

Stand Out and Deliver Frictionless Retail: The VMware SASE Advantage

vmware®

SASE™

Benefits

- Enhance customer experience with consistent, reliable, and secure access to cloud applications that enable customer engagement and store operations.
- Protect your brand reputation by securing sensitive customer data, network, devices, and employees – no matter where they are.
- Increase your bottom line with lower bandwidth costs and reduced infrastructure costs.
- Say goodbye to complicated operations with rapid roll out of new stores.
- Deliver proactive fixes for connectivity issues faced at a store or by a remote employee, from a centralized location.

Consumer shopping behavior has changed over the last few years. Technology plays a key role in this behavior. Consumers are returning to brick-and-mortar stores, pop-up shops, and kiosks. They expect personalized omni-channel experiences, such as curbside pickup and accurate digital inventory, from retailers. There has also been a shift in how retail employees work. Many corporate employees are embracing a hybrid workstyle and store associates are using technology to ensure a seamless and modern consumer shopping experience.

To remain relevant amidst these changes, retailers need to deliver a frictionless experience across the value chain—helping the customer to consume, enabling employees to assist customers, and improving employee experiences—all while digitally transforming the operating model.

Retailers are increasingly digitizing their businesses, embracing cloud and SaaS, and moving workloads to the edge to deliver a seamless experience. In fact, 88% of retail executives report that they have increased investment in digital-first experiences (VMware Retail Executive Pulse, June 2021). A high-performing network is foundational to provide effortless retail encounters.

Legacy networking and security architecture cannot meet evolving retail needs

Retail employees need ubiquitous access to cloud applications and data. Retailers cannot deliver effortless retail encounters without fast and secure access to SaaS apps and cloud-based resources. To best serve customers, retailers need to be transaction-ready at all times, with no network downtime. Retailers are developing edge-native applications, which require a low-latency, secure, and resilient network infrastructure.

Traditional network architectures for retailers use a hub-and-spoke network to route traffic from store and fulfillment locations through the headquarters, then back out to cloud-based applications and data sources. This results in higher bandwidth requirements, network bottlenecks and poor user experience. Network bottlenecks affect employee productivity and customer experience, while higher bandwidth increases costs. As retail organizations scale their

business through new brick-and-mortar stores and retail pop-ups, the time and cost of legacy networks can delay store openings.

Security is also a key concern for retailers, with 67% of retail executives ranking security and safety as one of the top three business categories perceived to have the biggest impact on revenue (Coresight Research, Feb 2023).

Employees working remotely, unsecured internet, and the rapid rise of IoT devices can leave the network open to intrusion. Cybersecurity breaches can result in the potential loss of sensitive customer data, customer distrust, and reputational damage.

To overcome the challenges of legacy network architecture and security concerns, modern-day retailers need a scalable, secure, reliable, and bandwidth-rich network that can optimally deliver applications, data, and services to stores and employees—no matter where they are—in an efficient and simple manner.

Transform your retail organization with SD-WAN and SASE

To address legacy network and security concerns, a software-defined WAN (SD-WAN) and Secure Access Service Edge (SASE) solution helps retailers connect and secure distributed stores, users, devices, applications, and data. Retailers need SD-WAN and SASE to access cloud and SaaS applications while minimizing latency, to enable smooth customer transactions.

With SD-WAN and SASE, retailers have the flexibility to use a combination of WAN transports, such as broadband, MPLS, and 5G/LTE, to connect their stores, headquarters, and home offices and to access cloud resources and SaaS applications. SD-WAN and SASE help overcome legacy architecture challenges by providing direct access to cloud and SaaS providers, without having to backhaul the traffic to the data center. This ensures stores and corporate employees have high bandwidth, reliable connectivity, and low latency for business-critical application traffic.

SD-WAN and SASE offer consistent connectivity, performance, and security to ensure retailers are always transaction-ready, even during partial and service outages. This ensures customers have a great experience, while maximizing employee productivity—no matter where they are—and protecting the organization from threats through principles of zero trust and cloud-based security.

SD-WAN and SASE offer an easy-to-deploy solution with a single management interface for both networking and security services that leverages artificial intelligence to simplify operations. With zero touch deployment, stores can be brought online in minutes without the need for technical resources on-site.

VMware SD-WAN and VMware SASE are foundational to delivering a frictionless experience

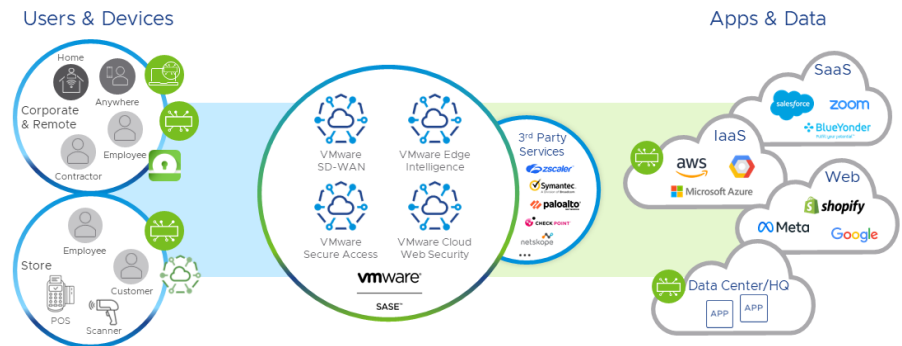


Figure 1: VMware SD-WAN and SASE enable the new retail edge, architected for distributed locations, clouds, and edge applications.

