

Juniper® Session Smart™ Routing—Take SD-WAN to the Next Level

Juniper Networks' Session Smart Routing takes routing and SD-WAN to the next level, creating a solution that is experience-centric, session-aware and built on a zero trust philosophy. It provides agile, resilient and efficient WAN connectivity in a way that's both easy-to-use and cost-effective. Juniper gives today's businesses the network connectivity they need to foster growth and maintain leadership.



Unprecedented Scale, Speed and Reach

Today's businesses need strong network connections in order to be successful. Even if you're just trying to make sure your video conference doesn't freeze halfway through, it's imperative that a strong, secure and resilient network connection is available. You also need that network connection to be able to easily scale up or down based on business needs, without having to implement a new solution each time the business pivots. Further, IT teams need to be able to quickly find and resolve network issues.

Juniper® Session Smart™ Router delivers a flexible, service-aware and AI enabled network fabric by automatically adapting to accommodate dynamic workloads and fluctuating traffic flows associated with today's digital businesses. It is built on technology that meets or beats stringent enterprise performance, security and availability requirements - ensuring a strong, fast connection, every time.

Lowering Expenses and Simplifying Implementation

The Session Smart Routing solution slashes costs and complexity. It is software-based and deployable on white-box CPE, data center servers, and the cloud. It eliminates the middlebox and virtual network function virtualized network function (VNF) sprawl that plague traditional WAN products and legacy SD-WAN solutions and can be fully managed and orchestrated by the Juniper Mist Cloud or on-premises with the Juniper Session Smart Conductor.



What Makes Session Smart Routing Different

How It Works

The Session Smart Router supports a variety of session optimization and intelligent routing features that enable high performance and quality for diverse applications and services. Through granular quality of service (QoS) controls, network administrators can efficiently shape and prioritize traffic to enforce different service-level agreements (SLAs) for different dataflows. Innovative, application-aware routing intelligently steers traffic based on administratively defined policies and real-time network conditions meaning it automatically selects the right network path (MPLS, 4G/5G, Internet) for the right application at the right time.

Server load balancing capabilities automatically distribute workloads across cloud or data center resources to optimize application performance. And a unique lossless application delivery capability boosts WAN bandwidth utilization, helping improve performance over lower-capacity WAN connections.

Key Benefits

- **AIOps** – Provides real-time insight into user-experience and automated troubleshooting for improved uptime and performance.
- **Scale, Speed and Reach** – Because the Session Smart Router is free from tunnel-based limitations and fully incorporates automation, it can deploy new services in only minutes. It automatically optimizes applications with low-bandwidth links and can scale rapidly to up to 10,000+ edges.
- **Improved User Experience** – The solution's session-based visibility and fine grain application-aware routing is unprecedented, providing up to a 60% reduction in quality-killing latency. With greater tunnel-free service availability you never have to worry about dropping video conferences or voice calls again.

Why Choose the Session Smart Router?

Built on a tunnel-free architecture that eliminates protocol overhead, enabling better performance and economics—while providing granular control and visibility

Enables advanced AI and automation by collecting rich session-based telemetry

Fast failover ensures continuous availability without expensive hot standby tunnels

Zero touch deployment eliminates manual intervention and accelerates rollouts

Single-VNF implementation runs on low-cost COTS servers, improving overall economics

Full stack compatibility with Juniper Wired & Wireless with Mist AI

Take Routing and SD-WAN to the Next Level

- **Zero Trust Security** – The Session Smart Router incorporates a zero trust security approach, meaning a major reduction in the risk of network breaches. It provides the market's only zero-trust fabric that also simplifies access control, segmentation and directionality with Secure Vector Routing, a way to route traffic that provides strong data security without the overhead of traditional encryption protocols like IPsec.
- **Complete Visibility** – Administrators get full session visibility and application insights, with a superior level of richness and granularity, enabling the continuous optimization of network performance and the user experience. With the Session Smart Router, support costs and MTTR are reduced by up to 40%.
- **Network Agility** – With Session Smart Routing, session-based fine-grained routing and application-aware boundary-free fabric extends the client to cloud. This means that cloud applications are deployed faster, with a greater built-in resilience to any network issues that may exist or arise.

A Framework for Success



Unpredictable service quality and poor network reliability limit access to business-critical applications and information—frustrating executives and IT teams alike. Every second of downtime is another moment of lost productivity, and eventually, lost revenue.

When a company's network is lacking in terms of service quality and reliability, it makes it even harder to successfully bring new applications and services to the cloud. Enterprises are looking to cut expenses and improve service availability by embracing cloud computing—but if their infrastructure can't handle it, they're destined to fail.

The need for strong, reliable, and secure connections has been exacerbated by the rise of remote working and the need to make services available around the clock, at any time and place. Video and voice are more important than ever before. Furthermore, many IT teams are under resourced and overextended and require automation and AI to speed deployments and find and resolve network issues quickly. This will become a greater challenge as more and more endpoints hit the network in the coming years.

Session Smart Routing packages up improved performance that's secure, agile, and available in a cost-effective solution that makes it easier to implement with legacy technology. Juniper's Session Smart Routing solution is also engineered to help service providers quickly scale while developing additional services and functionality for existing, new, and potential customers.

For More Information

To find out more about how the Juniper Session Smart Router can benefit your business, contact your Juniper representative and visit www.juniper.net.

About Juniper Networks

Juniper Networks is dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world's greatest challenges of well-being, sustainability and equality. Additional information can be found at Juniper Networks (www.juniper.net) or connect with Juniper on [Twitter](#), [LinkedIn](#) and [Facebook](#).

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