new external packages are now available from fairroot.gsi.de, the tar file fairsoft.tar.gz include:

ROOT 5.18
Geant4 4.9.1
Geant3.21+vmc.1.9
VGM 3.0
Geant4 VMC (r331)
CLHEP 2.0.3.1
ApMon -Application Monitoring API for C++ (v. 2.2.2)
Cmake 2.4.7 (optional)
GSL (GNU Scientific Library)
PLUTO (v.412)
Pythia6
New configuration scripts for linux and Mac OS X

untar fairsoft.tar.gz and run the configure.sh script.

we tested this on the following systems:

Mac OS X 10.5
Debian Sarge 32 and 64 bit
Debian Etch 32 and 64 bit
Fedora Core 5 (icc 10.0)
Fedora Core 8 (gcc and gfortran)
Open Suse 10.1
Open Suse 10.3

The SVN head of Pandaroot works fine with these packages!

among the new features in fairroot:

1. New Flags for simulation (can be set from macro):

SetPythiaDecayer(Bool_t decayer) : switch On/Off external decayer (Pythia)
SetUserDecay(Bool_t decay) : switch On/Off user defined decay. If true
gconfig/UserDecay.C macro will be called

SetRadLenRegister(Bool_t value) : switch on/off the radiation length register module

2. New mode for fast simulation:

primGen->DoTracking(kFALSE);

in a simulation macro setting this flag will prevent the transport in Geant3/4 transport is parametrized via tasks (see pandaroot/fsim)

3. New variable GEOMPATH

setting this environment variable, the framework will look for the detector geometry specified in detector ctor first in this path and then in the input directory (pandaroot/input or cbmroot/input)

regards

Mohammad

Subject: Re: New External packages

Posted by [Johan Messchendorp](#) on Thu, 13 Mar 2008 12:42:32 GMT

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Thanks Mohammad,

I am meanwhile compiling....will let you know where I hit problems,

Johan

Subject: Re: New External packages

Posted by [Vanniarajan Suyam Jothi](#) on Thu, 13 Mar 2008 14:59:58 GMT

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I have tried to Install in the fedora 2 machine i had following Error message.

Could not extract the version of gfortran
Stop script at this point

Can you help me with this?

Vanni

Subject: Re: New External packages

Posted by [Dima Melnychuk](#) on Thu, 13 Mar 2008 15:01:03 GMT

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Hi Mohammad,

I have the following problem with new external packages.

When I run

```
./configure.sh automatic
```

I have the following message

```
The build process for the external packages for the FairRoot Project was started at  
130308_153705  
Could not extract the version of gfortran  
Stop script at this point
```

When I try

```
>gfortran -dumpversion
```

it gives:

```
GNU Fortran 95 (GCC 4.0.2 20051130 (Red Hat 4.0.2-14.EL4))  
Copyright (C) 2005 Free Software Foundation, Inc.
```

GNU Fortran comes with NO WARRANTY, to the extent permitted by law.
You may redistribute copies of GNU Fortran
under the terms of the GNU General Public License.
For more information about these matters, see the file named COPYING

So when I look into /scripts/set_compiler.sh on the line 20

```
if [ $(gfortran -dumpversion | grep 'GNU Fortran 95 (GCC)' | cut -c 1-3) ];
```

my "gfortran -dumpversion" output mismatch this pattern, since bracket is not closed after GCC.

I am using Scientific Linux 4.

How to proceed?

Dima

Subject: Re: New External packages

Posted by [Mohammad Al-Turany](#) on Thu, 13 Mar 2008 15:14:40 GMT

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Hallo Vanni,

I m not sure if you have gfortran on FC2, but do you have g77! normally it should works also with g77! if it is not installed please install it! and try again.

Mohammad

Subject: Re: New External packages

Posted by [Mohammad Al-Turany](#) on Thu, 13 Mar 2008 15:36:35 GMT

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Hallo Dima,

As far as I remember, with gfortran < 4.1.0 we could not compile the geant3! in the set_compiler script there is also an IF statement for that, can you install g77 on this machine! it should work! any way I will try to install SL4 my self and let you know!

