

GDB Report on 1H2007 Experiment and Site Resources

Based on changes since MB report of 3Q2006 using site resources reported in the October 2006 accounting reports.

Needs refresh of site resource purchases/installations – have had recent changes/plans from FZK, NIKHEF, FNAL and PIC but expect more.

Tier 1 percentage shares do not add up to 100% of experiment requirements (not new)

Does not yet include Atlas and LHCB changes announced after 14 December

Sources/comments (1/2)

- **ALICE:**
 - global requirements from F.Carminati table of 20 October.
 - Replaces all numbers from 3Q2006 (disk and tape were essentially zero, cpu is much more)
 - USA Tier-1 available capacity is not yet known but presumably matches requirements
 - largest increase of all 4 experiments. Based on plan to perform PDC07 in 2007 demonstrating full heavy ion running.
 - Requirements not expected to be available immediately: will use (all) resources as/when they become available.
- **ATLAS:**
 - Monte-Carlo requirements from G.Poulard of 13 Nov.
 - Plan is 40M events during 1Q and 80M during 2Q with 40% at Tier-1
 - Additional disk and tape requirements were added to the 3Q2006 base
 - Does not include the Tier-0 data export to scratch resources tests (originally mid-January for 3 weeks – new date not yet known) nor the full-scale dress rehearsal of June/July

Sources/comments (2/2)

- CMS:
 - Numbers from M.Ernst 10 November.
 - Steady 30M events per month, 20% at Tier-1: waiting for cpu (KSi2K) equivalent number.
 - Events go to tape at Tier-1. Staging disk assumed to be available.
 - Requirements within pledges: CMS leave the 3Q2006 cpu and disk requirements unchanged and add the new MC tape requirements (global 75 TB/month).
 - Waiting for CSA07 plans/dates.
- LHCb:
 - Spreadsheet from N.Brook of end September: this is the model we would like from each experiment.
 - Requirements indicate cumulative totals so replace completely the 3Q2006 values.
 - Steady profile but only up to April 2007. Full year expected soon.

Some conclusions

- In 1Q2007 global cpu and tape are a reasonable match but skewed over sites.
- Increases to 2Q2007 are modest (ATLAS is most of it).
- Biggest increases from 3Q2006 are from ALICE especially in tape requirements.
- Available disk looks 35% too low but site purchase plan updates are needed before concluding.
- ExperimentPlans Twiki needs to be updated with latest ATLAS changes, the full LHCb 2007 spreadsheet and the CMS CSA07 plans.

Links

- The short/medium term experiment plans/requirements for the first half of 2007 (beyond for ALICE) are at:

<https://twiki.cern.ch/twiki/bin/view/LCG/SC4ExperimentPlans>

- Additional plans/milestones for 2007 as proposed by the WLCG Service Coordination team are in the report by Jamie to yesterdays MB at

<http://indico.cern.ch/getFile.py/access?contribId=4&sessionId=0&resId=0&materialId=slides&confId=9140> with a

more detailed paper at

<http://indico.cern.ch/getFile.py/access?contribId=4&sessionId=0&resId=0&materialId=paper&confId=9140>

- The paper and the Twiki will be made more consistent.
- The requirements for the 2008 accelerator runs are in the C.Eck compiled megatable at:

<http://lcg.web.cern.ch/LCG/documents/Megatable191206.xls>