



technology   
**Decisions**  
IT leadership & innovation

**GET  
SMART**

The changing  
face of business  
intelligence

Server  
virtualisation tips

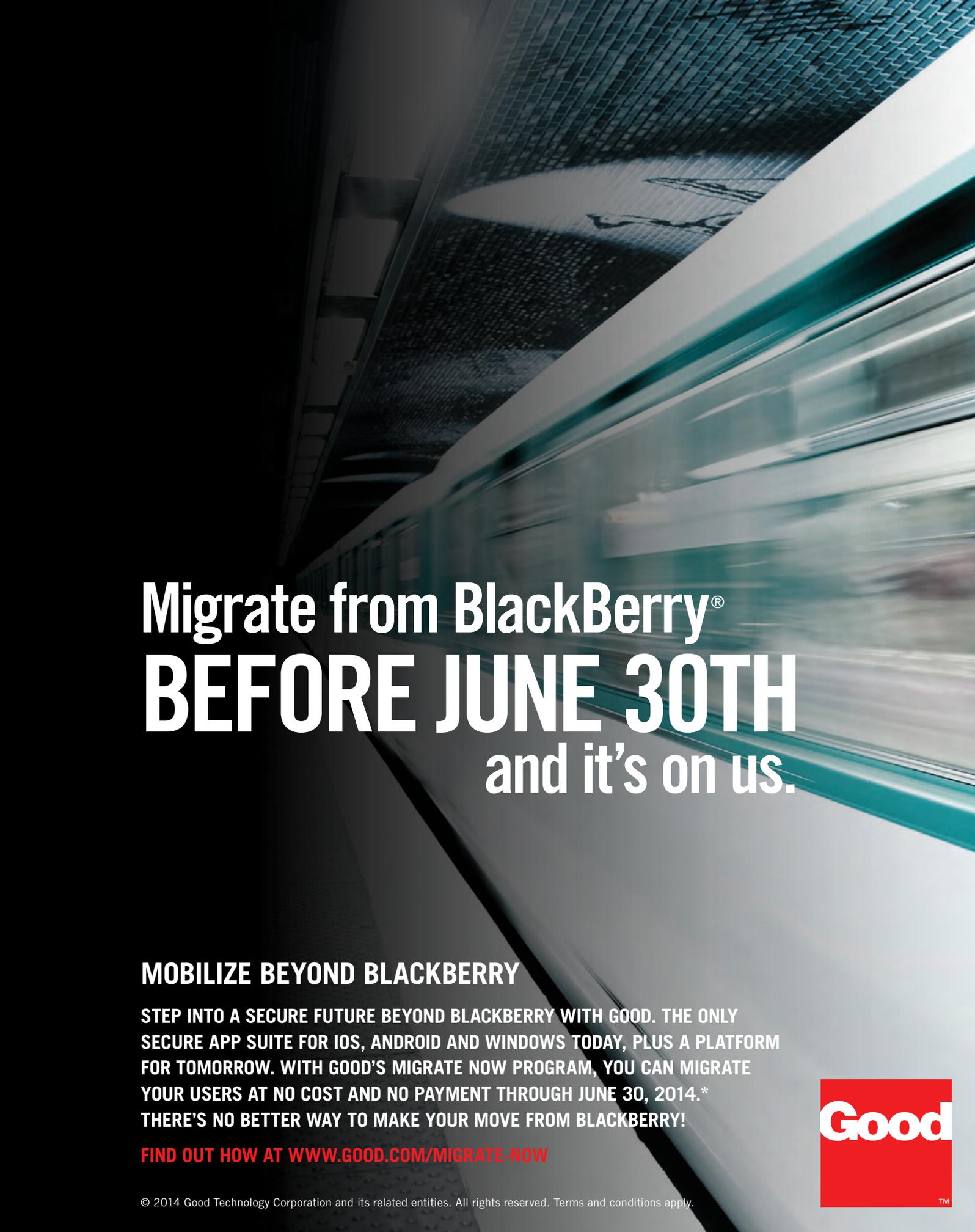
Data centre  
communities

Reducing customer  
service staff churn



# “START CONSIDERING AN EXIT STRATEGY”

*PC WORLD*



# Migrate from BlackBerry® **BEFORE JUNE 30TH** and it's on us.

## **MOBILIZE BEYOND BLACKBERRY**

**STEP INTO A SECURE FUTURE BEYOND BLACKBERRY WITH GOOD. THE ONLY SECURE APP SUITE FOR IOS, ANDROID AND WINDOWS TODAY, PLUS A PLATFORM FOR TOMORROW. WITH GOOD'S MIGRATE NOW PROGRAM, YOU CAN MIGRATE YOUR USERS AT NO COST AND NO PAYMENT THROUGH JUNE 30, 2014.\* THERE'S NO BETTER WAY TO MAKE YOUR MOVE FROM BLACKBERRY!**

**FIND OUT HOW AT [WWW.GOOD.COM/MIGRATE-NOW](http://WWW.GOOD.COM/MIGRATE-NOW)**





It's 2014.

Another year clocks over and the cycle starts anew. You'll trundle along to work day after day, where you'll be expected to do your job quickly, efficiently, within budget and without hassle. And - let's be

honest - it probably won't work out that way.

Despite your best efforts, Murphy's law will rise up out of the cracks between moments and have its way with your fortunes. Anything that can go wrong, will go wrong.

But it's our job to make your job that little bit easier - to help reduce the influence of Murphy's law.

That's why this month we're looking at what can go wrong in a wholesale server virtualisation project. By this point it's a pretty mature technology - but it turns out people still struggle with implementation in certain circumstances. So we've got some expert insight on how to prepare your people and your operation, in order to avoid these implementation issues.

And as always, if there's a technology issue that you need a hand with, you can shoot me through an email at [andrew@technologydecisions.com.au](mailto:andrew@technologydecisions.com.au), and I'll see what the experts have to say.

*Andrew Collins, Editor*

---

feb / mar 2014

# INSIDE

---

- 14 | Retaining your customer service staff
- 16 | Protecting pubs' power with UPSs
- 24 | Data centre redesign provides flexibility
- 29 | VM backup and recovery 10 times faster at medico after upgrade
- 30 | The data centre as castle
- 34 | Google's "privatised surveillance" breaks Dutch law

---

## FEATURES

---

### 06 | Get smart



As business intelligence tools are becoming more popular, vendors are offering them in different forms, on different devices and through different models.

### 20 | To virtualise or not to virtualise



Some applications can cause problems to the unprepared when thrown onto a virtual server, and uncooperative software vendors don't make life any easier.

### 26 | Different strokes for different folks



Many business intelligence tools present a 'one-size-fits-all' solution. But the BI tools of the future might look quite different.

### ALSO available in DIGITAL

This magazine and a complete library of back issues are available in digital format at

[www.technologydecisions.com.au/latest\\_issue](http://www.technologydecisions.com.au/latest_issue)

This issue's eMag is proudly sponsored by  Centrify®

<http://www.centrify.com/products/centrify-server-suite.asp>

# COMMUNICATION MADE EASY

## by the Industry Leader



|                        |   |                           |   |
|------------------------|---|---------------------------|---|
| Australian Owned       | ✓ | Obligation Free Advice    | ✓ |
| Australian Manufacture | ✓ | 10 & 40 Gigabit Solutions | ✓ |
| State Offices          | ✓ | Test & Measurement        | ✓ |
| Vast Product Offering  | ✓ | Calibration & Servicing   | ✓ |
| 20 Years Warranty*     | ✓ | Hire Equipment            | ✓ |

\* Subject to certified site Guarantee Terms & Conditions

AFC Designs, Manufactures and Integrates Fibre Optic and Copper Communication Solutions. We are an Australian owned and operated company with more than 21 years industry experience and service our customers through a National and International branch structure.

Call AFC now on **1800 810 707**

For more information, please visit [www.afcgroup.com.au](http://www.afcgroup.com.au)



# Get smart

## The changing face of business intelligence

*Stephen Withers*

As business intelligence tools are becoming more popular, vendors are offering them in different forms, on different devices and through different models.

**B**usiness intelligence (BI) is becoming more pervasive, said Yellowfin CIO Glen Rabie, noting that BI features are showing up in a widening range of packaged software and that organisations are becoming more aware of the value of data. And where BI has traditionally been used internally, changes in licensing models mean it is increasingly showing up in customer or supplier-facing dashboards - “a huge shift”, according to Rabie. For example, one of Yellowfin’s clients uses the product to provide dashboard-style report visualisations to its customers.

There is also growing awareness of the value of using data to predict what may

happen and to decide which levers to pull in order to get the desired outcome, said James Foster, head of marketing at SAS Australia & New Zealand. He pointed to examples such as a Charles Sturt University project using sensor data to predict the best time to pick wine grapes, a logistics company re-using data needed for reporting purposes as an input to its quoting and route planning engines, and the Hong Kong government identifying patterns in its call centre data in order to proactively improve services.

Trevor Legg, APAC program manager for BI at Oracle, added the example of Oracle customer Ambulance Victoria, which is



using the company's BI tools to perform real-time analytics to route patients to the most appropriate hospital.

### Self-service

The desire to provide self-service environments is widespread among IT departments, Legg observed, and this applies to BI where users want to be able to build their own reports with little training rather than assigning the tasks to specialist analysts. Oracle's BI tools are role-based to suit various jobs, and the data available is described in everyday business terms (eg, 'revenue') rather than database-specific terminology.

Consequently, self-service accounts for up to 90% of BI use by the company's customers, freeing up analysts to explore the data - to "uncover gems within the data" - rather than answering users' questions.

QlikTech's QlikView is used by Inner East Melbourne Medicare Local (IEMML) to allow clinicians and other non-IT staff to explore data without needing specialist training, said James Belsey, lead solution architect at Qlik-Tech ANZ.

