TRANSFORM HEALTHCARE NETWORKS WITH AN AI-DRIVEN ENTERPRISE

The power of Mist AI and AIOps brings innovation and modernization to the healthcare industry

Challenge

- *Reliable management of IoT devices, heterogenous infrastructure, and dated equipment*
- *Predictable, dependable, and measurable networks for critical services*
- *Scalable high security for patient accuracy and confidentiality*

Solution

- *Industry-leading wired, wireless, and WAN solutions with AI*
- *Pinpoint-accurate indoor location services*
- *IoT assurance for flexible BYOD environments*
- *Rapid deployments and updates with zero-touch provisioning and microservices architecture*
- *Full-stack support for wired, wireless, and wide area networks*

Benefits

- *Optimized healthcare network performance based on apps, devices, and bandwidth*
- *AIOps for proactive insights and actions*
- *Cloud-hosted operations for high availability and flexibility*
- *Superior experiences and assurance for patients and staff*
- *Accelerated deployments for wireless, wired, and wide area networks*

Solution Brief

The Challenge

Facing pressure from multiple sources, the healthcare industry is reevaluating its networks, operations, and technologies. The complex, expensive, and specialized health tech infrastructures have led to an industry with limited IT resources that struggles to maintain positive experiences for patients and staff alike.

Hospitals, health systems, clinics, long-term and post-acute care facilities, skilled nursing, diagnostic imaging centers, labs, and related facilities are all facing a long list of requirements set by government regulators and stakeholders. Wired, wireless, and wide area networks that deliver automation, intelligence, scalability, and security can help modernize these organizations and enable innovative patient services.

For many of these organizations—especially those operating on thin margins in this demanding industry—a Managed Service Provider (MSP) can provide an advanced, fully stacked solution that is both reliable and cost effective.

Key Priorities and Technologies

To tackle skyrocketing costs and maintain the highest service standards, healthcare providers must modernize their facilities to meet rising demand and growth. IT is rightly seen as an enabler for better patient care and cost reductions through the elimination of time lags, medical errors, duplicate tests, and other difficulties that arise in this fast-paced and stressful working environment.

Critical technologies that must be supported by IT are:

- Applications: Electronic Health Records (EHRs), registration, revenue, lab, pharma, ERP/CRM systems, and analytics
- Imaging: Radiology Imaging Systems (RIS) and Picture Archive And Communication Systems (PACS)
- IoT: User devices, wheelchairs, medical devices, printers, robotics, smart beds, asset tags, sensors, biometrics
- Physical security: Cameras, door locks, lighting, sensors, alarms

IT can improve the quality of healthcare and hospital operation by:

- Enhancing patient engagement with easy step-by-step navigation, streamlined check-in process, concierge-like services, and more personalized engagements
- Improving clinician workflows with more effective resource usage, location tracking of critical assets, service level prioritization, and increased engagement opportunities

- Enriching IT operations by reducing support tickets, decreasing time to resolution, eliminating physical beacons and BLE surveys, and boosting visibility, accuracy, and performance

At the same time, healthcare is the industry where IT can least afford to make mistakes. Since medical equipment is specialized for unique purposes (and is expensive to procure in the first place), it cannot be frequently upgraded once it becomes relied upon. Similarly, software upgrades, such as network controller releases, can lead to compromised security or operations in this demanding environment.

Unique Role of the Network

Healthcare networks can enhance patient experience and health outcomes; to do this, they must provide reliable and secure connectivity. They must also be modernized to support a range of digital services over outdated systems and infrastructure. A key goal is to simplify and automate troubleshooting, providing the fastest possible response times. Secure access and the ability to meet always-increasing bandwidth demands are also critical.

Most healthcare organizations have limited IT resources. A network that pulls disparate IoT devices and data together in the wired and wireless domains helps optimize costs through network IT efficiency and in making better use of existing equipment and software resources.

Devices that must be managed and properly utilized include research equipment, monitors, outpatient diagnostic and treatment equipment, pharmaceuticals, wheelchairs, and ambulances. Thousands of these devices can be on a single floor of a hospital.

Location services applications that optimize the use of these devices for better patient experiences can be pivotal in providing the best patient care and making the provider environment more efficient. These operational efficiencies can indirectly serve as a recruiting tool to acquire the best and most talented clinicians.

Many hospitals and healthcare systems are migrating IT systems and applications to the cloud. This enables solutions that both improve quality of care and lead to better business performance. The cloud reshapes WAN traffic patterns, which need to meet new requirements for service quality, security, and high availability. WAN requirements can also grow after mergers and acquisitions of hospital systems. M&As can create an immediate need to integrate the IT infrastructure of all affected companies to enable a full realization of economies of scale.

Security is critical, and cyberattacks continue to target hospitals and health systems. More than 44 million patient records were compromised in 686 separate incidents in 2021; in 2022, more than 21 million people were affected by just the 11 largest breaches of health information.

To handle these scenarios, the network must assure high-quality experiences for all users in the wired, wireless, and WAN domains. For complex networks that must meet these demanding requirements, only the power of AI Operations (AIOps) can meet the need.

