ALICE Q-Report

2007Q3

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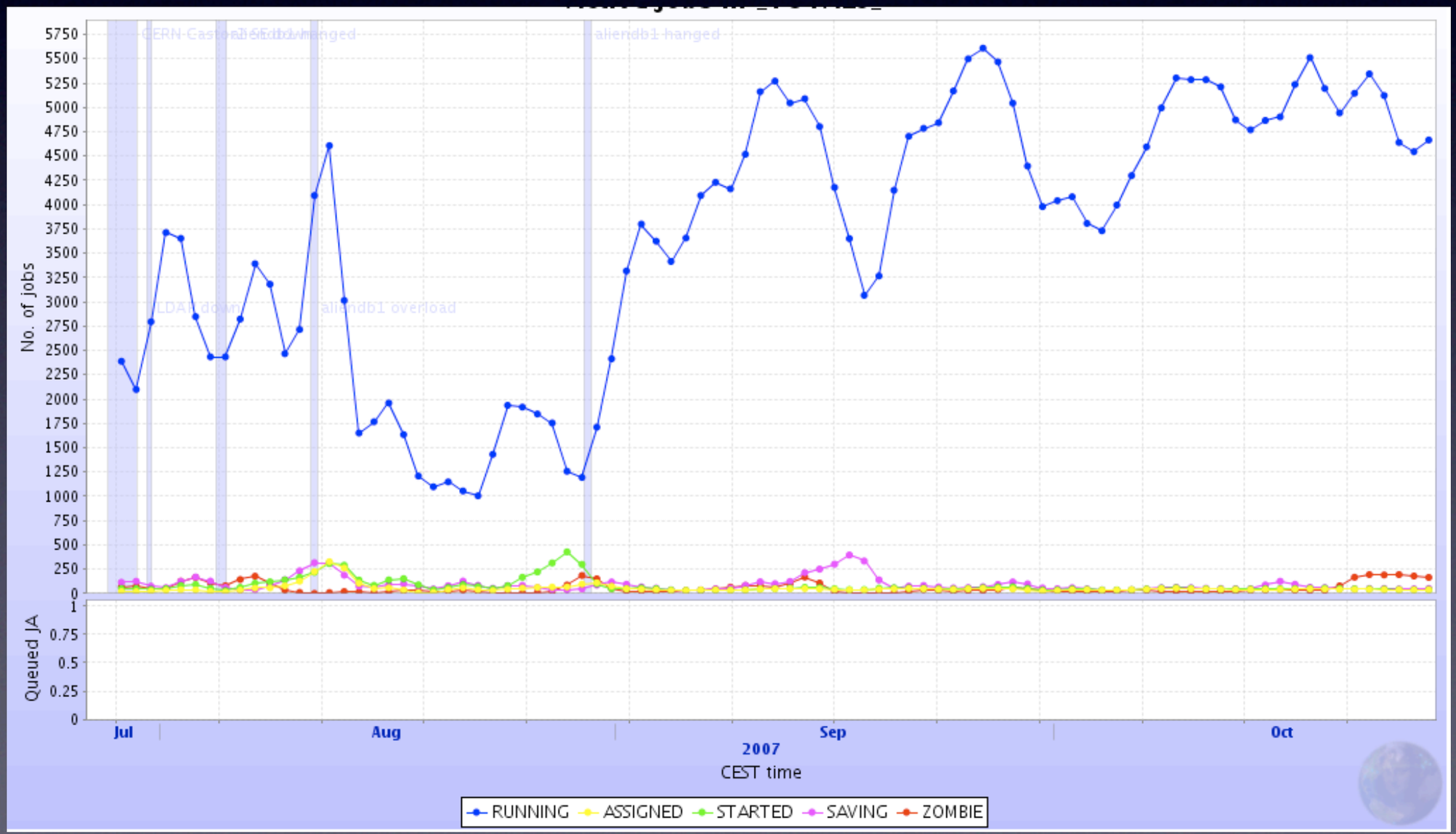
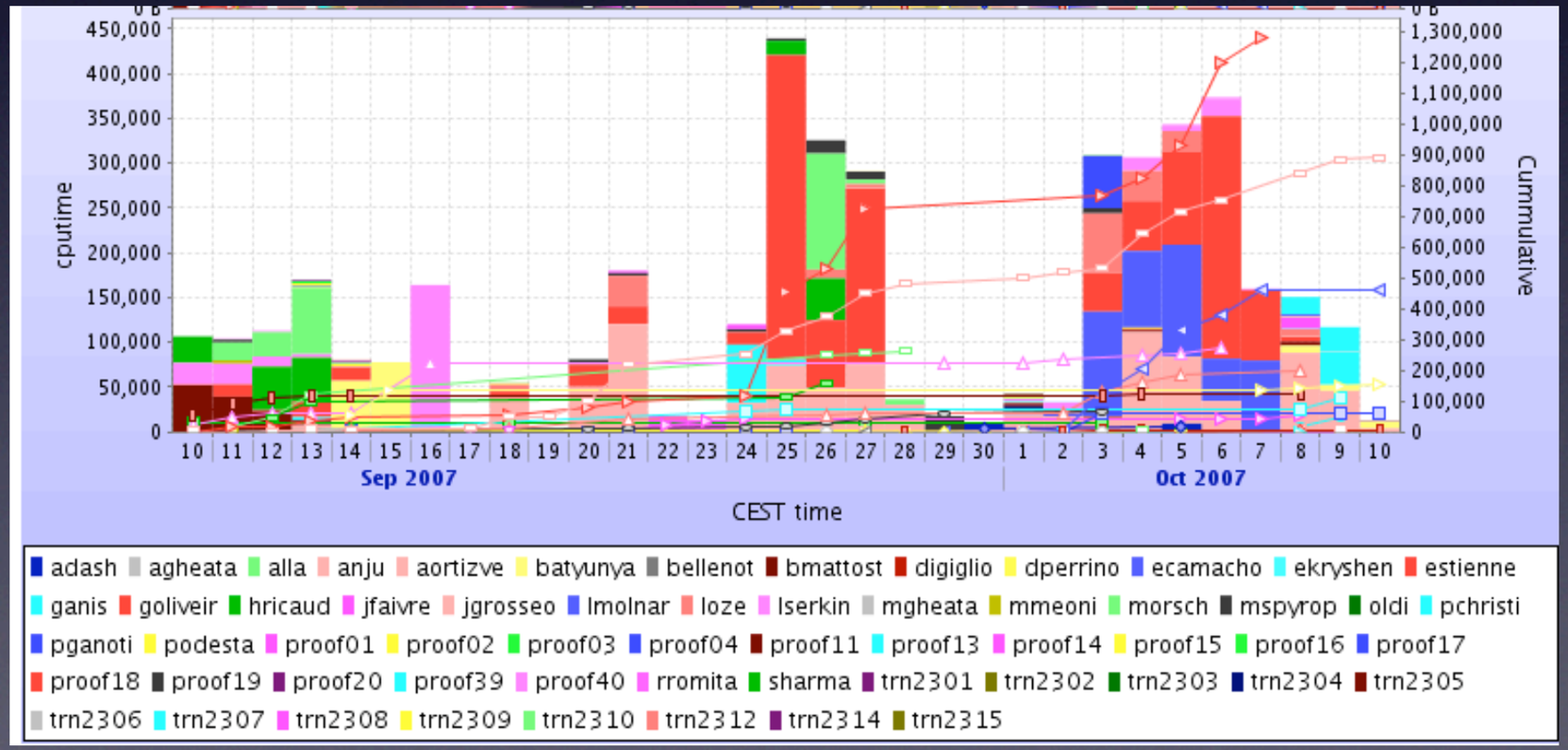
Physics Data Challenge 07

