A software-defined future

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Contents

Foreword

Injecting intelligence into Network Services is the gateway to success for every growing organisation.

The integration of technology with human expertise is crucial for positioning software-defined solutions at the heart of today's fast-changing digital world. Managed network services have become the driving force behind realizing the full potential of this shift towards application-centric environments.

The true value of managed network services extends beyond their technical capabilities, encompassing the entire technology stack. This comprehensive approach provides significant benefits for organizations aiming to harness the power of software-defined networks.

By infusing intelligence into networks, we can develop flexible, adaptable, and scalable solutions. Relying solely on traditional network architectures limits our ability to quickly respond to the demands of the application layer. An application-aware network offers a range of efficient options to address traffic congestion, rather than the conventional method of simply increasing bandwidth.

To successfully navigate the transformation towards efficient networks, organizations need more than just a technology provider; they need a genuine partner. By collaborating with teams that deeply understand the complexities of the back-end while prioritizing the end-user experience, organizations can unlock opportunities for growth and success.

These partners must not only have the technical expertise but also take the time to understand the unique business needs of their clients. Through these partnerships, customized solutions are crafted to address the specific challenges and goals of each organization.

It's essential to remember that technology should serve humanity, not define it. The true measure of success lies in maintaining the human element in every technological solution we create and support. Ultimately, it is people who will benefit from the power and potential of managed networks. By prioritizing the human experience, we can create transformative solutions that enhance productivity, foster innovation, and enrich lives.

Now is the time to embrace software-defined solutions that bring intelligence to every aspect of our networks.

David Leen,
Head of Product, Interactive

> **Like people, technology flourishes in the right environment. No matter how sophisticated your technology is, it will only live up to its full potential with a secure, resilient and managed networks environment.**
>
> **DAN COX,**
> **CHIEF TECHNOLOGY OFFICER, INTERACTIVE**

The current state of networks in Australia

Deeper, more valuable connections

It's no secret that we've seen a definitive shift in the way we work and live. Everywhere we go there's an expectation to be connected to an ecosystem of technologies around us.

Even 30,000 feet in the air, it's Wi-fi that keeps us grounded – something that has only become possible in the last six years.

Disconnection is no longer an option and large scale enterprise-grade networks are no longer cost-prohibitive technologies employed at the cutting edge. Rather, they are an integral part of the fabric of our society.

For businesses, this change has manifested in greater consumer expectations, but also in higher standards for staff. Secure, efficient, and effectively managed network technologies allow businesses to thrive.

The rise of SD-WAN, in particular, has been instrumental in decoupling the control plane from its underlying hardware, enabling centralised management through software-defined policies.

At the same time, our workforces are becoming more disparate, evidenced by the rise of hybrid work, and we're seeing the inverse becoming true for network management, with centralised visibility and control pushed to the fore. Findings from Gartner's Forecast Analysis: Knowledge Employees, Hybrid, Fully Remote and On-Site Work Styles, Worldwide, revealed that 39 per cent of global knowledge workers will be working under hybrid arrangements by the end of 2023, higher than the 37 per cent in 2022[1] – and sometimes higher than 30,000 feet.

As network technologies continue to leap ever forward, now is the time to embrace the enhanced capabilities offered by open architectures such as SD-WAN.

HYBRID WORK IS HERE TO STAY

39%

of global knowledge workers will be working under hybrid arrangements by the end of 2023, higher than the 37 per cent in 2022.

Four pillars of network success

While new technologies are exciting, one important truth remains: the network solution is largely dictated by – and designed around – the application layer.

There are four broad pillars that impact networks:

#1

Reliability

How do we remain reliable during the inevitable? Your network's ability to withstand and recover from various disruptions such as link outages and hardware failures without significant downtime or loss of data is a measure of resilience in design. A reliable network focuses on the consistent performance and availability through redundancy and risk analyses. It is essential to ensuring uninterrupted connectivity and efficient operations, especially when supporting business essential applications and those utilised in the areas of critical services; such as healthcare or emergency services.

#2

Security

All networks face the threat of network penetration, data loss, denial of service and targeted persistent attacks. Network security demands constant assessment and adjustment to maintain a strong security posture. A secure network must protect its assets from unauthorised access, data breaches or malicious attacks using robust authentication protocols, encryption mechanisms, and intrusion detection systems.