Mohammad

Subject: Re: New External packages

Posted by [Vanniarajan Suyam Jothi](#) on Thu, 13 Mar 2008 15:47:47 GMT

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Hello Mohammad,

I have the following gfortran

GNU Fortran 95 (GCC 4.0.0 20050406 (Red Hat 4.0.0-0.41.fc3))

in the machine I am trying to compile.

The Problem was the response of the

gfortran -dumpversion command.

I have added the following lines in my set_compiler.sh script.

```
elif [ $(gfortran -dumpversion | grep 'GNU Fortran 95' | cut -c 1-3) ];  
then  
    gfortran_major_version=$(gfortran -dumpversion | grep 'GNU Fortran 95' | cut -c 21)  
    gfortran_minor_version=$(gfortran -dumpversion | grep 'GNU Fortran 95' | cut -c 23)
```

from lines 28 to 31.

now the compilation is going smooth.

vanni

Subject: Re: New External packages

Posted by [Vanniarajan Suyam Jothi](#) on Thu, 13 Mar 2008 15:53:21 GMT

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Hello Dima,

You can just leave the closing Bracket 'GNU Fortran 95 (GCC'
for pattern matching also inside the then condition '(GCC' That will work fine.

and you should cut characters 21 and 23 , instead of 22 and 24

Vanni

Subject: Re: New External packages

Posted by [asanchez](#) on Tue, 18 Mar 2008 10:55:15 GMT

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Dear Mohammad

Here from GSI

i get the following error message after having
got the new packages.

It seems to be related with rootcint,

how to solve it?

ALicia S.

```
lxi004:fairsoft_marc08>mkdir build
```

```
lxi004:fairsoft_marc08>cd build/
```

```
lxi004:build>export SIMPATH=/misc/cbmsoft/Debian3.1/mar08/fairsoft/
```

```
lxi004:build>cmake ../pandaroot/
```

```
-- Check for working C compiler: /usr/bin/gcc
```

```
-- Check for working C compiler: /usr/bin/gcc -- works
```

```
-- Check size of void*
```

```
-- Check size of void* - done
```

```
-- Check for working CXX compiler: /usr/bin/c++
```

```
-- Check for working CXX compiler: /usr/bin/c++ -- works
```

```
--- Found a Linux ssystem
```

```
--- Found GNU compiler collection
```

```
--- Build Type: RelWithDebInfo
```

```
--- Compiler Flags: -O2 -g
```

```
-- You're using the GSI installation of the external packages.
```

```
-- This is an 32 bit machine
```

```
-- Found root of the simulation software at /misc/cbmsoft/Debian3.1/mar08/fairsoft
```

```
-- Looking for Root...
```

```
-- Looking for Root... - found /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/bin/root
```

```
-- Looking for Root... - version 5.18/00
```

```
-- Looking for Pluto...
```

```
-- Looking for Pluto... - found /misc/cbmsoft/Debian3.1/mar08/fairsoft/generators/lib
```

```
-- Looking for Pythia6...
```

```
-- Looking for Pythia6... - found /misc/cbmsoft/Debian3.1/mar08/fairsoft/generators/lib
```

```
-- Looking for GEANT3...
```

```
-- Looking for GEANT3... - found
```

```
/misc/cbmsoft/Debian3.1/mar08/fairsoft/transport/geant3/lib/tgt_linux/li bgeant321.so
```

```
-- Looking for GEANT4...
-- Looking for GEANT4... - found
/misc/cbmsoft/Debian3.1/mar08/fairsoft/transport/geant4/lib/Linux-g++
-- Looking for GEANT4VMC...
-- Looking for GEANT4VMC... - found
/misc/cbmsoft/Debian3.1/mar08/fairsoft/transport/geant4_vmc/lib/tgt_linu x
-- Looking for VGM...
-- Looking for VGM... - found /misc/cbmsoft/Debian3.1/mar08/fairsoft/transport/vgm/lib
-- Looking for CLHEP...
-- Looking for CLHEP... - found /misc/cbmsoft/Debian3.1/mar08/fairsoft/cern/clhep/lib
-- Configuring done
-- Generating done
-- Build files have been written to: /d/panda02/asanchez/fairsoft_marc08/build
lxi004:build>make install
[ 0%] Generating CbmDict.cxx, CbmDict.h
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/bin/rootcint: error while loading shared
libraries: libCint.so.5.18: cannot open shared object file: No such file or directory
make[2]: *** [base/CbmDict.cxx] Error 127
make[1]: *** [base/CMakeFiles/Base.dir/all] Error 2
make: *** [all] Error 2
```

