

An aerial view of a city skyline, likely Chicago, with several prominent skyscrapers. Overlaid on the image are several vertical, glowing blue and white light trails that resemble data streams or network connections. A large, semi-transparent white circle is positioned on the left side of the image, containing the main headline text.

D-Link brings Nuclias Cloud Networking Platform to the mass-market

Cloud-managed infrastructure has been around for a number of years, but has mainly been adopted by large enterprises, dispersed organisations or managed service providers but has not been accessible for small to mid-sized businesses. Adopting cloud-managed networking presents an opportunity for businesses to decrease the complexity of deploying and managing their network due to the migration of core applications to the cloud. D-Link's Nuclias Cloud Networking platform is specifically designed to address this need.

Nuclias may be a new name in the channel but it has been around for over four years. The platform was a dedicated development by D-Link for a global telecommunication company who was looking to provide a cost-efficient managed service to its customers, most of whom were SMBs. They tried to provide a cloud solution from one of the largest networking companies in the world but found that the solution was overly complex, over-engineered and too expensive to meet the budgets requirements of their SMB customers, resulting in lost business opportunities.

Through this partnership, D-Link realised that complexity was the enemy of small IT departments. Whilst enterprise IT teams often have the in-house resources, knowledge and manpower and budgets to work their way through complex issues, smaller businesses often lacked the expertise to manage anything other than routine maintenance alongside their day-to-day tasks. At the same time, expectations have increased significantly, even the smallest business now expects their infrastructure to have the high-performance systems and resilience of much larger organisations since not having an appropriate infrastructure not only affects their competitiveness but provides a distraction from focusing on their core business.

Simplicity is at the heart of Nuclias, it takes all the functionality expected by an MSP from high-end solutions and combines it with the usability requirements of a small business. D-Link's design goal was to provide the smallest reseller with a platform they could use to provide a managed service, whilst having to spend the least amount of resources to familiarise themselves with the platform, making it ideal to deploy even in the smallest business.

Nuclias offers true zero-touch provisioning. Access points can be shipped from stock without the necessity of an IT professional to pre-configure them, saving significant time on deployment and boosting service level performance when damaged equipment needs rapid replacement. For businesses that have multiple sites, infrastructure management becomes a breeze since no dedicated VPNs are required to set up and manage the sites, simply take an existing profile and push to the various sites for a homogeneous deployment.

We believe that Nuclias cloud networking is the answer to many of the challenges that small business and MSPs face. With our Nuclias Cloud Networking Solution, we're delivering against that sweet spot between the feature-rich, high-end solutions and lesser featured high maintenance "budget" solutions currently available.

D-Link's Nuclias family of products are specifically designed to take advantage of the cloud since they remove the complex configuration conundrum from being done onsite and move it to the cloud. Unlike existing cloud providers, customers will not pay a price premium for the privilege of moving to cloud networking. A wireless infrastructure can be managed by an MSP for as little as €15 per device per month. By adding cloud switching to the portfolio, D-Link is able to remove the complexity of combining a wired and wireless network.

Cloud network designs are essentially the same as standard cloud networks: the same number of access points placed in the same locations, the same number of switches required to provide the bandwidth for the network traffic. The real difference lies in how the hardware is deployed and configured. Typically an installation requires the presence of a mixture of skilled people, some to handle the manual task of installing the hardware in the appropriate locations and more technical engineers responsible for the configuration of the hardware.



In a Nuclias deployment, profiles or templates can be created before installation of the wireless and wired LAN onsite. The same engineers go onsite to deploy the hardware but the higher skilled engineers can now remain in the office and can use their skills to configure multiple sites centrally. This results in cost savings due to less travel time, fewer people on site and the ability to pre-configure and test before deployment. As well as the ability to deploy the same configuration to another device locally to replicate any unforeseen problems. For businesses with multiple sites, Nuclias empowers you to centrally create and deploy configurations to the remote site without the necessity of having to be onsite or the added expense of business trips. Equally, the monitoring and management of the remote locations become simple thanks to the central dashboard, which makes management and reporting easy.

So, why are cloud-based network management not more commonplace? It's because the marketplace is polarised. The high-end cloud offerings deliver the automation, visibility and simplicity of deployment needed to improve efficiency. But they come with a significant price tag, which most small businesses can't afford. More often than not, this high price is because these solutions have not been tailored to the needs of small and medium-sized businesses and contain a raft of features that aren't necessarily required.

For instance, does a chain of coffee shops really need the capabilities of a layer seven firewall, deep packet analysis and application control in their access point? Probably not. Do they need the constant monitoring or control that a large corporation needs? They will want to look at authentication information provided by the captive portal, but not much else. However, if the coffee chain's CIO wanted to invest in cloud-based network management, he would invariably be paying for these additional features that he does not need.

On the other end of the scale, cheaper solutions which offer fewer feature options or advertise themselves as Cloud can be a false economy. There are a few offerings in the marketplace which despite labelling themselves as "cloud", are in reality just a standard network management tool hosted on an internet-facing server. Who really wants to go onsite with their phone to add network devices to their cloud account, but then has to switch to a tablet or laptop to configure and deploy the devices to the network? This could be the reality of adopting the wrong cloud solutions, whilst technically cloud-hosted, engineers will still continue to be required onsite to set up the "cloud" infrastructure, and then manually configure each device. This is no different to a normal installation except you now have to pay a monthly fee per devices to maintain the right to configure and monitor the device via web browser.



As the expectations grow so do the demands and the variety of pressures applied to medium-sized business networks, network managers need a solution that is comparable in functionality to those implemented by the enterprise but at a price that is affordable. Nuclias is specifically designed to meet this requirement.

Looking to the future, Nuclias will integrate Artificial Intelligence (AI) to bring a whole new level of consistency and control for the modern network. Deploying the guest Wi-Fi network will become simple since AI controllers can identify the reason for the new SSID and in turn configure all the devices in the network with the correct network and VLAN settings without having to do any additional configuration. AI will further bridge the lack of skills or knowledge in businesses, enabling them to concentrate on running the business and not the infrastructure. The integration of voice-controlled AI platforms like Amazon Alexa or Google Assistant which we believe will migrate from consumer to business applications will take network control to another level by making the interaction between the network administrator and Nuclias more human. Making configuration changes or receiving network alerts could be more human and personalised than sending an email message to a group.

