

Notes for the ITC-Research Computing Standing Committee Meeting
May 11, 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, Katherine Holcomb, Ed Hall, Kathy Gerber, Dale Castle

Chair: [Tom](#)

Recorder: [Alice](#)

I. Corrections to [minutes from last meeting on April 13, 2009?](#) (Click to review the [agenda from this meeting](#))

II. Old Business:

- Update on UVACSE APB and related. Queuing policy / documentation
- New cluster node installation
 - Elder will be down (from 5/12) for the ROCKS5 upgrade and the addition of new nodes to the cluster – and back up by 5/15. Assuming all goes well, Cedar and Dogwood will get the same treatment the following week.
- Moving Research Computing pages to UVACSE; web page maintenance; other “transition” questions?
 - Even though Andrew Steele is gone, there are some possibilities for getting some web page maintenance accomplished: identify the deadwood in the Research Computing pages, and maybe ITC’s Customer Communications group would do the pruning; Andrew G. could hire some students for a ‘project’ if we can settle on what needs to be done. Research computing support web pages are spread over ITC’s web (for ‘the basics’), the Library (Scholars lab, Research computing lab), and UVACSE. Tom is looking at multiple-site search options from Google, and could talk to Tom Skalak about a ‘home’ for all this information.
 - Nothing has happened with respect to determining which Research packages are ‘basic research’ and which are ‘HPC’. Need to look at ITC’s research software downloads and see if the contact info and links to document locations are correct.
- Storage needs assessment and strategy (e.g., Lustre?)
 - CS Department experienced an electric outage that brought Lustre down – but Lustre coped as the nodes came back up again – so the experience was good.
 - So what do we want to do? Hamp and his group could talk to Scott about the CS experience – and then we could try it out. There was some discussion about users’ exceeding capacity and the impact of taking nodes up/down – CS uses resource-based routing and users have to specify how much memory they require. Hamp suggested that we tie all our storage nodes together before trying this on our compute nodes.
 - With memory so cheap now, Andrew suggested that we buy 2 GB per node – Hamp will price memory and we will look at it. UVACSE could add a drive to each node and we could add them in one at a time. We could do a better Lustre experiment on more nodes.
- PBS Renewal (pricing?)
 - The last time Katherine checked, the renewal pricing was the same as last time (~\$11,000) – Katherine will go back and get a quote. So, should we continue to fund this for another year? And/or try to find an alternative (Sun Grid Engine/SGE, Torque/Maui)? We need resource-based routing and pre-emption – it would be nice if it had some ‘accounting’. Let’s look at and experiment with SGE. If we are going to switch, need to figure this out soon.
- Cray benchmarking
 - Cray is up and running in CS – can be experimented with if you have a CS account.
- Service Unit allocation
 - Andrew, Mike, and Murielle meeting about this next week.

III. New Business:

- Funding for future clusters
 - As we get feelers from some researchers/prospective-new-faculty and engage with departments about continuing to add ‘condo cluster’ nodes, what kind of options could there be with respect to form-of-payment, trade-offs for contributions to a shared pool of resources, hardware (e.g. not one-of-a-kind), service contracts, physical location and physical access, etc, etc.
- Terabyte storage
- MPICH / OpenMPI
- Facilitator for June 8 meeting
 - Katherine volunteered to facilitate
 - For that meeting we will include:
 - Hamp’s report on SGE
 - Experiment with Lustre on 4-8 drives
- Any other Items?
 - Andrew mentioned a new NSF ARI (Academic Research Initiative) program to use Stimulus \$\$ for research infrastructure at universities (e.g. networking, power/generators, cooling, etc.) – have to make a science case that the infrastructure is in support of

science research.

IV. Adjourn by 11:45 and next meeting

- Next Scheduled Meeting of ITC ResComp Standing Committee: June 8, 2009 in ITC-2015 Ivy Road, Room #102 (First Floor Conference Room)

Please send suggestions, additions, corrections to: [Tom](#) or [Alice](#)