Subject: segmentation violation in sim macro
Posted by Ajay Kumar on Tue, 18 Sep 2012 19:20:26 GMT
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Hi ..

I have installed fairsoft jan12 and pandaroot nov11 on my ubentu 12.04. As I run simulation for 10^5 events inside my sim macro(pandaroot/macro/pid/) getting a crash after several thousand events.the pandaroot revision is 17102.I have seen one older post by Albrecht Gillitzer on the same topic.it seems similer to me.but still no solution is there if am not wrong.I have attached my simulation macro here and crash is looks like as :-

[INFO] FairPrimaryGenerator: (Event 16430) 2 primary tracks from vertex (0.000000, 0.000000, 0.000000) Event Time = 0.000000 (ns)
DIGI EXECUTION **********
-I- PndStt: 0 points registered in this event.
-I- PndFts: 49 points registered in this event.
**** GTRIGI: IEVENT= 16431 IDEVT= 16431 Random Seeds = 1347986948 0
[INFO] FairPrimaryGenerator: (Event 16431) 6 primary tracks from vertex (0.000000, 0.000000, 0.000000) Event Time = 0.000000 (ns)

*** Break *** segmentation violation

==========
There was a crash.
This is the entire stack trace of all threads:
==========
#0 0x00007ff5b3fd4c3e in waitpid () from /lib/x86_64-linux-gnu/libc.so.6
#1 0x00007ff5b3f5af5e in ?? () from /lib/x86_64-linux-gnu/libc.so.6
#2 0x00007ff5b4e86347 in TUnixSystem::StackTrace() () from /home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#3 0x00007ff5b4e88bc3 in TUnixSystem::DispatchSignals(ESignals) () from /home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#4 <signal handler called>
#5 0x00007ff5b1781238 in TGeoVolumeAssembly::SetNextNodeIndex(int) () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#6 0x00007ff5b17567ff in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#7 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#8 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#9 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#10 0x00007ff5b17567d7 in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#11 0x00007ff5b17567d7 in TGeoShapeAssembly::DistFromOutside(double*, double*, int, double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#12 0x00007ff5b173187c in TGeoNavigator::FindNextDaughterBoundary(double*, double*,

int&, bool) () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#13 0x00007ff5b1735df9 in TGeoNavigator::FindNextBoundary(double, char const*, bool) ()
from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#14 0x00007ff59e27c88c in gtnextTGeo () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#15 0x00007ff59e0f5d14 in g3tmuon_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#16 0x00007ff59e0ff54f in g3track_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#17 0x00007ff59e27a8aa in gutrak_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#18 0x00007ff59e100a99 in gtreveroot_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#19 0x00007ff59df82244 in g3trig_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#20 0x00007ff59e26c84c in TGeant3::ProcessRun(int) () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#21 0x00007ff5a99ec205 in FairMCApplication::RunMC (this=0x2d093b0, nofEvents=100000)
at /home/ajay/pandaroot/base/FairMCApplication.cxx:224
#22 0x00007ff5a9a1d91a in FairRunSim::Run (this=0x216c680, NEvents=100000,
NotUsed=0) at /home/ajay/pandaroot/base/FairRunSim.cxx:351
#23 0x00007ff5a9a8897d in G__FairDict_982_0_5 (result7=0x7fff6f466e70,
funcname=0x21683e0 "", libp=0x7fff6f45c460, hash=0) at
/home/ajay/pandaroot/buildPanda/base/FairDict.cxx:15294
#24 0x00007ff5b33caa3b in Cint::G__ExceptionWrapper(int (*)(G__value*, char const*,
G__param*, int), G__value*, char*, G__param*, int) () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#25 0x00007ff5b346fe11 in G__execute_call () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#26 0x00007ff5b34701fe in G__call_cppfunc () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#27 0x00007ff5b3450ba7 in G__interpret_func () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#28 0x00007ff5b343d086 in G__getfunction () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#29 0x00007ff5b35270e0 in G__getstructmem(int, G__FastAllocString&, char*, int, char*, int*,
G__var_array*, int) () from /home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#30 0x00007ff5b351deca in G__getvariable () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#31 0x00007ff5b341681b in G__getitem () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#32 0x00007ff5b341cf04 in G__getexpr () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#33 0x00007ff5b34a0326 in G__exec_statement () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#34 0x00007ff5b344ecf7 in G__interpret_func () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#35 0x00007ff5b343d0ee in G__getfunction () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#36 0x00007ff5b3416fc9 in G__getitem () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#37 0x00007ff5b341cf04 in G__getexpr () from

