

Inside Networks

State of flux

HOW THE CLOUD WILL CONTINUE TO BE REVOLUTIONISED

FACT

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FACILITATING THE NEEDS OF CABLE MANAGEMENT AND AISLE CONTAINMENT

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Lesson plan

REAPING THE
BENEFITS
OF DIGITAL
TRANSFORMATION

True or false?

MOVING THAT CLAIMS
ENVIRONMENTAL
CELLENCE STACK UP

FICTION

Safe in the knowledge

WHY AIM SOLUTIONS MAKE
MANAGING COMPLEX
NETWORKS EASIER

Why Your Cabling Infrastructure Latency Matters

As a result of rapid Digital Transformation and adapting business requirements, 'higher bandwidth' and 'lower latency' have become core focuses for modern data center infrastructure designs. **But where does the cabling factor into this equation?**

Join Nicolas Roussel, Siemon Technical Manager – Central Europe for a deep-dive session exploring:

- What latency means for your IT infrastructure
- Why cabling infrastructure is a key factor to support latency requirements
- What choices are available to improve latency

Register your place today

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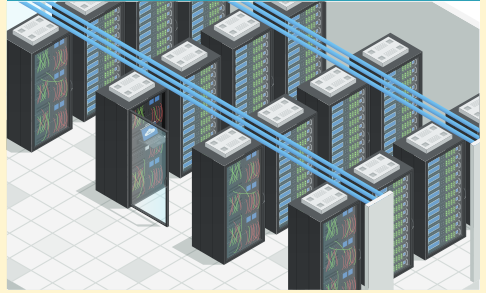
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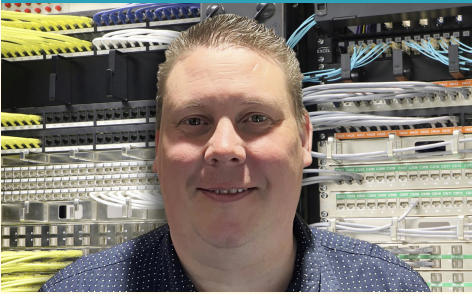
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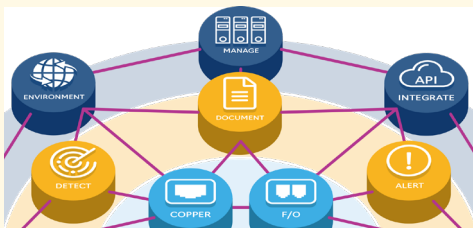
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In the early days of environmental awareness, the issue of greenwashing plagued the network infrastructure sector.

Companies that were actually doing very little in terms of sustainability were using what amounted to token gestures to overplay their commitment to the environment. Fortunately, the number of companies paying lip service to the issue has started to recede.

While some certainly view sustainability as the right thing to do for the planet, many businesses are not operating this way purely for altruistic reasons. A significant factor in choosing to adopt such a policy is based on the notion that end users of network infrastructures want to work with companies whose products and services can help them achieve their own environmental objectives. That's the subject our panel of experts examine in this month's Question Time and they offer some excellent advice on how to separate the lip service paid to being green from the hard facts.

In addition, we have a special feature dedicated to automated infrastructure management (AIM), intelligent infrastructure management (IIM) and network management. Rifai Khan of RiT Tech examines the peace of mind afforded by AIM solutions, while Rahul Rathod of Nexans explains why this technology is essential for intelligent buildings.

The need for high quality containment has never been more important but aisle containment and cable management have opposing needs. The former seeks to close every hole to keep air where it is needed, while the latter wants apertures for cable entry paths. We've asked Andrew Wreford of Rittal how to address this conundrum.

With lots more besides, I hope you enjoy this issue of Inside_Networks and if you'd like to comment on any of these subjects, or anything else, I'd be delighted to hear from you.

Rob Shepherd

Editor

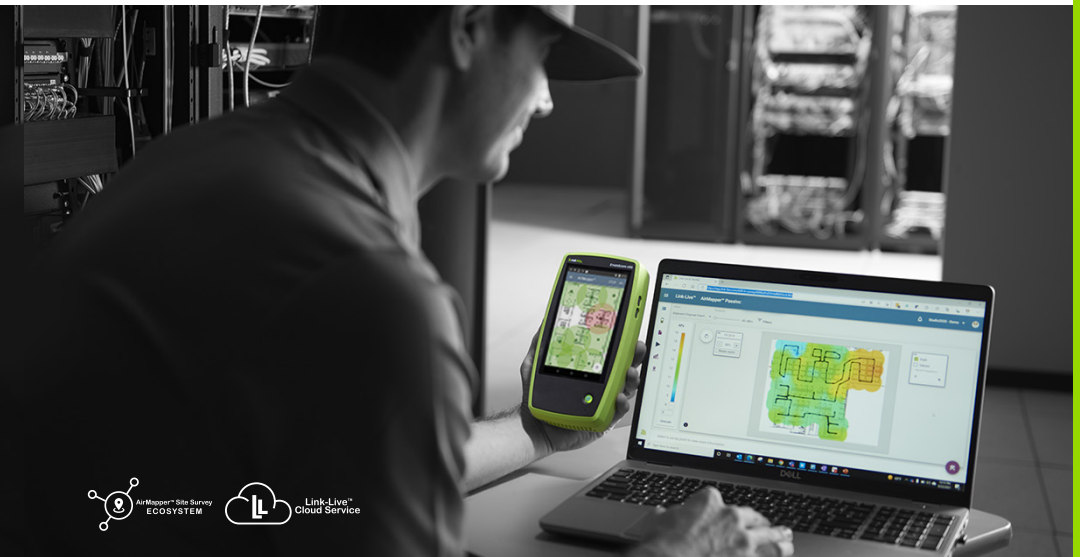


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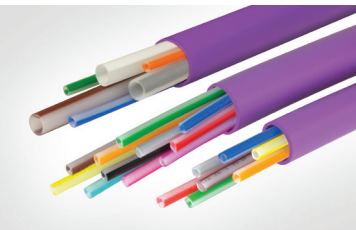
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Rapid growth in data demand is driving increased investor interest in data centres

The appetite for data and the emergence of new technologies such as 5G, artificial intelligence (AI) and autonomous vehicles is driving increased investor interest in data centres, according to a CBRE survey.

95 per cent of survey respondents plan to increase their capital deployment in the global data centre sector in 2022, with more than three-quarters of investors allocating over \$100m of equity to the global data centre sector and nearly half allocating over \$300m. Investor interest in the global data centre sector is robust across the risk spectrum, with half of respondents



expressing interest in opportunistic/new development, value add and core plus offerings.

Kristina Metzger, leader of data centre capital markets for CBRE in North America, said, 'Investors are flocking to data centres because of the stability they provide as mission critical

infrastructure hubs for global business. The emergence of new technologies such as 5G, AI and autonomous vehicles holds promise for further explosive growth in data use and, therefore, data centre demand.'

Telehouse opens fifth data centre at London Docklands campus

Telehouse International Corporation of Europe has opened its fifth data centre in London – Telehouse South. Located in London Docklands, Telehouse South is the provider's largest facility.

The first floor of colocation space at Telehouse South provides the capacity for up to 668 racks and 2MW of power, with a further upgrade to 2.7MW for an additional data hall scheduled for the end of 2023. At full buildout the 31,000m² facility will provide 12,000m² of colocation space and a total power capacity of 18MW.

Seigo Fukuhara, European Bloc chief and managing director at KDDI Europe and



Telehouse Europe, said, 'London Docklands remains an important strategic location for us and one of the most critical interconnection points in the world. As businesses continue to accelerate their digital transformation and demand for digital services grows, Telehouse South offers enterprises greater efficiency through

scalable hybrid cloud infrastructure, with faster access to data and applications and the flexibility to grow.'

Investment in IoT is critical to remain competitive as organisations face fresh challenges

A report by Wi-SUN Alliance has found that the internet of things (IoT) is a top IT priority for global organisations for the next 12 months. But while the vast majority (92 per cent) agree that they need to invest in IoT technologies in order to remain competitive, IT complexity and proven return on investment are creating challenges.

Overall, plans to rollout smart initiatives have grown in the last five years. Security and surveillance is the most likely IoT use case, with 87 per cent of respondents very likely or definitely planning to deploy the



technology in the next 12-18 months. This is followed by distribution automation and advanced meter infrastructure.

‘IoT is now a bigger priority than ever across all sectors and the scale of what is being planned over the next few years is encouraging,’ commented Phil Beecher, president and CEO at Wi-SUN Alliance. ‘Obstacles still remain and organisations, supported by IoT services and solutions providers and the industry as a whole, must work to overcome a mixture of technical and non-technical barriers.’

Knowledge and experience need to ramp up quickly to meet the expectations for cloud native development

OutSystems has released findings from a global survey of IT leaders and developers gauging the benefits and challenges of cloud native development, with results highlighting stark contrasts between expectations and readiness. The report reveals that while analysts expect a sharp rise in cloud native development globally, more than half of respondents (53 per cent) still don’t know much about it.

‘Cloud native technology unlocks new possibilities for application speed,

reliability and massive scale – if it’s done right,’ said Patrick Jean, chief technology officer at OutSystems.



‘Many businesses are showing a delta between their desired future state and their current knowledge and expertise. Our research reveals that most businesses don’t know enough about cloud native’s challenges and don’t have the staff to successfully implement it. The answer lies in high performance low code

tools that can help speed and simplify the path forward, and dramatically improve the way they build and manage apps for the future.’

76 per cent of organisations suffered downtime and data loss in 2021

An Acronis report that surveyed over 6,200 IT users and IT managers from small businesses to enterprises across 22 countries has found that 76 per cent of organisations experienced downtime due to data loss.

This downtime stemmed from a number of sources including system crashes (52 per cent), human error (42 per cent), cyberattacks (36 per cent) and insider attacks (20 per cent). As a result, 61 per cent of global organisations' IT teams now report a preference for integrated solutions

Candid Wuest



that replace their complicated stacks of cybersecurity and data protection tools with a single, unified console.

'As the entire world is increasingly at risk from different types of attacks, accelerating to universal all in one solutions is the only way to achieve truly complete cyber

protection,' said Candid Wuest, vice president of cyber protection research at Acronis. 'Attackers don't discriminate when it comes to means or targets, so strong and reliable security is no longer an option – it's a necessity.'

Public sector organisations are leading in multicloud adoption

Nutanix has announced the public sector findings of its global 2022 Enterprise Cloud Index (ECI) survey and research report. The research showed that more public sector organisations than average have adopted multicloud as a primary IT operating model, outpacing the global average. Adoption is expected to nearly double from 39 per cent to 67 per cent in the next three years.

Multicloud is now the dominant IT architecture in use worldwide, and it's also dominant across the public sector. In fact, the global public education sub-sector reported the largest usage among all ECI respondents (69 per cent), with adoption nearly twice the global average. To address top challenges related to cost, security, interoperability

and data integration, 75 per cent agree that a hybrid multicloud model is ideal.

Chip George



'The evolution to a multicloud IT infrastructure that spans a mix of private and public clouds is underway across the globe, with the public sector on the fast track,' said Chip George, vice president of public sector at Nutanix.

'Public sector organisations must look to hybrid multicloud solutions that meet security requirements, while delivering visibility, manageability and consistent policy enforcement, coupled with tight cost control, across environments.'

Moving to telecom SaaS services can cut IT costs by 25 per cent over five years

Communication service providers (CSPs) can realise IT cost savings of approximately 25 per cent over a five year period by adopting telecom services delivered through a software as a service (SaaS) model, according to research from Analysys Mason. The projected reduction compares to the cost of traditional on-premise model of software delivery and consumption, which entails CSPs having to buy, manage and maintain hardware and software infrastructure.

While market perceptions exist of telecom SaaS services having higher longer-term costs due to recurring monthly subscriptions, Analysys Mason said



Mark
Bunn

those perceptions did not typically take into account the full extent of potential benefits using SaaS services including lower initial investment and always having the latest software and technology. In the case of the on-premise model, CSPs often have to buy data centre resources every five years or so and use IT consultants regularly to manage their elaborate IT environments.

Mark Bunn, senior vice president cloud and network services at Nokia, said, 'There is a strong operational and financial case for moving to SaaS services today and away from the dated practice of buying customised software for analytics, security and other functions that run on costly, complex, on-premise infrastructure.'

NEWS IN BRIEF

Equinix has completed its deal to acquire MainOne for \$320m, marking the beginning of its expansion into the African continent. It augments Equinix's long-term strategy to become a leading African carrier neutral digital infrastructure company by being able to bring a full range of transformative technologies and connectivity to Nigeria, Ghana and Cote d'Ivoire.

