



EBOOK

# Revolutionising business connectivity

With



# Revolutionising business connectivity

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# Introduction

Organisations of all sizes are leveraging cloud networking to power new services, ensure business continuity and accelerate digitisation. With innovative solutions, companies can securely connect devices and applications in new ways, delivering networks that offer both strategic advantage and consumer-centric experiences.

Whether it's improving patient care in hospitals, powering the classroom of the future or boosting services across smart cities, the key is to leverage networks as a strategic asset – ensuring business continuity and boosting innovation.

## New ways, better outcomes

With the right solutions, companies can enrich customer experiences, reduce risk, improve efficiency and solve challenges.

Using the following services, businesses can optimise their offering:



These services can help businesses simplify and improve the way they work.

In this eBook, we look at how organisations can use network solutions to best effect, and how Extreme is supporting companies across the world to drive better outcomes.

# Introducing Extreme

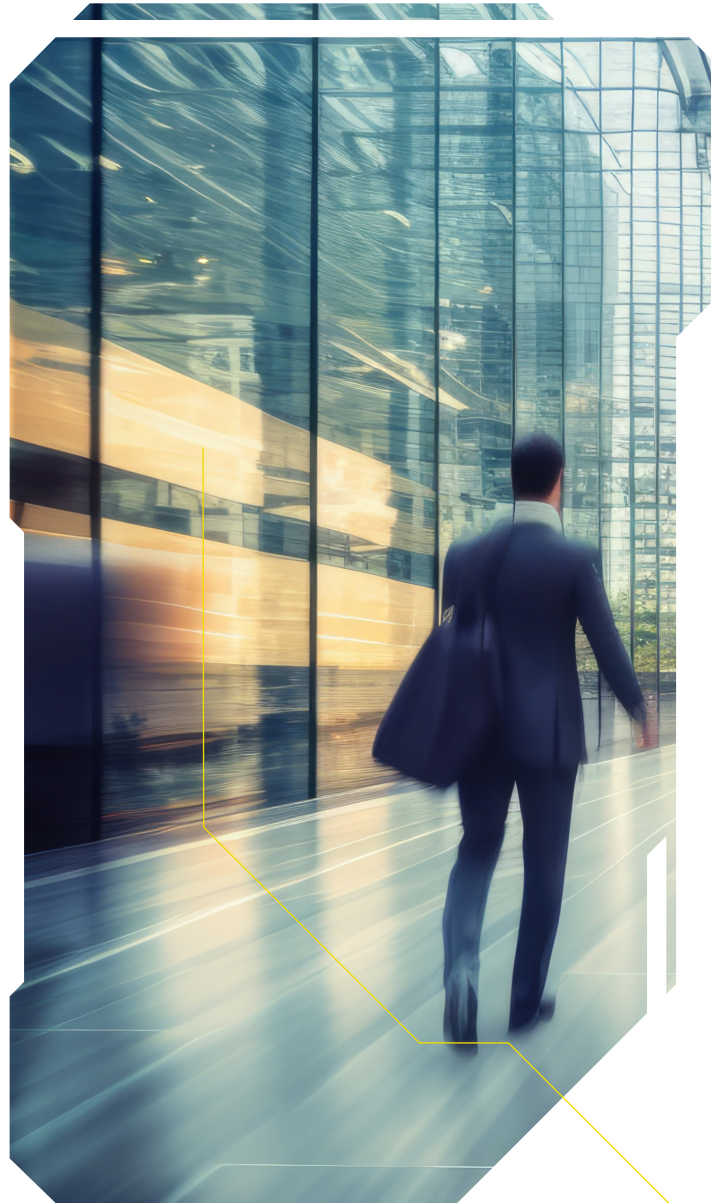
We work in partnership with Extreme, a specialist provider of cloud networking that specialises in simple, flexible and scalable networks.

As a Gartner leader at the forefront of their field, Extreme Networks has proven industry technology expertise that customers trust, time and again.

With a flexible approach that can be tailored to any requirement, Extreme's top-rated team provide global technical support that is 100% in-sourced, with a comprehensive portfolio of solutions designed to meet every organisation's unique requirements.

