

# networking

FIXED & WIRELESS NETWORKS FOR ENTERPRISE USERS

## Secret destroyer

N2S awarded government accreditation for destroying data  
**News, p3**



## The art of IT

Networks in the leisure and tourism industry

**Real World Networks, p8**



## Testing 1, 2, 3...

The changing face of LANs and WANs demands a new approach to testing  
**Feature, pp10-13**



## Certified data centres

The secure, efficient and green DCs that have the paperwork to prove it

**Off-the-shelf, p14**



# Oracle flops in popularity poll and slated for “brutish” sales tactics

by Rahiel Nasir

Oracle has come under attack with enterprise users giving it the thumbs down in a recent customer poll, and rival firms accusing it of “brutish sales tactics that show a disregard for customers”.

In May, Flexera Software and IDC conducted a survey as part of the *2015 Customer Choice Awards*. Users from 147 enterprise organisations were asked to either agree or disagree with eight different statements describing each company and its products.

Some of the questions asked were: this vendor’s applications are easy to manage, apply patches, maintain and upgrade; this vendor is easy to work with; this vendor’s licensing rules are easy to understand making it easy to maintain software license compliance; and others.

Oracle scored the lowest in all eight categories. For example, 44 per cent “disagreed” or “strongly disagreed” when asked if the pricing for its applications were reasonable and provided good ROI. A similar number also disagreed/strongly disagreed that Oracle’s licensing rules around mobile, virtualisation and the cloud will better facilitate migration to those environments.

Citrix won both of the above categories, while VMware, HP and EMC came top in the other categories. The line-up of vendors in the survey also included: Adobe, CA, IBM, Microsoft, salesforce.com, SAP and Symantec. IDC says these companies collectively represent more than 47 per cent of the commercial software market which was globally worth \$368.9bn in 2013.

Meanwhile at the end of July, TmaxSoft accused Oracle of putting profits above gaining customer trust thorough the introduction of a new sales culture.

The South Korea-based firm – which is tipped to become one of the world’s top five software companies by 2015 – claims Oracle is issuing “breach notices” where sales representatives inform customers that they are over-using their service and have 30 days to either negotiate or stop using the software.

TmaxSoft sales director James Mills says: “This puts pressure on organisations who think that they can’t move away because historically it has taken a long time to do so. This is now not the case – transition can be done in weeks. This is a completely unacceptable manoeuvre from Oracle, through which customers are forced to pay for more services they likely neither want nor need.”

Anne Stokes, CEO of IT services aggregator Streamwire which is also a TmaxSoft partner, believes this “relatively new tactic” from Oracle could be driven by poorer earnings. “The disappointing performance in the cloud arena may well be driving the agenda,” she says. “No organisation should ever consider putting sales above service. This will drive a wedge between themselves and their customers.”

**Streamwire CEO Anne Stokes says organisations that put sales above service will drive a wedge between themselves and customers.**



Stokes adds that because Oracle has long dominated the enterprise software market, customers have had little room for manoeuvre on licensing. She says clear licensing structures are really important for organisations as it prevents them from paying for redundant services, and calls upon Oracle to change its approach.

“It’s clear that recent research by IDC and Flexera Software, showing that 43 per cent of businesses don’t find Oracle’s products to be reasonably priced, continues to be pertinent. Oracle’s customers just aren’t getting the service that they want or deserve,” says Stokes.

*Networking+* asked Oracle for its views, but the company declined to offer any comment.

## McKay claims lowest microwave latency between UK and Germany

McKay Brothers International (MBI) has chosen Interxion’s London data centre to deploy what’s claimed to be the lowest known latency connections between the City of London, Slough and Frankfurt.

MBI says by colocating at the Interxion London Campus and cross-connecting to its European network, trading firms can benefit from microwave and millimetre wave links to the continent’s key financial centres and thereby achieve better risk management.

McKay already runs networks in the US based on millimetre wave and microwave technology which it claims typically offers a better than 40 per cent improvement in

latency over fibre connections.

Earlier this year, it launched two services in the UK based on microwave. They include a private wireless bandwidth product and the *Quincy Extreme Data* service which distributes select European and US market data to subscribers at the lowest known latency (*News, March 2015*).

“We know that the link between Interxion’s London data centre and Frankfurt is one of the single most important in Europe. Many of Europe’s leading financial services companies are situated in Interxion’s data centres,” says François Tyč, MD at MBI.

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**How many customers do you lose when your retail operations go offline?**

**For point of sale systems, the average cost is almost \$5,000 per minute!\***

Learn more on page 4

\*the Standish group international, ‘Trends in IT Value’

# Gigaclear plans to deliver ultrafast broadband in Essex and Berkshire

Gigaclear has won two separate contracts to deliver its ultrafast, pure fibre broadband networks in West Berkshire and Essex.

Both projects have been awarded under the government-subsidised BDUK scheme, and are the first in each of the counties to be given to an alternative operator to BT.

In West Berkshire, Gigaclear says it will invest more than £4 for every £1 of state aid, contributing nearly £16 million to transform the online experience for all

those living in the area. It adds that with more than £3.7m of public funding invested in this first phase of the project, the region will exceed 99 per cent superfast coverage by the end of 2017.

The company claims it will turn some of the most difficult to reach communities across West Berkshire into the “best-connected” broadband areas in the world. It plans to install pure fibre and open infrastructure in parallel to the existing copper network. Gigaclear says this will

create an ultrafast network offering speeds up to 1000x faster than are currently available, with symmetric download/upload rates of up to 1Gb available.

In a separate deal, Gigaclear will also work with Essex County Council to provide ultrafast broadband to more than 4,500 homes and businesses across the north east of Epping Forest District. Construction on the £7.5m project will start in October, with the aim of making the first connections live before Christmas.



**Chief executive Matthew Hare believes Gigaclear is making broadband dreams come true.**

Under the BDUK scheme, Gigaclear says it will invest more than £2 for every £1 of state aid, contributing an investment of £5.5m in the area.

The company's chief executive Matthew Hare says: “We're not simply bringing the broadband here up to date. We're going to give people living and working in this area the kind of speeds that others in major cities can only dream of.” ■

## To catch a cyber thief...

MWR InfoSecurity has launched what it says is a complete service for detection and response to cyber attacks.

Run by one of the only independent security consultancies listed on the CESG Cyber Incident Response scheme, *Countercept* is built around endpoint threat detection and response, and is delivered from MWR's operations centre for round the clock real-time monitoring of an organisation's assets.

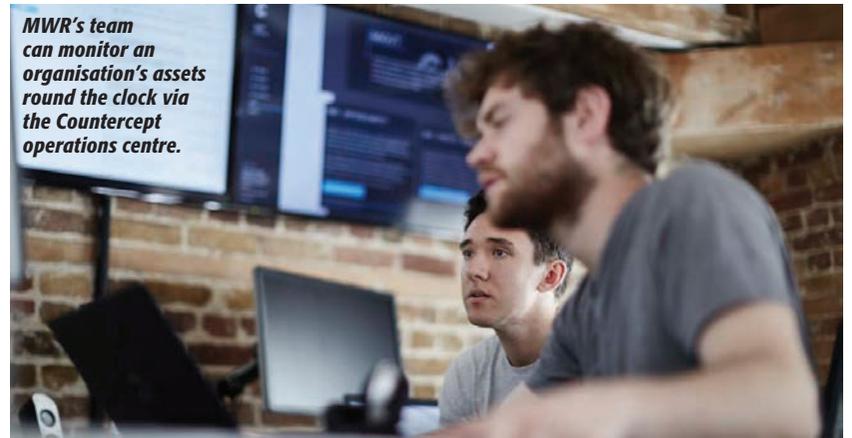
The company says traditional signature or threat-intelligence-based recognition has proved limited as attackers simply make minor adjustments to their attack to subvert detection. Instead, *Countercept* uses *Detect*, MWR's anomaly based detection tool, in conjunction with real-time traffic

and event analysis to determine what “normal” behaviour looks like and then identify deviations. It's claimed this gives *Countercept*'s analysts the intelligence needed to identify malware and breaches on the network that traditional anti-virus and detection tools would miss.

