

#### **Product Overview**

The Juniper Mist Premium
Analytics cloud service offers
network and security visibility
and business intelligence to
drive your digital transformation
journey. It provides insights into
your network and business
operations while overcoming the
complex challenges associated
with the influx of big data from
a multitude of networks and
clients. Use the service to:

- Empower IT and business teams with end-to-end network visibility to enable data-driven decision making
- Eliminate challenges of data silos, providing actionable insights across <u>wireless</u>, <u>wired</u>, and <u>WAN</u> networks
- Support your ongoing network and security optimizations

# JUNIPER MIST PREMIUM ANALYTICS DATASHEET

#### **Product Description**

Juniper Mist<sup>®</sup> Premium Analytics is an advanced, cloud-based analytics service that provides enterprises with end-to-end network observability. IT and line-of-business users can gain unique networking and location insights based on any combination of Juniper Mist Al-driven datasets. Simple dashboards make it easy to:

- Specify criteria and filters
- · Identify issues and trends
- Generate, schedule, and email customized reports

Premium Analytics is the only analytics service of its kind that stores up to 13 months (or more) of data. This feature extends observability of historical data beyond the 30 days available with the standard Juniper Mist analytics service, enabling users to perform long-term historical time series analyses of network, app, visitor, and employee behavior to enhance business decision making.

Premium Analytics helps IT professionals obtain insights across their entire network—wired, wireless, and WAN—to aid in planning their IT infrastructure, manage resources, gain insights into security events, and improve IT operations. Professionals in a range of vertical markets—including retail, healthcare, education, and hospitality—can use Premium Analytics to analyze long-term trends, visitor behavior, and zone movement. Additionally, Premium Analytics provides facilities managers with insights to help them optimize space and manage assets and occupancy.



Table 1: Premium Analytics service use case examples

#### **Features and Benefits**

## Wireless, Wired, and WAN Network Insights

To ensure that IT assets and controls meet the business expectations of your digital business, end-to-end network visibility, continuous monitoring, and actionable insights are critical. This involves not only identifying network infrastructure misconfigurations and issues, but also addressing deficiencies impacting applications, end users, and client devices.

With the Premium Analytics service, networking teams gain insights from client to cloud, allowing them to effectively identify and solve sub-par experiences. They can also use

client and traffic utilization data for better planning, resource management, and for improving public safety (see Table 1). Sample networking use cases include:

- Monitoring and behavior reports for applications, traffic, and clients
- Monitoring historic and average service-level expectations (SLEs) across wired, wireless, and WAN domains
- WAN visibility for link and application quality of experience
- Ingestion and reporting from Juniper and third-party network devices (not managed by <u>Juniper Mist Cloud</u> architecture)
- Insights on device OS and device manufacturers
- Traffic metrics on the basis of service set identifier (SSID), switch interfaces, or WAN zones
- Client access and authentication events, statistics, and trends
- Complete visibility into security events on the network

#### Gain Complete Visibility into Security and Network Access Events

In the world of security, having a clear view of what's happening on the network is essential to prevent attackers and other threats from infiltrating the network. Juniper Mist Premium Analytics' Security Assurance gives organizations the security insights they need with visibility into security and network access events within the Juniper Mist dashboard.

- Security Assurance helps security operations teams identify and respond to potential threats, reducing security risks and improving the organization's overall security posture.
- Access Assurance insights dashboards help network managers see connection trends and statistics for clients as well as access points (APs) and switches over time.

Juniper enables the integration of network and security domain—and provides an industry-first persona-based workflow response system—to enhance the user experience. Now, organizations can configure their security capabilities directly on the <u>Juniper Networks SSR Series Routers</u> and/or the <u>Juniper Networks SRX Series Firewalls</u> through the Juniper Mist framework.