## Extreme's services cover

- Planning, deployment, maintenance and support for your IT environment
- Integration of existing technologies with new solutions for the optimal mix
- Cloud architecture to simplify diverse operations
- IoT troubleshooting and security with PPSK and NAC
- Location services to easily track and secure devices
- Realising maximum value from your IT investment





# Understanding the modern business landscape

In today's digital landscape, the demand for reliable and high-performance network connectivity has never been higher.

With organisations increasingly relying on technology to facilitate communication, collaboration and day-to-day operations, robust network infrastructure is vital. Downtime is a critical issue, and uninterrupted connectivity is the key to business continuity.

The surge in remote work, the growth of IoT devices and the huge increase in data have increased the complexity of network requirements. Companies are facing a mounting list of challenges, including system downtime, security threats and a rapidly growing need for scalable, adaptable solutions.

**Reliable and high-performance networks offer a solution.**



# Challenges to Overcome

## Reliability and downtime

Unreliable connectivity is a serious problem for businesses.

When network infrastructure stops working, businesses are forced to deal with disruptions that stop them accessing essential online services and communication platforms. Not only does this affect day-to-day operations, but it can lead to financial losses and damage the trust of clients and partners.

Internet access alone is not enough. Organisations need robust connectivity solutions that are dependable and capable of scaling to meet evolving digital demands. Reliable connectivity is not just a technical requirement; it's a strategic necessity for businesses who are looking to maintain a competitive edge and maintain stakeholder trust.

Addressing these challenges head-on is vital when it comes to ensuring uninterrupted operations and empowering businesses to connect and thrive.

## Security threats and risks

Whilst it's important to safeguard physical office spaces, cybersecurity poses a new challenge altogether.

Business data is a prized asset, so it's no surprise that hackers want to get hold of it. With so much sensitive information contained within business networks, they're a prime target for hackers – posing a double-edged threat to both data integrity and organisational credibility.

As companies increasingly depend on technology to streamline operations and enhance services, the risk of network gaps, breaches and cyber threats escalates.

The key is to implement robust security measures that are capable of adapting to evolving cyber threats, striking the right balance between information accessibility and system safeguarding. This goes beyond protecting data;

it's about preserving the trust of clients, partners, and stakeholders.

## Scalability and bandwidth demands

As businesses experience unprecedented growth in data volume and the number of network users, they face a challenge: how can they scale seamlessly to accommodate increased demand?

With the constant influx of new data and new applications being integrated, organisations need agile solutions that can flex and scale to meet changing requirements. Without this, businesses face increased network congestion, decreased performance and, in the worst cases, total system failures.

The solution is to develop and sustain networks that have the agility to expand and contract as needed. This adaptability ensures that businesses can maintain a robust network infrastructure capable of supporting both current and future needs. It's about future-proofing connectivity, allowing businesses to scale without compromising efficiency or the quality of services.



# The solution

## Resilient network infrastructure that drives better outcomes

Extreme's networking solutions empower organisations to enhance their operational efficiency and safeguard sensitive data.

By helping businesses embrace the possibilities of cloud-based networking systems, Extreme paves the way for digital transformation, with solutions that enhance quality, productivity and cost-effectiveness.

Not only do Extreme's solutions streamline processes, but they also increase collaboration, scalability and accessibility – ensuring that organisations can fully realise the benefits of a modern, agile approach to networking.

Whatever your requirements, we can provide tailored support that aligns with your individual goals and budget, ensuring a seamless and resilient experience across every aspect of your business.

## Solutions to drive innovation forwards



**Ensure uninterrupted operations with consistent and stable network performance**



**Adapt seamlessly to change with solutions that allow for expansion without compromising quality**



**Boost cybersecurity with advanced features including threat intelligence, analytics and automated responses for a secure network**



**Minimise downtime by quickly identifying and resolving network issues**

# Extreme's services

## Cloud

Businesses are becoming increasingly dispersed. With more devices, more data and more people than ever before, network flexibility has never been more important.

Extreme Networks offers a range of cloud-based solutions designed to provide customers with the optimum balance between simplicity, performance and cost.

