

**UNIVERSITY OF CALIFORNIA ACADEMIC SENATE
UNIVERSITY COMMITTEE ON COMPUTING AND COMMUNICATIONS
Meeting Minutes**

November 9, 2011

Attending: Joel Primack, Chair (UCSC), Sreenivas Jammalamadaka (UCSB), Paulo Chagas (UCR), Shahrokh Yadegari (UCSD) (telephone), Robert Anderson (Academic Senate Chair), Robert L. Powell (Academic Senate Vice Chair), Martha Winnacker (Academic Senate Executive Director), Ramon Lim (Director ,Strategic IT Projects, IR&C) (telephone), Shelton Waggener (Associate Vice Chancellor & CIO, UCB), Richard Moore (Deputy Director, San Diego Supercomputing Center) (telephone), Stephen Lau (Director of Policy, IR&C) (telephone), Brenda Abrams (Policy Analyst)

I. Welcome and Introductions

The chair welcomed the members to the committee.

II. UC VCR/CIO Summit

The chair was not involved with the ITLC meetings last year but attended a meeting in September. The Computing Summit of the University of California was supposed to be attended by several people from each campus. Administrative members met on Sunday and were joined on Monday by faculty. The discussion Monday was about what to do about the ShaRCS project. The plan was to extend it with buy in of two different nodes. The administrators wanted to come up with a plan and go to the president for more money. Unexpectedly the provost told the campuses that the president would not provide any money and that the campuses would have to buy in. Two campuses were prepared to buy in at a cost of two million dollars each. Researchers were to buy nodes. There was not much interest from faculty to join the project. The administrators decided that each campus can do what it wants and there will be efforts to link things together.

The Monday meeting consisted of faculty panels. The first session of three faculty members discussed their processing needs. Chair Primack described the difficulties that will be encountered when programming new supercomputing machines. The Executive Director of the California Digital Library reported on the resources available for repositories. Many speakers stated that UC should aspire to national leadership. A system to transfer terabytes of data would be necessary if there is a need for biodefense. One speaker said that scientists do not care where the computers are located but that close relationships are needed with the support staff so these people should be local. It was noted that scientists need to collaborate much more than they have in the past. The recurring theme was that NSF has given UC an amazing challenge and think of how to respond collectively. UCOP provided funds for faculty to participate in the Summit and some campuses were better represented than others. Chair Primack shared his notes from the Summit with the committee.

Discussion: The UCR, UCSD and UCSB representatives were not aware of the Summit.

III. Consultation with the Office of the President

- *Richard Moore, Deputy Director, San Diego Supercomputing Center*
- *Ramon Lim, Director, Strategic IT Projects, IR&C*
- *Stephen Lau, Director of Policy, IR&C*

Deputy Director Moore and Director Lim joined UCCC to discuss the status of the Shared Research Computing Project. The motivations for the project were explained. A condo computing model is being used. Objectives included demonstrating the ability to effectively administer system wide resources and serve PIs and their equipment needs. The project has been running for one year and one to two years of useful life are left on various components. A detailed business model proposal has been developed based on best practices and experiences at other institutions that used similar models. The PIs in the project were surveyed and reported

being satisfied with how the project supported their science. Benefits of the project included increasing research competitiveness and being an important element of faculty recruitment and retention.

The proposed business model has two elements, capital costs and operating costs. Up front hardware buy is PI funded. One third of the operating costs are the incremental costs such as utilities and it is proposed that the administration will pay for the operating costs. Throughout implementation of this project, the goal of saving and raising money through the investment has been discussed. Utilities and facilities costs are a transfer of costs into a more energy efficient facility. Two phases of the project have been discussed by the oversight body. Phase I would involve making a number of clusters available and developing a business model. Phase II would involve improved efficiency and building a community. During this phase, there will be a move to build and extend campus research capacity. Several major technical implementation tasks will be undertaken in Phase II. Additional expertise and systems would be tapped into to achieve the project's broader vision. Funds for the pilot will come to an end in March. The provost requested that campuses evaluate the project and provide feedback. One VCR will draft a summary of the discussion for the EVCs. A decision will be made as soon as possible, keeping the March deadline in mind. Some thought has been given to using higher GPU nodes.

Director Lau provided an update on the systemwide privacy and security initiative which began 12 months ago. There is an initial draft of the final report. An all day working group meeting will be held to go through the final report which will be completed in April. Representatives from faculty include Senate Chair Anderson, Vice Chair Powell, and a member from the University Committee on Academic Freedom. This is a complex problem and as a result of the investigation, it has been discovered that UC is ahead of other educational institutions. The current stance on privacy and information security is that UC sets a very high bar but it is in some ways too rigid for today. There are categories for granting access to information. Individuals or groups have to provide a high level of proof that access is needed. Institutional review board policy currently does not provide any option to consider, on a case by case basis, research that violates UC policy. Work on privacy and security issues will continue after the final report is released and one thing being considered is a set of privacy principles.

