



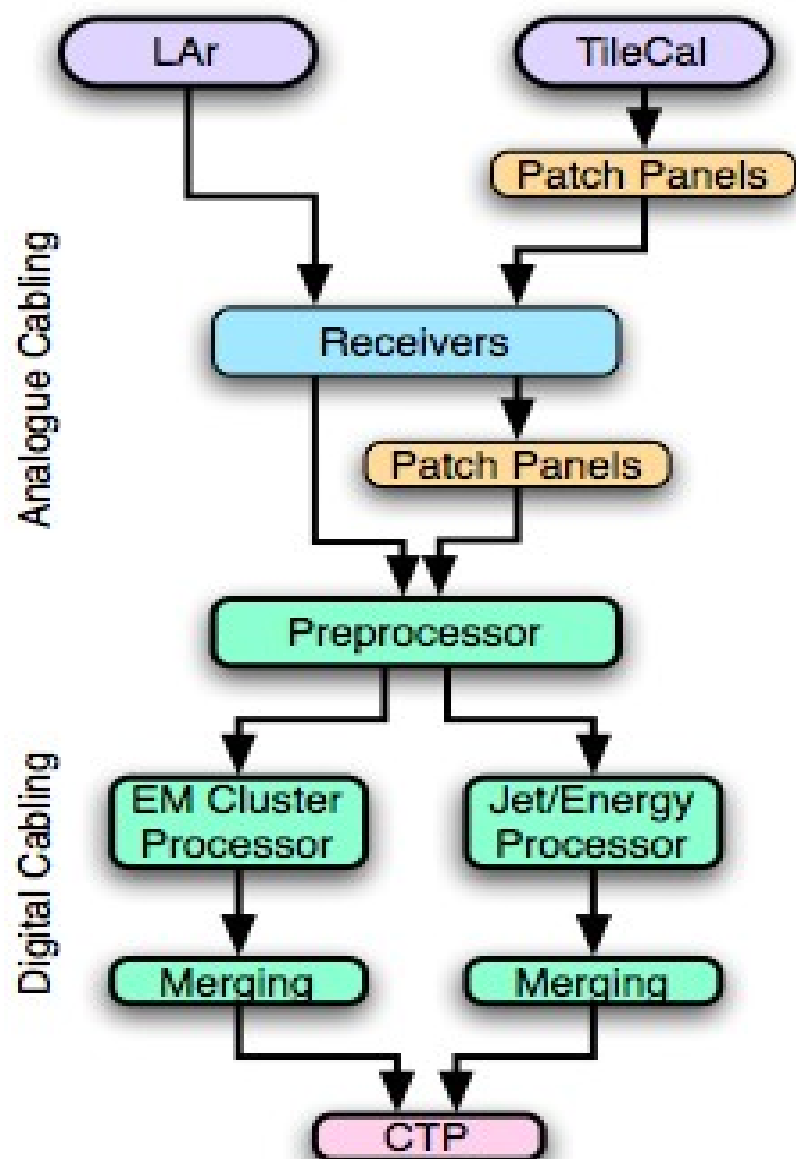
L1Calo Databases

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- Overview
- Recent Activity
- To Do List
- Run types



L1Calo Database Overview



Calibration Data

Analogue Gains

DAC, pedestal
Pulse shape (filters)
Lookup tables (linearity)
Timing

Timing

More timing

Configuration Data

Connectivity

Trigger menu
Connectivity
Operational choices

Trigger menu
Connectivity
Operational choices

Trigger menu
Connectivity
Operational choices



Calibration DB Model

- For each calibration run
 - retrieve parameters from COOL folder
 - separate folders for each type of run (different parameter sets)
 - collect data from calibration sequence
 - process and store results from each run
 - separate folder of “unvalidated” results for each type of run
 - separate validation step
 - copy/merge results from validated run to folder for validated calibration results
 - normally use only validated folders in new runs
 - but in a sequence of calibration runs may want to use unvalidated results to execute the next run in the sequence



Calibration DB Progress

- Preprocessor
 - analogue pulse pedestal & coarse and fine timing scans
 - operates entirely in the online framework (eg GNAM)
 - calibration saves results to COOL and run control uses them
 - pulse shape (BCID filter)
 - not yet implemented
 - energy calibration, Et correction
 - work started in ATHENA
 - implemented conversion service between online and offline IDs
- Cluster & Jet/Energy Processor
 - internal timing
 - implementation in online framework in progress



Database To Do List...

- More realistic tests of recent work
 - Have mostly used SQLite or MySQL for tests so far
- DCS (crate/module monitoring) config and results
- Cabling
 - Digital cabling presently in OKS. Final cabling can now be generated. Changes required for next tdaq release
 - Analogue cabling: some work done on relational DB
 - how to correlate with TC database?
 - same issues of updating as for recent readout link discussion
- Configuration
 - Some still in OKS: want to separate HW description from (run type dependent parameters) to be loaded from COOL
- Tools



Run Types Discussion

- Current L1Calo scheme in OKS (mostly)
 - Many run types (>20)
 - Digital tests using playback
 - Various calibrations
 - standalone or with Tile/LAr
 - Physics
 - TDAQ run type string presently ignored!
 - L1Calo run types are object structures
 - Settings for calibration scan (moving to COOL)
 - Control of playback data (linked to OKS HW)
 - Special parameter sets (hope to move to COOL)
 - Would like run type to include sets of applications to run
 - Future TDAQ global run type could also be an object with some attribute/relationship to subdetector run types