Lenovo has committed to double investment in research and development (R&D) by hiring 12,000 R&D professionals around the world over the next three years, as well as setting a vision to achieve net zero by 2050. The intensified commitment to innovation is underpinned by its environmental, social and governance (ESG) commitments.

EPI has developed the Computer Room Utilization Ratio (CRUR) metric to address two areas for optimisation. First is the ICT environment and the second is the computer room and the direct supporting facilities.

Johnson Controls has acquired Xcell Misting.

According to the data presented by Atlas VPN, web threats increased by 133 per cent in November and December of 2021, compared to September and October.

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FOR MORE INFORMATION CONTACT:

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Opportunity knocks

Hi Rob

The coronavirus pandemic has, of course, had an immense impact on health, society, industry and economies. As soon as it emerged, entire industries were shut down, while others were severely disrupted. Businesses had no experience of such calamity, nor had they any contingency plans that came anywhere close to being adequate.

The last two years have taught us two key things. First, the impact of the pandemic will be with us for some time to come. Second, the proverbial black swan events can, and indeed will, happen eventually.

That means that we not only need to make permanent some of the rapid changes recently made, and make them more robust and operationally sound, but we need to rethink many parts of our business operations. How flexible are they? How robust are they? And how are they able to support other future

events that may have an unprecedented impact on their business? Not just in terms of another pandemic, but from other events such as terrorist activities, natural disasters, economic crashes, geopolitical breakdowns and major trade wars, for example.

For manufacturers, this ultimately means the optimisation of their operations to ensure that they are efficient, agile and robust. There are a plethora of ways this can be achieved. The way forward is for manufacturers to learn from the crisis and proactively identify pain points and weak points from across their operations.

These may include challenges in access to data, decision making resources or simply initial response plans to major disruptions. From this understanding, it's possible to work through sustainable, tactical improvements to eliminate these risks and constraints including through the effective use of technologies.

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Organisations can then build a vision for the future with a pipeline of short-term and long-term transformation opportunities that outline a path from recovery to thriving in the post pandemic world.

Once a lower priority on company budgets and agendas, digital transformation has, over the last two years, been pushed to the forefront of investment. This especially the case among those who found deficiencies in their technology and infrastructure, which impaired their ability to respond and pivot operations when the outbreak began.

Now, more manufacturers want to create nimble, flexible, and proactive manufacturing environments – driven by data. It indicates a remarkable shift from the investments in electromechanical automation seen over recent decades, which primarily focused on improving efficiency and productivity.

We now can do more than automate manufacturing. We can optimise processes, giving manufacturers intelligent means of understanding what's happening on the plant floor so they can make informed decisions to drive enhancements and adjust operations accordingly. Those that can readily collect, centralise, analyse and act on real time quality data will be the ones best equipped to recognise and navigate any future disruptions.

Jason Chester
InfinityQS

Editor's comment

Albert Einstein once said, 'In the midst of every crisis, lies great opportunity.' While the last two years have caused huge disruption across society manufacturers now have the chance to respond positively and reap the benefits of digital transformation.



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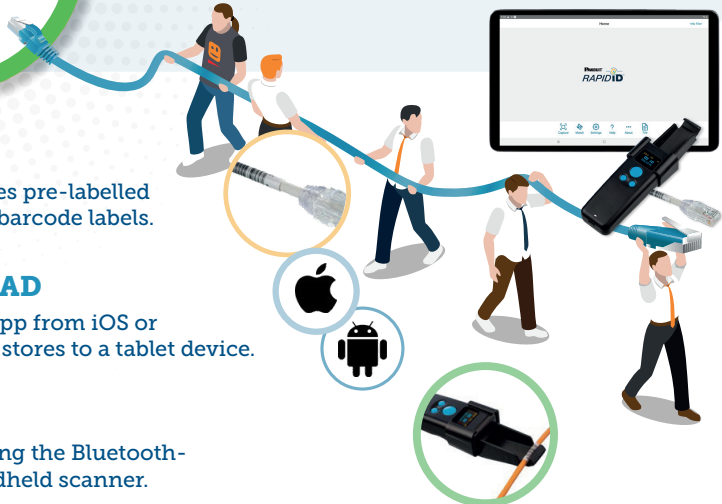
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2 DOWNLOAD

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3 SCAN

Barcodes using the Bluetooth-enabled handheld scanner.



Proof positive

End users of network infrastructure solutions are increasingly choosing to work with companies whose products and services can help them achieve their own environmental objectives. [Inside_Networks](#) has assembled a panel of industry experts to offer advice on how to separate the lip service paid to being sustainable from the hard facts

 The need to reduce carbon emissions is now recognised by the vast majority of end users of network infrastructure solutions, and many will only work with companies that possess exemplary environmental management and sustainability credentials.

Not so long ago, ‘greenwashing’ within the industry was rife. Companies were using what amounted to little more than token gestures to overlay their commitment to the environment. For those organisations that took the issue more seriously, this was a highly irritating state of affairs – one that simply served to dilute the whole positive message about sustainability and why it is so

important. However, the number of companies paying lip service to the issue has started to recede, driven in part by a greater recognition by manufacturers and providers of network infrastructure solutions of the need to be able to substantiate their claims.

Inside_Networks has assembled a panel of experts to discuss whether it’s important for manufacturers and providers of network infrastructure solutions to have green credentials and explain how to differentiate the environmentally friendly from the unfriendly.

Don’t forget, if you have a question that you would like answered [CLICK HERE](#) and we’ll do our best to feature it.



HOW IMPORTANT IS IT FOR PROVIDERS OF NETWORK INFRASTRUCTURE SOLUTIONS TO HAVE CLEAR, DEMONSTRABLE AND PROVEN SUSTAINABILITY BASED CREDENTIALS? CAN WORKING WITH COMPANIES THAT OPERATE SUSTAINABLY HELP INSTALLERS AND INTEGRATORS WIN BUSINESS, AND WHAT TYPE OF EVIDENCE SHOULD BE REQUESTED TO ENSURE THAT A VENDOR’S CLAIMS OF ENVIRONMENTAL EXCELLENCE STACK UP?

BRIAN DUVAL

CORPORATE SOCIAL RESPONSIBILITY PROJECT LEAD AT SIEMON

The drive towards environmentally sustainable business practices has long been a double-edged sword in the network infrastructure space – especially for installers and integrators.

Wading through vendor claims, customer demands and the potential minefield of finger pointing on who is responsible for what can leave network infrastructure professionals struggling to determine their ultimate role in the big green world.

But even as the need to address sustainability grows, the quantity and quality of information available to installers and integrators has more than kept pace. Looking back just a handful of years, environmental sustainability claims from most companies were a Wild West of sorts. Though they may have been good faith, well intentioned messages based on accurate data, there was a general lack of consistency on the key environmental benchmarks, as well as the methodologies to calculate them.

Fortunately, the smoke has started to clear. Globally recognised third-party organisations have emerged to set some basic green standards that can help installers build and communicate their environmental credentials and win more business.

Whether the customer requests it or not, installers and integrators need to include sustainability practices in bids/tenders and leveraging vendor environmental qualifications is the easiest piece of the puzzle. Choosing green partners and highlighting their credentials makes the installer's services greener by default.

Vendors should have information at the ready and good ones will have information based on recognised third-party standards. Installers and integrators can validate this info with some basic questions:

- ISO 14001 certified? This is still one of the most rigorous environmental certifications
- Are carbon footprint claims based on regionally/globally recognised standards, such as Greenhouse Gas Protocol, Carbon Trust, or others?

- Have they received certifications from organisations such as EcoVadis, Eco-Management and Audit Scheme (EMAS) and Blue Planet Friendly?

There are many other credible green indicators and it is not difficult to find out if the sustainability information provided by a given vendor is valid. If it is, it should be leveraged. In addition to the vendor's information, installers should also consider the green potential of their own practices to show commitment and to build green credibility.

'GLOBALLY RECOGNISED THIRD-PARTY ORGANISATIONS HAVE EMERGED TO SET SOME BASIC GREEN STANDARDS THAT CAN HELP INSTALLERS BUILD AND COMMUNICATE THEIR ENVIRONMENTAL CREDENTIALS AND WIN MORE BUSINESS.'



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MARKETING MANAGER AT MAYFLEX

It's extremely important for every business, not just the providers of network infrastructure solutions, to have a clear strategy when it comes to the planet and sustainability. Businesses first need to calculate their carbon footprints and emissions before they can implement a plan to start to actively reduce them.

Initiatives can include the use of renewable energy sources and preserving energy with the use of LEDs, detectors, temperature regulators, etc. It also includes encouraging the use of hybrid and electric vehicles for both the delivery of products and use by field sales teams. Installing electric charging points at your premises makes it easier for staff and customers to charge their vehicles.

Businesses also need to work towards a circular economy to look at how they can recycle, reuse, repair, refurbish and possibly rent or lease to help reduce the number of products and waste produced. For network infrastructure vendors, removing single use plastic from packaging will also have a significant impact on the environment and will stop millions of plastic bags from entering the supply chain. Products should



be packaged using recycled materials that are 100 per cent recyclable.

We are seeing far more tenders requesting the removal of single use plastic from the product supplied, which has led to our partners winning many more infrastructure projects.

The next steps are to look at the carbon footprint and lifecycle of each product, with a view to reducing it – something that we are also starting to see being asked for in tenders.

As awareness of the actions that providers of network infrastructure solutions can take to ensure a more sustainable supply chain, expectation will also grow for these actions to be taken in a prompt and consistent manner.

'FOR NETWORK INFRASTRUCTURE VENDORS, REMOVING SINGLE USE PLASTIC FROM PACKAGING WILL ALSO HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT AND WILL STOP MILLIONS OF PLASTIC BAGS FROM ENTERING THE SUPPLY CHAIN.'



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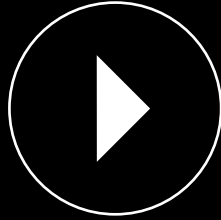
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JOHN BOOTH

MANAGING DIRECTOR AT CARBON3IT

It's going to become very important for providers of network infrastructure solutions to have clear demonstrable and proven sustainability based credentials, as their customers and regulators are going to demand it as part of the drive to net zero. Whilst this area is still emerging, companies that do not have these credentials will find that their opportunities to win business will be diminished, whilst those that do will boom.

Emerging legislation from the European Union (EU) and US is bound to have an impact on the UK. In terms of carbon reporting, GHG Scope 1 and 2 are relatively easy to calculate, but Scope 3 for upstream and downstream activities is gaining importance and all organisations are well advised to get a handle on these sooner rather than later.

The EU Code of Conduct for Data Centres (Energy Efficiency) 13th Edition, published earlier this year, includes a best practice 3.2.4 Life Cycle Assessment requirement for new build and retrofit. This will translate into a need to have an Environmental Product Declaration for all capital plant equipment providing information as required by ISO 14040, ISO 14044, the ISO 14064 series and ISO 14067. There is also the EN50600 TR99-2 Best practices for sustainability standard.

In the UK, organisations, if they already

qualify, will already be reporting their own energy use and carbon emissions under the Energy Savings Opportunities Scheme (ESOS) or the Streamlined Energy and Carbon Reporting (SECR) and, if

working with the public sector, under Public Procurement Notice (PPN) 06/21 to provide a carbon reduction plan at tender stage. A carbon reduction plan should contain the efforts the organisation has taken to reduce its own carbon, as well as the products it manufactures and, potentially,

individual project based carbon calculations.

However, it must also be said that determining the embodied carbon/energy content of products is difficult, and organisations should seek external assistance from suitably qualified companies to assist in this task.



'IN TERMS OF CARBON REPORTING, GHG SCOPE 1 AND 2 ARE RELATIVELY EASY TO CALCULATE, BUT SCOPE 3 FOR UPSTREAM AND DOWNSTREAM ACTIVITIES IS GAINING IMPORTANCE AND ALL ORGANISATIONS ARE WELL ADVISED TO GET A HANDLE ON THESE SOONER RATHER THAN LATER.'

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ZAC POTTS

HEAD OF SUSTAINABILITY AND INNOVATION AT SUDLWS

When the impacts of inaction are considered, the need to develop sustainable solutions cannot really be overstated. Although we certainly do need to see major changes, we also appreciate that every small action also contributes to this end goal.

Customers and businesses throughout the supply chain are rightly challenging suppliers and partners to demonstrate their commitments to sustainability, and to clearly report on the impact associated with their products and services. This allows both to inform the decision process accordingly.

The sustainability credentials of a business, and of the products or services it offers, is a major factor in the selection process. From early on in a project, decisions are being made based on the potential to impact the complete lifecycle, and the sustainability of an offering can most certainly be the deciding factor that wins, or loses, a job. In some cases, simply not being able to provide the required information can practically preclude options from further consideration due to commitments that the purchasing business has made.

