# ALICE QUARTERLY REPORT
2009Q3

Summary

- Data Taking
  - Resumed since August (cosmic, calibration and injection tests)
- Data Processing
  - Cosmics and calibration data being continuously processed at T0
- MC Data Production
  - On demand productions in preparation of 2009/2010 data taking
- Software
  - Final AliRoot release in production
- Services
  - SL5 and CREAM being deployed
- Analysis
  - CAF (fast), analysis train (organized) and end user analysis (chaotic) running routinely

- Milestones

Data taking

- Data taking with complete detector has resumed in July 2009
  - Cosmics
  - Injection tests
    - 11-12 July: TI2 transfer line test
    - 25-28 September: TI2-TI8 transfer line test
  - All Tier0/CAF tasks are continuously exercised, except export to T1s and pass2 reconstruction, for the sake of saving storage
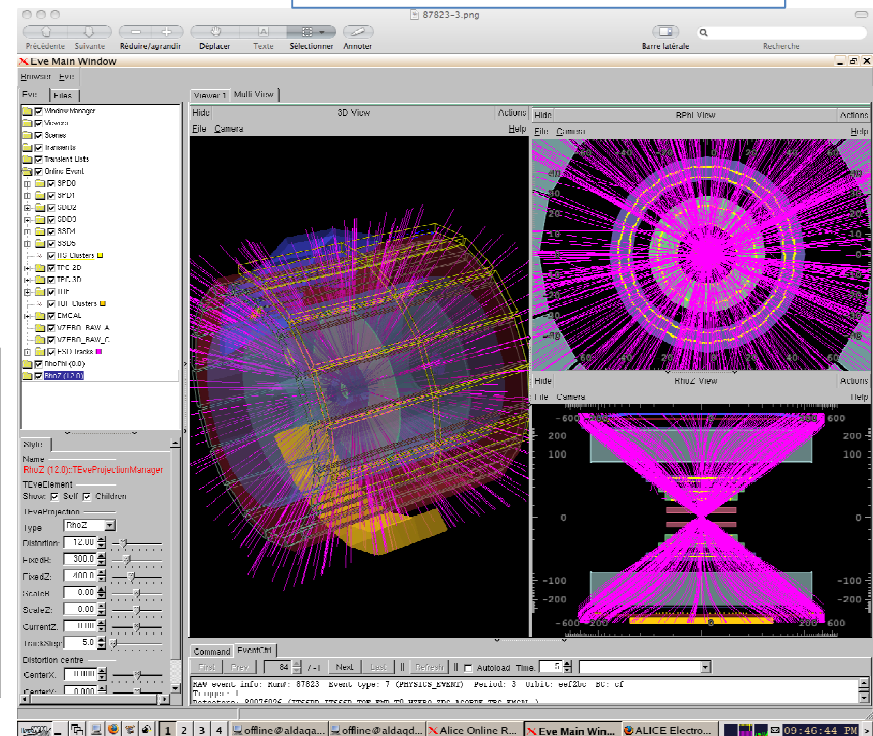
Raw Data Registration

