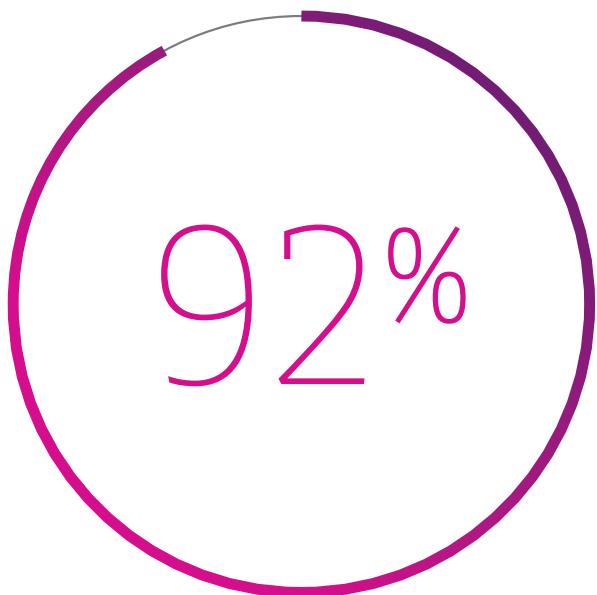




The Convergence of SD-WAN and Security

Secure Access Service Edge (SASE)

A unified, secure connectivity experience available anywhere and anytime.



IDC reports that **92%** of enterprise businesses say their IT environment—including their infrastructure, applications and data analytics—relies on the cloud. This number predicted to grow to **95%** in 18 months.¹

Migrating to the cloud opens the door to new opportunities. And new challenges.

The way we work has evolved. Two enormous shifts—the cloud and mobility—require organizations to reconsider how to better connect and secure their offices, users and resources.

Enterprise IT teams are being asked to implement immediate solutions in response to new environments. These factors are driving an unparalleled acceleration of enterprise migration to the cloud, dispersing the network edge more than ever before and in some cases, making it vanish completely.

The rise of cloud application adoption generates new demands for teams who need to ensure quick access for an often dispersed, remote workforce. With more than 90% of enterprises expected

to rely on hybrid clouds by 2022,² organizations are turning to centralized and dynamic access to network resources from anywhere and the ability to do it on any device.

Simultaneously, there's a growing necessity for reliable, advanced security policy enforcement across the enterprise. Providing secure access to company resources is essential to achieve business continuity and a work-from-anywhere setting during a time where cybersecurity is most needed.

The SASE revolution

SASE is a layered, interwoven fabric of network and security technologies that protect an organization's data and systems from unwanted access. It enables enterprises to deliver protected networking and security services in a consistent way and supports the unceasing movement towards digital business transformation and workforce mobility.

SASE achieves its capabilities because it's built upon a solid platform of SD-WAN and is intertwined with software intelligence. This combination allows users to access applications from any device, and from any location. The result is enhanced security with less network complexity.

60%

By 2025, Gartner expects that at least 60% of enterprises will have explicit strategies and timelines for SASE adoption, up from 10% in 2020.³

5 major components of SASE

Software-Defined Wide-Area Networking (SD-WAN)

SASE is built upon a solid foundation of SD-WAN, intertwined with software intelligence, which enables optimal WAN management. SASE leverages SD-WAN capabilities to provide optimized application performance, network routing, global connectivity, WAN and Internet security, cloud acceleration, and remote access. SD-WAN also provides an ideal platform to secure unified communications applications including voice, video and chat.

Firewall as a Service (FWaaS)

FWaaS is a new type of a next-generation firewall, it eliminates the appliance form factor, making network security capabilities such as URL Filtering, Intrusion Prevention System (IPS), next generation anti-malware (NG-AM) and Managed Detection & Response (MDR) available everywhere.

Secure Web Gateway (SWG)

SWG solutions protect users against malware, phishing and other web-borne threats. SASE offers SWG protection to all users, at all locations and eliminates the need to maintain policies across multiple point solutions.

Zero Trust Network Access (ZTNA)

ZTNA offers a modern approach to securing application access for users replacing legacy VPN. It embraces a zero-trust policy, where application access dynamically adjusts based on user identity, location, device type and more.

Cloud Access Security Broker (CASB)

CASB helps enterprises adapt and protect against new threats that come with cloud computing like when connecting to IaaS and SaaS. CASB applies security policies as users access cloud-based resources to protect against cloud security risks, comply with data privacy regulations and enforce corporate security policies.

Ready to get SASE?

If these trends and challenges apply to you, it's time to adopt SASE:

Need protection from malware and exposure to security vulnerabilities

Disjointed management of siloed security and networking technologies

Applications reside in the cloud

End users connect to your network from outside a controlled environment

Limited visibility to cloud compute and end-user resources

End user performance experience is degrading

Unable to control all device connection to your network

Increased network complexity

End users expect more direct access to resources

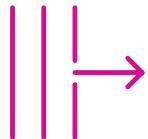
How SASE works

SASE consists of a layered, interwoven fabric of network and security technologies that protect an organization's data and systems from unwanted access.



WE + leading SASE technology

Windstream Enterprise is partnering with industry leading SASE technology vendors to deliver the most sophisticated and resilient SASE solutions available. We deliver four core SASE capabilities.



Next-generation Unified Threat Management (UTM)
firewall security



Secure Remote Access (SRA) to ensure an encrypted
connection over the internet



WE Connect, a true ‘single pane of glass’ that provides network
visibility and management



A nationwide Cloud Core™ SASE architecture for rapid
deployment, seamless integration, greater extensibility
and higher uptime.

Why SASE from Windstream Enterprise

SD-WAN Concierge™ and Managed Network Services from Windstream Enterprise create the foundation for a sophisticated and resilient SASE solution. They provide a high-performance network with integrated security that will help your organization consolidate security elements in the cloud.

Enterprise-level security

Allow access to apps and data over any connection type

Centralized operations

Put policy management in the cloud and distributed enforcement points close to the user, app or device

Device consolidation

Occurs via the reduction of the number of single-purpose customer premises equipment (CPE) at a branch to a single agent or SD-WAN device

Secure Remote Access

Help ensure encrypted connections and bases network access on the identity of the user, device or application—not IP address or physical location

Hybrid WAN

Run security over the top of both existing private MPLS connections and public Internet bandwidth for rapid, seamless deployment

Improved performance

Enables critical for latency-sensitive apps such as collaboration, video, voice and web conferencing

Lower operational overhead

Eliminates the need for IT to constantly update, patch and scale appliances

Cloud-enabled connectivity, communications and security—guaranteed.

Windstream Enterprise drives business transformation through the convergence of our proprietary software solutions and cloud-optimized network to unlock our clients' revenue and profitability potential. Our managed services streamline operations, enhance productivity and elevate the experience of our clients and their end users while securing their critical data and brand reputation. Analysts certify Windstream Enterprise as a market leader for our product innovation, and clients rely on our unrivaled service guarantees and best-in-class management portal. Businesses trust Windstream Enterprise as their single-source for a high-performance network and award-winning suite of connectivity, collaboration and security solutions—delivered by a team of technology experts whose success is directly tied to our clients' complete satisfaction.

1. IDG, "2020 Cloud Computing Study." July 8, 2020.

2. Stewart, Duncan, et al. "Cloud Migration Trends and Forecast." Deloitte Insights, Deloitte, 17 Nov. 2021.

3. MacDonald, Neil, et al. "2021 Strategic Roadmap for SASE Convergence." Gartner. March 25, 2021.

To learn more about SASE, visit windstreamenterprise.com