

5.G IT Infrastructure

Describe any significant IT infrastructure issues your MAU addressed in FY07 and planned projects in FY08 and FY09.

FY07 marked the first year that OIT budgets were aligned with the new OIT structure. Working collaboratively with UAF and Statewide offices to function as a consolidated unit has been rewarding and challenging as both groups adjust to the logistics of a unit that encompasses a campus, Statewide, and UA system component.

In FY07, OIT hired four Executive Directors, completing the leadership team reporting to the CITO. This team is engaged in strategic planning activities, process development and refinement, and was introduced to the concept of technology based performance metrics and goal setting exercises that will help OIT work in combination with campus and system missions and goals. OIT produced its first Annual Report, in an effort to communicate FY07 accomplishments and strategies. This report will be distributed in Oct-Nov 2007.

OIT invited an external consultant to gather consumer feedback on its Five Year Business Plan, developed in FY06. OIT will continue to vet its planning documents to best define consumer needs, levels of service, and align priorities for effective technology management. Additionally, OIT managers and executive staff attended a Service Level Management workshop in April 2007. This training and active follow-up will assist OIT management develop the framework for future internal and external partnerships as process improvements are adopted.

OIT reviewed and streamlined its internal recharge process in FY07 and eliminated business inefficiencies. To increase access to information and accountability for services, OIT is working to integrate constructive suggestions for continued process improvement and campus (departmental) interactions.

As part of the regular Review and Remediation (R&R) exercises implemented in FY06, OIT began an R&R process for Security systems and services in FY07. The review examined hardware, software, and staffing, and identified deficiencies in all three areas. The remediation resulted in specific action plans to fix identified deficiencies. Priority reallocation of resources are be given to single points of failure for any core (or critical) systems and services. The outcome of this remediation is being analyzed in FY08. OIT addressed the Bethel Security Incident in FY07 and has taken steps to integrate security improvements such as firewalls, training, and new password requirements to protect sensitive information.

In October 2006, the primary and backup telecommunications providers (ACS and GCI) experienced severe outages affecting telephones, cellular phones, and Internet connectivity. Communication services within the State of Alaska were disrupted during this outage. In response, OIT worked with both carriers to communicate situation updates to the affected university communities. Since then, OIT has been collaborating with the IT leaders from UAA and UAS to implement network infrastructure changes that will provide additional network



redundancy. As a member of the newly formed Disaster Preparedness Task Force, OIT continues to improve responses to unplanned outages and events.

Projects initiated/completed in FY07 include:

- External review and remediation procedures for security improvements
- Increased bandwidth to community campuses
- Expand Fairbanks off-campus locations connected by fiber optic cable
- Increased redundancy and reliability in course management system (Blackboard) for improved Fall 2007 semester start-up
- Barrow Arctic Science Consortium (BASC) IT outsourced through UAF/OIT

Projects planned for FY08 include:

- Extended wireless coverage for all UAF campuses
- Consolidate server and data storage to increase reliability, redundancy, and contain costs
- Upgrade telephone switch
- Plan and prepare infrastructure for VoIP upgrades
- Expand network security
- Increase network capacity for research and instruction
- Expand Review and Remediation processes for IT
- Implement standardization of Smart Classroom equipment, provide training, and gather feedback for academic technology best practices and plans
- Grow Project Management effort across OIT and within the system to assist in the prioritization of IT projects and resource allocation
- Continue efforts to streamline business processes, implement best practices, and improve internal service level management for IT operations
- Internal review of consolidation
- Review and begin consolidation of distributed IT services where appropriate

Projects planned for FY09 include:

- Begin VoIP implementation (pending funding)
- Upgrade campus cable plant (infrastructure)
- Continue consolidation of appropriate distributed IT services
- Install fiber optic cable between Fairbanks, Anchorage, and Juneau campus locations to the Lower 48 (pending funding)
- Upgrade community campus infrastructure as needed
- Put (a) backup power source into operation for machine room(s)

In FY07, UAF investments in IT were made through the use of \$100,000 in carry forward funds for the security review and remediation (in cooperation with Statewide) which encompasses the Fairbanks campus and community campuses. UAF additionally made investments in Roxen web content management software to replace aging hardware and expand license to the entire campus. As a result of faculty interest, the UAF Provost and OIT invested in an anti-plagiarism software pilot. OIT also reallocated internal resources to meet department and academic



technology needs including improved desktop support and expanded video conferencing capability.

Technology Advisory Board (TAB) network fee funds were utilized to refresh computer equipment and staff public student computer labs ensuring access to current technologies. These funds were also allocated to establish new and upgrade existing Smart Classrooms. Supporting student success initiatives, OIT utilized network fee funds to provide “clickers” to student groups for interactive learning. Additionally, student network fee funds supported academic software used by multiple departments, and a Student Desktop Support Center located in the Moore-Bartlett-Skarland residential community.

