

IT Infrastructure Present and Future

Significant IT Infrastructure Issues Addressed in FY06

The new consolidated UAF-Statewide IT organization structure, the Office of Information Technology (OIT), was put in place in December 2005. Interim directors were put in place and national searches begun for those four executive positions. One permanent hire is in place. Three are still in process.

A five year IT business plan was developed; all recharge activities were reviewed and modified for FY 07 based on need for the service and past performance.

At the end of FY 06, UAF made MyUA available for general use with a major roll-out planned for fall of 2006.

A yearly Review and Remediation process for all systems and services was implemented. The review examines hardware, software and staffing and identifies deficiencies in all three areas. The remediation provides a specific action plan to fix identified deficiencies. Priority reallocation of resources is given to single points of failure for core systems and services. Once this process has been refined and standardized within OIT the plan is to extend it across the MAU.

Areas identified and receiving remediation in FY 06 included:

- Email
- MAU networking
- Help desk support
- Telephone support
- Security

There was a significant hardware failure causing a disruption of service fore email before the complete email remediation could be completed emphasizing the importance of this work and the liability faced with inadequate support.

There was also a significant security incident in the last quarter of FY 06 that took place at the Bethel campus. There was immediate response to secure all systems. There appears to have been no significant loss or identity theft from the incident. Some processes were immediately changed to secure systems with more detailed work to take place in FY 07.

Projects underway for FY 07 include:

- External Review and internal remediation of all online systems and of business processes for security vulnerabilities
- Consolidation of UAF and Statewide email systems
- Install standard equipment in all Smart Classrooms (based on faculty input) and double the number of available Classrooms
- Increase bandwidth to all community campuses
- Connect Fairbanks campus locations by fiber optics where possible

- Install network redundancy
- Upgrade and provide full redundancy for Course management System
- Work with departments to standardize and upgrade video conferencing equipment

Projects planned for FY 08 include:

- 100% Wireless coverage for all UAF campuses
- Consolidation of server and data storage to increase reliability, redundancy and contain cost
- Telephone Switch Upgrade
- Infrastructure work on campus cable to prepare for convergence of voice, video and data services
- Expand network security
- Increase network capacity for research and instruction
- Expand Review and Remediation of IT across MAU

IT Investments

In FY 06 UAF continued to increase the base IT budget from internal reallocation based on a plan adopted four years ago; however, the incremental increase was reduced by \$100,000 due to other pressing UAF priorities.

In FY 07 there was neither a capital nor operating increase to the central IT budget. There was a reallocation of \$100,000 of OTO funds for a security review and remediation.

Other IT revenue includes the student fees for technology and network and recharge centers for telephones, server support and calendaring. There is a standing Technology Advisory Board for the student technology fee. Those funds are distributed across MAU departments, including a percentage earmarked for the central IT organization specifically for instructional technology support. The community campuses neither participate in collection of this fee nor its distribution and use. The student network fee funds are distributed to the central IT organization and separately to the community campuses. New in FY 07, the UAF IT Council, created in FY 06, will review plans for use of these funds.

The FY 08 budget request for UAF IT reflects a move to fund most core IT services (defined as an IT system that provides service to more than one department and must be available [uptime] at least during the normal 8 hour workday) from the base budget rather than recharge. This primarily affects the hardware and software for core applications which has historically been supported through recharge or the capital request process. Both of these have resulted in under funding for these core services, fragmentation of support and service (departments opting to maintain their own server and application rather than pay central It for that service), and more expensive crisis management when under funded systems inevitably fail, disrupting normal administrative and academic business, forcing resource reallocation that detrimentally affects other services.

The notable exception to this approach is telephone services which have been 100% recharge and successfully so, as it is on most university campuses, for a number of years. The OIT business

plan calls for evaluation of the telephone service recharge activity into a broader telecommunication recharge activity when voice and data are converged. This convergence is contingent on investment to upgrade the core cable infrastructure (wiring and wiring closets) on the UAF campuses.

Investment prioritization is based on critical need to maintain the service first and second on support for the MAU strategic plan and support for MAU PBB goals.

Renewal and Replacement

There are three ways renewal and replacement of IT takes place at UAF.

- Technology refresh for staff desktop computers
- OIT Review and Remediation
- Department budget allocation

The technology refresh program, in place for over 5 years, has a \$50,000 central pool of funds controlled by OIT to provide incentive for departments to place all faculty and staff computers on a regular replacement schedule of 3 to 5 years. Departments apply for refresh funds that partially cover the cost of a replacement computer. Acceptance of these funds includes purchasing a computer from an approved list. This reduces total cost of maintenance for the life of that computer. Replaced computers are recycled by OIT if in good condition; otherwise, they are to surplus. In prior years the program has been operated on a first-come basis for department priorities; however, this has resulted in a skewed refresh cycle among departments. In FY 07 additional criteria are being tried to give more departments an opportunity to participate. Typically the funds are depleted six months into the fiscal year. While this indicates demand may exceed funding, there may still be departments relying solely on these funds that have not adjusted operating budgets to reflect equipment refresh as a normal cost of doing business.

The OIT review and remediation process, begun in FY 06, provides an ongoing process to review systems, identify weak points, reallocate funds immediately if necessary for critical risks, and build coherent, planned operating and capital budget requests based on identified and documented needs. This process has gone through two iterations and will become a standard procedure in OIT with plans to expand its use across the MAU as an operational and planning tool for all IT infrastructure and services at UAF.

Adoption of ACAS and other Automation

Near the end of FY 06, UAF became the first MAU (after Statewide) to “go live” with MyUA with a major roll-out in the fall 2006 semester. UAF has also adopted the Statewide EDIR online directory and is using it to automate account creation for other applications. The adoption of automation at UAF is one area where the IT consolidation works to the advantage of all. The UAF perspective is helping Statewide adjust automated processes to better meet campus needs and the Statewide perspective is helping the campus see the value of system wide standards.