

Information Technologies Activity Report

May – September 2015

My UD Business

UD Information Technologies (IT) recently launched [My UD Business](#), a new service that allows students, parents, faculty members, and employees to search or browse academic and administrative business forms and applications.

Since the launch of My UD Business on August 18, the site has had over 51,000 unique visitors with 84% of visitors making at least one return visit to the site.

My UD Business organizes about 700 UD business forms and applications in a tile-based layout similar to the format used by popular e-commerce websites. Users can search for forms by keyword or can filter results based on role or business category.

Other notable features include the ability to mark forms and applications as favorites, to view recently used and most popular forms and applications, and to see more information about a resource, such as a description, contact information, and related forms and applications.

The forms and applications available through My UD Business are also searchable from UD's Google Search Appliance or via www.google.com. The IT Web Development (IT-WD) team is continuing to work with campus business process owners to refine content and improve search results.

The University community has not needed a lot of training to start using My UD Business; however, IT-WD is offering hands-on training throughout the fall and will offer custom training upon request. If you would like a 10-minute demo of My UD Business at your department or group meeting, contact Joy Lynam at lynam@udel.edu.

Want a hands-on training session? Sign up at www.udel.edu/connectingu.

Looking for a business application? Go to www.udel.edu/myudbusiness.

Questions? Use the Feedback or Help links on www.udel.edu/myudbusiness.

More than 500 of your colleagues are using 2FA. Are you?

On September 10, Acting President Targett and Provost Grasso sent an email message to all UD employees explaining how employees can protect themselves against the consequences of surrendering information in a phishing attack.

Phishing attacks are malicious email messages designed to steal your password and then use your credentials to steal funds or information. In particular, University faculty and staff have seen a dramatic increase in dangerous "spear phishing" attacks that convincingly use stolen logos, names, and other information to target the University community.

Over the summer, scammers tried to steal paychecks using University employee credentials that were likely stolen in a phishing attack or by malware downloaded onto employee devices.

All UD employees are encouraged to make it more difficult for scammers to use stolen credentials to log in to University systems by activating **two-factor authentication (2FA)** on their accounts. 2FA provides an extra layer of protection by requiring a unique, temporary security code in addition to your password.

2FA is recommended for every UD employee as a small but powerful tool for defending yourself and the University against costly losses. Over 500 employees have signed up for 2FA so far. Why haven't you?

Visit [Getting started with 2FA](#) for instructions on enabling and using 2FA.

October 28: UD Tech Fair

UD IT invites faculty and staff to explore the ways technology can help them, their clients, and their students by attending the annual IT Tech Fair on Wednesday, Oct. 28, 10:30 a.m.-2:30 p.m., in the Multipurpose Rooms of the Trabant University Center. Lunch will be provided.

The Tech Fair provides an opportunity for faculty and staff to familiarize themselves with the technology services offered by the University. Staff who provide technology support and manage central systems will be available for questions, short discussions, and hands-on demonstrations of technology tools.

In addition to staff from IT, the 2015 Tech Fair will include representatives from other campus units that provide support for various technologies:

- Human Resources
- Procurement
- Communications and Public Affairs
- Registrar's Office
- Campus and Public Safety
- Disability Support Services

- UD Online
- University Library
- The Library's Student Multimedia Design Center.

By attending the Tech Fair, members of the campus community can explore new technology while enjoying a light lunch.

For more information, go to the [2015 Tech Fair website](#). If you plan to attend, please [register online](#).

Planned Outages

UDSIS will be unavailable from 5:00 p.m. Friday, Oct. 9, 2015 through the early hours of Monday, Oct. 12, during the process of upgrading the database from Oracle 11g to 12c. During this upgrade, the PeopleSoft infrastructure (tools) will also be upgraded from 8.53 to 8.54. These upgrades are essential to enable future upgrades to the latest versions of the software.

Security, Privacy, and Safety

Use Identity Finder to reduce the risk of sensitive data breaches

Faculty and staff can use **Identity Finder** to take an active role in reducing the University's risk of accidentally exposing sensitive information to hackers. [Identity Finder for both Macintosh and Windows computers](#) is available at [UDeploy](#).