MWR says the team behind its new service has a “deep understanding” of the cyber criminal's mindset gained from more than a decade of experience simulating attacks against major organisations. It says this understanding enables the team to anticipate an attacker's next move and therefore stay one step ahead.

“No matter how good your defences are, they will be breached at some point,” warns MWR InfoSecurity MD Ian Shaw.

**MWR's team can monitor an organisation's assets round the clock via the Countercept operations centre.**



“This is just a fact of life when doing business in a world inhabited by increasingly sophisticated attackers and greater reach of networked technology. The most advanced

automated detection and prevention tools are by themselves no match for an intelligent human with the right capabilities and resources at their fingertips.” ■






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To find out more

## Imerja now monitoring GÉANT's network infrastructure

Imerja is providing monitoring services and a fully managed round the clock technical service desk to GÉANT, the pan-European data network dedicated to the research and education community.

GÉANT's network connects more than 50 million users at 10,000 institutions across Europe, and reaches 100 countries worldwide. A major part of its work is to plan, procure and build international high-speed networks.

Under a three-year contract that was awarded last year, Imerja is responsible for predicting, responding to and solving any network incidents reported by GÉANT's

users, vendors or suppliers. The service is delivered via a secure operations centre at the firm's Bolton headquarters.

Since going live in October, and following a rapid transition and on-boarding of each member organisation across EMEA, Imerja says the service desk has exceeded the 95 per cent service thresholds set by GÉANT.

“Research and educational users are demanding,” says Mark Johnston, chief network operations officer, GÉANT. “Infrastructure, supplier and user generated incidents must be professionally managed and resolved effectively and accurately every time 24 hours a day.” ■

## C4L and TalkTalk partner to bring EoFTTC to a wider audience

C4L and TalkTalk Business have joined forces to roll out new and improved superfast Ethernet over fibre to the cabinet (EoFTTC) across the UK. The companies say they will offer a solution that has the dual purpose of provisioning leased lines and then performing as a failover circuit.

EoFTTC is a new product designed by TalkTalk for businesses. It's claimed to be an enterprise class, zero contention, 20Mbps symmetrical service with the capacity to burst to 80Mbps inbound.

According to C4L, this essentially means a business grade Ethernet broadband service with unlimited data is now more widely available. It reckons the product will be “ideal” for firms who do not want the

expense or lead times of a full leased line, or want a very good leased line failover circuit. The company adds that it features quicker installs of up to 30 days, a seven hour fix time, scalability and competitive pricing. Installation costs for the service can be covered by the government's *Connection Vouchers* scheme.

C4L chairman and founder Matt Hawkins believes the new offering could sound the death knell for Ethernet in the first mile: “EFM continues to be a solid connectivity option and will continue to be widely used. However, this may be the beginning of the end of EFM as EoFTTC provides higher performance at a lower cost where it is available.” ■

# Software thin clients deliver fat savings

Converting old PCs into thin clients will help businesses save money as well as reduce environmental impact, according to IGEL Technology and researchers from the Fraunhofer Institute for Environmental, Safety and Energy Technology.

The thin and zero client solutions specialist claims that by using its software on a USB stick or disk, computers and laptops destined for the WEEE skip can be converted into thin client devices in just minutes. The firm adds that its *Universal Desktop Converter 2 (UDC2)* thin client software is installed as the operating system on PCs, notebooks and selected thin clients, turning the hardware into a "powerful" software-based and universally deployable thin client.

Fraunhofer Institute researchers compared new PCs and notebooks to older devices which continue to be used after being converted to IGEL software-based thin clients. The firm claims they found that over a typical three-year period, the software-based thin clients reduced global warming potential by up to 59 per cent, and cut overall costs by up to 47 per cent. For a business with 100 converted computers, that's a saving of £720 per machine, according to IGEL.

"This study is a revelation for businesses and public sector organisations struggling to manage with old PCs," says Simon Richards, IGEL's technology MD for UK and Ireland. "In addition, this conversion of old PCs is the first simple step to moving to a virtual cloud or server-based computing infrastructure, which is much more flexible and easier to manage moving forward."

IGEL adds that its software is designed to enable secure access to almost all centralised IT infrastructures, and users have stable and reliable access to cloud computing services, server-based computing applications and VDIs. It says the local desktop operating systems are unified and standardised, and are centrally managed by its *Universal Management Suite*. ■



IGEL can supply its UDC2 software on a USB stick and claims it can turn any computer into a "powerful" thin client.



Redundant IT equipment at N2S ready for destruction and recycling.

## N2S approved to destroy data at highest levels

Network 2 Supplies (N2S) has been awarded CESG Assured Service Sanitation (CAS-S) accreditation for data destruction at the highest levels within government departments.

The Suffolk-based IT lifecycle management specialist says its engineers are security cleared, and the accreditation will allow it to specialise in the destruction of Government Security Classified data-bearing assets in accordance with CESG policy.

The firm will now provide government-approved onsite data sanitisation and recycling of IT equipment at the end of



## THE WORLD ACCORDING TO...

Poul Nielsen, director of strategy, Nextthink

### What security solutions could turn grim headlines into optimistic ones?

Targeted cyber attacks are in the headlines almost every day, and it seems that no one is immune – even large companies such as Adobe, eBay, JP Morgan and Home Depot have been victims. The common feature of these targeted cyber attacks is that they have been discovered months after launching.

It is clear that prevention measures are not enough today. These cases reported in the news show that it is easier than we think for an opponent to take control of internal IT systems. Once inside an organisation they sit silently, sometimes for months, searching and exfiltrating information that can eventually be exposed on the internet, end up in competitors' hands, or used for other malicious purposes. Such situations always lead to major financial, image and legal impacts that are costly to recover from.

It's important to concentrate on the signs of the first steps of an intrusion, and have the visibility and means of immediately responding to any suspicious activity from the earliest stage. By leveraging IT analytics solutions that can document and generate alerts for any

abnormal activity, organisations will be able to prevent the spread and damage of attacks that are simply invisible to their eyes today.

In today's world of custom targeted attacks, traditional security solutions are ineffective because they do not discover unusual activities and usages that should be detected as such. The scenarios we read in the news highlight the need for robust solutions that can detect security violations and breaches in real-time, and provide a new line of defence against modern and sophisticated targeted attacks.

IT analytics solutions can help organisations detect potential security breaches in progress by providing early alerting on any abnormal activities, unauthorised access or unknown software.

Organisations need real-time visibility into their IT environments, with supporting and intelligent IT analytics to reveal risk factors and exposure, indicators of compromise and data exfiltration activities. They need to recognise that it is not possible to provide a 100 per cent secured environment. Perimeters and firewalls are no longer enough.

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its life. N2S can shred or disintegrate all IT equipment including computer hard drives, tapes, mobile phones and associated cabling. It can also offer onsite data wiping and carry out secure moves from one customer site to another.

Company director Andy Gomarsall says obtaining CAS-S accreditation is part of an ongoing strategy to make N2S the UK's "most secure" IT data destruction company.

He adds: "This accreditation will complement the range of services that N2S provides to its client base, and one which will be required by our global business partners."

