



# User jobs, storage and AliEn v.2-15

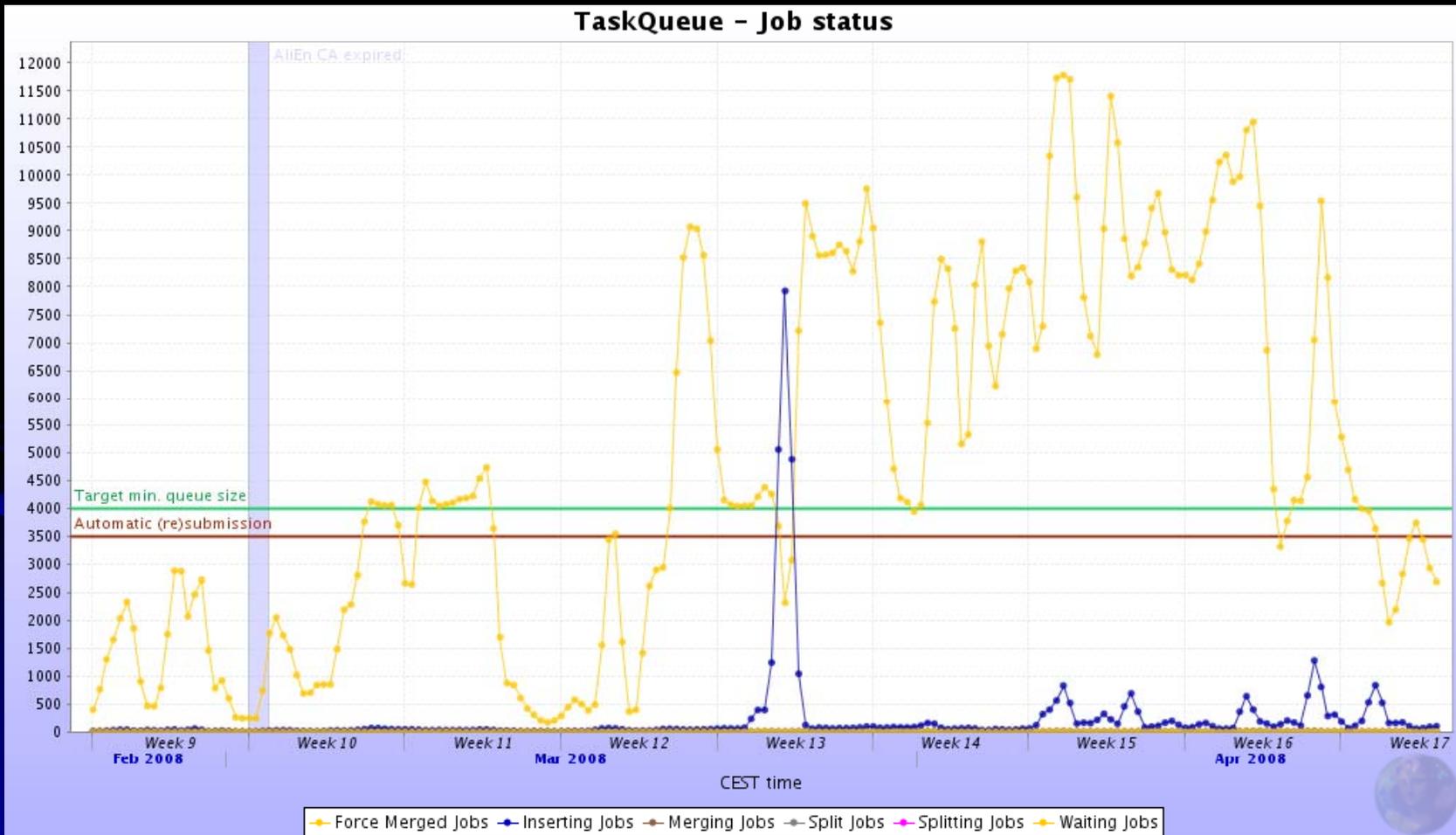
GRID/CAF user forum  
April 24, 2008

# User jobs in the AliEn Task Queue

- The common AliEn tasks queue is holding all jobs submitted to the Grid
  - MC production: running + 4K jobs waiting at all times, constant load
  - RAW data production – spurious at present, in principle same as MC production
  - User jobs: chaotic submission, executed with high priority
- In the past month, the number of user jobs has increased substantially, sometimes it is higher than all MC+RAW production together (good!)
  - This can be attributed to the availability of data for analysis

