



DoD



Borders



Command & Control



Energy / Gas / Oil



Nuclear



Air & Sea Ports



As the world becomes increasingly interconnected via internet-protocol (IP) enabled devices, incidents of network attacks and cybersecurity breaches are a daily occurrence. Emerging technologies in artificial intelligence, software and computing bring evolutionary innovation and convenience—however, these capabilities cut both ways. Terror attacks and cybercrimes continually demonstrate foreign agents/dangerous actors and even homegrown hacker sophistication, desire and ability to penetrate and exploit the nation’s best fortified systems. Protecting critical infrastructure “points” is a prime focus for all and government organizations must continually increase investment to upgrade existing security infrastructure with innovative, emerging technologies and products.

An integrated solution approach using advanced technology and methods is required to achieve security goals. Prometheus Security Group Global

(PSG Global) a veteran owned small business is dedicated to this mission, providing solutions for some of the world’s most Critical Infrastructure Protection (CIP) needs/sites. PSG has developed and released three new, innovative and unique product technologies all built with an eye for mission-specific applications: (1) a Linux Video Management System, (2) Scene Authentication, and (3) Talon—an advanced Enterprise IP Network Security Panel. “PSG has been awarded numerous large federal and industrial contracts and is a recognized leader in integrated electronic and cyber security programs,” says Jeremy Freeze-Skret, Vice President, of PSG Global.

LINUX AND WINDOWS SERVERS, PROVIDING THE BEST OF BOTH WORLDS.

The company has deployed solutions at hundreds of CIP type facilities and DoD base-wide integrations across the globe. PSG’s security solutions range

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 OF
 HOMELAND
 SECURITY
 & CIP**

from enterprise-wide to stand-alone and comprise intrusion detection systems, access control, video surveillance management and cyber security compliance and auditing; all tightly integrated with a host of third-party products ranging from basic sensors to advanced and highly sophisticated products such as radar systems with automated targeting and tracking of intruders-personnel-vehicles.

At the core of PSG's suite of solutions is their video management system with roots back to the 90's an outgrowth of development of highly complex intelligent traffic solutions. The robust video image control and display system (VICADS) is the backbone for some of the world's most intense and sensitive traffic management environments and now holds a nuclear market certification, providing video-over-IP hardware and software solutions for monitoring and recording via existing network equipment and infrastructure. The video surveillance and camera control are distributable to any authorized workstation connected to the network. The digitally recorded video is stored in a central repository for archival. In 2010 PSG developed a next generation video management platform (complies with DoD's mission and requirements for a critical infrastructure protection framework). The next generation 2018 by PSG builds on the best of both worlds, providing both a Windows, as well as Linux core OS server systems. The dual OS solution features a Windows graphical user interface (GUI) familiar to the operator, while offering the best in breed of ultra-hardened secure servers and big-data capabilities of the Linux world. Built from the ground up and working with Hewlett Packard, these performance matched Linux OS servers greatly enhance mega data storage and information management, speed, redundancy, encryption, reduced foot-print, "rack, stack and power consumption" with much less

overhead, updating and risk (think security) than a traditional end to end Windows platform.

At the backbone of PSG's next generation suite of security solutions, is their cyber aware foundational philosophy. "Cyber Security is an ever-evolving threat landscape, so versatility is the key to solution delivery. A holistic and agile approach in our products allows organizations to effectively maintain the confidentiality, integrity and availability of mission critical information." says Daniel Griego, PSG's Director of Cyber & Network Services. Supporting the five foundational pillars of Information Security—Confidentiality, Integrity, Availability, Non-Repudiation and Authentication, PSG's Cyber platform features a customizable virtual server with robust Informational Assurance (IA) architecture and compliance with Information Security - policies, procedures, guidelines and specifications, tested by government experts to meet deployment for securing CIP and even Nuclear type assets.

SCENE AUTHENTICATION ("THE" SCENE FINGERPRINT)

Validating the value proposition of Scene Authentication, Kevin Bray, Director of Sales, cites an instance where the International Atomic Energy Agency (IAEA) faced challenges in ensuring safeguards. The IAEA carries out 2,000 inspections on the ground, with more than 20,000 seals, over 1,000 attended/unattended monitoring and measuring systems in the field. While the acceleration of new video-based technology is a positive enhancement to overall security, it's simultaneously exposed infrastructure to a myriad of attack entry points where new threats are introduced. "The authenticity of the video chain of data transmitted over networked systems is crucial to the entire security solution—the first of its kind," explains Bray.

