Reorganized Information Technology Architecture Committee (ITAC)

Dr. Hébert Díaz-Flores Campus Chief Technology Architect

Background

One of the initial priorities assigned to me after being appointed as Berkeley's first Chief Technology Architect was to reorganize and restart the activities of the campus' Information Technology Architecture Committee (ITAC)

ITAC's first Charter is dated September 25, 2001 and indicates that "The IT Architecture Committee is the primary campus forum for developing a shared vision of how information technologies can best support UC Berkeley. The ITAC carries out this charge through research, consultation, advice, and communication. The ITAC reports to the Berkeley campus Chief Information Officer and also functions as an advisory group for the e-Berkeley Steering Committee. The ITAC consults with campus constituencies, including the Academic Senate Committee on Computing and Communications, on topics under consideration." While no previous ITAC Charter appears in the documented archives, it is clear that the campus had and Information Technology Architecture (ITA) function that produced campus-wide recommendations as far back as June of 1997.

The need for a shared campus vision of how information technologies can best support UC Berkeley is not new. However, as information technologies become more pervasive across campus and as the complexity and rate of change increases, the need for campus wide technology standards and reference architectures that are aligned with campus-wide strategic goals also becomes a growing priority. Another priority is fostering collaboration and enhancing the skills of campus technology staffs. Finally, with information technology budgets unable to grow at the pace of technology needs, there is a growing need to be able to prioritize technology investments using this common vision.

Reorganizing ITAC to Better Meet Campus Needs

Recognizing the increasing importance of moving towards an information technology architecture that is fully aligned with campus strategic goals and meets the growing need for campus standards and a more rational approach towards technology investments, CIO Shel Waggener made the strategic priority of creating a Chief Technology Architect (CTA) position to oversee the process of developing and maintaining this architectural framework. This is where I entered the picture.

My initial recommendations to CIO Waggener were as follows:

¹ See: ITA:Hot Topic:Mac Status at UC Berkeley at http://itac.berkeley.edu:4259/itatf/hot.topics/mac/mac.html

- 1. Broaden the scope of the work of ITAC to include non-technology aspects that are crucial to meeting campus needs. For example, include business process analysis and modeling as a necessary component of the architecture. Include information management besides the traditional areas of technology infrastructure and applications development.
- 2. Develop and maintain architectural roadmaps in the following areas as frameworks to guide all the work of the Committee: Information, Applications, Business Processes, and Technology Infrastructure.
- 3. Prioritize the work of the Committee to address the review and assessment priorities established by the Campus Technology Council (CTC) and the CIO.
- 4. Make ITAC a working committee composed of fewer than 20 members. The idea is to facilitate the creation and delivery of work products in a timely manner.

Based on these recommendations, ITAC has been reorganized as of June 14, 2007. The new Committee Charter now indicates that: "The vision to be shared, known as the Enterprise Architecture (EA), encompasses issues related to information management, business process analysis, applications architecture, and technology infrastructure. In addition, the EA encompasses certain non-technical topics that affect the feasibility of the EA, including IT skills, training, as well as governance and cultural implications of changes induced by the EA. The EA provides a framework in which decisions may be made in designing and purchasing technology."²

ITAC's reorganized committee has 17 members (15 voting) providing cross-campus representation. ITAC includes technical leaders that usually guide technology architecture decisions in their organizations or play key enterprise information technology roles for the campus. Nominations to the Committee are reviewed by the CIO who makes final appointments. The Committee Chair has a 1-year term. The Vice-Chair has a 2-year term, rotating to Chair on the second year. As of this writing, the following individuals have been appointed to ITAC:

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² See new ITAC Charter at: http://technology.berkeley.edu/architecture/itac/charter.html

ITAC Membership (June, 2007)

