Subject: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Fri, 24 Nov 2017 13:55:51 GMT
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Hi,

the backtracking macro of the LMD does not work atm and crashes with the following error messages (I cut away the unimportant log parts)

Quote:
```
----------------------FairGeane::Init ()-----------------------------
Loading Geant3 libraries ...
Loading Geant3 libraries ... finished

 MZSTOR.  ZEBRA table base TAB(0) in /MZCC/ at adr  1026518087    3D2F6C47 HEX

 MZSTOR.  Initialize Store  0  in /GCBANK/
        with Store/Table at absolute adrs  1021071557  1026518087
                                HEX    3CDC50C5    3D2F6C47
                                HEX    FFACE2B2           0
                        relative adrs    -5446990           0
        with     1 Str. in     2 Links in   5300 Low words in 4999970 words.
        This store has a fence of   16 words.

 MZLOGL.  Set Log Level 0 for store  0
1*****  GEANT Version  3.21/11 Released on 100298
0*****  Correction Cradle Version  0.1100

 MZDIV.   Initialize Division  Constant  in Store  0
        NW/NWMAX=   20004000000,  MODE/KIND=  1  2
        Division 20 initialized.

 MZLINK.  Initialize Link Area  /GCLINK/  for Store  0 NL/NS=    20    20

 MZLINK.  Initialize Link Area  /GCSLNK/  for Store  0 NL/NS=   100   100
-I- G3Config: Geant3 with TGeo has been created for Geane.
-I- Geane.C: NOPRNT flag set to 1
-I- Geane.C: IERR flags are not printed. If you want to switch them on, please set
fErtrio1->noprnt = 0 in Geane.C
Energy straggling area parameter from user set to: 0.999
0*** GSTMED *** Warning, medium =      2, value of EPSIL= 0.000E+00 reset to 1 micron

 Calculating cross section tables, see gphysi.dat for more information

 !!!!! ZFATAL called from MZTABC
            called from MZTABR
            called from MZGAR1
            called from MZLIFT
            called from MZBOOK

 !!!!! ZFATAL reached from MZTABC    for Case=  1
```

IQUEST(11) = 4992103 4C2C67
IQUEST(12) = 4991367 4C2987
IQUEST(13) = 4999968 4C4B20

Current Store number = 0 (JQDIVI=20)
1ZEBRA SYSTEM Post-Mortem from ZPOSTM.

The crash occurs in the BuildPhysics() function call of the TVirtualMC (here of type TGeant3TGeo). The call to BuildPhysics() is made within the FairGeaneApplication::InitMC(). I'm using FairSoft 17.03.

Quote:
```
void FairGeaneApplication::InitMC(const char*, const char*)
{
// Initialize MC.

  TVirtualMC::GetMC()->Init();
  TVirtualMC::GetMC()->BuildPhysics();
  fMcVersion = 3;  //Geane

  TVirtualMC::GetMC()->SetMagField(fxField);
}
```

Any help is appreciated. Thanks in advance

Stefan

Subject: Re: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Mon, 27 Nov 2017 15:29:41 GMT
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Hi,

I think this problem is more general. Does anyone use the pandaroot trunk (so with ROOT6) and performs simulations with geant3? I think this does not work either...

Cheers,
Stefan

Subject: Re: Initialization Error of Geane using Geant3
Posted by Tobias Stockmanns on Mon, 27 Nov 2017 15:37:53 GMT
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Dear Stefan,

try to delete the simparam.root file and redo the simulation. We check the operation of the trunk every night with our CDASH system.

There no problem of Geant3 is reported.

Cheers,

Tobias

Subject: Re: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Mon, 27 Nov 2017 17:40:40 GMT
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Hi Tobias,

thx for the info. I tried to delete the simparam.root file but same result. But know I know that Geant3 runs fine with the Pandaroot trunk, and I can check what I have different

Thx
Stefan

Subject: Re: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Tue, 28 Nov 2017 10:26:34 GMT
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Hi again,

so I ran the master simulation macros etc on my machine with the same result.

Then I also checked the CDash and it seems like that it does not work...
https://cdash.gsi.de/viewTest.php?onlyfailed&buildid=165787

From the CDash results it looks like the problem comes from a change in FairRoot. Versions 16 seems to run, but not for version 17. I will investigate a bit further

Cheers,
Stefan

Subject: Re: Initialization Error of Geane using Geant3
Posted by Tobias Stockmanns on Tue, 28 Nov 2017 10:32:54 GMT
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Hi Stefan,

the CDASH you are refering to shows the same problem as you have but yesterday it did not have this problems:

https://cdash.gsi.de/viewTest.php?buildid=165682&onlyfailed

The software has not changed from yesterday to today. Therefore it seems that this problem

shows up randomly which is a bit strange.

Cheers,

Tobias

Subject: Re: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Tue, 28 Nov 2017 10:37:40 GMT
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Hi Tobias,

hmm yeah strange indeed... A pity the log is truncated. Thx for the information

Stefan

Subject: Re: Initialization Error of Geane using Geant3
Posted by Stefan Pflueger on Fri, 08 Dec 2017 13:11:12 GMT
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Hello,

this problem is fixed by now. Florian and Mohammad inspected this (see https://github.com/FairRootGroup/FairRoot/issues/686).

The issue arises from a conflict of geant3 with the optimizations done by the gcc 6.4.0, which I was using. Turning off the optimizations for the geant3 library fixes this kind of crash.

Cheers,
Stefan