CESG is the information security arm of GCHQ and the National Technical Authority which is considered to be the definitive voice on the technical aspects of information security in the government. ■

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# DrayTek

## Kirklees Gigabit fibre rollout well under way

CityFibre claims Kirklees is well on its way to becoming one of the best digitally connected regions in the country, as the 72km ultra-fast pure fibre network it is building reaches 20 per cent deployment. Construction on the CORE network began in March, and the first businesses and public sector sites in Huddersfield will be able to receive services at gigabit speed from September. Yorkshire-based Abzorb will be the first provider to deliver services over the network. CityFibre plans to announce more partners as they come on board. "This is our opportunity to make Kirklees one of the most digitally advanced places in the world, with connectivity on a par with major international centres," says Jacqui Gedman, director of economy, skills and the environment at Kirklees Council. ■

## Scottish Government approves Pulsant

Following a competitive tender process, Pulsant has secured a place on the Scottish Government's newly announced multi-supplier framework for cloud and colocation services. The regional government was looking to work with a range of suppliers who together could help deliver its digital strategy for cloud, colocation and hosting services. This sets out how the public sector will adopt cloud computing, virtualisation and colocation to achieve significant efficiency and energy savings by using aggregated demand and economies of scale. Pulsant was previously on the single-supplier central government (Scotland) framework for Web Hosting. ■

## NTT-Fortinet global security partnership

NTT Com Security and Fortinet have teamed up to provide expert security advice and solutions to organisations worldwide. The partnership includes incorporating Fortinet's range of security products into NTT Com Security's *WideAngle* portfolio. The two firms plan to collaborate across a number of technology deployments, including cloud, firewall and network risk management, SIEM systems integration, SDN, and virtualisation. NTT adds it will also use Fortinet's technical consultants to expand its support services in terms of incident management, operational risk reduction, and complex architectural designs and implementations. ■

# Dorset hospitals reap the benefits of unified communications

Dorset County Hospital NHS Foundation Trust is estimating savings of around £5,000 per year thanks to a new unified communications system supplied by Multitone.

The vendor says its *i-Message* platform has given the trust a centralised and intelligent communications hub that is intuitive to use, uses the localised wireless network to reduce mobile provider costs, offers an automatic switchover in the event of a fault, and allows for easier integration of smart mobile devices.

One major advantage of using the new platform is that it cost-effectively integrates communications between the trust's sites in Dorchester and Weymouth, as ICT infrastructure manager Brian Stalker explains: "This is one of the bigger benefits for us. We had an existing link with BT between the two sites, purely for



**Instead of carrying around multiple devices as they did before, staff can now use a single device that manages all communications.**

paging, but it was very expensive. With the *i-Message* system we can communicate across the existing network link which means we don't need to use the old BT link, and we estimate this has actually saved us around £5k per year."

Previously, the hospitals also used two servers for failover but this had to be done manually which increased the time needed to restore it in an emergency. Multitone says its system is also dual server-based

but will automatically switch over in the event a fault with one of the servers, significantly enhancing resilience.

Other advantages include staff now being able to use just one device that manages all communications, rather than the multiple devices such as pagers and their own mobiles which they had to carry around before.

Stalker says another benefit is that switchboard operators can now message people instantly through a variety of methods directly from a single console screen.

He adds: "Whereas other systems tend to work on a divert system and very much rely on the user to set up the divert (using the desktop phone to a mobile phone, for example), *i-Message* automatically routes calls or messages to the most convenient communications." ■

## Hosted survey system enhances customer service

Marsden Building Society is using a hosted system from Sinclair Voicenet to get customer feedback about its products and services.

*SmartVoice ViewPoint* is enabling the Nelson-based firm to conduct up to 3,000 telephone and email-based customer surveys each month. Most of these are completed by customers at the end of calls to Marsden's contact centre which houses around 30 agents responsible for handling a wide range of product and account management issues.

Sinclair Voicenet says *SmartVoice ViewPoint* also provides a web-based dashboard with a "comprehensive" range of reporting tools which automatically create and deliver bespoke management reports to designated employees and stakeholders. Surveys can be tagged with additional



**Survey results can be viewed instantly using desktops, laptops, tablets and smartphones.**

data relating to different services, teams or locations to give a clearer view of how the organisation is performing, and results can be viewed instantly using desktops, laptops, tablets and smartphones.

Heather Crinion, Marsden Building

Society's GM of operations, says: "The new system was easy to deploy requiring no hardware or software to be installed in the contact centre. It will revolutionise our understanding of what customers really want, and automatically alerts us should the service we are delivering fall below the society's usual high standards, or when an exemplary level of service has been provided enabling us to react within seconds."

In the future, the society plans to extend use of the system to its branch network where web-based surveys can be completed by customers using kiosks before leaving.

The firm hopes this will help identify the best performing branches and allow best practices to be cloned to enhance performance across the organisation. ■

## Tablet usage soars in schools despite poor Wi-Fi

The use of tablets in schools continues to rise as barriers to adoption shift, according to recent research from the British Educational Suppliers Association (BESA).

The association carried out its annual *Tablets and Connectivity* study in June, and surveyed 335 primary and 297 secondary schools in the UK. It revealed an annual 56 per cent increase in the number of schools using tablets in the classroom, with 71 per cent of primaries and 76 per cent of secondaries now using the devices.

BESA says it is currently estimated that

there are 721,000 tablets for use by pupils in classrooms across UK maintained schools and academies, and this is forecast to rise to more than 946,000 by the end of next year.

It adds that this upward trend appears to be continuing with 15 per cent of schools suggesting that they will have 1:1 access to tablet technology by 2016, and 44 per cent having one tablet per child by 2020.

But the research also showed that 88 per cent of primary schools regard the management and security of tablets as a significant barrier to adoption. In secondary schools,

the top three barriers are: training and support (91 per cent); funding (83 per cent); and management and security (83 per cent).

BESA also highlights a lack of bandwidth, particularly in rural areas, as a key hurdle to overcome. Association director Caroline Wright says: "It is disappointing to see so many schools still struggling with Wi-Fi and broadband connectivity issues. With nearly half of schools reporting poor connectivity, we run the risk of failing to equip our young people with the essential digital skills that they need for their future careers." ■

## Point of sale systems lose as much as \$5,000 per minute when retail operations go offline.

IT managers have options to ensure these locations stay online and can be proactive about deploying solutions which not only provide wireless back-up to office infrastructure, but also enable remote troubleshooting and maintenance to get locations back online quickly.

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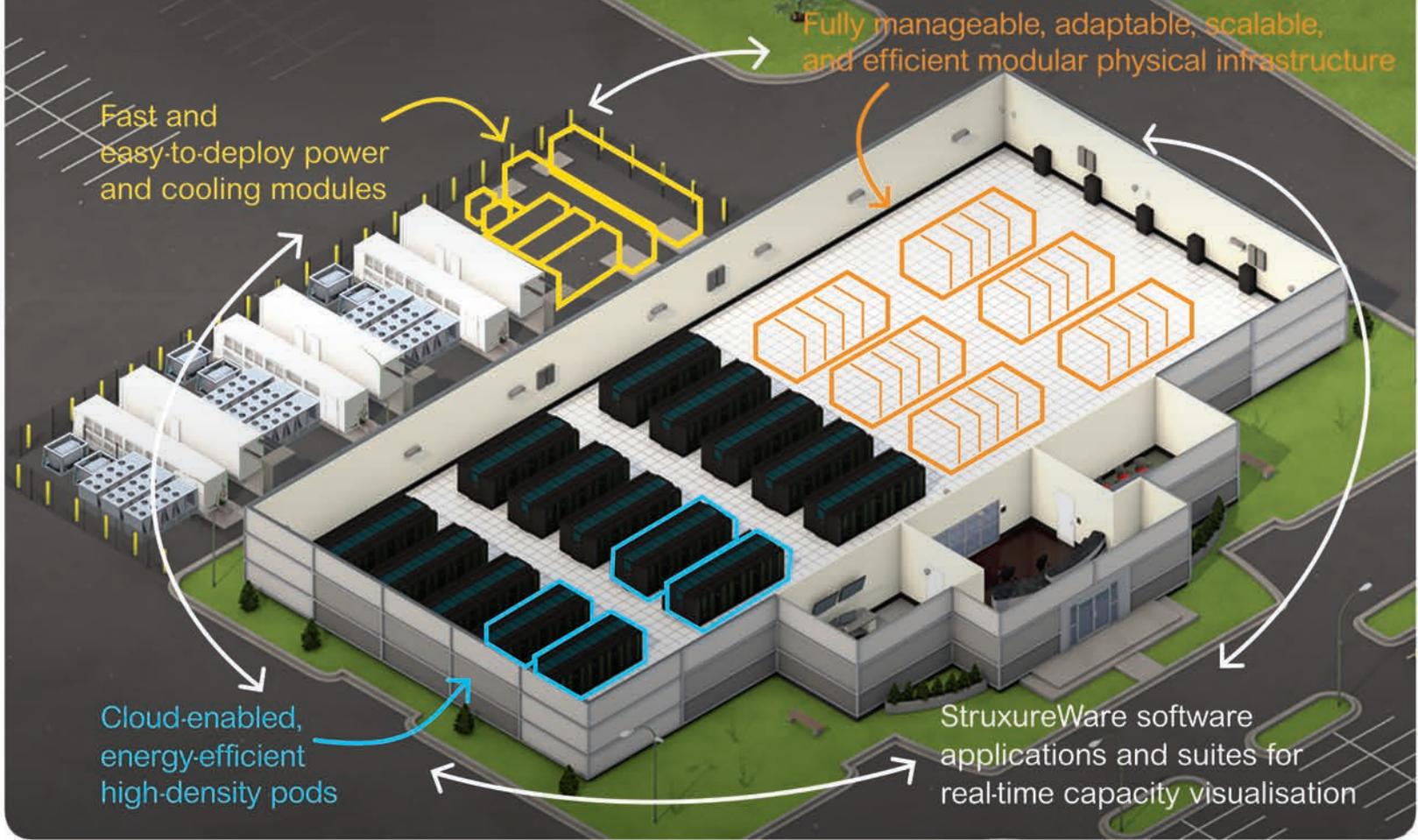
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# Cloud providers not supporting migration enough

