



Networking Refreshed

Removing Network Complexity
with the Cloud

Cloud managed networking presents the opportunity for businesses to decrease the complexity of deploying and managing the networks they now need. What are the challenges that businesses are faced with traditional network infrastructure, the rise of complexity, and why cloud network management could be the right choice for a range of businesses?

Complexity is the enemy of small IT departments. Whilst enterprise IT teams often have the skills, knowledge and manpower to work their way through issues, smaller teams struggle to balance managing complexity and making improvements alongside the day-to-day tasks, which simply keep the operation running.

Unfortunately, for in-house IT teams and Managed Service Providers (MSPs), the pressures of demanding workplace environments means that even the smallest businesses now need enterprise-class connections to stay competitive. High performance systems are expected by staff and customers at all sites and secure scalability to deal with changing demands is essential.

In essence, the network concerns of the large enterprise are now mirrored in that of more modestly-sized business. We've seen this growth in complexity coming for quite some time. As more employee-owned laptops and smartphones have connected to the network, and 'bring your own device' (BYOD) culture, official or not, has become the norm - managing both security, applications and performance has become more burdensome than ever.

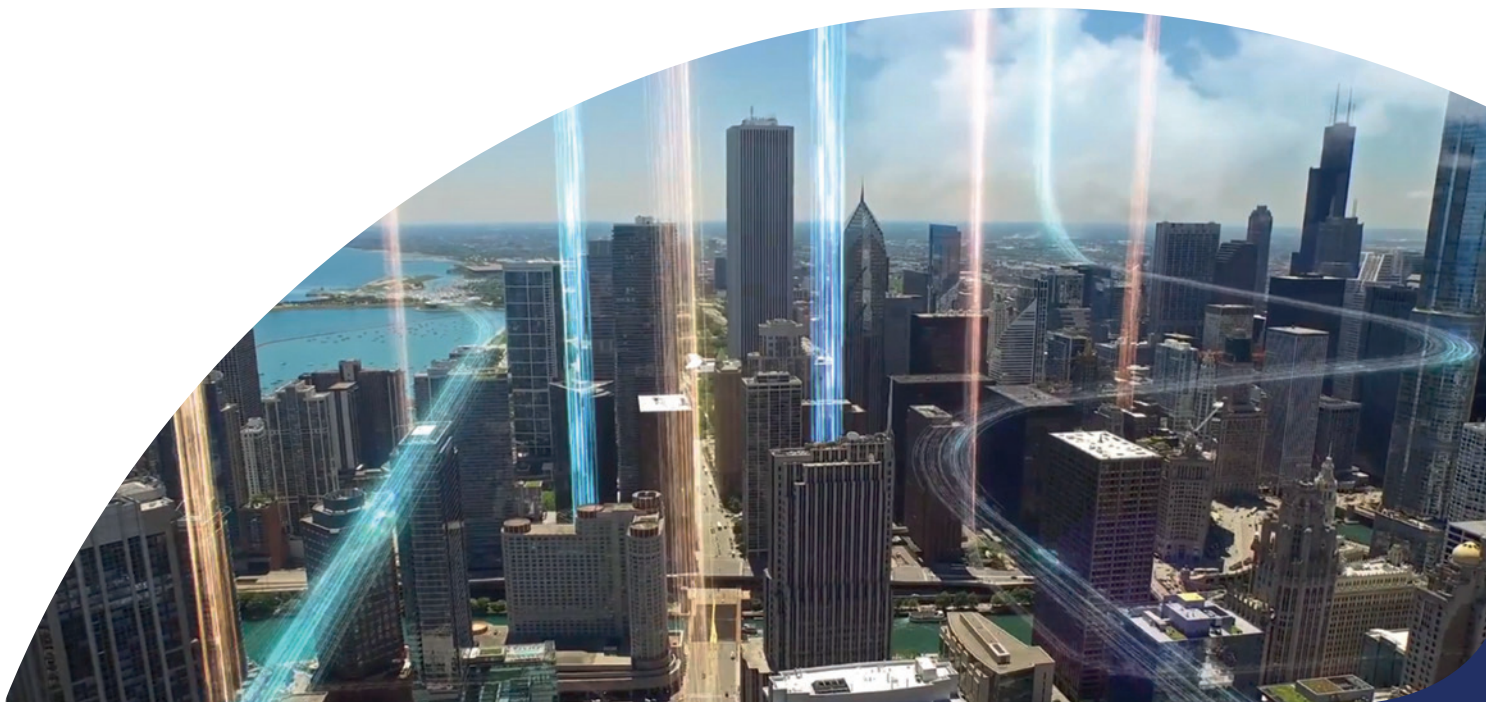
Adding to the mix IP telephony, IP CCTV, Wi-Fi connected point of sale systems, inventory management scanners and other IoT devices, it's clear that network complexity shows no sign of abating.

