



# SOFTWARE DEFINED ACCESS

## The high-performance network solution from Ideal.

### The case for modernisation

Digital transformation is not a hype, it's not a buzzword, it's here to stay and if you're not investing in digital initiatives, your business will be left behind. It may sound harsh but it's true. Consumers today demand seamless, personalised interactions and optimised experiences. They are online, connecting via multiple devices and need access to your services 24/7. The hyper competitive nature of business today demands that we are all investing in transformation programs that not only allow us to keep up, but forge ahead. Yet for many of us, we are likely to be held back by the single most important asset holding everything together – the network.

Network technology has failed to keep pace with the transformation in the demands we make on the network. Today's enterprise IT network is the fabric that connects stalwarts like PCs and servers with mobile devices, and an ever-expanding array of smart systems and things. New devices are attached daily, and systems, users and their data need protection from threats that are becoming more sophisticated and persistent.

Despite this, IT teams are still expected to provision, support and defend network technologies with the same labour-intensive, error-prone tools and processes they had a decade ago. In an age of flex, of fast-moving, customer-led business demands, network administration is still a tedious journey through spreadsheets and command-line interfaces, while network management is hampered by a lack of visibility across multiple, disparate systems.

“ Traditional networking cannot keep pace with the demands of digital business. Modern enterprises need intelligent secure networks to advance their transformation programs. ”

---

---

---

## Your challenge

Enterprise organisations today need to enable fast innovation. They need to safely scale the business at the same time as reducing cost and complexity. Yet many legacy network technologies face the following challenges:

- **Operationally they're a drain.** As local area networks become more and more complex, they become more expensive to operate and maintain efficiently, and - with up to 95%<sup>1</sup> of network changes performed manually - their operation ties up resource. Troubleshooting becomes more involved, and the IT team are called on more and more for support, diverting them from higher-level roles.
- **Performance assurance in doubt.** Manual network configuration is inherently error-prone, making it difficult to maintain standards and assure quality. Resilience suffers: a minor mistake can cause an outage.
- **Network security risk is high.** As 'smart' endpoints such as CCTV cameras and connected building systems are added to networks, they can pose a security threat. With conventional LAN technology it's hard to effectively segregate Internet of Things (IoT) devices, raising the risk that they become weak points or backdoors into the network. Edits to the network configuration may require security exceptions that aren't closed down again afterwards - Cisco research has found that 70%<sup>1</sup> of policy violations are down to human error.
- **Seen as a blocker to business change.** Conventionally managed networks can't offer the flexibility and security required by the business. Often the network becomes a damper on change, as reconfigurations are complex and have to be performed manually.
- **There's no central visibility.** Operational and management resources are occupied by troubleshooting, and in trying to achieve visibility of the health or otherwise of the network. Cisco research suggests that 75%<sup>2</sup> of network OpEx is spent on network visibility and troubleshooting.

As business' operations and network infrastructure continue the move into a new digital era, there's an urgent and growing need for network provisioning, management and visibility to follow suit. Networks that underpin dynamic, expanding and agile organisations need the intelligence not only to respond, but to anticipate, understand and facilitate all the demands and needs of the business.

“ Networks are becoming too complex for manual design and management to be effective. Simply put, a new era of business demands the next generation of network. ”

### Reference

1) McKinsey Study of Network Operations for Cisco, 2016

2) <https://blogs.cisco.com/cin/techwisetv-dives-into-enterprise-service-automation-and-easy-qos>



## Introducing Software Defined Access

### High-performance networks designed for you

There is a way to reduce network complexity and operational workload while achieving new levels of security, speed and visibility. Introducing Software Defined Access – the high-performance network solution from Ideal.

Software Defined Access is an innovative technology that delivers policy-based automation of users, devices, and things from the edge of the network to the cloud. Delivered through a centralised management console - **Cisco DNA Center** – Software Defined Access brings automation and visibility to complex network systems that currently require heavy manual intervention to maintain legacy levels of availability and security.

With Software Defined Access we can simplify the complexity of your Enterprise LAN estate with an integrated ‘fabric’ enabling alignment and simplified management. Plus, we can support the explosion in new endpoints by securely segmenting and adopting new users and devices at speed.

Designed, implemented and managed by trusted network experts, we ensure your complex infrastructure is robust, optimised and delivering the intelligent automation you require. We have expertise in baselining current networks so that an innovative and bespoke network design can be worked up and delivered. You can now keep pace with the demands of your digital business and advance your digital transformation program.

Network environments are complex, and we have proven abilities delivering large-scale, high-profile network transformation projects around the UK. Designed for your individual business, we’ll ensure you get optimal results from your high-performance network, and that you maximise your return on investment. We continually invest in our in-house skills to ensure we can offer the strategic guidance and vision our customers expect, while maintaining focus on delivering the network you need.

“ We can help you radically reduce the cost of network operations and troubleshooting by removing manual configuration and introducing intelligent automation and central visibility. ”

# SOFTWARE DEFINED ACCESS FROM IDEAL

## What are the benefits?

Our next-generation LAN provides intelligence that rapidly and securely accelerates change. Here are some of the other enterprise-wide benefits:



**Simplify** the complexity of your Enterprise LAN estate with an integrated 'fabric' enabling alignment and simplified management.