Depending on in-house IT resources and technology priorities, many healthcare providers will choose a more hands-off model by implementing a solution from a trusted MSP.

The Solution

The Juniper® AI-Driven Enterprise portfolio is built on Mist™ AI for wireless, wired, and WAN networks. AI-Driven Enterprise solutions provide both indoor location services and IoT assurance, which offer unique benefits in hospital environments. AI-Driven Enterprise solutions also bring the benefits of Juniper Session-Smart™ Routing and Juniper SD-WAN, driven by Mist AI, into healthcare networks and cloud environments with high scale and security.

Wired and wireless networks are key vehicles for delivering optimal patient and provider experiences. Solutions such as Juniper Indoor Location Services and Juniper Mist IoT Assurance provide the foundation for relevant applications. Mist AI ensures service level experiences (SLE) for patients and staff that are consistent and reliable connectivity throughout the network.

Deployment and management is crucial in the hospital environment. Juniper AI-Driven Enterprise solutions enhance and speed the process of planning, deploying, and managing the complex IoT dependencies in healthcare facilities with device scanning and claiming techniques that set network-wide policies via template-based configurations. Day 2 operations are simplified with the Natural Language Processing (NLP) capabilities of the Marvis™ Virtual Networking Assistant and lead to proactive problem resolution and rapid troubleshooting in the event of experience disruption.

Using a MSP to deliver and maintain the solution can be an ideal way to consume an AIOps solution. An MSP can reduce time and costs by providing IT resources on demand. This can lead to greater assurance of necessary knowledge and experience, and smoother integration with other network and cloud services.

Solution Benefits

The benefits of an AI-Driven enterprise are many. They start from having an architecture that provides deep visibility and AIOps, along with a resilient and flexible cloud management solution and a patented technology for digital engagement.

AIOps for Distributed Healthcare Operations

Built on a common microservices cloud architecture and connected with a common AI engine, the AI-Driven Enterprise portfolio provides real-time insight into the patient, staff, and operator experience with assured service levels for wired, wireless and WAN networking. This includes AI-driven SD-WAN, switching, Wi-Fi, indoor location, and enhanced security—all delivered by the Juniper Mist cloud. Tunnel-free Session Smart Routing and Mist AI combine to deliver improved application performance, simplified operations, and a secure branch. Session Smart Routing further assures optimal experiences with zero-trust security and tunnel-free session-layer routing, along with built-in firewall functionality such as intrusion detection and prevention (IDP) and URL filtering.

AI-Driven Enterprise solutions simplify network configuration, deployment, and operations across wired and wireless LANs and WANs with cloud-based management, allowing IT teams to do more with less.

Mist AI Scope and Architectural Differentiators

A single dashboard under Mist AI covers the wired, wireless, and WAN domains (Figure 1).


Figure 1: Mist AI controls all network domains.

Juniper Mist Wi-Fi Assurance, Juniper Mist WAN Assurance, and Juniper Mist Wired Assurance, powered by Mist AI, identify issues that may have sources in any network domain. The network can be explored end to end (client to cloud) and problems that may appear in one domain, but are sourced from a different one, can be resolved quickly and automatically.

Many healthcare providers of all sizes are moving away from legacy architectures and replacing their networks with Juniper solutions, driven by Mist AI.

AI-DRIVEN ENTERPRISE FOR HEALTHCARE
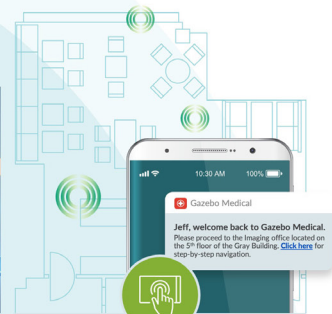
Key Differentiation

Substantially Better
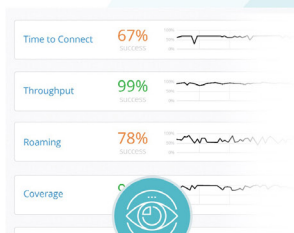
| Client Level Visibility | AI-driven Operations and Support | Microservices Cloud for Agility | Digital Engagement with Virtual BLE |

UNDERPINNED BY A 100% OPEN API DRIVEN ARCHITECTURE

Delivered Across the Full Stack

Figure 2: AI-driven enterprise solutions provide visibility, AIOps, agility, and digital engagements.

Four key reasons are leading to the increased adoption of Juniper and Mist AI. (Figure 2):

1. **Deep client-level visibility** enhances the user experience. When a device attaches to a network, potentially hundreds of things can go wrong. Mist AI tracks every device in real time and understands exactly what is happening, monitoring hundreds of states per device. This is critical in a hospital environment, where there can be dozens of devices in a single room.

2. **AI-driven Operations** use data science and deep learning to create a self-driving network. Mist AI takes intelligent, targeted packet captures to provide automated root-cause analysis that tells operators exactly what is wrong even before problems begin to show. Mist AI often takes actions that a human operator would otherwise have to perform.

3. **Microservices-based cloud** allows levels of agility that are not possible with embedded controller architectures, which can often not be regularly upgraded in hospital environments. The full stack network evolves at the same rate as the endpoints attached to it.

