



information TECHNOLOGY

Fall 2017

Campus Wireless Upgrade Expands Coverage, Increases Connection Speeds, and Enhances Performance

For many of us here at WSU Spokane, the first thing we do after arriving on campus is to connect to the wireless and check schedules, messages, or access content on the web. This ability to connect and send or receive information has a big impact on the entire campus population. Based on your feedback about this critical technology, WSU Spokane ITS has responded by implementing a new wireless infrastructure throughout campus that is nearly 10 times faster, is more secure, reduces environmental and operating costs, and expands the areas where wireless is available.

The wireless infrastructure upgrade is a major investment that began as a direct response to comments from the 2016 and 2017 TechQual+ IT surveys regarding adequate Wi-Fi coverage, reliability, and capacity. After addressing the problematic areas cited in the surveys, ITS is now expanding wireless coverage to increase our ability to connect and communicate.

This past spring, the Networking team deployed Aruba wireless Access Points (APs) throughout the Spokane Teaching Health Clinic (STHC) in parallel with the existing system. After that successful installation, Jason Minton, ITS Assistant Director, Networking & Telecommunications Infrastructure Support, reflected that “with so many examples of the Aruba technology being used by other high-profile and high-demand institutions, we felt that there was very little risk in choosing Aruba.” Using the STHC as a test site, the Networking team confirmed its choice of vendor, whose customers include Facebook, Microsoft, the University of Washington, and Gonzaga University.

ITS began rolling out the campus-wide upgrade in August by installing wireless APs in Walgreen’s Auditorium and the first floor of the Pharmaceutical and Biomedical Sciences building and in the Spokane Academic Center in Auditorium 20, the SAC basement, SAC library, and SAC 241. The new

wireless APs are especially noticeable in PBS where wireless speeds have soared from 50 - 75 Mbps to a consistent 450 Mbps. These areas of high student density were especially problematic prior to the upgrade. Now, with consistent performance at higher communication speeds, students will no longer have problems getting wireless access to connect to a site for instructional content or testing. Jason expressed relief that ITS “can finally put to rest the worry that [students are] going to get kicked off the wireless and won’t be able to get back on.”

To date, ITS has completed installation in SAC and PBS, with a total of 290 APs to be installed by the end of spring 2018. This semester, several outdoor APs will also be installed to extend wireless access to areas where students have never previously had access. After installation, outdoor wireless will be available in the courtyards of the Nursing building and the Pharmaceutical & Biomedical Sciences building, and outside the Academic Center on the adjacent lawn area. It is the goal of the Networking team to have the outdoor wireless up and running by the end of October. Jason believes that, “from the students’ perspective, the coolest thing about this project is probably going to be the outdoor wireless. It’s a question that gets asked a lot.”

In addition to faster connection speeds, greater performance, and lower power consumption, the new system also has the capability to augment troubleshooting. Furthermore, as part of our Smart Campus initiative in synergy with Spokane’s Smart City initiative, the Networking team is testing the system’s geolocation capabilities. By using mobile Apps, students, faculty, staff, and visitors will be able to receive information while navigating our campus. The application of geolocation technology will provide notification about events happening on campus and show users the locations of those events, benefiting mobility and wayfinding at WSU Spokane.

Tech Expo 2017

ITS is host to WSU Spokane's 3rd annual Tech Expo on October 20th. Students, faculty, and staff are all invited to join us to learn about the technologies being used on the WSU Spokane campus, view product demonstrations, and gain valuable insight about cyber security awareness.

ITS staff from our Education Technology, Technical Support Center, and Network Security teams will be on hand, in addition to the Academic Outreach and Innovation Test Kitchen, Nursing Simulation, and the Spokane Academic Library. Other partners and vendors include Student Affairs, Student Leadership and Engagement, EWU Tech Support, ASEWU, Apple, Cisco, Dell, Elsevier, and EBSCO. Workshops and demos include Skype for Business, Videoconferencing Use & Etiquette, New Library Resources & Using Mobile Devices, Blackboard, AirServer Streaming, Poll Everywhere, Panopto, and OneDrive Plus Other Storage Solutions.

