



Powered by AI. Delivered by experts.

Designed for retail: experience-first networks for next-level omnichannel

HPEs AI-driven platforms and NEC’s global integration expertise combine to simplify complex networks and enable retail innovation, seamless omnichannel experiences and agile, secure supply chain optimisation.

A retail evolution, to compete on experience and agility

Retailers have been at the forefront of our shift to digitally led living. Consumers review, engage with and purchase using an expanding number of channels and payment methods. Experience, online and instore, is determining loyalty and profitability. At the same time supply chains are becoming less predictable and reliable. The pace of change that retailers must respond to is escalating. New risks – increased levels of fraud, cyber-attacks, the impact of downtime – demand urgent action to thrive and survive.

Retailers are responding with innovation and smart retail technologies. They seek to integrate eCommerce and instore to track and target consumers more effectively. They look to deliver personalised engagements, offers and communications at point-in-time for greater impact and increased basket value. AI, data science, Internet of Things (IOT), and automation are being adopted to improve forecasting, enable real-time inventory management, and build flexible supply chains that can withstand economic shocks and geopolitical instability.

Virtual-try-on, self-checkout, product personalisation, digital signage, and chatbots are all becoming standard elements in retailers’ ecosystems. Investment continues to create experiences that increase spend, loyalty and that reduce abandoned baskets.

Yet without the right low-latency, resilient and scalable networks, all this investment is at risk – as are retailers’ businesses. Consumers remain unforgiving in the face of slow app or tool response times. They expect seamless experiences that rely on real-time data transfer across multiple networks, channels and platforms. And while consumers are increasingly happy to share their personal data to receive more personalised services, they demand it be protected fully, requiring networks that are secure end-to-end. Successful retail evolution relies on advanced network transformation.

A partnership for the next era in retail evolution

NEC Corporation and HPE deliver secure, scalable and future-ready network transformation for retailers and eCommerce providers.

Together they deliver fully integrated, end-to-end solutions that help retailers:

- **Know and target their customers:** to enable personalisation that drives loyalty, and revenue and helps predict demand effectively. AI-powered solutions and an infrastructure that supports advanced data analytics and data lake solutions provide real-time insights and enable automated targeting at scale.
- **Serve customers better to deliver omnichannel experiences** that differentiate and increase retention and basket value. Secure Wi-Fi-enabled location-based services, uninterrupted connectivity online and instore, and cloud-to-endpoint cyber defence all support advanced POS, digital display, instore analytics and more backed by a broad portfolio of CRM solutions.
- **Protect their business by maintaining brand equity** and minimising the risks of lost business and consumer trust, and of regulator fines. NEC and HPE help retailers combat cyber threats and fraud with AI-powered analytics, assure business continuity with increased resilience and fast business recovery, and enable efficient, automated, operations that slash infrastructure costs and technology debt.

NEC has been supporting retailers for over 40 years, covering more than 53,000 stores and offering a unified yet modular suite of retail solutions:

- **The NEC Retail suite is an omnichannel integrated,** plug-and-play retail platform covering POS, back-office, inventory, eCommerce, digital coupons, analytics, and customer loyalty.
- **NEC Smart Retail CX is powered by AI,** IoT and a real-time Digital Store Platform.
- **The CxD solution offers data analytics** optimised customer experiences, and its Integrated Management Platforms for Digital Stores centralise and streamline store operations.

Analytics, hardware, devices and advanced networks are combined with deep understanding and expertise of the retail environment. HPE's advanced portfolio, including MX Series Universal Routing Platforms, PTX Series Packet Transport Routers and ACX Series Universal Metro Routers, is matched by NEC's leading integration expertise and global deployment capabilities.

With proven deployments worldwide, NEC and HPE deliver transformation projects on time and at scale, supporting everything from national backbone upgrades to enterprise WAN modernisation. Together, we provide the vision, technology and operational execution that retailers need to succeed in a rapidly evolving digital landscape.

Our joint approach addresses the challenges of growing bandwidth demands, increasingly complex traffic patterns and the need for rapid service innovation. We enable customers to simplify operations, reduce total cost of ownership and accelerate the rollout of new services while ensuring carrier-grade reliability and security.

Through solutions such as HPE Juniper Networking's Paragon Automation Suite and NEC's award-winning system integration, we help customers automate service delivery, optimise performance and strengthen network resilience. This integration extends to secure SD-WAN, intelligent traffic engineering and API-driven orchestration for seamless multi-vendor environments.