4. **Wireless networks become more relevant with digital engagement** that leverages Bluetooth Low Energy (BLE). A patented vBLE antenna array enables identification and sophisticated engagement of patients, hospital staff, and medical devices. This often means that patients can be made more comfortable or treated faster.

Service Level Experiences and their Classifiers

SLEs are effectively the high-level states that are tracked for medical devices and other equipment connected to the network. Within all domains, AI-Driven Enterprise solutions provide SLEs that focus on potential issues in any network (Table 1).

Table 1: SLEs by network domain

Wireless	Wired	WAN
Overall service	Overall service	Overall service
Time to connect	Switch health	WAN edge health
Successful connections	Successful connections	WAN link health
Coverage	Throughput	Application health
Roaming		
Throughput		
Capacity		
AP Health		

These SLEs include classifiers that are continually updated based on analytics and that help quickly isolate and repair network problems. For example, wireless issues with "Successful connections" can be classified as authorization or DHCP issues, among others. Similarly, a problem with WAN link health could be a physical cabling problem or related to ISP reachability.

Finding problems and ensuring the lowest possible Mean Time to Repair (MTTR) is critical in healthcare for reasons that go far beyond traditional business efficiency requirements. For an example of how a AI-Driven Enterprise solutions can help, consider the suboptimal care that can result from poor experience on a telemedicine call. This can be caused by events in multiple domains (Figure 3).
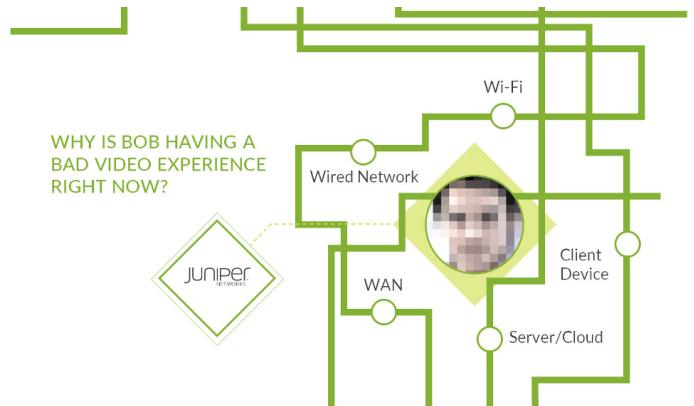

Figure 3: Many domains can contribute to poor experience on a telehealth call.

With end-to-end service levels, event correlation, anomaly detection, and self-driving capabilities, administrators can easily isolate the domain and the failing component. A possible cause could come from the Wi-Fi access point—perhaps the provider is having trouble connecting to it.

Further upstream, a bad Ethernet cable on the router could be causing the issue. The video application server, housed in a cloud data center, could be yielding low performance on a virtual machine.

Alternatively, the problem could be with the provider's PC, Internet connection, or a node in the healthcare system's WAN. Mist AI can correlate SLEs and classifiers across all domains to find the underlying cause and either recommend or perform a correction.

Marvis Virtual Network Assistant

The analytics discussed previously are integrated with **Marvis Virtual Network Assistant** for AIOps-based troubleshooting. Marvis, powered by Mist AI, proactively detects network issues before they impact users. As such, time-consuming manual IT tasks are replaced with proactive automation and self-healing capabilities, lowering operational costs—a critical requirement in modern healthcare.

Marvis Actions drives simplicity and transforms IT methodologies from reactive troubleshooting to proactive remediation. Marvis with Marvis Actions delivers a self-driving network with automatic actions, and/or assistance to recommend actions (Figure 4).
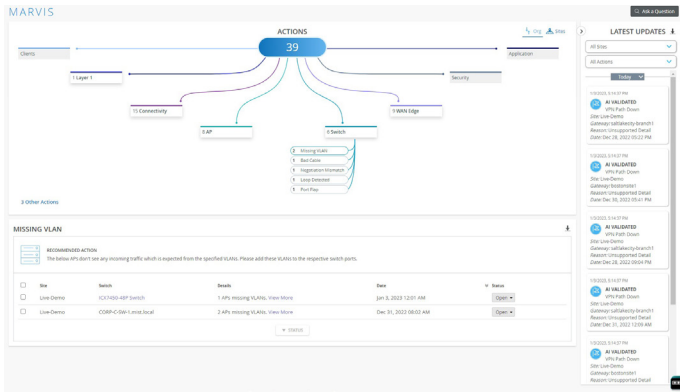
Figure 4: Marvis Virtual Network Assistant offers recommended actions.

For instance, network administrators can track upgrades, repair misconfigured ports or VLANs, identify bad cables, locate switching loops, or identify compromised devices and their attendant risks to the network. These capabilities directly result in better patient and operations experiences.

