

NZSecurity

An aerial photograph of the Palmerston North City Council building, a tall, white, modern structure with a clock face, situated in the center of a city. The building is surrounded by green spaces, trees, and other urban buildings. In the background, a church spire and distant mountains are visible under a clear sky.

February / March 2016

**Achieving safety & security
effectively through design**

Stranger than fiction?

The curious evolution of robots in security

**Lessons learnt in implementing early safe
city schemes: An integrator's view**

Cover photo courtesy of
Palmerston North City Council

Loktronic

SECURITY • TECHNOLOGY • RELIABILITY

your electromagnetic locking specialist!

**Underpinned by
25 year's
experience
and service with
integrity.**

Standard features include:

- Field-selectable 12 & 24 VDC options
- 300/550/750 kg holding force options
- Slimline styling
- Instant release
- Stainless steel fitting hardware
- Through hardened, polished stainless sex nut
- Full protection against transients.

Options include:

- Door Position Switch
- End-to-end Magnetic Bond Sensor
- Header extension angle bracket
- Custom full width housings
- Z/L brackets for inward opening doors
- Frameless glass door brackets
- Powder coated or anodised colours
- Stainless indoor, outdoor and gate locks

For expert advice and assistance with **your** security locking needs, trust in Loktronic, call us on **0800 367 565**

10
YEAR
GUARANTEE



Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
mail@loktronic.co.nz www.loktronic.co.nz



Your **guaranteed** supplier of
Lockwood and **Trimec** products.
PLUS! Large stock and
numerous models available.



Better Security, Better World

YOU CAN COUNT ON ME

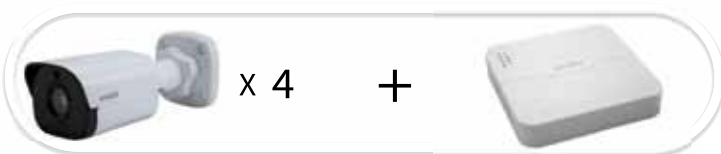
UNIVIEW HD IP KIT, YOUR PERSONAL SUPER GUARD

- View anywhere
- Alarm real-time push
- Easy connection & installation



HD IP KIT

Products included:



IPC2121/2SR3-PF36

1.3/2MP Network IR Mini Bullet

Up to 30m IR

Triple streams

IP66

NVR201-04LP

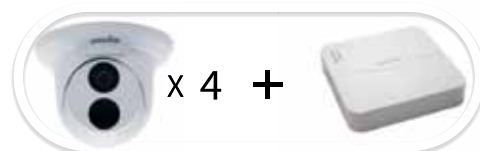
4-ch 1 HDD PoE Network Video Recorder

HDMI/VGA output

4 10M/100M PoE interfaces

USB3.0 interface

Other Optional kit:



IPC3611/2SR3-PF28

NVR201-04LP

Contact Details:

Craig Flint

Telephone: +64 (07) 868 2703

Mobile: +64 (0) 274 597 621

Postal and delivery address:

27 West Crescent

Te Puru 3575

Thames RD5

New Zealand

Email & Web:

craig@newzealandsecurity.co.nz

www.NewZealandSecurity.co.nz

Upcoming Issues

April / May 2016

Government, Transport, Tourism,
Featuring Access Management, IT
Security Threats.

June / July 16

Wholesalers and Manufacturers
Featuring Perimeter Protection,
Alarms.

Disclaimer:

The information contained in this publication is given in good faith and has been derived from sources believed to be reliable and accurate. However, neither the publishers nor any person involved in the preparation of this publication accept any form of liability whatsoever for its contents including advertisements, editorials, opinions, advice or information or for any consequences from its use.

Copyright:

No article or part thereof may be reproduced without prior consent of the publisher.

CONTENTS

- 6 From the Editor
- 8 Dahua Delivers
- 12 Achieving Safety & Security Effectively through Design
- 14 Noke Smart Locks
- 15 Safer Internet Day 2016
- 16 ASD Tips for Home Users
- 17 Allegion - Flexible, Simplified Security
- 18 Stranger than Fiction?
- 20 Lessons Learnt
- 24 HIB Global®
- 27 Vortech Drone wins
- 28 Putting the Eye in IoT
- 30 Global Biometric Market
- 32 Everything in View
- 34 Australia Round-up
- 36 Product Showcase
- 38 Australia's Cyber Warfare Capabilities Slammed
- 38 Data Retention Grants Program open for Industry

ENJOY a **10** year guarantee*
on Loktronic Indoor Electromagnetic Locks!

Loktronic 0800 367 565
www.loktronic.co.nz

*Standard terms & conditions of sale apply.

Industry Associations



www.security.org.nz



NEW ZEALAND INSTITUTE OF
PROFESSIONAL INVESTIGATORS INC.

www.nzipi.org.nz



Advancing Security Worldwide™

www.asis.org.nz



www.masterlocksmiths.com.au



Squeezed storage.

Keep the essence with
Axis' Zipstream technology.

Optimized for video surveillance, Axis' Zipstream technology is a radically more efficient H.264 implementation. Zipstream lowers bandwidth and storage requirements by an average 50% or more for many common 24/7 surveillance use cases - all without losing forensic details.

Visit www.axis.com/zipstream or send an email to contact-sap@axis.com for more information.



The Innovative Product of The Year Award



Distributed by:



From the Editor

In this issue of NZSM, we feature the insights of CCTV integrator Peter Houlis on pioneering safe cities in the UK, Canadian CPTED expert Kate Gallagher on achieving security through smart environmental design, and Wai King Wong of Axis Communications on surveillance trends for 2016. We also place UGVs - and their aerial cousins - within historical context, and much more.

2016 is promising to be a big year for New Zealand Security Magazine (NZSM). Just last December we launched our new online home at www.defsecmedia.co.nz. This means that NZSM is now available online as well as via our full-colour print edition.

Over coming weeks you'll notice our website posting news on a more frequent basis – and between the two months separating each print edition. Subscribers will also receive our news e-newsletter fortnightly via email. Feature articles from back issues will also become available on the website over time.

With developments in the international and local security sectors occurring more quickly – and more curiously – than ever before, NZSM is committed to providing Kiwi businesses with a magazine that focuses on the emerging trends and technologies – and a website that keeps our readers more up-to-date than ever.

NZSM is also joined by its sister publications, FireNZ and Line of Defence, on the new website. For our online audience and advertisers, this means more news and views on the interrelated frontline industries of defence, security and fire protection. Line of Defence is our eagerly anticipated and soon-to-be launched NZ defence business magazine.

Amid all of these developments, the one thing I hope you'll notice – and benefit from – is our unwavering commitment to keeping our readership well ahead in the race for meaningful information and business intelligence. And if you've got something to say, news to tell, or products or services to promote, please do get in touch.

Nick Dynon



Nick's professional background is in government and the military. He was posted to Shanghai, Beijing and Suva as a diplomat during a 14-year career with Australia's Department of Immigration and Border Protection, and has also served in the Australian Army's Signals (RASIGS) and Transport (RACT) corps. He holds Masters degrees in Asian Studies and International Relations from the Australian National University and the University of Sydney respectively, and he is a graduate of the Royal Military College of Australia.

Nick's research has been published in several peer-reviewed journals and for the Washington-based Jamestown Foundation on international security, cyber conflict and terrorism. His writing has also appeared in international affairs publications including The Diplomat, National Business Review, Global Times and World Policy Institute Blog. His insights are regularly sought via interview by outlets such as CNN and Agence France-Presse (AFP).

www.defsecmedia.co.nz

4K

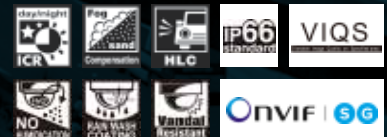
IT'S IN OUR DNA

The new Panasonic WV-SFV781L Camera embodies Panasonic's Security DNA philosophy. We provide True 4K from the Panasonic made optics to the chipset and black box technologies, such as the rain wash coating. The WV-SFV781L is designed from the ground up to provide the best 4K experience.



WV-SFV781L VARI-FOCAL CAMERA

- 4k images up to 30fps
- Ultra wide 6x motorised optical zoom
- 12.4 Mega pixel sensor
- Rain wash coating
- Fog compensation



OUTSTANDING CLARITY

THE PANASONIC VARI-FOCAL OPTICS AND 12MP SENSOR

4K OFFERS IMPROVED CLARITY

With 4x the resolution of FHD more details can be seen.

FALL OFF REDUCED

The Panasonic 4-25mm optics insure the image stays sharp right to the edges.

12M PIXEL MODE

The WV-SFV781L Can provide a 12M Pixel output at 15Fps.



WWW.PANASONIC.NET/SECURITY

Panasonic



Dahua Delivers an Elite Security Solution for a Luxury Hotel in Italy

The Villa d'Este has been nestled in Cernobbio for almost 150 years. It was built in 1568 as a private residence and was transformed into a hotel in 1873. The Villa itself is a great example of Renaissance architecture and its luxurious rooms are located majestically along the shore of Lake Como. For years, many international awards have been bestowed upon Villa d'Este as the most wonderful hotel in the world. It has received numerous prestigious international awards for excellence.

Through the centuries, countless celebrities have stayed in this beautiful hotel, including kings and queens, presidents, Hollywood stars, writers, musicians, singers, designers, politicians, etc. The first important guest was Giorgio Ricordi who invited famous composers Giuseppe Verdi e Giacomo Puccini. Additionally, celebrities like Alfred Hitchcock, Frank Sinatra, Leopold, King of Belgium, King Vittorio Emanuele, the Princess of Monaco, Barbara Streisand, Madonna, Mick Jagger, Bruce Springsteen, John Kennedy, Gorbachev, Churchill, the Shah of Persia, Maria Callas, Onassis, just to name a few have all been guests at the Villa d'Este. Also, each year the hotel hosts internationally cultural events like the

“Workshop Ambrosetti”, a benchmark for the highest levels of politics, finance and industry; and the “Concorsod’ Eleganza Villa d’Este”, an annual world-wide event for classic cars with custom bodywork.

Dahua, in conjunction with Videotrend, was paid the highest compliment as it was asked to secure this spectacular venue. The challenge was to set up a highly professional video surveillance system with the specialist installer Emit di Lecco for its property protection, while ensuring the most absolute privacy for the celebrity guests. The security system exerts strict monitoring for the entrances, parking lots and other outdoor areas to greatly eliminate possible unsafe factors. In total, the hotel has installed 75 units comprised of different camera types from the Dahua Eco Savvy 2.0 series.

Dahua’s latest 2.0 series features a 4-megapixel progressive-scan CMOS, which delivers high quality images at 20fps. The end result is an image twice as clear as a traditional 1080p camera. The series features an impressive range of smart detection features, including face detection, tripwire detection, and intrusion detection. These features mean that users are equipped with more precise video analysis and, as

End to End IP Solution Provider

Build the best and efficient solution to leverage your benefits

Dahua Technology aims to build its brand as the premiere choice for industry professionals, offering comprehensive product portfolios in the industry from front-end to back-end in complete IP solutions.



CE FC CCC UL RoHS ISO 9001:2000



DAHUA TECHNOLOGY CO., LTD.

No.1199 Bin'an Road, Binjiang District, Hangzhou, China. 310053
Tel: +86-571-87688883 Fax: +86-571-87688815
Email: overseas@dahuatech.com
www.dahuasecurity.com



Add: Unit G 701 Great South Road Penrose
Auckland 1642 New Zealand
E-mail: andrew@swl.co.nz
Web: www.swl.co.nz

DAHUA TECHNOLOGY AUSTRALIA PTY LTD

Add: Unit 8, 39 Herbert Street St Leonards, NSW, 2065
E-mail: sales.oc@global.dahuatech.com



a result, greater security efficiency. Eco-savvy 2.0 also boasts WDR image enhancement technology, triple video streams, and Intelligent Video Surveillance (IVS). The wide dynamic range (120dB) ensures the cameras offer impressively high performance in scenes that are backlit as well as those situated in dark areas, which has traditionally been challenging for surveillance cameras.

The majority of the cameras are installed mainly in the primary areas for monitoring. The camera is equipped with CMOS progressive scan sensor, featuring 4MP resolution which provides high quality images at 20 fps. Thanks to the powerful sensor, images are twice as clear as traditional cameras 1080p (2MP) which affords the hotel better protection with finer details.

In addition to these cameras, Dahua also upgrades the NVRs for the hotel which is NVR6000. It supports max 128

channel IP cameras input with 1080P real-time live view. It is able to provide smooth video streams as well.

Moreover, the hotel has simultaneously installed Dahua VDP system for the interior of the villa. Dahua video door phone is specially designed for the modern intelligent Villa. It features outdoor visual intercom, face recognition access control, card unlock, indoor monitor unlock, and camera surveillance. The outdoor station is made with an aluminum alloy panel with an ultrathin machine. The indoor monitor is very sleek looking and easy for installing and removing. A complete parking guidance system solution, including monitoring, recording, analysis and license plate reading was also installed. All the information is recorded and classified for rapid access of information when searching for a particular event.

“We delivered the most advanced comprehensive product series to secure Ville d’Este. Compared to other suppliers, Dahua’s products offer the great advantage of high definition viewing, which enables users to see the details of the scenes and ensures safety as well,” said Elmer Zhang, Sales Director of Europe at Dahua Technology. “The proper use of our products in Ville d’Este has proven to be a great success, which we hope will encourage the installation of our products to serve more customers in the hospitality field.”



