

Information Technologies Activity Report

May – September 2016

Over 5,700 members of the UD community are using 2FA – are you?

Since the summer of 2015, the University has offered [two-factor authentication \(2FA\)](#) to UD faculty, staff, and students as part of the [Secure UD Initiative](#). 2FA uses a security code—in addition to a password—to help community members safeguard their UD accounts, their confidential and personal information, and the UD information entrusted to their care. Simply put, 2FA is one of the easiest and most secure ways to protect your personal accounts and information.

As of Sept. 20, 5,751 members of the UD community are using 2FA to protect their accounts, including 3,778 employees and 1,340 students.

Beginning in May, employees who have not yet signed up for UD 2FA have been regularly encouraged to do so. Employees logging in to UD services protected by the Central Authentication System (CAS) have seen a reminder screen every 15 days. These reminders will become more frequent to urge employees to sign up for this simple, yet strong security measure.

Banks, financial institutions, email providers, and many commercial websites now encourage or require that accounts be protected by 2FA. To protect its community and its data, the University is working towards complete 2FA adoption.

- More UD units are embracing 2FA, and an increasing number of UD forms and online services now require 2FA for access.
- 2FA is also required for virtual private network (VPN) connections to many UD services, including off-campus file transfer and secure shell/PuTTY connections to research computing resources.
- As of July 1, 2016, 2FA has been required of employees in all units that report to the University's executive vice president.
- Within the next 18 months, most students will be required to use 2FA.

All employees, faculty members, and students can choose to sign up for 2FA now at [My UD Settings](#).

Learn more about 2FA by visiting the [2FA help files](#).

Planned Outages

Sometime before Oct. 17, UDSIS will be down for about two hours to apply Solaris patches. The downtime has not yet been scheduled, but the exact date will be announced on the IT home page (www.it.udel.edu).

Information Security

New Secure UD website

IT recently relaunched its [Secure UD website](#) as part of an ongoing commitment to improving security awareness within the University community. The new website equips students, faculty, and staff with the knowledge and resources they need to keep themselves, the community, and the University safe from cyber threats.

As part of the update, the website has been visually redesigned to help members of the University community find relevant information. The home page and sidebar provide easy access to several new resources:

- a [Getting Started](#) guide that introduces visitors to the basics of computer and information security
- [Secure UD Essentials](#) aimed at helping units and individuals protect their computers, mobile devices, and data and remain aware of security threats
- [Best Practices](#) that provide guidance and resources for key topics in security.

The Secure UD website also provides information about, and a link to, [Secure UD Training](#). Phase three of Secure UD Training will become available to faculty and staff Sept. 27.

Summer desktop security series for departmental IT staff

Over the summer, IT Client Support & Services (IT-CS&S) sponsored a series of bi-weekly seminars and discussion groups focusing on securing client desktops. Fourteen modules were presented from late May through mid-August covering a wide range of topics including password management, application blocking, and whole-disk encryption. About 60 departmental and college IT staff members took the opportunity to attend. A separate focus group comprised of IT-CS&S staff and members of nine units outside central IT met throughout the summer to develop standards and best practices for managing MacOS systems. That group will present its findings to all departmental and college IT staff during the fall semester.

Security infrastructure improvements continue for older applications

IT Web Development (IT-WD) has recently released updated versions of the University's Course Description, Transcript Archive, Advising Notes, Parent/Guardian views, and Security Questions applications. These new versions have been rewritten to take advantage of improved security frameworks. They also now use responsive design, which supports improved usability for all types of devices. The business owners of all applications tested functionality and security before each application was released.

Constituent Groups & Feedback

Save the date: UD Tech Fair, October 26

The 2016 Tech Fair will allow faculty and staff to explore the various technology services that are available on campus. This year, the Tech Fair will highlight the technology that fosters innovation through collaboration.

The 2016 Tech Fair will be held Wednesday, Oct. 26, in the Multi-purpose room of the Trabant University Center from 10:30 a.m. to 2:30 p.m. A light lunch will be served. Watch *UDaily* for more information.

Survey of student Wi-Fi use

This spring, IT added questions about Wi-Fi connectivity to the annual Residence Life survey of students living in UD residence halls. Over the summer, IT reviewed the results and found that the responses from 1,277 resident students validated the Wi-Fi network upgrades IT began implementing over the summer with work carrying over to the fall.

The survey responses also suggested some areas of future growth of Wi-Fi usage. For example, 42% of the students responding brought three or four internet-capable devices to campus, and 22% brought five or more internet-capable devices. Knowing that 64% of our students are bringing three or more devices to campus helps with planning for future Wi-Fi capacity in residence halls, classrooms, and common areas across the campus.