~82 TB
3000 runs
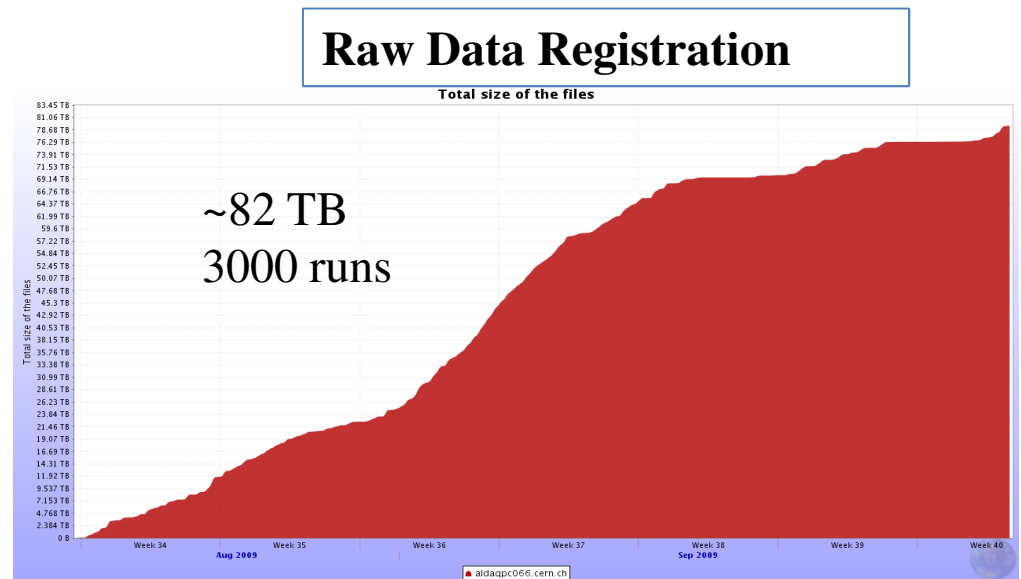
Data processing

- All data are reconstructed in a first pass at T0
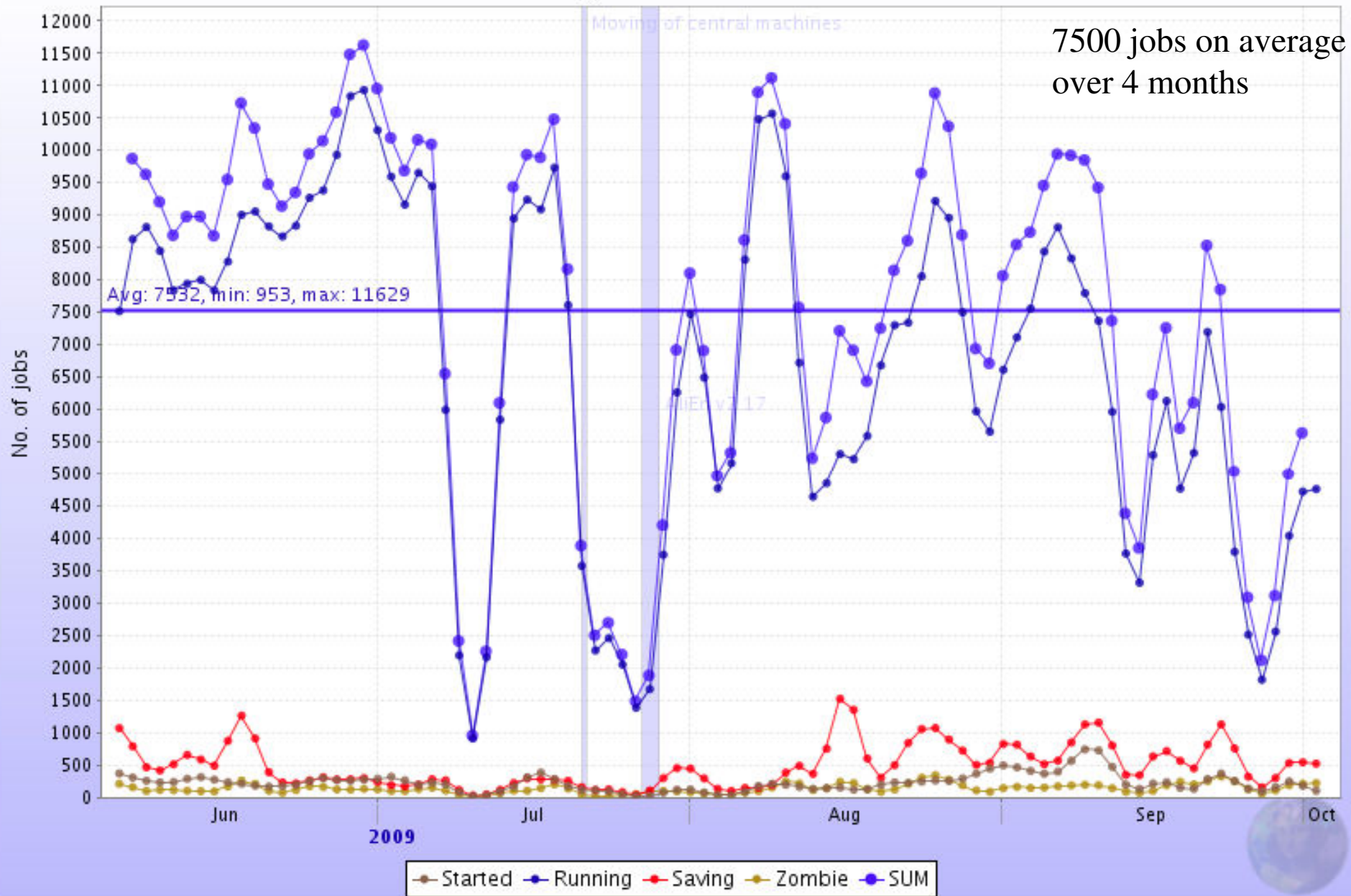- Reconstructed data analyzed on the 2 AF (CERN & GSI) and on the GRID