Jason Ferriggi, data manager at IEMML, said, "Since deploying QlikView, we've seen major improvements in how we're able to serve the local community. Through the software's user-friendliness, our staff are saving between 20-30 hours per week on reporting and we are able to quickly pull valuable insights from community generated data, something that wasn't possible previously.

"The BI 2.0 tools definitely have less 'clutter' in the user interface but they do have some limited functionality compared to the original generation tools," he said, predicting the emergence of analytics apps for particular purposes such as sales reporting, with user interfaces that are specifically tailored for that function and therefore more suited to self-service BI.

### Mobility

"BI is going mobile," said Paul Goepfert, marketing manager at Pronto Software. This is in line with a general shift towards mobile technology as people expect to use IT wherever they need it. Most use of BI will be on mobile devices within a few years, he said, "I'm in no doubt about that." Conse-

---

"The challenge that remains is getting a small organisation's data into a structure that will enable the use of these cheaper tools." – Conrad Bates, C3 Business Solutions

---

"As a result, we've been able to improve the way we use government funding to support the health of over 680,000 residents of the inner east Melbourne region. We are also providing two health services and 170 general practices in the area with real-time data to assist them in identifying potential gaps in their delivery of healthcare services."

David Norman, national BI practice manager at NEC, also observed this trend to enabling non-technical staff to do their own BI tasks, noting that it avoids the long lead times and expense of big deployment projects and allows a more agile approach to BI.

Conrad Bates, managing partner at C3 Business Solutions, noted that current tools (which he refers to as 'BI 2.0') are more lightweight than their predecessors such as Cognos, MicroStrategy, BusinessObjects and OBIEE.

quently, Pronto has adopted a 'mobile first' approach to development with an emphasis on user interfaces that can be used without training or manuals, and on providing 'task intelligence' that draws attention to the most important information.

Suhas Uliyar, vice president mobile strategy & product management at Oracle, agreed, saying, "Mobile BI is a great way for enterprises to get onto a mobile journey," while Foster described mobile access to BI tools as "critical". But Alec Gardner, general manager advanced analytics at Teradata, warned that mobile BI tends to increase the volume of queries, so it is important to make sure that the system has the back-end capacity to support the additional load.

### Big data

There has been a lot of talk about big data, and according to Belsey it is starting to

become a reality in Australia. One example, he said, is the way Candy Crush company King.com stores massive amounts of player information in Hadoop and then analyses it with QlikView.

Teradata customers have been doing what are now called big data projects for a long time, Gardner said, with banks, telecommunications carriers, logistics firms and government agencies using the technology to better understand their customers/clients, reduce risk and fraud (eg, the ATO used Teradata systems to identify around \$130 million of fraudulent claims in a single year) and to improve operational efficiency. Using BI tools in real time to improve efficiency is a continuing trend, he suggested. But “having the holistic view of a person [ie, customer] is important”, he added: a mobile phone user experiencing a single dropped call probably does not consider it a big deal, but it is a different story if three calls are dropped in the same day, especially if they all happen in the same place.

## Cloud

Like so many aspects of IT, BI is starting to move into the cloud, and even where an on-premises deployment cannot be escaped it is possible to minimise entry costs by selecting a provider that offers an OPEX model, Norman said. There has never been a better choice of BI tools, and they are more affordable than ever, he added.

But Bates noted, “The challenge that remains is getting a small organisation’s data into a structure that will enable the use of these cheaper tools. This integration of their data would traditionally have been an ETL (extract, transform, load) platform in a data warehousing/business intelligence implementation.” So C3 has created a hosted data integration platform and now works with SMEs on hosted data



integration from multiple applications and services, and BI reporting.

## Built-in, add-on or third party?

There are three basic ways of obtaining BI tools. They may be baked into software you already use (eg, Pronto Xi or SQL Server 2012), offered as add-on modules (eg, Oracle Business Intelligence Enterprise Edition, often abbreviated to OBIEE) or sold by third-party developers (eg, Yellowfin). Naturally, each camp has its own view of the merits of the three approaches.

“Business software without BI is now dead,” asserted Goepfert (Pronto Xi includes IBM’s Cognos software, which was one of the early leaders in the BI market) as people increasingly want to understand what is happening and work intelligently rather than blindly following processes. They are accustomed to the graphical display of information on smartphones and also to being presented with significant amounts of information (eg, sports coverage on TV), and they “are thirsty for the ‘why,’ not only the ‘how’”, he said.

One advantage of Pronto’s approach is that it provides a middle layer between the ERP data and the BI tools, making the latter easier to put to work. Some

vendors provide ERP and BI but not that middle layer “because it is hard to do” and provides an opportunity to sell consulting services, he said.

However, Legg said that Oracle’s BI tools incorporate a world-class data model and provide many built-in KPIs, so its customers do not face a big consulting bill for implementation.

Pronto spends around 25 to 30% of its R&D budget on BI, Goepfert said, as its predominantly mid-market customers would not accept the consulting costs associated with traditional BI implementations. With Pronto, “80% of the BI analysis people want to do is actually there and available” in the form of content, cubes, dashboards, reports and indicators that are available straight out of the box, he said, allowing those mid-market customers to gain immediate benefits.

Brent Dunning, general manager of specialist tool supplier Gasweld, said the BI tools provided by Pronto were very easy to use and configure. The company previously had to produce digests of reports for use by senior managers, but they now received automatically the precise information they required. For example, it used to take an employee half a day to produce

Visit us at  
the Gartner BI  
& IM Summit  
to enter prize  
draw

When it comes to data,  
we're all **in**.

integration



integrity

**insight**

intelligence

Get sharper insight from your data.

Our solutions for business intelligence, integration and data integrity can help. Visit our booth at the Gartner Business Intelligence & Information Management Summit in Sydney on 24-25 February to learn more, or contact us today for a free assessment.

[www.informationbuilders.com.au/assessment](http://www.informationbuilders.com.au/assessment)

Information  
Builders

---

Dunning's weekly backorder report, but it is now generated automatically and the staff time is put to better use. And the enhanced reporting to store managers about customers that are on credit hold has improved efficiency and cash flow.

Dunning said new reports are written at Gasweld every day, cutting the white noise and giving people the information they actually need. This process is helped by the way data relating to accounts, payroll, inventory, manufacturing and other areas can be assembled into meaningful reports, he explained.

That experience aligned with Norman's, which is that the main benefits of BI projects include replacing human-driven reporting (eg, consolidating spreadsheets) with automated processes and thereby providing the time for more productive activities, exploiting data that has not previously been combined (eg, combining HR and ERP data to reveal true performance) and providing a more accurate and less confusing view of the organisation's data.

Rabie suggested that most 'built-in' BI tools were not designed-in by the companies selling them, but were instead acquired (either as products or as part of a takeover) - fine if what you get fits your requirements, but these tools may not work with all the applications in use within the organisation, he warned.

Best-of-breed BI vendors are more focused on that technology than more broadly based vendors are, and so are more likely to respond to customer requests for changes and new features, said Rabie: "You do tend to work harder for the business."

Furthermore, there is greater pressure on such vendors to be technology agnostic and willing to connect to "anything and everything", he added.

Foster pointed to a Forrester Research finding that 'best of breed vs suite' was no longer a major selection criterion for BI software. "BI has matured and standardised," he said, claiming that SAS software is very well known, integrates easily with a wide range of other applications, and "provides richer features and functionality" than built-in BI tools.

SAS has advantages in three key areas, he said: data management (using multiple sources, whether they are internal or external and structured or unstructured), reporting (including the ability to embed advanced analytics into reports) and gaining insight (and perhaps even more importantly "making the insight actionable" by delivering it to the right person at the right time).

"Business discovery is really what we do at QlikTech," said Belsey. "It's all about focus on the business user" and empowering them to get answers to questions about data quickly and independently, while enforcing appropriate access controls.

ERP systems typically provide bundled reports that answer the common questions, but to get full value from their data, organisations need to combine information from multiple systems. One customer - IST Financial Group - was spending between 250 and 300 hours a month to assemble data from multiple sources, but after adopting QlikView that was reduced to less than 10 hours while gaining greater insight. These multisource reports can be constructed very quickly with QlikView, sometimes in hours or days rather than weeks or months. Belsey said that Amcor was able to combine the data from two very complex systems in just 25 days.

Legg suggested that "specialist" tools were suitable for reporting rather than BI, saying that Oracle's strategy assumes customers

are looking for high-value strategic BI aimed at changing the business. So the strategy is based on three pillars: optimise processes around organisation-level KPIs (not those relevant to an individual department or function), simplify the technology (eg, via the company's Engineered Systems approach which provides complete stacks from application to hardware as a single product) and innovate (eg, predictive analytics, mobile BI and support for unstructured data).

Oracle's BI product originated with Siebel, he explained, but around four years ago the company decided to make it the standard for reporting across its product range. Consequently, some functions are present in each suite, but the various Oracle BI tools bring it all together. Furthermore, integration with non-Oracle applications is not only possible; Oracle's pre-built data model means implementation can be significantly quicker than with some other products.

Gardner pointed out that Teradata's systems are designed specifically for decision support and analytics. There are always multiple sources of data, he said, so Teradata takes care of gathering, consolidating and then analysing it.

The company does partner with companies including Microsoft, Oracle and SAS, and their tools can be used to access Teradata stores.