Many suppliers are yet to mature in the cloud market and end-users need to make more careful assessments before choosing a provider, according to Outsourcery.

Citing research carried out by the Cloud Industry Forum (CIF) earlier this year, the cloud services provider says 35 per cent of IT leaders think their suppliers could have provided better support to help them migrate.

"Moving to the cloud is often more complex than just flicking a switch to get an off-the-shelf-service," says Outsourcery co-CEO Piers Linney. "Depending on the cloud service being adopted, data will have to be transferred and staff migrated

to new ways of working. It can be a complex process."

Linney advises IT leaders who are looking for a provider to first assess their existing in-house skills and experience. He says this will enable them to understand how reliant they will be on the supplier to ensure a smooth transition. "Equally, cloud suppliers need to be more sensitive to their customers' requirements and tailor their service to the level of support needed for successful cloud adoption."

The CIF polled 250 senior IT decision-makers in firms with UK-based operations, and found that problems in service

delivery could be caused by several factors. These could include: poorly constructed services that lead to complications with legacy system integration; the cloud provider lacking sufficient knowledge about the customer's existing IT estate; or blurred lines of responsibility among the network of partners established by the cloud provider which prevent the swift resolution of issues.

Linney warns that the cloud industry is still reaching maturity,

and without enough due-diligence some end-users could get burned. "The most critical factor is for IT leaders to really get under the bonnet of their potential cloud provider, make sure that they have a strong and highly integrated stack of partners, and a proven track record of delivery for other customers with needs similar to their own." ■

**Outsourcery's Piers Linney warns that some end-users could get "burned" when they move to the cloud.**



## Traditional SAN takes a beating in Bath and Somerset...

Bath and North East Somerset Council is underpinning its VDI with a software-defined storage platform from Atlantis.

It's claimed that by using *Atlantis SDS*, the council has cut its operational costs in half and login times by a factor of 10, compared to a "prohibitively expensive" traditional SAN.

Following the building of its new administrative HQ, the council chose to overhaul its entire IT infrastructure by deploying VDI. It needed a storage solution to support more than 30TB of data and 1,500 virtual desktops running over two data centres.

Atlantis says the council now has a consistent, high-performance desktop environment across all of its sites which

enables mobile employees to work productively from any location. It adds that the new system has also lowered the council's carbon footprint due to the reduced power and cooling requirements of the *SDS* solution.

Atlantis software has been installed to support the virtual desktops at the council's new headquarters, and throughout five other main offices and 70 remote sites. The vendor says the scalable solution allows the council to run 1,500 concurrent virtual desktops using its existing attached storage, saving the cost of purchasing additional storage. It has also reduced storage management time, saving the council more than 100 hours a year. ■

## ...and again as VESK also brings in software-defined storage

VESK – which is said to be the UK's largest provider of hosted virtual desktops – has chosen Nexenta's open source-driven software-defined storage to support its increasing storage and IOPS requirements, and growing portfolio of cloud services.

It has deployed the *NexentaStor* high availability cluster in a SAN which is providing more than 130TB of raw storage, as well as read and write SSD caching. Nexenta says it also enables VESK to cluster so it can simply add more SANs when required, removing the need to purchase any new solutions.

In addition, backup and data retrieval has also dramatically increased with VESK's three disaster recovery locations connecting via 10GbE dark fibre and provided with an hourly data auto-sync.

Founded in 2009, it's claimed VESK was one of the first companies to implement

and support VDI in the UK. In recent years, it has expanded into providing PaaS and IaaS capabilities from its data centres in London, Singapore and the US.

As its client base and cloud offering grew, the firm says it continually found storage issues barring the way to future and sustainable growth. Its current business model could no longer support any under-utilisation of expensive storage equipment, and the management of an extended SAN also risked swamping system administrators.

Equally, with the need for a higher IOPS and 100 per cent performance level uptime for high density applications, recurring issues such as low caching ability and limited network speed further constricted VESK's development.

Despite having more than 70 hypervisor servers running, it discovered that the legacy SAN was the root of the problem. ■

## University of Bradford transforms HR with cloud-based software

The University of Bradford is using ServiceNow's cloud-based software to transform how HR services are delivered to over 3,000 employees. The move is said to have improved the HR department's efficiency and responsiveness, while allowing it to focus on more strategic issues such as recruitment.

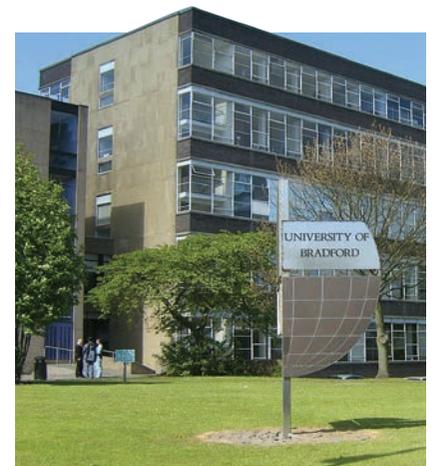
The university previously relied on manual, transactional processes to manage all HR queries. There was no prioritisation or reporting, giving the department little flexibility or visibility into its day-to-day activities. With the help of *ServiceNow HR Service Automation*, it has now been able to streamline key processes.

For instance, it has enabled the university to build a self-service portal that allows staff to access HR-related documentation on a PC or mobile device. This knowledge base is constantly updated to ensure employees have round the clock access to personnel advice and information.

Electronic request forms have also been created for enquires ranging from vacancy requisitions to flexible working requests.

Other benefits include streamlining workflows for a multi-tiered service model where enquires are 'triaged' and prioritised accordingly, and generating a holistic view of all HR activities to help improve the department's overall performance.

ServiceNow says data from the first full month of deployment revealed that 45 per



**The university has 3,000 employees who can now access a self-service portal for HR advice and information.**

cent of the 1,976 enquires received were successfully handled through the new self-service portal.

"Our old way of working was no longer fit for purpose," says Joanne Marshall, HR director at the University of Bradford. "ServiceNow has facilitated a new model where employees can complete their own transactions and find answers to a wide range of questions. As a result, we now have the ability to redirect strategic HR resources to other areas within the business." ■



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# Networking while not working

How the leisure and tourism industry is making the most of the latest network technologies to help us rest and play.