Discussion: A member asked for a summary of the responses from the campuses. Deputy Director Moore thinks campuses fall in different categories. Some would like to see if move forward and are willing to commit resources, others are not supportive of it as a systemwide and are unwilling to invest, others would like to see if go forward but cannot make a firm commitment to funds. Chair Primack indicated that there has been unclear information about the commitment for ongoing systemwide support for the project after the pilot. Without a commitment for future funding the project has not been marketed in order to get more participants. If there is financial support for the project Deputy Director Moore is confident that there would be a large number of PIs who would be interested. Participants in the pilot were primarily scientists and the one humanities faculty participant dropped out early in the project. New users could be given access to and training on how to use supercomputing resources to increase the possibility that they could become power users of national resources. Securing external resources would be the intention if the project moves forward. Chair Primack informed the committee about the position that UCCC took and the response from CIO Ernst when the pilot started. Proposals to NSF are due in January and the PIs are not relying on the ShaRCS centers being available for their projects.

Chair Primack commented that the online project is similar to ShaRCS in that it is already a failure. Senate Chair Anderson pointed out that the online pilot has not failed yet and that it is possible that UC will be able to recruit non-UC students in order to pay off the loan from UCOP. The learning platform is an issue that UCCC could discuss and Vice Provost Greenstein could be invited to the committee's next meeting and the analyst will discuss this with Faculty Advisor Keith Williams. Last year the UCD representative made a request to his campus for access for search engine data which was denied. The representative then went to Google which cooperated with his request. One of the key issues for UC is access to medical records. The criteria that must be considered when evaluating whether to grant or deny a request will be identified.

IV. GigU

Chair Primack indicated that no UC campus has expressed interest in GigU and suspects that this is because the

university is already well connected. The initiative involves universities in the mid-West.

Discussion: Chair Anderson indicated that bandwidth is becoming more congested. UCSC has a new high speed internet connection this year and is nowhere near capacity. Capacity may be sold to local users. UCR's representative indicated that this campus is not well connected. A question is how good are the connections within a campus. There is a plan to upgrade the links on one part of the UCSC campus with an investment of ten million dollars over the next several years. Faculty purchase hard disks to transfer large terabytes of data. Large data sets can be stored but not moved. Data at one center has to be linked to be linked to data at other centers. Google is able to interact with data on different sites efficiently.

V. Web Conferencing Software

At the ITLC leadership meeting in September, a consultant presented WebEx. There are several other high end systems like this. WebEx will be a significant cost to users. Chair Primack reminded the committee about EVO which is free but strictly for research by physicists. A commercial version is being developed, SEVOGH. The cost will be one fifth of what WebEx costs. SEVOGH will be an enhanced version of EVO and is cloud based. The vice chancellors for IT and research would make the ultimate decisions about which system is used.

Discussion: The strength of Skype is that it is peer to peer but the bandwidth is not becoming crowded. Since users pay for bandwidth there may be limits to the number of participants. Skype is not reliable with more than three or four users but EVO reportedly can accommodate hundreds of participants. WebEx requires the use of ReadyTalk. SEVOGH allows users to call in if they do not have internet connectivity.

VI. Consultation with Senate Leadership

- *Bob Anderson, Chair, Academic Senate*
- *Bob Powell, Vice Chair, Academic Senate*
- *Martha Winnacker, Executive Director, Academic Senate*

Executive Director Winnacker reviewed the logistics of how to book travel, pointing out that the Senate's SWABIZ site should be used. Members should contact the Executive Director if there are difficulties with being reimbursed.

Chair Anderson indicated that the second cut to the budget of \$200 million will happen and it is not yet clear how it will be absorbed. There may be layoffs in the Spring. The University's future budget situation depends on when the state's budget improves.

Discussion: Chair Primack suggested that the California Digital Library is developing or has resources that might be used to meet the Senate's archiving needs. Director La 's report to UCCC was shared with the Senate leadership. The Executive Director indicated that it is not clear why a representative from UCCC is not participating in the privacy and security initiative. The degree to which technology is used has evolved significantly since UC drafted its policy and the question of the scope and bounds of consent needs to be discussed. UC has not taken a stand about whether it would defend a faculty member if there was a case like the one last year in Wisconsin. There are discussions about how UC would respond to a public information records request so Chair Anderson advises faculty to utilize a private email account for personal business only. NSF requires a data management plan and repository of data sets that are subject to peer review.