#3

Growth

Networks is your gateway to growth. Organisations need to assess the cost-effectiveness of network solutions and evaluate factors such as scalability, compatibility with existing infrastructure and future growth potential. The choice between proprietary or open standards, as well as vendor selection, can likewise impact long-term costs, support, and flexibility. Transforming legacy environments and applications without the support of an experienced team can quickly run up against budget constraints.

#4

Service

Service delivery and management of networks encompasses the processes involved in deploying, configuring, and maintaining network infrastructure. Managing crucial aspects such as network architecture, policy design, equipment selection, installation, and ongoing monitoring and troubleshooting demand a strategic approach. Efficient management practices are essential for optimising network performance, and ensuring the network meets the evolving needs of the organisation. A strategic approach to delivery and management will ensure network stability, reliability, and overall operational efficiency.

The pain points

Here are some of the most consistent challenges faced by organisations:

Network availability

From lost sales and dissatisfied customers to damaged reputation and potential liability, network downtime severely impacts operations. Retailers rely on networks for critical functions including point-of-sale systems, inventory management, and online transactions. Furthermore, educational institutions rely heavily on networks for various tasks, including online learning platforms, collaboration tools, and administrative systems. Network downtime can disrupt virtual classrooms and hinder access to educational resources. Scalability and bandwidth are essential as educational institutions handle a growing volume of digital content and multimedia files.

Network security

Organisations that handle a significant amount of sensitive customer data, including payment information and personal details, are prime targets for cyber attacks. Networks need robust security measures to protect against unauthorised access, malware, and other cyber threats. Organisations should implement firewalls, intrusion detection and prevention systems, data encryption, and regular security audits to safeguard customer information and maintain compliance with data protection regulations.

"

Network security is more than firewalls. It's about layered security controls that are continually updated to protect systems and data from cyber threats and importantly, to reduce risk.

FRED THIELE,
CHIEF INFORMATION SECURITY OFFICER, INTERACTIVE

SECURING YOUR NETWORK

Bandwidth utilisation

Record traffic means record bandwidth load – when dealing with critical data like a Census, you can't afford a crash.

As organisations expand, their network infrastructure needs to scale accordingly. With the rise of e-commerce, mobile applications, and omnichannel strategies, businesses require networks capable of handling increasing amounts of data and higher bandwidth demands. Inadequate network capacity results in slow website loading times, poor customer experience, and inefficient data processing. They need to assess their network scalability requirements and work with service providers to ensure their networks can accommodate increasing volumes of data.