As with performance related claims, there is a need to assess an organisation's individual sustainability claims and, importantly, evidence them, rather than

just accepting them at face value. Instead of only asking for ISO 14001 certification, for example, also ask for relevant policies and then review them. Similar can be said for any other standard or voluntary scheme that a company claims to endorse or subscribe to – don't be afraid to ask for the detail.

Requesting environmental product declarations for the products you are considering is an effective way to confirm claims made about an individual product. Even where they are not immediately available, the request itself can prompt discussion and help show where suppliers are with their development.

Different businesses will be at different stages in their sustainability journey – and that's OK.

If you're ahead of your supply chain, pull them forwards with you. On the other side, businesses who are leading the way with sustainability genuinely do want to take others with them and can offer a lot of insight and support, if you just ask.



'AS WITH PERFORMANCE RELATED CLAIMS, THERE IS A NEED TO ASSESS AN ORGANISATION'S INDIVIDUAL SUSTAINABILITY CLAIMS AND, IMPORTANTLY, EVIDENCE THEM, RATHER THAN JUST ACCEPTING THEM AT FACE VALUE.'

MICHAEL AKINLA

BUSINESS MANAGER NORTHERN EUROPE AT PANDUIT

Developers, manufacturers and the supply chain are working towards more sustainable processes. Leading companies are continuing to develop manufacturing and sales strategies that benefit customers, contractors and installers with higher

commitments to sustainable products and reduced packaging. Customer awareness of the opportunities and the data that supports these is essential in driving future growth and reduced emissions across the supply chain.

Up to 40 per cent of data centre energy is used in cooling and lighting. Therefore, increasing energy efficiency is important in improving sustainability and reducing carbon emissions. Panduit found that white cabinets provide a light reflective value of 80 per cent, versus black cabinets that offer five per cent. This equates to a light energy saving of between 25-30 per cent, requiring fewer light fittings in the area. We also found that the reflective light allowed easier working within the cabinets for installation or moves, adds and changes (MACs).

A bigger opportunity to increase energy efficiency is around servers. ASHRAE TC9.9 has encouraged operators to raise temperatures in technology spaces and introducing environments such as hot and cold aisle containment systems that eliminate hot air recirculation. Improving cold air direction into cabinets intake fans reduces inlet air temperature and improves cooling and equipment reliability.

Air seal features ensure empty rack spaces and gaps are covered and can



reduce air leakage by up to 20 per cent, preventing hot air recirculation. These measures can reduce energy use by a staggering 40 per cent – a demonstrable sustainability win. Today, wireless monitoring devices and data centre infrastructure management (DCIM) systems ensure

these benefits are collected and reportable. Meanwhile, small diameter Category 6A cable uses less material in its manufacture and maintains the quality and capability of its characteristics. This also allows more reels per pallet, increasing shipping efficiency.

Companies looking to evaluate potential suppliers should ask for environmental, social and governance (ESG) and evidence that they contribute to internal efficiencies, drive lower energy use, reduce base materials usage and minimise packaging. Also key is what internal practices are suppliers taking to drive internal efficiencies to improve sustainability drives, such as Environmental Product Declaration and Health Product Declaration certification on Euroclass rated cables, which help with LEED and BREEAM and demonstrate a cradle to grave measurement approach.

'COMPANIES LOOKING TO EVALUATE POTENTIAL SUPPLIERS SHOULD ASK FOR ESG POLICIES AND EVIDENCE THAT THEY CONTRIBUTE TO INTERNAL EFFICIENCIES, DRIVE LOWER ENERGY USE, REDUCE BASE MATERIALS USAGE AND MINIMISE PACKAGING.'

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KATHRYN AVES

MANAGING DIRECTOR AT BLUEPOINT TECHNOLOGIES

Sustainability in network infrastructure is becoming increasingly more achievable. This makes it even more crucial for providers with proven capability to deliver green solutions to evidence their sustainability credentials and clearly differentiate themselves from those who have not obtained the same status.

The widespread increase in focus on net zero, accompanied by the growing body of carbon embodiment data, is a great example of the type of detailed information that we, as an industry, can provide to our customers. Using carbon embodiment data, manufacturers and installers are able to provide customers with a bill of materials detailing the associated carbon dioxide (CO₂) emissions throughout the whole lifecycle of each product.

An overtly sustainable customer touchpoint, such as a paper wrap, is only the first point of reference for a product. Is it produced using responsibly sourced plastic? How is it transported and from where? Is the machine used to produce it run sustainably or built using sustainable parts?

Vendors should be able to calculate and share detailed data evidencing the true environmental and infrastructural impact of a project. This data gives the customer the choice and the opportunity to invest in diverse sustainable projects to offset their

own carbon footprint.

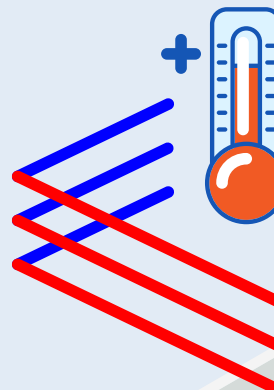
Whether committing to sustainability throughout the delivery of a project can help win business is tough to quantify, as it ultimately depends on each customer's motivations. Instead, the focus should be on educating customers about how their project could be made more sustainable and how realistic sustainability measures can make a positive impact on their carbon footprint. For us, the end game is to educate customers on the importance of demanding a green install from the outset.

We are aware that we are a small piece in a much larger puzzle, but we are determined to contribute to the solution. Establishing a customer's appetite for sustainability in the first instance and changing the conversation around the subject is our opportunity to get more sustainably focused projects underway.



‘WHETHER COMMITTING TO SUSTAINABILITY THROUGHOUT THE DELIVERY OF A PROJECT CAN HELP WIN BUSINESS IS TOUGH TO QUANTIFY, AS IT ULTIMATELY DEPENDS ON EACH CUSTOMER’S MOTIVATIONS.’

Get the balance *right*



Andrew Wreford of Rittal explains how to facilitate the needs of both cable management and aisle containment

▶ Sometimes solving one problem creates another one – for example, aisle containment and cable management have opposing needs. The former seeks to close every hole to keep air where it is needed, while the latter wants apertures for cable entry paths. This means there will always be a compromise when using aisle containment. The trick is to balance this whilst maintaining the ability to route cables without affecting airflow efficiency.

DRILLING DOWN

Let's first look at the challenges of keeping IT equipment sufficiently cool. They're still the same as they have been for many years and choosing a cooling method takes time and careful consideration in order to optimise the space available. In a traditional data centre, cooling systems are tasked with supplying cool air throughout the room. This layout can lead to less directed cool airflow to the IT racks and can cause the mixing of the hot and cold air, which leads to inefficiency.

To combat this, a rack layout can be arranged into hot and cold areas. This enables the front of the racks to draw in cool air and exhaust it through the rear of the cabinets into the hot aisle. The containment aids the separation of the cool and hot air zones, which avoids them mixing and leads to higher air temperature being

returned to the cooling units. This, in turn, makes the data centre more energy efficient.

HOT AND COLD

Cold aisle containment confines cold supply air within the aisle so that its only available path is through the IT equipment. This stops it escaping above or below the server cabinets. The most common approach to this type of containment is to install roof panels and sliding doors at either end of the rows. These are typically installed on to a raised floor with computer room air conditioning (CRAC) units at either end of the pod.

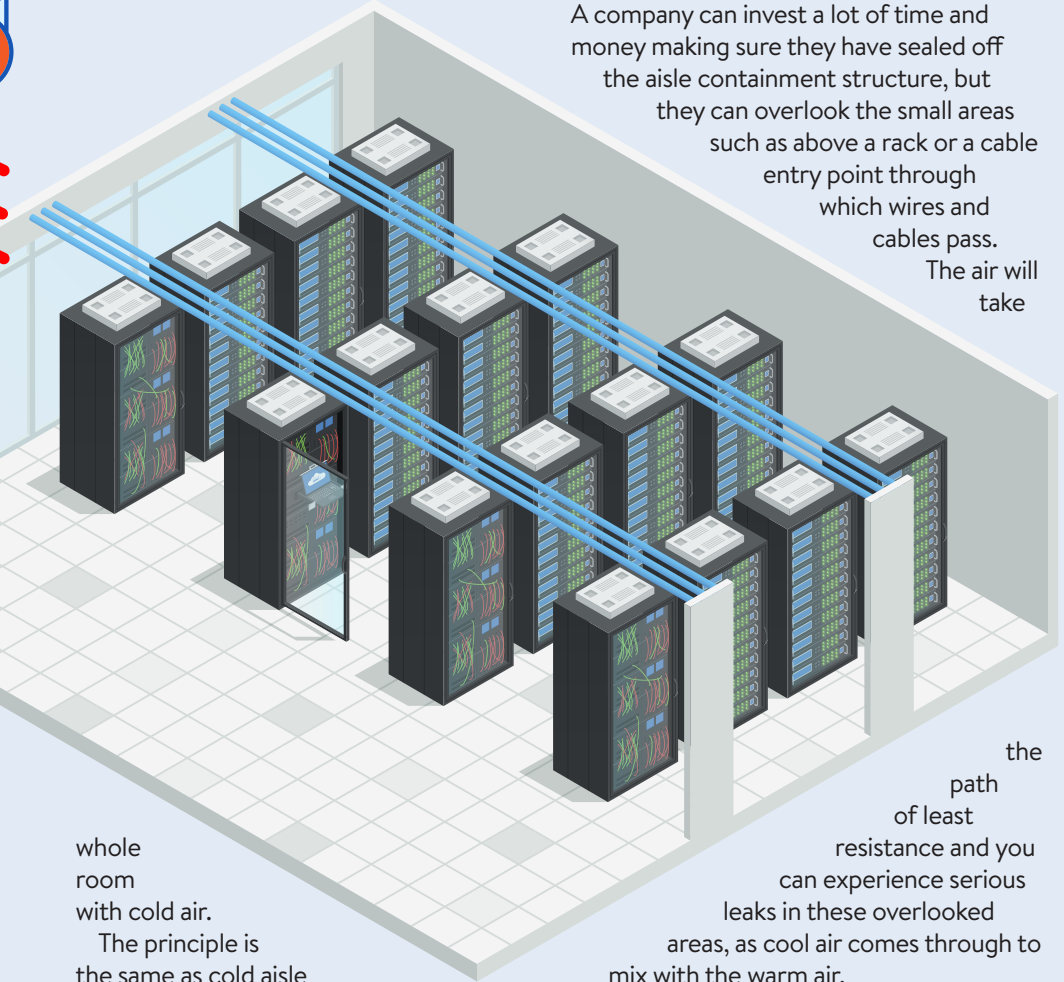
This type of containment can also be used with inline cooling units. Cold aisle containment can be easily retrofitted to existing sites and can accommodate existing fire suppression systems with the use of dropdown roof panels. This solution can also be installed below existing cable trays and other cable management systems.

Conversely, hot aisle containment focuses on isolating hot exhaust air on its return to the CRAC units. Cold air is typically generated from inline cooling units placed within the row and supplies the

MANAGEMENT DECISION

A company can invest a lot of time and money making sure they have sealed off the aisle containment structure, but they can overlook the small areas such as above a rack or a cable entry point through which wires and cables pass.

The air will take



whole room with cold air.

The principle is the same as cold aisle containment and separates the hot and cold air paths, although there are downsides to bear in mind. Firstly, in legacy sites that are using a CRAC system, it is hard to retrofit because you need to route the hot air to the back of the CRAC via a hot air plenum. This may not be possible in certain sites. The other consideration is by containing the hot air engineers at the back of the rack could be working in very hot conditions.

the path of least resistance and you can experience serious leaks in these overlooked areas, as cool air comes through to mix with the warm air.

As well as aisle containment, it is important for server and network cabinets to have the ability to manage airflow with the use of air baffle kits. These are typically fitted at the front of the cabinets to stop any air escaping along the sides, forcing the cooled air through the servers.

The ideal solution is for these to incorporate brush strips so that cables can pass through from the front to the rear of the cabinet without compromising the

‘A company can invest a lot of time and money making sure they have sealed off the aisle containment structure, but they can overlook the small areas such as above a rack or a cable entry point through which wires and cables pass.’

existing cable management solutions such as high level basket and ladder work to support the structured cabling above. The use of overhead containment that fixes to the top of the cabinet can be used to support cable management at high level. However, consideration must be given

airflow. It is also very important to block any gaps between the installed equipment with the use of blanking panels to achieve maximum efficiency. Cable management accessories such as cable trays and cable management rings can be installed inside of the racks – this will help to route structured cabling to exit from either above or below.

