Subject: Modified FairLinks
Posted by Tobias Stockmanns on Wed, 22 Dec 2010 13:53:23 GMT
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Dear colleagues,

as anounced already in the EVO meeting today, I have redesigned the storage of the FairLinks in the Tree. This work has reached a stage were it has to be tested by other users. Especially if the TPC digitization problems still exist and how the memory consumption develops during a simulation.

The new FairLinks work for MVD, TPC and Lhe. For all other detectors the dependence of FairMultiLinkedData has been removed.

The files can be found in the development branch of pandaRoot in the branch FairExtLink_TS. It contains a full pandaRoot installation.

I wish you all a Merry Christmas and a Happy New Year.

Cheers,

Tobias

Subject: Re: Modified FairLinks
Posted by StefanoSpataro on Thu, 23 Dec 2010 14:02:26 GMT
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Hi,
maybe you have forgotten something in your development pandaroot:

```
[spataro@pandafarm04 build]$ cmake ../pandaroot_ts/
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/bin/gcc
-- Check for working C compiler: /usr/bin/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/bin/c++
-- Check for working CXX compiler: /usr/bin/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- The Fortran compiler identification is GNU
-- Check for working Fortran compiler: /usr/bin/gfortran
-- Check for working Fortran compiler: /usr/bin/gfortran -- works
-- Checking whether /usr/bin/gfortran supports Fortran 90
-- Checking whether /usr/bin/gfortran supports Fortran 90 -- yes
CMake Error at CMakeLists.txt:21 (include):
  include could not find load file:

    FairMacros
```

```
CMake Error at CMakeLists.txt:22 (include):
  include could not find load file:

    WriteConfigFile


CMake Error at CMakeLists.txt:24 (include):
  include could not find load file:

    CheckCompiler


CMake Error at CMakeLists.txt:25 (include):
  include could not find load file:

    CheckFortran


CMake Error at CMakeLists.txt:29 (Check_Compiler):
  Unknown CMake command "Check_Compiler".


-- Configuring incomplete, errors occurred!
[spataro@pandafarm04 build]$
```

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Subject: Re: Modified FairLinks
Posted by StefanoSpataro on Thu, 23 Dec 2010 14:07:31 GMT
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Exactly:

cmake
trackbase
geane
eventdisplay
geobase
parbase
generators
genfit

i.e. the external packets but base.
Should I add them in the dev ?

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Subject: Re: Modified FairLinks
Posted by Tobias Stockmanns on Fri, 24 Dec 2010 08:23:20 GMT
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Hi Stefano,

for me I did a complete new check out of pandaRoot based on the development branch and it added automatically the external packages. Therefore I did not add them by hand into the SVN branch. It is strange that it did not work for you.

You can add them.

Have a Merry Christmas today.

Ciao,

Tobias

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Subject: Re: Modified FairLinks
Posted by StefanoSpataro on Sun, 23 Jan 2011 15:09:31 GMT
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Hi,
I did find the time to check the tpc digitization problem with the modified version of FairLinks from Tobias.

To perform the check, I have used a lenny64 machine at GSI.

I have tried the standard "jan10" external packages -> crash
I have tried the trunk external packages -> crash
I have tried Tobias development version of Links and jan10 -> crash

In this sense, it seems Tobias' changes do not improve the situation. By the way, I had to comment out GEM because they were hanging the digitization with the dev links, probably there is something wrong inside.

From my side, the last think to try is to run it on a machine w/o nfs to see if this is the cause.

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Subject: Re: Modified FairLinks
Posted by Tobias Stockmanns on Mon, 24 Jan 2011 10:33:43 GMT
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Dear all,

I am realy confused. The way the FairLinks are stored now is exactly the same way the rest of the PANDA data is stored (as a TClonesArray of data objects(FairLink in this case)). The FairLink is a very simple object just with a few integers and a float. I do not see a reason why this still can cause crashes from the code point of view.

Maybe it is just the huge number of links needed for the TPC and the EMC which blast the RAM. If this is the case we have a general problem which is just intensified by the FairLink.

Cheers,

Tobias