The University also participates in the annual EDUCAUSE Center for Analysis and Research (ECAR) survey of student use of university computing. When the results of the 2016 ECAR survey were returned, IT received a note from the ECAR survey administrator congratulating UD on the "outstanding student ratings of student housing Wi-Fi." Interestingly, 95% of the UD students who responded to the ECAR survey reported simultaneously using two or more internet-capable devices on a regular basis.

Research Support

Mills HPC cluster being retired, new HPC cluster planned

On Jan. 27, the HPC team announced the plans for the final year of the Mills high performance computing (HPC) community cluster. The Mills cluster was designed to have a 5-year life span; that span concludes at the end of the 2016 calendar year. Refer to the [Mills formal policy](#) document for details on the strategy to retire Mills. Questions about Mills and its final year can be directed to the HPC team using the [HPC help request form](#).

Currently, the HPC team is designing the next HPC cluster. Researchers who use Mills are encouraged to complete the [HPC cluster interest form](#) to indicate their future HPC needs and to provide input on the transition from Mills to a new cluster.

September 28: HPC Symposium

The final [2016 High Performance Computing Symposium session](#) will be hosted at Faculty Commons on Wednesday, Sept. 28 at 10:00 a.m., and will kick off with a presentation by Sunita Chandrasekaran, assistant professor of Computer and Information Sciences, and her research group. Chandrasekaran and her group will discuss how they are using parallel programming models to migrate legacy scientific code to HPC platforms, how the computing challenges differ from application to application, and what tools and techniques they use to gather profiling and application performance data. The researchers will also discuss recent results gathered using NVIDIA K80 GPU and an emerging programming model, OpenACC.

The presentation will be followed by an hour-long open forum for researchers, staff members, and students to ask questions and share ideas. The IT Research Computing staff will also ask participants for input on the development of the next computing cluster. ([Register](#))

This presentation is one of a series of meetings designed for researchers using or interested in using the University's [HPC clusters](#). Those interested in presenting a future HPC Symposium should contact it-hpc-interest@udel.edu.

October Training Sessions

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, Tuesday, Oct. 4 ([Register](#))
- The Unix Basics Series will continue in October with four 1.5 hour sessions held in Faculty Commons (116 Pearson Hall). The sessions will cover a variety of UNIX/Linux concepts such as variables and environments, aliases, permissions, regular expressions, and shell programming. ([Register](#))

- Introduction to UNIX/Linux (Part 2) on Tuesday, Oct. 11, 1:30-3:00 p.m.
- Regular Expressions on Thursday, Oct. 13, 10:00-11:30 a.m.
- Shell Programming (Part 1) on Tuesday, Oct. 18, 1:30-3:00 p.m.
- Shell Programming (Part 2) on Thursday, Oct. 20, 10:00-11:30 a.m.

GIS events

- **Community coffee hours:** This summer, IT-CS&S began hosting coffee hours for the UD Graphic Information Systems (GIS) community. These bimonthly meetings begin with a special research or vendor presentation followed by a discussion about current issues in GIS. The next GIS coffee hour will be Tuesday, Oct. 11 at 10:00 a.m. in 304 Pearson Hall. For more information, email [Olena Smith](#), IT-CS&S.
- **GIS Day:** IT-CS&S and the University Library will host GIS Day on Wednesday, Nov. 16, in the Library's Class of 1941 Lecture Room. More details will be posted on the [UD GIS website](#).

Teaching and Learning

UD Capture Version 2 Upgrade Complete

[UD Capture](#), the University's own lecture capture system, was upgraded over the summer. The system, which was implemented about six years ago, is widely used by students to review recorded content from centrally scheduled classrooms. This semester, more faculty are taking advantage of UD Capture than ever before.

The upgrade includes all new equipment that adds new features such as high resolution recording capability, a wider range of supported input resolutions, as well as the ability to capture from either analog VGA sources or digital HDMI sources (where available). Certain classrooms also gained upgraded audio capture for the recordings.

New recordings are now in MPEG-4 H.264/AAC 720p format which will play back on a vast majority of devices without the need for the Flash plugin. In addition, playback pages also feature the ability to speed up or slow down the playback of the video without changing the pitch of the audio. This feature was implemented in direct response to student requests.

The upgrade was completed through a collaborative effort by IT Academic Technology Services (IT-ATS) and IT University Media Services (IT-UMS).

It's not too late for faculty to [register](#) their courses for UD Capture.

