**S² Spry Squared**
www.sprysquared.com/trapezoid

# Challenge: Firmware Integrity across IT, IoT & OT Devices
# Solution: Trapezoid's Firmware Integrity Verification Engine

## Commercial Value:

- ✓ **Firmware is 50% of the code in your organization and it is not being monitored.**
- ✓ **Today organizations have "Zero Visibility" into firmware vulnerabilities.**
- ✓ **Vulnerabilities Below the OS (VBOS)** are increasing and are a clear and present danger to all organizations.
- ✓ **Firmware monitoring is a requirement of every major risk-based Cyber Security Framework** but until now has been ignored. Patching does not solve the problem.
- ✓ **Enterprise-wide, device integrity monitoring solution.**
- ✓ **Best in Class Vulnerability Research –** OEM Databases, National Vulnerability Database, Independent Research Firms & Custom Research.
- ✓ **Cybersecurity Maturity Model Certification (CMMC) –** allows government contactors the ability to meet all levels of CMMC compliance.

## Technology:

- ✓ **Firmware Compromise/Vulnerability management –** Monitors / Alerts to any critical vulnerabilities and firmware compromises any IT, IoT & OT device in real time.
- ✓ **Able to connect to ANY device –** Connector's can access ANY IT, IoT & OT devices via either REST APIs or SDK or basic SSH CLI sessions.
- ✓ **Supply Chain Integrity & Compliance Tool.**
- ✓ Device "Evidence Record" is extracted and saved in an "insert only" database.
- ✓ "Evidence Record" is compared to the last record and all changes in device state are identified and logged for the forensic lifecycle of the device.
- ✓ Device state changes are run through an Analysis layer to identify anomalies based upon the 4 quadrants of integrity.
- ✓ Resulting Events and Critical Alerts are sent to organization's security tools as well as are available in T5 User Interface for further deep dive analysis.

## Federal Government Value:

- ✓ **DOD Certified COTS solution –** Commercial Item Designation.
- ✓ *DHS-CISA CDM –* Only authorized enterprise firmware monitoring solution.
- ✓ **Vendor Agnostic –** Monitors any infrastructure, network or virtual device (IT, OT, IoT).
- ✓ **Compliance Reporting –** NIST 800-53, FEDRAMP, FISMA, HIPAA, HITRUST CSF, PCI, 20 CIS Controls and GDPR.
- ✓ **Big Data Analysis –** Runs data science tools directly; no ETL required.
- ✓ **Single Pane of Glass –** Alerts sent to your SEIM or logging tool or drill down into built in UI for investigation.
- ✓ **Lightweight and agentless –** Avoids invasive code distribution by polling systems on user defined frequency without degrading performance.
- ✓ **Flexible Deployment –** On Prem, in the Cloud, or as a Managed Security Service.

## Company Background:

- ✓ **Founded 2015 –** HQ Denver Colorado with multiple offices across the USA.
- ✓ *CAGE CODE – 7EYS9 –* Certified Woman / Minority Owned Small Business.
- ✓ **Core Competencies –** Cybersecurity, Managed IT Services, IT Consulting & IT Recruiting.
- ✓ **Clients Include –** we have work with Airforce, Army, Navy, CBP, FBI, VA, SOCOM, NETCOM and Army Corps of Engineers,

| Layer | Tools | Vendors |
|---|---|---|
| ✓ CLOUD ORCHESTRATION | Application Delivery Control, Orchestration & Mgmt. Tools | Cisco Cloudlock, FORCEPOINT, CipherCloud |
| ✓ NETWORK APPLICATIONS | IPS, IDS, NAC, Firewalls DLP, Mobile Device Management SW, Web App Firewalls, Encryption | Cisco, paloalto, FORTINET, splunk>, FireEye |
| ✓ OPERATING SYSTEM ✓ HYPERVISOR/VMs | Virtualization Security, Control and Compliance Software, AV, Endpoint Protection, Encryption Tools | TREND MICRO, Symantec, CROWDSTRIKE, CYLANCE, McAfee, ArcSight |
| ⊘ FIRMWARE/BIOS | Trapezoid is the only vendor and device agnostic solution that provides visibility by continuously monitoring, detecting and alerting for compromised firmware and device integrity | TRAPEZOID Firmware Integrity Management |