

13-Aug-2024

Some easy-to-merge changes have already been done and are ready for review, see [here](#).

Changes that have already been merged include ones in the following packages: ers, logging,

Feature	Repositories	Responsible people
Timing software changes	timing, timinglibs	Stoyan, Diana?
Improved TPSWriter warnings	daqdataformats, hdf5libs, dfmodules	Kurt, other(s)?
TDE		Done!
dpdklibs changes?		done?
callbacks?		done?
NUMA-aware and CPU affinity changes?		Done? Check on bug that was fixed in 4.4.6
integtest updates		
New config params for updated offline metadata	daqconf, etc.	
nanorc changes		Not CoreSW, of course...
CIB, CTB, CRT, etc		
Previous TPG improvements		AlexO
TPG by plane		

KAB, 07-Aug-2024

This document is intended to capture changes that were made in software packages that are relevant to the Core SW WG during v4 development that we should remember to port to the v5 line of development. An attempt has been made to not include changes that were made in Trigger packages, but of course, some overlap is certainly possible. The list of Trigger changes is shown on slide 9 of [this presentation](#) by Artur at the 30-Jul DataSelection meeting.

To generate this list, I looked for repositories that have a *patch/fddaq-v4.4.x* branch and then compared the head of that branch to the *fddaq-v4.4.0* or *coredaq-v4.5.0* tags. I should check to see when the v5 line diverged from the v4 line and re-do this exercise if an earlier tag than *fddaq-v4.4.0* should be used.

daqconf

- tbd

daqdataformats

- Changes to support better TPStreamWriter error reporting
 - Should be an easy merge from v4->v5

detdataformats

- Trivial change to return the size of an HSI frame

dfmodules

- integtest changes to support system layout changes (e.g. TP producers per plane instead of per APA) and to support changes to config param names
- DFO metrics changes
- HDF5DataStore bug fixes for file index Attribute with one-event-per-file writing mode
- TPStreamWriter changes for better reporting of tardy TPs, etc.

ers

- Addition of Schema set_severity

hdf5libs

- Changes that are part of better handling of tardy TPs in the TPStreamWriter
- Minor changes to reduce warnings when the number of digits in a record or sequence number are large
- Changes to hdf5_dump.py to fix bugs and keep up with changes to data format headers
- A few improvements in HDF5LIBS_TestDumpRecord

hsilibs

- Changes to get the iceberg_real_hsi_test working

readoutlibs

- TPG threshold per plane
- NUMA-aware and CPU affinity changes

trgdataformats

- Changes to the TC type enum
- Python binding changes

utilities

- TimestampEstimator changes

- Minor change to prevent TimeSync updates from the same process
- Improved timestamp estimate between timesync reports
 - KAB note: I believe that this broke the workings of the RTCM
- 12-Aug: everything in prod/v4 is already in develop, but we should double-check the running of RTCM

daqsystemtest

- Integtests and sample configs

dpdklibs

- TDEEth

fddaqconf

- CRT, TPG

fdreadoutlibs

- CRT, DAPHNE, TDE, TPG,

fdreadoutmodules

- CRT, DAPHNE, libNUMA

rawdatautils

- Python unpackers (TA & TC?)

ctbmodules, crtmodules, daphnmodules, fixlibs, sspmodules, wibmod