Subject: Re: New External packages
Posted by [Mohammad Al-Turany](#) on Tue, 18 Mar 2008 10:58:47 GMT
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Hallo Alicia,

you just forget to call config.sh before calling make install!

regards

Mohammad

Subject: Re: New External packages
Posted by [asanchez](#) on Tue, 18 Mar 2008 11:02:13 GMT
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Hi

you are right i was
thinking to run it afterward.
and it has to be done before!!
thanks a lot
ALiciaS.

Subject: Re: New External packages

Dear all,
again by running my macro hyp
with geant4,
with the new packages march_8
i get the error message

```
*** Break *** floating point exception
```

(the same occurs by running
the demo in recotask)

i thought that was already fixed at geant4.8

ALicia S.

```
lxi004:hyp>root sim_hyp.C -l  
root [0]  
Processing sim_hyp.C...
```

```
PSaid instance created... access via gSaid->f()
```

```
- RTDB container factory CbmBaseContFact  
- RTDB container factory PndFieldContFact  
- RTDB container factory PndPassiveContFact  
- RTDB container factory PndHypContFact  
-l- CbmRun::SetMaterials() Media file used:  
/d/panda02/asanchez/fairsoft_marc08/pandaroot/geometry/media_pnd.geo  
-l CbmAsciiGenerator: Opening input file /d/panda01/asanchez/PANDA/ximinAscii.dat
```

```
===== CbmRunSim: Initialising simulation run =====  
Info in <TGeoManager::TGeoManager>: Geometry CBMGeom, CBM geometry created  
-l- CbmGeoMedia Read media  
Loading Geant4 granular libraries ...  
Loading VGM libraries ...  
Loading libraries ... finished  
Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave  
Info in <TGeoManager::CheckGeometry>: Fixing runtime shapes...  
Info in <TGeoManager::CheckGeometry>: ...Nothing to fix  
Info in <TGeoManager::CloseGeometry>: Counting nodes...  
Info in <TGeoManager::Voxelize>: Voxelizing...  
Info in <TGeoManager::CloseGeometry>: Building cache...  
Info in <TGeoNavigator::BuildCache>: --- Maximum geometry depth set to 100  
Info in <TGeoManager::CloseGeometry>: 247 nodes/ 247 volume UID's in CBM geometry  
Info in <TGeoManager::CloseGeometry>: -----modeler ready-----  
Info in <TG4RootNavMgr::SetNavigator>: TG4RootNavigator created and registered to  
G4TransportationManager  
Running TVirtualMCApplication::ConstructGeometry  
*****
```

```
Geant4 version Name: geant4-09-01 (14-December-2007)
```

Copyright : Geant4 Collaboration
Reference : NIM A 506 (2003), 250-303
WWW : <http://cern.ch/geant4>

Info in <TG4RootNavMgr::Initialize>: Creating G4 hierarchy ...
Info in <TGeoManager::ConvertReflections>: Converting reflections in: CBMGeom - CBM geometry ...
Info in <TGeoManager::ConvertReflections>: Done
==> GEANT4 materials created and mapped to TGeo ones...
==> GEANT4 physical volumes created and mapped to TGeo hierarchy...
INFO: TG4RootDetectorConstruction::Construct() finished
TG4PostDetConstruction::Initialize
G4 Stat: instantiated 247 logical volumes
 246 physical volumes
Info in <TG4RootNavMgr::ConnectToG4>: ROOT detector construction class connected to G4RunManager
Adding HadronPhysicsList QGSP_BERT_EMV

<<< Geant4 Physics List engine packaging library: PACK 5.4
<<< Geant4 Physics List simulation engine: QGSP_BERT_EMV 1.0

Adding OpticalPhysicsList
Adding SpecialPhysicsList
Debug mode is switched on.
Visualization Manager instantiating...
Visualization Manager initialising...
Registering graphics systems...

You have successfully registered the following graphics systems.