Of all the people we interviewed for this article, Norman had the broadest view as NEC implements systems for its customers using products from a range of vendors. While IBM, SAP, Microsoft and others have traditionally provided "pretty complete systems", he said, organisations are increasingly calling for a multivendor approach and focusing more on business rather than technology issues. ☹



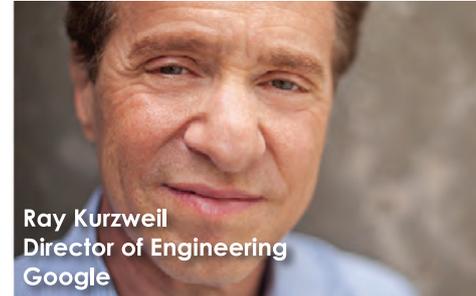
# CONNECT

## EXPO 2014

Melbourne Convention & Exhibition Centre

13th & 14th March 2014

## JOIN AUSTRALIA'S NEWEST ICT EXHIBITION



Ray Kurzweil  
Director of Engineering  
Google

Coinciding with the roll-out of ultra-high speed broadband, is a tsunami of disruptive technologies and new devices, applications and services which are about to revolutionise the way we communicate, live and work.

This is your opportunity to ....

- 'see' the future...now
- Find new business opportunities
- Adopt these technologies into your work & life

### 6 Strategic Business Conferences

- + Next Big Thing Summit
- + Connected Entertainment Summit
- + Digital Health Summit
- + M2M & The Internet of Things Summit
- + Enterprise Mobility Summit
- + Connected Government Summit

## WWW.CON-NECT.COM.AU

OFFICIAL EVENT PARTNER



IN PARTNERSHIP WITH



SUPPORTED BY



SPONSORS/EXHIBITORS





© iStockphoto.com/Brian Jackson

# AUSTRALIAN PRIVACY ACT CHANGES SMELL OF SOX

**A**ustralian organisations risk financial and reputational damage if they fail to meet the challenges of this year's Australian Privacy Act changes, warns Centrifly Regional Director APAC Matt Ramsay.

Taking effect from March, the Privacy Amendment (Enhancing Privacy Protection) Act 2012 implements a new set of harmonised privacy principles to regulate the handling of personal information by both Australian businesses and government agencies.

Ramsay warns that these changes risk emulating the cost and compliance challenges of the Sarbanes-Oxley (SOX) legislation in the US. "While SOX has raised the compliance bar for corporate reporting, it has had the unintended impact of creating a lot of uncertainty because of its lack of precision," he said.

"SOX compliance costs and complexity have run out of control in the US during the past decade. The SOX legislation is prescriptive without being descriptive: it tells you to jump, but not how high. As a result, US corporations need to jump a very high bar indeed to avoid the threat of non-compliance."

Enacted in 2002, the SOX law strengthened compliance standards for US public company boards, management and public accounting firms by requiring top managers to individually certify the accuracy of financial information, applying more severe penalties for fraudulent financial activity.

From March, Australian organisations will face the same challenge from the new privacy legislation — the

requirement to 'take reasonable steps' to demonstrate compliance without a clear understanding of exactly what is required.

The updated privacy act will implement 13 new Australian Privacy Principles (APP) to replace the existing Information Privacy Principles. The first major change is that the Privacy Commissioner will gain the power to investigate an organisation's information security controls without receiving a complaint. Penalties range from \$340,000 for an individual to \$1.7 million for an agency, in addition to reputational brand damage that may result from such an investigation.

Ramsay says organisations needed to provide the Privacy Commissioner with an assessment of the effectiveness of their information system protection controls. "In reviewing the changes to the Australian Privacy Act, I conclude that IT security departments in both public and private sector organisations should take special note of key changes to the law and act now to prepare for these changes," he said.

"From my review, it is clear that three key principles from this new privacy protection legislation are particularly relevant to IT Security.

"APP 1 requires open and transparent management of personal information. Entities must take 'reasonable' steps to implement practices, procedures and systems relating to the privacy code.

"What makes this smell a little 'SOXish' is the imprecision of the term 'reasonable steps' to control



© iStockphoto.com/EHStock

such broad areas as data access and control, which are essential aspects of information security and cooperation between IT, legal, risk and executive management without any specific guidance as to which internal controls must be assessed.”

Ramsay says the second relevant principle, APP 8, establishes an entity’s responsibility for ensuring privacy for cross-border disclosure of personal information. “If you don’t comply, you could be liable here,” he warned.

“This may be particularly relevant when an organisation uses Cloud-based services such as Office 365, Salesforce, etc, that can hold personal information, yet may not be hosted in country. This scenario raises questions about potential privacy concerns and whether APP 8 issues are at play.

“The third relevant principle, APP 11, requires that an entity must take ‘reasonable steps’ to protect unauthorised access and disclosure of information. Here, the term ‘reasonable steps’ is problematic because it is qualitative rather than quantitative.”

Ramsay says the challenge posed by the new act was exacerbated by two major technology trends: Cloud services and mobility.

“Highly-connected pocket-sized devices coupled with Cloud-enabled enterprise applications make private details potentially more accessible and more vulnerable than at any time in our history,” he said.

“For organisations to successfully comply with this new legislative environment, they need to ask not only ‘what private information should we protect?’ but also ‘who has access and how should we protect it?’”

To comply with the new Australian Privacy Principles without onerous costs and complexity, Ramsay says organisations need to precisely manage individual identities by embracing approaches such as Single Sign On (SSO) authentication and least privilege access controls. “SSO provides a real-time corporate roadmap of an organisation’s APP compliance,” he said.

“SSO can also free your staff from needing to remember usernames and passwords and greatly simplify de-provisioning Cloud apps by tying all logons back to a single identity store such as Microsoft Active Directory.

“It is also highly likely that granting administrative privileges to numerous staff, whether at a local machine or wider level, will be regarded as unnecessary, far from best practice and thus entirely inconsistent with compliance to the new Australian Privacy Principles.”

#### *About Centrify*

Centrify provides Unified Identity Services across the data centre, cloud and mobile that result in one single login for users and one unified identity infrastructure for IT. Centrify’s solutions reduce costs and increase agility and security by leveraging an organisation’s existing identity infrastructure to enable centralised authentication, access control, privilege management, policy enforcement and compliance. Centrify customers typically reduce their costs associated with identity lifecycle management and compliance by more than 50%. With more than 5000 customers worldwide, including approximately half of the Fortune 50 and more than 60 Federal agencies, Centrify is deployed on more than one million server, application and mobile device resources on-premise and in the cloud. For more information about Centrify and its solutions, call 1300 795 789 or visit <http://www.centrify.com/>.

*Centrify and Centrify User Suite are trademarks of Centrify Corporation in the United States and other countries. All other trademarks are the property of their respective owners.*

[www.centrify.com](http://www.centrify.com)





# Retaining your customer service staff

*Daniel Scheltinga, Asia Pacific Support and Services Director at Zendesk*

Customer service teams are crucial to any organisation; they are the ones that are in contact with your customers long after the sales team has moved on.

Unfortunately, customer service team churn can be an ongoing challenge for many CIOs and customer service team managers. It's not uncommon for people to use a customer service role as a stepping stone into the business, with the future aim of moving to another role within the company. While ambition is a quality to be admired and encouraged in any employee, this does leave the customer service team in a difficult position.

The other major challenge in retaining customer service staff can be due to the very nature of the job itself. Customer service teams tend to manage a great deal of

problems and frustrations from customers and the business on a daily basis. With a constant barrage of queries and requests, it can be difficult to keep customer service staff engaged and motivated.

Employee turnover can be disruptive and expensive and affect team morale, but there are a number of things you can do to turn this around. Focusing on the very people that staff your customer service team, ensuring you have efficient and supportive processes in place, and investing in the right technology will all combine to keep your customer service team happy, reduce churn and set your team up for the years ahead.



## People

While your business is likely to have standard HR processes in place across the company, it pays to invest your own time and energy into your customer service staff. When it comes to effective staff retention strategies, one size doesn't fit all, but below are a few points that can complement your company's existing HR and development strategies to build a successful customer service team.

- **Connect your team with peers** - Support requests can be so varied it greatly assists to have contacts in different areas. With this in mind, arrange for different staff members from across the business to present to the customer service team on a regular basis, ideally weekly. This allows your customer service team to connect with different individuals within the company, whether that be marketing, finance, operations, sales or development.

- **Give staff other responsibilities** - Mix up the daily routine of customer service staff by asking them to create knowledge base articles, answer questions on a community forum or take on another responsibility like a team event planner.
- **Share the load** - Encourage other areas of the business, for example sales or development, to sit with the customer service team and answer requests for support on a regular basis. This helps customer service staff network with their peers and keeps non-customer service staff in touch with the product and common customer feedback. It also tends to invoke a certain level of understanding and compassion from the wider business for what the customer service team does on a daily basis.

## Process

Putting the right processes in place improves efficiency and effectiveness, and offers a reliable standard to make individual tasks and the work day simpler.

- **Create a troubleshooting workflow** - Developing a troubleshooting workflow allows customer service staff to follow an established methodology to troubleshoot known issues or channel requests to the correct person or group within the company. Run every support request through this workflow to aid continuous improvement.
- **Use a knowledge base** - A knowledge base provides an easily accessible central repository for processes and procedures. Encourage staff to contribute to, grow and own elements of the knowledge base.
- **Develop an escalation process** - Create a process that allows your customer service staff to easily escalate to a manager or co-worker when things get difficult. This takes the pressure off those on the front line and allows customers to see their support request progressing.
- **Follow the DARK principle** - Where possible, everything should be Documented,

Automated, Repeatable and Kept simple.

- **Allow for flexibility** - While processes are an important and helpful part of any customer service role, don't make processes too rigid. Allow some flexibility and give your staff the power to do their job the best way they can.

## Technology

There are many applications such as Confluence, Yammer and Flowdoc that can make the work of your customer service team more efficient.

**Distribute knowledge** - Help your customer service team share critical information in real time by adopting applications such as Flowdoc. For non-critical information, use a knowledge base to share information and best practice.

**Embrace a remote workforce** - Gone are the days when individuals need to be physically situated in the office to perform their job, and customer service teams are no exception. There are enormous benefits to allowing staff to work remotely, from happy staff who find it easier to juggle work and family, to ensuring you can employ the best people, no matter where they live.