Lead Beam splash

Cosmic DQM
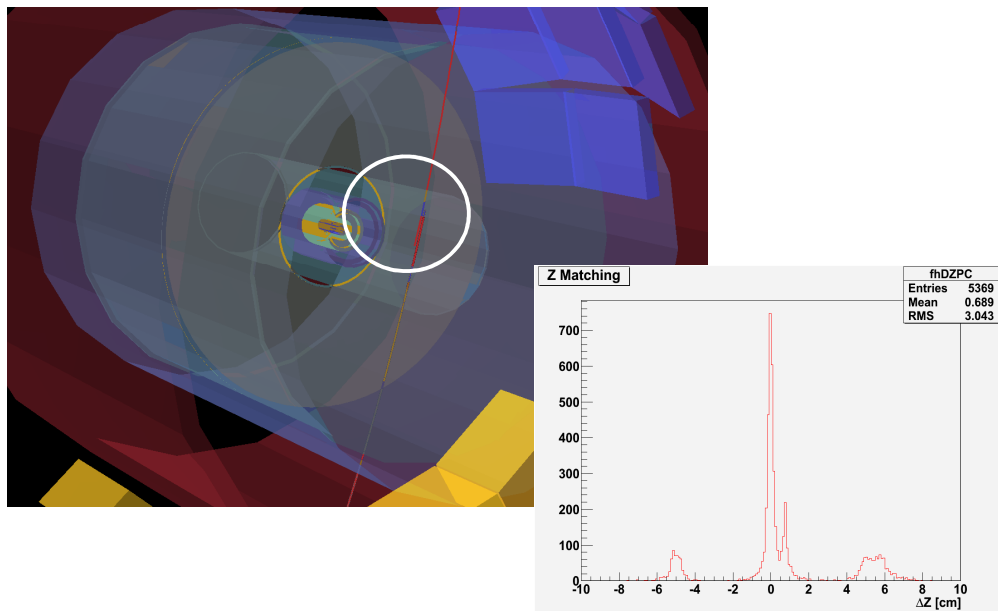
Productions

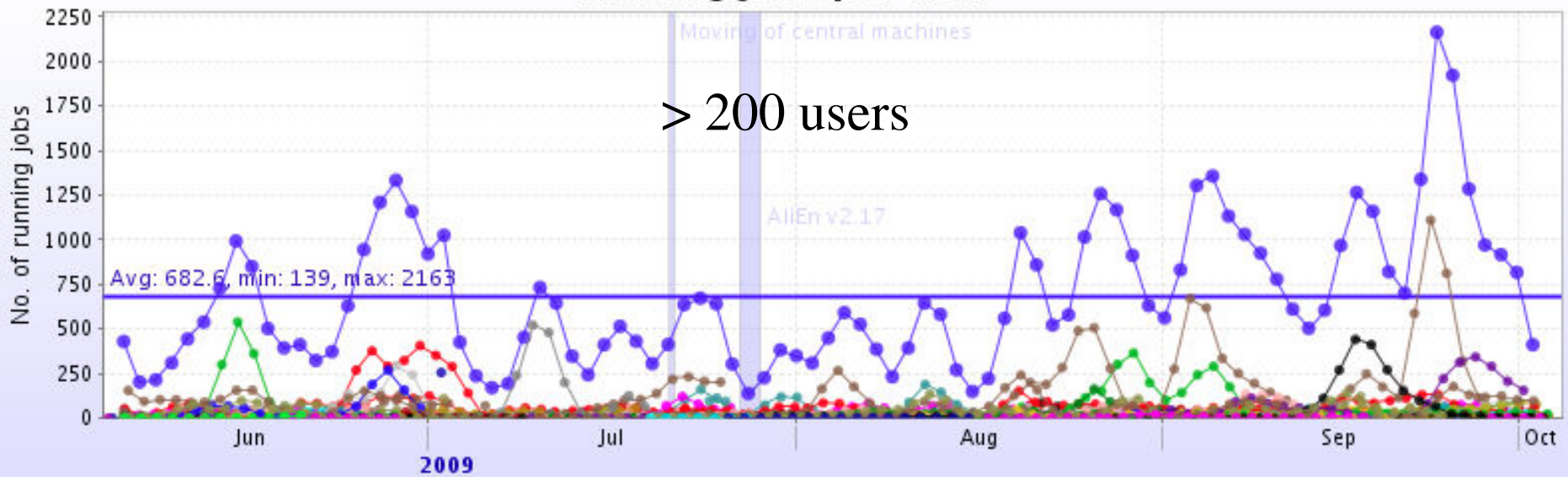- MC run in all sites, data replicated in 3 SE (xrootd enabled)
  - Only run if needed (no "keeping processors warm" strategy)
  - Mainly first physics type of production
- Raw data reconstruction (cosmic, calibration, beam tests)
  - At T0 exclusively, several passes
  - Selected data at CAF
- Analysis
  - Train on the Grid for all major production in 2009
  - End user on CAF and Grid, AOD is the preferred input