Juniper AI-Driven Enterprise portfolio also includes the Marvis Conversational Interface (Figure 5) which uses NLP to understand user intent and goals. Inquiries are contextualized to return specific results. Marvis understands intent, and will take actions without requiring operations to remember specific dashboards or CLI commands to implement the change.
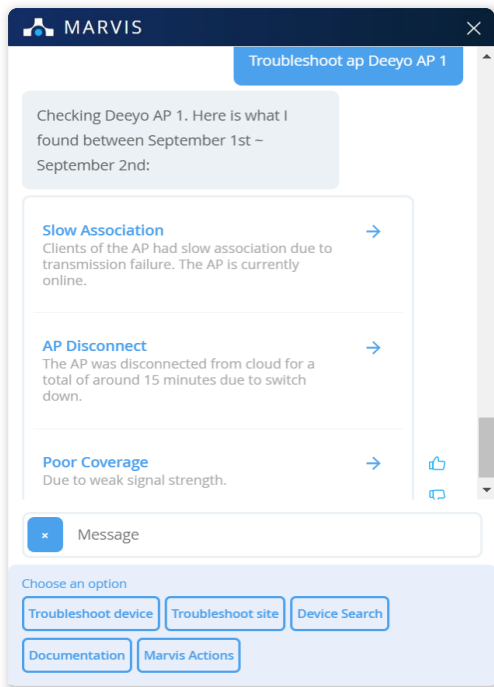

Figure 5: Marvis Conversational Interface uses NLP to understand user intent and goals.

AI-Driven SD-WAN

Keeping pace with change is a significant challenge for healthcare network planners. Hospitals and healthcare systems are continuously extending services to new locations and merging with other hospital systems to improve business results.

Cloud applications and digital solutions are the lifeblood of today's healthcare organizations. A key component of Juniper's AI-Driven Enterprise, the Juniper SD-WAN, driven by Mist AI solution (Figure 6) delivers reliable WAN connectivity for all applications in all locations, with a flexible and scalable tunnel-free architecture that has built-in, zero-trust security capabilities.
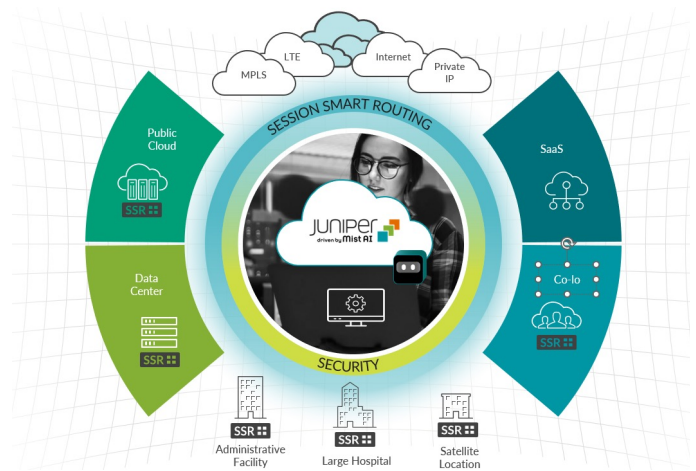

Figure 6: AI-Driven SD-WAN supports any distributed health network.

Service-based routing ensures that sessions are delivered based on identity and context to relevant parties following unified policies. This ensures that a modern cloud-centric healthcare institution can provide secure access to patients, employees, and devices wherever they are located.

Juniper AI-Driven SD-WAN supports large headquarters and data center environments. Public clouds and SaaS applications are accessible over any common WAN or Internet links.

Juniper SD-WAN is driven by Mist AI (for AI-based insights and resolution) and Juniper Session Smart Routing, which provides application-layer control so that critical applications such as protected health information (PHI) receive priority treatment and guaranteed uptime based on session policies and network status.

The Session Smart Routing fabric maintains full end-to-end context (state) of user sessions, services, and applications, as well as other dynamic workloads for a far more responsive, application-aware, network. The solution scales to tens of thousands of sites, while the tunnel-free architecture enables a 30- to 50-percent reduction in bandwidth costs.

The AI-Driven Juniper SD-WAN provides a self-driving healthcare network, identifying and acting on root causes of issues across IT domains, automatically recommending actions or performing repairs. The solution provides fine-grained quality of service (QoS), subsecond failover, and lossless application delivery.

For more details about role of SD-WAN in healthcare, including an example from a major US hospital operator, see Accelerating Network Transformation for Digital Healthcare.

Cross-Domain Security

Security is critical in healthcare networks for compliance with privacy mandates such as Health Insurance Portability and Accountability (HIPAA), Health Information Technology For Economic And Clinical Health (HITECH), and General Data Protection Regulation (GDPR). Juniper SD-WAN has built-in capabilities to provide numerous security services from every router in the network.

The primary security advantage of Juniper SD-WAN is the deny-by-default approach to session access, providing a zero trust environment. Adding to this, an Advanced Security Pack contains intrusion detection and prevention systems (IDS/IPS) and URL filtering capabilities (Figure 7).

Juniper SD-WAN also includes built-in corporate network firewall functions and policy-based policing and forwarding. Distributed healthcare centers can provide differentiated security and services to every traffic flow.

Session Smart Routers can encrypt, decrypt, and authenticate any packet flowing through them. They support adaptive encryption to dynamically detect encrypted sessions and prevent double encryption ensuring that user experiences aren't sacrificed as a result of needless double encryption and overhead.

Administrators must explicitly define policies for valid sessions. If no policy is associated with a session, the session will be dropped. This level of security aligns well with strict healthcare standards.

