Netskope One SASE Branch

Netskope One SASE Branch delivers the industry's most complete SASE solution by integrating all elements of Netskope One SASE into a unified, cloud-delivered service, powered by Netskope One SDWAN and SSE. It seamlessly converges the three layers—SASE Fabric, SASE Hybrid Security, and SASE Orchestrator—into a single service, transforming both connectivity and security. At its core, Netskope One SASE features a Zero Trust engine, the global NewEdge network spanning 75+ regions, and a thin branch that optimizes and secures traffic from all locations and users to cloud and on-prem environments.

Quick Glance

- **SASE Fabric,** is context-aware, it ensures Cloud Confidence Index (CCI)-based SD-WAN optimization for 85k+ apps, offering VRFaware segmentation across sites, NewEdge connections for cloud on-ramp, and Global WAN services.

- **SASE Hybrid Security** provides cloud- based Netskope One SWG, CASB, FWaaS and more, alongside on-premises NGFW, IPS/IDS, and IoT security. Netskope One Private Access combines SD-WAN and Zero Trust capabilities, replacing VPN completely with Netskope One Client.

- **SASE Orchestrator** provides advanced capabilities, including WAN Insights with integrated DEM, role-based access, and flexible containerized service deployment. Its unified, single SASE console centrally manages all Netskope One SD-WAN and SSE capabilities, enabling true zero-touch provisioning.

The Challenge

Legacy SD-WAN and existing point solutions struggle to meet the needs of today's borderless enterprise. Challenges include:

Poor User Experience: Legacy SD-WAN can't detect tens of thousands of cloud apps and lacks distributed cloud on-ramp service, resulting in poor user experience. Thick and costly SD-WAN appliances for remote users strain IT budgets.

Bolt-on Security: Disjointed point products like on-premises IPS, Application Firewall, IoT security, or cloud security services like CASB, SWG, and more increase cost and complexity and create inconsistent security between branch and remote users.

Manual IT Operations: Legacy solutions fail to automate laborious tasks, burdening teams with management inefficiencies. Current monitoring tools lack hop-by-hop WAN insights or require additional appliances, hindering digital experience management.

The Solution

Netskope One SASE Branch enables the industry's most complete SASE solution, concurrently cutting costs and complexity while elevating network performance, security, and operational efficiency. It ensures exceptional user experiences at branches and remote locations with the same SD-WAN optimization and security capabilities, eliminating complexities of traditional branch architectures and management appliances. With unified SASE management, driven by SASE Orchestrator and digital experience management (DEM), operations are streamlined and application performance is optimized. It integrates on-premises and cloud security, providing end-to-end protection across the connected enterprise network.

The Netskope SASE solution is composed of three innovative layers that are summarized and explained below.

- SASE Fabric
- SASE Hybrid Security
- SASE Orchestrator

SASE Fabric

Context-aware AppQoE AppQoE (Application Quality of Experience): Context-aware AppQoE for Over 85k+ Apps

Deliver context-aware SD-WAN by integrating with Netskope Zero Trust Engine to support the industry's highest number of 85k+ SaaS applications for visibility and control. Build efficient operations by automatically prioritizing with Netskope Cloud Confidence Index-based smart defaults. Provide real-time link monitoring, measuring latency, jitter, and packet loss for enhanced application performance. Support uninterrupted operations with dynamic path selection and sub-second failover blackouts and brownouts protection. Implement intent-driven remediation to protect against concurrent degradation on all available paths, leveraging technologies like Forward Error Correction (FEC) and TCP optimization.

Advanced Routing: 100% SaaS Controller and Advanced Routing

Harness a 100% SaaS-based SDN controller with cloud-scale key distribution to dynamically expand your network and eliminate complexity associated with DIY controllers. It offers support for industry-standard protocols like eBGP/iBGP, OSPF, static, and advanced routing capabilities, including route filtering, routing automation to ensure symmetric routing, and redistribution. True separation of control plane and data planes to allow customers to build a highly modular and resilient architecture.

Segmentation: Secure End-to-End Segmentation at Scale

Serves various use cases including threat isolation, compliance, merger and acquisition, and more. Gain network control and visibility by extending VRF-aware segmentation across branches, data centers, and multiple cloud environments seamlessly. Apply network-specific or segment-specific policies to all devices and networks consistently, overcoming the limitations of traditional VRF-aware approaches that are more complex and non-scalable. Support versatile segment-aware topologies like full mesh, hub-spoke, and dynamic B2B for diverse business needs.

Multi-cloud Networking: Secure Multi-cloud Networking and Access

Connect major clouds (AWS, Azure, GCP) using cloud-native application networking constructs. Enable automated, policy-based steering in multi-cloud environments. Secure clouds and apps with one click to Netskope One SSE.

