WSU Spokane is home to a high-caliber genomics core lab, envied by schools across the nation. The lab allows researchers to code DNA samples for in-depth study. The technology is powered by a high-performance computing cluster (HPCC), which uses layers of processing to mine and store the millions of data points that come from DNA.

Danilo da Silva and Bryan Valley have worked together to provide the university with the HPCC power necessary for this important research. Da Silva explains, “DNA profiles are all simple files in “IT” terms, but they contain millions and millions of lines and are incredibly complex. So that’s why it requires such a high-performance computing system to process the data.”

Running the HPCC is not an easy task. As Valley explains, the systems are controlled by a head or management node, “so you have to cluster the resources to maximize performance by leveraging parallel processing between each node.”

High-Performance Computing Cluster Aids Genomics Research

At present, WSU Spokane has one mini HPCC. Still, researchers have been able to process around 15 projects in the past year—a huge feat for a beginning core. In September, WSU Spokane received a $500,000 NSF grant to build the framework for a full-sized HPCC. The new computer will catapult WSU Spokane into the big leagues of life sciences research and produce important discoveries that will impact the entire world.

Multiple Layers of Redundancy to be Added to Internet Infrastructure

In November, the Network team will install an internet border refresh, allowing the campus to receive connectivity more securely, quickly, reliably and efficiently. This will consist of implementing new infrastructure with multiple layers of redundancy. With this change, if any part of the network were to fail temporarily, WSU Spokane would not lose campus internet connectivity.

Network Engineering Manager, Jason Minton, says, “people will be able to sleep at night because you’ll have plenty of redundancy. Additionally, with this project we are implementing much more capacity and granular control/influence over WSU Spokane internet traffic.” Furthermore, the speed and bandwidth of the network has been upgraded from 600 Mb to 2.2 Gb.

After a year of hard work and planning, we are very excited to implement this new system and architecture.
Thanks to an initiative to upgrade the wireless network at WSU Spokane, installation of new software has resulted in improved visibility into campus wireless connectivity.

A recent TechQual survey of faculty, staff, and students found that the wireless connection provided by Cisco and previous infrastructure was lacking features and troubleshooting tools. This, coupled with a lack of visibility of dead spots and general slowness, hampered productivity. As a result, the Network team has implemented Aruba Airwave as the campus wireless Local Area Network (LAN) management provider for WSU Spokane.

With Aruba Airwave’s innovative technology, our technicians will be able to visually see potential problems: areas of interference, how many users are connected at one time, and where the population is most dense. With this information, our network engineers will be able to build new infrastructure that will be perfectly suited to the campus’s needs.

The Network team continues to investigate the next step up for wireless networks. According to Jason Minton, Network Engineering Manager, it is crucial to have a quality internet connection. “It has to work, it has to be available, and it has to be on. I put myself in the shoes of a student, and if I was paying tuition I would expect that; to me that’s part of my tuition.”

Aruba Airwave will meet our standards, making the wireless internet much faster and more reliable, eliminating dead spots, increasing time-to-resolution for Wireless Local Area Network (WLAN) problems/issues, and creating a much better campus environment.

**2nd Annual EdTech Fair**

Find out about the latest available educational technologies at the 2nd annual EdTech Fair scheduled for 10 a.m. - 3 p.m. Thursday, Oct. 22, in the SAC lobby, hosted by WSUS IT Services. Representatives will be available to answer questions about Blackboard, Panopto, Apple and more. There will be tours of the new Innovation Center in SAC 313 and a demonstration of the new Smartboard. Questions? Contact the Education Technology team at spok.it.help@wsu.edu or 358-7748.

**Innovation Center Provides Space for Learning and Experimentation with Education Technology Solutions**

The Innovation Center, located in SAC 313, is a state-of-the-art facility, allowing faculty to learn about the various cutting edge education technology solutions offered on campus. It contains similar equipment and software used in most WSU Spokane classrooms. The classroom’s flexible design allows the furniture to be re-arranged to suit a multitude of learning needs. The Center is also home to a brand new Smart Board. This large touch-screen is perfect for interactive teachings, demonstrations, and collaborative approaches to research.

Whether users want to practice with technologies already offered on campus, test specialized technologies, attend workshops, or individual trainings, the Innovation Center is the place to go! To reserve this room, or inquire about customized technology and software trainings for your college or department, please contact the Education Technology team at spok.it.help@wsu.edu or 358-7748.
Education Technology Team Presents Poster at TechEd Conference

Erik Blackerby and Karla Ealy-Marroquin represented the Education Technology team at the recent TechEd conference in Pullman. They presented a poster on our new Innovation Center along with a virtual tour of the innovative space to show how it is used for learning and experimentation with education technology solutions. Good work!