If and when more Secure Service Edge (SSE) functionality is needed, often required in SASE-based architectures, Juniper delivers a suite of these capabilities under unified security management with the Juniper Secure Edge, providing a best-in-class security solution. Additionally, the rich application-aware capabilities of the Session Smart Router can identify specific sessions that require routing to third-party security providers as required.

Wireless Leadership

For the wireless domain, Juniper provides reliable and consistent Wi-Fi access in all provider locations. The AIOps capability begins with the ability of Juniper Wireless Access Points to analyze large amounts of rich metadata collected from patients and network operators in the hospital or the remote office LAN. This enables operators to set up pervasive and reliable Wi-Fi connectivity with consistent coverage networkwide. From a TCO perspective, this delivers maximum value to hospitals and patients.

Session Smart Routing Security

- ✓ Centralized management
- ✓ Full Encryption
- ✓ Zero Trust Model
- ✓ Route Directionality, Policy Enforcement
- ✓ Layer 3/Layer 4 DOS/DDOS
- ✓ FIPS 140-2 Certified
- ✓ Fine-grained segmentation

SSR SECURITY

SSR

ADVANCED SECURITY PACK

SSR Advanced Security

IPS/IDS

URL Web Filtering

ICSAlabs CERTIFIED FIREWALL-CORPORATE · PCI DSS COMPLIANT · GSA Approved · FIPS 140-2 NIST

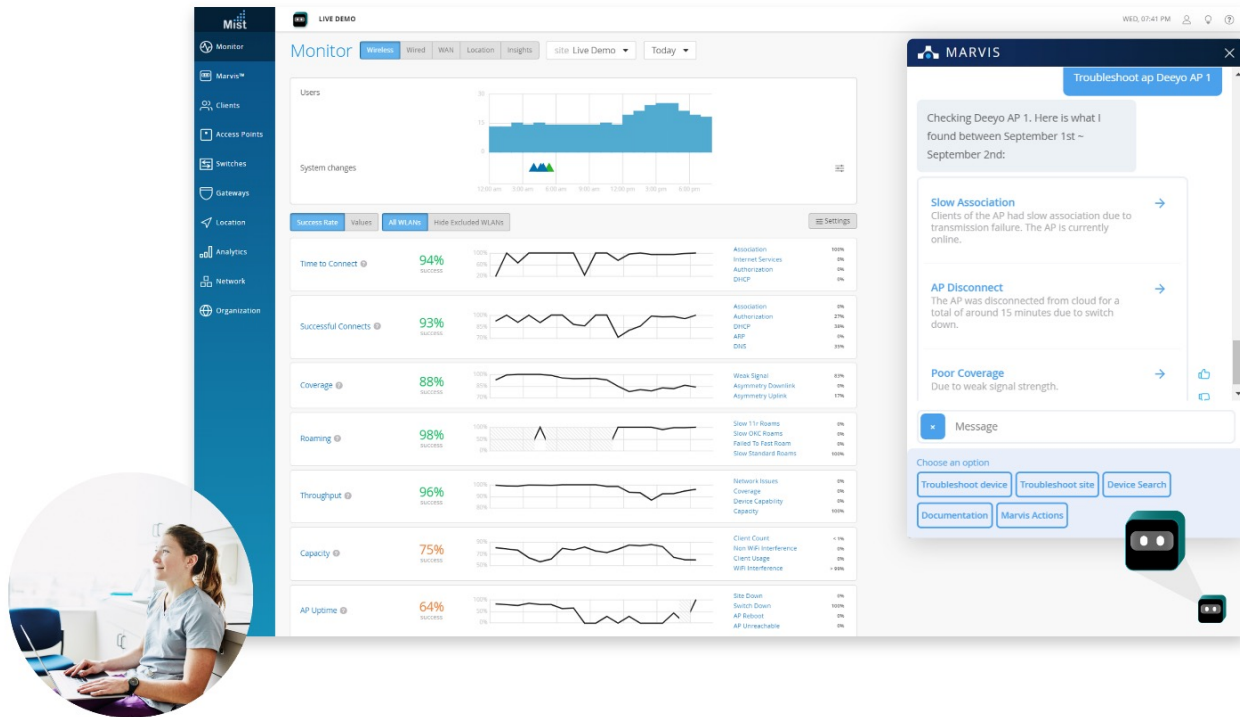*Figure 7: Session Smart Routers deliver secure, AI-Driven SD-WAN*

Figure 8: Mist AI and Marvis optimize wireless performance.

A wireless network managed by Mist AI (Figure 8) provides proactive optimization of wireless performance.

The deep learning capabilities of Mist AI provide actionable insights that correlate events with root causes and solutions. Maintenance and troubleshooting throughout any location is greatly simplified with the Mist AI cloud. Regular firmware and security updates can be pushed to all provider sites from a centralized management console, which also allows for remote troubleshooting of many common problems.

Large complex medical environments can be stressful for patients, visitors, and employees alike, including doctors. An indoor location solution can make an undeniable impact on experiences for all groups of network users.

Juniper APs incorporate a patented, dynamic vBLE 16 element antenna array to deliver the industry's most accurate and scalable indoor location services. These services are the foundation for applications that help pinpoint key medical equipment and personnel (Figure 9).