Cloud On-Ramp: Enhanced Application Experience with Cloud WAN

Netskope One SD-WAN incorporates a distributed network of cloud-delivered unified SASE gateways within the NewEdge Cloud to provide a high-performance data-path from any branch, data center, or remote user to any cloud, SaaS, or UCaaS application.

Global WAN: Optimized Global WAN Connectivity

Establish low-latency, highly optimized global WAN connections for trans-continental branches to headquarters across different continents, utilizing a global backbone to ensure exceptional reliability and a superior worldwide user experience.

Exceptional user experience with CCI-based SD-WAN optimization for over 85k+ apps and SD-WAN integration in NewEdge. SD-WAN for Endpoint extends optimized access to remote users for productivity and cost savings.

SASE Hybrid Security

Application Firewall/FWaaS: Consistent Firewall Policy On-premises and in the Cloud

NGFW services on-premises and in the cloud secures both east-west and outbound traffic across all ports and protocols for users and offices. Policy controls include applications, port/protocol, group-IDs, fully qualified domains, and wildcards as destinations.

Device Intelligence: SD-WAN with Integrated Device Intelligence

Discover and autonomously categorize both managed and unmanaged IP-connected devices within the network. Leverage AI/ML to detect breaches, perform dynamic risk assessment and dynamically microsegment those devices to isolate and prevent lateral movement of threats.

Intrusion Detection and Prevention: Get Intrusion Detection and Protection Right

Suricata, in collaboration with Netskope Threat Labs, introduces real-time intrusion intelligence boasting an impressive database of over 60,000 threat signatures. These new signatures are automatically integrated into the Netskope unified SASE gateway, enhancing our commitment to top-tier security.

Secure Web Gateway: Protect Users from Web-based Attacks Everywhere with SWG

Reduce risks by inspecting and controlling web traffic utilizing cloud-native capabilities. Secure your branch offices and remote users from malware, phishing, and other web-borne threats with inline visibility and URL filtering with SSL decryption.

Cloud Access Security Broker: Monitor and Regulate Access to Cloud Apps with CASB

Confidently adopt cloud applications and services—without sacrificing security. Manage the unintentional or unapproved movement of sensitive data between cloud app instances and prevent sensitive data from being exfiltrated from your environment.

Seamlessly integrate top-tier on-premises and cloud-delivered security services, slashing risk by 85%, while consolidating point products and offering complete and consistent protection everywhere.

Private Access: Retire VPN completely and Embrace Zero Trust

Converge SD-WAN with Zero Trust capabilities in a unified SASE client to provide secure, optimized least-privilege access to all private and public applications including business-critical services like voice/video to boost productivity.

SASE Orchestrator

ML Insights: ML-powered Insights

Autonomous monitoring to collect Service Level Experience (SLE) data from users and branch offices to detect anomalies and forecast SLA violations. Use enterprise-wide WAN predictive analytics to identify and resolve policy violations.

Zero Touch Provisioning: Automate Network Operations with Zero Touch Provisioning

Simplify branch and remote user deployments with a unified cloud console. Simply connect unified SASE gateway or SD-WAN for Endpoint to your network and enable zero- touch provisioning to bring your new sites, users, and cloud environment up in minutes.

SASE Policy: Unified Management and Policy for SD-WAN and SSE

Empowers IT teams to unify SD-WAN and SSE management with Netskope one platform, eliminating the need for multiple products and policy inconsistencies. Ensure consistent zero trust security and optimization across all branch offices, users, and cloud.

ZT Device Access: Zero Trust Device Access

Deliver proactive support through zero trust secure access to remote devices inside the branch, including phones, ATMs, and servers via HTTP, RDP, SSH, and VNC, speeding up incident resolution.

