



Improve your network efficiency

How switching to SD-WAN
could take your business
to new heights

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Traditional networks are history

It's hard to believe, but most networks haven't actually changed that much since the 90s.

Wide area networks (WANs), for example, still use 20-year-old private line technology and expensive, proprietary network hardware.

Yet everything around those networks has changed – and radically so.

These days, the kitchen has become the call centre. Bedrooms have become boardrooms. And your staff need to collaborate with each other and your customers using any number of different systems and apps – some of them hosted on-premise, some in the cloud.

Your organisation may be consuming more and more content from multiple software vendors, often stored in the vendor's own cloud environment.

With so many different streams of data being hauled in so many different directions, what happens to your legacy network?

In effect: it grinds to a halt.

Only 29% of employees are currently happy with the technology they use at work, according to The Employee Experience.

SD-WAN can help you achieve quantifiable improvements in data security, network performance and efficiency the moment you switch it on.

You'll reduce your hardware footprint and give network managers greater control and visibility of the ever-increasing number of apps across all your sites. Not to mention improved customer and employee experiences.

All of which adds up to the Holy Grail: improved network efficiency.



Improve your network efficiency

TRADITIONAL NETWORKS ARE HISTORY

GET YOUR NETWORK UP TO SPEED

CUTTING-EDGE SOFTWARE. NOT LEGACY HARDWARE

IMPROVING THE UNDERLAY NETWORK: THE SD-WAN EFFECT

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COMBATting EFFICIENCY CHALLENGES

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Get your network up to speed

Now more than ever your organisation is under pressure to collaborate better with partners and colleagues from other businesses. Your staff need to be able to work efficiently with the tools they have at their fingertips.

Your customers may be demanding increasingly personalised experiences, and you need to find agile and inspiring ways to serve them using cloud-based technologies.



WE BELIEVE THAT A TRULY EFFICIENT NETWORK CAN EMPOWER YOUR ORGANISATION TO:

- Stay connected to your customers by allowing you to respond to demand quickly and efficiently
- Reimagine the way you communicate with your customers, and give them a more cohesive and tailored experience by collecting real-time data and insight
- Improve employee satisfaction and engagement by giving people collaboration tools that meet their high expectations
- Keep sensitive information safe without ever slowing your staff or customers down

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Cutting-edge software. Not legacy hardware

“CIOs everywhere are keen to embrace a working environment that is connected digitally, rather than physically, driven by the power of cutting-edge software not legacy hardware. That’s why the last few years have seen pressure for the kind of flexibility, scalability, efficiency and security that SD-WAN can enable.”

[Guy Matthews, NetReporter editor](#)

The benefits you get from SD-WAN vs traditional networking will be slightly different depending on your underlay type. But whether it’s MPLS, internet, broadband or 4G, SD-WAN will have a positive impact across your business.

With the right SD-WAN approach you can:

1. Secure your data

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

2. Optimise and evolve your technology

Simplify your current infrastructure to accelerate digital transformation, making the most of past investments.

3. Move fast without losing control

Scale easily and quickly create new customer touchpoints, giving users the services they need, when and where they need them.

4. Improve your customer experience

Optimise your customer experience between all channels, providers and locations supported by real-time information.

5. Empower productivity

Connect all your sites and devices securely and efficiently, so staff can work flexibly from anywhere.

6. Inspire employee engagement

Give people a technology experience that meets and surpasses their expectations.



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Improving the underlay network: the SD-WAN effect

If you want to ensure your organisation is ready for today's *and* tomorrow's challenges, your underlay network has to deliver across a broad range of performance indicators. These include cost, quality of service, agility, SLAs, deployment and security.

Of course, not every underlay is the same.

In episode four of our SD-WAN Insider series, **Re-evaluating Your Underlay Network**, we explored the impact of SD-WAN on four different types of underlay, in relation to six key features, with '1' the lowest impact, and '3' the highest impact.

