St. Catherine University Embraces Digital Learning and BYOD Explosion with Unified Network from Computex and Juniper

Summary

Organization:
St. Catherine University

Industry:
Education

Business Challenges:
Explosion of mobile devices on campus required upgrading campus and data center networks to accommodate digital learning and mobile lifestyle of students and faculty.

Selection Criteria:
St. Kate's needed pervasive Wi-Fi, which demanded high-performance, robust campus and data center networks.

Technology Solution:
- WLA532 and WLA522 Wireless LAN Access Points
- WLC2800 Wireless LAN Controller
- EX4550, EX4200, and EX3300 Ethernet Switches
- Junos Space Service Now
- Junos Space Network Director

Business Results:
Enabling digital learning and collaboration in the classroom and beyond increased students and faculty satisfaction with St. Kate's network.

All institutions of higher learning are facing challenges in today's digital age, and that includes St. Catherine University (St. Kate's) in Minneapolis-St. Paul, which includes the largest college for women in the U.S., in addition to coed associate and graduate programs. With student and faculty expectations that their mobile devices will work in the classrooms and anywhere on campus, St. Catherine reached a tipping point for digital transformation.

Business Challenge

As Wi-Fi has become the connectivity method of choice off campus at coffee shops and other locations, students expected the same quality Wi-Fi service on campus.

"Wireless was becoming a major point of contention for students who wanted to have the same services they would get at home or at a Starbucks," says John Jeries, CIO at St. Catherine University. "They wanted the simplicity and ease of wireless that they were used to, but also the accessibility and bandwidth for their devices, which caused us to speed up our network upgrade process."

The university wanted to outfit its residence halls and classrooms with first-class Wi-Fi to support the explosion of mobile devices on campus. "Previously, classrooms could accommodate 20 devices—one per student—but students now carry two or three devices like a laptop, iPad, and iPhone, so we had to accommodate 60 devices connected to the wireless system from one small room."

The added traffic from mobile devices, coupled with the transformation of digital learning, including interactive curricula and streaming media, meant that the university also needed to refresh its data center network.

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Scott Prchal, IT Solution Specialist, Computex

Selection Criteria

St. Kate's turned to the Minneapolis office of Computex Technology Solutions to bring its network vision into reality. Computex, a premier IT consulting firm headquartered in Houston, helps organizations transform their businesses using the latest and most advanced technology solutions. Computex offers a full-service, end-to-end implementation that includes expertise and resources to deploy the most appropriate solution to the customer. As a Juniper Networks Elite Partner, Computex is well-positioned to create highly customized environments that deliver operational simplicity, enterprise-grade performance, flexibility, and overall cost savings.

Technology Solution

Computex worked side-by-side with St. Kate's on the campus-wide technology refresh. "Computex came in with the product proposals and implementation plan for this project," Jeries says. "We liked their people and we liked their ideas and the companies they worked with and represented."

Computex leveraged its cutting-edge proof of concept lab, integration center, and central warehouse to provision products in real time and deliver the IT solutions on site and on budget for St. Kate's. "We were able to design a campus and data center network that would work with St. Kate's existing environment and platform for cabling, cabinetry, power, and space," says Scott Prchal, IT solution specialist at Computex. "This, along with the unique skill sets of our team, the technical design and implementation of the Juniper network, and education and knowledge transfer, helped us maximize St. Kate's technology investment."

"The learning environment is changing, and we have a lot of faculty and students who work remotely from outside the campus, along with the students and the faculty that are on campus. That puts more pressure on making sure that the network is available all the time. With Juniper, we are confident that we have a solid infrastructure to support multimedia and learning today—and tomorrow."

John Jeries, CIO, St. Catherine University

With the assistance of the Computex team, St. Kate's chose a unified wireless and wired network solution from Juniper. Juniper Networks® WLA532 and WLA522 Wireless LAN Access Points support seamless 802.11n mobility both indoors and outdoors. Juniper Networks WLC2800 Wireless LAN Controller manages the entire wireless environment for the university. St. Kate's has also deployed Juniper Networks EX4550, EX4200, and EX3300 Ethernet Switches for its core and edge network to handle the growing bandwidth requirements of digital learning and mobility.

St. Kate's uses Junos® Space Service Now and Junos Space Network Director to streamline operations and management of the unified network. Now, trouble detection for the Juniper network is automated, and trouble-ticket management is simplified if problems do arise. The result is streamlined operations and reduced risk.

Business Results

The new network from Juniper and Computex's expertise has exceeded St. Kate's expectations and has allowed the university to roll out new applications to support learning in all its forms. For example, students enrolled in the Henrietta Schmoll School of Health get hands-on experience with electronic medical records. And, digital tools help St. Kate's extend the reach of learning by allowing instructors to move the classroom to an online platform—during inclement weather, for example—giving students access to lectures, files, and more from any location.

Jeries says that network management has become a breeze due to the tools provided by Juniper. "We're able to monitor both the wired and wireless side and see if there are any changes or any needs we have to address," he says. "We can resolve issues very quickly without having to spend a lot of time identifying and troubleshooting problems." Students can get support quickly by contacting the service desk, which can then look at the network, identify the problem, and resolve the issue faster.

Through it all, Computex has remained by St. Kate's side delivering world-class support services to the university through its 24/7 network operations centers. This is coupled with Juniper's renowned support offerings to deliver a truly solid, reliable environment with the uptime necessary to support an always-on campus environment.

Next Steps

Education technology is changing rapidly, and universities have to make sure that they are keeping up with the times. This means deploying a network infrastructure that can handle today's needs and anticipate what will be required for student success tomorrow.

"The learning environment is changing, and we have a lot of faculty and students who work remotely from outside the campus, along with the students and the faculty that are on campus," says Jeries. "That puts more pressure on making sure that the network is available all the time. With Juniper, we are confident that we have a solid infrastructure to support multimedia and learning today—and tomorrow."

And with the combination of Juniper and Computex, St. Kate's is ready for anything.

For More Information

To find out more about Juniper Networks products and solutions, please visit http://www.juniper.net.

About Computex Technology Solutions

Computex Technology Solutions is an industry-leading national IT solution provider focused on helping customers transform their businesses through technology. The company employs a talented and diverse team of trained and specialized solution architects to create high-performance IT infrastructure solutions. From architecture design to implementation, the company's core expertise is in virtual infrastructure, cloud computing, business continuity, data storage management, networking, client computing, and managed IT services. With offices in Florida, Georgia, Michigan, Minnesota, and Texas, Computex Technology Solutions is an award-winning IT service organization recognized on a national and regional level for its success and service excellence. In 2013, the company was named to the prestigious CRN Tech Elite 250 and the CRN SP500. Learn more at http://www.computex-inc.com/.

About Integration Partners

Integration Partners designs, implements, and supports secure, fully converged networks using the best solutions the industry offers. We are an engineering firm with roots in enterprise data networking, staffed by professionals who are certified at the highest levels. Most important, we are deeply committed to our customers' success from configuration and integration through to support and maintenance of the network (www.integrationpartners.com).

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

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