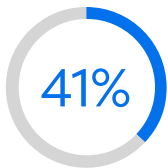# Lower your network's total cost of ownership

Discover cost efficiencies with a modern SD-WAN solution

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It's difficult to operate today's networks with yesterday's technology. Many networks have grown organically over the years to keep up with user demands, but have become challenging and expensive to manage in the process. As organizations scale, the complexity and cost of legacy IT systems, like multiprotocol label switching (MPLS), can strain performance and budgets, making it challenging to add locations or new capabilities to meet operational needs.

## 41%

Reduction in connectivity costs for enterprises that deployed SD-WAN.[2]

**The more locations you have, the greater the cost savings.**

Software-defined wide area networking (SD-WAN) offers increased performance alongside efficiencies that can reduce total cost of ownership (TCO). Not only does it allow for networking with less expensive internet connections, its architecture provides much more flexibility in the way bandwidth is managed across different locations and applications. For example, one study found that eight large enterprises that deployed SD-WAN experienced a 41% reduction in connectivity costs.[1]

This brief will explore the ways SD-WAN from a managed provider can reduce expenses while maintaining a higher standard of network reliability, security, visibility and control business operations require.
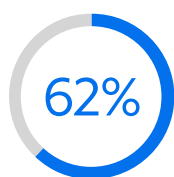
### More efficient connections

In most MPLS networks, on-premises network equipment sits at the center of a hub-and-spoke configuration connected to other locations. Each needs an individual connection to the hub for access to both the internal network and the internet. By contrast, every location in an SD-WAN can connect directly to the internet and also uses it to reach other network resources. Without the need to backhaul traffic through a central location, network performance can improve significantly — benefiting employees using web-based apps, as well as customers who connect to your WiFi network to access the internet. This architecture can also eliminate the expense of leasing individual MPLS connections for each branch. The more locations you have, the greater the cost savings. Plus, an SD-WAN creates opportunities to directly connect with cloud service providers that can be less expensive than running your own data center.

### Better bandwidth allocation

One challenge of operating any multi-site network is making the best use of the bandwidth you're purchasing for each location. MPLS connections are designed to deliver a fixed amount of bandwidth across a single type of connection sized for the largest amount of traffic it might have to handle. This can result in wasted bandwidth during normal operations and no longer reflects the dynamic traffic patterns of networks that connect to multiple cloud applications.

SD-WAN solutions handle dynamic networking with ease. They can save operational expenses by optimizing traffic to use all of the available bandwidth within a connection. This means you can design a highly reliable network without overbuying connectivity. An SD-WAN solution will also offer traffic shaping, application recognition and traffic prioritization, giving your team better tools to manage the network more efficiently.

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An SD-WAN service provider can help you select the best type of connectivity for each location.

**62%**

of companies are not realizing the full potential of SD-WAN.[3]
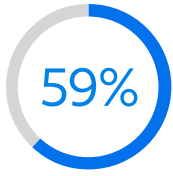
## Flexible connectivity

An SD-WAN service provider can help you select the best type of connectivity for each location, warehouse or office. MPLS can be replaced with dedicated internet connections, broadband service or a hybrid architecture that includes both public and private networking. You can tailor your connectivity based on the specific needs of each location and its applications, whether those include e-commerce platforms, point-of-sale systems, on-site WiFi or cloud-based inventory solutions. You can buy the bandwidth you need to ensure network performance with the assurance that you are not overspending.

## The value of SD-WAN compared to MPLS

A managed SD-WAN solution shifts networking from an upfront capital expense with variable maintenance costs to a predictable monthly operating expense with no hardware to purchase or maintain. It also offers reliable, secure, direct access to cloud service providers (CSPs). Organizations can access the CSP technology services and applications they need on an "only pay for what you need" model, which helps control costs without sacrificing performance.

## Managed SD-WAN opportunities to reduce TCO over MPLS

| Cost-saving opportunity | Managed SD-WAN | MPLS |
|---|---|---|
| Infrastructure | • No hardware to purchase.<br>• Securely leverages cost-effective connections like dedicated or wireless internet.<br>• Centralized network visibility, management and control helps reduce IT costs. | • Utilizes expensive, private circuits.<br>• Managing multiple vendors for connectivity (underlay) and apps, network and security (overlay) can be complex and costly. |
| Network security | • Includes network firewall and threat management.<br>• Vendor provides security configurations, support and automatic updates.<br>• Saves IT resources by centralizing maintenance of consistent security polices. | • Independently managed firewalls.<br>• IT must manage and maintain consistent security internet policies across all branches. |
| Performance | • Efficiently utilizes available bandwidth from primary and secondary connections.<br>• Connects directly to CSPs and automatically prioritizes traffic to apps, reducing latency and improving productivity. | • IT maintenance of application routing tables and connectivity to CSP apps require latency-impacting backhaul or custom management of branch firewalls. |
| Scalability and flexibility | • Easily accommodates increasing capacity demands.<br>• Simplifies adding new locations.<br>• Supports remote workforces. | • Requires the purchase of new infrastructure to increase capacity.<br>• Higher-skilled labor and equipment costs are needed to scale the network. |
| Management and monitoring | • Saves time and resources by providing complete network visibility and management from a single, cloud-based portal. | • Decentralized WAN management requires high management and maintenance costs. |

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## 59%

of large and **50% of midsized businesses** prefer a fully managed model for buying and managing SD-WAN.[4]

## Accomplish more with a managed solution

Some turnkey solutions consolidate network components but leave IT teams with the task of implementing and managing the platform on their own. Spectrum Business® offers fully managed SD-WAN services. One monthly price includes hardware, licenses, upgrades, maintenance and support. This takes the guesswork out of IT network planning and financial forecasting.

Our network experts work closely with your IT team to plan, design, implement and manage the entire solution. As your organization evolves, we offer free consultation on network requirements and options for new capabilities to ensure your needs are always met. The result is a solution that easily adjusts to meet your connectivity challenges as they develop with minimal-to-no downtime during implementation.

Spectrum Business SD-WAN service is available with a range of connectivity options, including Dedicated Fiber Internet that provides a service-level agreement (SLA) that includes a 100% uptime guarantee.* We also back our solutions with 100%, 24/7/365 U.S.-based support and a 4-hour mean time to restore service.**

*100% uptime guarantee SLA applies only to Dedicated Fiber Internet, Secure Dedicated Fiber Internet, Ethernet Services, Cloud Connect and Enterprise Trunking.
**4-hour mean time to restore service SLA.

**Learn more**

1.  "The Business Value of Cisco SD-WAN," IDC (Doc # US49579122), August 2022.
2.  Ibid.
3.  Shamus McGillicuddy, "WAN Transformation with SD-WAN: Establishing a Mature Foundation for SASE Success," Enterprise Management Associates, April 2023.
4.  "US Enterprise Network Survey — SD-WAN and SASE Adoption by Business Size, 2023," Frost & Sullivan,  November 20, 2023.

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