Partner Containerized Apps: Extensibility and Open Integrations with Container Services
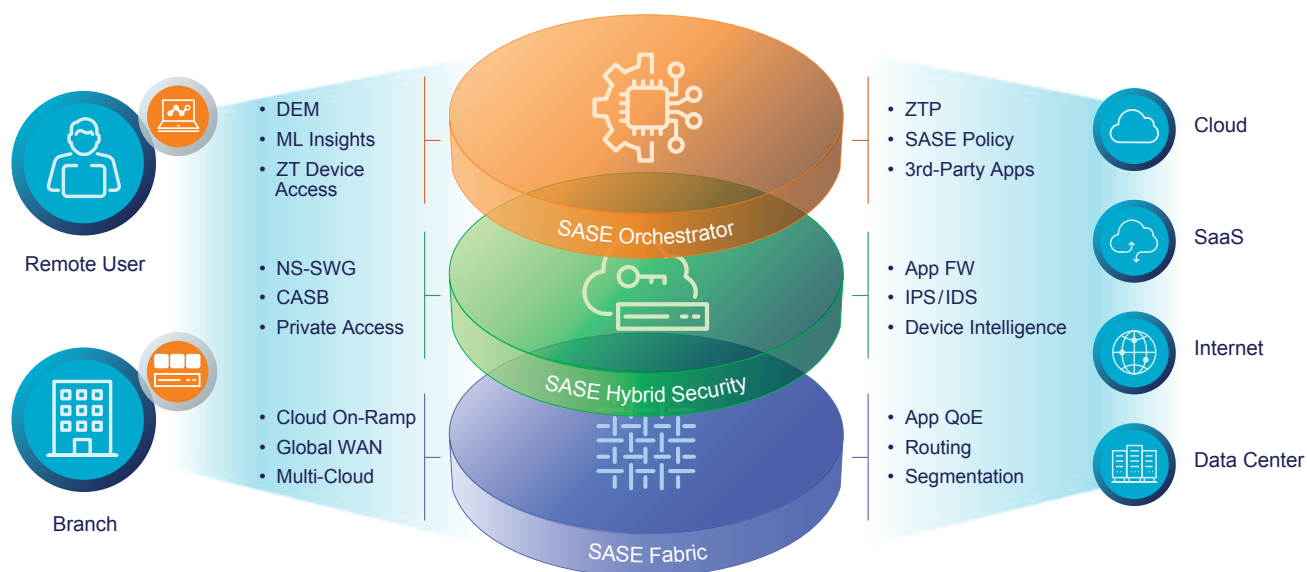
One-click deployment of container services from a catalog that includes Netskope services like IoT Security and Netskope One DEM, as well as partner containers such as Cisco Thousand Eyes, Microsoft Azure IoT Edge, and custom containers.

Netskope One DEM: WAN Insights with Built-in Digital Experience Management

Provides visibility into end-to-end performance monitoring with hop-by-hop analysis across Global WAN providers and application performance monitoring. IT teams can accurately identify the root cause of issues so they can remediate them to optimize application performance.

Reduce the volume of support tickets and mean time to resolution significantly with per-user SLE metrics, WAN anomaly detection, and hop-by-hop path visibility for end-to-end monitoring.

"The era of the hyper-distributed enterprise—where workers can be anywhere and applications are everywhere—is causing organizations across the globe to transform their network and security strategies," said Brandon Butler, IDC Research Manager, Enterprise Networks. "Key capabilities for next-generation architectures include deeply integrated networking and context-aware security, cloud-based management, and advanced automation enhanced by AI/ML. Netskope's One SASE Branch exemplifies the company's approach to SASE by combining the important elements of SD-WAN via NewEdge with a portfolio of cloud-native and context-aware security capabilities."

The diagram shows a layered architecture:

Remote User (with DEM, ML Insights, ZT Device Access) and **Branch** (with NS-SWG, CASB, Private Access / Cloud On-Ramp, Global WAN, Multi-Cloud) on the left.

Three stacked layers in the center:
- SASE Orchestrator
- SASE Hybrid Security
- SASE Fabric

Left side capabilities:
- DEM, ML Insights, ZT Device Access
- NS-SWG, CASB, Private Access
- Cloud On-Ramp, Global WAN, Multi-Cloud

Right side capabilities:
- ZTP, SASE Policy, 3rd-Party Apps
- App FW, IPS/IDS, Device Intelligence
- App QoE, Routing, Segmentation

Right side destinations: Cloud, SaaS, Internet, Data Center

BENEFITS	DESCRIPTION
Exceptional User Experience	Exceptional user experience with CCI-based SD-WAN optimization for over 85k+ apps and SD-WAN in NewEdge. SD-WAN for Endpoint extends optimized access to remote users for productivity and cost savings.
Better Security Outcomes	Seamlessly integrate top-tier on-premises and cloud-delivered security services, slashing risk by 85%, while consolidating point products and offering complete and consistent protection everywhere.
Streamlined Operations	Reduce the volume of support tickets and mean time to resolution significantly with per-user SLE metrics, WAN anomaly detection, and hop-by-hop path visibility for end-to-end monitoring.

Conclusion

Netskope's One SASE Branch solution delivers exceptional user experiences at branches and remote locations with the same SD-WAN optimization and security everywhere. Reduce the complexity of traditional branch architectures and stacks of management appliances through unified SASE management, driven by SASE Orchestrator and digital experience management (DEM) to streamline operations and ensure top-notch application performance. Realize better security outcomes through integrated on-premises and cloud security, providing end-to-end protection across the connected enterprise network. Power your enterprise networking with Netskope One SASE Branch delivering industry's most complete SASE solution, reducing cost and complexity while enhancing network performance, security, and operational efficiency, ensuring business growth through digital innovations.

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Interested in learning more? Request a demo