



ICON Connect SD-WAN



Why networks need to get smarter

The role of your network is changing

Applications have been on the move for some time, from local servers handling all data and user requests locally, to their centralisation in data centres and now public clouds. As applications and storage move, traffic inevitably follows. With fewer applications based locally more data will route over the WAN and beyond to cloud services providers and internet based services. Maintaining a quality user experience, particularly with low latency applications becomes a problem.

This means your network must be aware of the applications and their relative importance to your operations, of the traffic flowing across it at any point in time and how the network is performing – it needs to know and react to connections where performance has deteriorated or where traffic is particularly heavy, causing congestion.

The rise of data protection and compliance regulation in response to the data breaches suffered by high-profile organisations creates additional challenges. Companies are now expected to design and operate their networks, compartmentalise data and restrict access and data loss. Traditional approaches to network configuration limit IT's ability to implement detailed and timely changes to networks.

All these elements influence how a network can handle applications performance and access. To achieve this level of operation your network must be intelligent and flexible and able to respond dynamically to the performance of applications and communications in real-time. SD-WAN provides that intelligence to identify performance issues and dynamically react to send traffic by the optimal route for each application – raising the overall performance for your business and increasing productivity of your end-users.

Introducing ICON Connect SD-WAN

ICON Connect SD-WAN is Maintel's enterprise class connectivity solution that provides dynamic networking for your current environment and scales to your future needs.

ICON Connect SD-WAN is built on Maintel's rock-solid managed network, extending the platform with a range of optimisation and management tools to ensure your traffic always uses the most appropriate route. By identifying your business critical applications, the network will continuously test all available routes and pass critical data over the optimal path, seamlessly coping with the inevitable traffic pinch points and network issues which are the reality of any Wide Area Network.

Maintel's technology partner for SD-WAN is Cisco, named as a leader in the Gartner Magic Quadrant.

Scale, interconnectivity and availability

At the heart of ICON Connect is the ICON Core, a scalable, resilient and robust infrastructure that both connects and controls traffic flows.

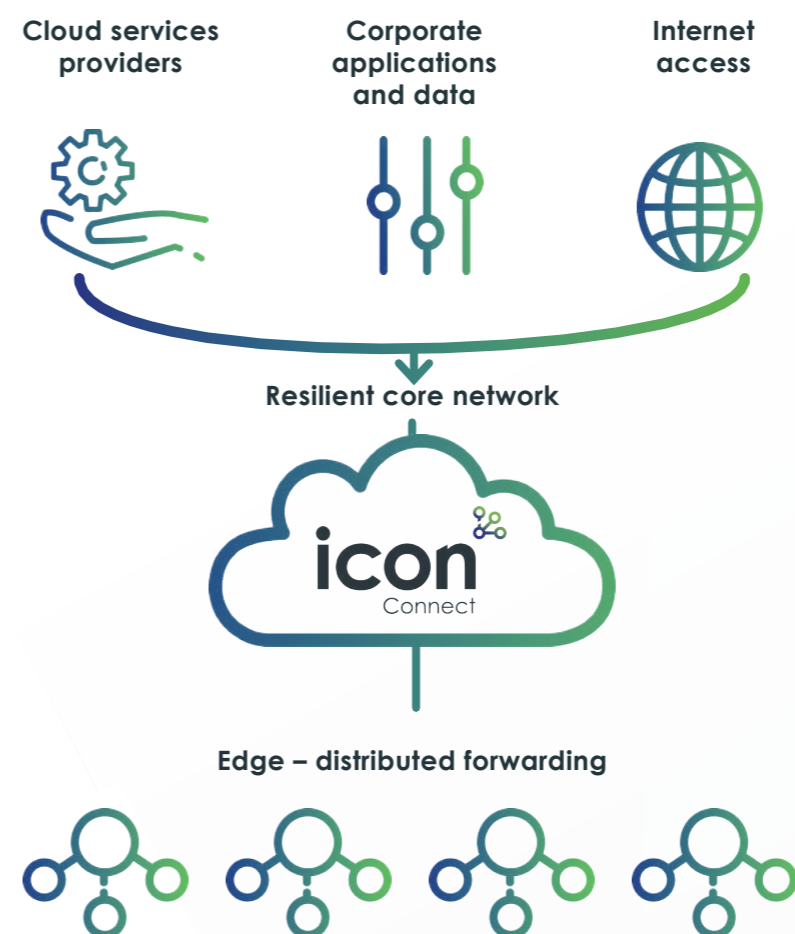
With connections to all major UK carriers, we connect all your sites wherever they are using the most appropriate technology for the individual sites, its requirements and traffic profiles. The core also provides a mechanism to connect to additional functionality and external services centrally to keep your costs as low as possible.

