

2011- 2012 Annual Report

Entity: Information Technology Services

University of North Carolina at Greensboro

Information Technology Services

1A: Internet2 Day

Providing Department: Information Technology Services

Talking Point

On February 17th, 2012, ITS, along with the Office of Research & Economic Development, hosted an Internet2 Day at UNCG to promote awareness of the benefits that this advanced networking consortium provides for research and instructional purposes. The event included a remote music interaction demonstration in which tuba professor Dr. Denis Askew provide master class instruction to a student at Northern Illinois University. The demonstration was made possible by UNCG and Internet2's high-speed networks combined with specialized "DVTS" videoconferencing technology never before used for a live event at UNCG. Such technology makes it possible for UNCG to provide remote musical instruction across the globe.

Subsequent to this event, ITS began work with School of Music, Theater, and Dance technology staff to build UNCG's first LOLA (low-latency audio/video) node, which, by reducing the latency between remote sites to mere milliseconds, allow musicians to perform together remotely as if they are sharing the same stage. Internet2 Day also included demonstrations of remote control of scientific instruments, including the Helium Ion Microscope located at the Joint School of Nanoscience and Nanoengineering. For more information regarding Internet2 Day see the Chancellor's Report feature at http://chancellor.uncg.edu/chancellor_report/2012/uncg-partners.html, and the ITS Research Computing website at <http://its.uncg.edu/research/>.

Audience: Internal: 

Audience: External: 

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 U-R03: Technology or Technological Support

 U-AR02: Research/Creative Activity

 U-SG04.04 : Basic and Applied Research

 U-SA04.0: Economic, Cultural, and Community Engagement

1B: Support for JSNN and Middle College

Providing Department: Information Technology Services

Talking Point

In 2011-2012, ITS devoted substantial resources to the success of two major University academic initiatives – the Fall 2011 welcoming of the first class of UNCG Middle College students, and the opening of the new building for the Joint School of Nanoscience and Nanoengineering (JSNN) on the South Campus. In support of the successful launch of the Middle College, ITS completed infrastructure and networking projects to help meet network connectivity and communication needs, including access to Guilford County Schools resources from the UNCG campus. ITS also completed Banner system modifications to meet Middle College specifications. ITS has continued to support Middle College technology needs in ITS labs, and through other University technology services. To support the opening of and move-in to the JSNN building in December 2011 and early 2012, ITS worked closely with NC A&T staff to plan and build the appropriate infrastructure for network and voice services. During the move-in period, ITS stationed staff at the new JSNN building to provide immediate and direct assistance to JSNN student, faculty and staff. ITS continues to work closely with NC A&T technology staff in support of JSNN technology needs.

Audience: Internal: 

Audience: External: 

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 [U-R03: Technology or Technological Support](#)

 [U-SA01.0: Access to Education and Student Success](#)

1C: Blackboard Mobile Learn & UNCG Mobile Implementation

Providing Department: Information Technology Services

Talking Point

In FY 10-11, ITS decided to purchase Blackboard Mobile Learn in response to student demand and positive student feedback gathered during the Mobile Learn testing project. ITS launched Blackboard Mobile Learn for UNCG in August, 2011. This mobile application provides access to the UNCG Blackboard Learn system on mobile devices such as smartphones and tablets. Such flexibility in access has been described as “critical” by student government leadership.

Use of the application grew tremendously during FY 11-12, increasing almost 100% during the 6 months from November, 2011, to May, 2012, reaching 5,344 unique users at the end of the Spring 2012 semester. Based on feedback from the ITS Student Advisory Committee and comments received on UNCG’s Spring 2012 TechQual+ survey, student reaction to the new service has been positive overall.

Also in response to growing demand for mobile services, ITS has developed and will launch prior to the Fall 2012 semester, Phase 1 of the “UNCG Mobile” application to provide expanded University information and services on mobile devices.

Audience: Internal: 

Audience: External: 

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 [U-R03: Technology or Technological Support](#)

 [U-SA01.0: Access to Education and Student Success](#)

1D: Launch of Virtual Desktop Services through virtual.uncg.edu

Providing Department: Information Technology Services

Talking Point

During the Spring 2012 semester, ITS launched the new Virtual Desktop and UNCG App Store services that will facilitate and simplify client access to University technology resources, including from off campus and from a variety of hardware devices, while also helping to protect the security of restricted University data resources and systems.