You can improve the University's security posture by scanning your computers and external storage devices (e.g., hard drives, USB thumb drives) for Personally Identifiable Information (PII)—such as Social Security numbers (SSNs)—and then deleting or encrypting that information. To date, your colleagues have used Identity Finder to uncover a variety of sensitive information on their computers:

- class rosters and grading spreadsheets from the 1990s (with student SSNs)
- Social Security forms (with parents', children's, or employees' SSNs)
- SSNs and credit card information in old receipts.

If you find sensitive information, decide whether it should be securely erased or retained. Reminder: If a document with PII needs to be transmitted or retained, University policy states it **must be encrypted**.

For more information, read the [Identity Finder help files](#), consult with your college or departmental IT staff, or contact the [IT Support Center](#).

DHS risk and vulnerability assessment

In June 2015, the Department of Homeland Security (DHS) National Cybersecurity Assessment and Technical Services (NCATS) team conducted a risk and vulnerability assessment of the University's network. Starting from both on- and off-campus Internet addresses, the DHS NCATS team scanned the entire University network for vulnerabilities. The team reported that, particularly given the challenges posed by an academic environment, "[University of Delaware] IT staff [are] doing an exceptional job at securing the numerous web applications that exist on the network as well as retaining good situational awareness about the network as a whole." The report also delineated recommendations for improving the University's IT security. The University is taking steps to follow those recommendations, including:

- promoting use of 2FA for logging in to UD services
- improving endpoint (computers and devices used by faculty and employees) security
- enhancing campus awareness of spear phishing attacks.

UD IT security training for departmental and college IT staff

Over the summer, IT-Client Support and Services (IT-CS&S) offered desktop security training to departmental and college IT staff. In June, IT staff offered a session about securing and managing client desktops using Active Directory and Group Policies, laying out a logical organizational unit (OU) structure. In July, IT staff led a deep-dive session on Applocker, a follow-up to an overview session held in early spring. Applocker can block a client desktop from using software that has known security vulnerabilities. These workshops are part of ongoing training that began with a "Desktop Security Tools, Techniques, and Best Practices" workshop in February and that will continue during the coming school year.

UD Financials move behind CAS: A step towards a standard security interface

UD Financial systems' users began logging in using the UD CAS screen on Sept. 9. UD employees who use the reporting (FIRPT) and production (FIPRD) parts of UD Financial systems now log in through the same CAS screen they see when using applications such as Web Forms, Web Views, or My UD Business.

Moving more UD applications behind CAS allows the University to move towards a standard security interface for all UD applications. In addition, UD CAS supports [two-factor authentication](#), a more secure way of logging in to UD resources, thereby reducing the risk to University information.

For more information, contact the [IT Support Center](#).

Infrastructure

Wi-Fi in classrooms upgraded to keep pace with student demand

Most UD students now bring at least two wireless devices to campus. Being able to support this increase in wireless demand has been a top priority for UD IT. The University now has about 2,700 wireless access points (APs) in buildings across the Newark campus.

Over the past several months, IT staff completed an evaluation of the wireless service in all 182 centrally scheduled classrooms on the Newark campus. All UD classroom APs now have been upgraded to the newest generation of wireless protocol (802.11ac), including 119 APs installed this summer. The new APs provide more capacity, each able to support almost twice the number of devices than older APs while providing 33-50% more bandwidth to those devices. The new APs also extend wireless signals further and with greater strength than the previous generation of APs.

Every classroom now has at least one AP, and classrooms with more than 60 seats have at least two. APs were relocated in several classrooms for better coverage, and many of the large lecture halls (e.g., 120/130/140 Smith, 130/131 Sharp) each have four APs to service the expanded needs and increased number of devices today's students bring to class. Before the spring 2016 semester, IT plans to add additional APs to eight classrooms that present network design or construction challenges (e.g., 100 Wolf).

Windows 10 licenses added to UD's Microsoft agreement

This summer, the University added Windows 10 to its Microsoft license agreements.