The Tech Expo runs from 9 a.m. to 2 p.m. with informational tables in the SAC Lobby and technology workshops starting every half hour in SAC 145A, SAC 147, and SAC 313. Full details are available at <https://spokane.wsu.edu/its/education-technology/training-schedule/>.



TSC Staff Enables Users to Benefit by Using Cloud-Based Applications

Since WSU rolled out Office 360 last spring, the Technical Support Center has been training students, faculty, and staff to use cloud-based productivity and storage applications including OneDrive, OneNote, Outlook, and other Office products. Users who take advantage of these cloud-based applications enjoy the ability to access their files from any device they use, easily transfer files to co-workers or project team members, and to know that no matter what happens to their personal devices, their information is safe.

The TSC is also training users on moving their most important information to OneDrive where they can store or share information securely. To schedule a training session with the TSC, contact us at 358-7748, spok.it.help@wsu.edu, or stop by SAC 311.

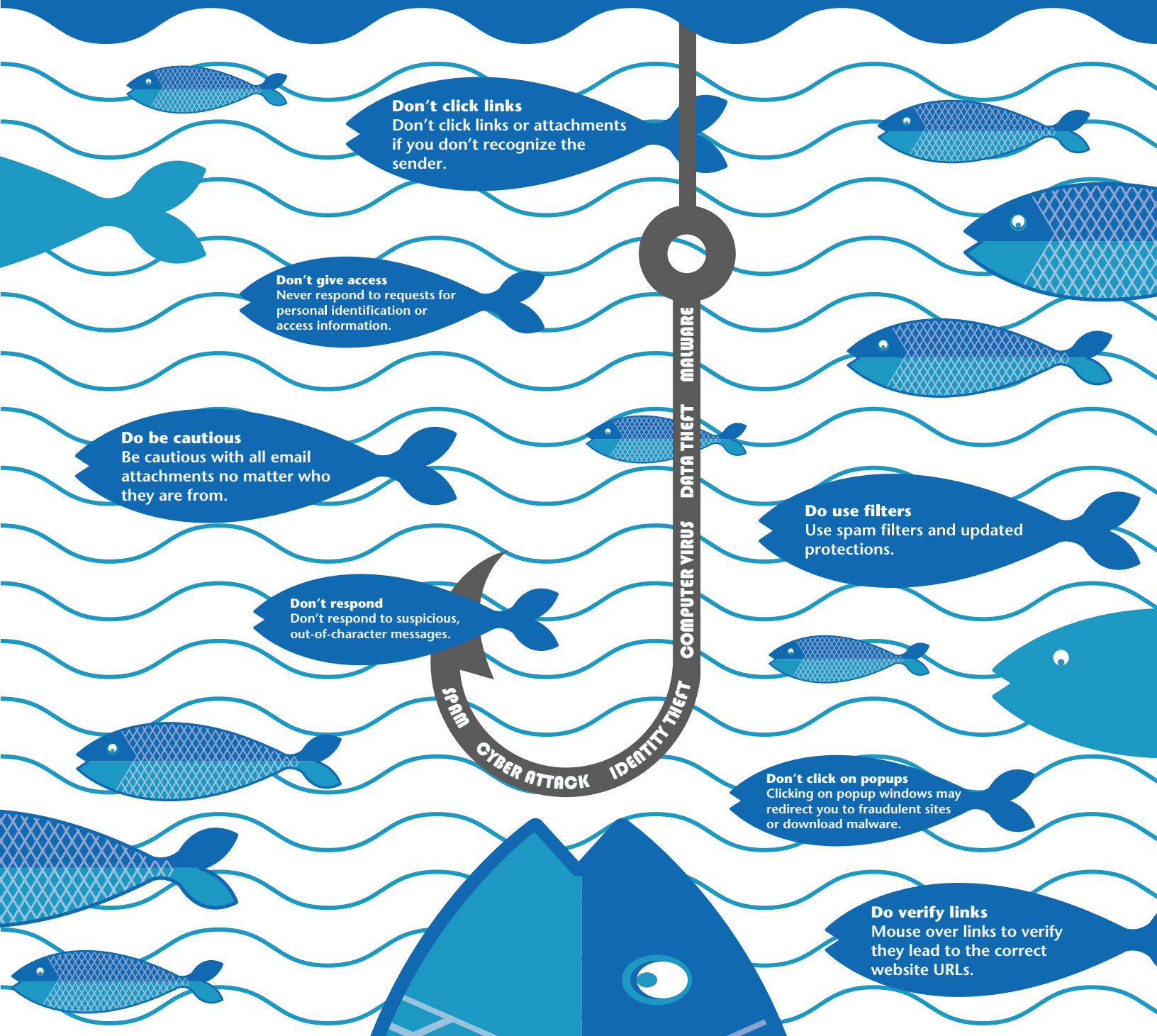
ITS Encryption Services

ITS is taking an active stance in the fight to protect institutional data from theft or leakage. Last year in the U.S., data theft incidents cost victim organizations an average of \$3 million to \$6 million per incident and exposed personal, financial, and proprietary information which cost individuals even more.

Due to the nature of overall data growth, safeguarding data becomes increasingly difficult without encryption. And the loss or theft of data often results in increased institutional costs and/or reduced public goodwill. As such, we are working to make encryption services available to WSU Spokane faculty and staff, safeguarding sensitive information on WSU equipment.

By using Microsoft BitLocker Administration & Monitoring (MBAM) tools in conjunction with our existing authentication tools, ITS is making institutional data safer. This additional safeguard does not affect the ability of our faculty and staff to access and use their data. MBAM also provides an additional benefit by addressing data lost through mischance. If a device is lost or damaged, any data on the device remains in an encrypted state and the device can be safely decommissioned. We anticipate rolling out this service to faculty and staff on the Spokane campus by January, 2018.

