



JUNIPER MIST™ ROUTING ASSURANCE DATASHEET

Product Overview

Juniper Mist™ Routing Assurance brings the [power of Mist AI](#) to routing. It's a different approach to network monitoring, focusing on user and device experiences rather than network uptime. Routing Assurance delivers unparalleled user experiences for routing operations with shorter mean time to repair and better visibility into connected devices.

Product Description

Juniper Mist Routing Assurance extends Mist AI™ to the Enterprise Edge. By harnessing the power of [AIOps](#), it delivers enterprises with actionable routing visibility and insights. This reduces complexity, allowing IT teams to effortlessly troubleshoot using natural language to detect anomalies in routing infrastructure, ultimately reducing mean time to repair/innocence (MTTR/MTTI) and automating root cause analysis for faster and more accurate issue resolution.

You can't manage what you can't measure, and you can't measure what you can't see. Visibility into enterprise routing infrastructure is critical to consistently guaranteeing amazing experiences. In an attempt to meet quality of service key performance metrics, network operators use various legacy tools and scripts to collect routing insights from the network to try to gain visibility. However, the data provided by such tools is often limited, unreliable, and not actionable. To stay ahead of service-impacting issues, network operators need reliable and actionable insights to be able to respond proactively and react quickly to network events.

With Juniper Mist Routing Assurance, enterprises can streamline operations and become more agile in discovering network problems before they can impact end users. Enterprises gain end-to-end operational visibility into the WAN experience at the enterprise edge with Service Level Expectations (SLEs) tailored for Juniper routing platforms, enabling them to enforce throughput, alleviate congestion, and assure router health with performance metrics. SLEs enable simplified troubleshooting and proactive anomaly detection, ensuring optimal network performance and user experiences.

Juniper Mist Routing Assurance simplifies Day 2 operations for [Juniper MX](#) and [Juniper ACX](#) through the use of rich telemetry from [Junos® operating system](#) and [Junos® Evolved operating system](#), which enables deep actionable insights into what the router and WAN infrastructure is experiencing and how it is doing.

Key Features

- Foundation of Mist AI cloud-delivered microservices to optimize experience from client to cloud
- Empower users with proactive recommendations and simplified troubleshooting
- One-step, simplified Day 0/1 device onboarding into Routing Assurance for existing and new installations
- Streamline Day 2 operations with routing service level expectations and AI-driven insights
- Open programmable APIs for seamless third-party integrations

Juniper Mist Routing Assurance provides insights about:

- The platform, including the health and performance of the routing platforms and their components
- Forwarding, including interface traffic, errors, queues consumption, and drops
- Routing, including routing events, routing protocol states, peer status analysis, routes, and more

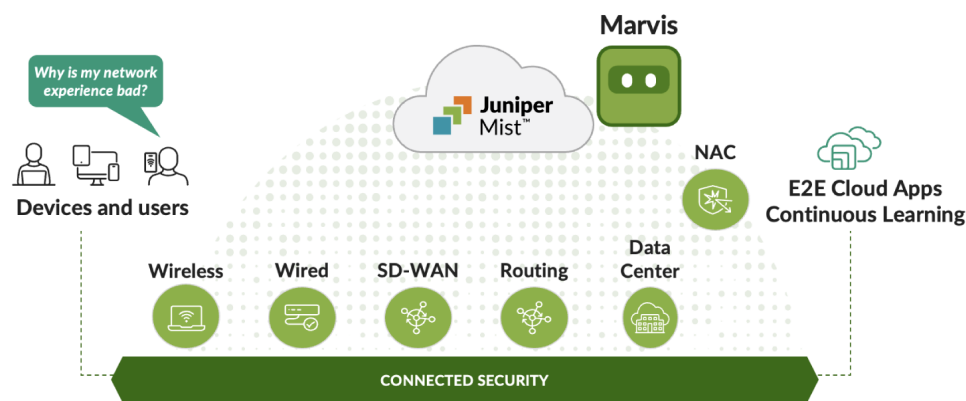


Figure 1: AI-Driven Enterprise portfolio overview

Day 0/1: Single-Click Onboarding of Routers

One-step, simplified onboarding. Routers can be onboarded to the cloud with an automated set of commands to be added to the router configuration.