New Faculty Orientation

The partners of [Faculty Commons](#) and the Provost's Office welcomed 71 new faculty members to campus in August with two days of orientation activities designed to equip the new faculty with everything they would need to succeed in their UD classrooms. IT-ATS participated with other partners of the Faculty Commons in the hands-on training. New faculty were able to check items off their "first day" to-do lists including setting up a Canvas course, registering for UD Capture, and learning about i>clickers.

IT-ATS will continue to support new faculty throughout the year by participating in workshops and other events organized by the partners of Faculty Commons and the Provost's Office.

Classroom technology orientation

At the end of the summer, the Classroom Technology group within IT-UMS held five classroom technology orientation sessions attended by 41 faculty members. In the first two weeks of the fall semester, IT-UMS staff conducted an additional 30 personal faculty orientations. Faculty members are welcome to call IT-UMS at (302) 831-3546 to schedule an orientation.

Faculty Commons website

Faculty Commons has a [new website](#) to make it easier for those who teach at UD to find events, resources, and funding opportunities. A long list of fall events and other new information is added to the site on a regular basis. The best way to stay informed is to subscribe to the [Faculty Commons monthly email newsletter](#). Contributions to the newsletter are always welcome via email to faculty-commons@udel.edu.

Business Systems

My UD Business

Since My UD Business launched in spring 2015, the site has had over 350,000 visits. My UD Business is a service maintained by IT-WD that helps students, staff, faculty, and even parents easily search all of the University of Delaware's 700+ forms and then conduct their University of Delaware business. IT-WD continues to work closely with business form and application owners to continuously improve the content and usability of My UD Business. Try it! Go to www.udel.edu/myudbusiness.

Blue Hen Planner improvements

IT-WD teamed up with the Office of the University Registrar to build a homegrown schedule planning tool for students. The new planning tool has more features and integrates more

smoothly into our existing registration system than any commercial products on the market. The Blue Hen Planner was released in April 2016, just in time for student registration for fall 2016 classes. With the Blue Hen Planner, students can

- quickly and easily explore thousands of possible schedule combinations.
- determine their enrollment eligibility for specific courses and sections prior to registration.
- find and save preferred schedules ahead of their registration appointment.
- import saved schedules directly into WebReg to greatly streamline the registration process.

Students can further refine their schedule options by excluding recurring blocks of time from their schedule for work or other weekly activities and by pinning or excluding specific course sections. The Blue Hen Planner helps students discover their ideal schedules while simultaneously expediting enrollment in their courses.

Calibrations added to the Performance Appraisal system

IT-WD partnered with the Office of Human Resources to develop a new calibration feature in the Performance Appraisal system. Performance calibrations allow employees and supervisors to assess and document progress towards the goals set during the annual appraisal. Goals may be modified or added at any time during the appraisal year. HR recommends a review of performance goals several times throughout the year. HR announced the calibration feature to UD employees on July 15, 2016.

Application for Undergraduate Readmission enhancements

IT-WD recently partnered with the Office of the University Registrar to improve the process for undergraduate readmission. The new process feeds the application form into Web Forms to take advantage of existing routing and audit trail capabilities. The application is automatically routed to the appropriate college for final decision, and the Registrar's office is notified. For more information about this form or the approval process, contact the Office of the University Registrar at registrar@udel.edu or (302) 831-2131.

Faculty180 update

Over the past two years, IT Management Information Services (IT-MIS) has been working with the Provost's Office, the Research Office, and other collaborators to implement **Faculty180**, an application that migrates the University's manual, paper-based faculty evaluation processes to a secure, cloud-based environment. Over the spring and summer, IT-MIS developed an interface from PeopleSoft Financials to Faculty180 to provide current and pending grant information, including "person efforts" per year committed to each project. IT-MIS has

developed views that allow the Research Office to validate proposal and award data sent to Faculty180.

Financial systems updates

- IT-MIS worked with the University Cashier's office to put together an RFP to implement the PeopleSoft Cash Management module. The RFP was released to selected vendors on Aug. 24.
- IT-MIS has automated the manual process used by the Office of the University Controller to produce reports of balances that need to be corrected. The new report includes general ledger data that needs correcting and relevant information from the general ledger scrub table, thereby reducing further data manipulations in Excel.
- IT-MIS moved all Financials test database instances into the new SuperCluster server for better performance. This is a step towards moving all the Financials systems to the new SuperCluster.
- IT-MIS created a process to incorporate information about student advisors into several Student Financials tables and forms, particularly the Student Funding Allocation Form.
- Enhancements to the Salary Obligations process for the PeopleSoft Labor Allocation Module have been completed. The enhancements improve methods used to calculate obligations for specific fund types and salary admin plans.
- IT-MIS developed a process that uses shell scripts to encrypt and decrypt files on the Financials file server. This process improves the security of University financial information.
- General billing invoices have been modified per U.S. Office of Management and Budget's Uniform Guidance regulations to include certification text.