With the help of these integrated dashboards, network operations and security teams can easily detect and highlight security events and connection issues. It effectively addresses threats and suggests audit actions to improve operational workflows. Benefits include:

- Accelerating the time to mitigate threats
- Improved agility
- Reducing operational costs by saving time and mitigating potential damage

Table 2: Dashboards for IT networking professionals—wireless, wired, and WAN

Networking Dashboards	
Wireless AP Insights	AP-specific insights for traffic and clients
Executive Summary: Wireless	<ul> <li>High-level summary wireless network metrics</li> <li>Performance overview information, including site-level SLE's, client count, and traffic trends</li> </ul>
RF Health and Utilization	<ul> <li>Channel utilization analytics for RF bands</li> <li>Interference, neighbor count, and co-channel metrics</li> <li>Filter by org, site and AP</li> </ul>
Wireless Client Events	<ul> <li>Organization-wide client-failure analysis</li> <li>Failure types and distribution by site, WLAN, AP, client type, and operating system</li> <li>Detailed failure analysis for DHCP, DNS, authorization, association, and roaming</li> </ul>
Wireless Client Sessions	<ul> <li>Client session trends and insights</li> <li>Session distribution views for top APs, WLANs, and client operating systems</li> <li>Guest session details, including registration data</li> </ul>
Wireless IDS	<ul> <li>Long-term storage of rogue and IDS (Intrusion Detection Services) events</li> <li>Filter by site, BSSID, and RSSI</li> <li>Trending and distribution views</li> </ul>
Wireless Network Insights (Figure 1)	<ul> <li>Organization-wide SLE and traffic trends</li> <li>Client distribution by device type, operating system, 802.11 protocols</li> <li>Traffic and applications insights by SSID and clients</li> <li>Busiest AP and SSID</li> </ul>
Wireless Site Comparison	Compare up to three sites or site groups for various wireless metrics, including SLE, client, traffic, and applications

Networ	Networking Dashboards			
Wired	Executive Summary: Wired	<ul> <li>High-level summary of wired network metrics</li> <li>Performance overview information, including site-level SLE's, client count, and traffic trends</li> </ul>		
	PoE Switch Details	<ul> <li>Detailed PoE information on switch and port basis</li> <li>Client information</li> <li>Power draw</li> <li>PoE device class</li> <li>PoE mode</li> </ul>		
	Sustainability Analytics	<ul> <li>Energy consumption insights on the wired network</li> <li>POE budget and consumption</li> <li>POE usage insights by site, switch, and ports</li> </ul>		
	Switch Insights	Switch-specific metrics for ports, traffic, and utilization		
	Wired Network Insights (Appendix Figure 1)	<ul> <li>Traffic metrics of wired networks by site, switch, port, and VLAN</li> <li>Traffic trends by switch, port, and VLAN</li> <li>Port utilization trends</li> <li>Switch SLE metrics</li> </ul>		
	Wired Site Comparison	Compare up to three sites or site groups for various wired metrics, including SLE, interfaces, traffic, and POE		
WAN	Security Assurance (Appendix Figure 2)	<ul> <li>Insights on IDP and URL events</li> <li>IDP and URL event trends</li> <li>Top IDP threats with source and destination IPs</li> <li>Top URL blocked events with source and destination IPs</li> </ul>		
	WAN Network Insights-SRX	<ul> <li>WAN SLE metrics for SRX Network</li> <li>Link metrics for organization-wide WAN links, including average and peak utilization, latency, and jitter packet loss</li> <li>Application distribution by users</li> <li>Traffic metrics by site, SRX, zone, and time</li> </ul>		
	WAN Network Insights-SSR (Appendix Figure 3)	<ul> <li>WAN SLE metrics for the SSR network</li> <li>Link metrics for organization-wide WAN links, including average and peak utilization, latency, and jitter packet loss</li> <li>Application distribution and trends</li> <li>Traffic metrics</li> </ul>		
Other	Access Assurance Insights (Figure 2)	Client and authentication statistics and trends Failed authentications distribution and trends Access Assurance event list		
	Audit	<ul> <li>Long term storage of audit logs</li> <li>Top actions by type</li> <li>Top actions by user</li> </ul>		
	Inventory	Organization-wide inventory report     Firmware and model details		



Figure 1: Top-level view of the Wireless Network Insights dashboard that includes organization-wide SLE and traffic trends; client distribution by device type, operating system, and 802.11protocols; traffic and applications insights by SSID and clients; and more

# Freemium and Premium Analytics in Juniper Mist

The Juniper Mist dashboard includes a freemium version of analytics as part of Juniper Mist Cloud services for <u>Wired Assurance</u>, <u>Wi-Fi Assurance</u>, and <u>Juniper Mist Indoor Location Services</u>. Data storage in freemium analytics is limited to 30 days. Juniper Mist Premium Analytics provides deeper data analysis and visibility, leveraging long-term (13 months plus) historical data.