### Cloud applications

- **Network Management:** Covers wired, wireless, SD-WAN and IoT devices
- **Security:** Layered across the entire infrastructure with network access solutions, air interface protection, fabric-based hyper-segmentation and SD-WAN
- **Analytics:** Context-based, including diagnostics and troubleshooting
- **WAN Edge:** SD-WAN connectivity between campus, data centre, cloud and branch with application performance management for enhanced user experiences

### Platform

- Multiple deployment options, including:
  - Public
  - Private
  - ExtremeCloud Edge - the strongest platform for cloud sovereignty, data residency, privacy and performance
- Present across Amazon Web Services, Microsoft Azure and Google Cloud Platform
- Unified, automated and secure by design







## Network fabric

Fabric technology is the answer to faster, simpler, more resilient and connected networks with enhanced security.

As a leader in fabric technology, Extreme Networks offers a range of options to meet all needs – from plug and play solutions to highly scalable, programmable technology.

- **Fabric Connect:** A network fabric that ties all the components of one network together
- **IP Fabric:** An open and programmable solution optimised for standard BGP-EVPN deployments

### Features and benefits

- Powerful centralised management
- Embedded automation capabilities
- Simplified deployment
- Seamless integration with hypervisor providers, security partners and IoT vendors

## Security

For any organisation, safeguarding digital assets is a top priority. Cyber threats are evolving, and businesses need to ensure the integrity of their network to protect sensitive data.

As a market leader in network security, Extreme's solutions are designed to adapt to a range of requirements.

### Features and benefits

- Actively monitor and analyse potential risks for real-time insights that help strengthen your systems against cyber threats
- Advanced analytics decode patterns and anomalies within your network to identify threats before they escalate, enabling proactive mitigation
- Quickly detect and neutralise threats through automated processes, minimising response times and reducing the risk of data breaches



## Wired access

Extreme Networks' Wired Access solution is where connectivity meets reliability to redefine your network experience.

Tailored for businesses navigating increased digital demand, this solution is designed to elevate your network infrastructure, ensuring seamless operations and enhanced performance.

### Features and benefits

- Lightning-fast gigabit speeds ensure swift data transfer and optimal performance for bandwidth-intensive applications
- Enhanced reliability minimises downtime, creating a stable network foundation for critical operations
- Intelligent network management offers you greater control and visibility, enabling you to streamline operations and address issues proactively

## Wireless access

Wireless access is the future of business connectivity. Created for the growing demands of the digital era, Extreme Networks' Wireless Access solution is designed to foster flexibility, scalability and innovation across organisations.

### Features and benefits

- High-speed connectivity empowers your workforce with fast and reliable access to data, applications and collaboration tools
- Seamless roaming capabilities make staying connected easier. Whether in the office or on the go, staff will have access to uninterrupted connectivity, ensuring productivity wherever they work
- Advanced security protocols safeguard your network, protecting against evolving cyber threats and ensuring data integrity
- Wireless access evolves with business needs, ensuring that your wireless infrastructure flexes and scales to accommodate increased demand

# The real-world impact on business digitisation

## Manchester United

### The challenge

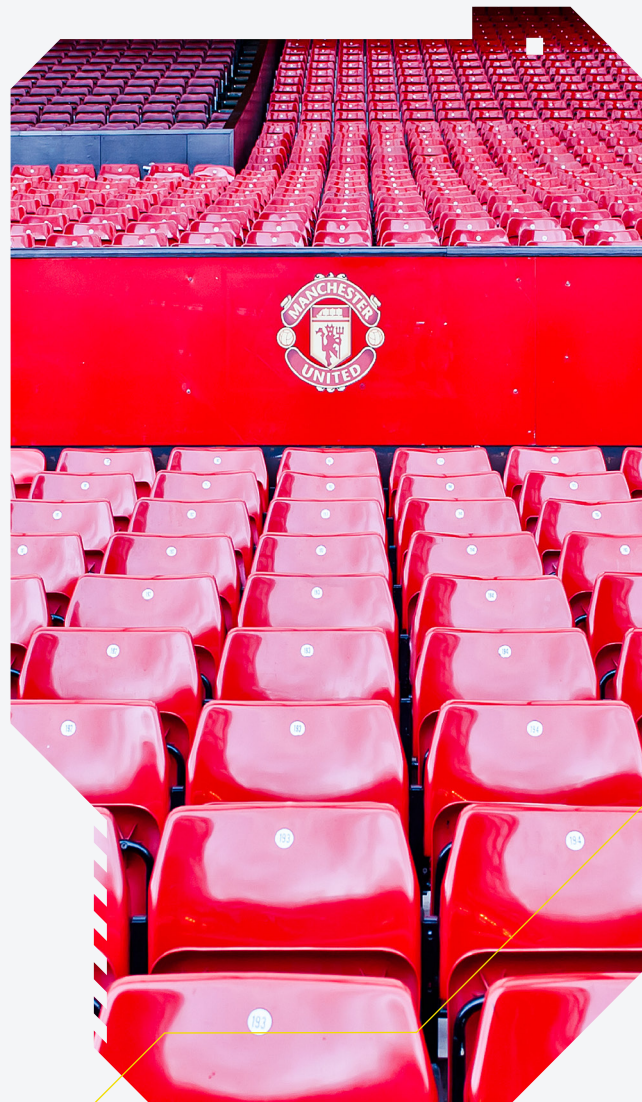
Manchester United had outdated and insufficient network infrastructure, which was having a negative effect on fan engagement and venue operations.