Member	Title	Department	E-mail	Governance Role
Dr. Hebert Diaz-Flores	Chief Technology Architect	Office of the CIO Residential and	hjdiazflores@berkeley.edu	Chief Enterprise Architect
	Application Services	Student Service		
Steven McCabe	Manager	Programs	smccabe@berkeley.edu	Student Experience
		VC-Admin Information		
Chris Whitney	Principal Analyst	Technology - ESS	cwhit@berkeley.edu	Administration
TBD	r iiiloipai Allaiyst	recimology Lbb	<u>cwill@berkeley.edu</u>	Administration
	Chief Technology	Haas School of		
Zane Cooper	Officer and Director	Business	zcooper@haas.berkeley.edu	Academic
		Electrical Engineering and		
Eric Fraser	Director of IT	Computer Sciences	fraser@eecs.berkeley.edu	Academic
		Neuroscience	·	
Jarrod Millman	Director of Computing	Institute	millman@berkeley.edu	Academic
Greg Paschall	SSL Network and IT	Space Sciences Laboratory	gregp@ssl.berkeley.edu	Academic
Gabriel Gonzalez	Manager Information Architect	School of Law		
Gabrier Gonzalez	Information Architect	College of Letters &	ggonzalez@law.berkeley.edu	Academic
Tom Holub	Director of Computing	Science	tom@LS.berkeley.edu	Academic
Thom King	Data Architect	IST - Data Services	thomasking@berkeley.edu	Enterprise Data Architect
	Director of Applications	IST - Application	schulden@socrates.berkeley.	Enterprise Applications Architect
JR Schulden	Services	Services	<u>edu</u>	(shared)
Steve Masover	Application Architect	IST - Application Services	masover@berkeley.edu	Enterprise Applications Architect
Steve Masovei	Application Architect Chief Technology	IST - Application	masover@berkeley.edu	(shared) Enterprise Applications Architect
Randy Ballew	Architect	Services	randy@berkeley.edu	(shared)
		IST - Infrastructure		Enterprise Technology Infrastructure
Michael Sinatra	Programmer/Analyst V	Services	michael@rancid.berkeley.edu	Architect
Karl Grose	Programmer/Analyst IV	IST - Infrastructure Services	karlgrose@berkeley.edu	Enterprise Security Infrastructure Manager (non-voting)
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Member	Title	Department Residential and	E-mail	Governance Role
	Chief Security Officer,	Student Service		
Clyde Valdez	RSSP	Programs	clyde@berkeley.edu	Vice-Chair CISPC
TBD				Academic Senate
TDD				Campus Technology Council (non-
TBD				voting)

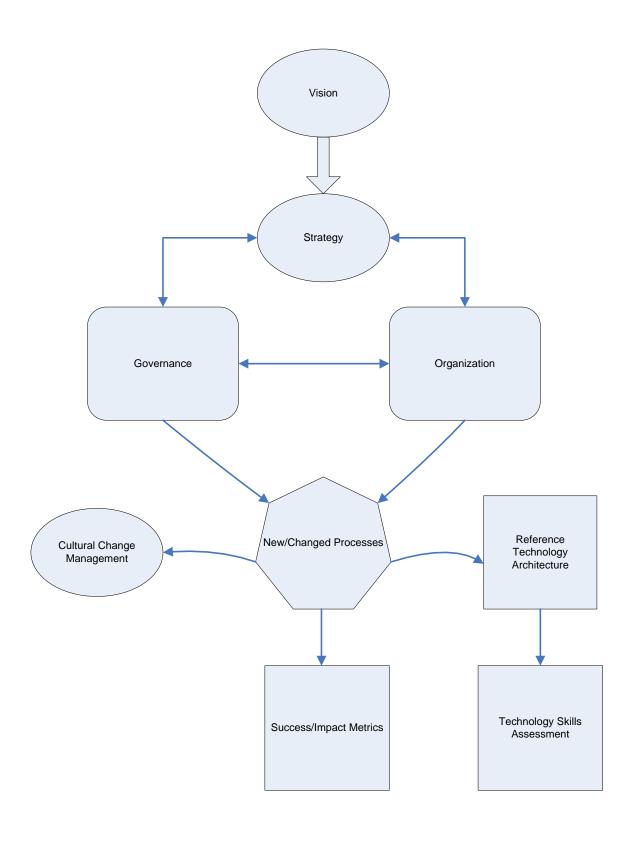
Enterprise Architecture Roadmaps

ITAC will have the primary role of developing and maintaining the following architectural roadmaps that will describe the desired future shared vision that the campus will move towards:

- Enterprise Information Architecture (EIA)
- Enterprise Business Process Architecture (EBPA)
- Enterprise Applications Architecture (EAA)
- Enterprise Technology Infrastructure Architecture (ETIA)

ITAC members have agreed on the key building blocks of these roadmaps to ensure that they become actionable blueprints that induce changes needed to arrive to the desired states. These key building blocks are depicted in the following diagram. Descriptions of each of these building blocks will be shared with the campus in a future iNews issue:

The Key Building Blocks of Actionable Enterprise Architecture Roadmaps



Enterprise Architecture roadmaps will be "living" documents that will periodically (e.g., every two years or so) be sent to the CTC for review and adoption. Approved roadmaps represent the shared vision the campus will move towards and will have significant influence in deciding on campus IT priorities and funding.

