RM News 20110916

(Richard Mount) I will be on vacation on Friday so here are some brief status reports:

ATLAS Tier 2

- We have just ordered 78 Dell R410 boxes (2*6 cores, 48 GB memory) with the last of our FY11 funds.
- We don't know exactly how much FY12 equipment money we will get – there is an ongoing PPA/US-ATLAS/DOE discussion about offloading non-Tier-2 ATLAS support from the Tier 2 budget and thus leaving us more money for hardware. The expected range is $200k - $350k. We are likely to be expected to spend this money and deliver the services to ATLAS by April 1, 2012.
- The next purchase – late calendar 2011/early calendar 2012 will stress storage, but the product has not yet been chosen. Likely we will spend ~$200k delivering between 1PB and 2PBs of cheap storage. We may also buy a significant quantity of solid-state storage. Rounding out the purchase with some CPU is probable. US ATLAS is about to hold discussions about the Storage/CPU balance in the next few weeks and we will follow the guidance coming out of these discussions. The discussions are likely to encourage step-by-step adventures into solid-state storage.

Geant4:

- We are talking to Margot Gerritsen (Stanford ICME about an Nvidia sponsored project to begin to adapt Geant4 for GPUs (initial focus is medical electromagnetic simulations – much less complex than LHC). Amber is the godmother of this development.
- We are finalizing a white paper on speeding up Geant4 together with Fermilab and ANL plus computer scientists at Renci and ISI. This is targeted at an expected HEP-ASCR SciDAC call. Lali Chatterjee at DOE is the godmother.

Xrootd:

- We have sent an FWP and an earlier white paper to Lali making the case for expanded xrootd effort.