Ivy Leaguer Dartmouth College Delivers User-friendly, Intelligent Device Security Campus-Wide and Protects Research IP with WootCloud

This large Ivy League college based in New Hampshire Dartmouth has long recognized the security challenges associated with unmanaged devices, as well as the importance of creating the right segmentation strategy for its network to provide more value-added services to its student body. Dartmouth adopted WootCloud as the device security and network access platform for its entire campus.

The Challenge: Massive Device Usage, Complex Compliance, Small Team

Dartmouth's IT management team had long been working to address device visibility challenges, recognizing the formidable security challenges associated with a plethora of unmanaged student devices, which went well beyond laptops and phones to gaming consoles and connected speakers. As a research university, management also had cutting edge R&D equipment, significant IP, and data to protect.

Those in higher education know how important high-quality WiFi is to prospective students considering attending a given university. In addition, seamless peer to peer network for students, students having a say in influencing and changing policies, and ease of use of technology infrastructure for students also weigh in the decision to attend or not attend a school. Specific to Dartmouth College, having very-advanced network segmentation and enhanced IAM use cases in student health & safety were the practical implications of this.

With a small network team, a completely automated platform with deep machine learning capabilities was of the utmost importance to the client so that the system could take over most of the tasks around device identification, classification and risk management thus allowing the team to focus on strategic initiatives. The integration with Mist to drive access control was also a critical specification.

The university also realized that its existing IT and IoT infrastructure required a contextual solution that would help give them the flexibility to address their multiple challenges around device visibility, alert management, and SOAR integration, while retaining full control on the policies that control access.

The Solution: Dynamic, Intelligent Security at the Individual Device Level

Dartmouth realized that its existing IT, IoT and R&D infrastructure required a passive, agentless solution that would help address challenges around device discovery, deep analytics & inspection, and automated threat defense, all the while allowing Dartmouth's IT team to retain full control of the access policies.

During the proof of value (POV), the results spoke for themselves. Woot-

> *"WootCloud's micro-segmentation capabilities are a game-changer. We can make on-the-fly access control decisions based on a person's identity as well as their normal patterns of usage and device hygiene characteristics. This allows us to make the most of our investments in information security by ensuring the most effective protections are in front of the right people, and right resources."*

Cloud demonstrated the ability to provide access restriction on their MIST access points based off policy, device type, and posture. This essentially underpinned the organization's Zero Trust Network Access in their overall plan.

To satisfy student expectations for a dynamic, intelligent security system, advanced device identification and modeling, with deep device intelligence for risk and threat management allowed Dartmouth College to manage indicators of compromise at an individual device. This offered students a far better experience than every user with a certain type of device or in a certain location to be locked out in case of attacks or compromise.

Ultimately the client decided to award the business to WootCloud based on specific observations around the fact that WootCloud outperformed on all the core threat and risk use cases and then added new capabilities around network micro-segmentation and access control using the current Mist access infrastructure at no additional cost.

WootCloud HyperContext Solution

WootCloud's award winning HyperContext platform is an AI-based, agentless solution, that provides contextualized visibility and analytics for all devices, and uses this intelligence to segment the network, correlate threats and vulnerability propagation across interfaces, and automate access control.

- Advanced device identification, classification, and modeling abilities ensure 100% device visibility which leads to more accurate threat analysis and assessment of risk that a device poses to the organization. Accurate identification leads to improved efficiency in remediation.
- Greater device intelligence coupled with higher accuracy in threat and risk assessment enables WootCloud to provide actionable intelligence for Incident and Problem management in the ITIL framework.
- WootCloud supercharges existing Network Operations with an integrated product offering with its partners such as Juniper Networks to provide next-gen access control and network micro-segmentation capabilities.

As with most security and IT organizations, the university is resource constrained. Using inefficient tools causes tremendous strain and fatigue in SecOps personnel. The client's vision is to utilize HyperContext® to accurately discover, catalog and assess device threats & risks and provide meaningful, actionable insights from a device-centric view, thus dramatically enhancing process efficiencies, automate alert and risk management, and eliminate operations fatigue for the utility's IT organization.

If you are interested in a Shadow IoT report and zero touch, no obligation POC, contact us.

ABOUT WOOTCLOUD

WootCloud is the only device security platform that uncovers unmanaged devices on both the radio and network spectrum, uses AI/ML to analyze over 300 device parameters to discover gaps in their device and infrastructure risk posture, and the opportunity to close these gaps automatically – all at scale. A privately held company, WootCloud is headquartered in San Jose, California, with industry-leading customers, partnerships with leading security and infrastructure platforms, and top-tier investors.

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