

Prisma SD-WAN

At a Glance

The Industry's Only Complete Secure Access Service Edge Solution

It is clear that three fundamental shifts are driving network and security transformation in the enterprise: hybrid work, cloud and digital transformation, and branch transformation. As a result, we believe that a differentiated approach is needed: secure access service edge (SASE).

SASE converges best-of-breed networking and security into a single solution purpose-built for agile, cloud-enabled organizations. Prisma SASE is the industry's only complete SASE solution, converging network security, SD-WAN, and Autonomous Digital Experience Management (ADEM) in the cloud. Only Prisma SASE uniquely and consistently delivers cloud-delivered security services to secure all apps used by your hybrid workforce, regardless of whether users are remote, mobile, or working from a branch office. The industry's only SASE-native DEM helps ensure an exceptional user experience for all users. With ADEM on Prisma SASE, your employees will be happier and more productive, regardless of where they work.

The Branch Has Evolved

Three fundamental shifts are driving the need for branch transformation in the enterprise: hybrid workforce that is here to stay; ubiquitous adoption of modern collaboration and videoconferencing apps; and protection for all users, apps, and devices in an ever-increasing threat landscape. This has seen the rise of the software-defined wide area network (SD-WAN), which promises to enable organizations to seamlessly embrace the benefits of network transformation and remove any limitations from legacy WAN architectures.

Legacy SD-WAN Solutions Fall Short

Legacy approaches to SD-WAN have relied on taking the hairpinned, complex, and expensive hardware solutions. As a result, while some solutions have managed to connect additional WAN links like broadband, they remain bookended and cripple any direct-to-app access for apps like SaaS, internet, and cloud, introducing several challenges:

No Active-Active Connections: Legacy SD-WAN solutions lack application awareness that enables accurate identification, prioritization, and forwarding. As a result, directly access apps cannot leverage these WAN links in an active-active fashion to deliver better WAN capacity and lower latency to ensure improved user experience.

No Application SLAs: Legacy SD-WAN solutions only compute network SLAs to make traffic-forwarding decisions on all WAN links. As a result, performance for directly accessed apps that require application SLAs like transaction failures, app response time, and round-trip delays are impacted significantly.

No Zero-Trust Security: With modern apps distributed, legacy SD-WAN solutions fail to deliver the security that provides Zero Trust at the cloud scale to protect apps, users, and devices.

The Next Generation of SD-WAN from Palo Alto Networks

Palo Alto Networks takes a fundamentally different approach, with the industry's first Next-Generation SD-WAN solution with SASE for the branch of the future. Legacy SD-WAN approaches aren't cutting it for today's branches. With our platform approach, Palo Alto Networks can deliver exceptional user experience, secure your network holistically (including IoT), and automate complex IT operations. With the ability to provide elastic networks, direct-to-app access, and Zero Trust while automating complex IT operations with the power of AI/ML, Prisma SD-WAN provides the branch of the future, today. It delivers an ROI of up to 243%, simplifies network operations by leveraging ML to eliminate up to 99% of network trouble tickets, and improves the end-user experience by enabling a 10x increase in WAN bandwidth for a lower cost than legacy solutions.



Figure 1: The industry's most flexible SASE model

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Highlights

Prisma SD-WAN ION devices offer:

- **Elastic networks**—delivering a zero-routing network with a centralized controller-based architecture that seamlessly builds, manages, and updates the network while flexibly supporting carrier-independent WAN connections like 5G, MPLS, broadband, and satellite.
- **App-defined fabric**—providing direct-to-app access that ensures an exceptional user experience for all applications like SaaS, cloud, and business-critical/private applications while delivering application availability based on application performance SLAs.
- **Zero Trust security**—providing integrated and cloud-delivered security services to branch offices. The security needs to be granular (Layer 7) to enforce true least-privileged access and ensure only the right people get access to the right information and assets, including IoT.
- **AI-powered operations**—leveraging the latest advancements in observability and AI/ML built natively to help customers automate complex IT and network operations center (NOC) functions with the power of AI/ML to increase productivity and reduce MTTR.