The introduction of voice technology means that customer service staff can answer inbound or make outbound calls from their computer or existing home landline or mobile phones, with all phone calls and voicemails automatically recorded and transcribed into support requests.

**Look to the cloud** - Cloud-based customer service software can help customer service teams have all customer requests go through one place, regardless of where they originated. Queries can also be handled from smartphones and tablets, so customer service teams can respond to customer queries while they are out of the office or outside office hours. ☺



## Protecting pubs' power with UPSs

**T**he ALH Group, which operates more than 320 licensed venues and over 460 retail liquor outlets across Australia, has implemented an uninterruptible power supply (UPS) at each of its pubs.

ALH's brands include BWS and Dan Murphy's, and its interests include electronic gaming, sports bars, bistros, restaurants, cafes, retail liquor, accommodation, nightclubs and wagering. The last 10 years have seen the organisation acquire new pubs and venues.

Two years ago, ALH embarked on an infrastructure overhaul to upgrade and improve communications capabilities. This involved replacing its existing network and appointing a new carriage provider. As part of the project, ALH needed to source and install racks to hold the new networking equipment. In addition, the company decided it was time to protect the network by equipping all pubs with UPS devices.



Richard Judd, technical team leader at ALH Group, said: "The back-of-house environments could best be described as unique, diverse and interesting. The network refresh was an opportunity to standardise the environment across the board, making it easier to maintain and manage. In the process, we were also creating a template for future rollouts and acquisitions.

"Racks were essential for this in order to house and consolidate all the core communications infrastructure on-site. In addition, we wanted a UPS at each pub to provide visibility into power issues. In the past, some of the Queensland properties had been equipped with UPSs, mainly because they had experienced frequent power supply issues. In the other states, we'd always had a view to do something to protect power but had never got around to it. The network refresh gave us that opportunity," Judd said.

Judd carried out a review of potential appliances. "Reliability was essential for uptime of the network and for maintenance and warranty of network equipment. We use Cisco end-to-end communications products and it was key that we protect this environment from surges and other problems."

Following the review, ALH selected Eaton and organised with the vendor to equip 280 pubs across the country with racks and UPS devices. The vendor's partner, DESA, was tasked with project management, including logistics and installation. Work on the project started in January 2012 - but the plans were soon revised.

"As all the rollout was happening we acquired another 35 pubs. They had to be brought on board quickly, so we got Eaton to facilitate them also," Judd noted.

In total, 326 pubs received the new racks and power protection infrastructure - including server racks, UPS, monitoring software, surge protection devices and other accessories - over a period of 14 months.

The UPS devices are now providing visibility into power across the network. Automatically generated reports provide Judd and his team with notifications of variations in power supply, such as spikes or loss of power. The devices are keeping the pubs connected and protecting the infrastructure whenever the power goes out.

"From the start, the network reporting has given us a lot more visibility into our communications. The products stand up well and never miss a beat. I've never had to deal with them; we've had no bugs or issues in any shape or form. The UPSs give resilience to all the network infrastructure that lies behind them. They deliver the service level agreements for the business," Judd said.



# FOREVER YOUNG.



Type A cabinets

At MFB, keeping up with the times means more than just implementation of the latest technologies; it's a continuous investment in producing innovative superior racking solutions time and time again.

Uncompromised material selection backed by constant, insightful development and design advancements keep our entire range of precision-engineered and hand built products, one tick ahead of the competition. With a solid history of over 40 years supplying innovative, off-the-shelf and custom built racking systems, you can rely on MFB for consistent precision, time after time.

**AUSTRALIAN MADE MAKES AUSTRALIA**



[www.mfb.com.au](http://www.mfb.com.au) DESIGNERS AND MANUFACTURERS OF 19" RACK SYSTEMS

VIC - P (03) 9801 1044 F (03) 9801 1176 E [sales@mfb.com.au](mailto:sales@mfb.com.au)

NSW - P (02) 9749 1922 F (02) 9749 1987 E [sydney@mfb.com.au](mailto:sydney@mfb.com.au)



19" Rack Cabinets  
Licence No. 84394

# CONNEX

## AUSTRALIA & NEW ZEALAND

The leading brands in the Australia & New Zealand cabling market,

**KRONE and AMP Netconnect,**

together under one company - **TE Connectivity.**



TE Connectivity is the sole manufacturer in Australia & New Zealand providing ITC solutions from Data Centre to Enterprise buildings.

**Data Centre Infrastructure Management systems**

**Choice of media and application speed**

**Cabling for Building Automation Systems**

**Designed for low operating cost**

**Local design and project support**

**25 year system warranty**

Contact us call 1800 TE INFO (1800 83 4636) | email [infoanz@te.com](mailto:infoanz@te.com)

[www.te.com/enterprise-au](http://www.te.com/enterprise-au) | [www.te.com/enterprise-nz](http://www.te.com/enterprise-nz)

# ECTING

## AND FOR OVER 30 YEARS

**AMP**

NETCONNECT

KRONE



KRONE has been in Australia & New Zealand for more than 30 years designing & manufacturing products such as the ever-lasting disconnect module for all telephone systems, to the locally-made RJ-45 outlets for Australian faceplates.

With local technical expertise and manufacturing we are able to provide custom solutions and tailored products for the Australian and New Zealand market.

A country wide network of distributors and a large central warehouse near Sydney, means we can support your projects as needed.

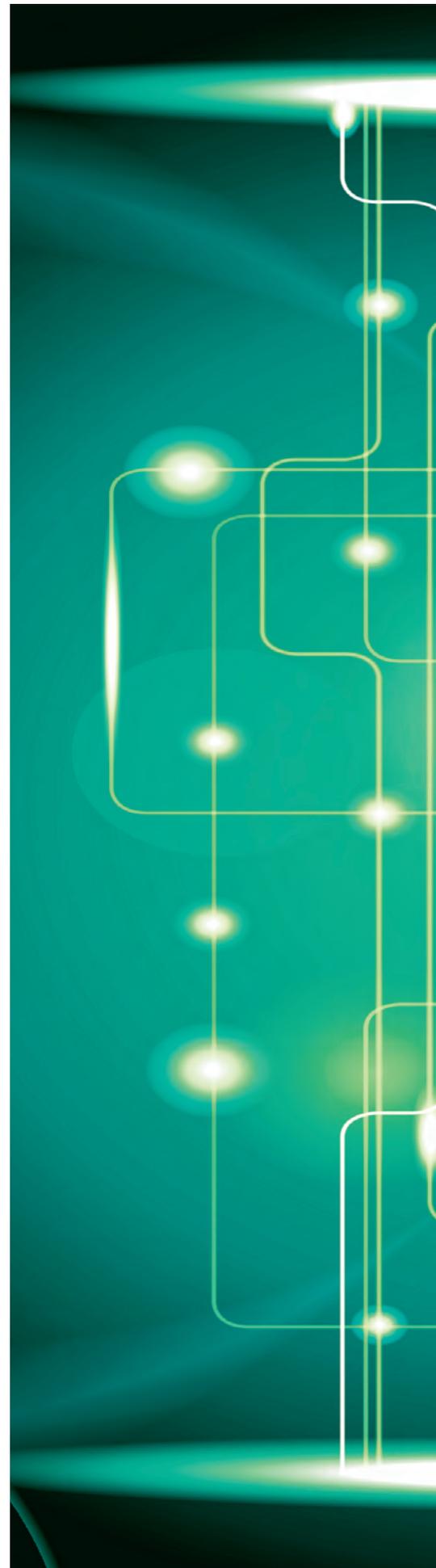
# FROM THE FRONTLINE



## To virtualise or not to virtualise

*Andrew Collins*

Server virtualisation is now mainstream in Australia and New Zealand. But there are still some workloads that can cause problems to the unprepared when they are virtualised, and uncooperative software vendors don't make life any easier.



Interestingly, Australia and New Zealand are leading the pack when it comes to adopting server virtualisation, with more than 80% of server operating systems running as virtualised machines, according to Gartner's Michael Warrilow. This is in comparison to the global figure of 74.9%.

Traditional virtualisation wisdom dictates that there are some functions, workloads or types of server that shouldn't be virtualised - particularly those with high IOPS (input/output operations per second). In these cases, the virtual machines (VMs) sitting on top of a hypervisor simply can't get enough access to a host machine's physical resources, meaning applications just won't work. Or so the traditional wisdom goes.

While that wisdom may once have rung true, Kevin McIsaac reckons it's not the case these days. He says the idea that VMs can't handle applications with high IOPS is "completely incorrect".

"The virtualisation platform does not necessarily mean that you're not going to get throughput, or good memory, or good CPU. In fact, there are published tests from VMware that show over a million IOPS for a virtual machine. Show me a vendor who needs a million IOPS, and I'll show you someone who's got very badly written something," he says.

"The story that they can't get the IOPS is actually a lie. There are usually other reasons why they don't want to do it. The most common one is that the vendor has just not got off their arse and tested it on a virtual machine."

Other times, McIsaac says, a software supplier's sales reps will lie and claim their company won't support their software if used on another vendor's virtualisation platform. In reality, the sales reps are just trying "to sell their entire stack end to end".

However, you can run into problems with IOPS on a virtual platform if the environment is misconfigured. "If you don't actually architect the layout of the disk, or the number of paths, or the way you set queues, and that kind of technical mumbo jumbo, you can get poor performance," McIsaac says.

In fact, "today, there are only a couple of things that really can't run in a virtual machine", he says, with the only real exceptions being those that involve highly specialised hardware, like specific fax cards, graphics cards, I/O cards or NICs.

Gartner's Warrilow believes similar, saying that some corner cases - including some applications that are "very sensitive to real-time capabilities" - aren't really suited to server virtualisation. And while these use cases are few, "they can be very important and very sophisticated workloads".

"Generally with each new release of software, those use cases get a little bit smaller, and a little bit less of an issue, but there are always going to be holdouts," he says.

