

DAQ / Online Status

- Using a kind of sliding window technique, achieved ~94% efficiency for a period of ~5 hours
 - Previously, "Flying Wires" alone was loss of ~8%
 - Up to 10% lost in Level 2 timeouts: wait for the timeout to happen, plus 2xHRR ~30s
- Level 3
 - Filter log files: plan to collect these at End-of-Run and send to offline (long term)
 - Inconsistencies in L3 End-of-Run summaries: will remove unreliable information
 - Some "bad" nodes repaired/recovered/reintegrated
 - Still occasional deaths of L3 proxy/monitoring - under investigation
- CSL / Consumers
 - Proper treatment of End-of-Run is almost there (needed for automatic startup by run control) - required AC++ changes, handling SIGUSR1 to initiate End-of-Run procedure
 - Selection of events by trigger bit for Consumers is finally working, since Friday YMon is receiving Minimum Bias events only. This was a long ordeal, finally tracked down do a problem in L3, looking at TL2D instead of TFRD bank.
 - "Stream-less events": CSL apparently receives, in many runs, ~ few % events that don't belong to any stream. Further investigation revealed that these didn't pass any L3 filter, so probably no event loss. Under study.
 - RCP tag auto detection module written by Bill B., will become required module in next offline release

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Run Control

- Automatic shift summary entry for e-log, with all physics/beam runs
- ACNET interface to run control still occasionally dies. Working on a way to identify this faster.
- "ADMEM not properly configured" errors on Coldstart: lots of these over the weekend, communication failure between shift crews that these were harmless (for that weekend) caused confusion
- "Timed out waiting for readout list" errors on Coldstart: likely due to occasional high load on run control PC, caused by rogue error handler processes. Improved start/stop procedure of error handler.
- Message logging: Silicon group wanted to look at errors from previous night to identify bad ladder, and failed:
 - * Missing classes forwarding these errors to the Level 3 gateway → fixed
 - * Job that puts messages into database died → added occasional check
 - Voice messages from Run Control are *popular*: aces complained when it was turned off!

Front-End

- Frequent crashes of SVT crates: found problem in SpyMon code, fixed
- Improved central ShowerMax zero suppression
- Initialize SMXR trigger registers for L2/RECES
- Beam Shower Counter QIE calibration downloading through run control implemented
- "Noise" in b0cot15 limits L2A rate to ~200Hz before deadtime kicks in