RUCKUS AI™

AI-Driven Network Assurance and Business Intelligence Service

BENEFITS

- Intent-driven networking through IntentAI™
- AI-driven incident identification, prioritization, and remediation
- Accelerates network and client troubleshooting
- Helps IT teams improve the user experience
- Service Validation works with your RUCKUS network to automatically validate service levels

RUCKUS AI™ is a cloud service for network assurance and business intelligence. Powered by artificial intelligence (AI), the service gives IT comprehensive visibility into network operations, it accelerates troubleshooting and helps IT teams meet their network service level agreements (SLAs).

AI-DRIVEN NETWORK ASSURANCE

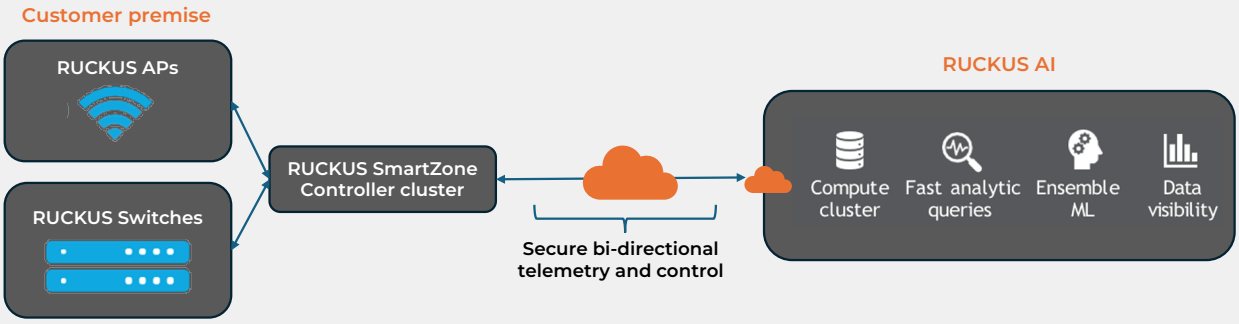
RUCKUS AI monitors the network for service-affecting issues around the clock! Once an incident is identified, RUCKUS AI prioritizes the incident based on its impact to the network. It then offers corrective actions to remediate the fault.

The service also delivers robust reporting and informative dashboards. Create custom dashboards and data visualizations with the Data Studio tool—and flexibly explore your network data warehouse with drag-and-drop ease.

Autonomous Networking with IntentAI

RUCKUS IntentAI is a network management framework focused on automation of functional objectives and goals, approved by the user, and delivered through an easy and intuitive interface. Each feature, or intent, presents binary choice with corresponding outcomes. The intents are explained in simple language, along with the potential tradeoffs for each. Once the user executes an intent, RUCKUS' AI engine takes over and manages the action for as long as it remains active. IntentAI learns the desired network behaviors and focuses on maintaining the optimal configuration to continuously meet required key performance indicators.

Benefits of IntentAI include significant simplification of the day-to-day network management through more powerful AIOps, and explainable AI (XAI) in simple-to-understand language and interaction. Furthermore, IntentAI focuses on learning the desired behaviors of the network and tailoring the actions to maintain those behaviors. With IntentAI, RUCKUS moves further toward autonomous network assurance, freeing up human resources and lowering operational costs.



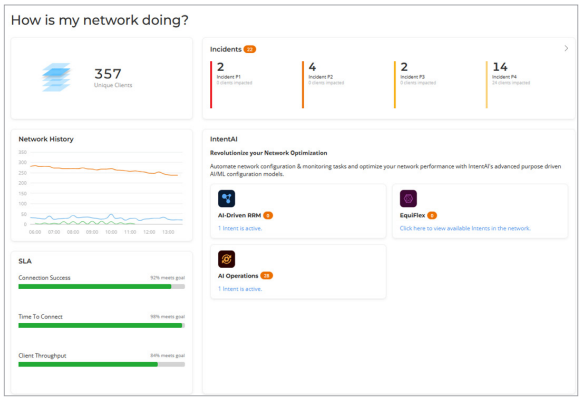


Figure 1. Autonomous Networking with IntentAI

Figure 2. Incident Detection & Prioritization

Incident Detection & Prioritization

RUCKUS AI uses AI to monitor the network for unusual behavior or potential issues. It automatically identifies service incidents related to both wired and wireless connectivity, performance and infrastructure that affect user experience. Identified issues are then classified by priority P1 through P4 depending on the severity of the issue.

The system provides details for each incident, including:

- Root cause and recommended action
- Affected areas (client operating system types, access point models, firmware versions, WLANs and more)
- Other impact details, including severity, client impact and duration.
- List of impacted clients
- Presentation of the underlying data that drives the incident.

RUCKUS AI dramatically reduces mean-time-to-identification (MTTI) and mean-time-to-resolution (MTTR) for service incidents. It can eliminate some helpdesk tickets by letting you address issues before they affect users. By addressing the root cause for one incident, you can avoid other incidents that might arise from that cause. Service providers can realize instant business value when level 1/2 helpdesk personnel can remediate complex network problems using RUCKUS AI.

Configuration change analysis

RUCKUS AI automatically monitors the impact of RUCKUS SmartZone™ software configuration changes on network performance. This features provides two 24-hour widgets which can be adjusted to the time frames to be analyzed. Standard KPIs are then updated to indicate the net effect before and after the changes were implemented. You can observe the effects of each change on a portion of the network before rolling it out more broadly. This helps to avoid fully rolling out changes that might have an adverse effect on network performance.