Other OIT revenue sources include recharge operations for telephone services, video conferencing, shared server storage, server maintenance and administration, and calendaring. In FY08, these operations were expanded to include web streaming and video production services.

In FY08, UAF increased OIT’s base budget per a pre-consolidation plan at UAF to invest in central IT services. OIT is currently utilizing this base adjustment by allocating funds to existing needs or projects. OIT is internally “jumpstarting” items as able, in order to alleviate the need for future operating budget requests. These jumpstarted requests include \$50,000 in multi-departmental use academic software and \$30,000 in academic technology and departmental computer lab supplies for use across the campus. OIT investment prioritization is based on critical needs to maintain services in support of the UAF strategic plan, mission, and PBB objectives.

Is there a plan in place, including funding, for renewal and replacement of core administrative and academic IT infrastructure?

Renewal and replacement of core administrative and academic IT infrastructure takes place at UAF through programs like the Desktop Technology Refresh (Tech Refresh) program, through planned use of network fee funds allocated specifically for refresh of student access computer labs, as part of OIT’s Review and Remediation process and identification of critical needs or single points of failure, and through UAF budget allocations.

The OIT Tech Refresh program, in place for over six years, has a \$50,000 annual pool of funds available for distribution to UAF departments. Functioning as incentive for departments to regularly refresh faculty and staff computer equipment every three to five years, Tech Refresh also allows OIT to control costs by standardizing the types of computers supported and utilizes the UAF designed machine build to alleviate additional workstation set-up time.

Refresh of the UAF general use computer labs on a three year renewal cycle is maintained by student network fees. Replacement of critical systems is built into OIT recharge operations as appropriate (i.e. calendaring, and some server replacement). Licenses and ongoing hardware maintenance increases however, are built into fixed cost funding requests.

OIT’s Review and Remediation process provides an ongoing mechanism to identify system weaknesses and critical infrastructure needs in order to reallocate resources or plan budget requests as necessary. In its third year as a standard practice, OIT has successfully been able to



reallocate resources to address critical needs. An example of this process includes the identification of outdated or obsolete academic technology equipment in the Reichardt Building, room 201 (formerly the Natural Sciences facility). OIT replaced the controls in this Smart Classroom to enhance faculty and student lectures and presentations. Another example of Review and Remediation allowed for the regulation of UAF and UA server traffic (or load-balancing) to improve server access response time. After the identification of critical system needs, OIT installed hardware to provide more consistent, faster, and reliable access to servers and services across the system. This practice is expected to continue to promote the proactive identification of system deficiencies.

Are the community campuses included in this plan?

Community campuses are included in OIT refresh options, through increased network connectivity and infrastructure upgrades, and sites are supported through the OIT Support Center and community campus site visits. There is an annual Rural Sites Training opportunity facilitated by the OIT Support Center's training group. Additionally this group provides regular scheduled training options and coordinates with the functional process owners (Human Resources, Business Offices, etc.) to develop online assistance for systems accessible throughout the UAF community.

What is the plan for adoption, including training, for the ACAS and other systemwide automation services being introduced (such as digital document delivery and MyUA)?

OIT is currently involved in several ACAS and systemwide automation projects including but not limited to: Digital Document Imaging/Delivery (OnBase), the EDIR electronic directory, non-resident alien tracking (fsaAtlas), UA housing software, the MyUA portal, the human resources (HR) workflow Banner module, UAOnline enhancements, social security number deletion to assist with identify protection and security, Enterprise Architecture, and the establishment of a systemwide Project Management Office and project prioritization framework. These examples demonstrate some opportunities where OIT is facilitating and working with process and project business owners to implement automation and efficiencies across the system.

Selected UAF departments have adopted digital document imaging and delivery, and all UAF departments utilize the online directory as it is now used to automate account creation for other applications. The MyUA portal has been rolled out to all MAUs and is currently supported by MyUA staff positions located at each of the three campuses.

Enterprise Architecture is the implementation of a process or best business practices facilitated at the system level and across the MAUs. In FY07, OIT played an active role in Enterprise Architecture consulting sessions through an external group.

In FY07, OIT created an office of Technology Oversight Services which has oversight for technology projects, collaborates with internal and external technology partners, is leading the organization in an effort to streamline internal business process through Service Level Management, serves as a communication outlet for IT projects, and provides strategic vision and leadership in project management and technology innovation. As a result of a collaborative



review and need for system project management services, OIT is playing an active role in the development of an ACAS funded system Project Management Office. As this office will be established in FY08 and located in OIT Technology Oversight Services, OIT will assist with project workflow and training in conjunction with the Executive Project Management Advisory Council to provide project management services, prioritization, and workflow to the system.