### How Extreme helped

Extreme stepped in to address this challenge by implementing advanced networking solutions tailored to Manchester United's unique needs. The focus was on enhancing connectivity, streamlining operations and providing a robust foundation for digital innovation.

### The outcome

- Extreme's solutions significantly improved connectivity, creating a seamless and immersive digital experience for fans attending matches and events.
- With a scalable and agile network infrastructure, Manchester United were able to streamline venue operations, optimising resource management and improving overall efficiency.
- Consistent and reliable connectivity throughout the venue meant they could meet the growing demand for bandwidth-intensive applications and services.
- Advanced security measures were implemented, ensuring the integrity of critical data and maintaining a reliable network even during high-traffic events.
- Ultimately, Manchester United emerged as an innovative digital leader, leveraging technology to enhance both fan engagement and operational excellence.





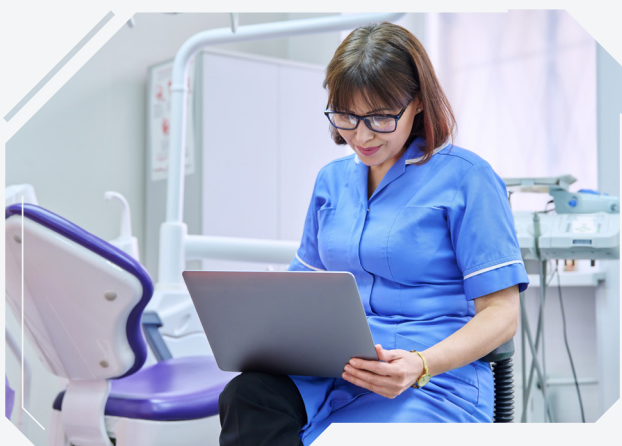
## WiFi for hospitals

### The challenge

The healthcare industry was grappling with outdated and disparate network systems, which was causing issues with communication, data access and overall operational efficiency within healthcare facilities.

### How Extreme helped

Extreme addressed this challenge by implementing tailored solutions designed around the unique demands of the healthcare sector. The focus was on creating a unified and secure network infrastructure to enhance communication, support critical healthcare applications and ensure seamless data access.



### The outcome

- Extreme's solutions enhanced communication among healthcare professionals, improving collaboration and enabling quick access to critical patient information.
- The new network infrastructure streamlined healthcare operations, optimising workflows and reducing delays.
- Extreme prioritised the security of patient data, implementing robust measures that controlled access to safeguard sensitive healthcare information.
- The solutions provided scalability and resilience, adapting to growing demand and ensuring continuous network availability even during peak times.
- Overall, this supported the growth of telehealth services, enabling healthcare providers to deliver remote care efficiently and expand their reach more effectively.

## Digital-first learning for the classroom

### The challenge

The education sector was looking for a way to bring digital-first learning into the classroom. However, the existing network was struggling to support the increasing demand for technology integration in education settings.