Table 3: Wired, wireless, and WAN network insights - analytics feature comparison

Features	Basic	Premium Analytics
Networks insights on wired and wireless	Υ	Υ
Security Assurance: Rogues and honeypots	Υ	Υ
Client connections: Trend and counts	Υ	Υ
Application visibility from Juniper Mist Wireless	Υ	Υ
Queries (rank, list, trend, and counts)	Υ	Υ
Custom queries: Unique devices on multiple WLANs (trend and counts)	N	Υ
Average and historic service-level expectations beyond seven days	N	Υ
Trend reports for applications, traffic, and clients	N	Υ
Insights on device OS and device manufacturer	N	Υ
Traffic metrics based on SSID, switch, switch interfaces, or WAN zones	N	Υ
Access point ranking by clients and traffic	N	Υ
Wireless security threat distribution and rogue access point trends	N	Υ
Audit log reports for longer period	N	Υ
Inventory reports	N	Υ
WAN visibility for link QoE and application QoE	N	Υ

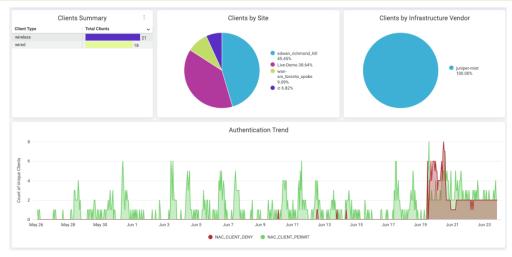


Figure 2: Top-level view of Access Assurance insights that includes client and authentication trends, failed authentications distribution and trends, and an Access Assurance event list.

For more networking dashboard examples, see Appendix A.

#### Line of Business Insights

Business insights, including customer and employee engagement, occupancy analysis, and proximity tracing, have become top priorities for digital transformation initiatives, especially in hybrid workforce environments. Whether analyzing retail traffic flows, space occupancy and utilization in the enterprise, optimizing staff operations, or conducting real-time reporting of congested areas, operations and real estate management teams can benefit from network data insights to drive decisions around staffing, product placement, real estate planning, and proximity tracing.

Premium Analytics combines user engagement and asset visibility location services built into the <u>Juniper Al-Native Networking</u>
<u>Platform</u> with services from technology partners to deliver fast access to business insights supporting requested analytics about customers and guests.

Enterprises and retailers that segment end users and subscribe to the user engagement or asset visibility service can gain clear insights about areas frequently visited by customers. For retailers, this information helps drive more interactions with associates and customers, ultimately leading to higher basket sizes. For other enterprises, these insights can enhance workspace utilization and improve employee engagement. Retailers can also use the digital platform to support industry best practices for cross-selling and omnichannel marketing and sales initiatives.

Real estate management teams can also leverage occupancy analytics from Premium Analytics to optimize their building and real estate portfolio management (see Table 4). Using long-term occupancy data, they can gain insights into how spaces are utilized, identifying peak usage times and underutilized areas. This enables more efficient allocation of resources, such as heating, cooling, and lighting, reducing operational costs and enhancing sustainability efforts.

Additionally, data-driven insights into tenant behavior and preferences can inform more strategic decisions regarding space renovations, reconfigurations and overall building use. By leveraging analytics, real estate managers can create smarter, more responsive, and cost-effective building environments.

