



HARMONY IoT
Cyber Of Things

Harmony IoT vs. Aruba Products compression

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By ORCHESTRA

Confidential

Executive Summary

It is important to note that Harmony IoT does not compete with Aruba, but complements it. Aruba sells some of the best network infrastructure appliances today, and they come with some security measures - mainly for the Wi-Fi protocol and for very few, specific types of attacks. Unfortunately, that is not enough to keep you safe in today's "smart" and connected world.

Harmony IoT provides additional value on top of Aruba:

1. Significantly better visibility and insights to the wireless networks, devices and vulnerabilities in and around your premise.
2. Broader detection of the attacks that happen today, including zero-days, based not on signatures but on advanced behavioral profiling and anomaly detection.
3. Complete security solution to mitigate the threats in the wireless world with the same security team you have today.

With Harmony IoT, there is very little work and configuration for you SoC team to do, as the protection is fully automatic thanks to fact that:

1. Our behavior-based analytics engine and global learning abilities saves you the need for rules. We automatically understand, rank and mitigate attacks in real-time.
2. We are not just a product, but a service. That means you are getting support with root cause analysis, recommendations based on lessons learned, response and recovery playbooks, and more.

With Harmony IoT you get a monthly report that will precisely list the risks discovered, along with recommendations on the best way to handle them and the recommended policy that will fix them automatically. You will also get real-time alerts on the most pressing issues, along with our recommendations. With the additional data that Aruba provides, in comparison to other network infrastructure appliances, you will get stronger protection and better security.

Ultimately, with Harmony IoT you get very high ROI, affordable and zero-friction solution to keep you safe in the world of wireless threats.

Visibility and Network Hygiene

Added value with Harmony IoT on top of Aruba:

- Full visibility into all wireless-capable devices in the protected area, whether they are connected to your network, your neighbor's network, or to no network at all.
- The ability to see devices that are hopping between corporate and external networks, devices communicating through Wi-Fi Direct,

Bluetooth and BLE, and even external devices that put you at risk such as wireless attack platforms.

- Monitoring and behavioral analytics on the surrounding wireless networks and tracking of any suspicious behavior that targets your employees or puts them at risk, such as malicious access points, Wi-Fi phishing and data leakage attempts through external networks (and not only “classical” rogue access point threats).
- Accurate risk assessment and ranking done by the Harmony IoT big data analytics engine and data science based AI, so you can focus on what’s most important.

With Aruba alone you get:

- Limited visibility only to your access points and corporate clients. However, we can integrate his data into the Harmony IoT analytics engine and leverage it to enrich the smart insights provided by Harmony IoT.

Detection and Response

Added value with Harmony IoT on top of Aruba:

- Real-time, accurate detection of live attacks and dangerous vulnerabilities thanks to Harmony IoT’s proprietary behavioral profiling and anomaly detection algorithms (compared to traditional signature-based solutions).
- The widest coverage of wireless threats today: from network hygiene, to attacks on the Wi-Fi protocol and the connection itself to attacks on individual clients and access points. Remember, a smart attacker will never use the basic Wi-Fi attacks that will get caught by any elementary WIPS.
- The ability to detect wireless zero-day exploits, thanks to our anomaly detection, and even already-infected assets that operate in a suspicious manner, thanks to our behavioral profiling. We see a dramatic increase of such events. Ask us for real life examples.
- Global learning based on hundreds of millions of devices profiled from all over the world continuously enrich Harmony IoT’s unique detection capabilities. Along with Harmony IoT’s expertise and experience with offensive wireless tactics, you get unmatched protection in the wireless world.
- Harmony IoT alerts come with full details of the incident, root cause analysis, participating actors, affected devices and risk level, and as part of our full service you also get suggested solutions and recommendations based on lessons learned, best practices and our response and recovery playbook.
- Best-in-market location precision of incidents and suspected devices, thanks to the combination of greater distribution of sensors and Harmony IoT’s proprietary machine learning based location algorithm, you get the

most accurate location information for supreme visibility and attack detection.

- Even more flexible policy options, thanks to the accurate location capabilities, such as the ability to alert on an unauthorized personnel inside the server room late at night.

With Aruba alone you get:

- Partial, signature based detection of about a dozen wireless vulnerabilities, most of them denial-of-service. Adding Aruba's internal, wired-network data and statistics to Harmony IoT's external monitoring and visibility provides the best value all together.

Mitigation and Policy Enforcement

Added value with Harmony IoT on top of Aruba:

- Real-time mitigation of any ongoing attacks and active prevention of possible attacks before they begin, alongside constant enforcement of policies to prevent policy breaches.
- Predefined and recommended mitigation suggestions and policies, alongside best practices tips and recovery playbook.
- A variety of mitigation options to combat every threat, from completely external neutralization techniques to integration with other internal corporate security measures.
- A simple, easy-to-use and policy wizard to configure your corporate security policy. You can keep the control in your hands with real-time alerts on selected threats, along with the appropriate remediation suggestions, or let the Harmony IoT AI handle the entire incident cycle for you, letting you know when the threat has been resolved.
- The power of behavior-enriched policies that allow for highly flexible settings such as the capability to set different rules for employees, contractors and guests and even the ability to act upon suspicious, anomalous behavior. No need for whitelist/blacklist management or tagging every single device. You can easily set policies such as preventing all guests from connecting to corporate networks, without the need to configure every single guest separately.

With Aruba alone you get:

- A very complicated, dense policy editor that Aruba themselves recommend not setting to many of, or you'll drown in alerts.

Additional Added Value

- Better coverage and larger wireless defense perimeter. Thanks to Harmony IoT's small and cheap sensors, you are able to easily disperse

them throughout the designated area and achieve better detection and mitigation of threats.

- Better scalability of protection. Thanks to its distributed nature, Harmony IoT's solution can easily scale to cover everything from a floor, to a building, to the entire organization. This helps you achieve 100% coverage of your premise while maintaining a low total cost of ownership.

Summary

Harmony IoT is all about security. We are completely agnostic to your network equipment, but are able to leverage the data it collects to enrich our analytics engine so you can get better insights and protection from wireless threats. This separation of roles is important, as you don't want IT and network operation problems to affect your security (or the other way around). That is why you can't let your infrastructure protect itself. Ultimately, Harmony IoT gives you higher ROI and additional value over other wireless security solutions, without the need to spend a lot of money on expensive networking equipment or add extra personnel to your SoC team. If you haven't installed Aruba's AM (security-only) access points, Harmony IoT's solution will save you money and provide you with better security value. If you have installed Aruba's AM access points, you will get higher value with Harmony IoT by integrating them into the Harmony IoT platform as an additional data source for better insights.