



LHC Computing Grid Project

LCG Verification Milestones

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Verification Milestones

- From the May '03 Milestone analysis:

Without having a base of people in the experiments using LCG software or GRID middleware, the milestone reporting exercise lacks substance. It is suggested to add milestones on verification, use of products or services in experiments wherever adequate.

The project should propose such a set of milestones to be discussed in the SC2. These milestones will be on the experiments and therefore need to be agreed by all parties in the SC2.



Verification Milestones - Candidates

WBS.	Lv	Name	Date_MS
1.1.2	2	CMS POOL integration: POOL persistency of CMS event	15 Jul '03
1.1.2	2	ATLAS POOL integration: POOL persistency in Release 7	31 Jul '03
1.1.2	2	CMS POOL acceptance for PCP	31 Jul '03
1.1.2	2	ATLAS POOL validation with DC1 data	30 Sep '03
1.1.2	2	CMS POOL validation with PCP data	30 Sep '03
1.1.3	2	ATLAS SEAL integration supporting POOL usage	31 Jul '03
1.1.3	2	CMS SEAL integration supporting POOL usage	31 Jul '03
1.1.4	1	M1.3 Distributed production environment using grid services	01 Nov '03
1.1.4	2	Fully functional analysis environment	01 Nov '03
1.1.4	1	M1.5 Distributed end-user interactive analysis from a Tier 3	09 Jul '04
1.1.5.4	2	Selected test beam setups available in FLUKA	15 Jul '03
1.1.5.4	2	First cycle of EM physics validation complete	30 Sep '03
1.1.5.4	2	First cycle of hadronic physics validation complete	31 Jan '04
1.2.1.1.4	2	Full functional CASTOR release	01 Mar '05
1.2.1.2.1	2	ALICE DC5 (300 MB/sec)	01 Oct '03
1.2.1.2.2	2	ALICE DC6 (450 MB/sec)	01 Oct '04
1.2.1.2.3	2	ALICE DC7 (750 MB/sec)	03 Oct '05
1.3.5.2	2	Review of LCG-1.2 against system performance goals	29 Aug '03
1.3.5.3	2	Review of LCG-1.3 against system performance goals	19 Dec '03
1.4.1.6	2	LCG-1 Experiment verification	31 Jul '03
1.4.3.5	2	LCG-3 Pilot system available	01 Jul '04



Overview

- **Called for proposals by the experiments**

- SC2 – 25 June; PEB - 1 July

- **Received contributions mid to end July:**

<http://lcg.web.cern.ch/LCG/PEB/Planning/ExpVerificationProposals.html>

- LHCb – milestones with dates

- POOL, SEAL, LCG1 prod & analysis, “final” analysis model

- CMS

- Applications: POOL, SEAL, PI, production & analysis by LCG
- Fabrics: Castor, Tier0 functionality for DC04, DC05, LCG fabric
- GTA: Grid components selected, analysis components integrated
- GDA: LCG-1 for DC04, worldwide deployment for DCs, scalable system for LHC

- ALICE – detailed milestones with dates

- 9 milestones on LCG1 – production & analysis
- Fabrics: Castor, DC 5, 6, 7 ALICE target performances – 300 – 700 Mb/s; 150 – 250 nodes



To be done

- **Agree between experiments and projects on verification milestones with**
 - Realistic dates (delta-dates after delivery of product)
 - Extended description of milestone with metrics on what will be measured/verified
 - Iteration procedure on possible improvements/upgrades during the verification
 - Identification of responsible person/group within the experiment
 - The milestones should include documents summarizing the results and identifying necessary improvements.
- **Can we converge towards a set of milestones for the baseline in a meeting between the area managers and the experiments e.g. at the next PEB?**



Conclusions

- A list of verification milestones has been proposed.
- There is reasonable overlap between the experiment's proposals.
- Some more work is needed before the verification milestones can be included in the baseline.