## The art of Wi-Fi not on display at Saatchi Gallery

A high-performance Wi-Fi system has ensured that London's world-renowned Saatchi Gallery can provide reliable wireless access, even when faced with unpredictable traffic load from many simultaneous users.

As well as hosting innovative contemporary art exhibitions, the gallery is also a venue for corporate events. The ability to give many simultaneous wireless users a flawless online experience, often at a moment's notice, is therefore essential.

Previously it depended on temporary wireless APs that were set up on demand to coincide with specific events. But with ever-growing visitor numbers and events involving bluechip companies taking place on a regular basis, it became clear that the gallery needed to deploy a permanent wireless network that had the necessary reliability, speed and capacity, using as little equipment as possible.

As a result, it deployed Xirrus' *Wireless Array* which is claimed to be the only fully distributed dense radio Wi-Fi architecture available in the industry today.

According to the vendor, the *Array* integrates up to 16 radios in a single device, all paired with high-gain directional antennas. It says this enabled the gallery to deploy fewer devices while benefiting from greater coverage, bandwidth and throughput than ever before.

Saatchi Gallery CEO Nigel Hurst says: "It's vital that any technology we use is as unobtrusive as possible and delivers a flawless user experience. Compared to the alternatives, Xirrus was the only provider able to deliver a solution that exceeded all our current technical requirements and would meet our anticipated needs for several years to come."



Unlike the venue's previous network, Xirrus says its solution enables visitors, corporate clients, and staff to access the internet from any device, anywhere on the premises. It also includes support for the live streaming of events, content and media distribution to screens throughout the gallery, and interactive art installations.

Xirrus claims its unique array-based solutions draw from cellular tower design principles to provide "wired-like reliability", increased user density and capacity, plus superior security.

"We apply the 'best practices' of wired networking to wireless infrastructures by distributing the intelligence to the edge and outfitting the *Array* with dense multi-state radios in the same manner as a wired switch," says the firm.

## Touriocity never misses a call thanks to cloud-based communications system

A cloud-based business communications system from Solgari is helping Touriocity meet both its office telephony needs as well as increased international customer call volumes.

Touriocity was founded in 2013 as an online marketplace that brings together local tour providers and connects them to customers who want a bespoke travel experience. The company has offices in London and Rome, and with Solgari's integrated cloud software and carrier platform it is now able to provide multiple local numbers to its global customer base, and avoid using different, disjointed, telephony solutions in each office location.

It's claimed intelligent call routing means Touriocity never misses a call, while all staff are always reachable on their extensions no matter where they are or what device they are using.

The company is using Solgari's single cloud business communications solution for its London and Rome offices, covering all global cloud telephony, numbers and carrier requirements. The supplier says this has negated the need for Touriocity to invest in different telephony solutions in each country and for mobile users in other locations.



Solgari adds that its system also ensures business continuity by diverting calls to different locations and devices with no loss of functionality in the event of an office being shut down for whatever reason.

Touriocity CEO and founder Alex Grant says the new system has been really crucial given the average 200 per cent quarterly increase in call volumes his firm has been seeing.

"Once the service was live across our desktops, tablets and smartphones, we suddenly had a single communications platform across both our offices and all our mobile staff," says Grant. "As well as avoiding the alternative of having to use different local telephony vendors, we are also able to present a really slick communications system to our customers and prospects, ensuring we never miss a call from anywhere."

Dublin-based Solgari has developed the technology, network and partnerships to deliver what's claimed to be the world's first complete enterprise cloud business communications solution. The firm is a licensed telecoms operator and integrates this with a scalable and modular cloud software platform to provide what it says is "every service" from a cloud PBX to an "intelligent" contact centre, with call encryption and compliance with FCA, SEC and PCI DSS requirements.

## Scottish Athletics backs up to race ahead

Scottish Athletics is responsible for fostering, developing and controlling athletics in the country.

During the run up to last year's Commonwealth Games that were hosted in Glasgow, event organisers were expecting a million spectators in the

city, so it was vital that the governing body's IT systems performed well on this international stage.

In order to maintain a high standard of service to its more than 12,000 members and assure the confidentiality of their sensitive data, Scottish Athletics needed a resilient and robust backup platform to guarantee the availability of its mission critical data.

Following a comprehensive analysis of the market, the organisation chose Onyx Group to deliver a solution using its Asigra-powered *Cloud Backup* platform. Onyx says it was able to replicate Scottish Athletics' data between secure Hitachi Data Systems storage vaults at its ISO 27001 accredited data centres in Edinburgh and Newcastle.

The company claims its platform provided a cloud backup solution for the organisation that was "unrivalled" in terms of security and speed of deployment.

It says this helped Scottish Athletics to benefit from a more cost-effective service by eliminating the capital expenditure associated with managing and maintaining hardware, and also helped to enhance its members' confidence by utilising the group's resilient core network and products.

Onyx adds that Scottish Athletics was also able to increase the time spent on its core activities by benefiting from rapid data recovery times, management and flexibility.

The complete migration process to the cloud was advised and managed by the supplier, and continues to be supported by what the company says is "highly skilled" and accredited staff via its service desk in Edinburgh.

Onyx says that all this also ensures Scottish Athletics has one easy to reach, single point of contact for any IT-related issues.



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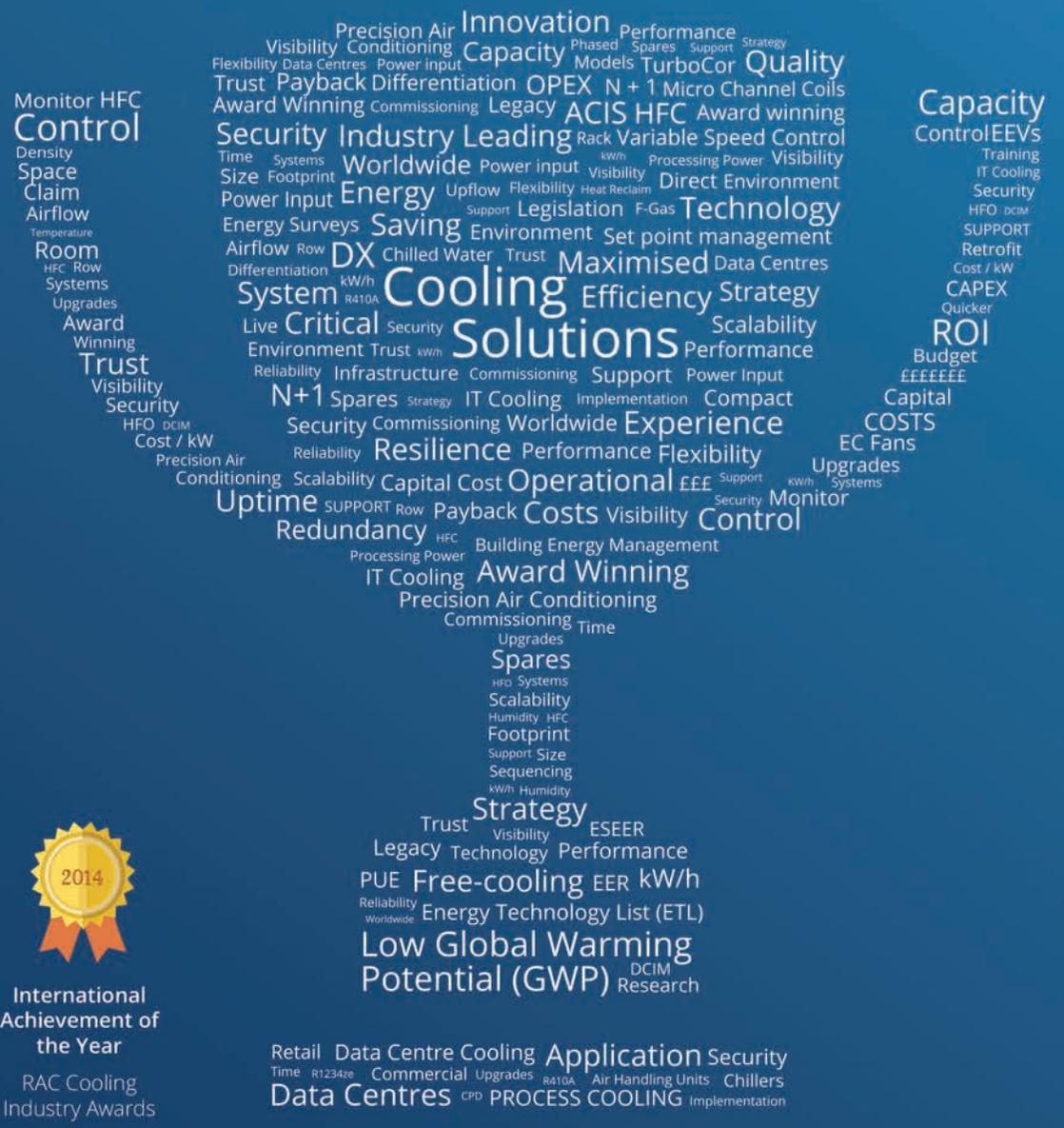
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# The test imperative