Current available graphics systems are:

- ASCIITree (ATree)
- DAWNFILE (DAWNFILE)
- G4HepRepFile (HepRepFile)
- G4HepRep (HepRepXML)
- RayTracer (RayTracer)
- VRML1FILE (VRML1FILE)
- VRML2FILE (VRML2FILE)

Registering model factories...

You have successfully registered the following model factories.

Registered model factories:

- drawByCharge
- drawByParticleID

Registered filter factories:

- None

Geant4 has been created.

-l g4Config() using g4conf macro:
/d/panda02/asanchez/fairsoft_marc08/pandaroot/gconfig/g4config.in


```

Physics cuts with script
/d/panda02/asanchez/fairsoft_marc08/pandaroot/gconfig/SetCuts.C
#### Adding Neutron tracking cut for neutron
#### cut value is 10 microseconds
#### Hadron physics constructed.
G4Cerenkov::G4Cerenkov constructor
NOTE: this is now a G4VDiscreteProcess!
Required change in UserPhysicsList:
change: pmanager->AddContinuousProcess(theCerenkovProcess);
to:   pmanager->AddProcess(theCerenkovProcess);
      pmanager->SetProcessOrdering(theCerenkovProcess,idxPostStep);
#### Optical physics constructed.
#### Processes mapped to VMC controls ok.
#### Step limiter physics constructed.
#### User particles physics constructed.
#### Processes mapped to VMC codes ok.
-l- CbmMCApplication -> simulation RunID: 142029661

```

```

*****
GEANT4 Geometry statistics:
  247 logical volumes
  246 physical volumes
   5 materials
   5 user limits
  247 sensitive detectors
*****

```

```

-l- CbmMCApplication:: Monte carlo Engine Initialisation with TGeant4
RuntimeDb: write container CbmBaseParSet
*** CbmBaseParSet written to ROOT file version: 1
RuntimeDb: write container PndGeoPassivePar
*** PndGeoPassivePar written to ROOT file version: 1
RuntimeDb: write container PndGeoHypPar
*** PndGeoHypPar written to ROOT file version: 1

```

```

----- actual containers in runtime database -----
CbmBaseParSet          Test class for parameter io
PndGeoPassivePar      Passive Geometry Parameters
PndGeoHypPar          Hyp Geometry Parameters

```

```

----- runs, versions -----
run id
  container          1st-inp  2nd-inp  output
run: 142029661
  CbmBaseParSet      142029661  -1      1
  PndGeoPassivePar   142029661  -1      1
  PndGeoHypPar       142029661  -1      1

```

```

----- input/output -----
first input: none
second input: none
output:
OBJ: CbmParRootFile  simparams.root : 0 at: 0x8502578
Root file I/O simparams.root is open

```

detector I/Os: CbmGenericParlo

phot: Total cross sections from Sandia parametrisation.
Sampling according PhotoElectric model

compt: Total cross sections has a good parametrisation from 10 KeV to (100/Z) GeV
Sampling according Klein-Nishina model
tables are built for gamma
Lambda tables from 100 eV to 100 GeV in 90 bins.

conv: Total cross sections has a good parametrisation from 1.5 MeV to 100 GeV for all Z;
sampling secondary e+e- according Bethe-Heitler model
tables are built for gamma
Lambda tables from 1.022 MeV to 100 GeV in 100 bins.

msc: Model variant of multiple scattering for e-
Lambda tables from 100 eV to 100 TeV in 120 bins.
LateralDisplacementFlag= 1 Skin= 0
Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

eloni: tables are built for e-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Delta cross sections and sampling from MollerBhabha model
Good description from 1 KeV to 100 GeV.
Step function: finalRange(mm)= 1, dRoverRange= 0.8, integral: 1, fluct: 1

eBrem: tables are built for e-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Total cross sections and sampling from StandBrem model (based on the EEDL data library)
Good description from 1 KeV to 100 GeV, log scale extrapolation above 100 GeV. LPM flag 1

eloni: tables are built for e+
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Delta cross sections and sampling from MollerBhabha model
Good description from 1 KeV to 100 GeV.
Step function: finalRange(mm)= 1, dRoverRange= 0.8, integral: 1, fluct: 1

eBrem: tables are built for e+
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Total cross sections and sampling from StandBrem model (based on the EEDL data library)
Good description from 1 KeV to 100 GeV, log scale extrapolation above 100 GeV. LPM flag 1

annihil: Sampling according eplus2gg model
tables are built for e+

Lambda tables from 100 eV to 100 TeV in 120 bins.

msc: Model variant of multiple scattering for proton

Lambda tables from 100 eV to 100 TeV in 120 bins.