Transitions:

1. Angel to Blackboard
   As of December 30th, Blackboard will fully replace Angel. At this time, Angel will no longer be accessible. In order to access Angel course materials and/or have Angel courses migrated to Blackboard, faculty can email migrationhelp@wsu.edu.

2. Tegrity to Panopto
   As of December 30th, Tegrity will no longer be used for lecture capture by WSU. Panopto will be the lecture capture software available in Blackboard. If you need to have your recordings moved to Panopto from Tegrity, please send an e-mail to: migrationhelp@wsu.edu before the end of the semester.

If you have any questions about these transitions, please feel free to contact the Spokane Technical Support Center at spok.it.help@wsu.edu or 358-7748.

Members of Systems Infrastructure Support Team Receive Formal Recognition

Bart Brazier, Bryan Valley, and Billy Burnham (right) received formal recognition for their outstanding efforts during the recent information technology security intrusion, commonly referred to as Felicia. Their actions not only helped WSU overcome the attack, but also put the University in a much better position to defend against future breaches. Chancellor Lisa Brown aptly stated that their actions were “above and beyond the call of duty.”

Thank you all so much for making WSU a better and safer place!

CLASSROOM SUPPORT SERVICES

- Classroom technology support
- Videoconferencing support

SYSTEMS INFRASTRUCTURE SUPPORT

- Enterprise application support and development
- Windows and Linux server support and development
- Active directory/identity management
- HPCC (high performance computing cluster) development and support
- Manage and maintain Enterprise storage; virtualization; hosting services; datacenter services
- Manage and maintain physical security (surveillance and access control)
- Manage and maintain videoconferencing infrastructure
- Manage and maintain digital signage
- Manage and maintain campus anti-virus and security patching
Coming Soon!

Videoconferencing is an important aspect of education at WSU Spokane. Videoconferencing enables WSU faculty to teach students who are located all over the state. Using videoconferencing technology, faculty, researchers, and staff are also able to collaborate with people around the world.

Unfortunately, according to the latest classroom/conference room videoconferencing usage study, when WSU Spokane audiovisual technology is being used, videoconferencing is only in use 20% of that time.

Because of these usage rates and the high cost of videoconferencing technology, the Audiovisual team is implementing a pilot program using portable videoconferencing technology. This will allow us to serve multiple classrooms with one portable videoconferencing endpoint.

The first portable system is being built this fall with the hope of introducing it into several test classrooms in the spring. If all goes as planned, the program will go into full production Fall 2016. Not only will this project save the campus money, but it will also make videoconferencing technology accessible across campus.

Portable Videoconferencing Equipment Available in 2016

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Syncplicity Offers Secure File Storage and Sharing

Syncplicity is our elegant, powerful, new cloud storage solution for global file sharing and document collaboration. Whether you’re editing or sharing a PowerPoint file or collaborating on a Word doc, Syncplicity makes file syncing and sharing a breeze.

This service, which was rolled out last spring, allows users to access and edit their files on any device and share those files inside and outside WSU Spokane. The information is managed by the Systems Infrastructure team so files stored on campus systems are guaranteed a high level of support. The stored files are encrypted, secure, and remote accessible, so users can access their files from anywhere.

The service is available to all faculty and staff at WSU Spokane. A 5 gigabyte storage quota is provided at no cost with additional storage available for a modest cost-recovery fee.

According to Systems Infrastructure Support Manager, Bryan Valley, “We think Syncplicity is going to bring all sorts of new freedom, productivity, and creativity to our collaborative work, and we hope you love using it as much as we do!”

To download and install Syncplicity, simply visit wsuspokane.syncplicity.com and download the client on your primary workstation. Syncplicity will be installed on your computer and backed-up in the secure cloud. The application is available for Windows, iOS, and Android devices. If you need assistance setting up your Syncplicity account, please contact our Technical Support Center at spok.it.help@wsu.edu or 358-7748.

Did you know ITS has a Print Shop?

Printing services are offered by the ITS department! Students, faculty, and staff can submit large-format posters for printing and have them laminated or mounted to foam core, if desired.

For pricing and more information, please contact Bonnie Cooper at bonnie.cooper@wsu.edu or 324-7228.