Network admins can get visibility into router metrics and service levels within a few minutes.

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

Automated router insights. Know exactly how Juniper MX and ACX routers are performing with detailed device-level metrics and insights, such as CPU and memory utilization. You can also see metrics down to the port level, including bytes transferred, traffic utilization, and queue monitoring and utilization. Routing assurance also details BGP routes, peering session health, and provides routing tables.

You'll receive performance series data and real-time status data for connected endpoints. Routing Assurance also logs and correlates router events, like configuration changes, firmware updates, and system alerts.



Figure 2: Router charts

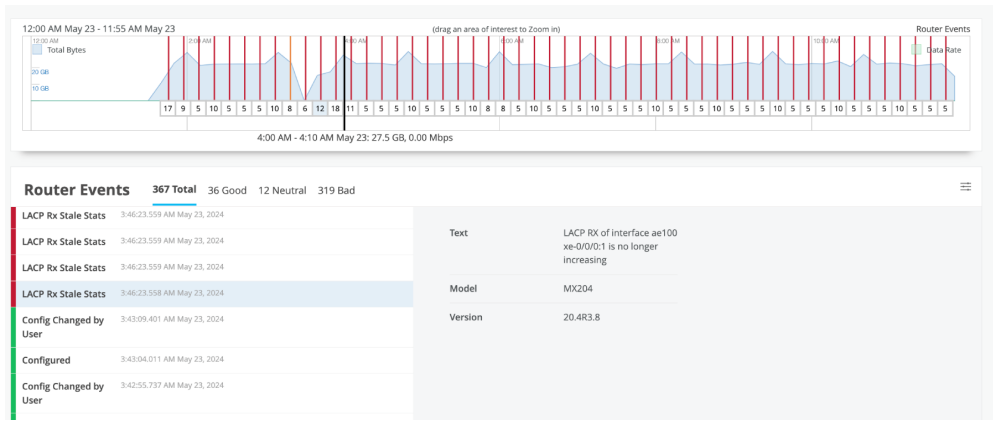


Figure 3: Router health metrics

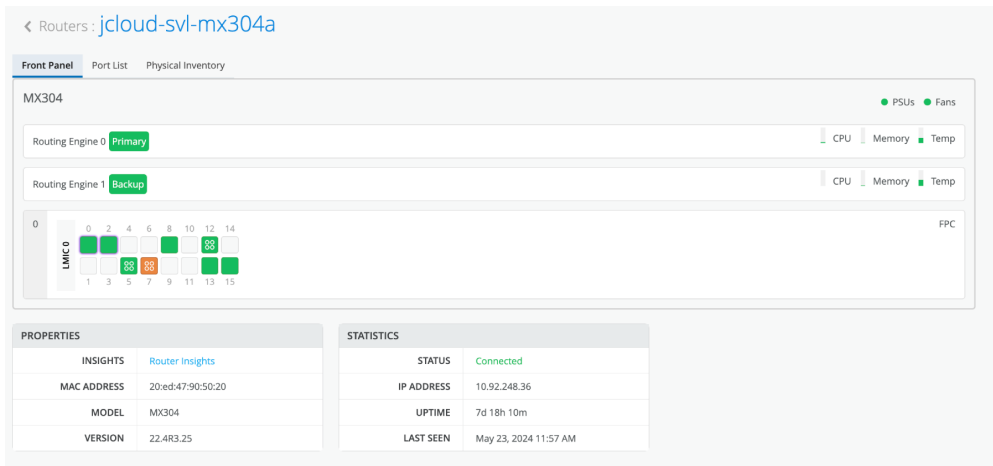


Figure 4: Router level insights

BGP Global

