ITS to Launch Catalog of Services
This fall, Information Technology Services will launch the ITS Service Catalog. The Service Catalog is a comprehensive listing of the business, technical, and infrastructure-related services provided by the ITS organization. The Service Catalog will contain a list of service offerings from which users of ITS services can gain additional service-related information, procure service, and acquire support and status updates.

The main components of the ITS Service Catalog will include service descriptions, deliverables, costs (if applicable), Service Level Agreements (SLAs), and availability and capacity. The Service Catalog will be available to clients via an interactive Web portal. Catalog entries will be presented with different, unique views based on the client type. For example, students may be provided with an alternate set of offerings than faculty or staff members.

For more information as it becomes available, visit the ITS Web site (http://its.uncg.edu) or contact 6-TECH at 256-TECH (8324).

Research Computing Support
Information Technology Services offers computing support and training for researchers.

Research Software - ITS provides a wide variety of software useful for research activities. A list of available software is at http://its.uncg.edu/Software/Research/. Training is also available for many frequently-used research software applications, including Qualtrics (Web-based survey tool). See article on training opportunities on page 2.

Research Computing Platforms/High Performance Computing - For researchers who need an alternative computing platform, ITS offers the Instructional Linux Environment (ILE). The ILE provides operating system command-level access using standard UNIX/Linux utilities. For more information and a list of ILE software, go to http://its.uncg.edu/Software/Available/ILE/.

For those who need more computing power, ITS partners with NC State to provide technical support and training for High Performance Computing (HPC). HPC services provide researchers with access to the HPC Henry 2 Linux cluster with approximately 1,000 computer nodes and a variety of software packages. Go to http://its.uncg.edu/Research/HPC/ for more information about this service.

High Speed Networking Services - UNCG provides researchers access to a high-capacity, highly-available Gigabit Ethernet network. The university is connected to the Internet2 network (see article on page 2), peer institutions, and the North Carolina Research and Education Network (NCREN) infrastructure. For more details, visit http://its.uncg.edu/Network_Services/High_Speed_Networking/.

For more information about research computing support at UNCG, go to http://its.uncg.edu/research/ or contact 6-TECH.

Information Security Office: Password Management
If you have ever reused a password at multiple sites, you may be in more trouble than you suspect.

Cyber-criminals are stealing password databases from companies and Web sites with increasing frequency. Hackers break into computer systems and copy the databases that store the password hashes. Press releases and news articles may emphasize that passwords stored in a hashed form (rather than plain text) provide you with some measure of security. Unfortunately, while hashing passwords is an accepted best practice, once the hacker has the hash it is a relatively simple matter to turn that hash back into a password.

It is important to point out that the real value to the attacker is not access to the original target. If you reuse the same password at multiple sites, the attacker can use the first compromise to hop onto your accounts at other businesses.

It is also important to understand the realities and suggest ways to implement practical changes to protect you and your data. The realities are:

- You should use a unique password for all services. Password reuse is an open invitation to security problems.
- Passwords need to be as strong as possible within the limits of the system to protect against cracking.
- Human beings are not good at accomplishing the above two items.

One option, recognizing that people may need help in effectively managing passwords, is to use password management software. A password manager is a program that stores and generates passwords for the user—the

(continued on page 2)
Technology Training Opportunities

ITS offers a variety of on-campus technology training opportunities. The list of workshops offered this fall includes:

- **Google Groups Management**
  This workshop covers the basics of setting up and managing your Google Group. Topics include general group details, group types, membership types and management, and posting and managing posts.

- **Introduction to Online Surveys using Qualtrics/Intermediate Qualtrics**
  The introductory class provides an overview of online surveys using Qualtrics. Items covered include survey creation, survey collaboration, question types, survey distribution, and results and reporting. The intermediate class focuses on more advanced features of the software, including customizing survey templates, working with survey blocks, using panels for email invitations and piping custom text to your survey questions.

- **iPad**
  This workshop provides an overview of the iPad device. Attendees will explore applications and learn how to properly operate and maintain the device. Bring your own iPad to the training.

- **Introduction to WordPress**
  This class covers the primary components and features of WordPress and how to manage and maintain a WordPress Web site.

- **Introduction to Web Development with Dreamweaver**
  This workshop introduces HTML basics and how to use the Dreamweaver software to create and edit Web files.

To register for any of the above workshops, go to [http://workshops.uncg.edu/](http://workshops.uncg.edu/) and select the appropriate “ITS Training” title. For more information about ITS training opportunities on campus, go to [http://its.uncg.edu/Training/](http://its.uncg.edu/Training/) or contact 6-TECH.

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**Campus Technology Updates**

**Digital Video Transport System; Performance using LOLA**

In February, UNCG and Internet2 hosted an Internet2 event at UNCG.

The event featured (for the first time at UNCG) a live demonstration of remote musical interaction using the Digital Video Transport System (DVTS) technology. This technology allows for teleconferencing without the typical delay and opens UNCG to the opportunity of musical instruction across the globe.

The Internet2 event also presented a 2011 video of a simultaneous musical performance by UNCG violin professor Marjorie Bagley and Cheng-Hou Lee (Cellist, Northern Illinois University) over Internet2 using LOLA (low latency audio visual streaming system) software. On October 2, Ms. Bagley performed (using LOLA) at an Internet2 member meeting in Philadelphia.

**Internet2** is a high-speed advanced network linking universities, industry, government, and other entities. ITS obtained full membership in Internet2 in 2011.

**ITS Service Consulting**

ITS has created the Service Consulting Group. This group will promote awareness of ITS services, and will be proactive in identifying potential client questions and concerns regarding services. This will include reaching out to areas of the campus where there are perceived service gaps, and working with concerned clients to identify areas for service improvement or service limit clarification.

**ITS Annual Report**

ITS has published its 2011-2012 Annual Report. For more details, go to the ITS Web site and click on the About ITS link ([http://its.uncg.edu/About/](http://its.uncg.edu/About/)).

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User remembers the password for the password manager and the manager encrypts and stores the other passwords the user needs. For a full discussion, see [http://en.wikipedia.org/wiki/Password_manager](http://en.wikipedia.org/wiki/Password_manager).

A password manager in use by many in the UNCG technology community is KeePass ([http://keepass.info](http://keepass.info)). It is robust and distributed under the GPL (meaning it is free and does not require additional click-wrap approval for use at UNCG). Versions 2.0 and above work on both OSX and Windows. Documentation is available at the above site for installation and use of the software. Additionally, implementations are available for Android and iOS.

It is worth mentioning two alternatives to a stand-alone password program you may come across and why neither is recommended: Web browser password managers and Web site based password managers. A browser-based password manager runs in the same environment as Web pages, pages which may be malicious or execute malicious code. Web page password services, such as LastPass, are tempting targets for attack by password-harvesting criminals and may be a higher risk than a program on your own computer.

If you would like more information about password management, contact the Information Security Office via 6-TECH.

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