Jobs status

7500 jobs on average over 4 months

Moving of central machines

Avg: 7532, min: 953, max: 11629

No. of jobs

2009

Jun | Jul | Aug | Sep | Oct

— Started — Running — Saving — Zombie — SUM

Running jobs per user

> 200 users

Avg: 682.6, min: 139, max: 2163

CAF usage
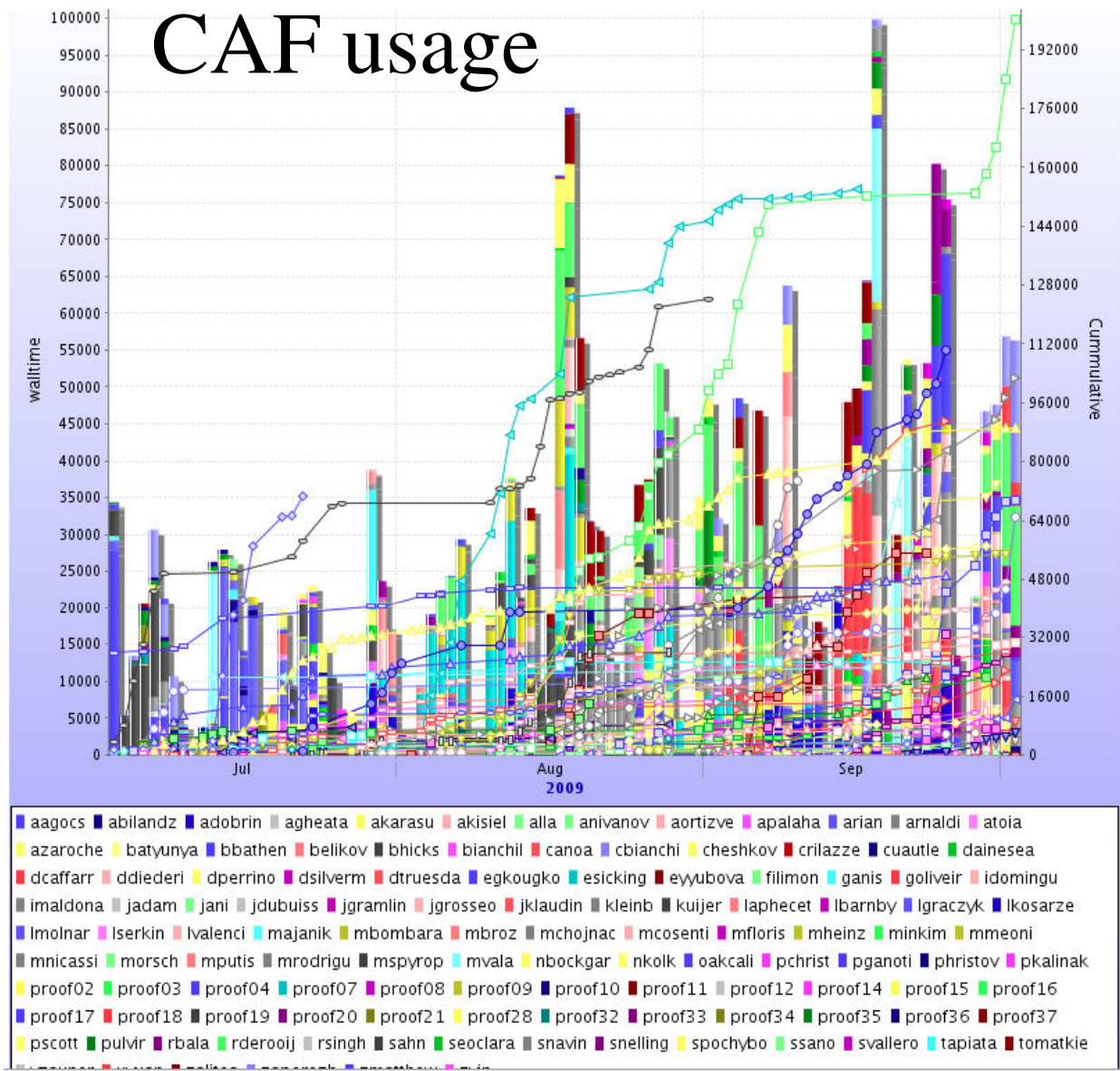
Resource to be increased x3 by end of November (300 cores)

