

Commissioning: Everything Else!

Murrough Landon 15 March 2007

Other aspects of commissioning and operation not covered by the preceding talks

- Online SW
- Databases
- Documentation
- Operational Model



Online Software

- Covered at greater length in SW meeting talks
 - And earlier talks in this session
- Main focus is on calibration & setup procedures
 - And their integration with COOL databases
- Improvements are also desirable in areas of run control, IGUI panels, information displays, etc



Databases (1)

- "OKS" database (online SW configuration)
 - Need to organise for ATLAS integration at point 1
- "COOL" database (calibration and conditions data)
 - Move of calibration data to COOL is still in progress
 - Also definition of "run actions" for different types of run
 - Not yet started: moving module configuration data (operational choices) to COOL
- Online conditions DB
 - Not yet started: store changes in online status
- Tools
 - Need tools for database editing and display



Databases (2)

Equipment databases

- Most of our equipment was entered into MTF
- But a few things are still missing (SBCs)
- "Slots" in the rack wizard are mostly defined
 - But only TCPPs and RPPPs are now marked as installed

Cable database

- All our cables are entered
 - Except ROD related ones (Glinks, Busy)
- Extraction from TC to relational DB (or OKS)
 - No work done on this yet



Documentation

What exists?

- Module specifications and programming models
 - Are they all up to date?
- Cabling documents
- Various others, eg on monitoring and calibration

Whats missing

- Online Software
 - High level descriptions, details for (some) packages, FAQs, etc
- Offline Software
 - Descriptions of some packages starting to appear...
- Operation
 - · Need a lot more here!



Operational Model

- Resident support needed at CERN
 - About 1 "full time equivalent" expert per subsystem?
 - Eg student mostly doing Physics plus frequently visiting expert?
 - Plus some more general expertise
 - Eg some of the existing CERN residents?
- Visiting shift crew
 - Do we expect one L1Calo person on every shift?
 - At the beginning, probably yes
 - Or a more general Level 1 expert, with L1Calo on call?
 - Perhaps after a year or so?
 - Either way, CERN residents will probably provide most of the on call responsibility, so we will need up to three visitors present every day



Control Rooms

ATLAS Control Room

- One desk (four screens) expected for the whole of Level 1
- Probably get one screen for L1Calo status displays
 - Need to decide what key information to show here

Satellite Control Rooms

- One additional "satellite" control room for Level 1
 - Probably the place for hordes of experts to diagnose problems
- Could have a few screens for additional L1Calo displays



Information, Status and Logbooks

- Efficient operation needs a lot of information
 - And this needs to be kept up to date (regular reviews?)
- Shift crew and expert documentation
 - Training material, guides to problem solving, etc
- Good status displays of the current situation
 - Hopefully addressed by the monitoring "posse"
- Faithful recording of new problems and solutions
 - We recently started using the ELOG, soon to be ATLOG
 - For permanent changes or new solutions, Twiki pages also need to be created/updated