*Microlease says monitoring the network is a continual process, from initial installation all the way through its operational lifespan.*

**The nature of enterprise networks has changed dramatically in recent times. So what affect has this had on how network managers should test LANs and WANs? RAHIEL NASIR asks the experts.**

**M**igration to the cloud, virtualisation, BYOD, a growing mobile workforce, SDN – there is no doubt that the face of networking in the corporate world has changed irrevocably in recent years. And there's yet more to come when you start factoring in the upcoming Internet of Things, dealing with our insatiable appetite for data, and the ever present threat of increasingly sophisticated cyber attacks. All of which not only adds up to greater complexities for network managers, but also means that the need for continually monitoring LANs and WANs has never been more crucial.

"Modern life seems to be increasingly focused on immediate access to information or the obtaining/sharing of data intensive content," says Geoff Kempster, technical manager at test equipment specialist Microlease. "This is placing huge pressures on both LAN and WAN infrastructure to deliver elevated levels of bandwidth."

As a result of all the factors outlined above, Kempster says owners of LANs and WANs need to continually monitor and upgrade the performance of their networks, as well as ensuring that they are functioning at maximum efficiency. "This has to be a whole life process, from the initial installation of the network all the way through its operational lifespan."

That last piece of advice sounds expensive and is likely to turn most of the corporate bean counters into gibbering wrecks. So can't today's networks continue to be tested and monitored using the existing tools that the IT department invested in years ago?

Perhaps. For instance, Richard Clothier, marketing manager at network performance solutions provider Phoenix Datacom, says traditional network test tools still have a part to play when building and troubleshooting LANs, WLANs and WANs.

"You will always need to verify new (and existing) copper and fibre optic cabling, Wi-Fi coverage, switches, routers and, in some cases, connectivity from your service provider. However, reliance on the network is heavier now than at any previous point in time because enterprises are always seeking to improve their capabilities and staff productivity with new services and applications."

He goes on to say that because the network needs to step up to the challenge of delivering securely, consistently and at all times, the tools and systems used to test and validate them have to keep up with the associated demands.

Brad Reinboldt, solution manager at Viavi Solutions (formerly JDSU), agrees here. He believes network managers can continue to utilise passive monitoring of network traffic as they have done in the past, but points out that they will need to support higher traffic levels and emerging traffic types.

"With WAN loads becoming ever more critical, they also need to more effectively verify transport layer health, ideally with active testing that can alert on issues before they impact the application layer."

"It's worth highlighting the importance of ongoing validation of WAN performance in particular, as it relates to quantifying network delay. This is critical because WAN delay is often a function of carrier congestion and any material variations – especially slower – can have drastic implications for application and service health."

More about how carriers can impact enterprise WAN testing later. But for now, as corporate networks become bigger, faster

and more complex, the demands placed on them mean they are now significantly different to what they were just a decade ago.

"Perhaps ten years ago it was legitimate enough to rely on traditional load testing tools," says Jeff Curley, business solutions director at infrastructure monitoring specialist Aurora365. "Now, testing demands much more than simply validating the performance of switches and routers, as the requirement is to test how applications are performing across organisational boundaries."

IT management software specialist SolarWinds echoes this and says it's what we're doing on the network rather than the network itself that is dictating what needs to be tested.

For example, Don Jacob, the company's "head geek", says video usage has rocketed, BYOD means workers could be using up to three personal devices (laptop, mobile and tablet) on the corporate network, remote connections have increased, and malware has become smarter.

"If the network admin is managing a network that is experiencing this exponential growth of data volume, speed and new technology adoption, then it is

also the time to invest in new hardware and software capable of handling the requirements of the enterprise," he says.

For instance, Jacob says test equipment that was used years ago for security analysis based on signature worms will not be enough to evaluate a security breach that has occurred today using non-signature attack.

So what should network managers look out for when testing, and how should they go about it given all the challenges?

## The cost of testing

"First of all, effort must be made to ensure that the physical installation is fully compliant with the stipulated requirements," advises Kempster. "This may involve the physical testing of LANs to certify their conformance to the relevant Cat 6 or Cat 7 standards. Alternatively, it could be verifying the characteristics of a fibre in a WAN, which may include dispersion testing and thorough optical time domain reflectometer measurements."

Kempster continues by saying that once the physical environment of the network has been verified, data performance can then be tested: "This could be a simple RFC-2544 test. But more companies are looking to use the newer, highly sophisticated Y.1534 test processes, which are designed to enable testing of the network that is more applicable in real world scenarios."

Y.1564 is Ethernet service activation test methodology developed by the International Telecommunication Union. But whichever method is adopted, all of it will be for nought if the network isn't continually monitored and tested on a regular basis, particularly as it evolves over time.

And for the gibbering wrecks in the CFO's department, Kempster has this advice: "The company should, with help from its test equipment partner, be able to decide which sourcing option is most appropriate from a financial point of view – whether rental, purchase, new, used, or even utilising divide-by programmes – and be able to keep total flexibility."

The cost of testing is clearly going to be a hurdle that needs to be overcome in these cash-strapped times. But as Phoenix



*Richard Clothier, Phoenix Datacom's marketing manager, says testing is a "no-brainer" as the systems that are critical to an enterprise can only be as good as the network used to deliver them.*

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Datacom points out, not investing in testing could prove to be a heftier price to pay. For instance, it says as more enterprises turn to cloud-based services, not all of them will have the budget to simultaneously invest in application performance monitoring solutions. But without these, how will they know if their new investment will deliver the performance and capability gains required to justify the outlay?

"The systems and applications that are critical to the enterprise can only be as good as the network used to deliver them," says Clothier. "If you had to choose between knowing the new service/application would work properly (i.e. delivering value), and the uncertainty of its performance once rolled out across the company, which would you choose? It's a no-brainer."

"The cost for such erudition is less than you may think and micro in size when you factor in the cost of the new service or application – and indeed the price of potential downtime, failure and staff twiddling their fingers."

As a result, Clothier says Phoenix Datacom is seeing increases in the number of firms who want to stress and test their network fabrics to a far greater extent than at any previous point in time.

"We are seeing particular growth in demand for our professional test/validation services and our *Xena Networks* range of Ethernet and TCP traffic generation equipment. These include the Ixia *PerfectStorm ONE* platform for generating high volumes of stateful (application layer) traffic and malware, and our *PacketStorm* solutions for replicating the unfavourable conditions and impairments of IP networks. [The latter] shows how services such as VoIP and video will work when used over

varying types of connection, from fixed Ethernet in the office to a remote user connecting via VPN over a low bandwidth DSL, cellular or satellite link."

