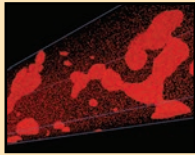


networking

FIXED & WIRELESS NETWORKS FOR ENTERPRISE USERS

The patterns of things to come

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Once more unto the breach

Latest security software to help you stay ahead of the hackers

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DreamCloud to develop new load balancing for multicore apps

by Rahiel Nasir

A European consortium of technology developers, industrial system suppliers and research organisations have launched a project that will develop new approaches for balancing the load of multiple applications running across hundreds of computer processing cores.

The Dynamic Resource Allocation in Embedded and High-Performance Computing (DreamCloud) project is supported by the EC and backed by more than €4m (£2.8m) of investment.

It will aim to develop new technologies that offer major advances in being able to manage the trade-off between computing performance and efficient energy usage according to the needs of each application.

The DreamCloud consortium says computing devices with multiple

processing cores are now the norm, and the number of cores per device will continue to grow. While this will enable users to run more complex applications simultaneously, experts warn that balancing their load over dozens or hundreds of cores will not be easy.

For example, they say a system with 20 application tasks and two cores can have 380 distinct allocations of tasks to cores, but simply by increasing the number of cores to four, the number of possible allocations becomes 116,280.

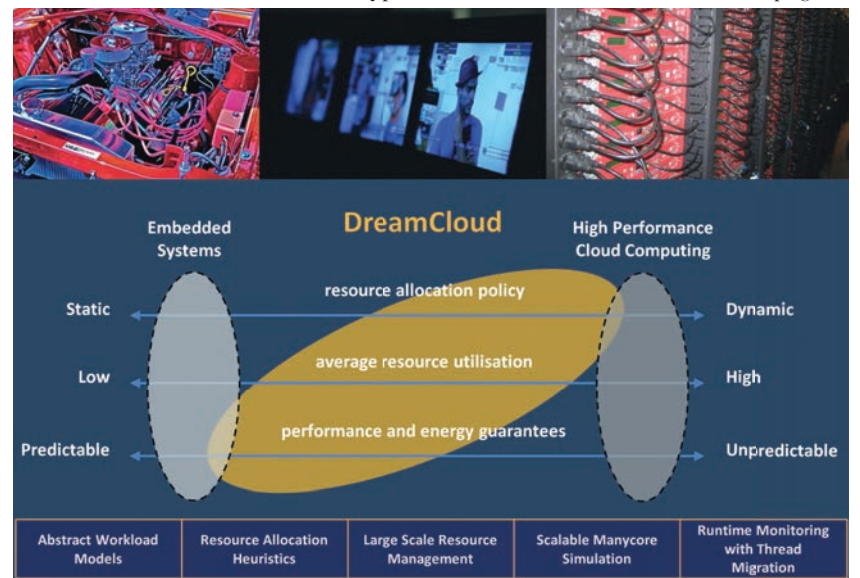
“Going further, the number of possible allocations of a system with 25 tasks and 25 cores is larger than the number of stars in the observable universe,” says DreamCloud.

It believes the only way to cope with such complexity is to create computing

systems that are capable of balancing the load over multiple cores during runtime. The consortium plans to develop new mechanisms based on three distinct types

of cloud infrastructure that will manage application workloads on different kinds of multicore platforms.

(continued on page 2)



Large scale resource management, scalable 'manycore' simulation, and runtime monitoring with thread migration are among a number of key technology areas DreamCloud will address.

Most network security models have exceeded their use-by date

Organisations are continuing to rely on outdated access control technologies, according to a new study by security specialist Cryptzone.

It says there is a lack of advanced solutions to limit the *carte blanche* access granted to employees and third parties under older network security models.

In a survey published in April, Cryptzone found 91 per cent of respondents still regard VPNs as the main form of security for controlling network access, despite the fact the technology was created almost 20 years ago. Most revealed that their access control technology was greater than three years old, and 11 per cent said it was more than 10 years old.

Host IPS, next-generation firewalls, identity management solutions and

vulnerability assessment all followed the leading solutions, but were only being used by 24-30 per cent of respondents for the purpose of access control.

“It’s remarkable that so many organisations are still utilising network security technologies developed in the nineties – a time when the internet was still in its infancy,” says Cryptzone CEO Kurt Mueffelmann. “Organisations need to accept that outdated access control technologies are not working against today’s sophisticated adversaries.”

“The default position should be to make your infrastructure invisible, and then grant access on a case-by-case basis, only after user identity, posture and context have been validated.”

Latest security solutions – Off-the-shelf, p14

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Broadband in Scotland “inferior” to rest of UK

Broadband in Scotland is inferior to the rest of the UK and is affecting growth and productivity, according to the country's business leaders.

A recent YouGov poll commissioned by network infrastructure provider CityFibre revealed that the majority of enterprises in Scotland rate high-quality broadband as the most important factor for business success. In the online survey of 100 IT decision makers that was carried out in

April, 92 per cent said it was vital to the success of their company. Despite this, 52 per cent considered Scotland's broadband infrastructure to be inferior to other parts of the UK.

When asked about businesses in Scotland in general, improved internet connectivity was the most commonly cited driver behind economic and business growth (61 per cent). This ranks higher than a reduced rate of tax (48 per cent), improved national

and international transport links (59 and 37 per cent respectively), and increased housing construction (23 per cent).

Sixty-five per cent of businesses surveyed said insufficient internet would cause a drop in office productivity, while 42 per cent said it would affect their ability to grow. Almost half felt that poor internet connectivity would adversely affect their decision to invest in new technologies such as cloud and VoIP. ■



Business leaders say improved broadband infrastructure such as the deployment of more fibre is crucial for the success of 'Scotland plc'.

Consolidation of over 200 server rooms cuts costs for Cambridge

The University of Cambridge expects to reduce IT energy costs by as much as 40 per cent after upgrading its data centre infrastructure with the help of Emerson Network Power (ENP).

With large quantities of data, including sensitive research material, internal records and financial information, advanced data storage capabilities are critical for the university's staff and students. But due to the fragmented nature of its campus system, Cambridge uses more than 200 independently managed server rooms across 120 departments to cope with its data. This was resulting in inefficient energy usage.

To address these challenges, the university wanted to rationalise its server rooms by building a co-existing central data storage hub to improve service efficiency and tackle its high energy consumption. It also wanted visibility into IT and infrastructure processes which would provide the ability to manage them holistically.

Its new data centre hub is split into three separate halls, allowing space for approximately 300 racks, supported by both redundant UPS and generators.

It features a range of products from ENP, including high power modular

Trinergy UPS systems, remote diagnostic and preventive monitoring services, and MPH2 rack PDUs.

The university is also using Trellis, Emerson's data centre infrastructure management platform, to gain real-time insights into power, thermal management and IT equipment to help control capacity and increase efficiencies.

“By upgrading our data centre infrastructure, we expect to reduce our carbon footprint by 30 per cent and our IT energy costs by as much as 40 per cent,” said Ian Tasker, the university's data centre manager. “This equates to a considerable reduction in our PUE, which currently spans from 1.7 to 3, lowering it to 1.2 and below.” ■



The university has deployed variety of Emerson's products, such as the MPH2 rack PDUs, which are helping it to reduce data centre energy costs.

Infinite Codeworks ditches hosted VoIP for Skype for Business

Software development and web application specialist Infinite Codeworks has replaced its previously hosted VoIP system with VIA Voice, a Skype for Business application.

