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);
}
```
