Juniper Mist WAN Assurance is a cloud service that brings automated operations and service levels to the enterprise access layer for the WAN edge, and when used in conjunction with Juniper Mist Wired and Wireless Assurance, transforms all operations covering the switches, IoT devices, access points, servers, printers, etc. Juniper SRX Series Gateways provide the rich Junos-based streaming telemetry that enable the insights for gateway health metrics and anomaly detection.

Juniper’s AI engine and virtual network assistant further simplifies troubleshooting and streamlines the helpdesk with self-driving actions to automatically remediate issues. Marvis Virtual Network is one step towards the Self-Driving Network™, turning insights into actions and fundamentally transforming 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: Portfolio Overview of Juniper Mist cloud services, Juniper Access Points driven by Mist AI, Juniper EX Series Switches, Juniper SRX Series Gateways
WAN Service-Level Expectations (SLEs). Get operational visibility into the WAN experience with SLEs for Juniper SRX Series Gateways. Measure impact of gateway health, WAN link health on end user experience. WAN Link Health SLE that is affected by issues such as congestion, IPSec and ISP availability gives us the insights into how any of the above factors affect a user or an application. Juniper Mist SLE dashboard helps identify root cause proactively and isolate “needle-in-a-haystack” problems. Leveraging the APPQoE infrastructure – the Juniper Mist portal brings about real time performance for individual applications and SLE framework provides the root cause for sub-optimal application experience in a few clicks.

WAN Insights Driven by Mist AI. Know exactly how Juniper SRX Series Gateways are performing with detailed gateway metrics and insights down to the port level such as CPU, memory utilization, bytes transferred, traffic utilization, and power draw. WAN Assurance also logs gateway events, like configuration changes and system alerts. Along with WAN utilization, IPSec Utilization insights help understand the amount of traffic sent over the tunnel vs local breakout. WAN Insights also provide application visibility on a per user as well as per app basis.

Marvis, the AI-Driven Virtual Network Assistant for WAN. Marvis 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 WAN issues such as MTU Mismatch, Bad Cables, WAN Link Issues.

The Marvis Conversational Interface service allows IT teams to quickly get to answers by simply posing questions to Marvis. Questions like, "why is my user’s video chat application experience bad?" can be directly queried. Temporal Entity Relationship Framework brings across co-relation from different entities (WAN, LAN, WLAN) of a network that could cause an application experience and provide the end user with the exact root cause for problem.

Additionally, Marvis Actions provide proactive recommendations to improve user experience issues.

Please reference the Marvis datasheet for more details.
Natively Integrated Juniper SRX Series Gateways. The following models of Juniper Networks SRX Series Gateways are supported:

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<thead>
<tr>
<th>Model</th>
<th>Image</th>
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Juniper SD-WAN. Juniper Mist WAN Assurance complements and supports Juniper SD-WAN deployments, orchestrated by Juniper® Contrail® Service Orchestration. Contrail Service Orchestration allows you to securely tame the WAN with a secure SD-WAN. A secure, flexible, and scalable solution, Contrail Service Orchestration dramatically reduces network complexity. It’s available as a cloud-based service from Juniper, giving enterprises of all sizes access to its intuitive and simple GUI for WAN use cases.

FOR MORE INFORMATION
To find out more about Juniper Networks and Juniper Mist product solutions, please visit [www.juniper.net](http://www.juniper.net) and [www.mist.com](http://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 AI
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 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 Systems was acquired by Juniper Networks and operates as a business unit focused on the AI-Driven Enterprise which combines the Juniper Mist 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.