LateralDisplacementFlag= 1 Skin= 0

Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

hloni: tables are built for proton

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Scaling relation is used from proton dE/dx and range.

Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV

Parametrisation from Bragg for protons below.

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

msc: Model variant of multiple scattering for Genericlon

LateralDisplacementFlag= 0 Skin= 0

Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 1

ionloni: tables are built for Genericlon

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Scaling relation is used from proton dE/dx and range.

Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV

Parametrisation from Bragg for protons below. NuclearStopping 1

Stopping Power data for 8 ion/material pairs are used.

Step function: finalRange(mm)= 0.1, dRoverRange= 0.1, integral: 1, fluct: 1

hloni: tables are built for anti_proton

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Scaling relation is used from proton dE/dx and range.

Delta cross sections and sampling from BetheBloch model for scaled energy > 2 MeV

Parametrisation from Bragg for protons below.

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

msc: Model variant of multiple scattering for mu+

Lambda tables from 100 eV to 100 TeV in 120 bins.

LateralDisplacementFlag= 1 Skin= 0

Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

muloni: tables are built for mu+

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Bether-Bloch model for E > 0.2 MeV, parametrisation of Bragg peak below,
radiative corrections for E > 1 GeV

Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

muBrems: tables are built for mu+

dE/dx and range tables from 100 eV to 100 TeV in 120 bins.

Lambda tables from threshold to 100 TeV in 120 bins.

Parametrised model

muPairProd: tables are built for mu+
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Parametrised model

muloni: tables are built for mu-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Bether-Bloch model for E > 0.2 MeV, parametrisation of Bragg peak below,
radiative corrections for E > 1 GeV
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

muBrems: tables are built for mu-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Parametrised model

muPairProd: tables are built for mu-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Parametrised model

G4UHadronElasticProcess for neutron PDGcode= 2112 Elow(MeV)= 19 Elowest(eV)= 0

hloni: tables are built for pi+
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Scaling relation is used from proton dE/dx and range.
Delta cross sections and sampling from BetheBloch model for scaled energy > 0.297504
MeV

Parametrisation from Bragg for protons below.
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

msc: Model variant of multiple scattering for pi-
Lambda tables from 100 eV to 100 TeV in 120 bins.
LateralDisplacementFlag= 1 Skin= 0
Boundary/stepping algorithm is active with RangeFactor= 0.2 Step limit type 0

hloni: tables are built for pi-
dE/dx and range tables from 100 eV to 100 TeV in 120 bins.
Lambda tables from threshold to 100 TeV in 120 bins.
Scaling relation is used from proton dE/dx and range.
Delta cross sections and sampling from BetheBloch model for scaled energy > 0.297504
MeV

Parametrisation from Bragg for protons below.
Step function: finalRange(mm)= 1, dRoverRange= 0.2, integral: 1, fluct: 1

===== Table of registered couples =====

Index : 0 used in the geometry : Yes recalculation needed : No

Material : air
Range cuts : gamma 1 mm e- 1 mm e+ 1 mm
Energy thresholds : gamma 990 eV e- 990 eV e+ 990 eV
Region(s) which use this couple :
DefaultRegionForTheWorld

Index : 1 used in the geometry : Yes recalculation needed : No
Material : vacuum
Range cuts : gamma 1 mm e- 1 mm e+ 1 mm
Energy thresholds : gamma 990 eV e- 990 eV e+ 990 eV
Region(s) which use this couple :
DefaultRegionForTheWorld

Index : 2 used in the geometry : Yes recalculation needed : No
Material : HYPdiamond
Range cuts : gamma 1 mm e- 1 mm e+ 1 mm
Energy thresholds : gamma 3.86474 keV e- 791.969 keV e+ 763.254 keV
Region(s) which use this couple :
DefaultRegionForTheWorld

Index : 3 used in the geometry : Yes recalculation needed : No
Material : HYPsilicon
Range cuts : gamma 1 mm e- 1 mm e+ 1 mm
Energy thresholds : gamma 6.88731 keV e- 540.718 keV e+ 521.113 keV
Region(s) which use this couple :
DefaultRegionForTheWorld