Popular business analytics use cases include:

- Visitor segmentation and trends with dynamic categorizations
- Unique visitor trends with popular motion flows for user journey mapping and proximity tracing

Table 4: Line-of-business dashboards for engagement, occupancy, and proximity tracing

Line-of-business dashboards				
Location	Engagement Analytics (Figure 3)	<ul> <li>Visitor footfall metrics</li> <li>Loyalty visitor, one time visitor, passerby visitor</li> <li>Monthly and weekly trends of visitor footfalls</li> <li>Dwell time metrics and trends</li> <li>Zone ranking and zone movement analytics</li> </ul>		
	Occupancy Analytics (Figure 4)	<ul> <li>Occupancy and dwell-time details of sites, floors, and zones</li> <li>Zone ranking and heatmap</li> <li>Filter occupancy sources from Wi-Fi, BLE Tags, BLE App clients</li> </ul>		
	Occupancy Analytics – Users	<ul> <li>Counts unique users rather than unique devices for precise occupancy data in enterprise and educational environments where a single SSID is deployed across the network</li> <li>Eliminates duplicate counting of multiple Wi-Fi devices connected to a single SSID with unique usernames guaranteeing each user is counted only once</li> <li>Occupancy and dwell-time details of sites, floors, and zones</li> <li>Zone ranking for user count and dwell-time</li> <li>Occupancy heatmaps</li> </ul>		
	Occupancy Analytics by Zone	<ul> <li>Zone-specific occupancy insights</li> <li>Device trends, device visits, and dwell times</li> <li>Filter occupancy sources from Wi-Fi, BLE Tags, and mobile apps</li> </ul>		
	Proximity Tracing and Occupancy Compliance	<ul> <li>User journey map</li> <li>Proximity tracing filtered by engagement duration</li> <li>Filter by multiple input sources, including Wi-Fi, BLE, and tags</li> </ul>		

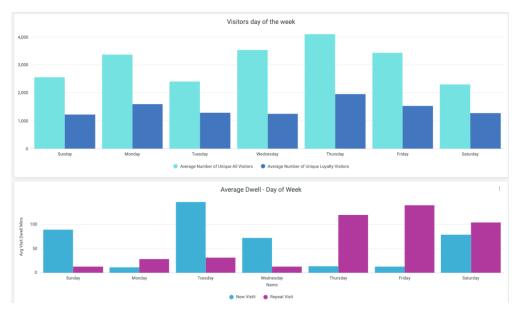


Figure 3: Top-level view of the Sample Engagement Analytics dashboard that summarizes loyalty, one-time, and passerby visitor footfall metrics, and provides monthly and weekly trends of visitor footfalls, as well as dwell-time metrics and trends, zone ranking, and zone movement analytics.

Table 5: Engagement analytics – analytics feature comparison

Features based on subscription	Basic	Premium Analytics
Visitor segmentation and reporting based on user-defined dwell times	Υ	Υ
Dwell time that includes trends and averages for predefined labels for visitor segmentation	Υ	Υ
Unique visitor trends based on predefined labels for visitor segmentation	Υ	Υ
Dwell and visits per site, floor, and department	Υ	Υ
Visitor segmentation between new and repeat based on a fixed, seven-day rolling window	Υ	Υ
Heat maps, including real time and historical replay of visits and dwell times	Υ	Υ
Visitor segmentation between new and repeat based on flexible and configurable time duration	N	Υ
Data segmentation and reporting based on dynamic aggregation of dwell times for visitor segmentation	N	Υ
Dwell time that includes trends and average for dynamically defined labels for visitor segmentation	N	Υ
Unique visitor trends based on dynamically defined labels for visitor segmentation	N	Υ
Ability to reprocess historical datasets based on changes in criteria	N	Υ
Popular motion paths, including traffic flows between zones	N	Υ

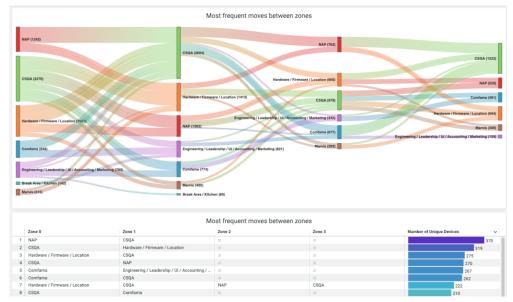


Figure 4: Sample Occupancy Analytics view of movement

Table 6: Occupancy analytics – feature comparison

Features based on subscription	Basic	Premium Analytics
Heat map of floor and zone occupancies based on preconfigured maximum capacity restrictions	Υ	Υ
Ability to customize timeframe and location sources	Υ	Υ
Occupancy trends over time	N	Υ
Zone ranking based on capacity and dwell time	N	Υ
User ranking based on dwell times	Ν	Υ

