

PEPPERDINE UNIVERSITY ENABLES NETWORK ACCESS CONTROL FOR RAPID THREAT REMEDIATION



Pepperdine University is a liberal arts and research university with about 8,500 students and 2,000 faculty at its main campus near Malibu, plus five graduate schools across Southern California. The Bring Your Own Device (BYOD) movement has been a way of life at Pepperdine for many years. Thanks to the Fortinet Network Access Control (NAC) solution, students, faculty and staff, as well as thousands of guests at special events, can use their personal devices safely on the campus network.

Dr. Kim Cary, CISO at Pepperdine University, has some key insights about the role of a university network in the BYOD era. “Our students compare the University’s ease of wireless connection to places like McDonalds and Starbucks, so we don’t want to be super-intrusive and make people jump through a lot of hoops.” In addition, Cary notes that Pepperdine’s distinguished faculty sometimes come to campus and go directly to class with a new device. “They come to class, turn on their device, and expect to get network access to the resources they need. And they expect the process to be easy regardless of the device they’re using.”

But how do you ensure a quality experience for thousands of users bringing every conceivable type of device onto campus? How do you block infected devices without restricting the vast majority that are safe? These questions led Cary to another key insight: “The device type doesn’t matter — what’s important is to provide appropriate access and respond immediately to any security threat.”

Cary created a new kind of network control for BYOD at Pepperdine that could meet the needs of a dynamic campus community. “We need to know who is on our network, give them appropriate access, and let them know where they stand at all times. And we need a solution that’s fully automated and user-friendly, which is easy to do with NAC.”

SECURING THE NETWORK FOR BYOD

Pepperdine selected Fortinet’s NAC solution to enable a flexible, secure BYOD environment to enhance the University experience. The solution’s endpoint visibility and automated, policy-based access control enables thousands of varied users to safely access the University network with devices of their choice.

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CISO at Pepperdine University



DETAILS

CUSTOMER: Pepperdine University

INDUSTRY: Education

LOCATION: Malibu, California

BUSINESS IMPACT

- Provides fast, easy, and secure network access for thousands of students, faculty, and guests
- Identifies and blocks compromised devices, and provides self-service remediation
- Protects the university from copyright violations when students or staff download copyrighted materials onto their devices
- Reduces user frustration and troubleshooting calls to overworked technical staff
- Automates network provisioning for headless infrastructure devices that are often moved around campus

DEPLOYMENT

- Network Access Control

NAC simplifies access permissions through group profiles to enable users to get on the network quickly with access according to their role. Students, faculty and staff enter their credentials once to register their device, then access the appropriate University network when they chose. This is crucial to quickly on-boarding high volumes of new students each semester.

NAC also regulates guest management. Contractors get access set by their sponsoring department, while guests get web access only to public campus sites and the Internet. Furthermore, using NAC's guest management features, event sponsors at Pepperdine can create hundreds or thousands of accounts for conference visitors with just a few clicks, specifying parameters such as start date, end date and time-of-day, which NAC enforces automatically. NAC also logs all connection events, allowing IT staff to track registrations, device types, operating systems and changing trends to help manage service levels and plan for capacity.

THE SECURE, RESPONSIVE UNIVERSITY

One of the key features that Cary likes about Fortinet's NAC solution is that it integrates with the University's Intrusion Detection System (IDS). When the IDS detects an attack, NAC identifies the device and automatically blocks it from the network. NAC then notifies the device owner via a web page that they're quarantined and how to contact someone for help to fix the issue. "We have security, but we also have a great user experience to go with it," Cary adds. "By providing the quarantine reason and remediation help link to the student, staff or visitor, we keep their frustration low and reduce troubleshooting calls to overworked network staff."

The solution's ability to seamlessly integrate with numerous best-of-breed security technologies is a huge benefit for Pepperdine. This saves numerous IT ticket remediation hours, enhances the user experience and enables Pepperdine to leverage top security solutions to build a comprehensive network security solution.

The same approach helps protect the University from copyright violations. When Pepperdine receives a Digital Millennium Copyright Act (DCMA) takedown notice, information security staff use NAC to identify which device was used when the violation occurred, quarantines the device, and notifies the student that their computer is blocked due to a copyright violation. The resulting web page instructs the student to contact Tech Central for help. "We have very few repeat offenders," Cary observes. "By enabling us to follow the law, NAC helps protect the student and the University from liability."

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AUTOMATING ACCESS FOR UNIVERSITY-OWNED DEVICES

Pepperdine also uses NAC to manage its own networked devices. For example, using NAC's security automation capabilities, the University can move their enterprise printers anywhere on campus, and NAC automatically puts them on the appropriate VLAN (which is on a dedicated network for security reasons), thereby eliminating a previously manual task. Pepperdine has been so impressed with NAC that they are planning to expand usage to include automated threat response.



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