VMware SASE

Succeed in a completely distributed world

SASE™

Built on the success of VMware SD-WAN, VMware SASE is a leading secure access service edge platform enables a distributed workforce, and ultimately enables and accelerate your WAN and edge transformation. It delivers cloud agility, consumer simplicity, and enterprise security to users anywhere.

Industry disruptions across multiple verticals are forcing changes everywhere. Users, workloads, applications, and data have become highly distributed. For example, use cases like point of sale, theft/loss prevention, physical security, and digital signage in the retail industry require compute to be close to the users at the edge to provide needed performance. The centralized cloud and data center model presents limitations in serving enterprises' needs. Organizations are facing challenges to stay competitive in this highly distributed world.

IT infrastructure must evolve to address these new challenges—creating new experiences for customers from the edge. Along with compute at the edge, Secure Access Service Edge (SASE) is a critical component of this new enterprise edge. Together, they offer secure, reliable, and optimal application connectivity, regardless of user and application locations.

VMware SASE and cloud-based architecture

VMware SASE™ converges industry-leading cloud networking and cloud security to deliver flexibility, agility, protection, and scale for enterprise and enable WAN and edge transformation.

VMware's unique approach includes SASE points of presence (PoPs) worldwide to serve as an on-ramp to SaaS and other cloud services. These PoPs, strategically located in IaaS and co-location data centers, deliver optimal performance because they are close to users and applications.

The VMware cloud-native SASE architecture combines VMware SD-WAN™ cloud gateway, VMware Secure Access™, VMware Cloud Web Security™, VMware Edge Network Intelligence™ and firewall as-a-service (FWaaS).

- **VMware SD-WAN Cloud Gateways** are multitenant gateway service and policy control points with a global footprint of more than 2000 gateways supported by VMware and its partners to deliver superior application access performance and scale.

- **VMware Secure Access** is a remote access solution based on a zero-trust network access (ZTNA) framework. The cloud-hosted solution offers multiple benefits over traditional VPN solutions to provide users with consistent, optimal and secure cloud application access.

- **VMware Cloud Web Security** leverages and integrates best-of-breed secure web gateway (SWG), cloud access security broker (CASB), data loss prevention (DLP), URL filtering, content filtering and content inspection into the SASE PoP to provide secure, direct, and optimal access to SaaS applications and Internet sites.

- **FWaaS** integrates VMware NSX next-generation firewall and advanced security functionalities such as deep packet inspection (DPI) and intrusion protection systems (IPS)/intrusion detection systems (IDS) as part of the SASE services to provide identity-based protection to the on-premises application access from anywhere.

- **VMware Edge Network Intelligence™** is a vendor-agnostic AIOPs platform delivering rich user experience and providing artificial intelligence/machine learning (AI/ML)-enabled visibility from WAN to branch, Wi-Fi/LAN, and application.
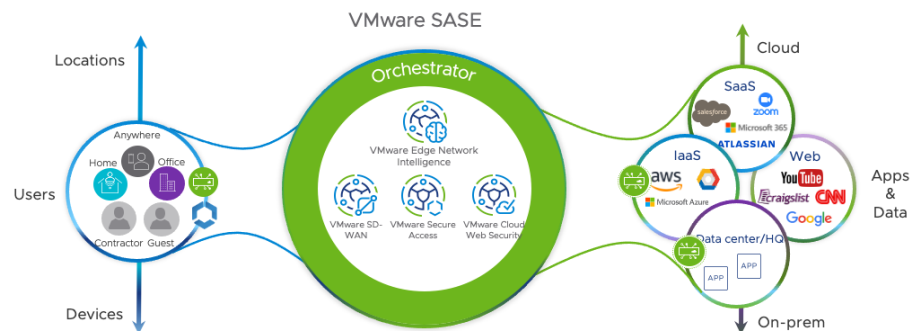

Figure 1: VMware SASE

Transform the distributed edge

With VMware SASE, organizations benefit from the power of SASE in Internet exchange and co-location data centers. VMware SASE simplifies cloud-on-ramp and multi-cloud interconnect and provides automatic discovery of IaaS routing domains, automated and segmented routing between domains. You decide where to keep your applications and data. Your users choose where they work:

home, office, or anywhere. Regardless of user and application locations, you're ready to deliver the most optimal and secure cloud application access experience in this highly distributed world.

Enhanced security

By integrating advanced security capabilities including ZTNA, SWG, CASB, URL filtering, IPS/IDS, and DLP, VMware SASE extends the security boundary beyond data center and cloud to applications and users, minimizes attack surfaces by trusting no one, and protects user, network, application, and data against threat from inside and out.

With VMware SASE, organizations can:

- Use a single cloud-native multi-tenant platform for secure access to public and private cloud applications

- Provide unified secure access experience for branch, campus, and mobile users through VMware Secure Access service

- Deliver contextual access based on user identity, device location, and security posture

- Administer web and security policy control from a single management platform

- Gain visibility into end-user and IoT device experience accessing multi-cloud applications

- Take advantage of local self-healing with dynamic remediation and global self-healing, with assisted remediation configured by policy

Customer benefits

Built on the success of VMware SD-WAN and the unique Network of Clouds service, VMware continues to enable and accelerate your WAN and edge transformation journey through VMware SASE.

Organizations can continue to expect and achieve:

- **Cloud-first**: Cloud gateways offer the first hop for VMware SASE and enable multi-cloud interconnect. VMware SASE service is completely cloud-based, and easy to consume and scale.

- **Uncompromised protection**: ZTNA, SWG, CASB, DLP and FWaaS are built into the VMware SASE PoP. The solution delivers a comprehensive suite of security features including contextual access, network security, application protection, and workload encryption, to protect organizations against attacks at all levels.

Learn more

- VMware SASE, *sase.vmware.com*

- VMware Secure Access, *sase.vmware.com/products/ vmware-secure-access*

- VMware Cloud Web Security, *sase.vmware.com/products/ cloud-web-security*

- VMware Edge Network Intelligence, *sase.vmware.com/products/ edge-network-intelligence*

- VMware SD-WAN, *sase.vmware.com/sd-wan*

- **Digital experience**: Ensure the availability and performance of your mission-critical applications, even over a single link and degraded network conditions. Deliver assured and high-performing application access through Dynamic Multipath Optimization™ (DMPO). By combining key elements of unified endpoint management, SASE, and endpoint security technologies from VMware, enterprises now can meet the needs of their distributed workforce, delivering reliable and optimal access experience.

- **Maximum efficiency**: Simplify Day 0-1 operations through automation and zero-touch provisioning (ZTP). Transform Day-2 operations, including monitor, maintenance, management, and troubleshooting. Self-heal your network through actionable insights and remediation suggestions delivered through VMware Edge Network Intelligence and its AI/ML analytics engine.