OUR 10-MINUTE GUIDE TO NETWORK MANAGEMENT
WHAT'S THE BIG DEAL?

The pandemic has been a game changer in so many ways. For SMEs, it has seen a huge growth in the complexity of digital networks, thanks to the wide adoption of new cloud services, the transition to remote working and the greater use of mobile devices.

With the prospect of a hybrid working future, this complexity is unlikely to ease. Businesses of all sizes will continue to rely on their digital networks more than ever, for (among many others) remote communication and collaboration, back office functions and e-commerce.

And as AI, big data and the Internet of Things applications make more of an impact into the SME space, network complexity will only increase further.

All of which makes the health of your digital network a business critical issue. That was true before the upheavals heralded by Covid, but it's even more so today.

RECENTLY CALCULATED COST OF NETWORK DOWNTIME WAS WHOPPING $5,600 (£4,017) PER MINUTE.

THE PITFALLS OF AN UNMANAGED NETWORK

Your network is becoming more sophisticated, which also means there's more to go wrong. By contrast, when your network is working smoothly and efficiently, so is your business.

In worst case scenarios, a network outage could cripple your business for a prolonged period of time. A few years ago consultancy Gartner calculated the cost of network downtime at a whopping $5,600 (£4,017) per minute.

That's across all business sizes and sectors, and the financial losses might not be as great for small organisations. But they will be significant.

And the worst case scenario is just one of many. An inefficient network might struggle on, but it undermines innovation and slows your everyday operations. Bottlenecks are the source of frustrating delays.

A poorly configured network makes deploying new devices and services a slower and more painful process. Quite simply, a bad network is bad for business.

That's why managing your network is essential, whatever the size of your business. Managed networks used to be the preserve of large multi-site enterprises, but as SMEs become increasingly digital, monitoring and managing the health of digital infrastructure is no longer something that can be left to chance.

In the rest of this paper, we'll explain what network management means, and how SMEs can secure the health of their networks in easy and cost-effective ways.

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WHAT IS
NETWORK MANAGEMENT?

So what is network management, and how do you do it?

Very simply, if you have more than one computer connected to the internet, to each other or to other office equipment (like a printer) you have a network. Of course, your own network is likely to be far larger than that, with multiple digital devices connecting to the cloud, to on-premise infrastructure and to a plethora of tools and applications. In which case, you have a network that needs managing.

Network management is the process of administering, managing and operating a network. In the simple two computer scenario mentioned above, that can be done in an ad hoc way. If your devices are working, then they're working.

In more complex scenarios, you need a network management system, which collects and analyses data about your digital network, allowing you to maximise performance, stability and security.

Data is collected from network devices, like routers, switches and wireless controllers.

It's also gathered from what are called network endpoints, which simply means the computers, smartphones, sensors and other equipment your business uses every day.

When it has this data, your network management system can automatically make configuration changes that optimise the network, send reports to your IT team and troubleshoot issues.

In a word, it ensures all parts of your network, and the network as a whole, are in healthy working order.

Network management systems can be either cloud-based or on-premise. There are now specific solutions designed to meet the needs of small and medium sized enterprises.

NETWORK MANAGEMENT IS THE PROCESS OF ADMINISTERING, MANAGING AND OPERATING A NETWORK.

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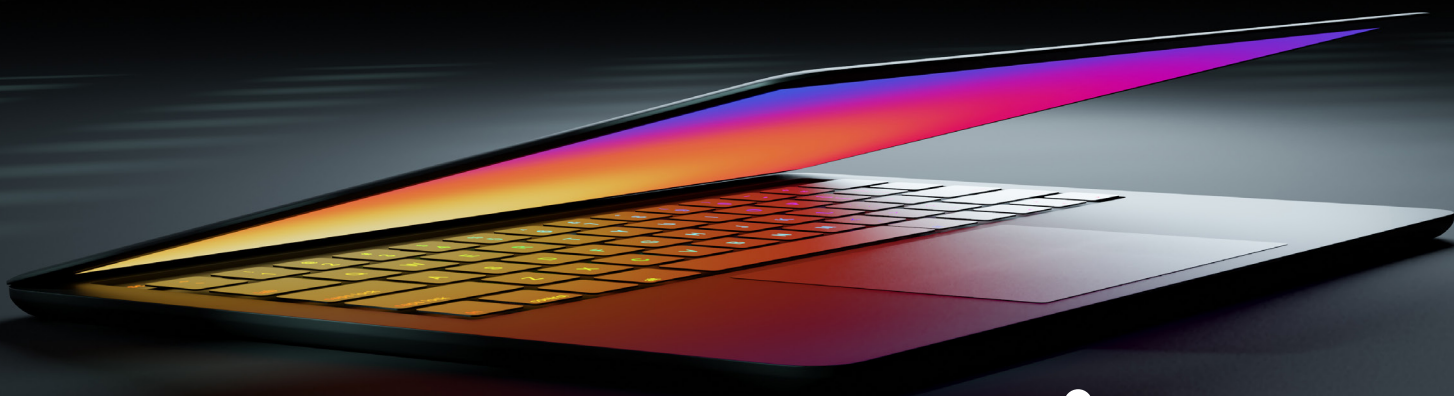
THE FOUR FUNDAMENTALS
OF NETWORK MANAGEMENT

Network management systems can be boiled down to four fundamental components that work together to ensure the health of your network.

