

Online Planning FY06 - Database

Michael DePhillips - STAR

Critique of Run 5

Immediate Changes for Run 6

Longer Term Goals

Flow Control

- Architecture
- What Works
- What Doesn't (didn't)
- New Features/systems
- Future (Beyond Run 6)

Hardware Run_5

- ONLSUN1
 - port 3501 – RunLog ShiftLog ShiftSignup
 - port 3502 – Conditions
 - port 3503 – eventTag (daq)
- Bufferbox
 - backups
- ONLSUN2
 - eventTag backup

Hardware Run_6

- ONLDB01
 - port 3501 – RunLog ShiftLog ShiftSignup
 - port 3502 – Conditions
 - port 3503 – eventTag (daq)
- ONLSUN1
 - realtime backup conditions – daqReady
- ONLSUN2
 - daqReady – disk space

Software

- online daemons
 - Conditions
 - ftpc-temps
 - RunLog
 - a lot of modifications this year
- migration macros
- runlog browser
- scaler files
- QA Plots
- event-by-event aggregates
- ad-hoc

Problems

- Hardware
 - Fan died in ONLSUN1
 - lack of immediate non-expert backup
- Software
 - Long Run
 - stressed system
 - Fast Triggers
 - abused system

Software Problems (DB)

- long run
 - file size QA plots
 - roll over scripts like the eventTag
 - hardcoded dates
 - code fixed
- fast triggers/detectors
 - 5m event runs
 - no solution
 - number of triggers blew-up runlog
- tpcGas macro
 - needs to be rewritten

Software Problems (DB)

- Table locking
 - fast-offline has a big footprint on the db
 - backups at the end of the run - QA
- EPICs/Slow control support
 - don't send anything

Beyond Run 6

- online api
- storage solution (multi-disk – tera+)
- more machines (master – slave)
 - separate writes and reads

Actions

- rewrite tpcGas macro
- slow control - broken flags
- purchase spare disk for onldb01
- DNS/machine name magic
- Automate Roll-over scripts