London-based Infinite Codeworks already uses Office 365, and VIA Voice is said to “seamlessly” integrate with the existing infrastructure. It features additional bespoke features for the company, combining voice, IM, email, video and audio across a variety of devices such as landlines, smartphones, PCs, and tablets.

As well as enhancing internal communications and productivity, the new platform is said to have improved how Infinite Codeworks collaborates with its clients. Several of its key customers also use

Skype for Business, and it regularly uses VIA Voice's conferencing facility and document-sharing feature to update clients on multiple projects and maintain a highly efficient working relationship.

VIA adds that its unique real-time management portal is helping Infinite Codeworks to observe trends, evaluate the usage and productivity of employees, as well as monitor costs.

VIA became the first UK-based firm to offer a hosted communications solution that incorporates Skype for Business which replaced Microsoft Lync in April. ■



VIA's system combines voice, IM, email, video and audio across a variety of devices.

A new banking crisis looms

Investment banks have lost out on trading revenues that could have been worth as much as \$5 million per year as a result of missed opportunities caused by delays in connecting to new markets.

In March, Colt conducted a survey of 289 heads of trading and fund managers in 12 countries in Europe, US and Asia. Forty-nine per cent of buy-side and sell-side traders said delays in connecting to new markets results in missed trading opportunities. Around the same number said this also impacts client relationships and causes loss of customers.

More than a quarter revealed that it took them more than a month to connect to a new client, with one-in-ten saying it took over two months. When it comes to the performance of the connectivity in place, nearly one-third said they experienced technology failures at least once a fortnight.



John Loveland, Colt's VP of capital markets, says ultra-low latency should not be the only consideration when it comes to connectivity.

“Both this study and feedback from Colt's own capital markets customers makes it clear that ultra-low latency is not the only consideration when it comes to a firm's connectivity strategy,” says John Loveland, VP capital markets, Colt. “Reliable and faster connections to the marketplace are essential to trading desk performance.”

The survey also noted that an increase in regulation and market complexity were also partly to blame for the long delays. ■

IBM claims breakthrough in silicon photonics technology

IBM claims it has reached a milestone in the development of silicon photonics with its CMOS Integrated Nano-Photonics Technology.

The company says that for the first time, its engineers have integrated different optical components side-by-side with electrical circuits on a single chip using sub-100nm semiconductor technology. IBM believes this will pave the way for manufacturing 100Gbps optical transceivers, allowing data centres to offer greater data rates and bandwidth for cloud computing and Big Data applications.

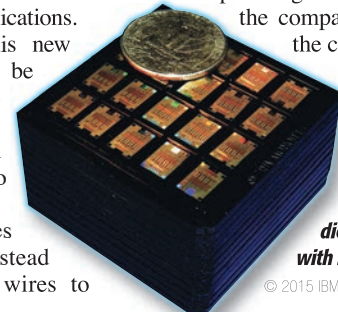
“In just one second, this new transceiver is estimated to be capable of digitally sharing 63 million tweets or six million images, or downloading an entire HD movie in just two seconds,” states the firm.

Silicon photonics enables chips to use pulses of light instead of electrical signals over wires to

move data at rapid speeds and longer distances. The technology has the ability to overlay multiple colours of light within a single optical fibre to multiply the data volume carried, all while maintaining low power consumption.

IBM's chip uses four laser ‘colours,’ each operating as an independent 25Gbps optical channel. Within a full transceiver design, it says these four channels can be wavelength multiplexed on-chip to provide 100Gbps aggregate bandwidth over a duplex single-mode fibre. According to

the company, this will minimise the cost of the installed fibre plant within the data centre. ■



Cassette carrying several hundred chips intended for 100 Gbps transceivers, diced from wafers fabricated with IBM's new technology.

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Load balancing investment

(Continued from page 1)

‘Embedded Clouds’ will be used for systems with time-critical behaviour (such as the flight control in an aircraft), allowing for restricted load balancing and providing strict performance guarantees. ‘Micro Clouds’ will rely on new extensions to operating systems and VMs, allowing for dynamic migration of processing from one core to another. ‘High Performance Clouds’ will balance highly dynamic workloads, aiming for full utilisation of the underlying platform while providing performance guarantees.

The project includes case studies in three

different domains – automotive, digital video streaming and scientific computing – to validate the three types of cloud infrastructure developed in the project.

DreamCloud will produce reference implementations of developed approaches, along with extensions of commercial and open source tools and operating systems to facilitate the adoption and use of the new technologies by industry.

The project is being coordinated by international vendor- and technology-neutral standards body, The Open Group, with technical leadership from the University of York. It will run through autumn 2016. ■

Researchers improve parallel processing

A European team of academics and industrial experts have completed a four-year research collaboration to improve the programmability and performance of modern parallel computing technologies.

The team behind the €4.2M *ParaPhrase* project say they have developed an approach that allows large parallel programs to be constructed out of standard building blocks called 'patterns'. A re-factoring tool allows these so-called patterns to be re-assembled in optimal ways without changing the functionality of the overall program.

Further tools developed during the project allow the program components to be run on the system in ways that make best use of the available processors, maximising throughput and minimising runtime of large programs. Researchers say the tools can even adapt the program while it is running to improve performance.

Project leader Professor Kevin Hammond of the University of St Andrews says future computers will consist of thousands or even millions of processors, which poses a real problem to traditional programmers not used to thinking in parallel.

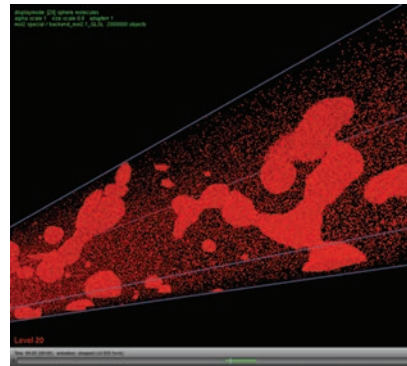
"The sheer complexity of these systems means that powerful tools are needed to develop software that runs stably and efficiently while making the most of the ability to process in parallel," he says. "The technologies we have developed in *ParaPhrase* make it possible now to really exploit the power of these new systems."

The project has led to a range of new software tools and programming standards to support the growing global community in

parallel programming. A Streaming Parallel Skeleton Library for Erlang has recently been made available, and a new release of the FastFlow parallel programming framework has already seen thousands of downloads.

The team has also developed use case scenarios in various application areas such as industrial optimisation, data mining, and scientific simulation. Industrial partners are already applying the technology in their own operations and three recently launched spin-off firms are set to take full commercial advantage of the technologies produced.

A number of follow-on projects are now under way with more in the pipeline. Hammond says: "*ParaPhrase* has been a tremendous success but significant challenges remain. In the future, parallel programs will need to self-adapt to computing architectures we haven't even thought of yet."



Researchers have developed an approach that allows large parallel programs to be constructed out of standard building blocks called 'patterns'.

Three arrested in counterfeit Cisco equipment operation

Detectives from the Police Intellectual Property Crime Unit (PIPCU) have dismantled a criminal operation suspected of importing, exporting and selling fake Cisco networking products.

At the end of April, three men aged 36, 35 and 38 were arrested by the City of London Police unit on suspicion of running a business that has sold in excess of \$10 million worth of counterfeit Cisco equipment. The suspects' homes along with a further business address in Bishops Cleeve were searched and

counterfeit Cisco networking equipment with an estimated value of more than \$1 million was seized. It's believed the group was importing, exporting and selling the fake networking products via a company website and through telesales.

Between December 2012 and April 2015, 40 shipments of suspected counterfeit Cisco products are thought to have been sent from the suspects' business in the UK to the US where they were intercepted by Customs and Border Protection officials. PIPCU has been working with US



THE WORLD ACCORDING TO...

