Research Computing Advisory Committee

Minutes Sep 8, 2014 (taken by Erik Deumens)

Present: Sophia Accord, Mike Conlon, Erik Deumens, Lauren McIntyre, Hannah Norton, Alberto Riva

Updates

GatorBox

The first new service to be ready is the ownCloud interface to storage that has been made available, at cost, to the community of researchers. That data storage is available to HiPerGator for rapid processing and be accessed from desktop and laptop computers via SAMBA using the SMB/CIFS protocol. With the new capabilities to interact with the data via a drop-box way through the ownCloud server, we are introducing the brand name "GatorBox" for all Research Computing storage systems and services. The data policies are being modernized and we added 1 PB of storage that was installed last week.

Currently GatorBox and HiPerGator are not approved for PHI data, but we are going through a security review to try and get approval to work with PHI data on HiPerGator and GatorBox until the long-term solution for PHI data, GatorVault, is ready. We expect the ownCloud servers to be ready for existing research computing customers in the last week of September with a first training session scheduled for Thursday September 25. Then we plan a public announcement in the first week of October, with precise date to be announced.

GatorVault

The data storage system of 1 PB has been installed and is being tested. The computer system configuration was finalized last week and will be ordered this week. The first use of GatorVault hardware will be to thoroughly test the design and software for "UFApps for Research". Once we are satisfied that it works robustly, "UFApps for Research" will be deployed for production on HiPerGator with GatorBox as data storage. We expect this to happen around the end of October.

"UFApps for Research", like "UFApps" offers ready-to-run applications in VMs. We are also planning to offer the service of VMs for research and virtual clusters of VMs for research, but that will be after "UFApps for Research". These are not intended as a replacement or competition for the VMs offered by EIO; those are targeted for enterprise-quality services most often maintained by units for units.

Then we will close off the GatorVault hardware behind the high-security measures and deploy very much the same services, but secured for PHI data. One easy to use form of

the service will be "UFApps for PHI", because it will work very much the same way. We expect this to be complete sometime in November.

GatorNet

A new network architecture has been put in place that allows UF to have the right network to any port for any type of user, no matter whether you are in a HealthNet managed building or a UFIT NS managed building. The backbone is ready to go and two weeks ago CTRB (Clinical Translation Research Building) was made live with this new network architecture. We are working with a few pilot users to get the kinks worked out. As to be expected, once you solve this problem, a new one becomes visible. During the fall we will work with people to explore this new way of managing networks and the associated ways of managing data. The VetMed building and the GCRC (Genetics and Cancer Research Complex) are two of the buildings we want to enable next.

HiPerGator2

HiPerGator is running at 60% capacity with 13,000 out or 21,000 cores sold to faculty and their research groups. At the current rate of growth in utilization, we will reach 75% capacity in March 2015. We have been working on HiPerGator2 to come online in April 2015 to ensure no decrease in quality of service due to lack of capacity. An extra PB of storage to expand HiPerGator storage was installed in the first week of September.

Informatics Institute

An offer is outstanding to a very qualified candidate to become director of the Informatics Institute. If he accepts, he will start January 2015. During the fall several activities are planned to get the institute started. Meeting, discussion, and collaboration space has been identified on the 2nd floor of the CSE building and this space will be renovated.

SSERCA and NCMS

The collaboration between SSERCA (Sunshine State Education and Research Computing Alliance) and NCMS (National Center for Manufacturing Sciences) and Lockheed Martin Corp. to create education, training, and consulting in the State of Florida is moving forward. The legislature will be approached with a detailed plan in November.

Discussion

The above updates on UFIT projects come with a disclaimer: No dates are official dates for production. Recent experience at other institutions has strengthened our resolve to not go to production until we are sure we have a solid service. That means:

- It has to work as advertised
- There is good training and documentation in place and accessible to customers
- There knowledgeable and trained is HelpDesk support

The SECIM project will have on a site review by NIH on September 15. Note added after the meeting: The NIH review was successful and the NIH team was very impressed with the work accomplished by SECIM.

Organization

Next meeting will be on Monday October 6, 2014 at the usual location in NPB 2205 from $1:30-2:30\ pm.$