03 Volume 11 May 2015

CTT SECURITY AND SECURITY AND SECURITY SECURITY



Special Focus: Video Management Security for Production Sites Business Intelligence Fire Protection

Airport Security

COVER:

VICON: The True Open Platform



MxDisplay Video Remote Station





The "Smartphone" On The Wall!

The new, flush wall-mounted MxDisplay is an intuitive, multifunctional and gesture-controlled remote station for every MOBOTIX IP Video Door Station. With just a few finger swipes, the user can get an overview of the cameras in the house, retrieve the latest video messages on the door intercom or create a new access transponder for a visitor.

More information: www.mobotix.com > Products



Live View & Access

MxDisplay



Quick Event Overview



Playback Messages & Alarm Events



Access & Device Configuration



*Sold only to distributors or commercial partners • Prices excluding VAT/sales tax • Manufacturer's recommended retail price ex-factory Langmeil, Germany • Subject to change without notice

Available in black or white

MOBOTIX AG • Kaiserstrasse • D-67722 Langmeil • Tel.: +49 6302 9816-103 • Fax: +49 6302 9816-190 • sales@mobotix.com • www.mobotix.com

598 €*

Management Matters

Two months ago, a big acquisition in the security industry was my topic. When commenting the acquisition of Axis by Canon, I mentioned that still a lot of segments in the market are highly fragmented. The market for video managment systems is a good example for such a fragmented market, so it was no big surprise when we heard that OnSSI acquired German VMS provider SeeTec.

On-Net Surveillance Systems (OnSSI) announced that it has signed a definitive agreement to acquire SeeTec. Both companies commented that the agreement combines the strengths of OnSSI and SeeTec. For me it looks like a good fit as SeeTec is highly regarded in European markets while OnSSI has a very strong presence in the US.

Why are software companies - and especially management software companies - so much in the focus of the industry? It is because management systems are in the centre of all security and safety activities. The best cameras can't develop their full power if their data is not well processed. Fire detectors and the alarms they create need to fit into alarm and management systems. This is no news, but we should not forget this when we talk about the importance of management systems. On top of this, management systems are getting even more important when we look at all the integration work that has accelerated the progress in our industry during the last few years. Integration is where management really matters most. And integration does not only mean integration of different systems. Modern equipment means advanced functionalities. The Integration of advanced device functionalities is only possible if you have a management system that can process the metadata coming from your security or safety device. Standard interfaces based on industry standards like ONVIF are not sufficient to process valuable data, e.g. video analytics meta data, well enough. I strongly recommend you to read the article from Eric Fullerton on page 16 where he takes a closer look at 'open standards'.

To keep you updated on this topic, you will find a lot of articles and news that cover security management and management systems in this issue of GIT SECURITY.

Enjoy reading this issue!

Heiko Baumgartner For GIT's Safety and Security team



WELCOME TO THE G-WORLD



Don't accept patchwork solutions for your security! Demand the right video security solution for your needs! Simple. Powerful. Flexible. Reliable and from a single source. Made in Germany. Video security from GEUTEBRÜCK – Welcome to the G-World! www.geutebrueck.com



GIT SECURITY

16

COVER STORY The True Open Platform The Rise of the Standards-based Open Platform

MANAGEMENT

SECURITY MANAGEMENT Unified Security under a Single Roof Frank Richard on His Tasks and the Newly Constructed Messe Frankfurt OSC

PROTECT AND CONNECT Solution Safeguards Residents at the

Prestigious Spring Mews Development

CONTROL ROOMS

| The Eyes Have It | |
|---|--|
| New Visualization Improves Gas Processing | |
| Plant Management | |

Single Roof

INTERVIEW

10

13

14

Security Platforms at All Levels Siemens Expands Security Portfolio With Siveillance VMS 15

SECURITY MANAGEMENT

Frank Richard on His Tasks and the

Newly Constructed Messe Frankfurt OSC

Unified Security under a

COVER STORY The True Open Platform The Rise of the Standards-based Open Platform **16**

VIDEO MANAGEMENT

Winning Together Milestone Integration Platform Symposium Celebrates Winning through Partnership

20

28

22

Surveillance Parcours Shared Security Network Used Video Surveillance Hub

PHYSICAL SECURITY INFORMATION

MANAGEMENT In Complete Control A Centralized Management System for Diverse Components

VIDEO SURVEILLANCE

| A New Perspective | |
|--|----|
| Value Creation by Video Surveillance: IP-based | - |
| Video Surveillance Meets Business Intelligence | 24 |
| Great Power, Great Responsibility | |
| The Medupi Power Station Project | 26 |
| What's Up? | |
| Combining Disparate System Alarms Into an | |
| Intuitive GUI | 30 |
| The Evidence, M'lud | |
| Dispute and Legal Avoidance through | |
| Long-term Video Storage | 31 |
| Network Nine | |
| Canon Expands Camera Range | 34 |
| The Art of Protection | |
| Security for Museum and Exhibitions | 32 |
| | |
| | |

INTERVIEW Security Platforms at All Levels Sigmons Expands Security Portfolio

Security Platforms at All Levels Siemens Expands Security Portfolio With Siveillance VMS



SECURITY FOR MUSEUM The Art of Protection Security for Museum and Exhibitions

SECURITY FOR PRODUCTION SITES

Security at Your Fingertip German Chemical Plant Increases Handling Capacity By Using Biometrics

ACCESS CONTROL

Living for the City Housing and Hotel Complex Secured by Integrated RFID Access Control System

Wireless, Not Clueless Some Myths and Truths of Wireless Access Control

Open Doors Dorma Equips Bush House Redevelopment

SMART BUILDING

Changing of the Guard Abus Introduces a New Generation of its Wireless Alarm System

FIRE PROTECTION

Wireless, Not Clueless

Some Myths and Truths of

Wireless Access Control

Safe on HighFire Protection at the Karwendel Summit42

IT SECURITY

35

36

38

39

40

Implementing the Next Generation A Whitepaper on Industry 4.0 Infrastructure

| SECTIONS |
|---|
| Editorial 3 |
| News6 |
| Security Products |
| BusinessPartner |
| Company Index / Imprint Inside Back Cover |

A PERSONAL NOTE

To be compliant to the European data protection laws, we have undertaken an initiative to secure that our newsletters and communication are targeting only recipients who have opted-in to get e-mails from us.

Those of you who have been on our distribution list in the past have already got invitation e-mails to renew the double opt-in to get information from us. Many of you have helped us by clicking on the opt-in and will receive further information from us. Thank you!

For those of you, who have missed this opportunity and those who want to be on our distribution list in the future, please take some minutes of your valuable time to fill out the online form on

www.git-security. com/user/register



44



Heiko Baumgartner For GIT's Safety and Security team

SECURITY NEWS

Milestone Systems Gathers EMEA Distributors



The open-platform company in IP video management software (VMS), Milestone Systems, held its first ever summit devoted solely to distribution partners. The theme for the event was 'Winning Together'. This is the focus for 2015 to signal an even greater dedication to the Milestone partner ecosystem. Thomas Lausten, VP EMEA confirmed, "We are a company based on the premise of partnerships". The summit took place at the global headquarters in Denmark and provided the company's distribution partners with an opportunity to network and accelerate their activities more effectively by leveraging the company's expertise and selling tools. www.milestonesys.com

Teleeye Provides Secure Network Cameras

Recently, there has been a lot of media attention on surveillance cameras being easily invaded by hackers, with video data and images being uploaded to the Internet. Any device linked to the Internet is susceptible to hackers' attacks, also IP cameras as they are designed to support open standards. Hackers are able to attack H.264 IP cameras through the Open Systems Services such as HTTP, RTSP, FTP which are commonly embedded in the cameras. This would be a huge problem for industries that have to deal with classified information and highly confidential data on a daily basis. Teleeye has developed its own anti-hacking technology to close off any loopholes. This applies a secured protocol, a set of special video streaming protocols to provide extra security during internal transmission as well as AES256 encryption. This is a higher level encryption adopted by the U.S. government to protect top secret information. IP filtering allows only designated IP addresses to access the cameras and a proprietary video coder ensures that hackers cannot recognize the video stream at all. www.teleeye.com

Camera Tracking Patent for Puretech

Puretech Systems, an Arizona-based geospatial video analytics company, today announced the issuance of a patent by the United States Patent Office – US Patent No 8,929,603 "Autonomous Lock-On Target Tracking with Geospatial-Aware PTZ Cameras." The newly awarded patent covers the company's technology utilizing video analytics on pan-tilt-zoom cameras, whether stationary or on a mobile platform. In the same manner as video analytics is utilized on fixed cameras, when applied to a moving camera the software must determine what part of the image is inherent to the scene and what part constitutes the target of interest. This problem becomes somewhat more complicated when the target is moving, the camera is moving and there are potentially other objects in the scene. This patent protects Puretech's method for autonomously locking onto a target of interest and automatically keeping it centered in the camera's field of view as both the target and camera move. The practical application of the patent provides for high automation, greater target detail and addresses operational needs in the protection of critical facilities, defense, border and homeland security.

www.puretechsystems.com

Canon Offer Acceptance Period Extended

On February 10, 2015, Canon announced a recommended public cash offer to the shareholders in the Swedish company Axis AB to tender all their shares to Canon for an Offer Price of 340 Swedish krona per share. As of April 1, 2015, the end of the acceptance period under the Offer, Canon acquired 52,415,897 shares. Additionally, Canon acquired 423,326 shares in Axis outside of the Offer, none of which were purchased at a price that exceeded the Offer Price. Canon now holds 76.07% of Axis's outstanding common stock. Canon has decided to complete the Offer by purchasing all the tendered shares in Axis and extended the acceptance period until 17:00 CET on April 21 2015 at the Offer Price in accordance with Swedish law. Please refer to further important information regarding the offer in the news section of Canon's website. www.canon.com

Access Control and Intrusion Detection Integration

CEM Systems, part of the Security Products business unit of Tyco, has announced that they have secured the new Silesian Museum in Katowice, Southern Poland. The AC2000 access control and security management system was delivered by their Approved Reseller Samaxon and installed by IB Systems and Budimex. The stunning new Silesian Museum houses 109,000 items from different fields of art, as well as archaeological, ethnographic and historical artifacts. The new museum building, opening mid 2015, has all the Museum's exhibition space buried underground with only glass tower skylight extensions visible above. As an organization with a large number of important works of art and other artifacts of historical importance, security is obviously of paramount importance for The Silesian Museum. The CEM AC2000 access control system was chosen because of its proven security and reliability in addition to its flexibility to integrate with third party security systems. Integration is an important part of the Museums' overall security strategy, requiring their existing intruder and CCTV security systems to work seamlessly with the access control system. The manufacturer worked together with Samaxon to develop a software interface between the access control and Avigilon video management systems and used the Galaxy Dimension interface to integrate with the Honeywell Galaxy intrusion detection system. This enables inputs from intruder panels to be placed as icons on the Alarm Event Display application, allowing for central alarm monitoring of both access control and intruder alarms. The Museum then has a powerful security management tool that provides a central command and control user interface for the access control, video and intruder systems. The Museum will utilize the Visual Imaging Pass Production module to give museum security personnel the ability to design and customize ID badges. The Visitors module enables staff to monitor and control visitor access to the prestigious building, granting access levels and/or tracing, allowing visitor movements to be monitored and controlled. The Museum has also installed CEM S610f integrated fingerprint card readers at high security doors throughout the building. This additional layer of biometric security allows for triple authentication - card, PIN and fingerprint - for highly restricted areas that require extra security. www.cemsys.com

Assa Abloy acquires MSL in Switzerland

Assa Abloy has signed an agreement to acquire MSL Schloss und Beschlägefabrik AG, a leading Swiss supplier of innovative locks. Johan Molin, President and CEO of Assa Abloy said, "This acquisition delivers on our strategy to strengthen our position in the mature markets through adding complementary market segments and products". MSL was founded in 1892 and has 106 employees. Its head office and factory is located in Kleinlützel near Basel, Switzerland. Sales for 2015 are expected to reach CHF 20m in the financial year ending 30 June 2015. The acquisition will be accretive to EPS from the start and the transaction is expected to close during Q2 2015. www.assabloy.com

Bosch Upgrades Fire Protection in Data Center



Bosch Security Systems has upgraded the fire protection system of the 25,000 m² Telehouse data center in Frankfurt with a modular and networked solution based on its UGM 2040 Universal Security System. All systems are networked via optical fiber in a ring topology. Existing fire extinguishing and sprinkler systems were also connected to the UGM 2040. More than 3,800 fire detectors and a large number of smoke aspiration systems were installed. Critical detector data such as temperature, operation hours and degree of pollution are constantly collected and stored in a database (condition monitoring). The new fire protection system meets all requirements of the EN54 norm.

Suprema Reports Record Revenues and Market Capital for 2014

The financial results of Suprema for its 2014 fiscal year ended Dec 31, 2014 have just been announced. The company posted record high yearly revenue of US\$65.5 million and an increase in market capital to US\$357 million. The results were fueled by all-time record revenue from access control and time and attendance devices as well as a strong performance in ID solution device sales. The revenue rose 26.2% from \$49.2 million in 2013, and market capital again reported double-digit growth. The revenue growth has well exceeded Suprema's 5 year average CAGR of 17.8%. Among four different global region groups, Europe had the lion's share of revenue with 41%. Americas followed up with 21% of the total revenue. Asia/Pacific and Middle East/Africa had revenue distribution of 20% and 18% respectively. James Lee, Suprema's CEO said, "The new products scheduled for release in 2015, along with our recently released Biostar 2, web-based open security platform, will set the foundation for our market expansion in 2015." www.supremainc.com

Milestone Systems Adds Wide-Angle Camera Support

The latest bi-monthly Device Pack 7.8 from Milestone adds support for a new hybrid type of 360-degree camera to use with Xprotect video management software. The number of devices supported is now more than 4,000. The most significant feature in this upgrade is support for hybrid cameras combining a PTZ and a 360-degree camera. An example of this is the Axis Q6000-E network camera which offers a 360° overview provided by four 2-megapixel camera heads, and when integrated with a Q60-E camera, it simultaneously offers high-detail optical zoom on areas of interest. www.milestonesys.com

Security Institute Initiates ,Commonwealth'

Eighteen security organizations and associations attended the first meeting of a new Security Commonwealth, initiated by The Security Institute and hosted by UBM in London on 4th February. The Manifesto for Professional Security, published by the Security Institute in November last year, provides many challenges and ideas for the group to develop. Their next meeting will start to look at common themes amongst commonwealth members, setting priorities and targets for the group. Emma Shaw, chairman of the Security Institute, led the first meeting's discussions, which she hopes to be the start of a new era in collaboration in the security sector. www.security-institute.org

White Paper from Euralarm on Alerting the Public

Euralarm, the association of European manufacturers, installers and service providers of the electronic fire safety and security industry, represents the industry at European and worldwide levels. The organization provides technical and market expertise for policy making and standardization work in the field of security and fire safety. Founded in 1970, Euralarm represents over 2,500 companies, having a total turnover of approximately 16.4 billion Euro, 70% of the total European fire safety and security market.

Euralarm published a white paper on PEARS (Public Emergency Alarm and Response System) in August last year. It was written to advise on the actions necessary to increase the effectiveness of public alert scenarios and highlight the increasing challenges governments across Europe face when mastering crisis situations caused by natural catastrophes, man-made disasters or criminal and terror attacks. The question of how to alert the population in affected areas quickly, reliably and effectively has recently gained importance and new methods are necessary, because of urbanization and outdated technologies.

The European Union and several member states have started testing new methods. The most common methods use cell broadcast messages to mobile phones. This is an easy to implement method, which however has big issues because, according to a study by the UK government, only approx. 30 to 40% of the persons reached read the messages directly. Another concern related to the testing of new methods is the lack of coordination between countries. The various methods are not compatible, which prevents messages from crossing borders. The white paper detailing this situation has now been translated into German and both versions are available from the company's website.

Samsung Techwin Appoints Technology Partner Manager

Dan England has been appointed Technology Partner Manager for the Security Solution division of Samsung Techwin Europe. Dan will be working closely with the manufacturer's Applications Partners and VMS developers to raise awareness of how Open Platform technology can provide users with significant added value from their video surveillance systems. "Having spent the last 16 years working for consultancies and companies in the design and installation of integrated solutions, I am very excited to have the oppor-



tunity to drive our Technology Partner program," said Dan. "I look forward to implementing a strategy which encourages a wide range of third party software developers to take advantage of our Open Platform technology."

www.samsungsecurity.co.uk

Assa Abloy's Annual Report Published

The 2014 Annual Report of Assa Abloy, the door opening solution provider, has just been published. It is available now from the group's website at the URL below. The printed version will be available soon and can be ordered from the same website under Investors/Reports/Order IR material, or by phone from +46 850 648 500. Since its formation in 1994, Assa Abloy has grown from a regional company into an international group with about 44,000 employees, operations in more than 70 countries and sales close to SEK 57 billion. www.assaabloy.com

Vanderbilt Names New Chief Financial Officer

Jürgen Schnöbel has been appointed as Chief Financial Officer of Vanderbilt, a supplier of safety and security technology. Schnöbel has worked in the security industry since 2001. Over the past 12 years, he has served as the Vice President of Finance for HID Global with worldwide responsibility for its Advanide and Identification Technologies (IDT) business units, as well as for GovID and Identity Access Management (IAM) in the EMEA region. He holds an MBA from the University of Applied Science with an emphasis on accounting, taxes and audit. Schnöbel will oversee financial management of the company from its new international headquarters in Wiesbaden, Germany, which was established in February as part of Vanderbilt's agreement to acquire Siemens' Security Products. The acquisition, scheduled to close in the second quarter of 2015, expands Vanderbilt's global presence and further boosts its technology and service capabilities. www.vanderbiltindustries.com.

Laser Sensors at Heart of Security System

A recently refurbished business park in Manchester that wanted a more modern and flexible security solution than its existing manned guarding operation, turned to a complete new electronic system that relies on Optex Redscan laser sensors. Greencourt Business Park, now known as Manchester Green, is located only



five minutes from Manchester Airport and has five large buildings in a landscaped environment. The current landlords, Barwood Investments, purchased the site at the end of 2013 and undertook a significant refurbishment program to improve the buildings, the landscaping and the security of the whole site. Property Letting Agents, Savills turned to Clarion, an electronic security system integrator, to design a system delivering high security and capable of replacing the costly manned guarding solution that had been used historically. The site is constantly in use so the system needed to be flexible in its configuration and always 'on'. For Clarion the best way to protect the entire site was to secure the perimeter by deploying an integrated solution comprising an access control system working in conjunction with an intrusion detection and an IP CCTV system. At the heart of this solution was the deployment of nine Redscan laser sensors, scanning the activity on the perimeter line but also inside the perimeter.

The laser sensors detect vehicles and people within a 30m radius and aren't affected by light or weather conditions. They were integrated with the vehicle barrier and the IP-based intercom system so that they don't trigger when an authorized vehicle or person enters the site. The sensors integrate directly with the video management system, Avigilon's Control Center platform, triggering dome cameras to go to pre-set positions to track any detected intruder and send an alarm to Farsight, the monitoring station looking after the site. "Our philosophy is to provide a solution that offers flexibility to the customer and minimizes unwanted alarms so the monitoring station can operate at its best," says Chris Billinge, Managing Director at Clarion. "We chose these sensors for this project for their flexibility and stability; it was easy to set up customized detection areas and to integrate the perimeter intrusion detection system with the rest of our security system. The system has proven very stable since the installation. Although we have been working with Optex for many years, this is the first project where we have deployed the Redscans and we are very satisfied by this intelligent sensor." www.optex-europe.com

Mobile Wallet with Secure Payment App

Rabobank, a large Dutch financial institution, is now offering its customers an easy-to-use, secure and private mobile payment system. With its highly secure Convego Appworld solution for smartphones, Giesecke & Devrient (G&D) provides the service platform for this mobile payment and mobile value-added services solution. Dutch consumers are now able to use their Samsung S4 and Note 3 smartphones to pay for their shopping, check balances, store loyalty cards and to redeem digital vouchers via Near Field Communication (NFC) in shops with contactless terminals. The Rabo Wallet is supported by G&D's Trusted Service Management (TSM) service for secure mobile payments, which is connected to Samsung's provisioning solution and provides secure transmission of sensitive applications to mobile phones. It enables Rabobank to securely manage the complete life cycle of its mobile debit card after issuance and to add further services later. www.gi-de.com

Hikvision Camera and Agent Vi Analytics Collaboration

Hikvision together with Agent Video Intelligence (Agent Vi), a provider of open architecture video analytics software, have announced a strategic cooperation to integrate their products and allow Agent Vi's embedded component to run on Hikvision cameras. The integration enables end users to run a full range of video analytics solutions on up to 200 cameras simultaneously over a single server. Cameras from the 4 series Smart IP camera range are the first to be included in the integration. The savvi video analytics platform has a set of advanced, automated video analysis tools that provide the immediate detection and extraction of events and valuable data from surveillance footage. www.hikvision.com

Slim Display and Video Wall Management Solution

Eyevis recently showed its visual solutions at the Integrated Systems Europe 2015 event in Amsterdam. The company demonstrated its HiRes commercial grade 4K/UHD LCD monitors in new UHD display versions. They provide pinsharp Ultra-HD resolution with 3840x2160 pixels. A second range of products on display was the EyeLED series of LED display modules which have an ultra-fine pixel pitch (1.5/2.0/2.5 mm) that meets the demands of largescreen solutions in indoor installations. They are designed especially for use in environments with bright ambient light conditions where a bright display with high light output is required. The eyevis LED rear-projection Slim Cubes find application in situations where rear projection systems have previously not been considered because of their space requirements. With a depth of only 422 mm for the 50-inch full HD version, the wall-mounted units require no substructure. The company's EPU Wall product is an IP-based video wall system consisting of any number of eyevis OPS LCD monitors with their integrated processing units, Eyecon software and an ECS-510 database server. It can be utilized in any situation that requires the transmission of streams over IP-networks. The product allows streams that are available in the network to be easily distributed to single displays or unlimited video walls. The product enables the assembly of flexible video wall arrangements without the necessity of a separate graphic controller. As the OPS-compatible processing units are built-in, the monitors can be directly connected to a standard IP-network. With just a few clicks, the displays can be integrated into the wall and display all sources available in the network, such as video streams or captured desktops. This provides a high amount of flexibility for the extension of control room video walls. The system is suitable for the presentation of several video formats. To display 4K-signals, the company's 4K/Ultra-HD displays with screen sizes from 31.5" to 98" can be integrated into the wall. The network functions as an unlimited crossbar through complete IP-based signal processing. The product has simultaneous access to unlimited sources, information and alarms from standard IP networks, the Internet or the Cloud. Since all the electronics for image processing is integrated into the display, only power and network cables have to be connected. New displays can be easily integrated into the system without having to shut it down. www.eyevis.com

Rainer Fano Takes Over American System Construction at Wagner

Rainer Fano became Head of the System Construction division on 1 October 2014 at Wagner America. Together with the President of Wagner Fire Safety, Albert Janjigian, the 53-year old will continue to grow the business of the Group on the American continent. A further objective is the concentrated market growth of core business areas such as warehousing and logistics on which the company has specialized internationally. "We will focus on establishing our Oxyreduct oxygen reduction technology as the standard



fire prevention solution in cold stores in den USA. In large parts of America sprinkler systems are considered the ne plus ultra of firefighting. That should change" said Fano. www.wagner.de

Vivotek Announces Dedicated Driver for IP Cameras with Xprotect VMS

In a step which will allow the optimal integration of Vivotek's network cameras and the Milestone Xprotect open platform IP video management software, a driver has been launched dedicated to the IP network cameras. The launch of this optimized driver enables even more efficient and effective communication and collaboration between the two products. Installation flexibility and expandability are two important factors that lie behind customers' considerations when implementing an IP surveillance system and this integration of hardware and software platforms is critical to keep products and services at the forefront of innovation.

