

Shared Research Computing Services Pilot Project

Follow up to 9-03-08 Council of Chancellors Discussion

(November 14, 2008)

The Shared Research Computing Services Pilot Project will measure and demonstrate how a shared research computing cluster residing in regional data centers can provide computing services to principal investigators (PIs) at lower cost to UC and with greater service to the PIs. It will show how the current practice of PIs to obtain their computing from dedicated servers housed in or near their offices degrades their service, puts their research data at risk, and costs the university 3 to 4 times what it would cost in a shared environment. Twenty-four projects are included in the pilot from 9 of the 10 UC campuses and others may be included in the near future. The pilot will cost about \$3.4M in one-time cost and \$1.1M annually for the two years during which the pilot will be used to develop a strategy for UC research cyber infrastructure. Once this model has been successfully tested, the shared research computing services will be supported with funding from the PIs' contracts or grants.

Two primary questions from the September 2008 COC meeting:

1. How does this fit among all the other IT projects we should undertake?
2. Why this project and why now?

How does this fit among all the other IT projects we should undertake?

- This is the academic program component of the Regional Data Centers recommendation in the "Building Administrative Efficiency" report.
- This is the UC-wide version of the Consolidated Campus Data Centers recommendation in the "Building Administrative Efficiency" report.
- The pilot is a key part of the proof of concept for shared regional data centers, which are essential prerequisite platforms for building both administrative and academic efficiencies.
- The pilot provides a balance to several of the other projects on the horizon which are more administratively oriented

Why this project and why now?

- There are 24 projects from Principal Investigators on 9 campuses that are ready to begin and more can be added.
- The technology is straightforward — we know how to do this.
- We need the data from this pilot to determine if this approach will be the answer to the growing demand for research computing capacity, which cannot be met in the long run by inefficient, decentralized campus server closets.
- Providing this kind of access to research computing resources that can be dynamically increased or decreased on demand will positively impact faculty recruitment and retention.

- Many of UC's competitors have already invested in shared research computing facilities, and this pilot will begin the process of leap-frogging them.
- By acting now, we have a window of opportunity to better our position significantly for winning extramural research grants.
- The pilot can be rigorously assessed and evaluated as a basis for future investments in research computing services, as it will be guided by a UC-wide advisory group, comprising faculty, technical staff, and administrators.
- The pilot has been discussed and endorsed by VCs for Research, CIOs, and Executive Vice Chancellors.

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