- Windows 10 is available from the University's [UDeploy](#) server. Costs are as follows:
 - Windows 10 for Education: free for UD students
 - Windows 10 Enterprise: free for UD-owned computers
 - Windows 10 for Education: \$9.75 under a Microsoft work-at-home license for UD faculty and employees.
- Windows 7 and 8 are still available at no charge for University-owned computers, and are available for faculty- and employee-owned computers under a Microsoft work-at-home license. ([UDeploy](#))
- Office 365 for Education remains free for student-, faculty-, and employee-owned computers and devices ([Instructions for downloading from Microsoft Office 365 Portal](#)). This version is **not** for use on University-owned computers or devices.

- Office Professional Plus (Windows) and Office for Mac are available at no charge for University-owned computers. ([UDeploy](#))

Note: Windows 10 for Education and any software acquired under a Microsoft work-at-home license are provided by Kivuto, an academic reseller.

Research Support

HPC Symposium

The final [2015 High Performance Computing \(HPC\) Symposium](#) session will be hosted at Faculty Commons on Wednesday, Sept. 23 at 10:00 a.m., and will kick off with a presentation by [David Racca](#), policy scientist in the [Center for Applied Demography and Survey Research \(CADSR\)](#). Racca will be presenting for the research team of [Edward Ratledge](#), CADSR Center Director, about using the UD IT [Community Clusters](#) to develop a statewide speed survey from vehicle GPS data. Processing the data produced by 2,400 GPS equipped vehicles has been made possible by using the [UD's Mills Community Cluster](#).

During his presentation, Racca will review the non-parallel, higher level network calculations developed in Python by Ratledge's research team. The presentation will be followed by an hour-long open forum for researchers, staff members, and students to ask questions, have their questions answered, and share ideas. ([Register](#))

The HPC Symposium series is designed for researchers using or interested in using the University's [High Performance Computing \(HPC\) clusters](#). Researchers who are interested in presenting at one of HPC Symposium sessions in 2016 can submit a [research computing help request](#) form.

October research computing training

The IT Research Computing staff will be offering a variety of training sessions during October. An updated list of events, topics, and dates is available at the [Research Computing website](#).

- XSEDE HPC Monthly Workshop: OpenMP, Faculty Commons (116 Pearson Hall), Tuesday, Oct. 6 (11:00 a.m.-5:00 p.m.)
- Introduction to Research Data Management, 114 Morris Library, Thursday, Oct. 15 (10:00-11:30 a.m.)
- October Unix Basics Series, Faculty Commons (116 Pearson Hall), Tuesdays (1:30-3:00 p.m.) and Thursdays (10:00-11:30 a.m.) ([Register](#))
 - Unix Introduction: Thursday, Oct. 1 ([Register](#))
 - Shell Programming Part 1: Thursday, Oct. 8 ([Register](#))

- Shell Programming Part 2: Tuesday, Oct. 13 ([Register](#))
- Python Part 1: Tuesday, Oct. 20, guest speaker Mike Porter ([Register](#))
- Python Packages: Thursday, Oct. 22, guest speaker Glen Jenness ([Register](#))
- Python Part 2: Thursday, Oct. 27, guest speaker Mike Porter ([Register](#))

VSCSE/OpenScience Grid/XSEDE HPC monthly workshops

The IT Research Computing team encourages researchers to participate in workshops and events hosted by other universities and research centers. Over the summer months, UD participated as an in-person site for the [Virtual School of Computational Science and Engineering \(VSCSE\)](#) and three [XSEDE Monthly HPC Workshops](#).

Additionally, Ph.D. candidate Mario Guevara, Department of Plant and Soil Sciences, recently received a grant to participate in the [2015 Open Science Grid \(OSG\)](#) school in Madison, Wisconsin. The OSG school is a week-long course in High Throughput Computing (HTC)—a cutting edge computational approach to efficiently manage and analyze large amounts of data and information. HTC relies on the availability of shared networking resources for the serial computation of hundreds or thousands of related jobs.

Guevara also acted as a Teaching Assistant at the August VSCSE “Supercomputing for Everyone Series: Performance Tuning Summer School” and “Science Visualization” sessions. For more information about each course, visit [UD's VSCSE website](#).

The Research Computing team will host the next XSEDE HPC monthly workshop on Oct. 6. ([Register](#))

University researchers are invited to use the [Research Computing Help Request form](#) and select “Education and Outreach” to request that Research Computing staff facilitate other specialized training.