Index : 4 used in the geometry : Yes recalculation needed : No
Material : HYPcarbon
Range cuts : gamma 1 mm e- 1 mm e+ 1 mm
Energy thresholds : gamma 3.29462 keV e- 568.011 keV e+ 554.196 keV
Region(s) which use this couple :
DefaultRegionForTheWorld

=====

```
### Run 0 start.  
-I CbmAsciiGenerator: Event 1, vertex = (0,0,-76.5) cm, multiplicity 1  
-I CbmPrimaryGenerator: 1 primary tracks from vertex (0, 0, 0)  
>>> Event 0  
  
*** Break *** floating point exception  
Using host libthread_db library "/lib/libthread_db.so.1".  
Attaching to program: /proc/22483/exe, process 22483  
'system-supplied DSO at 0xffffe000' has disappeared; keeping its symbols.  
done.  
done.  
[Thread debugging using libthread_db enabled]  
[New Thread 16384 (LWP 22483)]  
done.  
done.  
done.
```

done.
done.
done.
done.
done.
done.
0x40ca7788 in waitpid () from /lib/libc.so.6
#1 0x40d2f8c0 in __DTOR_END__ () from /lib/libc.so.6
#2 0x40c40442 in do_system () from /lib/libc.so.6
#3 0x40bbac5f in system () from /lib/libpthread.so.0
#4 0x401f979f in TUnixSystem::Exec () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#5 0x401f9c63 in TUnixSystem::StackTrace ()
from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#6 0x401f75cc in TUnixSystem::DispatchSignals ()
from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#7 0x401f53a8 in SigHandler () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#8 0x401fcefefe in sighandler () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#9 0x40bb9825 in __pthread_sighandler () from /lib/libpthread.so.0
#10 <signal handler called>
#11 0x46a9a61c in G4VProcess::AtRestGPIL (this=0x9c86748, track=@0xa7ae350,
condition=0x99f53b8)
at G4VProcess.hh:434
#12 0x46a99001 in G4SteppingManager::InvokeAtRestDoltProcs (this=0x99f52b0) at
src/G4SteppingManager2.cc:284
#13 0x46a9d4ce in G4SteppingManager::Stepping (this=0x99f52b0) at
src/G4SteppingManager.cc:160
#14 0x46aa6b99 in G4TrackingManager::ProcessOneTrack (this=0x99f5288,
apValueG4Track=0xa7ae350)
at src/G4TrackingManager.cc:126
#15 0x46b93f24 in G4EventManager::DoProcessing (this=0x99f5240, anEvent=0x9a01ee8) at
src/G4EventManager.cc:185
#16 0x46b9473e in G4EventManager::ProcessOneEvent (this=0x99f5240,
anEvent=0x9a01ee8)
at src/G4EventManager.cc:335
#17 0x46c3402c in G4RunManager::DoEventLoop (this=0x99f5180, n_event=500,
macroFile=0x0, n_select=-1)
at src/G4RunManager.cc:235
#18 0x46c33974 in G4RunManager::BeamOn (this=0x99f5180, n_event=500, macroFile=0x0,
n_select=-1)
at src/G4RunManager.cc:140
#19 0x4749c51b in TG4RunManager::ProcessRun (this=0x9c86748, nofEvents=164128584)
at run/src/TG4RunManager.cxx:384
#20 0x474a3049 in TGeant4::ProcessRun (this=0x9c86748, nofEvents=164128584) at
run/src/TGeant4.cxx:1140
#21 0x4494f9c1 in CbmMCApplication::RunMC (this=0x85257a8, nofEvents=164128584)
at /d/panda02/asanchez/fairsoft_marc08/pandaroot/base/CbmMCApplication.cxx: 182
#22 0x44960f79 in CbmRunSim::Run (this=0x9c86748, NStart=164128584, NStop=0)
at /d/panda02/asanchez/fairsoft_marc08/pandaroot/base/CbmRunSim.cxx:148
#23 0x44995dd9 in G__CbmDict_530_0_5 (result7=0xbf873a90, funcname=0x84c23a0 "\001",

```
libp=0x1f4, hash=0)
  at /d/panda02/asanchez/fairsoft_marc08/build/base/CbmDict.cxx:9342
#24 0x40778856 in Cint::G__ExceptionWrapper ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#25 0x4084fddf in G__call_cppfunc () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#26 0x4083b969 in G__interpret_func () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#27 0x4081ab8c in G__getfunction () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#28 0x408e5469 in G__getstructmem () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#29 0x408e4792 in G__getvariable () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#30 0x4080fac0 in G__getitem () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#31 0x407fed80 in G__getexpr () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#32 0x4086faa8 in G__exec_function () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#33 0x4087f325 in G__exec_statement () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#34 0x407ea88a in G__exec_tempfile_core ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#35 0x407ebe41 in G__exec_tempfile () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#36 0x4088a8b4 in G__process_cmd () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCint.so.5.18
#37 0x401c5e45 in TCint::ProcessLine ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#38 0x401c6006 in TCint::ProcessLineSynch ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#39 0x4011fed0 in TApplication::ExecuteFile ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#40 0x4011f816 in TApplication::ProcessFile ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#41 0x4011f5a4 in TApplication::ProcessLine ()
  from /misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libCore.so.5.18
#42 0x40b47582 in TRint::Run () from
/misc/cbmsoft/Debian3.1/mar08/fairsoft/tools/root/lib/libRint.so.5.18
#43 0x08048e2e in main ()
Root >
```