VMware SD-WAN™ and VMware SASE™ bring cloud-delivered networking, security, and AI-enhanced IT operations (AIOps) together with compute to support ubiquitous access for distributed retail stores and workforce along with modern edge-native applications. VMware SD-WAN and SASE offer enterprise-grade performance, security, visibility, and control over both Internet and private networks for retailers.

With VMware SD-WAN and SASE, retail organizations can:

- **Enhance customer experience:** Gain consistent and reliable access to cloud applications that enable customer engagement and store operations.
 - Ensure continuous uptime for point of sale (POS) and scanner systems and prioritize critical application traffic with VMware Dynamic Multipath Optimization™ (DMPO). In a recent evaluation, VMware SD-WAN mitigated 86% of a total partial outage per retail site per month.
 - Leverage 5G/LTE/satellite connectivity to open and operate pop-up stores and mobile sites if fixed lines are not available. Enhance connectivity and compute for edge-native applications at the most far-flung remote locations.
 - Guarantee remote corporate employees have the same user experience and application performance as they would have in-office, for improved retention and employee satisfaction.
- **Reduce security risk:** Protect your brand reputation by securing sensitive customer data, network, devices, and employees—no matter where they are.
 - Simplify and unify network and application security policies for branch, home, fulfillment center, showroom floor employees with VMware SD-WAN.
 - Ensure sensitive customer data is protected from breaches with PCI-certified VMware SD-WAN.

- Protect retail employees and infrastructure from cyberattacks with a comprehensive portfolio of VMware SASE security offerings. Provide optimal and secure connectivity for remote workers with VMware SD-Access™ or VMware Secure Access™ for Workspace ONE users. Safeguard employees accessing cloud and SaaS from internet threats with VMware Cloud Web Security™. With VMware Enhanced Firewall Service, improve branch office, retail store, headquarters, and distribution center security by leveraging IDS/IPS and hosted firewall logging.
- **Accelerate ROI:** Increase your bottom line with lower bandwidth costs and reduced infrastructure costs.
 - Reduce datacenter backhaul and bandwidth costs through direct cloud and SaaS access with VMware SD-WAN. According to a Forrester Total Economic Impact Report, VMware SASE customers can achieve an ROI of 218% with payback in less than 6 months.
 - Gain long-term cost savings by replacing or supplementing existing MPLS connections with high-speed commodity broadband or 5G/LTE/satellite services and eliminating outdated, legacy hardware.
 - Future-proof your infrastructure and transition smoothly to SASE with a flexible architecture, leveraging services from VMware and a broad ecosystem of third-party solution providers, from analytics to security.
- **Simplify operations:** Rapidly roll out new stores and proactively fix connectivity issues faced at stores or by remote employees from a centralized location.
 - Bring new sites online in minutes, without the need for technical resources on site with zero-touch provisioned VMware SD-WAN and SASE.
 - Leverage an easy-to-use, single pane of glass to control SD-WAN, security services, and edge services with VMware Edge Cloud Orchestrator™.
 - Gain proactive insights into user device and IoT device network performance used in the store. These devices can range from hand-held scanners and point-of-sale systems to environmental sensors in cold storage that connect over wireless network. Poor performance of these devices directly impacts store revenue. Powered by VMware Edge Intelligence™, the solution applies machine learning and artificial intelligence to network analytics to identify network or application issues and suggest remediation.

Retail use cases

VMware SD-WAN and SASE support use cases across the retail sector to deliver frictionless retail. These use cases include:

Modernization: Provide reliable, efficient, and secure connectivity between the headquarters, stores, fulfillment centers, edge sites, and cloud applications. Upgrade store network infrastructure and complement or replace MPLS

Learn more

- VMware SASE for retail:
sase.vmware.com/solutions/retail
- VMware SASE: sase.vmware.com
- VMware SD-WAN:
sase.vmware.com/sd-wan
- VMware SASE retail eBook:
sase.vmware.com/content/dam/digitalmarketing/vmware-sase/pdfs/vmware-sdwan-reimagine-shopping-ebook.pdf

connections with direct internet access (DIA) to lower transport costs for cloud and SaaS traffic.

- **Distributed workforce:** Deliver secure and reliable access to improve employee productivity. Retailers require a SASE architectural approach for secure, agile, and optimal application access, whether the user is at the corporate office, on the store floor, or at home.
- **Security and compliance:** Safeguard customer and organizational data while ensuring PCI-DSS compliance with VMware SD-WAN. Deliver zero trust security to protect employees and devices, no matter their location. Mitigate risk from security breaches and protect against ransomware, exploits, malware, and cyber threats at the branch and in the cloud with robust perimeter security and cloud security defenses such as firewall, IDS/IPS, secure web gateway, CASB, and data loss prevention.
- **Client and IoT device experience:** Leverage the power of SASE with AIOps to automatically detect IoT devices in all store and distribution facilities. Automatically baseline device network performance, detect deviations and proactively remediate issues to improve customer experience, increase revenue and reduce loss, giving IT time to focus on more critical tasks.
- **Remote and mobile pop-up stores:** Rapidly open new stores with limited IT resources through automated operations and zero-touch deployment. Leverage 5G/LTE/satellite as a primary option for reliable and secure connectivity for pop-up stores. Manage networking and security from an easy-to-use single pane of glass.