Triad Biometric Cooperation

Paxton has announced the integration of its networked access control system, Net2, with Neametric's biometric management application called Prosync. The integration utilizes technology from Suprema, a major global provider of biometrics, and allows seamless connectivity of their access control readers and the Net2 access control platform enabling the straightforward addition of biometrics to the system. System administrators can biometrically enroll users, create biometric tokens in the management software and automatically link user templates to the access control readers. This is all done via the addition of a single function to the Net2 client software. Frequent upgrades to the Prosync biometric management engine make it ideal for continuously evolving business requirements. New functions and features are also released as they become available, avoiding long, costly product specific development and maintenance cycles. Walter Rautenbach, Neametric's Managing Director, said: "Our benchmark was to keep it easy with an interface that opens up the world of Suprema biometrics within Net2 with no fuss. Although it is nowhere to be seen, our proven engine takes care of all the aspects of biometrics in the background." Young S. Moon, Suprema's Vice President, said: "This integration is a well-blended combination of state-ofthe-art solutions in each category of biometrics and access control. The integrated solution will enable users to enjoy our biometric authentication solutions under the same access control environments." And Gareth O'Hara, Paxton's Sales and Marketing Director, added: "Our Net2 access control is built upon the foundations of being easy to install, configure and operate. The wealth of experience and expertise held by these two companies make this the ideal integration for our installers. We hope it provides an ideal solution to suit their needs, and look forward to receiving feedback." www.paxton.co.uk



Intelligent solutions from Bosch. Bosch Security Systems provides intelligent products and services to maximize the benefits of a connected security solution. **www.boschsecurity.com**



With a turnover of nearly 550 million Euro and more than 2,200 employees, Messe Frankfurt is one of the world's leading trade fair companies. In August last year, the new Operation & Security Centre (OSC) was inaugurated. The OSC, which was completed after two-years of construction, combines all of the involved services under a single roof. Our Scientific Editor Heiner Jerofsky spoke to the Head of the OSC, Frank Richard, in Frankfurt.

SECURITY MANAGEMENT

Unified Security Under a Single Roof Frank Richard on His Tasks and the Newly Constructed Messe Frankfurt OSC

Messe Frankfurt is present for its customers in more than 160 countries. The group of companies has a global network of 28 subsidiary companies and 50 international sales partners. The 578,000 square metre area of the Messe Frankfurt includes ten halls. As well as this, there are two congress centres. The company is publicly owned. Shareholders are the City of Frankfurt and the state of Hesse.

GIT SECURITY: Mr. Richard, the new OSC has now been in operation for about eight months. What experience have you gained? Have there been any practical tests with major events?

Frank Richard: Along with the "World Congress on Safety and Health at Work" in September last year, the Automechanika, the world's leading exhibition for the automobile industry, was the first major event, which we managed from the new site. Everything went smoothly and the entire team was very satisfied with how things went. The planned concept of short distances and working "shoulder-to-shoulder" with authorities, security organisations and Messe Frankfurt staff proved to be highly effective right from the very first day.

Can you describe the tasks and functions of the OSC to our readers in greater detail? Which different areas does it integrate?

Frank Richard: The Operation and Security Centre combines the control centre for corporate and event security, as well as the fire protection and building control systems for Messe Frankfurt under a single roof. At the same time, the OSC houses representatives from the police and fire services, the German Red Cross and safety and security staff.

What about the work and staffing of the security control centre? Is this comparable with that of a normal emergency service control centre? Can you continue operation in case of a power failure?

Frank Richard: The control centre is manned 24/7 For events, in addition to our permanent staff members of the German Red Cross as well as the police and fire service are deployed as contacts and coordinators. As well as all security-relevant aspects, the control centre of the Operation and Security Centre also handles all of the messages from the building control systems. Among other things, active operational control processes are programmed in advance according to the event. As an emergency control centre normally handles alarms in the form of conventional alarm responses, the OSC control centre cannot be compared with this. Due to the uninterruptable power supply (UPS) and an emergency generator, operation of the entire Operation and Security Centre is ensured at all times.

When is the police station on the exhibition site manned, and which public and non-public areas is it responsible for during events? Do you produce a joint risk analysis for each event?

Frank Richard: We are the only trade fair location in Germany to have a permanently manned police station, which is also manned on workdays out-



The Messe Frankfurt control center

side of major events. During large events, the police station is manned around the clock. Because the police station is located on the exhibition site, we do not make a distinction between public and non-public areas. The police are closely involved in the risk assessment process for each event. As the operators, we ensure the cooperation between the police and the other security and auxiliary organisations.

What are the tasks of security services in the OSC and which services support during major events? Is there something like a task force? Frank Richard: The safety and security service assists our visitors and exhibitors in questions of security. If crimes are reported, those involved are taken to the police station. Security patrols inspect the grounds and the halls. They ensure that all safety-relevant regulations are complied with to ensure the safety of the events. Thanks to specialist know-how and training, (rules of etiquette, addressing and accompanying VIPs, documentation and recording, as well as first-aid training) the individual security groups can quickly and competently respond to our customers' varied needs. In addition, they carry out conventional security services day and night.

What special technical equipment does the OSC have and what is the extent and importance of hazard warning systems, video surveillance and access control for the security of the exhibition grounds?

Frank Richard: The control centre controls over 200 surveillance cameras and the entire building technology. This includes recording of all fault, alarm and emergency messages, for example information about road accidents on the premises, a defect in a jammed lift or a message from a colleague who has lost his employee's pass. Direct links to the German Meteorological Service help the staff in the control centre to react quickly to weather hazards. This is not just important during erection and dismantling periods, but rather also during events, when the grounds contain lightweight buildings. Through the integration of one of the essential technical safety systems, the electronic public address system, safety texts can be given from a single site in case of incidents.



Messe Frankfurt security personal

What about the work and staffing of the medical station like during a large trade fair? Do you also have a doctor on hand at large trade fairs and is there a helicopter landing area?

Frank Richard: Our Medical Station is similar to a hospital emergency department. We have several treatment rooms, rest rooms and a fully equipped shock room. This includes ultrasonic equipment, an ECG and other medical equipment for emergency treatment. Staffing (at least a paramedic, emergency doctor, ambulance, emergency response vehicle, etc.) depends on the size and type of the event, in particular the average number of visitors to the exhibition grounds each day during the event, the individual risk assessment, e.g. visitor profile, weather, etc. and the expected number of cases of assistance, in the form of statistical in-



Images shown are for illustrative purposes only, and may not have been taken by the camera depicted. @2015 FLIR Systems, Inc.

Superior Detection. All the Time.



THE MOST ACCURATE MOTION DETECTION CAMERA AVAILABLE.

- Reduce false alarms with more reliable motion detection
- Most affordable intrusion detection and video alarm verification system
- Easy integration PoE/12VDC, IP/MPX(HDCVI)/analog, ONVIF

Find out more at www.flir.com/TCX



The World's Sixth Sense™



External view of the OSC

formation for each day on the exhibition grounds. For the medical and rescue services of the Messe Frankfurt, all cases of assistance are recorded in our own feedback system. This feedback system is based on the feedback information system and feedback codes which have been established with the Hessian rescue service since 2001. This matrix has been specially modified for the Frankfurt area in order to more closely depict the special features of the assistance which is primarily required. With this it is possible to make precise statements about the type and scope of the assistance which is given. Of course, it is always possible for a rescue helicopter to land in the Messe Frankfurt grounds.

Preventative and active fire protection is a central safety topic for major events. What is the task of the integrated fire station and is the fire alarm centre also in the OSC building? How is the cooperation with the Frankfurt fire service organised for major events and trade fairs?

Frank Richard: The topic of fire protection has been becoming increasingly important over the years. The OSC also contains the fire alarm centre for the entire exhibition site, so that in case of incidents external services can use this as their initial meeting point on the fair grounds, e.g. in case of a fire alarm. There they receive further information about the building on the site from which the alarm has been reported. An "Exhibition Management Department" is set up in the control centre during major events. This group consists of an assistant manager, exhibition staff, the rescue service coordinator, members of the security and safety services and any other persons who are necessary. The "Exhibition fire station" is manned and a fire truck is also on site. Short distances and direct exchange of information round off the concept for our OSC. According to a specially produced "Fire Service Deployment Concept" a fire risk assessment is produced for each event. This determines the deployment of the necessary personnel. Messe Frankfurt has closely cooperated with the Frankfurt fire department for many years. Through our fire protection officer, there is an intensive contact between Messe Frankfurt and the fire service. The various topics concerning exhibitions are jointly coordinated as necessary. Qualified and dedicated staff in the fire department enable us to obtain a rapid response to any questions, which may arise.

What technical and constructional methods can you use to achieve good communication between individual services within the OSC? Can you make loudspeaker announcements from the security control centre into the halls and on the outdoor areas?

Frank Richard: Even at the planning stage of the new OSC, all security-relevant services cooperated closely. A high priority was placed on the aspect of communication. By the use of glass walls and generous lines of sight, we have created transparency and proximity. Common recreation rooms and social areas also promote personal contact In addition to the constructional measures, the latest technical communication equipment is of course essential. This includes for example a digital radio cell. With the aid of the electronic loudspeaker system, announcements can be made from the control centre to all halls and outdoor areas. All announcements are either saved in digital form or are spoken live.

How does the joint situation and risk assessment by the various services work before an exhibition? How is the cooperation in the OSC? Frank Richard: For the security organisation of Messe Frankfurt, it is essential to determine the security requirements for the event as precisely as possible in advance. Depending on the type of event, the number of visitors expected, the content of the event and the specific ambient conditions, the risks for all involved must be assessed and appropriate protective measures must be taken. The assessment is made on the basis of a documented risk assessment by the police, the fire service, the medical and rescue service, as well as the security and safety staff. On the basis of the risk assessment, the deployment strength of the emergency forces for external services is made and duty manager is designated in a "security staffing plan" To enable coordination of the security services at all times, the "security staffing plan" with the names and communication data is distributed to the duty managers of the various organisations.

You and your team also involved in the security planning for other large exhibitions. How many and which exhibitions does this mainly involve?

Frank Richard: All events which are held on the grounds and in the buildings of Messe Frankfurt are subject to our standardised process for the production of a security concept. The emergency management always applies regardless of the concept.

How do the security measures differ between the International Automobilausstellung (IAA) in Frankfurt and the Intersec in Dubai or Buenos Aires?

Frank Richard: Each Messe Frankfurt event is assessed for possible risks in advance. The requirements and determination of the necessary measures are always implemented on site according to the needs of the individual events. In other countries this is carried out in close cooperation with the operators of the particular exhibition grounds.

What new projects are you planning with the OSC team and what are the challenges?

Frank Richard: We ensure that everyone who visits our premises, regardless of whether they are staff, service providers, exhibitors or visitors, leave the premises safe and sound. Because of this, we continue to develop and we will interlink the security-relevant functions of the business even more closely.

Thank you for this open and friendly discussion.

The interviewer was Dipl.-Verw. Heiner Jerofsky Senior Police Officer (retd.)



SECURITY MANAGEMENT

Protect and Connect

Solution Safeguards Residents at the Prestigious Spring Mews Development

Spring Mews is an upmarket 400-bedroom student residence and 93-bedroom hotel. To integrate advanced keyless access control, surveillance and intruder detection onto a single platform the developer, CLS Holdings, chose the Maxxess eFusion security management platform to run separate surveillance, intruder detection, and access control for the student residence and hotel while optimising functionality at a much lower cost than a conventional physical security information management (PSIM) solution.

Maximum Flexibility

As a modular system built on open technology software, eFusion has delivered maximum flexibility with one common situational view via a user-friendly interface, off-the-shelf integration, unlimited functionality and future expandability with the freedom to use best-in-class equipment from different manufacturers. These include: SALTO Aelement access control across 640 readers; Honeywell Galaxy intruder detection; 256 Axis IP full-HD cameras; and a Wavestore video surveillance recording platform.



The eFusion platform controls video surveillance, intrusion detection and access control

This set-up combined with simple, intuitive programming has made it easy for the building managers to manage individual room access privileges, arrange instant room moves, extend stays, cancel cards, enable remote-door opening, activate meeting rooms, identify low batteries and much more. They can also gather real-time audit trail data from every door, programme multiple camera views, settings and protocols and allow smartphones to be used as room keys via near-field communications.

As a result, Maxxess eFusion provides unified security and access control for hundreds of students and hotel guests, giving them the peace of mind that their safety is assured 24/7, while enjoying the convenience of keyless access throughout the building. At the same time CLS Holdings plc benefits from remote management across the entire site from a central location, low operating and maintenance costs, powerful reporting to enable regulatory compliance and a future-proof solution with easy upgrade paths.

Safe an Welcoming

David Towse, Project Manager at CLS Holdings plc said: "Spring Mews provides high quality accommodation where a safe, welcoming environment for our students and guests is of paramount importance. The Maxxess eFusion solution has provided all the functionality and flexibility we needed to cost-effectively manage, control and secure our properties to a high quality standard. We are extremely pleased."

Lee Copland, Maxxess Managing Director, EMEA, said: "eFusion delivers all the required functionality at a lower cost of ownership than with a conventional physical security information management solution, by combining a mix of equipment, features and functionality over the IP network. Additionally, simple transparent pricing structures and no annual license charges ensure that operating overheads at Spring Mews are minimised with no unexpected costs or recurring integration fees."

CONTACT

Maxxess, Bracknell, United Kingdom sales@maxxess-systems.com www.maxxess-systems.com **CONTROL ROOMS**

The Eyes Have It New Visualization Improves Gas Processing Plant Management

The gas processing and distribution plant at Kårstø, Norway

The processing plant of the Statoil oil and gas company in Kårstø plays a central role for the transportation and processing of natural gas and condensates that are produced at the Norwegian continental shelf. The gas is processed and purified there and then passed on to different recipients all over Europe. Since June 2014, forty-two rear-projection cubes from eyevis have been displaying the transportation and processing of gas at the Statoil processing plant in Kårstø, Norway.

The pipelines of several natural gas fields in the North Atlantic converge at the plant. The central process management, the pipelines, the gas transportation and the processing data on site are visualized on display walls. Control room technicians also monitor the plant safety from here. The EC-60-LHD-CP 60" cubes that make up the display walls give reliable, around-the-clock visualizations, precisely predictable maintenance intervals and a flexible presentation of data. They provide an ex-



Forty-two display cubes run 24/7 in Statoil's control center

act overview, allow for quick decisions and, therefore, the safe operation of the plant at all times.

High Reliability Requirements

The Norwegian integrator Global Control Center Design AS was in charge of the control center design, including 3D-modeling as well as the technological equipment and the installation. All AV components had to meet the high requirements of the Statoil's technical specifications for large screen systems. This included the eyevis cubes, which complied and were able to convince the client with their numerous features.

The long service-life of the LED-rear-lighting of about 60,000 hours ensures that the cubes offer reliable and stable long-term visualization for 24/7 operation required in the Kårstø control center. The innovative Heatpipe cooling system without mechanically moving parts guarantees long maintenance intervals. Precisely predictable maintenance intervals increase the user-friendliness. An integrated automatic color tracking feature allows the slightest color deviations of single LEDs to be detected at an early stage. Maintenance can then be conveniently integrated into the working processes of the plant.

The flexible presentation of different process data and camera signals is provided by the company's netPIX graphic controller and the eyeCON wall management software. Presets and alarms can be set for different events and scenarios. Meeting the client's requirements, the controller and software allow for the free scaling and distribution of the signals, even over several cubes of a wall.

> CONTACT Eyevis, Reutlingen Germany Tel.: +49 7121 4330 3127 max.winck@eyevis.de • www.eyevis.de



INTERVIEW

Security Platforms at All Levels

Siemens Expands Security Portfolio With Siveillance VMS

In January Siemens announced Siveillance VMS, a video management solution that enhances the company's existing security portfolio. The strategic partner for this software is Milestone Systems, on whose technology Siveillance VMS is based. Siveillance comprises software-based security platforms and modules that are used in critical infrastructures and by enterprise customers. At MIPS in Las Vegas, Heiko Baumgartner had the opportunity to talk to Rich Cillessen, Region Head Americas of Siemens BT's Enterprise Security business, about the strategic cooperation and the Siemens VMS offering.

Rich Cillessen, Region Head Americas of Siemens BT's Enterprise Security business

GIT SECURITY: Why did Siemens choose Milestone for this strategic partnership and how do the VMS solutions fit into the Siemens offering?

Rich Cillessen: Milestone is the leading provider of open, IP-based video management software. Its flexible technologies have been proven in thousands of installations worldwide. You can see here at MIPS 2015 how important a good VMS is for security projects. We are a key player in the security industry and the VMS is a vital module in our Siveillance portfolio. The cooperation helps us to further focus and expand our enterprise security solutions business. In the very near future the same video technology will also be integrated into the Desigo CC building management platform which is an outstanding addition to our total building solutions portfolio.

Can you give us an overview over the versions that will be available for Siveillance VMS?

Rich Cillessen: We will offer the Siveillance VMS in three versions. The version VMS 100 supports up to 128 cameras and is suitable for small and medium-sized facilities. The VMS 200 meets the demands of centrally managed systems with the high scalability requirements typical of major industrial facilities while the VMS 300 is used in systems that are distributed over multiple locations. It centrally manages user and system data. VMS 300 has a redundant design and is therefore available during network interruptions. It is suitable for critical infrastructures such as airports.

Video Analytics is a hot topic here at MIPS. What options do Siemens customers have to combine the VMS with video analytics?

Rich Cillessen: Siveillance VMS can be enhanced with Siveillance SitelQ Analytics, an intelligent video analytics plug-in to form powerful solutions like for example to protect perimeters. It is a plug-in for perimeter security that is characterized by high detection rates and low false alarm rates. It has an innovative, zone-based approach to alarm configuration and reliably detects intruders in even the most challenging conditions. As a result SitelQ Analytics can be used in power utilities, air- and seaports, petrochemical facilities and wherever else a premium perimeter security solution is required.

You mentioned the integration of video technology into Desigo CC in the future. Can you tell us more about this project?

Rich Cillessen: Desigo CC is our integrated building management platform, probably the most extensive building management platform currently available on the market worldwide. It is an integrated solution that provides managers, CEOs, facility managers, and building occupants with all relevant information for all aspects of properties and building portfolios. With Desigo CC, you can control and optimize all the systems in the building: heating, air conditioning, room automation, energy management but also fire safety and security services like video surveillance, access control and intrusion protection. Here, too, Siemens and Milestone Systems are working closely to provide video functionalities in Desigo CC. We have a team of experts that are in close contact and will develop this integration to optimize video surveillance within Desigo CC.

Siemens has vast experience in the integration of access control into management systems. Can you help Milestone in their development of the XProtect Access Control Module, the module they present here at MIPS?

Rich Cillessen: The aim of the Milestone's Access Control Module is to unite access control and video into security solutions and to enable easy integration of third-party access control solutions into their Smart Client. To help Milestone with the ACM is not part of the deal, but in the day to day work between our experts and the Milestone technicians, I am sure that we can give them valuable feedback to develop a better product.