HR system updates

- **Grad On/Off:** In an effort to reduce the number of JED's that departments and HR have to process during peak times, the applications that support updating graduate students' terms, funding, and titles were streamlined this summer.
- **Dependent Coverage Process:** In June, IT-MIS and HR Benefits created a new report that shows what dependents have been added or removed from an employee's coverage throughout the year, especially during open enrollment.
- **Auto Termination Process:** IT-MIS, HR, and Payroll created a new process for finding employees in the Semi-monthly Other (SOT) and Bi-weekly Other (BOT) categories who have not been paid in 12 months. If the SOT and BOT employees are retirees, the process will mark their action reason (AR) as "Terminated: rehired retiree." Otherwise the AR will be "Terminated: completion of contract." A report of those being terminated, including counts for both categories, will be sent to each department.

- **System upgrades:** IT-MIS is working with the HR and Payroll departments on the next upgrades to the PeopleSoft HR system (version 9.2) and PeopleTools (version 8.55). The upgrade project is scheduled to be completed at the end of October. More information will be provided once the date for the upgrades is scheduled.

Budget Turnaround application improvements

Several key enhancements were made to the Budget Turnaround (BTA) application for the annual budgeting process. Chief among these enhancements was creating a new “Allocated & Restricted Funds” section to support the new all-funds budgeting/reporting initiative. Other key enhancements included

enabling users to download their data in spreadsheet format
and implementing a finer-grained categorization of budget data so that users receive the most accurate and relevant budget information possible

The Budget Office worked with IT-WD on the definition and testing of these improvements. The new BTA process was released in May 2016.

RFS UMS Web Form improvements

The Request for Service: University Media Services Web Form was updated as the result of collaboration between IT-UMS, General Accounting, and IT-WD. The updated form uses responsive design, allowing it to be used effectively on any device. The form also incorporates UD’s new CFS Component, an improved method for gathering chartfield information. The CFS Component, being implemented in many of the University’s Web Forms and applications, makes it easier for users to find SpeedType and Account codes and lets users that have accounting shortcuts select existing shortcuts to populate the CFS Component automatically.

Event Production and Media Services

Twilight ceremony

The IT-UMS Performance and Events group provided the public address system on the south Green for the annual Twilight Induction Ceremony. The speaker towers and line array rig provided sound for the Class of 2020 from the steps of Memorial Hall to the southern end of Morris Library. In addition, IT Network and Systems Services (IT-NSS) provided temporary additional W-Fi coverage for that portion of the Green, allowing the University’s Office of Communications and Marketing and individual students to record and share the ceremony with people around the globe.

Replay system for CAA football officials

The IT-UMS Media Engineering and Design group worked with IT-NSS to install a new football officials' video replay system in Delaware Stadium. Newly mandated by the CAA and NCAA, the system provides game officials with four different camera angles from which they can confirm or reverse a call on the field. IT-UMS added two additional cameras to the existing production system as well as booth-to-field communications.

IT Support Center

First week report

Over 1,750 people contacted the IT Support Center (ITSC) during 1743 Welcome Days and the first week of the school year. On Monday, Aug. 29, over 400 people called the ITSC, and over 350 called on the first day of classes, Tuesday, Aug. 30.

The vast majority of the calls came from students, as demonstrated by the top five topics people asked about: The University's learning management systems (Sakai and Canvas) were the most frequent subjects of questions during this time period, followed by requests for help with passwords, network registration, parent/guardian services, and television/CATV.

Personnel

Stephen Contigiani started working in IT-CS&S in July as an IT Support Consultant I. He provides technology support to faculty and staff. Prior to joining IT at UD, Stephen provided desktop and platform support in the private sector.

Crystal Henderson, a Technology Support Specialist II, joined IT-CS&S in mid-September. Crystal provides first-level support for a variety of technology-related questions at the IT Support Center. Her responsibilities also include account provisioning and security incident processing. Crystal comes to UD after years of providing technical support in public libraries.

Charles Russell Gibbs ("Rusty"), joined IT-UMS as a Media & Engineering Design Technician in September. He will provide high level technical and broadcast engineering support for IT-UMS activities such as live events, live TV broadcasts, video productions, telecourses, satellite programming, and other projects. Rusty comes to UD with over 10 years of providing Audio Visual Engineering support at the School of Visual Arts in New York City.

The IT Activity Report is published 3-5 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.