
Subject: Problem with a symbol lookup
Posted by [Ralf Kliemt](#) on Tue, 04 Sep 2007 11:05:32 GMT
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Hi everybody.

I have a problem with my mvd code.

First of all: It Compiles.

When running the macro (calling the MvdRecoTask("Simple")) it crashes with

```
/data_hilbert/Software/fairroot/cbmsoft/tools/root/bin/root.exe: symbol lookup error:  
/home/ralfk/Pandaroot/build/lib/libMvdReco.so: undefined symbol:  
_ZN12MvdCalcStrip20CalcStripPointOnLineEdR8TVector2
```

This happens in the SimpleHitmaker.cxx, where I want to access the
MvdCalcStrip::CalcStripPointOnLine() function. There is a similar calling with the
MvdCalcFePixel and this works.

The thing is that I have the class MvdCalcStrip compiled into the library libMvd.so and my
SimpleHitMaker is inside the libMvdReco.so. If I look inside the libraries I find this:

```
ralfk@pktw61:~/Pandaroot/pandaroot/macro/mvd/Ralf> nm ../../../../build/lib/libMvdReco.so |  
grep _ZN12MvdCalcStrip20CalcStripPointOnLineEdR8TVector2  
U _ZN12MvdCalcStrip20CalcStripPointOnLineEdR8TVector2  
ralfk@pktw61:~/Pandaroot/pandaroot/macro/mvd/Ralf> nm ../../../../build/lib/libMvd.so | grep  
_ZN12MvdCalcStrip20CalcStripPointOnLineEdR8TVector2  
0002ff20 T _ZN12MvdCalcStrip20CalcStripPointOnLineEdR8TVector2
```

It means the Function is undefined inside the LibMvdReco and it is there inside the LibMvd. I
think there should be no Problem at all.

And I did load both libraries in the needed order.

Any Ideas?

Regards, Ralf.

Subject: Re: Problem with a symbol lookup
Posted by [Mohammad Al-Turany](#) on Tue, 04 Sep 2007 11:58:12 GMT
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Hallo Ralf,

can you commit these classes and the macro to SVN so I can reproduce this error!

Mohammad

Subject: Re: Problem with a symbol lookup
Posted by [Ralf Kliemt](#) on Tue, 04 Sep 2007 12:23:40 GMT
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Hi,

I committed my changes and the macros. To get the data please run in
pandaroot/macros/mvd/Ralf the runsim.C and rundigi.C first before the runreco.C.

Thanks,
Ralf.

Subject: Re: Problem with a symbol lookup
Posted by [Mohammad Al-Turany](#) on Tue, 04 Sep 2007 13:31:49 GMT
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Hallo Ralf,

after SVN update I get your code, runsim.C and rundigi.C go without problems, but thr
runreco.C crashes in the MvdDigiStrip::GetDetName() method, which should only return a
TString?? Any way I did not see the problem with symbol lookup at all, So may be you should
make clean and then re-make again!

the output of simreco.C :

```
root [0]
Processing runreco.C...
```

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

```
- RTDB container factory CbmBaseContFact
- RTDB container factory CbmFieldContFact
- RTDB container factory CbmPassiveContFact
- RTDB container factory TpcContFact
- RTDB container factory MvdContFact
-I- CbmRunAna: Opening Input file: ../data/testMC10k.root
-I- CbmRunAna Input file: ../data/testMC10k.root is connected to friend: ../data/testDigi10k.root
Warning in <TClass::TClass>: no dictionary for class PndBoxGenerator is available
Simple Reconstruction task for PANDA Mvd
```

```
-I- CbmRunAna::Init :
../data/testMC10k.root is connected with: ../data/testDigi10k.root
```

```
Info in <TGeoManager::CloseGeometry>: Geometry loaded from file...
Info in <TGeoManager::SetTopVolume>: Top volume is cave. Master volume is cave
Info in <TGeoManager::Voxelize>: Voxelizing...
Info in <TGeoManager::BuildCache>: --- Maximum geometry depth is 100
```

Info in <TGeoManager::CloseGeometry>: 9347 nodes/ 87 volume UID's in CBM geometry
Info in <TGeoManager::CloseGeometry>: -----modeler ready-----
CbmFieldCreator::SetParm()
create CbmFieldPar container CbmFieldPar
create CbmFieldPar container PndSolenoidPar
create CbmFieldPar container PndDipolePar
create CbmFieldPar container PndTransPar
create CbmFieldPar container PndConstPar
create CbmFieldPar container PndMultiFieldPar

initialisation for run id 1606028375

-I- MvdDetector: fListOfSensitives contains:

Disk-Sensor
Barrel-Sensor
StripSensor
SensorActiveArea

Error in <TBuffer::ReadObject>: trying to read an emulated class (PndBoxGenerator) to store in a compiled pointer (TObject)

Container CbmBaseParSet initialized from ROOT file.

Error in <CbmFieldPar::init()>: CbmFieldPar not initialized

Error in <PndSolenoidPar::init()>: PndSolenoidPar not initialized

Error in <PndDipolePar::init()>: PndDipolePar not initialized

Error in <PndTransPar::init()>: PndTransPar not initialized

Error in <PndConstPar::init()>: PndConstPar not initialized

Error in <PndMultiFieldPar::init()>: PndMultiFieldPar not initialized

Error in <CbmRuntimeDb::initContainers()>: Error occured during initialization

CbmFieldCreator::createCbmField()

MvdDetectorDescr::MvdDetectorDescr() called.