Figure 9: Indoor location services enable better patient experiences.

Being able to instantly pinpoint where key medical equipment and personnel are located is essential when every minute matters. Using Indoor Location Service applications, hospital staff can:

- Ensure the health and safety of workers, patients, and visitors

- Quickly locate critical medical assets including equipment and personnel; this can lead to better patient care with applications such as a wheelchair reservation system

- Prevent patient elopement by remotely initiating safety and security measures such as automatic door locking so that other patients don't experience unnecessary lockdowns

- Easily execute proximity contact tracing for other applications

Locations services lead to optimal patient and visitor experiences that:

- Alleviate the complexity and stress of a healthcare visit

- Expedite a patient or visitor arrival with turn-by-turn navigation to a doctor's office, lab, pharmacy, cafeteria, or gift shop

- Deliver a premium mobile experience that starts with easily accessed and pervasive guest Wi-Fi

- Integrate with partner apps and platforms (Jibestream, Medrics, and more) to enable features like auto-patient registration and check-in

These personalized services greatly accelerate digital transformation with enhanced user engagement and key insights. The insights include datapoints to optimize operations throughout each location. Hospital administrators can better understand foot traffic patterns and monitor patient stays; staffing resources can thus be optimized to accommodate demand.

Juniper Mist User Engagement provides technologies to improve the accuracy and agility of these services, and **Juniper Mist Asset Visibility** revolutionizes healthcare operations with immediate identification and location of Bluetooth LE tagged items.

When appropriate, security cameras and other IoT devices such as door locks, can be triggered based on patient location. These unique applications are only possible with the Mist SDK and pinpoint Indoor Location Services with patented vBLE for tracking. For a detailed descriptions of this and other applications, see the **Orlando Veterans Administration Case Study**.

Finally, Juniper **Mist IoT Assurance** provides a full suite of access control functionality for IoT and BYOD using multiple and private pre-shared keys (MPSK and PPSK).

Wired Leadership

Equipment on the wired network, such as kiosks and patient monitors, is critical and needs to be available 24x7 in the hospital environment. In the **wired domain, Juniper EX** and **Juniper QFX** Series Ethernet Switches provide rich telemetry to the Juniper Mist cloud, which streamlines deployment and management of a campus fabric. The wired network provides metrics for throughput, successful connections, and switch health (Figure 10).
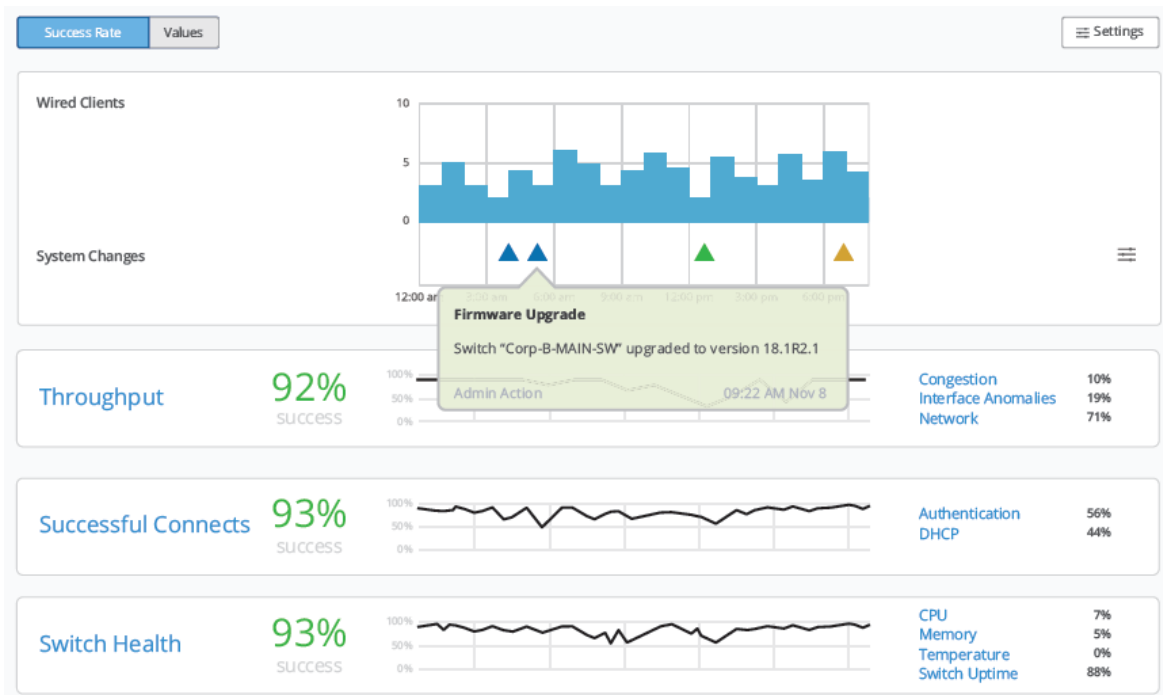

Figure 10: Wired Assurance displays service level experiences.

