

Experiment Operations: ALICE Report

WLCG GDB Meeting

CERN, 13th January 2010

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Outlook

- During the last « *Experiment Operations* » session (October GDB 2009) ALICE presented the following requirements
 - **Deployment of SL5** in all WNs and VOBOXEs (T0,T1,T2 sites)
 - DEADLINE: Mid-September 2009 → Self-imposed and following the recommendation of the MB in terms of pushing T1/T2 to migrate to SL5
 - **Deployment of a CREAM-CE** at all sites (T0,T1,T2 sites)
 - DEADLINE: Mid-November 2009 → following the milestones defined in terms of CREAM-CE deployment
- We present now the follow-up of these requirements
- In addition we present the status of the ALICE activities and operations during the 2009 Christmas period

Deployment of SL5 WN/VOBOXES

- Setup of SL5 together with CREAM-CE: highest priority of ALICE in 2009
 - GOAL: Full migration of all T0/T1/T2 sites by Sep09 but **extended to Dec09**
 - SL5 WNs: Deployed in March 2009
 - SL5 VOBOX: Deployed in October 2009
 - CURRENT STATUS: **achieved in (almost) all sites**
 - Pending sites (WNs and VOBOX setup pending)
 - UNAM (Mexico)
 - ATHENS
 - MEPHI (Russia)
 - SINP (Russia)
 - CESGA (Spain)
 - All these sites have been excluded on the ALICE production until the services update

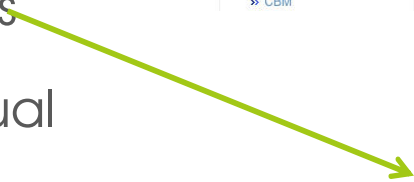
Follow up of the sites

- Summer 2009: Daily followup of resources status and weekly reports during the ALICE TF meeting



#	Centre	WNs SL5	gLite3.2 VOBOX	CREAM	CREAM Version	Comments
1	Aalborg	YES	N/A	N/A	N/A	Ubuntu 9.04
2	Athens	Q1 2010	Q1 2010	YES	?	
3	Bari	YES	YES	NO	1.5	
4	Birmingham	DONE	Ongoing	no news		
5	Bologna-T2	YES	YES	YES	1.5	
6	Bratislava	DONE	DONE			
7	Cagliari	YES	YES	ALMOST		
8	Catania	YES	YES	NO		

- Establishment of local pages including the resources status



Saint-Petersburg State University ALICE Group

GRID // LCG
Resource for alice from RDIG

Site name	Type SE	Monitoring SE	VO-BOX 1 (for LCG)	VO-BOX 2 (for CREAM)	WNs	Comments	Date (author)
IHEP	xrostd		SL5	SL5	SL5	gLite-ce-cream-1.10.3-0 gLite-CREAM-3.1.10-0	11.12.2009 (Andrey Zarochentsev)
ITEP	xrostd		SL5	SL5	SL5	gLite-ce-cream-1.11.1-13.	11.01.2010 (Andrey Zarochentsev)
JINR	xrostd		SL5	SL5	SL5	gLite-ce-cream-1.11.1-16 gLite-CREAM-3.2.1-0.x86_64	18.12.2009 (Andrey Zarochentsev)
MEPhi	xrostd		SL4	no	SL4	Migration to SL5 has been promised only in the beginning of 2010.	12.11.2009 (Galina Shabratova)
PNPI	xrostd		SL5	no	SL5		11.01.2010 (Andrey Zarochentsev)
SPbU	xrostd		SL5	no	SL5		11.01.2010 (Andrey Zarochentsev)

- Dec09: individual notification of blacklist operations to affected sites

- Pending sites blocked the 3rd of January

Deployment of CREAM-CE

- This service has been requested on all sites in Summer 2008
 - GOAL: Deployment of CREAM-CE in parallel to the LCG-CE at all T0/T1/T2 sites before the end of 2009
 - CURRENT STATUS: not achieved
- ALICE has been actively involved in the operation of the service at all sites together with the site admins and the CREAM-CE developers
- Sites providing CREAM-CE infrastructure for ALICE:
 - T0
 - T1s: SARA, RAL, CCIN2P3, CNAF, FZK
 - Pending site was CC-IN2P3 which uses BQS as batch system. The CREAM-CE has been tested this week with positive results
 - The site is however not ready to be put in production due to some lack of performance in the VOBOX delivered for CREAM submission
 - Several T2 sites:
 - Prague, Subatech, Torino, Legnaro, Cagliari, Bologna-T2 (in preparation of the vobox setup), Kolkata, IHEP, JINR, Troitsk