The new "virtual UNCG desktop" service offers faculty and staff access to a UNCG "private cloud" where the University applications, devices, and data they need (the "UNCG desktop") can be accessed as an on-demand service – anytime, anywhere, on almost any device. Because the "virtual UNCG desktop" runs on servers in the campus data centers (not on the user's local computing device), users can access a fully functional "virtual UNCG desktop" from an Internet-connected device without the requirement of having a powerful workstation or laptop computer.

The UNCG App Store, currently accessible from within the virtual desktop, is populated with UNCG licensed software applications, which are provided at no cost to faculty and staff. Applications accessed through the UNCG App Store require internet connectivity, but otherwise function as if they are installed locally on the end user's workstation or laptop.

Audience: Internal: [e](#)

Audience: External: [e](#)

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 [U-V03: Sustainability](#)

 [U-R03: Technology or Technological Support](#)

1E: University Website Redesign and Launch of Web Self-Hosting Services

Providing Department: Information Technology Services

Talking Point

During 2011-2012, ITS devoted resources to two critical projects that provided better support for University web developers and promoted improvements to the University website. First, ITS worked closely with University Relations on the launch of the new UNCG website design and updated web standards. ITS efforts included creation of new standard "web assets" to allow department website maintainers to more easily update their sites to the new web design. Given that many UNCG websites are not maintained by dedicated technology staff, but rather by faculty or administrative staff, ITS placed emphasis on developing web tools that would be relatively easy to implement. Over the course of 2011-2012, ITS worked closely with departments to provide individual assistance with implementation of the new web standards.

For those with more advanced web technology needs, ITS also launched a new web "self-hosting" service, providing a LAMP (Linux, Apache, PHP, MySQL) environment for departments desiring to implement dynamic web applications such as WordPress and tools such as MySQL databases. The new "LAMP" environment allows web developers to implement such applications without setting up their own stand-alone web server, or seeking external services, as was previously required. WordPress, the engine for the University's **Inspire Change** site at <http://inspirechange.uncg.edu>, has proven to be popular among unit/department web developers. When ITS began offering workshops for those interested in implementing WordPress, high demand resulted in workshops filling quickly. ITS has increased the number of these workshops substantially, yet continues to see workshop registrations reach capacity two months in advance.

Audience: Internal: [e](#)

Audience: External: [e](#)

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 **U-R03: Technology or Technological Support**
 **1F: Enhanced Research Support Services**

Providing Department: Information Technology Services

Talking Point

In FY 11-12, ITS completed projects and added resources to significantly enhance our ability to provide support and services for basic and applied research. In addition to partnering with the Office of Research and Economic Development (ORED) to host the previously mentioned Internet2 Day, significant enhancements include:

- ITS filled a new position to augment existing research technology support services. The focus of this new position includes support for qualitative analysis and information management software (e.g., NVivo and Atlas.ti qualitative analysis software), complementing existing ITS support for statistical analysis software (e.g., SAS, SPSS) and online survey tools (TechQual).
- ITS established a shared position for support of high performance computing (HPC) with NC State University. Because UNCG demand is not yet sufficient for a full FTE position, this arrangement allows ITS a cost-effective means to offer support in a highly specialized technical area.
- ITS finished Banner project work to connect the WebFOCUS reporting environment to the UNC Chapel Hill-hosted SeRA database used for UNCG research administration.
- In response to faculty requests for University-supported document indexing software, ITS worked with ORED and the Research Advisory Council to complete the "Index Creation Software Evaluation and Recommendation" project that recommended CINDEXT as the University supported product. Network installation will occur in FY 12-13.
- ITS has also begun to work more closely with ORED to identify and respond to external funding opportunities to enhance the University's network and technology infrastructure and services to better support University researchers.

Audience: Internal: 

Audience: External: 

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

 **U-R03: Technology or Technological Support**

 **U-AR02: Research/Creative Activity**

 **U-SG04.04 : Basic and Applied Research**

 **U-SA04.0: Economic, Cultural, and Community Engagement**

 **2: Information Technology Services Progress on Strategic Plan**

Providing Department: Information Technology Services

Start Date: 7/1/2011

End Date: 6/30/2012

Strategic Plan Complete: 

Related Items

There are no related items.

