

# Online Software Status

Murrough Landon 25 May 2006

- Cable Tests
- Run Plans
- Monitoring
- Databases
- ROD Crate DAQ (still!)
- Test Rig (please!)



### Cable Tests & Run Plans

#### Cable Tests

- Currently driving the run control by scripts
  - Works and quick to fiddle with, but not long term ideal
- Various improvements in PPM FW&SW by Kambiz
  - Still problem with high rate of LAr triggers...

#### Run Plans

- Idea from discussions with calorimeters
- Database description of series of runs (could be standalone or jointly with calorimeters)
- Florian has recently developed a new "run plan" library in C++ to replace scripts and give better link to DB
  - He has done this very quickly but he does have a test rig at Heidelberg (those of us at CERN consider this cheating!)



## Monitoring

### PPM Monitoring

- Nice work by Victor to add monitoring for cable tests
  - Again, tested at Heidelberg first

#### GNAM

 Paolo is working on more general monitoring across the whole system (not just PPM or other module specific)



#### **Databases**

### DB Workshop

- Useful 1.5 days of discussions resulting in workplan
- Various DB areas to be moved into "COOL" conditions database

### Next steps

- Calibration data: PPM and CPM+JEM+CMM separately
  - Aim for implementation in July
  - SW constraints mean CPM+JEM+CMM need to move together
  - Will not happen without testing => need test rig at CERN!
- Trigger menu: use new ATLAS trigger DB by autumn
  - NB CTP integration pencilled in for September?
- Work on connectivity
  - Links to TC databases (or not), new TDAQ development
- Link new Run Plans (and run type description) to DB



### ROD Crate DAQ

- Still an ongoing saga...
  - Basically ready, but only partly tested
    - · Some problems found in one day test at RAL in April
    - One problem demonstrated by remotely on HD test rig
  - Finishing the business needs full slice test rig at CERN!
  - Better support for our non-event calibrations added for us in next TDAQ release
  - NB we need to adapt to new state transition model



## Test Rigs

- For software development
  - Really need a full slice: one of each module ASAP!
    - Testing new DB code, ROD Crate DAQ, next TDAQ release
      - NB we will need to use next TDAQ release for joint runs with calorimeters
    - Testing ROD inputs for FW development
  - For SW development, prototype modules & crates OK
    - Though there are issues with compatibility?
- For integration
  - Need final custom crate and preproduction modules
    - Not so urgent, but dont let things slip even more (see next slide)
- Practicalities
  - Dont expect both soon, so all in USA15 for now (alas)



## Timescale and Holidays

#### Scenario 1

- Ask Stockholm to press ahead now with water cooled custom crate to be delivered to CERN before end of June
  - Dont wait for Bham test, fix any problems found there later
- Risk: possibly a little money

#### Scenario 2

- Wait a bit, then hit Swedish holidays (all July)
- No response from ERNI in August (German holidays)
- Build crate in September, have it at CERN in October
- Risk: a huge delay
  - No CTP integration even on re-re-revised September timescale
  - Immediately throw out re-re-revised milestones shown last week

#### My personal conclusion

- Phone Sam today!