Loktronic

SECURITY • TECHNOLOGY • RELIABILITY

HOLD ON A MINUTE

...OR AN UNRIVALLED 10+ YEARS!

Not all products are created equal.
Take Loktronic's premium quality Fire
Door Holding Electromagnetic FDH40...
they are simply the best in their field.



PLAY IT SAFE AND LOCK IN
Loktronic quality, every time



FDH40S: Standard, floor mounted



FDH40SS: Flush mounted



FDH40SS: Surface mounted



Designed, tested
and produced in NZ
to AS4178

10 year guarantee*

Unbreakable
universal mounting

Floor or wall
mounting options

Superior quality
materials
and fastenings

Full and immediate
on-shore support

Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
mail@loktronic.co.nz www.loktronic.co.nz

For expert advice and
assistance with **your** security
locking needs, trust in Loktronic,
call us on **0800 367 565**

*Standard terms & conditions of sale apply.

Achieving Safety and Security Effectively Through Design

According to Susan Gallagher, most security practitioners know that the emergence of security risk management is a direct result of the costliness of security measures – especially when it comes to physical security. “What many don’t realise,” she says, “is just how much savings can be achieved with some simple design choices that make the most effective use of the safeguards at your disposal.”

An expert in physical security and Crime Prevention Through Environmental Design (CPTED) principles, Susan presented at last November’s NZ Security Conference and Expo. Her session highlighted some real-life examples of how good planning helps to create outcomes that are both enjoyable and aesthetically pleasing as well as providing for effective security.

After a career in project management, design and architecture, Susan began working for the Royal Canadian Mounted Police (RCMP) as a Physical Security Advisor in 1999. In this role, Susan provided guidance for all Canadian federal government agencies on their security programs, large construction projects and threat and risk assessments.

Susan relocated to New Zealand in 2004, founding a security and risk management consulting business. Her clients included Telecom New Zealand, RBNZ, BP at Auckland International Airport, and the Civil Aviation Authority among others. Upon returning to Canada in 2008, Susan has returned to government and has been an active member of the security professional community in Canada and Australasia.

An introduction to CPTED

According to the NZ Ministry of Justice, CPTED is a set of principles that can be applied to the design and development of buildings and other public areas. It seeks to use effective design to reduce the incidence and fear of crime.

CPTED provides a framework for incorporating crime prevention into good urban designs. It focuses on reducing the opportunity to commit crime and lowering the motivation to offend, while promoting positive interactions among the legitimate users of a space.

With her background in architecture and design, Susan is a big advocate of CPTED, security planning and zones in public urban spaces, and a risk management approach to security.

Natural surveillance

Natural surveillance, says Susan, helps promote a feeling of safety by deterring criminal activity. The mixed use of space, such as cafes and activities in open public spaces, not only provides natural surveillance, but also enhances the enjoyment and value of a space, which in turn leads to a sense of ownership among the people who use it.

However, the natural surveillance value of a space can diminish if the space is not well maintained. If graffiti starts to appear, for example, a space can become less attractive to positive space users and thus less legitimate users will use it. Meaning fewer eyes on the ground.

Activity generators are important because they help to maximise use of spaces and help reduce unwanted activities because of fear of being seen. Public art can create meaningful points



Susan Gallagher presented at last November’s NZ Security Conference and Expo

where people can stop and rest, thereby promoting security through increased natural surveillance.

Similarly, effective lighting along pathways and pedestrian traffic areas provides the perception of surveillance, sending a message to people intending to engage in criminal activities that they are going to be seen. “Lighting should provide people with a 15-metre clear zone or buffer,” recommends Susan. This provides users with a sense that they can identify a potential threat early enough to enable an effective retreat.

Risk Management

The emergence of security risk management, Susan asserts, is a direct response to high cost of security measures.

Bollards for example, prevent vehicles from entering spaces where they are not

wanted, but they can be expensive. Given expense of vehicle rated bollard, she suggests, it's worthwhile looking at the outcome a bollard is designed to achieve from a risk management perspective based on the environment and types of threats faced.

It may be that there are other ways of using and shaping the environment to achieve the same outcome without breaking the bank. After all, she states, CPTED is "a low-tech method for achieving security."

It's about maximising the dollars spent on a project and focusing planning on the most effective risk mitigators that you can. This requires early planning based on a comprehensive understanding of the threat environment – local, domestic and international – so as to avoid costly errors post-tender.

"Planning for security early into the design and development stages of a project provides for cost-effective "outside the box" ingenuity. This concept applies to all security planning; whether it is a small commercial facility or a large campus."

Based on rational choice theory

In essence, CPTED aims to ensure that the users of a space make the right kinds of choices so as to encourage the positive use of that space. So it does prevent crimes, but not all crimes. It is particularly good at preventing opportunistic crimes against people, such as assaults, and other types of nuisance activities like vandalism.

The downside, Susan cautions, is that if you stop crime in one area it may be displaced into another, and very often into more vulnerable neighbouring areas.

"It's really difficult to determine whether CPTED is effective in achieving what you want it to unless the space has a high volume of passers by and good metrics," she warns. Security has



Palmerston North's Square

measurable outcomes - you know a fence will prevent people from accessing a particular area. On the other hand, as a 'soft' measure that's all about encouraging, CPTED is inherently harder to measure.

Zoning and territoriality

Zoning can be used to encourage natural surveillance of an area. Zones help demarcate what should be happening in a space, and they can be used to target areas where CCTV or public audio addresses should be occurring.

Good planning, reiterates Susan, is key. With planning, pedestrian flows can be planned to channel pedestrian traffic into CCTV footage areas.

Creative use of borders, buffer zones and transition areas, such as ponds, kerbs, stepped paving and well-plotted paths can maximise the security of a space. Pruned trees maintains visual surveillance through line of sight.

Transition in the use of materials can also assist in demarcating different space uses, and signage can be used to identify the legal demarcation of property as well as directional information.

Creating territoriality is an important CPTED principle. Well-designed public parks and green spaces promote ownership of space and encouragement of positive activities – both stationary and mobile. Territoriality is also about promoting the enjoyment of spaces through concerts and community events, and the use of shade, plantings, seating and cafes to encourage positive loitering.

Palmerston North's Square a CPTED success

Palmerston North's city centre in the 1990s was experiencing high levels of crime, including a rape and assaults. In 1997, local authorities engaged CPTED Architect Frank Stoks to redesign the city's central parkland square.

Benches were constructed to allow people to sit and enjoy the park. Poorly placed paths that had caused people to take short cuts and walk into spaces less secure and less adequately lit were re-routed. Low glare lighting was installed that was just bright enough to allow people to wayfind and to feel safe.

Good planning and effective environmental design has led to a significant cut in crime in Palmerston North's centre, and it didn't necessarily come at great cost. Low-tech, low-cost environmental design well planned and executed not only has the clear potential to prevent crime, but it can also make us feel good about the community and city that we live in.



Effective use of zoning, borders, mixed use and public art in CPTED

Astute Smart Locks launches Noke - the world's smartest bluetooth padlock

Astute Smart Locks, an Auckland based thought leader and pioneer of smart lock & smart access technology, is excited to announce the launch of Noke into the New Zealand market.

Noke is a bluetooth enabled smart padlock that you unlock with your smartphone - eliminating the hassle of keys and combinations forever! All Noke locks are compatible with iOS, Android and Windows smartphones, and work in conjunction with the Noke app for **smart, convenient security**.

Features:

Designed to be the simplest electronic device you own, Noke automatically finds and connects to your **Bluetooth 4.0** enabled smartphone. Instead of fumbling for keys, simply walk up to your Noke, press the shackle, and instantly access your possessions.

Noke's app even lets you **share guest access** with friends and family, so they can unlock your Noke with their own smartphone. You can allow a guest unlimited access, one-time access, or create a custom schedule of specific times and days of the week.

For added control and peace of mind, Noke lets you **monitor its history** so you know where, when, and by whom your lock was accessed.

In case your phone battery dies, Noke has a back-up plan called 'Quick-Click,' so you're never left stranded. Noke's **Quick-Click** technology allows you to create a custom access code of short and long clicks on the shackle so you have the **option to open it manually** if necessary.

Security:

Noke uses the latest in anti-shim technology so security is not compromised. It also uses the latest in PKI technology and cryptographic key exchange protocol to stand up to hackers.



Product Quality:

Made of boron-hardened steel, Noke is not only attractive, but also incredibly strong. It's designed to stand up to the toughest environments and weather conditions so Noke can go where you go.

Battery:

Noke locks are packed with a long lasting battery, giving you over a year's worth of use before needing to be replaced or recharged.

Fleet Management:

With Noke, it's easy to take the benefits of a smart lock—ease, convenience, control, security, durability—and scaling that to **work for an entire enterprise**. It will help professionals better manage their fleet by allowing them to be the administrator over an unlimited amount of locks. They can issue locks to individual employees, while still having the power to revoke access as well as monitor where and when the locks are used. **No more giving up control** and no more changing locks and combinations again.

Customers:

Noke locks are wildly **popular among all ages and demographics**. Kids tend to use Noke on bikes and school lockers, while adults use Noke for locking up their back gate, gym locker, storage units, shed, cabin, trailer and more. Noke also accommodates business professionals by adding control to everyday security needs ranging from enterprise shipping containers to individual employee lockers. The use cases are endless and the benefits unparalleled.

For more information

please visit www.astutesmartlocks.com or email: info@astutesmartlocks.com.

Noke Padlock Specs

Material: Zinc alloy body with boron-hardened steel shackle

Colors: Silver, Black

Water Resistant Strength Rating: IP66

Operating Temperature Range: -23degC to 65degC

Security: PKI technology and cryptographic key exchange protocol

Bluetooth: 4.0

Battery: 2032 coin cell battery



Safer Internet Day 2016

9th February is Safer Internet Day – a day celebrated worldwide to encourage the safe and positive use of the internet and digital technologies such as mobile phones, especially among children and young people.

New Zealand's Safer Internet Day (SID) is being coordinated by the online safety and security organisation NetSafe.

The theme of SID 2016 is "Play your part for a better internet". According

to organisers, it's a theme intended to encourage people to think about their role in developing a safer and more responsible online experience for children and young people.

Industry, says NetSafe, has a role to play by creating and promoting positive content and services online and by empowering users to respond to any issues by providing clear safety advice, a range of easy-to-use safety tools, and quick access to support if things do go wrong.

19 national and international organisations participated in NZ's SID 2015. The day highlighted the important work that these organisations throughout the year to promote internet safety.

For last year's SID, the NZ Police developed a sample cybersafety intervention plan for schools, and Google NZ launched a phishing awareness initiative asking users if they can spot the tell-tale signs of an online scam. Co-operative Bank encouraged customers and staff to do a 'sense check' on how they use digital banking technology to keep their money and their personal information safe.

To register your interest in being involved in Safer Internet Day 2016, email : sid@netsafe.org.nz In return for participation, NetSafe will promote your organisation's participation on its SID website and to the media.



Astute
SMART LOCKS



The smart padlock you unlock with your phone

Resellers Wanted

For details please email:
resellers@astutesmartlocks.com
www.astutesmartlocks.com



ASD Tips for home users

With Safer Internet Day fast approaching, it's as good a time as any to review one's personal IT security practices. And as good a guide as any is the Australian Signals Directorate's Top Security Tips for the Home User. Importantly, all of the ASD's tips are also just as valid for the SME user.

Update your software

New versions of software are released to address security problems that have been found. Updating your software ensures you take full advantage of all the security upgrades. If you do not update the software you can put your computer at risk.

The takeaway from this is to update your software, or set your computer to apply updates automatically in the background so you do not have to remember to check.

According to the ASD, surveys have found that at least 40% of people do not update their software. Apparently, most people think it takes too long or they don't understand why it's important. Don't be one of those people!

Use anti-virus software

Only use anti-virus software from a reputable company and keep it up-to-date. Anti-virus software doesn't have to be expensive, and many companies have anti-virus software that is free to download.

Think about your online presence. Check your privacy settings on sites like Facebook to make sure you know who can see your information, and check your privacy settings regularly to ensure they haven't changed in the background. Think twice before posting any personal details online.

Google yourself once in a while as a way of checking the information that others put on the internet about you. While small pieces of information might not seem important, these can be put together to form a more complete picture about you.

At the lower end, your details may be used against you to spam you. At the higher end, your details may be used to steal your identity for illicit purposes.

Be suspicious of unsolicited phone calls or emails

Do not follow instructions from a caller offering to resolve your computer's 'technical problems', unless he/she can prove they are from your internet service provider.

Check emails before opening them or clicking on any attachments or links. If you've received an email that seems strange in any way, consider deleting it. It may contain a bug you'd prefer not to catch.

Back up your data

Save all your files onto a different device such as a USB, external hard drive, cloud-based service or DVD. You never know when you might be the victim of an attack or a technical failure that causes your files to vanish. Regular back-ups ensure that you keep any potential losses to a minimum.

If saving your files to a portable storage device, don't make them too portable! Keep them secure under lock and key.

Use legitimate software

Always use legitimate software that has been purchased from a vendor or downloaded from the vendor's

website. Otherwise, the software won't be supported by the vendor, and you won't receive regular security updates. The software itself may even contain a virus!

Set strong passwords and use different passwords for different accounts.

Yes, it's a no-brainer, but many of us still don't seem to get it. Passwords should contain a combination of upper and lower case letters, numbers and symbols, and they should be changed regularly.

If you use the same password for all your accounts and one account is compromised, then consider the rest of your accounts compromised as well. And whatever you do, don't store an unencrypted list of your passwords on your computer. If someone gains unauthorised access to your computer the list can be found no matter how carefully you've hidden it.

