

Secure and Optimized Connectivity for Zoom

Solution Brief



Netskope, a leader in Secure Access Service Edge (SASE), and Zoom partner to deliver superior collaboration experiences with optimized performance, security, and compliance. The integrated solutions optimize connectivity and security of Zoom voice and video communications using Netskope Borderless SD-WAN and Netskope SSPM for users working from home, in a cafe, or in a branch office.

Quick Glance

- Provides full visibility and ML-insights with application and real-time path monitoring.
- QoE smart defaults for more than 60,000 applications, and automatically identifies and prioritizes Zoom sub-applications.
- Improves network performance with on-demand remediation, sub-second failover, and cloud on-ramp to Zoom.
- Simplifies remote maintenance of Zoom Phone behind Netskope SASE Gateway with built-in secure inbound access service.
- Provides unified policy with a consistent experience for users across remote users, branches, and multi-cloud.
- Discovers misconfigurations with Netskope SSPM to improve security posture and maintain compliance.

Partnering with Netskope enables Zoom to deliver the best user experience while providing security teams with the tools they need to maintain a strong security posture and compliance with privacy and security regulations.

The Challenge

Unified Communications as a Service (UCaaS) users often struggle with low reliability, high latency, and network disruption, all of which limit worker productivity. In addition, organizations face security challenges, including risks coming from users and sites that communicate directly over the internet with additional challenges listed below:

- **Low Reliability:** While broadband internet provides easy, cost-effective access, it can also introduce packet loss, jitter, and latency, resulting in unpredictable quality.
- **Elevated Cybersecurity Risk:** Users and sites that communicate directly over the internet with UCaaS and other cloud-based applications are exposed to cybersecurity attacks.
- **High Operational Costs:** Increased IT costs can result from troubleshooting on-premises devices like Zoom Phone with a truck roll.

The Solution

Netskope Borderless SD-WAN provides organizations with secure, reliable, optimized access to Zoom. Borderless SD-WAN also:

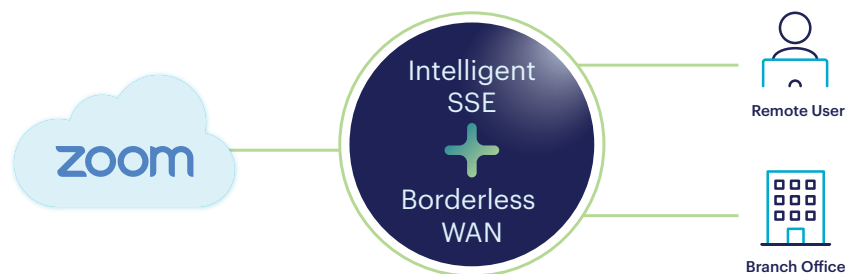
- Identifies and prioritizes Zoom sub-applications
- Optimizes and secures on-ramp access direct to Zoom PoPs
- Simplifies remote maintenance of Zoom Phone behind Netskope SASE Gateway with built-in secure inbound access service
- Provides unified policy with a consistent user experience across branches, sites, and remote locations
- Netskope SSPM continuously monitors Zoom environments to discover and remediate any misconfigurations

Fully Converged Borderless SD-WAN - Architectural Components

Netskope Borderless SD-WAN Gateway leverages one-click to Netskope Intelligent Security Service Edge (SSE) and delivers a platform that seamlessly converges networking and security. Netskope Intelligent SSE provides integrated security services including ZTNA, SWG, CASB, SSPM/CSPM, IoT security, DLP, Threat Protection, FWaaS, and RBI from one platform with one policy framework and one console. Netskope Borderless SD-WAN components include:

- **Netskope Borderless SD-WAN Orchestrator and Controller:** Multi-tenant, cloud-delivered controllers enable AI-driven operations to onboard customers, sites, and services with simplicity at cloud scale.
- **Netskope Borderless SD-WAN “All-in-One” Software:** Enables all remote users, sites, and IoT devices with secure, reliable access to enterprise and cloud resources, supporting the widest deployment options in the industry.
- **Netskope Cloud Services Fabric:** Globally distributed, multi-tenant, multi-service, cloud-delivered network providing a secure, high-performance direct on-ramp to the cloud from any location.

