

GENERATING HAPPY CUSTOMERS WITH JUNIPER AI-DRIVEN ENTERPRISE SOLUTIONS

The fast, reliable, and secure network retailers trust to drive real business results



Challenge

Creating reliable, personalized shopping experiences that translate to better engagement and higher revenue. To compete, retailers must improve their operational performance to be more efficient and ensure their wireless connectivity is on par with the growth of mobile and IoT devices.

Solution

Juniper AI-Driven Enterprise solutions give retailers reliable wired, wireless, and WAN connectivity, location-based services, and asset tracking that enables them to deliver great experiences regardless of when, where, or how the customer shops.

Benefits

- Automates the entire network life cycle in a single, closed-loop system to reduce operational costs and IT burden
- Boosts uptime and performance for point of sale (POS) transactions and back-of-store operations
- Provides superior in-store shopping experiences with real-time wayfinding and guest Wi-Fi
- Enables more personalized shopping experiences with relevant messages, notifications, and alerts
- Protects commercial and customer data at all points of the network

When it comes to retail, experience rules, both in-store and online. In today's rapidly changing, highly competitive retail landscape, retailers that can create the best shopping experiences will realize more growth and success. To create amazing experiences, they must make it as easy as possible to engage and support customers in-store, online, and via mobile channels. Simultaneously, they need to be able to complete transactions whenever and wherever the customer wants. Unfortunately, legacy infrastructure holds retailers back, making it difficult to deliver the performance and insights they need to compete.

Juniper provides the AI-Driven Enterprise solutions and expertise retailers can rely on to build fast, efficient retail operations. With predictable wired, wireless, and WAN connectivity, retailers can keep their stores, warehouses, and headquarters humming and create the types of personalized experiences that keep customers coming back for more.

The Challenge

To stand out, retailers must deliver highly reliable, engaging experiences that satisfy the needs of customers and help them transact whenever and wherever they want. The quest to deliver enhanced personalized experiences often strains a retailer's already overtaxed IT infrastructure. Most are finding their legacy networks are not equipped to support the rising demands of wireless and location-based services and meet omnichannel expectations. The complexity of current network tools and operational workflows further adds to their difficulties, driving up operational costs when they should be reducing them to be more competitive.

"To achieve greater digitalization of the shopping experience, we needed an excellent network infrastructure. And Juniper network enables us to deliver that experience."

Simon Drees - Director of Omnichannel Services and Innovations, Outletcity Metzingen



Juniper Networks AI-Driven Solutions for Retail

Juniper® AI-Driven Enterprise solutions, driven by Mist AI™, offers a superior network infrastructure that harnesses the latest innovations in cloud, Wi-Fi, artificial intelligence (AI), and security, so retailers can meet customers wherever they are and create the best shopping experiences possible. With Juniper, retailers can seamlessly connect users and devices across wired, wireless (Wi-Fi 6E, Wi-Fi 6, and Bluetooth LE), and SD-WAN domains to keep customers engaged. Through faster ubiquitous connectivity, retailers can deliver more personalized information; allow quicker access to product comparisons, promotions, loyalty programs; and offer checkout options, both in-store and online. By applying AI and machine learning (ML), Juniper can reduce operational costs and the overall burden on a retailer's IT, as workflows are simplified, tasks automated, and issues proactively addressed before they can impact quality of experience (QoE). With Juniper AI-Driven Enterprise solutions, retailers can optimize every touchpoint to keep customers engaged and shopping—driving higher satisfaction, loyalty, and revenue.

Features and Benefits

The Juniper AI-Driven Enterprise portfolio gives retailers the modern network architecture they need to roll out new innovative services, engage customers, and help them compete:

- Enterprise-class multigigabit access switches with 802.3bt Power over Ethernet (PoE) capabilities, complemented by wireless access points that support Wi-Fi 6E, 802.11ax (Wi-Fi 6), and Bluetooth LE
- Ability to set, monitor, and enforce service-level expectations for key switching and Wi-Fi performance metrics to optimize the reliability and speed of front-of-store sales and back-of-store operations
- Indoor location services, powered by Juniper's patented vBLE technology, to support user engagement, asset visibility, premium analytics, and contact tracing
- Insights, automation, and actions that can be used to enrich user experiences across the WAN and safeguard customer and corporate data from client to cloud
- End-to-end enterprise-grade security with centralized management, analytics, reporting, and unified policy orchestration
- Modern cloud services that uniquely apply AI and machine learning (ML) to automate key tasks, proactively address networking issues, and streamline IT operations to lower costs and improve service
- Remote administration and zero-touch provisioning (ZTP) that eliminate the need for expensive truck rolls—the network can all be managed from anywhere using just a browser
- A centralized knowledge base of all network devices that includes configuration backup and change audit information

Solution Components

Juniper has earned the trust of top retailers around the world and the distinction of industry analyst firms, such as Gartner, who named Juniper as a Leader in the latest Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure (with

top scores for execution). The main components of the Juniper AI-Driven Enterprise solutions are Juniper Mist cloud, Juniper Access Points, Juniper Networks® EX Series Switches, Juniper Networks SRX Series Firewalls, and Juniper Session Smart™ Router for SD-WAN (See Table 1).

