

Notes for the ITC-Research Computing Standing Committee Meeting
April 13, 2009 at 10:45 AM
2015 Ivy Road, 1st Floor Conference Room

Members: Alice, Andrew, Hamp, Jim, Joe S., Mark, Mike, Robin, Terry, Tim S., Tom and members of Systems, Research Computing and ACHS as desired

Attending: Alice, Andrew, Hamp, Jim, Joe S., Mark, Robin, Terry, Tim S., Tom, Ed Hall, Katherine Holcomb, Kathy Gerber

Chair: [Tom](#)

Recorder: [Alice](#)

I. Corrections to [minutes from last meeting on March 9, 2009?](#) (Click to review the [agenda from this meeting](#)) -- No corrections.

II. Old Business:

- Update on UVACSE APB and related. Queuing policy / documentation
 - Testing is needed for the new queuing policy – e.g. what happens on Cedar? (Hamp says the request will match architecture, if specified) What if the request is for conflicting resources, etc.? Will test this coming week.
 - Have this implemented on Elder, without a pre-emption option.
 - Andrew is advocating for a single server to do the resource allocation (vs. using peer allocation).
 - Need to test – then document – and announce on the web, etc. (Did announce at the most recent Town Hall meeting.)
- Moving Research Computing pages to UVACSE; web page maintenance; other “transition” questions?
 - There was discussion about how to go about maintaining the Research Computing web pages: What can be deleted? What needs updating? Whose responsibility is it to do this? How to make searches work better (particularly with pages on 2 different servers)?
 - Decided to convene a sub-group to figure out how to ‘paper over the gap’. Tom will schedule and convene the first meeting. Members of this sub-group are Andrew Steele, Kathy Gerber, Nancy Kechner, Ed Hall, Katherine Holcomb, Scott Crittenden, Michael Black, and Tom Spraggins.
 - Other transition issues:
 - need someone to create a UVACSE group in mygroups so that UVACSE staff can manage/access the mysql PBS accounting database – Katherine will create the UVACSE group.
 - Terry brought up the renewal of HPC research packages – what to continue, or not? Need to determine which are ‘Research’ and which are ‘HPC’. Will make a list and bring it to this group for review
- Storage needs assessment and strategy (e.g., Lustre?)
 - Andrew reported that the CS department experiment with Lustre is going well and they are assessing impact. They are putting Michael Shirts on it as well.
- New cluster node installation
 - Hamp’s group is working on a ROCKS5 upgrade and wants to get it scheduled – 1st on Elder, then the others; using a new head node.
- PBS Renewal (pricing?)
- Documentation of ssh tunnel for Matlab, etc.
 - Mark reports the documentation is in place.
- Compiler usage (Hamp)
 - 29 Unique Users, approximately 140,000 calls
- Cluster usage reporting
 - Unix Systems logs jobs to a database; Tom will discontinue sending pbs-reports.
- Cray benchmarking

III. New Business:

- Terabyte storage
- Service Unit allocation for cycles (and other resources?) Andrew, Mike, and Murielle have been working on a “[Market Driven Resource Allocation Strawman](#)”. This topic has been brought up at the Town Halls. For discussion purposes, assume that the bookkeeping can be done.
 - The model includes adopting a Service Unit (SU) as the basic allocation and costing unit.
 - Any UVA community member could get an initial allotment of SU’s just for asking. Anything larger would require a proposal to the allocation and policy board.
 - People/departments could put their resources into the XCG and be paid in SU’s for these resources. People/departments could purchase additional SU’s with real/grant money.
 - This is a way to rationalize resource management – not a way to recoup \$\$.
 - Tim and Jim recounted past attempts at doing similar kinds of accounting – there were so many complaints, etc, that the accounting was discontinued as not being worth the effort/hassle. If you do not allow real \$\$, accounting would be simpler because you would not have to do cost accounting. How many people would we need to hire to do the accounting?
 - The goals are to incentivize people to add their resources to the pool – to rationalize resource allocation – and to incentivize researchers to plan ahead for their use of these resources. So what could help us get to these goals?
 - A different approach would be to handle specific cases.

- Want to provide better, more flexible services to researchers. A market-based resource allocation model would give options and flexibility for both storage and cycles.
- If allocations were big enough, might not have many arguments.
- What does VaTech do with respect to accounting and resource allocation?
- “Prodstat” software usage tracking
 - Tom and Hamp discussed what we want to keep track of.
- MPICH / OpenMPI
- Any other Items?

IV. Adjourn by 11:45 and next meeting

- Next Scheduled Meeting of ITC ResComp Standing Committee: May 11, 2009 in ITC-2015 Ivy Road, Room #102 (First Floor Conference Room)
Please send suggestions, additions, corrections to: [Tom](#) or [Alice](#)