



Gartner COOL VENDOR 2020





# Zero Trust Hardware Access – Visibility.Control.Trust.

#### For Federal

Federal agencies and the nation's critical infrastructure - such as energy, transportation systems, communications, and financial services-depend on IT systems to carry out operations and process essential data. But the risks to these IT systems are increasing-including insider threats from witting or unwitting employees, escalating and emerging threats from around the globe, and the emergence of new and more destructive attacks.

As per GAO's recommendation - Establishing a comprehensive cybersecurity strategy and performing effective oversight with regards to mitigation of global supply chain risks and possible malicious hardware is of the utmost importance, further emphasized by section 889b directive. Tackling this challenge requires complete visibility to your Hardware assets, regardless of their characteristics and the interface used for connection, as attackers take advantage of the "blind" spots - mainly through USB Human Interface Device (HID)emulating devices or Physical layer network implants. These challenges are also supported by the Comply-to-Connect and various Zero Trust guidelines.

Securing your network assets at the hardware layer by using a field proven solution developed by Cyber Physical Security experts, will be the first step in bringing your cyber security posture to the next level.

# **Key Challenges**

- Total visibility is required to account for all of the agencies' IT/OT/IoT assets Knowing what you have, verifying what you own and only then trusting it.
- Spoofed devices, physical layer implants, "hiding" in the physical layer or impersonating as legitimate devices while sharing the same logical identification are hard to identify using existing technology.
- Rogue wireless AP's that can be used for attacks both in the enterprise and WFH environment.

# Sepio Zero Trust Hardware Access approach to the challenges

Sepio's HAC-1 solution uses a unique algorithm based on physical layer fingerprinting module augmented by Machine Learning techniques. The unique approach allows HAC-1 to discover and report ALL devices, rogue devices included, enforce usage policies, deliver risk insights and device scoring.

By enabling organizations full visibility of their IT/OT/IoT assets, a stronger cybersecurity posture and true Zero Trust methodology are achieved with the following highlights -

- Asset visibility
- Policy management
- Device risk scoring
- Risk insights & actionable playbook

- Embedded Device Threat intelligence database
- Extensive device hunting, IR & Forensic features
- Fully integrated with popular orchestration & automation products

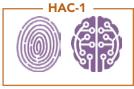
## **How It Works**

Network Switches



SSH Polling Switches (read-only) Physical Layer Information (no traffic monitoring)





Discover & Mitigate

- All Hardware Assets
- Device Vulnerabilities
- Unmanaged Devices
- Manipulated Hardware





Physical Layer, Interface, And Behavior Information Fingerprinting and Machine Learning



# **Main Benefits of HAC-1**



Complete Visibility of all Hardware Assets: With all devices and anomalies detected, enterprises benefit from a greater overall cybersecurity posture. Gaining full visibility of all hardware devices from endpoint peripherals to connected devices (IT/OT/IoT), Sepio uses unique physical layer hardware fingerprinting technology and data augmentation from endpoints and networks.



Full Control through Predefined Policies: Enterprise-wide policies enable compliance, regulation and best practices. With predefined templates and no baselining or whitelisting, and no requirement for a clean environment start, Sepio provides a fast and easy setup.



Rogue Device Mitigation (RDM): Threat mitigation upon discovery of rogue or threatening devices. Integrations with existing security platforms such as NACs and SOARs for mitigation and remediation enhancements.

# **Use Cases**



# Visibility Gap

Transparent Network Device that was found on a network in a Tier 1 bank.

- Can you detect it?
- Do you have a visibility to your hardware assets that are connected to your infrastructure?
- Do you have any idea about unmanaged devices in your network?
- Do you know how many and what peripherals are connected to your endpoints?



#### **Insider Threat**

In 2019 a US Federal Agency facility had been hacked by a

Raspberry Pi device that was linked to the agency's network without authorization. Attacker exploiting this device were able to facilitate a massive breach of classified data.

- Are you sure you don't have hidden implants in your network?
- Are you sure you know what your endpoint devices really are?
- Can you be sure that you don't have tapping devices inside your network?
- Do you know how many devices are being charged through a USB port on endpoints?



#### **Supply Chain**

A malicious peripheral device was found in an air-gapped network in a Power plant

- How do you know if you really received the hardware you bought?
- How do you know that your hardware was not modified/ switched/tampered during upgrade or maintenance sessions?

# Sepio Phased Trial Program

Demo

POC - Lab/Production

Partial/Full production deployment

>> Demo Feedback report

>> PoC report

>> Complete Visibility & RDM coverage











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### **ABOUT SEPIO**

Founded in 2016 by cybersecurity industry experts, Sepio's Asset Risk Management (ARM) platform sees, assesses, and mitigates all known and shadow assets at any stage. The only trafficless solution, Sepio is infinitely scalable to protect the company 's decentralized, uncontrolled ecosystem as fast and often as anyone, anywhere connects any assets. Sepio provides actionable visibility with the Asset Risk Factor (ARF) score based on a unique Asset DNA generated for each asset at its physical source, reflecting actual business, location, and rules. Sepio Radically improves the efficacy of NACs, EDRs, XDRs & Zero Trust layer solutions that simply see only the assets they are there to protect. Visit: www.sepiocyber.com.

#### ABOUT SRC CYBER SOLUTIONS LLP

At SRC Cyber Solutions LLP, we provide Next Generation, Highly Automated, and User-Friendly Solutions in partnership with AUTOMOX for Patch and Endpoint Management, IRONSCALES for Comprehensive Email Security and Anti-Phishing Protection SEPIO for Asset Risk Management (ARM) to assess and mitigate all known and shadow assets at any scale, THREATX for WAAP (WAF + +) for Web Application and API protection and Project Ares for Online Gamified Simulation-based Cyber Security Training.

