



CASE STUDY

Network Access Control Makes BYOD Fast, Simple, and Reliable at Large Public University



Utah Valley University (UVU) is the second-largest institution of higher learning in Utah, with nearly 33,000 students and 5,000 faculty members. As a key provider of educational opportunity for its region and the state, UVU strives to accommodate growth while providing quality programs and services.

UVU leadership recognized early on that bring your own device (BYOD) is not just a “nice-to-have” feature, it’s an integral part of the university experience. Students and faculty members now expect to be able to use their personal devices on campus, not just for convenience but to take advantage of new learning opportunities made possible with mobile technology. The university needed to make it easy for them to do so, even when thousands of students were demanding access.

For several years, UVU had been relying on a legacy network access control (NAC) solution that was not designed for a BYOD environment. The university was paying the price. “Over the past few years we’ve seen a dramatic increase in the number of mobile devices connecting to our ‘UVU-WiFi’ wireless network,” explains Duke Heaton, wireless network engineer at Utah Valley University. “This went hand in hand with a significant increase in the number of calls to our Help Desk because of associated network access and security problems. We knew we needed a new NAC solution that was easy to use and didn’t impact students—and lessened the burden on our Help Desk.”

Utah Valley University selected the Fortinet FortiNAC¹ solution to address the university’s key BYOD challenges. The software provides automated network access control that enables UVU students and faculty to use their own Windows, Mac, or Linux-based devices across campus. Unlike their previous legacy solution, the new NAC solution is purpose-built for BYOD, making life easier for students while dramatically reducing the number of calls to the Help Desk. Ten days after going live, 5,500 students and faculty had signed up 6,600 unique devices to the UVU-WiFi using FortiNAC.

“Within two months there were over 20,000 users and 30,000 unique devices registered on the network,” says Ray Walker, associate vice president of information technology, Utah Valley University. “We’re now seeing a more productive classroom experience, a more rewarding student experience, and a better learning experience overall because we’re able to use mobile technology to full advantage.”

“NAC was designed with network management in mind. We see the difference every day; it enables us to track and manage thousands of varied devices and provide secure access automatically. Now I don’t have to run out and look at every device to figure out why it can’t connect. What a difference NAC makes!”

– Duke Heaton, Wireless Network Engineer, Utah Valley University

Details

Customer: Utah Valley University

Industry: Education

Location: Orem, Utah

Making BYOD Work at UVU

The FortiNAC solution automates the onboarding process at UVU. Students registering for the first time enter their login credentials to download FortiNAC's agent onto their device. The agent associates the device with the user and scans their machine, checking for the required operating system and antivirus software. If everything is up to date, the user is logged onto the network based on their access rights. "The next time a user opens his or her device to access the network, the connection is automatic and almost instantaneous," comments Heaton.

If any software is out of date, a message appears informing the user that they need to update their device and providing a link to launch the update. This is a simple process that users can do themselves without calling the Help Desk. Once they're compliant, they can immediately access the university network. "The onboarding of personal devices is now so much easier and much, much faster than ever before, and we've seen a big drop in the number of calls and walk-ins to our Help Desk," says Heaton.

Using FortiNAC, Heaton and his colleagues can also set and modify flexible network access policies with point-and-click simplicity. "We just click or unclick the checkboxes to indicate what we want. The next time the agent does a scan, it checks for the new requirements," adds Heaton.

Onboarding Options for Guests

FortiNAC also automates network access for guests and other visitors at the university. Using the policy controls, Heaton can set up multiple access options for different types of guests—such as conference attendees, business guests, and contractors. High school students get access that includes filtering that complies with the Children's Internet Protection Act.

What's Next

A new student life building and a new classroom building will both have BYOD built in as UVU continues to integrate mobility into the university experience. The university also plans to expand its use of BYOD, such as in the classroom, allowing students to take tests online using their personal devices.

Heaton plans to expand FortiNAC to cover UVU's wired networks, allowing automated access control campuswide for nearly 1,000 infrastructure devices such as security cameras, printers, and scanners.

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Business Impact

- Fully automated network access for UVU students, faculty, and guests using their personal devices
- Access to the wireless network is nearly instantaneous
- Students are much happier with their network service—and with the university for providing it
- New opportunities to improve the classroom experience with mobile technology
- Help Desk calls and walk-ins cut by half

Deployment

- FortiNAC

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¹ Formerly Bradford Networks.