Our differentiators

Extensive instore and eCommerce retail expertise

NEC and HPE have deep expertise across their teams in delivering retail solutions that connect stores, data, devices, and people to improve consumer experience, and drive efficiency and agility across supply chains and operations. Retailers are made more resilient, profitable, and able to adapt to future trends as they happen. Customers include Gap, ALDI, and Halfords.

Integrated technology and services

HPE's carrier-grade networking platforms combined with NEC's end-to-end integration simplify complex, multi-domain and multi-vendor environments. Our unified approach replaces siloed management with one consistent, cloud-managed ecosystem.

Global scale, local presence

Our combined footprint spans over 70 countries. This means global consistency and shared best practices, alongside on-the-ground support in local languages and cultures. Customers benefit from worldwide experience tailored to local market requirements.

Deep co-innovation and expertise

NEC employs more than 450 HPE-certified engineers and participates actively in joint R&D labs. This enables rapid feature adoption and ensures tested, proven architectures for diverse environments.

Flexible commercial models

We offer multiple purchasing and financing options, including CapEx, OpEx, Network-as-a-Service, and subscription. Large projects can access financing reducing financial risks and accelerating delivery.

Commitment to sustainability

Both HPE and NEC prioritise energy-efficient designs and reducing emissions. NEC's long-standing recognition in sustainability rankings supports solutions designed for long-term environmental and financial efficiency.

Proven track record and trust

Our partnership has delivered successful outcomes for over 120 customers worldwide, across industries including telecom, finance, and manufacturing. NEC has been HPE's Global Partner of the Year for five consecutive years (2019–2023).

Technical leadership and awards

Juniper Networks (now part of HPE) is recognised as a Leader in Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure, SD-WAN, and Network Firewalls. NEC's local presence and systems expertise complement HPE's cutting-edge platforms.

Talk track 1: Simplify your network operations with unified, AI-driven automation

The challenge

Many retailers have highly fragmented networks with multiple vendors and legacy systems providing infrastructure across stores, warehouses, head offices and data centres. These fragmented environments lead to operational silos and inconsistent policies. IT teams find managing these networks at scale is difficult and error prone.

The result is increased operational costs, delayed deployments, and limited agility due to manual provisioning and a lack of end-to-end visibility. Troubleshooting performance or security issues is slow and inefficient.

Our approach

HPE and NEC simplify complex multi-vendor networks into one unified, automated ecosystem by taking a full lifecycle approach: plan, design, implement, operate, and optimise.

- **Centralised management** across domains is achieved using HPE Juniper Networking's Mist AI and Apstra platforms, which provide a single cloud dashboard for wired, wireless, WAN, and data centre environments. This eliminates fragmented tools and creates one source of truth.
- **Automation of provisioning** and configuration replaces manual, error-prone tasks. HPE's intent-based automation, validated in NEC's multi-vendor labs, enables rapid deployment of new branches or services using templates, reducing provisioning times from days to minutes.
- **NEC ensures legacy and new systems** operate seamlessly as one network. Our engineering teams align on a single architecture blueprint, eliminating gaps between equipment, software, and services.
- **HPE Juniper Networking's Marvis Mini capability** provides always-on network validation and digital twin capabilities for simpler, automated business continuity and fast recovery.

"The network is a big part of our digital transformation journey, and we needed a very intelligent, secure network with next-generation capabilities."

Neil Holden CIO Halfords

Customer value

- ✓ Simplified operations through a single integrated platform reduces time spent managing disparate tools.
- ✓ Automation and standardisation minimise errors and outages, accelerating rollout speeds.
- ✓ Unified visibility and control across all network layers enable proactive performance tuning and consistent security.
- ✓ Streamlined upgrades and modular architectures make adopting new technologies faster and less disruptive.

Proof points

- 01 8 of the top 10 global retailers choose HPE
- 02 Halfords experienced a 100% reduction in network-related trouble tickets and 35% Improvement in uptime across more than 1,400 stores.
- 03 Organisations that consolidate networking and security platforms see on average 3.6 times higher Return on Investment (ROI) than those relying on multiple point solutions (116% versus 32%).

"Before HPE Mist, we spent a lot more time troubleshooting. Mist is always measuring the baseline, and if there's a deviation, Mist helps our operation team identify the problem."