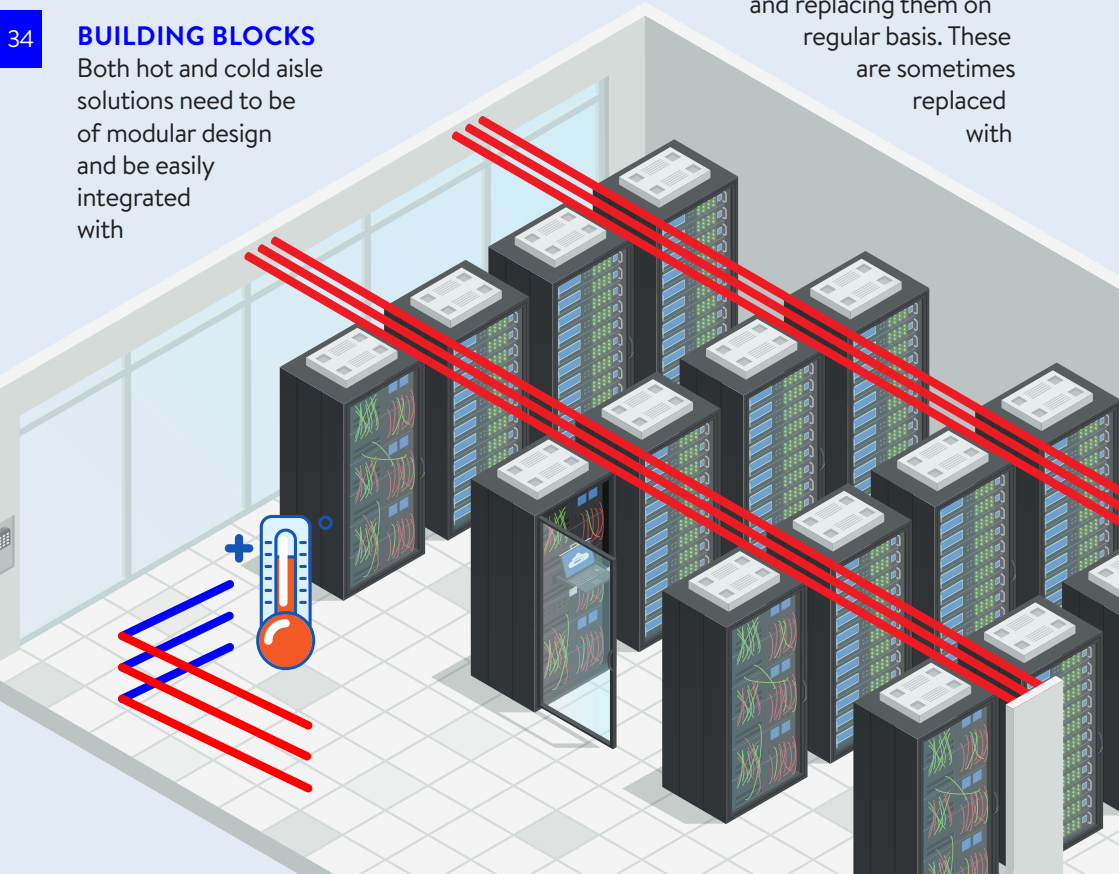
to the loading capacity of the rack to support – not just the installed equipment but also the load of the roof panels and containment structure above.

Freestanding cold aisle containment can offer flexibility when it comes to removing existing cabinets and replacing them on regular basis. These are sometimes replaced with

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BUILDING BLOCKS

Both hot and cold aisle solutions need to be of modular design and be easily integrated with



different sized racks, which means they can accommodate more servers. However, this also means more cables. Cable management must be fastened neatly and securely to the cable trays inside of the rack. This should allow clearance for hot air from the servers to freely leave the cabinet, as otherwise issues can arise in overheating and downtime due to lack of airflow, which must be avoided at all costs.

SPACE INVADER

Even if cables are properly managed, sometimes there just simply is not enough space. This increases the demand for deeper cabinets to accommodate more cables, however, solutions are available to add extension frames that can be bayed to the front or rear of the existing cabinet to increase the size.

These typically come in sizes of 200mm in depth, giving the end user the possibility of retrofitting without having to swap out the original cabinet. When third-party racks are installed in a row, very rarely is the entire row changed out. Most of the time the cabinets are added to an existing row which ends in cabinets of different sizes, creating a 'skyline' effect.

This creates challenges for the installation of containment systems, but these issues can be addressed with the use of freestanding containment and can solve the issues associated when moving and replacing cabinets.



The freestanding type solution includes all the components needed to construct a self-supported structure to capture the airflow in the contained aisle. This design accommodates a mix of cabinet sizes and allows IT racks to be changed when required.

SMART THINKING

Demand for more space to mount IT equipment continues to grow. Although this trend often allows for better space utilisation, it doesn't come without its challenges. To ensure the effectiveness and efficiency of your data centre, a rigorous approach to layout, cable and airflow management must be taken into account. ■



ANDREW WREFORD

Andrew Wreford has over 15 years' experience within the IT and data centre industry. He joined Rittal in 2006 as a field service technician covering the south of England. His extensive knowledge led Wreford to become Rittal's product manager for IT – a role that enables him to capitalise on his experience and demonstrate his understanding of how crucial it is to support key data centre infrastructure.

USystems

The many years of innovation and experience that USystems has accumulated in producing cutting edge solutions for data centres has been channelled into developing the most effective and efficient aisle containment systems currently available.

Thermodynamically advanced, cost and energy efficient, our solutions incorporate horizontal (flat roof) and vertical solutions spanning hot aisle or cold aisle options – all of which improve cooling efficiencies specific to your data centre requirements. Each style of containment can be designed around multiple height cabinets without affecting thermal performance.

When partnered with our ColdLogik CL80 InRow Coolers, you can utilise space



efficiently, whilst offering closed coupled cooling within the aisle containment. The solution provides precision in-row cooling that is controlled and integrated via ColdLogik's award winning Intelligent Management and Room Management systems.

To find out more [CLICK HERE](http://www.usystems.com).
www.usystems.com

Cable Management Warehouse (CMW)

Cost savings have always been high on the agenda, along with the requirement for improved anti-corrosion, as contractors seek new ways to build better, faster and smarter.

Available from CMW, Conlok from Metpro is the only fully galvanised steel conduit system on the market. Conlok provides 75 per cent labour savings and conforms to BS EN 61386-21:2004 Conduit systems for cable management – rigid conduit systems.

Using the traditional screwed system, the average amount of time to cut, dress,

thread and fit a box to a piece of conduit tube is five minutes. There is no need to

thread conduit tube with Conlok's unique built-in grub screw. So using Conlok, the average amount of time to cut, dress and fit a box to a piece of conduit tube is just one

minute. Conlok products are also IP30 rated and are compatible with threaded lengths of conduit tube.

The Conlok product range is available from CMW and you can find out more by [CLICKING HERE](http://www.cmw ltd.co.uk).
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HellermannTyton

Together, HellermannTyton and gabocom deliver a full end to end FTTX solution, combining a wide choice of quality products and strong industry knowledge.

A winning partnership of quality optical fibre management closures and wallboxes, along with perfectly manufactured microduct, means the demands of fibre deployment are met at every stage of the last mile network. From the street to the building and into your property, HellermannTyton and gabocom offer a full range of connectivity solutions completing



the fibre journey from the central office to the router.

With products for both internal and external fibre applications, the combination of HellermannTyton and gabocom allows end users and installers to source a full fibre solution from companies with a wealth of knowledge and experience in fibre connectivity in the UK, across Europe and the wider global market.

To find out more [CLICK HERE.](http://www.htdata.co.uk)
www.htdata.co.uk

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Inside Networks

2022 CHARITY GOLF DAY 25TH MAY

An opportunity to compete and entertain clients and colleagues at the superb Marriott Hanbury Manor Hotel & Country Club.

www.marriottgolf.co.uk/club/hanbury-manor

Playing the Hanbury Manor PGA Championship Course:

This prestigious golf course was the first to be designed by Jack Nicklaus II and still incorporates features from an earlier 9-hole course designed by the great Harry Vardon. The course is now widely recognised as one of the best in England.

The event will ask for 4-ball teams to compete in a 'best 2 from 4' full handicap Stableford competition over 18 holes (with a 2-tee start from 10:30am).

Live Scoring sponsorship is available.

Golf will be preceded by tea, coffee and bacon rolls at registration and will be followed by a 3-course private dinner and prize giving with charity raffle.

There will also be opportunities for sponsorship of all aspects of the day – all raising money for Macmillan Cancer Support – since 2005 this industry event has raised over £78,500 through our charity golf events!

Supporting:

**WE ARE
MACMILLAN.
CANCER SUPPORT**



Indoor Simulator Competition



The cost of a 4-ball team will be £595 (+VAT).

There will also be discounted accommodation at Hanbury Manor Hotel & Country Club, which will include breakfast and use of the extensive leisure facilities. Price to be confirmed.

As in previous years – teams will be asked to provide a raffle/auction prize on the day in support of the charity.

Organised by:

Promoted & Supported by:



To book a team or for further information email info@slice golf.co.uk or telephone 077 69 69 69 76

Panduit

Panduit's Adjustable Depth 4 Post Rack is tailored to network equipment in data centre and telecommunication environments. Each rack has 39 different depth options – from 584mm-1066mm in 13mm increments. The rack can be assembled in minutes and is self-squaring when assembled, with the option of eight different masked grounding locations.

Upgrading active equipment in telecommunication rooms and data centres often requires a deeper rack than standard supplied units, which the Panduit 4 Post Rack system offers. It combines the

stability of a cabinet with the accessibility of an open rack to provide maximum flexibility when designing a network layout.

Increased mountings allow for accessories, such as power distribution unit (PDU) brackets, vertical patch panel brackets and vertical tie-off brackets, to create greater application flexibility. Available in black and white,

the rack has a UL load capacity of 907kg, offering a highly adaptable rack and cable management system.

To find out more [CLICK HERE](#).
www.panduit.com



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Comtec

Comtec, part of the ETC Group, offers a comprehensive range of containment and cable management solutions including FiberGuide – the optical fibre management system from CommScope.

Offering the greatest breadth of optical raceway products, FiberGuide basic components include horizontal and vertical straight sections, elbows, downspouts, junctions and numerous support hardware and flex tube kits. All are designed to add greater flexibility, drive down installation time and ensure a smooth deployment.

A long-term solution for controlling

and protecting your growing cable infrastructure, the FiberGuide solution is available in a variety of sizes from 2x2 inches through to 4x24 inches and features 38 support structures, over 75 fittings, multiple drop options and components to suit any application you create. Features such as Express Exit drops as well as tool-less products including

Snap-Fit junctions, snap-on covers and new hinged cover options save valuable time for installers.

Need help or advice? Give the Comtec team a call on 01480 415000 or [CLICK HERE](#) to find out more.

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Excel Networking Solutions' copper cables are UKCA certified

Excel Networking Solutions has now certified all of its copper cabling to UK Conformity Assessed (UKCA), ahead of the 2023 deadline. The UKCA marking came into effect from 1st January 2021 because of the UK leaving the EU. All products entering the UK market will need to carry this marking from 1st January 2023, where previously the CE mark was used.

Neil Payne, Excel's product manager, commented, 'Excel cable will carry both the UKCA and CE markings since the cable is sold in both Europe and the UK.'



The UKCA marking has no effect on the Construction Products Regulation (CPR) classification – in fact it adds to the validity

of it, as all cables are subject to a secondary test in the UK to verify the cables' CPR classification. Having the UKCA in place so early gives our customers further assurance in legal compliance and reliability when

specifying and installing Excel cables. They also have the benefit of knowing that the correct certification is in place, particularly when bidding for projects in coming weeks where deployment runs into 2023.'

Mayflex appoints Simon Steer as director of sales for security

Mayflex has appointed Simon Steer in the role of director of sales for security. He has extensive experience in the industry having previously worked for IndigoVision for the last 10 years, where his last position was sales director covering the UK and Ireland. Prior to that he worked for an installer for eight years in the security industry.

Ross McLetchie, sales director at Mayflex, commented, 'Simon has good technical knowledge, commercial experience and great leadership qualities, which will all be crucial for driving our continued growth of our security focused business. He will be working closely with



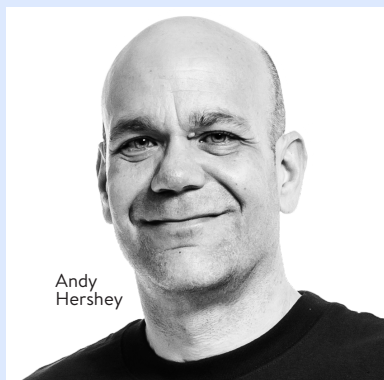
our security vendors to continue building our close relationships with brands such as Avigilon, Axis, Hikvision, Milestone, Mobotix, Paxton, Suprema and Wavestore, to

name but a few.'