1. Network visualisation

To manage your network, you need to know what it's made up of. A network management solution should automatically discover and group together all the elements - routers, wireless, switches, servers etc - that form your network, mapping them and allowing you an at-a-glance understanding of the health of the network.

2. 24/7 monitoring

A network management system shouldn't be passive. Instead, it should continually collect data from the various elements of your network to make sure they're working efficiently. A good solution allows you to perform availability monitoring on all network devices (i.e. is the device working) and also perform proactive health monitoring based on certain criteria. To take one simple example, you might monitor the free disc space in a file server, so you can add more capacity before it runs out.

In effect, health monitoring means spotting problems before they affect users. It can show a deterioration in performance over time, alerting you to a router (for example) that's ready to crash before it actually does.

3. Response

When your network management system detects a problem, it needs to be able to fix it automatically or make sure the right people know about it.

Your solution might take remedial action based on agreed parameters, or send notifications to relevant staff. It should display important information about your network in an easy-to-digest fashion on a single dashboard.

4. Reporting

Reports allow you to identify trends in your IT infrastructure and take appropriate action. Real-time analytics and automated reporting produce insights that drive business value. Where are bottlenecks most likely to occur?

On what devices are outages most common? Having the answers to questions like these (and many others like them) allows you to optimise your data network for the long term.

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NETWORK MANAGEMENT
MADE SIMPLE

It's clear from all this that if you have a modern data network, you need to manage it. It needs to be secure, reliable and optimised for your specific requirements.

At the same time, SMEs naturally balk at what they see as the expense and effort involved in quality network management. Network visualisation, 24/7 monitoring and automated response and reporting sound like the kind of services that are designed for large enterprises rather than small, one-site organisations.

But as the need for SME network management has grown, a new breed of affordable, powerful and easy-to-use network management solutions has emerged to meet it.

For example, network management tools from D-Link are designed for SMEs, allowing small businesses with limited resources to create and manage flexible and reliable data networks, minimising network downtime while maximising efficiency and productivity.

Nuclias Cloud, is a complete cloud-managed networking solution for SMEs, accessible through web browser or management app.

Nuclias Connect, is an enterprise-grade on-premise network management system for SMEs.

These systems offer:

• End-to-end - a complete WLAN infrastructure solution that can be deployed and managed with minimal in-house expertise

• Real-time analytics and automated reporting produce insights that drive business value

• Ease-of-use - an intuitive, customisable interface saves you time while giving an at-a-glance understanding of your network status

• Hassle-free deployment, configuration and network administration

• Flexibility to meet the needs of different businesses needs and use cases

These systems are ideal for SMEs that want a solid foundation for digital transformation, and perfect for businesses in sectors like retail and hospitality that want to offer premium-grade guest Wi-Fi and benefit from real-time analytics.

A MODERN DATA NETWORK NEEDS TO BE MANAGED. IT NEEDS TO BE SECURE, RELIABLE AND OPTIMISED FOR SPECIFIC REQUIREMENTS.

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THE MOONCOMPUTERS
DIFFERENCE

The takeaway here is that it's crucial for businesses of all sizes to get serious about network management. The health and security of your digital infrastructure depends on it, which means that in most cases the health and security of your business depends on it too.

If you're not sure where to start, Mooncomputers can help. We've got long experience in cloud and network management, and over 20 dedicated engineers whose role is to design tailored services to meet our customers' needs.

We've partnered with D-Link to offer SMEs Nuclias Cloud and Nuclias Connect, the powerful and affordable network management tools created for small and medium sized organisations.

We can implement Nuclias network management in your business and configure it to your precise requirements. We'll support the service with our knowledgeable, 24/7 service team.

Together, Mooncomputers and D-Link can ensure your business has a healthy and hardworking data network with reliable internet access, no matter the size or scope of your site. We'll monitor your network, leaving you to focus on your business.

MOONCOMPUTERS HAS A LONG TERM EXPERIENCE IN CLOUD AND NETWORK MANAGEMENT WITH OVER 20 DEDICATED ENGINEERS

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