How to Modernize Your Branch Office Networking
It’s Time to Bring the Branch Office Up to Date

As businesses across industries adapt to the digital era, IT organizations are changing the way they connect and serve remote and branch offices. More and more, they’re realizing that enabling consistent network connectivity and application access at every location is critical to helping the business succeed. This is particularly important for organizations that have to scale across hundreds or thousands of branch locations.

What they need is a model for creating enterprise-grade wide area networks (WAN) that improve application performance and simplify service delivery across every branch—and do it fast, by leveraging broadband Internet with or without traditional connectivity. But it’s not always easy. Teams looking to solve the most pressing WAN issues face challenges such as:

- **Complexity in the branch.** IT often has to manage different solutions that were built in different branches over time, which led to operational and management complexity. Modern IT teams need solutions that unify the branch, for consistent management and operations across the board.

- **Equipment sprawl and legacy drag.** Branch offices often accumulate equipment and legacy systems over time that IT is ultimately responsible for managing, supporting, and upgrading. These disparate systems and appliances can lead to significant delays and hiccups at a time when IT needs to be more agile. Yet another time drain: legacy connectivity such as Multiprotocol Label Switching (MPLS), which can take months to obtain.

- **Lack of cloud readiness.** As end users increasingly require access to applications and data hosted in the cloud, IT is grappling with branches that aren’t technologically ready to adopt the cloud in an efficient, secure manner—which can keep them from meeting business goals.

- **Desire for industry validation.** Business decision-makers are looking for solutions from IT that have been validated by experts and proven in the industry to deliver good ROI and position the business for the future.
A Transformational Approach to Branch Office Networking

To overcome these challenges, IT leaders are taking a whole new approach to how they architect and use their networks and infrastructure. They’re moving away from hardware-based solutions toward a cloud-delivered, software-defined model for their WAN and branch. A software-defined wide area network (SD-WAN) doesn’t just improve on traditional WAN—it redefines it, simplifying branch office networking and assuring reliable application performance.

An SD-WAN solution should:

• Ensure consistent, highly-secure connectivity and cloud/SaaS access over any transport.
• Deliver applications and services faster and more reliably.
• Have the ability to address divergent needs and issues in the move from a traditional environment to this new end-state.
• Meet the challenges of today’s branch environment with a solution that is simple, reliable, and easy to set up.

WHAT IS SD-WAN?

SD-WAN is the extension of software-defined networking (SDN) that abstracts network hardware into software to connect enterprise networks over diverse geographic locations. It is based on the principles of SDN, and applies the concepts of SDN to WAN connectivity, rather than extension. SD-WAN enables simple cloud-based management and leverages the cloud as the network to simplify the delivery of services to the branch office.
The VMware Solution for SD-WAN

As IT organizations discover the versatility and reliability that SD-WAN delivers, they’re looking for solutions they can trust from industry leaders. VMware SD-WAN™ by VeloCloud® is that solution, with a unified software-defined model that extends from the branch, across the cloud, to the data center and the cloud.

The Advantages of VMware SD-WAN

- **A consistent, unified platform.** VMware SD-WAN provides a platform that allows for virtual services insertion in the cloud or on-premises, ensuring highly-secure performance and reliability for SaaS, IaaS, and cloud applications over Internet links.

- **Assured, reliable application performance.** VMware SD-WAN provides bandwidth expansion as well as direct access to applications and data—wherever they are, from the data center to cloud to branch, and everywhere in between.

- **Simplified WAN management.** VMware SD-WAN enables automation and management at scale to simplify complex day-to-day operations, for a simple, agile, and highly secure approach to branch office WAN.
The Future Is Here: Customer Case Studies

Organizations across industries, from healthcare to retail to construction, are using VMware SD-WAN to help them simplify branch office networking and assure optimal application performance. In the pages that follow, we’ll see how companies in five different industries are using this solution to move their businesses forward.

