

User Board Meeting, QMUL, 28th June 2006

Present: Chris Brew, Frederic Brochu, Catalin Condurache, Jeremy Coles, Tony Doyle, Tim Folkes, Peter Hobson, Matt Hodges, Roger Jones, Akram Khan, Gennady Kuznetsov, Gidon Moont, Raja Nandakumar, Henry Nebrinsky, Dave Newbold (Chair), Glenn Patrick (Minutes), Andrew Sansum, Owen Synge, James Werner, Nick West

1. PREVIOUS MINUTES

These were accepted without alteration. All previous actions completed except for:

Action 1: Update website with resource schedules, minutes, etc. - Dave Newbold
Status - ongoing.

Action 2: Confirm tape profiles on a monthly basis for rest of 2006 - all LHC experiments.
Status - Still needs to be done for Q3/Q4.

Action 3: Resurrect list of experiment representatives - Dave Newbold
Status - complete except for ILC.

2. REVIEW OF GRIDPP3 DOCUMENTS

The spreadsheet of hardware requirements was circulated during the meeting. Experiments need to check their numbers as a table of the raw numbers will appear in the proposal.

A statement from each of the experiments is required to justify the scale of the T1 and T2 resources in the bid. A CMS template will be circulated to help with this.

A summary of data rates for I/O at the Tier 1 centre needs to be prepared and Andrew and Dave are working on this.

Action 4: Experiments to check hardware in spreadsheet - Evans, Jones, Newbold, Patrick, Wilson.

Action 5: Experiments to provide Tier 1/Tier 2 text for bid - Evans, Jones, Newbold, Patrick, Wilson.

Action 6: Provide summary of data rates for I/O at Tier 1 - Dave Newbold/Andrew Sansum.

3. EXPERIMENT REQUESTS FOR 2006 Q3/Q4.

3.1 Status of Tier 1 Hardware

The tender had been for 260 KSI2K of CPU and 144 TB of disk with the hardware ordered in January and delivered in March. The CPU was on stream in early May, but the disk commissioning had not gone well due to changes in the drives. A firmware update had been installed and the new disk was on test again. It was planned that the available disk would increase from 179TB to 311TB by the end of July. A total of 532TB was available in the tape robot with approximately 427TB for particle physics.

3.2 Tier-1 CPU Resources

The CPU utilisation in Q2 was discussed. BaBar had used 248 out of the 500 KSI2K requested. Chris Brew said this was partly due to a drop in efficiency due to tape staging and partly due to delays in MC production because of bugs. Tony Doyle pointed out that this was not consistent with the CPU being used for analysis. ALICE had used very little (3 out of 20 KSI2K), ATLAS was on target (193 out of 217 KSI2K), CMS were under their allocation (80 out of 120) and LHCb had managed to exploit spare capacity (212 out of 150 KSI2K).

MINOS had only used 2 KSI2K (out of an allocation of 50), but Nick West pointed out that this was due to the fact that they were still awaiting 2.5TB of disk.

The total CPU requests for Q3 came to 1,479 KSI2k with a capacity of 1,031 KSI2K. It was decided to simply scale all requests for July, August and September to fit this capacity.

Action 7: Enforce scaled CPU allocations from 1 July - Catalin Condurache.

3.3 Tier-1 Disk Resources

ALICE had used 0TB out of an allocation of 2TB. It was thought this may be due to the fact they need Xrootd, which they would have to install themselves. ATLAS had used 7TB out of 14TB, although the details were not clear and a breakdown of the numbers was needed. CMS had used 11TB out of 14TB. LHCb had used 5TB out of 10TB, but this was not consistent with the fact that they had only 5TB in dCache (before the increase to 20TB for DC06). CDF had used none of their 5TB allocation. MINOS had only been given 2TB out of their 4TB allocation and SNO had received only 0.5TB out of their 1TB allocation.

Andrew felt that the management of disk allocations was not working well and he planned to appoint a "disk management manager" to improve matters.

It was decided to discuss the disk allocations during the third week of July when more would be known about the situation with the disk deployment.

With the current plan, 524TB was expected to be available in February 2007 (delivery in September 2006). The Tier 1 Board held back £100K of spend, but Andrew pointed out that a decision would be needed in the next 2 weeks if more disk were to be purchased in this procurement.

Action 8: Give MINOS extra 2TB and SNO extra 0.5TB to bring up to allocation within two weeks - Andrew Sansum et al.

Action 9: Breakdown experiment disk usage for future meetings - Andrew Sansum et al.

Action 10: Review management of disk allocations - Andrew Sansum et al.

Action 11: Re-discuss Q3/Q4 disk allocations in third week of July - All.

3.4 Tier 1 Tape Resources

It was noted that BaBar was exceeding their tape allocation (253TB out of 200TB), but the overall utilisation of tape in Q2 situation was good.

Action 12: Review Q3/Q4 tape profiles before third week in July meeting - All.

3.5 Tier 2 CPU and Disk Resources

The requested cpu resources (4,780 kSI2k) could be met by the published capacity (6,322 KSI2K), although there was some discussion over whether this cpu capacity was really available to experiments.

Due to the problems with different reporting periods, the Q2 disk utilisation figures were not available from the Tier 2 Board (the figures will be available in July). There was 887TB available, but only 131TB had been requested by experiments.

4 APPLICATIONS "SHOW AND TELL"

It had previously been suggested by Roger Jones that the experiments would benefit from a "Show and Tell" meeting, where the different Grid applications could be discussed. It was felt that this should be organised before GridPP17.

Action 13: Arrange "Show and Tell" in Sept/Oct - Roger Jones.

5 AOB

There was a brief discussion that the User Board should try and get past just discussing resource allocations, but this is difficult given the current hardware situation.

6 NEXT MEETING

It was agreed to hold a meeting during the third week of July to discuss Q3/Q4 disk allocations, etc.