

Run Control (and Other) Work

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- Run Control
- IGUI and IS
- Releases
- Documentation!
- Miscellaneous



- ROD Crate DAQ controllers (hey ho!)
 - Still on the agenda
- Run states
 - Sort out what changes we would like
 - Initial TTC reset required?
 - Internal transition in places where we have long sleeps?
 - May need module services changes too?
- Multistep run control and sequences of runs?
 - Future of run plan handler GUI and run sequencer?
 - For users, the ideal would be one IGUI panel to launch any set of calibration runs



- Startup/control of standalone ("kicker") programs
 - What standalone programs will we still keep?
 - Calibrations to GNAM where possible?
 - Multistep/multicrate calibrations for PPM & JEM
 - CPM calibration still single crate
 - Is this viable for determining overall LVDS delay?
 - In future such programs
 - Either need to be started by the standard TDAQ mechanisms (for all run types) and just sleep if they should do nothing for this run
 - Or be started by hand, eg as monitoring programs or DVS tests
 - Can use Controllable interface (to see state transitions)
 - Could define such programs as ResourceApplications
 - Allows persistent enable/disable via Segments&Resources panel
 - Could have separate Segment containing calibration apps
 - Ditto



- Every extra setting reduces "usability"
 - At least for non-experts
 - Of course experts just love having more things to fiddle with!
 - Shift documentation required for each possible user choice
 - Additional entries in shift checklists for each one too
- Remove unnecessary options and whole IGUI panels
 - Keep basic run type/parameters choice
 - Remove multistep run settings (to COOL)
 - What about test vector generators: to run parameters?
 - Or perhaps suppress panel if simulation is disabled (somehow)?
 - Remove module parameters panel
 - Make modules into Resources (automatic with latest RCD?)
 - Enable/disable via IGUI Segments&Resources panel



- Update status information panel (and services)
 - Many modules falsely claim to be absent with no module ID
 - Is there more useful status to be reported per module?
 - Not much room in the present panel in some cases
 - Nice to have summary status reported per crate
- Keep (rename?) "Kicker" panel
 - Ideally only present when needed, ie not for Physics
 - Could perhaps be run type dependent?
- Are there any new panels we should add?
 - Or other radical changes to existing ones?
- IS variables
 - Still need to arrange to archive them
 - Easy to do, just not done...



- TDAQ
 - tdaq-01-08-00: comes with new LCG (COOL v2)
 - Changes to our coolL1Calo package
 - New(ish) RPM distribution scheme for TDAQ and Offline
 - Includes LCG, DetCommon, etc
 - Tag all our packages (this afternoon ??)
 - Starting making backwards compatible changes
 - All sites should move to this: when to drop tdaq-01-06-01 support?
- L1Calo
 - Builds using l1calo account seem to be working OK
 - Updates installed at point 1 at least every week
 - But do require people to tag tested changes promptly
 - Should perhaps keep some versions around on AFS?
 - Retire more packages: cpRodServices/Sim,cbdServices?



- Similar slide repeated more often than the RCD one!!!
- Requirements and design documentation
 - Why the code is like it is?
 - Ideally in the form of a SW note...
- Implementation documentation
 - Well commented code for the benefit of future maintainers
 - Probably best in the form of Doxygen
- Timescale
 - Now (or earlier!) before you forget... (or leave)



- Error handling and robustness
 - Use TDAQ error handling and exceptions (ERS) more
 - Make sure errors which do occur are handled properly
 - Need to report errors, attempt to recover, continue if possible
- DVS style tests
 - Simple tests in DVS framework to check modules, crates, connections(?) at startup time
- Verifying and archiving loaded configuration
 - At present only JEM services(?) verify whats loaded
 - Done "by hand" maybe HDMC layer method would be better?
 - Still need to archive (summary/pointer to) whats loaded
- HDMC: bus errors and hardware byte swapping
 - Just in case Bruce didnt already mention it!