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...