MIST WIRED ASSURANCE OVERVIEW

The Mist Cloud Services are transforming IT operations towards the intelligent Self-Driving Network™ in the era of the AI-Driven Enterprise. Mist Wired Assurance delivers simpler operations, shorter mean time to repair and better visibility into end-user experiences.

Mist Wired Assurance is a cloud service that brings automated operations and service levels to the enterprise access layer for wired switches, IoT devices, access points, servers, printers, etc. It's about simplification every step of the way, starting from Day 0 for seamless onboarding and auto-provisioning through Day 2 and beyond for operations and management. Juniper EX Series Switches provide the rich Junos streaming telemetry that enable the insights for switch health metrics and anomaly detection.

Mist's AI engine and virtual network assistant, Marvis, further simplifies troubleshooting while streamlining helpdesk operations with self-driving actions to automatically remediate issues. Marvis is one step towards the Self-Driving Network™, turning insights into actions and fundamentally transforming IT operations from reactive troubleshooting to proactive remediation.

Mist Cloud services are 100% programmable using open APIs for full automation and/or integration with your IT applications.
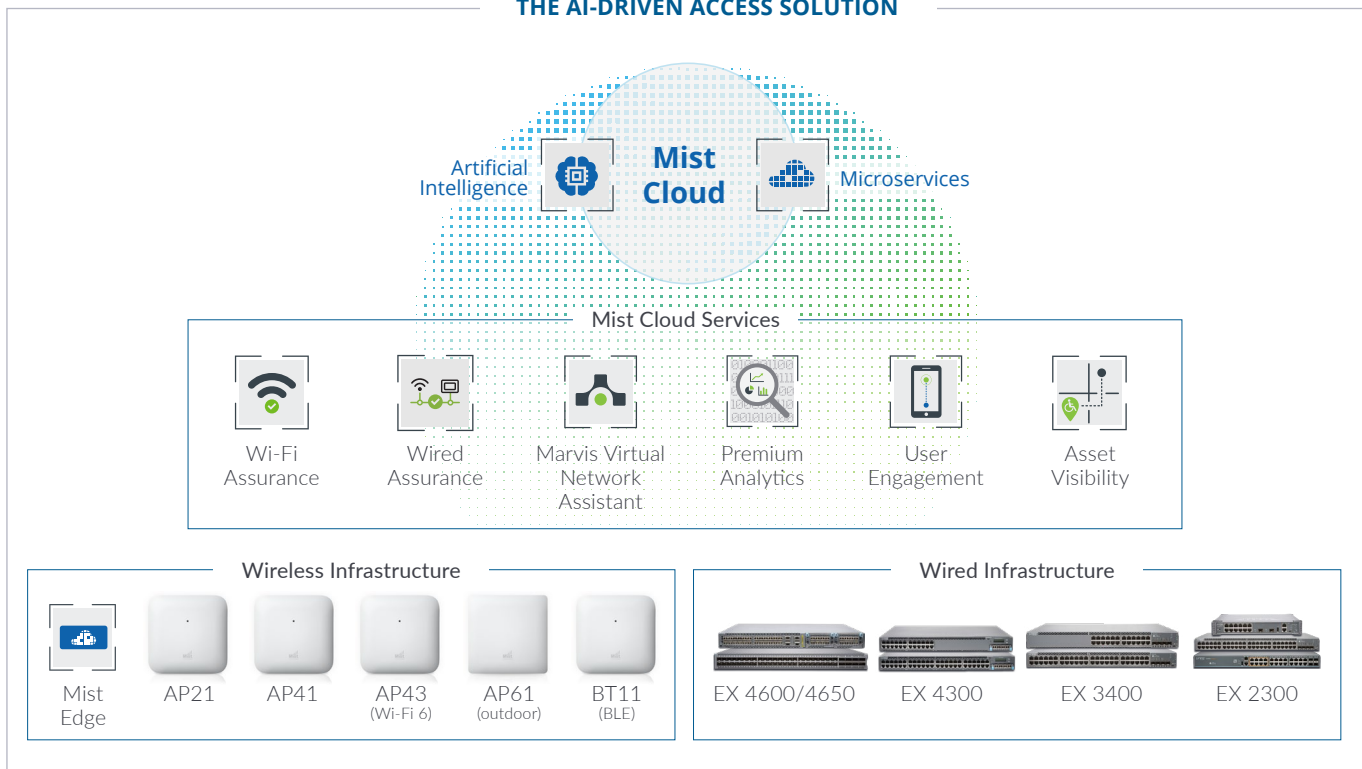
THE AI-DRIVEN ACCESS SOLUTION

