

Software Status and Workplan

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<http://www.hep.ph.qmw.ac.uk/~landon/talks>

Overview

- Recent Activities
- Organisation
- Task List
- Resources

Recent Activities

- A lot of activity on test vectors and testing the ROD
- Started work on Online software “integration”: slice system setup via run controllers, database etc
- Started defining test plans for forthcoming modules
- Some documents (run control, TTC, calibration)

Recent Inactivities

- Test plan for whole slice test system
- More on documentation?
- Slice test readout, monitoring, analysis
- Slice test configuration/calibration procedures

Organisation

Software Process

- So far very informal
- Probably a good idea to be more rigorous
- More documentation and reviews
- Schedule and milestones?

Packages

- Identify separate packages
- Single person mainly responsible for each package
- ...who should be notified of any changes by other people

Repositories

- So far separate CVS repositories at HD and RAL
- Someday move to single repository? At CERN?
- Meanwhile slice test s/w in RAL CVS l1calo tree
- ATLAS will soon move to a new configuration management tool for handling software packages, libraries, etc
- We should probably adopt it (may imply changes to our internal software organisation)

Conventions

- Follow ATLAS offline naming and coding conventions for C++ and Java

Task List (1)

Test Software

| Task | Months | When | Who |
|--|--------|-------|------|
| Test vectors for single module tests | 2 | Tests | WNS |
| Test vectors (simulated data) for slice test | 1? | Slice | ? |
| HDMC development (new Parts?) | 1? | Slice | ? |
| Actually testing the modules: | | | |
| CPROD (3 * CP firmware) | 3 | Tests | BB |
| CPROD (5 * JEP firmware) | 1 | Tests | ? |
| CPM | 2 | Tests | GM? |
| CMM | 2 | Tests | NG? |
| JEM | 2 | Tests | JT? |
| PPROD | 2 | Tests | [HD] |
| PPM | 2 | Tests | [HD] |

System Setup

| Task | Months | When | Who |
|---|--------|-------|------|
| Databases: hardware configuration, calibrations, trigger menu | 2 | Slice | ML+? |
| Run controller framework | 1 | Slice | ML |
| IS classes for run parameters, crate and module status | 1 | Slice | ML |
| IGUI panel(s) | 1 | Slice | ML |
| Hardware access library (developing HDMC framework) | 1 | Slice | ? |
| Module actions | 2 | Slice | ML+? |

Task List (2)

Readout and Data Taking

| Task | Months | When | Who |
|---|--------|-------|-----|
| Readout framework for tests (eg DSS) | 2? | Tests | BB |
| Learning about PC ROS... and/or ROD crate DAQ | 1 | Slice | BB |
| ...and/or developing ROD crate DAQ | 1? | Slice | BB? |
| Hardware access library (again)? | 1? | Tests | ? |
| Internal calibration procedures | 2? | Slice | ? |
| Other calibration procedures | 2? | Integ | ? |

Monitoring and Analysis

| Task | Months | When | Who |
|--|--------|-------|------|
| More IGUI panel(s) | 1? | Slice | ? |
| Event dump (9 different event fragments) | 1? | Slice | SJH? |
| Online monitoring of event data | 3? | Slice | SJH? |
| Histogramming and displays | 1? | Slice | SJH? |
| Simulation of the processor (overlap with offline) | 2? | Slice | ? |
| Offline analysis of slice test data? | 2? | Slice | ? |

Miscellaneous

| Task | Months | When | Who |
|------|--------|-------|-----|
| DCS? | 2? | Slice | ? |

Task List (3)

Integration Work

| Task | Months | When | Who |
|------------------|--------|-------|------|
| CPROD-ROIB | 1 | Tests | BB+? |
| CPROD-ROS | 1 | Tests | BB+? |
| PPROD-ROS? | 1 | Tests | ? |
| Slice test | 10?? | Slice | * |
| TDAQ integration | 5? | Integ | * |

Documentation

| Task | Months | When | Who |
|------------|--------|-------|------|
| Test plans | 1 | Tests | * |
| Packages | 1 | * | * |
| Web site | 1 | * | ML+? |

Administration

| Task | Months | When | Who |
|--------------------------------|--------|-------|-----|
| Workplans, schedules, meetings | 1 | Tests | * |

Resources

Hardware

- Propose to buy more VME CPUs
- Check hardware required for various slice test and sub-system test configurations: DSS modules and daughter-cards, RODs, crates, etc.

People

- Bill
- Bruce
- Gilles (30%)
- Murrough
- Norman (10%?)
- Oliver? (?%)
- Steve

Say 5 months from now to start of slice tests (1 Sep 2001). We have roughly 4.5 FTEs (plus Oliver?). Available effort is about 22 FTE*months.

By end of slice tests (31 Mar 2002) about 45 FTE*months.

By TDAQ integration (1 Jun 2002) about 55 FTE*months.

Guesstimate from task list tables: about 70 FTE*months (mostly desirable for the slice tests).

NB Guesstimates may be optimistic or pessimistic...