• Mining
• Retail
• Healthcare
• Food Service
• Transportation
A Mining Company Improves Connectivity Across Sites

A large international mining company has operations around the globe, from North and South America to Peru to Indonesia. With such a geographically diverse operation, it needed a robust, dependable network that could support a range of needs, including areas with limited infrastructure capabilities. Thanks to VMware SD-WAN, it is now able to connect and secure its business around the world, with far less strain on IT.

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<td>The company needed to quickly and securely transmit terabytes of data, including visual and sonar scans, but poor connectivity in remote locations required them to send files at night.</td>
<td>With VMware SD-WAN, it can now transmit large files during business hours, and still support all forms of unified communications across the business, including VoIP traffic and video calls.</td>
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<td>Employees needed the ability to collaborate and connect with others, but often experienced jitter and latency on calls, and delayed file transmission, which slowed down their work.</td>
<td>Employees didn’t experience any disruption during the transition to VMware SD-WAN, but instantly knew something changed, as the user experience improved immediately.</td>
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<td>Legacy network routers on-site were difficult to configure and manage, and required technicians to travel to manually make changes—an expensive, time-consuming process.</td>
<td>VMware SD-WAN allows administrators to create centralized policies that can easily be modified and populated across the entire network from a centralized location.</td>
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“SD-WAN has completely transformed the way we do business now, allowing our employees to gain efficiencies that couldn’t be obtained with a legacy network.”

MANAGER
GLOBAL NETWORK OPERATIONS
MINING COMPANY
Esteemed Retailer Takes the Future in Stride

Brooks Brothers has been dressing corporate America since 1918, evolving from small family business to a global enterprise. Yet with a small IT staff, they needed a solution that made it easier to support their stores. They turned to VMware SD-WAN to help them streamline deployment and management, and become more responsive and efficient.

**CHALLENGE**

Network outages prevented stores from processing transactions—which led to lost sales. Even with failover modems, the routers often failed to shift traffic, which then required manual intervention.

New retail locations needed network connectivity to process transactions, yet deploying new circuits took days or even weeks. Any delays put store opening dates at risk.

Providing customers more choice through on-site online ordering was important to the company—but slow bandwidth resulted in browsing and buying experiences that were less than optimal.

**SOLUTION**

Thanks to non-disruptive business continuity from VMware SD-WAN, Brooks Brothers stores remain transaction-ready at all times. If the connection ever fails, the outage is immediately detected and the traffic rerouted in milliseconds.

Onboarding new locations is greatly simplified. IT teams can now make the network operational within minutes, allowing new stores to open and process transactions immediately.

Higher levels of bandwidth and efficient throughput now enable instant page and image rendering, making it fast and easy for customers and employees to find special clothing.

“Our migration to SD-WAN has made life much easier on the IT staff, allowing us to implement best practices across all retail sites and reduce network error.”

MANNY STERGAKIS
TECHNICAL ARCHITECT
BROOKS BROTHERS
Saber Healthcare Brings Senior Care to a New Level

Saber Healthcare Group manages nursing and rehabilitation teams that seek to enhance the lives of both short-term and long-term senior patients. They provide 24-hour care that spans therapy, post-surgical care, recovery, and more. With such an important mission, they need consistent networking to serve patients to the best of their ability.

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<td>Residents with compromised health weren’t always able to make appointments, travel to the doctor’s office, or make arrangements for care—and needed an option for remote consultations.</td>
<td>A HIPAA-compliant platform lets workers and patients alike access doctors in a virtual environment, anytime, without traveling to offices for diagnosis and care.</td>
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<td>As a healthcare group, they needed a networking and security solution that complied with security and availability requirements. They also wanted to enable patients and healthcare providers alike to access data and information with ease.</td>
<td>VMware SD-WAN allowed them to launch a secure virtual network solution, with seamless access to the Telehealth platform. Now, users and providers can securely access information, and count on apps to be reliable anytime, anywhere.</td>
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<td>Traditional WAN costs for dedicated business connectivity were spiraling out of control. The company needed to lower costs without compromising security or availability.</td>
<td>They can now leverage inexpensive broadband links to optimize traffic delivery across any available transport system. With intelligence built into each touchpoint, they get better video, voice, and data quality—without going over budget.</td>
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“Complaints about network speed were common with our legacy network. Now with VMware SD-WAN, we don’t encounter that issue anymore.”

