DAQ Offline Software Status

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Restructuring

- Change back in December required **reorganisation**
  - Move directory structure and classes around

- Cleanly **divide** software
  - “Real” offline; mainly for LCIO conversion – “**records**”
  - Non-online; immediate checks, counts, plots, etc. - “**daquser**”
  - True online; physical readout – “**online**”

- Only use for online and daquser is on **DAQ PCs**
  - All other users only need **records** package
Records package

• Some **restructuring** of records package also done
  • Should be **backwards compatible**
  • Class definitions can be included or excluded
  • `#define CALICE_DAQ_ICC`

• Contains minimum of software in ten **subpackages**
  • Utility classes (**utl**)
  • Classes for record/subrecord handling (**rcd**, **sub**)
  • The data classes (**bml**, **daq**, **crc**, **emc**, **ahc**, **dhp**)
  • Classes for data repair (**fix**)

• Anything **missing**?
  • Feedback would be useful
  • Then dump into cvs

14 June 2005

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Tasks from last meeting

- **Renumber** older runs with epoch run numbers
  - Code exists in fix subpackage
- Fix **run and event** numbers
  - Code exists in fix subpackage
- Insert EMC movable stage position data
  - Code exists in fix subpackage; values need checking
- Version **migration**
  - Code in exists fix subpackage; only one data class so far (CrcReadoutConfigurationData)
- Code can be used **two** ways
  - To fix data on-the-fly when records read in
  - To convert files once-only and write out again
  - Fixes should be do-nothing if run twice
Tested on cosmics data

- One file **corrupted**: Run1104771321.asc (a.k.a. run 80034)
  - Copies at RAL and Ecole Polytechnique also bad
  - Luckily version on **original** DAQ PC was OK; recopied
- Add **slow data** directory structure and files
  - Allows **database code** for slow data to be developed
- Original asc files **converted** including fixes to new bin files
  - DESY/whoever need to take **new copy** of data

- Issue to settle before doing DESY beam data
  - Runs up to **100042** are asc so can do the same as for cosmics
  - Runs from **100043** are bin; how to handle fixes?
- Will need to do **on-the-fly** fixes for some data?
  - More **consistent** to do for all?