Network integration with legacy systems

Legacy systems are often foundational building blocks for complex networks, and managing technology lifecycles is key to effective network architecture.
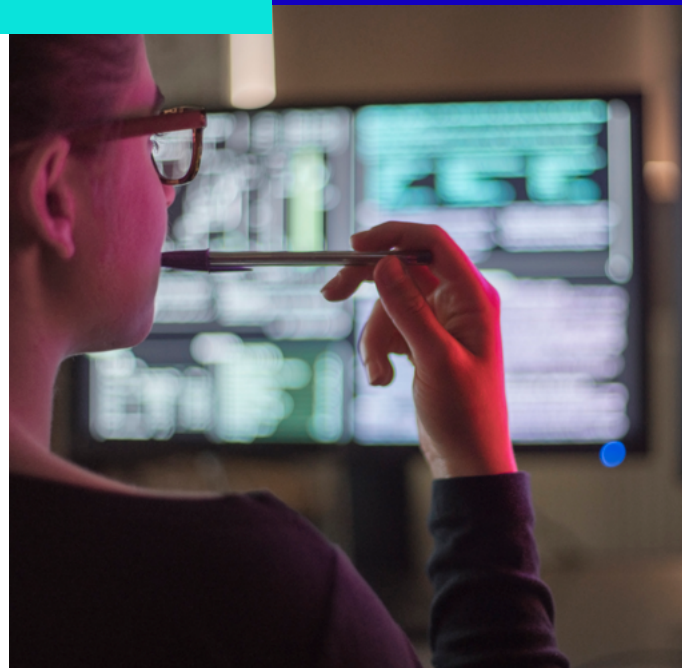
Many organisations have a complex IT infrastructure which relies on a legacy system. Integrating these systems with modern networks is challenging, and requires careful planning, compatibility testing, and potentially updating or replacing outdated equipment. Failure to integrate legacy systems effectively can result in data synchronisation issues, process inefficiencies, and compatibility problems that hinder overall operations.
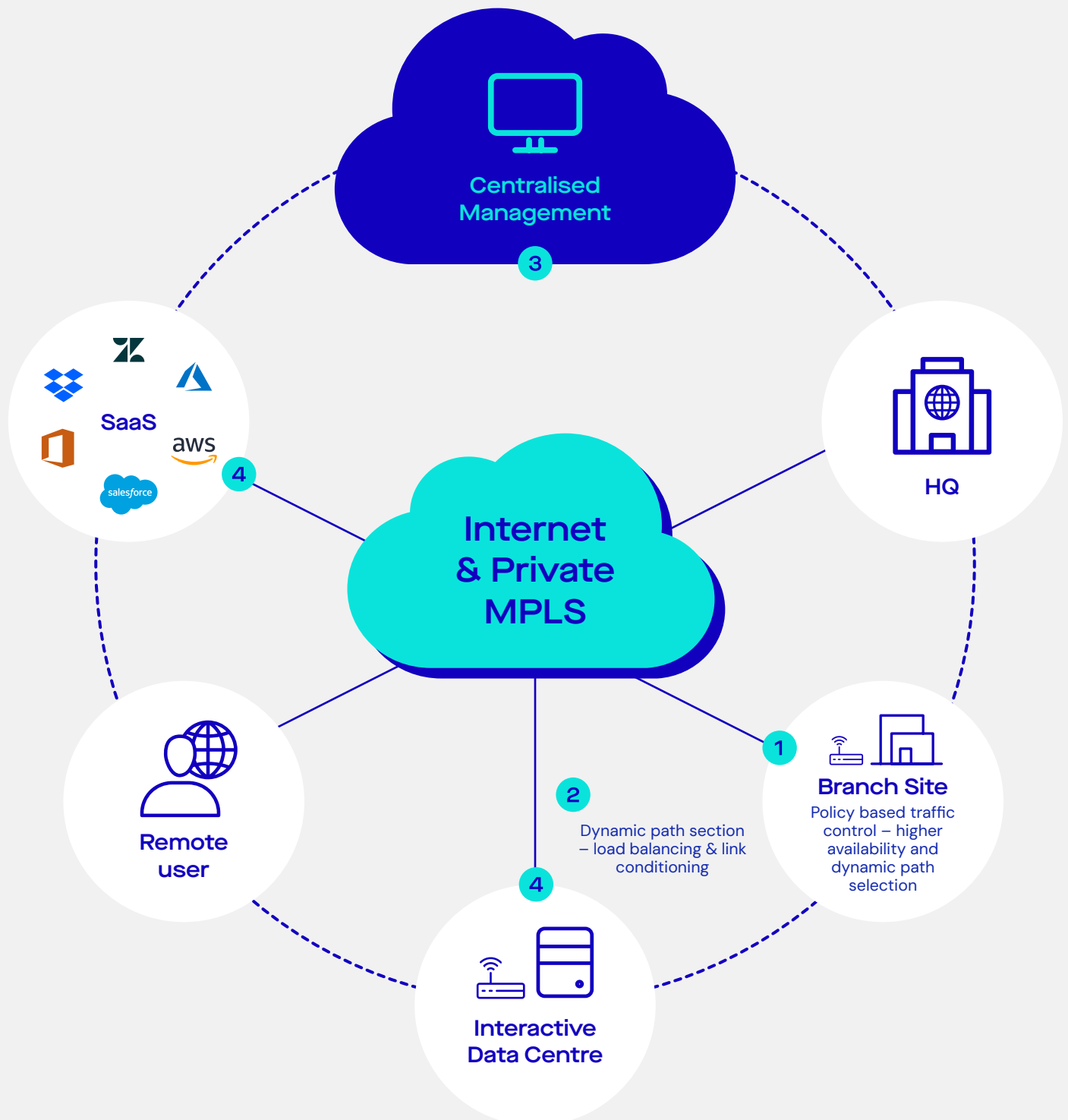
Network management and support

Troubleshooting network performance issues across multiple vendors and service level agreements (SLA) can hamper timely mitigation activities.