Table 1: Solution Building Blocks

Enterprise-Class Wired Access	Enterprise-Class Next-Generation Firewalls	Enterprise-Class SD-WAN	Enterprise-Class Wireless Access	Cloud-Based Network Management
Juniper Networks EX Series Switches Offers AI-driven, cloud-ready switches that provide reliable, high-performance access capable of meeting the many demands of retailers. EX Series Switches can be sized for a retailer's headquarters, data center, operation hubs, and stores. The EX Series reduces the complexity of wired networks, reducing risk and cost without compromising performance, quality, or innovation. IT teams can use Juniper Mist cloud to add a switch in minutes, with no technical expertise needed onsite—all onboarding, configuration, and ongoing management can be handled remotely, allowing small teams to operate extensive network fabrics at scale to keep the business running smoothly.	Juniper Networks SRX Series Protects the retailer's networks, data centers, and cloud applications. The SRX Series physical, virtual, and containerized firewalls offer built-in advanced threat prevention, threat intelligence, and security analytics that allow retailers to extend security to every point of connection on the network. With Juniper, retailers can quickly create, manage, and enforce a unified security policy to protect their employee data, customer payment information, and transactions, while also maintaining Payment Card Industry (PCI) compliance and protecting in-store point of sale (PoS) and Internet of Things (IoT) devices.	Juniper Networks Session Smart Routing Delivers distributed, software-defined routing and security. Builds an application and service-centric fabric that provides the industry's best throughput, shifting the focus from network and application behavior to actual user experiences. Its smart design delivers breakthrough economics, granular visibility, insights, and zero trust security to help retailers protect and optimize the online shopping experience. Automated workflows enable retailers to take proactive actions to correct any issues, with an eye toward creating completely self-driving networks from client to cloud.	Juniper Series of High-Performance Access Points Works in conjunction with Juniper Mist cloud and Mist AI to deliver premium wireless access (Wi-Fi 6E, Wi-Fi 6, and Bluetooth Low Energy (BLE)) capabilities for in-store and back-office operations. Juniper wireless access points make Wi-Fi predictable, reliable, and measurable by providing unprecedented visibility into overall performance and user experience. Enterprise-grade Wi-Fi, BLE, and IoT are merged, so retailers can create unique, personalized, location-based wireless services that transform shopping experiences. For example, retailers can customize Wi-Fi service levels, provide easy guest Wi-Fi services, replace time-consuming manual IT tasks with proactive automation, gain insights into experiences through detailed analytics, and leverage location-based services to locate merchandise and other assets.	Juniper Mist Cloud Provides easy, cloud-based management that helps retailers reduce costs and simplify their wired, wireless, and WAN deployments to achieve unparalleled agility, scale, and resiliency. Using a microservices cloud architecture that is 100% programmable, Juniper Mist cloud allows retailers to quickly add or remove network and security services to create an infrastructure that works for their business. For instance, retailers can use Juniper Mist cloud to deliver advanced wired and wireless experiences unavailable with outdated network solutions. Retailers can buy one or mix and match subscription services to get the perfect blend of connectivity, insights, troubleshooting, analytics, and engagement.

Indoor Location Services Personalize and Improve Experiences

Retailers can use [indoor location services](#) to create more engaging personalized customer experiences, while reducing operational costs through intelligent automation. Driven by Mist AI, the Juniper Mist cloud architecture converges Wi-Fi and virtual Bluetooth LE (vBLE) to enable high-accuracy indoor location services with scalability, resiliency, and flexibility. With Juniper's patented vBLE technology, no battery beacons or manual calibration is required to start using indoor location services for:

- **Customer engagement:** Offer real-time wayfinding, reliable guest Wi-Fi, and interactive experiences that make shopping easier and more enjoyable. For instance, help customers (and employees) get to where they need to go with turn-by-turn instructions; provide automated services, such as self-checkout, curbside pickup, or stock checking; or deliver information, alerts, menus, or relevant marketing offers based on where someone is located and what they are doing.
- **Asset visibility:** Find key assets and people with detailed analytics based on their location to help improve product placement based on traffic patterns, optimize staffing resources, maximize real estate usage, and find assets quickly to keep inventory flowing. Get in-room and zone-level accuracy for any objects that have a Bluetooth LE asset tag or mobile devices with Bluetooth radios.
- **Premium analytics:** Assure quality experiences across both wired and wireless networks, with the ability to set, monitor, and enforce service-level expectations for key Wi-Fi and switching performance metrics, like throughput, capacity, connection, and uptime. This visibility can help retailers improve the quality of experience (QoE) for specific links, applications, and devices. For example, retailers can prioritize or accelerate point of sale (POS) transactions.
- **Contact tracing:** Help employees and customers stay safe with a comprehensive business continuity plan that includes contract tracing.