Another fall semester— another school of phish.



Don't take the bait!

If you feel you've fallen prey to a phishing scam, please don't hesitate to contact the Technical Support Center immediately for help at 358-7748 or spok.it.help@wsu.edu or visit us on the 3rd floor of the Academic Center.

Cyber Security Awareness Starts with STOP. THINK. CONNECT.

STOP. THINK. CONNECT.™: The Basic Steps to Online Safety and Security

Staying safer and more secure online starts with **STOP. THINK. CONNECT.™** — it's simple, actionable advice anyone can follow.

STOP: make sure security measures are in place.

THINK: about the consequences of your actions and behaviors online.

CONNECT: and enjoy the Internet.

October is National Cyber Security Awareness Month, coordinated by the National Cyber Security Alliance (NCSA) and U.S. Department of Homeland Security (DHS) in a month-long effort to engage the general public in awareness about what they can do to improve their cyber security. WSU Information Technology Network Security teams from every campus are working hard to develop cyber aware Cougs.

Cyber Security is everyone's responsibility. Practicing strong cyber security habits is essential to protecting WSU's assets and data within the University's information systems as well as your own personal devices, assets, and information on the Internet. Allowing threats to pass through can lead to irreversible harm. Though no person is solely responsible for keeping the Internet safe, everyone maintaining a secure Internet presence ensures a vastly safer cyber environment for others.

Today, lives pulse with digital signals, and opportunities to post more aspects of our personal lives online is pervasive. Waking up and checking texts and emails, checking in on Facebook, streaming music in the shower, researching data on the Internet at work, checking finances on smartphone banking apps, and reading simple blogging websites is commonplace in daily lives. All of these access data through the Internet, a very prominent portion of our network infrastructure. This can have critical effects not just for the individuals accessing the data, but for everyone else they connect with as well.