Snehal Patel, Global Network Architect, Gap Inc

Talk track 2: Cut costs and boost efficiency through intelligent design and flexible financing

The market

Network modernisation is expensive, with high CapEx and OpEx, rising energy costs, and support expenses from legacy hardware. Tight budgets and currency volatility further restrict investments. Skilled IT staff shortages increase pressure to do more with less.

The challenge is to upgrade infrastructure across stores, warehouses, logistics, and data centres to support current and future requirements (for customer experience in real-time. IoT, video and cameras, devices and digital POS) while managing costs and alleviating staff workload.

Our approach

HPE and NEC enable cost efficiency through lean network design and flexible consumption models.

- **We audit and re-architect networks** to remove waste. Multiple legacy appliances are often consolidated into a single HPE platform, cutting maintenance and energy costs.
- **AI-driven tools** like HPE Juniper Networking Apstra identify underutilised links or equipment, enabling rightsizing or repurposing of assets.
- **Automation via HPE Juniper Networking Mist AI** and scripting reduces operational headcount requirements. NECs managed and co-managed services provide scalable workload offloading.
- **Creative financing**, including loans and subscription models, convert large CapEx investments into predictable OpEx payments. Phased deployments enable early savings to fund subsequent phases.

Automated operations make retail networks more predictable, reliable, and impactful, resulting in a 100% reduction in network-related trouble tickets at Halfords, a 16x faster network-service provisioning at Musgrave, and an 85% reduction of onsite visits to stores by technical staff at Gap

Customer value

- ✓ Lower total cost of ownership from equipment consolidation, energy-efficient HPE hardware, and streamlined operations.
- ✓ Immediate OpEx savings from reduced manual labour and fewer outages.
- ✓ NEC's scale in deployment supports faster rollouts for new stores and seasonal peaks.
- ✓ Optimised networking helps with real-time inventory and omnichannel fulfilment.
- ✓ Pay-as-you-grow financing aligns costs with usage and minimises upfront risk.
- ✓ AI Ops from HPE automates troubleshooting and improves uptime in POS and in-store devices. Scale-up and add stores or sites over time.
- ✓ Maximised value from existing investments by optimising legacy equipment performance.

Proof points

- 01 HPE Juniper Networking MX routers have demonstrated significantly lower power consumption per gigabit than competitors, reducing network energy bills and carbon footprints.
- 02 NEC's inclusion in the FTSE4Good Index for 24 years and top EcoVadis sustainability ratings confirms our solutions are both cost-effective and environmentally responsible.

Talk track 3: Strengthen security and resilience with built-in protection and rapid response

The challenge

Cyber threats are increasing in sophistication, while organisations' security often remains fragmented with disparate firewalls, VPNs, and cloud protections. Meeting PCI DSS requirements consistently across all locations is challenging, and blind spots in Wi-Fi and WAN/LAN setups increase risk of vulnerabilities.

If business continuity suffers from prolonged outages, consumers abandon carts and shop elsewhere. Compliance requirements further complicate security management. IT teams seek 24/7 protection and rapid incident recovery but are challenged by siloed tools and limited staff resources.

Our approach

HPE and NEC embed security and resilience into the network architecture from the start.

- **We adopt a Zero-Trust model** where every user and device is authenticated with least-privilege access. HPE Juniper Networking's Connected Security approach integrates threat detection and enforcement into routers and switches, such as branch SRX devices combining routing, firewall, and intrusion prevention.
- **Our approach addresses requirements** from PCI DSS and compliance and ensures edge security is consistently established and maintained.
- **Security events are unified** into a single operational view using HPE Juniper Networking Security Director Cloud, with AI-driven threat correlation across network and cloud. NEC provides 24/7 SOC monitoring and incident management.
- **Network resilience is ensured** through redundant HPE Juniper Networking devices, diverse fibre routes, and automated rerouting protocols. HPE Juniper Networking Paragon Pathfinder continuously optimises paths and pre-emptively shifts traffic to maintain performance.
- **Regular failover testing** and incident simulations guarantee quick network self-healing during real events.

Customer value

- ✓ Enhanced security posture with consistent protection across all users and devices.
- ✓ Rapid threat isolation and automatic containment minimise downtime and damage.
- ✓ Simplified compliance through unified monitoring and reporting.
- ✓ Confidence from expert-managed SOC services and proven security technologies.