Organisations often operate across multiple locations, including physical stores, distribution centres, clinics, warehouses, and e-commerce platforms. Managing and supporting networks across various locations is complex and time-consuming. Businesses need efficient network management tools and processes to monitor network performance, troubleshoot issues, and ensure consistent connectivity. Additionally, they require reliable technical support and service level agreements from their network service providers to minimise downtime and resolve issues promptly.

Addressing these pain points requires proactive network planning, robust infrastructure, and collaboration with reliable network service providers. Organisations need to prioritise network resilience, scalability, security, and management to ensure smooth operations, seamless customer experiences, and secure data handling.

Centralised Management ③

SaaS

Internet & Private MPLS

HQ

④

Remote user

① **Branch Site**
Policy based traffic control – higher availability and dynamic path selection

② Dynamic path section – load balancing & link conditioning

④ **Interactive Data Centre**

① **Visibility**
SD-WAN edge devices gives real-time visibility and insight into application performance

② **Connectivity**
Deliver application aware bandwidth over Internet, MPLS and 4G/5G links (or a combination) for resilience and diversity

③ **Control**
Orchestrate traffic and application policy controls across your network from a single, central portal

④ **Agility**
Enable seamless access to corporate applications, data bases and collaboration tools, through public or private clouds and Data Centres, from anywhere

How to unlock potential with managed networks

The benefits of managed network services

Cost savings and predictability through managed services

Using a managed network service often leads to significant cost savings and predictability for businesses. Instead of investing in expensive network infrastructure and hiring a dedicated IT team, organisations can eliminate upfront capital expenditures and maintenance costs by outsourcing their network management to a third-party partner. With a fixed monthly fee, businesses can accurately forecast their network expenses, simplifying financial planning.

Avoid network outages and increase efficiency

Managed network services offer proactive monitoring and maintenance of the network infrastructure. Service providers constantly monitor the network, identifying potential issues or vulnerabilities before they cause significant disruptions. Through real-time monitoring and analytics, they're able to detect and resolve problems swiftly, minimising downtime and ensuring optimal network performance.

### Improved network performance and uptime

Managed network services focus on optimising network performance and maximising uptime. Providers employ industry-leading technologies, such as load balancing, traffic shaping, and Quality of Service (QoS) mechanisms, to ensure efficient data transmission and reduced latency. This results in improved network speed, reliability, and availability, ultimately improving the end-user experience. Access to the nbn™ high performance fibre access network means the system can use priority data, symmetrical upload-download speed, and business-grade failsafe.

Enhanced network security and data protection

Managed network services offer robust security measures to protect the organisation's network and sensitive data. Advanced firewalls, intrusion detection systems, and encryption protocols help safeguard against cyber threats. Providers of managed network services implement regular security updates and patches to keep the network infrastructure resilient against emerging vulnerabilities. Additionally, managed services include data backup and disaster recovery solutions, ensuring that critical information is securely backed up and recoverable in the event of a breach or system failure.