How can you be safer online?

Social Media

- Review and apply privacy settings on your social media accounts.
- Think before you share personal information like your birthdate, birth location, and mother's maiden name which can be used to access account information on many websites.
- Only post pictures that won't embarrass you or stop you from getting your dream job.

Financial

- Only access financial websites or information over wireless networks that you know are secure.
- Every year, check your credit report to see if your score is radically different. You are entitled to 1 free credit report per year at www.AnnualCreditReport.com.
- If you're going to buy something from a website you think may be unsafe, use a prepaid debit or gift card instead of your bank card.

Passwords

- Never re-use passwords from one login for another login, or they might both be compromised. Change passwords twice a year.
- Check your password strength. Strong passwords are: UPPERCASE, lowercase, num83r5, \$ymbo!, and over 8 characters long. Check your password strength at <http://password-checker.online-domain-tools.com/>.

Email

- Don't click on links or attachments in emails from people you don't know, or that look suspicious. Report suspicious account activity to the Technical Support Center. Forward scam emails to abuse@wsu.edu and then delete the email.

Security Software

- Basic antivirus software is free and available to all Microsoft users via Security Essentials for Windows 7 users and Windows Defender for Windows 10 users.
- ITS offers support and education to help users install and manage personal antivirus software and avoid common security threats, such as email phishing.

If you have any questions, please contact the Technical Support Center at spok.it.help@wsu.edu or 358.7748 or stop by the TSC offices on the third floor of SAC. For more information, go to staysafeonline.org, security.wsu.edu, and spokane.wsu.edu/its/tech-support

Tech Support is Virtually Everywhere

If you've walked through the Student Academic Center lobby this semester, you've probably noticed a large flat screen display with a live shot of one of our student Technical Support specialists. Don't be shy—walk right up and engage with a Tech at our Virtual Tech Support Desk to get help with all your technology needs.

After working out any technical issues with the initial implementation, we hope to expand our presence throughout campus by placing several Virtual Tech Support Desks in locations that students frequently use for study and collaboration. Expanding our presence broadens our ability to support the WSU Spokane population and leverages increased availability of service while keeping our Tech Support staff centrally located to reduce wait times for desktop support.



Classroom Technology Upgrades

WSU ITS is integrating efforts to improve classroom technology, to lower the University's operating costs, and to make the use of classroom technology a little easier for our students and faculty. To accomplish these goals, ITS is replacing outdated equipment on a rotational basis.

Since last spring, videoconferencing hardware and cable connections have been upgraded in several classrooms in the Academic Center and the Nursing building. Conferencing hardware in the EWU Center has also been replaced with newer software solutions.

As positive feedback is received resulting from these upgrades, we plan to continue this initiative throughout WSU Spokane. ITS is also adding new software capabilities to classrooms and conference rooms throughout campus, including AirServer, a wireless presentation application for mobile devices. If you need assistance with any classroom technologies, contact the Classroom Support Services team at 358-6770 or spok.it.help@wsu.edu.

Pounce Improvements

If you've been using WSU's Pounce application this semester, you may have noticed that WSU Spokane ITS has increased the speed of upload and download transfers and decreased wait time when changing workspaces. If you haven't been using Pounce, we highly encourage you to do so. Pounce is a dynamic storage access solution for sharing, synchronizing, and securing data to WSU security standards.

While we were making these improvements, we also took some time to completely rework the interface, giving you a cleaner and simpler landing page that displays your most recent data usage. We also added several tracking options to know at a glance which documents you have shared with others, to know how many people are accessing your shared documents, and to track information on users accessing your public links. WSU ITS is confident that Pounce users will have a more fluid and comfortable experience with these changes.

For more information about cloud file storage on Pounce, contact the TSC at 358-7748 or spok.it.help@wsu.edu.



