Internet of Medical Things (IoMT) devices like remote patient monitoring systems, smart continuous glucose monitoring (CGM), connected inhalers, and ingestible sensors typically lack the security features required by enterprise zero trust frameworks. As such, these devices are at risk for network breaches due to unpatched software or misconfigured settings. To remediate this, healthcare networks require the latest and greatest security features to fend off cyber attacks, malware, and ransomware.

The best way to protect medical devices is by strictly controlling network access and micro-segmenting devices to allow communications only with approved applications and network resources. This approach is foundational to a zero trust framework because it can minimize the attack surface and, by extension, the chances of a successful attack by infections in otherwise trusted devices.

The Aruba ClearPass policy management platform centrally enforces security policies with any device operating on any vendor’s network. Granular policy enforcement is based on a user or device’s role and type, authentication method, Mobile Device Management (MDM) and Enterprise Mobility Management (EMM) attributes, device health, traffic patterns, location, and time-of-day.

CyberMDX, an Aruba 360 Security Exchange technology partner, provides medical cybersecurity software for healthcare organizations by adding layers of cyber protection and improving cyber insights.

Aruba and CyberMDX have partnered to integrate Aruba ClearPass Policy Manager with the CyberMDX platform to enforce security policies across IT and IoMT networks. REST APIs provide ClearPass with the real-time status of medical devices on a network, which then assigns the appropriate level of network access.

### WHY ARUBA AND CYBERMDX
- Identification and classification of connected medical devices
- Per-device level risk assessment and automated network policy assignment
- Tag-based, context-aware policies to reduce the attack surface
- Aruba validated Interoperability

### HOW IT WORKS
At the time a device authenticates on the network, a risk analysis is conducted based on known vulnerabilities, detected threats, original research, and deviations observed from baseline performance measures collected by CyberMDX. CyberMDX automatically pushes these updates to ClearPass Policy Manager (CPPM) via device custom attributes for policy enforcement, VLAN assignment, and dACL policy management.

These attributes are further used to define and enforce context and risk aware policies within CPPM, including VLAN assignment and downloadable ACLs, to reduce the attack surface. Together, the itemized inventory and individualized risk assessment provide comprehensive visibility into devices and their cybersecurity posture.
CERTIFIED INTEROPERABLE

We’ve taken the guesswork out of IoMT threat prevention and clinical assets network micro-segmentation by certifying the interoperability of CyberMDX with Aruba infrastructure. The integration set-up, including creating an API Client and an API administrator user, resides within ClearPass, while setting the client ID and user credentials happens inside CyberMDX. Deployment is quick and hassle-free.

SUMMARY

Together, Aruba and CyberMDX ensures the resiliency and safety of clinical networks with identity-based policy enforcement. Contact your local sales representative to see how together we deliver the most comprehensive threat prevention solution for clinical networks in the industry.

For more information on Aruba ClearPass, please visit: https://www.arubanetworks.com/products/security/network-access-control/

For more information on CyberMDX, please visit: https://www.cybermdx.com/

Figure 1: Aruba ClearPass Policy Manager and CyberMDX Joint Solution Diagram