

Online Overview



MICE CM37
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Firstly...

- I'm not Linda Coney
- Just in case that wasn't clear.
- I doubt anyone missed it...
- Linda has moved on to bigger and better things
 - I've taken over management of the Online Group since Oct.
- Doesn't mean I haven't stolen her slide structure for these reports.

Also in This Session:

- DAQ Report – Yordan
- Controls & Monitoring – Pierrick
- Will leave most of the specifics to them...

Since CM36 in June

- Significant events in the 4 months since the last CM:
 - August Run
 - October EMR Run

October EMR Run

- Main focus of my talk today.
- Went pretty well:
 - Some aspects had issues during the running
 - Everything was resolved by the last weekend
 - Half a day of everything in the control room working, with all PID detectors in play.
 - Many other days of stable running.
 - See MOM talk for details of data.

EMR Run OnRec Servers

- miceonrec01 was initially carrying full load for Online Monitoring (OnMon) and Online Reconstruction (OnRec).
 - 02 and 03 not used.
 - Load too high on 01.
- 01 is now running OnMon.
- 02 & 03 will share OnRec load.
- New OnRec GUI will run on 01, for single shifter interface.

EMR Run C&M Servers

- miceiocpc1 & 2 worked well.
- miceecserv had an X problem.
 - Resolved at end of running period, but...
 - miceecserv2 wasn't correctly prepared to run as a spare.
- Developing plans and systems for keeping all C&M machines in a ready state
 - Automated notification if not ready.
 - Must separate development and production systems (in progress).

EMR Run DAQ

- Worked well, majority of problems were related to EMR integration.
 - Addition of EMR to data had some knock on effects, all resolved.
- One EMR DAQ board, FlashADC, was faulty...

EMR Run DAQ Spares

- The fADC card needed to be replaced, and EMR did not have a replacement card on site.
 - EMR group borrowed an identical card from the Ckov detectors
 - Clearly not an ideal solution.
- Would like to arrange a set of local spares, for temporary use only, of the most common / vital boards.
 - Managed by local Online / DAQ representatives, with MOM having access.
 - Get the DAQ running again as soon as possible.
 - Not clear where the money would come from, who would own them...

EMR Run Online Monitoring

- New system worked well:
 - Some startup issues, actually an Operations problem with instructions.
- The system can be expanded:
 - TOF / Ckov / KL – Plots exist, but could do with better documentation for shifters.
 - EMR / Tracker – No plots currently included.
- Looking for a system that makes it easy for shifters to notice discrepancies:
 - Overlay reference plots / KS test?

EMR Run Run Control

- All other parts of C&M worked well.
 - Alarm Handler producing a few too many false positives.
- By the end of the running period, RC was working and the CDB was being populated with all available data.
 - Some information was incorrect, even on the last weekend, but mostly due to other systems.
 - The Run Spreadsheet was used for all runs as well, hopefully not required next time.

Goals for CM38

- Servers:
 - Standard clean config for C&M, OnRec, DAQ
 - Enforced / Alarmed
 - Easy switching to backups for C&M (OnRec & DAQ?)
- DAQ:
 - Investigate spares
- Online Monitoring:
 - Comparison to reference runs.
 - Review of plots.
- C&M:
 - Documentation:
 - Run Control
 - Alarm Handler:
 - Fewer false positives.