## C+SW Rearrangement



- Computing and software will be rearranged
- Durga to take on C+S/W coordinator
  - And by extension infrastructure coordinator
- Rogers moves to Analysis coordinator
- Rogers keeps RAL PPD liaison
  - Requirement for RAL staff member to manage this
  - Responsible for accepting new users onto computing network, etc

## Webservice Downtimes





- Micewww downtime
  - 3 hours downtime due to failed bug fix to SSL
  - Rest is networking noise
- CDB downtime
  - As per micewww
  - Mostly memory leak bug (workaround now in place)

## GRID Reconstruction Efficiencies

- The last time we ran a batch production was about a year ago
- Several stacked issues
  - Problem with deploying MAUS on the GRID fixed
  - Problem with MAUS memory leak fixed
  - Problem with GRID certificates partial fix
- Real time to fix these issues was a few days, but people are busy!
- Now:
  - Tracker data unpacking crashes the code













MAUS-v0.9.1

(3)

## Data Quality Flags



#### Chris Rogers, ASTeC, Rutherford Appleton Laboratory



# Concept



- We need to relay to analysis group what happened in the contro room
  - Did any alarms sound?
  - Did anything happen?
  - MICE log can have detail, but if people want to automatically find the right data (we will have 1000s of runs) then it is not sufficient
  - "data quality"
- Also what happens outside of the control room
  - Did the data move?
  - Did the data reconstruct okay?
- Set of flags
  - True means "okay for analysis"
  - Written to DAQ stream on a per-spill basis
  - Written to CDB as a logical AND of every spill
- Propose following list of flags
  - Please help where I have asked, or think of flags that are missing

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### Beamline

- Beamline
  - ISIS has current
  - Target frame lowered
  - Target frame actuating
  - 12 Beamline magnets have correct currents
  - D1 has correct polarity
  - D2 has correct polarity
  - proton absorber has correct setting
  - diffuser has correct setting
  - beam stop has correct setting



## Plan

- Detector hardware
  - Luminosity Monitor
  - TOF0
  - TOF1
  - TOF2
  - CkovA
  - CkovB
  - KL
  - EMR
  - Tracker1
  - Tracker2





#### DAQ

- DAQ crate voltages okay
- GDC okay

Plan

- 6 LDCs okay
- Online Monitoring okay
- Online Reconstruction okay
- Trigger gate okay

## **GRID/Recon**



- Data compacted okay
- Data moved okay
- Data reconstructed okay
- For each reconstructed MAUS version number we get few bits per detector indicating "that detector reconstructed okay"
  - "reconstructed okay" should be defined by detector software experts
  - Typically look at things like reconstruction efficiency versus number of triggers (triggering detector) and digits (other detectors)
- This will be written to GRID Controller DB, then pulled by MICENet and uploaded to CDB
  - Will add flags to MICE data structure top level
  - Detector groups responsible for writing flags per detector
  - MAUS will provide an integration reducer

### Comments

- Comments?
- Criticisms?
- Suggestions?