According to Chair Anderson, the health sciences are a driving factor behind the initiative. Federal law is very restrictive with respect to the transmission of personal information, and this is basis for the concerns of General Counsel and the compliance unit. Emails are being scanned to look for social security numbers. Records stored on laptops are a risk and laptops may or may not be encrypted. With potential litigation there could be an issue with efforts to find discoverable information by a machine initially.

There is a question about what systemwide technology issues need to be brought to UCCC's attention. Now an active member of ITLC, Chair Primack is privy to more information such as more details about ShaRCS and reported on this project to the Senate leadership. The best outcome is for campuses to have the flexibility with how they provide computing resources. The Senate could call an open meeting with the goal of developing collaborative UC proposals that will be competitive with other institutions. A joint Senate/Academic Affairs meeting could be recommended by UCCC to be held in February.

Action: A letter with background about what NSF is asking for should be submitted to Chair Anderson. More concrete information needs to be gathered by UCCC members so that the Senate leadership can discuss this idea with Steve Beckwith. Chair Primack will contact Steve Beckwith to notify him about NSF's invitation. The chair will also discuss this with ITLC.

VII. Pedagogical Issues Report

The report contains a number of different ideas. Issues and opportunities are listed in the first appendix and key people on each campus are listed in the second. The report was written by Jim Phillips, Director, Instructional Technology at UCSC. It is background information that was provided to ITLC based on results of a survey of faculty.

Discussion: It is not clear what is being stated regarding issues at the campuses. There are concerns about budget and the online instruction pilot project. Members discussed how student evaluations of teaching are currently conducted at their campuses. Use of multiple non-interoperable platforms for the online instruction pilot project may become more challenging if the project expands. UC is switching to one payroll system for all of the campuses. Members discussed problems for faculty in the humanities related to the use of grants and the inability to work on multidisciplinary projects.

VIII. Plans for Charging for Electricity and Cooling

This topic was not discussed.

IX. UC Contracts with Microsoft and Adobe

- *Shel Waggener, Associate Vice Chancellor & CIO, UCB*

Chair Primack indicated that the committee would like to hear about negotiations with Microsoft, Adobe and Apple; preferred web videoconferencing systems; and about the NSF challenge for UC to submit proposals for national leadership in information technology leadership. CIO Waggener indicated that discussions at ITLC have been focused on projects that are large scale. There are plenty of cohorts that could benefit from the collaborative approach. CIO Waggener agreed that there is not a specific NSF program but rather a request for UC to help NSF develop one. The product of a workshop would be one or more proposals that are submitted to NSF. The realization at a national level that there is a desire to do things differently is heartening and there may be interest at NIH for similar proposals from medical schools.

CIO Waggener has been actively engaged with the EVO developers. The search was narrowed down to two or three web videoconferencing systems and not to select a provider. There are benefits to adopting something to scale to all of UC. The ability to integrate what to buy with what is developed has been challenging. A number of infrastructures for service were explored. Three products are certificate services called Higher Net Plus, a pilot program underwritten by HP to create a community cloud that allows for services to be shared across several institutions, and the Box.net subscription program, an enterprise version of Drop Box. The final program will result in a huge reduction in costs.

The programs being developed by UCB are intended to be campus wide and available to all campuses. A common suite of tools will be available but faculty will not be required to use them. The current state is chaos and the future goal is integration. Current costs for a number of services is close to \$300 and the new services

will result in a savings of \$100 and can be extended to students for an additional forty dollars. The pricing of the whole Adobe suite of software is \$20. The cost for the entire Microsoft suite software is will cost be one million dollars which includes the cost for students. The savings on hardware are minimal. Bulk purchased of desktops will be used in the future. The goal of the Microsoft license was to simplify purchasing, tracking and compliance. New models, options and offerings were explored and the ability to extend the license beyond the conventional three year term.

Discussion: Microsoft was not willing to extend the deal negotiated by UCB to the other campuses until UCB signed the contract, which was done today. Adobe has never entered a deal like this either and wanted to keep the pricing confidential, however in response to a public information records act request the deal is now public. A letter from UCCC supporting the new financial model would be helpful with CIOs.

Action: The analyst and chair will draft a letter expressing the committee's support.

X. Sharepoint Presentation

- *Todd Giedt, Associate Director, Academic Senate*

The Senate's Associate Director provided an overview of the UCCC website.

Discussion: None of the members present have used Sharepoint.

III. Member Items and Campus Reports

There were no member items.

IV. New Business

The was no new business.

Meeting adjourned at: 3:45

Minutes prepared by: Brenda Abrams

Attest: Joel Primack