

# VIALOGY<sup>®</sup>

## Sensor Policy Manager<sup>™</sup>

SPM<sup>®</sup> Data Sheet  
PSIM Overview  
CBRNE  
Environmental Monitoring  
Campus Security  
Defense

### ViaLogy SPM<sup>®</sup> Solution for Physical Security Information Management

ViaLogy's Sensor Policy Manager (SPM<sup>®</sup>) software is being positioned as the engine of any Physical Security Information Management (PSIM) solution architecture. Physical security, with an estimated total market in excess of \$150 billion, has become a complex industry with more than 500 companies providing various, and usually proprietary, monitoring services. The bottom line is that the amount of data available, as well as the amount of data necessary to respond to security incidents in a coordinated and timely manner, has become unmanageable; end users have become inundated with security information.

There are currently few solutions available which take sensors information in a inter-textual context. That is, to take data from different, separate categories of sensors and fuse them into an automated policy which recognizes patterns of questionable behavior and which can automatically generate alerts to notify the responsible supervising authority. On top of this, the system must be able to limit the number of false alarms, which is the Achilles heel of most sensor fusion solutions.

This overview, intended for systems integrators as well as enterprise operations managers in the public and private sectors, explains ViaLogy's network-centric approach for enabling truly smart sensor networks, along with the mediation and correlation of this data into actionable intelligence. Unlike sensor-management solutions that are limited to sensors from certain suppliers, the ViaLogy SPM<sup>®</sup> software solution can connect with network-attached sensors from many vendors, fuse and normalize their inputs for distributed, Web-based monitoring, and invoke real-time responses based on customer-defined policies. The network-centric approach provides measurable benefits for security, safety, and surveillance.

*"The most recognizable information management innovation of the last decade is video analytics. Yet, after all the hype, little has come of the intelligent video phenomenon...The root cause is much simpler...End users are already inundated with data...In one global financial services company more than 100,000 false alarms occur daily..."*

*From Physical Security Information Management, Imperial Capital, May 2008*

### Limitations of Today's Sensor Management Approaches

System integrators can integrate the input from multiple sensors to overcome problems such as those listed in the table below. However, integration has historically been time consuming and costly. Costs increase exponentially as an organization attempts to integrate more and different types of sensors, especially highly complex sensors such as radars and CBRNE sensors. Furthermore, it is difficult to transition from centralized to distributed control as networks grow.

Problem	Example
False positives	Perimeter security motion sensor is tripped by an animal or moving vegetation.
False negatives	Operator misses out-of-range sensor reading or significant event captured by surveillance camera.
Delayed awareness and response to critical events	Oil field operations personnel are not alerted to incipient leaks revealed by slightly off-normal readings from different types of sensors.
Underutilization of sensors because of their placement	No historical trending information is available to help determine if a sensor would be more useful in another location.
Information available at one terminal only	Operational personnel can only view sensor readings from a dedicated terminal or from the sensor itself. This prevents monitoring by personnel in different geographical locations and impedes continuity of operations if employees cannot access the sensor or terminal for some reason.
Lack of automated response	Until now, there has been no easy way to rapidly and reliably implement policy-based responses to sensor input, such as triggering another sensor for a confirmatory test, locking doors, or notifying a response team.