Do not lose your device

With most of us carrying around phones and tablets that can fit in our pockets, wallets or purses, or can be placed almost unconsciously on a coffee table or desk, the chances of losing one's device is higher than most of us care to think.

One of the biggest risks to your information is from a lost or stolen device. When out and about, always keep your devices at arms reach or on your person, and don't leave them alone – even for a minute.

Although you may think that the above tips are just a little too elementary, keep in mind that one small slip can cost you more than what you bargained for – financially and reputationally.

Flexible, simplified security

Upgrading old access control systems is now easier than ever with aptiQ™ readers and credentials. aptiQ™ offers both proximity and smart credential readers, allowing for a flexible, simplified migration path to increased credential security levels.

Easy integration

Existing security systems can be economically and easily upgraded from proximity to smart technology systems with aptiQ multi-technology readers. Featuring cutting-edge security technology, both the aptiQ multi-technology and smart readers support a variety of credential options in a single unit.

The open architecture design of aptiQ provides compatibility with nearly any access control system on the market. Each reader can handle all applicable ISO standards (14443A, 14443B, 15693), are FIPS 201-1 compliant, and are versatile enough to read 125 kHz proximity and 13.56 MHz contactless smart cards. aptiQ readers have standard Wiegand output, supporting simple interface with most access control panels.

Upgrading readers is made even easier, with aptiQ's quick-connect wiring harness and a standard wiring colour scheme.

Featuring a sleek, low-profile design, aptiQ readers blend seamlessly into modern interiors and architectural styles.

Smart credentials

aptiQ's wide variety of credential offerings allows businesses to choose the best option to fit budget or security requirements. Whether a facility requires a highly secure smart card option with the ability to be used for other applications, or a traditional proximity technology for less demanding installations, aptiQ has a suitable credential option.

Credentials are available in popular forms; ISO-style card, clamshell and key fob. An adhesive PVC patch that can be attached to existing surfaces is also available.

Flexible design

The aptiQ line of multi-technology readers provides flexibility with an open architecture design. The comprehensive, yet simple, range of aptiQ readers is suitable for any new smart or proximity installation, while the multi-technology readers are great for



aptiQ Multi-technology reader with anti-microbial keypad

aptiQ Multi-technology mullion reader

bringing an existing access control system up-to-date with more modern technologies.

aptiQ's range of versatile readers are capable of interfacing with many systems and security products currently on the market. This flexibility provides security solutions to meet a facility's current security needs, and support for future technologies.

For more information please contact Allegion on Ph: 0800 477 869 or visit Web: www.allegion.com



- Keypad, proximity cards and magnetic stripe card options available
- Convenient and secure
- User friendly
- Open platform
- Up to 2000 users
- Stand alone, full access control

For more information, contact Allegion (New Zealand) Limited on 0800 477 869 or visit www.allegion.co.nz

www.allegion.co.nz


ALLEGION

Stranger than fiction?

The curious evolution of robots in security

A year ago, the New Zealand Herald carried a story suggesting that robots are set to displace human workers to unprecedented levels. Cheaper and improved robots will, it asserted, increasingly replace humans in factories, cutting labour costs by an average of 16 percent by 2025. In this article we explore the rise of robots in the security industry.

Recent editions of NZ Security have covered developments in the rapidly evolving drone industry, and it's here that our exploration begins.

In mid-January, international media covered the launch of a new drone (UAV) by Japanese security giant Secom. Suited to organisations needing to protect large areas, the drone is designed to launch once suspicious vehicles or people are detected on the property by surveillance systems, and then to follow and photograph them.

The seemingly instant rise of non-military drones in the public consciousness has been something of a phenomenon, capturing the ire of privacy advocates and the fascination of consumers. Previously the stuff of sci-fi films, UAV technology has, it seems, transported us suddenly into 'the future'.

While these eyes in the skies have been stealing all the attention, the past few months have also seen developments in their flightless cousins – the UGV (Unmanned Ground Vehicle), otherwise known as the humble robot.

The robot: an artifact of futures past?

It's now been a decade since Secom developed the "SECOM Robot X", an outdoor patrol robot designed as an alternative to patrolling guards. An August 2004 New Scientist article

described the impending development as follows:

Secom, a company better known for supplying human security guards, has developed a six-wheeled surveillance robot which can be either remotely controlled or pre-programmed. It can chase intruders, take high definition video pictures of them, issue loud warnings and release a dense, billowing cloud of smoke to frighten them off.

Sounds a lot like what the security drones of today are promising to do from their air. And like many of today's available security drones, the Robot X was available for hire at around half the price of a human security guard. The one-metre high, 120-kilogram security robot cut an imposing figure, and at 10km per hour it could keep up with most people.

According to an online paper by Secom's Service Robot Group, the general advantages of security robots include increased precision, power, speed and effectiveness for tasks; increased safety for operating in hazardous areas through tele-operation; and the ability to operate continuously without rest or fatigue.

The advantages of robots over fixed sensors and surveillance cameras, continues the paper, include: active detection of intruders or irregularities, the ability to give chase to intruders and gather more video evidence; deterrence; large area surveillance, performance of a range of different duties; and the elimination of blind spots caused by environmental changes or malicious intent

With such glowing attributes, it's no wonder that a 2004 Geek.com article commented that the Robot X posed a real threat to uniformed security folk. "Unlike humans these robots won't slack off, divert from routes, or need breaks. And given that they only cost half what a normal security guard costs, some businesses may replace the humans completely with robots."

Contrary to such expectations, with their reliability heavily dependent on weather and terrain, robots have largely been confined to a limited range of security applications. Wheel mounted UGVs, for example, require relatively flat, unobstructed ground, and outdoor robots prefer fine weather. The idea of R2D2 traversing the sand dunes of Tatooine on his little caster-like wheels always seemed a little implausible!

While UGVs have clearly found their niche within military, law enforcement and security in areas involving explosives and hazardous materials, and in remote and sterile sites, they've hardly become widespread. For the time being, the idea of robots posing a threat to the employment prospects of security guards remains the stuff of science fiction.

Or does it?



Secom's pioneering Robot X dispensing a cloud of fog

Seeking a security robot with brains, personality... and looks

The Knightscope K5 security robot has recently been turning heads on the streets of Silicon Valley. The five-foot tall, 300-pound moving bollard looks something like an aesthetically enhanced Dalek out of Dr Who, with more rounded, less menacing features. It's apparently elicited the odd hug from curious passers-by.

The K5's machine operating system boasts 'machine learning', which is a form of artificial intelligence that analyses the data it collects and adjusts its behaviour according to conditions. The robot is fitted with a range of sensors allowing it to survey and interact with its surrounding environment, and to communicate the data back to a monitoring station. Capable of character recognition, it can scan alpha-numerics and compare them instantly against databases.

Other features include cameras, microphones, and sensors to capture video and ambient audio, and measure airborne particulates. It uses lasers to three-dimensionally map its environment, sonar waves to identify the speed, range, and altitude of moving objects, and thermal imaging to detect the slightest changes in temperature.

The K5 OS' predicative analytics engine analyses data gathered from the system's on-board sensors, microphones, and cameras with data derived from public and private social feeds, sending alerts when any disruptions to established patterns are observed. Crowd sourced human input can then be added to the mix.

Knightscope operates the robots on a Machine-as-a-Service (MaaS) business model, with preliminary pricing for a well-equipped machine set at USD 4,500 per month for 24/7 operations, equating to approximately USD 6.25 per hour. They throw in the charging station free-of-charge.

The price of the K5 makes it significantly cheaper than a human guard, and its smarts make it more intelligent than the average appliance. But perhaps its biggest advantage – and innovation – is that it seems to exude, well... personality. The very sight of it acts as a clear deterrent to would-be wrongdoers, yet at the same time it seems approachable – perhaps even comforting – to the rest of us.

Security 3.0: robots and the evolution of security

The dualistic struggle of man against machine is an idea that has been coded deep into the DNA of popular culture through various science fiction offerings from Metropolis to The Matrix. But perhaps there are ways to perceive the mechanisation of security as being more than merely zero-sum.

According to Komatsuzaki Tsuneo, managing executive of Secom and director of the Intelligent Systems (IS) Institute, it's about achieving the best solution via the most effective possible division of labour between human and robot. Says Tsuneo, "we are intimately familiar with which points among our company's services are more efficient if they are automated rather than having people do them, and which parts are better left in the hands of humans, and how best to combine those two."

It's a sentiment unsurprisingly shared by Knightscope's Chairman and CEO, William Santana Li. "I believe robots are the perfect tools to handle the monotonous and sometimes dangerous work," blogs Li, "in order to free up humans to more judiciously address activities requiring higher-level thinking, hands-on encounters, or tactical planning."

Placing robotics along an historical continuum, Li suggests that the evolution of security may be categorised into the following three epochs:



Knightscope's photogenic K5 patrolling an outdoor beat

Security 1.0 (through 1980s)

Analog. Humans on foot, on horseback or in a car with a call box or radio for communications.

Security 2.0 (1990s – present)

Digital. Assistive devices are added such as Mobile Data Terminals (MDTs) or Computers (MDCs), radar, LIDAR, video cameras, etc.

Security 3.0 (2014 and beyond)

Robotic. Machines and intelligence augment boots on the ground to bring new depth and precision into policing.

It's to be expected that a manufacturer of robots will claim that the current and foreseeable era of security is 'robotic', but how accurate is this claim, and what are the implications?

Despite filmmakers and futurists having given it a sort of social inevitability, actual evidence that we're living in a 'robot age' isn't exactly littered all around us. To find it requires visiting places most of us would prefer to stay away from: the factories and warzones that are home to work that is unpalatably monotonous, dirty or dangerous.

Mind-numbingly repetitive parts assembly and heavy lifting, explosives disposal and the carrying out of aerial surveillance and precision bombing are all tasks to which robots, UAVs and UGVs are particularly suited. Some of this type of work exists within the security industry, but only then as part of an overall security solution.

That human, digital and robotic assets are all ingredients of a comprehensive and scaled security solution offering is a fact that nowadays seems irrefutable. Security providers that evolve to offer all of these are those most likely to thrive into the future.

That being said, R2D2's casters – or K5's for that matter – are never likely to completely fill the need for boots on the ground. And even Robocop, for all his mechanical strength and technological smarts, was the fictional crime-fighting phenomenon he was only because he had the mind and soul of a human.

The idea that robots might one day eject drunken patrons from bars, provide directions to accidental trespassers, or make reliable tactical decisions based on first-responder intelligence, is one that for the foreseeable future remains firmly tethered to the realm of science fiction and creative briefs.

Lessons learnt in implementing early safe city schemes:

An integrator's view

CCTV expert Peter Houlis spoke on implementing safe city schemes in the UK as part of the seminar series at last November's New Zealand Security Conference and Expo. His experience in delivering some of the earliest schemes makes him a pioneer in the area and a natural source of wisdom in relation to how to create a safe city and what 'safe cities' actually means.

A Chartered Security Professional, Peter boasts a meritorious track record of designing ground breaking, high end CCTV, access control and integrated security solutions. For 22 years he has been MD of the multi award winning security system integrator 2020 Vision



Peter Houlis presented at last November's NZ Security Conference and Expo



A bank of CCTV cameras keep watch in London's Royal Docklands

Systems, having kicked off his career as security systems and fire alarms engineer at the age of 16.

He is also a member of the Security Systems and Alarms Inspection Board (SSAIB) a UKAS accredited Certification Body, and has represented them on the British Standards Institute (BSI) technical committee responsible for drafting European CCTV Standards.

This is the first in a series of two articles aimed at providing an insight into Peter's involvement in early CCTV-led safe city schemes, lessons learnt from the integrator perspective, and understanding the role of surveillance using the military concept of C4i.

Newcastle city centre scheme

In the early 1990's, frustrated at the regularity of alcohol fuelled incidents in their city centre, local police in the north England working class city of Newcastle turned to CCTV. Six black and white PTZ cameras were installed in the 'Bigg Market' area, which, at the time, housed over 22 bars, clubs and restaurants in mainly heritage buildings.

Linked by free space microwave transmissions to a police station, the cameras were building mounted, with power taken from the building's supply. Utilising existing structures avoided the need for civil works, making it easily manageable from a project point of view.



**World leaders in
revolutionary Electric
Locking Design
and Craftsmanship.**
Proudly stocked and
supported by NZ's
leading authorized
distributor...

Loktronic

SECURITY • TECHNOLOGY • RELIABILITY

Your FSH Electric Locking
range includes...