3A: Identity Management Services Enhancement – Enterprise Authentication Reliability

Providing Department: Information Technology Services

Administrative Institutional Effectiveness Highlight

Stable and robust Identity Management services, including authentication services to access University enterprise and department applications and technology resources, are essential to providing successful technology services. In July-October 2011, UNCG experienced outages of our "Enterprise Authentication" service that exceeded our stated downtime tolerance. Specifically, ITS's uptime goal for "Enterprise Authentication" services is 99.9%, and ITS failed to achieve this level of uptime for 4 consecutive months, with the lowest uptime percentages occurring in the critical Fall semester start months of August and September. In response to these problems, ITS redesigned the "Enterprise Authentication" service to move it from a multiple server configuration, which required manual intervention in response to a service failure, to a new server cluster environment which allowed automatic failover in the event of a service failure. Since the new solution was implemented in January, 2012, uptime exceeded 99.9% in 5 of 6 months, with 100% uptime achieved from March through June, 2012.

ITS has also completed work to prepare for the July, 2012, cutover from "Enterprise Authentication" services based on Novell eDirectory technology to the new "Spartan ID" service which will provide robust, more secure, and more fully featured authentication and identity management services.

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

There are no related items.

3B: Internet Redundancy Phase II Implementation

Providing Department: Information Technology Services

Administrative Institutional Effectiveness Highlight

In FY 10-11, ITS implemented Phase I of an effort to establish redundant internet connectivity between UNCG's network and the external internet. Phase I offered redundancy and protection against failure of UNCG's internet connectivity equipment located in downtown Greensboro. In October 2011, UNCG experienced a 20 minute internet service outage caused by a Denial of Service (DOS) attack against another entity also connected to the internet through UNCG's regional network service provider (MCNC). In this event, MCNC services, rather than UNCG equipment, created the failure point. Following this incident, ITS worked with MCNC to implement Phase II of the redundancy solution. The Phase II solution, implemented in May 2012, will protect against service disruptions in the event of similar future events.

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

There are no related items.

3C: TechQual+ Technology Survey Action Plans

Providing Department: Information Technology Services

Administrative Institutional Effectiveness Highlight

In the spring of 2012, Information Technology Services (ITS) conducted its first TechQual+ survey, a national survey from the [Higher Education TechQual+ Project](#) which is used to assess, analyze, and report on the effectiveness of technology services at higher education institutions. The "UNCG ITS 2012 TechQual+ Survey" was conducted to solicit student, faculty, and staff perceptions about campus technology services and to gather suggestions for service improvements. The results are being used to help set priorities for technology planning and service improvements in FY 12-13. Based on survey results, ITS has identified 7 areas related to ITS-provided technology services in which client minimum service expectations are not being met. ITS has developed "TechQual Action Plans" to respond to each of the following 7 areas:

- Need for reliable internet service
- Need for easy-to-use campus web sites
- Need for prompt, effective, courteous service
- Research computing
- 6-TECH services after 8-5 M-F
- Need for access to services from off campus
- Student & administrative systems

ITS will post on our web site, approximately six months from now (July, 2012) and then again approximately twelve months from now, summaries of the service changes that relate to the seven areas above.

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

There are no related items.

3D: ITS Lab Computer Performance Improvements

Providing Department: Information Technology Services

Administrative Institutional Effectiveness Highlight

In summer 2011, ITS migrated its instructional/open access and training labs to the new General Computing Network. In Fall 2011, ITS began receiving considerable complaints about the performance of these lab machines, including long login times, missing software, failure to properly map network drives, and "logon server" errors. ITS developed a modified OS configuration and software deployment method that was tested on a subset of "Superlab" computers in mid-Fall 2011. ITS administered a survey to users of these test machines as well as to users of nearby unchanged "control" computers. Survey results showed that login time, the most widely heard complaint, was substantially reduced with the new design. In the test group, the proportion of machine logins completed in under two minutes was greater than 2/3's, as compared to approximately 1/3 of control group machines. Based on these results, ITS launched a formal pilot of the new configuration in the Bryan 211 instructional lab, and implemented the new configuration for all ITS labs in January, 2012. Students comments on the UNCG ITS Spring 2012 TechQual+ survey, as well as feedback received through the ITS Student Advisory Committee, indicated that students had generally noticed an improvement in lab computer performance as compared to Fall 2011.

Start Date: 7/1/2011

End Date: 6/30/2012

Related Items

There are no related items.

Filter Criteria

Prepared by: Gloria Thornton
Start Date: 7-1-2011
End Date: 6-30-2012
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