Status (and future plans) of tsim_l1ft

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Status:

Kin Yip wrote the original version of tsim_l1ft .
The package has been taken over by JFR, Bruno, VJ,....

As of the moment (released in t01.30.00) , this package has the following features

- Package deals with CFT, CPS (axial) and CPS (stereo)
- New class: CTTT which calculates the trigger terms
- New class: CFT_TM which reads epics.sim as input and sends the trigger terms to L1
- Consistent with tsim_coor package: Uses epics.sim data file, selects up to 64 trigger terms
- Trigger terms, TTK(8), TEL(6), TDL(6), TPQ(8),
  TIS(2), TDS(2), TIQ(4), TLO(1)
  TNQ(16), THT(2), TMO(1), TAC(2), TOC(4), TTA(2)
  have been implemented, and sent to L1 framework
- Documentation for trigger terms is in tsim_l1ft/doc/Manual.txt
- Data is sent to L2pp via iogen classes
- Data is sent to L3 via I/OGen objects. These I/OGen objects are also used to pass the data internally , say, between the classes which simulate the DFE boards and the Octant boards
- Trigger terms are now made using I/OGen objects.
- Analyze package has been written - - l1ft_analyze. Feedback is necessary to improve package

Future Plans:

Even though a lot of work has been completed some modifications/improvements still need to be made

- Get rid of upack data chunk and related code. Has implication for tsim_l1muo
- Some more trigger terms T1, T2 need to be implemented - need changes to IOGen objects
- Bruno has volunteered to write a note "soon", which will describe the workings of the package
- "Versioning" system for constants like equation files, etc.
- For some of the boards, the firmware is being finalized now. These changes still need to go in.
- Provide hooks to input test vectors to study the behaviour of various components