/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#38 0x00007ff5b3428c0c in G__calc_internal () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#39 0x00007ff5b34afd6f in G__process_cmd () from
/home/ajay/fairsoftj12/tools/root/lib/libCint.so.5.32
#40 0x00007ff5b4e507ea in TCint::ProcessLine(char const*, TInterpreter::EErrorCode*) () from
/home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#41 0x00007ff5b4e471e3 in TCint::ProcessLineSynch(char const*, TInterpreter::EErrorCode*)
() from /home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#42 0x00007ff5b4db95c4 in TApplication::ExecuteFile(char const*, int*, bool) () from
/home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#43 0x00007ff5b4db82ff in TApplication::ProcessLine(char const*, bool, int*) () from
/home/ajay/fairsoftj12/tools/root/lib/libCore.so.5.32
#44 0x00007ff5b4a197da in TRint::Run(bool) () from
/home/ajay/fairsoftj12/tools/root/lib/libRint.so.5.32
#45 0x0000000000400f6c in main ()
==========

The lines below might hint at the cause of the crash.
If they do not help you then please submit a bug report at
http://root.cern.ch/bugs. Please post the ENTIRE stack trace
from above as an attachment in addition to anything else
that might help us fixing this issue.
==========
#5 0x00007ff5b1781238 in TGeoVolumeAssembly::SetNextNodeIndex(int) () from
/home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#6 0x00007ff5b17567ff in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#7 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#8 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#9 0x00007ff5b1756962 in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#10 0x00007ff5b17567d7 in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#11 0x00007ff5b17567d7 in TGeoShapeAssembly::DistFromOutside(double*, double*, int,
double, double*) const () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#12 0x00007ff5b173187c in TGeoNavigator::FindNextDaughterBoundary(double*, double*,
int&, bool) () from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#13 0x00007ff5b1735df9 in TGeoNavigator::FindNextBoundary(double, char const*, bool) ()
from /home/ajay/fairsoftj12/tools/root/lib/libGeom.so
#14 0x00007ff59e27c88c in gtnextTGeo () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#15 0x00007ff59e0f5d14 in g3tmuon_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#16 0x00007ff59e0ff54f in g3track_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#17 0x00007ff59e27a8aa in gutrak_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#18 0x00007ff59e100a99 in gtreveroot_ () from

/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#19 0x00007ff59df82244 in g3trig_ () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#20 0x00007ff59e26c84c in TGeant3::ProcessRun(int) () from
/home/ajay/fairsoftj12/transport/geant3/lib/tgt_linuxx8664gcc/libgeant32 1.so
#21 0x00007ff5a99ec205 in FairMCApplication::RunMC (this=0x2d093b0, nofEvents=100000)
at /home/ajay/pandaroot/base/FairMCApplication.cxx:224
#22 0x00007ff5a9a1d91a in FairRunSim::Run (this=0x216c680, NEvents=100000,
NotUsed=0) at /home/ajay/pandaroot/base/FairRunSim.cxx:351
==========

Root > Function run_sim_sttcombi_dpm() busy flag cleared

can anyone suggest me what I should do for the solution of this problem?

File Attachments

1) run_sim_sttcombi_dpm.C, downloaded 492 times

Subject: Re: segmentation violation in sim macro
Posted by StefanoSpataro on Tue, 18 Sep 2012 20:31:47 GMT
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Please try some more recent code, i.e. sep12 external packages and the latest trunk. Second, it is not recommended to create large files, it is better to run more files with less events. I.e. maximum of 1000 events, in order to reduce the probability of crashes and to waste less time in the case.

Subject: Re: segmentation violation in sim macro
Posted by Ajay Kumar on Thu, 20 Sep 2012 13:31:07 GMT
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Hi Stefano,

Thanks for your reply. but one think I could not understand that how to run more file with less event.suppose I want to generate 50 thousands events,for this job I have to run my macro 5 times by taking 10 thousand event each time.As much as I know,every time it will repeat the same events.

So shell I have to do some changes in seeds ??
or Already some run script is there by using that I can do my work??

Thanks

Subject: Re: segmentation violation in sim macro
Posted by Stefan Pflueger on Fri, 21 Sep 2012 09:29:18 GMT
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Hi,

I'm not totally sure that I understood your question completely, but here goes my answer:
I haven't tested your macro myself but in case this runs fine now, all you need to do is call the macro with different seed numbers to obtain "independent" samples. So by running

root -l -b -q run_sim_sttcombi_dpm.C\(10000, 1.5, 1, 123456.\)

you would obtain data with 10000 events which are generated with DPM with 1.5 GeV beam momentum in mode 1 (elastic & inelastic) with a seed of 123456. Change these numbers to your needs.

To automate this, you can use for example the $RANDOM variable in bash (in case this macro is not running very long)

for i in `seq 1 5`; do root -l -q run_sim_sttcombi_dpm.C\(10000, 1.5, 1, $RANDOM\); done

Otherwise you need to write something to submit it to some cluster etc.

Best regards,

Stefan

Subject: Re: segmentation violation in sim macro
Posted by Ajay Kumar on Tue, 25 Sep 2012 15:45:17 GMT
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Hi Stefan,

Sorry I delayed to reply you.

I have just given some seed no (as 12050) in my macro than its works fine with 100000 events.

Thanks for your reply.