- Excellent stability of central services
- Sites deliver > 90% of pledged resources
- New sites joining (Wuhan, Hiroshima)



CAF

- CAF with PROOF is in production
- Under development:
  - disk quota and fair share CPU target for groups
  - data staging with PROOF Datasets

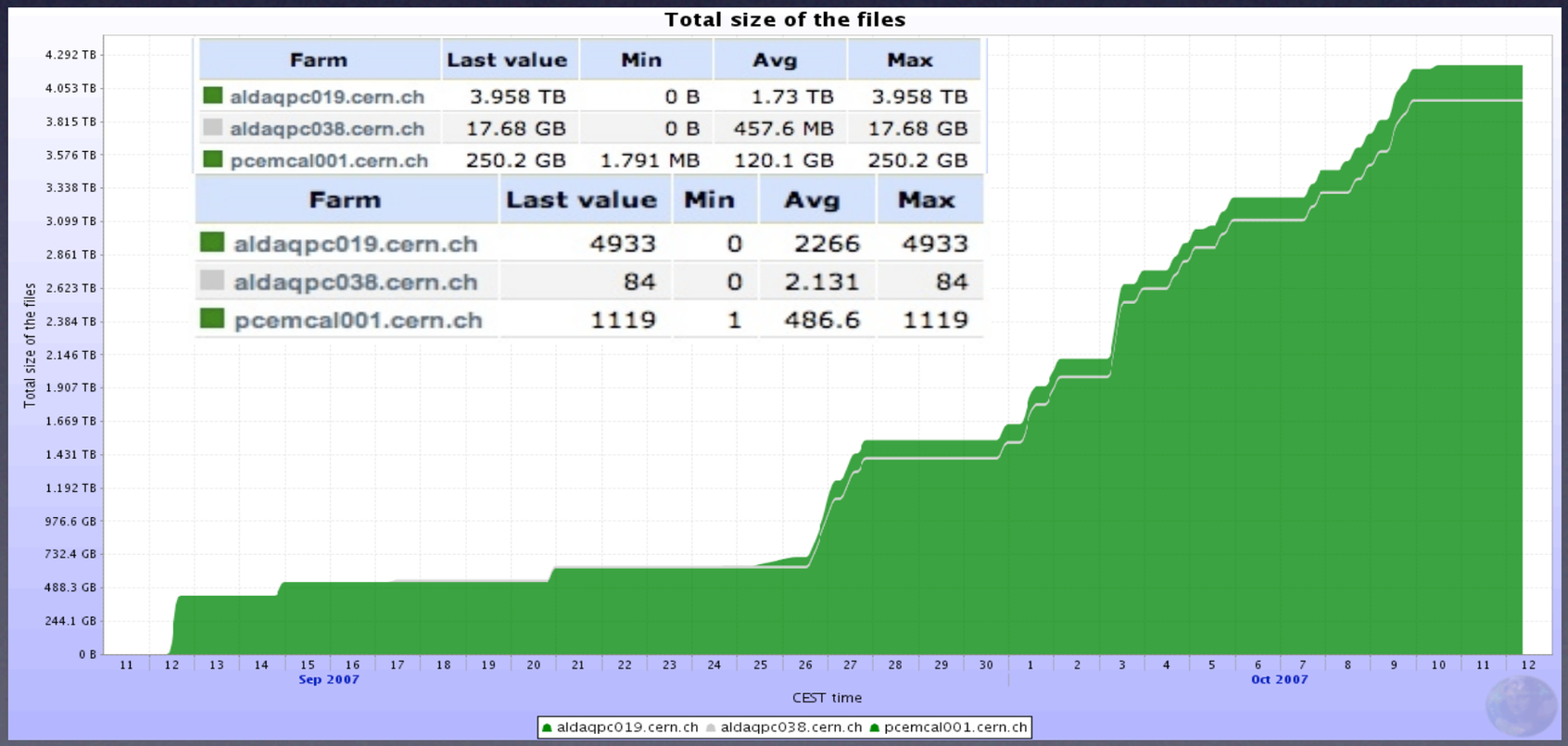


Full Dress Rehearsal milestones

- Phase 1: DEC-2007
  - Cosmic rays data taking, calibration runs from detector commissioning (started for some detectors in lab)
  - Registration in CASTOR2 + Grid File Catalog (OK)
  - Replication T0->T1s synchronous with data taking using FTD/FTS utilities (tested with FTS v.2)
    - no critical dependance on the SRM version
  - Asynchronous replication to CAF (OK)
  - Pass 1 reconstruction on Grid at T0 (OK)
  - Interactive expert analysis with PROOF on the CAF (OK)

