Research Computing Advisory Committee
Minutes Feb 4, 2013 (taken by Erik Deumens)

Present: Sophia Accord, Paul Avery, S. Balachandar, Hai-Ping Cheng, Mike Conlon, Erik Deumens, Bill Farmerie, Rob Ferl, Felix Liu, Rolando Millian, David Nessl, Sanjay Ranka, Alberto Riva, Laurie Taylor

Announcements

Announcements from the Jan 7th meeting with updates current as of Feb 4th

1) The 100 Gbps switch has been bought for the outside connection to FLR and Internet2. The connection went live on Feb 1st and a press release will go out on Feb 7th. UF is the 4th institution in the US to have 100 Gbps to Internet2.
2) The switches for CRN are being ordered this week; the new data center and Larsen Hall will be at 200 Gbps; other machines rooms will be at 40 Gbps.
3) UF Data Center was handed over to UF on Feb 1st.
4) The 2.88 TB TeraScala storage for a new Research Computing system is being delivered Feb 4th.
5) The 16,000 core Dell cluster will be delivered March 25.
6) We will hold Research Computing on the Eastside Campus tentatively on May 2nd to present the details of all the new equipment and capabilities. Check the web site for details http://www.it.ufl.edu/community/events/rcday/
7) This year the matching program generated $490K from faculty that was matched with $315K by the program. (Large grants do not get 1-1 matching; there is one for $206K.)
8) The new matching program will be announced on RC Day May 2nd. The new price for NCU will be $200 for 5 years, half of the $400 for 5 years it is now.
9) Several projects are underway to explore and define new services that will affect more people throughout campus, e.g. the ArcGIS that we reported on in November. More details will be provided at a future meeting.
10) The search and interviews for the assistant scientist position are complete and Yu Fu became officially a full time staff member of Research Computing starting Jan 18th.
11) The new Research Computing website went live on Jan 18th. We incorporated the suggestions received from the RCAC and several others.
12) We applied for new domain names and received them. The following now all point to the same test system that holds the new web site until it goes live and replaces www.hpc.ufl.edu:
    a. www.researchcomputing.ufl.edu
    b. www.rc.ufl.edu
    c. www.hpc.ufl.edu
13) The second period of posting for the system administrator position closed Dec 31st. This time we have 13 candidates, some of whom look very good. We interviewed

three candidates and are ready to make an offer to one outstanding applicant on Feb 8th.

Data Management and Curation Task Force

Laurie Taylor reports on the creation of the Data Management/Curation Task Force to address the needs at the university for a coherent plan for training and support of data management and curation practices. The task force has met since the beginning of January and has a web site http://cms.uflib.ufl.edu/datamgmt/index.aspx.

UF initiative on dense, intense, and complex data

The VP for Research is starting a new effort on campus, called "Initiative on Dense, intense, and complex data". A first exploratory meeting will be held on Feb 27th. We will keep this committee informed of any development as details become known.

SSERCA proposal to NSF solicitation 13-528

The Sunshine State Education and Research Alliance (SSERCA http://sserca.org) has 6 members and 5 affiliates. The six members are working together to submit a proposal for the storage system part of the solicitation from NSF http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf13528 within the XD (eXtreme Digital) program in OCI that also funds XSEDE, the follow-on to the TeraGrid. The budget is $6M for a system that must be operational for a national community on Jan 2015. There is an additional $1.8M per year for 4 years after that for maintenance and operation. The deadline is April 15. The next SSERCA Summit will be held in Miami on Feb 22nd and this proposal will be a major item on the agenda.

Discussion

The growth of data in all disciplines requires new kinds of support. Researchers are using various tools that help, but are not necessarily optimal. Dropbox and Google Drive are used by many because collaboration is easy with this tool.

Laboratory Information Management Systems are increasingly important to keep data from getting lost or stored in suboptimal ways, leading to loss of productivity. In this field there are software vendors and cloud providers as well, e.g. LabArchives ELN and LabGuru. It was discussed whether Research Computing can work with these vendors on e.g. the option they offer for researchers to store the data on systems on campus for processing with the company's software. This is something RC and this committee will look into.

Further problems brought up for discussion are the need for clinical trial support. There are 700 different system all ad hoc used on campus. This prevents UF from acting on opportunities because the information cannot be accessed and assembled from all these sources. It also puts the University unnecessarily at risk. This needs to be addressed at the institutional level. The committee decides that the time is now to start exploring this problem with the goal of developing an institutional solution. The IDR was

a good first step that is part of the solution and is of similar scope. It took 5 years and millions of dollars.

The fact that researchers across this campus have to work with multiple incompatible networks that impose firewalls and limitations is also a major problem inhibiting productivity. Research is inherently collaborative. There are now better ways to ensure the security and privacy of restricted data, e.g. using encryption and authentication methods. The old way of blocking all network access to everyone for all transactions because some transactions involve restricted data is no longer the best way to address this issue.

Organization

The agenda for the winter and spring 2013 semester can be found at http://www.it.ufl.edu/governance/advisorycommittees/researchcomputing.html.

Next meeting will be on March 4 at the unusual location of the UF Administration Building CNS conference room on the 2nd floor (room 211) on the Eastside Campus so that committee members can get a tour of the new data center. The time is the same as usual: 1:30 pm.