Current IT Issues @ UC Berkeley

A Presentation to Micronet
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“We do not have enough budget to do the job correctly, but somehow we scrounge the resources to do it multiple times in half-baked ways.”

Anonymous Berkeley observer
Agenda

- How much do we spend on information technology (IT) at UC Berkeley?
- What is our architecture for supporting IT services?
- Are there many overlaps in IT services?
- Are there important gaps in IT services?
- How can we continue to move forward despite the current budget crisis?
- What issues are currently keeping me up at night?
- A few challenges for you.
How Much Do We Spend on IT at UC Berkeley Every Year?

- We don’t know – we don’t measure it.
- ~45,000 active network connections
  @ ~ $600/year hardware/software
  => ~$27M/year equipment costs
- ~800 professional IT staff at UC Berkeley
  @~$100K/year (salary, benefits, space, etc.)
  => ~$80M/year staff costs
- Rough estimate of UCB total ~$100-$125M/year
How Do We Set IT Policies?

- Eleven official campus-wide committees make recommendations =>
- E-Berkeley Steering Committee =>
- Cabinet
UCB’s IT Support Architecture

Departments, Projects, and Individuals

College and Departmental IT Support
Departmental & college systems, desktop support, local area networks, specialized services, etc.

IST Campus-Level Support
Voice & data network, enterprise systems (financial, personnel, email, student, research, etc.), secure operational facilities, site licenses, etc.

UC, National, and International Infrastructure
CENIC, Internet2, Commercial Internet, system-wide payroll, supercomputing, California Digital Library, Melvyl, system-wide data, etc.
Are there many overlaps in IT services?

Yes! – some illustrative examples follow.
Many Campus Email Servers

- UCLink and Socrates service ~ 61% of campus email activity
- ~200 mail servers in departments handle the remaining 39%
- => lack of uniform name space, uneven virus and spam protection
- Resources wasted on duplicated service
Secure 24x7 Operations Centers

- Campus currently investing millions in SRB1 as a world-class secure operations center to replace Evans
- Library looking to rebuild a similar facility as part of seismic retrofit
- Other significant centers throughout campus (e.g. CS, Haas, COIS, L&S, etc.)
Multiple Application Development & Hosting Sites

- Dozens (hundreds?) of departmental Web sites designed, hosted, & supported independently => uneven, no UCB style, etc.
- Easy-sure-pay local and at UCOP
- Course management systems (WebCT, Blackboard, Haas, Campus OMS, etc.)
- Portals (BIS Reporting, HRMS, Haas, etc.)
Other Illustrative Examples

- Payroll processing (campus and at UCOP)
- Active Directory root support
- Local access points for wireless network
- Credit card payment systems
- GIS systems
- Independent efforts for development of IT support for academic collections
- Multiple approaches to off-site data storage and backups
- Management of hardware and software maintenance contracts
Illustrative Gaps in IT Services at UCB

- Integrated Berkeley Portal
- Unified approach to spam filtering
- Roles based authorization system
- Unified approach to firewalls
- Content management system for Web apps
- Departmental business resumption planning
- General archive facility for storage of large datasets
- Calendar system for students
- Unified email addressing space
- Integrated “Personal Information Mgt” (PIM systems)
Making Progress in Current State Budget Climate

- Need to examine ways of reducing overlaps so that we can develop incremental resources to fill selected gaps.
- Need to collaborate more – example of Common Solutions Group, JA-SIG, and JOG.
- Need clear statements and priority setting from Cabinet to begin changing the culture.
What Currently Keeps Me Awake?

- Budget, budget, and budget
- Privacy, piracy, & security
- California statute - SB1386
- Business resumption planning
- HRMS Phase II
What Currently Keeps Me Awake?

- Business resumption planning
- New operations center
- AirBears expansion
- New email & voicemail environment
- Open Source Application Foundation & Chandler project
A Few Challenges for You

- Work with ITAC to analyze overlaps and make recommendations.
- Work with CISC to improve IT security.
- Submit a proposal to UC Sautter award: [http://www.ucop.edu/irc/jog/sautter/](http://www.ucop.edu/irc/jog/sautter/)