### At work

But there are current examples of Australian and New Zealand organisations approaching server virtualisation differently for some functions. Gunnensen, a manufacturer and distributor of wood-based building products, provides one such example. Gunnensen had largely embraced a SAN-based server virtualisation set-up, which worked well until it decided to implement a new ERP system.

"The suppliers of the new ERP system were insisting that the primary database server - which was based on Microsoft SQL - should run on a dedicated piece of tin. They didn't think you would be able to get an adequate disk access environment for the high demand that SQL was going to be putting on the database," Watson says.

"We tended to agree with them with that possibility. The SANs that we were using met our basic requirements, but if you really pushed it hard, the SAN - because it was a network-based connection and a virtualised environment - meant that you probably were not going to get the I/O throughput that we would possibly require," he says.

### OUR PANEL



Michael Warrilow,  
Research Director, Infrastructure Software, Gartner



Sean White,  
ICT Manager for Australasia,  
Masterpet



Dr Kevin McIsaac,  
Advisor, IBRS



Stephen Watson,  
IS Manager, Gunnensen



The company has therefore adopted Nutanix servers. “It’s all still virtualised,” Watson says, but it provides better throughput than the old SAN-based environment, in order to satisfy the requirements of the ERP system.

“As far as virtualisation is concerned, we’ve never had a problem with anything we’ve tried to do. We’ve had suppliers say to us: no, our system won’t run in virtualised environments, or no, that OS won’t run in a virtualised environment, but most of the time we’ve found that’s not correct - it’s just they haven’t been willing to play with it or test it or stick their neck out on it,” he says.

Masterpet, a pet services and products company, has two virtualisation environments - one in NZ and one in Australia - each with 20 production servers virtualised over three physical hosts. Like Gunnensen, Masterpet has approached its SQL-based ERP server differently when it comes to virtualisation. The company has its ERP on a dedicated physical box.

“And that’s just for sheer grunt. Our physical ERP box has got some pretty impressive disk performance. It is just a pure grunt box - it’s all it does for us every day,” White says.

The company is testing virtualisation of its ERP with Windows Server 2012 and the latest version of SQL, “to see how it runs and what impact it has on the rest of the infrastructure”.

Masterpet also has a physical box for one of its domain controllers (DCs). “We did virtualise it, and then we realised ... as the environment powers up, it is quite nice to have the DC up and ready for things to talk to,” says White. Without a separate DC, “we’ve found that things would fire up and if something wasn’t happy, you’ve

got to reboot it again. And the actual power-up time just becomes fairly large.”

Watson notes that “even if we do have a physical host for the DC and the ERP, we still throw our basic version of VMware on there. So they still sit on top of the virtualisation layer. So really we are virtualising everything - we’re just giving those guys a big slice of grunt, exclusively to themselves. I think the virtualisation layer is definitely up to it - it’s just about how you share it out.”

### Obstinate vendors

While some software sales reps are lying when they say their company doesn’t support server virtualisation, some software vendors actually will refuse to support their product on virtual environments.

McIsaac has a simple solution. If it’s a smaller software supplier, tell them you have a virtualisation-first approach, and if they don’t support virtualisation they’re out of the tender. Their position may change very quickly.

“If they’re a large vendor, you just need to work your way up the management chain and find somebody who is more aligned around the company policy, rather than a personal sales agenda,” he says.

Alternatively, approach your virtualisation vendor and ask them to point you to other customers who are using large workloads, “and confront the vendor with their lie”, McIsaac says.

And if you’re a VMware customer, the virtualisation vendor may give you a hand with support. “I’d lean on my VMware account manager” to help sort it out, McIsaac says.

There are those software vendors who, if you experience an error with an applica-

tion on a virtual server, will ask that you reproduce the error on a physical box.

And according to Warrilow, it’s “probably fair to ask that [the customer] replicate the problem in a physical environment, even just from a problem determination perspective”.

If it’s any consolation, Warrilow says that “software suppliers that outright refuse to support their product on a virtual server are shooting themselves in the foot. In Australia in particular, where 80%+ of all server OS instances are virtualised, they’re leaving themselves 20% of the market.”

So, aside from those regions of the world where server virtualisation has low adoption, “it’s going to be prudent and wise to support server virtualisation if you’re an ISV”, Warrilow says.

### A people problem

While server virtualisation might work fine in ideal circumstances, there are still plenty of things that can go wrong. To avoid such an outcome, Watson suggests that you make sure you have the right people, as far as knowledge and skills are concerned, which may mean engaging a third-party support organisation to help.

“You need to make sure you have ready and immediate access to the everyday technical skills that are necessary to do this. It’s something people don’t do all the time, so you’re unlikely to have it in your own office. I would look for an organisation that’s got fairly deep resources that can do it, and I’d be prepared to pay for it,” Watson says.

For those with concerns about moving a particular app to a virtual server, Warrilow says: “There are technical communities where you can ask for the war stories ... around how well the application runs and if there are any gotchas.” ☹



# Veeam Backup & Replication **v7**

Taking **Modern** Data Protection  
to the Next Level!

**Let's face it – trying to scale your IT environment is complicated. Stop struggling with your current backup solution that was built to tolerate the virtual environment.**

Veeam Backup & Replication delivers enterprise-level functionality without the enterprise-level price tag.

- Optimized for global datacenters and remote/branch (ROBO) offices
- Engineered for multi-hypervisor environments with thousands of VMs
- Built to simplify deployment and optimize performance

Call: 02 9191 7840  
Email: [veeam.sales.ANZ@veeam.com](mailto:veeam.sales.ANZ@veeam.com)  
[www.veeam.com](http://www.veeam.com)



## Data centre redesign provides flexibility for next decade

**S**outhern Cross Health Society has rejigged its data centre design, boosting the facility's energy efficiency and providing enough flexibility to cover the organisation's racking needs for the next 10 years.

Founded in 1961, Southern Cross provides health insurance and a range of health and wellness services to its more than 800,000 members. To deliver its services, Southern Cross Health Society relies on its IT systems.

"When it comes to IT, like any major organisation, we can't afford to miss a beat. We need to know that the data we're capturing, and the business processes we're supporting, are protected," said April Walker, head of information systems and business change, Southern Cross Health Society.

Southern Cross had outgrown its old premises. With Auckland employees spread across two different locations and the main building not fit for required purposes, the organisation needed to

relocate. Bringing the Auckland-based operations of the society together in one location would also mean improved efficiency and productivity for the staff and business.

The organisation's previous computer room was dated. It had grown organically over a long period, leading to power and cooling inefficiencies as well as capacity and performance problems. The change of premises provided an opportunity for Southern Cross to rethink its approach to IT and overcome issues presented by the legacy system.

Southern Cross took a proactive role in the construction required for the new office fit-out and got involved in designing the new data centre space. As part of this, the engineer on the project approached Schneider Electric to assist.

"Initially, Schneider Electric was brought in to advise on uninterruptible power supply (UPS) solutions; but we soon saw the benefit of using their expertise in data centre design

## Gartner Business Process Management Summit

19 - 20 May 2014 | Sydney, Australia | [gartner.com/ap/bpm](http://gartner.com/ap/bpm)

Prepare for the Digital Business Disruption – Embrace, Adapt, Reinvent

### Hot topics to be covered:

- Defining the Value of BPM to Business and IT
- Managing Change as You Improve Processes
- Making Process Governance Work
- Developing Key Roles and Skills for Continuous Process Improvement
- Measuring Business Outcomes in a Process Context

Register before  
21 March to  
save \$400



and implementation to help us save on space, achieve greater energy efficiency and boost the overall performance of the facility,” said Walker.

The vendor worked with Southern Cross’s IT facility management supplier, Datacom, on the project. Over the course of about six weeks, the team designed a modular, high-density data centre.

Central to the new data centre design was the APC InfraStruxure (ISX) architecture, comprising a configuration of eight racks, four

InRow RDs, Symmetra PX UPS, hot aisle containment system (HACS) and environment management.

The StruxureWare Operations data centre infrastructure management (DCIM) software is built in to enable Datacom to host the data centre remotely. It facilitates ongoing monitoring and alert management by Datacom, again adding to the system’s overall resilience.

“[The] solution - including racking, power and cooling, as well as UPS - was innovative and responded to our needs. The modular design, with all elements completely enclosed, builds the resilience of the entire data centre. It means that, if for any reason there is a single failure in one module, it’s a non-event to us and doesn’t impact on our operations,” said Walker.

Southern Cross now has a maintenance agreement with Datacom and Schneider Electric to cover all aspects of the data centre.

The new data centre is more energy efficient and greatly reduced in size. The active-active configuration of the data centre architecture and built-in redundancy across all modules helps improve resilience.

“The new data centre design is flexible enough to meet Southern Cross’s racking needs for the next 10 years. And we can easily add another two racks using this modular design,” said Walker.