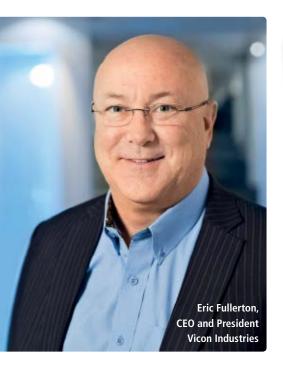
CONTACT

Siemens Switzerland Ltd Building Technologies Division Switzerland www.siemens.com/buildingtechnologies

COVER STORY

The True Open Platform

The Rise of the Standards-based Open Platform



While "open platform" is most common in technology, the concept exists in many sectors. Open platform is an approach where one company invites other companies to build applications or offer products and services that can be used on their existing platform.^[1] Instead of controlling the development pathway, the sponsoring company creates a proprietary interface and enables other companies to build products and services leveraging their assets.

As video surveillance industry insiders can attest, the open platform approach was adopted as a best practice within the past 10 to 15 years as it became apparent that Internet Protocol (IP)-based systems were overtaking incumbent analog systems. Many companies touted open platform development as the foundation for their integration platforms, which benefited this fragmented industry by enabling multiple companies to work together to support their specific customers' needs.



Alas, companies then proceeded to develop proprietary interfaces that forced customers to fall victim to vendor lock-in. Can a video surveillance platform really be open if the customer is dependent on one vendor to update interfaces to cameras and other third-party solutions? The notion of open platform has degenerated into "proprietary open platform," obliterating the benefits of managing a multi-vendor environment and future proofing the system. Vendors believe that they can provide greater functionality through proprietary interfaces than what's available in the standard. They also consider having a proprietary interface that doesn't support a standard as being a competitive differentiator.

It's time for a change. Trends indicate that the proprietary open platform will not give the industry the sustainable, profitable growth it needs or satisfy customer demand. This paper will review some of those trends, the benefits of a true open ecosystem and standards-based video integration platform, and how a team-based ecosystem approach can achieve this vision.

Trends Indicating a Need for Change

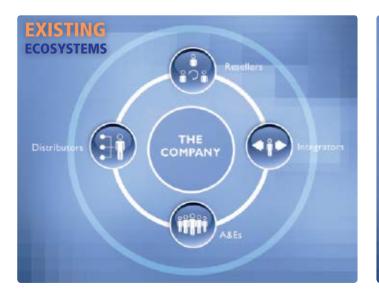
Decline in Industry Innovation

Perhaps the most glaring indicator that open platform has become proprietary open platform is the decline in industry-wide innovation. Most industries experience technological shifts that allow for increased innovation, as occurred when IP-based security systems first hit the market. There were massive improvements and new technology coming to market for what seemed like almost every day, on both the hardware and software sides. However, innovators now spend more time on user interfaces and software changes than on hardware changes. Similarly, in the telecommunications industry, companies are finding tremendous value in software-defined networking and are not focusing solely on switches and routers anymore.

The disruption that IP had on hardware and software - on cameras and video management systems (VMS) - has declined. Higher resolution cameras and increased features and functionalities within the VMS are not producing the innovative benefits that they once did.

High-resolution multi-megapixel cameras can cover larger areas without losing detail, which means system designers can use fewer cameras. Their superior resolution also "enables highly detailed and accurate digital PTZ (pan-tilt-zoom) of live and recorded images,"^[2] making them preferable to costly, mechanically fragile PTZ cameras.

Nevertheless, 2- and 3-megapixel cameras are in the sweet spot of today's video solutions. Price pressure on IP cameras, storage implications for video captured by cameras larger than 5 megapixels, and IP network bandwidth competition with other services (including voice, video conferencing, software-as-a-service, and more) have allowed these 2- and 3-megapixel cameras to prevail in





volume. They offer sufficient detail and manageable amounts of data at an affordable or rather acceptable price.

Though IP has been gaining market share over incumbent analog systems, high-definition analog cameras now compete well with IP cameras up to 2 megapixels. In some applications, these highdefinition analog cameras may even work better, especially if legacy customers using analog aren't ready to make a forklift upgrade to IP. Hybrid solutions seem to be here for many years to come.

While proprietary open platform VMS innovation continues, customers are not willing to pay the higher price per license to support the cost. A telltale example of this phenomenon can be found in video analytics.

Questioning the Value of Video Analytics

Video analytics can offer immense value in the form of improving certain functions of a VMS, but overall it has not been the revolution many in the industry hoped it would be. For example, advanced motion detection helps reduce the number of people needed to monitor live video and increases efficiency, but at best it is a valuable add-on rather than a standalone solution. Facial recognition may assist in reducing the list of possible matches within a given sample, but other VMS and advanced data analytics resources and functions are needed to draw out the true value.

Popular movies and television shows misrepresent video analytics' capabilities, resulting in false expectations from end users. For example, recognizing the face of a criminal reflected in a puddle of water, zooming in on the face, and then using that video to detain the criminal isn't realistic in 2015. This would require an expensive, custom solution featuring a level of network and storage bandwidth, camera resolution, and data analysis that limits its availability to mainstream customers.

When it comes to video analytics, customers now have a choice. They can add a sophisticated layer of advanced video analytics or demand that basic analytics functions be included in their cameras or VMS. According to IHS, "For some time now, video surveillance device vendors have been embedding low-end video analytics applications in their devices and offering them as 'free' features...it's clear that vendors can no longer charge for basic algorithms."^[3]

A true advanced video analytics platform requires expert setup from the solution provider. While it may include impressive funcionality such as facial recognition, bag left behind, intrusion detection, tripwire, and more, it also comes with a high price tag and greater demands on network resources. Customers also need expert support after implementation to keep the system running and understand the frequent, often counterintuitive, updates. To date, few verticals can afford these additional costs for both the implementation and long-term support. Typically, organizations trying to use advanced analytics rely on government funding (e.g., security organizations responsible for borders, ports, and government buildings).

The market is trending toward basic analytics functions integrated into VMS and cameras as being good enough. However, this is resulting in more proprietary behavior because solution providers have tried to include basic analytics functions such as motion detection and reduction of false positives as a sales differentiator.

Since customers already expect basic analytics functions to be included – or at least to be affordable add-ons – solution providers continue to spin their wheels, wasting time on incorporating functionality in proprietary solutions that are no longer innovative. As a competitive differentiator in choosing a specific video platform, video analytics has had little impact to date.

Higher VMS Expectations

In addition to basic video analytics capabilities, many customers now demand that other former standalone solutions be included as standard in their VMS platform, such as Physical Security Information Management (PSIM). PSIM adds situational awareness to video surveillance and backs up that awareness with situation management tools to accelerate and improve response. Companies that used to specialize in PSIM only – as a complete solution or on separate capabilities of collection, analysis, verification, resolution, reporting, or auditing – have been forced to expand their platforms to include VMS or integrate with a full solutions vendor. Otherwise, they become obsolete.

As we see the video hardware market commoditize, successful companies will add value through software. Equipment vendors, distributors, and integrators in specific verticals can differentiate with more complete and rich software solutions within these verticals. "As the market becomes more commoditized, vendors are increasingly looking for ways to stand out from the crowd, either through product or service features, or with the help of channel solution partners."^[4]

"Siliconization" Driving Commoditization

Siliconization – defined as when valuable functionality becomes readily available on a silicon chip – has driven change in many industries. A complex network adaptor card became a simple LAN on a chip. Digital, analog, mixed-signal, and radio frequency functions became a system on a chip. Now, the functionality of an IP camera is available on a chip, and this siliconization is driving industry commoditization.

Commoditization is leveling the competitive landscape. Customers are not willing to pay for the extra features that some companies provide as "premium" when adequate features are available from other manufacturing platforms with aggressive pricing models. Consolidation will continue to be an industry trend as companies with economic models that don't address end user value and value creation may fall to the wayside.

According to Bill Bozeman, president and CEO of PSA Security Network, "Commoditization is the biggest problem facing today's security integrators." Large manufacturers use economies of scale to drive down prices, and lower prices will hurt video systems integrators' business. "You have to sell that many more cameras and card readers to create the same amount of revenue. There's a lot of danger there."^[5]

Consolidation and the Rise in Proprietary Behavior

The video surveillance industry has been primed for consolidation for years. The evolution from analog to IP (or hybrid) solutions combined with the need for economies of scale have formed an opportunity for larger

Companies to consolidate a fragmented industry. Customers demand end-to-end solutions that seamlessly integrate cameras, software, and other components, and consolidation addresses that demand. Referring to one of many recent acquisitions, Jeff Kessler, Managing Director for Institutional Research at Imperial Capital, said, "This has proved out our five-year thesis on the vertical structure collapse of the video industry where (mainly) standalone software management and camera manufacturers – no matter how well regarded and no matter their technological leadership – are increasingly seen as parts of a much larger value proposition in video at the enterprise, institutional, and critical infrastructure level."^[6]

This industry consolidation is also what's behind much of the proprietary influence on the so-called open platforms of today. When open platform camera manufacturers, access control companies, software developers, and integrators merge, the interfaces, drivers, and interactions are controlled by the dominant player, or "consolidator." Meanwhile, each proprietary have interface created by each player requires funding and expertise to keep updated, and the consolidators will need to accept these costs or try to pass them on to customers. Customer frustration grows because they must adapt to the interface of the most powerful player in the merger. Customers may find themselves at the mercy of a vendor they never worked with before, obligated to trust that the vendor is proactive about updates and patches for their system. In an industry where trust and security are key, this is a potential risk.

The consolidator expects value out of an acquisition and thus is likely to prioritize their own proprietary interface in order to gain more business. End users and integrators will be the losers here when they are locked back into a proprietary jail.

How to Move the Video Surveillance Industry Forward

The Standards-Based Video Platform

The only way to protect customers' investments and future-proof their IP video surveillance systems is to truly embrace open standards. Companies that want to survive the consolidation trend and achieve sustainable, profitable growth will need to build standards-based video integration platforms.

Free and uninterrupted access to the underlying code for camera drivers is a real strength of the true open standards approach. In-house or third-party developers can address bugs and issues immediately without needing to rely on a vendor, whose priorities and resources may not always align with customers. Standards-driven organizations like Open Network Video Interface Forum (ONVIF) and the Physical Security Interoperability Alliance (PSIA) are committed to the adoption of IP in the security market and ensuring interoperability between IP-based physical security products regardless of the manufacturer. These groups are open industry forums and global consortiums focused on the development of a global standard and promoting interoperability.

Though they have been around for years, these organizations and their standards have unfortunately not taken off as they should had the industry truly embraced open standards. Ironically, the slow-down in innovation in the industry has given these forums the time they have needed to tighten standards, priming the industry to finally embrace a true open standards-based platform. Vendors within the physical security industry need to start pushing for this interoperability and utilizing development resources on standards-based integrations rather than on their own proprietary integrations or the whole industry loses. The end goal should be to empower the customers and provide open standards-based solutions that are truly open.

Offering free and uninterrupted access to the underlying code for proven and tested camera drivers is a springboard for reigniting innovation at the edge. "It's a huge ecosystem of innovators who are no longer competing for scarce resources but rather sharing knowledge with others to create new solutions and opportunities for others to benefit from these resources."[7] Moving forward, companies that will thrive in the IP video surveillance industry will innovate on standards-based video platforms. The cost and time-to-market benefits are necessary to keep up with the Internet of Things (IoT), 4K Ultra HD, HD over coax, body cameras, video surveillance as a service (VSaaS) and other new technologies that customers will soon expect to be standard functionality of their video surveillance platform and other physical security applications.

Developing a Team-Ecosystem

There is a huge ecosystem of innovators who, given the ability to truly partner with others, can create new solutions and opportunities. IP video surveillance vendors hold the key to embracing the open standards to create these partnerships. Vendors can make their software development kits (SDK) widely available in open-source bodies, thus enabling more companies within the ecosystem to differentiate the integrated systems. Using IP cameras as an example, a vendor who opens up their SDK allows integrators and other partners to write simple on-camera programs in order to create differentiated offerings and custom integrations for their customers.

The creation of this "team-ecosystem" – inclusive of camera manufacturers, software developers, value-added resellers, distributors, access control companies, building management, IT, and many more – increases the likelihood that all the

components essential to the development of a successful integrated security solution will work together as a true open standards-based solution. Customers will have access to systems tailored to their needs without needing to succumb to vendor lock-in.

Conclusion

As Memoori Business Intelligence states in their article, "The only long-term solution is to innovate, improve the quality and value of products and target growth markets."^[8] Embracing open standards using open-source forums can foster this innovation. Instead of creating another proprietary solution comparable to a solution that already exists in the marketplace, industry leaders can channel research and development resources and investments toward other more creative work. Video surveillance companies can adopt open standards at a lower cost and focus their energy and efforts on bringing innovation to the industry.

Standards-based video integration platforms built according to tighter standards from ONVIF and PSIA offer the potential for IP video surveillance companies to create systems that are both flexible and future-proof. With innovation currently lagging, teamwork splintered, consolidation and commoditization continuing, and ever-increasing customer expectations, standards-based video integration platforms provide the video surveillance industry room to grow while allowing customers greater agility and flexibility. Those who emerge as industry leaders will be those who embrace a truly open and collaborative ecosystem – the Team Ecosystem.

References

- For more information, visit www.innovationinthecrowd. com/open-platform/
- [2] Source: "Defining HD and megapixel camera resolution," June 21, 2011
- [3] Source: "Video surveillance trends to look out for in 2014," December 18, 2013
- [4] Source: "Top Video Surveillance Trends for 2015," January 14, 2015
- [5] Source: "The Threat of Commoditization And New Opportunities," September 29, 2014
- [6] Source: "My Point of View: Industry Landscape Shifts with Increasing Frequency," March 23, 2015
- [7] Source: "Open Source: A Platform for Innovation," Wired, November 2013
- [8] Source: "The Chinese Video Surveillance Market No. 1 Opportunity of No. 1 Threat?" January 13, 2015

CONTACT Vicon Industries, Hampshire, UK www.vicon-security.com · sales@vicon.co.uk

Security Products

Video Compression Technology

Reducing storage requirements by an average 50 percent in video surveillance applications, Axis' Zipstream technology analyzes and optimizes the network camera's video stream in real time, is fully compatible with the H.264 standard and can be used with the company's latest cameras and contemporary video management software available on the market. A new module inside the network camera's video compression engine ensures important details in the image get enough attention in the video stream while unnecessary data is compressed. Important forensic details like faces, tattoos or license plates are isolated and preserved, while irrelevant areas such as white walls or lawns are sacrificed by smoothing. www.axis.com

Four and Eight-Channel Encoders

Idis has extended its surveillance line-up with four and eight-channel H.264 video encoders, allowing customers to integrate Direc-



tIP with their existing analog systems. Customers can add IP cameras, network video recorders (NVRs), video management software as well as analog cameras to benefit from DirectIP high definition (HD) and network surveillance. The units support four audio inputs and have the ability to connect to existing PTZ cameras using 87x RS485 telemetry protocols. www.idisglobal.com

Compact Video Door Entry Station

Talkaphone has introduced a compact video door entry station that features a contemporary new design and IP66 weather rating for tough environments. The embedded wide-angle megapixel camera is ONVIF compliant and offers a clear view of the caller. Unlike closed intercom systems, this compact video door entry station works with major video management system (VMS) vendors and offers greater deployment flexibility to institutions and corporate facilities where it is necessary to retain video evidence. The compact video door entry station is SIP compliant and allows other IP devices to be connected directly into the unit and share network connectivity. www.talkaphone.com

Advanced Network Camera

Vivotek launched the IP816A-HP, a professional 2-Megapixel box network camera with advanced image processing technologies such as WDR Pro and SNV (Supreme Night Visibility), making it suitable for



monitoring traffic and tunnels. The IP816A-HP is able to provide superior visibility in environments with high contrast lighting conditions. 3D Noise Reduction technology suppresses sensor noise, thus reducing bandwidth consumption and enhancing image detail. It is equipped with a Piris lens, which maintains the iris opening at an optimal level, resulting in both better sharpness and depth of field. A remote back focus system helps the installer to adjust focus more precisely. www.vivotek.com

Collaboration For Enhanced KPI Monitoring

The combination of Vizualize technology with Wavestore's video management software (VMS) enhances the ability of businesses to increase operational efficiency and enhance customer satisfaction. Vizualize sensors, intelligent devices, analytics and dynamic reporting solutions, when working alongside Wavestore's open platform VMS, can provide a highly accurate 3D edge-based people counting system, for example, and the facility in retail environments for shopper tracking, in-store audience measurement and product interaction monitoring, which deliver an insight into virtually every element of shopper activity. **www.wavestore.com**

HDCVI Lite Series Extended

Dahua Technology has introduced a 1080p HDCVI solution with a more affordable price, which consists of 1080p 1200-Lite-series HDCVI cameras and S2-series tri-brid DVRs. The camera series includes IR-bullets



and dome cameras; fixed and vari-focal lenses are optional. The camera uses a powerful chipset, using an advanced sensor and ISP, which not only provides high image quality with vivid color and abundant detail but also offers a wider angle of view. The tri-brid S2-series DVRs can support a long transmission distance up to 1,100 meters for 720p with clear images and 800 meters for 1080p; it also supports 4G/Wi-Fi, making transmission smoother and faster. www.dahuatech.com

Marketing and Security In One Product

Privendo marketing software by Vidicore is an effective tool to analyze customer behavior, improve safety and help retail store owners optimize their business. The number of customers in different areas at different times can be identified and how long they dwell in store, in a specific department or in front of a specific product. It can differentiate between product interest and engagement. The collected data can be shown in real time in diagrams, graphs or tables. Heat maps and hot spots show at a glance which parts of a store are most frequented and mostly ignored by customers. Using the results, store managers can implement optimization measures immediately. www.privendo.com

Increased Flexibility of Mobile App

Ipolis Mobile for Android and Apple iOS devices has been upgraded and can now support playback directly from SD cards inserted into Samsung Techwin cameras. The added flexibility will



interest users who wish to remotely retrieve recorded video of specific incidents captured by a small number of cameras installed in their home or working environment, as there is no need for a DVR or NVR to record and store the video. The free app can be downloaded from the Android Play store and iTunes. Users are able to view streamed video from their selected camera via a wireless or 3G network. www.samsung.com

Full HD PTZ Camera

The Ulisse Compact HD is an outdoor network PTZ camera for 1080p/60fps Full HD. It now incorporates a 30x optical zoom lens, able to accurately identify specific details of a scene and deliver bright images. Thanks to the higher sensitivity, higher gain level, improved WDR, defog function and improved auto-focus speed, this

PTZ camera provides good images even in extreme low light conditions. With the help of the optional IR LED illuminator, sharp images of the monitored area during nighttime enable the detection of a figure in the dark up to 200 meters away. A built-in wiper keeps the front window clean in any weather conditions. www.videotec.com





At its annual MIPS conference Milestone System shared expertise, honored partners with awards and discussed innovation with a broad audience. Milestone held its 10th annual MIPS partner conference in Las Vegas, Nevada, March 24 to 26. It was their largest-ever gathering with close to 500 attendees and 50 exhibiting companies in the Technology Showcase that demonstrated integrated solutions for enhancing safety and optimizing business.

CEO Lars Thinggaard and CSMO Kenneth Petersen welcome their partners to MIPS 2015

VIDEO MANAGEMENT

Winning Together

Milestone Integration Platform Symposium Celebrates Winning through Partnership

Over the last 10 years the industry has seen MIPS grow from a small manufacturer event to one of the most esteemed industry events of the year. The central theme of this year's event was 'Winning Together – The Power of Partnership". MIPS 2015, as in the previous years, was action-packed and filled exciting opportunities for Milestone's eco system partners and attendees. This year, more than before, the focus was on the importance of building powerful partnerships and the significance of the value-adding partner ecosystem. During the event, attendees heard from different speakers on how we will be directing efforts towards focusing even more on our partners and making 2015 a partner-focused year.

CEO Lars Thinggaard and CSMO Kenneth Petersen welcomed the distributors, system integrators, end users, software solution partners, camera manufacturers and storage providers to the event that took place at the Cosmopolitan Hotel's new concert venue called The Chelsea. Speakers, industry panelists and interactive breakout sessions highlighted how the Milestone VMS open platform enables ongoing innovation and efficiency.

Demonstrating Expertise

The Utah Transit Authority, hhgregg retail chain, lberdrola power utilities management, a major metropolitan police force, and Hyatt Hotels presented the solutions that meet their security and business challenges. Each illustrated how the IP networked video systems built with the Milestone open platform are reliable, flexible, and scalable as their needs change and grow.

A lively industry panel discussion involved five leading camera manufacturers: Axis Communica-

tions, Arecont Vision, Bosch, Samsung Techwin and Sony. Top managers from these companies shared their opinions on the future of the industry and ideas on 4K expectations, recording at the edge, cloud technology progress and its potential impact.

Partners and Their Technology

The Technology Showcase included Milestone Partners exhibiting every kind of integration with the open platform VMS:

- Network camera manufacturers: Arecont Vision, Axis Communications, Bosch, Canon, Lilin, MicroPower Technologies, Panasonic, Pelco, Samsung Techwin, Sentry360, Sony, Vicon, Videotek and Vivotek;
- Server and storage providers: App-Techs, DDN, EMC, HP, IBM, Iomnis, Oracle Storagetek, Pivot3,

Quantum, Razberi, Seneca, Spectra Logic, Veracity;

- Access control vendors: Axis Communications, ISONAS, Keyscan and Open Options;
- Analytics and biometric solutions from Agent Vi, Ganetek, Ipsotek, Mango & Mate, NEC Corporation and VCA Technology;
- Perimeter scanners and GPS locators from SICK Sensor Intelligence, Optex and Savvux Technology/The Hawkeye Effect;
- Display, infrastructure, device and software applications from BriefCam, Moxa, RGB Spectrum and Snap;
- Wireless technology from Digital Barriers and Fluidmesh;
- Distribution and security service partners ADI, NMS, ScanSource and SYNNEX.