Unified and converged architecture to simplify operations



Deep Visibility, Reliable and Optimized Connectivity

Netskope Borderless SD-WAN can distinguish each Zoom Meeting, Zoom Phone, Zoom Room, and Conference Room Connector from other application workloads egressing a user’s network. It separates them from generic internet traffic and routes these packets to the closest hosted Netskope Cloud Services Fabric, which then hands them off to the best peering Zoom PoPs. Netskope Borderless SD-WAN QoS smart defaults for over 60,000 applications, and automatically identifies and prioritizes Zoom sub-applications and minimizes latency, jitter, and loss to deliver consistent quality of experience. Netskope Borderless SD-WAN also ensures application performance without compromising payload security, even over a single, unstable broadband internet connection.

Netskope Borderless SD-WAN components work together to implement the best overlay for real-time Zoom voice and video traffic.

Assured Application Experience

Netskope Borderless SD-WAN ensures nonstop WAN availability with ML-insights, application and real-time path monitoring, link remediation, and packet steering over multiple WAN links including wired and integrated cellular, resulting in location-independent optimal application delivery.

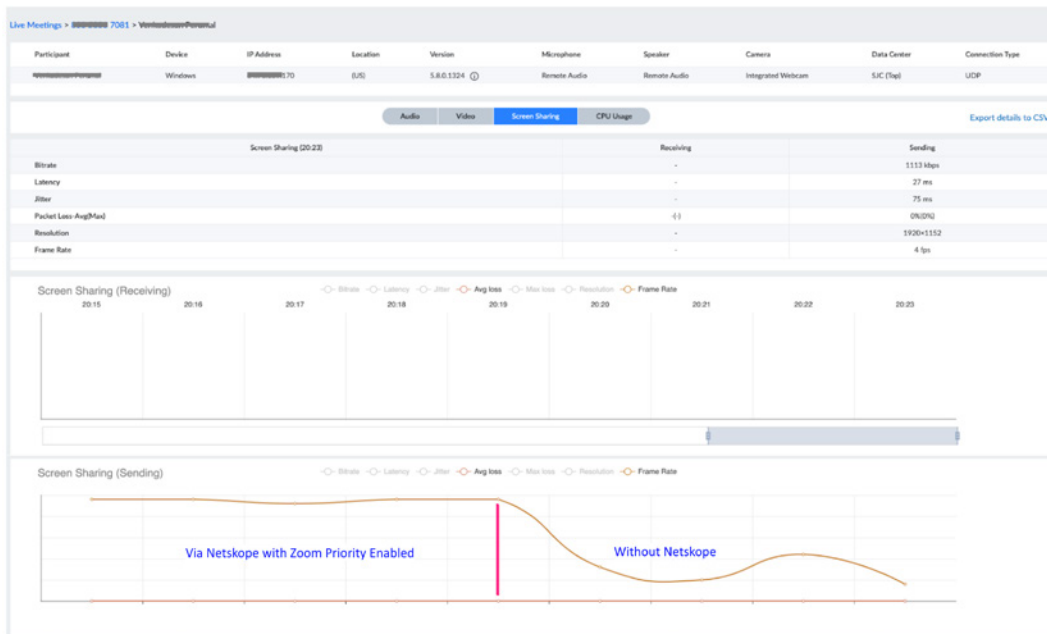
Netskope Borderless WAN includes support for real-time link monitoring and dynamic path selection, plus sub-second failover for blackout and brownout protection, ensuring optimum network performance. Using a bookended deployment of Borderless SD-WAN Gateways helps to further optimize performance down to the last mile by leveraging built-in TCP and UDP optimizations, such as forward error correction, for VoIP, video streaming, and video conferencing applications sensitive to latency, loss, or jitter.

Cloud On-ramp

Borderless SD-WAN enables optimized access to and across clouds with full context-aware Quality of Experience. Endpoint SD-WAN routes these packets to the closest hosted Netskope Cloud Services Fabric, which then hands them off to the best peering Zoom PoPs.

The proof is evident based on joint test results

In joint testing with Zoom, with 3% packet loss, Netskope Borderless SD-WAN demonstrates a continuous high-quality user experience by remediating packet loss significantly and delivering 24FPS share frame rate with a steady bit rate to the client machine (shown in figure below). The Zoom client without Netskope Borderless SD-WAN solution couldn't cope with the packet loss and had to drop its resolution to 8FPS share frame rate with an unstable bit rate, leading to a degraded user experience.