Dave Larson, CTO, Corero

DDoS: what you can't see can't hurt you, right?

Online organisations need to look closely at the problem of business disruption as a result from the external DDoS attacks that every organisation is unavoidably exposed to when they connect to an unsecured internet feed. Key components of any realistic DDoS defence strategy are proper visualisation and analytics into these security events.

Unfortunately, many legacy DDoS defence solutions are not focused on providing visibility into all layers of an attack and are strictly tasked with looking for flow peaks on the network.

So if all you are looking for is anomalous bandwidth spikes, you may be missing critical attack vectors that are seriously compromising your business. In the face of this new cyber risk, traditional approaches to network security are proving ineffective.

Today, DDoS attack techniques are more commonly employed by attackers to do far more than deny service. Attack attempts experienced by Corero's protected customers in Q4 2014 indicate that short bursts of sub-saturating DDoS attacks are becoming more of the norm. Our recent *DDoS Trends and Analysis* report indicates that 66 per cent of attack attempts targeting Corero customers were less than 1Gbps in peak bandwidth utilisation,

and were under five minutes in duration. Clearly, this level of attack is not a threat to disrupt service for the majority of online entities. And yet the majority of attacks utilising well-known DDoS attack vectors fit this profile. So what's going on here? Why would a DDoS attack be designed to maintain service availability if 'denial of service' is the true intent?

These attacks are sophisticated enough to leave just enough bandwidth available for other multi-vector attacks to make their way into the network and past weakened security layers undetected. There would be little to no trace of these additional attack vectors infiltrating the compromised network, as the initial DDoS had done its job – distract all security resources from performing their intended functions.

As the DDoS threat landscape evolves, so does the role of the security team tasked with protecting against these sophisticated and adaptive attacks. Gaining clear visibility into the attacks lurking on the network is rapidly becoming a priority for network security professionals. Next-generation DDoS first line of defence solutions provide security teams with the tools required to better protect their organisation against the dynamic DDoS threat landscape.

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ABC audited circulation:
19,679
1 Jul 2011 –
30 Jun 2012

Immigration and Customs Enforcement, Homeland Security Investigations, and Cisco's Global Brand Protection Team as part of an ongoing investigation.

Detective inspector Mick Dodge from PIPCU said: "Cisco products are used by organisations worldwide to underpin their IT infrastructures. Businesses need to have confidence in their supply chains and be aware of the risks that counterfeit

products can have on their networks, potentially compromising integrity and functionality including significant network outages."

Launched in April 2013, PIPCU is a specialist national police unit dedicated to protecting UK industries that produce legitimate, high quality, physical goods and online digital content from intellectual property crime.

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Gigaclear secures £30m for rural FTTP

Gigaclear has secured £30m in funding to accelerate the build of new FTTP networks in rural areas. Prudential has committed up to £20m, while Gigaclear's existing shareholder, Woodford Investment Management, is promising a further £10m from funds under its management. Gigaclear has already built and launched 23 rural fibre networks, and has a further 31 under construction. The company is targeting a market of 1.5 million rural households and businesses, and says it will deliver "world class" ultra-fast broadband at up to 1000Mbps. Gigaclear's chief executive Matthew Hare says: "These investments give us the resources needed to accelerate our roll out over the next 24 months to many more communities." ■

Daisy upgrades core network

Daisy Group has upgraded its MPLS/IP core network to 100Gbps. Also known as the *Daisy Digital Platform*, the network is based on Cisco's *ASR9000* service provider routing platform. It comprises a fully resilient optical ring architecture in southern England, serving all customer access, interconnects, peering and nationally distributed data centres. By adding 100GbE Ethernet capability, Daisy says its *Digital Platform* is now able to deliver a ten-fold increase in capacity. It adds that the platform is monitored and proactively managed, ensuring "optimum experience" for customers. ■

Vodafone manages privileged accounts

Vodafone has implemented CyberArk's *Enterprise Password Vault* and *Privileged Session Manager* to protect and manage its privileged accounts, identities and applications. The vendor says it will help ensure Vodafone's privileged accounts are highly secure while enabling full management of privileged credentials. This will be based on security policy, and controlling and monitoring privileged user access across critical machines. CyberArk was selected as part of Vodafone's Privileged User Management Access (PUMA) programme to ensure that the best security solutions are implemented across its global networks. ■

Computacenter supports shared ICT for NHS in Worcestershire

NHS hospitals, health centres and GP surgeries in Worcestershire will be able to provide a more responsive and efficient service to thousands of patients thanks to a new ICT partnership with Computacenter.

Worcestershire Acute Hospitals NHS Trust, Worcestershire Health and Care NHS Trust, and Worcestershire's three Clinical Commissioning Groups have signed a shared ICT services contract. Their aim is to improve the reliability of core clinical systems as well as the availability of electronic patient records and other important information.

Under a five-year deal, Computacenter will be responsible for remote and desk-side support for more than 9,000 NHS staff across over 160 sites, including eight hospitals and 66 GP surgeries. It will manage and maintain the organisations'



Computacenter's Edward Kenny says a shared approach to ICT service delivery will drive greater innovation for the NHS in Worcestershire.

core ICT infrastructure which includes 500 servers, thousands of networking components, and 600TB of storage. The first phase of the service went live at the end of last year and will continue to be rolled out across all three organisations during the rest of 2015.

Computacenter says a modernised ICT framework will provide a solid foundation for future technological initiatives, such as mobility, desktop virtualisation and secure information sharing, across the NHS.

"By taking a shared approach to ICT service delivery, the NHS in Worcestershire will be able to drive greater innovation, enable better governance and deliver measurable results in a rapid timeframe," says Edward Kenny, Computacenter's director of regional government.

A number of ICT transformation initiatives are already being planned in Worcestershire, including providing enhanced connectivity for the county's GP surgeries, and establishing UC for community and mental health workers.

Computacenter will also be assisting the organisations in transforming data centre operations. As well as consolidating and virtualising the server and storage estate, the firm says it will be adding greater resilience to the data centre to prevent clinical application outages. ■

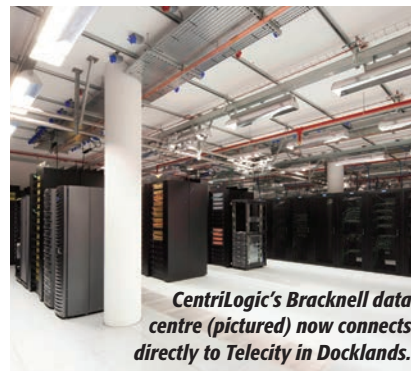
CentriLogic links to Telecity to cut connection costs

CentriLogic has announced the successful completion of the first phase of a major upgrade that will help its London-based customers reduce the cost of connectivity into its data centres.

With a UK data centre in Bracknell, North America-based CentriLogic specialises in managed hosting and co-location services. It has now added multiple 10GBps and further Tier 1 IP transit connectivity links directly into Telecity's interconnection point in London's Docklands.

The firm says this will give its clients based in the capital a lower cost option to directly connect the Bracknell data centre to its wider global network of centres in the Americas and Asia.

CentriLogic says it has made "significant"



CentriLogic's Bracknell data centre (pictured) now connects directly to Telecity in Docklands.

investment in the project including equipment, dedicated lines as well as an overhaul of the data centre backbone to accommodate the new 10GB links. In addition, the upgrade

includes dedicated SIP trunking to accommodate direct peering for UC solutions including CentriLogic's own partnership which serves the Alcatel-Lucent Enterprise channel community in the UK.