Award Night

"The constantly growing number of Milestone Solution Partners illustrates that winning through partnerships is the key to solid growth through the freedom of choice provided when doing business with our open platform," said Lars Thinggaard, President & CEO, Milestone Systems. "The multi-faceted expertise throughout our global ecosystem is enabling the industry to continually improve safety and security as well as efficiency in business operations." Milestone Partner Awards were announced on the final night to celebrate stellar performance in sales, marketing and innovation for the year 2014:

- National Partner of the Year: Johnson Controls
- Distributor of the Year: Anixter
- Technology Partner of the Year: EMC
- Integration of the Year: Isonas
- Solution Partner of the Year: Sick
- Camera Manufacturer of the Year: Arecont Vision
- Regional Partner of the Year: Continental Computers/WLANmall
- Installation of the Year: Mainline Information Systems, WinStar Casino

The Chickasaw Nation WinStar World Casino and Resort installation is a 4,000 channel system at the customer's flagship location with more than 7,400 electronic games, 100 gaming tables and 50 poker



Scott Schafer (third from right) and his team from Arecont receive the 'Camera Manufacturer of the Year' award from Kenneth Petersen

tables – the largest casino in North America. The Milestone XProtect video management system is fully virtualized, utilizing two petabytes of storage with system fail over to ensure gaming regulations are met and zero downtime is achieved.

What's New in 2015?

In one of the keynote speaches Milestone's new CSMO, Kenneth Hune Petersen, who joined the Milestone team in 2014 unveiled the plans and strategies to work in better proximity with our partners to make the open platform an even bigger reality. There were additional breakout sessions, which provided an exclusive sneak peek into what Milestone has in store for the market for the rest of the year. MIPS 2015 saw a new and solution oriented series of technology-based breakout sessions being held.

Updates from Milestone's Research and Development and the latest products and tools in Milestone Husky NVR series were just some of the areas of emphasis in these sessions. The popular sleek network video recorders (NVRs), which come pre-installed with the Milestone VMS, are launched in April with significant increases in internal storage, enabling longer video retention and continuous high-resolution recordings. "We recognized the shift in the market for integrated NVR solutions," said Jay Shah, Global Business Development Director, Incubation and Ventures. "Our Milestone partners and customers asked us for more storage with the Milestone Husky Series and we will deliver."

All in all the attendees got a heads up on the near term possibilities for customer-centric solutions based on the open platform technology. But MIPS was not just about the products. The event also featured exciting new business initiatives and updates from the respective Milestone departments. The business track breakout sessions focused on support and auxiliary services, which are being introduced to help our partners take the open platform technology even further.

> CONTACT Milestone Systems A/S, Broendby Copenhagen, Denmark Tel.: +45 88 300 330 · www.milestonesys.com





PHYSICAL SECURITY INFORMATION MANAGEMENT (PSIM)

A Centralized Management Platform for Diverse Systems

Over the past five years, UAE authorities introduced new regulations and international standards in order to modernize security systems. Dubai Law 24-2008 was the first comprehensive set of regulations based on international standards and the new realities of security threats. In 2013, the National Bank of Abu Dhabi (NBAD) implemented the most comprehensive and advanced Security Command and Control Center in the MENA region, built around the WinGuard software platform from Advancis. The most often cited reason for the previous lack of investment in security in the UAE was that it was considered a safe, low threat country. Without mandates and directives from authorities, previous investment in security was minimal. Suddenly the NBAD had to comply with these new security regulations, requiring retrofitting or replacing the entire IDS and video surveillance systems.

Target was to create a vision, strategy, solution and support team to not only meet the current challenges, but to place the NBAD at the pinnacle of security in the Middle East and the West-East corridor which the Bank intends to dominate in the coming decades.

In 2013, the NBAD implemented the most comprehensive and advanced Security Command and Control Center (SCCC) in the MENA region. Whilst many other institutions may already have robust components of security, the NBAD system is a true Physical Security Information Management (PSIM) system to centralize and control all components via a single interface. The chosen WinGuard software platform reaches far beyond the usual PSIM scope. As a PSIM+ system, it comprises the complete security and building management as well as the communication and IT infrastructure.

Now Ranked as one of the 50 Safest Banks in the World for the last five years, the Safest Bank

in Middle East and the Safest Bank in Emerging Markets 2013 and having won the Sheikh Khalifa Excellence Award in Finance in the Diamond Category in 2013, building the most secure branch network in MENA was the goal for the NBAD.

Functional Requirements

In order to establish the SCCC properly, a number of criteria had to be considered. It was specified that the PSIM should be manufacturer independent and highly available, and able to control all fire and police alarm panels via one centralized user interface. The solution should be flexible so that it would leverage existing investment in infrastructure, have a low operating cost and capital investment while meeting or exceeding functional requirements. As a busy bank in the public view, business interruption during deployment should be minimal or avoided entirely. Further, only a small team of between two and seven staff operating 24/7 should be required for the monitoring and processing of alarm events, the dispatch of vendors and the tracking of break-fix activities.

Sudden changes in regulations by the Central Bank and Ministry of Interior could cause an alteration of priorities during implementation and maintaining compliance would be essential. The upgraded IDS for all branches would be based on European standard EN 50131 – Grade 3 and

a centralized dispute and fraud investigation facility would be realized using March Networks Searchlight software and their DVRs and NVRs. This would allow 100% retrieval of video evidence linked to transactions in the core banking system.

Manufacturer Independent

The Bank investigated fully integrated solutions from single manufacturers, but those solutions required the NBAD to also install only their hardware and software. As the Bank has a very large and diverse operating environment with tens of thousands of devices, full replacement to a unified product was cost prohibitive. Therefore, one of the strongest factors influencing its decision to select WinGuard over other products is its manufacturer independence. Having interfaces to numerous security, building and information management systems and with new ones constantly being developed, the product is able to control any connected device.

The SCCC is a model of efficient space management. The dominant feature is a video wall comprised of a 5x10 matrix of Christie Microtiles. These run cool with no additional air conditioning required. They also deliver the most consistent image quality over time as the tiles communicate to each other via infrared ports on the four sides of each tile. The six operator stations and supervisor desk were designed by Lund and Halsey, who also provided 24-hour chairs. The SCCC management system provides the ability to connect all fire panels to the SCCC. Within a few seconds, it can be determined whether an alarm is real and contact made immediately with the Civil Defense. Further, a complete floor plan with the location of the fire, the nearest entrance and firefighting equipment can be sent to Civil Defense before they leave the station.

One vital security feature is the storage of multiple CCTV snapshots at the time of transactions in the data center. Using the Searchlight software, still images are stored in a secure data center while maintaining 180+ days of video on each DVR/NVR. If there is a hardware failure or maybe even the theft of an ATM, the NBAD will not lose 180 days of video recordings to provide evidence. The chosen solution minimizes bandwidth and has no impact on normal operations with many ATMs communicating by GPRS, while securing data to Payment Card International data security standards.

Operating Cost

The integrated building and communication management can also regulate lights and HVAC, providing control over systems that were either unmanaged or locally managed by a building management system. Over the next years, the NBAD will roll out additional functionality in order to reduce operating expense. A complete ROI will be achieved in a very short time. One additional benefit is support of the NBAD Sustainability Program by reducing the bank's environmental impact.

In less than six years, the NBAD will expand operations into more than 20 new countries along the West-East corridor and expand the SCCC operations beyond the borders of the UAE. The WinGuard platform as a flexibly extendable PSIM+ system will constantly adapt to increasing requirements, setting a new benchmark for this business sector.

CONTACT

Advancis Middle East GmbH Abu Dhabi, United Arab Emirates Tel.: +971 2 5102 425 info@advancis.ae www.advancis.ae

C SUN

IR beams are completely

e.g. car's headlights

obstacles are present

IR'₅(¹)

X SEA

hardly reduce field

maintenance costs

DAGC

immune to direct solar rays or

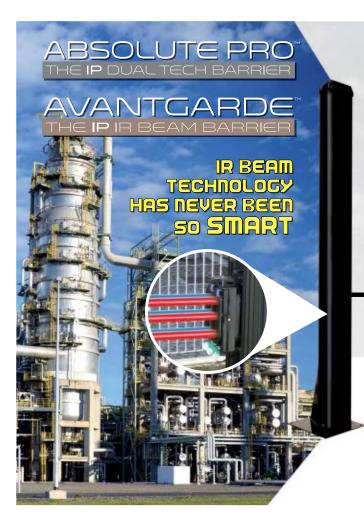
Any IR beam can be disabled

by software when temporary

Signal Efficiency Analysis:

Digital Auto Gain Control:

increases the immunity against any infrared radiation



Optical Data Check: IR beams are optical synchronized and not wired

1.5-DS

Up to 5 Detection Scenarios can be programmed in order to reduce nuisance alarm rates

Target Direction Analysis: double alarm information (crossing left-right / right-left)



PERIMETER PROTECTION SYSTEMS

SICURIT Alarmitalia S.p.a. Ъ

- Via Gadames, 91 20151 Milan ITALY a division
- T: +39 02 380701 F: +39 02 3088067
- E: export@sicurit.it I: www.sicurit.com

VIDEO SURVEILLANCE

A New Perspective

Value Creation by Video Surveillance: IP-based Video Surveillance Meets Business Intelligence

Video surveillance has long been a widespread and proven method of preventing and analyzing crime. Nevertheless the purchase of a video surveillance system is all too often viewed as as a pure cost factor and a necessary evil. And even though especially IP-based video surveillance technology offers so much more: it can also be used to extend the value chain. An article from Andreas Conrad, Head of Product Management and Marketing at SeeTec.

Analog video solutions were mostly proprietary and isolated systems – they either could not communicate at all or only be connected to other systems and solutions with great difficulty. In contrast, video technology today offers a much higher degree of openness and connectivity – and not just to systems in the security environment. This has been made possible by the convergence that the move to IP technology has brought with it: networking makes the simple exchange of signals and events possible. In addition, unified data formats such as XML have established themselves that also make it simpler to set up the data communication between different applications – and this is where IP-based video surveillance meets Business Intelligence.

The term ,Business Intelligence' describes procedures and processes for the systematic gathering, evaluation and presentation of business data with the help of IT-based solutions. The aim of Business Intelligence is to gain knowledge that makes it possible to improve the quality of operative and strategic decisions. This happens with the help of analytical concepts and the corresponding software tools that combine and evaluate the data about one's own company, its competitors or market developments with respect to the company's objectives. The knowledge gained enables companies to make their business processes as well as their customer and supplier relations more profitable, to reduce their costs, minimize their risks and increase their added value. Business Intelligence consists of a range of analytical rules and tools that draw from a Data Warehouse of parts thereof.

In the physical world, seeing is what counts

In contrast to the data-based view of Business Intelligence, events in the physical world are best seen with the eyes – and thereby with the use of video technology – captured, supported and controlled. Traditional system in the field of Business Intelligence have not had this visual access to date. With the help of intelligent analysis, modern video technology now makes it possible to extract information from images that can be used elsewhere in IT systems. And in reverse, data from IT systems can be complemented by images of procedures that describe them. The intelligence lies then in the association of that which has been seen (or recognized) with additional information. Two completely different product and market approaches can be brought together in this way and permit us to view the subject of video technology from a totally new perspective.

Whether in retail, at fuel stations, in logistics or in banks: everywhere that business-relevant data is generated in processes and video images or the significance of this data is supported or increased by information gained from image streams, there is a commercial value for the end user. Finally it is possible to talk about that eternally popular subject of ,Return on investment' and video technology in the same sentence.

Fuel theft, disappearing packets, customer analysis

So that's the theory – here are some examples: the pump at a fuel station can be deactivated if a known fuel thief stops in front of it; a packet can be found again in a warehouse where archived images from multiple cameras are used to follow its progress from its last bar code scan to its resting place; the demography of buyers of particular goods can be analyzed for marketing purposes through a combination of till data and video images; with claims for defective products, the production chain can be looked at closely and parameters such as material, tools and processes be checked. The interaction of ,Video Surveillance' and ,Business Intelligence' gives us ,Business Video Intelligence'" – aka BVI.

From a technical point of view, applications built around the subject of BVI usually consist of a number of components. One of these are the sensors that, apart from the images and imagerelated information (for example metadata from video analysis), gathers the business and process information such as till, ERP, warehouse or weather data from other systems and pass this to a highperformance database. In the ideal case, the sensors are flexibly integrated into the BVI solution via a driver-based process.

As the central element of the BVI application, the database must be able to absorb large volumes of data in the form of video images in real time as well as numerous other events (such as transactions or scans). Using the example of a large packet distribution center that often has many hundreds of cameras and in which hundreds of thousands of packets are scanned daily at multiple points in the process, the technical requirements of such a database become clear. In addition, it's purpose is to logically link this data and to make it available to the users. The ,intelligence' of a BVI solution lies in this rule or scenario-based linking and evaluation of the information. Querying and display of data can by done through corresponding query forms, via individual or regularly-generated reports as well as via selfupdating dashboards in real time. It is critical that the type of data presentation is oriented towards the needs of the user and provides the option of flexible configuration – the best solution allows users to define their own reports and dashboards without any programing knowledge.

Wider Focus

Compared to classic video security technology, BVI widens the focus of the available information: as well as object and event-related information (such as damage caused to an individual packet in the distribution center) aggregated information emerges that allows empirical analysis (for example, the comparison of customer or visitor numbers over the period of a week or a year). This in turn alters the profile of the user - BVI solutions are then more likely to be used by an Operations Manager or Shop Manager. And this in turn has an effect on the media and devices used to view the data: in addition to the classic PC workstation we must add mobile devices such as tablets or smart phones. Data can also be brought into other information systems through ,Widgets' (for example, Management Cockpits). So it makes sense to use multi-platform web technology through which search masks for metadata, diagrams and reports and details about individual events can be presented equally well.

Open and easily-configured interfaces that provide communication with third-party systems and initiate subsequent actions (such as automatically locking the pump in front of the fuel thief) complete the functionality of a BVI solution.

Even if the use of Business Video Intelligence appears somewhat complex and visionary at first glance, the advantages are obvious, both for the end user as well as for the system integrator. By utilizing new or existing video security systems, BVI enables the user to generate additional value that will look after the amortization of the installed technology. The system integrator can also differentiate himself from the competition through his competence in planning, adaptation and implementation of BVI solutions, and thereby open up new business potential as compensation for the falling margins in standard business.

Andreas Conrad, Head of Product Management and Marketing at SeeTec

CONTACT

SeeTec AG, Bruchsal, Germany Tel.: +49 7251 9290 0 info@seetec.de · www.seetec-ag.com

Security Products

more info at www.PRO-4-PRO.com/security

Integration for IP VMS Applications

Mobideos has announced that its ONVIF-compatible, UCNE IP and cloud-enabled surveillance platform now integrates with Ocularis 4.1 video management software (VMS) solutions from OnSSI. The IP video surveillance and security platform combines powerful network video record-



ers (NVRs) with physical security information management (PSIM) functionality. The integration of Ocularis with UCNE ensures that video images from any analog camera or DVR can be obtained and stored for network-based VMS applications. www.mobideos.com

Vehicle-Mounted Camera

The Axis P3905-RE camera is an outdoorready addition to the family of compact, rugged and discreet cameras from the company's P39-R network camera series. They are all specially designed for onboard video surveillance in or on buses, trams,



subway cars and other rugged environment vehicles. This model is designed to be mounted on the exterior of a vehicle, increasing safety onboard and to simplify incident investigations. The camera can be used for rear view surveillance, along the side of the vehicle, mounted over a door or forward-facing. It has passed the demanding IP6K9K tests and withstands vibrations, shocks, bumps and temperature fluctuations as well as vehicle washing. www.axis.com

Video Planning Tool Extended

The ,IP Video System Design Tool' from JVSG is a software program that is used widely for planning video surveillance projects. An extensive product database and clear 3D views provide help in choosing the right cameras and their optimal installation locations. The latest version of



the tool now supports Dallmeier Panomera multifocal sensor systems. With just two of these cameras it is possible to cover a huge area of 100x100 meters with an image quality sufficient for people recognition. These and other megapixel cameras require proper planning and the design software helps to design efficient video surveillance systems quickly and easily. **www.jvsg.com**

Ultra-HD Fisheye Camera With De-Warping Software

The Grundig Fisheye camera is based on Sony's 6MP CMOS sensor with Ambarella S2 digital signal processing. The GCI-M0566F camera has 360° panoramic and 180° viewing options in image resolutions of up to 6MP, 3072 x



2048p at 25FPS. It provides ultra-HD images of a site and is suited to retail environments. Six IR LEDs are included in the design giving true day/night functionality with 0.2/0.02Lux sensitivity. Built-in de-warping presents corrected video streams to NVR or VMS control and recording solutions. Further video stream options include 4MP at 25FPS or 2MP at 50FPS, with simultaneous quad video streams at lesser resolutions. www.grundig-security.com

SECURITY

Eskom is a South African electricity public utility established in 1923. It is the largest producer of electricity in Africa, and is ranked seventh in the world in terms of power generation capacity, and ninth for sales. Eskom has engaged in the construction of the Medupi Power Station near Lephalale in the Limpopo Province, South Africa. This dry-cooled coalfired power station is expected to become the largest in the world, comprising six 800 MW turbines for an accumulated capacity of 4800 MW.



VIDEO SURVEILLANCE

Great Power, Great Responsibility

Surveillance System Overhaul

The sheer size of Medupi Power Station presents numerous challenges in terms of security. Primarily, the site required a comprehensive solution that could not only effectively operate over extended distances, but also concurrently produce highresolution video feedback. Moreover, the lack of onsite network infrastructure amplified the difficulty of producing an effective solution. Stallion Security, the original surveillance system integrator for Medupi Power Station, was re-commissioned in late October, 2014 by Eskom to overhaul the initial onsite surveillance system completely. Stallion's proposal was extensively review by the technical specialists of the Medupi Project Team, whom outlined several non-negotiable requirements. These requirements included the deployment of an ultrahigh-resolution imaging system capable of not only surveying the entire site, but also zooming in on targets at a distance.

Seamless Integration

To fulfill Stallion's proposal, two hundred Vivotek cameras, comprising the FE8174V and SD8363E models, were commissioned and installed in specific areas of the power station to monitor smoke stacks, conveyors, and canteens in the power station.

A total of 131 FE8174V cameras were commissioned. This model features a 5MP CMOS sensor capable of producing 1080p Full HD images at 30 FPS. Equipped with a 1.5 mm fisheye lens for 180° panoramic view (wall mount) or 360° surround view (ceiling/floor/table mount) without blind spots, the camera is able to provide coverage of wide, open area like Medupi Power Station. Moreover, the FE8174V features a removable IRcut filter, maintaining clear images 24 hours a day. The FE8174V's IP66-rated and IK10-rated vandalproof housing effectively provide robust protection from, rain, dust and physical damage. The camera supports industry-standard H.264 compression technology, alleviating considerable strain on the already-lacking network infrastructure of the power station.

A total of 69 SD8363E cameras were commissioned. This model offers 1080p Full HD resolution at 30 FPS. The camera is equipped with a 20x optical zoom lens, producing images with exceptional quality, even when zoomed in at close range. Similar to the FE8174V, this model also supports industry-standard H.264 compression technology to conserve bandwidth. In addition, the IP66and NEMA 4X-rated housing protect the camera against rain, dust, and corrosion, and increase the camera's durability against temperature fluctuations, rendering this model perfect for outdoor applications.

The cameras are connected to Milestone Systems XProtect Corporate. XProtect Corporate is IP VMS designed for large-scale, high-security deployments that demand high-performance surveillance. Using the software's single management interface, system administrators can efficiently control all cameras and security devices regardless of the system's size or if it is distributed across multiple sites. For systems demanding supreme situational awareness and precise response to incidents, XProtect Corporate has interactive maps linked to alarms and included support for XProtect Smart Wall. Furthermore the system can easily be adapted to specific and changing needs for video intelligence. The open platform technology enables optimized support for advanced cameras and the ability to use extension modules enabling functions like video analytics.

Customer Feedback

The diversity and flexibility of Vivotek products have allowed Stallion Security to repeatedly develop comprehensive and customized surveillance solutions to satisfy the unique requirements of Eskom. In addition, the holistic, integrated solution outlines the ease of the implementation and the use of the Milestone XProtect Corporate software with Vivotek cameras, making the holistic solution for Medupi Power Station a sustainable, scalable system for their future growth needs. The Medupi Power Station can easily expand its system based on situational and financial requirements in the future. Mr. Alvin Flaum, technical director at Stallion, reports, "The client is extremely happy with the quality of images produced by the cameras."