Seamless scalability and flexibility

Managed network services provide businesses with seamless scalability and flexibility to adapt to changing needs. As organisations grow or experience fluctuations in demand, the network infrastructure can quickly adjust to accommodate the evolving requirements. Service providers have the expertise to scale up or down the network capacity, add or remove devices, and implement new technologies without disrupting operations. This dynamism allows businesses to stay agile, meet customer demands, and efficiently support remote workforces or expansion initiatives.
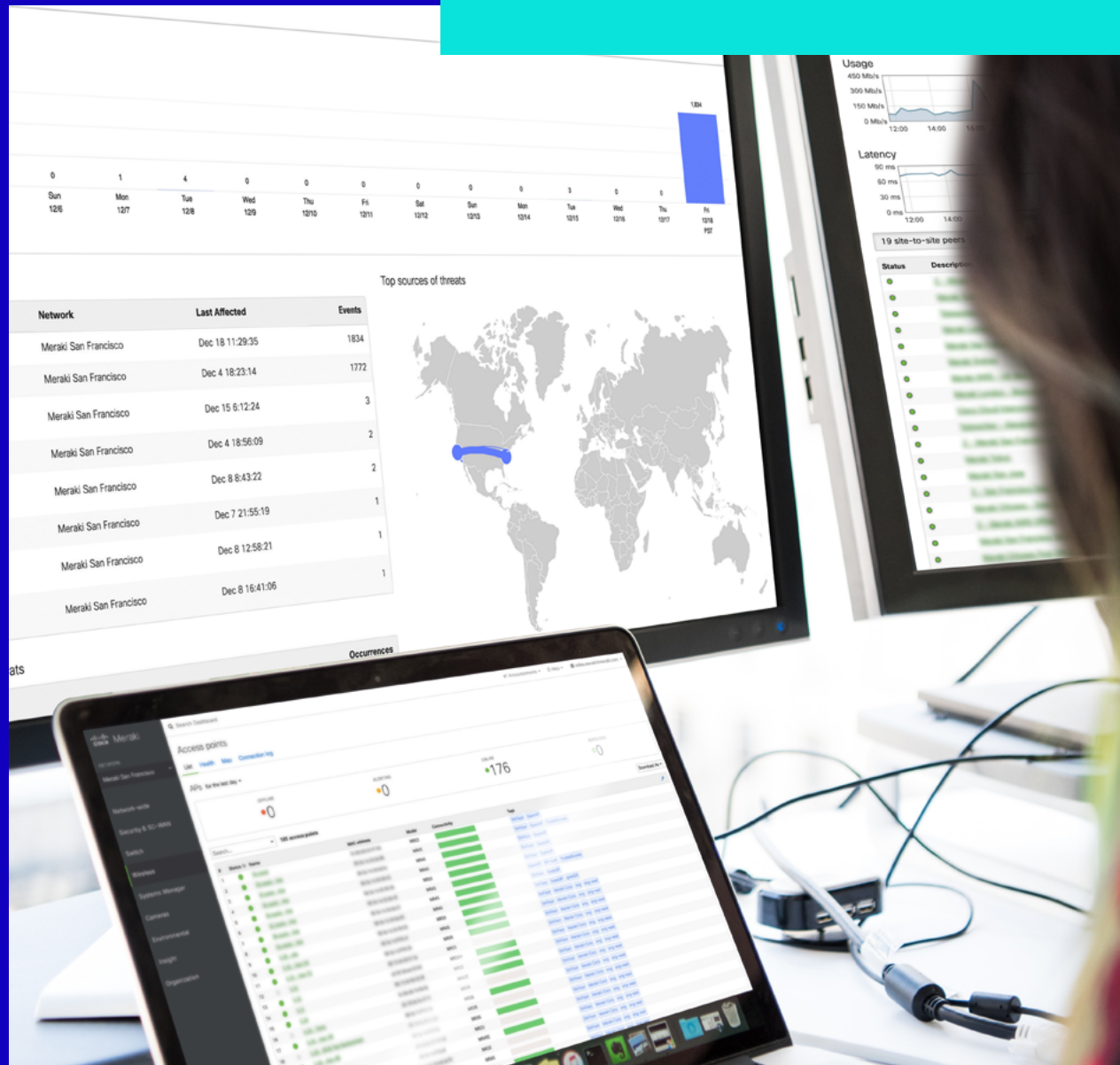
Having a single point of control for an entire network is an incredible advantage. At the press of a button, all the information you need is right there for you. It means less time spent chasing down potentially hundreds of individual devices, and more time spent delivering bandwidth when and where it's needed.

Does your network work for you?

Our workforce is hybrid and geographically disparate

As many organisations embrace flexible work, they must ensure that their remote workforce has reliable and optimised network connectivity, enabling efficient communication, file sharing, and access to critical applications.

Interactive supports the modern workforce by providing managed network services that enable secure remote access to corporate networks, allowing employees to connect and collaborate seamlessly from various locations.

Our data needs to be secure

Managed network services provide robust security measures to protect organisations' sensitive data and networks from cyber threats. With the increasing sophistication and frequency of cyber attacks, businesses need comprehensive security solutions to safeguard their valuable assets.

Interactive implements advanced firewalls, intrusion detection systems, and encryption. By conducting regular security audits, vulnerability assessments, and proactive monitoring we can detect and mitigate potential risks. Businesses can enhance their security posture, protect against data breaches, and ensure compliance with industry regulations.

Our future is software-defined

An open architecture approach that allows businesses to accommodate future requirements and scale their network infrastructure effortlessly is part and parcel of a managed networks package. As technology advances rapidly, organisations need a flexible and scalable network foundation to adapt to emerging technologies and business growth.

