JUNIPER NETWORKS | Engineering Simplicity | LAYER3

eGuide

Delivering a better user experience.

Your straightforward guide to AI-driven WAN.

August 2020

Many organizations have transitioned to SD-WAN, wanting to benefit from the availability, quality, and capacity it provides for distributed locations.

So far, so good.

But while SD-WAN solves many of the issues associated with traditional enterprise WAN routing, most vendors' SD-WAN solutions are built on a static and outdated model.

And with the surge in numbers of remote workers and the ongoing shift of applications to cloud-hosted SaaS models, user experience is becoming increasingly important.

Uptime is not the same as good user experience.

If you've ever travelled by public transport, you'll know that while getting from A to B is the basic aim, your actual experience on that journey – how seamless and easy it is – can make a big difference to your stress levels. In the same way, just because a WAN link is passing traffic, it doesn't mean that the users on that link are having a good video conference or SaaS experience.

And without being able to evaluate that user experience, how can an IT Administrator know if a change to the WAN has made it better or worse?

Enter the AI-driven WAN.

If a video call isn't working properly at a user's home, how do you tell if the problem lies with the client device, application, Wi-Fi network or WAN?

Focus on user experiences, from client to cloud.

With an AI-driven WAN, you can measure and manage end-to-end user experiences through insight, automation, and self-driving actions.

An effective AI-driven network takes the data relating to WAN attributes (such as jitter, packet loss and latency) and combines it with application data (such as connection retries, bandwidth consumption and other WAN metrics).

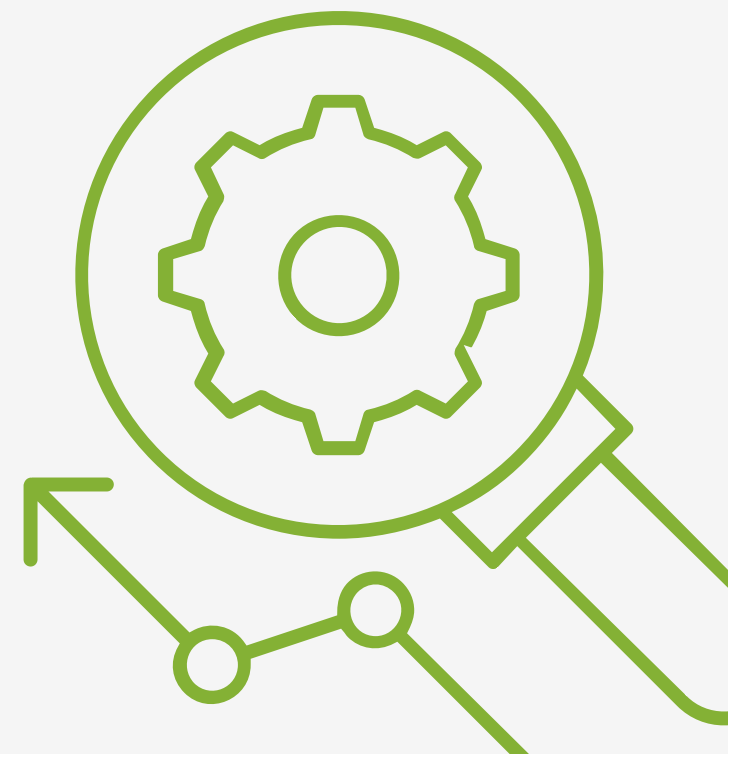
It then uses AI and Machine Learning techniques to optimize and measure users' experiences in near real-time.

This means that you can monitor and manage customizable service-level expectations for individual users, groups, device types or locations. And you can leverage automated workflows to take appropriate action if those SLEs are not being met.

Adding WAN insight and troubleshooting enables you to make three game-changing shifts in focus that will significantly elevate network performance and user experience:

- From service level agreements to AI-driven SLEs.
- From monitoring your network to optimizing user experiences.
- From static intent-based WAN policies to dynamic AI-driven actions.

Juniper's SD-WAN, driven by Mist AI, combines our SD-WAN solution with insights and automation to deliver the simplicity, reliability, and agility your IT teams need in the modern era of distributed networking.



WAN assurance changes the game.

Juniper Mist WAN Assurance brings insight and troubleshooting to SD-WAN to deliver better end-to-end user experiences.

Just as we have delivered wired and wireless assurance to optimize user experiences in the LAN and WLAN, we are now doing the same with WAN.

Juniper Mist WAN Assurance brings AI-driven insights for the WAN and branch to Juniper's already robust and secure SD-WAN solution (and wired and wireless assurance solutions).

