ENHANCING CYBERSECURITY FOR EMERGENCY COMMUNICATIONS SYSTEMS

The Emergency Services Sector, which is comprised of Fire Departments, Law Enforcement, Emergency Medical Services Agencies, and Public Safety Answering Points (PSAPs), has a computer network serving as its backbone. The PSAP or Emergency Communications Center (ECC) is the focal point for how these agencies respond to a citizen's 9-1-1 call for help and serves this function over 240 million times each year. The focus of the Enhancing Cybersecurity for Emergency Communications Systems project is to protect our nation's most important number—9-1-1—by predicting Public Safety cyber-needs for vulnerable legacy systems and for the future interconnected Next Generation (NG) 9-1-1 systems through network and malware profiling. Its primary mission is to promote and support the communications infrastructure in protecting the confidentiality, integrity, and availability of the thousands of computer networks that perform ECC functions.

IMPROVING THE CYBERSECURITY POSTURE

Cyberattacks have long been an issue in technologically advanced systems and public safety infrastructure is a particularly valuable target to cyber criminals and state actors. The scope of this Department of Homeland Security Science and Technology Directorate-backed project relies on Predictive Analytics (PA) that gather cyber analytics to build PSAP threat environment situational awareness. Predictive and cyber analytics are used to improve the detection and elimination of cybersecurity attacks against current and future emergency communications systems. Near-real-time behavioral threat analysis of the traffic hitting an emergency communications center's network provides recommended remediation steps to address the attack.

A NEW LAYER OF CYBER DEFENSE

SecuLore's Paladin Overwatch is a cybersecurity monitoring service that uses patented technology to capture data and provide valuable information for in-depth forensics to stop cyberattacks before they begin. Guardian, when paired with SecuLore's Paladin Overwatch, securely allows remote protection to ECCs from malicious network traffic that could disturb operations. Guardian is a module—also developed by SecuLore—that is positioned in line with network traffic and

Paladin + Guardian
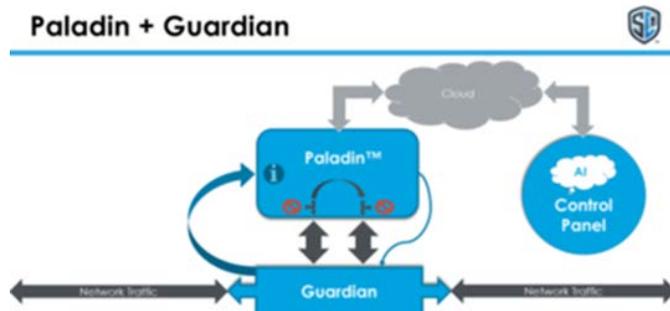
enables all ECC network traffic to flow through Paladin for analysis and blocking.

ACCOMPLISHMENTS TO DATE

- First pilot launched in Palm Beach County, Fla. July 2020
- In the last 24 months, SecuLore has recorded 423 incidents that impacted PSAPs in 50 states + Washington, D.C. due to inadequate cyber infrastructure
- SecuLore held a Pilot Project Demonstration January 2021

UPCOMING MILESTONES & DELIVERABLES

- Identification of new pilot partners
- New pilot installation
- Software and hardware design revisions
- SecuLore Pilot Project Demonstration II

PERFORMER

- SecuLore Solutions