Artificial Intelligence — **Mist Cloud** — Microservices

Mist Cloud Services

| Wi-Fi Assurance | Wired Assurance | Marvis Virtual Network Assistant | Premium Analytics | User Engagement | Asset Visibility |

Wireless Infrastructure

Mist Edge | AP21 | AP41 | AP43 (Wi-Fi 6) | AP61 (outdoor) | BT11 (BLE)

Wired Infrastructure

EX 4600/4650 | EX 4300 | EX 3400 | EX 2300

Figure 1: Portfolio Overview of Mist Cloud Services, Mist Access Points, and Juniper EX Series Switches

DAY 0/DAY 1: SINGLE CLICK ACTIVATION AND AUTO-PROVISIONING FOR WIRED SWITCHES

One Step, Simplified Onboarding. With true plug and play capabilities, the wired access layer can be onboarded onto the cloud with a single activation code. Network admins can get visibility into switch metrics and service levels for wired devices within a few minutes.

Existing EX deployments ("brownfield") can take advantage of Wired Assurance as well, once adopted to the cloud.

Configurations Models. Enable consistent configurations via global templates through the cloud with the flexibility for specific switch and site attributes. Colorless ports add another dimension of plug and play, where the Mist Cloud can automatically detect the type of device plugged into the switch and apply the relevant port profiles. This helps to drive consistency and commonality across a number of sites, while streamlining bulk deployment rollouts.

Device, Port and Interface Profiles for Static and Auto Provisioning. Port profiles provide a convenient way to manually or automatically provision switch interfaces. For the static provisioning of color ports, users can manually assign profiles to specific port ranges and odd/even ports.

For the auto-provisioning of colorless ports, simply plug in the end client into the port. Users set up the profiles and the Mist platform can automatically configure and apply policies to specific types of wired devices (access point, corporate device, IoT device, etc.) based on LLDP, radius name or manufacturer OUI attributes.

Open APIs for Third Party Integrations. Proactively monitor the network with the power of 100% programmable APIs for full automation of activation, onboarding and configuration. Mist APIs are open and seamlessly integrate with third party systems like ServiceNow and Splunk which support APIs for automated ticketing, troubleshooting, and more.

DAY 2 AND BEYOND: AI-DRIVEN OPERATIONS

Wired Service Level Expectations (SLEs). Get operational visibility into the wired experience with SLEs for Juniper EX Series Switches. Enforce throughput, successful connects and switch health with pre- and post-connection performance metrics. Pre-connection shows the number and time of successful connects and authentication, while post-connection measures throughput and detects STP loops, interface errors and congestion—all in one dashboard. SLEs help to measure and manage networks for simplified troubleshooting and proactive anomaly detection.

