

Intelligent Video facilitates port security

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Efficient port security

Growing threats posed by terrorist activities have directed the attention of public authorities and logistics companies to port infrastructure where ever-increasing global trade volume demands a high level of security. While international initiatives and programmes like the ISPS code or CSI aim at securing supply chain processes, they can only be economically reasonably implemented by adequate security solutions. In particular, as growing competition drives international container trade security, measures need to be an integral part of the value chain. Ports will have to invest in effective and sustainable solutions to avoid disastrous consequences if there were a major attack. To facilitate these goals there is a range of supporting technologies including Screening & Scanning, Intelligent Video, IT integration and Command & Control System.

Value-add of intelligent video

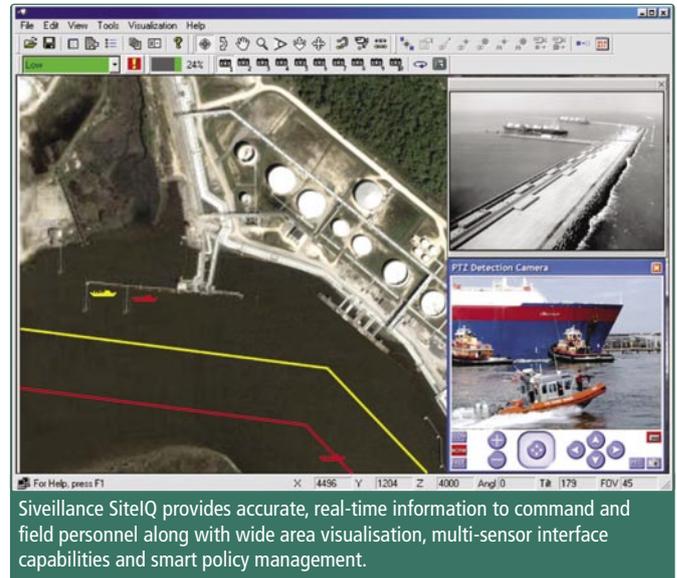
Typically, ports have a large and fragmented area that has to be kept under surveillance. There is clearly the need for hundreds of cameras, networked and streaming data over a widespread network along with a control centre that allows management of the video data. However, prevailing approaches to secure port infrastructure are reactive and cost prohibitive: Traditional video surveillance provides only a forensic record of events and related video data, but relies on humans to monitor and detect events. Hence, there are some major problems for securing critical infrastructure sites which include:

- Lack of incident prevention – most organisations rely on their security infrastructure for deterrence and forensics
- Lack of situational awareness and integration of sensor data
- High total cost of security

In this setting, Wide Area Surveillance and Video Analytics play a key role in reducing costs while allowing to focus on faster retrieval of evidence from large quantities of video. Video surveillance can be transformed from a reactive to a preventive tool.

Intelligent video solutions for ports

Siemens offers various software solutions for Intelligent Video applications under the new brand Siveillance incl. products of the formerly acquired VistaScope Security Systems. Based on an intelligent software platform, an automated wide-area surveillance



system is used to display real-time information on a monitor in a unified view using satellite or topographic images. The solution combines input signals from a large variety of cameras or other sensors, e.g. GPS or fibre-based sensors simultaneously monitoring the various risk zones such as quay walls or perimeter fence. It is perfectly suitable for comprehensive, pro-active surveillance of ports or other critical infrastructure facilities.

Complementary to wide-area surveillance, Siemens develops and offers a wide range of Intelligent Video indoor applications for motion and object detection. Such solutions cope with the monitoring of crowded scenes, gate control or restricted areas within buildings, as they occur in port facilities. These applications can easily be linked into the wide-area command display. Furthermore, Siemens Intelligent Video solutions can be integrated into advanced Command and Control Systems to take appropriate action which further facilitates situational awareness.

Conclusions

Efficient Intelligent Video solutions will be key in achieving efficient port operations. These solutions offer situational awareness for prevention and protection while keeping cost control.

ABOUT THE AUTHOR AND THE ORGANISATION

Ulrich Gremmelmaier is the Head of Technology Center for the Security Systems Division HQ of Siemens Building Technologies (SBT), Karlsruhe, Germany. The division is a worldwide leading provider and integrator of security systems and services. He is responsible for global product lines incl. product line management and R&D in the area of Intelligent Video, Access Control and Intelligent Life Safety solutions.

Building Technologies, an operating group of Siemens, combines offerings for security and life safety and building automation within one company as a service

provider, system integrator and as a manufacturer of respective products. By virtue of the unique combination of these business sectors, the company occupies a leading position worldwide. In the growing market for electronic security, Siemens ranks among the five top global players and offers integrated total solutions that are more efficient and more advantageous in terms of operating costs for use in both the private and the public sector. The range encompasses video surveillance, tracking and tracing, access control, intrusions protection as well as command and control.

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