- **ELECTROMAGNETIC
LOCKS**
- **STRIKES**
- **DROP BOLTS**
- **ELECTRIC MORTICE
LOCKS**
- **5 YEAR WARRANTY**



MEM2400LP



- Suits low door height or narrow profile frames
- High holding force up to 1000kg
- Releases with up to 70kg of side pressure; early warning alarm
- Supplied with anti-tamper bracket
- 12/24 VDC, low power consumption
- 4 hour fire rated
- Lock Status & Door Status Sensors

MEM2400LED-LZ

- Features as for MEM2400LP with L/Z Bracket for inward opening doors

FES20M



- High security stainless steel strike rated up to 1490kg holding strength
- Quick and easy Power to Lock/Power to Open interchange
- Mounting kit with adaptor tabs
- 12VDC 220mA; 24 VDC 120mA; 36 VDC 80mA
- Door, Lock & Frame status monitors
- Pre-drilled for extension lips, 25mm & 50mm available

FES 10 and FES 10M



- Stainless steel faceplate & keeper rated up to 1300 kg holding strength
- FES 10 is IP56 rated
- Dual voltage capable; 12VDC 200mA, 24VDC 100mA
- Pre-drilled for extension lips, 25mm and 50mm available
- FES 10M has door latch monitor

VE1260



- High security, 1000 kg holding force, 35kg pre-load capability
- Accepts 12-30 VDC
- Door status & Lock status monitors
- Square & radius edge models
- Pre-taped glass door housing available for radius edge version
- Special strike plate caters for up to 12mm door misalignment

FEL990M



- Multi-functional and field changeable
- Vestibule or combination
- Fail Safe/Fail Secure
- 12/24 VDC
- Left or Right hand
- Key override
- Monitors: Door, Lock, Key & REX

Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
mail@loktronic.co.nz www.loktronic.co.nz

For expert advice and assistance with
your security locking needs, trust in
Loktronic, call us on **0800 367 565**



Surveilling the safe city: Integrating, analysing and processing data and then transferring it to those that need it

Although the installation of CCTV did not do away with crime altogether, it did help in the detainment of the offenders and led to arrests and sentences being handed down. The cameras were, states Peter, “a very powerful weapon in the fight against crime.”

One telling case involved footage of a young man being jumped by two others upon exiting a pub. Kicked in the face, he was rendered unconscious and left lying in the gutter. “20 meters down the street, one of the men turned, came back and kicked the guy in the head like a football,” described Peter, “it was sickening to see.” Without CCTV evidence it is highly unlikely that the perpetrator would have been arrested and punished for the severity of his crime.

Another case involved a man who had been targeted by a couple of youths for a fight because of his large build. “They jumped on him and he eventually went down, a few seconds after which he then jumped up, scattering them like mice.” The man then proceeded to walk away, collapsing about 20 metres down the road. When police went back through the CCTV evidence, they found that what otherwise appeared to be a punch was actually the thrusting of a knife.

The Newcastle scheme worked, according to Peter, “mainly because of its small operational scope: one simple task, anti social drinking behavior.” The limited number of stakeholders – police, local council, building owners and a number of publicans – also meant that there was a common understanding of operational requirements and less potential for non-cooperation, conflict and opt out.

Due to the success of the scheme, in 1997 the city decided it would extend the scheme from the Bigg market to cover the whole of the city, and 2020 Vision Systems won a competitive tender for the project. Known as the ‘Safer Cities Programme’, it was part of a wider initiative designed to address and reduce crime and the fear surrounding it.

“It was quite a different project to the original system in terms of scope and stakeholders,” he explains. “We installed a number

of cameras and then came up against problems in terms of street works, power supply, owners of buildings, tenants, councils, and street lighting people who were national providers.

We had to work with each owner in each building, all who had different priorities and requirements.” While the project ended up well in the end, there were major headaches along the way.

Edinburgh City in View

The Edinburgh City scheme, according to Peter, reflected more readily what safe cities is all about today. Launched by Lothian and Borders Police (now Police Scotland), the project aimed to gain access to the potential intelligence value of the many cameras around the city that Police hitherto had no control over.

It was, according to Peter, “an interesting project which it is believed was the first to integrate a number of disparate systems; bringing together the existing City centre, Scottish Parliament and six surrounding town systems and networking them back to a new Police Force Communications Centre (FCC), the largest in Scotland at the time.”

The integration allowed FCC staff to gain access and control any of the CCTV cameras in the network for investigation following emergency calls and enquiries. The system was linked to GIS mapping, ANPR number plate recognition and all camera streams called up at the FCC were automatically recorded and all the systems were able to operate independently.

There was a range of different protocols to attempt to convert. Although video was no problem, reconciling control systems proved quite difficult with a lot of work done on developing translation modules.

In the words of the project leader, Detective Sergeant Ian Lusk of Lothian and Borders Police, the scheme “was by no means an easy system to design, due to five different local authorities having different matrices requiring integration to inter-communicate. It is in our opinion, truly innovative and has achieved the desired objectives of Lothian and Borders Police.”



Highly mounted camera keeps watch near the UK Houses of Parliament

What is a Safe City?

While working on a Safe City project in the Ukrainian city of Kiev, Peter gained unexpected perspectives on what a safe city is understood to be. Having asked a group of stakeholders in the former communist-ruled city how they would define the concept, one stakeholder replied that it is about “waking up in the morning and having hot water and heating in the apartment.”

“My personal opinion is that the Safe City objective is about creating a secure, pleasant and welcoming environment for the inhabitants of a city to prosper and grow and enjoy an improved quality of life,” states Peter. “I think fundamentally it’s about detection and prevention of crime and public safety and rapid recovery from incidents, and surveillance plays a big part in fighting crime and providing community safety.”

The fact is there is no one definitive definition of ‘safe city’. It’s an ideal that is, as they say, in the eye of the beholder.

Because what constitutes a safe city is largely dependent on citizen perceptions around their wellbeing and safety, the public has to be brought into it – and buy into it – in a big way. “You need public support,” he asserts. “One thing that started to change this [in the UK] was when councilors decided to start using CCTV for revenue raising measures, such as parking fines. It alienated the public.”

“As an integrator, the role in ‘Safe City’ is all about deploying video surveillance and complementary systems to gather intelligence and then sharing it with the emergency services and authorities who require it so they are able to make informed decisions and proceed with the correct response.

“It is about installing the right hardware – cameras, access control, alarms, gunshot detection etc, and software – video management, analytics, recording devices to collect, analyse and process the data and transfer it to those that need it.”



NZ’s #1 security training provider – a one-stop shop for all your security training needs. The first security training provider to be awarded the Skills Organisation quality assurance award ‘Skills Certified’.

We are able to offer the following courses and programmes.

NZQA COURSES:

- National Certificate in Security Level 2
- National Certificate in Security Level 3
- National Certificate in Security Level 4
- National Diploma in Security Level 6
- Certificate of Approval Mandatory training
- Conflict Management Instructor training

NON-NZQA COURSES:

- Professional Investigator
- Port Facility Security Officer
- Bomb Threat
- IED
- Armed Robbery
- Security Consultant
- Control and Restraint
- Calming and Restraint (Health)
- Close Protection (Body Guard)
- Self Defence
- Baton and Handcuff training
- Aviation Cabin Crew training

For more information go to www.c4group.co.nz



Diploma in Security Management

Specialist Programme in Protective Security Requirements (NZPSR)

New Zealand’s only Diploma level security course specifically designed for Chief Security Officers
Modules include;

- Operational Security Plans
- Legal Issues
- Security Risk Assessments
- Security Surveys
- Develop Policy and Procedures
- Security Management Principles

As a Skills Certified training provider C4 has the Security industry Standard Setting Body support for its programmes.

The National Diploma in Security Level 6 is currently under review and C4’s Diploma, focussing on the PSRs, will map directly to the new qualification.

Chris Lawton (CEO C4) is directly involved in the review of this qualification at a Skills and NZQA level.

For more information go to www.c4group.co.nz

HID Global® selected by Performance Buildings® in Germany to create access management solutions that enable companies and individuals to utilize shared workspaces and ‘on-demand’ offices

Performance Buildings® is a system integrator that provides technology for ‘on-demand’ offices. It has formed a partnership with Design Offices, an innovative service provider, to successfully design and implement high-end technology solution offerings for tenants of shared office workspaces. Typically, tenants are private companies and public organizations that utilize office space as and when required, without having to commit to full-time rent.

Performance Buildings currently operates in Switzerland, Germany and in the USA. It has ambitious plans to expand across Asia and South Africa.

Design Offices is headquartered in Munich and offers a broad range of high-end, shared workspaces for clients seeking to rent temporary office space ‘on-demand’, as well as short, mid and long term rentals.

“We’re not just offering rooms, we’re offering end-users of the office space – tenants or temporary ‘on-demand’ end-users of the office space, a secure environment where they can work, meet, hold conferences and provide training sessions.”

Phill Handy
Managing Director Design Offices

Challenges

As part of their technology offering for tenants, Performance Buildings and Design Offices were looking for a technology solution provider that met their high standards for a secure access system to the office space that was easy to use and delivered cost benefits.

The key requirements they wanted to focus on were as follows:

- ◆ Interoperable, secure, convenient and future-proof access control technology for office spaces.
- ◆ A cost efficient IP-based solution that could be easily integrated and installed.
- ◆ Supported their book rooms ‘on-demand’ functionality, thus providing an open application programming interface.
- ◆ Allowed for a wide choice of custom configurations. Ability to allow the use of traditional methods of secure



PHYSICAL VIRTUAL LOGICAL ACCESS GRANTED.

Today, security solutions need to stretch beyond just physical access. With a mobile workforce on the rise, eliminating network vulnerability is just as critical to securing your most valuable assets. HID Global offers the most broad portfolio of advanced IT security solutions in the world. From smart device interoperability using SEOS technology to embedded credential readers and biometrics, we're strengthening defenses even as we streamline process and accessibility.

You'll call it the evolution of IT security. We call it, "your security connected."

YOUR SECURITY. **CONNECTED** | Visit us at hidglobal.com

access, such as smart cards, as well as newer technologies utilising Near Field Communication (NFC) enabled phones for mobile access control.

Solutions

Performance Buildings evaluated HID Global's network access control solutions along with a number of other solutions. However, the decision was an easy one; HID Global was selected as the provider of choice because it was the only company with the ability to support their cutting-edge IT architecture and provide the flexibility that they required.

HID Global was successfully able to address the following key selection criteria:

- ◆ Integration into any type of building.
- ◆ Integration into any type of legacy system.
- ◆ Capable of providing a flexible approach that could adapt to different types of application scenarios.
- ◆ Customised service approach.
- ◆ Completely automated solution.
- ◆ Interoperable with Performance Buildings' current IP-based architecture, linking all subsystems and their devices.

The core solution implemented was HID Global's EdgeReader® ERP40, an IP-based card reader that meets the demands of open architecture, IP-centric environments and provides fully distributed intelligence and decision making right to the door, leveraging the IT infrastructure to the maximum extent possible.

"The addition of HID Global's EdgeReader ERP40 provides the access intelligence to do much more than open doors with cards," said Dr. Vishal Mallick, CEO Performance Buildings. "The fact that it is open and IP-based allows us to integrate the ERP40 device into our IT-centric architecture and use authenticated credentials to drive lighting, climate and audio visual systems today, as well as room bookings and facility management task allocation in the future."

In addition, HID Global's multiCLASS SE®, part of HID Global's award-winning iCLASS SE® platform, provided tenants flexibility in using a range of new and existing access card technologies, such as contactless proximity cards and smart cards, or more advanced technology such as NFC smartphones to access the office building and rooms. Office visitors could also be provided access to office workspaces via Performance Buildings touch screen that was enabled by HID Global's EdgeReader to open doors.



Furthermore, HID Global's EdgeReader also allowed for cost efficiencies, as the initial investment outlay was reduced through the reader's use of Power over Ethernet (PoE) that eliminates the requirement for additional cabling, separate power supplies and multi-door controllers. Finally, HID Global's open architecture based OPIN® application program interface (API) was highly cost-effective and required relatively little effort to create a robust integrated solution with EDGE® readers/controllers.

"The EDGE Reader/Controller is the only open IP solution available on the market," explained Dr. Mallick. "And with its API, it could be easily integrated into our software and installed. Also, HID Global's multiCLASS SE readers allow us to have one standardised product for the vast majority of buildings due to its interoperability with a range of legacy and existing smart cards in our facility."

"Identity management touches everything in the Performance Buildings grid," said Dr. Vishal Mallick, CEO of Performance Buildings. "A strong identity management governance structure was required from Design Offices to facilitate a seamless experience for their existing tenants and clients using the facilities 'on-demand', including the ability to book rooms and catering services online, open conference room doors, and sign out once their session is over. It was important to offer a wide menu of services to enhance the way we do business."

"We're not just offering rooms, we're offering end-users of the office space – tenants or temporary 'on-demand' end-users of the office space, a secure environment where they can work, meet, hold conferences and provide training sessions in a location where they feel comfortable, and for us, which includes offering all the technological solutions they need in today's modern world," said Phill Handy, Managing Director from Design Offices.

"So, for example, we wanted to be able to offer 24-hour access to rooms, automated check-in and check-out services but without having to provide staff or all the paper-based procedures," Handy explained. "We also wanted people to be able to book rooms on the move, so it was critical that easy-to-use online options were available."

This broad range of functionality and flexibility supported by HID Global's solutions allowed Performance Buildings to offer a comprehensive service that catered for different user needs as well as multiple application requirements.

Results

With a robust system that powered Design Offices' shared workspaces, Performance Buildings reported that it had seen a return on investment (ROI) within six-months of their deployment in Munich and improved efficiencies thereafter. As the company continues to expand, the use of HID Global solutions will continue to broaden.

The solution has also enabled Performance Buildings to accelerate the on-boarding of four new deployments in different German locations, as it has been able to utilize the experience and expertise gained from this implementation. This has resulted in cost and time efficiencies.

"We were curious about how a large, global company would deal with a small, developing company like us but we were thrilled that HID Global responded quickly and provided us with the level of support and consultation that we needed to progress," said Dr. Vishal Mallick.

Design Offices is delighted with the results. "Using HID Global's solutions in conjunction with Performance Buildings' technology is all part of our future expansion plans," said Handy. "We're going to take their combined solutions with us when we move to Dusseldorf, Berlin and Hamburg and we're doing this because it allows us to be more efficient while providing our clients – existing tenants or temporary clients 'on-demand' with the security, privacy and ease of use that they've been looking for."