## Gartner IT Infrastructure Operations & Data Center Summit



21 - 22 May 2014 | Sydney, Australia | [gartner.com/ap/datacenter](http://gartner.com/ap/datacenter)

### Maximizing Value and Managing Change in a Cloud Driven World

#### Hot topics to be covered:

- Developing Cloud Strategies
- Implementing Enterprise Mobility
- Successfully Demonstrating Value and Relevance
- Attracting and Creating the Best I&O Team
- DevOps and Achieving IT Operational Excellence

Register before  
21 March to  
save \$400

## TECHNICALLY SPEAKING



# Different strokes for different folks

## The future of 'pervasive BI'

*Dr Rado Kotorov, Vice President of Product Marketing at Information Builders*

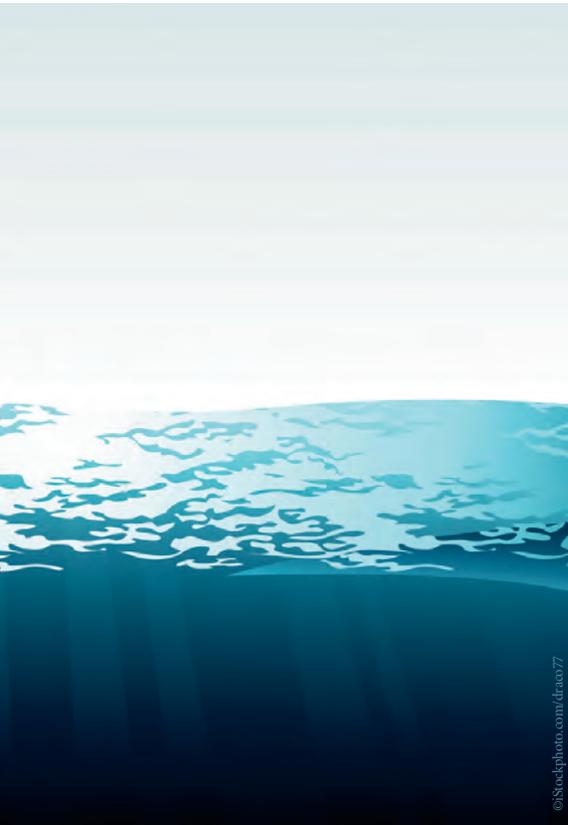
Many business intelligence (BI) tools present a 'one-size-fits-all' solution. But the BI tools of the future might look quite different.

**B**usiness intelligence refers to technology that helps companies make better decisions. Traditionally, BI includes reports, dashboards and scorecards that monitor various parts of the operation. BI enhances business data by turning it into useful information, or builds knowledge by gathering insight about a particular domain - from production to sales, finance to HR.

Enterprises started to adopt BI on a wide scale 25 years ago. The initial motivation was to empower executive managers with current insight about business operations so they could align corporate strategy with

employee performance and culture. For a long time, the BI market was dominated by two types of tools: one that generated static reports for the masses and another that used analytics to help technically savvy users slice and dice data in very sophisticated ways.

As the years passed and the value of BI became apparent, industry pundits coined the term 'pervasive BI' to describe a more extensive vision. Everyone makes decisions, they reasoned, so why not help them make more informed, fact-based decisions? This philosophy launched a wave of end-user-oriented BI tools. And yet the reality is that BI penetration remains dismally low. Today,



©iStockphoto.com/dlaco77

less than 30% of potential BI users actually use BI, according to Gartner.

### Stuck in the past

One reason for this disparity is that business professionals and BI vendors often cling to yesterday's perspective that BI is for analysts. Economists call this 'path dependency' - following the same old approach instead of switching paths. Every time a BI initiative fails to expand beyond the early-adopter phase (which typically includes the analysts who have selected the solution), they tend to blame it on the usability of the tools. What's the typical solution? Get new tools, of course, in the hopes of remedying the situation. The success rate does not increase in each cycle - but the frustration certainly does!

Usability is important, but we should also consider what behavioural economists have learned about the human decision-making process. Nobel Prize laureate Daniel Kahne-

man describes two sides of the brain in his book *Thinking, Fast and Slow*. One side of the brain makes a decision in a split second; the other side takes time to analyse and ponder the facts. Other behavioural economists have coined the term 'tacit knowledge' to describe how professionals use their experience to quickly glean facts and make decisions. Our fast and slow mental systems work together. And so it should be in the enterprise as we set our minds to solving a variety of business problems.

For a similar example in the business world, take a look at labour statistics to see how jobs are allocated. The US workforce includes two million employees with the word 'analyst' in their titles. On top of that, there are six million executives, 19 million managers and 70 million operational employees with decision-making authority. This division of labour reflects an important issue in the decision-making potential of most enterprises. The two million analysts spend 90% of their time analysing data. The rest of the employees must make decisions very quickly to expedite the execution of vital tasks.

Clearly analysts need sophisticated BI tools to do their jobs. And as the volume, variety and velocity of data grows, these professionals require progressively more powerful tools for data management, data integration, data quality and data analysis. Some analysts need ad hoc tools to answer routine questions. Others need a general-purpose BI environment to uncover new ideas and create new products. For multivariate datasets, analysts need machine-learning tools that can detect patterns in large volumes of data. And, of course, statisticians need specialised tools to model data and create predictive applications. All of these professionals have different skills and roles within the enterprise. One tool would definitely not fit all.

Consider the software tools that Adobe has brought to the world of publishing.

Adobe's suite of products accommodates a broad division of labour, with photo editing tools to work with individual images, illustration tools for drawing and design tools for laying out entire magazines. Adobe's success in this market stems, in part, from the interoperability of these tools: a project begun in one of them can be passed on to another.

Similarly, the BI industry should never have attempted to package every conceivable function into one tool set. Far better to create a related family of tools that serves a diverse group of data-management professionals - and, increasingly, rank-and-file business professionals as well.

### Keeping it simple

Remember, despite their varying needs, professional analysts comprise a small segment of the decision-making workforce. What about the 100 million working professionals who need information at a glance? We can't saddle them with unwieldy BI tools that require a learning curve. This busy segment of the workforce is accustomed to simple, intuitive apps that yield answers with a couple of clicks or taps, like the weather app on your phone. Enter a postcode to see the five-day forecast, then tap an icon or two to drill into the details. Whether you want an hour-by-hour breakdown or a moving satellite image, it's obvious what you are supposed to do.

This is exactly what business professionals need: simple BI apps that can answer basic questions - ideally, with a user interface that has been tailored to the job function at hand. Pair this functionality with an app-store-like portal, where users can assemble their own dashboards from a library of components, and you have a great way to expand an organisation's decision-making potential.

This vision represents an entirely different mindset from what the BI industry has

espoused for most of its history. Rather than waiting for IT to develop dashboards and reports, business users can manage their own content in the portal. They can assemble their own dashboards by dragging and dropping the pertinent components from a repository or choose job and function specifics. This is precisely the type of consumer-oriented approach that can make BI pervasive. Casual business users want to manage their own content via interactive apps that are limited in scope and focused on a specific business problem. Whether they are at the office or on the go, they can call up the right app, interact with it and get the results they need.

Unlike full-fledged BI applications, these apps aren't designed to manipulate arbitrary data sets. They only include the data that is pertinent to the problem at hand. While dashboards and reports might require you to go back to IT for additions and cus-

tomisations, these apps let you customise your content with ordinary controls such as drop-down boxes and clickable graphs. This self-service approach permits ordinary people to get answers fast, without calling an analyst or loading up a spreadsheet.

### Pervasive BI - revisited

Professional analysts will always want advanced tools. What we are talking about here is empowering the next wave of thinking professionals. Do pilots and surgeons analyse information in Excel when they need to make a split-second decision? Or do they simply glance at equipment consoles to assess the status of current conditions?

Leave the tools to the people who need to pour over the data and provide simple BI apps for everybody else. Toyota calls it 'visual controls' (Toyota Way Principle 7) - bits of information, presented in context, that encourage you to act or react.

This brings up another important requirement. These apps shouldn't just present information. They should offer advice, such as indicating whether or not a condition is acceptable and providing guidance about what to do next. In every business, important events happen during the execution of core operational processes. Yet few companies have the ability to detect and respond to these events the moment they take place. This leaves them unable to act decisively when critical business conditions occur, such as a complaint filed by a large customer, the receipt of a large sales order or the onset of hazardous weather conditions that may delay deliveries.

Such apps bring business intelligence and operational processes together to empower people to react to critical business events immediately. That's the promise of pervasive BI. ⌚

## SIEMON's LC BladePatch®

REVOLUTIONIZING HIGH DENSITY FIBER PATCHING

### Innovative, Easy Access, Push-Pull Latch Activation

Specifically designed to simplify fiber jumper access in tight-fitting, high-density patching environments, Siemon's revolutionary LC BladePatch fiber jumpers feature an exclusive boot/latch mechanism that allows the cord to be securely inserted and easily removed via the push-pull boot – eliminating the need for direct access to the latch in space challenged applications. In addition to the innovative push-pull design, the duplex LC BladePatch latches can be rotated 180 degrees to quickly and easily make polarity corrections.

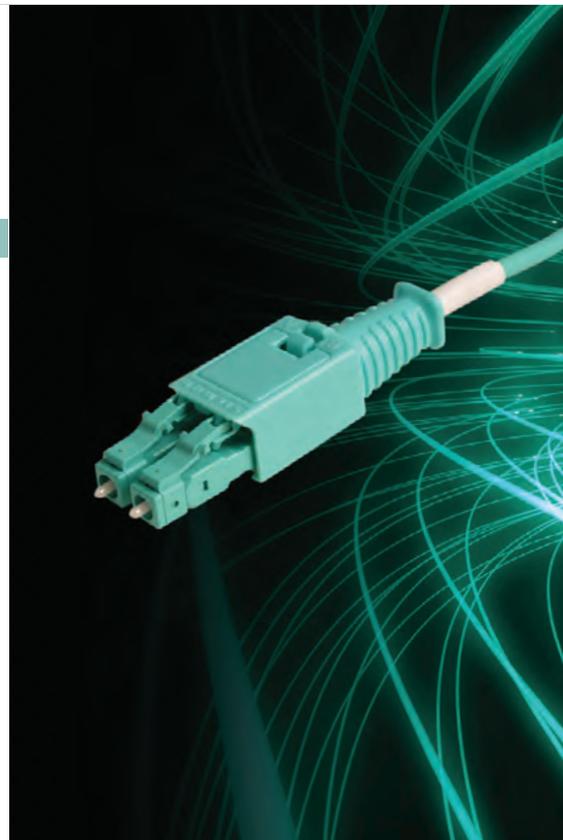
These new innovative jumpers utilize a smaller diameter uni-tube cable that reduces cable pathway congestion for improved airflow and energy efficiency as well as simplifying overall cable management. Combined with its low-loss Multimode and Singlemode performance, the LC BladePatch is the ideal LC fiber patching solution for today's high-speed, high-density network connectivity needs.

