
Subject: Re: PandaRoot meeting, Wednesday 21th of October, 10:00, EVO
Posted by [Bertram Kopf](#) on Wed, 21 Oct 2009 18:11:40 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Mohammad,

Mohammad Al-Turany wrote

What do you mean by dictionary in this context? what does it have more than parameter definitions and values? How different is it from PndEmcDigiPar for example?

How a dictionary is defined in general, you can find for example in wikipedia at:

http://en.wikipedia.org/wiki/Data_dictionary

In our software, we normally use condition objects which change frequently. Therefore we need a general mechanism to store and retrieve these objects.

To do this in a performant way, it's common use to add a layer of lazy database proxies. A lazy proxy creates objects only on request. In addition such a proxy can cache things coming from the database. Using a dictionary makes these proxies available everywhere in the code in a flexible way.

Mohammad Al-Turany wrote

Where do you need to set a branch address? Usually this is hidden from the user? some people hardcore the branch name of the input for there task in the task init, and if the task can only analyze or work with this specific input then it is not that bad! others make the branch name as argument of the task ctor and then they pass it to the GetObject. So is that what you are speaking about here or something else?

Of course, names of branches, trees and files have to be hidden from the user, and in addition also from any specific code in the sim/digi/reco and analysis.

Mohammad Al-Turany wrote

Which data base you are speaking about here?it is not clear for me, if you mean our run time data base and the oracle behind or something else?

I am speaking about the condition database. The name "rundatabase" suggests that only run or job based changes are supported. As I tried to point out, one should also support event-to-event changes.

Mohammad Al-Turany wrote

Event time stamp as key to query database! How do you think this should be implemented? And which parameters are changing event by event? Normally some parameters could change and this is usually detected and trigger a re-init of the runtimepdb and the reconstruction or analysis tasks.

I think that it is not that bad to use the time informations for the request to the database. The

validity of specific parameters/objects can be realized via certain time intervals. In principle all calibration, alignment and environmental data can change from event to event.

Best regards,
Bertram.
