

JUNIPER MIST™ WAN ASSURANCE OVERVIEW



Juniper Mist cloud services are moving IT operations closer to the intelligent Self-Driving Network™ in the era of the AI-Driven Enterprise. Juniper Mist WAN Assurance delivers simpler operations, shorter mean time to repair, and better visibility into end-user experiences.

Juniper Mist WAN Assurance is a cloud service that brings automated operations and service levels to the enterprise access layer at the WAN edge. When used in conjunction with Juniper Mist Wired and Wireless Assurance, the service transforms all operations across network switches, IoT devices, access points, servers, printers, and other equipment. Juniper SRX Series Services Gateways provide the rich Junos® operating system-based streaming telemetry that enables gateway health metrics and anomaly detection.

The Juniper Mist AI engine and virtual network assistant further simplify troubleshooting and streamline the helpdesk with self-driving actions that automatically remediate issues. The Marvis Virtual Network Assistant turns insights into actions and fundamentally transforms IT operations from reactive troubleshooting to proactive remediation.

Juniper Mist cloud services are 100% programmable using open APIs for full automation and/or integration with your IT applications.

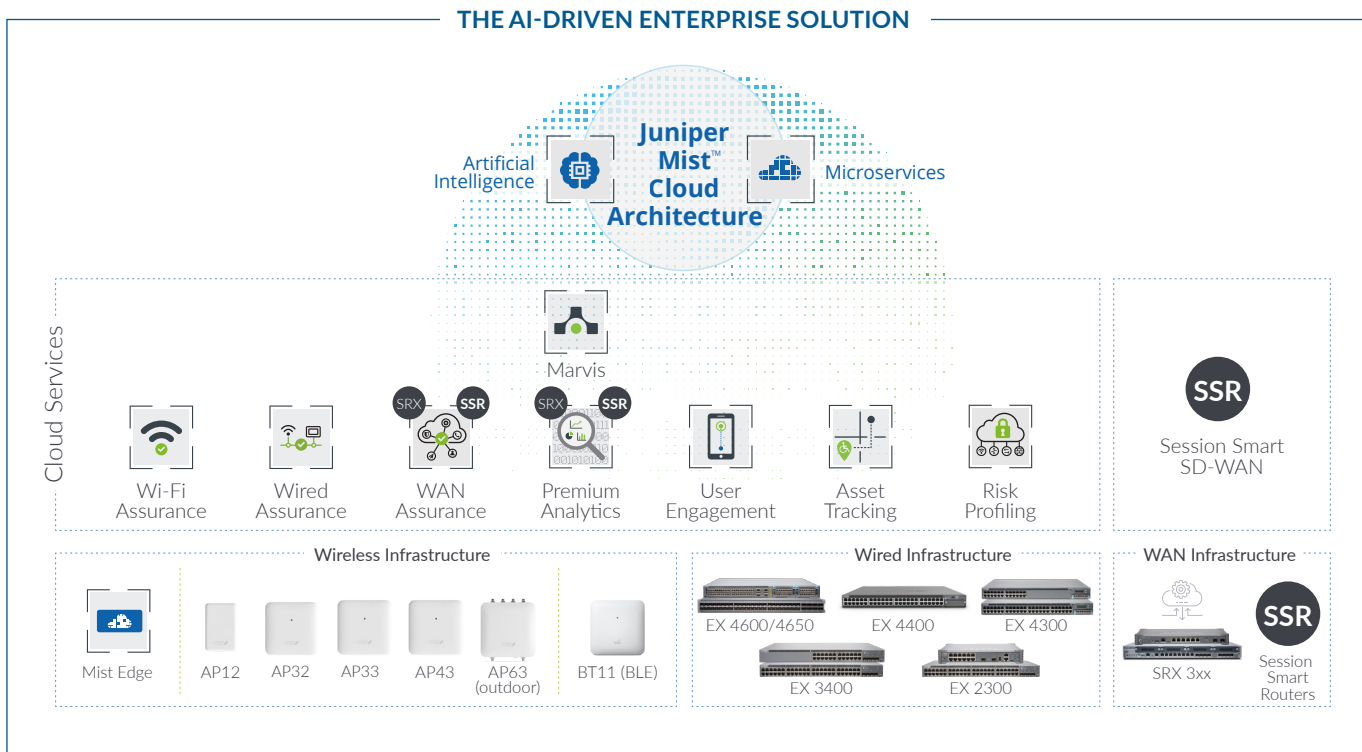
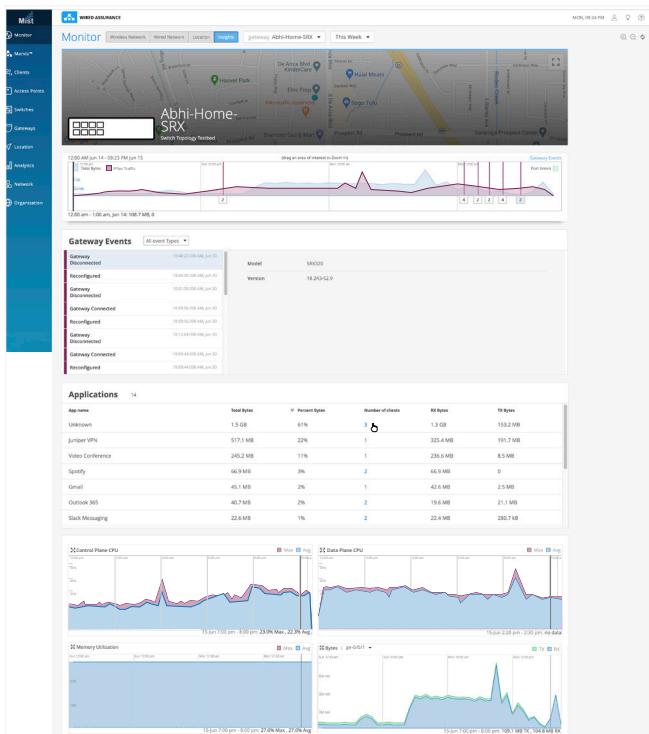