Having Wired Assurance helps IT teams reduce MTTR and deliver a new generation of experience-first networking. As a physical controller is not required, Juniper wired solutions minimize on-premise physical infrastructure. As a result, healthcare providers report needing as little as half the physical space of competing solutions, with corresponding reductions in power consumption. In addition to creating a more reliable and agile environment, moving from controller to cloud allows healthcare services to use a SaaS licensing model for network operations and management.

As with the wireless portfolio, the wired portfolio allows for a streamlined campus deployment. Once deployed, the AI-Driven Enterprise solutions simplify troubleshooting. Operators can quickly identify and troubleshoot "needle in haystack" problems like misconfigured VLANs and bad cables.

Day 0, 1, and 2 Operations

The deployment and provisioning for all Day 0, 1, and 2 operations is simple and secure. Preconfigured devices—access points, switches, and Session Smart Routers—are shipped to sites and can be set up in a "plug and play" fashion in a matter of minutes.

Users can simply scan the claim code on the devices and the predefined configurations are instantly applied. They then apply additional policies via templates and remotely provide updates from the Mist portal.

With the preconfiguration of device types, port detection, and dynamic configuration, this is a true Zero Touch Provisioning (ZTP) operation. For access points, a deployment service allows for automatic placement and orientation.

This approach scales to any number (thousands) of locations, and proactively ensures exceptional patient experiences. Administrators quickly, easily, and accurately configure and make changes to new sites and applications. Juniper High-Performance Access Points are designed to mount securely within existing ceiling brackets.

For details on these operations, see Implementing Branch Networks for AI-Driven Enterprise Customers. These operations can be made more predictable by having some or all of them performed by a trusted MSP.

Industry Analyst Perspective

Juniper AI-Driven Enterprise solutions have been recognized as the unequivocal leader in the Gartner Magic Quadrant for Wired and Wireless LAN Access infrastructure for three consecutive years (2020-2022). Gartner has positioned Juniper as a Leader, ahead of all other vendors in both completeness of vision and ability to execute

Juniper is also a leader in Gartner's 2023 Magic Quadrant for Indoor Location Services, and is the only company in the leader quadrant for both of these categories. Healthcare facilities thus get two industry leading solutions in from one single network provider.

In addition to leadership positions in Wired and Wireless and Indoor Location Services, Juniper is a visionary in the SD-WAN Infrastructure Magic Quadrant. From a portfolio-wide perspective, this is the strongest combined position of any networking vendor.

The financial benefits of the AI-Driven Enterprise portfolio are detailed in this report from ACG Research.

Deployments

Deployments of AI-Driven Enterprise solutions are growing rapidly year over year; this is due to Juniper and Mist AI providing the industry's most sophisticated AIOps, significantly ahead of all other networking vendors.

Architecture

A high-level AI-Driven Enterprise architecture is shown in Figure 11.

Mist AI drives the full stack branch and its connections to all domains in the distributed healthcare enterprise. This includes Session Smart Router nodes in all locations: branches, headquarters, data centers, and public or private clouds. The solution includes multiple WAN links for redundancy and/or load balancing.

Mist AI and Juniper SD-WAN create and enforce shared policies and AI-based insights for all locations, clouds, users, and devices. The application-aware routing in Juniper SD-WAN is deny-by-default for zero trust security and is tunnel-free for bandwidth optimization.
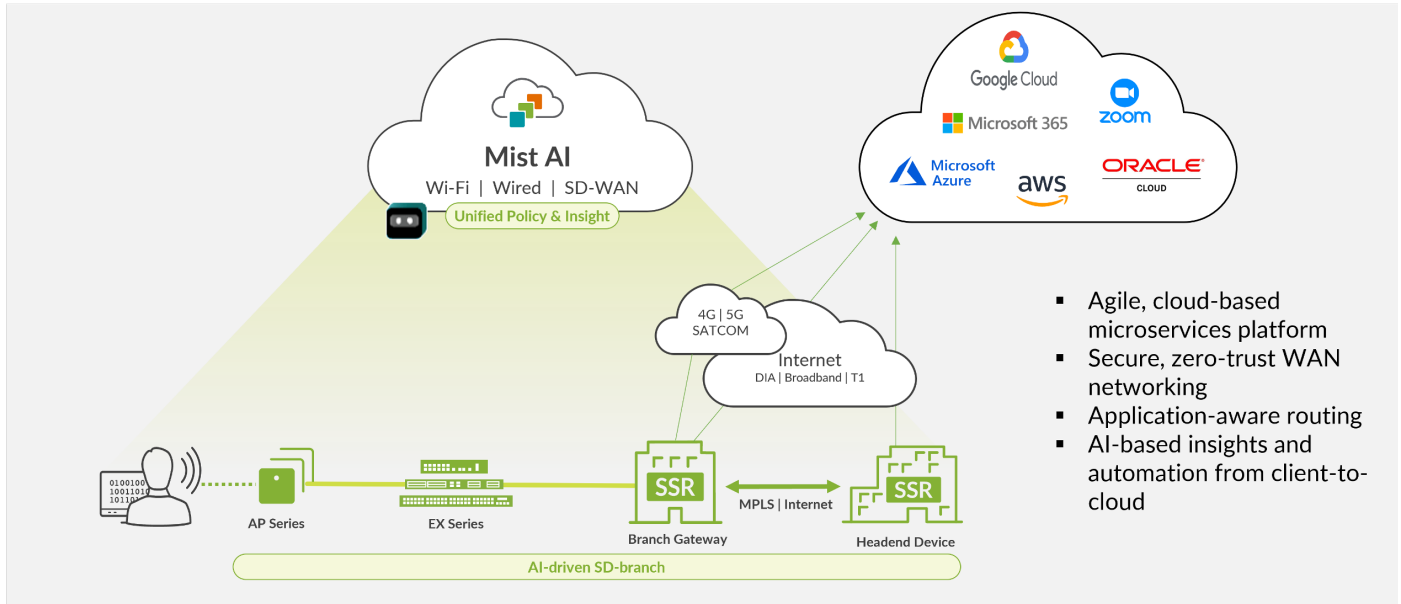
Figure 11: An AI-Driven Enterprise architecture can transform healthcare networks.

