

# SOFTWARE-DEFINED WIDE AREA NETWORK (SD-WAN) SOLUTION



# Embrace a cloud-based network and accelerate digital transformation

Virgin Media Business' SD-WAN solution enables enterprises to increase their bandwidth and cloud experience, improve flexibility, and decrease the cost of their legacy WAN all with an application-driven and software-defined overlay solution.



## Why SD-WAN?

The growing demand for cloud-based applications is shaping the design of future corporate networks. Employees and customers alike are demanding more flexibility, agility, and reliability when it comes to business connectivity. With the age of digital transformation, enterprises must extend their cloud connectivity, protect data streams, increase capacity, and ensure maximum visibility regarding applications and network behaviour. The answer to these challenges is the Software-Defined Wide Area Network (SD-WAN).

## What is SD-WAN?

SD-WAN forms a virtual overlay network based on classic transport networks - whether it is MPLS, VPNS, broadband, DSL, radio and even mobile. This wide area network works through a centralised platform, detaching the management of the network from the hardware itself and then steering traffic across the WAN in an intelligent way. It allows you to securely connect any user, any application, anywhere, with the power of the cloud.

Here's the pillars on how SD-WAN works:

- SD-WAN allows you to simplify your WAN infrastructure by replacing legacy branch routers, giving you full visibility of everything happening across your network at an individual application level – all from one virtual dashboard.
- Unlike most traditional networks, SD-WAN understands individual applications – including any service level agreements (SLAs) – and automatically creates network policies for them, constantly monitoring each application to optimise performance.
- The network policies SD-WAN creates are adaptive, updating in real time based on current business needs.

Thanks to SD-WAN, your end users are closer to the apps and data they need, your apps will perform better and the experience those end users have will dramatically improve as a result.

## Advantages of SD-WAN

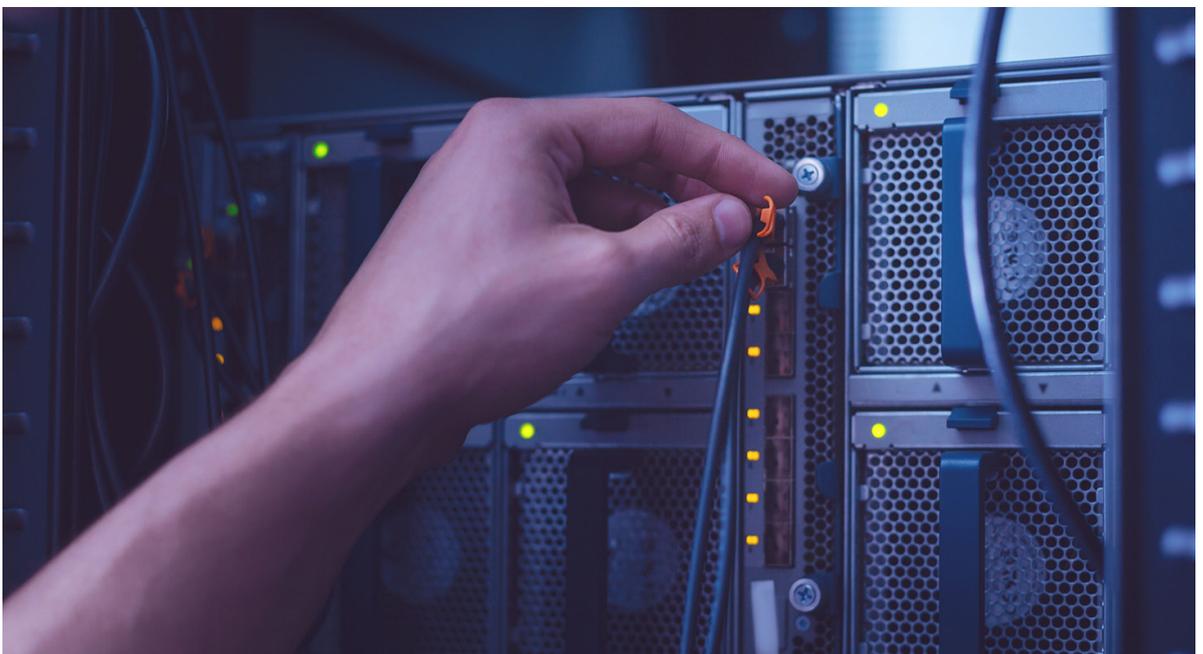
**Secure your data** - Get control and visibility of your data with fast, secure, easy access to the cloud and a next-gen managed security service.