Analysis trains

Production info			Completion rate	Jobs status			
Production	Description	Status		Total	Done	Running	Waiting
LHC09b6AOD	LHC09b6: standard AODs with MC info, AOD tags and pyxsec_hist	Completed		0	0		
LHC09b5AOD	LHC09b5: standard AODs with MC info, AOD tags and pyxsec_hist	Completed	100%	5	5		
LHC09b4AOD	LHC09b4: standard AODs with MC info, AOD tags and pyxsec_hist	Completed	97%	257	251		
LHC09b3AOD	LHC09b3: standard AODs with MC info, AOD tags and pyxsec_hist	Completed	98%	128	126		
LHC09b2AOD	LHC09b2: standard AODs with MC info, AOD tags and pyxsec_hist	Completed	98%	257	254		
LHC08d6	LHC08d6: standard AODs with MC info, AOD tags	Completed	100%	110	110		
LHC09a6AOD	LHC09a6: standard AODs with MC info, AOD tags and vertexing HF delta AODs	Completed	0%	18			18
LHC09a5AOD	LHC09a5AOD: standard AODs with MC info, AOD tags and vertexing HF delta AODs	Completed	98%	218	215		
LHC09a4AOD	LHC09a4AOD: standard AODs with MC info, AOD tags and vertexing HF delta AODs	Running	49%	3446	1709	264	444

Software: AliRoot

- Deployment of the online-offline QA framework
- PROOF based parallel reconstruction operational
- Validation and tuning of the offline framework with cosmic data
- Optimization of memory and CPU consumption
- Design of multi-threaded reconstruction
- Validation of the GEANT4 and FLUKA transport models

Services: CREAM & SL5

- CREAM CE in 50% of the ALICE sites
- dual submission CREAM/WMS still the norm
- All ALICE software has been validated for SL(C)5
- The production (RAW and MC) and user analysis is already running on SL(C)5 resources wherever available

SITE	SITUATION
CERN	2 VOBOXES in SLC4 and one in SLC5, submitting to both types of WNs
KISTI	1 VOBOX in SL4 and 1 in SL5 (CREAM VOBOX), submitting to both types of WNs
SUBATECH	2 VOBOXES in SL4, small cluster available in SL5 (behind CREAM)
RAL	2 VOBOXES in SL4, cluster avalable in SL5 (behind LCG-CE)
ITEP and SPBSu	Full site migrated to SL5, but only one VOBOX available
KALKOTA	1 VOBOX in SL4 and 1 in SL5 (CREAM VOBOX), submitting to both types of WNs
IPNL, IHEP RRC-KI and GRIF_DAPNIA	Full site migrated to SL5 BUT the VOBOX (still SL4)
IPNO	VOBOX migrated to SL5 but not the WNs

Milestones

- ## New milestones
  - MS-130 Jun 09: CREAM CE deployed at all sites ← 50%
  - MS-131 26 Jun 09: AliRoot release ready for data taking ← done
  - MS-132 14 July 09: release and deployment of AliEn v2-17 ← done