"Our end users who are renting our office spaces love it. It's easy to use, and allows them to use the online booking system from the road and come to the offices with their PIN code to access meeting rooms whenever they want – they love the flexibility and security," added Handy. "And we love it because we don't have to supply staff 24 hours nor all the paper-based checking-in and checking-out, so feedback has been fantastic. For us, this is a confirmation that this is the right product for our different types of clients."

VorTech drone wins Callaghan Innovation competition

A team of former students of the University of Auckland has won Callaghan Innovation's inaugural C-PRIZE competition for innovative drone development.

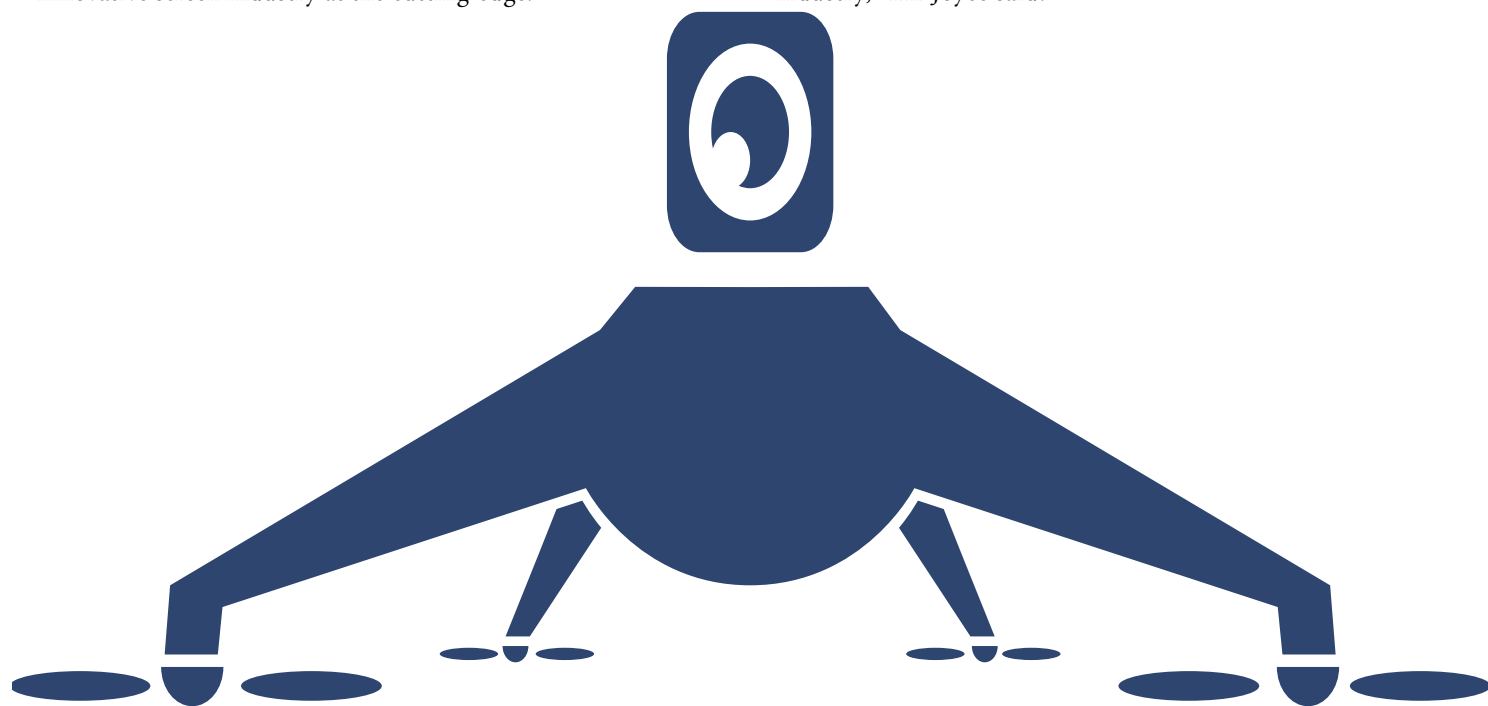
New Zealand's screen and unmanned aerial vehicle (UAV) industries stand to benefit from technology developed by VorTech, Science and Innovation Minister Steven Joyce said on 1st December 2015.

Launched in April last year, the competition aims to boost New Zealand's position as a world-leader in the development of drone (UAV) technology and to help keep the country's innovative screen industry at the cutting-edge.

For their efforts the VorTech team wins \$50,000 and an expenses-paid trip to exhibit at the 2016 National Association of Broadcasters trade show in Las Vegas, the largest international trades show for media content and technology.

The six finalists were selected from 80 entries last July and had less than four months to build and test their prototype.

"New Zealand is at the forefront of technology when it comes to making movies and television shows, but it's less well known that we are also a leading designer of UAVs for use in industry," Mr Joyce said.



The competition challenged teams to design and build a prototype drone that could overcome one of three obstacles that limit their use in the film and TV industry: strong wind, rotor noise and the need to track moving objects automatically.

VorTech's Gyroscope UAV, stated Mr Joyce, "uses an innovative propeller design that allows thrust in any direction, helping it hold position in gusty winds.

They have also incorporated a range of advanced sensor systems to understand the environment the UAV is operating in. On top of the significant technical achievement, VorTech presented a very strong commercialisation plan."

"The C-PRIZE has helped two sectors to work together through a challenge format to quickly develop breakthrough technologies that will keep both at the top of their respective fields."

Callaghan Innovation is the government organisation that helps businesses succeed through technology. It supports hi-tech businesses in NZ through product development, access to experts, R&D grants, and initiatives such as the C-PRIZE in order to accelerate commercialisation of innovation, achieve success through technology, and gain a competitive advantage for local businesses internationally.

Putting the Eye in IoT:

What we can expect to see in 2016 in security & video surveillance

By Wai King Wong, Country Manager,
Oceania region, Axis Communications

It's hard to read any kind of technology newspaper or web site these days without seeing several references to IoT – the Internet of Things. It has become the buzzword of all buzzwords, the next killer app, and the bandwagon that everyone from car makers to home appliance companies hopes to ride to success.

Despite its hype, IoT does represent a very real and practical step forward in how to connect disparate machines and widely dispersed data. And it has profound ramifications on the security and video surveillance industry. Axis Communications introduced what many consider a pioneering IoT device in 1996 (long before the term existed) when we launched the security industry's first network camera. Little did we know it would ultimately spawn a tidal wave far beyond security.

To be sure, the concept of network cameras has come a long way in 20 years. Yet if we were to rank the top emerging trends for 2016, connected systems would still have to be at the top. Why? Because the capabilities of IP-based systems are constantly evolving and suppliers of all types are still discovering new ways to leverage the power, flexibility and reach of connectivity. As more IP-based security devices inevitably replace aging analog systems, we will see wider use of security products that integrate the growing wealth of information generated by the IoT into not just information for security purposes, but a range of other applications and uses.

IoT will allow network cameras to think independently and make smart decisions on their own. Imagine a mesh of network cameras that correspond between each other to alert the next camera of a person or object entering shortly from the left of a given scene. IoT-enabled cameras may also be able to cover up for one of their peers being damaged or obstructed.

IoT: From cool features to useful solutions

As enthralled as we are with the individual capabilities of IoT devices, in the security world the more important aspect of this trend is how all the components work together to solve a tangible challenge. First of all, IoT-based systems must be easy to design, install, maintain and use. And one size does not fit all.

To maximize the potential of IoT, it requires an in-depth knowledge by suppliers who:

1. understand how each feature or component works together.
2. can design a solution that can be used to solve specific challenges.
3. are able deliver it as an integrated offering whose long-term value has more value than just the sum of its parts.

This is especially true as security solutions move well beyond their roots in cameras. Indeed, largely because of IoT, the security sector's traditional boundaries continue to blur. For example, network cameras can be used for Building Information Management (BIM), Business Intelligence (BI) in retail and even leaping into scientific research with real-time analysis of traffic patterns and crowd movements. IoT will allow for combined systems integrating previously disparate devices such as video surveillance cameras, smoke detectors, gas sensors, access control panels and loudspeakers into a common management console providing a 'single pane of glass' overview across entire buildings and sites.

The result is a huge opportunity for security solutions that are purpose-built to share useful data with other connected devices, all of which can be monitored remotely. This connectivity between devices will provide end users with more complete situational awareness across multiple locations. Axis Communications itself is branching out and has introduced IP-based loudspeakers and door controllers, for example, enabling not just an Internet of Things, but a step towards truly smart buildings.

With the increasing amount of data being generated, shared over the network, and, in many cases, stored and accessed through cloud computing models (see below), there is a growing need to focus on the protection of all this data and assets that exist 'virtually.' New technologies and methods for enhancing cyber security specifically for networked and cloud-based security systems are emerging. This is critical to protect against vulnerabilities, such as hacking, and will be an important aspect of how physical security and surveillance solutions are designed and implemented.

Security as a service: The Cloud emerges

Cloud-based computing has touched just about every industry and it will continue to reshape the security and surveillance sector as well. Security can now be offered as a service that is managed remotely, freeing up valuable human and capital resources that no longer need to be on site at every location that requires monitoring. Secure remote access to security systems will increase in use, including by end users who want the convenience and real-time benefits of being able to monitor property and events without having to be physically present.

Cloud storage is another important aspect of how systems are becoming more efficient in this model. Much larger volumes of data can be stored, cost-effectively and securely, at dedicated server facilities, allowing users to archive video and associated data for longer periods of time and improve its accessibility as well.

More cameras mean Big Data

According to market researchers, video is now the fastest growing type of data in the world, and video generated by security and surveillance systems is no small reason. While this vast amount of video data is largely being used for security purposes, as mentioned above, it is increasingly valuable as a source of business intelligence. However, there still remains a significant challenge to effectively manage and use the endless amounts of video data being generated, so-called big data. Big data is difficult to process through traditional data processing applications. We expect to see more investment in tools and other resources that can effectively mine and derive actionable intelligence from the big data that security systems are producing. This technology can put structure around vast amounts of unstructured video data, helping better understand significant patterns and trends.

In the coming years, look for improvements in and greater use of video management systems (VMS) to search big data in order to pull up relevant events, people, locations, times, colours

and keywords. Such tools will assist business operators to turn big data into critical information that aids in loss prevention, marketing, operations, and customer service.

Cutting the cords

Wireless technology has transformed our lives in many ways, from mobile phones, to WiFi connectivity. We have already seen the benefit and convenience of remote security monitoring via smartphones and tablets. Video surveillance systems of up to ten network cameras can be managed entirely via mobile devices, no longer requiring a desktop PC to run video management software. Especially for SMBs, this significantly lowers the technology hurdle as users are more open to using a smartphone app than having to overlook a more comprehensive and detailed video management software on a desktop PC. It also reduces overall system and maintenance costs.

Expect to see more use of wireless technology in security and video surveillance, particularly as an enhancement to business optimization and improvement of the customer experience.

The never ending quest for more detail

Security operators have an insatiable appetite for more clarity and detail in the images produced by their video surveillance systems. This is especially true as the adoption of intelligent video analytics continues to grow.

So continued improvement in megapixel technology is certainly in our future. Enhanced techniques to handle challenging low-lighting conditions in new ways are coming to market, making cameras even more useful in a wider array of applications and use models. These improvements, largely focused on expanding the wide dynamic range (WDR) capability of cameras, also provide enhanced information for analytics to help decipher. Look for continued adoption of 4K Ultra HD, which enables network cameras to see more details. With an HDTV or megapixel network camera, the resolution is at least three times better than an analog CCTV camera. And 4K Ultra HD offers four times the resolution of HDTV 1080p.

However, higher and higher resolutions also result in increasing storage consumption. Intelligent video compression algorithms such as Axis' Zipstream technology allow for a reduction in storage needs by an average 50% or more. This is achieved by analyzing and optimizing a network camera's video stream in real-time. Scenes containing interesting details are recorded in full image quality and resolution while other areas are filtered out to optimally use available storage. Important forensic details like faces, tattoos or license plates are isolated and preserved, while irrelevant areas such as white walls, lawns and vegetation are sacrificed by smoothing in order to achieve better storage savings.

Analytics provides the brain for smarter systems

If IoT devices are the eyes and ears for increasingly interconnected systems, then analytics technology is the brain. We expect to see continued adoption of sophisticated video and audio analytics in the coming year, helping security systems evolve from passive monitoring to intelligent and adaptive recognition, situational awareness and analysis systems.

Analytics go far beyond security uses. Retailers, for example, are increasingly using video analytics to gain business intelligence insights that allow them to optimize shop floor plans, merchandise display or checkout queue management. This opens up entirely new user groups to video surveillance. For example, in-store traffic flow and behaviour analysis can help guide advertising and promotion campaigns.

Axis's Zipstream Compression Technology wins Innovative Product of The Year Award in New Zealand

Axis Communications, the market leader in network video, has won The Innovative Product of The Year Award from the New Zealand Security Association (NZSA).

The award-winning technology, Zipstream, was developed in early 2015 specifically for video surveillance applications, to lower bandwidth and storage requirements by an average of 50% or more. It achieves this performance by analysing and optimising the network camera's video stream in real time, to determine which details need to be stored in high resolution, and which can be saved in lower quality.

