## **Software Status**

## **Murrough Landon – 16 April 2002**

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

### **Overview**

- Effort
- Packages
- Test vectors
- Next steps
- Schedule

## **Effort**

## **People**

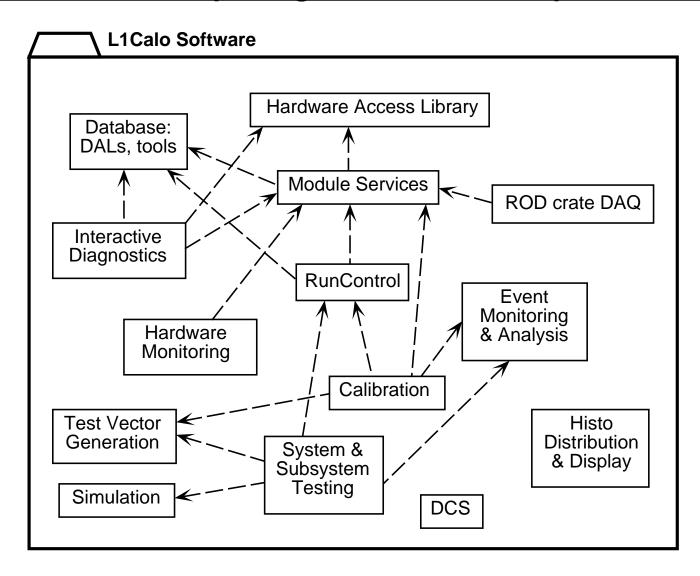
- Heidelberg: Oliver is leaving in August.
- Mainz: new PhD student (Michael Bussmann) starting in June (for one year, then he goes to D0).

### **Distractions**

- Cabling document!
- Task forces and working groups (ROD crate DAQ, Online software requirements reviews, condition database)
- Calibration discussions

# **Packages Diagram**

## L1Calo software packages and internal dependencies



# Packages (1)

#### **HDMC**

- VME driver for Heidelberg "home brew" CPU.
- Our old VME drivers dont work under RedHat 7.2 (kernel 2.4). Now using new VME driver from CERN (for Concurrent CPUs).

#### **Module Services**

- Almost complete?
- Apart from documentation...
- Move to CMT for common build process?

# Packages (2)

#### **Databases**

- Not much development recently.
- API of integrated database objects must be finished to allow progress with CPM and CMM.
- Further development for overall management of test vector runs is still requried.

### **Run Control**

• Still required: DSS "kicker", calibration/test sequencer and starting those processes automatically.

# Packages (3)

#### **Simulation**

- Work started on CPROD simulation.
- Integration of Bill Stokes test vector generator.
- CMM simulation still required.
- Still required: CMM simulation, more integration with database, move to CMT (desirable).

#### **Test Vectors**

Still need code to generate test vectors for CMM.

## **Test Vector Organisation**

- Largely a database issue: named collections of run types with configuration and calibration data, sets of test vectors and simulated outputs, etc.
- Another apsect is L1A handling. Solution using DSS agreed and DSS firmware changes specified.
- Recent software discussions reviewed the above. But more details need to be defined, agreed and implemented.

# **Next Steps**

- Complete work on database, fix APIs
- Complete CMM, CPM module services using database objects
- Develop CMM and CPROD simulation
- Implement ideas on organising test vectors
- Integration(s) of existing modular components

# Timescale (1)

## **Optimistic estimates? [At Heidelberg!]**

- Database work: 4 weeks?
- Module services work: >2 weeks? + documentation
- Test vector scheme: >4 weeks?
- Module services for CPM, CMM: 2-4 weeks each?
- Simulation of CMM: >2 weeks?
- More test vector generators: few weeks?
- Run control related: 2 weeks?
- Various integration tests: 2-4 weeks
- Not likely to be ready before June??

# Timescale (2)

### **Overall Schedule**

- UK software work until end of June
- Followed by software and hardware testing
- JEP (DAQ) software integration after that
- Followed by preprocessor...