Radically **reduce the cost** of network operations and troubleshooting by removing manual configuration and introducing intelligent automation and central visibility.



**Proactively** manage your network and reduce risk through enhanced automation and visibility.



Easily and confidently support the explosion in new endpoints by **securely segmenting** and adopting new users and devices at speed.



Own and improve the **quality of user experience** at any point in time through historical troubleshooting to get to the root cause.



**Keep pace** with the demands of your business and advance your digital transformation program with an intelligent, secure network.

## What our managed services customers say:

“ I really trust Ideal - they completed the project under pressure with no disruption to our business. It was all about the planning. Ideal ensured a high level of excellent technical briefing coupled with simplicity, and they ensured that the business understood what was being delivered. As a result, we have a faster network, a strong robust system, greater resilience and decreased security risks. ”

**Chris Fullalove**, IT Director,  
Caffyns Group

If you're concerned about the security of your network and its ability to support the explosion of new devices, or frustrated that your conventional network can't provide the flexibility your business needs to support innovation, we can help. Ideal's Software Defined Access can securely segment and adopt new users and devices at speed and reduce network complexity and operational workload. Find out more at:

[www.ideal.co.uk/software-defined-access](http://www.ideal.co.uk/software-defined-access).



## The network of the future

**Software Defined Access** lets you easily design, provision, apply policy, and assure network services. You benefit from full visibility across the entire network, simplifying the delivery of consistent, highly secure, identity-based policy for users and devices across wired and wireless networks. It's a step-change in the way users and devices are managed on the network, made possible by the application of intelligence in Cisco's latest generation of switches, access points and routers.

In the legacy network, policies are enacted by careful provisioning of physical ports, user accounts or groups, but Software Defined Access breaks the conventional dependencies between IP address, identity and location. Devices and users are authenticated on the edge of the network and granted the appropriate access as they traverse the entire estate.

The benefits are manifold. Users and devices are managed through Cisco DNA Center, a single interface that eliminates the need for multiple or interdependent configuration changes.

**Software Defined Access** presents a simple, estate-wide solution. IoT devices can be identified at the edge of the network, assigned the appropriate access and restrictions, and securely segregated from the rest of the network. If a class of device is insecure, or in the event that devices are compromised, the network is protected, and their access can be easily managed or revoked.

## Securely supporting the explosion of IoT

“As ‘smart’ endpoints such as CCTV cameras and connected building systems are added to networks, they can pose a security threat. By 2020 it's forecast<sup>5</sup> more than 26 billion things will be connected. The number, scope and sheer diversity of the IoT presents a problem: innumerable devices, multiple vendors with different stances on security, and no unified system for managing updates. With current networks, that's a huge challenge. While the best practice is to segment IoT devices, isolating them from other business systems, the reality isn't so straightforward. Legacy segmentation tools such as VLANs are time-consuming to configure and test and can be especially challenging to extend across multiple sites.”

For more detail on the Ideal solution, including SLAs and the full scope of the service, please contact an Ideal account manager today.



## Key Features



**Intelligent policy enforcement:** Policy-based automated provisioning, based on your identity, not your address. Simplify provisioning using best practice configuration and automation enabling the connection of devices in real-time.



**A single integrated fabric:** Flexible architecture and integrated 'fabric' enabling wired, wireless and WAN to be aligned and managed as a single system.



**Manage, add, change at speed:** Quickly and easily onboard users. Full user mobility between different access areas is possible without changing the endpoint network address.



**Intelligent automation:** Significantly reduce the cost and number of policy violations caused by human error using highly-intelligent, automated software.



**Add IOT-type devices with confidence:** Isolate non-traditional end points so you can rapidly segment and configure IOT-type devices with secure boundaries.



**Central visibility:** Accelerate time to resolution and prevent problems on the network before they start via a central dashboard and new levels of visibility.



**Historical troubleshooting:** Easily look back and source the root cause of historical issues and provide your users with rich insight, advice and assurance.



**Network experts:** Experienced, certified, UK-based team of network experts to design, deploy and optimise the right solution for your business.

## About Ideal

Ideal designs, provides and manages secure infrastructure for organisations who see IT as a core business enabler. With over 100 customers across all industries, we deliver brilliant business outcomes through innovative, secure technologies and services. Our work is distinguished by excellence in communication and delivery, and by the width and depth of our in-house expertise.

With the experience and vision to advise organisations on how their IT estate can deliver and accelerate their business goals, Ideal is a trusted advisor for enterprises seeking to deploy, refresh and future-proof their network systems.

Ideal's extensive, 10-year partnership with Cisco is enhanced by the Advanced Enterprise Networks Architecture and Advanced Security Architecture specialisations. We architect, install and support high-performance network and unified comms infrastructure for clients including Caffyns, IKEA, OneFamily, the Rugby Football Union, SITA and Skanska.