Table 7: Proximity tracing

Features based on subscription		Premium Analytics
Ability to rewind and replay the location history of individuals	N	Υ
Ability to identify users who were in close proximity to a selected individual	N	Υ
Ability to identify encounter duration	N	Υ
Ability to customize encounter duration and historic timeframes	N	Υ
Heat map of zone occupancies based on preconfigured maximum capacity restrictions	N	Υ

# **Ordering Information**

You can purchase Juniper Mist Premium Analytics directly through Juniper Networks or through one of our partners and resellers.

Please contact your Juniper account team or partner for licensing.

Have additional questions or looking for more information on how to buy Mist Premium Analytics? Set up a call with a sales expert at: https://www.juniper.net/us/en/how-to-buy/form.html.

## **About Juniper Networks**

Juniper Networks believes that connectivity is not the same as experiencing a great connection. <u>Juniper's Al-Native Networking Platform</u> is built from the ground up to leverage Al to deliver exceptional, highly secure, and sustainable user experiences from the edge to the data center and cloud. You can find additional information at <u>www.juniper.net</u> or connect with Juniper on <u>X</u> (formerly Twitter), <u>LinkedIn</u> and <u>Facebook</u>.

#### Appendix A: Networking dashboard showcase

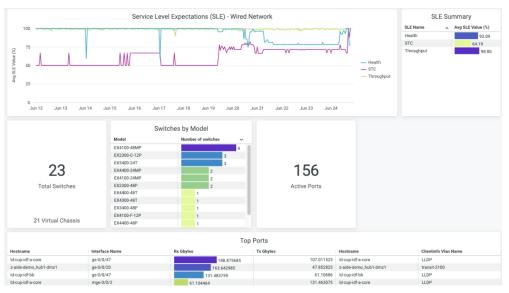


Figure A-1: Top-level view of Wired Network Insights dashboard that summarizes traffic metrics of wired networks by site, switch, port, and VLAN traffic trends by switch, port, and VLAN; port utilization trends; and switch SLE metrics

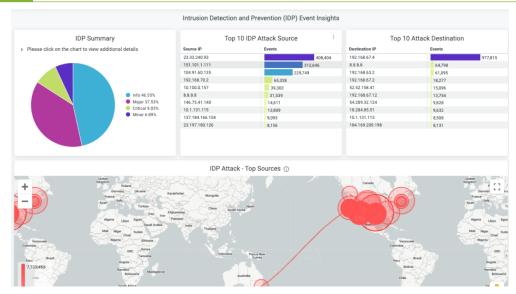


Figure A-2: Top-level view of the sample Security Assurance dashboard that provides insights on IDP and URL events, IDP and URL event trends, top IDP threats with source and destination IPs, and top URL blocked events with source and destination IPs.

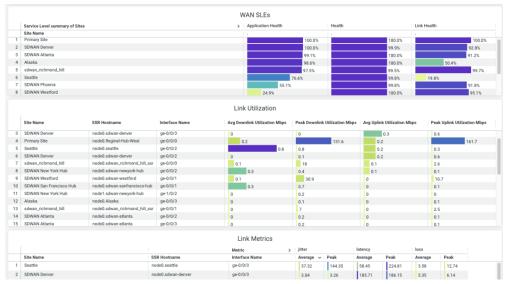


Figure A-3: Top-level of the WAN Network Insights-SSR dashboard that provides WAN SLE metrics for the SSR Network, link metrics for organization-wide WAN links, application distribution by users, and traffic metrics by sites, WAN edges, interfaces, applications, and more.

# **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** 

Driven by Experience

Copyright 2024 Juniper Networks, Inc. All rights reserved. Juniper Networks, the Juniper Networks logo, Juniper, and Junos are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners. Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

1000744-006-EN Oct 2024 9