VMware SD-WAN with Zscaler

Performance and security without complexity

SD-WAN™

KEY HIGHLIGHTS

OPTIMAL PERFORMANCE
• Desired performance with policy-based categorization and prioritization among over 3000 applications

• Security as-a-service—without impacting performance

• Enhanced quality of experience with real time monitoring, packet steering, and link remediation

ASSURED SECURITY
• Entire security stack as-a-service at scale, including SSL inspection

• Policies that follow the user to provide identical protection for users whenever they connect

• No need to buy, deploy, and manage security appliances in every branch location

SIMPLICITY AND SCALE
• Reduced cost and complexity of traditional network and security architectures

• Zero-touch provisioning to enable simultaneous deployment of new branches and security services, in just a few clicks

• Simple operations with centralized configuration, management, and monitoring

Together Zscaler and VMware SD-WAN deliver an integrated, secure SD-WAN solution that optimizes performance for cloud applications, while providing assured security, scalability, and flexibility to meet the needs of today's enterprises.

As cloud-delivered applications become commonplace and the dispersed workforce a norm, the old approach of backhauling traffic over MPLS to a centralized data center via a hub-and-spoke architecture is as inefficient as it is irrelevant. This fixed approach introduces unnecessary complexity and latency that negatively impacts application performance and user experience.

To support a cloud transition with the right user experience, enterprise network architects are reevaluating the design of their WAN architectures to route Internet traffic locally. They are taking advantage of inexpensive but omnipresent broadband Internet services, often turning to Software-Defined Wide Area Networking (SD-WAN).

Cloud-delivered VMware SD-WAN™ simplifies how traffic is steered and provides bandwidth optimization for the branch without the complexity of MPLS. It enables direct access to applications deployed on- or off-cloud for users through a distributed network of highly available VMware SD-WAN Gateways and VMware SD-WAN Edges.

• The VMware SD-WAN Orchestrator acts as a brain for the network and provides a single pane of glass view for monitoring and management.

• VMware SD-WAN Dynamic Multipath Optimization™ (DMPO) decides how traffic is steered on a per packet basis and remediates link quality degradation, improving application performance.

• VMware SD-WAN Edges can identify and prioritize mission-critical traffic like voice and video among over 3000 applications. They offer closest on-ramp access to leading cloud service providers based on business intent.
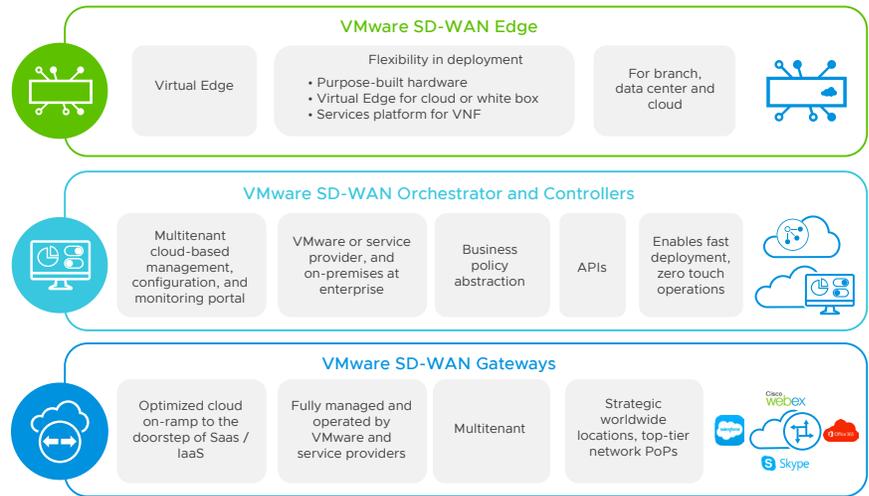
FIGURE 1: VMware SD-WAN components

Security and performance together

While cloud-delivered applications offer a myriad of benefits, including agility, accessibility, economy of scale, and ease of use, they multiply the risk of cyber attacks and performance degradation due to the very benefits of the delivery model. Security and networking are particularly challenging to manage with distributed applications and limited IT resources. Considering these challenges, a fundamental shift in your approach is required to take network and cloud security into account when migrating to the cloud infrastructure.

Zscaler delivers comprehensive security and enables inspection of all traffic at scale—all ports and protocols, including native SSL inspection, URL filtering, full proxy content inspection and access control, advanced firewall, intrusion prevention, advanced threat prevention, sandboxing, cloud access security broker (CASB), and data loss prevention (DLP). It ensures identical protection for all users, on any device, wherever they connect and with policies that follow the user. Because it's a fully cloud-delivered service, Zscaler completely eliminates the need to buy, deploy, and manage security appliances at user locations.