CONTACT

Vivotek Inc., Taiwan Tel.: +886 2 8245 5282 sales@vivotek.com · www.vivotek.com

Security Products

Multimedia Conference Device Receives Design Award

The annual German Design Awards to distinguish outstandingly well-designed products and excellence in communications design are among the most coveted prizes on the global design scene. The Multimedia Device



of the DCN multimedia Conference System from Bosch is a winner of the 2015 awards in the ,Excellent Product Design' category. Featuring an intuitive user interface, a discreet microphone and excellent speaker quality, the trend-setting conference system's Multimedia Device impressed with the quality of its design and innovative technology. It unites multimedia, Internet and excellent sound in one system and uses standard Ethernet for flexibility, ease of installation and maintenance. Using a 7-inch capacitive touchscreen, participants can retrieve the information they need at all times. The system is built on OMNEO media networking architecture. **www.boschsecurity.com**

Dual Technology Perimeter Protection

The Avantgarde barriers from Sicurit are high-security, fully digital and modular IR beam barriers designed for long range outdoor surveillance (up to 200m coverage between transmitter and receiver unit). They feature the company's bi-directional IR beams with optical synchronization, stacked in discrete and rugged extruded aluminum columns. At the heart of the barrier is the control for each IR beam which in turn is interfaced towards an internal analysis unit. This is able to manage up to 18 IR beams stacked into columns up to 6m high. The system is available in virtually any size in terms of column height and the number of IR beams, which is directly related to the degree of security required. Thanks to the internally integrated web-server, installations can be easily configured and diagnosed remotely via a LAN connection. Without any additional interface, the barriers can be easily integrated into existing or new IP backbone networks in virtually any location, providing remote accessibility for system maintenance and diagnostics. The system provides not only simple alarm information but also target direction information (left > right or right > left) which makes target tracking with perimeter CCTV cameras easier and more accurate. As each IR beam inside the column is equipped with a microprocessor, individual crossing parameters can be set and up to five multiple intrusion detection scenarios can be configured for better filtering of nuisance alarms. These can be caused by random animal activities, such as flying birds or small wild animals, but the system nevertheless maintains a high capability of real intrusion detection. Thanks to the already patented bidirectional IR beam technology, the system is completely immune to direct solar rays or car headlights that are often the cause of nuisance alarms in conventional IR Beam barriers. The system can adapt itself to any drastic environmental changes such as heavy snowfall, growing grass or sand storms. It does this by simply disabling those IR beams temporally covered by high layer of snow or sand, without any additional commands from the control room. Other circumstances may require remote IR beam disabling, for example to cope with temporary obstructions. The Signal Efficiency Analysis function continuously monitors the optical communication stability and efficiency of each IR beam which could decrease, for instance, due to powder on lenses, dirty plexiglass or any other factor that can cause optical communications reduction. An alert is sent if the signal decreases below a threshold level. Data communication between slave (TX) and master (RX) units is optical and does not require any SYNC cable, which would make installation procedures longer and more costly. The security of the optical data transmission is guaranteed by continuous regeneration of specific codes protected with checksums. www.sicurit.it

Speed Dome Camera

Samsung Techwin has introduced a 1.3MP 43x PTZ network dome camera with autotracking. The launch of the SNP-5430H follows on from the introduction in July 2014 of the SNP-6320H 2MP Full HD 32x optical zoom PTZ speed dome, which also features auto-tracking. Both models are weatherproof, and fitted with heaters powered by PoE+ to withstand extremely low temperatures as well as digital image stabiliza-



tion which negates the effects of vibration. They provide users with highperformance video surveillance options for external environments such as airports, ports, car parks, industrial estates, retail parks and a wide range of other applications where high performance PTZ functionality is required. The auto-tracking feature allows operators to monitor the movement of people or vehicles whilst remaining hands-free to control other cameras. These two cameras can capture images at an ultra-fast frame rate of 60fps. Multiple streams can be transmitted at a variety of frame rates and resolutions to any PC on the network or other devices such as smartphones and tablets, whilst utilization of the latest version of H.264 compression minimizes latency.

www.samsungsecurity.co.uk

Camera Range Upgraded

Arecont Vision, the supplier of IP megapixel camera technology, has added a number of significant features to its popular Megaview 2 true day/night bullet-style megapixel cameras. These



include the company's STELLAR (Spatio TEmporal Low Light ARchitecture) low light technology to reduce motion blur, noise and storage requirements, enhance contrast and produce color imaging in near complete darkness. Also included are optional on-board storage, Corridorview for narrow hallways and non-integer scaling to scale images to different resolutions down to 128x96. To reduce the risk of losing important data from short network outages or to help reduce network strain, the camera includes local storage supporting up to a 32 SD/SDHC card. The new cameras seamlessly integrate with a wide range of third-party providers, since they are PSIA and ONVIF conformant. **www.arecontvision.com**

Network Camera for City Surveillance

The Axis Q1635 indoor network camera offers enhanced image quality, with less noise and motion blur due to its large 1/2 inch sensor. The camera is ideal for meeting city surveillance challenges, day and night, and



can be installed outdoors when placed within the T93F housing series or another suitable outdoor housing. It is the company's most light-sensitive 1080p HDTV network camera to date. Featuring improved near infrared (IR) sensitivity in a range where the human eye cannot see, the camera delivers extremely high-quality b/w images in situations with very little or diminishing visible light. The camera's features for optimizing image quality include a wide dynamic range, forensic capture, the manufacturer's Lightfinder technology, electronic image stabilization, shock detection and defogging as well as 50/60 frames per second in HDTV 1080p resolution. www.axis.com

dasi

Teamwork

for many years.

NYRR hired a strong team of leading security industry partners. Virsig configured and deployed a wireless network in and around Central Park, including the marathon's finish line. The network consisted of the latest Sony network surveillance cameras, and Ethernet transmitters provided by

overview for ensuring safety at this huge event.

Tall trees that line the curvy roads and path-

ways in Central Park do not provide a clear line

of sight, and often runners are hidden from the

view of medical and safety personnel responsible

for responding to emergencies. With 50,530 fin-

ishers and an estimated two million onlookers in

2014, the TCS New York City Marathon was the

world's largest ever. Tata Consulting Services was

the event's title sponsor but the New York Road

Runners (NYRR) organized the event, as they have

Network Video Technologies. These components were linked with Firetide wireless mesh nodes that securely transmitted video and voice data to the Race Command Center where a Milestone Xprotect Smart Wall displayed 36 simultaneous camera views. The VMS served as the platform for live and recorded playback. Centennial Security Integration assisted with installation to transform the multiplenode architecture into a seamless unified system.

The open platform architecture of this VMS made it possible to configure and deploy a network with the depth and flexibility to deliver reliable functionality to more people in more places. The IPELA engine of Sony's ultra-wide, dynamic-range network cameras provided the outputs, including fixed models with on-board video analytics, PTZ and 360-degree views. These were managed and displayed through an Xprotect Corporate VMS developed for large-scale, highsecurity deployments. The Command Center had a consolidated operational view in a 55-screen smart wall, while roving staff could view video on the move using the Milestone Mobile client. Glenn Taylor, Executive Director of Virsig, said: "The open platform enabled us to provide a highavailability, high-performance network with the high-availability, high-performance video management system."

www.GIT-SECURITY.com

For thousands of runners pushing the limits of their physical endurance, the finish line at the TCS New York City Marathon represented the achievement of a lifetime. For those responsible for safety, however, the very same finish line presented its own security challenges. A shared security network used a Milestone video surveillance hub to integrate a multi-vendor solution that allowed forty local agencies

to view video feeds and to manage

crowd and runner safety.

The Milestone Systems Xprotect open platform video management software (VMS) was at the core of a collaborative effort between the 2014 New York City Marathon team and many local agencies. The networked solution integrated components from top vendors of IP and wireless security systems equipment, including remote and mobile technology that resolved issues of critical

VIDEO MANAGEMENT Surveillance Parcours

Shared Security Network Used Video Surveillance Hub

SECURITY



At the Race Command Center a XProtect Smart Wall displayed 36 simultaneous camera views



Sony network cameras deliver the pictures

Medicenter

Dr. Stuart Weiss is the medical director for the New York Road Runners. On race day, his job was to direct the tent near the finish line that was fully staffed as an emergency room. The goal was to treat on-site as many runners as possible requiring medical attention who could then be sent home. Weiss said that the video capabilities proved to be a critical part of his team's situational awareness, supporting decision making through views of the finish line, walk-off areas, Central Park and various points along the marathon's course. Being able to see runners as they finished the race helped his team identify those who needed emergency room treatment and what type of care to provide for injuries that could be treated in the tent. The sheer number of people made it complicated to keep track of what was going on as runners cooled down on their way to the area for reuniting with family and friends. In addition, the cool-down period is when trauma is most likely to occur.

"The Milestone software helped us integrate all the camera feeds into one screen area we could easily look at to see what was happening across the area," Weiss said. "We used it to make critical decisions throughout the day." The race commander used his view of the five medical tents to decide which tents were at capacity and needed more medical personnel and which tents were able to receive additional people. At one point the electricity went out on one of the poles where a camera was mounted, and a member of the technical staff used the mobile client on a smartphone to send images from that location back to the command center.

Central Park West is one location where a network would be difficult to deploy if it weren't for wireless capabilities. Glenn Taylor reported that the platform's ability to support a wide range of wireless devices gave the deployment far greater reach. He explained that most wireless equipment requires a clear line of sight – a rare luxury in a setting known for winding roads and dense vegetation. Virsig overcame that by installing wireless devices at the tops of 140-foot utility poles to receive signals from the IP cameras that carried the data to the servers, where the images dramatically increased the marathon's overall situational awareness. "The wireless mesh extended the network out into areas where you typically would not be able to put a network," Taylor said. "We created a platform that everyone was able to share in order to make the marathon a safer, more secure event."

CONTACT

Milestone Systems A/S, Broendby Copenhagen, Denmark Tel.: +45 88 300 300 milestone@milestone.dk · www.milestone.dk



VIDEO SURVEILLANCE

What's Up? Combining Disparate System Alarms Into an Intuitive GUI



It's all very well having a high-tech fire alarm system and a really secure intruder alarm system effectively keeping the wrong people out. Your industrial process control is probably right up-to-date too. The building you're working in is of course thinking intelligently and its facility management system is constantly optimizing all variables for you. But while you're watching the peace and calm surrounding the site quality on the HD video surveillance system however, alarms suddenly begin to sound. Now what? Can you, your security staff and safety personnel cope with a plethora of different GUIs and individual alarms with no apparent connection? What exactly should they do?

In large systems with intensive use, multiple simultaneous alarms are not uncommon. Priorities must be set and the processing procedures organized within the team. Security, planning, processes – to make the right decisions at stressful moments it is always important to have the right information. This usually arrives from different systems but Geutebruck's G-SIM (Geutebruck Security Information Management) can provide a clear overview of the entire security infrastructure, process control and facility management in one place and switch to the right cameras to cover an event. In the version now available, 64-bit architecture and GPU acceleration help to make this happen three times faster than before.

Pre-Defined

An essential step is preparing for an emergency by defining the optimum alarm handling procedure: which scenes from the video surveillance provide which information, which process steps are performed and in which order. In the event of an alarm, these predefined scenes then turn on automatically and provide the relevant information to assess the situation. Alarms are processed stepby-step according to your own pre-defined plan. The clear workflow reduces stress, thus providing support to the personnel and improving security.

G-SIM provides maximum performance for all product generations, both for existing systems or along with a first introduction to the company's world of video security. The 64-bit architecture and integrated GPU acceleration provide faster image processing for both live images or recorded video. This not only simplifies operation but also reduces the load on the hardware. The system meets the highest standards for graphical representation, alarm management and documentation.

Small Scale

And because the stringent demands placed on security information management do not depend on the size of the system, there is also a smaller system called G-SIM Express, which provides an interesting starter package. This is scaled for small systems and provides the functionality of an enterprise solution including map-based operation, safe alarm processing and convenient video search features. Central setup and user management with manipulation-proof audit functions increase availability thanks to failover options. Setup wizards are also included that assist with quick configuration. The entire system configuration is performed centrally, for everything from camera allocation to recording parameters to alarm processing. The subsequent creation of site maps is achieved by a simple drag-and-drop feature. This ensures that when an alarm occurs, the most important issues are addressed first.

CONTACT

Geutebruck, Windhagen, Germany Tel.: +49 2645 137 0 info@geutebrueck.com www.geutebrueck.com SINSUR SINSUR VIENT VIEN

Europe's largest indoor trampoline arena is taking advantage of video surveillance technology to ensure that it is able to retrieve high definition video evidence of any incidents up to three years after they have occurred.

Visitors to Jump Nation, which is located at Trafford Park, Manchester, have the opportunity to enjoy 139 trampolines, which are all connected together to form one huge arena where you can literally bounce off the walls. There is also a huge foam pit to practice tricks or simply to have fun.

"We want our customers to have maximum enjoyment when using our facilities, but bouncing on trampolines is an inherently dangerous activity and is categorized as an extreme sport, " said Matthew Ball, Managing Director of Jump Nation. "It is therefore very important for all customers to understand the risks and bounce within their own ability. With this in mind, we need a video surveillance system which can verify that customers have complied with our safety rules and if necessary, help us to resolve any claims for injury. As it is legally possible for injury claims to be made up to three years after an incident, it is essential that we are able to store video evidence for the same length of time."

The contract to design the video surveillance system was awarded to Selec Systems who recommended, and subsequently installed, eight Samsung Techwin SNV-6084R 2MP Full HD network dome cameras at key locations throughout the arena. Part of the WisenetIII camera range, this camera is vandal-resistant and has built in IR LEDs to enable images of any activity to be captured, regardless of the lighting conditions. It also features enhanced Wide Dynamic Range which, with performance greater than 120dB, can accurately produce images in scenes that simultaneously contain very bright and very dark areas.

Unusual Duration

Three of the cameras are able to collectively cover the entire trampolining area and it is the images from these which are stored for a three year period. "It is an unusual requirement as the specification for most video surveillance systems is for recording to be stored up to 31 days," said Alan Atyeo, Technical Manager for Axminster, Devon based Selec Systems. "However, we carefully calculated the storage requirements based on the need to record at 10 frames per second, 24 hours a day, seven days a week, as the system needs to be used for general security purposes when the arena is closed. We then worked closely with the manufacturer's pre-sales support team to identify ▲ Three SNV-6084R cover the trampolining area

that the SRN-4000 network video recorder (NVR) could meet the client's requirements."

The NVR is designed to enable authorized personnel to quickly search and retrieve recorded video evidence of any incident. The model installed at Jump Nation has been equipped with 11 internal 4TB hard drives which are hot-swappable and support RAID5 and RAID6 recording, to provide protection against unrecoverable read errors, as well as whole HDD failure. The remaining five cameras have been installed in non-critical areas such as the café and reception areas, and images from these cameras are transmitted to an NVR which has been configured to store images from all of the cameras for up to 31 days.

Peace of Mind

"Since opening our doors in August 2014, we have been very popular with schools and birthday parties, as well as members of the public who want to get fit or just have fun," said Matthew. "Safety is the number one priority and we are therefore very pleased to have peace of mind in knowing that our safety policy is being well supported by a highly effective video surveillance solution."

CONTACT

Samsung Techwin Europe, Weybridge, United Kingdom Tel.: +44 1932 826 700 · www.samsungcctv.com

SECURITY FOR MUSEUM

The Art of Protection Security for Museums and Exhibitions

RFID solutions under the brand name Amantag from Deister can be found equally in healthcare, in industry, in research institutes and government offices. Another no less important application is the protection of exhibits in museums and similar buildings, as Uwe Bartels, Key Account Manager Europe Amantag by Deister, and the burglar alarm technology specialist Uwe Schmeissner explained in a conversation with GIT SECURITY.

GIT SECURITY: Mr. Bartels, Deister Electronic has a product that addresses the aspect of security in museums and exhibitions. What is this in detail?

Uwe Bartels: We are concerned here with the security of museums, but also of exhibitions of art that, for example, take place in the foyers of banks, companies or other buildings. Amongst other things we protect the exhibits against theft and malicious damage.

Mr. Schmeissner, what is your role in this venture, and how is the cooperation with Deister arranged?

Uwe Schmeissner: As a provider of various solutions to protect valuable objects we integrate components from Deister in our systems. We work together to improve and develop the products and benefit from each others experience.

In the first instance then we're talking about theft protection – what form does this take?

Uwe Bartels: We secure paintings or sculptures with our RFID transponders from the Amantag series. If the exhibit is removed, or even moved a few millimeters, the alarm will sound. Our transponders also protect the portable audio guides that are issued by many museums. An alarm goes off if the visitor takes it with them instead of handing it in at the exit. In addition to theft protection, certain environmental parameters must also be maintained in museums and exhibitions.

What parameters are those?

Uwe Bartels: For many pictures it is important that the temperature and humidity stay within a certain range so that they are not damaged. In particular old paintings cannot tolerate large changes of temperature and humidity. So we attach our transponders fitted with integrated sensors to the exhibits. This has the advantage that

Such transponders are attached by Deister for example on the rear of paintings

the parameters can be automatically checked around the clock. If, for example, to many visitors are in one room and the temperature and humidity become too high, this is recorded so that connected systems that regulate these factors can be activated. The necessary parameters can be set in advance for each case.

How exactly are the transponders attached?

Uwe Bartels: They are attached invisible to the visitor and clicked into a holder on the rear of each picture or the sculpture or the glass case. This activates the transponder and protects it against removal: even if someone moves the picture just a few millimeters and alarm will sound. Of course accurate placement of the object is very important here.

What form does the alarm take?

Uwe Bartels: The transponders raise the alarm via a receiver unit that is connected to the alarm and building management system via specific interfaces. This enables automatically regulated measures to be carried out, for example controlling the heating or the air-conditioning system.

A further field of application in this area is the management of pieces loaned to the museum?

Uwe Bartels: Yes. When a museum borrows an article from another institute for example – perhaps as part of a special exhibition – this is carefully packed in a special container and this is then accompanied during its transport by staff from the lending establishment and looked after by them at







Uwe Bartels, Key Account Manager Europe Amantag by Deister



Uwe Schmeissner, Managing Director Schmeissner

the new location. The staff ensure that a picture, for example, is shown under the correct environmental conditions. Now this effort can be either reduced or completely avoided thanks to the technology that will alarm the security personnel should the preset parameters not be maintained.

What role do the insurance companies play here?

Uwe Schmeissner: Insurers who offer art insurance recommend appropriate options and solutions to their clients to protect such objects. The VdS (Association of Insurers) also has a test lab, looks closely at the subject and provides the opportunity for exchange of information during its seminars. The most recent VdS Museum Seminar took place at the end of March 2014 in Bonn. In

addition, it has published VdS Security Guideline 3511 for museums and exhibition halls.

In which museums or other exhibitions can we see Deister technology in action?

Uwe Bartels: We have secured the pictures in one wing of the Louvre in Paris for example, also exhibits in the Centre Wallonie-Bruxelles in Paris. Our projects can be found right across Europa – they are not just large museums, but also special exhibitions in public areas such as the foyers of banks and building societies.

You probably have to do some convincing with some potential customers?

Uwe Bartels: That's right. We don't have to convince large museums anymore of the advan-

tages and possibilities of RFID technologies. But in smaller institutions they still rely on old lists and inspection tours, etc. But this is changing with the spread of danger management technology. The security of such objects can be sensibly ensured by integrating RFID technology into these systems.

> CONTACT Deister electronic, Barsinghausen, Germany Tel.: +49 5105 516 01 info.de@deister.com · www.deister.com

VIDEO SURVEILLANCE

Network Nine Canon Expands Camera Range

Canon Europe has announced the addition of nine new network security cameras to its range that are suitable for a wide variety of indoor and outdoor environments, including retail applications, city surveillance and critical infrastructure monitoring. These additions to their range provide a full array of network camera formats, including devices for outdoor and indoor use, PTZ, fixed domes and fixed box cameras.

The PTZ cameras offer users a longer zoom range to deliver improved identification and lowlight performance, while the latest outdoor additions feature IK10 vandal resistance certification, ensuring that users can rely on the cameras continuing to operate in demanding environments. The camera housing design and camera body material for the outdoor cameras also allow a larger temperature range of operation for use in various environmental conditions.

The whole camera range has optimized H.264 encoding and redefined image quality settings. The addition of new Area-Specific Data Size Reduction (ADSR) technology offers users greater bandwidth control by allowing the selection up to eight distinct areas in the field of view for HD recording, whilst the remaining areas are recorded in standard definition. This helps to reduce overall infrastructure and storage costs.

Light Source

All nine cameras feature the company's ultra-low dispersion lens technology, anti-reflective infrared coating and a new high sensitivity CMOS sensor to attain improved low light performance. They also feature two different types of lens; the High UD and Super UD. Super UD lenses minimize inconsistent focus under visible and infrared light, and help to maintain accurate focus and high resolution when switching between light sources. The High UD counteracts chromatic aberration whilst reducing the lens' overall physical size.

The range comes equipped with Profile S ON-VIF compatibility, allowing for simple integration with the majority of VMS platforms, as well as Profile G, for the recording, searching, and play-back of footage from the edge recording device.

Julian Rutland, Planning and Strategy Director, Canon Europe, says: "Video surveillance has become an essential tool against crime and to improve safety. The CCTV industry is evolving rapidly and it's important for integrators to be able to offer customers solutions that cater for their specific environment and business needs. Our new cameras are a fantastic addition to the surveillance camera landscape, offering the high-quality, low-light performance demanded by the market while keeping bandwidth requirements to a minimum." He adds: "Our new cameras offer system integrators and customers the product format, performance, durability, compliance and certifications that the evolving security market is now demanding, and these devices provide true high-end network video surveillance both indoors and outdoors."