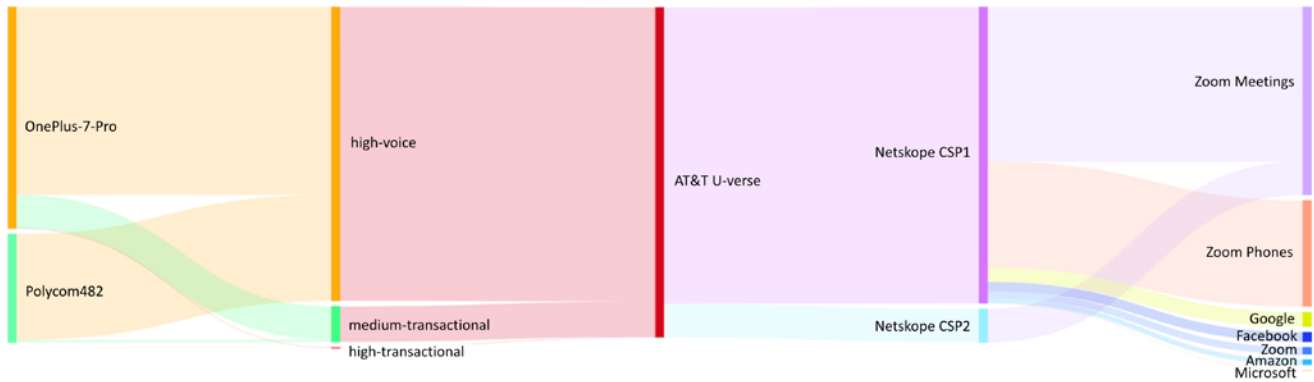


By leveraging cloud-ready architecture and remediation technology, customers can continue to experience high-quality Zoom sessions even on degraded SD-WAN links.

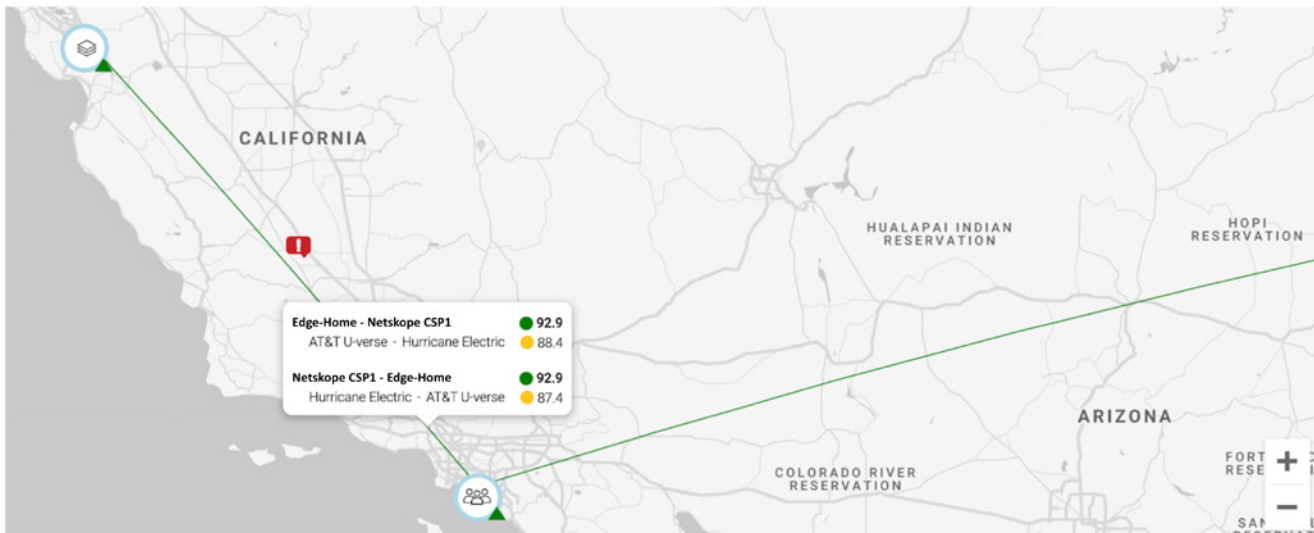
AI-driven Operations

Traffic Insights with Netskope Borderless SD-WAN

IT can proactively resolve end-user Zoom issues with the dynamic remediation capabilities and actionable insights of Netskope Borderless SD-WAN. The figures below show how Netskope Borderless SD-WAN detects, prioritizes, and steers Zoom application traffic via different cloud exits on-demand to simplify monitoring and troubleshooting. It provides an end-to-end view of the paths that traffic takes from the device to Zoom applications.