Maintained by our UK-based engineering team, it is monitored 24 hours a day, 365 days a year to provide the highest contracted service levels.

High performance access to applications in the cloud

Using the internet to access mission critical applications carries risks of contending with other users for limited bandwidth resulting in delays and corruption as packets are dropped and traffic is delayed.

With Cloud Connect, Maintel provides dedicated and private access to all of the major cloud based services from Microsoft, Amazon, Google and Oracle, bringing their clouds into your network.



ICON Connect SD-WAN's key features

Intelligent path routing

At the core of SD-WAN is the ability to route traffic intelligently, making the best use of network resources available, and providing the most appropriate experience to the user. ICON Connect SD-WAN is continually assessing the performance of all possible routes to ensure it can use the most appropriate paths – but it also understands business priorities, and will route and prioritise accordingly.

So while the traffic on the CRM system and key applications hosted in a public cloud provider like Amazon Web Services may be prioritised via the dedicated cloud links, large email attachments might be routed over public internet. In another scenario, where a site has two links – a primary connection via MPLS and one via public internet, Salesforce traffic will be routed straight over the internet link while the financial and UC systems make use of the MPLS circuit with its reserved and uncontended access.

Best path routing

As SD-WAN is constantly monitoring all available routes, it can make informed decisions constantly, ensuring optimal performance at all times. It is also aware of the characteristics of different applications and will ensure they are prioritised appropriately – for example, ensuring the quality of voice and video calls.

Unlike MPLS networks, where for a secondary circuit to kick in the primary needs to be pretty far gone, SD-WAN can route traffic over secondary circuits in the event of “brown-out” situations, keeping applications performing for users while the primary circuit recovers.

Invisible failover

Traditional MPLS design often includes a

primary and a secondary circuit, and if managed correctly the secondary will always take over in the event of a failure in the primary. However, that process can take some time, and many applications may not automatically recover. SD-WAN offers almost immediate and seamless re-convergence of the networks meaning that the applications are unaware there's been a change – keeping users' voice and video calls going and applications performing.