Interactive designs networks that support open standards, interoperability and integration with various applications and devices. This enables businesses to seamlessly incorporate new technologies, expand their network capacity, and efficiently meet evolving demands. By leveraging the open architecture of managing network services, organisations futureproof their network infrastructure and ensure it scales with their needs.

Success stories

Food and beverage industry: UCC Coffee

Vision

Known for housing Australasia's most loved coffee brands such as Robert Harris, Toby's Estate, L'affare and Mocopan, UCC Coffee spans eight sites, including two production and distribution centres in Melbourne and Auckland.

UCC Coffee aims to be Australasia's premier coffee provider, and to do this, it leverages modern technologies.

With an average of 40 people per site vying for bandwidth, the roasters turned to Interactive to transform its network from MPLS to managed SD-WAN. After its acquisition in early 2022, UCC Coffee needed to guarantee that it could continue to grow and give its hybrid workforce what they need to succeed.

Challenge

A growing workforce meant that network congestion was a huge issue for UCC Coffee. Staff were forced to choose between working on site or having reliable and fast access to important data.

Strategy

We provided a bespoke managed SD-WAN solution, giving UCC Coffee greater control and management over their networks by dynamically routing and prioritising network traffic according to the specific needs of each application.

Critically, Interactive's solution broke the glass ceiling for the organisation, as they were looking for more direct ownership over their networks.

Outcome

Our solution was highly cost-effective, with UCC Coffee saving 25 per cent off their overall network costs, enabling them to bring two more sites under one network. Network speed also increased significantly, with one site going from 30Mbps to 500Mbps, while costing less than their previous network.

> "Interactive's team has made this entire project a breeze. They are an incredible team of experts who know exactly what they're doing. They've provided a hassle-free delivery ahead of schedule, making my life stress-free during a major transformation project.
>
> **GREG WRATT,**
> **IT MANAGER, UCC COFFEE ANZ**

ucc
Every coffee, every moment

Electrical industry service provider: IPD Group

Vision

IPD Group (IPD) is an Australian operated, ASX-listed electrical product distributor with more than 70 years' experience. Delivering low-voltage power distribution, automation and industrial communications products, IPD provides end-to-end solutions across Australia.

IPD needed support getting its technology in line with its ambitions.

Challenge

IPD had rapidly grown from 120 users to more than 450 – however, its systems and processes remained the same. Consequently, legacy issues were present in business systems, posing significant obstacles, day-to-day challenges, and risks to the group's operations.

With a team of 10 managing its technology department, legacy lethargy was beginning to set in, with operational issues, manual processes, and reactive, labour-intensive problem-solving occupying much of their time.

Strategy

We knew that these issues required a multi-faceted solution, rather than a one-size-fits-all approach. Instead of pitching a product, Interactive proposed a solution that utilised and integrated technologies, products and services that were most suitable for IPD.

As a strategic partner, Interactive offered IPD a single platform (public, private, and cyber) with a fully managed capability that could be measured against. The depth and breadth of skills within Interactive's team ensured any additional vulnerabilities and areas for improvement within IPD's business were identified and addressed – such as backup and disaster recovery.

Outcome

Since migrating to the cloud and eliminating the time-consuming maintenance of legacy hardware, IPD's IT team has gained back 20 hours a week per person – for a team of 10, that's 200 hours back into the business.

> " I could call someone from Interactive, no matter who it was, no matter the difference in years of experience, they'd always have the right skillset and bring the same value to the issue. To us, Interactive is not a provider, they're an extension of our team. Everyone is working towards the same outcome.

**BEN ALLWOOD,
CHIEF INFORMATION OFFICER, IPD**

Augmenting your team

The best-fit solution

With a dedicated focus on managing and optimising your network infrastructure, Interactive allows your internal IT team to focus on core business objectives. We have a deep understanding of network technologies, best practices and industry standards. Our specialised knowledge can enhance your IT team's capabilities, providing strategic guidance, proactive network monitoring and rapid incident response.

Interactive manages routine network management tasks such as configuration management, performance monitoring and security updates, freeing up your internal IT staff to concentrate on high-value initiatives.