Easier, Cloud-Based Network Management Boosts Performance and Reduces Operational Costs

With Juniper Mist cloud, retailers can manage their entire network stack to quickly and easily scale and future-proof their networks to deliver new innovative applications that meet the evolving needs of their customers and business. Cloud services uniquely apply AI and ML to automate key tasks and proactively address networking issues before they can impact customer or staff experiences. With Juniper, the IT team can remotely monitor and manage the network, eliminating the need for technical staff to be onsite or in-store.

Open APIs enable seamless integration with external tools and systems to increase agility and network visibility, while reducing costs. Plus, retailers can add bench strength to their IT team with [Marvis™ Virtual Network Assistant](#), which can do the heavy work of locating and troubleshooting problems quickly to solve issues fast and stay ahead of trouble.

Juniper Mist cloud makes it easy to provision, manage, and maintain:

- Wired, wireless, and SD-WAN access with automated event correlation, root cause identification, Self-Driving Network™ operations, network assurance, and proactive anomaly detection. IT can manage the network from anywhere—using any browser to perform remote management with the ability to respond quickly and effectively. Zero-touch provisioning (ZTP) enables remote deployment without the need for local technical staff, while simple one-page workflows make changes easier and faster, without the threat of human error.
- WAN routing with network health and diagnostics for corrective actions, multivendor configurations and service orchestration, and workflow and closed-loop automation.
- Security with real-time actionable intelligence for threat prevention and unified monitoring and management of threats.

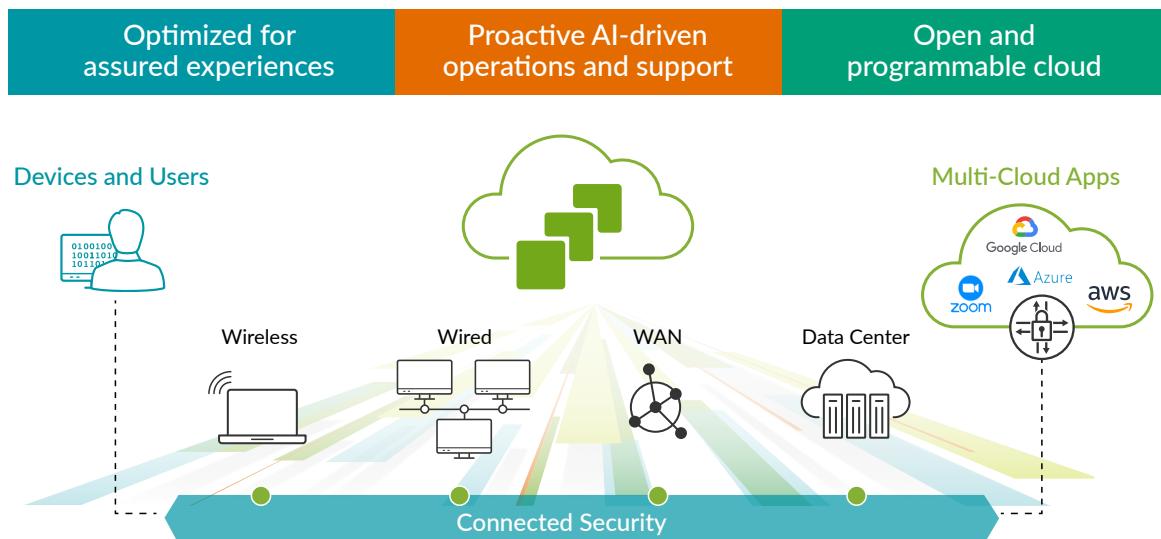


Figure 1: Juniper AI-Driven Enterprise enables retailers to create engaging shopping experiences online and in-store.

Summary—Transforming Shopping Experiences with Juniper

Juniper AI-Driven Enterprise Solutions, driven by Mist AI, give retailers a network infrastructure they can rely on to improve their operations and deliver the best experiences across wired, wireless, and SD-WAN domains. This helps keep customers engaged and buying, both in-store and online. With Juniper, retailers can:

- Drive revenue with personalized experiences, using wired, Wi-Fi, and indoor location services that make it easy for customers to shop whenever, wherever, and however they want.
- Boost network performance, reliability, and scale across wired, wireless, and WAN domains to meet the increasing expectations and demands of retail customers, applications, and devices.
- Lower TCO with faster network deployments, fewer trouble tickets, faster mean time to repair (MTTR), and easier, more cost-efficient operations—start to let the network take care of itself with AI-driven, self-healing that optimizes network performance and reliability.

- Safeguard customer and corporate data with end-to-end enterprise-grade security that offers centralized management, analytics, reporting, and unified policy orchestration.

Next Steps

Juniper Networks has a rich history of helping retailers deliver the best possible customer experience, whether it is online or in-store. For more information on how to benefit from all that the Juniper AI-Driven Enterprise portfolio offers, contact your Juniper Networks account executive or your authorized Juniper Networks partner. To learn more about Juniper solutions for retail, visit www.juniper.net/us/en/solutions/retail.html.

About Juniper Networks

At Juniper Networks, we are 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.



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