Full Dress Rehearsal
Status Phase I

- Three detectors taking cosmic data on surface
  - DAQ registration working 100%, no failure in one month
- Next
  - commissioning exercise will start in situ in December
  - Generated data fed into the DAQ data flow to reach nominal pp data rates



Full Dress Rehearsal Status Phase I

- Continuous replication T0->T1 pending
  - Current RAW rate from detectors is 0.2 MB/s (target 60MB/s for pp)
  - Need to re-establish the tape storage at T1's
    - Replication with nominal rate will be done with injected RAW data
- Pass 1 reconstruction
  - Detector experts driven reconstructions on the Grid
  - Rapid changes in the reconstruction software required makes automatic processing difficult

Full Dress Rehearsal milestones

- Phase II: FEB-2007
  - All elements of Phase I
  - Second pass reconstruction at T1s
  - Collection and registration of conditions data from DAQ, ECS, DCS, HLT during commissioning
    - On line detector algorithms in DAQ/DCS/HLT (OK)
    - Data transit through File Exchange Servers (OK)
    - Shuttle registers condition objects and metadata in Grid FC (OK)
- Phase III: April-2008
  - All elements of Phase I and Phase II
  - Gradual inclusion of online Detector Algorithm and QA

CCRC'08 Feb/May 2008

- ALICE requirements:
  - Work Load Management
    - Hybrid mode (LCG RB or gLite WMS) OK
    - To use gLite WMS, we need gLite VO Box suite
  - FTS service from T0-T1s
    - no constraint on the SRM version
  - xrootd interfaced with all supported gLite SE's

CCRC'08 Feb/May 2008

- ALICE readiness:
  - FTS/SRM not tested at nominal transfer rates
  - Grid services for reconstruction and simulation at T0-T1-T2 OK

- SE with xrootd
  - dCache in production (GSI, CCIN2P3, SARA, NDGF, FZK)
  - CASTOR2 with xrootd in advanced testing phase
  - DPM prototype under test at CERN and Torino

Resources

- Progress in using the CPU resources allocated to ALICE
- Storage in external SE is gradually becoming operational
- Deficit problem not solved with new contributions

Pledged by external sites versus required (new LHC schedule) all													
		2007		2008		2009		2010		2011		2012	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
CPU	Requirement (MSI2K)	3.2	4.6	10.1	12.5	19.9	14.3	23.5	25.0	30.5	32.5	39.7	42.2
	Missing %	-45%	-3%	-31%	-36%	-47%	-18%	-39%	-38%	-53%	-52%	-64%	-63%
Disk	Requirement (PB)	1.2	0.7	4.1	1.7	6.8	4.0	12.0	4.3	16.6	5.6	22.4	7.3
	Missing %	-38%	6%	-34%	6%	-37%	-21%	-50%	-1%	-64%	-24%	-73%	-42%
MS	Requirement (PB)	1.4	-	5.9	-	12.6	-	20.0	-	27.3	-	34.1	-
	Missing %	-24%	-	-34%	-	-37%	-	-41%	-	-57%	-	-66%	-

Milestones

- MS-118 sept 07: AliRoot and analysis package release for day 1
  - postponed to May 2008
- MS-119 oct 07: AliRoot release for detector commissioning
  - done
- MS-120 oct 07: MC raw data for FDR
  - ongoing
- MS-121 oct 7: on line DA and shuttle integrated in DAQ
  - postponed to February 2008 (FDR Phase II)
- MS-122 oct 07: FDR Phase II
  - postponed to February 2007
- MS-123 oct 7: online analysis with CAF
  - done

New Milestones

- MS-124 Feb. 08: Start of FDR Phase II
- MS-125 Apr 08: Start of FDR Phase III
- MS-126 Feb 08: Ready for CCRC 08
- MS-127 Apr 08: Ready for CCRC 08