INTRO

The endpoint clients you know about are just the beginning

The increasing reliance on IoT (Internet of Things) for business efficiency, automation and digital transformation initiatives comes with risks due to an expanding attack surface. IT teams need visibility and require actionable risk-based segmentation as unknown clients or endpoints are connected to their network. It can be impossible to keep up.

CHALLENGE

Unknown clients and unforeseeable concerns

Not knowing exactly what is connected to your network can lead to security holes and performance issues. Often, unknown clients are given broad access privileges so as not to hamper the user experience. While admirable, it leaves your network open to internal and external attacks.

In addition to security issues there is also a lack of insight into the type and amount of traffic being generated by these clients if they are not monitored. Problems are compounded as networks grow and is more distributed as it becomes very difficult to control what is being connected and enforced appropriately.

Automated and accurate client insights are critical.

SOLUTION

Aruba Central with AI-powered client insights

Luckily there's help. Aruba Central includes ML-based classification of traditional as well as IoT clients that offer the ability to go beyond basic profiling. ML algorithms use dynamic comparisons against known clients and MAC range classification in the likely event that unknown clients are connected to your network.

What makes Aruba unique is that we are the only vendor to build in this level of client visibility and accuracy into our cloud and AI-powered network management, inventory, and troubleshooting solution. No extra charge.

When it comes to your network, why guess? Aruba ESP delivers full-service network to client AIOps tools that give you the ability to build a better network where you can optimize and troubleshoot issues before they turn into security or performance outages – all from a single dashboard.
A REAL-LIFE EXAMPLE

Without good client visibility a network refresh seems to always uncover unexpected issues. The IT team at a retailer with over 5500 sites was concerned that small client and traffic variances would hamper the roll out of new Aruba SD-Branch Gateways and APs across 100 stores weekly. Would the prior configuration continue working or would they run into new bandwidth and security issues?

Endpoint clients were often given broad access privileges as IT found it difficult to differentiate between customer, sales oriented and IoT clients. Not only was this a network configuration issue, but it carried over to firewall rules and local access policies as well. Outdated and manual ways of identifying client types were no longer good enough.

Fortunately, their timing was perfect. As part of their new roll out the customer was also deploying Aruba Central for Cloud, which includes AI-powered client visibility and classification. Now each Wi-Fi or wired client that connects is dynamically profiled, and placed into a category of known clients to simplify the assignment of access privileges.

Machine learning techniques are used to help for instances where clients with unknown characteristics are seen. The IT team now has over 95% confidence in understanding the type of clients coming into their stores and their intended use. Policies can now be written to directly impact network security and capacity in a positive way. The addition of ClearPass helps automate local access policy enforcement.

SUMMARY

When it comes to digital transformation and effectively meeting your goals, inline telemetry, the cloud and automation with granular visibility are the future. Aruba’s client insight capabilities along with the other AIOps tools that are included in Aruba Central are just one step in delivering the best user experience possible.