Out of 24 benchmarks, SD-WAN out-performed its traditional counterpart in 18, was equal in four, and scored lower in just two.



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	Underlay type MPLS		Underlay type Internet		Underlay type Broadband		Underlay type 4G	
Service Features	Traditional	SD-WAN	Traditional	SD-WAN	Traditional	SD-WAN	Traditional	SD-WAN
Cost	1	1	2	2	3	2	2	1
QoS	2	3	1	3	1	3	1	3
Agility	1	3	1	2	1	2	1	2
SLA	3	3	2	3	1	2	1	2
Deployment	1	2	1	3	2	3	2	3
Security	3	3	1	3	1	3	1	3
Total/18	11/18	15/18	8/18	16/18	9/18	15/18	8/18	14/18

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Improving the underlay network: the SD-WAN effect

How does SD-WAN achieve such significant impacts? One of our Specialist Engineering Managers explains:

“For a start, you don’t need to move data as far, or through as many places. You can break traffic out locally, **BYPASS A BIG CHUNK OF YOUR NETWORK** and steer the data directly to where it needs to be.

“Where we’ve moved our own customers from IPVPN to SD-WAN, we’ve seen **UP TO 40% IMPROVEMENT IN NETWORK RESPONSE TIME**, increased bandwidth efficiency, a reduction in failover times between connections, a smaller hardware footprint and improvements in network throughput.

“Because SD-WAN allows you to prioritise and redirect data flows in an automated way, you can **EASILY ACCOUNT FOR ANY RAPID CHANGES IN BANDWIDTH CONSUMPTION** – staff suddenly having to work from home, for example.

“**YOU DON’T HAVE TO ASK YOUR CONNECTIVITY PROVIDER FOR MORE BANDWIDTH.** You can just make better use of the bandwidth you already have.”



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The end of the inefficient network

Cost is clearly a big consideration when it comes to transforming your network. You may have heard that SD-WAN isn't always the cheapest option – and there's truth to that, although it can make your long-term network management far more cost-effective.

But cost is far from the whole picture. In the new world of remote working, inefficiencies that were a nuisance before suddenly become seriously bad for business.

Take branch sprawl for example.

Are you hosting multiple pieces of hardware across different sites, with all the space, power, support and cooling functions they need? If the answer is yes, chances are you're spending far more than you should be and finding it hard to integrate and manage all the disparate software.

Are your employees working away from the office and using internet-based apps?

If you're running an IPVPN, your traffic has to go through the data centre before your teams can use the apps they need to. Which slows things down. It may be just milliseconds – but when you multiply that by the number of employees and how often they need to use those apps, the picture doesn't look so good.

How about failover time?

Based on our own data and wider industry benchmarking, in an IPVPN failover scenario it can take up to four minutes for the network to reconnect. That's a long time for your teams to be disconnected from the workplace tools they need, unable to do anything productive. Especially if it's something that could impact your customer experience.



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Combating efficiency challenges

Research by Futurium showed that **three of the five most important benefits that businesses' expect from SD-WAN are efficiency-related.**

And the numbers don't lie.

Here are five things that happened when our customers switched from IPVPN to SD-WAN:

1. 80% increase in bandwidth efficiency

With SD-WAN you can use both the primary and backup circuits simultaneously, switching between the two in a dynamic and automated way.

You still have the same level of resilience – if the primary circuit fails, you can simply failover onto the backup circuit just like you would have before.

But if you make that backup circuit permanently active, perhaps using it for some of your less critical traffic like guest WiFi or internet browsing, you instantly give yourself 80% more bandwidth.

2. 98% faster failover time

With SD-WAN it takes just six seconds for the network to reconnect after an IPVPN failover scenario. By the time you've noticed the network isn't working, it's reconnected.

That's 234 seconds of productivity, saved.

3. 85% improvement in network throughput

With SD-WAN your traffic doesn't have to go through a data centre. It breaks off the network locally and goes direct to the internet. Which means it gets there and back much faster.