A steady hand and a keen eye

With 24/7 network monitoring capabilities, we detect and resolve issues promptly, minimising network downtime. This also brings scalability to your team, allowing you to easily adapt to changing business needs without the burden of hiring and training additional IT personnel. By leveraging the expertise and resources of a managed network services provider, your IT team will operate more efficiently, improve network performance and enhance overall business productivity.

Keeping your vision in focus

Interactive understands that each business has unique requirements and priorities. That's why no two solutions are ever the same. We offer customisation options to meet your specific needs. Whether you require a fully managed network solution or a combination of managed and co-managed services, Interactive will design a solution that aligns with your business objectives and budget.

Interactive's point of difference

Deep experience needed for networks success

Knowing it all – so you don't have to

Network administrators and engineers must possess in-depth knowledge of networking principles, protocols, and technologies. We have a solid understanding of network architecture, routing, switching and security. Expertise in configuring and troubleshooting network devices, such as routers, switches, firewalls and load balancers is essential. Continuous learning, keeping up with industry trends and staying updated with emerging technologies are essential for network professionals to maintain their expertise and deliver efficient network management.

Decades of experience

Experience plays a vital role in managing complex networks effectively. Network managers need hands-on experience in designing, implementing and maintaining networks of varying scales and complexities. They must have a deep understanding of the challenges and best practices associated with specific industries or network environments. Real-world experience helps in developing problem-solving skills and the ability to handle unexpected network issues efficiently. Our experience in managing projects, coordinating with cross-functional teams and communicating with stakeholders is invaluable for successfully executing network management tasks and aligning them with organisational objectives.

End-to-end continuity

From data centres to end-user devices, we provide full continuity – under a single vendor. This prevents the siloing of networks and teams, promotes a whole-of-business approach and ensures that changes can be rolled out smoothly. Interactive simplifies the whole network management process.

SD-WAN NETWORK DASHBOARD

Device status

| Good | Alerting | Offline | Dormant |
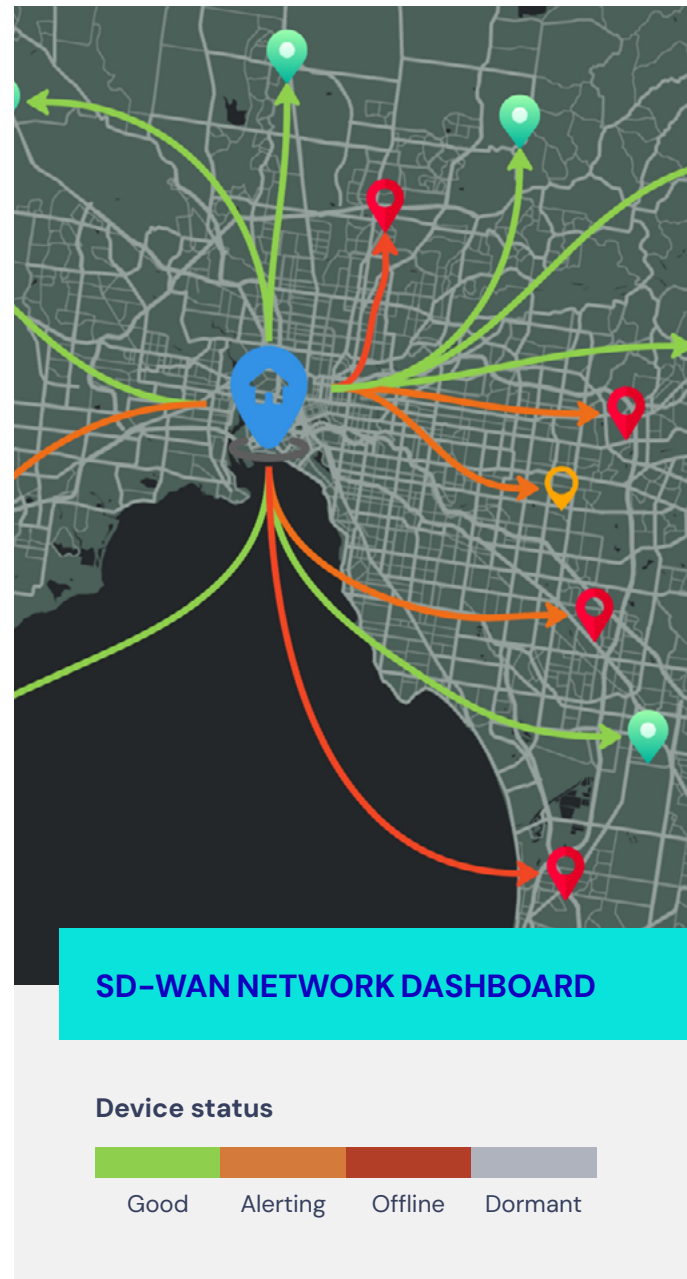
Partnering with the best

