

## Research Cyberinfrastructure Workgroup Meeting

November 9, 2015

Dana Roode opened the meeting and introduced new group member Harry Mangalam, who is an OIT Research Computing Specialist. Harry and his colleagues interact with researchers on daily basis and have a good understanding off a large subset of RCI needs.

### Research IT at other Institutions

One goal for today was to hear about RCI at other institutions to provide input to our own conversation and planning.

David Greenbaum from Berkeley was unable to make it and is rescheduled to December.

### Purdue

Allen Schiano presented on Purdue research computing. Purdue has a similar size and level of research funding as UCI. They have 15 research IT staff vs UCI's 4 in OIT. Like us, Purdue oversees a compute cluster environment but has 6 clusters (3 retired) vs. UCI's 2. The financial model for clusters is different at Purdue. They buy equipment upfront and recharge PIs for the service. At UCI, the clusters comprise hardware purchased by researchers. Purdue includes older equipment phase out in their planning; i.e., each cluster is designed, funded and implemented with a planned timeframe for operation in mind. Purdue has twice as many cluster users. They are somewhat a "gold standard" in high performance research computing and use it as a selling point in attracting research talent to Purdue.

Other points of interest regarding Purdue research computing support:

- All campus researchers get 100G of maintained storage at no charge as a component of Purdue's "Data Depot" service. 105 research groups participate.
- Purdue has a goal to create seamless movement of content between systems, with dropbox-like ease of use.
- They have significant RCI training/education effort across campus
- They have HPC support specific to instruction, several classes use clusters (a separate educational cluster is available for this)
- Purdue gained campus credibility by increasing the amount of free storage and capitalizing on it. The demonstrated value to the campus led to researchers adding additional storage through grant funding.
- Purdue showcases their research computing support at the Supercomputing annual conference, getting a level of exposure which enhances prestige and helps attract researchers

## University of Washington

Steve Franklin presented on University of Washington research computing. UW has a big interest in how data moves around and researches HPC networking for high throughput. UW does no indirect cost charges on storage, compute, and cloud storage, for on-campus services and external services including Microsoft and Amazon. Steve shared an example of cyberinfrastructure support within the Center for Demography & Ecology. They receive funding from student controlled funds, some from NIH, and some from central university administration. One service model they use is the provision of "virtual desktops" that have pre-installed computing environments configured to address various research requirements. This is something to look into further here at UCI.

## Research Cyberinfrastructure Symposium

The workgroup discussed the proposed agenda for the UCI RCI symposium to be held at Calit2 on January 27<sup>th</sup>:

- We discussed the goals for the event, coming to the conclusion the primary ones are to raise campus visibility of RCI use in research and evolving requirements, and also to gain additional input to our vision planning process. We hope to be able to distribute an early draft of a vision prior to the meeting.
- We discussed nominations for the panels and for the keynotes (we will likely de-emphasize the latter).
- We discussed whether or not to have vendors present on trends (not make sales pitches). One suggestion that the vendors present during lunch to save conference time.
- There was some discussion on best ways to elicit needs from "non-traditional" High Performance Computing (HPC) users, which resulted in reviewing confusion between RCI (for which one sort or another is required for ALL disciplines) and High Performance Computing (which is required for a subset of research).
- The audience for the symposium is UCI faculty and leadership, factoring in all requirements, not at all limited to HPC.
- There was discussion on how best to elicit opinions from attendees.
- We discussed various options for how to schedule the day. The current proposed schedule may be too much for a single day. By the end of the discussion we were leaning towards using lightning talks for UCI researchers to tell others about their research and how it leverages RCI and then follow with a panel which can be used to summarize issues brought up in the lightning talks. We would start the day with a presentation on what the RCI group is doing to set the tone.
- Allen Schiano will make edits to the proposed agenda based on the discussion.

## Seeking Written Input for RCI Vision

Dana distributed a "RCI Workgroup Input 'Ask'" document - all are charged with using this to gain information from their constituencies.