Teaching and Learning

Classroom technology

University Media Services (IT-UMS) continued a 6-year cycle of upgrading A/V technology in centrally scheduled classrooms. The upgrades include conversion to fully digital systems and designs that will standardize A/V equipment operations campus wide. Four rooms in Purnell Hall and two auditoriums in Sharp Lab were updated over the summer, with upgrades to 24 rooms in Gore Hall scheduled for January. This work follows the first leg of the upgrade cycle in which 23 rooms in Alison Hall, Harker Lab, and Colburn Lab received the new technology.

UD Capture concierge-level service

Since 2009, faculty members have taken advantage of UD Capture, UD's classroom recording service, available in all centrally scheduled classrooms [upon request](#) and, since 2013, the [self-service recording studios](#) in 309 Gore Hall and 208 Harker Lab. Beginning this year, a new concierge-level recording service is available in [Faculty Commons](#), 116 Pearson Hall. Using a green screen backdrop, faculty can appear in the recording, superimposed on an image from a laptop or document camera. During the recording, faculty can switch which inputs are recorded. Contact Faculty Commons to reserve the studio at faculty-commons@udel.edu or (302) 831-0640.

"Keep Calm and Teach On"

Over 100 faculty members participated in the new "Keep Calm and Teach On" series of workshops (Aug. 18-Aug. 27) to help prepare for the fall semester. Faculty Commons partners led sessions on over 20 topics, including learning the basics of Canvas, developing effective rubrics, getting updated on new iClicker software, and connecting with Library resources. Based on the reception to this event, faculty can look forward to a similar offering next year.

First Friday Roundtables

The partners of Faculty Commons offer a monthly discussion series, First Friday Roundtables, to provide an opportunity for UD faculty members and graduate students to examine teaching, learning, and assessment practices and issues.

The first session, Sept. 11, focused on campus resources for new faculty and included guests Lynn Okagaki, deputy vice provost, and Chris Lucier, vice president for enrollment management.

The rest of the fall semester First Friday Roundtable sessions will address topics related to student motivation:

- Oct. 2: Spark learning with community engagement ([Register](#))
- Nov. 6: Create teachable moments with the help of student response tools ([Register](#))
- Dec. 4: Considering the right things: Motivate students to evaluate teaching fairly ([Register](#)).

For more information, visit the [Center for Teaching and Assessment of Learning's website](#).

Other upcoming Faculty Commons events

This fall, Faculty Commons partners will be hosting several other events including Game Night; Discover Delaware: Roots, Rifts, Reconciliation; a Book Club meeting for *In Defense of a*

Liberal Education (Oct. 7); and several events during [Open Access Week](#) (Oct. 19-Oct. 25). For an updated list of events and times, visit the [Faculty Commons website](#).

Business Systems

Because you asked...

During the summer, IT-WD completed updates to several University forms; most of the updates were in direct response to campus client requests.

- Cash Transmittal Web Form—Added the ability to include attachments (Cashier)
- Employee Demographic Data Web Form—The form was cut in half. The way some of the data is collected has changed, enabling us to shorten this form. (Research and HR)
- Request for Service (RFS) - Campus Delivery Web Form—A new form moves this business online. (Campus Delivery)
- RFS - Facilities Web Form—Added "copy now" functionality to this form, enabling college financial staff to track in-progress purchases as they are made (Facilities)
- Graduate Student Contractual Responsibility Form—Customized contractual options for professional students (Graduate Studies and Student Financial Services)
- UDataGlance single sign-on with My UD Business and Web Forms (General Accounting)

The IT-WD team worked with the business owner for each form to authorize and implement these changes.

CFS rollout continues

Several updated Web Forms have been released as the result of the collaboration between General Accounting, the business owner for each form, and IT-WD. The new forms use responsive design, allowing them to be used effectively on any device, including smartphones and tablets. The forms also incorporate a new method of gathering chartfield information, dubbed the "CFS Component," which was rolled out last quarter on the Journal Voucher and continues to be implemented widely throughout UD forms and applications. These changes were implemented in the following forms:

- RFS - IT Software Licenses
- RFS - Bus Service
- RFS - Review Advertisement
- RFS - IT Large Format Print (Posters).

