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Subject: Problem with G4 Libraries

Posted by [Ralf Kliemt](#) on Tue, 01 Apr 2008 16:04:01 GMT

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Hi everyone,

I switched to the new external packages and got the latest revision (2412). Nevertheless I experience a problem with the Geant4 libraries loading.

Output:

Toggle Spoiler

root [0]

Processing materialsim.C...

- RTDB container factory CbmBaseContFact

- RTDB container factory PndFieldContFact

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

- RTDB container factory PndPassiveContFact

- RTDB container factory PndTpcContFact

- RTDB container factory PndMvdContFact

PndStringVector for: ../data/mvdTestGeo.root

0: ..

1: data

2: mvdTestGeo.root

-I- CbmRun::SetMaterials() Media file used:

/home/ralfk/Pandaroot/pandaroot/geometry/media\_pnd.geo

- I - PndMvdDetector: fListOfSensitives contains:

Disk-Sensor

Barrel-Sensor

StripSensor

SensorActiveArea

===== CbmRunSim: Initialising simulation run =====

Info in <TGeoManager::TGeoManager>: Geometry CBMGeom, CBM geometry created

-I- CbmGeoMedia Read media

CbmMCApplication::SetRadiationLengthReg(Bool\_t RadLen)0x85625e0

Loading Geant4 granular libraries ...

Loading VGM libraries ...

Loading libraries ... finished

Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave

Material silicon is not defined

Create Medium silicon

Material aluminium is not defined

Create Medium aluminium

Material carbon is not defined

Create Medium carbon

CbmMCApplication::ConstructGeometry() : Now closing the geometry

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>: 9352 nodes/ 92 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 92 logical volumes
      273 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 SpecialPhysicsList
Debug mode is switched on.
Visualization Manager instantiating...
Visualization Manager initialising...
Registering graphics systems...
/home/ralfk/fairsoft/tools/root/bin/root.exe: symbol lookup error:
/home/ralfk/fairsoft/transport/geant4_vmc/lib/tgt_linux/libgeant4vmc.so: undefi
ned symbol: _ZN18G4OpenGLImmediateXC1Ev
```

The library is there. Everything should work.  
I'm out of clues.

Ralf.

PS: my macroToggle Spoiler

```
{
  TStopwatch timer;
  timer.Start();
  gDebug=0;
  int verboseLevel = 0;
```

```

Int_t nEvents = 10;
// ---- Load libraries -----
gROOT->Macro("../Libs.C");

CbmRunSim *fRun = new CbmRunSim();

fRun->SetName("TGeant4");

PndMvdFileNameCreator namecreator("../data/mvdTestGeo.root");
std::string filename = namecreator.GetSimFileName();
fRun->SetOutputFile(filename.c_str());

CbmModule *Cave= new PndCave("CAVE");
Cave->SetGeometryFileName("pndcave.geo");
fRun->AddModule(Cave);

CbmModule *Pipe= new PndPipe("PIPE");
Pipe->SetGeometryFileName("pipebeamtarget.geo");
fRun->AddModule(Pipe);

CbmDetector *Mvd = new PndMvdDetector("MVD", kFALSE);//kTRUE);
Mvd->SetGeometryFileName("MVD14.root");
Mvd->SetVerboseLevel(verboseLevel);
fRun->AddModule(Mvd);

CbmPrimaryGenerator* primGen = new CbmPrimaryGenerator();
fRun->SetGenerator(primGen);
//ROOTino
PndBoxGenerator *fBox1 = new PndBoxGenerator(0, 1);
  fBox1->SetXYZ(0.,0.,0.);
  fBox1->SetPRange(0.1,0.5);
  fBox1->SetThetaRange(0.,180.);
  fBox1->SetPhiRange(0.,360.);
  fBox1->SetCosTheta();
  primGen->AddGenerator(fBox1);

fRun->SetStoreTraj(kFALSE);
fRun->SetRadLenRegister(kTRUE);
fRun->Init();
Mvd->Initialize(); // do this, if the detector is not set active

// Fill the Parameter containers for this run
//-----

CbmRuntimeDb *rtdb=fRun->GetRuntimeDb();
Bool_t kParameterMerged=kTRUE;
CbmParRootFileIo* output=new CbmParRootFileIo(kParameterMerged);
output->open("../data/mvdTestGeo_partest.root");
rtdb->setOutput(output);
rtdb->saveOutput();
rtdb->print();

```

```
// Transport nEvents
// -----
fRun->SetTrackingDebugMode(false);
fRun->Run(nEvents);

timer.Stop();
Double_t rtime = timer.RealTime();
Double_t ctime = timer.CpuTime();
printf("RealTime=%f seconds, CpuTime=%f seconds\n",rtime,ctime);
}
```

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Subject: Re: Problem with G4 Libraries  
Posted by [Mohammad Al-Turany](#) on Wed, 02 Apr 2008 10:00:05 GMT  
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Hallo Ralf,

can you check please if your gconfig/g4libs.C macro is uptodate!

regards

Mohammad

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Subject: Re: Problem with G4 Libraries  
Posted by [Ralf Kliemt](#) on Wed, 02 Apr 2008 13:55:24 GMT  
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I suppose so.  
It is from the rev. 2290 (13.Mar.).

Ralf.