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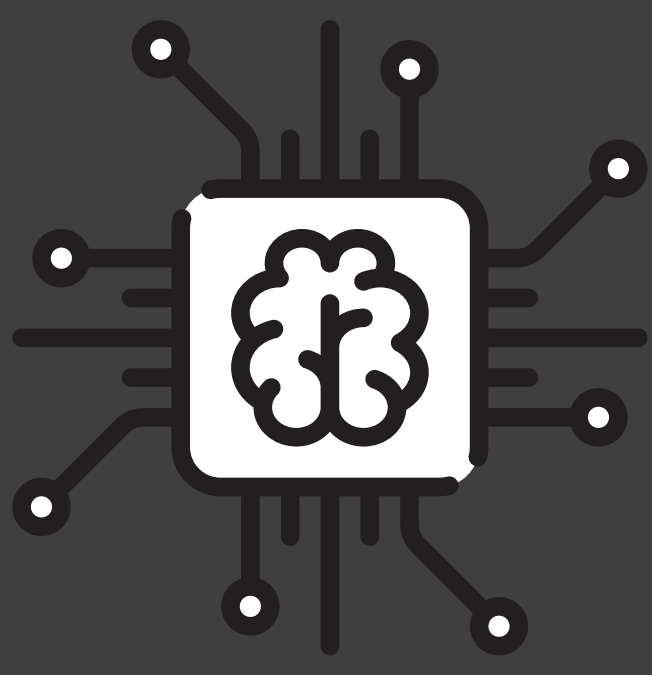
SD-WAN SIMPLIFIED

WHAT IS SD-WAN?

SD-WAN is short for 'software-defined wide area network'. Quite simply, it is the next generation of WAN technology that helps you get the best out of your network.

With the application of software-based network technologies, such as VMware SD-WAN by VeloCloud, you get total, centralised control of your entire network. This intelligently leverages the benefits of the cloud, the bandwidth of broadband and existing wide-area network infrastructure to route all traffic (e.g. data, video, voice) between HQ, data centres, branch and remote offices in the most efficient way that dramatically saves bandwidth costs and improves Quality of Service (QoS).

Essentially, it creates a high performing network over private, broadband Internet and LTE links that is easily managed and so flexible you can manage all devices and make adjustments quickly and seamlessly on command.



HOW DOES IT WORK?

Sounds complicated right! Whilst it may appear to be complex, the principles of SD-WAN are simple. The technology intelligently utilises any of the available connections (MPLS, broadband, LTE) to find the optimal delivery path for traffic across the network. This dynamically eliminates jitter and dropped data packets, thus providing a great user experience regardless of location.

HOW DOES IT HELP?

Put simply, SD-WAN can help a business in many ways. Firstly, SD-WAN turns your otherwise static network into an intelligent dynamic network that will automatically optimise performance. The aggregation of multiple links will help improve resilience, whilst making the network more flexible – such as seamlessly handling short-term peaks in demand. As a result, SD-WAN will solve many network and reliability issues.

With a centralised management interface, it also gives back control of your network, providing an incredible level of insight and the ability to manage your entire network, including branch offices, from a single location.

If that wasn't enough, all this can be achieved quickly, and without the typical 90 days, or longer, that it would take to install a new MPLS connection. By leveraging different types of connections, such as broadband or even 4G, some of which can be live within a day, SD-WAN can be provisioned virtually immediately.

And then there is the cost. Incredibly, it has benefits here too, especially in comparison to expensive MPLS, by reducing networking costs by utilising more affordable broadband and alternative connections. But still resulting in an enterprise-class network.

WHAT ARE THE REAL WORLD APPLICATIONS?

Whilst there are a number of real world use cases for SD-WAN, the below are some common applications...

Connecting remote sites

With an increasing reliance on cloud-based applications, connecting branch offices to the internet efficiently is key. Traditionally, setting up internet break outs and branch offices is inefficient, slow and prone to errors. SD-WAN completely simplifies the process, using zero touch provisioning to connect devices at remote locations without the need for administrative action.

Improve Application Performance

An important advantage of SD-WAN is that it can provide secure intelligent path control that chooses the route taken by traffic, based on application. This traffic-forwarding capability is set centrally, based on any number of policy conditions such as IP address, application profile or QoS markings, and then pushed out to all SD-WAN devices. By removing the need to backhaul all traffic to the datacentre, SD-WAN will help optimise the efficiency of your network by directing relevant traffic from each site directly to the cloud, further improving application performance for cloud solutions.

Video and Voice

As demand for video and voice applications, such as Skype, continue to increase, businesses will invariably experience unacceptable call quality or complete call failure when using standard broadband connections. With SD-WAN, video and voice traffic can be prioritised to ensure problems aren't experienced and the user experience is greatly improved.

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