Canon

Canon's VB-R11VE network dome camera

CONTACT

Canon Europe, Uxbridge, United Kingdom Tel.: +44 208 588 8000 www.canon-europe.com

Canon's VB-M741LE outdoor bullet camera

SECURITY FOR PRODUCTION SITES

Security at Your Fingertip German Chemical Plant Increases Handling Capacity By Using Biometrics

Chempark in Leverkusen, Germany, has three sites located in the center of Europe's chemical market and is one of the largest chemical parks in Europe. Project ,GATE' was started to find the optimum solution for managing increasing transport volumes at plant gates. At the same time, it had to take into consideration the limited infrastructure capacity and higher demands on security within the chemical plants of Chemion, Bayer and Lanxess.

The result of detailed consultation was the establishment of a standardized solution based on three components: the Flow vehicle control system from star/trac, 3D biometric technology from TBS and i-Chem Identec Solutions wireless RFID technology. Biometric identification is a rapidly spreading method of providing both accurate and fast security checks. This particular application identifies truck drivers as they arrive at a chemicals terminal park. A three-dimensional and contact-free fingerprint terminal provides a high level of security and multi-functionality right at the point of access. Preregistered vehicles and transport components are automatically detected prior to entry to the plant. Without getting out of their cab at the check-in terminals, the drivers quickly identify themselves with their identification card and biometrics.

The biometric identification is done by the three-dimensional and contact-free finger scanning technology from TBS. It is capturing a high amount of detail and therefore recognizing even the most difficult driver's fingers. The 3D technology captures the highest possible quantity of fingerprint detail, guaranteeing significantly higher security than many other biometric systems. Contact-free solutions qualify in particular for higher



risk, large user groups or hygienically sensitive applications.

Quick Payback

Processing is automated directly at the plant gates with RFID technology and real time process control. All in all, introduction of the system has resulted in a turnaround time saving of over one hour for the incoming and outgoing plant traffic at each of the three Chempark sites. This translates into an immediate increase in productivity and a quick payback on the system investment. Since it is a clear benefit for both the chemical plant as well as for the freight forwarders, Project Gate is poised to be extended to other sites.

The fingerprint capture terminals can be supported by a suite of software that makes such a system no more complicated to commission than a conventional card or token-based access control system. The TBS ,Complete' package, for example, provides a complete access control and time and attendance system comprising web-based Bio Admin management software. The ,Inside' software allows integration of the TBS system as a biometric sub-system into third party security solutions, based on web services, with distinct advantages over an SDK-based approach. It needs minimal integration effort – it can normally be completed within 1-2 days – and relieves the integrator from biometric details. The software takes care of biometrics such as algorithms, thresholds, synchronization and encryptions.

Further Functionality

The company's web-based Bio-Admin management software is designed to administrate all of its devices in a network. Its basic modules cover the tasks of user enrollment and administration, including data transfer from external systems. Device administration and configuration and a logbook function allow assessment of all access and time events. Amongst other functions, optional additional modules can add user rights management, biometric templates management and branch and zone management. Such a system can also provide IP camera management, an anti-tailgating feature and people counting.

CONTACT

Touchless Biometric Systems, Pfäffikon, Switzerland Tel.: +41 55 533 20 00 tbs@tbs-biometrics.com www.tbs-biometrics.com



ACCESS CONTROL

Living for the City Housing and Hotel Complex Secured by Integrated RFID Access Control System



Combining a student accommodation complex and a hotel into one development within demanding construction and fit-out timescales was a challenging brief. Having taken the decision to ensure security at the development used the latest technology, the search began for a reliable and economical electronic system.

Spring Mews, a recently completed mixed-use scheme consisting of 378 en-suite student bedrooms together with a 93 bed suite hotel and office development, itself a central part of one of London's largest regeneration projects, is using advanced contactless access control technology from Salto Systems to control security throughout the site. Developed by CLS Holdings in partnership with Fresh Student Living and Staybridge Suites London, the £50 million Spring Mews site on Glasshouse Walk is one of more than 20 interconnected regeneration development schemes that are changing the face of this largely industrial riverside district. It spans 195 hectares on the south bank of the River Thames and lies directly opposite Westminster. By far the largest regeneration zone in central London, its many brown field sites on the last remaining industrial stretch of the South Bank are now being transformed.

The 378 bed student accommodation complex has been designed to relieve pressure on local housing stock and is ideal for students preferring to be closer to central London. It is configured so that 75% of the rooms are cluster beds, to be shared by either 7 or 8 students, each with their own en-suite bathroom and shared kitchen facilities. It is only a few minutes walk away from Vauxhall rail station, giving easy access to many renowned London Universities. The 93 bed "Staybridge" suite hotel provides modern and comfortable studio or one-bedroom rooms designed for residents with longer stay requirements.

40,000 BUYERS AND BUSINESS PARTNERS

No Small Feat

A reliable and economical electronic security system was required that could efficiently run and manage multiple rooms in both developments and be fully integrated with the Axis CCTV and Galaxy intruder alarm system, while all being controlled from one front-end Maxxess E-Fusion graphical user interface.

The essential requirements for the system were to secure all internal doors, be simple and quick to install, to use RFID escutcheons so there would be no need to flood the buildings with wiring, to have scope to expand the system if the need arose, to provide future-proof investment through the use of contemporary technology offering easy upgrade paths, to integrate with other systems – notably CCTV and intruder alarm, to be easily able to track and replace key cards in use and to be able to remotely manage the access control system across both the student accommodation and hotel properties from one central location if required.

Application-Specific

Through a partnership between Salto Systems, Maxxess and ABCA Systems (an approved Salto Service Center), CLS Holdings were able to find both a suite of systems and suppliers that delivered on all of these requirements. They selected Salto's Aelement product as the access control platform for their door security solution. This not only complements the modern aesthetics of the building and its design, but operates seamlessly and discreetly in the background while giving users reliable, unobtrusive 24/7 protection. The system has been developed with hospitality-specific applications in mind, including the ability to control the security of the entire building from a single location. Other features include instant room move and instant extended stay abilities as well as lost card cancellation, intrusion alarm, door ajar alarm, remote opening, audit trail, passage mode activation for meeting rooms and automated low battery reporting.

Nearly Open

Aelement is also NFC (Near Field Communications) enabled, so as this technology appears on more smart phones users, if they wish, will be able to use their NFC enabled smart phones to emulate a Mifare smart card, turning the phone into their room key. This in-built technology gives building operators the ability to continuously upgrade their security without having to upgrade their locks, saving them long term operating costs while providing them with what they need most – total control.

Phillip Miller, Managing Director, ABCA Systems, says "With young students in the accommodation, many living away from their parent's homes for the first time, and longer term guests using the hotel space, it was vital that any security system installed provided complete protection to ensure their security at all times. Spring Mews will be a very busy environment with lots of traffic on its doors so the solution we recommended was robust, technologically advanced, scalable and capable of standing the test of time, which is why we chose to put forward the Salto Aelement platform."

The electronic escutcheon platform provides the operators with the means to operate a totally keyless, secure environment. It provides a full audit trail of all door access including what has been granted as well as rejected and provides staff and students with access to all the areas they need automatically.

Client Satisfaction

David Towse, Project Manager at CLS Holdings plc says "This solution, in conjunction with other elements of the security product platform is secure, reliable and highly configurable, allowing us to set up, manage and control the properties securely and easily. Now that the system has been implemented, we're pleased with the quality and efficiency of the product. Besides helping us move closer to our vision for utilizing RFID technology and providing a keyless environment, the new system neatly leverages this technology, while helping us meet our goal to provide a safe and secure environment for our users."

CONTACT Salto Systems, UK Tel.: + 44 019 26 811 979 · www.saltosystems.com



Access to leading global technology, solutions and knowledge to enable security excellence



- Hear from industry leaders on how we are securing our cities at the Safe Cities Theatre
- Meet international thought leaders at the Euralarm conference
- Pre-book meetings with your preferred suppliers through the Global Meetings Programme
- Get all your security solutions, education and training in one place

REGISTER FOR YOUR 2015 BADGE TODAY at www.ifsec.co.uk/GIT

The global stage for security innovation and expertise at ExCeL London, 16-18 June 2015

HYPER /CAT

Organised by

UBM

SECURITY

With the evolution of any technology there are always a handful of first-adopters willing to experience its potential benefits, at the risk of encountering some problems at first. After that come those keen to always implement the latest technology at every opportunity. Then over a period of time comes the rest of the market. In access control, wireless technology is undoubtedly already rolling out, but where are we exactly in the market evolution? Chris Bone, Vice President Access Control Solutions EMEA at Assa Abloy, looks for the answer.



ACCESS CONTROL

Wireless, Not Clueless Some Myths and Truths of Wireless Access Control



Chris Bone, VP Access Control Solutions EMEA, Assa Abloy

"Let's begin with something that's hardly frontpage news: the market potential for wireless access control is huge. At January's Intersec exhibition, forecasts of 15% annual growth in the Middle East region alone were suggested. Assa Abloy's own data predicts that wireless locks could make up 30% of the total market within a decade. The potential is there. But when we worked with IFSECglobal.com last year on a major market survey of security managers, industry insiders and decision-makers, we encountered some big surprises. The conclusion: our market knows less than you think about wireless locks.

For starters, almost two-thirds of those we surveyed thought that fitting a wireless access control system would be disruptive to an already fitted traditional system. In fact, wireless access control systems — including our own battery-powered Aperio locks — can run fully integrated with an existing wired system, even if it incorporates CCTV or energy management functions. Integrations have already been demonstrated, both by ourselves and other leading access control manufacturers. Installation is quick and easy.

A Question of Power

Around a third of our respondents using wired access control had no idea that wireless systems use much less energy. Because wireless locks are battery powered and only ,wake up' when a credential is presented, they consume a tiny fraction of the power used by always-on wired mag locks. And battery life? Not a problem – that's another market myth shared by close to 100% of our research group, who expected wireless lock batteries to drain too quickly. In fact, our locks run for approximately 2 years on a new battery.

If you thought wireless locks don't support multiple credentials, sorry, you're wrong. Products that offer multi-authentication via PIN, smart card or mobile phone are out there. What about the fact that wireless locks are not secure? Another myth: there are CE and EN certified, or even firerated products available, including those for security doors.

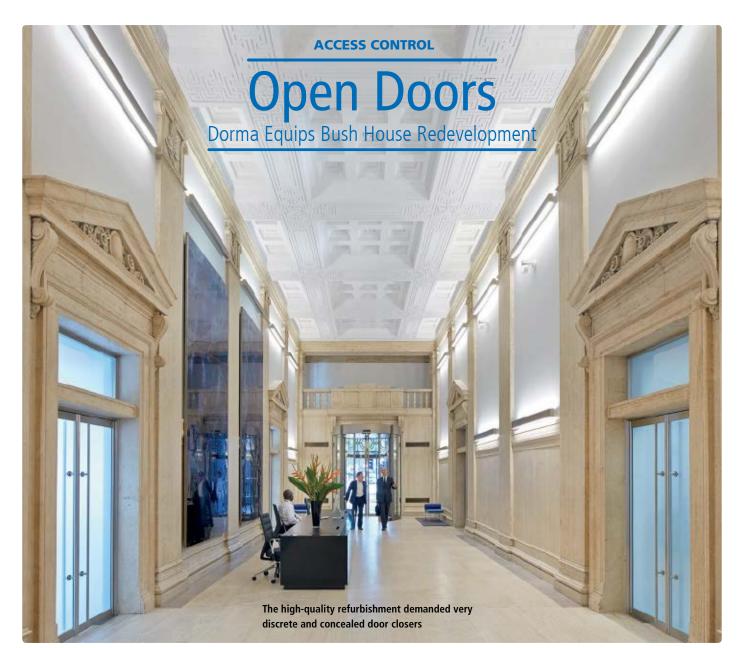
An Education Task

Most ironic of all, over half of those we surveyed cited ,fear of the expense' as a reason not to up-

grade to wireless. In fact, when you factor in major savings on energy costs and maintenance bills, even a fairly small facility could save thousands of euros by making the switch to wireless locks.

The challenge is there. The potential is huge, but the market is suffering from some serious misconceptions. As a global industry leader we have begun a game of knowledge whack-a-mole, and all of us with a stake in the future of wireless access control need to get involved. There are so many myths about what wireless locks can and can't do. Our solution? Assa Abloy has launched a true facts campaign – "Busting the myths about wireless access" – aimed at professional end-users. Not specifically about our locks, but wireless locks in general."

CONTACT Assa Abloy EMEA, London, UK Tel.: +49 30 810 6297 0 · www.assaabloy.com



In 1929 it was the most expensive building in the world but the former HQ of the BBC World Service, Bush House in London, has been sensitively restored and brought up to modern standards as part of the landmark £61 million Aldwych Quarter redevelopment. To meet the client's exacting standards for product quality and long term performance, Dorma, a global supplier of premium access solutions and services, supplied a range of door controls and floor springs. In a design by John Robertson Architects, the redeveloped and iconic Bush House along with Melbourne House and the re-branded Strand House and King House have been comprehensively refurbished to provide 290,000 sq feet of flexible Grade A office space with a target BREEAM rating of 'Excellent'. With the building stripped back so that the original Edwardian features could remain prominent it was imperative that door closers and ironmongery were both aesthetically pleasing and compliant with the latest legislation.

Provided by architectural ironmongery specialists Aspex UK, numerous door operators, concealed door closers and floor springs from Dorma were specified on various packages of works for their compact and elegant design, long term durability and ability to provide safe, secure and reliable access. Over 200 ITS96 concealed door closers, 140 TS72VBC closers, 47 TS73V closers and four BTS75V floor concealed closers were supplied and installed across the three buildings in offices, corridors and entrances.

Concealed and Compliant

The first system of its kind to subtly integrate door closers into the leaf and frame of the door itself, the ITS96 can be incorporated into most door types to maintain an elegant interior design. These concealed closers were selected due to their low opening forces in accordance with BS8300:2009 and Approved Document M, fire test performance and their hidden design. With the transformation of this iconic building now complete, the company's comprehensive door package for the Aldwych Quarter will provide high safety standards and reliable, smooth access for office users for decades to come.

CONTACT

Dorma Holding GmbH & Co. KGaA, Ennepetal, Germany Tel.: +49 2333 793 5660 · www.dorma.com SMART BUILDING

Changing of the Guard

Abus Introduces a New Generation of its Wireless Alarm System

The new Secvest wireless alarm system is an even more advanced version of the 2Way system, which has enjoyed several years of success. Like its predecessor, it offers reliable protection against intrusion, fire, flooding and emergencies. But the new generation also provides remote access through a web server, thus making configuration, installation and maintenance even easier for the installer.

A Secvest app also allows the user to operate their alarm system remotely from anywhere in the world and to receive feedback messages - such as alarm notifications or live video verification - directly on their smartphone. And to scare off intruders it can remotely trigger presence simulation.

Those who already know how to configure, install and service the 2Way alarm panel will master the new system in just a short time. Although the overall tried-and-tested process is essentially the same, the individual installation steps for this model are even more simple and user-friendly. In addition, the installer is able to easily access all parameters via a web server, including remotely, making remote configuration possible, for example.

Detectors and Remote Control Options

The system still includes the same set of components as its predecessor, as well as some new features. In addition to wireless opening, wireless motion, wireless shock, wireless glass breakage and wireless flood detectors, and tried-and-tested mechatronic wireless locks for windows and doors, this system also features the FO 400 E wireless window handle lock, the FURM50000 wireless smoke alarm device and the FUHA50010 wireless

socket. The latter can be used, for example, to initiate presence simulation by controlling lights and electronic devices.

The Secvest wireless alarm system provides maximum security for up to fifty users and can control up to forty-eight wireless detectors and four wired detectors. Users can operate it locally in a number of user-friendly ways, such as by inputting a code, using a proximity chip key or via a remote control. A new feature is mobile alarm panel control via an app which allows the panel to be operated using a smartphone. The system includes an integrated web server which allows users to quickly and easily change any parameters from a remote location as soon as it is connected to an IP network. While remote configuration can be performed, all settings can of course also be entered directly on the alarm panel itself.

An integrated dialing device and network connection, which can be used to transmit analog and digital monitoring station protocols, are included in the system. The device's network connection allows IP-based messages, such as VoIP calls and email notifications, to be sent. All communication



Burglary, fire, flood and emergency: a field-proved range of detectors now available with remote control via an app and video verification of events

is HTTPS and SSL encrypted and thus complies with modern security standards. The integrated analog PSTN dialing device and an optional GSM module make all conventional methods of communication possible.

Uninterrupted Live Video Verification

Remote alarm panel access via the web server or app means the user does not have to worry about whether the alarm panel has been armed or disarmed. If, for example, the alarm system has been accidentally disarmed, it can now be armed or disarmed from anywhere in the world with just a simple click. When the app is used together with the Secvest wireless socket, specific outputs can also be turned on or off, allowing lamps or other devices to be controlled remotely. In the event of an alarm, images (snapshots) taken by the indoor camera are sent to authorized users via email and saved on the alarm panel. This allows the images to be analyzed later by the police. In the event of an alarm, users can also immediately verify via the live stream whether an internal motion detector has simply been triggered by a household pet or if an intruder has actually entered the building. All controls, such as arming and disarming the alarm system or requesting status reports, can be executed using the company's app for Android or iOS.

Mechatronics

A further safety feature are the company's mechatronic detectors. Classic perimeter protection systems without external lock zones cannot tell the difference between doors or windows that are ajar and those which are properly shut. By contrast, every Abus mechatronic component includes an additional lock monitoring security feature. This means, for example, that the system can only be armed when all alarm zones have been properly closed. The mechatronic components can also ensure that intruders are met with over one tonne of pressure resistance. This severely hampers any attempt to lever open doors or windows. Studies and police reports show that opportunistic intruders generally give up after a maximum of five minutes and abandon their break-in attempt altogether if are met with any resistance.





◄ Security in a flash: the FO400 E radio window security lock fastens, detects and reports

CONTACT Abus Security-Center, Affing, Germany Tel.: +49 8207 95990 0 info.de@abus-sc.com · www.abus.com



BEYOND LIMITS. LEAVE SYSTEM LIMITS BEHIND WITH SEETEC.

SeeTec Cayuga uses its open architecture to exchange information with third party systems in real time – in a native form or by using open interfaces. That way video integrates smoothly into your company's solution world.

Combining server and camera based analytics SeeTec Cayuga provides critical focus. Every transaction can be tracked by linking video to the ERP system. And with the connection of the access control system you'll always have an eye on who is entering your company building.



More information on **www.seetec-ag.com**



FIRE DETECTION

Safe on High Fire Protection at the Karwendel Summit

Karwendelbahn mountain station

Professional fire protection in cable car stations such as the Karwendelbahn in Mittenwald, Germany has always been an important issue and is subject to strict safety requirements of the responsible authorities. The operator commissioned a local contractor with the installation of appropriate fire protection components. A sophisticated technical solution networks the control panels at the summit and valley stations using a radio link.

The Karwendel range is the largest continuous nature reserve in the Eastern Alps with around 80% on the Tirol side. In 1954, meat distributor Hans Hoffman of Munich founded the Karwendelbahn company. The proposed construction cost was DM 2.5 million, but the difficult terrain broke the budget mid-project and the government did not keep its pledge of support. Building stopped in spring 1958, and the project appeared to be

doomed. It was Josef Brander, the mayor of Mittenwald at the time, and his board who fought for construction to continue. In the end, banks, a few construction firms and committed citizens as well as the market town of Mittenwald took on the total costs of DM 5.2 million through the founding of a new company. On June 7, 1967, the first gondola finally started up the mountain.

Today this 7km professional ski route is the longest in Germany. However, the area is most commonly frequented by hikers and the cable car is one of the key tourist attractions in the Karwendel mountains. It travels up a maximum incline of 92% from the valley station 933 m above sea level to the summit station 2,244 m above sea level at a speed of up to 10 m/sec. The 48 mm supporting cable is anchored in the summit station, with a 44-ton concrete weight for traction at the valley terminus. Up to 350 passengers an hour can enjoy the vista of the Isar valley below, including historic Mittenwald known for its violin production and the spurs of the Zugspitz.

The Karwendelbahn operating company had to comply with the regional government of Upper Bavaria's technical standards and regulations with regard to fire protection. It quickly became clear that attention could not be limited to building protection. Karwendelbahn therefore chose to protect both the summit and valley stations by equipping each with a fire alarm control panel, and networking these via an IP radio link. Hans Gehrz drafted the fire protection concept and developed the corresponding measures together with the installation company, Lech Alarm.

Hot and Cold

The installation for the cable car's fire protection monitoring uses products from Esser. A Flex ES control panel with project-specific peripherals in each of the stations ensures the necessary safety. Extreme temperature fluctuations were a particular challenge for the fire alarms in this project. A Titanus Pro Sens aspirating smoke detection system is installed in the valley station to monitor the transformer room that serves the power station from the false floor and ceiling.

Fire detectors of various types from the IQ-8Quad series as well as manual call points and alarm signaling units are installed in the mountain station and connected restaurant. Independent water and energy supply circuits that ensure autonomy are also monitored. Following consultation with DIN EN ISO 9001 and DIN 14675 certified technical installer Lech Alarm, the company was commissioned with planning and project development as well as installation and commissioning of the fire protection engineering. Preparation of the full documentation, including fire department exit route cards and action plans with subsequent expert acceptance from the VdS and fire





IQ8Quad detector in the bollard room

From L to R: Max Altstätter from Lech Alarm, Klaus Dölker from Novar and Hans Gehrz from Karwendelbahn

department completed the service provided by the company. Maintenance of the fire alarm system, a 24-hour emergency service and cooperation with a VdS-approved alarm receiving and service center assure safety around the clock.