AI-Driven Switch Insights. Know exactly how Juniper EX Series Switches are performing with detailed switch metrics and insights at a device level such as CPU, memory utilization and Virtual Chassis status, as well as down to the port level including bytes transferred, traffic utilization and power draw. It shows performance series data and real-time status data for connected endpoints. Wired Assurance also logs and correlates switch events, like configuration changes, firmware updates and system alerts. By hovering over the switch ports, device details (wired client or access point) and connectivity details (connected speed, PoE status, and throughput) pop up.
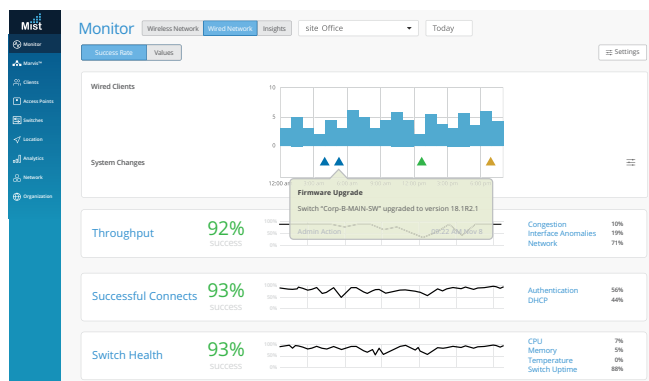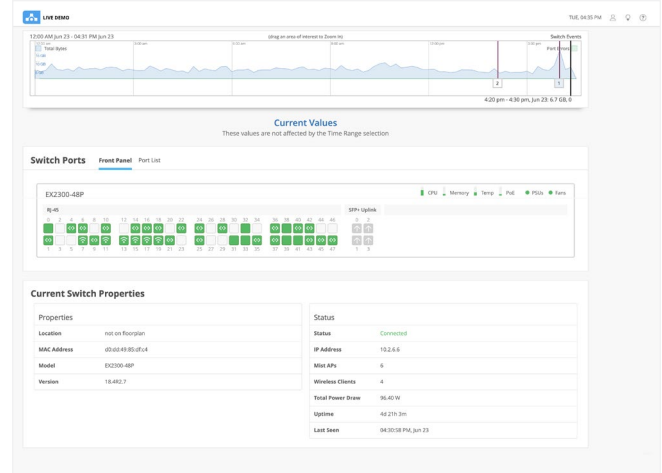
Wired Clients Health Metrics. See an inventory of switches and wired devices in a list, topology or location view. Wired Assurance ensures optimal network operations with key health metrics such as switch firmware compliance, switch AP affinity, PoE compliance, and missing VLANs. These metrics are available for multivendor environments across all vendors' wired switches when paired with Mist access points and the Marvis cloud service.
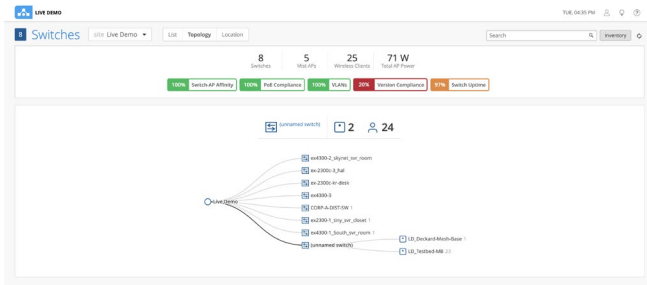
Marvis AI-Driven Virtual Network Assistant. Marvis, a complementary cloud service to Wired Assurance, transforms IT operations towards The Self-Driving Network with simplified troubleshooting and performance analysis for helpdesk staff and network administrators. Simply ask a question in natural language and get actionable insights. Marvis brings proactive anomaly detection into the SLE dashboard so users know when there are deviations from established baselines. And with Marvis Actions, users get proactive recommendations for wired issues such as missing VLANs, bad cables, or port negotiation mismatches and spanning tree loops.
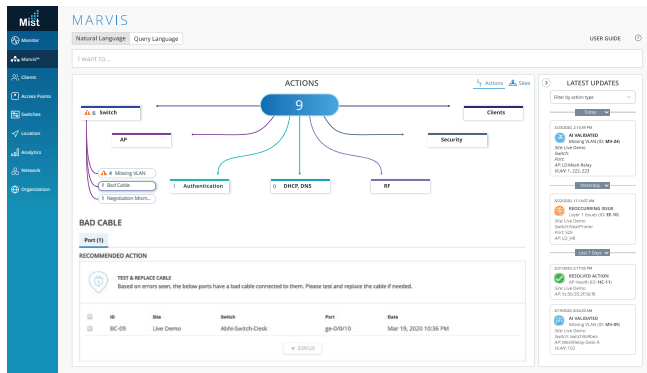
Please reference the Marvis datasheet for more details.

Accelerate Your Digital Transformation with Network Insights. Wired Assurance includes a base analytics capability for analyzing up to 30 days of data which enables you to simplify the process of extracting network insights from data and analytics across your enterprise. Review your network throughput peaks to properly align your support resources. To extend these capabilities to 3rd party network elements and the ability to consume up to one year of data, along with the option to generate customized reports, Mist Premium Analytics is available as an additional subscription.

Natively Integrated Juniper EX Series Switches. The following models of Juniper Networks EX Ethernet Series Switches are supported:

EX 4600/4650	
EX 4300	
EX 3400	
EX 2300	

FOR MORE INFORMATION

To find out more about Juniper Networks and Mist product solutions, please visit www.juniper.net and www.mist.com.

ABOUT JUNIPER NETWORKS

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

ABOUT MIST

Mist built the first AI-driven, microservices cloud-based Wireless LAN (WLAN), which makes Wi-Fi predictable, reliable, and measurable and enables scalable indoor location services like wayfinding, proximity messaging and asset visibility. In addition, Mist's AI technology plays a key role in bringing automation and insight across the full IT stack, delivering seamless end-to-end user experiences and substantial IT cost savings. In 2019, Mist was acquired by Juniper Networks and operates as a business unit focused on the AI-Driven Enterprise which combines Mist's next-generation wireless platform with Juniper's best-in-class switching, routing, security and SD-WAN solutions to deliver unsurpassed end-to-end user and IT experiences.