An overview of Calibration Infrastructure

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Summary of Requests to SAS

- These are requests made to Joanne
  - Promote selection method of calibrations to jobOptions based on
    - flavor (vanilla is default, can use any other name if we want to compare calibrations)
    - calibration procedure level (production/development/superseded/test)
    - Instrument type (what to put for a partially populated LAT?)
  - Ensure we only have one flavor valid for production
    - Ensure that for production and vanilla flavor there is one validity time with no overlaps
  - Provide the capability to add serial number to XML
    - Subsystems will add serial numbers themselves
    - There is no interface at the moment to read the serial numbers (to be implemented later)
  - Provide a proposal to connect constants from charge injection and muon calibrations
    - One could in principle add in the comments field the value in the field serial number but,
    - We are working with Joanne to come up with a proposal
Reminder…

• Serial number versus bay location in the flight grid
  • Serial numbers appear in the Online LATTE’s rcReport.out file
    – These are not needed for reconstruction
    – May be needed for trending
  • This information is available in the runs database
    – Of course, subsystems must ensure this flows into I&T
  • Do we want to query on Serial Number?
    – If we do, this is the time to tell us!

• Retrieval of Calibration Constants
  • We assume event time is given by SBC clock until we get a GPS
    – Recon uses the event time to look for validity time in database
    – and then asks if the calibration set is flavor vanilla and procedure level production.
    – If it does not find a calibration set
      – it searches under the procedure level development
  • Can specifying start time to retrieve constants
    – Needed for populating the trending database with calibration data
      » not needed for reconstruction
  • Which flavor to use for comparisons of calibrations?
    – Store in user database?
    – Official flavor is vanilla in main database