Features

Prisma SD-WAN provides numerous key features:

SD-WAN with Integrated IoT Security: Palo Alto Networks introduces the industry's first SD-WAN with integrated security for IoT devices. The existing Prisma SD-WAN appliances provide visibility and help secure all IoT devices with Prisma Access by acting as sensors and control points, unlike other SD-WAN solutions that require additional sensors to be deployed in the network to gain visibility and prevent threats. This enables accurate detection and identification of all IoT devices and security controls from within the familiar cloud management for Prisma SASE.

Security: Prisma SD-WAN seamlessly integrates with our cloud-delivered security platform, Prisma Access, delivering the industry's most comprehensive SASE solution. With Prisma Access combined with Prisma SD-WAN, you'll be able to consolidate ZTNA, Cloud SWG, CASB, FWaaS, and SD-WAN into a single integrated service, reducing network and security complexity while increasing organizational agility. Additionally, Prisma SD-WAN ION devices include an application-based, zone-based firewall (ZBFW), ensuring compliance across different network circuits and interfaces.

Integrated 5G: Prisma SD-WAN is expanding its lightweight appliance portfolio to include the ION 1200 and ION 1200-S with integrated 5G. With this new appliance, organizations can ensure optimal uptime with 5G leveraged as a backup WAN transport for business-critical applications. In addition, businesses with ATMs and kiosks that require cellular as their primary WAN can simply deploy this appliance and ensure rapid deployment without the hassle of adding additional appliances to leverage 5G.

SD-Branch Capabilities: Prisma SD-WAN is extending SD-branch capabilities to the local area network (LAN) with the ION 1200-S and the ION 3200. The integrated switching

with universal Power over Ethernet (uPoE) on these appliances powers end devices like IP phones and cameras, point-of-sale systems, and wireless access points without additional switch appliances or power sources, while the built-in fiber ports provide flexibility to connect either your LAN or WAN to high-speed and long-range fiber connections. Additionally, they provide power redundancy with an optional dual supply.

CloudBlades: The Prisma CloudBlades platform delivers comprehensive branch services—such as security, multicloud, and collaboration tools—without needing to update your branch appliance or controller, thus eliminating service disruptions. This unique cloud-based API architecture automates deployments of third-party entities, enabling organizations to simplify network operations and multicloud connectivity as well as expedite branch deployments.

AIOps: Enhanced AIOps capabilities provide rich telemetry of network insights, allowing admins to perform granular trend analysis and create unique network conditions that can automate tedious manual tasks. Admins can view VPNs, circuits, and site health metrics to discover long-term trends and issues. All of this insightful data and analysis can be viewed on Prisma SD-WAN's new site summary dashboards, allowing admins to easily consume and correlate data to reduce time to resolution.

ADEM: Palo Alto Networks Autonomous Digital Experience Management (ADEM) manages the digital experience for mobile and branch users. You can leverage SASE-native DEM to gain end-to-end visibility and segment-wise insights across the entire SASE service delivery path, regardless of where their users are located. ADEM with Prisma SD-WAN provides observability in the cloud and across multiple WAN paths for branch and remote users. In addition, you can leverage real and synthetic traffic analysis for both user endpoints and IoT devices to pinpoint issues easily.

Clarity: Prisma SD-WAN Clarity provides unparalleled, actionable insights into the health and performance of your WAN links and applications to help with network planning, problem resolution, and analytics. With instant visibility into application performance, you can better understand your network health and usage to determine more effective policy decisions on your network.

Bandwidth On-Demand: Palo Alto Networks is revolutionizing how organizations can consume SD-WAN by becoming the first vendor in the industry to offer SD-WAN Bandwidth On-Demand. This game-changing, flexible, subscription-based model for Prisma SD-WAN enables customers to reduce WAN costs by up to 45%, enabling them to purchase bandwidth on a per-Mbps basis and effortlessly allocate bandwidth from an aggregated pool. In addition, customers can now easily activate Prisma SD-WAN as a simple module to Prisma Access to expedite their journey to SASE. Existing a la carte consumption models such as those with Prisma SD-WAN and Prisma SASE bundles are also supported to ensure the ultimate flexibility for organizations.

Learn more at paloaltonetworks.com/prisma/sd-wan.