Mailto program migrates to udapps

The mailto program used in many UD forms is now available on the new, more secure udapps server. By the end of October, IT-WD will be retiring the chico and primus servers that had housed the mailto program. Once the two older servers are retired, forms that use the mailto program will work only if the forms are updated to use the new server's URL.

Form owners must take one of three actions by the end of October to ensure their forms that use UD's mailto program continue working when the old servers are retired:

- Update the action attribute in the <form> tag to <https://udapps.nss.udel.edu/mailto/mailto>.
- Retire old, unused forms by deleting the forms and removing any links to them.
- Convert the mailto forms to Google Forms.

For additional information on these three options, the mailto program, and how to find forms affected by the mailto migration, visit the [IT mailto help page](#).

ACA Views

New Web Views have been made available in order to help University departments navigate the complexities of the "Employer Mandate" requirements of the Affordable Care Act (ACA). The ACA View collects the latest data from various systems and presents the results in a concise report to allow quick determination of an employee's ACA Status. A Department ACA View is also available. This view allows browsing a summary of all department members' ACA status and features a "Download to spreadsheet" function to aid in the creation of custom reports. departmental HR managers, business/financial administrators, and administrative assistants can use these views to monitor the employment of and hours worked by variable hour (non-benefited) employees and ensure the University is compliant with ACA regulations. Human Resources and IT-WD will continue to work to refine these views. Questions may be sent to aca-help@udel.edu, and more information is available at <http://www.udel.edu/hr/ACA.html>.

UD Financials

Financial business systems saw several improvements in the last couple of months.

- The Research Office and IT-MIS staff implemented a new keyword-based search of Research Abstracts.
- The Year End turnover processes for General Accounting were improved. The accrual of salaries process was modified to accommodate old and new benefits rates for a new year. The online balances used in UDataGlance were updated to give more accurate beginning balances throughout the close period. And the research support percentages were modified for one college, saving more year-end manual keying.

In addition, Vasu Garlapati and Jim Green, IT Management Information Services (IT-MIS), and Procurement's Abbi Narayan presented at the June Mid-Atlantic HEUG users group conference in Baltimore, sharing an enhancement of Oracle PeopleSoft reporting of 1099s. They discussed a method of consolidating 1099 reporting that saves several days of manual adjustments.

UDSIS (Student Information Systems)

- Security overhaul in UDSIS: IT-MIS staff worked with the Registrar's Office and an external consultant to completely overhaul the security configuration within UDSIS. User accounts were transitioned to new security groups in phases over a period of several weeks. All accounts accessing Self Service, Campus Community, Student Records, and Academic Advising data in UDSIS have been given new roles in the system. Student Financials and Admissions data security access will be changed in the next phases of this project.
- Batch load advisor information: IT-MIS staff worked with the Registrar's Office to automate assignment of advisor information to individual students. This process will save several hours of manual work for users in various departments and the Registrar's Office.
- SEVIS critical patch: A critical patch was applied to UDSIS to handle the latest changes in Student and Exchange Visitor Information System (SEVIS) processing. This patch enables continued automated processing of SEVIS data in order to process visa information that enables international students to attend the university.

Database (DBA) management

- Oracle Database Security
 - Software Patches: Working with IT-NSS, members of the IT-MIS DBA team applied the latest security software patches to the Oracle databases as well as the operating system software for all of the production and test database servers (both PeopleSoft and Web Forms). The quarterly update from Oracle has been applied to our test and production Web Forms platforms, with plans to apply it to the PeopleSoft environment in the fourth quarter of 2015.
 - The DBA team has completed the implementation of encrypted weekly offline backups for both the PeopleSoft and Web Forms production environments. The team continues to assess database-level encryption methods in pursuit of the goal of optimizing strong encryption and acceptable database performance.
 - The DBA team has worked with IT-NSS to purge or secure files that contain personally identifiable information such as SSNs from University database servers.

- Disaster recovery
 - The DBA team, other members of IT-MIS, and staff from IT-NSS participated in a day-long mock disaster recovery exercise. Several procedures were modified as a result of what the team learned during the dry run of recovering the University's business information and networks in the event of a disaster.