Subject: Re: New External packages

Posted by [Mohammad Al-Turany](#) on Tue, 18 Mar 2008 12:14:47 GMT

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Hi Alicia,

remove the optical list in your g4Config.C and it should work!

i.e:

```
TG4RunConfiguration* runConfiguration  
= new TG4RunConfiguration("geomRoot", "QGSP_BERT_EMV");
```

regards

Mohammad

Subject: Re: New External packages
Posted by [Sebastian Neubert](#) on Thu, 20 Mar 2008 14:38:57 GMT
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Hi!

I just installed the new packages. Running the recotasks/demo/runMC.C gives this error:

```
===== CbmRunSim: Initialising simulation run =====  
Info in <TGeoManager::TGeoManager>: Geometry CBMGeom, CBM geometry created  
-I- CbmGeoMedia Read media  
Loading Geant4 granular libraries ...  
Error in <TUnixSystem::DynamicPathName>: libG4UIcommon[.so | .sl | .dl | .a | .dll] does not  
exist in  
./afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/tools/root/lib:./afs/e18/panda/SIM/FAIRRoot/fairso  
ft_etch/tools/root/lib:/usr/lib:/usr/X11R6/lib:/afs/e18/panda/SIM/sneubert/buildFair/lib:/afs/e18/p  
anda/SIM/FAIRRoot/fairsoft_etch/tools/root/lib:/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/gen  
erators/lib:/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/generators/lib:/afs/e18/panda/SIM/FAIR  
Root/fairsoft_etch/transport/geant3/lib/tgt_linux:/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/tran  
sport/geant4/lib/Linux-g++:/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/transport/geant4_vmc/li  
b/tgt_linux:/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/transport/vgm/lib:/afs/e18/panda/SIM/F  
AIRRoot/fairsoft_etch/cern/clhep/lib  
dlopen error:  
/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/transport/geant4/lib/Linux-g++/libG4UIbasic.so:  
undefined symbol: _ZTI13G4VBasicShell  
Load Error: Failed to load Dynamic link library  
/afs/e18/panda/SIM/FAIRRoot/fairsoft_etch/transport/geant4/lib/Linux-g++/libG4UIbasic.so
```

Any idea?

Cheers! Sebastian.

Subject: Re: New External packages
Posted by [Johan Messchendorp](#) on Thu, 20 Mar 2008 23:41:13 GMT
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Hi Sebastian,

It seems that your libG4UIcommon.so has not been build in geant4 part of the compilation of fairsoft. Probably missing a system library like "libXmu(-dev)", I also had it on my Debian etch (virtual) machines. Just check your output log, or rerun by hand a "make" in the .../geant4/sources/ directory, and it will show up what is missing to build the UI library. Maybe as a request to Florian or Mohammad: could the configuration script of fairsoft check whether all the geant4 libraries were compiled properly?

Johan.