Critical Issues To Review During 2007-08

Besides being stewards of the campus enterprise architecture roadmaps, ITAC members will be tasked to review/assess information technology issues that have an immediate or relatively near-term impact on the campus. Under steady-state conditions, ITAC reviews these issues using the adopted enterprise architecture roadmaps, making sure that its assessments/recommendations are in agreement with these blueprints. Because the first set or architectural roadmaps will take at least a year to develop and approve, ITAC must address the current set of critical issues using the usual group assessment, discussion, and consensus building that has been used in past years. The critical issues that ITAC will review during 2007-08 are the following:

ITAC Critical Issues (2007-08)

Issue	Brief Description
Getting Ready for Kuali Student	Berkeley is now a founding member of the Kuali Student Services System university consortia (U of British Columbia, Berkeley, Maryland, Florida State, San Joaquin Delta College, Carnegie Mellon, and MIT). Kuali Student is being designed as a full Service Oriented Architecture (SOA) system that will replace Berkeley's legacy mainframe student systems. ITAC needs to assess the impact of Kuali implementation on Berkeley's current and future technology architecture as well as to "move" the campus in a direction that readies us for a successful implementation. The work performed by ITAC in this area will be fully coordinated and complement the work Berkeley staff does as part of the Kuali Student Services consortia.
Student/Faculty Portal Assessment	The campus needs to provide a unified experience for students, faculty, and staff to access Berkeley-provided student-related services and information as well as complementary, externally-provided collaboration tools and information. An environment that allows central-departmental applications to integrate, internal and external content to integrate, as well as development teams to collaborate around a common architectural vision is what will be investigated here.
Student E-Mail and Collaborative Tools Partnerships Assessment	With the emergency of what is known as the Web 2.0 world, all campus constituents, but students in particular, are becoming accustomed to collaborating and socializing in a technology-supported environment. Integrating these capabilities with Berkeley-provided applications and tools by partnering with key vendors in this space is something that needs to be investigated as the campus looks forward to providing cost-effective, best-of-breed technology solutions to the campus. ITAC efforts in this area will be fully coordinated and complement the work being done by IST's Data Services Division.
Recommendations on SOA Governance and Middleware	Berkeley joining the Kuali Student consortia sends a signal to the campus that we are ready to move the campus in the direction of developing enterprise applications using SOA. For SOA to be successfully implemented on campus, a governance structure and supporting middleware technology infrastructure is required. ITAC will review these issues and make recommendations that start moving us in this direction.
Review Identity Management and Master Person Data Management Loose Ends	ITAC has addressed the issue of Identity Management in the past and good progress has been made in addressing shortcomings in this area. Because of the importance of Identity Management and Master Person Data Management to the development of future IT capabilities for the campus, the reorganized ITAC will review what has been accomplished in this area and make recommendations to address any loose ends.

ITAC Permanent Subgroups and Issue Working Groups

Most of the work that ITAC will perform will be done as part of permanent subgroups and issue working groups. Permanent subgroups are being formed to start developing each of the enterprise architecture roadmaps described above. Issue working groups are also being formed to address the critical issues described above. Both the permanent groups and the issue working groups can include non-ITAC members and represent an opportunity for interested staff to join in the efforts.

Web Sites and Contact Information

Adopted products and public materials developed by ITAC for broad consumption will be published at: http://technology.berkeley.edu/architecture/itac/.

Working products, reference materials, meeting agendas, minutes, discussions, surveys, and other collaborative information will be available at the following CalShare site (requires CalNet authentication): https://calshare.berkeley.edu/sites/itac/default.aspx

If you are interested in joining an ITAC permanent subgroup or issue-working group, or if you want to provide any feedback related to ITAC, please e-mail me at <a href="https://high.nih.gov/high.nih.g