

Mist and WootCloud Deliver Contextualized Visibility & Control to Secure Smart Devices

Securely deploy wireless networks at scale with inbuilt device level risk management across wired, wireless and RF spectrum, in an agentless environment.

The Challenge

Smart devices occupy multiple communication spectrums like Wi-Fi, Bluetooth™, BLE, and ZigBee. Smart device manufacturers have little background in dealing with security, and there are no industry defined security standards driving trusted software development on smart devices. In most cases, smart devices have limited computing power, memory, and bandwidth and thus cannot host a security solution internally. Many smart devices store and send sensitive data, including credentials, in plain text. Default device configurations and passwords are public information. Customers deploying these devices in many cases continue to use the default credentials which are easily hacked and repurposed to suit the malicious intent of hackers the [world over](#). Further these devices end up interconnected over LAN, WAN and PAN at enterprises. A single attack can thus affect the entire network of connected devices. Due to the complex layers of smart device systems, it is hard to identify where any problem is originating from. With the explosion in the number and types of connected devices, identifying devices (i.e., device fingerprinting) has thus become of critical importance to ensure security, and enforce the right access control to the network.

Solution

Mist and WootCloud have partnered to combine access point functionality with device level risk and threat assessment to deliver an industry leading integrated solution that provides actionable insights by combining device context, network data and threat intelligence and enables companies to understand the risk profile of unmanaged, transient devices and enforce a unified policy across all their campuses.

The Mist-WootCloud Solution

Mist, a leader in artificial intelligence (AI)-driven networking, and WootCloud, a leading provider of device security have partnered to deliver an integrated solution to enterprises and give them the ability to easily and securely deploy wireless networks with inbuilt device level risk management, at scale across wired, wireless and RF spectrum, in an agentless environment.

Features and Benefits

The integration of AI-driven networking from Mist and the contextual device security from WootCloud delivers:

- A comprehensive connectivity score and risk score for every device in the environment
- Improved visibility and control over unmanaged and headless devices
- Unified view of security, IT and network hygiene and risk scores across all customer sites and locations
- Micro segmentation via software driven dynamic access control beyond 802.1x
- Zero Day threat detection and remediation

Solution Components

The Mist solution includes the following components:

Mist cloud: All wireless deployment, operational, and management functions are handled via the Mist microservices cloud, which delivers these through the following cloud services:

- **Wi-Fi Assurance:** brings insight into user experience with service levels and leverages anomaly detection, automated event correlation for troubleshooting, dynamic packet capture, policy configuration, guest WLAN access, and more
- **Wired Assurance:** extends insight into user and device/IoT experience to the wired access network, leveraging the rich telemetry of Junos
- **Marvis Virtual Network Assistant:** Provides natural language queries with integrated help desk functionality for rapid and simple root cause determination and problem resolution while realizing the self-driving network with its Marvis Actions framework
- **User Engagement:** Pushes location-based information to mobile users, such as turn-by-turn directions and proximity notifications
- **Asset Visibility:** Finds high-value resources such as shipping pallets, wheelchairs, security personnel, etc.

Mist and Juniper access infrastructure: Mist Access Points are deployed on premises for Wi-Fi, BLE, and/or IoT access as well as the Juniper EX series access switches for wired connectivity.

The WootCloud HyperContext™ platform delivers:

- **Device Discovery:** Agentless, passive and non-intrusive solution that discovers managed and unmanaged devices on both the network and RF spectrums and ties these spectrums to a single device. It also monitors peer to peer in-air communications over Wi-Fi, Bluetooth, BLE, and Zigbee.
- **Granular Device Context:** Collects device information from physical, logical, operational and locational touch points and performs deep packet analysis to provide a fine-grained analysis of every device in the organization.
- **True Identity™:** Accurately identifies and fingerprints all new devices seen in the organization automatically, recognizes anomalous behavior at device level, and offers insights and analytics about device level risks and threats and best practices around mitigating threat profiles.
- **Risk Assessment:** Provides unique risk profile for each device, calculated by our proprietary algorithm to identify SecOps, Network Ops, & IT Ops gaps to improve device risk posture.
- **MicroSegmentation:** Implemented in a software layer, decoupled from the network hardware and NAC tools, and, when coupled with deep device context, delivers segmentation that is easy to deploy and operate automatically at IoT scale.
- **Large scale automation via policy enforcement:** A powerful policy engine automates and enforces control points which automates handling large numbers of different devices and maintaining hygiene in the organization.

Summary – Combine AI-Driven Networking from Mist with HyperContext Device security from WootCloud to Elevate User Experience

Increasingly, the requirement for organizations to connect, communicate with, and remotely manage a staggering number of networked smart devices via the Internet is the new normal. Most enterprises and government institutions are already under constant and unyielding attacks by rogue nation states and cyber criminals, yet they typically overlook smart devices as a significant attack vector for such attacks, despite the fact that recent high profile device breaches in the news only scratch the surface of the magnitude of the problem that exists today. Leveraging Mist Access Points and cloud functionality with WootCloud HyperContext enables security professionals to gain complete device visibility, exercise

granular nuanced control and receive a risk profile score to help improve your risk posture. This integration will provide a unified risk score to every device in the network resulting in an optimal risk posture for our clients.

Next Steps

To learn more about the joint Mist-WootCloud solution, please contact your WootCloud or Mist representative, or visit <http://wootcloud.com/> and <https://www.mist.com/>.

About Mist

Mist built the first AI-driven Wireless LAN (WLAN), which makes Wi-Fi predictable, reliable, and measurable and enables scalable indoor location services like wayfinding, proximity messaging and asset visibility. In addition, Mist's AI technology plays a key role in bringing automation and insight across the full IT stack, delivering seamless end-to-end user experiences and substantial IT cost savings. In 2019, Mist was acquired by Juniper Networks and operates as a business unit focused on the AI-Driven Enterprise which combines Mist's next-generation Wireless LAN (WLAN) platform with Juniper's best-in-class wired LAN, SD-WAN and security solutions to deliver unsurpassed end-to-end user and IT experiences. For more information, visit www.mist.com.

About WootCloud

WootCloud is the only enterprise device security solution provider to leverage both the radio and network characteristics to neutralize device threats. WootCloud's unique HyperContext™ platform empowers security and IT teams to identify both managed and unmanaged devices and proactively control access. The company's scalable, agentless deployment capabilities, covering 100 percent of a network, enables actionable insights to detect behavioral anomalies faster at a lower cost.

WootCloud was one of the select companies to win the prestigious 2017 Tie Silicon Valley Top 50 Startups Award. A privately held company, WootCloud is headquartered in San Jose, California, with offices in India and Argentina. Learn more at www.wootcloud.com