Networked Through Thin Air

Max Altstätter, CEO and owner of Lech Alarm, which among other things provided the fire protection engineering for the Olympic ski jump in Garmisch-Partenkirchen, points out a particularity of the Karwendel project: "The fire alarm control centers in the summit and valley stations were networked via an IP radio link using TCP/IP, which had never been used before in this form for fire alarm technology." An existing Lancom directional radio link connecting both stations could be accessed here via an RS232 LAN converter, which was installed by Marshall Electronics based in

Garmisch-Partenkirchen. This networking is of key importance for the Karwendel cable car operators: if, against all expectations, a fire should occur, it is crucial to know where the smoke detection occurred in the building. If it were triggered in a suspension cable bollard, then emergency personnel and equipment would under no circumstances be transported with the cable car, as the cable can only withstand fire for up to an hour before failing. The fact that the cable car route crosses both an alpine road and a 110 KV railway line as well as a 220 KV line from energy supplier EON presents the added danger of a torn cable coming into contact with live current elements. Power lines would need to be shut down immediately if this were the case.

The fact that there has never been an accident at the Karwendelbahn will only be further enhanced by the latest fire protection. Upon installation in the mountain station, this fire alarm control panel became the highest-altitude Flex ES control in Germany. Klaus Dölker, regional sales director for Novar and contact for Esser clients in the region, is pleased with the excellent coordination in executing the work: "The example of the Karwendelbahn clearly shows that innovative products, good cooperation between the participating companies and service quality are key." Max Altstätter summarizes: "It is reassuring when quality products from an innovative company are accompanied by smooth processes around the complex technology."

CONTACT Novar GmbH a Honeywell Company, Neuss, Germany info@esser-systems.com · www.esser-systems.com

Air Sampling Smoke Detectors

Firex, the international trade fair for fire protection, prevention and detection, will be held in London from 16-18 June 2015. Wagner Group will demonstrate its solution and system construction expertise in active fire prevention and intelligent early fire detection.



Their Titanus air sampling smoke detectors use continual air sampling to detect fires in the early pyrolysis phase. The technology detects the tiniest quantities of smoke particles and is up to 2,000 times more sensitive than conventional point-type detectors. This offers a valuable head start when locating the fire source and for extinguishing fires before they become established. www.wagner-uk.com

Wireless Alarm System

The Easy Series from Bosch, a voice and RF-token operated alarm system for small commercial and residential applications, is now available with a wide range of Radion wireless peripherals. Both are EN 50131 Grade 2 certified. Radion wireless consists of 15 different sensors operating at 433 MHz. Remotely located devices up to 1,350 meters away can be in-



tegrated by using repeaters. Control is by an icon-based command center that also gives two-way audio verification while the built-in microphone and loudspeaker allow monitoring center staff and owners to verify alarms. Easy Series systems already in use with wLSN peripherals can be updated with the new version 4.2 firmware to support Radion. www.boschsecurity.com

© Karwendelbahn



INDUSTRY 4.0

Implementing the Next Generation A Whitepaper on Industry 4.0 Infrastructure

Manufacturing industry can only gain speed and increase flexibility with consistent, IT-assisted value chains. A newly published whitepaper from Rittal shows why IT plays a key role in Industry 4.0 and explains how companies can establish the infrastructure needed. The whitepaper entitled ,IT infrastructure in the context of Industry 4.0' has been published by Rittal. In this document, decision-makers, as well as those responsible for production and IT, can learn about the demands that Industry 4.0 is placing on existing and new infrastructures. Based on an example IT infrastructure, the reader is shown just how IT and production are interlinked with one another, as well as being informed of the interdependencies between the ,office' and ,factory' sectors. A comparison of the requirements for IT systems in production and the data center helps in developing concrete solutions. It shows how managers in production environments face quite similar challenges to system administrators.

However, there are significant differences at the field and machine level. To achieve Industry 4.0 initiatives, the two spheres must continue to grow together. Besides highlighting this, the whitepaper also identifies data quality as one of the success factors for Industry 4.0. Additional suggestions for achieving advanced industrial environments give the reader some practical approaches to initial projects.

Why Industry 4.0 Is Important

Manufacturing industry is now facing the challenge of having to rapidly and flexibly adapt to new customer requirements and market demands. Industry 4.0 supplies a concept of how businesses can automate their production processes even more, and shows how machines can network with each other to make those processes more flexible. The basis of Industry 4.0 is assured by IT systems that represent the entire value chain related to development and manufacturing. Intelligent machines that communicate with one another, selfregulating manufacturing processes and highly efficient volume production (even with small batch sizes) are the aims of the Industry 4.0 concept. The ,IT infrastructure in the context of Industry 4.0' whitepaper can be obtained free of charge from the Rittal website: www.rittal.com/whitepaper.

CONTACT

Rittal GmbH & Co. KG, Herborn, Germany Tel.: +49 2772 505 0 info@rittal.de · www.rittal.com

Security Products

Intercom Integrated Into Security Management

Nedap launches AEOS 3.1.4, introducing intercom integration with Commend intercom. As a result of this integration, AEOS not only instantly shows who is at the door, but



at the same time verifies this person via the intercom. Controlled access can subsequently be given. "Granting controlled access is one of the tasks most frequently performed by receptionists and security guards", says Arjan Bouter, Sales Manager at Nedap. "In the Graphical Alarm Handler of AEOS they already had direct control of sensors, doors and cameras and now an intercom has been added to that. Moreover, for subsequent investigation, this solution simply provides complete insight into which operator gave access via which intercom, including the accompanying video recordings".

www.nedapsecurity.com

Expanded IP Camera Portfolio

The recent release of the IP 2000, IP 4000 and IP 5000 camera families from Bosch Security Systems creates a comprehensive portfolio of IP cameras that makes it easy for small and medium-sized organizations to set up professional surveillance solutions.



These cost-effective cameras are intended for everyday surveillance situations, including schools, hospitality sites, retail shops, commercial buildings and more. The IP 5000 family offers resolutions up to five megapixel to make it easy to distinguish individuals or minor details, significantly increasing the effectiveness of retrospective analysis. For applications where cost is more important than fine scene details, the IP 4000 family offers 720p resolution. The IP 2000 family is ideal for small retail businesses, as it includes two-in-one solutions that combine a built-in passive infrared (PIR) sensor and a 720p HD IP video surveillance camera, providing easy identification of events or intruders day and night. All cameras are equipped with Content Based Imaging Technology (CBIT) to tailor camera settings to scene contents. Depending on movement and varying light intensity, the camera settings are continuously and dynamically adjusted to ensure perfect exposure of objects of interest while reducing bitrate by up to 50 percent. Consequently, storage costs and network strain are reduced significantly without compromising video quality. Video data can be stored in the cloud, on a network video recorder like the manufacturer's Divar IP 2000 recording solution, or on the built-in SD card offered by many of the cameras. Users can easily access video data and control cameras with the free Video Client or Video Security app. The Video Security app combined with Dynamic Transcoding technology delivers both smooth, live video streaming and instant access to HD images when needed, regardless of available bandwidth. Users can easily control cameras and view live video streams and HD images via a mobile device at anytime and from anywhere. The IP 2000, IP 4000, and IP 5000 cameras support Dynamic Transcoding when used with a Divar IP recording solution or the Videojet transcoder. The cameras also work seamlessly with security software and recording solutions from Bosch as well as many other industry providers. This is backed by ONVIF conformance (Open Network Video Interface Forum) and the Integration Partner Program (IPP), which gives developers immediate access to software development tools to easily integrate Bosch products with third-party systems. www.boschsecurity.com

Premium Ceiling Speakers

The new LC20 Premium Ceiling Speaker Systems join the Bosch family of small-format installed audio products. The LC20-PC60G6-6 (6.5" two-way) and LC20-PC60G6-8 (8" two-way) are designed to provide superior performance across every detail. Each self-contained unit features a dedicated compression driver



for enhanced high-frequency performance and coverage control. Detachable pass-thru Phoenix-style signal connections simplify wiring up and a fourpoint clamp mechanism and integrated mounting legs enable quick installation into a wide range of ceiling cavities and construction formats. Both models have increased power handling of 100W, a higher output at 115 dB/116 dB and wider coverage angles of 120°/100°, complementing the range as a high-end option. They are fully compliant with EN 54 (pending), UL 1480, and 2043 standards.

New Website for Hazardous Area Division

Raytec is delighted to announce the launch of a website dedicated to their comprehensive range of hazardous area lighting products. The company has over 10 years experience of designing LED lighting solutions for safety and se-



curity-critical projects in the most extreme and challenging applications. The new website reflects its commitment to bring their experience, innovation and proven LED lighting technology to key hazardous area markets. The new website provides quick access to information on the full range of Spartan products including Flood, Linear, Bulkhead and Transportable, also available with emergency variants for increased flexibility, versatility and safety. There is also access to a range of valuable services including a lighting design service, a custom-built product design service for bespoke projects or challenging applications, a demo product service for trialling products prior to installation and a live online chat service to connect with in-house lighting experts. An ,Industry Knowledge' hub shares knowledge, tips and opinions from experience in designing, specifying and selling LED lighting.

www.raytecled.com

Tiny Camera System

Dallmeier has added another model to its 5200 Nightline series, the MDF-5200HD-DN, a compact module camera. The series has been developed with special attention to changing light conditions for 24-hour video surveillance. The extremely high light sensitivity of the sensor and sophisticated image processing ensure crisp color images even in the dark. In night mode, the cameras also provide outstanding results due to their high infrared sensitivity. The MDF5200HD-DN module camera is built into a small sensor enclosure and a separate encoder enclosure. This extremely compact design makes the camera suitable for installations in automated teller machines, gambling tables and display panels. It provides up to 2K Full-HD video with up to 30fps at full resolution (1080p/30) and has a motor-driven megapixel varifocal lens. The adjustment of zoom, focus and iris is made conveniently using a web browser and no manual lens setting is required at the installation site of the camera. To cover any short-term network downtime, the camera is equipped with a RAM memory so no picture data ever gets lost. www.dallmeier.com

The ,Best of British' Security Solutions at Intersec 2015

Members of the British Security Industry Association's Export Council recently demonstrated the best of British security innovations and services - from video management software to highly efficient power supplies, dual technology detectors and access control panels - at the Intersec 2015 show in Dubai, with members keen to expand their presence in the region. Underlining Intersec's status as a must attend event for British security companies, this year it played host to a record number of BSIA member companies, with many concentrated on the BSIA-organized UK Security Pavilion. The BSIA built on the unprecedented success of last year's edition which saw the UK Pavilion grow by an unprecedented 40%, year-on-year. British Government support was also much in evidence at the 2014 event, with the Secretary of State for Business, Innovation and Skills, the Rt Hon Dr Vince Cable MP speaking to BSIA representatives and exhibitors during a high level ministerial visit. Putting the business benefits of Intersec into perspective, last time around 67% of BSIA Export Council members reported an upturn in visitor numbers - post show - and signaled that they a saw a leap upwards in the quality of attendees. As the leading trade association representing the UK's private security industry, the British Security Industry Association, through its dedicated Export Council, plays a central role forging productive links between UK security companies and overseas buyers. Intersec is certainly pivotal to this process, with the BSIA – which attended for the 17th year – having members on hand to offer valuable face-to-face advice and guidance on the latest products and services that British security businesses have to offer. Underlining the importance of the Middle East to member companies, the BSIA's Export Council has conducted its annual ,State of the Nation' survey to identify global export trends. This confirms that the region is the primary market being targeted by members for growth over the next 12 months. In addition, Intersec ranks amongst the most important overseas exhibition for members with an impressive 80% confirming, when questioned, that they also attended the 2014 exhibition. Given the above, it is perhaps not surprising that the Export Council's Chairman, Ian Moore, is enthusiastic about Intersec 2015: "Intersec provides the ideal opportunity for companies to underline the innovative solutions they can offer to customers across the Middle East and beyond. Our members, as the ,State of the Nation' survey underlines, are particularly keen to forge relationships with overseas distributors. The scope of member companies' expertise is certainly impressive, with industry leaders well represented across areas as diverse as video management software, biometric access control systems, turnstiles, perimeter protection and power supplies." Moore feels that the strong BSIA presence at Intersec parallels the way the show has developed from a key regional exhibition to a major international security solutions showcase: "Given that Intersec is strategically located in Dubai it acts as a convenient worldwide hub."

Moore continues: "Our members not only have an invaluable opportunity to engage with visitors from the Middle East itself but can, just as easily, conduct business with customers from as far afield as South Africa, Pakistan, India, China, Australasia and the Far East, who may not necessarily want to travel to the UK." Remarking on the benefits that overseas buyers can enjoy when working with BSIA members, Moore says: "It is important to stress that there is the reassurance of dealing with professional, quality, companies that have gone through rigorous accreditation and credential checks and, crucially, are at the forefront of compliance with relevant industry standards." Here are some of the highlights of products and services that were displayed by BSIA's Export Council members at Intersec 2015.

Elmdene – www.elmdene.co.uk – promoted its solutions for security and fire applications at Intersec 2015, with the key focus for this year's show being on a range of STX switch-mode power supplies for fire systems with EN54 UL approval. The new range has been designed specifically to meet the demands of today's EN54-4 complaint fire systems and is the first product from Elmdene to come, as standard, with its advanced Ecocharge intelligent battery charging capability. According to Elmdene, rigorous in-house



testing has demonstrated that the STX PSU models are capable of delivering impressive efficiency levels of up to 95%. In addition the company's EN54-23 Certified Fire Strobe FBC100-3-15 caught the attention of visitors. Another new launch for the show was a range of 12V/24Vdc switchable PSUs. Says Paul King, Elmdene's Commercial Director: "Our wide range of highly efficient and reliable switch mode PSUs, which we are seeking to promote to Middle East customers, are ideally suited to intruder alarm, access control, CCTV and fire applications. The strong focus on these PSUs reflects the demand that Elmdene is already seeing for these solutions across the wider EMEA region, compared to more traditional linear power supplies." King goes on to say that, with the Middle East region a target market for the business, Intersec offered a great opportunity to gain more market contacts at the start of 2015.

G4S - www.g4s.ae - made a big impression at Intersec 2015 as the largest multi-solution security provider in the Middle East, offering electronic security solutions, manned security services, cash solutions and facilities management. For this year's show, G4S hosted an on-stand Consultant Zone to demonstrate how the various G4S security services can interact with security technology to form a complete security solution. On the product front there are two key lines which the company showed in the Middle East for the first time. The Symmetry v8 Access Control and Video Management Software is a new version of the access control and video system which the company reveals is sold in every country in the region by G4S. Also new for Intersec, was the Symmetry EN-2DBC Edge Network Intelligent Door Controller with PoE+. This is designed for two doors and so reduces installation time by well over an hour a door. Says Ramon Grado, Vice President International Sales: "Without doubt Intersec is the flagship security show for the Middle East, and G4S has a strong presence as we know it will be the springboard for strong growth in 2015. The Middle East is one of our substantial growth markets, and as the largest security solutions provider in the region we are able to put together a complete security and risk mitigation solution for our customers. Alongside all of our well known service offerings we are showing our own Symmetry access control and video management products to all the leading consultants and new and existing customers who visit us at the show."

Pyronix – www.pyronix.com – presented a number of new solutions on its stand which formed part of the large UK Pavilion. The key launches for Intersec 2015 include the Enforcer 32WE APP, which is promoted as a two-way wireless app panel. This system, according to Pyronix, integrates with the company's current Enforcer range of two-way wireless peripherals, but now also has the capability to be monitored and controlled through the all new Homecontrol+ Android and iOS app for smartphones, which was also unveiled at Intersec 2015. This takes place over IP communications, giving users unprecedented access to their home system from anywhere in the world. Another associated innovation which Pyronix is planning to promote in Dubai is the Pyronix Cloud that enables the Homecontrol+ app to communicate with the Enforcer 32WE-APP system. Paul Ramsay, International Sales Director, confirms that the Middle East is a big growth market for the company and that, in his view, Intersec is the number one show here. "Not only does the show give us access to new and existing distributors, installers, and specifiers from the Middle East, but the show is becoming more and more international, which can only be a good thing for the market going forward." He goes on to stress that Pyronix, which he says is known for quality British technology development and manufacturing, is keen to take this opportunity to demonstrate what the company and its solutions can offer to prospective customers.

Wavestore - www.wavestore.com - used Intersec 2015 to demonstrate the advantages of its open platform VMS (Video Management Software) which is designed to support a wide range of camera technologies, including 360 degree cameras simultaneously. Regarding highlights for Intersec 2015, the company spotlighted its Wavestore Version 6 which is reported to feature advanced Ecostore intelligent power management technology. According to Wavestore the thinking behind this product is that it can reduce hard drive power consumption while supporting large data storage volumes. Chris Williams, Wavestore's Director is keen to underline the company's strong focus on the Middle East. "Intersec is an important exhibition for Wavestore as our high integrity recording solutions continue to be recommended to potential new customers by our agents and technology partners. We have committed significant resources to provide a high standard of technical and commercial support to our agents and customers. Wavestore has also made a sustained commitment to its partner program, to ensure that the resulting integrated security solutions fully meet the expectations of the design authorities, installers and customers."

Remsdag – www.remsdag.com – launched Entro Star DUO at Intersec 2015, the latest addition to its multi-award winning access control range. It is designed to work with the license-free Entro Watch software or any third-party BACnet compliant system. Remsdaq stresses that Entro Star DUO offers a new price point for 2 door access control panels, coupled with all the inherent benefits of automatic discovery and advanced diagnostic LEDs to dramatically reduce installation time. The company also feels that newly released Entro Watch v1.2 breaks new ground in the license-free security management market with its sophisticated array of new features, many of which are costly add-ons with competitors products. These include ONVIF Profile S video client, peer-to-peer triggers, card designer, global anti-passback and security lock down. Beyond this, visitors to Remsdag's stand could see the new Entro PAD multi-technology proximity reader complete with Arabic keypad. Commenting on Remsdag's attendance at Intersec, Mark Williams, the company's Business Manager - Security, underlines the fact that the company has a long history of working on prestigious security projects

Interactive Video Surveillance Magazine App

An interactive app from Geutebruck for Android, iOS and now also for Windows operating systems called G-World provides comprehensive information on products and solutions. It shows practical



examples from reference customers and provides technical background information. Images and graphics further illustrate the content. And educational, but also entertaining video clips offer additional opportunities to review and understand the information. **www.geutebrueck.com**



across a wide range of vertical markets in the Middle East. "Intersec allows our new products to be showcased to a receptive audience. The Middle East remains a key export market for Remsdaq and Intersec is the ideal forum for us to engage with that market."

Norbain SD – www.norbain.com – is a UK distributor of IP, CCTV, access control and intruder detection equipment. Its international sales division sells into 77 countries, with an office in Dubai covering the entire Middle East region. Regarding what was new for Intersec, the company is keen to single out qulu, Vista's new video management software. This is designed to offer the most efficient performance on the market today, allowing users, says Norbain, to interact with video like never before. The company ran rolling demonstrations of qulu, displaying various camera types from a range of manufacturers. There were also on-stand demonstrations from a number of 3rd party integration partners in access control and CCTV. Other products which Norbain showed at Intersec include the Vista IP monitor that can display images on an IP system, without the need for a PC or client software. In terms of cameras, Norbain confirms that it has designed a 3MP camera range specifically for the Middle East market, where higher resolution images are a prerequisite. Peter Ball, Divisional Director of Sales stresses that the distributor has ambitious plans for the region in the year ahead: 'Norbain has been exhibiting at Intersec for many years and it is key to our strategy for expanding in the Middle East. We have a well established office in Dubai and plan to expand our sales operation during 2015.'

GJD - www.gjd.co.uk - highlighted the company's Dual Tech Anti Masking Curtain Detector, the Pearl at Intersec 2015. This utilizes microwave and PIR sensors with integral anti-masking detection to create a curtain beam pattern. GJD says that boundary overspill and, as a consequence, nuisance alarms are minimized due to the narrow field of view of the protection beams. Applications for the Pearl include external windows, gates, roller doors and access points in narrow passageways: The company also showcased a new range of Clarius Plus Illuminators, targeted at the professional CCTV sector. The latest models feature an interchangeable lens system. The advantage here is that they allow users to adjust the output angle of an illuminator on site to a precise angle. Ana Maria Sagra-Smith, International Sales and Marketing Director at GJD is very positive about Intersec and having a presence on the UK Pavilion: "This provides an excellent platform to launch new products and to meet up with existing as well as new customers from the Middle East and North Africa. It always surprises me every year just how many people from the Middle East and beyond take the time to visit this exhibition." www.bsia.co.uk

360° Hemispheric IP Dome

The hemispheric IP dome camera launched by Abus can swivel, incline and zoom without mechanical camera movements at up to 6 MPx resolution. 360° and 180° panoramic views are also possible. Sometimes one eye sees more than two so, if required, the hemispheric IP dome, available as an indoor and outdoor model, can permanently provide either a 360° or 2 x 180° views of everything that moves in its vicinity. Variable digital swiveling, inclining and zooming are possible, supported by up to 6 MPx resolution @ 25 fps. The hemispheric cameras offer a continuous 360° field of vision, which provides fresh surveillance opportunities. The camera can provide a good solution for a wide range of environments, both indoors and outdoors. If the camera is mounted on a ceiling, it is possible to discreetly monitor an entire room or other large areas with just one camera, for example in businesses that are open to the public. Indoor and outdoor domes are suitable for 24/7 as they are fitted with IR LEDs. The indoor model also has its own alarm input and output, as well as an audio input and output, for example for the purpose of video verification of events detected by the alarm system. The outdoor IP dome with protection class IP66 is built to withstand all weather conditions as well as particularly dusty environments. Freely configurable tours can be set for both models if required. www.abus.com



advancis

Advancis Software & Services GmbH Monzastraße 2 · D-63225 Langen Tel.: +49 (6103) 80735-0 · Fax: +49 (6103) 80735-11 info@advancis.de · www.advancis.de

WinGuard – Integral system for security and building management, control and visualization, alarm management, video management, communication

Security Management

deister electronic

The RFID Company

deister electronic GmbH Hermann-Bahlsen-Str. 11 D-30890 Barsinghausen Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217 info.de@deister.com · www.deister.com access control; vehicle identification; biometric verification; guard tour systems; storing and management of keys and valuables

Security Management



DigiMem Deutschland Ltd & Co KG Weilstraße 2 · 65520 Bad Camberg Tel. +49(0)6434/90 99 110 info@digimem.eu · www.digimem.eu

Robust data carriers using IPC, SD or USB protocol for security in industry, medicine or the military. IP65 and IP67 sockets with redundant gold contacts ensure reliability in mobile applications under tough environmental conditions. Can be sterilised either with EtO, an autoclave, gamma or e-beam radiation for use in food and medical applications. Encapsulation and hardening of customer's own electronics.