Minimizing attacks on shared networks, PSG developed the Scene Authentication solution which leverages advanced encryption and proprietary video analytics techniques to protect the video scene from its inception to delivery points for viewing or storage. PSG's scene authentication system integrates in real-time with video over an IP network. The technology ensures a scene displayed is live and authentic, without being manipulated by outside parties. It works by an active transmitter sending an encrypted light-wave source, which is inserted into the video scene and subsequently read by a paired receiver. The transmitter sends an encrypted coded signal which carries: time, spatial positioning, global positioning, and unique identification information. The technology functions like an "invisible fingerprint" or silent bank alarm for video—it remains ever present, ever vigilant even in video storage. With this technology, the IAEA is able to safeguard their auditing via video operations – even supporting the chain of evidence and ensuring it remains unaffected. "Scene Authentication can be sold as a standalone, OEM product or in conjunction with PSG's TALON and may be paired with virtually any camera from any manufacturer," says Bray.

ADVANCED ENTERPRISE IP NETWORK SECURITY PANEL

Drawing on years of experience in all facets of an electronic security solution, PSG's management team and engineers ensure operational integrity by providing long-term maintenance support structured around the customer's needs and required standards-compliant network security.

Industry concerns over network security issues have elevated the notion of federally mandated regulations and security compliance. To meet this compliance and deliver high-quality security solutions, PSG developed

TALON, an ultra-high security standards and encryption compliant approach to deliver high definition real-time video and control data over an IP network. It effectively and securely integrates sensor, alarm and video data into command and control display platforms. A market first - TALON provides an unrivaled level of security and prevents spoofing or snooping of the communications links. Compliant to stringent Federal Information Processing Standard Publication 140-2, level 2 encryption, and data validation standards, TALON assures end users that their sensitive and critical information is reliably transported and securely delivered. Further, TALON delivers features such as secure boot, secure real-time clock and a tamper-proof enclosure capable of zeroing memory containing critical security parameters. Able to function as



a high definition HD-SDI, or a standard definition NTSC/PAL video encoder which is ONVIF Profile S conformant, meeting industry standards for product and safety as well as interoperability requirements with other ONVIF-certified products, making it easier for end users, OEM's, integrators, consultants and manufacturers to take advantage of its robust security features. The Talon panel is easily integrated as a core communication component for virtually any high-end application and data network.

MARKETS SERVED

PSG's solutions focus on Homeland and Critical Infrastructure Protection (CIP) markets: Fed-Gov, DoD, Borders, Command and Control, Energy, Nuclear, and Air/Seaports.

Cyber and terrorist attacks are an ongoing concern, securing these assets is a prime concern for all. Keeping dangerous actors at bay, materials and goods under control

is a critical mission for governments. PSG's solutions are designed for these applications as well as harsh and remote locations lacking infrastructure which may require camera options ranging from basic to sophisticated thermal, infrared, long-range and wireless and solar solutions. "Our approach provides CIP security and management personnel with an early warning or intrusion detection annunciation," Rich Anderson, Director of Business Development and Services. When it comes to implementation of PSG's security solutions Anderson says, "We provide reliable, repeatable results with a proven reduction in field errors while reducing on-site installation and maintenance hours". Ranging from small to large form factors and using Underwriters Laboratories certified components, the PSG product suite is designed for reliability, standardization, ease of installation, service-support, and maintainability. PSG technical staff holds Department of Defense clearances, IAT-Level II network or greater certifications and work extensively with our global certified staff of third-party strategic partners that provide a wide range of security system solutions. "We're a trusted partner for some of the world's largest product manufacturers and service organizations such as Hewlett Packard, Johnson Controls, Honeywell and others" explains Anderson.

The heightened concern associated with large-scale terrorism has created a collaborative need for DoD to work with federal, state, and local agencies in their homeland security activities. "PSG is a trusted DoD partner and helps in designing, deploying, and integrating electronic security solutions. The company embraces unique customer requirements and can fully interface with complex third-party PSIM, alarm and access control annunciator platforms including Vindicator, Linx and others, as well as Government proprietary solutions", states Anderson.

"Our executive and managerial team provides capable leadership combining hundreds of years of experience in integrated security solutions supporting 24/7 mission-critical applications utilizing a COTS based approach. Today, PSG's team has been involved in over 1,400 projects with over 200 years of combined technical and highly successful efforts to include seven separate and unique nuclear programs for various governmental agencies," Rick Gross, CEO of PSG points out. The company's unique products are available via the General Services Administration Schedule 084 for federal customers. From information assurance (IA) compliant secure communication networks to fully integrated security systems, PSG's team continues to stay true to its corporate philosophy of providing superior technological solutions, delivered on-time and within budget. 