# User jobs in the TQ (2)

- Job profile

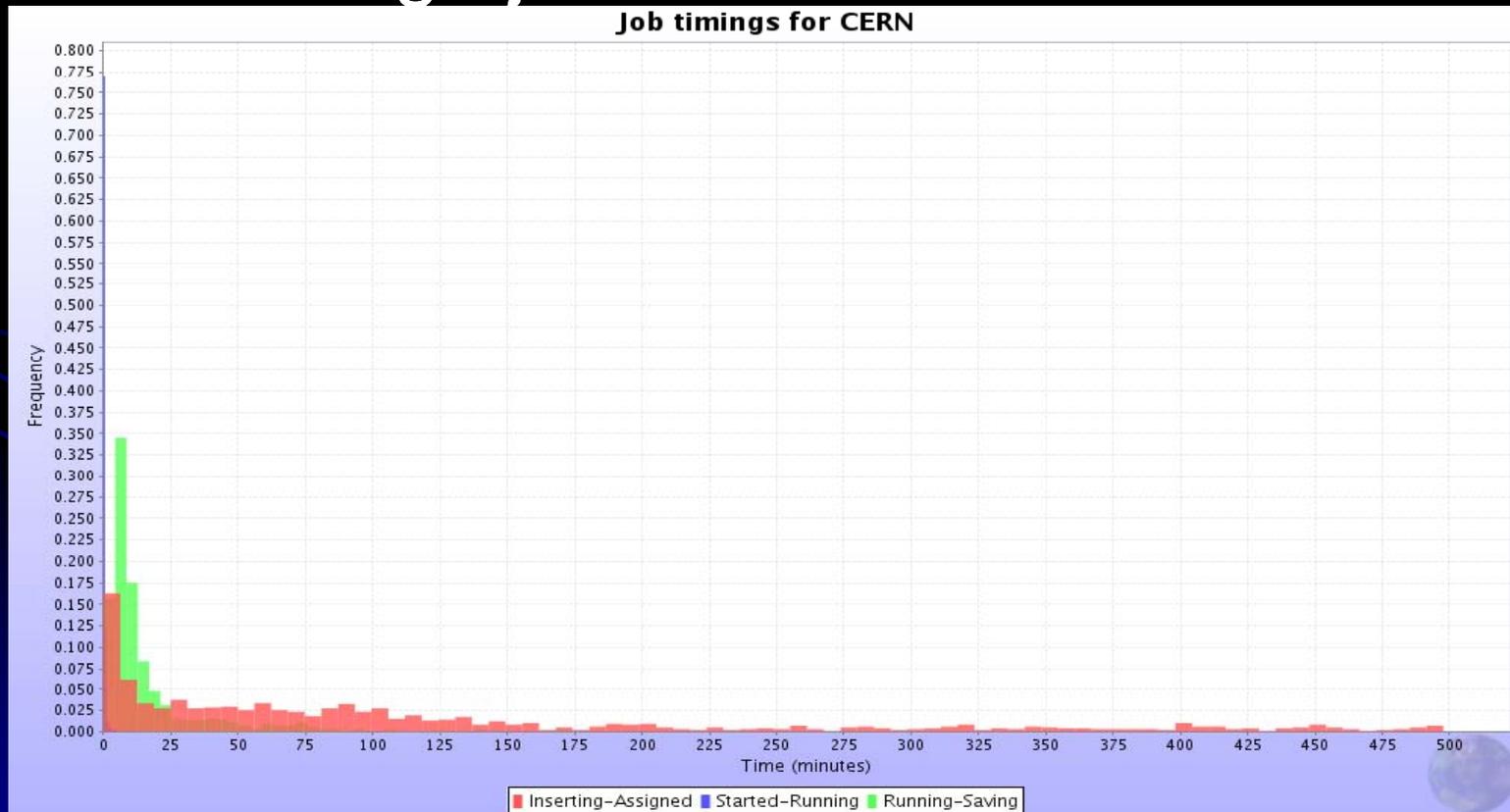


## User jobs in the AliEn TQ (3)

- The distribution shows that AliEn (and the underlying resources) can process ~8000 user jobs/day
- So far, we do not observe a critical overload of the TQ and the services (JobOptimizer), however
- Please do not submit many thousands of jobs
- Wait until completion and then submit (or re-submit) next batch
- For comparison at CERN (entire cluster)
  - 5000 running jobs (comparable to AliEn)
  - 10000 waiting jobs (less than in AliEn)

# User job timing

- User jobs are executed in average 120 mins after submission
- The average job duration is 17 minutes



# Data availability for analysis

- Primary copy of all recent productions is on disk (at T2s)
- The SEs holding the data are performing well (or at least there are no reports of unavailability)

Production	Description	Status	Run Range	Events Count	Comments
PDC 08/LHC08x	p+p, charm, forced had decays	Running	180001 - 180042	3,478,700	All runs staged
PDC 08/LHC08w	p+p, beauty, forced had.charm decay, PYTHIA	Completed	290001 - 290017	786,500	Residual misalignment, all run staged
PDC 08/LHC08v	jet-jet pp, PYTHIA, 15 GeV/c < Pt hard < 50 GeV/c	Completed	280001 - 280043	4,316,900	All runs staged
PDC 08/LHC08u	gamma-jet pp (2), PYTHIA, no quenching	Completed	260007 - 260036	3,036,000	All runs staged
PDC 08/LHC08t	MUON Cocktail pp, MB	Running	170001 - 170167	64,648,000	Ideal alignment, all runs are staged
PDC 08/LHC08s	p+p, beauty, with B->J/psi->ee decay	Completed	200001 - 200003	197,400	All runs staged