**Optimise today. Evolve tomorrow** - Optimise your existing network to accelerate digital transformation, making the most of investments you've already made.

**Build sites fast and manage remotely** – This “over-the-top” solution is network agnostic, meaning sites can be connected with any fixed or mobile connection and can be managed remotely through a centralised platform.

**Empower productivity. Inspire engagement** - Open to a world of flexible working by connecting all your sites and mobile devices in a secure and efficient way, empowering your employees to be productive and effective wherever they are.

**Improve your customer experience** - Create the foundations that let you prioritise business-critical applications, collect customer data and share insights, in real-time, to enable new and cohesive customer experiences.



## SD-WAN the Virgin way

Where other SD-WAN providers focus on either the software (overlay) or the network (underlay), we provide both in one fully managed package. And we've partnered with Versa Networks to make that possible.

Gartner recognised Versa Networks as a leader in its 2020 Magic Quadrant for WAN Edge Infrastructure for its "ability to execute" and "completeness of vision".

So you get our superfast connectivity and 30 years' of network experience, with Versa's software expertise, all from one point of contact, giving you world-leading SD-WAN without the headache of multiple vendors. On top of this we will work with you at every step of the way and will manage your SD-WAN solution 24/7.

Our team is made of consultants, engineers, project leaders and service managers who will lead the way to your company digital transformation. As part of the SD-WAN journey, we will manage every step of your migration - from planning, to delivery of service and implementation, right through to training and support of your team.



## Standard features

<b>Service features</b>	<p><b>Application-based routing</b> creates transparency in the network and enables control and improved performance of the data traffic.</p> <p><b>Encryption:</b> All transmitted data are encrypted using IPSec in all transport networks used (Internet, MPLS, mobile network). SD-WAN constitutes a secure overlay network.</p> <p><b>Network segmentation:</b> Multiple VPNs enable the development of logical topologies and the separation of business segments.</p> <p><b>Application-based topologies:</b> The applications can be assigned their own topologies (Full Mesh, Hub and Spoke, Point-to-Point as well as Multicast and Unicast).</p> <p><b>Direct Internet access</b> makes it possible for certain applications in a branch office to relay Internet and cloud data traffic directly to the Internet.</p> <p><b>Hybrid network services</b> utilise private (MPLS, Ethernet) and public (Internet) networks in order to ensure connectivity at every location across Ireland.</p> <p><b>Application awareness</b> Recognition of 3000+ applications to forms the basis for application firewalls, traffic prioritisation, application-based routing, analysis, etc.</p> <p><b>SLA based traffic steering:</b> Selects the path in accordance with quality requirements, thus guaranteeing compliance with the SLAs.</p> <p><b>Cloud access - Coming soon Q1 2022:</b> Cloud On-Ramp enables the integration of IaaS (Microsoft Azure, AWS, etc.) and SaaS (Microsoft Office 365, Salesforce, Dropbox, etc.).</p>
<b>Service management</b>	<p><b>Analytics portal:</b> Monitor performance of the entire SD-WAN overlay network 24/7 via an analytics portal. Includes real time insights on consumption and usage with traffic flows, security, alarms and logs.</p>
<b>Security Features</b>	<p><b>DNS filtering:</b> Block access to websites, webpages and IP addresses to provide protection from malicious website such as malware and phishing sites.</p> <p><b>URL filtering</b> allows or denies access to websites based on reputation and category.</p> <p><b>Antivirus protection</b> is a comprehensive solution for detecting and blocking malware.</p> <p><b>Stateful and Next Generation Firewalls</b> control the traffic within the SD-WAN as well as traffic to and from the outside internet.</p>
<b>Transport level</b>	<p>Connectivity is provided by Virgin Media Business or other service providers both nationally and internationally.</p>
<b>Bandwidths</b>	<p>Up to 10 Gbit/s.</p>
<b>Locations</b>	<p>Up to 2,500 company site locations.</p>
<b>Service and support</b>	<p><b>Best in market service level agreement</b>, tailored to your infrastructure and your company needs.</p>

## Options

<b>Remote working</b>	<p>Provide employees with secure access to the network with Versa App. The app enable employees to work from anywhere as if they were in the office and bring remote workers into the SD-WAN network. The Versa App is available on Windows and Apple.</p>
<b>Redundancy/ Backup</b>	<p>Path redundancy, connecting device redundancy and connectivity provider redundancy, including DIA, Fibre, vDSL and LTE.</p>