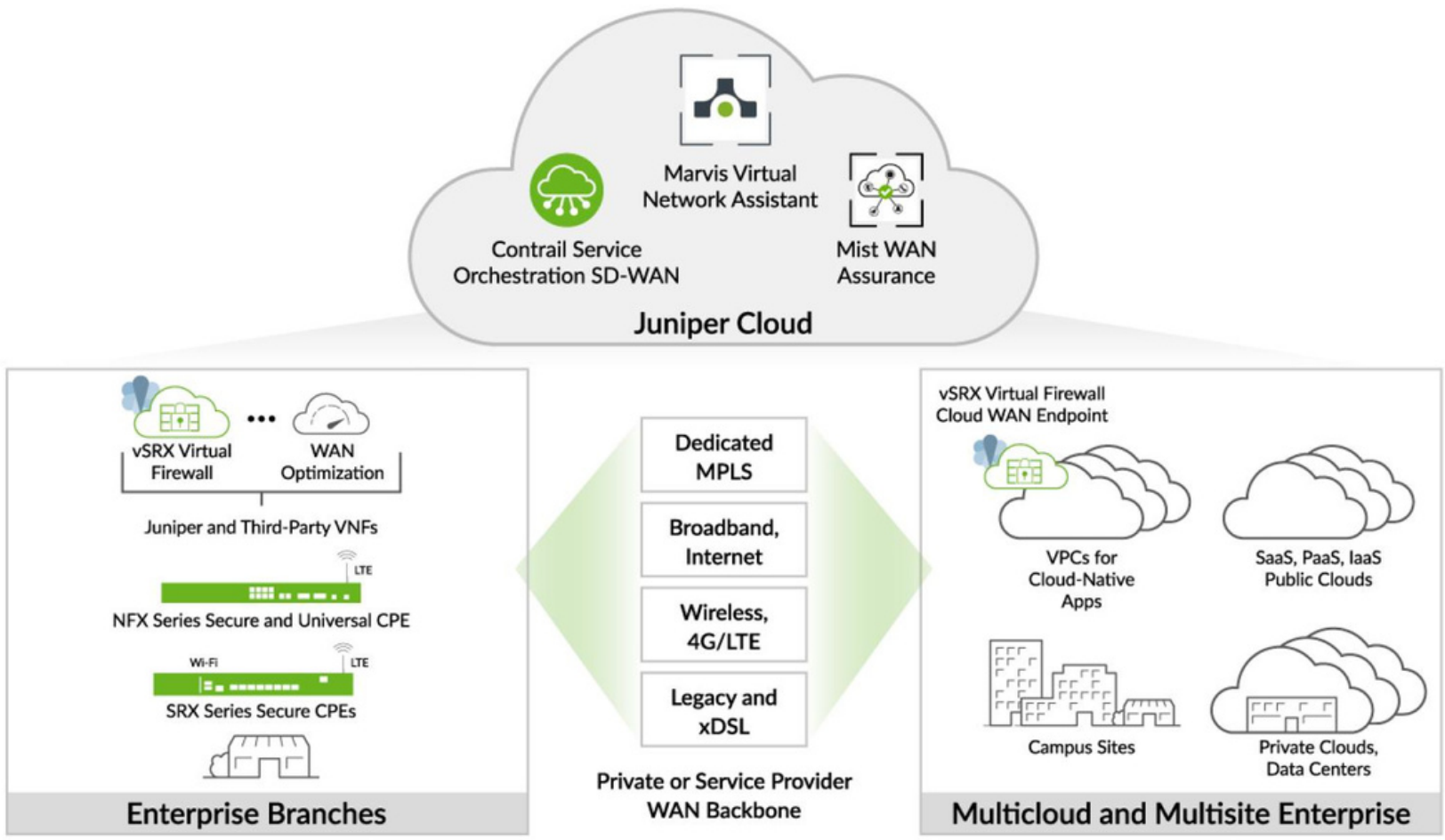
Juniper Mist WAN Assurance:

Streams key telemetry data from Juniper SRX devices to the Mist AI engine in the cloud for customizable WAN service levels to optimize user experiences.

Works with Marvis to correlate events across the LAN, WLAN and WAN for rapid fault isolation and resolution.

Detects and resolves anomalies using automated workflows while building its self-driving capability.

Juniper SD-WAN driven by Mist AI.



With Marvis, all you need to do is ask.

Marvis, our Virtual Network Assistant, brings AI-driven support to a new level with interactive and intuitive problem solving and insight that keeps getting better over time.

The ultimate goal of an AI-driven network is to proactively maintain network performance with zero human intervention. For example, if the network detects that someone's video call will degrade in quality due to issues with a WAN circuit, AI can adjust policy to bypass the issue entirely.

Acting as the IT Administrators best friend, Marvis provides prescriptive actions and proactive notifications on how to constantly optimize user experiences. The Marvis Actions dashboard is a one-of-a-kind single location for identifying and correcting network issues, including the WAN.

"What was wrong with Bob's Microsoft Teams video call yesterday?"

But it doesn't stop there. Thanks to the conversational interface, users can ask Marvis questions as if they were talking to a human IT expert. Marvis can answer questions, ask clarifying questions, and guide IT Administrators to other areas of interest/importance. With Juniper Mist open APIs, Marvis can also operate via third party chat, such as Slack and ServiceNow. Just type in your question using natural text.

AI-driven support gets better with age.

When tickets are fed back into an AI engine, it will constantly learn and adapt, enabling it to troubleshoot more and more different problems over time without the need for human intervention.

As the number of Juniper devices driven by Mist AI proliferate, the number of manual support tickets has remained the same. This is the value of AI-driven support with reinforcement learning: we get better, so your workload decreases.

Experience AI across your entire network.

The Juniper Mist WAN Assurance cloud offering enables simpler operations, better visibility into end-user experiences, and shorter meantime to repair for your connected wired and wireless devices. Now you can use our Mist AI solution to deliver better user experiences for your SD-WAN deployments with SRX Series gateways.

Ignore the hype – here's what's real.

Mist delivered the first AI-driven network almost five years ago, combining network automation with insights to drive great user experiences. Since then, the Juniper Mist solution has become the AI-driven networking platform of choice for customers all over the world – including three of the Fortune 10, over 30 of the top 50 global retailers, two of the most prestigious universities and the largest healthcare network in the United States.

In a world of AI-washing, Juniper steadily continues to deliver and grow its vision, solving real customer and partner needs through Mist AI.

Attend one of our live Transformation Thursday demos to see how The Self-Driving Network™ driven by Mist AI brings insights into user experiences.

REGISTER NOW

or visit: juniper.net/ai-driven-demo

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