Web application upgrades

IT-WD has rewritten existing applications with both security and modernization in mind. For the applications listed below, the code has been migrated to a sophisticated and mature infrastructure and the user experience updated to reflect a more modern and responsive design. IT-WD and the business owner for each application worked to define and implement these changes:

- Course Inventory: Course revision and proposals (Registrar's Office)
- HR Employee Merit (Human Resources)
- Dining: Meal plans and administration (Facilities Auxiliary Services).

Event Production and Media Services

New video production project

IT-UMS produced the Admissions Office video series "This Is The Place." The eight two-minute segments convey real student experiences about when everything "clicked" and the students knew UD was the place for them. The series currently can be seen on the University home page.

IT Support Center

1743 Welcome Days

During 1743 Welcome Days, IT-CS&S staff offered support to students moving into their residence hall rooms on Saturday and Sunday. Traffic at the IT locations in the George Read and Harrington Residence Halls was moderate, but students and their parents did not seem to have major problems. However, they did ask for assistance with TVs (scanning for channels; hooking up smart TVs, Apple TV, Roku, or other "set-top boxes"), gaming systems, printers, eduroam and other Wi-Fi connections, and smartphone use on UD's network and/or with UD email.

At the Support Center itself, incidents came in at a steady pace: about 280 students contacted the Support Center over the weekend.

IT home page updated

UD IT released a [new home page](#) that combines the former IT home page with the former IT Support Center (ITSC) home page on Aug. 28. The new page

- includes both tech help information and news about technology at UD
- uses responsive design so that the information is displayed properly on computers, tablets, and smart phones
- uses a new twitter feed (@udelitstatus) to display system status, allowing the University community to get status updates directly by following the twitter account and
- uses a grid to present a high-level view of the IT services most people use, with easy-to-find links to all IT services.

The new page's address is <http://www.udel.edu/it>. Both the old IT home and ITSC pages redirect to the new address automatically.

Contact the [IT Communication Group](#) if you have any questions or comments about the new page.

Personnel

Fatema Bannat Wala joined the Technical Security group in IT-NSS in August as a Systems Programmer III (Security Analyst). Fatema recently graduated from UD with a Masters in Computer Engineering. Her primary responsibility is working to ensure the security of the central IT managed systems and networks. Systems security work involves log analysis, incident response, and SIEM (Security Information and Event Management) monitoring.

Mu He is an Educational Technology Consultant I (Educational Technologist) who began working full-time in Academic Technology Services (IT-ATS) in July. Mu was employed in IT-ATS for several years as a graduate assistant and is currently working on completing his Ed.D. in Educational Leadership. He will help faculty and students use educational technologies effectively and is responsible for the day-to-day operations of the Learning Management Systems supported at UD (Sakai and Canvas).

James Richardson joined IT-NSS as a Network Technician I in July. Jim brings his experience as a field and service desk technician to IT-NSS and had previously been employed part-time in the Network group working on network installations. He will support the telecommunications infrastructure and work primarily on installing, troubleshooting, repairing, and maintaining a wide variety of data communication systems.

In July, **Christopher Shaw** started working in IT-NSS as a Network Technician I. Prior to coming to UD, Chris had experience in the commercial business environment with installing structured cabling systems. His primary responsibilities include installing, troubleshooting, repairing, and maintaining a wide variety of data communication systems.

Erin Sicuranza will join IT-ATS as an Education Technology Consultant I (Instructional Designer) in October. Erin has years of experience working as an Instructional Designer having previously worked in UD IT and, most recently, part-time in UD Professional and Continuing Studies. Erin's position is shared with the Alfred Lerner College of Business & Economics graduate and MBA programs. She will consult with and support faculty to enhance teaching and learning through the use of technology.

Olena Smith became a member of the IT-CS&S Research Support team in July. She is a Scientific Applications Consultant III (Geographic Information Systems). Olena has extensive experience as a Geospatial Engineer and Database Administrator in government and has worked at the Environmental Systems Research Institute (ESRI). At UD, Olena will provide technological leadership, consulting, and in-depth support to the campus for GIS projects at all levels.

The IT Activity Report is published 4-6 times a year. Archived reports are located at <http://www.udel.edu/it/activity-reports/>. If you have comments, questions, or suggestions for future articles, contact the IT Communication Group at it-commgroup@udel.edu.