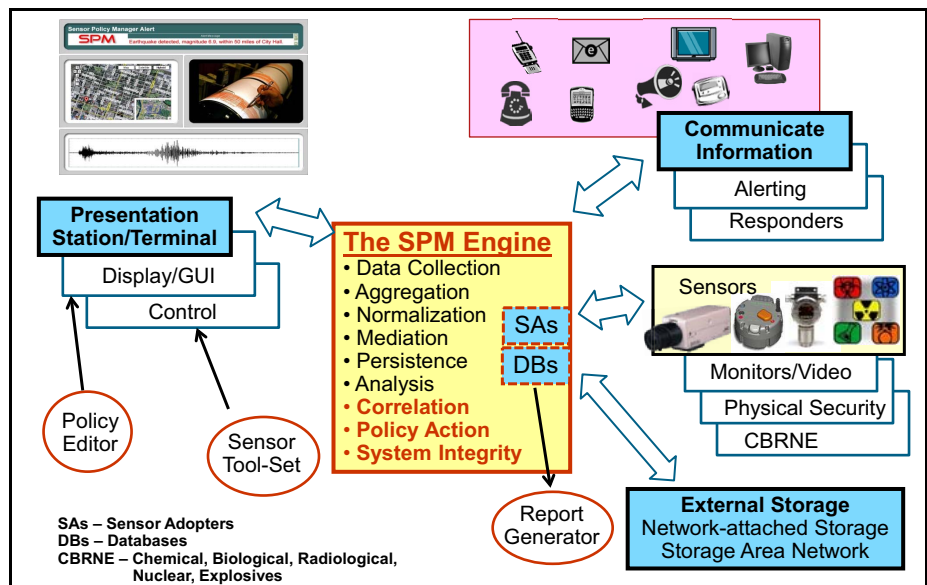
## The SPM® PSIM Solution

SPM is a PSIM engine that employs a unified approach to sensor integration, fusion, and standards-based interoperability. SPM enables rapid deployment within wired and wireless topologies involving hundreds of legacy and IP-enabled sensors.

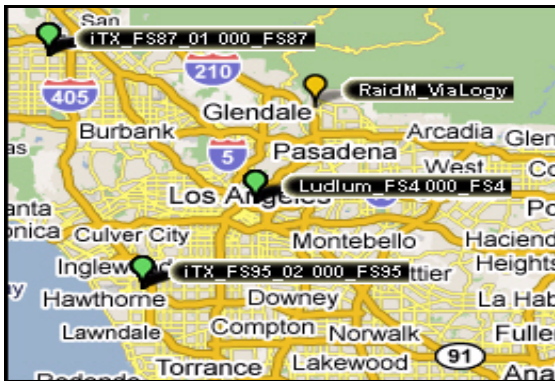
Observing converged network best practices, ViaLog's NIMS-compliant SPM is a drop-in policy engine for military/government applications, as well as enterprise, fixed and mobile security platforms.

For the end user, SPM enables operator-mediated remote monitoring, integrated security and business operations, as well as providing a

coordinated response to any incident. SPM includes a suite of comprehensive policy development, simulation and testing, and network monitoring tools. It delivers robust sensor integration within net-centric architectures that interoperate with tactical Command and Control (C2) and incident response systems. SPM normalizes sensor data in an IP-enabled environment for standards-based integration with upstream/front-end applications and distributes the intelligence out to the network edge. SPM accomplishes this while optimizing data traffic for efficient network bandwidth utilization.



## SPM® Solution Components



**Interoperability with existing systems** – SPM builds on existing systems by working with a wide range of IP-enabled legacy sensors.

**Sensor adapters (SAs)** – system integrators can connect existing sensors and cameras via SPM sensor adapters, which are software wrappers for each sensor type. The SAs convert output from the various sensors into a common language so that the SPM policy engine can analyze events according to customer-specific policies and execute appropriate actions through other sensors, messaging applications and display devices.

**Integration with presentation and communications layers (front and back ends)** – SPM is readily integrated with many Common

Operating Pictures through standard messaging protocols (e.g. CAP 1.1).

**Easy integration of new sensors** – SPM scales cost-effectively to accommodate multiple sensors of any type, at new sites, and employing new policies.

**Policy-based, automated response** – SPM responds automatically to alert conditions by executing customer-defined actions and responses, including personnel notification via voice, Short Message Service (SMS), and e-mail. Automated notification reduces operational costs and minimizes human error.

**Standards compliance** – SPM is certified by the National Incident Management System (NIMS) as compliant with the OASIS CAP 1.1 protocol.

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### Contact Information

To learn more about the ViaLog SPM® software solution, e-mail [sales@vialogy.com](mailto:sales@vialogy.com) or call (626) 768-2580 (U.S. headquarters) or +44 (0) 207 869 7014 (European headquarters).

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