IDOL for Intelligent Scene Analysis
Real-time automated monitoring and detection of suspicious objects and activities

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Advanced Data Analytics for Video Surveillance
We all know that CCTV systems work well only when individuals recognize and respond to the video surveillance images they see. Human error accounts for virtually all failures to respond appropriately to surveillance images. Issues may occur due to multiple duties, discontinuity in personnel, and failures in concentration and consciousness.

When manual processes are used, gaps exist that perpetrators can exploit, as evidenced by the 2014 intrusion at the Mineta San Jose Airport. Although the perpetrator was actually caught on video, the person was not noticed by security personnel, which demonstrates that the weakest link in airport security might just be the perimeter fencing, not the terminal itself. Fortunately, the intruder at San Jose was just a stowaway and not a terrorist.

To avoid the aforementioned incident, it is of paramount importance for security operators to automate real-time monitoring, detection, and action triggers that effectively mitigate the risks of either oversight or false alarms.

Micro Focus® IDOL powered by machine learning and deep neural network algorithms is a proven advanced big data search, knowledge discovery, and analytics platform for building intelligent context-aware applications. It’s advanced video analytics capabilities enable security operators to focus on activities that truly require attention from a security professional. By anticipating and detecting potential threats or illegal actions—instantly and automatically—IDOL delivers comprehensive and highly effective video monitoring, analysis, and alerts. It automatically tracks and identifies objects, analyzes motion for events, and extracts video intelligence from analog or digital video.
streams. The video analytics system can output analysis results in real time or archive them for retrospective video data mining.

Designed to simplify data analytics deployment in your existing surveillance infrastructure, IDOL integrates with market-leading video management systems (VMS) such as Milestone XProtect and physical security information management (PSIM) systems such as VidSys.

IDOL is used across diverse industries and is operating under some of the most demanding situations such as base protection in combat environments. It has been proven to dramatically increase the efficiency of surveillance operations by automatically detecting, analyzing, and interpreting activity within view—enabling organizations to take preventative action against any security concerns. IDOL offers a wide range of features and can be easily customized and configured to address the following as well as many other applications:

**Event detection activity** is identified from within the scene, and objects are identified and tracked. This information can be used in scenarios such as:
- Tripwire
- Zone detection
- Illegal traffic movement

**Object detector** monitors an area to detect objects that have been left unattended for too long. It looks for objects that are not part of the "normal" scene and issues real-time alerts upon detecting exceptions. It is suitable for identifying left luggage or illegally parked vehicles.

**Asset monitor/protector** monitors an area to detect removal of assets/valuable property from the scene. It "learns" a scene and issues automatic real-time alerts when objects are removed from the scene.

**Categorization and counting** processes video streams in real time to classify identified objects such as people or vehicles and provide the ability to count said items. The system can perform multi-directional counting of people and vehicular traffic in an area.

**Warning lights can be used in conjunction with object detectors** to monitor signal lights such as traffic lights or rail crossing signals. The color duration and sequence can form part of the requirement for any event to occur.

**Training and Configuration**

IDOL gives you the flexibility to set and refine your own definitions of what behavior could constitute a potential security threat and also define the precise action to be taken once a potential threat has been correctly identified. Your operators can train the system to recognize unusual behavior that may present a threat and establish multiple definitions for multiple scenes and locations within a complex, multi-camera environment.

IDOL supports a range of training methods, including non-alerting content, alerting content, simulating alerts, and alert verification. You can configure it to identify multiple categories of alarms within a scene at the same time, each with its own set of specified alert actions. The system performance model, once given
user feedback, can be automatically configured to fine-tune operational or retrospective performance.

Mobile Platforms
IDOL has the ability to understand video from cameras that are mounted on a moving platform. Whether this is vehicle-mounted, from a PTZ camera, or attached to an Aerostat, kilometers above the ground, intelligent scene analysis can extract information from the video to help monitor diverse scenes for threats. Regardless of whether the background is stationary or not, objects are identified and tracked to alert on required behaviors.

The potential applications of advanced video analytics for intelligent scene analysis are incredibly far-reaching. Following are several potential uses:

Airports: Airports require a wide range of intelligent video capabilities to detect exception conditions and allow airport and security personnel to improve security. IDOL identifies suspicious behavior such as loitering and can monitor planes and service vehicles while on the ground.

Retail stores: Retail stores need compelling business intelligence that can be used for improved customer service, marketing, and customer analysis. In addition, they also need capabilities to increase safety and security for their customers and employees. In this context, IDOL delivers business intelligence and customer analysis, queue management and customer service, safety, security, and loss prevention, as well as face detection/recording.

Traffic systems: Intelligent traffic systems monitor freeways/highways, busy intersections, bridges, tunnels, and railway crossings. IDOL provides the full range of capabilities in the transportation sector to improve traffic flow and safety, including traffic analysis, vehicle count, speed checks, automatic traffic reports and congestions, and vehicle parking violations.

Surveillance: Agencies requiring 24x7 surveillance of “subjects of interest” amass a huge amount of video data very quickly. IDOL is used to identify salient activity within the video, thus reducing the time required by highly valued analysts. When also combined with our license plate and face recognition technologies, it provides a powerful tool.

Learn More At www.microfocus.com/richmedia
“As a transport agency, our IDOL analytics platform is helping us exceed customer expectations and shape positive perceptions”

ROGER JONES
Chief Technology Officer
Auckland Transport

Contact us at:
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