### How Extreme helped

Extreme implemented enhanced wireless solutions specifically tailored to digital learning environments. This involved creating a robust, high-performance wireless infrastructure that could support the increasing number of devices and applications essential for modern education.

### The outcome

- Extreme's wireless solutions facilitated a seamless digital learning experience by providing reliable and high-speed connectivity, ensuring students and teachers could access digital resources without interruptions.
- The infrastructure supported increased demand for access, accommodating the growing number of laptops, tablets and other connected devices needed for learning.
- With improved connectivity, teachers were able to boost engagement and collaborate more effectively with students
- The solutions empowered more efficient network management, ensuring that administrators could monitor and optimise network performance
- With a future-ready wireless infrastructure, the education sector is ready to adapt and scale in line with evolving technology.





# The future of business connectivity

## 5G technology

The rollout and widespread adoption of 5G technology is set to shape the future of business connectivity. With faster speeds, lower latency and increased capacity, 5G will support a wide range of applications, including IoT, augmented reality and real-time data analytics.

## Edge computing integration

Businesses are increasingly incorporating edge computing into their connectivity strategies. This trend involves processing data closer to the source, reducing latency and enhancing the efficiency of applications that require real-time processing, such as IoT devices and AI applications.

## SD-WAN evolution

Software-Defined Wide Area Networking (SD-WAN) is evolving to meet the growing demands of businesses for flexible, secure and efficient network management. SD-WAN solutions will become increasingly sophisticated, incorporating AI and machine learning to optimise network performance, security and application delivery.

## Hybrid and multi-cloud architectures

Hybrid and multi-cloud architectures are on the rise as businesses seek flexibility, scalability and contingency. By using a combination of on-premises, private cloud, and public cloud resources, organisations will be able to tailor their connectivity solutions to specific needs and workloads.



## Who we work with

### Enterprises: Large corporations in sectors such as finance, technology, manufacturing and retail

Assisting businesses in establishing and maintaining robust and secure communication networks.



### Small and medium-sized businesses (SMBs)

Working to provide cost-effective communication and technology solutions tailored to each organisation's specific needs.

### Healthcare providers: Hospitals, clinics and healthcare organisations

Enabling communication and connectivity between systems, facilities and employees within the healthcare sector.



### Housing sector: Working in partnership with Housing Associations

Helping housing associations build fast and supported networks to enable change and resilience.

### Educational Institutions: Schools, universities and educational institutions

Keeping schools online and facilitating the delivery of critical information to parents and staff at scale.

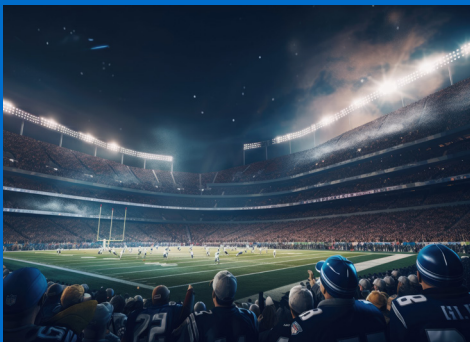


## Customer quotes



Extreme Networks has been a key partner in helping us to build a smart city that meets the current and future demands of our citizens.

Boras Stad



Demands for technology-driven experiences are evolving, and it's our job to fulfil those expectations. Our partnerships with innovative companies like Extreme allow us to stay ahead of the curve.

National Football League



We're excited to partner with Extreme and its best of breed analytics and networking solutions to uncover insights. The information they are able to provide allows us to gather a deeper understanding of preferences and trends so we can deliver a more personalised and engaging experience.

NHL



## GET STARTED

# Work with a provider who can transform your organisation's networking capabilities.

Wavenet is a trusted managed services provider, working in partnership with public sector bodies and businesses nationwide.

We utilise our experience and expertise to learn each customer's needs and offer solutions that provide industry-leading telecommunications and technology capabilities, empowering you to create a platform that will truly optimise your operations.

Our partnerships are long-standing and hand-picked to only offer the best technology to our customers, giving you the peace of mind that a Wavenet solution will support and grow with you, no matter what the future holds.

**Talk to us**





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Unified  
Communications  
& Voice



Contact Centres



Mobile Solutions  
& IoT



IT, Cloud  
& Technology



Network  
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