SL5/64b CREAM-CE

- In Dec09, the SL5/64b distribution of CREAM-CE was announced (patch # 3260)
 - This version corresponds to CREAM1.5/SL4
 - Patch #3260 not in production before Christmas (planned for January10: Already done, 7th January 2010)
 - Distribution already available in production
 - Alice sites – test and provide feedback of this version during the vacations period
 - JINR (Dubna) installed the patch and put the CE in production
- **This is not the CREAM-CE1.6 distribution**
 - Certification expected by end January/beginning of February

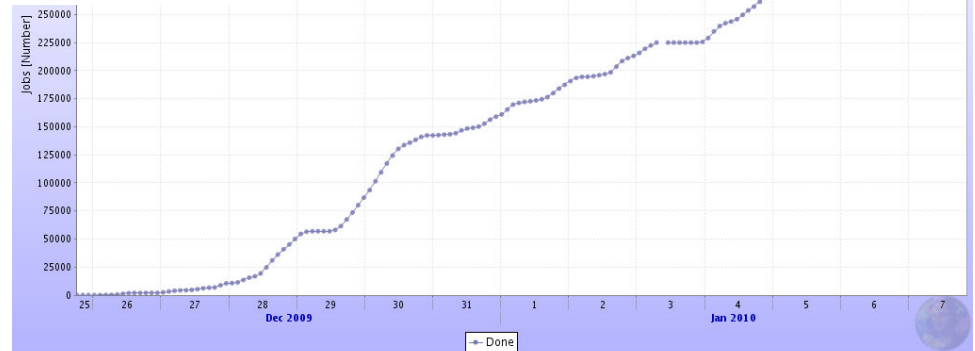
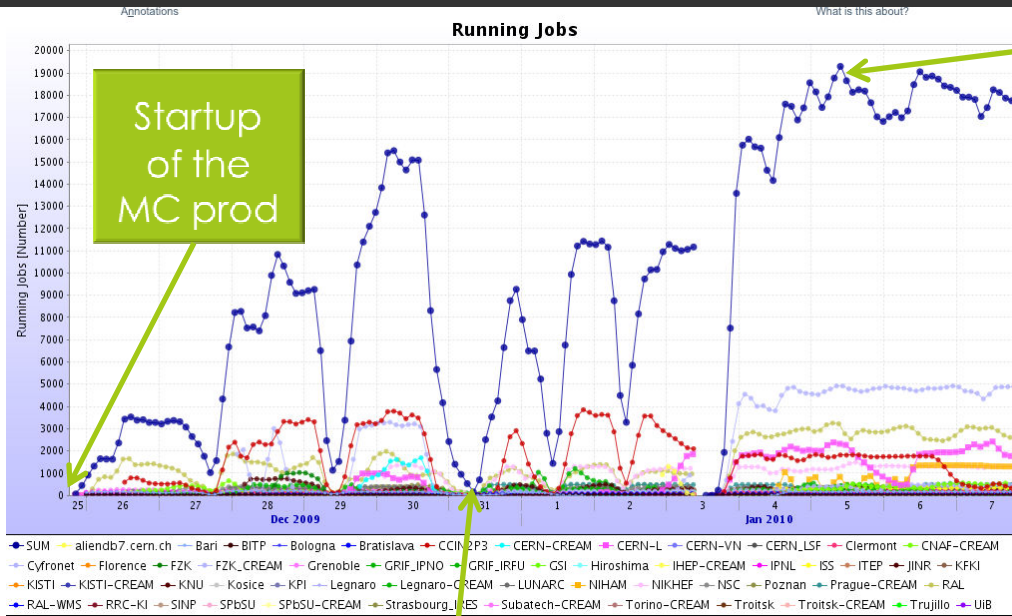
SL5/64b CREAM-CE: Feedback