Nigel Offley, CentriLogic's EMEA VP, says the upgrade is part of a wider push to ensure clients have a flexible range of connectivity solutions which can be delivered as integrated service packages to help reduce costs and complexity. He adds: "Our upgrade in the UK mirrors similar interconnection projects around the world that are furthering our global capabilities."

Offley says that when CentriLogic launched in Europe in 2012, it chose to locate in Bracknell for its security, ease of access and lower operating costs. ■

Ultra-fast network from TrueSpeed and Hibernia

TrueSpeed Communications and Hibernia Networks have teamed-up to enable ultra-fast broadband delivery across Somerset and Wiltshire.

TrueSpeed is rolling out FTTP from Bath into the Chew Valley, and high specification ducting from Hibernia Networks runs through the middle of its proposed network.

Under the partnership deal, TrueSpeed has purchased sub-ducting along the route from

Hibernia which will allow it to complete its network build ahead of schedule. It promises to increase broadband connectivity with speeds from 100Mbps to 10Gbps for thousands of businesses and homes along the 77km stretch from Bream to Chippenham.

Local MP Jacob Rees-Mogg said: "The goal is to provide all of North East Somerset with access to the fastest broadband available, helping our businesses grow.

This partnership enables our communities' access to all the digital age has to offer, now and in the future."

Hibernia Networks is installing the 4,600km *Express* transatlantic submarine cable system that will provide a high capacity, low latency fibre optic path between New York and London, and connecting Halifax in Nova Scotia with Bream in Somerset. ■

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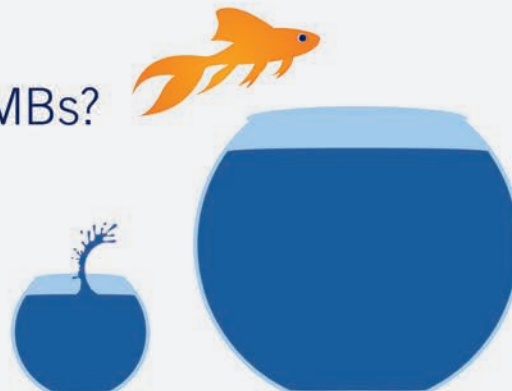
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By using its CloudBridge Virtual WAN, Citrix claims mobile workspaces can be created for less outlay.

Citrix powers 'always-on' branches

Citrix reckons its new *CloudBridge Virtual WAN* solution reduces the cost of delivering applications, documents and IT services to branch offices by up to 80 per cent, while ensuring nearly 100 per cent application availability.

According to the company, scaling WAN bandwidth is expensive for enterprises that have traditionally relied on costly MPLS services to avoid disruptions to their business and maintain the usability of mission-critical applications.

To address this, *CloudBridge* allows organisations to create a virtualised WAN by bonding together multiple network services, such as MPLS, broadband, mobile and satellite internet, to maximise network capacity and reliability.

Citrix claims the software constantly assesses the performance of paths within

the virtualised WAN to instantaneously and automatically adapt to changing network conditions. It says this ensures constant connectivity of mission-critical applications without human intervention or complex routing table reconfigurations.

Other benefits include enabling enterprises to "easily and seamlessly" pool active and backup link capacity, therefore eliminating wasted bandwidth. Citrix says *CloudBridge* provides a failover system to ensure adequate bandwidth on the best-performing remaining paths is used to deliver business-critical applications.

It adds that advanced encryption allows the secure connection of branch offices to cloud services. Users can also easily monitor WAN performance via a simple management system that provides end-to-end network visibility. ■

'Energy Management-as-a-Service' helps cut IT energy costs



Planet Hippo has become the UK's first ISP to offer Cisco's new 'Energy Management-as-a-Service' offering on an e-commerce basis. It's claimed the cloud-based solution provides 100 per cent visibility into the energy use of every network connected device, and will help corporate and public sector users to cut IT energy costs by up to 35 per cent.

The *Cisco Energy Management* suite enables customers to measure and manage the energy use of all connected devices. These can be from any vendor and can include switches, routers, computers, APs, IP phones, etc., across distributed office and data centre environments.

Planet Hippo provides a web-based portal where users can access a single dashboard showing wasted and saved energy for every IP-connected device, along with detailed energy data and recommendations for optimising usage. The ISP says its cloud-based solution also allows

Cisco's 'EMaaS' is designed to provide 100 per cent visibility into device energy use.

organisations to demonstrate compliance with regulatory requirements for sustainability, carbon accounting and energy use reporting. This includes ESOS, the mandatory energy assessment and energy saving identification scheme.

Planet Hippo MD Darren Lavender says: "With no hardware or software rollouts to worry about, the Cisco solution can be quickly and easily deployed for a low monthly cost without requiring high levels of technical expertise." ■

Orwell helps ex-pats not be down and out in London (and beyond)

Orwell will host its new online current account service *ipagoo* on Interoute's cloud platform. Available in France, Italy, Spain and the UK, the service is designed for all customers wishing to carry out transactions abroad, and is claimed to provide the world's first truly cross-border service.

Orwell is an independent financial group that provides services in cash management, including current account, multi-country and multi-currency services.

According to the London-based firm, 2.5 million people within the EU change countries every year. It says they find it difficult to open a traditional bank account, which can take several months to complete and the process can be complicated and time consuming.

The company adds small businesses that make regular transactions in the EU are faced with prohibitive costs and delays in payment that can damage their business.

Orwell needed a highly secure hosting provider with PCI-DSS certification, reliability and performance in order to launch *ipagoo*. It chose Interoute which has designed a secure distributed and hybrid cloud platform hosted at two sites – one in London as a live environment and the other in Paris for test and development.

In addition, the company is providing backup services as well as a VPN tunnel between Orwell's Fenchurch Street premises and the hosted platforms.

Interoute offers cloud services in Europe using more than 67,000km of lit fibre, 12 data centres, 13 virtual data centres and 31 colocation centres. The operator says it also has connections to 195 additional third-party data centres across the continent.

"Interoute's European dimension fits our requirements perfectly, both in terms of regional language and hosting locations," says Orwell CIO Russ Fray. ■

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RAC drives efficiency with cloud customer contact platform

The RAC is said to have "revolutionised" its customer experience and improved operational efficiencies with NewVoiceMedia's cloud customer contact platform. Since deploying *ContactWorld for Service*, it's claimed the motoring organisation has increased customer satisfaction to 93 per cent and reduced call abandonment rates to less than three per cent.

NewVoiceMedia says the RAC chose its platform because of its integration with *Salesforce*, flexibility and scalability. It says the company can simply pay for the number of licences it requires, upscale or reduce these according to business needs, and all at a "fraction of the cost" of traditional systems.

The RAC now benefits from access to a customer's entire history of interactions via a single screen, as well as real-time reporting and analytics. NewVoiceMedia says this offers complete visibility of contact volumes,

advisor performance and customer experience, enabling the RAC to improve business processes and advisor performance.

Using 'click-to-dial', agents can make calls directly from within *Salesforce*, delivering significant efficiency improvements while reducing dialling errors.

ContactWorld for Service also features 'whispers' to announce call information and automatically presents customer information before the call starts, allowing the agent to handle enquiries more effectively.