Together, VMware SD-WAN and Zscaler deliver the best application performance and assured security with:

• Direct-to-cloud connectivity to eliminate backhauling and reduce latency

• Cloud-delivered security, so all users in all locations get identical protection—including native SSL inspection, access controls, advanced threat protection, and data loss prevention

• Flexible deployment options to simplify branch IT operations while enabling scalability and centralized policy and WAN management

• Zero-touch provisioning to enable rapid deployment of branches and security services, ensuring security and performance from day one

ABOUT ZSCALER

Zscaler enables the world's leading organizations to securely transform their networks and applications for a mobile and cloud-first world. Its flagship services, Zscaler Internet Access™ and Zscaler Private Access™, create fast, secure connections between users and applications, regardless of device, location, or network. Zscaler services are 100% cloud delivered and offer the simplicity, enhanced security, and improved user experience that traditional appliances or hybrid solutions are unable to match. Used in more than 185 countries, Zscaler operates a multitenant, distributed cloud security platform that protects thousands of customers from cyberattacks and data loss. Learn more at *zscaler.com*.
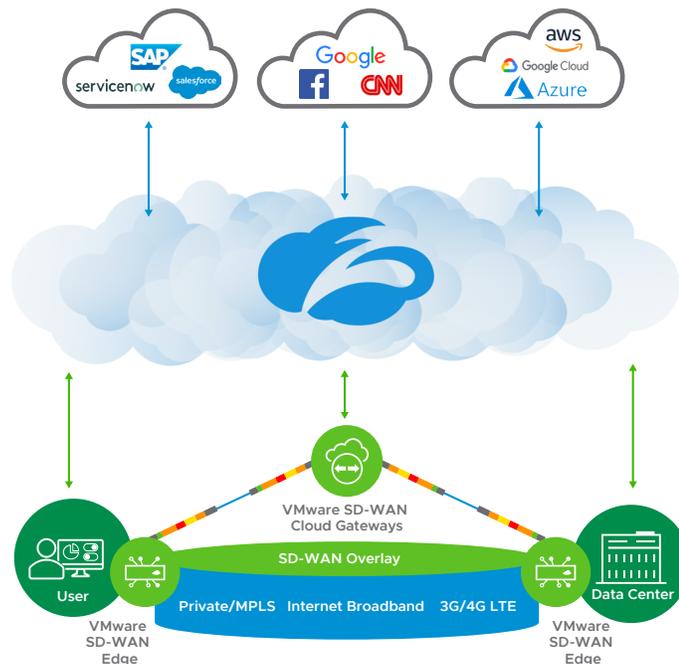

FIGURE 2: VMware and Zscaler delivering optimal performance and security

VMware SD-WAN is a transport-agnostic overlay that simplifies how traffic is steered. It logically expands bandwidth to improve delivery, providing capacity on an application basis. With Zscaler and VMware SD-WAN integrated, it becomes not only easy to migrate from hub-and-spoke to an optimized direct-to-cloud architecture, but also to secure applications with full stack security.

With VMware SD-WAN Orchestrator, network administrators have the option to steer traffic from VMware SD-WAN Edge directly to Zscaler Cloud Security Service or via VMware SD-WAN Gateways. Both routes are provisioned with IPsec tunnels in a centralized manner. Zscaler secures all traffic in the cloud, without the need for on-premises security appliances at user locations, simplifying IT-intensive maintenance and upgrades.

The highly available and distributed VMware SD-WAN Gateways offer the added benefit of real-time monitoring, packet steering, and remediation on the link between user sites and these gateways, which then hand off the traffic to either a Zscaler tenant location or to cloud service locations. The combined Zscaler and VMware SD-WAN solution delivers a secure, scalable SD-WAN connecting branches to the Internet while maintaining the desired user experience.

While VMware SD-WAN offers a WAN-agnostic overlay to simplify and optimize site connectivity to applications, Zscaler offers comprehensive security to address SaaS and Internet application traffic needs. The joint VMware SD-WAN and Zscaler integration enables organizations to easily scale and deploy access and security policies across large number of locations from a single console in a matter of a few clicks. Together, Zscaler and VMware SD-WAN help organizations simplify IT operations, eliminate unnecessary backhauling, and minimize security risks while optimizing application connectivity and performance at scale.