Software Status

Murrough Landon – 18 June 2002

`http://www.hep.ph.qmul.ac.uk/~landon/talks`

Overview

- Effort

- Packages

- Next steps

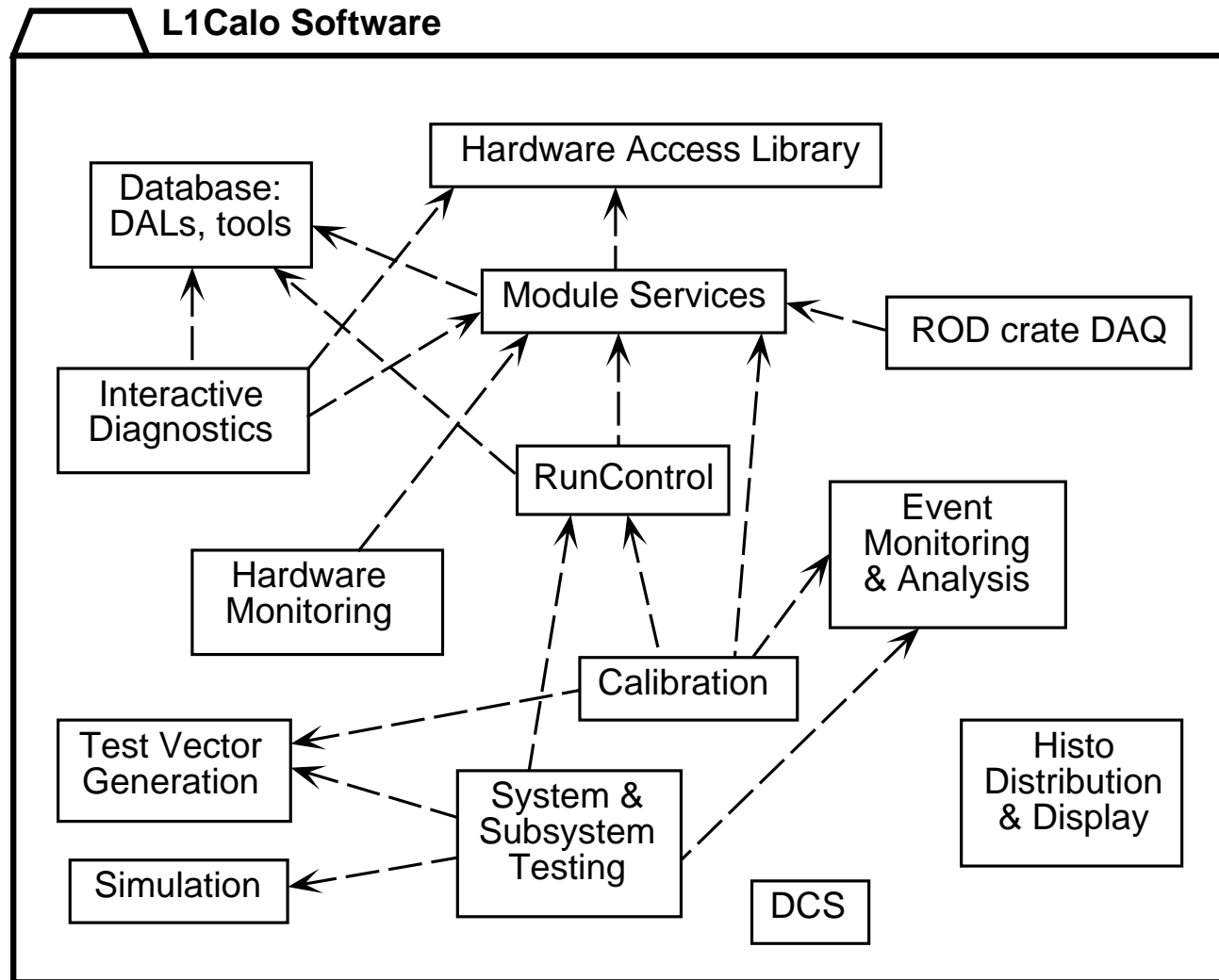- Schedule

Effort

People

- Heidelberg: Oliver is leaving in August. No news yet on any replacement.

- Mainz: the new PhD student they expected has decided not to join ATLAS after all unfortunately.

Distractions

- Cabling document is still not finished...

- Calibration discussions

- Courses

- Holidays

L1Calo software packages and internal dependencies

Packages (1)

HDMC

- HDMC CVS repository now moved to RAL

- New Parts being developed by Gilles for loading CPM flash RAM, loading memories from files, for accessing TTCrx

Module Services

- First version is complete and saved as a set of CMT packages in CVS. Some HDMC tidying up still to do (once HDMC CVS repository is available again)

- CMM module services are now being implemented

- CPM module services still required (work on HDMC parts files and new parts has to be integrated with higher level services)

- Further work to integrate with database and run control

- Documentation is still required

Packages (2)

Databases

- Integrated database object API available (Doxygen web documentation only) and implemented for modules under test in the UK

- More work required for calibration datasets

- Further development for overall management of test vector runs is still required (no progress on this since my last talk)

- Initial integration of current database with module services has been made – but not yet working

Run Control

- Still required: DSS "kicker", calibration/test sequencer and starting those processes automatically (no progress on this since my last talk)

- Also need to recheck use of run control states, update documentation and, if necessary, give feedback to the Online software

Packages (3)

Simulation

- Simulation being moved into CMT

- Implementation of the L1A handling is being studied

- Progress on JEM simulation by Stockholm students has been reported

- CMM simulation is still required...

- Integration with the database still needs to be completed and a mechanism for saving and accessing sets of test vectors from other software components needs to be agreed

Test Vectors

- Still need code to generate test vectors for CMM.

- NB no progress on overall organisation of sets of tests.

Next Steps

Suggested evolutionary path

- Finish integration of module services with (a) database and then (b) run control. Demonstrate CPROD tests in this mode as the first example of a real working system.

- Extend integration to simulation and test vectors

- Implement ideas on organising test vectors

- Extension to CMM and CPM

- Extension to Jet/Energy system

- Extension to Preprocessor system

Timescale

Overall Schedule [As at Heidelberg!]

- UK software work until end of June (depending on the hardware schedule)

- Followed by software and hardware testing

- JEP (DAQ) software integration after that

- Followed by preprocessor...

Intend to resuscitate attempts at more detailed schedule and planning...

Miscellaneous Issues

Reviews and Working Groups

- Response to updated ATLAS event format (via DIG)

- Response to suggestions on partitioning, definition of a run

- Database working group

- Other DIG and/or "Global Issues" working groups (eg run control?)

- Online Software review: new requirements and overall design documents in preparation. A good time to give feedback.

- July TDAQ week: discussion on run states

Visits and Workshops

- Thomas will be visiting later this week

- We should consider more a serious software training session

- Also software integration working sessions