"NewVoiceMedia has completely transformed the way we handle our calls," says RAC service delivery manager, David Peate. "With *ContactWorld's* real-time reporting, the team can keep on top of changes in call volumes and the reasons for those calls, enabling us to improve our processes and service every week." ■

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Our early years were spent providing third party technical resource to service providers and manufacturers. Our first major projects were for the North Sea Oil and Gas Industry building integrated voice, data and telemetry solutions for offshore installations. We worked directly with the product developer/inventor, building and testing equipment to his design specifically for the emergency communications systems for many oil and gas production companies. The experience of building and testing solutions to such exacting standards provided the baseline for our engineering services up to the present day.

As a direct result of our engineering experience, we were asked by various service providers to develop and present bespoke technical training courses for engineering staff. These organisations included Cable & Wireless, Bell Communications, Bell Technical Services and The Stock Exchange. The courses were a mix of theory and hands on practical work to prepare their engineering teams for new applications and technologies. We designed and built our own training test racks to simulate real life technical problems.

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IT systems in the spotlight

While leisure and tourism in the UK often draws on great British traditions, such as theatre and football, the technology required to run the venues needs to be state-of-the-art.

TGI Fridays connects with Astro Communications

Since launching in the late 80s, TGI Fridays has opened some 65 restaurants throughout the UK. With such a wide geographical spread, controlling the quality of service to customers as well as maintaining high standards in employee operations is challenging. What is essential in managing such a sprawling business is, of course, a good communications network.

In April, the company installed a new MPLS network with the help of Astro Communications. Dartford-based Astro has been working with TGI Fridays for several years, supplying and managing the wireless network for its restaurants and support centre. But it still had to undergo a formal tender process before being awarded a three-year contract for

the supply and management of the WAN and centralised data centre services.

TGI Fridays uses its network for all essential services to the restaurants, such as payment traffic, supplier orders, internal communication via the intranet, hosted VoIP, email and web access.

Astro has provided various connectivity technologies including Ethernet, FTTC and ADSL, many backed up by 3G failover. The WAN and infrastructure in the primary and secondary data centres together with the shared services centre at head office are monitored round the clock at Astro's network operations centre. A granular and bespoke alerting process has also been put in place to ensure that maximum available uptime and minimum disruption to the network is guaranteed.

Jeremy Dunderdale, head of IT for TGI Fridays UK, says the drivers for change were: the need for an improved level of service, improved network performance, and reduced total cost of ownership.

He adds that combining the provision and management of all services and infrastructure via Astro has given the company better visibility of the service it offers and simplifies troubleshooting. "We can fully monitor and manage all issues and improvements within our infrastructure through the close relationship of a single partner."



Stage set for dramatic change in IT scenery

The Royal Shakespeare Company (RSC) employs around 500 regular and permanent staff. This includes an IT team of 10, and to ensure they can cope with the company's daily demands, a second line of support and services is provided by Reading-based IT company Nouveau Solutions.

When the RSC moved out of the Barbican Theatre to new offices in Earlham Street in London's West End, it became apparent to the in-house IT team that the ADSL link was not sufficient for its needs.

All of the RSC's IT applications reside in Stratford-upon-Avon, and the poor connection was not allowing staff to work properly as it lacked the bandwidth to support the volume of data that needed to be transferred by the sites. Moreover, the VPN link into the London office backup was also used for data and was compromised by the performance of the ADSL connection.

Nouveau decided that an urgent upgrade was needed. Operation-sensitive data needed to be stored, backed up and transferred as quickly as possible. Production staff required a more robust, resilient connection to gather and store data relating to the RSC's tours both in the UK and around the world. Stage sets, props and costumes were frequently in transit, and all of it needed to be organised and retrievable which meant that a good connection was vital.

Nouveau advised the RSC to switch from ADSL to SDSL which it describes as the "next step" on from ADSL. This provides high bandwidth to be uploaded and downloaded at equal speeds.

The SDSL link was installed at RSC's new central office. Supplied by altoHighway, it provides a more robust connection, and is said to be more appropriate for business-critical data as well as for more frequent backups. It also offers greater VPN throughput for RSC's and Nouveau's offices, resulting in less downtime.

The SDSL has impacted many aspects of the RSC's operations, improving the reliability, speed, and accessibility of vital data. Now with the high-quality link to Stratford, staff at the head office in West London can work with each other as well as sponsors, with whom they often have to exchange large graphics files.

The RSC's head of IT Chris O'Brien says: "The SDSL connection has made a significant difference to both the speed and quality of our connectivity. We are so pleased with the connection that we are considering migrating the entire office network to SDSL. We also benefit from a seamless relationship with Nouveau, who have a full understanding of the business critical aspects of our operations."



Safety first as stadium deploys Sepura DMR

The Abbey Stadium has been the home of Cambridge United FC since 1932, and since the club's promotion to League Two the team has played in front of 8,000 capacity crowds almost every week.

On match days, Cambridge United's security team manages fans, deals with queries from the public, and ensures health and safety procedures are followed. A good communications system is vital in ensuring everything runs safely and smoothly. Increasing radio traffic at the stadium and the unreliability of the club's analogue radio system therefore drove the need for Cambridge United to upgrade and replace its communications equipment.

Stadium manager Ian Darler says the club's existing communications equipment had become obsolete and unreliable, and was frequently breaking down. In January 2015, the FA Cup match with Manchester United was the catalyst for the adoption of Digital Mobile Radio (DMR) technology.

The solution chosen was a system from local-based vendor Sepura. Its regional direct market reseller, Direct Telecom Services, worked closely with Cambridge United to carry out a site survey and designed a solution that met its communications needs.

On any given match day, 42 members of the club's staff, including stewards and club medics, now use Sepura SBP8000 hand-portable radios to secure the venue and provide swift rescue and assistance whenever necessary. The match day safety officer is the main point of contact for any emergency.

"Every single step of the migration process from analogue to digital went very smoothly; it has been a positive experience for all of us," says Darler. "Direct Telecom Services delivered the radios in record time and provided outstanding support throughout the migration process."

He adds that the new equipment is considerably more rugged and durable, and has improved quality of communications across the team. "Messages are now delivered once and clearly in all circumstances," says Darler.

Earlier this year, the new system was put through its paces during the FA Cup tie against Manchester United in January. Darler says stewards had to deal with 49 incidents, including a large number of ejections from the ground. There were three health emergencies, and swift and clear communication between stewards and medical staff ensured that the appropriate levels of assistance and treatment were provided.

"Staff were under immense pressure, but were able to handle every emergency successfully thanks to Sepura DMR radios," Darler concludes.



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IBM estimates that we create 2.5 quintillion bytes of data every day. Such large quantities present a major challenge when it comes to processing, storing and analysing data in a meaningful way.

What's the big deal with Big Data?

Some companies see Big Data as a natural resource. But what is it? And how can it be managed and analysed by IT professionals? ABDUL MONTAQIM finds out.

The reason why Big Data is important to understand as an issue is because the sheer volume of data being created today is making gathering information and analysing it a very difficult task.

According to recent figures from Cisco's latest *Visual Networking Index* released in May, IP traffic in Western Europe is forecast to reach 24.7 exabytes per month by 2019. In the UK, it predicts there will be 614.9 million networked devices in the next four years, up from 317.5 million in 2014. While this will all result in the creation of huge amounts of data, 'Big Data' is more specific. Gartner defines it as "high-volume, high-velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making".

IBM describes Big Data as a "new natural resource". It reckons we create 2.5 quintillion bytes of data each day from a variety of sources. A quintillion is a one with 30 zeroes attached to it.

Over the years, IBM has developed a range of cloud-based data management and analytics solutions to help organisations predict customer behaviour and outcomes

with speed and ease. Steve Mills, the company's SVP and group executive for software and systems, has previously said: "As the value of data continues to grow, the differentiator for clients will be around predicting what could happen to help transform their business with speed and conviction."