SolarWinds continues with the cost theme and reckons it should be the first consideration for an organisation. Furthermore, it should also look at whether it can afford to invest space and manpower not only for the test equipment needed but the test lab that has to be created. Jacob says when choosing equipment for this lab, network administrators should try to design a test area that can imitate the actual network as much as possible while also taking into account cost constraints.

"They should also keep in mind whether the hardware and software can scale for the future and has the capabilities to be reprogrammed to support future requirements. Further, look for test equipment that can provide analytics or actionable intelligence, and not just statistics from running a test. This will help design and scale up the actual network to meet zero downtime."

"Test equipment should not be chosen based on what the organisation has today, but should be based on what it will be in the next five years, while keeping in mind cost considerations and scalability of the equipment to cater to future demands of speed and volume."

Jacob reckons it might be feasible for some organisations to consider outsourcing the test lab to a network testing vendor. Such a vendor could then handle the enterprise's requirements as and when needed, and help scale up when the need to test new technology comes up. "This way, the enterprise will not have to invest capex in new hardware and software when the network evolves," he says.

The latter certainly comes across as sound advice given the pace at which network technology has evolved over the last few years and is expected to do so in the foreseeable future. So what are the features and functions that test and monitoring equipment will need to incorporate in the coming years?

## The test of time

According to Viavi, test equipment vendors will need to continue to develop products that address the latest trends and technology challenges with distinct features.

"Manufacturers need to ensure their solutions maintain operational visibility for the network manager with these new challenges by enhancing their form, features, and functions," says Reinboldt.

"Examples here include proactively verifying underlying transport layer status – a must for consistent WAN performance. Increasing packet capture rates to keep up with the traffic deluge, and the ability to de-encapsulate tunnelled traffic will also be important when troubleshooting is required."

Security is another key feature, and he adds that test equipment capable of passively capturing all network traffic can serve as a backstop to other IT security initiatives.

As more services are outsourced, Reinboldt also advises enterprises to keep in mind the concept of collaborating with carrier and service providers: "Moving from a model that was often more adversarial to one of cooperation can maximise the business value of all stakeholders."

He says there are several examples here, such as: "Enterprises could work with a service provider on WAN performance and optimisation by deploying *TrueSpeed*



**"Test equipment should not be chosen based on what the organisation has today, but should be based on what it will be in the next five years."**

*Don Jacob,  
"Head geek",  
SolarWinds*

*VNF [Viavi's standards-based network performance tool] in the cloud provider's infrastructure. This allows for rapid detection of WAN issues before they reach a level that impacts users."*

Phoenix Datacom's Clothier says service providers are usually early adopters for new test and measurement technologies and processes because networks are their "bread and butter".

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“Until recently, Wi-Fi testing and planning solutions have provided a heat map view of Wi-Fi coverage and signal strength. But in response to the growing need to improve staff productivity, we can now empower customers to make key decisions based on how services and applications will work in all areas of the building over the Wi-Fi network.”

As an example, Clothier says domestic installation engineers from service providers can now place probes throughout a house and quickly show consumers on a tablet how applications such as *Skype* and *Netflix* will work in each room. He says this capability has reduced truck rolls and customer complaints, and has also provided opportunities to upsell more access points and repeaters.

“The solution service providers are using for this is *AirScout* from GreenLee Communications. As GreenLee’s partner in the UK we are now receiving much interest from enterprises moving premises, adding new Wi-Fi access points, and of course adopting new services and business applications. This arms them with the valuable intelligence required to make basic but very important decisions over the number and location of APs.”

Microlease agrees that as carrier/service providers improve their networks, more specialist test equipment will be needed. For example, Kempster says the integration of ROADMs (reconfigurable optical add-drop multiplexers) into networks is helping to improve efficiency levels as it removes the need for electro-optical conversion activity. This heightens the capacity of deployed fibres, allowing far greater levels of data to be transported.

“With the increasing use of ROADMs to improve the performance of networks, more specialist test equipment is required in order to measure the performance of these networks. State-of-the-art optical spectrum analysers and power meters are designed to look at these systems.

“Also, the widespread deployment of LTE networks has meant that synchronisation of network infrastructure is even more critical now than ever before. Even small errors can result in dropped calls and failed handovers which will frustrate subscribers.

“Therefore, the use of packet-based timing technology such as Synchronous Ethernet and IEEE 1588v2 Precision Time Protocol is becoming commonplace, and more in-depth testing of networks for stability is now a high priority.”



**“More in-depth testing of networks for stability is now a high priority.”**

Geoff Kempster,  
Technical manager,  
Microlease

Jacob’s advice to test equipment makers is to scale up their kit so that it can be used with higher volumes of data at a higher speed: “Traffic generators should be able to generate more volumes, and protocol analysers should have the capability to handle and process this high-speed data even more quickly.”

He adds that vendors should also consider building functionalities into their equipment that allow users to test based on their organisations’ needs. For example, these could include metrics specific to voice and video performance, desktop and server virtualisation, etc., or higher speed and volume considerations

when it comes to testing cabling and connectors.

Ultimately, Jacob believes vendors should come up with test equipment that has the capability to provide actionable and intelligent data that can be used to improve existing network designs.



*Phoenix Datacom says it’s seeing particular growth in demand for its Xena Networks range of Ethernet and TCP traffic generation equipment.*

“The major focus for networks is performance and scalability which is also what the network equipment should

be capable of. The test equipment of the future should be able help customers make informed decisions that will help them with the upgrading of their existing network infrastructure, as well as what should be checked for when adopting new technologies. ■

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off-the-shelf: data centres

# A credit to the industry

Data centre operators often claim to run facilities that are highly secure, efficient and environmentally-friendly. Here are some of the ones who now have the certificates to prove it.

**AIMES Grid Services** has become the first data centre in the EU to be awarded the Data Centre Alliance's new certification which assesses a facility's quality and resilience.

Having successfully passed a tough audit carried out by the alliance and its approved expert firm Certios, AIMES was awarded level 3 classification for Kilby House, its 35,000ft<sup>2</sup> facility at Liverpool Innovation Park. It received the rating after being monitored for resilience in power distribution, connectivity and cabling, and environmental control (cooling).

Kilby House hosts an SN UPS and electrical infrastructure with N+1 standby power and cooling systems that are designed to save 3,000 tonnes of CO<sub>2</sub> a year. AIMES says the system is managed by an advanced monitoring system that is constantly identifying opportunities for improved efficiency, resulting in cost saving as well as increased performance, productivity and adaptability.

The DCA developed its certification to provide industry with a clear set of criteria designed to embrace existing codes and standards of best practice. It is also the only scheme that requires the implementation and participation of the European Code

of Conduct (ECOC) on Data Centres. This was created in response to increasing energy consumption in data centres and the need to reduce their environmental impact.

AIMES participates in the ECOC and says the code is verified and regularly checked at its data centres, thus providing an essential extra layer of confidence to users.

**Interoute** has obtained the Metro Ethernet Forum's MEF 2.0 Carrier Ethernet E-Line (EPL, EVPL) certification. The firm says it is the only UK headquartered service provider to be awarded the certification and one of only ten European providers to achieve this industry standard.

The company says the certification covers its entire global network and means it is able to fast-track technical discussions and interconnections, whether connecting to other carriers, customer networks or cloud services.

Interoute adds that because of a greater demand for connectivity across the industry, standards are increasingly important. It believes that as a globally-recognised stamp of approval, the MEF 2.0 certification will therefore support



Rackspace's new data centre uses 'indirect outside air' cooling which cuts the overhead energy needed by almost 80 per cent.

it in meeting the rising demand for interconnectivity between networks.

According to Interoute, MEF's accreditation has significantly contributed to the successful worldwide deployment of Ethernet by defining industry standards, accelerating processes and deployments, and lowering cost and risk variables.

Interoute claims to be the owner operator of Europe's largest cloud services platform. It is said to encompass more than 67,000km of lit fibre, 12 data centres, 14 'Virtual Data Centres' and 31 colocation centres, with connections to 195 additional third-party data centres across the continent.