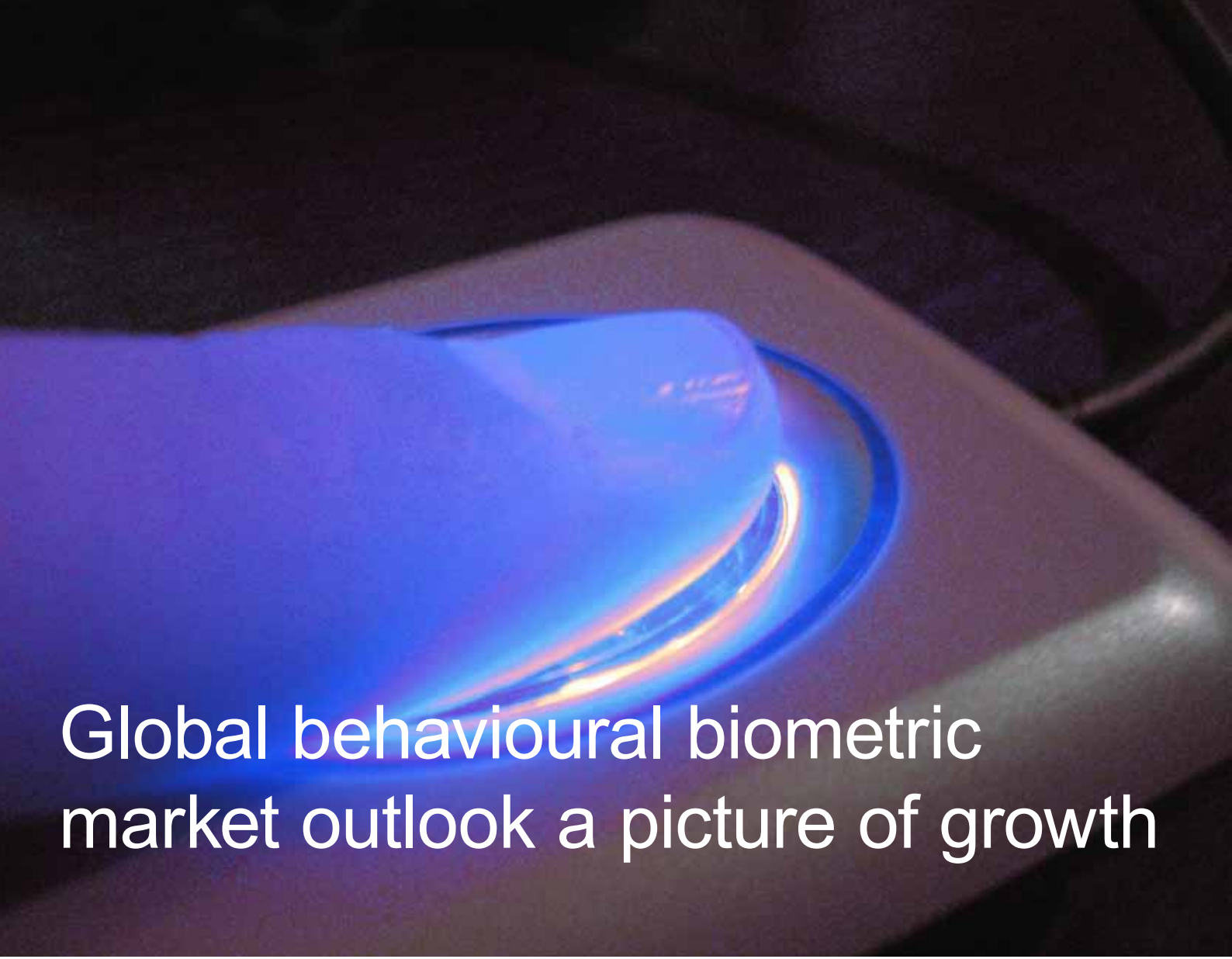
This smart analysis focuses on very specific details relevant to the customer's needs – such as faces, tattoos or license plates – recording and storing them in full image quality and resolution, while filtering out other areas such as white walls, lawns and vegetation.

The NZSA Innovative Product of the Year Award 2015 honours the most outstanding development achievements in the local security industry. They chose Axis Zipstream Compression Technology as the category winner for the bandwidth and storage savings that it opens up for many common 24/7 surveillance recordings due to its compatibility with the widely adopted H.264 compression standard.

Wai King Wong, Country Manager for Oceania at Axis Communications, commented: "We are very honoured that Axis zipstream technology is gaining global recognition, from U.S.A during the ISC West 2015 and recently at the Australian Security Industry Awards for Excellence 2015 in Australia.

Storage is a growing concern for our customers, especially as technology improves and the quality and therefore size of images and videos increases. To be acknowledged for our achievements and services to security professionals across New Zealand due to helping them solve the storage problem is a huge honour, and reflects our commitment to continuously innovate as we endeavour to provide our customers with smarter solutions."

Customers can use Axis Zipstream technology alongside other Axis network camera technologies such as Wide Dynamic Range – Forensic Capture and Lightfinder. Zipstream is fully compatible with H.264 and can be used with AXIS Camera Station, AXIS Camera Companion and third-party video management software installations already in place.



Global behavioural biometric market outlook a picture of growth

A recently released market research report from Technavio predicts the global behavioural biometric market to grow at a CAGR of around 17 percent by 2020.

According to the report, the recent rise in the demand for behavioural biometric technologies, such as keystroke recognition, signature recognition, and voice recognition, from the banking, financial services and insurance sector, is a significant factor behind market growth.

Technavio's industry research report covers the growth prospects of the global behavioural biometric market with segmentations based on technologies (voice recognition, keystroke analysis, and signature analysis), end users (government, BFSI, automotive, healthcare, and education), and regions (North America, APAC, Europe, Latin America, and MEA).

The report estimates that the North American region will account for a market share of more than 40 percent by 2020. The augmented use of behavioural biometrics by government organisations,

hospitals, and ATMs in this region is forecasted to promote market growth.

According to news site Find Biometrics, the report highlights the amorphous nature of the concept of 'behavioural biometrics'. "Some companies are offering behavioral biometrics solutions based on users' online activity, while others," states the article, "... consider physical, bodily activity."

The term "behavioural biometrics" relates to the measure of uniquely identifying and measurable patterns in human activities, such as voice, signatures and keystrokes. The term is distinct from 'physical biometrics', which relates to innate human characteristics such as fingerprints, facial structure or iris patterns.

The report's end-user segmentation of the behavioural biometric market into the government, finance, automotive, healthcare, and education sectors found that the government sector dominated the market in 2015, accounting for a total market share of more than 40 percent.

With the implementation of BYOD policies in enterprises and the high adoption of mobile devices by customers for various banking applications, the usage of behavioural biometrics is expected to become widespread by the end of 2020.

In the report's segmentation of the market by technology – voice recognition, keystroke recognition and signature recognition – it is estimated that voice recognition segment will be the largest market segment during the forecast period.

The ability of voice recognition systems to eliminate the need of having multiple complex passwords to gain access to secured transactions and systems is a big factor behind the segment's massive forecasted market share of more than 80 percent by 2020.

The report also identifies the key players in the market, including AGNITiO, AuthenWare, ID Control, M2SYS Technology, Nuance Communications, and Safran, among others.

fired up protection

VITECH

LOKTRONIC's expansive product range has just become even wider with these first class **EGRESS** and **FIRE PROTECTION DEVICES** and **PROTECTIVE COVERS**.



STI-1130 Ref. 720-102
Surface mount with horn and spacer
255mm H x 179mm W x 135mm D

STI-13000-NC Ref. 720-090
Flush mount, no horn
206mm H x 137mm W x 69mm D



STI-13B10-NW Ref. 720-092
Surface mount, horn and label optional
206mm H x 137mm W x 103mm D

STI-1100 Ref. 720-054
Flush mount with horn
255mm H x 179mm W x 86mm D



STI-6518 Ref. 720-060
Flush mount, no horn
165mm H x 105mm W x 49mm D

STI-13210-NG Ref. 720-094
Surface mount, horn and label optional
206mm H x 137mm W x 103mm D



All **STI 'Stoppers'** are made of tough, UV stabilised polycarbonate. Many can be supplied with or without a 105 dB horn. Other models and sizes available including weather resistant options.



STI-WRP2-RED-11 IP67
Ref. 720-062R
Also available in White.



STI-RP-WS-11/CN
Ref. 720-052V
Available in White, Green, Blue & Yellow.



STI-RP-GF-11/CN
Ref. 720-051G
Available in White, Green, Blue & Yellow.



STI-RP-RS-02/CI
Ref. 720-058
Cover included.
Flush Mount Available.

- Approved to EN54-11
- **Current Rating:** 3 Amps @ 12-24V DC, 3 Amps @ 125-250V AC
- **Material:** Polycarbonate
- Comes with Clear Cover
- 2 x SPDT switches
- Positive activation that mimics the feel of breaking glass.
- Visible warning flag confirms activation.
- Simple polycarbonate key to reset operating element - no broken glass.
- **Dimensions:** 87mm Length x 87mm Width x 23mm Depth (Flush Mount) & 58mm Depth (Surface Mount)

STI-6255 Ref. 720-042
Mini Theft Stopper discourages inappropriate use of equipment. Sounds a powerful 105 dB warning horn when activated. Tough, ABS construction. Reed switch activation for cabinets and display cases or unique clip activation for freestanding equipment. Does not interfere with use of protected fire fighting equipment. Compact design 85mm H x 85mm W x 25mm D.



STI-6720 Ref. 720-047
Break Glass Stopper. Keys under plexiglas. Protects emergency keys from inappropriate use. Keys remain visible. Fast, easy installation. Simple, inexpensive plexiglas. 3 year guarantee against breakage of the ABS housing within normal use.



Battery Tester Ref. 730-101
VITECH, strong, lightweight aluminum case, 5, 15 and 30 amp battery tester for fire and alarm use. Weight: 500gms, Size: 165mm x 90 x 70mm.



Fire Brigade Alarm: (Closed/Open) Ref. 730-202
VITECH branded Type X and Type Y (illustrated) models with temperature compensated pressure transducers with digital display showing pressures for defect, fire and pump start.



Anti-Interference Device
Ref. 730-400 series
VITECH AID for sprinkler valve monitoring; fits all ball valve sizes.



VITECH products are designed and produced in New Zealand.

Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
mail@loktronic.co.nz www.loktronic.co.nz



Everything in view!

B+B Parkhaus GmbH & Co.KG is a private, family-run parking facilities company based in Dusseldorf, Germany. It manages some 20,000 parking spaces in 60 properties. The technical management of the parking facilities is being centralized incrementally. At the center of it all is a new Geutebruck video solution that utilizes G-SIM, a powerful security information management system. The interfaces to the Schneider Intercom voice communication and the pay machines from Scheidt & Bachmann make it possible for the systems to work together perfectly. Currently 16 locations are connected and another 44 will follow. What can this video solution do?

The majority of the parking-facility properties are owned by the family, other properties are leased. The total portfolio is therefore inevitably a mixture of different technical components, with various ages and from different suppliers, but which must still work together. Up till now, the “conductor” has been missing: something to coordinate the various components. That has changed. Two years ago the department responsible for control room technology addressed this subject, developing a comprehensive system solution with a central control station. The plan was to consolidate the camera images from all parking facilities centrally, providing concise information on the local situation at any time. In particular, providing security for the pay machines was a high priority. To achieve this goal, interfaces were needed to the existing systems from Scheidt & Bachmann and Schneider Intercom, in order to get an informative overall picture of the situation when necessary: Pay machine

information, voice communication and simultaneous activation of the associated live images. This makes it possible for the control station to see, talk and act quickly and decisively.

Two security information management systems were in the final running and were thoroughly tested. In the end, G-SIM from Geutebruck was the winner. Years of positive experience with Geutebruck video systems were certainly influential, but it was another factor that was deciding: The already implemented interfaces to Scheidt & Bachmann and Schneider Intercom systems, which have proven themselves in daily use in numerous real-world applications.

Every Geutebruck video management solution already provides image information combined with process data or specific information from connected third-party systems. To arrive at the next level, a transition is made from a video management system to the G-SIM security information



management system. This system is capable of providing the perfect overview and fulfilling additional demands: on the graphic display, on the alarm management, on the documentation. G-SIM has now been in use in the new control center since 2014. It is staffed around the clock, 365 days a year. This is also part of the service concept: During opening times, an employee is always available as a contact for customers. Here in Dusseldorf, video images from some 120 cameras in 16 parking facilities currently come together. Step-by-step, more will be added until the final stage nationwide in Germany, when all B+B parking facilities are connected to the control center, representing around 500 cameras. Successively, all local video recorders will be replaced with GeViScope systems: an IP model (GeViScope IP server) is usually used. For leased objects with expiring contracts, modernization of the infrastructure, including new cabling and camera installation, is not justified economically.

Therefore existing analog cameras, some still using black and white images, will be integrated and their images fed to GeViScope recorders with analog ports.

In all parking facilities, the entrances, exits and the pay machines are secured. Property-specific areas, designated by the local property manager, are secured as well, and all recording is performed permanently and saved locally at high resolution on GeViScope. Images are then transmitted to the control center with a reduced image quality. If a parking lot customer submits a service request, the associated camera image pops up in the control center. A still image is typically displayed along with the live images. It is also convenient to open a map, showing the property and the position of the camera. The sequence of images associated with the request is marked so that it can be easily found again later. Especially practical: The event is created in all systems, thus identifying and summarizing the entire package of information. If image details are needed, the stored high-resolution images are accessed. The video sequences are visualized using G-SIM. The individual settings are comprehensive, making it possible to optimize the settings for each parking lot and user. Operators appreciate the ease of use.