One touchpoint, many options

Keeping our single vendor model means that our partners have access to the best technology on offer, but also a consistent touchpoint that will work with them throughout the project. From ideation and design, project management and workshops, through to deployment and onshore after sales support, we pride ourselves on being there with you every step of the way.

Keeping the engine running smoothly…

At the back-end, vendor partnerships enable us to access the latest technology, tools and resources needed to deliver robust and reliable network solutions. By collaborating closely with vendors, we gain in-depth knowledge of product offerings, ensuring efficient implementation and seamless integration with clients' existing network infrastructure.

This partnership allows for timely updates, patches and firmware upgrades to enhancing network security and performance. Moreover, vendors can provide specialised training and support, enabling Interactive to stay at the forefront of emerging network technologies and industry trends.

…while seizing new opportunities

At the front-end, our certifications demonstrate Interactive's proficiency in deploying, managing and supporting a range of products or technologies. We are particularly proud to be a **Cisco Gold Partner**. This enables us to deliver the very best to our customers, at an excellent price.

Interactive's partnership with Cisco has given us unbridled access to **Cisco Meraki** – a highly optimised IT service that seamlessly connects people, places and things. From hybrid workforces to smarter workspaces, Meraki brings together technology and touchpoints to deliver exceptional experiences.

Certifications

Interactive is a **Cisco Gold Partner** with the following specialisations:

- Advanced Collaboration Architecture
- Advanced Data Centre Architecture
- Advanced Enterprise Networks Architecture
- Advanced Security Architecture
- Collaboration SaaS
- Customer Experience
- Data Centre
- Webex Calling Partner

Our team holds

290+

Cisco certifications

Recommendations

Managed network services are less about the technology and more about the potential it unlocks for your organisation.

With more than 600 technology professionals operating over 300,000 in-field devices, our team is well-equipped to handle even the most complex network project. By getting our experts to do what they do best, you'll free up your people to do what they do best. As network technology evolves, so too must your organisation's network posture.

Ask yourself the following three questions to ensure you don't fall behind:

Is cloud working for you?

Whether you're exploring the benefits of migrating to the cloud or seeking to optimise your existing cloud infrastructure, our expert team is here to help. With a wealth of experience in designing and implementing robust cloud strategies, we can tailor solutions to meet your unique business needs, driving efficiency, scalability and cost savings.

Are you on top of your security?

Cyber security is an arms race, and the shifting threat landscape necessitates constant vigilance. Protecting data integrity and ensuring the confidentiality, and availability of your systems is paramount in today's digital landscape. Interactive offers a holistic approach to security, providing robust threat detection, proactive monitoring and incident response services. With our expertise in the latest security technologies and industry best practices, our solution will fortify your defences, mitigate risks and provide you with peace of mind, enabling you to focus on core business objectives.

Does your network structure support your growth?

An excellent network should be an asset, not a hindrance. Interactive specialises in designing, implementing and managing scalable network solutions. Whether you require an upgrade to accommodate your growing business, enhanced wireless connectivity or improved network security, our experienced team can assess your unique requirements and deliver cost–effective solutions tailored to your specific needs. Maximise your network's potential with our comprehensive range of services and experience enhanced performance.

Keen to take the next step in your networks journey? Speak to our networks expert about:

Performance and reliability
Reviewing your topology, application and traffic paths, and carriage technologies

Security
Analysing firewall policy, conducting a network health check and assessing firmware

Efficiency
Identifying commercial efficiencies and developing a roadmap with technology recommendations

BOOK A COMPLIMENTARY ASSESSMENT

About us

Interactive®

We are the people behind the technology. We help organisations to reach their full technology potential and transform.

Interactive is a technology solutions provider across Australia and New Zealand providing services across three core capabilities: cloud, cyber and systems.

Interactive®

CISCO
Partner

Gold Provider
Gold Integrator

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