Learn more and engage with Siemon experts at [www.siemon.com/lcbp](http://www.siemon.com/lcbp)



Low profile boot design optimizes side-stackability | Multimode: SMT2 OM3 and OM4 Singlemode (SPC), OS2 | Fits within any standard LC adapter opening or LC SFP module | Exclusive rotating latch design supports simple field polarity changes without the risk of fiber damage | The push-pull design enables easy access and removal via the boot in tight-fitting areas

[WWW.SIEMON.COM/AU/](http://WWW.SIEMON.COM/AU/)





## VM backup and recovery 10 times faster for medicos after upgrade

**W**estern Health has adopted a virtual machine (VM) backup and replication solution in order to make sure data is available for patient care.

Western Health is a public provider of medical services for people living in western metropolitan Melbourne, Australia. The organisation has 6000 employees and supports four hospitals, two aged-care facilities and a drug and alcohol treatment centre.

High availability of data is critical to patient care, so Western Health used Microsoft Hyper-V to virtualise nearly all of the systems and applications on its physical servers. Approximately 250 VMs, which run on a Cisco UCS solution for EMC VSPEX, support electronic medical records, document processing and web interfaces. Having an efficient ICT infrastructure is key for Western Health, because its facilities operate around the clock, every day of the year.

In addition to being an early adopter of virtualisation, Western Health was a beta user and launch partner for Windows Server 2012. When it experienced data recoverability constraints with its legacy VM backup tool, team members began looking for a new solution.

The legacy backup tool required agents, meaning VMs were restarted unnecessarily whenever agents were upgraded. Licensing and deploying new agents was expensive and time-consuming as well. The legacy tool also required backups to be routed via the backup server, rather than go directly to Western Health's deduplication storage appliance, causing bottlenecks that decreased backup speed. In addition, the legacy backup tool required the entire host to be restarted - even if the problem was within a single VM - causing the host to miss the weekly backup window, which presented significant risks.

"Our legacy backup tool did not support the modern architecture of our virtual environment," said Cameron McBride, manager, systems and software solutions at Western Health. "We had several criteria for a new backup and recovery solution: it had to be designed specifically for virtual environments, support Hyper-V, provide fast backup and recovery, be agentless and back up directly to our deduplication storage appliance."

Western Health chose Veeam Backup & Replication to protect its Hyper-V environment and ensure data is always available for patient care.



"Veeam offered support for Hyper-V much earlier than other vendors, which allowed us to back up our Hyper-V VMs shortly after we installed a beta version of Windows Server 2012," McBride said.

The vendor also offered multi-hypervisor support earlier than other vendors, he said.

"We have a very small VMware environment for applications that can't be virtualised on Hyper-V, so using one backup solution for both environments is very efficient."

McBride said VM backup and recovery are considerably faster with the new solution, and because it's storage-agnostic, it can back up directly to Western Health's deduplication storage appliance, meaning the previous bottlenecks are gone.

"Since we work in a 24x7x365 environment, our aim is to have the least amount of impact on production servers when backing up VMs," he explained.

"We have found [the new solution] to be 10 times faster in both backup and recovery, and it's less CPU-intensive compared to our previous backup tools. Backing up directly to the duplication appliance lets us fully utilise the bandwidth we allocated for backup, so backup speed has increased significantly."

The solution is licensed per CPU socket. There are no per-application, per-VM or per-host fees. Licences can be purchased for any mix of hypervisors and can be swapped between hypervisors free of charge.



# The data centre as castle

## Digital communities behind the firewall

**T**he concept of a community is not a new one. It's been the bedrock of civilisation for centuries. In recent years, management authors have borrowed the concept from sociology and developed ideas like 'communities of practice' in their quest for more efficient and effective running of organisations and the fostering of innovation. The term has found its way into IT with concepts such as the 'online community'. With the advent of the internet, it has been interesting to observe the creation of virtual - rather than physical - communities. Virtual and physical communities each have their own advantages and disadvantages. Sometimes we overlook the fact that physical geographic communities have advantages that can't currently be replicated by distributed virtual ones.

Communities afford a number of advantages. They provide: protection and order for their members; an environment for economic and social development; and access to resources (like information), security and joint infrastructure. In a community, individuals are able to do things that they otherwise wouldn't be able to do. Communities are synergistic: not only are groups able to achieve more than an individual, but also more than the individual contributions of the individuals. There are particular advantages that close proximity gives, particularly the speed at which information is exchanged and the connectivity that is enabled.

One of the challenges faced by enterprise IT since its inception has been convincing

the executive of IT's role beyond that of a cost centre with an efficiency focus. In an IDC ANZ survey of 675 C-suite executives conducted in May 2013, 53.5% of CFOs surveyed did not view IT as a competitive differentiator. This means that they did not view IT as major contributor to innovation and the development of unique core capabilities - the prerequisites for achieving and maintaining strategic competitive advantage. It suggests that many advocates of IT, principally the CIO and IT managers, still have their work cut out for them in terms of convincing their organisation's executive of the strategic relevance of IT. Such an understanding is critical for how IT is perceived within the organisation and the potential roles that it can play.

In an ANZ survey of 420 end users of data centres in 2012, IDC found that the main reasons enterprises were moving their data centres off-premises were for operational reasons, not strategic ones. 24% of respondents considered the CAPEX costs of building new facilities or upgrading existing ones to be too high. 16% of respondents were attracted to the redundancy and assurances of connectivity that their provider promised. Another 16% of respondents had increasing power demands that couldn't be met in-house. Finally, 11% of respondents lacked the necessary space or real estate to scale their needs.

However, in order to contribute to the organisation's competitive advantage, the reason for the decision must add value to core capabilities. CIOs and IT managers need to look beyond the traditional IT

terrain of efficiencies and costs for more compelling strategic reasons to move enterprise data centres off-premises. The existence of and potential for participation in a data centre community will be a potential opportunity for CIOs and IT managers to add competitive value for their organisations.

In ANZ, various types of communities (both virtual/digital and physical) are being fostered behind the walls of third-party data centres. These communities vary in terms of focus, scope, reach and catalyst for development.

The Australian Liquidity Centre (ALC) - a separate business unit of the ASX - has developed a digital financial trading community behind the walls (and firewalls) of its Sydney data centre. In the data centre sits the servers (matching engines) for the ASX and other financial markets. These markets (and their associated data repositories) serve as anchors around which an internal digital community has been built using cross-connects.

The first layer around these anchors are the financial brokers, including high-speed traders for whom closeness to the exchange has always been important, and for whom being part of a community is an industry legacy. Around this layer is a second, consisting of market data providers and service providers for the industry. The various stakeholders in each of the markets cross-connect across markets to form a financial markets ecosystem. Participants in the community outside the data centre

# Tap your data centre's full business value.

StruxureWare for Data Centres software helps cut energy and operational costs across facilities and IT.

## The right information at the right time

With Schneider Electric StruxureWare™ for Data Centres software suite, you easily can access the right information at the right time to make informed decisions related to resource optimisation, energy management, and operational efficiency.

## Data centre visibility = business vitality

Our pioneering data centre infrastructure management (DCIM) software provides complete visibility across your enterprise — from the building level down to the server. The result? CapEx and OpEx savings through better planning and operations, proactively protected system uptime, and reduced energy use.

What's more, our software services optimise performance throughout the data centre life cycle.

## See energy waste to manage it

With our StruxureWare for Data Centres software suite, you can monitor and track where your company's energy goes (and potentially is wasted) throughout your data centre — from facilities to your IT room. You can turn this energy insight into energy savings, as well as both enterprise and environmental sustainability. This robust view makes your data centre a strategic business asset.



Software engineered with your business in mind:

- > Obtain real-time resource and capacity information to support business decisions.
- > Get the most out of your data centre for CapEx and OpEx savings.
- > Improve energy efficiency and, in turn, cut energy costs across IT and facilities.
- > Have historical and real-time metrics and performance reporting at your fingertips.

## Business-wise, Future-driven.™



APC by Schneider Electric products, solutions, and services are an integral part of the Schneider Electric IT portfolio.



## Improve planning and cut OpEx via DCIM best practices!

Download whitepaper # 170 "Avoiding Common Pitfalls of Evaluating and Implementing DCIM Solutions" and go in the draw to WIN a \$500 Visa Gift Card!

Visit [www.SEreply.com](http://www.SEreply.com) Key Code **53554K**





© stockxchng/profile/fcl1971

are still able to connect via ASX-Net or a communications link. Customers chose to co-locate their servers in the ALC not just to reduce latency, but also for the access and availability afforded.

Equinix has developed a similar financial trading community around Chi-X, an alternative exchange in the Australian cash equities market. Equinix is also using its international network of data centres and communications network density to develop international non-financial communities. An example of this is the company's internet advertising community which links ad exchanges, demand side platforms and ad networks through the internal Equinix network to reduce latency and associated bidding times. The company also leverages its international network of data centres to create an international supply chain community through its Marketplace service. This service facilitates market and partnering connections between internal Equinix customers which can then be supported by internal network connectivity.

Communities can be fostered through the efforts of the data centre facility provider. They can also develop more organically between data centre tenants. In Equinix, enterprises and cloud service providers such as Amazon Web Services (AWS Direct Connect) cross-connect with each other. In isek's Brisbane and Sydney data centres, as well as its network of partners across Australia, significant business communities have developed organically. In Sydney, a number of cloud providers including CN Group, ITonCloud, ASE IT and Data People

have cross-connected with each other to work on mutual business opportunities within isek. Tenants are also able to cross-connect with private clouds within isek utilising their national MPLS network.