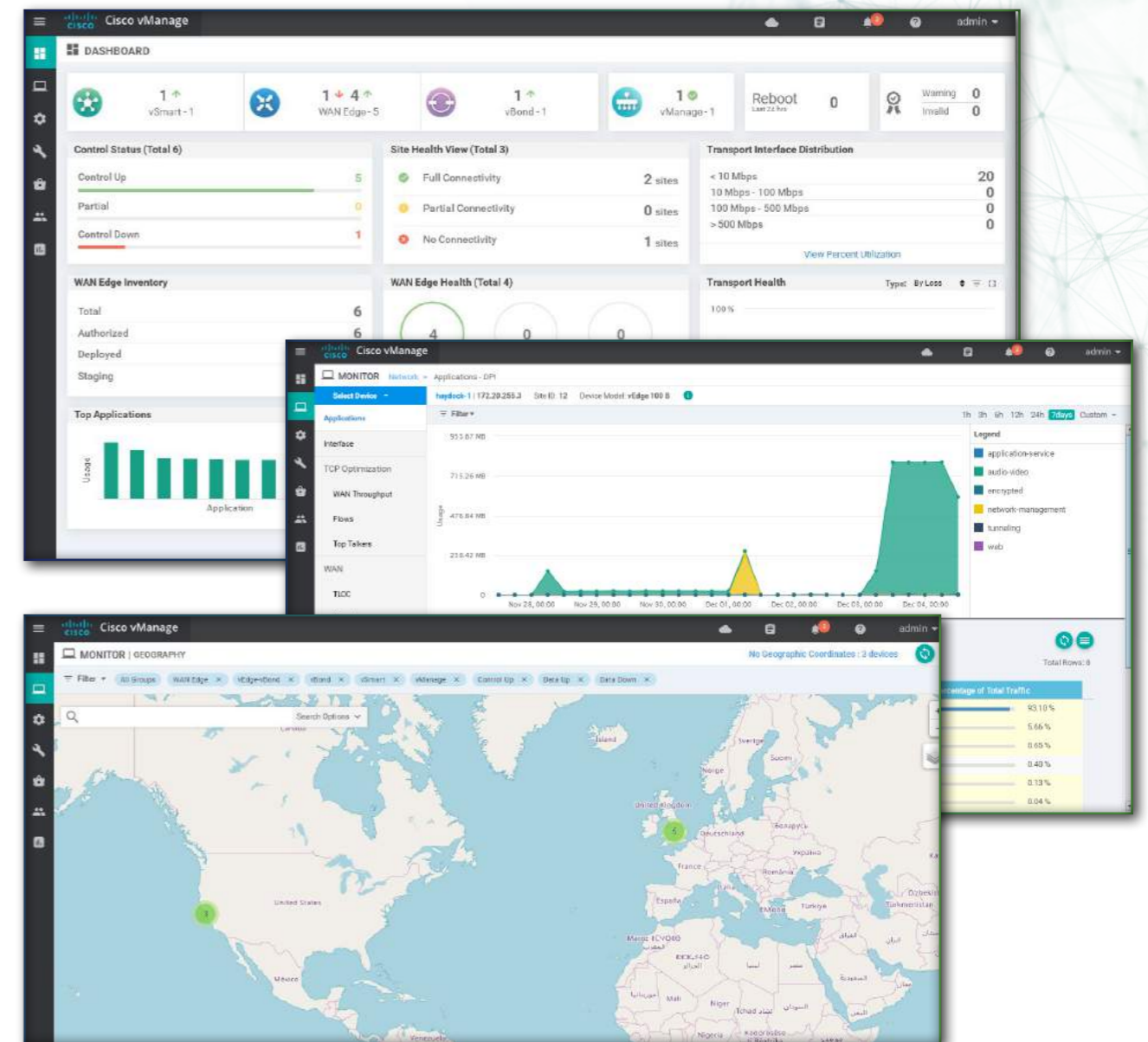
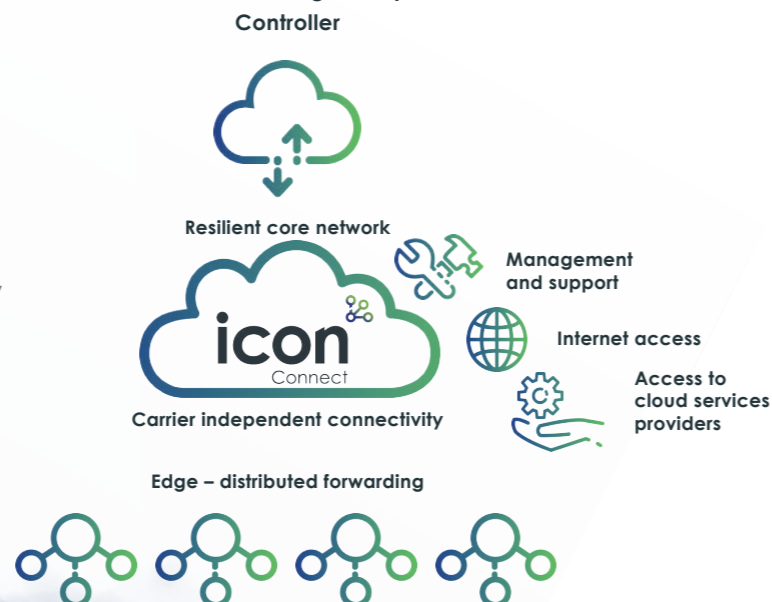
Bandwidth optimisation

In a traditional MPLS WAN design, the secondary circuit is often redundant until the primary circuit goes out of service, when it then takes over. With ICON Connect SD-WAN, the secondary circuit can be used in conjunction with the primary, making maximum use of all available bandwidth.

Hybrid access

ICON Connect SD-WAN can make use of a variety of access circuits and as well as private WAN connections can also make use of internet facing services of all technologies, including DSL, fibre and wireless technologies – enabling extremely rapid deployment and extension of bandwidth into the most inaccessible locations, quickly and cost-effectively.

Centralised monitoring and operations





Our ICON services

ICON is a powerful suite of flexible, secure and highly resilient managed connectivity and communications services from Maintel, including Unified Communications as a Service, Contact Centre as a Service, managed security, managed enterprise mobility and telephony and voice services.

Our ICON services deliver the technology and service capabilities you need to fulfill your communications needs and drive productivity across your business.

Our Foundation Services consist of predetermined components including the core technology, support, management and any essential features.

ICON's real flexibility comes from our enhanced services, which allow you to select from a range of extensive options to deliver the capabilities you want. Different services can be mapped for different user types or departments. ICON Services can also incorporate fully customised options if required, with bespoke design and integration requirements to suit your needs.



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