Jeff Veis, head of the Big Data business group at HP Software, agrees. He says companies want to improve products, personalise service, improve loyalty, cross-sell, upsell, improve operations, predict outcomes and maximise margins. "They want Big Data to help transform business into an active collaborative data-driven partner with IT, which is easier said than done. The biggest change is that business is no longer a passive consumer of data."

With the data tsunami predicted to get bigger, one problem for network managers is where to store the deluge.

"Managing data growth has been seen as a problem to be solved since the early days of computing," says Molly Rector, CMO for storage vendor DataDirect Networks (DDN). "What puts us in the Big Data age now versus say, 20 years ago, is the fact that

we view data growth as an opportunity, not just a problem. The 'three Vs' of velocity, volume and variety do a good job of describing the things that make data 'Big': how fast it is generated or ingested, how much of it you keep and manage, and how data varies by type and size."

Big Data is being created by a wide variety of networks and networked devices such as sensors, satellites, surveillance cameras, web browsing trends, etc. Rector says it all needs to be collected into central repositories. "Government institutions, universities or commercial conglomerates often host these. The more data that is available to analyse, (i.e. the larger the data set) the more powerful Big Data becomes."

She adds that during high performance functions like data ingest, generation, processing or re-processing, data too large to fit in a computer's memory resides on external, high-performance disk systems. When the data is no longer needed for high-speed access, its owner will typically reduce the cost of storage by migrating it to lower cost archive disk or tape, or even to a cloud or off-site storage facility.



"The differentiator for clients will be around predicting what could happen to help transform their business."

Steve Mills,
SVP of software and systems,
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The value of Big Data

Any organisation can benefit from using Big Data if it can analyse and utilise it in the appropriate way. However, typically it is the large, well-resourced corporations that make most use of the stuff.

Rector believes any data-centric organisation must use Big Data in order to remain competitive in its field. "This includes financial services for high-frequency trading, genomic and biotech institutes to accelerate time to discovery and time to cure, manufacturing organisations for rapid design validation and simulation, and so on.

"Using data predictively helps organisations model data-centric conclusions earlier in the design process and with significantly less hardware investment. Big Data, when used strategically, helps them predict the future with relative accuracy, greatly reduc-



"Any data-centric organisation must use Big Data in order to remain competitive in their field."

*Molly Rector,
Chief marketing officer,
DataDirect Networks*

intelligence, media, cloud and commercial environments generate, process, re-process and store Big Data, and many even need to share them among multiple sites or institutions for collaboration, publication or high availability purposes.

For example, Rector says at Oak Ridge National Laboratory in the US, multiple projects run in parallel on the

ing investment risk and greatly accelerating time to market and time to revenue."

She adds that most high-performance workflows in research, government

country's fastest research system, looking for practical insights into fundamental physical systems through techniques such as molecular scale modelling.

"To deliver this kind of fidelity they rely on a 27-petaflop system that can access 40 petabytes of data at over a terabyte a second," she says. "At some of the world's largest banks, quantitative analysts model the effectiveness of high-frequency trading algorithms by testing them against historical market (tick) data. The more data they can test against, the more confidence they can have in the quality of the algorithm and its ability to perform competitively in a live trading environment. The faster the data can be reached, the more can be used for testing, with the most competitive institutions regularly testing algorithms against years of tick data."

"A singular source of truth"

With data generation on the rise, the cost of managing data over its lifecycle also grows, leaving Big Data sites with growing administration cost and complexity. To address these, requirements for end-to-end systems that can manage data automatically across high-performance workflows, archive and even cloud storage are on the rise, though solutions that can actually deliver such functionality today are few.

Ron Lifton, senior solutions marketing manager at NetScout Systems, says there are many considerations to be made when carrying such vast quantities of data.

"Big Data is growing in volume, variety, and velocity in a shared connected world where there is no 'off'. Whether it is a corporate database, a network element or a web service, IT is tasked with anticipating change and reducing the time it takes to resolve service delivery issues by pinpointing the root cause. To do that, traffic data must be used as a singular source of truth, providing full visibility into Layers 2 through 7, and to gain a holistic and contextual end-to-end view of virtual, physical and hybrid environments."

According to Lifton, this traffic-based intelligence is needed to rapidly triage user impacting problems and improve capacity and infrastructure planning for Big Data initiatives. "Through a comprehensive service assurance solution with deeper insights into network performance and resource usage, enterprises ranging from manufacturing and healthcare, to highly competitive retail banking, insurance and travel, have the confidence to operate, innovate and compete at the highest level."

Security is always an issue, and when so much information is being collected about so many people and objects, it is difficult to see how all of it can be protected. But as Rector points out, the volume of data has no relation to the amount of security needed.

"Typically, the amount of data does not dictate security considerations. For most institutions, security practices are determined by a combination of applicable regulations and policies based on best practices and the institutions' own experiences.

"Regulatory policies regarding data management apply in many fields – utilities, financial institutions and any publicly held company. For institutions handling personal data (this could be anything from genomics research biobank samples to supermarket loyalty programmes) the protection of personally identifiable data has stringent guidelines in most countries."

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But HP's Veis believes security must be upgraded and standards raised in a Big Data environment. "Using encryption needs to become the norm. If implemented properly, security with regards to Big Data then becomes a moot point. With most large enterprises employing chief information security officers that report at the board level, standards should rise, and the risks associated with breaches lowered."

All the major security specialists have developed a number of security solutions aimed at network managers who deal with Big Data. But how to utilise them and effectively manage Big Data remains a challenge. NetScout's Lifton says: "The connected world is evolving at warp speed, with dizzying complexity. Things can go wrong with the network, transport, servers, service enablers (like DNS and DHCP), middleware and databases."

"IT teams can't face the challenges of delivering Big Data services with traditional silo-specific tools because they miss the big picture. Instead, they need a comprehensive service assurance solution that uses traffic data to gain visibility into service interrelationships and dependencies."

Lifton says that gaining deep and real-time insight into application and network performance across both physical and virtual environments not only dramatically reduces the mean-time-to-knowledge of service issues but also assures a "flawless" Big Data user experience.

"Even Bigger Data"

With companies such as Cisco and Ericsson (in its regular *Mobility Report*) forecasting ever-increasing rises in traffic, how will corporate networks deal with the data storm that becomes even worse when you start factoring in Big Data?

SevOne specialises in network performance and management. Tom Griffin, the company's EMEA VP of systems engineering, says: "Big Data is putting an unprecedented strain on networks, which are evolving into things of previously unseen complexity and scale."

"For the manager of these networks, the role remains the same: to monitor performance and protect against a failure

that could prove catastrophic for the business. What has changed thanks to Big Data is the sheer volume of information they must contend with from across the network. Understanding traffic patterns and looking for data anomalies throughout the course of a day, week and/or month becomes much more challenging when there is so much information to hand, especially if using legacy tools."

One thing you can safely predict about the future of Big Data is that it will be 'Even Bigger Data' in the years to come. Not only will 'conventional' traffic be generated by human beings, there will also be the billions of machines all connected through the Internet of Things (IoT).

Machina Research is predicting that cars connected to the IoT will cause data jams on networks, particularly in areas near mobile phone towers where

rush hour traffic is worst. And that's even before the inevitable appearance of driver-less vehicles.

However, network managers will have more of an understanding of the issues and ever-more powerful tools to help them make sense of it.

Veis says: "In the 2000s, traditional IT was fragmented. Over the past decade it has become more integrated to the point where we are now able to perform predictive analytics today."

