

# Research Computing Advisory Committee

Minutes January 23, 2012 (taken by Erik Deumens)

**Present:** Paul Avery, Mike Conlon, Erik Deumens, Rob Ferl, Eric Ford, Lauren McIntyre, Sanjay Ranka, Susan Sinnott, Charlie Taylor

## Reports

1. The Eastside Campus Data Center ground breaking was held in Nov 2011. The ECDC is expected to be fully operational in December 2012. The HPC Center is planning to deploy new equipment in the ECDC and leave older equipment where in Larsen 121, NPB 2250, and NPB 1114 until it is taken out of service, because it is very time consuming to move equipment for little benefit.
2. The HPC Center has acquired new hardware to meet long standing needs for general education and for evaluation in preparation of the Phase V acquisition. The funds raised with the matching program this summer have not been spent yet.
  - a. A cluster with 192 cores to run the Galaxy environment for computational biology.
  - b. A small cluster with 16 Fermi GPUs from NVIDIA for evaluating the optimal ratio of GPUs per node: 4 nodes have to GPUs, and one node has 8 GPUs.
  - c. An Ethernet-only connected cluster will arrive the second week of February to replace several 6-year old clusters to provide 8 times the compute power (number of cores) with the same amount of electrical power and cooling.
  - d. A network attached storage system providing NFS and CIFS access to a ZFS file system of 100TB has been used to provide the storage bought by investors as part of the matching program. A second unit will arrive in February to offer the replicated storage, i.e. storage with automatic backup for safety of the data.
3. Five Universities in Florida (FSU, UCF, UF, UM, USF) have created an alliance to build advanced cyberinfrastructure in Florida: Sunshine State Education and Research Computing Alliance (SSERCA) <http://www.sserca.org>. The alliance organized a booth at Supercomputing 2011 in Seattle Washington to promote Florida institutions and their researchers. They are now working on inviting other universities in the state. A booth is being planned in Supercomputing 2012 in Salt Lake City, Utah.
4. UF IT has launched a newsletter on IT matters at <http://www.it.ufl.edu/news>. Research Computing is included as one of the top levels. This will be a unified and streamlined way to communicate information about research computing.
5. Research Computing is working with PIs on campus on an NSF Major Research Instrumentation proposal and an NIH Regional Comprehensive Metabolomics Research Core proposal.

6. The date for the next Research Computing Day is April 25, 2012. Members of RCA are needed to form the organizing committee.
7. As discussed and mandated in the Fall by this committee, Research Computing is performing user surveys to use as partial input for the annual evaluation of Research Computing staff members. A separate survey will be organized on the services offered.
8. The mechanisms to correlate faculty sponsors of users of HPC Center resources with grants is being implemented to provide data for the annual review of Research Computing funding in April 2012.
9. Plans and configurations for the computational biology cluster and the GPU cluster are being finalized in discussion with the investors. The acquisition will happen in the next few months.

## **Discussion**

### **Cloud services**

Mike Conlon reports CTSI has worked out how to deploy some important services for the institute with amazon.com. They spent the effort and are very happy with the results, both in quality and in cost. Lauren McIntyre reports that Eric Triplett has done the same in his department of Cell Science in IFAS. Erik Deumens reports that the University is aware of the benefits of using cloud services and that Academic Technology (AT) has already moved all students' web sites from the old "grove" machine to a cloud provider. Now UF IT is trying to figure out how to provide a consulting service that will help researchers find the best solution when they do not have the resources CTSI has to properly explore cloud alternatives. Expect some announcement on this in the next several months. One example will be a service file-express.ufl.edu to act as an easy to use service to share large files that cannot be sent as email attachments. That will be announced in a month.

### **Collaborative tools**

Mike Conlon asks if UF will build collaborative frameworks for writing large grants. The committee agrees that this is a large commitment that will not be sustainable and strongly states that this should not be attempted.

### **Surveys**

Sanjay Ranka suggests that the annual surveys are good to do now, since this is the first year, but that it may be more effective to also send people a short survey immediately after an encounter with Research Computing staff, when the memory of the events is still fresh.

### **Scheduling of the RCAC meeting**

The meetings are now the 2<sup>nd</sup> and 4<sup>th</sup> Monday of the month, and this presents a conflict for Riob Ferl and Bill Farmerie. The chair will take the action item to see if the meetings can be shifted to the 1<sup>st</sup> and the 3<sup>rd</sup> Monday of the month.

Next meeting will be of the DLC subcommittee on Monday January 30 at 1:30 pm in NPB 2205.