Subject: Problem with FairMCApplication with R3BRoot on dev-branch
Posted by Anna Corsi on Wed, 08 Nov 2017 14:07:14 GMT
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Hello,

I have a segmentation fault when running r3bsim_g4.C macro with a target geometry created by myself within the dev-branch of R3BRoot. I use the dev-branch to get the updated version of Startrack classes. I am running the simulation on GSI cluster with pre-installed ROOT6, FairSoft, FairRoot.
I also tried to re-create existing geometries, and the problem persist. Therefore I don't believe the problem is with the geometry definition. Below is the error message.

Any idea?
Thanks in advance,
Anna

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#6 R3BTarget::ConstructGeometry (this=0x77b5760) at
/u/lndgst01/r3b/R3BRoot/passive/R3BTarget.cxx:33
#7 0x00007fa2950201d7 in FairMCApplication::ConstructGeometry (this=0x786be70) at
/home/uhlig/fairroot/source/v-17.10a/base/sim/FairMCApplication.cxx:942
#8 0x00007fa283964367 in TG4RunManager::ConfigureRunManager (this=this
entry=0x81e8620) at
/home/uhlig/fairsoft/source/oct17_root6/transport/geant4_vmc/source/run/
src/TG4RunManager.cxx:176
#9 0x00007fa283965012 in TG4RunManager::TG4RunManager (this=0x81e8620,
runConfiguration=<optimized out>, argc=<optimized out>, argv=<optimized out>) at
/home/uhlig/fairsoft/source/oct17_root6/transport/geant4_vmc/source/run/
src/TG4RunManager.cxx:102
#10 0x00007fa2839667fe in TGeant4::TGeant4 (this=0x855c120, name=<optimized out>,
title=<optimized out>, configuration=0x81dea00, argc=0, argv=0x0) at
/home/uhlig/fairsoft/source/oct17_root6/transport/geant4_vmc/source/run/ src/TGeant4.cxx:229
#11 0x00007fa2a0c7f1d2 in ?? ()
#12 0x00000000017a0140 in ?? ()
#13 0x00007fa29be3bb61 in cling::Value::determineStorageType (QT=...) at
/home/uhlig/fairsoft/source/oct17_root6/tools/root/interpreter/cling/lib /Interpreter/Value.cpp:187
#14 0x00007ffc4e8b8ee0 in ?? ()
#15 0x00007fa2a08be290 in vtable for TString () from
/cvmfs/fairroot.gsi.de/fairsoft/oct17_root6/lib/root/libCore.so.6.10
#16 0x4e495f505347511c in ?? ()
#17 0x0050485f58584c43 in ?? ()
#18 0x00007fa2a08be290 in vtable for TString () from
/cvmfs/fairroot.gsi.de/fairsoft/oct17_root6/lib/root/libCore.so.6.10
#19 0x0000001700000021 in ?? ()
#20 0x00000000080c0050 in ?? ()
#21 0x00007fa2a08be290 in vtable for TString () from
/cvmfs/fairroot.gsi.de/fairsoft/oct17_root6/lib/root/libCore.so.6.10
#22 0x6f6f526d6f656710 in ?? ()
#23 0x0000000001740074 in ?? ()
#24 0x00007ffc4e8b8ee0 in ?? ()

#25 0x00007fa2a02fd660 in ?? () from /usr/lib/x86_64-linux-gnu/libstdc++.so.6
#26 0x0000000000000000 in ?? ()
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Subject: Re: Problem with FairMCApplication with R3BRoot on dev-branch
Posted by Dmytro Kresan on Fri, 10 Nov 2017 08:06:53 GMT
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Hello Anna,

I have tested the r3bsim_g4.C macro with re-created geometries, exactly with your software configuration on GSI linux cluster. I can not reproduce your segmentation fault.
Please post here the macro, which you use to create your own target geometry.

Just to be sure. What do you mean by "re-creating" other geometries? Can you post here the commands you have used for that?

Best regards,
Dima

Subject: Re: Problem with FairMCApplication with R3BRoot on dev-branch
Posted by Anna Corsi on Mon, 13 Nov 2017 09:15:21 GMT
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Hi Dima,

Here is the file I use to create the target. I just added the function "CreateGeometry8".
By "re-create" I mean run the macro to generate anew a target that was already available in the macro, ie CreateGeometry# with # up to 7.
Just let me stress that I used the R3BRoot on dev-branch to get the updated startrack class.

Cheers,
Anna

File Attachments
1) create_target_geo.C, downloaded 339 times

Subject: Re: Problem with FairMCApplication with R3BRoot on dev-branch
Posted by Dmytro Kresan on Mon, 27 Nov 2017 14:22:50 GMT
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Hi Anna,

I have found the problem. Here is the line from R3BTarget::ConstructGeometry() :

TGeoNode* main_vol = gGeoManager->GetTopVolume()->FindNode("TargetEnveloppe_0");

So you need to name the logical volume with H2 as "TargetEnveloppe" (inside of your ConstructGeometry8 function).

Best regards,
Dima