Security Management

Security Management



LevelOne is a trademark of Digital Data Group

Digital Data Communications GmbH O D C Zeche-Norm-Straße 25 · D-44319 Dortmund Tel. +49 (0) 231-9075-222 · Fax +49 (0) 231-9075-184 sales@level-one.de · www.level-one.de

LevelOne provides full service – even when it comes to security: A broad range of high quality IP-products, combined with expertise in projects, assure reliable security solutions in all dimensions.



Funkwerk video systeme GmbH Thomas-Mann-Str. 50 · D-90471 Nürnberg Tel. +49(0)911/75884-558 Fax +49(0)911/75884-220

info@funkwerk-vs.de · www.cctv-systeme.com CCTV, system solution, system integration, video monitoring security, building management



Schille Informationssysteme GmbH SCHILLE Goseriede 4 · D-30159 Hannover Tel. +49(0)511/542244-0 · Fax +49(0)511/542244-22 info@schille.com · www.schille.com Facility and building management and security technology, fault and hazard management systems, OPC development, video surveillance systems



NSC Sicherheitstechnik GmbH

Lange Wand 3 · D-33719 Bielefeld Tel. +49(0)521/13629-0 · Fax +49(0)521/13629-29 info@nsc-sicherheit.de · www.nsc-sicherheit.de Access Control, CCTV, Fire Alarms, Intruder Alarms





deister electronic GmbH Hermann-Bahlsen-Str. 11 D-30890 Barsinghausen Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217 info.de@deister.com · www.deister.com access control; vehicle identification; biometric verification; guard tour systems; storing and management of keys and valuables



Dictator Technik GmbH Gutenbergstr. 9 · D-86356 Neusäß Tel. +49(0)821/24673-0 · Fax +49(0)821/24673-90 info@dictator.de · www.dictator.de Drive units, hold open systems and smoke detectors, door control solutions

Facility Security

Facility Security



GEZE GmbH

Reinhold-Vöster-Str. 21-29 · D-71229 Leonberg Tel. +49(0)7152/203-0 · Fax +49(0)7152/203-310 vertrieb.services.de@geze.com · www.geze.com Automatic door systems, security systems, security locks



SimonsVoss Technologies GmbH Feringastr. 4 · D-85774 Unterföhring Tel. +49(0)89/99228-180 · Fax +49(0)89/99228-222 marketing@simons-voss.de · www.simons-voss.de Digital locking and organisation systems with optional access control and time recording



Votern in Biech Walter Wurster GmbH Heckenrosenstraße 38-40 D-70771 Leinfelden-Echterdingen Tel. +49 (0) 711/949 62-0 kontakt@wurster-online.de · www.wurster-online.de Money handover systems fire resistant up to F90 and bullet resistant up to FB7, cash trays, cash-drawers and facade counters to pass through money, valuables, documents and for installation in high-security areas, banks, petrol-stations, pharmacies, sports – and cultural sites indoors and outdoors.

Alarm Management





ABUS Security-Center GmbH & Co. KG Linker Kreuthweg 5 · D-86444 Affing Tel. +49(0)8207/95990-0 Fax +49(0)8207/95990-100 info.de@abus-sc.com · www.abus.com

ABUS Security-Center is a manufacturer of innovative alarm systems, video surveillance systems, door intercom systems and detectors. As a member of the ABUS Group, the company is specialised both in industry-specific security requirements as well as the demands which private users have.

Alarm Management



ATRAL-SECAL GmbH Service Daitem Thaddenstr. 4 · D-69469 Weinheim Tel. +49(0)6201/6005-0 · Fax +49(0)6201/6005-15 info@daitem.de · www.daitem.de Radio-controlled burglary alarm systems, radiocontrolled fire warning devices, distribution via security suppliers

DIGISOUND®

Digisound Electronic GmbH Oststraße 54 · D-22844 Norderstedt Tel. +49(0)40/526869-0 · Fax +49(0)40/526869-13 contact@digisound.de · www.digisound.de Acoustic buzzers, piezo-electric sounders, electronic beacons, speakers, and transducers

BUSINESSPARTNER The Purchasing Section for direct contact





TAS Telefonbau A. Schwabe GmbH & Co. KG Langmaar 25 · D-41238 Mönchengladbach Tel. +49 (0) 2166 858 0 · Fax: +49 (0) 2166 858 150 info@tas.de · www.tas.de Manufacture and development of: alarm and conference units, VoIP- or ISDN emergency technology,

ference units, VoIP- or ISDN emergency technology alarm transmission systems



tetronik GmbH

Silberbachstr. 10 · D-65232 Taunusstein Tel. +49-6128-963-1 · Fax +49-6128-963-499 info@tetronik.com · www.tetronik.com broadcasts and alarns, telephone conferences, personal security measures with location tracking and visualisation, one number services and group calls, announcement and open listening services, telephony access services for host systems

Video Technology



ABUS Security-Center GmbH & Co. KG Linker Kreuthweg 5 · D-86444 Affing Tel. +49(0)8207/95990-0 Fax +49(0)8207/95990-100 info.de@abus-sc.com · www.abus.com ABUS Security-Center is a manufacturer of innovative alarm

Abus security-center is a manufacture of innovative anamisystems, video surveillance systems, door intercom systems and detectors. As a member of the ABUS Group, the company is specialised both in industry-specific security requirements as well as the demands which private users have.

Video Technology



Axis Communications GmbH Adalperostraße 86 · D-85737 Ismaning Tel. +49 (0)89/35 88 17 0 · Fax +49 (0)89/35 88 17 269 info-de@axis.com · www.axis.com Network video equipment – the AXIS IP-Surveillance allows remote access video management



CBC (Europe) GmbH

CBC (Europe) GmbH Hansaallee 191 · D-40549 Düsseldorf Tel. +49(0)211/530670 · Fax +49(0)211/53067180 info@cbc-europe.com · www.cbc-europe.com Video monitoring components – e.g. cameras, lenses, screens, monitoring technologies, DVR, NVR.



Dallmeier electronic GmbH & Co. KG Cranachweg 1 · 93051 Regensburg Tel. +49(0)941/8700-0 · Fax +49(0)941/8700-180 info@dallmeier.com · www.dallmeier.com Video: digital storage systems, image transmission, available through specialized retailers



VIDEO SECURITY & NETWORK GMBH Your reliable partner and provider of professional network video products in Germany & Austria

DEKOM Video Security & Network GmbH Hoheluftchaussee 108 • 20253 Hamburg Tel. + 49 (0) 40 4711213 - 0 • Fax Tel. + 49 (0) 40 4711213 - 33 info@dekom-security.de

www.dekom-security.de • www.divicro.de



Eneo is a registered trade mark of VIDEOR E. Hartig GmbH, Rödermark. Distribution via authorized dealers and installers.

info@eneo-security.com · www.eneo-security.com

Products and solutions for video security applications



eyevis GmbH

Video Technolo

Hundsschleestr. 23 · D-72766 Reutlingen Tel. +49(0)7121/43303-0 · Fax +49(0)7121/43303-22 info@eyevis.de · www.eyevis.de Large surface displays of security information in control rooms



logiware gmbh

Alfred-Mozer-Str. 51 · D-48527 Nordhorn Tel. 05921/7139920 · Fax 05921/7139929 info@logiware.de · www.go1984.de Software, video transmission systems, security, video, video surveillance systems, digital video surveillance, networking





Time + Access





Cichon+Stolberg GmbH Wankelstraße 47-49, 50996 Köln Tel. +49(0)2236/397-200 · Fax +49(0)2236/61144 info@cryptin.de www.cryptin.de Operational data collection, time recording, access control



CONIC DESIGN SRL 1 Piata Presei Libere · C1 Building 01370 Bucharest · Romania Tel: +40745342887 · Fax: +40378 104 216 office@conicdesign.ro · www.passchip.eu Self-Bank and Self-Service entrance by reading contact CHIP and/or NFC, High Security entrance solutions.

deister electronic

The RFID Company

deister electronic GmbH Hermann-Bahlsen-Str. 11 D-30890 Barsinghausen Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217 info.de@deister.com · www.deister.com access control; vehicle identification; biometric verification; guard tour systems; storing and management of keys and valuables



FEIG ELECTRONIC GMBH Lange Straße 4 · 35781 Weilburg Tel. +49(0)6471/3109-44 · Fax +49(0)6471/3109-99 obid@feig.de · www.feig.de Electronic locking systems, identification, access control, access road control



GANTNER Electronic GmbH Montafonerstraße 8 · A-6780 Schruns Tel. +43 5556 73784-542 · Fax +43 5556 73784-8000 info@gantner.com · www.gantner.com access control solutions/biometrics, time management, data capture, locking systems



ISGUS GmbH Oberdorfstr. 18-22 78054 Villingen-Schwenningen Tel. +49(0)7720/393-0 · +49(0)7720/393-184 info@isgus.de · www.isgus.de Time Recording, Access Control, Plant Data Collection, Staff Planning



PCS Systemtechnik GmbH Pfälzer-Wald-Straße 36 · 81539 München Tel. +49(0)89/68004-550 · Fax +49(0)89/68004-555 intus@pcs.com · www.pcs.com time recording, access control, BDE/MDE, biometric, video, SAP, Vein Scanner

Be Part of the Section BusinessPartner

Just send a mail to heiko.baumgartner@wiley.com We will be glad to advise you!



phg Peter Hengstler GmbH + Co. KG Dauchinger Str. 12 · D-78652 Deißlingen Tel. +49(0)7420/89-0 · Fax +49(0)7420/89-59 datentechnik@phq.de · www.phq.de RFID components for access control, timekeeping, factory data collection, canteen data, leisure applications, surfacemounted devices, flush-mounting components, biometrics, identification media and accessories



primion Technology AG Steinbeisstraße 2-4 · D-72510 Stetten a.K.M. Tel. +49(0)7573/952-0 · Fax +49(0)7573/92034 info@primion.de · www.primion.de Time management, access control and management, staff deployment planning, graphic alarm management, SAP communications solutions, pass and ID card production, Biometrics



Wanzl Metallwarenfabrik GmbH Rudolf-Wanzl-Straße 4 · 89340 Leipheim, Germany Phone +49 (0) 8221/ 729 - 6461 +49 (0) 8221/ 729 - 90461 Fax security-solutions@wanzl.de · www.wanzl.com Personal guidance systems, barriers, security turnstiles, electronic entrance systems

Fire Protection





Novar GmbH a Honeywell Company

Dieselstraße 2 · D-41469 Neuss Tel.: +49(0)2131/40615-600 Fax: +49(0)2131/40615-60 info@esser-systems.com · www.esser-systems.com Fire Alarm systems, voice alarm systems, emergency lighting systems, security systems



Hekatron Vertriebs GmbH Brühlmatten 9 · 79295 Sulzburg Tel. +49(0)7634/500-0 · Fax +49(0)7634/6419 info@hekatron.de · www.hekatron.de Fire alarm systems. Smoke switch systems. Smoke alarms, Safety linkage systems



Kidde Brandschutz GmbH Harkortstraße 3 · 40880 Ratingen Tel. +49/(0)2102/5790-0 · Fax +49/(0)2102/5790-109 info@kidde.de · www.kidde.de Fire detection and extinguishing technology · high sensitive smoke detection · fire protection systems for server cabinets and IT rooms.

Fire Protecti

Teckentrup GmbH & Co.KG Tel. +49 (0) 5246/504-0 Fax +49 (0) 5246/504-30



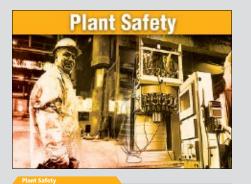
www.teckentrup.biz · info@teckentrup.biz Fire protection doors and gates T30/T60/T90, security doors (resistance class WK 1 – WK 4), sound insulated doors (up to Rw 57 dB), bullet-proofed doors, smoke-proof doors



WAGNER Group GmbH Schleswigstraße 1-5 · 30853 Langenhagen Tel. +49(0)511/97383-0 · Fax +49(0)511/97383-140 info@wagner.de · www.wagner.de

 $\mathsf{Hamburg} \cdot \mathsf{Berlin} \cdot \mathsf{Leipzig} \cdot \mathsf{Hannover} \cdot \mathsf{K\ddot{o}ln}$ Mülheim/R. · Frankfurt/Main · Stuttgart · München

fire suppression, fire prevention, very early fire detection, fire protection for server racks



F PEPPERL+FUCHS

Pepperl+Fuchs GmbH Lilienthalstraße 200 · 68307 Mannheim Tel. 0621/776-1111 · Fax 0621/776-27-1111 fa-info@de.pepperl-fuchs.com www.pepperl-fuchs.com Security sensors, inductive, capacitive, optoelectronic and ultrasonic sensors, vision sensors,

electronic and ultrasonic sensors, vision sensors, identification systems, interface modules

IMPRINT

Published by

Wiley-VCH Verlag GmbH & Co. KGaA A Company of John Wiley & Sons, Inc GIT VERLAG Boschstrasse 12 · 69469 Weinheim · GERMANY Tel.: +49 (0) 6201 606-0 · Fax: +49 (0) 6201 606-791 info@gitverlag.com · www.gitverlag.com

Managing Directors

• Dr. Jon Walmsley

Publishing Directors

- Dr. Heiko Baumgartner Tel.: +49 (0) 6201/606-703 heiko.baumgartner@wiley.com
- Steffen Ebert Tel.: +49 (0) 6201/606-709 steffen.ebert@wiley.com

Sales Managers

- Regina Berg-Jauernig Tel.: +49 (0) 6201/606-704 regina.berg-jauernig@wiley.com
- Dr. Katina Leondaris Tel.: +49 (0) 6201/606-734
- katina.leondaris@wiley.com • Dr. Michael Leising Tel.: +49 (0) 36 03/89 31 12

Editorial

• Matthias Erler Tel: +49 (0) 6723/9 94 99 82 matthias.erler@wiley.com

Editorial Assistant

• Sophie Platzer Tel.: +49 (0) 6201/606-761 sophie.platzer@wiley.com

Production

- Christiane Potthast
- Andi Kettenbach (Layout)
- Elli Palzer (Lithography)
- Claudia Vogel (Sales Administrator)

Power Supplies





SLAT SAS Designer of reliable power supplies 11, rue Jean Elysée Dupuy – B.P. 66 F-69543 Champagne au Mont d'Or Cedex – France Tel. +33(0)478 66 63 60 · Fax +33(0)478 47 54 33 www.slat.com · comm@slat.fr

fire detection, voice alarm, access control, intrusion. outdoor video surveillance

European Representatives

- Dave Harvett, Direct Media Tel.: +44 (0) 121 705 2120 daveharvett@btconnect.com
- Oliver Haines, Impressive Marketing Tel.: +44 (0) 1743 369611 impressive.marketing@virgin.net

Bank Account

Commerzbank AG Mannheim, Germany Account No.: 07 511 188 00 Routing No.: 670 800 50 BIC: DRESDEFF670 IBAN: DE94 6708 0050 0751 1188 00

GIT SECURITY is published 6 times per year.

Subscription 2015

6 issues 78.00 €, single copy 15.40 € plus postage. Pupils and Students receive a discount of 50 % at sight of a valid certificate. Subscription orders valid until cancelled, notices 6 weeks before end of the year. Subscription orders can be revoked within 1 week in writing. Dispatch complaints are possible only within 4 weeks after publishing date.

The publishing house is granted the exclusive right, with regard to space, time and content to use the works/ editorial contributions in unchanged or edited form for any and all purposes any number of times itself, or to transfer the rights for the use of other organizations in which it holds partnership interests, as well as to third parties. This right of use relates to print as well as electronic media, including the Internet, as well as databases/ data carriers of any kind.

All names, symbols etc. mentioned and/or printed in this issue may be registered trademarks of their respective owners.

Print run: 20,000

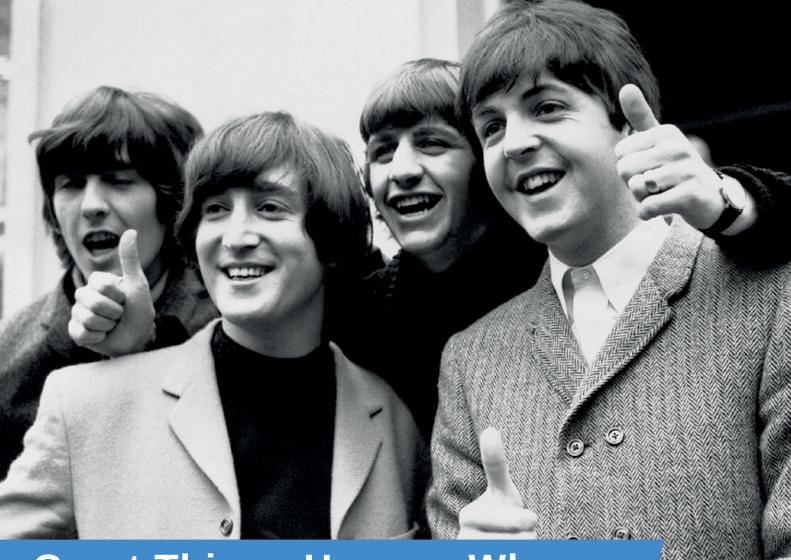
Cover Page Layout Elli Palzer · elke.palzer@wiley.com

Printed by pva Druck und Mediendienstleistungen GmbH D-76829 Landau/Pfalz

Printed in Germany ISSN 2190-4367

Company Index

| A bus | 40.47 |
|----------------------------|------------------------|
| Advancis | 40, 47 22 |
| Advancis Arecont Vision | 22 |
| Assa Abloy | 6, 7, 38 |
| Assa Abioy Axis | 0, 7, 38 19, 25, 27 |
| | |
| Bosch | 7, 9, 27, 45 |
| BSIA | 46 |
| Canon | 6, 34 6 |
| CEM | 8 46 |
| Compston D ahua | 40 |
| Dallmeier | 25, 45 |
| Deister | 32 |
| Dorma | 32 |
| Elmdene | 46 |
| Euralarm | 40 |
| Eyevis | , 8, 14, 29 |
| Flir | 0, 14, 23 |
| G 4S | 46 |
| Geutebruck | 48 3, 30, 47 |
| Giesecke & Devrient | 3, 30, 47 |
| GJD | 46 |
| Grundig | 25 |
| Hikvision | 8 |
| Idis | 19 |
| Maxxess | 13 |
| Milestone Systems | 6, 7, 20, 28 |
| Mobotix | Inside Front Cover |
| Nedap | 45 |
| Norbain | 46 |
| Novar | 42 |
| O nSSi | 25 |
| Optex | 8 |
| Paxton | 9 |
| PureTech | 6 |
| Pyronix | 46 |
| Raytec | 45 |
| Remsdag | 46 |
| Rittal | 44 |
| Salto | 36 |
| Samsung | 7, 19, 27, 31 |
| SeeTec | 24, 41 |
| Sicurit | 23, 27 |
| Siemens | 15 |
| Suprema | 7 |
| Talk-A-Phone Co | 19 |
| TeleEye | 6 |
| The Security Institute | 7 |
| Touchless | 35 |
| UBM | 37 |
| V anderbilt | 8, Outside Back Cover |
| Vicon | 16, Front Cover |
| Videotec | 19 |
| Vidicore | 19 |
| Vivotek | 9, 19, 26 |
| Wagner | 9 |
| Wavestore | 19, 46 |
| | |



Great Things Happen When You Come Together

John, Paul, George and Ringo: greatness happens through collaboration.

In that same spirit, Vanderbilt[®] has worked to strategically merge technology and solutions for more than 25 years. We know that when greatness comes together, our global customers and partners benefit from best-in-breed solutions.

For our next great collaboration, Vanderbilt is pleased to continue our history of innovation and growth with the acquisition of Siemens' Security Products business. Siemens' industry-leading access control, intrusion alarm and video surveillance products perfectly complement our fully integrated solutions, letting our partners benefit from the best technology out there.





IFSEC 2015, London: Booth F1300 For more information visit us at **vanderbiltindustries.com** or call 855.316.3900.