Back to the pay station. Its status is visually inspected at regular intervals. G-SIM provides support for this use-case with programmed tours. Once

programmed, they run automatically at predefined intervals and regularly call the attention of the employee. Naturally, outdoor pay machines are at greater risk. Others are protected at night, as the area is no longer publicly available at this time. And others are in a precarious situation because they are simply in a bad area. According to the risk classification, G-SIM operates different tours during the day and at night. Mr. Heiermann, Head of Technology and Control Stations at B+B Parkhaus GmbH & Co.KG, notes: "The programmed tours are very good. They are an enormous support for our work."

Geutebruck's G-SIM is a comprehensive package that can do far more than has previously been utilized. Step by step B+B will implement additional functions. At the same time, the complexity – resulting from different user levels for beginners and experts – remains manageable and each user can select their own scope of functionality. B+B's security expert was trained at Geutebruck and can now answer most of his colleagues' questions directly. In special cases, B+B can also take advantage of the fact that Geutebruck is not only the manufacturer, but also the developer of its products. Mr. Heiermann comments: "The in-house development at Geutebruck is a great benefit. The expertise is thus available within the company. This means easy access to the developers and therefore quick and competent answers."

Mr. Heiermann continues about the central G-SIM solution: "The new solution is simpler and also more extensive than the previous one. It makes much more efficient operation possible. In the past, employees were needed at each property to process service requests. Today two employees per shift can easily handle all incoming service requests from all the properties combined." Four workstations are currently installed. Each is equipped with 4 monitors, which provide different information: Number one uses G-SIM to display video images in any configuration. Number two is coupled to the data from Schneider Intercom. Number three shows property information and number 4 information from the pay machines.

Once time allows, in a future project step, event-driven recordings will be introduced. This will limit the quantity of data as well as prevent unnecessary distractions for the security personnel. "Action" will then only occur when something happens in the selected section of the image.

SUBSCRIBE NOW!

Readers of NZ Security include those working directly and indirectly in the domestic and commercial security industry. From business owners and managers right through to suppliers, installers and front line staff.

Among our readers are IT security experts, surveillance professionals and loss prevention staff.

Our readers take their job seriously and make an active choice to be kept informed and up to date with the industry.

For only \$75.00 plus GST you can ensure that you receive a 1 year subscription (6 issues) by filling out the form below and posting to:

**New Zealand Security Magazine
27 West Crescent, Te Puru, 3575
RD5, Thames, New Zealand**

or email your contact and postal details to:
craig@newzealandsecurity.co.nz

Mr Mrs Ms _____

Surname _____

Title _____

Company _____

Postal Address _____

Telephone _____

Email _____

Date _____

Signed _____

NZSecurity Magazine

Australia Round-up

Transport Security Infringement Notice Trial Targeting Aviation and Maritime Security Identification Cards

According to a media release from the Department of Infrastructure and Regional Development, the infrastructure department will conduct a transport security infringement notice trial in partnership with Australian Federal Police (AFP) and the Australian Border Force (ABF) in early 2016.

According to a media release, the trial will help to build transport security enforcement capability within the Department. It will target individual cardholders who improperly display or hold invalid Aviation and Maritime Security Identification Cards (ASICs/MSICs).

During the trial, AFP and ABF officers will issue infringement notices on behalf of the Department to anyone who is not correctly displaying a valid ASIC or MSIC in active secure areas and zones at airports and seaports.

Infringement notices issued to individuals are for 'strict liability offences', pursuant to the Aviation Transport Security Regulations 2005 and the Maritime Transport and Offshore Facilities Security Regulations 2003.

The exact dates and locations of the trial will not be communicated publicly, although a range of information is available on the Department's website at www.infrastructure.gov.au/idsecurityinfringements. This includes general information about the trial; obligations for ASIC and MSIC holders relating to card display and validity; and information for recipients of an infringement notice.

Enquiries about the trial can be directed to the ID Infringement team on: + 61 2 6274 7111 or by email idinfringements@infrastructure.gov.au.



Results of 2015 cyber security survey of major Australian businesses

The survey results are available via the ACSC's website, www.acsc.gov.au.

The 2015 Cyber Security Survey of major Australian businesses was recently conducted by the Australian Cyber Security Centre (ACSC) in order to obtain a clearer picture of Australian businesses' understanding of cyber threats and how they are placed to protect their networks.

According to the ACSC, the major businesses surveyed form part of Australia's 'systems of national interest' in that "they underpin the social and economic welfare of Australia and deliver essential services including banking and finance, defence industry providers, communications, energy, resources, transport and water."

The survey's results demonstrate that cyber security incidents are still uncomfortably common for Australian businesses. In particular, around 50 percent of the respondents reported experiencing at least one cyber incident that compromised the confidentiality, integrity or availability of a network's data or systems in the last 12 months.

In a significant improvement from 16 percent in 2013, only 3 percent of respondents claimed to not possess an IT Security area within their organisation. 77 percent of respondents have cyber security incident response plans in place, of which 37 percent regularly review them.

56 percent of respondents increased expenditure on cyber security in the last 12 months, compared to only 27 percent in 2013. 100 percent of respondents reported using anti-virus software and all but one respondent reported using network-based firewalls.

The survey also noted strong awareness and implementation of the Australian Signals Directorate's Top 4 Strategies to Mitigate Targeted Cyber Intrusions, with more than 90 percent of respondents having adopted three of the four strategies. 82 percent of industry organisations are using external IT security standards or frameworks.

92 percent of respondents that had experienced a cyber security incident indicated that the threat of the incident(s) had been identified in the organisation's risk register. Encouragingly, this is more than double the 2013 finding.

There has been a significant increase in the number of ransomware incidents, with four times the number of respondents reporting (72 percent) compared to 2013 (17 percent). This is followed by theft or breach of confidential information (70 percent) and Advanced Persistent Threats (66 percent).

The 'trusted insider' was the actor of most concern to respondents (60 percent), followed by 'issue motivated groups or hackers' (55 percent).

Worryingly, 8 percent of respondents were unsure if they had experienced a cyber incident. 43 percent of respondents did not report cyber incidents to anyone with the main reason given as "...no benefits of reporting".

Australian Cybercrime Online Reporting Network receives more than 39,000 reports

According to an 18 January media release from the Minister for Justice, the Australian Cybercrime Online Reporting Network (ACORN) has been doing its bit to support law enforcement efforts to crack down on cybercrime, having received more than 39,000 reports from individuals and organisations in 2015.

“As Australia’s reliance on technology grows, and online shopping remains an increasingly attractive option for busy Australians,” states the media release, “the cost and incidence of cybercrime is expected to increase.”

ACORN was launched by the Australian Government in November 2014 as an accessible way for the public to report cybercrime and contribute to a national intelligence database. It also provides information on how to avoid falling victim to cybercrime, and can be accessed online at www.acorn.gov.au.



According to ACORN, many instances of cybercrime go unreported because victims either do not know where to report, don’t think it’s worth reporting, or are reluctant to do so. Actual cybercrime numbers are therefore likely to be significantly higher than those reported.

The leading types of cybercrime being reported to ACORN were online fraud and scams, with 19,232 reports received, accounting for 49 percent of the total for 2015. Online trading issues affecting people who buy and sell goods online constituted the second highest type of cybercrime reported, with 8,368 reports or 22 percent of the total.

State-wise, Victoria received the highest number of cybercrime reports, followed closely by Queensland and New South Wales. The majority of reported victims of cybercrime were aged between 20 and 40 (40 percent), followed by those aged 40 to 60 (38 percent).

Four arrested in identity crime investigation

During the week of 14 December 2015, four people were arrested during raids on six properties as part of a joint agency investigation into alleged identity crime offences.

The Identity Security Strike Team (ISST) established Operation Drax earlier in the year to investigate the manufacture and use of false identity documents in NSW. The ISST is a joint agency strike force into serious and organised identity crime and comprises the NSW Police Force, the Australian Federal Police, and the Australian Border Force.

It will be alleged in court that fraudulent identity documents, including high quality drivers’ licenses, were being made to order for use in other crimes.

At about 6am on 17 December 2015, Operation Drax officers executed search warrants on six properties in the Sydney suburbs of Campsie, Carlton, Waterloo, Homebush West and Parramatta, seizing computers, hard drives and mobile phones, as well as bank documents, drivers’ licenses and items used in their manufacture. Cash and drugs were also seized.

Four men were arrested and taken to various police stations, and a 51-year-old female Chinese national was detained by the ABF as an illegal immigrant. She was later transferred to Villawood Immigration Detention Facility, pending removal from Australia.

Commander of the NSW Police Fraud and Cybercrime Squad, Detective Superintendent Arthur Katsogiannis, said the arrests were the culmination of months of outstanding police work by the ISST.

AFP Manager Criminal Assets, Fraud and Anti-Corruption, Commander Peter Crozier stated that “identity crime “impacts on each and every one of us in society, on our economy and on our national security, and acts as a facilitator for transnational and serious crime.”

According to ABF Acting Assistant Commissioner, David Nockels, “this type of criminal activity often involves international criminal networks targeting the Australian community, so it is imperative we take decisive action, either at our border entry points or within Australia.”

Police officer and security guard shot in Nepean Hospital

A 39-year-old man has been charged over the shooting of a police officer and security guard at Nepean Hospital during a scuffle at the Western Sydney hospital, according to a 13 January report in the Daily Telegraph.

They were shot after the man allegedly got hold of the police officer’s gun during a scuffle. Both men were apparently wounded by the same bullet when it passed through the police officer’s thigh and lodged in the security guard’s leg.

Health Services Union representative Gerard Hayes gave a press conference outside Nepean Hospital the same day, calling for an urgent meeting with the health minister to seek greater powers to



*Gerard Hayes,
Health Services
Union representative*

protect workers... an issue that the union claims it has been pushing for the past five years.

Mr Hayes stated that emergency departments are becoming more like battlegrounds than areas of care with the prevalence of ice and alcohol-related violence. He is now seeking the Minister’s action in providing security guards with the power to restrain and detain people.



Power supply cabinets

- Mounts for our 5 most popular models of power supplies; 6 key-hole anchor points for easier mounting
- Lift off hinged doors for added convenience
- Louvre ventilation on doors
- Roller ball reed switch provides anti-tamper to front and rear of cabinet
- 6 x 25mm knockouts, 2 each sides and bottom
- Medium cabinet holds 5 x 7 A/h batteries
- Large cabinet holds 14 x 7 A/h batteries
- Cam lock for security
- Front lip to retain batteries and for additional strength
- Removable shelf and removable back plate to facilitate easy bench mounting of equipment
- Lip return on door for greater rigidity
- Durable powder coated white finish
- Heavy gauge 1.2mm steel

Designed, tested and produced in New Zealand.

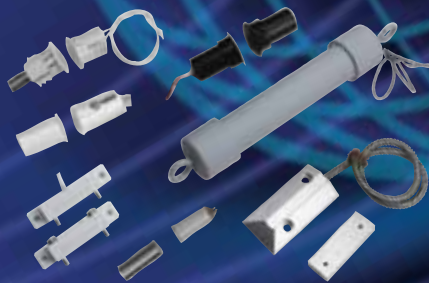


Loktronic



Loktronic Limited Unit 7 19 Edwin Street Mt Eden
Auckland P O Box 8329 Symonds Street Auckland
1150 New Zealand Ph 64 9 623 3919 Fax 64 9 623 3881
0800 FOR LOK www.loktronic.co.nz

2023B_PSC



total reed switch solutions from Flair

From closed loop, open loop to SPDT, we've got the lot.

Talk to Loktronic now about our comprehensive range of Flair Reed Switches. Not only for "standard" use, but also for specialty applications, from taught-wire types to waterguards, from collared to stubbies, from overhead door with offset to floor contacts, from latchguard to sub-miniature, from push-fit to surface mount.

Flair reeds from Loktronic: an unbeatable combination.

Loktronic



Loktronic Limited Unit 7 19 Edwin Street Mt Eden
Auckland P O Box 8329 Symonds Street Auckland
1150 New Zealand Ph 64 9 623 3919 Fax 64 9 623 3881
0800 FOR LOK www.loktronic.co.nz

20237_FL



Loktronic for power supplies

Source all your power supply requirements at Loktronic and choose from a range of over 20 ex stock options, with 100's more to select from.

Complete range of monitored security PSUs in 12 and 24 VDC from 2.5 A - 20 A. DIN rail units in 12 and 24 VDC from 10 - 100 watts. Plus, inline and Plug packs and DC/DC converters.

Power supplies from Loktronic – a great deal.

Loktronic



Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
www.loktronic.co.nz

20757_BP



ITRON SECURITY & AUTOMATION

uniview 8 Channel Premium IP Kit



Featuring an 8 Channel NVR with built in PoE, 2TB HDD fitted, plug and play setup with no port forwarding or router configuration.

Includes:

- 4 x 2MP Domes, IP66
- 23" Full HD Monitor
- 4GB USB flash drive
- 100m of Cat5 cable
- HDMI cable

CRK Professional Precision

Ph: 09 276 3271 • www.crknz.co.nz

uniview 4 Channel IP Kit



Perfect for home or business use.

The NVR has built in PoE and comes fitted with a 2TB HDD, featuring plug and play setup with no port forwarding or router configuration required.

The kit also includes four 2MP IP cameras with 30m IR and are IP66 rated for outdoor use.

CRK Professional Precision

Ph: 09 276 3271 • www.crknz.co.nz

uniview 32 Channel NVR



A 16-32 Channel NVR with 200Mbps total bandwidth available and 8 hard drive bays, comes with 3TB fitted.