**Rackspace** claims it has developed one of the UK's greenest data centres. The 130,000ft<sup>2</sup> facility in Crawley, West Sussex has been launched in partnership with Digital Realty, and has a design BREEAM assessment certification of 'Excellent'.

With a PUE rating of 1.15 compared to an average of 1.7, Rackspace says the new facility has "strong eco-credentials" to help meet growing demand for managed cloud services in UK and Europe.

Covering an area the size of two football fields, it says the data centre is the UK's first to make use of innovative 'indirect outside air' cooling technology on such a large scale. There is no mechanical cooling which, according to Rackspace, means the overhead energy requirement has been cut by almost 80 per cent.

The firm says the facility was developed using the latest ASHRAE guidelines which demonstrate an ability to follow stringent energy and sustainability targets while ensuring high levels of server performance.

It was also designed to maximise compatibility and compliance with Open Compute Project standards. Rackspace says this has enabled it to realise "outstanding" scalability and energy efficiency opportunities in the hardware it deploys, adding that the new data centre delivers less weight, less waste and less Wattage than traditional server designs.

The facility can hold up to 50,000 physical servers, and provides 6MW capacity across two data suites. It will eventually comprise four suites with a total 12MW capacity, but also allows for further expansion up to 30MW.

Physical security is provided at multiple layers starting with the perimeter fence through to personnel badge readers. There are also biometrics scanners that read the fingerprint of an individual before he or she is given access to sensitive areas.

**Pulsant** has begun expanding what's said to be the largest commercial data centre in Scotland. Once completed in August, the new South Gyle site in Edinburgh will be ISO27001, 14001 and PCI-DSS compliant, as well as part of the G-Cloud and Scottish Government frameworks.

The 75,000ft<sup>2</sup> tier 3 facility currently supports more than 800 racks and 12MW of power in two secure, purpose-built data centres. It also hosts Scotland's first

dedicated internet exchange, IX Scotland. The expansion will see the addition of two secure data halls. Pulsant says these will feature autonomous mechanical services to ensure complete redundancy and increased efficiency, and a boost to capacity with more than 150 new racks being installed. Two new build and configuration rooms will also be constructed, along with secure storage areas.

The new data centre will incorporate direct fibre access to a wide range of service providers and carriers. It will also make use of blended evaporative and fresh air cooling technologies, and onsite high voltage network to ensure 2N delivery of power to each rack.

Pulsant says it is one of only two firms globally to hold the BSI CSA Star accreditation for cloud security. It operates 10 wholly owned ISO 27001 compliant data centres across the UK, a number of which sites are ILS2, ILS3 and PCI DSS certified, and are also on the G-Cloud Framework.

**Volta Data Centres** has been granted ISO 27001:2013 security standard accreditation, and also now complies with the government's Climate Change Agreement (CCA).

Following a two-day audit, the Information Security Management System (ISMS) concluded that the firm's carrier-neutral data centre in central London had met the requirements of the latest ISO 27001 accreditation, and certified it as secure for delivering services.

The scope of the ISMS covers the design and provision of colocation and managed data centre services, including security policies, legal compliance requirements and in-house processes and business continuity systems.

Volta says the accreditation means it has a strict management of controls in place for all its own data and storage, and that staff are compliant with laws and regulations. This includes requirements for the assessment and treatment of any information security risks to ensure all sensitive data it holds on its clients is secure.

The CCA was granted after base data from Volta's electricity consumption for the last two years was recorded. The operator says energy efficiency targets will now be met in order for it to pay discounted rates as part of the Climate Change Levy (CCL).

Volta says it is currently using specially developed row-based cooling systems to improve its energy efficiency. It's claimed the system uses 42 per cent less fan power than standard CRAC units, and allows both Volta and its customers to monitor intake and discharge temperatures, peak loads, and fan speeds in real-time.

CCAs are voluntary agreements made by UK industry and the Environment Agency to reduce energy use and CO<sub>2</sub> emissions. In return, operators receive a discount on the CCL. For those who hold a CCA, the levy will be reduced by 90 per cent on electricity bills and 65 per cent on other fuels.

Volta adds that it is also working on accreditation to become PCI DSS compliant in order to be more secure for customers that process, store or transmit credit card data.

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## MoD calls for ICT experts to develop next-gen comms

The Ministry of Defence is seeking ICT experts to help it develop a new approach to communications that will support military operations in future decades.

Since 1989, the British armed forces have used a range of radio sets as part of the *Bowman* communications system which is now approaching its out-of-service date. As technology and the nature of military operations have changed dramatically, the MoD says it now requires new approaches to meet its communications needs.

The ministry will develop and consider options for replacing *Bowman* under its newly launched *MORPHEUS* project. It is seeking anyone involved in areas such as IT, networks, security, telecoms and wireless – as well as trainers in these areas – to feed expertise and ideas on new technological approaches into the project. The MoD aims to establish options that make best use of current and emerging technologies, resulting in a system that can be evolved and managed in a cost-effective way.

It adds that *MORPHEUS* provides a way for academics and businesses, especially SMEs, to inform the future of communications, as well as presenting significant long-term business opportunities for innovators in this area. Because the project will bring together different ideas into potential options, the MoD says even those with partial solutions and research are strongly encouraged to submit them.

The options will be addressed by the *MORPHEUS* Systems House, led by PA Consulting with QinetiQ, Roke Manor Research and CGI. They will assess which technologies and software are needed to get information from A to B, taking into account security, speed of communication, range, ease of use and cost.

The selected option(s) will form the basis for an MoD competition for the design of the new system. Beyond this, *MORPHEUS* will be the main vehicle for the procurement of the UK's tactical comms capability for the next 30 years.



Since 1989, the British armed forces have used the 'Bowman' communications system which is now approaching end of life.

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## Certification means cable industry is "growing up"

Draka is the latest cable manufacturer to have signed up to support the new *Certified Network Cable Installer (CNCI)* certification. The firm says it will now accept this accreditation as a demonstration of competence for contractors looking to join its *UC Connect* approved installers scheme.

For those who have yet to undertake the *CNCI* programme (or choose not to), Draka says it will still provide its current training scheme to ensure all contractors

have the opportunity to join the *UC Connect* scheme. However CNet Training, which is providing the *CNCI* programme, warns that the days of manufacturer-led training programmes may be numbered. Its MD Andrew Stevens says: "The industry has been crying out for this type of universal certification for years, yet nobody has been able to tackle the problem successfully."

*UC Connect* product manager Lee Stokes agrees, and reckons the new certification is a sign that the industry is finally "growing up". He adds: "Draka is a manufacturer not a training provider. Having an industry-led training programme delivered by a professional training company allows us to focus our resources where they should be: on providing the best products and most comprehensive technical support to our *UC Connect* installers."

## NEW COURSES

**Wi-Fi System Engineering – Mpirical**  
Mpirical's *Wi-Fi System Engineering* programme comprises three modules which cover the main features of a Wi-Fi access network. These include architecture and protocols, operation, plus security and QoS.

The course is part of Mpirical's web-based *LearningZone* platform and is taught over three months via 16 video lessons. Delegates are presented with technology challenges using NetX, along with tests and quizzes, to ensure they have grasped the content. <https://store.mpirical.com>

**Lean IT Partnership – Van Haren Publishing**

This new book is a reference guide aimed at managers who want to implement 'Lean' philosophies at an IT partnership level.

According to the publishers, over the past few years, many organisations have outsourced or co-sourced their IT supply and management services to professional service providers. At the same time, many IT sourcing relationships have become strategic in terms of intent and importance.

To make the next leap, IT sourcing clients and their suppliers are now exploring whether a 'Lean' transformation in their relationship could lead to similar promising results as achieved in the manufacturing domain.

The guide contains the results of the Nyenrode Lean Institute research project, *Lean IT partnering*. It provides the lessons learned from actual case studies and suggests suitable guidelines for successful partnerships in the IT world. [www.vanharen.net](http://www.vanharen.net)



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