PDC 08/LHC08r	jet-jet pp, PYTHIA, Pt hard > 50 GeV/c	Completed	270001 - 270028	2,900,000	All runs staged
PDC 08/LHC08q	jet-jet pp, PYTHIA, hard > 100 GeV/c	Completed	230002 - 230010	878,400	All runs staged
PDC 08/LHC08p	gamma-jet pp, PYTHIA, quenching	Completed	220001 - 260006	4,267,800	All runs staged
PDC 07/LHC07g	MC pp, di-muon cocktail	Completed	200007 - 200317	25,446,300	Ideal geometry
PDC 07/LHC07f	MC pp min. bias for V0 studies	Completed	160000 - 160300	3,286,500	V0, Residual misalignment

## SLC4 and AliEn v.2-15

- We are migrating all build server and site installations to SLC4 (and gcc 3.4.6)
- This will solve a number of issues related to the use of the code compiled with gcc 3.2 on new systems
- In addition, we are trying to have a coherent and matching installation (32- or 64-bit) of the services, AliRoot/ ROOT / Geant, and the worker nodes in the local batch systems
  - Extremely important for user code compilation 'on the fly'

# User action

- Once the build servers are up and the new AliEn is available, all users must reinstall gshell – there are backward incompatible changes
- In addition, we will no longer support the old versions of AliRoot, ROOT and GEANT3
- **Supported matrix**
  - AliRoot::v4-09-Rev-01, ROOT::v5-17-06, GEANT3::v1-8
  - AliRoot::v4-10-Rev-01, ROOT::v5-18-00, GEANT3::v1-9
  - AliRoot::v4-10-Rev-02, ROOT::v5-18-00a, GEANT3::v1-9-1
  - AliRoot::v4-11-Rev-02, ROOT::v5-18-00b, GEANT3::v1-9-2
  - AliRoot::v4-11-Rev-03, ROOT::v5-18-00b, GEANT3::v1-9-2