Below is the AppX Map that provides a flight tracker view of overlays between Borderless SD-WAN Gateways with AppX Scores (industry standard R scores). The "Before" and "After" scores help IT admins quickly narrow down if the issue is with the underlay or overlay.



Gain full visibility into your enterprise with Application Experience (AppX) score from every user and site to every destination.

Secure Inbound Access

IT often installs hardware devices such as Zoom Phone to achieve an in-office experience. However, they can be a nightmare for IT to maintain and troubleshoot. For instance, when IT needs to troubleshoot a device, they need to have end-users manually click 20-30 buttons to triage an issue with the phone.

With Netskope Borderless SD-WAN Secure Inbound Access, Zoom IT or third-party support can access the phone UI directly from the Netskope Borderless SD-WAN orchestrator portal without compromising security. This proactive remote support option helps to minimize truck rolls, reducing troubleshooting costs for on-premises hardware devices such as Zoom Phone.



Securing Zoom Deployments with Netskope SSPM

Netskope SSPM enables organizations to deploy and use Zoom securely while helping to maintain compliance obligations, regardless of where employees are located. Netskope SSPM is tightly integrated with Zoom APIs, providing security practitioners with visibility and insights into configuration settings, security posture, and compliance. It supports a broad collection of rules and compliance standards out-of-the-box, as well as the ability to add custom rules based on the data that Netskope gathers about connected Zoom accounts. Compliance administrators can modify and deploy policies to detect violations based on popular industry benchmarks and standards such as CIS, HIPAA, PCI, CSA, GDPR, AIPCA, ISO, and more. Security alerts include actionable remediation instructions to quickly bring Zoom deployments back into compliance and close any remaining security gaps.

One-click access to Netskope Intelligent SSE, delivering the industry's most integrated and converged platform that converges networking and security.

Conclusions

As video becomes the preferred mode for human interaction, it is important to provide the best possible user experience for communication and collaboration applications such as Zoom no matter where they are located—at any branch size or at any remote location. Netskope Borderless SD-WAN enables cloud-delivered, transport-independent, easy-to-use connectivity to Zoom, the world-leading Video and Collaboration service. Netskope Borderless SD-WAN helps customers bring all users, devices, sites, and multi-cloud environments online in minutes with intuitive, cloud-based centralized multi-tier management capabilities. In addition, Netskope Borderless SD-WAN's AIOps offers true insight into the network problems of the enterprise-wide SD-WAN network that IT departments could not previously see or correct. With Netskope Borderless SD-WAN Secure Inbound Access, Zoom IT or third-party support can access the phone UI directly from the Netskope Borderless SD-WAN orchestrator portal without compromising security. This proactive remote support option helps to minimize truck rolls, reducing troubleshooting costs for on-premises hardware devices such as Zoom Phone.

Netskope Borderless SD-WAN seamlessly integrates with Netskope Intelligent SSE to deliver a platform that seamlessly converges networking and security and delivers highly granular context-aware policies based on zero trust principles, and deep visibility into applications and app risks. It supports the industry's largest application database of more than 60,000 applications with out-of-the-box CCI (Cloud Confidence Index) smart default settings that enable efficient operations.

Tight integration with Zoom APIs enables Netskope SSPM to provide visibility and insights into configuration settings, compliance status, and security posture. Netskope SSPM supports a broad collection of rules and compliance standards out-of-the-box, as well as the ability to add custom rules based on the data that Netskope gathers about connected Zoom accounts. Compliance administrators can modify and deploy policies to detect violations based on popular benchmarks and standards such as CIS, HIPAA, PCI, CSA, GDPR, AIPCA, ISO, and more.

“Like so many organizations, we rely on Zoom communications for daily business use and productivity. The ability to maintain security, maximize the user experience, and minimize disruptions caused by latency, jitter, and loss between users and apps on unstable links with advanced remediation capabilities of Netskope's Borderless SD-WAN solution are what this compelling integration between Netskope and Zoom expertly delivers.”

Timothy Johnson, Assistant Vice President of ITS Operations, A.T. Still University



Netskope, a global cybersecurity leader, is redefining cloud, data, and network security to help organizations apply Zero Trust principles to protect data. The Netskope Intelligent Security Service Edge (SSE) platform is fast, easy to use, and secures people, devices, and data anywhere they go. Learn how Netskope helps customers be ready for anything, visit [netskope.com](https://www.netskope.com).