Steer commented, 'I'm very much looking forward to being part of the Mayflex team – it's a business that has continued to grow and evolve, and one that puts the customer at the heart of everything that it does. I'm excited about getting to know my team, the Mayflex associates and, most importantly, getting to know and support our customers.'

NS1 names former Splunk leader as CRO

NS1 has appointed Andy Hershey as chief revenue officer (CRO). Hershey will leverage more than 25 years of experience in leading and scaling go to market and sales teams to help the company build momentum for the NS1 Connect platform.



Technologies.

Hershey joins NS1 during a period of solid company momentum, having just celebrated eight consecutive years of annual recurring revenue growth. In 2021 NS1 added more than 150 customers, bringing its customer base to more than 850 companies including Uber, Belk, Nature's Bounty, Dropbox, LinkedIn and

Autodesk. The company's growth rate also earned it a spot on the 2021 Deloitte Technology Fast 500 list.

Hershey most recently served as group vice president, global cloud sales and GTM transformation at Splunk, where he played a significant role in turning the company's cloud business into one of its key growth engines, with over \$1bn in annual recurring revenue. He has also held leadership roles at companies like OPNET, acquired by Riverbed Technologies and CA

'Andy has deep experience developing winning strategies for companies that enable digital transformation,' said Kris Beevers, co-founder and CEO at NS1 'We look forward to his guidance in bringing new solutions to market that help meet our customers' growing needs.'

CHANNEL UPDATE IN BRIEF

Vertiv has appointed two new channel leads. Martin Ryder will take on the role of channel sales director and Stuart McDougall has joined the company as a channel marketing specialist – both for the UK and Ireland.

Lumen Technologies has appointed Chris Stansbury as chief financial officer.

Edgnext has selected JLL as its preferred facilities management partner for data centre operations. The strategic partnership supports Edgnext's mission to deliver data centre facilities that support booming demand across unique and diverse markets.

Ancoris has appointed Martin Lee as director of cloud services. The former head of managed services and cloud at Sopra Banking Software joins the company with over 15 years of experience in strategic, financial and operational aspects of IT and cloud for 24/7 global operations.

Emtelle Group is to expand into North America by opening a new manufacturing facility in the US. The company, which employs 700 staff worldwide, aims to open up its facility in Fletcher, North Carolina.

Leading from the fro

Having worked extensively within the network infrastructure sector for over 20 years, **Giordano Albertazzi** has seen many changes. Rob Shepherd recently caught up with him to find out more about his life and career, and his thoughts on some of the big issues of the day

RS: Tell us a bit about yourself – who are you and what do you do?

GA: A large part of my career has been dedicated to expanding and improving the performance and resilience of the world's digital and critical infrastructure – from data centres to edge computing, communication networks and commercial and industrial applications.

In my 20+ years in the critical infrastructure

industry, I've helped Vertiv – previously known as Emerson Network Power – become one of the world's leading providers of critical digital infrastructure. Over the past six years I have led its growing business in Europe, Middle East and Africa, which is worth about \$1bn. I have also supported Vertiv's fast growing global channel business over the past few years, working across the organisation to provide support for our channel partners, ensuring that they have the tools, technologies and benefits they need to work with us and grow their businesses.

In March this year, I was promoted to Americas president, which is a great

honour for me and an exciting step in my career.

RS: Why did you decide to embark on a career in the IT industry?

GA: Since I was a child I wanted to become a mechanical engineer, just like my father. But as I graduated, I realised that I much preferred the business and management side of things. So, I started my career in manufacturing, a totally

different sector, to then land at Emerson following a similar manufacturing opportunity, which also began my career in the IT infrastructure industry. I was hooked!

RS: What particular challenges are facing the data centre sector, and how can they be addressed?

GA: We're operating in an exceptionally technologically focused market

where innovation is critical. As cloud computing, 5G and digital technologies transform virtually all industries, one of the most urgent challenges is making digital infrastructure more environmentally sustainable.

On one side, we're seeing massive growth in digitalisation, which requires new

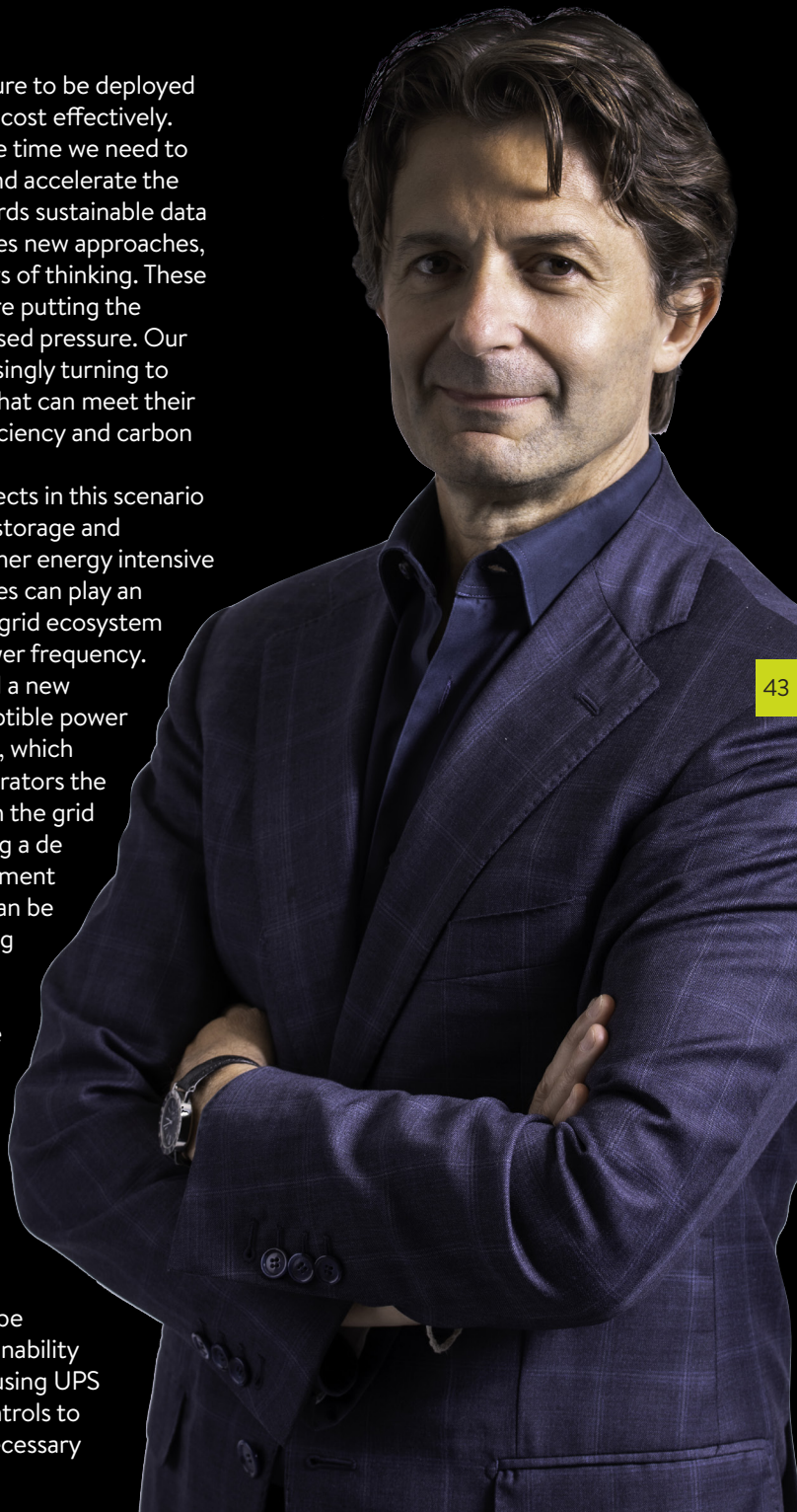
'As cloud computing, 5G and digital technologies transform virtually all industries, one of the most urgent challenges is making digital infrastructure more environmentally sustainable.'

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infrastructure to be deployed rapidly and cost effectively. At the same time we need to embrace and accelerate the move towards sustainable data centres, which requires new approaches, technologies and ways of thinking. These opposing dynamics are putting the industry under increased pressure. Our customers are increasingly turning to us for new solutions that can meet their ambitious energy efficiency and carbon neutrality targets.

One of the key aspects in this scenario is power generation, storage and management. Like other energy intensive industries, data centres can play an important role in the grid ecosystem and help stabilise power frequency. We recently launched a new feature for uninterruptible power supply (UPS) systems, which gives data centre operators the ability to interact with the grid – essentially becoming a de facto energy management centre that, in turn, can be monetised. This is a big step forward in terms of sustainability and the ability to optimise renewable energy sources, and it's a trend that we see continuing to grow.

Not only does this present new revenue opportunities, it also provides a chance to be part of a bigger sustainability value proposition by using UPS management and controls to ensure there is the necessary



energy to manage critical loads. We see the market going in this direction and it's very encouraging to see this theme of sustainability across the board.

RS: Is the battle for the energy efficient data centre being won?

GA: Digital infrastructure is growing and becoming an increasingly big consumer of energy. Against this backdrop, the move toward greater energy efficiency is a key trend and there is a big opportunity for data centres to realise major efficiency gains through better orchestration of their infrastructure.

The industry is addressing questions around sustainability by developing and adopting more energy efficient technologies. In addition to UPS technology that customers can use to actively and effectively support data centre and grid efficiency, great strides have also been made when it comes to thermal management and refrigerants. We are seeing a lot of advances around immersion cooling too.

Globally, governments have begun to ban or restrict the use of refrigerants that produce high carbon emissions, or high global warming potential (GWP) as it's known in the industry. European Union regulation aims to phase out the use of certain greenhouse gases used in refrigerants, with China and the United States having already introduced similar regulations.

As artificial intelligence, machine learning and high performance computing continue to grow, liquid cooling will be a frontrunner solution for sustainable practices. This is just the beginning, as there will also need to be collaboration between industry and academia to ensure the building of a sustainable future.

At Vertiv, for example, we're involved in

a series of initiatives around sustainability and the wider environmental, social and governance (ESG) arena, with the latest of these being the E2P2 project. The project is part of the company's effort to prioritise and support the development of clean, sustainable and renewable power solutions for applications across the data centre industry. Additionally, Vertiv contributes to the Climate Neutral Data Centre Pact, with the aim to meet the European Commission's goal for climate neutral data centres by 2030.

Combined, all these new technologies will be essential in winning the energy efficiency battle. Carbon neutral data centres are possible and can be achieved, and we are keen to contribute to this transformation.

RS: How will investment in edge computing change the profile of the data centre over the next few years?

GA: The cloud and edge transformation of digital infrastructure is accelerating, and 5G deployments are bringing further opportunities. In fact, edge computing is quickly evolving into a crucial technology for the 5G powered information age. IDC estimates the global edge computing market will continue growing and exceed \$275bn in 2025 – seeing an 80 per cent increase from 2021.

To fully harness the potential of 5G requires combining edge computing with machine learning. New deployments at the edge will generate and capture vast amounts of data. The application of machine learning at the edge will be pivotal in delivering real time responses for intelligent decision making – from internet of things (IoT) devices acting as sensors to detect any measurable activity, to healthcare in remote locations with limited connectivity and the handling of patient

device data analysis.

RS: Is enough being done to encourage more women to join the data centre sector and, if not, what would you like to see happening?

GA: In short, the answer is no. Things are progressing but far too slowly. As an industry, we need to do more to encourage women to join the data centre sector and make it easy for them to do so.

I believe that the best place to start is at the grassroots level.

More needs to be done to ensure that science, technology, engineering and mathematics (STEM) subjects capture the interest of girls early in education.

Then interest should be cultivated throughout school, college and university by inspiring women to participate in courses that teach knowledge and skills needed to thrive in technical careers within the data centre.

But we also need more courses such as the UTC Heathrow data centre programme and more support and mentoring groups to provide, facilitate and fulfil opportunities for women. We also need to look to other industries where skills can be easily transferred into the data centre industry.

RS: What impact has the coronavirus pandemic had on the network infrastructure sector?

GA: I believe the data centre industry has been key to keeping the world spinning throughout the pandemic. The past two years have also seen new trends begin to emerge across cloud, edge computing and 5G.

The ongoing shift to remote and hybrid

working models has put a strain on the system when it comes to connectivity and placed a lot of demand on distributed infrastructure. This is leading to increased cloud adoption across the globe and although the transition to the cloud is not new, it has certainly accelerated since the pandemic emerged.

More remote and hybrid workers means more data transferred and fewer people in offices. So where do businesses

house this data? As more businesses hop on the remote work train, expect to see an increase in the use of colocation data centres and cloud storage.

RS: If you could change one thing about the industry that

you work in, what would it be?

GA: Being an industry at the forefront of innovation and modernisation, I believe it should take a leading role in embracing diversity and inclusion. Although we have taken significant steps over the last few years, there is still so much more to be done in order to see some real change.

