

CCJ daily operation

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030926 CCJ users meeting at RIKEN/Wako

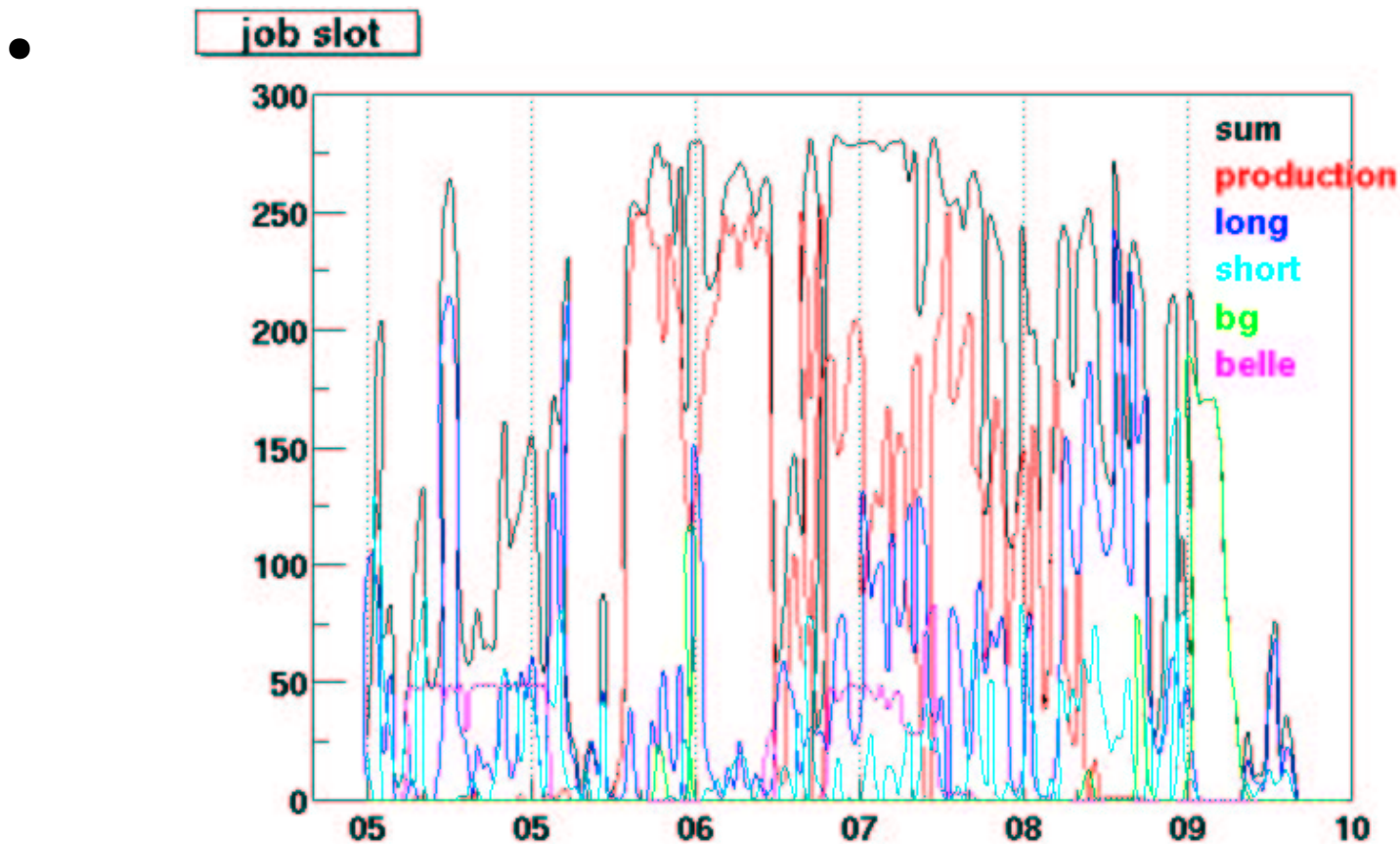
- plan/project proposal from users
- monitoring nodes & jobs
- resource allocation policy
 - CPU (LSF) and large disks
- hardware troubles
- local software status
- trend in PHENIX (software)

plan/proposals from users

- <http://ccjsun.riken.go.jp/ccj/proposals>
- 15 plans (unofficial)/4 proposals(official)
- please submit your plan to use rare resource
 - CPU, especially I/O (disk amount/HPSS B/W)
 - deadline
 - very small users report the end of his project.
- first large conflict in this summer

monitoring nodes & jobs

- <http://ccjsun.riken.go.jp/~yokkaich/mrtg/status/>



CPU allocation (LSF)

- 'job slot' = # of cpu
 - I/O bound jobs waste the cpu slot...
- 'fare share' policy built in LSF
 - cpu usage by many users are balanced in a week
 - weighted by human based on urgency
 - first case: phnxreco = other user x 3~4 in this summer
- max of each queue are also controled
 - e.g. Belle_sim queue
- not needed to limit # of jobs by user–script
 - max number control is easy
 - processing trend is watched

Disk allocation

- fuzzy control by human
- project oriented
 - 1–2 project / partition(~1TB) for regional
 - 2–3 partition / project for production
 - delete at the end of project
- And hardware spec.
 - slow/fast, stable/unstable
- public data (uDST, nDST)
 - list /DB is not well made...

hardware trouble

- CPU's
 - LSF hung up nodes (user cannot kill jobs)
 - M/B replace in last fall → resolved
 - OS hung up nodes (cpu panic with user jobs)
 - not resolved
 - 13% of cpu-powers are already down
- Large DISKs (RAID)
 - 17 cases / these 14 month
 - controler/ I/F card : 13 cases → down time
 - data were not lost, but waist of time...
- Network
 - switch replace plan

Local Software

- rcpX : effective use of RAID I/O
 - some poor spec. were found
 - remained lock just after 'bkill'
 - conflict between jobs using multi rcpX
- Objectivity
 - automatic copying stopped at April–trouble at 1008
 - 'oobackup' cannot work at 1008 by DB–inconsistency
 - 'oocopyfd' cannot work other inconsistency
 - 'ooinstallfd' cannot work with replication
 - 030905 ver. is under test
 - copied with some tricks...

trend in PHENIX (software)

- RH 8.0 : linux nodes & AFS-copy
 - should be done
- file catalog (postgresql)
 - needs ?
- new DB(Objy-> postgresQL)
 - when?
- GRID
 - Condor batch system in RCF
 - GridFTP
 - Gfarm (KEK/AIST)
 - ---- feasible ?