For brownfield or WAN-only deployments, or when customer-specific capabilities are needed for a particular network function, Juniper SD-WAN is vendor agnostic when it comes to operating with other switching and wireless solutions, or third-party security service edge solutions.

AI makes a huge difference to hospital IT, and Juniper solutions, powered by Mist AI, are fundamentally unique, providing improvements in user experiences and IT outcomes. Customers report 85% reduced site visits and a 90% reduction in user opened support tickets. Other performance improvements include improvement on MTTR and the reduction of escalated tickets.

Customers note that Juniper with Mist AI offers the fastest and most efficient rollouts they have ever experienced. See Implementing Branch Networks for AI-driven Enterprise Customers for more information. These rollouts may also be performed by an MSP.

Orlando Veteran's Administration Optimizes Patient Experience with Mist

The U.S. Department of Veterans Affairs' Orlando VA Medical Center (VAMC) serves more than 400,000 veterans across a 65-acre, 1.2 million square-foot facility. They are constantly looking for innovative ways to leverage technology to deliver a high-touch experience to patients, guests, and staff.

In such a large medical center, it was often difficult for patients and staff to navigate and find medical assets. In response, the executive team wanted to boost patient experience.

The solution included Juniper Wireless Access Points with Juniper Mist Wi-Fi Assurance and vBLE for user engagement and asset visibility. They are also using the Marvis Virtual Network Assistant.

VAMC now enjoys reliable Wi-Fi for patients and guests with real-time network analytics and AI-driven Radio Resource Management (RRM) to optimize performance. The location services include wayfinding and proximity notifications without battery-powered beacons or manual site calibration, along with solutions for wheelchair reservations and patient elopement.

For more information, see Orlando VA Optimizes Patient Experience with Mist.

Summary

Healthcare providers and related industries must continue to modernize their LAN and WAN architectures to support AIOps and the cloud-based applications and services of today and tomorrow. The AI-Driven Enterprise portfolio provides this modernization by optimizing experiences for patients, hospital medical staff, and IT staff alike.

Many providers are implementing AI-Driven Enterprise solutions through MSPs. This leads to time and cost savings as IT resources are supplied as needed, and the stability of the solution is guaranteed by the MSP.

The Juniper AI-Driven Enterprise portfolio provides insights to ensure each healthcare provider is optimized to deliver the best experience for all network users. This includes optimizing mobile traffic and streamlining advanced patient services.

Juniper is a leader in wired, wireless, and SD-WAN, offering the easiest and most comprehensive Day 0, 1, 2 operations in the industry. Juniper also leads in indoor location services that drive better patient experience and utilization of hospital assets.

Next Steps

For more information and assistance in starting or continuing your AI-Driven Enterprise journey, contact your Juniper account representative or inquire about a Juniper AI-Driven Enterprise managed service offering through your trusted provider. In many cases, this can reduce time and costs as IT resources are supplied on demand. You can also work with your representative to set up a reference call with an existing customer.

Finally, you can see firsthand how to perform many of these tasks by setting up an account at manage.mist.com and following the tutorials. Ask your account representative to help you get started.

Resources

Solution Briefs and White Papers

- Building a Secure AI-Driven SD-Branch
- Client to Cloud Assurance with an AI-Driven Enterprise
- Implementing Branch Networks for AI-Driven Enterprise Customers
- Session Smart Routing: How It Works
- Accelerating Network Transformation for Digital Healthcare with AI-driven SD-WAN

Web Pages

- Juniper IoT Assurance

Analyst Recognition

- 2022 Gartner Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure
- 2023 Gartner Magic Quadrant for Indoor Location Services

Videos

- AI-driven SD-WAN in Action: Design, Deploy, and Operate a Full Stack Branch with Mist AI
- Healthcare Variety Show – Improving Healthcare with IT Innovation - YouTube
- Experience-First Networking for Healthcare - YouTube
- AI-Driven SD-WAN Demo: WAN Assurance
- AI-Driven Enterprise in Action – MSP Dashboard Demo
- Juniper AI-Driven Enterprise: Full Stack AIOps
- Meet Marvis

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.

JUNIPER NETWORKS® | **Driven by Experience**™

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3510780-002-EN Apr 2023