RS: What's the most useful piece of advice you've been given and how has it helped you during your career?

GA: My first boss told me to think beyond your role and level, put yourself in your boss' shoes and always look at things with a perspective that is higher than your current job. I have always followed that advice and still do. When it comes instead to my personal and work philosophy, it is best crystallised by a quote from Enzo Ferrari that I saw at the Ferrari Museum in Maranello a few years back – 'The most important victory is the one which has yet to arrive.' ■

'As an industry, we need to do more to encourage women to join the data centre sector and make it easy for them to do so.'

Quick clicks

Your one click guide to the very best industry events, webinars, electronic literature, white papers, blogs and videos

The Journey To IoT Maturity is a state of the nation report by **Wi-SUN Alliance**. [CLICK HERE](#) to download a copy.

How Are Colos Meeting Evolving Customer Requirements? is an online panel discussion from **Panduit** featuring David Hall of Equinix, Emma Fryer of techUK and Michael Akinla of Panduit. [CLICK HERE](#) to watch it.

Schneider Electric has unveiled findings from a newly commissioned IDC white paper entitled Succeeding at Digital First Connected Operations, which highlights the power of edge computing in enabling the shift to a digital first world. To download a complimentary copy of the white paper [CLICK HERE](#).

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Building Operating Systems is a white paper from the **Telecommunications Industry Association (TIA)**. It explores how to design a smart building based on an operating system model to help ensure technology flexibility, reduced construction and operational costs, improved return on investment and a better occupant experience.

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Mitigating Risk To UPS Installations is an article by Timothy Ng of **Centiel**.
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The Edge Outlook is a white paper from **Intel** that identifies edge computing as a critical factor that businesses must harness to both successfully navigate and understand data both now and in the future.

[CLICK HERE](#) to download it.

Direct Liquid Cooling Bubbles To The Surface is an article by Lenny Simon of **Uptime Institute**.
[CLICK HERE](#) to read it.

Taking control of the situation

Rifai Khan of RiT Tech examines the peace (of mind) and goodwill afforded by automated infrastructure management (AIM) solutions

▶ As all those who have toiled to discover the lone blown bulb in a string of traditional Christmas lights will testify, even the most simplistic of electrical circuits can pose a headache and time draining distraction. With no obvious indicators to consult to help identify the source of the 'blackout', restoring normal working order through the systematic checking of every connection can be a frustrating, laborious and often fractious process.

LEVEL BEST

The more lights to check, the greater the potential for grief. This correlation between complexity and propensity for problems will be all too familiar for those charged with managing expansive IT infrastructures and data networks.

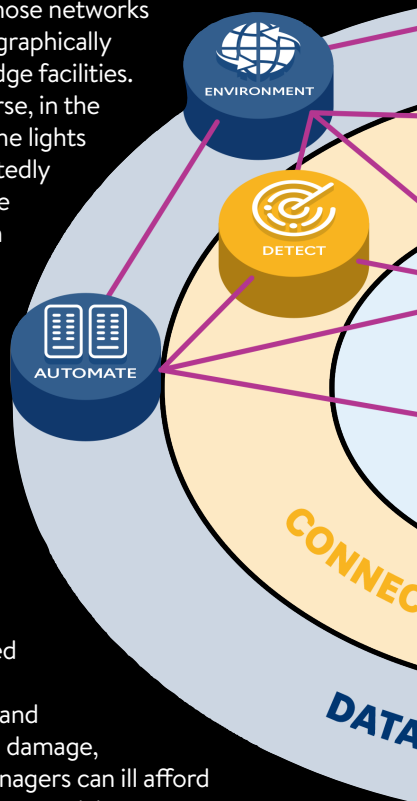
In an age when dependency on the digital domain has never been greater, the task of preserving and maintaining a high level of service is formidable. Far from just having a single plug and string of bulbs to untangle and check, those at the sharp end of keeping technology twinkling – data centre operators, for example – can be responsible for 'lighting up' the equivalent of entire streets, towns and cities.

The difficulty of doing so is further exacerbated when the demand for virtual decorations extends far beyond neighbouring properties, such is the case

for those whose networks include geographically dispersed edge facilities. And, of course, in the event that the lights do unexpectedly go out, there is more than just festive cheer at stake. With every second of downtime translating directly to a financial loss, the prospect of dissatisfied clients and consumers, and reputational damage, network managers can ill afford any cuts in connectivity.

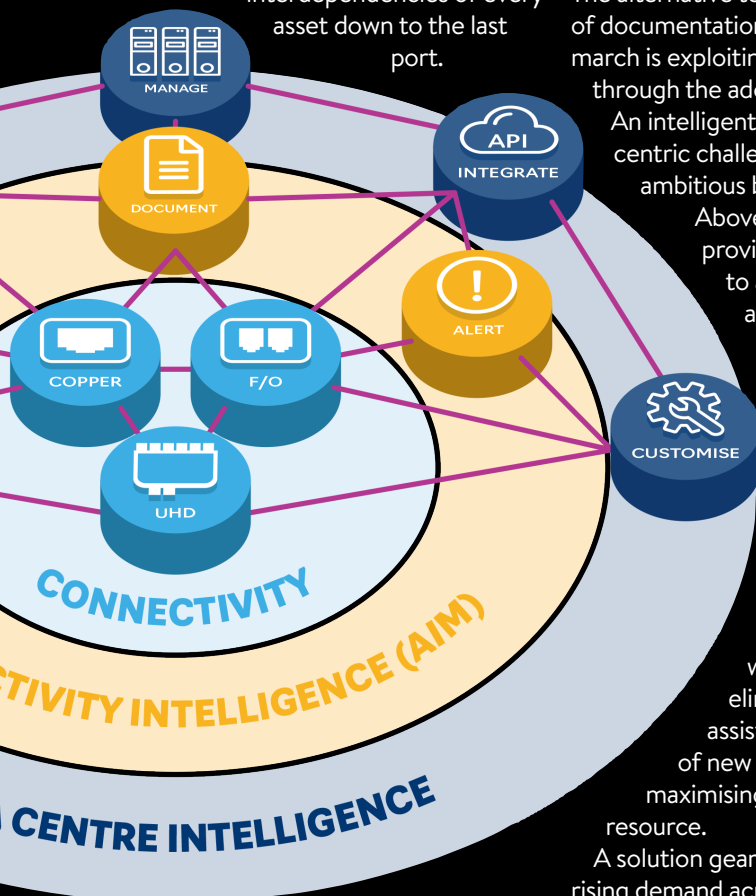
TRACK RECORD

The reliance on manual management, record keeping and maintenance of IT infrastructures is becoming increasingly fraught with risk. Given the sheer number of components to consider and catalogue of IP enabled devices now dependent



on the receipt of a stable service, any meaningful expansion – or indeed retraction – of a network that relies on human input alone is hazardous.

To err, after all, is human and even the brightest of minds would struggle to accurately track, record and appreciate the interdependencies of every asset down to the last port.



Redundant cables in cabinets, under the floor and in overhead trays – possibly obstructing cooling airflows – are an all too common feature in data centres and a sure sign of inaccurate documentation.

Poorly kept or incorrectly updated registers mean manual network

maintenance is generally labour intensive and error prone. Changes to physical networks becomes a risk laden lottery of educated guesswork, rather than a blueprint for operational efficiency.

MAKE THE DIFFERENCE

The alternative to using traditional means of documentation to maintain technology's march is exploiting technology itself through the adoption of an AIM solution.

An intelligent approach to a computer-centric challenge, AIM tools have ambitious but attainable aims.

Above all else, they target the provision of real time visibility to allow the monitoring and control of all a network's physical layer components to, in turn, enable points of failure to be immediately identified. In addition, AIM systems – a combination of hardware and software working in unison – should deliver automated work processes that eliminate manual errors and assist with the provisioning of new equipment, thereby maximising the utilisation of every resource.

A solution geared towards meeting rising demand across increasingly distributed architectures, the introduction and integration of automation to patch switches and devices accurately and rapidly must have the capability to represent both cross connect and interconnect topologies and manage connectivity from every angle – be it between switch and panel, panel and server, server and storage.

GET REAL

While AIM may sound fantastical for those still using a clipboard and pen or simple spreadsheet to chart the fate of their network, it is not science

fiction but a concept of considerable maturity. ISO/IEC 18598, which specifies requirements and recommendations for AIM systems, calls for hardware that automatically detects the insertion or removal of cords and software that collects and stores the resulting connection information, relates it to cabling connectivity and data from other sources, and shares this detail with authorised users.

Gathered by special ID keys, the data harvested and archived by AIM can be comprehensive, providing technicians and IT managers with far more than just link information. The system's software should not work in isolation, but be able to integrate and interact with other important platforms such as building management and data centre infrastructure management (DCIM) systems and configuration management databases. Application programming interfaces are crucial to this interoperability and pave the way for future integrations with next generation tools.

‘While AIM may sound fantastical for those still using a clipboard and pen or simple spreadsheet to chart the fate of their network, it is not science fiction but a concept of considerable maturity.’

THREE OF A KIND

ISO/IEC 18598 also defines the three building blocks of an AIM solution – asset, capacity and change management – all of which are key to operational efficiency and safeguard against network downtime.

A capability that can pre-empt when a part needs changing or immediately isolate



and locate one that has failed is even more crucial when there is nobody physically present to see a network's proverbial lights flicker. Indeed, it is critical to those supporting digital infrastructures out on a limb such edge data centres, which are typically unstaffed and adopt a dark site operating model that makes optimisation and maintenance a major headache.

When there are no operational staff on-site and instructions may have to be executed at a distance by third-party operators, AIM is not a nice to have but a necessity, and can deliver easily quantifiable

returns on investment. Constantly scanning the entire edge environment, it can not only detect operational disruption but troubleshoot and manage the response. A technician's dream companion, those sent to perform maintenance tasks go armed with a high fidelity and well planned work order to execute – ensuring tasks are completed efficiently and effectively.

GUARD OF HONOUR

AIM is a valuable ally when it comes to preserving the integrity of a data centre's

physical network security. An ever vigilant guard, the solution will raise the alarm if any unplanned connections or disconnections occur or non-recognised cords are patched into a network.

All these factors deliver tangible cost and time savings. From ensuring the right

resources are committed at the right time to reducing power consumption, downtime and management and technician overheads, the accuracy of AIM information alleviates the burden of running a remote site. Mitigating mistakes and expediting maintenance tasks means less time, effort and fuel is consumed by visits.

PRESENT AND CORRECT

Integrating an AIM solution is, of course, not a Christmas miracle and the cost saving gifts it ultimately delivers are preceded by

expenditure. Those non-believing Scrooges among you may be quick to highlight that an automated answer costs more than cable labels and a simple spreadsheet, but the long-term prospects of the two avenues are stark. Indeed, to add a bow to this article's unseasonal theme, comparing manual practices with AIM solutions is the equivalent of evaluating the merits of paper chains and LED lights – the former will eventually tear while the other will continue to shine. ■



RIFAI KHAN

Rifai Khan has 16 years of experience in data centre network infrastructure management and its implementation. He is an AIM specialist working with RiT Tech using his vast experience in implementing large scale projects worldwide.

Panduit

Panduit's new RapidID creates a network map using patch cord scanning techniques. The software enabled network mapping system supports smart, scalable and efficient connectivity solutions.



The network mapping capability automates the labour intensive and often error prone cable documentation process to reduce the risk of a network outage and costly downtime. RapidID is a practical alternative

The RapidID network mapping system is designed to reduce the time and cost of patch cord documentation by up to 50 per cent. Using prelabelled Panduit patch cords and the RapidID Bluetooth enabled handheld scanner, network engineers can place, trace and replace cables to create a comprehensive network map far more effectively.

to traditional manual approaches and is suited to building a new telecom room, locating installed cables or replacing a network switch. Each prelabelled patch cord has a unique barcode and using the handheld scanner the engineer can automate labelling, tracing and troubleshooting in three easy steps.

To find out more [CLICK HERE.](#)
www.panduit.com

R&M

Designed for simplicity, R&M's inteliPhy net is an easy to operate data centre infrastructure management (DCIM) solution for asset, capacity and change management. Users can organise and document an entire network infrastructure digitally, as it bundles and visualises information on capacities, cabling, patch panels, racks, power distribution units (PDUs) and IT equipment in a single database.

inteliPhy net reduces deployment time and ensures high quality documentation with great IT infrastructure visualisation. Component representations can be added and moved by dragging and dropping, while ports and patch cords can be monitored in real time. Network managers can ensure they are utilising resources and satisfying quality, compliance and service requirements.