- Site admins feedback:
 - Several operations have been required
 - Minor adjustment of local configurations
 - Solve manually some issues with the start/stop operations of the services
 - Follow up with the CREAM-CE developers
 - Show stop: wrong SGM mapping
 - Jobs submission fails when the jdl contains InputSandbox
 - The origin of the problem is a wrong user mapping between CREAM and gridftp
 - BUG #58941: waiting for the official fix, a "manual" solutions exists and is documented in the "CREAM known issue" page
 - After the fixes the CE was fully operational

ALICE Production during the Christmas break

- Pass 2 RAW reconstruction at T0/T1s and MC production at all sites
- Reconstruction operations:
 - 365GB of RAW in 41 runs
 - X2 replication to the T1 sites
 - Success rate 98%
- MC production operations:
 - From the 25th of December and still ongoing: 200Mio events
 - Remarkable efficiency of all sites and local services
 - Peaks over 19K concurrently running jobs
 - WMS@CERN serving the operations at the T0 and also at number of T2 sites

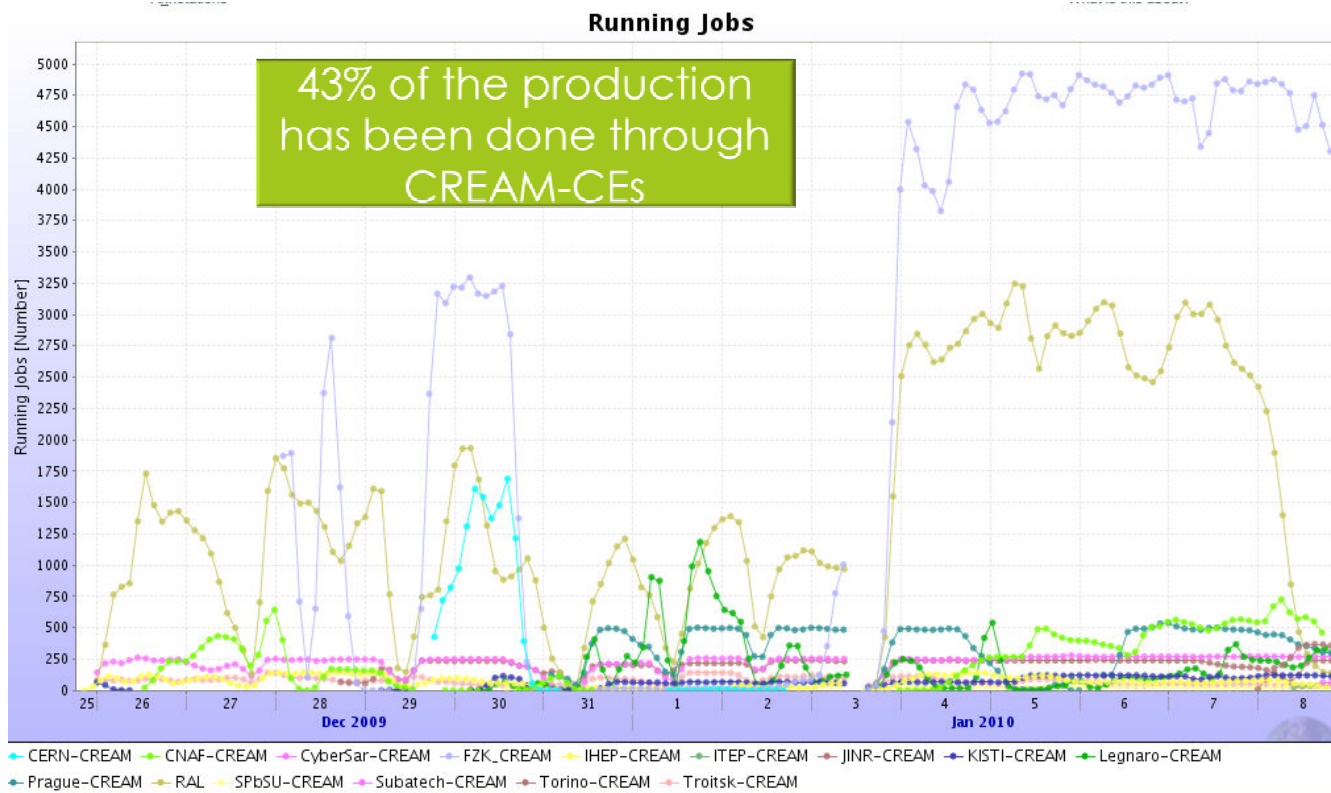
Job Profiles



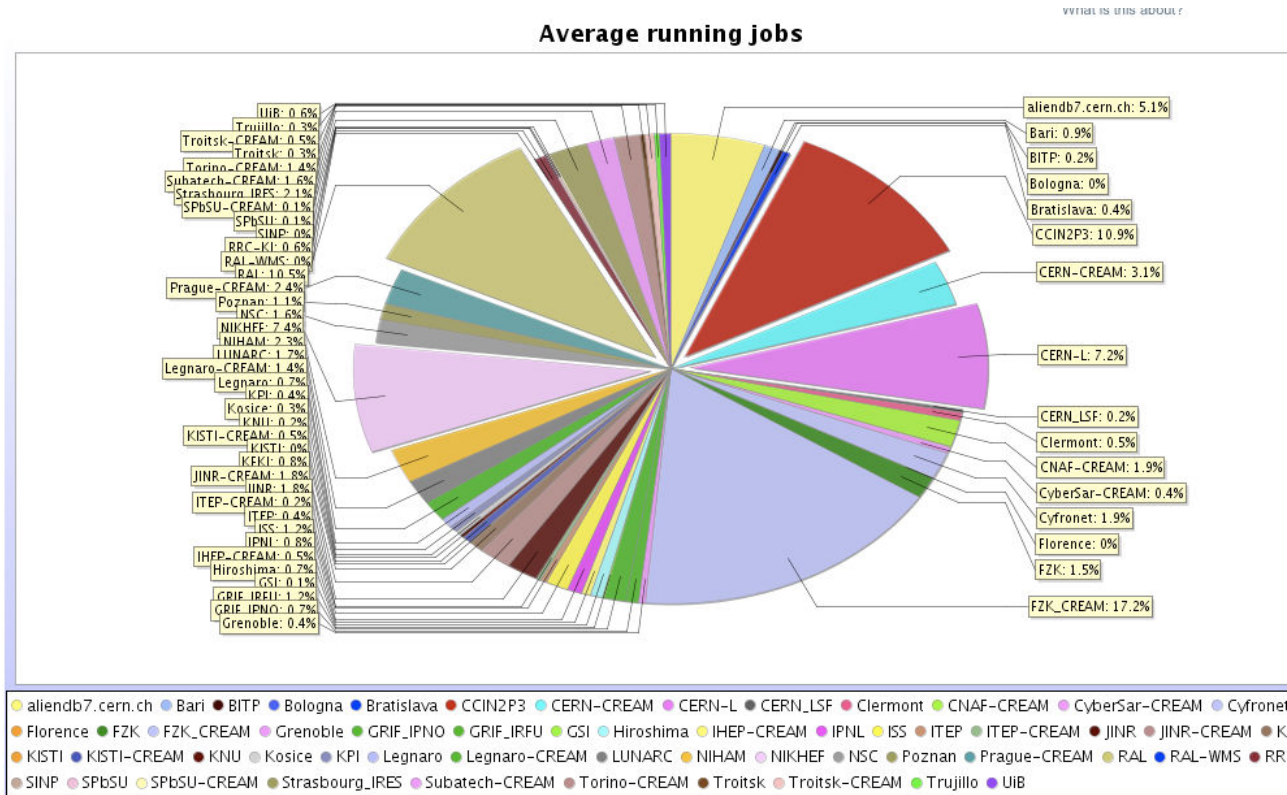
CREAM-CE Feedbacks

- Site admins were asked about the stability of their CREAM-CEs during the Christmas period
 - RAL
 - No problems over Xmas - CREAM CE ran fine with no interventions
 - JINR (Explained in the previous slide)
 - FZK
 - all our CREAM CEs did not need any manual intervention in December
 - Subatech
 - During the whole Christmas period, CREAM as been running without any single problem
 - CERN
 - Was not masivaly used. Back in production after Christmas

Job profiles using CREAM-CE



Jobs distributions per site



Few final remarks

- Good answer of the sites to ensure SL5 resources before the end of 2010
 - Very few sites did not upgrade before end of 2009
 - From these, about 50% will update by the end of January 2010
- In the next months ALICE will keep on working on the setup of CREAM-CEs in more sites
- Very good performance of the sites and services during the Christmas period