"Moving forward, we are heading towards an era of prescriptive analytics. Predictive analytics helps model and forecast what might happen. However, *prescriptive* analytics seeks to determine the best solution or outcome among various choices, given the known parameters. Advancements in the speed of computing and the development of

complex mathematical algorithms applied to the data sets are making prescriptive analysis possible. Optimisation, simulation, game theory and decision-analysis methods will become the norm by the end of 2017."

Veis adds that it's also important to address social media's role in Big Data. He says analysing semi-structured human data has been "all the rage" over the past two years, particularly the 'sentiment' analysis of social media.

"However, the power of social media by itself is over-rated especially if it is analysed in isolation without linking it to machine and business data."

"That said, exploring the Big Data potential of audio recordings, archive files, image files, RSS feeds and video extras will be a growing field with many start-ups now entering the market." ■



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Microlease names team to spearhead CPO channel

Harrow, UK, Wednesday, 29 April 2015:

Microlease plc., the leading test and measurement equipment management company, today named Paul McCloskey (pictured right) as Board Level Director dedicated to developing Certified Pre-Owned (CPO), a comprehensive programme to address a growing customer demand. It also named three senior executives, Philippe Suel, Jean Bernard and Neil Whitehead, who will report to him and oversee the CPO channel in specific European regions.

Commenting, Paul McCloskey, said, "Microlease's mission is to help customers acquire, use and dispose of their test equipment assets with maximal financial efficiency. The Certified Pre-Owned programme is central to that mission. It creates the opportunity for buyers to realise a risk-free financial saving by acquiring quality, guaranteed instruments at a much reduced cost. For customers who are using the Microlease Asset Management service, it provides the opportunity to achieve the best possible financial return on quality surplus test equipment."

The Microlease Certified Pre-Owned programme is based on instruments sourced from the Microlease rental fleet as well as the growing number of blue-chip companies whose test assets it manages. A number

of quality instruments that have been taken in part exchange are also included. Each instrument is inspected, refurbished and calibrated according to a 23-step certification programme and carries a comprehensive Microlease warranty. It includes instruments from leading manufacturers including Keysight Technologies, Anritsu, Rohde & Schwarz, Tektronix, JDSU and EXFO.

Paul McCloskey was previously Director of European Sales at Microlease and is a Board Director. He has spent 28 years at the company and has 38 years' experience in electronics test and measurement. He started his career as an electronics design engineer with Lucas.

Microlease has been presented with the highly prestigious Frost & Sullivan Company of the Year award for Best Practise in Global Test and Measurement Rental and Leasing Services two years in a row, for 2013 and 2014.

About Microlease

Microlease is the market leader in electronic test equipment, offering a range of solutions to help organisations globally use test equipment efficiently. Its services help minimise the costs of

acquiring test equipment, optimise its use and maximise return at end of life without stretching capital expenditure, and include rental, leasing, sale of new and used equipment and buy-back as well as full asset

management. Microlease supports its global customer base with over 57,000 test equipment assets worth over \$430 million. A team of 350 specialists serves Microlease customers in over 150 countries from offices across Europe, the US and Asia. Microlease currently provides equipment from leading manufacturers, including Anritsu, JDSU, Keithley, Keysight Technologies, Rohde & Schwarz and Tektronix.

Founded in 1979, Microlease is the number one test and measurement rental company in Europe. It is Keysight's Authorised Technology Partner (ATP) for the UK, Ireland and Italy as well as Premier Rental Partner (PRP) for Europe and Authorised Rental Partner for JDSU and Tektronix.

Microlease was awarded the 2013 and 2014 Global Company of the Year Award in Test and Measurement Rental and Leasing Services by leading research organization Frost & Sullivan. For more information, visit www.microlease.com.



"Using encryption needs to become the norm. If implemented properly, security with regards to Big Data then becomes a moot point."

Jeff Veis,
Head of the Big Data business group,
HP Software



microlease

The experts in Test Equipment management

off-the-shelf: data security

Fight them on the breaches

As the cyber criminals get smarter, here are some powerful weapons you could use to help defend your realm.

Cloud access security broker **Adallom** has teamed up with **OPSWAT**, a provider of software-based solutions to secure and manage IT infrastructure, to jointly-develop an advanced endpoint compliance solution for cloud applications.

Their integrated solution combines Adallom's purpose-built cloud application security platform with **OPSWAT Gears**, a cloud-based solution for device posture assessment and compliance to bridge the gap between SaaS and endpoint compliance.

Adallom claims its platform delivers a "seamless" experience, integrating with and securing cloud applications in minutes. It includes access control policies based on user, IP, device (managed or unmanaged), and role.

With the **OPSWAT Gears** integration, enterprises can now also monitor and enforce the status of **Windows** and **Mac** devices accessing cloud applications. This includes regulatory requirements such as endpoint antivirus, software firewall, OS patch status, and hard disk encryption.

The integration enables users to address granular use cases for cloud access. These include regulatory compliance for data at rest (such as HIPAA and FINRA) and ensures sufficient encryption of hard drives before allowing access to a cloud application.

It also ensures endpoints are protected and double-checks that they are free from viruses and malware before allowing access to sensitive cloud documents.

Both the Adallom and OPSWAT platforms support user self-remediation, and Adallom provides enforcement of granular access controls such as allowing access but blocking file downloads.

The developers say the entire process is nearly invisible to the end user, and can be configured by IT in "one click". When compliance issues need to be resolved, the end user is guided through remediation steps to gain access without contacting IT.

Unified Security Management (USM) 5.0 is the latest version of **AlienVault's** all-in-one security platform. It adds greater visibility into systems, data and users, with built-in essential security controls, compliance management and integrated threat intelligence.

USM 5.0 is aimed at mid-market firms that lack the IT budget and expertise to deploy numerous point security products and gather and analyse enough actionable information to stay ahead of threats.

For instance, AlienVault say managing the security of any number of assets can be challenging under the best of



EfficientIP claims **DNS Guardian** is the only solution that currently offers real-time analysis of the DNS cache-recursive transactions.

circumstances, and being able to identify and monitor all assets on a constantly changing network is critical. It claims **USM 5.0** makes it easier for IT teams with limited resources to find and group their assets, apply security controls, and monitor their assets for easier administration and simplified compliance management.

The new version is also said to offer 10x faster database performance and enhanced storage capacity for users to correlate and analyse more data, faster, and for longer periods of time than ever before.

USM 5.0 also features the **Rapid Response Message Centre** which ensures visibility of critical threat intelligence updates from AlienVault Labs. The software centralises delivery of all in-system alerts, warnings and messages within the **USM** console, enabling more immediate response to system issues and breaking threats.

CommVault has launched **Simpiana for Endpoint Data Protection** to help protect and enable a mobile workforce. The platform is said to enable compliance and e-discovery, while at the same time increasing productivity across the enterprise via self-service capabilities for data restore, secure file sharing, and advanced data analytics and reporting.

Endpoint Data Protection aims to ensure that sensitive business data remains safe and corporate data guidelines are met with IT customised policies. **CommVault** says it can accelerate legal response times and compliance readiness through a single collection and search of all electronically stored information across an organisation.

Simpiana software is FIPS 140-2 certified, ensuring data in transit and at rest comply with industry and government regulations and standards.

CommVault adds that security and efficiency are delivered with role-based access and the ability to easily place searched data into legal hold. Network managers can also utilise remote wipe capabilities to minimise the risk of critical business data being stolen or lost due to an unforeseen event.