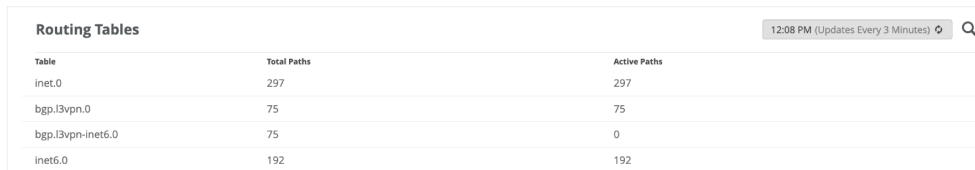


Figure 5: Routing – BGP view

BGP Peers

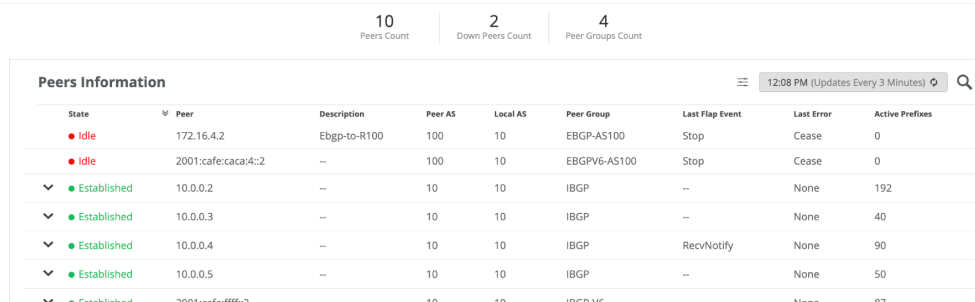


Figure 6: BGP Peer View

Day 2 and Beyond: AI-Driven Operations

Routing Service Level Expectations (SLEs). Gain operational visibility into the routing experience with SLEs for Juniper MX and ACX Routers. Aggregate router health KPIs, throughput anomalies, and interfaces metrics. SLEs help measure and manage networks for simplified troubleshooting and proactive anomaly detection.

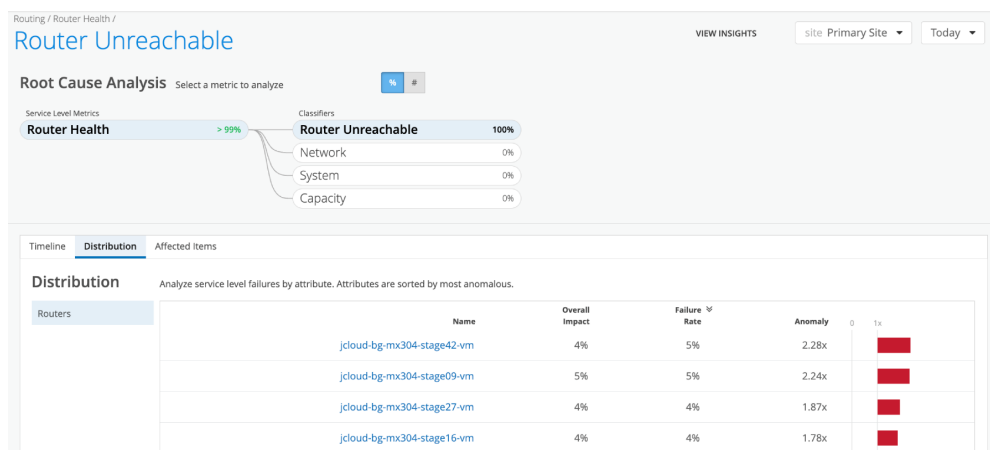


Figure 7: Juniper Mist Routing Assurance – Router SLEs

Marvis Virtual Network Assistant . Marvis leverages an LLM API to respond to user queries for technical documentation and other Juniper knowledge base data. The Marvis LLM interface will also cite resources for more information. This helps IT administrators get the necessary information almost immediately—ensuring the best user experiences possible.

