Online Software Status

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`http://www.hep.ph.qmul.ac.uk/~landon/talks`

Overview

- External developments

- Recent L1Calo Developments

- Next steps

External Developments (1)

COOL

- After a long wait, the new LHC conditions database, COOL, released in April

- Quickly followed by four subsequent releases
  (with RAL now enhanced and renamed as CORAL!)

- Since then rapid development of new tools in ATLAS offline, TDAQ and
  subdetectors, eg database web browser, various conversion tools for bulk data
  insertion and analysis

- COOL (and other packages it uses) now "integrated" into the latest TDAQ
  software release

External Developments (2)

TDAQ releases

- Latest TDAQ software release (tdaq-01-02-00) in May

- Contains improvements in ROD crate DAQ, new underlying monitoring system and new user monitoring framework (GNAM)

- We are still running the testbeam release (three releases behind)

- Some of what we need to do has been waiting for a suitable time to update – always after the next little bit of the slice tests...

- But now scheduled for next week!

Recent L1Calo Developments (1)

Monitoring, Calibration and Multistep Runs

- We have tried to do as much preparation as possible before updating to use the new TDAQ facilities

- PPM and CMM calibration and setup procedures use the monitoring system – greater separation of analysis from hardware access

- One program (will be run controller in new ROD crate DAQ setup) reads data and sends it to the monitoring system

- Separate program(s) reads and analyses monitoring data (and will eventually update database with new calibration)

- Run controllers use new module services calls to mark the steps in a multistep run (eg where TTCrx settings are scanned)

- Good news: PPM timing calibration now ready for TileCal cable installation

Recent L1Calo Developments (2)

9U ROD related

- Module services and (old style configuration) database mostly done

- Simulation and bytestream decoding of most new 9U ROD formats done (apart from PPM)

Databases

- Intention was to start investigating and using new COOL

- Only just starting with this

- And it is becoming a critical item...

Next Steps

- Long awaited OS and TDAQ update scheduled for next week

- Hope to move quickly afterwards to ROD crate DAQ run controllers
  (we have been saying this for well over a year)

- Migrate recent monitoring developments to new GNAM framework

- Concentrate efforts on using COOL database

- Fill a few remaining holes in the simulation

- Improve usability for production test software

- Need to try joint calibration with TileCal at some point...