



# Choosing the Right SD-WAN for Building a Better Branch

Restaurants, retailers, financial institutions, convenience stores, and other multi-location businesses are struggling to manage cost and complexity of network connectivity, security, and compliance. Multiple devices including routers, firewalls, cellular modems, access points, and switches are a primary driver of the challenge. Staffing and outsourcing to multiple vendors to address network deployment and configuration, network monitoring and threat detection, and provide PCI compliance tools and support results in worsen the complexity and increase the cost. What's needed is a significant convergence of technology and resources for increased agility, security, and cost efficiency.

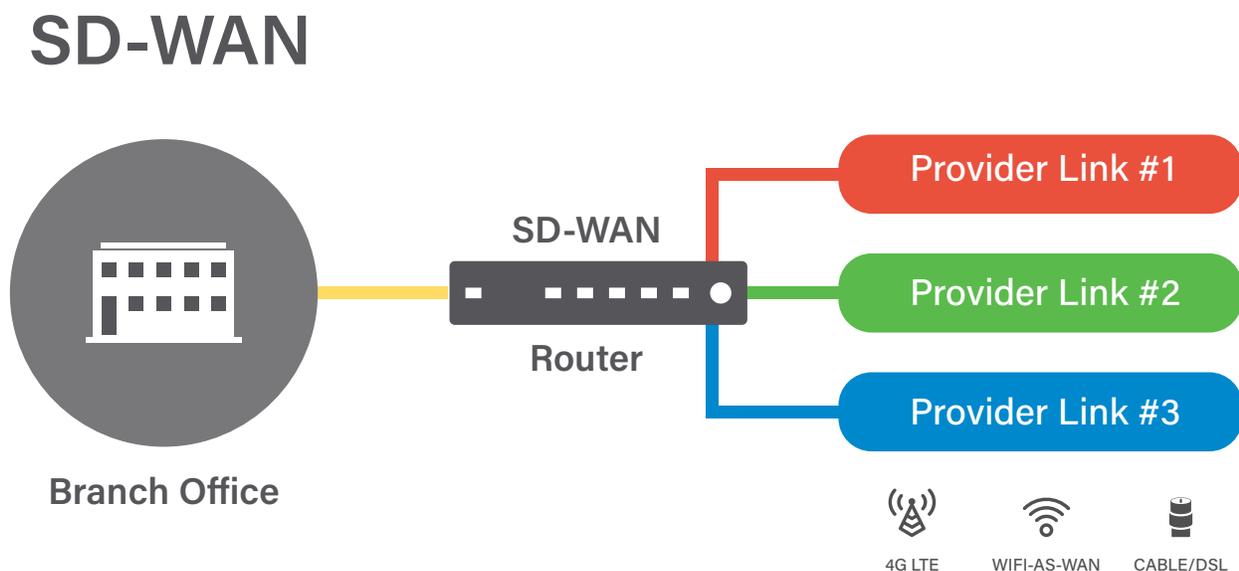
Many businesses are flocking to this new technology called "SD-WAN" as the solution to these challenges. However, in their eagerness to solve these problems, many are not asking is SD-WAN the right choice? SD-WAN represents a broad range of business solutions that vary drastically in suitability for small to large offices, and data centers locations. While SD-WAN is certainly part of the solution, it's critical that you dig much deeper to find the most suitable solution.

## Let's Start with the Basics- What is SD-WAN?

SD-WAN is formally defined as the application of Software-Defined Networking (SDN), which are used to connect small-to medium-sized businesses (SMBs) and mid-market networks – including branch offices and data centers – over large geographic distances.

SD-WAN allows business to streamline wide networking from hybrid MPLS to leveraging broadband to automate network traffic over multiple connection types and turns traditional networking into a software-based remote functionality. SD-WAN provides what we will call a new experience for Small remote sites with a limited number of users and applications making their networking experience simple and highly affordable, while addressing not only the connectivity and management but also the security and ease of deployment and use.

Our checklist below goes through all of the attributes that you should be looking for when evaluating SD-WAN solutions. With SD-WAN vendors offering different packages and vendors claiming they have a true SD-WAN solution when they don't, we're here to ensure you're getting the most SD-WAN bang for your buck.



## ✓ Low Cost for a Reliable Technology

- SD-WAN allows you to be flexible and use whatever connectivity makes sense for your business. In addition, you can expand your existing network inexpensively.
- If you haven't already invested in [MPLS for your business](#), you don't need to.
- Smaller sites, especially those connected to remote applications, require reliable, always-on connectivity to the data centers and the cloud-based SaaS applications. SD-WAN deployed over affordable broadband connections (cable, DSL, and 4G LTE) can offer network resilience and always-on connectivity through use of multiple links.
- An SD-WAN edge appliance with an integrated 4G LTE modem that intelligently uses the cellular connection for automatic failover along with a primary broadband link can offer cost-effective always-on network connectivity.
- ATMs and kiosks are typically deployed in malls and such other locations where a common internet connection through local Wi-Fi is available. SD-WAN edge appliances can utilize such Wi-Fi connections as WAN links, which can further reduce the cost of connectivity.