Cloud Managed Networking and the Complexity Conundrum

Many organisations aiming to handle additional network strains and cut cost and complexity are looking towards cloud-based network management. Put simply, cloud network management allows a business to centralise its network management for multiple locations through a web interface to a tool they run in a third-party hosted environment, or via a Software-as-a-Service (SaaS) application.

Once core systems are in place, for instance a gateway switch at a branch office or store, the best cloud network management systems enable new devices, such as a wireless access point (AP), to be provisioned, managed, secured and maintained remotely without any IT personnel needing to visit the site.

These benefits are particularly useful for businesses with several small locations, such as retailers, food and drink destinations, petrol stations and hotel chains. The ability for a wireless network device to be posted out, clipped into position by an onsite manager, then configured centrally through the cloud-based interface provides huge efficiency benefits for businesses with multiple locations, though limited IT headcount.



The Market for Cloud Managed Networking

So, why then is cloud-based network management not more commonplace? Quite frankly, because the marketplace is polarised. The high-end offerings deliver the automation, visibility and simplicity of deployment needed to cut complexity and improve efficiency. They come with a price tag most IT budgets can't justify. More often than not, this is because these packages come with a raft of features that aren't necessarily tailored to the needs of small and medium sized businesses.

For instance, does a chain of coffee shops really need the capabilities of a level seven firewall, deep insight analytics and application control? Probably not. They might want to look at authentication through webpage captive portal, but not much else. However, if the coffee chain's IT head wants to invest in cloud-based network management they'll be paying for these unnecessary additions.

On the other end of the scale are far cheaper, though less fully featured options, which despite being billed as "cloud", are in reality just a standard network management tool hosted on an AWS, Microsoft Azure or Google Cloud (or other) server. In other words, whilst it is technically cloud-hosted, users will still usually need to setup the cloud infrastructure, pay for this separately and manually configure each access point to connect to it.

As the expectations, demands and the variety of pressures on the medium-sized business network increase, network managers need a solution that is comparable in functionality to those implemented by the enterprise, but at a price that is affordable.

Not all Clouds are the same, so how do you choose the right Cloud for your business?

- Is it 100% cloud or not
- How easily and quickly can you deploy and configure access
- Does it provide comprehensive real-time insight to your network
- Overall cost vs required functionality



Cutting Complexity, Cutting Costs

At D-Link, we believe that cloud managed networking is the answer to many of the challenges that MSPs face when servicing multiple local businesses, and the IT teams of mid-sized companies. With our new solution, Nuclias, we're delivering into that sweet spot between the excess feature laden high-end and high effort, low value "budget" solutions currently available. We're delivering the visibility, ease of deployment, automation and security that smaller IT teams and MSPs need on tap to be able to do more with less, while future proofing their networks - all at a price point that delivers demonstrable ongoing value.

Nuclias offers truly zero touch provisioning. Access points can be shipped from stock without the IT team needing to pre-configure them – a significant time saving on initial deployment and a boost to service level performance when damaged equipment needs rapid replacement.

Being 100% a cloud based SaaS, Nuclias is highly accessible and offers transparent pricing – no hidden costs or separate bills for cloud hosting and configuration. The service is built on a platform that already supports more than five million devices, backed by a 24/7 multi time zone customer support service.

Designed from the outset for multi-tenant support, Nuclias ensures compliance with the latest data protection and privacy regulations – user traffic is not sent via the cloud service, and security is assured with out-of-band, SSL-encrypted management plane backed with 99.99% uptime service level agreement.



The management system supports both wireless APs and network switches. Nuclias switches are available with from 10 to 52 ports available and including PoE options to simplify the installation of APs and other networked equipment. Its wireless APs are next-generation 802.11ac Wave 2 devices, offering dual-band concurrent 2.4 GHz and 5 GHz so are suitable for high footfall locations and bandwidth-intensive applications such as data, voice, and video streaming.

The management system itself offers all the essential elements to deliver a robust network service with a lean team, including security features such as role-based administration, Auditable change logs, Authentication via customisable captive portal, 802.1x and RADIUS server, Over-the-web firmware upgrades, and a Searchable network-wide event log. Maintenance is aided by Automatic monitoring and alerts, an intuitive VLAN Configuration tool, Cloud based RF Optimisation, and Advanced traffic reporting and data analysis.

Delivering an excellent end user experience is ensured through the ability to offer Social login for Wi-Fi access via a Customisable Captive Portal.

Of course, every business' needs are different, and there's rarely a one-size fits all solution. So evaluating the full range of options available makes sense, however if network provision across multiple sites is part of your IT complexity challenge, cloud-based networking should be on your radar.

