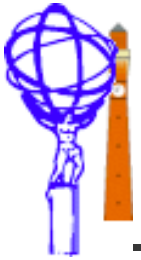
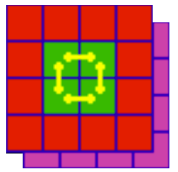
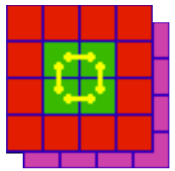


Software Status

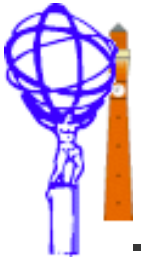


- As per Murrough…
  - Grand Scheme
  - Packages
  - Overall Test Organisation
  - Integrations
  - Software Organisation
  - Evolutionary Delivery

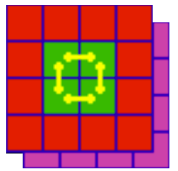
The Grand Scheme - status



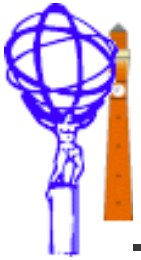
- Aim is to protype final software
  - Includes using ATLAS tools
- How to perform a test:
  - Configure distributed multicrate system from databases under the control of the ATLAS run control
  - Generate and load test vectors in parts of the system
  - Run, read out data and compare actual outputs with that from the simulation of the system under test
  - Use interactive diagnostics to peek at the running system
- Status for DSS/ROD setup
  - Done for one crate plus two modules
  - Generated test vectors to go into DSS
  - Not using ROS, but data read into DSS compared
  - Yes (usually system stalled!)



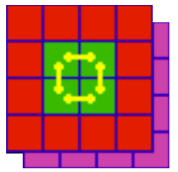
Packages (1)



- HDMC
  - New 'composites' syntax successfully deployed
  - Integrated with new CMT module services structure
  - Still a maintenance issue (recent work done by Bruce)
- Module Services
  - Core package and DSS and ROD now mature and stable(?)
  - CPM and CMM being brought into the fold
- Database
  - Many of Murrough's additional classes now well tested and used
    - eg cables, L1Calo specific modules, trigger menu
  - Small additional developments for DSS/ROD integration tests

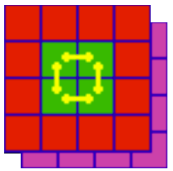


Packages (2)



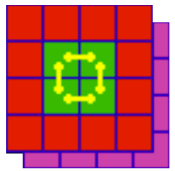
- Run Control, GUI etc
  - Little change, but have now been used
- Simulation
  - Many developments for integration tests – see later and Simulation talk
- Test Vectors
  - Little work on new test vectors, much on integrating old ones into overall testing scheme
- Work pending
  - Event monitoring, hardware monitoring, event dumps, book-keeping

Overall Test Organisation

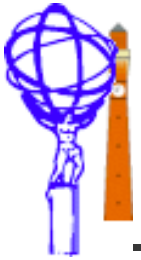


- Original proposal on 4th February
  - Database is test-master
  - Hardware (via run-control) and simulation obtain the setup from the database
    - Setup includes module settings, test-vectors, trigger menu, calibration – ie everything!
- Many details were still unclear
  - Hammered out in small groups and by email
  - Mostly now fixed, but some areas need revisiting
  - The DSS/ROD test-system has provided a good test-bed for the new scheme
  - See simulation talk

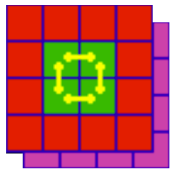
Integrations



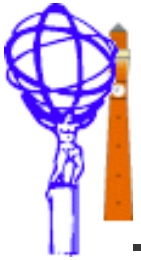
- Reported at Stockholm:
  - Module services and run control (for ROD etc)
  - Module services and database
  - Simulation and database
- Note most integrations probably only partial
- Now:
  - More complete integration for above
  - Simulation and run control
  - Test vector generation and run control
  - Full generation/simulation and module services from run control
- To do:
  - Data handling via ROS
  - Proper event monitoring scheme for data comparison



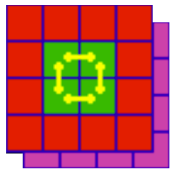
Software Organisation



- CMT
  - All UK packages now under CMT
  - Murrough has improved CMT tools
  - Personal opinion – a great success (after some initial discomfort)
  - Nightly builds with web page status
- CVS Repository
  - Still at RAL – but moving to CERN becoming more possible
- Website
  - Much information available, though more needed
  - Use of Doxygen for most packages helps for quick reference
- Meetings
  - Most recent meetings have been informal mini-workshops

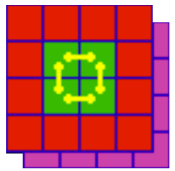


System Management



- CERN standardised on RedHat Linux 7.2
  - Online software based on this
  - ROS is a little behind!
- Thomas has RedHat 7.3
  - Birmingham may also move to this
  - Murrough recently tested 7.3 at QMUL
    - Some subtleties (Qt version) but should be OK
- Conclusion: 7.2 or 7.3 should be OK
- Other tools
  - Purify now available for Linux
    - Needs some testing – should be very helpful
  - Murrough investigated use of vnc for tutorial purposes

Evolutionary Delivery:
CP system status



- Complete integration of CPROD tests
  - Be able to succesfully run a single test via the run control (July)
    - Done (July)
  - Be able to run a single test including simulation of the selected configuration. Event readout still via DSS (August)
    - Done except test fails due to hardware problems (August)
- Integrate the ROS, implement event monitoring and comparison via the ROS
  - Still a little way off
- Add CMM and/or CPM with their test vector generators and simulation. Include L1A generation via DSS
  - Probably some way off
- Expand to whole CP system (September)
  - Don't think we're going to make this target!
- More refinements
  - Implement test sequences, timing calibration proceedures, hardware monitoring