85% faster, in fact. Saving your employees precious seconds – time after time.

4. 50% (minimum) reduction in network hardware

With SD-WAN you can replace routers and firewalls across your sites with just one box and one piece of software, doing everything you need. Use SD-WAN to connect other disparate products and services and reduce your hardware footprint even further.

5. 43,200 daily data snapshots from every site

Every two seconds, a device at each of your sites produces a snapshot of information: performance, applications, bandwidth, throughput, utilisation and more. That's everything you could possibly want to know. 43,200 times a day.

All those different data points go into an analytics tool, which sifts through all that information and presents it in a user-friendly way, allowing you to make much quicker and easier decisions about your network.

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Working with a managed service provider

So you've decided that you need a more efficient network to take your business productively into the future. But won't overhauling your legacy network be a huge challenge? Working with a Managed Service Provider (MSP) can remove the heavy lifting and complexity from your network management, but you need to ask questions before you can decide if working with an MSP is right for your organisation.

Why do businesses choose to work with MSPs?

The right MSP can completely remove the complexity from your network transformation and management, leaving you in control and freeing up your internal teams to do more meaningful work.

Is there a danger we'll lose control of our network if we work with an MSP?

It's true that the wrong partner could slow you down if you want to make quick changes – and that's not something you need. Choose an MSP that's in synch with you and your goals, and in fact they'll enable you to keep the control you want, and make changes when it suits you.

Does working with an MSP mean reducing headcount?

This is a myth we hear time and again. Working with a good MSP means working in partnership, sharing expertise between your teams and theirs. It should free your teams up to focus on what they do best – helping to build your business.

Are MSPs experts in all areas of network management?

Some MSPs are only experts in certain areas. Before establishing a partnership, make sure your MSP has a detailed understanding of all areas of your business, and the outcomes you want to achieve. Then they'll be able to support you in reaching your goals – and your teams will be free to innovate.

What are the potential risks of not using an MSP

Networks and IT services can be very complex. Not every organisation needs an MSP, but ask yourself what you lose or gain by doing it all yourself in-house. If you can do that, you know whether the risks are worth taking.

What should we consider when choosing an MSP?

Look at the organisations the MSP is working with. Do they have a strong heritage with the products you want to use? What's their roadmap? What are their areas of investment? And are they aligned with your own vision? Get as much information from potential suppliers as you can before you do business with them.

Ultimately, not every organisation needs an MSP. But in order to work that out, you need to ask yourself what the potential gains are to your business of working with one. Focus on outcomes you want to achieve, not just the tech – and any MSP you choose should do the same.



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We understand that changing your network is a big decision. And choosing the right partner to work with is just as important. One that focuses on the bigger picture for your business – and gets it from top to bottom.

A solution based on your needs

Work with our in-house network specialists. We'll get to know your current technology and infrastructure and the outcomes you're looking for. Then, and only then, we'll make recommendations that will help you achieve those outcomes.

Simple, secure, efficient

We've partnered with Versa – recognised as a 'leader' in Gartner's 2020 Magic Quadrant for WAN Edge Infrastructure – to create a secure software overlay that lets you control your entire network with ease through one simple interface.

A boost to your bottom line on us

If you do decide to partner with us, we'll cover your underlay costs for 6 months*, to make the transition easier- so you'll have no dual operating cost to factor in and providing all important business continuity whilst you transition.



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*Terms and conditions apply

- Circuits must be contracted for a minimum of 3 years
- Subject to site survey and design
- Sites must be new connectivity sites for Virgin Media Business i.e. sites not currently being billed for any form of connectivity e.g. DIA, IPVPN, Broadband etc.

Time to make the switch?

Get in touch to take advantage of our
2020 WAN audit or SD-WAN price offers,
or just to talk things over.

0800 953 0180

virginmedia.co.uk/enterprise

 **BUSINESS**