## ✓ Remote Installation and Management

- SD-WAN installation is as simple as plug and play, plus the device comes preconfigured for your environment. If you have IT staff in one location, but not at your other locations, they will not need to travel to be present for installation. This allows you to save money and logistical headaches.
- Smaller sites are typically geographically dispersed and require cost-effective remote management without requiring frequent truck rolls.
- SD-WAN offers complete remote management, from device upgrades to service provisioning and real-time status monitoring, available through a, cloud-based orchestration platform that is securely accessible from anywhere.
- Managed services from an SD-WAN provider can further simplify and reduce the cost of management.

## ✓ Security Options for all Location types

- While any internet-connected site is vulnerable to cybersecurity threats, those sites that perform credit card transactions or offer value added services such as loyalty programs, FREE guest Wi-Fi are especially ripe for cyber threats and require additional layers of security and compliance such as network segmentation to meet PCI-DSS requirements.
- Deploying separate security infrastructure at the small sites is cost prohibitive. SD-WAN offers edge appliances with integrated firewalls and can separate business-critical traffic from other users and applications sharing the same network.
- SD-WAN solutions may also integrate with cloud-deployed next-generation firewalls (NGFW) that can offer additional layers of security all from the cloud. However, such solutions do need an intuitive and easy-to-use orchestration platform where one can perform simple tasks such as whitelisting/blacklisting certain sites, monitoring connections with real-time alerts and checking the health of the connected sites.
- Managed Security service providers also offer complete management of the network and security infrastructure along with security-related compliance management such as PCI DSS.

## ✓ Efficient Bandwidth Usage

- Remote sites typically share the WAN bandwidth for multiple applications ranging from business-critical applications to guest Wi-Fi.
- WAN bandwidth is expensive for smaller sites, and efficient use of this limited bandwidth is critical for business operations. SD-WAN offers application intelligence where one can prioritize and control the use of bandwidth for a particular application or traffic.
- The cloud orchestration enables such controls to be enforced globally for multiple sites with a single click.

## ✓ Keep Your Business "Always On"

- If your network goes down, it will hinder your business. It will prevent you from being able to process orders, make credit card transactions, and prevent your employees from properly doing their jobs. SD-WAN can and should be failover ready.
- SD-WAN should allow you to enable 4G LTE to set up a backup connection to which the network can switch over when the main internet connection, typically over broadband, fails.
- SD-WAN plus 4G failover give you the peace of mind that your business is operational 24/7/365.

## ✓ Risks and Challenges

Like everything, SD-WAN does not come without risk and challenges. A few of the risks and challenges that stand out are:

- Moving to using broadband internet does improve productivity, but it opens the door for security risks.
- 90% of SD-WAN vendors are not traditional security vendors, which means the attention to protecting data is secondary to networking.<sup>1</sup>
- Evaluating SD-WAN solutions can be a bit tricky. Vendors and service providers differ in the maturity of their feature set and ability to protect organizations from advanced threats while enabling low touch provisioning. While the market offers SD-WAN solutions with secure Internet abilities, it is still maturing. This protection approach is here to stay.

Despite the various delivery models, SD-WAN with a secure internet gateway is most powerful as a cloud-based service. Why? Cloud applications can effectively protect company resources, solve for latency, and meet the need for business agility.

Across industries, SD-WAN is transforming SMB and mid-market networks with simplified network infrastructure and secure, reliable network connectivity, while dramatically reducing operational expenses. So, what is your next step? Look into comprehensive, affordable SD-WAN + security + compliance with flexible co-management services.

## The Netsurion Difference

Netsurion BranchSDO is a powerful and practical “integrated” device powered by a WAN security platform with flexible support options from co-management to self-management services, delivering edge optimization with enhanced network connectivity, resilience, security, and management for SMBs and mid size customers. This comprehensive, affordable solution when coupled with the advanced features of [Netsurion EventTracker](#) and [Compliance management](#), Netsurion BranchSDO provides an unparalleled level of enhanced security and simplified PCI compliance in a single offering.



Sources:

<sup>1</sup>Gartner

Century Link

Network World

## About Netsurion

Netsurion powers secure and agile networks for highly distributed and small-to-medium enterprises and the IT providers that serve them. In such environments, the convergence of threat protection and network management are driving the need for greater interoperability between the NOC (network operations center) and the SOC (security operations center) as well as solutions that fuse technology and service to achieve optimal results. To this end, Netsurion has converged purpose-built network hardware, innovative security software, and flexible managed services.

Netsurion's SD-Branch solution, BranchSDO, is a comprehensive network management and security solution consisting of SD-WAN, next-gen security, cellular, Wi-Fi, and PCI DSS compliance tools and support. At the heart of the solution is the CXD, Netsurion's SD-WAN edge appliance.

Netsurion's Security Operations solution, EventTracker, delivers advanced threat protection and compliance benefits in a variety of deployment options: a SIEM platform, a co-managed SIEM service with 24/7 SOC, and a managed SIEM for MSPs.