Collaborate in the Classroom with AirServer

WSU Spokane ITS recently added the AirServer presentation application to classroom presentation computers throughout the Spokane campus. This technology allows students and faculty to stream (mirror) content from their portable devices to our in-room presentation equipment. AirServer supports four simultaneous connections, allowing several students to share content with the entire class.

AirServer is compatible with Apple AirPlay, Google Cast, and Miracast, and can be used with Apple or Android devices.

If you are curious about how you can share content from your device with an entire class over classroom presentation equipment, contact us at 358-6770 or spok.it.help@wsu.edu.

RU Ready for Robo R2 3D?

The ITS Print Shop will soon be offering 3D printing services, benefiting students, faculty, and researchers across campus. Currently, we're experimenting with different materials and designs and developing our service model. We will be showcasing our Robo R2 smart 3D printer at the Tech Expo on October 20th. Drop by our table in the SAC lobby to see what it can do for you!

Other Print Shop services available through ITS include large-format printing for scientific poster presentations and for events marketing. For pricing information and submitting a service request, visit <https://spokane.wsu.edu/its/printing-services-request/> or contact Bonnie Cooper at bonnie.cooper@wsu.edu or 324-7228.

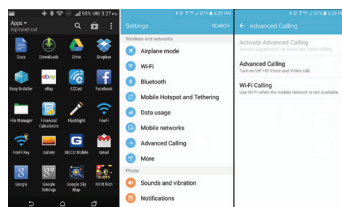


Keep a Weather Eye Out for Cloud Printing

ITS is currently pursuing technologies that will allow users to print files directly from their cloud storage. Users will be able to use an app on their mobile device, login to a service website from their desktop computer, or retrieve files from their cloud-based storage apps (e.g., OneDrive, Google Drive, Dropbox, etc.) and send files to physical printers on our campus. Alternatively, users will be able to email files or load them from a USB device to a print kiosk.



Apple Wi-Fi Calling



Android Wi-Fi Calling

Placing Calls over Wi-Fi

In response to our TechQual+ IT survey results, ITS has added cell service amplifiers to several areas that have traditionally experienced inconsistent cell reception. Though the cell amplifiers drastically improve cell signals, the physical composition of our facilities and the proximity of cell towers may still impact cell reception.

To ensure you are still able to make calls and to text from areas with poor cell reception, simply enable Wi-Fi calling. Wi-Fi calling is a utility supported by most newer cell phones and tablets and by all of the major cell service providers in the Spokane area (AT&T, Sprint, T-Mobile, Verizon). When Wi-Fi calling is enabled, your voice or text information is routed over the Wi-Fi network instead of the cell network. Wi-Fi calling is advantageous because Wi-Fi coverage is more prevalent and consistent than carrier cell coverage. Most cell service providers do not charge for voice or text data when sent over Wi-Fi networks (check with your cell service provider for details).

Enabling Wi-Fi calling on Apple devices:

1. Open the Settings app.
2. Tap Phone > Wi-Fi Calling.
3. Switch the Wi-Fi Calling on This iPhone slider to On.
4. Review warnings about location data and data collection. Tap Enable to turn on Wi-Fi Calling.

Enabling Wi-Fi calling on Android devices:

1. Open the Settings app.
2. Depending on the make/model of phone, tap Advanced Calling, Connections, or Wireless and Network.
3. Select Wi-Fi Calling.
4. Follow onscreen instructions to enter a US address for use in the event of an emergency call (911).
5. Once the address is saved successfully, the Wi-Fi Calling setting will be turned on. *Note: your location cannot be detected in the Wi-Fi Calling mode, so emergency responders will go to your saved address.*

Need help with technology?

Contact our Technical Support Center at spok.it.help@wsu.edu or 358-7748.

For AV or classroom technology support, contact our Classroom Support Services team at 368-6770.

Visit our website at spokane.wsu.edu/services/IT.



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