The NVR is capable of 16 channels at 1080p or 32 channels at 720p and includes 2 Gigabit Ethernet adaptors.

Easy to setup by QR code for remote access, support for Windows, Android and iPhone.

No port forwarding or router configuration.

CRK Professional Precision

Ph: 09 276 3271 • www.crknz.co.nz



Loktronic for gate locks

Choose from a comprehensive range of 23 models of electric gate and outdoor locks for a wide range of applications.


6 models from the famous Loktronic stable, and 7 imported models with holding forces from 300kg, 550kg, up to 740kg; all locks complemented by accessories to facilitate fitting.

7 models of strikes by Trimec and eff-eff, Rim mounted locks from CISA, and a versatile range from Securitron and Interlock.

Gate locks from Loktronic – a wise choice.

Loktronic

Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
www.loktronic.co.nz



Key switches

This versatile product range is produced with two functions

Momentary contact (90°)
Turns 90° clockwise from vertical to turn on
Maintained contact (180°) locked on or locked off
Turns 90° clockwise from vertical to turn on
Turns 90° anticlockwise from vertical to turn off
SPDT switch 5amp rating

Accessories are: Key switch mounting bracket
escutcheon for mounting bracket

Suitable for: Access control, air-conditioning, lifts, lighting.

Supplied random keyed. Can be master keyed.
Client's own key cylinder can be converted.
Front or rear fixing.

Designed, tested and produced in New Zealand by Loktronic.

Loktronic

Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
www.loktronic.co.nz

Loktronic Power distribution module



The Power Distribution Module allows the removal of power to a group of doors on a fire alarm activation whilst conforming to regulations. Provision for individual fused power supply to each door lock.

Red and black uncommitted terminals to facilitate distribution from power supply or battery, to load.

Comprises

- Fire Drop Relay DPDT 12 VDC • 6 x 2 Amp FU 500
- Terminals with LED Indication • 2 x Red Terminals
- 2 x Black Terminals • 1 x DIN Rail
- All terminals are labelled.

Designed, tested and produced in New Zealand.

Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden
Auckland P O Box 8329 Symonds Street Auckland
1150 New Zealand Ph 64 9 623 3919 Fax 64 9 623 3881
0800 FOR LOK www.loktronic.co.nz



Panasonic



Exmor
CMOS Sensor

HDCVI

(09) 414 5101 OR 0800 ITRONICS

SALES@ITRON.CO.NZ

WWW.ITRON.NZ




Wireless IP Surveillance

- Cost effective high performance wireless access points for outdoor use
- Stockists of AirMax, AirFiber, AirVision, UniFi & mFi series products
- ITPLUS are a Ubiquiti certified and trained partner

Distributed by

ITPLUS
SECURITY TECHNOLOGY

Ph: 09 950 4940 | E: info@itplus.co.nz
www.itplus.co.nz





Customized CCTV Kits

- We supply fully customized complete CCTV kits in form of Hybrid, Tribrid, IP, CVI etc
- Complete kits are a great way of reducing costs and getting the whole package from one place
- Receive FREE support* including remote connection assistance

Distributed by

ITPLUS
SECURITY TECHNOLOGY

Ph: 09 950 4940 | E: info@itplus.co.nz
www.itplus.co.nz




Open Platform VMS

- Award winning best open platform VMS
- Advanced Built-in Video Analytics
- Micromodule crashproof software architecture
- Includes powerful features such as Modern GUI, Video Archive, Green Stream, Time Compressor, Interactive 3D Map, Autozoom etc.

Distributed by

ITPLUS
SECURITY TECHNOLOGY

Ph: 09 950 4940 | E: info@itplus.co.nz
www.itplus.co.nz

Australia's cyber warfare capabilities slammed

A new report by Professor Greg Austin, *Australia Rearmed: Future Capabilities for Cyber-enabled Warfare*, was released on 19 January by the Australian Centre for Cyber Security (ACCS) at the Australian Defence Force Academy (ADFA)

In his report, Austin claims that Australia's response to the emerging key importance of cyber space in the conduct of future war has been slow and fragmented. His report highlights a number of international benchmarks that could "provide guideposts for a rapid catch-up in Australian capabilities for military security in the information age (for cyber-enabled war)."

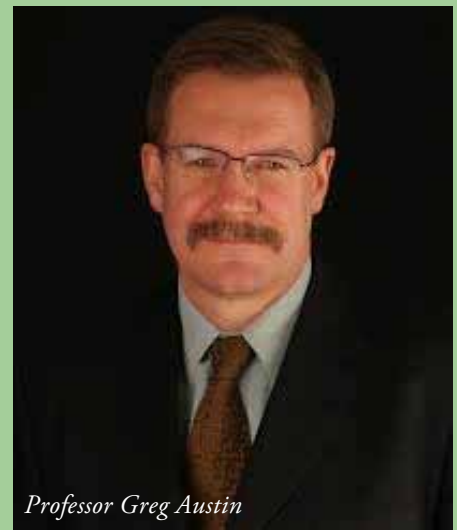
The report maps trends in the policy settings of China and the United States, which both regard military dominance in cyber space as one of the primary factors in winning conflicts. "The Australian government has not been prepared to canvas in public the centrality of cyber-enabled warfare nor craft policies and doctrines accordingly," argues Austin.

Austin observes that the US and China are quickly developing their

cyber arsenals and pursuing conditions in cyber space that in wartime could undermine the effectiveness of an enemy as quickly as possible. "The two major powers are placing considerable attention on disabling enemy cyber systems in the early stages of hostilities, or even on a pre-emptive basis."

According to the report's abstract, "Australia will need to develop complex responsive systems of decision-making for medium intensity war that address multi-vector, multi-front and multi-theatre attacks in cyber space, including against civilian infrastructure and civilians involved in the war effort."

This means maintaining capabilities for cyber warfare at the strategic level that are unified in both policy and doctrinal terms "in a way that lays a clear pathway for mobilization of the country in very short time to fight a medium intensity,



Professor Greg Austin

cyber-enabled hot war."

The report recommends that Australia build "a much more visible community of interest around the concept of cyber-enabled warfare with a recognised authoritative hub (a cyber warfare studies centre) that can unite political, military, diplomatic, business, scientific and technical interests and expertise."

Data Retention Grants Program open to industry

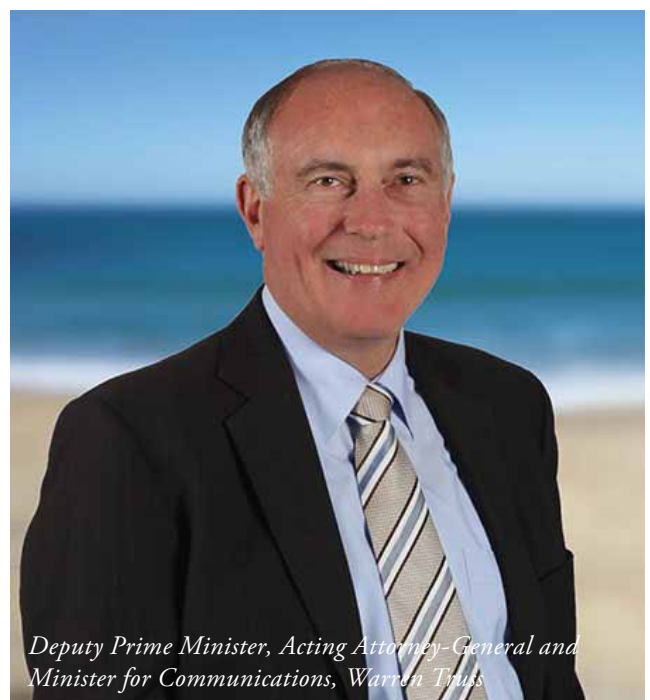
In early January the Australian Government announced the opening of a grants program to provide up to \$128.4 million to assist the telecommunications industry with the upfront costs of meeting their data retention obligations.

According to a joint press release by the Deputy Prime Minister, Acting Attorney-General, and Minister for Communications, the Data Retention Industry Grants Program consists of a single funding round open to telecommunications service providers who have data retention obligations. Applications close at 5:00 pm (AEDT) on Tuesday 23 February 2016.

According to the media release, assisting industry with the implementation of the data retention obligations remains a key priority for the Government for law enforcement purposes. The program aims to deliver on the Government's commitment to make a financial contribution to service providers' up-front data retention costs.

"Metadata is used in nearly every counter-terrorism, counter-espionage and organised and major crime investigation. It is also essential for the investigation of child abuse and child pornography offences, which are frequently carried out online."

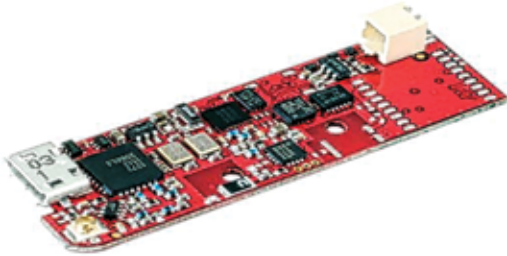
Service providers with queries about the grants program, including the program guidelines, eligibility advice and application form can visit www.business.gov.au/DRIGP or contact 13 28 46.



Deputy Prime Minister, Acting Attorney-General and Minister for Communications, Warren Truss

KCS TraceME

KCS TraceME TM-900 / N1C1 GPS/RF-module / OEM-version



The TM-900 / N1C1 is a budget product line member of KCS' advanced TraceME track and trace modules. The TM-900 is targeted for remotely tracking and tracing a variety of objects, even livestock, and for personal use.

The TM-900 offers excellent long range RF coverage and is equipped with a low-power GPS receiver.

The module is equipped with multiple on-board sensors, low-level I/O-connectivity and a solar (*) rechargeable integrated battery. It offers accurate location based position data to be connected to any existing worldwide server application.

Key Features

- Excellent satellite coverage
 - GPS
 - Glonass/GPS (*)
- Very small, only 49.6 x 15mm
- Lightweight: 3.4 grams for a fully equipped PCB
- Standby battery lifespan of more than 10 years.
- OEM version
- Excellent GPS accuracy, internal antenna.
- Integrated 2.45GHz. radio for special functions and peripherals.
 - Short range, up to 30m (*)
 - Long range, over 1 km range, line of sight
- LoRa™ technology, up to 10km, line of sight
- Excellent indoor and outdoor performance with accuracy up to 1.5m
- 3 LEDs for user interaction.
- 1 switch for user interaction.
- Onboard sensors:
 - Temperature sensor ($\pm 0.5^{\circ}\text{C}$)
 - 3D accelerometer up to 16g.
 - Humidity sensor (*)
- Wide operating range: $-20^{\circ}\text{C} \dots +85^{\circ}\text{C}$
- Multiple watchdog levels for maximum stability.
- Solar cell powered (*)
- Versatile interfacing:
 - Digital I/O
 - Serial, 3V
 - iButton™ / 1-Wire™
- Buzzer
- Event based free configurable module to fit any job.
- Remote maintenance. Both firmware and configuration files can be updated over the air.
- Runs local user scripts via .src files.
- Supports integration into third party networks.

Applications

- Object protection, up to 10 years of standby on a single lithium AAA-battery.
- Logistics, M2M
- Animal tracking, asset monitoring
- Security and surveillance
- Remote control and diagnostics
- Anti-theft

www.Trace.ME

(*) Optional, please contact sales for more details.

All trademarks mentioned herein belong to their respective owners.

Locked in... no compromise no comparison!

LOKTRONIC proudly continues to be a leading supplier of New Zealand and international electronic locking hardware brands, including....

Abloy Electric Locks • Cobalt 90 & 180 degree Locks • Effeff Electric Strikes • Egress Buttons
• Flair Reed Switches • FSH Electric Mortice Locks, accessories and furniture • FSH Electric Strikes
• FSH Electromagnetic Locks • FSH VE Locks • Haze Batteries • Lockwood Electric Mortice Locks,
accessories and furniture • Loktrenz, Abloy, Effeff & IR Power Transfers • Loktrenz Electromagnetic
Locks • Loktronic and Trencab Key Switches • Loktronic, Loktrenz, Cisa, Effeff and Securitron Gate
Locks • Loktronic Power Distribution Modules • Loktronic Power Supply Cabinets • Meanwell Power
Supplies • Powerbox Power Supplies • Prastel Door Controllers • Roller Door Locks • Rosslare
Keypads • STI Call Points • STI Secure Housings for Keypads, Fire Alarms and Exit Devices • Trimec
Drop Bolts • Trimec Electric Strikes • Trimec V-Locks • Trojan Em Rex & Prox Rex Devices • Trojan
Relays • ViTech Anti-Interference Device • ViTech Battery Tester • ViTech Fire Brigade Alarms,
Type X and Type Y • And many others. Plus, a wide range of spares and accessories.

Designed and made in New Zealand, our famous **LOKTRONIC** electromagnetic locks and Fire Door Holding electromagnets carry a solid

10 year* guarantee

And, our **LOKTRONIC** outdoor electromagnetic locks continue to stand the test of time!

25 years service and experience.
A future of secure growth and development.



* **Sales** * **Spares and accessories** * **Repairs** * **Advice**

Loktronic

Loktronic Limited Unit 7 19 Edwin Street Mt Eden Auckland
P O Box 8329 Symonds Street Auckland 1150 New Zealand
Ph 64 9 623 3919 Fax 64 9 623 3881 0800 FOR LOK
mail@loktronic.co.nz www.loktronic.co.nz