For more information [CLICK HERE.](#)

rdm.com

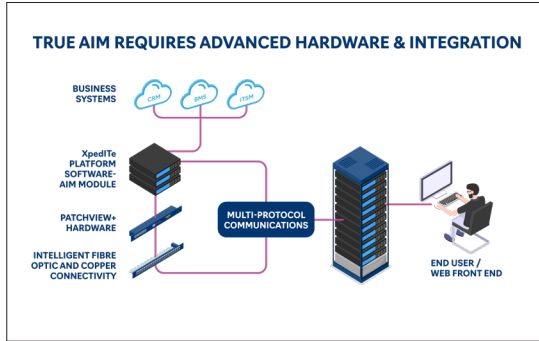


RiT Tech

True AIM requires both advanced hardware and software that integrates with other key systems to go beyond the basic elements of physical connectivity management.

RiT's PatchView+ with the XpediTe platform fulfils both of these requirements and provides the management capabilities needed to support the increasing number of remote locations that lack on-site expertise. This combination allows for the most efficient and reliable use of physical infrastructure, as well as providing real time visibility, monitoring, management and control of all network physical layer components.

Maintaining and managing network



infrastructure is becoming increasingly difficult as networks become more complex and more geographically dispersed. Effective AIM eliminates the

risk of human error, ensures resilience, and dramatically speeds up both deployment and fault analysis, while integrating seamlessly with legacy systems.

RiT's innovative approach to AIM is now incorporated as the basis for the ISO/IEC 18598 standard, which specifies the technical requirements for AIM systems globally.

To find out more [CLICK HERE](https://www.rittech.com).
www.rittech.com

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Knowledge is *power*

Rahul Rathod of Nexans explains why automated infrastructure management (AIM) is essential for intelligent buildings

▶ Buildings are becoming smarter, with connections between sensors, building management, lighting, security and communications systems bringing a wide range of benefits for different users. But with greater intelligence comes greater complexity. AIM can play an essential role in network management and administration as this complexity increases.

SMART THINKING

Building intelligence is largely being driven by the uptake of connected devices, wireless technology developments, a threefold increase in power over IP networks and increasing convergence as systems interconnect via IP and IT Ethernet infrastructures. The capabilities of smart buildings will continue to change as these trends develop.

In this fast moving environment, IT managers are required to meet high expectations, often with fewer resources and staff. However, even though building network infrastructure is now hugely dependent on connectivity, IT networks are still almost exclusively documented using tools such as spreadsheets. Traditional documentation tools increase the risk of error, which could introduce higher costs. Troubleshooting takes significantly longer and periods of downtime are extended unnecessarily.

NEED TO KNOW

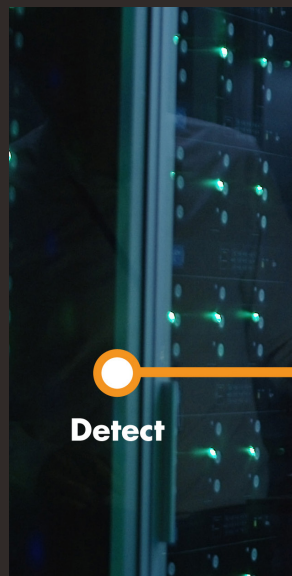
We're seeing a growing need for support for networks connecting an

ever wider range of devices, moving beyond traditional requirements related to IT devices such as laptop and wireless access points, and extending to operational technology (OT) for building management such as sensors, alarms and controllers. This increase in the number and variety of devices significantly adds to complexity.

A recent survey conducted by Nexans highlighted the fact that there is a significant amount of concern regarding the difficulty of managing networks – and this is growing. An important part of managing growing complexity is by ensuring records are as accurate as possible. Documentation and administration of networks including ports, switches and cabling is essential.

REAL TIME

An up to date, complete overview of physical infrastructure including all devices, ports and structured cabling makes it easier to use and control the network more efficiently, and manage costs. Being



Detect



Power



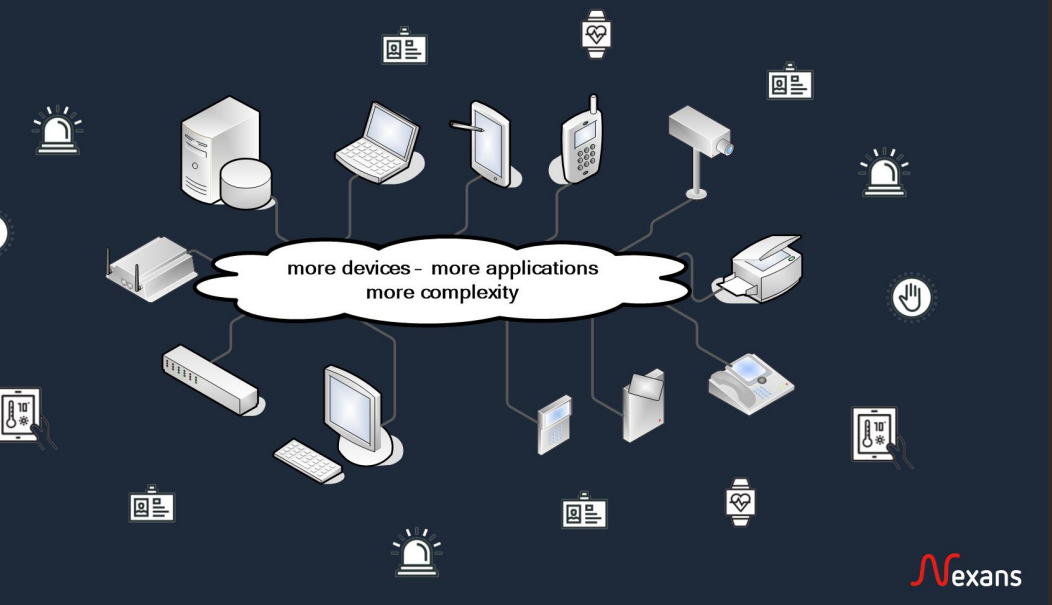
Log

Map

Share

Optimise

#smartconnection



‘An important part of managing growing complexity is by ensuring records are as accurate as possible. Documentation and administration of networks including ports, switches and cabling is essential.’

able to accurately map switches to network outlets makes planning, troubleshooting and repairs faster and easier.

Knowing which device is available where, and whether it has been authorised, supports capacity optimisation and security enhancements. AIM facilitates this by providing a link between the physical (cabling) and logical layer of the network. It automates cabling infrastructure documentation and provides an accurate overview of what is connected where on the network.

This allows fast and easy detection, monitoring and provisioning of connectivity and helps reduce downtime. IT managers can benefit from real time physical layer documentation and they can remotely monitor infrastructure performance with internet based dashboards and receive notifications easily and conveniently across different platforms and devices. Change logs and work orders can be recorded, making audits and troubleshooting easier.

SHARE AND SHARE ALIKE

Smart buildings rely on sharing data to make business decisions and AIM is a way to track some of those connections and collect and share data. Poor network overviews can mean excess capital and operational expenditure (CapEx/OpEx).

Organisations may spend a great deal of money on purchasing and managing new network switches each year and, if they're outsourcing IT, pay for management of

identify end locations when provisioning new IT services or carrying out network maintenance without disruption.

Reports and dashboards enable informed decisions to reduce CapEx and OpEx. Switch and port utilisation can be optimised in order to maximise return on investment and avoid overspending or under-utilisation. AIM also makes it significantly easier to make informed decisions about expansions. Capacity planning can even be extended to room level and material and energy consumption can be optimised to save resources.

SETTING THE STANDARD

An AIM solution should guarantee compliance with relevant standards such

unused switch ports. If ports are forgotten and unused it can take a lot of time and effort to find circuit information and

56



as ISO/IEC 14763-2 and ISO/IEC 18598 – the latter lists building management applications in which AIM solutions can play a role. They include energy management, lighting management, configuration management database, building security and access control. AIM can help satisfy compliance and legal requirements with status reports, trend analyses and audit trails.

Cabling systems may well remain in place for 10-15 years or more and many changes will occur during this lifespan. Building functions may change, building interiors might be altered completely, an organisation may grow or shrink, or new business models might change requirements. With all of these developments and activities, maintaining 100 per cent accuracy on documentation using non-AIM methods is difficult – or probably impossible.

LOOK AHEAD

To remain competitive, productive and profitable, IT infrastructure must meet

current requirements and be ready for future challenges. Technology evolution and increasing demands are resulting in increasingly complex, high performing networks and cabling, as well as a rise in CapEx.

What's more, the importance of IT network systems is increasing significantly. Today, this is critical and provides the

foundation of business. Downtime and error are to be avoided at all cost – which is why documentation has to be flawless and up to date.

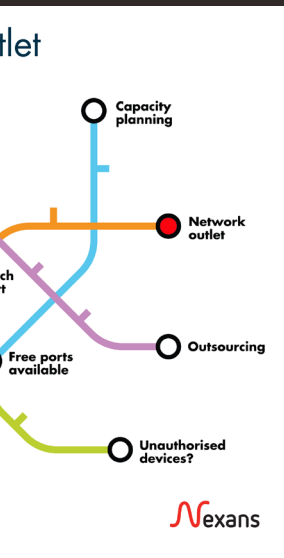
DELIVERY DRIVER

For buildings to become truly smart, they rely on accurate data – including accurate network documentation. This can only be delivered with AIM. However, when choosing an AIM solution, it is important to remember that it needs to be user friendly. If it is to be truly successful, the AIM solution should make managing complex networks of devices significantly easier and faster. ■



RAHUL RATHOD

Rahul Rathod is a product manager at Nexans and responsible for LANsense, Nexans' AIM solution. He has an electrical engineering background and a master's degree in international business. His prior experience was related to the power, cooling and data centre infrastructure management (DCIM) systems.



Edgnext breaks ground on data centre in Riyadh

Edgnext has identified Riyadh, Kingdom of Saudi Arabia (KSA), as the next location for its portfolio of data centre facilities. Edgnext's data centre will support the KSA's Vision for 2030 by providing a foundation for local and regional digital transformation and innovation, while aiming to attract global multinationals to the country.

The data centre will be located at Industrial City 2, which is 19km from the city centre and 47km from the airport. The facility's close proximity to Riyadh's city centre will provide low latency access to the entire KSA market, and customers will benefit



from high fibre density and connectivity options. The new data centre will have a maximum IT load of 20MW and sit on a 17,720m² plot. It will be ready to go live in Q3 2023.

This scalable colocation data centre will be ready to serve local customers, hyperscalers and other wholesale colocation requirements to eliminate the need for their own

facilities. The KSA national optical fibre network offers terrestrial connectivity to all major Gulf markets and acts as a gateway to key regional submarine cable landing stations.

Firmus Supercloud sets a new standard for sustainable cloud computing with Canonical's open infrastructure

Data centres are responsible for two per cent of global greenhouse gas emissions, and that number is rising. This is largely due to the inefficiency of traditional data centre designs. Firmus is solving the data centre efficiency and sustainability issue with an innovative new immersion cooling solution – submerging servers in a bath of non-conductive, biodegradable fluid that is approximately 1,000 times more effective at wicking away heat than air.

This is enabling Firmus to offer a public cloud service, Supercloud, at a price point

significantly lower than the rest of the market. What's more, Firmus' data centre is located in Tasmania, where it is powered

by genuine grid connected renewable energy. Firmus needed cloud infrastructure expertise and solutions that would enable rapid scalability to accommodate immense demand,



and tasked Canonical with building and supporting the public cloud, leveraging Charmed OpenStack and Charmed Kubernetes.

Nokia to supply its switching portfolio for Microsoft's data centre networks

Nokia will provide its switching solutions for Microsoft's data centre facilities to support the bandwidth growth to Microsoft Azure, as part of a multi-faceted



deal. The deal expands the longstanding relationship between the companies, which have been working together to bring massively scaled, agile and highly resilient networking to the data centre environment.

With the significant growth of cloud services and cloud computing, and the move to 400 Gigabit Ethernet, Nokia has been selected to supply its 7250 IXR chassis based interconnect routers to support high density 400 Gigabit Ethernet applications in Microsoft's Tier-2 network architecture. Nokia will also

be supplying fixed form factor platforms into other Microsoft network applications. This new agreement builds upon the companies' collaboration as part of the open source SONiC initiative to develop chassis based platforms

focused on the requirements of high capacity data centres.

Nokia's next generation data centre switching portfolio platforms deliver the scale, openness, aggregation and interconnectivity required for modern data centre networks. The 7250 IXR offers a broad range of high performance options for data centre top of rack, leaf, spine and super-spine applications. The platforms support port speeds up to 400 Gigabit Ethernet, with a path to 800 Gigabit Ethernet, along with IP and Ethernet feature sets.

PROJECTS & CONTRACTS IN BRIEF

Hyve has chosen Telehouse as one of its colocation partners to help meet growing sustainability demands. Hyve can now realise its ambitions of providing customers with long-term sustainable solutions, and easily scale for future growth.