Endpoint Data Protection features several capabilities that can be purchased as modules to meet each unique need. For example, these include rapid endpoint backup and recovery. **CommVault** says this helps gain control of endpoint data with rapid, efficient, secure and transparent laptop and desktop protection. It also has source-side de-duplication, opportunistic scheduling and bandwidth throttling.

EfficientIP reckons **DNS Guardian** is the first solution to ensure 100 per cent DNS cache function availability under attack.

According to the vendor, IT professionals have historically installed security solutions in an effort to block illegitimate traffic during an attack. However, until now they have not been able to accurately differentiate legitimate from non-legitimate traffic. As a result, legitimate traffic is also blocked, and this approach is also

ineffective against insidious attacks.

DNS Guardian is said to use a unique approach that separates the two DNS functions (cache and recursive) in order to dramatically strengthen and improve the security framework. Each function is protected separately allowing an uninterrupted service to be provided, even when one function is targeted by an attack.

The platform is claimed to be the only one that currently offers real-time analysis of the DNS cache-recursive transactions. This allows users to detect specific DNS attack signatures (such as tunnelling, Phantom or Sloth domain attacks), protect the service by applying the appropriate counter-measures, and remediate the threat by identifying its source.

The **Rescue Mode** counter-measure, based on **DNS Guardian's** intelligence, mitigates volumetric or slow and insidious attacks on recursive and cache functions. This is said to ensure 100 per cent availability of the cache service, even under the most insidious DoS attack on the recursive function.

DNS Guardian also includes features to optimise network bandwidth and latency. The DNS cache functions share their information across appliances and are synced in real-time to reduce bandwidth usage. The cache is saved to operate at a 100 per cent level of performance after a server restart, therefore not requiring to be populated again by customer requests.

Lancop has released **StealthWatch System 6.6**, the latest version of its context-aware security analytics software.

The new software leverages the latest **Cisco ISE 1.3** platform to deliver more extensive network visibility and new mitigation capabilities to joint customers. Through the integration, **Lancop** says it delivers in-depth identity/device awareness. Security managers can also take quarantine actions directly from the **StealthWatch Management Console** by using **Cisco ISE's** dynamic network control capabilities.

Additionally, new support for **Cisco UCS** blade servers provides greater visibility within data centres, while support for **Cisco NBAR2** improves application performance monitoring and root cause analysis.

Featuring new security algorithms, **StealthWatch** aims to provide increased defence against increasingly prominent attack behaviours, such as machines communicating with phantom hosts, applications travelling over non-standard ports, brute force login attempts, suspect quiet long flows, etc. It's claimed the algorithms enable more precise analytics and actionable alarming on today's top threats.

Lancop says more "operationalised" security intelligence and an actionable host report enables users to more quickly extract and visualise the exact data they need to solve problems.

New alarm categories have been added to the main **StealthWatch Security Insight Dashboard** for faster threat investigation, while the **StealthWatch Host Report** has been completely revamped to display more dynamic and visual analysis of host data.



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Security teams need more than technical skills

A senior security expert says the “wrong people” are leading security awareness programmes in many organisations or lack the training they need to be successful.

Citing the *2015 Security Awareness Report*, SANS Institute director Lance Spitzner says security awareness programmes are still in their infancy and many lack the soft skills needed to ensure successful implementation.

The SANS Institute questioned around 225 respondents as part of a study carried out last October during National Cyber Security Awareness month. It found more than 75 per cent of the awareness programmes surveyed are run by people with highly technical backgrounds, such as IT administrators or security analysts, but with little experience in softer skills, such as communications, change management, learning theory or human behaviour.

The institute believes people limited to just technical backgrounds may be prone to view security strictly from a technical perspective. Spitzner says: “There is a role for IT and for other stakeholders such as auditors but they should contribute to the definition of sensible policies. Organisations need to invest in and train their security awareness officers on the softer skills required for any security awareness programme, or provide them access to the people who can deliver those diverse skills.”

According to the report, the top two challenges facing security awareness officers are employee engagement and lack of support from senior management. “They need to understand that their organisation cannot effectively mitigate risk if security is treated only as a technical issue,” says Spitzner. “The human issue must also be addressed.”

The study also revealed that 50 per cent of the organisations surveyed either do not have an awareness programme or have one that is immature and solely focused on compliance. “Only five per cent felt that they had a highly mature awareness programme that was not only actively changing behaviour and culture, but also had the metrics to prove it,” says Spitzner.

Among several recommendations, the SANS Institute advises any organisation with over 10,000 employees to have at least one person dedicated to running the security awareness programme.



SANS Institute director Lance Spitzner believes organisations cannot effectively mitigate risk if security is only treated as a technical issue.

Rising opportunities for IT professionals in the UK

The vast majority of UK IT directors predict technology will play an important role in business growth during 2015, according to research from Robert Half Technology (RHT). As a result, the specialist recruitment consultancy believes that demand for IT professionals will continue to rise.

RHT interviewed more than 100 senior IT executives from companies across the UK as part of its regular bi-annual study. When asked where technology will play a primary role in delivering business growth, 45 per cent of respondents said it would be in improving customers’ transactional

experience. A further third said it would be in driving process or employee efficiency, while the rest said it would either improve the customer communication experience (12 per cent) or deliver data to drive business insights and strategy (11 per cent).

“There has been an emphasis in the past on demand for skills in managing information security or building regulatory compliant systems,” says RHT associate director Charlie Grubb. “While that demand will not disappear, firms are again turning their attention towards business growth, whether by becoming increasingly efficient, or by improving the customer experience in order to secure a larger market share.”

RHT predicts that skills in areas such as building more efficient transactional systems, delivering mobile apps, and improving customer communications will be in particular demand.

NEW COURSES

Ethical Hacking Foundation Certification – EXIN

EXIN’s new *Ethical Hacking Foundation* is a vendor-neutral exam that tests IT professionals on basic knowledge and understanding of ‘ethical hacking’ – the ability to evaluate IT security systems by exploiting hardware and software vulnerabilities using hacking techniques.

The certification covers a variety of hacking-related subjects and methods, including network traffic analysing, wireless network hacking, network scanning, and the penetration of IT systems and websites.

The new certification is based on the e-Competence Framework. It is available through EXIN’s partner channel as well as its *Anywhere* online platform. www.exin.com

VoIP Technology and Applications – Informa Telecoms Academy

This two-day training programme examines the architecture, protocols and components of VoIP networks, and provides a detailed view of how the technology will be supported and integrated with existing network architectures.

On successful completion of the course, delegates will be able to: compare and contrast the H.323 and SIP protocol suites and identify the basic call establishment procedures in a SIP network; identify the evolution of fixed and mobile networks and understand how this will allow support for VoIP; describe the features and functions of the IMS; list the security threats to IP networks and the techniques to combat these; and more. www.telecomsacademy.com



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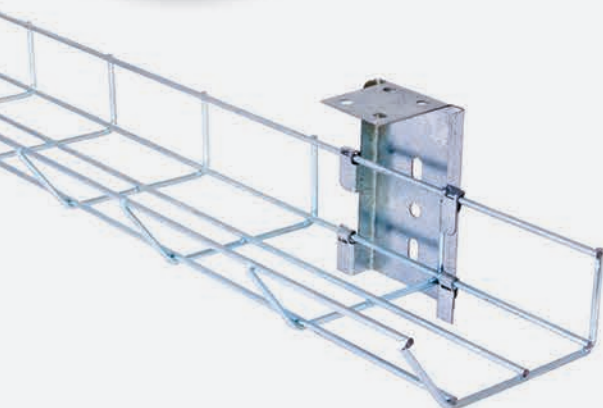
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