The general trend in the IT industry is towards geographical independence of the computing experience through mobility and the cloud. However, there is still a strategic place for geographically bound infrastructure. In the future, the development of communities within data centres will escalate. Data centre providers need to be aware of this phenomenon and to consider strategically which communities they wish to proactively engage with, foster and encourage. Other industries where communities are developing or may exist include health care (iseek), pharmaceuticals and government (Metronode), but there are potentially many more. A characteristic of some data centre provider fostered communities is some sort of anchor.

This anchor may be a key piece of infrastructure such as network POP or supercomputer, a particular central tenant or a data repository. The most effective engineered communities seem to be those that are open rather than closed, where even competitors are permitted to participate. Enterprises and service providers need to be aware that a potential community may exist for a data centre-based community in their industry. Participation in such a community has the potential to contribute to organisational strategic outcomes, not just operational, and should be a factor when deciding on a third-party data centre provider. ⌚



*Dr Glen Duncan is an analyst (Research Manager) at IDC ANZ and is also an Adjunct Lecturer in Management at Charles Sturt University. He researches widely in a diverse range of technology and management areas, including CXO research, data centres, managed print services and the mid-market.*





**2014**

Conference &  
Exhibition

**May**

**12-14**

Brisbane Exhibition  
& Convention Centre

# The **must attend** ICT Conference for ICT Infrastructure Professionals

Some of the exciting topics covered are:

- The NBN
- Data Centres
- Intelligent Buildings
- Convergent Technology
- Telecommunications Regulations

Key speakers include:

**Caroline Viney**  
CEO Grocon

**Paul Budde**  
Leading  
Telecommunications &  
Management Consultant

**Clare Murray**  
Registrar, Board of Professional Engineers Qld

**Julian Nachmais**  
GM, New Developments  
(Southern), NBN Co

**Nick Harris**  
Senior Analyst,  
Morgans Financial

Attend all 3 days as a Delegate  
or take advantage of our **free**  
Industry Day Monday 12<sup>th</sup> May

**FLUKE**  
networks.

Platinum  
Sponsor

For full details go to  
[www.bicsi.com.au/2014-conference](http://www.bicsi.com.au/2014-conference)



## Google's "privatised surveillance" breaks Dutch law

The Dutch Data Protection Authority has found Google to be breaking local laws with its practice of combining users' personal data across its numerous web services.

The authority has asked Google to attend a hearing and will then decide whether to take any enforcement measures.

"Google spins an invisible web of our personal data, without our consent. And that is forbidden by law," Dutch DPA chairman Jacob Kohnstamm said in a statement.

Changes to Google's privacy policy made in March 2012 state that the company can aggregate data from across services for purposes including website analytics, the delivery of personalised ads and the personalisation of services.

But the authority's report finds that Google "does not adequately inform users about the fact that it combines personal data from different services", as required by Dutch law.

It states that Google has "failed to put adequate safeguards in place to ensure that the combining of data is strictly limited to what is necessary in the context of the legitimate purposes and that the data subject's right to protection of their privacy prevails".

A key finding of the report, and one which could have implications for other markets, is that Google has failed to ensure that its users are giving unambiguous consent for their data to be aggregated. The company's argument that people using its services are bound by its ToS - and that this represents the giving of consent - does not hold water, the report says.

"It is evident from the legislative history that unambiguous consent cannot be obtained through general terms of service ... Consent - unambiguous or otherwise - [also] requires the information to be specific and the data subject to be informed."

The authority's findings are influenced by the fact that Google services are so ubiquitous in the Netherlands. The report states that it is "almost impossible" for a Dutch web user not to interface with Google.

Google search has a market share of over 90%, its Android OS captures 69% of the nation's smartphone market and Dutch web users would be hard pressed to avoid the more than 2 million websites worldwide that use Google advertising cookies.

IBRS advisor Guy Cranswick expects Google's sheer scale to play an

increasing role in its tussles with international regulators. "Politicians are getting wise, after the event, of how powerful corporations are that use transfer pricing, use tax minimisation schemes, limit privacy that is counter to prevailing legal convention - and are examining their role," he said.

"Google's scale means regulators must make governance a priority because the trade-off in Google's services may not be worth the price." The finding by Dutch authorities could thus pose problematic precedent for Google elsewhere in the EU, Cranswick said. "[This case is] about the combined effect, the aggregation, of data into

connections from which various uses can or are imputed to be made ...

The EU is likely to be the centre of disputes and investigations" into Google's data handling practices, he said.

A company the size of Google may have little to fear from the kinds of fines national data protection regulators are empowered to impose. But Cranswick said Google will still be taking the investigation seriously.

"Taking Microsoft's own problems in the 1990s as a guide, any fines are

a cost of business and additional laws to stop certain behaviour or actions are accepted or worked through with regulators and lobbyists," he said. "The bigger concern for Google are laws that stop [data aggregation] because this is essential to the company's core operation."

The Dutch case is not at all comparable to a French court's recent verdict that Google must automatically filter out scandalous images of former Formula One boss Max Mosley from search results, he added.

"The Mosley case was tabloid titillation, this is about much more - effectively privatised surveillance. The rights of the users are waived and they have no recourse over their own data, over their own privacy."

In a statement emailed to various news agencies, Google defended its privacy policy, arguing that the policy "respects European law and allows us to create simpler, more effective services".

The statement adds that the company has "engaged fully with the Dutch DPA throughout this process and will continue to do so going forward."



# SUBSCRIBE

(non-IT professionals) to *Technology Decisions* and you will pay

\* within Australia. Please apply for International rates.

> > \$60.00\*  
a year

# QUALIFY

for *Technology Decisions* and we will deliver you 6 information-packed editions FREE.

> > > **FREE**  
all year



The magazine is available FREE to IT and business professionals. Go to the website now and complete the simple registration form.

[www.technologydecisions.com.au/subscribe](http://www.technologydecisions.com.au/subscribe)

You can choose to receive the print magazine and/or the eMag. To ensure you are updated with key information between issues, sign up for the twice weekly eNewsletter too!



A.B.N. 22 152 305 336  
[www.westwick-farrow.com.au](http://www.westwick-farrow.com.au)

Head Office: Cnr Fox Valley Road & Kiogle Street (Locked Bag 1289), Wahroonga 2076 Australia  
Ph +61 2 9487 2700 Fax +61 2 9489 1265

#### Editor

Andrew Collins  
[andrew@technologydecisions.com.au](mailto:andrew@technologydecisions.com.au)

#### Chief Editor

Janette Woodhouse  
[jwoodhouse@westwick-farrow.com.au](mailto:jwoodhouse@westwick-farrow.com.au)

#### Publisher

Geoff Hird  
[ghird@westwick-farrow.com.au](mailto:ghird@westwick-farrow.com.au)

#### Associate Publisher

Glenn Silburn  
[gsilburn@westwick-farrow.com.au](mailto:gsilburn@westwick-farrow.com.au)

#### Art Director/Production Manager

Julie Wright  
[jwright@westwick-farrow.com.au](mailto:jwright@westwick-farrow.com.au)

#### Art/Production

Tanya Scarselletti, Odette Boulton, Colleen Sam

#### Circulation Manager

Sue Lavery  
[circulation@westwick-farrow.com.au](mailto:circulation@westwick-farrow.com.au)

#### Copy Control

Mitchie Mullins  
[copy@westwick-farrow.com.au](mailto:copy@westwick-farrow.com.au)

#### Advertising Sales

Liz Wilson Ph 0403 528 558  
[lwilson@westwick-farrow.com.au](mailto:lwilson@westwick-farrow.com.au)

Glenn Silburn Ph 0422 931 499  
[gsilburn@westwick-farrow.com.au](mailto:gsilburn@westwick-farrow.com.au)

#### Asia

Lachlan Rainey Ph +61 (0) 402 157 167  
[lrainey@westwick-farrow.com.au](mailto:lrainey@westwick-farrow.com.au)

If you have any queries regarding our privacy policy please email [privacy@westwick-farrow.com.au](mailto:privacy@westwick-farrow.com.au)



September 2013 Total CAB Audited Circulation  
(Aust + NZ) 7,035

All material published in this magazine is published in good faith and every care is taken to accurately relay information provided to us. Readers are advised by the publishers to ensure that all necessary safety devices and precautions are installed and safe working procedures adopted before the use of any equipment found or purchased through the information we provide. Further, all performance criteria was provided by the representative company concerned and any dispute should be referred to them. Information indicating that products are made in Australia or New Zealand is supplied by the source company. Westwick-Farrow Pty Ltd does not quantify the amount of local content or the accuracy of the statement made by the source.

Printed and bound by Webstar +61 2 9748 0020

Print Post Approved PP 100009359

ISSN 2201 - 148X

[www.technologydecisions.com.au](http://www.technologydecisions.com.au)

**BOOK EXHIBITION SPACE or SPONSORSHIP AT  
AUSTRALIA'S BIGGEST GOVERNMENT ICT FOCUSED SHOW**

**8<sup>th</sup> ANNUAL**

# **Technology *in* GOVERNMENT EXHIBITION 2014**

4<sup>th</sup> - 5<sup>th</sup> August 2014 | National Convention Centre Canberra

---

**Bringing together Canberra's ICT Community**

---

## ***Get Involved...***

.....

- › Place your CEO/CIO/CTO on the programme in front of 600+ senior Government ICT decision makers
- › Take the risk out of networking and meet with 80 + decision makers who are interested in YOU
- › Engage with 2000 + attendees on the show floor by taking an EXPO booth
- › Sponsor a networking event

## ***Sponsorship & exhibition SOLD OUT for the last 5 years!***

.....

**DON'T MISS OUT IN 2014 | Reserve your space now!**

For more information, please contact **Jon Treherne**

**T:** +61 2 8908 8516

**E:** jon@acevents.com.au



**Over 1400  
attendees  
in 2013**

 **[www.acevents.com.au/techingov](http://www.acevents.com.au/techingov)**

**(02) 8908 8516**