Proof points

- 01** Juniper Networks (now part of HPE) was the only Visionary in the Gartner® Magic Quadrant™ for SD-WAN security in 2024 and is recognised as a Leader in network firewalls by Gartner and CyberRatings.

“We were able to deploy the HPE Network without making any changes to the stores. HPE has given us the agility and scalability that we need.”

Raymond Beaudoin Network Architect Tractor Supply Company

Reliable, AI-Native wired and wireless performance at scale boosts productivity and enhances customer experiences, as seen in a 35% improvement in uptime at Halfords and increased efficiency of warehouse operations at JR/Duty Free.

Talk track 4: Accelerate innovation and future-proof your business with agile, cloud-ready networking

The market challenge

Organisations must leverage cloud, IoT, and AI to innovate, but legacy networks lack agility, scalability, and low latency required for modern workloads. Omnichannel experiences are harder to deliver with inconsistent connectivity. Digital signage, personalised offers, and mobile experiences depend on reliable networks. While legacy infrastructure consumes more energy, making sustainability goals harder to achieve.

And transformation initiatives often rely on secure multi-cloud connectivity, handling large data volumes, fast deployment of new sites and applications, all without disruption. Networks must become enablers, not bottlenecks, for digital initiatives.

Our approach

HPE and NEC provide cloud-ready, agile networks that accelerate innovation.

- **Cloud-first connectivity** ensures users and sites connect directly and securely to cloud services. HPE Juniper Networking Secure SD-WAN and Wi-Fi solutions optimise traffic routing for low latency and high performance, using SASE for security.
- **AI-driven automation** enables new capabilities such as location services and analytics via HPE Juniper Networking Mist Wi-Fi and telemetry streaming to customer data lakes for AI model integration.
- **NEC Retail platforms deliver targeted solutions** backed by vertical expertise and co-creation, tailoring networks for specific use cases and embedding experts with customer teams to prototype and pilot solutions.
- **Scalable, flexible architectures** with zero-touch provisioning and modular fabric designs support rapid expansion and changing business demands.

“HPE Juniper Networking Mist Indoor Location Services track real-time foot traffic and customer behaviour, deliver turn-by-turn navigation, and enable personalised and contextually relevant engagements and advertising powered by our pioneering AI and virtual Bluetooth® technology.”

Customer value

- ✓ Faster time-to-market for digital services, with DevOps integration and infrastructure as code.
- ✓ Maximise ROI from smart retail technologies and location services to enable targeted promotions, reduce theft, and improve layout of stores
- ✓ Digital-first store concepts offer personalised in-store experiences, smart signage, and mobile-first customer engagement.
- ✓ Energy-efficient infrastructure supports sustainability targets.
- ✓ Faster deployment cycles provide agility and enable assessment and testing of new formats (pop-ups, click-and-collect hubs) at low risk.
- ✓ Improved user experience (UX) with reliable, high-performance connectivity.
- ✓ Infrastructure that supports innovation initiatives such as AI-driven inspections, smart retail, and telemedicine.
- ✓ Future-proofed networks built on open standards and software-defined principles.

Proof points

- 01 Juniper Networks (now part of HPE) has been named a Leader in the Gartner® 2024 Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure for five consecutive years, recognised for its cloud-managed, AI-driven networking vision.



Our joint credentials

NEC

- 120+ customers across 70+ countries.
- 3 Centres of Excellence (CoEs) in EMEA, APAC, and LATAM, accumulating over 50 years of combined experience.
- Holds over 450 HPE certifications, demonstrating deep alignment and technical integration.
- Global Partner of the Year for HPE: 2019, 2020, 2021, 2022, 2023, 2024.
- Celebrated as HPE's largest global alliance for six straight years.

HPE JUNIPER networking

- Recognised leader in Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure, positioned as a Leader for five consecutive years (2021–2025).
- Since 2022, ranked furthest in “Completeness of Vision” and highest in “Ability to Execute,” reaffirmed in the June 2025 report.
- Awarded Gartner® Peer Insights™ Customers’ Choice for wired and wireless LAN access infrastructure in 2022, with a 4.9-star average from over 460 reviews and leading in “willingness to recommend”.
- The only vendor named Visionary in the Gartner® 2024 Magic Quadrant™ for SD-WAN.
- Market momentum confirmed by 650 Group as the fastest-growing wireless LAN vendor between 2022 and 2023, with strong adoption in Fortune 10 enterprises, retail, fintech, and healthcare sectors.