

ITS Campus Technology Report September, 2008

ITS attempts to keep our clients informed through the ITS newsletter sent with Campus Weekly, updates posted on the ITS web page, and as-needed updates from the ITS communications office. The ITS annual report (http://its.uncg.edu/Division_Planning/ITS_Annual_Report.pdf) provides more complete information. In addition, we're sending this beginning-of-the-year technology report to our key client groups. Below are some of the most significant changes for Fall 2008.

Network connectivity is the basis for many technology services, and refreshes of both the wired and wireless networks have given us many new capabilities. The wired network now affords us the ability to logically segment the campus network, enabling ITS to work with campus to offer services such as secure connectivity of point-of-sale terminals (cutting transaction times by 60% in dining services) and connectivity of UNCG Police campus surveillance cameras. The wireless network has not only been refreshed, but significantly expanded both in coverage and service. Today's "UNCG-FacultyStaffStudent" wireless network offers the same access to services as the wired network, while maintaining appropriate security for both network access and data transportation. This helps to move toward our goal of making appropriate UNCG services available to all our stakeholders, to have no "digital second class citizens." Academic year 08-09 is the second year of required freshman computer ownership, and these wireless network modifications will enable much broader access to campus services, as well as supporting ad hoc study gatherings of students. Our campus visitors can now access basic services (web and other common public services) using "UNCG-Visitor" through self-provisioned registration. Looking to future connectivity needs, we have created a design for a fiber link to Gateway University Research Park South Campus to service facilities such as the Joint School of Nanoscience and Nanoengineering (JSNN) and the Joint Primary Data Center (JPDC); construction of the fiber link is scheduled to begin soon.

The Legislature provided planning funding for the JPDC in the FY08-09 budget. This pivotal project, in partnership with NCA&T State University and Gateway University Research Park, will lay the foundation for computing services to support growth in research, teaching and administration over the next 20 years. This will be important in the future as we look to begin or expand innovative services, such as the Virtual Computing Lab (VCL), a flexible tool which will be initially used to offer specialized academic software to students and faculty. Pilots of instructional VCL services for select classes have been underway since spring semester 2008 and will continue this fall. Limited VCL services will be available to all UNCG students beginning in the spring of 2009.

Server support and management is a key part of delivering computing services, but one that is often invisible. We are developing "server virtualization," and now have migrated over 50 servers from physical hardware to virtual environments, supported on a small number of high performance servers. This affords ITS the ability to support high availability services by duplicating the virtual servers between the McNutt and Bryan data centers, and allows ITS to set up new servers in a fraction of the time previously required. ITS is using this technology not only on its own infrastructure services, but has also established this as a campus services offering, available for a modest annual fee, thus improving not only performance but reducing costs to the campus community.

ITS looks to partner with other universities and to use corporate services where it makes sense financially and technologically. We have more opportunities than we have resources

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to pursue, so targeted partnerships and outsourcing allow us to meet needs, reduce costs, and offer innovative services. Two exemplars of leveraging corporate services are the rollout of Google email and applications for education (GAFE) for students and the Collaborative Hardware Procurement (CHP) project. GAFE, referred to as "iSpartan" services for UNCG students, offers our student community a flexible, innovative industry-standard email experience, combined with calendaring, collaboration options and more. GAFE significantly increases the email storage available to our students and allows us to divert those resources to meeting faculty and staff needs. ITS is evaluating the possibility of using GAFE for faculty and staff services, though this study is still in its early stages. Collaborative Hardware Procurement provides a "storefront" for UNCG purchases of computer hardware from leading vendors at excellent prices, and provides centralized processing and delivery. Looking forward, the next phase of CHP will add purchasing for peripherals to the storefront.

Working with other universities is often a good way to expand services or reduce costs. Our Blackboard partnership with NCA&T State University, implemented during the past year, is an example. We host Blackboard services for NCA&T by adding their equipment to our environment, providing them with enhanced services, while leveraging economies of scale to reduce UNCG costs yet maintaining the service level the UNCG community demands. ITS has worked closely with NC State University, the developers of VCL, on our implementation of instructional VCL services. Our newest collaboration is a disaster recovery (DR) partnership with Appalachian State University (ASU). ITS has located equipment in the ASU data center, and is using NCREN connectivity to synchronize Banner data between UNCG's data center and the data center at ASU. This effort is still maturing, but is currently synchronizing some Banner environments and a test involving campus business users will be conducted in fall 2008. When fully developed, this will provide a further level of redundancy beyond McNutt and Bryan synchronization that would be used in the event that both on-campus data centers were unavailable. The ASU site will allow ITS to restore critical Banner services within a single day.

Implementation of the Banner Enterprise Resource Planning (ERP) system core modules is now complete with production deployment of the Human Resources module. Core business processes have been improved significantly, and enterprise administrative data is now co-located in a single database, providing an improved platform to build upon.

As we look to the future, ITS will work closely with our clients to continue to meet campus priority needs. Please let us know if you have questions.

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