North has been appointed by CGI to support the City of Edinburgh Council's vision to become one of the world's leading smart cities.

Colt Technology Services has announced the deeper integration of its Colt On Demand service with Oracle Cloud Infrastructure (OCI) FastConnect, offering customers an even smoother user experience.

Custodian Data Centres has become the lead technology partner for Crossways Business Park in Dartford, Kent. Custodian's 10MW DA2 facility will provide low latency connectivity, resilient power and foundational critical infrastructure for local businesses.

Equinix and NexGen Networks have announced the expansion of their collaboration to meet increasing capacity demand from leading financial services firms and global enterprises.

01T

01T has announced its new, purpose built global network – Global Network Exchange (GNX) – a high capacity network designed, built and operated by 01T in-house. GNX revolutionises global connectivity with speed, simplicity and service.

By using GNX, customers can access multiple services at any scale, from one single port. Available at any GNX point of presence, businesses can enable the power of cloud connections, internet access, point to point services, industry leading security and more, without compromise or complication. This innovative feature continues 01T’s mission of providing



intelligent, cost effective and agile global connectivity solutions to businesses around the world.

For businesses reliant on content distribution, a transformative feature of GNX is Gateway Edge. Gateway Edge solves the industry problem of an ever growing dependency on being present in multiple data centre locations. Gateway

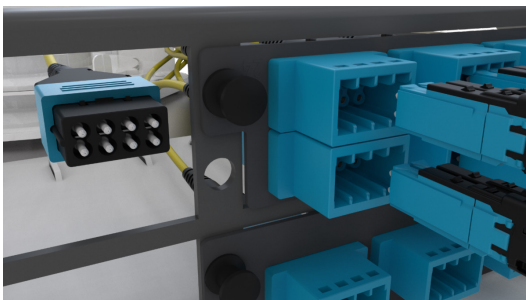
Edge utilises services that were once only available from a specific, expensive and hard to reach data centre, and brings them on to customer premises – anywhere in the world.

To find out more [CLICK HERE](http://www.01t.co.uk).
www.01t.co.uk

Legrand

Legrand’s Infinium acclAIM redefines connectivity by replacing pre-terminated cassette based solutions with direct mating breakout connections, eliminating extra components and cost. It represents a breakthrough in optical fibre connectivity that delivers the lowest insertion loss available on the market by leveraging unique innovations.

Bandwidth continually increases, forcing optical loss budgets to decrease. Infinium acclAIM offers the industry’s lowest optical loss by a significant margin – maximising lifecycle with a single installation of a sustainable



building asset.

It simplifies connectivity as there are no pins, just direct connections. Infinium acclAIM connectors mate directly to an array of 2-fibre MDC duplex patch cords. Polarity can be adapted to nearly any link configuration, pre-planned, on-site, or on the fly, with no options to determine when ordering or designing. With the increased density of each connector and a smaller footprint enabled by acclAIM, there is more room to work on each panel.

For more information [CLICK HERE](http://www.legrand.us).
www.legrand.us

Schneider Electric

Schneider Electric's new range of Uniflair Chillers, with inverter screw compressors for large data centres, provides the efficiency, precision and configurability to adapt to current and future data centre cooling challenges.

The air cooled and free cooling extra-large chillers provide increased cooling capacity and lower power consumption for high energy efficiency in all environmental conditions. Uniflair Chillers with screw compressors are within the first solutions to leverage low global warming potential (GWP) refrigerants.

Schneider Electric's latest 300-2200kW Uniflair Chillers introduce major improvements to high efficiency and

reliable cooling for data centre applications and enhance the current platform with new sizes and configurations. The chillers:

- Offer modular configuration and are packaged to simplify and accelerate site deployment and design.
- Integrate a free cooling system that leverages outdoor air to provide cooling, minimising energy consumption without impacting unit size.
- Minimise annual energy usage, improving total cost of ownership.
- Achieve +2MW with high water temperature, increasing unit cooling capacity in a reduced footprint.

For more information [CLICK HERE](#).

www.se.com

R&M

According to a new expert article by Matthias Gerber, market manager local area networks at R&M, the LAN is currently affected by three trends.

- **Higher bandwidth**
10GBASE-T is very sensitive to external noise and no more headroom is available, so installations must be absolutely standards compliant. What's more, 25GBASE-T and 40GBASE-T are coming on to the market.
- **Power over Ethernet (PoE)**
The third PoE generation uses all four wire pairs (4PPoE) and supports outputs of up to 90W with currents of 1A per wire pair. Certain applications require power 24/7, causing cables and cable bundles to heat up as a result of electrical resistance.
- **All over IP and consolidation**
Previously disparate applications and infrastructures are increasingly being

consolidated. LAN cabling has to provide full Ethernet/IP services for building automation, turning the LAN into a multifunctional LAN.

These changes are vital to planning, rollout and product selection.

[CLICK HERE](#) to read the article.

www.rdm.com



All you need to know

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Forward thinking

Amir Hashmi of zсах looks at how the cloud will continue to be revolutionised in the next 12 months

▶ Document sharing, videoconferencing, customer relationship management (CRM), enterprise resource planning (ERP), communication and productivity tools – these are all remarkably familiar systems that millions of businesses all over the world have increasingly adopted over the last few years. Without the cloud we would not have Zoom, Microsoft Teams,

Google Hangouts or the ability to work office systems and phones from home. Even those who have resisted cloud technologies, or been reliant on legacy systems and office tied processes, have felt the impact.

PAST AND PRESENT

2020 was the first significant year of the cloud. Initially, migrating to the cloud



‘Investing in hybrid cloud technology models, including some on-premises resources, dedicated private clouds and an array of public clouds for applications and data, provides organisations with more control on how and where data is stored and often more control over the cost.’

was the IT equivalent of grasping the nettle – with every business forced by the coronavirus pandemic to undertake significant digitisation projects.

Now, two years on, we continue to see a rapid development of cloud technology as more businesses adopt it and do so on a broader scale. The journey has not been easy for some, and many companies still struggle to balance its cost alongside fears of growing complexity. However, now that some firms are seeing wider growth opportunities through managed services, the burden of managing and maintaining the cloud environment is fast becoming less of a headache.

OPEN SOURCE

At scale development, deployment and management of application architectures on cloud services have been driven by open source technologies. With the world in lockdown, developers and engineers have found the value of contributing to open source.

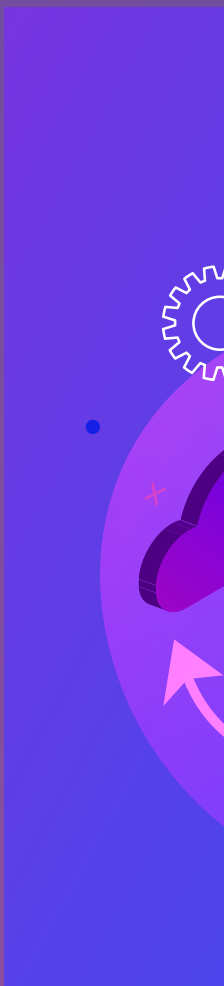
What’s more, there is a growing demand for fair, just, democratic and accessible policies to communities and of, course, the environment. Using open source tech is an effortless way to ensure accessibility, which will be a vital part of many organisations’ green policies. This is illustrated by how it is driving the United Nations’ (UN) sustainability goals.

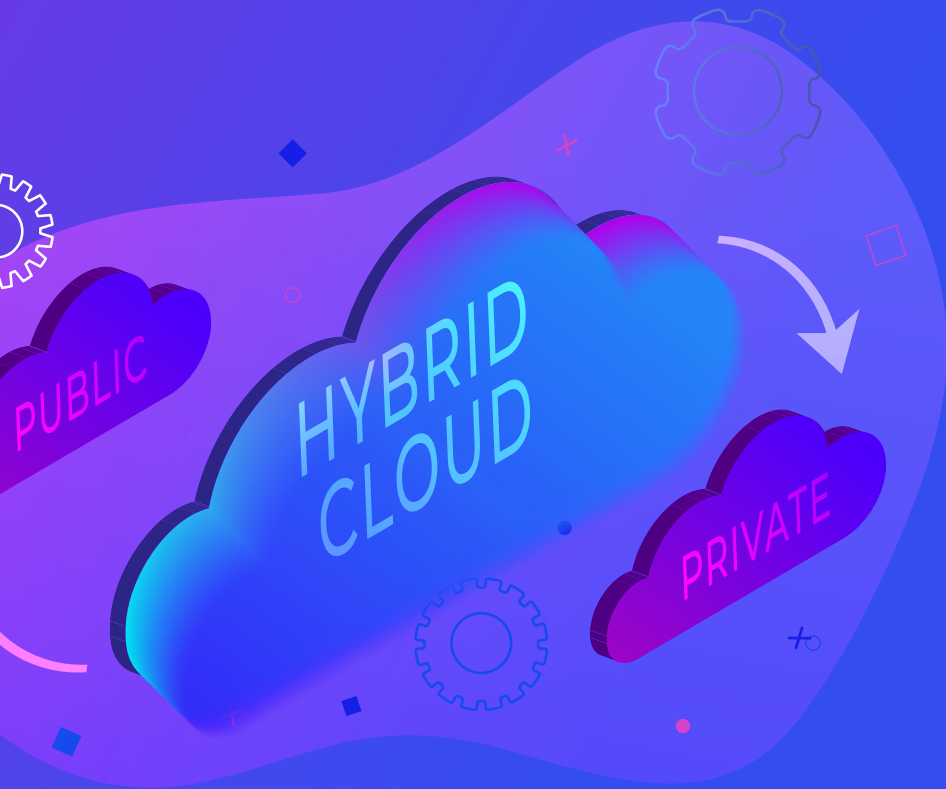
Joshua Pearce, chair in information technology and innovation at the Thompson Centre for Engineering Leadership & Innovation, said, ‘With leadership from the UN, we are perhaps not too far away from when, if you have a local problem (no matter where you are in the world), you can download a vetted and tested open source solution. Just maybe, this is the firepower we need to reach the ambitious sustainable development goals.’

HERE TO STAY

The abrupt interruption of business as usual brought on by the pandemic is here to stay and is likely to disrupt operations for the near future. As organisations struggle with safety for consumers, employees and partners, they increasingly look to the public cloud.

For the majority – particularly small to medium sized enterprises – this new outlook has been brought primarily through third-party applications and frameworks designed to quickly enable online business in a shuttered world. Having little or no IT capacity themselves, a broad range of industries and businesses





– from farmers to boutique retail shops – have embarked on a digital transformation journey that has taken them to the public cloud via software as a service (SaaS). The cloud, particularly the public cloud, will remain the backbone of business continuity for most enterprises.

However, this may start to create issues. The ‘cloud rush’ caused by past shutdowns amidst the pandemic has, at times, highlighted weaknesses in infrastructure as it struggled to keep up with demand from workforces. The distribution of cloud data

centres is currently inadequate to support significant longer-term workloads for a distributed workforce and an increasingly dispersed consumer base. That means that public cloud providers will need to carefully assess their current distribution of data centres and potentially expand to support a growing customer base from now on.

PUBLIC OR PRIVATE?

The public cloud has been great for companies who found themselves

suddenly in need of cloud storage and which require a flexible, pay as you go service, meaning that they have had to adapt quickly. However, as there seems to be no going back, many organisations are considering moving on to a private cloud for stability.

Private cloud offers greater security and cost efficiency and a myriad of compliance and data regulation benefits, which makes it ideal for the centralised storage and control of essential company data. Although, as mentioned above, the public cloud is still the best option when providing the tools that a remote workforce needs to function efficiently.

EXPANSION PLANS

The answer is to go hybrid. Investing in hybrid cloud technology models, including some on-premises resources, dedicated private clouds and an array of public clouds for applications and data, provides organisations with more control on how and where data is stored and often more control over the cost. Henceforth, this will be seen as a less unnecessary risk and more sensible option. Companies that are unsure of how much they will grow, yet know they will need at least some cloud storage, will drive the adoption of the hybrid set-up.

As centralised systems struggle to carry the load of a workforce not tied to a central office and businesses expanding their cloud usage, regional data centres will see substantial growth for cloud storage. For regional businesses that would traditionally have had to establish their point of presence and cloud connections in London or other major cities, this is a significant move in a different direction. It is radically improving efficiency and reducing latency. As we know, more

businesses are ditching that centralised, permanent office to operate from the comfort of their own homes.

GROWING DEMAND

Despite the fundamental importance of the cloud, it is challenging, if not impossible, for a fast growing SaaS company to create a dedicated in house team whose role is to ensure the smooth running of cloud systems and infrastructure without losing focus. So, it can make sense for firms to reach out to a hosting platform to do the heavy lifting. More importantly, it means that SaaS owners can focus on doing what they do best – building great applications and landing even more new customers. ■



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