CURTIS MCEWAN
SENIOR NETWORK ENGINEER
SABER HEALTHCARE
Café Rio Revolutionizes the Restaurant Experience

Founded in 1997, Café Rio is a growing chain of more than 100 Mexican restaurants that operates across the western United States. Their goal is to provide customers with fast, casual, from-scratch food—with an emphasis on seamless self-service. As they looked to the future, they knew an agile, secure network was a must for helping customers help themselves, without driving up costs or compromising service.

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<td>Important day-to-day practices, such as taking food orders, accessing management reports, and sending emails were slow. Many had to be performed manually by individual employees.</td>
<td>VMware SD-WAN provided the network capabilities necessary for seamless self-service portals that increased efficiency and created consistency across every restaurant location.</td>
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<td>Café Rio didn’t have the luxury of downtime caused by migration from their legacy network. The prospect of needing to shut down locations or miss out on orders was a tremendous concern.</td>
<td>They deployed VMware SD-WAN over the top of their existing legacy network infrastructure. Failover was instantaneous, with no network downtime at all—and no lost business.</td>
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<td>Their infrastructure couldn’t support the volume of online and phone orders. A two-second delay in a lagging VoIP phone system frustrated everyone, and customers couldn’t get what they needed.</td>
<td>The active-active Internet connections from VMware SD-WAN allow traffic to be constantly optimized, reducing lag, and preventing VoIP calls from being dropped when a single connection outage occurs.</td>
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With VMware SD-WAN, we were able to transform the entire network and shrink our hardware footprint. As a result, we have become agile, responsive, and fully capable of delivering on our future growth strategies.”

KEVIN MASTERSON
VP OF INFORMATION TECHNOLOGY
CAFÉ RIO
Stolt-Nielsen Increases Visibility and Simplifies Management

As a leading global provider of transportation, storage, and distribution solutions, Stolt-Nielsen delivers services to its clients through three large operation units. With more than 2,200 users spread among 40 branch offices, the company depends on a reliable network to support the complexities of its business and position it for future growth.

### CHALLENGE

- As a highly dispersed organization spread across more than 30 countries, Stolt-Nielsen couldn’t ensure consistent connectivity for all of its branch offices. Some offices had a single Internet line; others had redundant MPLS lines.
- Business-critical processes were managed through just two MPLS lines, creating delays and compromising security. Management was intensive and time-consuming.
- As the company grew, business users needed more access to more applications—but accessibility and user experience weren’t always up to par, causing frustration and lost productivity.

### SOLUTION

- VMware SD-WAN unified the entire network, creating a consistent, unified experience for all of its branches. They also gained end-to-end visibility, with insights into traffic patterns, problem identification, and incident resolution.
- By eliminating the MPLS-heavy solution they had before, IT can now manage and secure business-critical processes with ease, and has more time for innovation and other critical tasks.
- Newly expanded Internet lines increased capacity, failover, and redundancy—and immediately boosted satisfaction. Employees and partners can now do their work faster and more easily, and feel supported by the business.

“My team now has a lot of insights, and incident resolution process has highly improved due to visibility and transparency.”

DAAN MUIZER
GLOBAL SERVICE DELIVERY MANAGER
STOLT-NIELSEN
Give Your Business a Competitive Advantage

VMware SD-WAN ensures availability and high performance at the branch level. With it, you can extend consistent networking and security policies from the data center to the branch to the cloud.

VMware SD-WAN dramatically simplifies the WAN by combining the economics and flexibility of a hybrid WAN with the deployment speed and low maintenance of a cloud-based service. It enables policy-based network-wide application performance and improves visibility and control, while enabling zero-touch operations.

With VMware SD-WAN, you can reach the level of agility required to help your business compete—and succeed—in the digital world.

Start Learning More
Learn more about VMware SD-WAN >
Request a Free Trial >

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