MvdRecoTask::Exec() started event no. 1

MvdSimpleHitMaker::makeHits(): Error in arguments:

pixelarray = 0xbfce3ea4
striparray = 0xbfce3e98
clusterarray = 0xbfce3e8c

itstrip = 0xaaaf780

itstrip = 0xab18f38

itstrip = 0xaaaf370

itstrip = 0xaaaf3fa8

itstrip = 0xaaeabe0

itstrip = 0xaae1818

itstrip = 0xaad8450

itstrip = 0xaacf088

itstrip = 0xaabc8d0

itstrip = 0xab2baa8

itstrip = 0xab226c8

itstrip = 0xab0fee0

itstrip = 0xab06b08

itstrip = 0xaaaf4318

itstrip = 0xaaeaf50

itstrip = 0xaae1b88

itstrip = 0xaad87c0

itstrip = 0xaacf3f8
itstrip = 0xaac6030
itstrip = 0xaab3878

*** Break *** segmentation violation
Using host libthread_db library "/lib/libthread_db.so.1".
Attaching to program: /proc/9949/exe, process 9949
[Thread debugging using libthread_db enabled]
[New Thread -1238600016 (LWP 9949)]
0xffffe410 in __kernel_vsyscall ()
#1 0xb6386753 in __waitpid_nocancel () from /lib/libc.so.6
#2 0xb63313bb in do_system () from /lib/libc.so.6
#3 0xb64296bd in system () from /lib/libpthread.so.0
#4 0xb783af0b in TUnixSystem::Exec () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#5 0xb783f476 in TUnixSystem::StackTrace () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#6 0xb783e485 in TUnixSystem::DispatchSignals () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#7 0xb783e619 in SigHandler () from /home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#8 0xb783802d in sighandler () from /home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#9 <signal handler called>
#10 0xb798746f in TString::TString () from /home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#11 0xb2d7699e in MvdDigiStrip::GetDetName (this=0x71)
 at /home/turany/cbmsoft/svn/pandaroot/mvd/MvdData/MvdDigiStrip.h:33
#12 0xb2cf94c8 in MvdSimpleHitMaker::makeHits (this=0xaa4a5b8, pixelarray=@0xbfce3ea4,
 striparray=@0xbfce3e98,
 clusterarray=@0xbfce3e8c) at
/home/turany/cbmsoft/svn/pandaroot/mvd/MvdReco/MvdSimpleHitMaker.cxx:191
#13 0xb2cf4bc7 in MvdRecoTask::Exec (this=0x8fde8b8, opt=0xb32a4c60 "")
 at /home/turany/cbmsoft/svn/pandaroot/mvd/MvdReco/MvdRecoTask.cxx:209
#14 0xb776a363 in TTask::ExecuteTasks () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#15 0xb7769e01 in TTask::ExecuteTask () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#16 0xb323af75 in CbmRunAna::Run (this=0x8c56d50, Ev_start=0, Ev_end=10)
 at /home/turany/cbmsoft/svn/pandaroot/base/CbmRunAna.cxx:144
#17 0xb327024f in G__CbmDict_764_0_8 (result7=0xbfcf1c6c, funcname=0x8c4f3c8 "001",
libp=0xbfcee1c8, hash=0)
 at /home/turany/cbmsoft/svn/build/base/CbmDict.cxx:9065
#18 0xb71fb5c5 in Cint::G__ExceptionWrapper () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#19 0xb72e901b in G__call_cppfunc () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#20 0xb72c184b in G__interpret_func () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#21 0xb72b4909 in G__getfunction () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#22 0xb7359654 in G__getstructmem () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#23 0xb734f9d7 in G__getvariable () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#24 0xb727c97c in G__getitem () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#25 0xb728f3e5 in G__getexpr () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#26 0xb72f8727 in G__exec_function () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14

#27 0xb72fdb0 in G__exec_statement () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#28 0xb7267bd4 in G__exec_tempfile_core () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#29 0xb7267e53 in G__exec_tempfile () from
/home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#30 0xb730ad79 in G__process_cmd () from /home/turany/cbmsoft/tools/root/lib/libCint.so.5.14
#31 0xb77adb64 in TCint::ProcessLine () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#32 0xb77a83d4 in TCint::ProcessLineSynch () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#33 0xb76db3c5 in TApplication::ProcessFile () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#34 0xb76d7bde in TApplication::ProcessLine () from
/home/turany/cbmsoft/tools/root/lib/libCore.so.5.14
#35 0xb65692d3 in TRint::Run () from /home/turany/cbmsoft/tools/root/lib/libRint.so.5.14
#36 0x08048db0 in main ()

Subject: Re: Problem with a symbol lookup
Posted by [Ralf Kliemt](#) on Tue, 04 Sep 2007 13:32:48 GMT
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Ok, well.

I found another strange error before calling the function and so it doesn't appear anymore.
Now I get some segfaults which are surely my own mistakes.

Cheers, Ralf.

Edit:
Yes, Now I somehow crashed my pointers to my data
MvdDigiStrip::GetDetName (this=0x71)
I'll follow this...

Thanks for helping. Ralf.