Figure 1: AI-Driven Enterprise portfolio overview

WAN Service-Level Expectations (SLEs). Get operational visibility into user WAN experiences with SLEs for Juniper SRX Series Services Gateways. Measure the impact of both SRX gateway and WAN circuit health on end-user application experiences. A WAN Link Health SLE, which accounts for network congestion, IPSec processing, and ISP network availability, delivers insights into how these factors are affecting a given network user or application. The Juniper Mist SLE dashboard helps to identify root causes of suboptimal application experiences in just a few clicks and proactively isolate “needle-in-a-haystack” problems. Using the Juniper APPQoE infrastructure for route optimization, the Juniper Mist portal delivers real-time performance to individual applications.

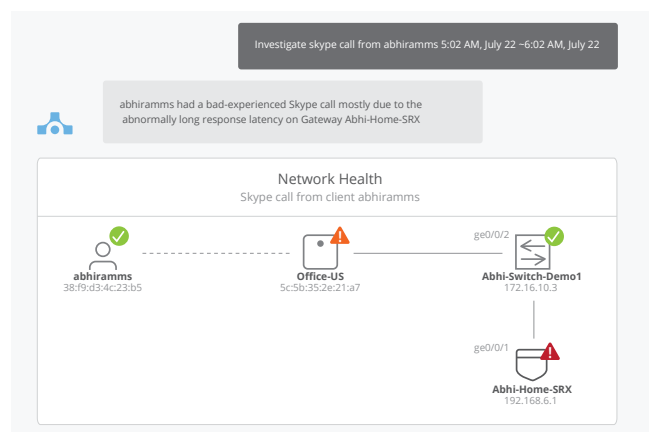
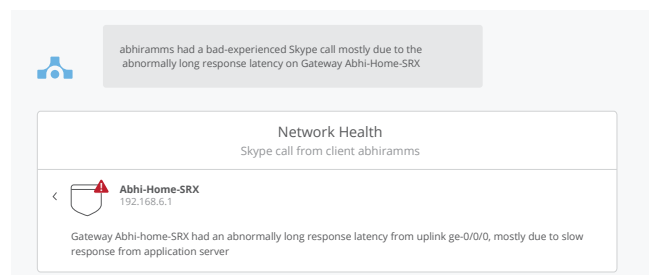
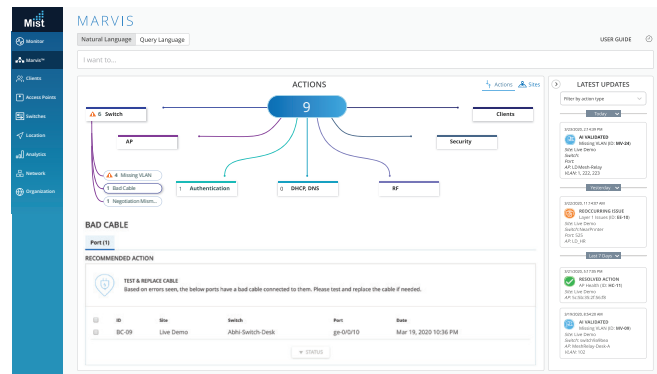


WAN Insights Driven by Mist AI. Know exactly how Juniper SRX Series gateways are performing with metrics and insights down to the port level. These include CPU, memory utilization, bytes transferred, traffic utilization, and power draw. WAN Assurance also logs gateway events, like configuration changes and system alerts. WAN Assurance also logs gateway events, like configuration changes and system alerts. WAN and IPSec utilization insights tell you how much traffic traverses your encrypted tunnel versus your local breakout. You also get visibility into per-user and per-application performance and experiences.








Marvis, the AI-Driven Virtual Network Assistant for WAN. Marvis moves IT operations closer to 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 you’re alerted to deviations from established baselines. And with Marvis Actions, you’ll get proactive recommendations for WAN issues such as MTU mismatch, bad cables, and WAN link congestion and outages.

The Marvis Conversational Interface service allows IT teams to quickly get answers to questions like, “Why is my user’s video chat application experience bad?” The Juniper Mist Temporal Entity Relationship Framework correlates WAN, LAN, and WLAN network entities to provide you with the exact root cause(s) of a degraded application experience. Marvis Actions then provides recommendations to improve those experiences.



Please reference the [Marvis datasheet](#) for more details.

Natively Integrated with Juniper SRX Series Gateways. The following models of SRX Series Gateways support the WAN Assurance service:

SRX300	
SRX320	
SRX340	
SRX345	
SRX380	

SD-WAN Support. Juniper Mist WAN Assurance complements the Juniper Session Smart SD-WAN, which is powered by Juniper Session Smart Router, which fuels an advanced, service-centric networking solution. Session Smart technology delivers experience-based SD-WAN with deep session visibility and insights and fine grained session control. Its tunnel-free approach enables agile, secure, resilient WAN connectivity with breakthrough economics and simplicity.

Risk Profiling Driven by Mist AI. WAN Assurance is a key component of the Risk Profiling solution, which brings network security to the distributed network edge. Risk Profiling provides visibility into infected wired or wireless clients that's observable within the Juniper Mist cloud and assigns a threat score determined by the Juniper ATP cloud. From within the Juniper Mist cloud, you can geospatially locate infected devices and take one-touch mitigation actions like ban or deauthenticate.