

SD-WAN

VS

MPLS

Which Is Best for Your Business?

As businesses move forward into an uncertain future, efforts to create a sustainable digital ecosystem for employees and customers have become a central focus for many IT leaders. From 2020 to 2023, IDC estimates¹ that businesses will spend more than \$6.8 trillion preparing their technology to handle the demands of what many people are calling the "next normal."

These investments are necessary for a myriad of purposes, but most important is the construction of digital infrastructure that can support an evolving workplace. Research shows that permanent remote workers will double to 34.4% of our workforce² in 2021 – and that number could rise, given that roughly 72% of global workers are currently working remotely.

In the past, many companies have relied on traditional multiprotocol label switching (MPLS) to connect their workforces. This technology runs on hardware, which helps to facilitate secure in-office connections. However, it does not offer the same flexibility as **software-defined wide area networking** (SD-WAN), a maturing technology that is currently experiencing a meteoric rise in popularity.

There are many differences between MPLS and SD-WAN, and each has unique benefits that will impact the

The History of MPLS

MPLS has had a great run as the leader in enterprise networking for more than two decades. As businesses have expanded, it has been the backbone of technology that has connected remote branch offices, offering secure access to data and applications that are hosted either at the organization's headquarters or their data center.

In the past, many IT leaders have been told that their business requires MPLS because of their security and privacy needs. Since it's partitioned from the public internet, it's considered secure even though it is not encrypted.

However, while this type of connection might be desirable for some companies, the rise of cloud computing and infrastructure has put SD-WAN in a place to deliver similar benefits for a lower cost along with additional flexibility.

trajectory of your business. We'll explore these two different forms of network infrastructure and help you determine which supports your future growth – minimizing complexity and stress, and maximizing productivity and ROI.

Why Choose SD-WAN?

In the last few years, SD-WAN has been experiencing a notable rise in popularity, due in large part to the global growth of fiberoptic and 5G internet architecture, as well as improvements in cloud infrastructure. This has allowed SD-WAN to become even faster and more reliable, and in many cases has led to decreased costs as better internet architecture has become more widespread.

However, these decreased costs aren't the only reason why many companies are taking the time to make the switch from their old MPLS network architecture to more flexible SD-WAN. Here are some of the most useful benefits that your business can access once you have made the switch to SD-WAN.

A Better Alternative to Hardware

Even before the transition to remote work, many businesses were working diligently to replace outdated hardware with newer and more responsive cloud infrastructure. This move doesn't just save you space and rental costs – it also helps to disaster-proof your business by moving critical data and infrastructure into a cloud environment, ensuring it's accessible and protected 24/7.

Many early SD-WAN setups were completely hardware-based, but with the rise of cloud infrastructure, it's entirely possible to deploy an SD-WAN solution that's based in the cloud. This doesn't just free up office space. It also ensures that it's easier to use, update, and integrate new functionality to keep up with innovations in this field.

Support for Multiple Locations

There are very few businesses in 2021 that operate from only one location. This isn't just due to expansion. With many part-time or full-time remote employees needing to work from home, access to critical data and line-of-business apps needs to expand as well.

SD-WAN can offer support for multi-site businesses, or even just those that support a remote or flexible workforce. This technology is best placed to solve many of the issues and challenges that stem from remote work, including:

- Cloud friction
- A lack of security
- Slow performance of cloud-based applications

SD-WAN can mitigate these issues by recognizing applications and adapting bandwidth and other services appropriately. By balancing loads over multiple parallel connections, it ensures that employees have reliable access to their data and apps, regardless of whether they've chosen to work in the office or at home. This flexibility helps keep productivity high, minimizing the friction that can so easily result from long-distance teamwork and collaboration.

Proper Support of Cloud-Based Apps

One of the factors that initially held back SD-WAN from a wider adoption was its lack of support for cloud-based apps. This led some eager early adopters to cobble together a patchwork of providers that could support the cloud-based apps that they used daily. While this solution worked for some businesses, complex interactions between the various providers often led to more work for IT teams.

Now, the newest generation of cloud-based SD-WAN is adept at handing off traffic between other cloud resources, enabling businesses to support a variety of cloud-based applications. This secure, local access to internet or cloud-based resources helps reduce costs, while providing optimized multi-point connectivity that helps to keep your staff connected, regardless of where they're located and what apps they need.

Automation Capabilities

Most configurations of SD-WAN currently deliver basic automation capabilities, including error correction and path selection.

Data Analysis

One of the key ways that SD-WAN can support your business now and in the future is by pulling information to enable better management, visibility, and troubleshooting of your applications.

There is already extensive data being generated by SD-WAN systems. With access to this data – plus the centralized view of your network that SD-WAN delivers – your IT team can better understand the changing needs of your business.

Ongoing Security and Flexibility

In previous generations of SD-WAN, security needed to be added towards the end of the process by an internal IT team. This afterthought security was a notable weakness that led many businesses to delay their adoption of this solution as they were concerned about privacy, security, and compliance issues that could arise if their security layer failed.

Now most SD-WAN configurations use advanced security that is integrated at every level. When security is integrated as part of the SD-WAN solution from the beginning, data is protected at every stage of its journey. These integrations need to be designed by an experienced and skilled expert to ensure that your business remains in compliance and can handle information and data entrusted to your company by partners and customers.

SD-WAN: An Ideal Solution for Multi-Site Enterprises

Supporting a multi-site enterprise is a massive, ongoing challenge – especially for IT teams tasked with providing equal access to a geographically diverse workforce. Add

in concerns about security and compliance as well as reliability and disaster-proofing, and it's no surprise that so many companies have simply decided to try and make their outdated yet familiar hardware-based or MPLS solutions work for just one more year.

Fortunately, if you want to upgrade, you don't have to do it alone. An experienced technology provider can help you invest in a reliable and flexible SD-WAN network solution that addresses all these problems and more.

Navigate the Changing Technology Landscape With TailWind

Designing, testing, and implementing a custom SD-WAN solution for your multi-site enterprise is a complex process. Instead of handing this to your internal IT team to tackle while they balance the rest of their day-to-day work, hire a technology provider to manage it all – like **TailWind**.

We know you rely on your network, which is why it should work for you – not the other way around. We're accountable to you from the moment we get involved and are diligent in ensuring all of your requirements are met during the process.

Have questions about how a custom, secure SD-WAN solution can work for your business? **Get in touch** today to explore the possibilities with one of our experts.

Sources:

1. <https://www.idc.com/getdoc.jsp?containerId=prMETA47037520>
2. <https://www.reuters.com/article/us-health-coronavirus-technology/permanently-remote-workers-seen-doubling-in-2021-due-to-pandemic-productivity-survey-idUSKBN2772P0>