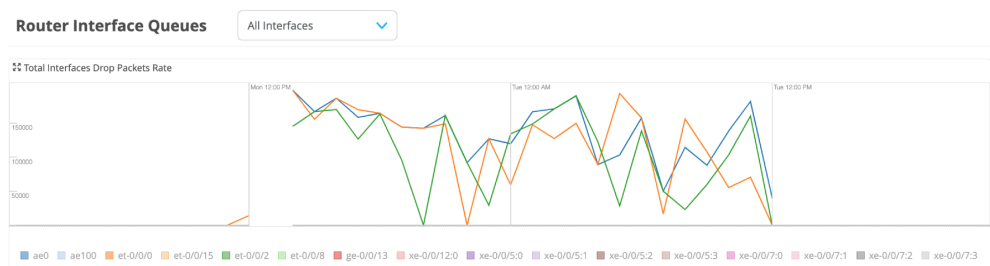


Figure 8: Interfaces queues: drops

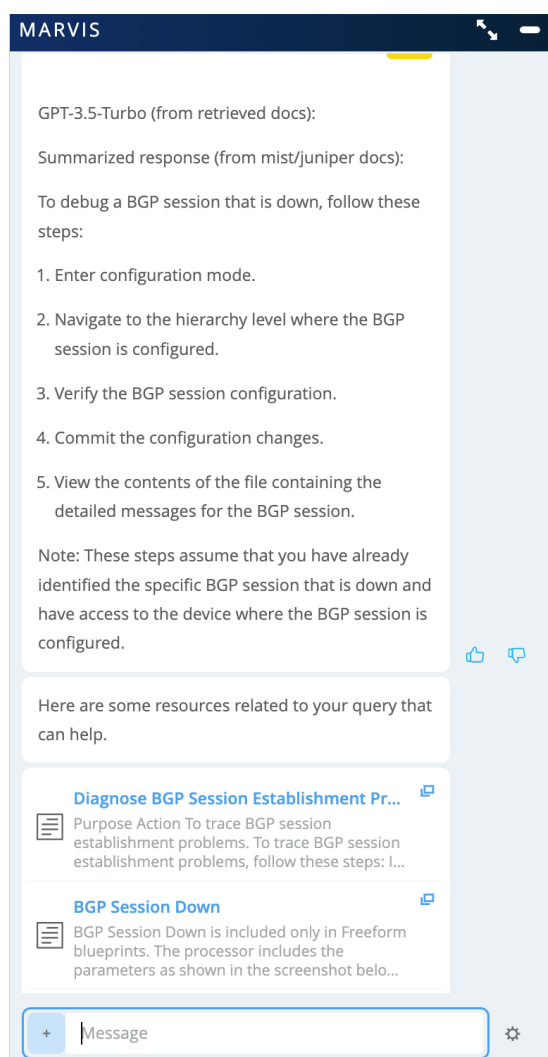


Figure 9: Marvis conversational interface

Network Insights. Routing Assurance includes a base analytics capability for analyzing up to seven days of data, simplifying the process of extracting network insights from data and analytics across your enterprise. Review your network throughput peaks to properly align your support resources.

Juniper MX and ACX Routers. The MX and ACX Routers are high-performance, access and aggregation/core layer routers designed for enterprise branch, campus, and [data center deployments](#). As the infrastructure foundation for the network of the next decade, the feature-rich MX and ACX Routers now deliver simple and secure connectivity at scale driven by Mist AI. The following MX and ACX Routers running Junos 20.4 and Junos Evolved 22.4 and beyond are supported with Routing Assurance:

- MX204
- MX304
- ACX7024
- ACX7024X
- ACX7100-23C
- ACX7100-48L

About Juniper Networks

Juniper Networks believes that connectivity is not the same as experiencing a great connection. Juniper's AI-Native Networking Platform is built from the ground up to leverage AI to deliver exceptional, highly secure, and sustainable user experiences from the edge to the data center and cloud. Additional information can be found at www.juniper.net or connect with Juniper on [X](#) (formerly Twitter), [LinkedIn](#) and [Facebook](#).

Corporate and Sales Headquarters

Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA

Phone: 888.JUNIPER (888.586.4737)

or +1.408.745.2000

www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240 1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands

Phone: +31.207.125.700

