Subject: pandaroot meeting, 10 May, 14:00
Posted by Johan Messchendorp on Sun, 08 May 2011 17:52:24 GMT
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Dear all,

As a reminder: the next pandaroot meeting will take place on Tuesday at 14:00 (EVO).
Tentative agenda points:

*) general announcements
*) preparations TDR campaign:
  - new external packages (may11)
  - GRID issues
  - status of code: status modules, eventmixing in TPC code, performances, DPM cutoff, ...
  - when may-pandaroot release?
*) AOB

Johan.

Subject: coordinates...
Posted by Johan Messchendorp on Tue, 10 May 2011 10:32:20 GMT
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Title: pandaroot
Description:
Community: Panda

Meeting Access Information:
- Meeting URL
  http://evo.caltech.edu/evoNext/koala.jnlp?meeting=MsMiMI282aDnDD9l99Dt9s

- Phone Bridge
 ID: 337 2317

Central European Summer Time (+0200)
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Subject: some notes...
Posted by Johan Messchendorp on Tue, 10 May 2011 19:17:23 GMT
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Here some notes after our meeting this afternoon:

*) new external packages: may11 release. Made available by Mohammad and includes the requested GLPK, root 5.29/02, updates Geant4, etc. The new external packages have been tested so far successfully on various linux flavors. Furthermore, it has been installed on most GRID sites (except for Glasgow: Dan is looking at that).

*) DPM discussion was concluded during last tracking meeting: there is a momentum-dependent cut-off implemented that cuts recoil protons of 100 MeV/c and less. The request has been implemented in PndDpmDirect.

*) Status of STT chain: 1) geometry+digi fixed! 2) GEM extension reconstruction completed. The efficiencies are larger than 80% for the hit finding; 3) Lia and Gianluigi presently working on secondary track finding code; 4) Gianluigi is furthermore working on a clean-up by studying the continuity in firing tubes.

*) Status TPC chain: 1) new ROOT geometry committed: still has to be tested. This will be done by Felix within the upcoming two days. He will notify Johan/Stefano when ready, so that we can start with DPM events on Grid; 2) Johannes presented some of the reconstruction results from the data taking run at GSI (see attachment). Efficiencies are typically 80% and larger; 3) Sebastian looked into some optimization of the performance. He will post the benchmarks asap on the forum. It is expected that the performance can be improved by a factor of two than what originally was stated, e.g. 1 event ~ 15 minutes with a few thousand tracks/event.

*) Event-mixing: since the time-based framework will not be ready for the TDR, we will continue with a mixing procedure "by hand", e.g. each of the two different tracking detectors will implement their own code that reads DPM events on the digi level. As well, Gianluigi as Sebastian have done this already for their own reconstruction.

*) Parameter management: at present, the detector parameters are stored in one ASCII file (all.par). Note that on the long run, we will make use of an oracle database (once we find a person for this), and the ASCII file will become obsolete. There is a request from Felix to make the existing structure more flexible, such that each detector can maintain their own parameters and that all these parameter files are automatically combined into one. Florian/Stefano might already have looked into this. They will be contacted to see whether we can accommodate such automatic merging.

Johan.

File Attachments

1) PR Performance on real Data.pdf, downloaded 529 times

Subject: Re: some notes...
Posted by StefanoSpataro on Thu, 12 May 2011 11:21:00 GMT
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Just one comment from my side:

Johan Messchendorp wrote on Tue, 10 May 2011 21:17There is a request from Felix to make the existing structure more flexible, such that each detector can maintain their own parameters and that all these parameter files are automatically combined into one. Florian/Stefano might already have looked into this. They will be contacted to see whether we can accommodate such automatic merging.

At present (since 2 years) each detector maintains their own parameters, but in the macro/params folder. The only request is only to send the create_par.sh script and commit also the all.par. This what we have done successfully in the last months.

Subject: Re: some notes...
Posted by Felix Boehmer on Thu, 12 May 2011 11:28:10 GMT
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Hi Stefano,

I know that this combined parameter file is existing, which is exactly the point I don't like. Wouldn't it be possible to create the combined set on the fly, while still reading in the individual detector-specific files? In that way one would only have to maintain one copy and not worry about the actuality of the combined file.

Cheers

Felix

Subject: Re: some notes...
Posted by Johan Messchendorp on Thu, 12 May 2011 11:36:37 GMT
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what about placing a call to the script that Stefano refers to, in the rootlogon.... in that way, the all.par is automatically updated.

j.

Subject: Re: some notes...
Posted by Mohammad Al-Turany on Thu, 12 May 2011 11:39:30 GMT
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Hi,

As I said in the meeting we had something, Florian has already done this and it is simply like this:

1. create a TList
2. Add a TObjString which present the file name of your ascii file
3. set the list as an input for the run time data base

i.e:

Quote: .....

```
    //  Digitisation files
  TList *parFileList = new TList();

  TString paramDir = gSystem->Getenv("VMCWORKDIR");
  paramDir += "/parameters";

  TObjString stsDigiFile = paramDir + "/sts/sts_standard.digi.par";
  parFileList->Add(&stsDigiFile);

 TObjString trdDigiFile = paramDir + "/trd/" + digipar + ".digi.par";
  parFileList->Add(&trdDigiFile);
      .....

      FairRuntimeDb* rtdb = run->GetRuntimeDb();
      FairParRootFileIo* parIo1 = new FairParRootFileIo();
      FairParAsciiFileIo* parIo2 = new FairParAsciiFileIo();
      parIo1->open(parFile.Data());
  parIo2->open(parFileList,"in");
  rtdb->setFirstInput(parIo1);
  rtdb->setSecondInput(parIo2);
  rtdb->setOutput(parIo1);

        .....
```

I think this should solve the whole problem, each detector has his own par file and we take it from there into the full simulation.

regards

Mohammad

Subject: Re: some notes...
Posted by Johan Messchendorp on Thu, 12 May 2011 12:07:48 GMT
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Mohammad's option would indeed solve the problem.... Felix, do you agree?

Johan

Subject: Re: some notes...
Posted by Felix Boehmer on Thu, 12 May 2011 14:30:44 GMT
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Yup, looks good to me!

Subject: Re: some notes...
Posted by StefanoSpataro on Thu, 12 May 2011 15:46:06 GMT
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The main idea of that all.par was to provide a full set of parameters so that the user should not care about the last version of params.
Some code doing this job automatically would be also better.
