

# HLT library update / STORE / daq\_slc

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# HLT library / online globaltag update

## ■ HLT optimization

- ▶ Optimize the ECLUnpacker code for decreasing its execution time [BII-8254]
  - Mikhail presented in the latest HLT meeting.

## ■ Online globaltags from run 2150

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Action	Payload	Rev	First Exp	First Run	Final Exp	Final Run
CLOSE	ECLCrystalEnergy	24	14	0	18	2149
CREATE	ECLCrystalEnergy	30	18	2150	-1	-1
CREATE	ECLCrystalEnergyGammaGamma	17	18	2150	-1	-1
CLOSE	ECLCrystalEnergyMuMu	6	0	0	18	2149
CREATE	ECLCrystalEnergyMuMu	21	18	2150	-1	-1
CLOSE	ECLCrystalEnergyee5x5	1	5	0	18	2149
CREATE	ECLCrystalEnergyee5x5	15	18	2150	-1	-1

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# STORE

- In monsrv, db tables for SROOT and ROOT files are prepared.
  - ▶ Contents should be updated including minor correction.
- For the goal, removing filedb and using db
  - ▶ Different account/password for b2slow database
  - ▶ Various flags for file status
  - ▶ Will discuss with computing group for file transfer
- Correct (ZMQ based) file close is necessary to write data into the table

```
b2slow> select * from datafiles_root;
id | name | path | host | label | expno | runno | fileno | size | nevents | chksum | time_close | time_listed | time_sent | time_remove
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----
1 | /rawdata/disk01/storage/tmp/0006/00018/debug.0006.00018.HLT13.root | /rawdata/disk01/storage/tmp/ | HLT13 | debug | 6 | 18 | 0 | 0 | 0 | 0 | | | | |
```

Figure 1: datafiles\_root table

# daq\_slc update at the maintenance day

- **This presentation doesn't mean that I will be a maintainer of daq\_slc!**
- **Runrecord HLT script has mixed values for monitor/filter [BIIDAQ-225]**
  - ▶ In the runrecord, HLT#.script values are taken from each HLT runcontrol and recorded.
  - ▶ However, worker nodes actually bring the value from RUNCONTROL
  - ▶ Therefore, I removed above wrong records and add RC.HLT.script in the menu.
  - ▶ Additionally, HLT and ERECO in/exclusion (used) flags are also added.
    - This would be helpful especially there are basf2 release inconsistency.
- **Auto restart flags (with RC GUI)**
- **Alarm menu improvement**
  - ▶ HV state sound alarm (for ERROR, TRIP, FATAL, and UNKNOWN)
  - ▶ More TOP alarm PVs (Martin)

# daq\_slc update at the maintenance day

## ■ Merging old, approved, but unmerged PR

- ▶ Rename ARICH tools [BIIDAQ-183]
- ▶ Deprecate obsolete tools
  - bootnsm2, many old fashion restart scripts...
  - After merging the PR, ERECO and local HLT restart script were tested and no problem was found.

## ■ We have still more PR in review...

- ▶ Python bindings for nsm2
- ▶ Remove loglistener capability to send RC\_STOP requests to random nsm nodes
- ▶ change all cpr(4/5/6).conf nsm hostnames to cpr\*s
- ▶ iwyu include sanitizer
- ▶ update of ecltrg slc
- ▶ Fix bug in stringutil::split() → will be merged at the summer shutdown
- ▶ EPICS 7 → will be merged at the summer shutdown

# Request from RC

- **Consider blocking unsafe run control and HV operation**
  - ▶ For the main STOP-START button, below conditions are applied
    - Disable physics run LOAD if there is excluded subsystem
    - Disable physics run START if there is excluded subsystem and not PEAK HV
    - Disable RESUME when HV is not PEAK
  - ▶ For the run setting
    - Disable to set the run type, hlt script, and trigger type if rcstate is not NOTREADY
    - Disable subsystem in/exclusion if rcstate is not NOTREADY
- **We need more categorized safe lock between runcontrol and hvmaster states**
  - ▶ Not in GUI, but in daq\_slc
  - ▶ Who can take care?