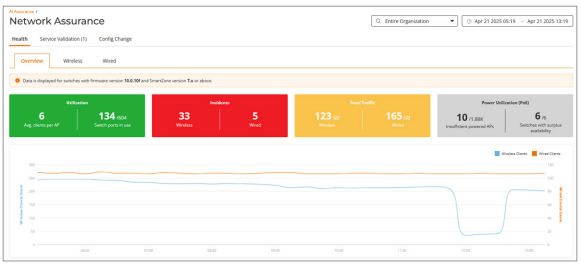


Figure 3. Network Health

Network Health

"Health" page provides users visibility to monitor network health, with an overview tab that provides a high-level summary view. Select other health monitoring tabs to view metrics in specific health categories: connection, performance, and infrastructure. Network health monitoring gives you instant visibility into metrics for both wired and wireless, lets the user define the service levels for those KPIs. For example, you might want to set the "time to connect" goal at five seconds—RUCKUS AI will tell you what percentage of the time the network meets that goal. The service lets you readily demonstrate to others in your organization performance to SLAs. You can also setup custom SLA and measure compliance of network values with custom thresholds.

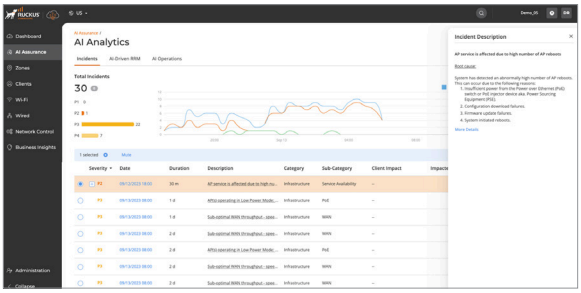


Figure 4. Powerful Client Troubleshooting

POWERFUL CLIENT TROUBLESHOOTING

With simple and flexible search and a holistic client troubleshooting page, RUCKUS AI gives you a complete picture of client experience for easy connectivity and user experience diagnostics, including:

- Successful, slow, and failed connections
- Disconnect events.
- Roaming events and failed roams
- Connection quality (RSSI, MCS, client throughput)
- Network incidents affecting users, with links to see incident details.
- Network pcap download for all failure events for detailed packet analysis.

Client troubleshooting is a powerful tool that helps you understand and address issues affecting specific clients on the network.

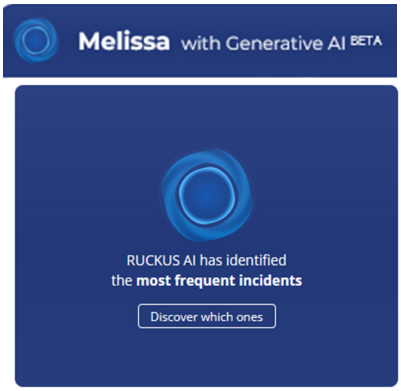


Figure 5. Melissa Virtual Assistant

MELISSA™ VIRTUAL ASSISTANT INFUSED WITH CHATGPT—YOUR OWN AI-POWERED VIRTUAL NETWORK ASSISTANT

RUCKUS AI includes a powerful AI-powered virtual network assistant called Melissa™ which has also been infused with chatGPT capabilities. Combining an intuitive interface with advanced natural language processing, Melissa determines the administrator's intent in posing a wide variety of inquiries and delivers highly insightful responses. IT teams save valuable time with ready access to information that helps them manage network operations—without the need for any coding.

BUSINESS INSIGHTS

RUCKUS AI also delivers valuable insights for business decisions with features such as Brand 360 that enables hospitality properties to monitor brand compliance scores. They can share the scores with ecosystem partners to help identify issues and make improvements quickly. With custom service level agreements, hotel operators can ensure that networks are available, reliable, and performing at their best for the end customer guests.

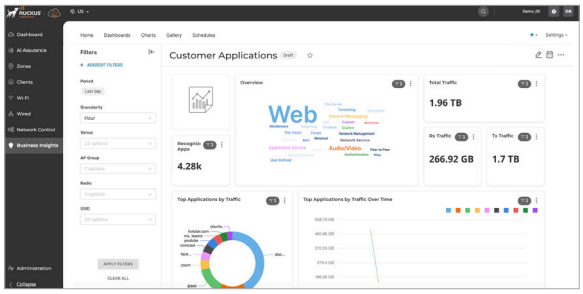


Figure 6. Data Studio

Data Studio

The RUCKUS AI Data Studio tool lets you create custom dashboards with multiple charts to dissect and analyze data from your network ecosystem. Drag-and-drop dashboard creation makes it easy to design views tailored to your needs. You can easily position and reposition dashboard tiles, edit tiles at will and toggle between different views.

Analyze and filter data by dozens of data sets (AP Hardware, AP, Applications, Client, Client Connection, Client Sessions, Controller and Switch Inventory). Data Studio puts your full network data warehouse at your fingertips so you can answer any number of network questions.

Prepackaged reports and dashboards

A wide variety of standardized reports provides visibility into network performance, traffic patterns, application usage and more. Summary views provide high-level information, and you can drill down to the level of individual network components and devices. Examples of standardized reports include:

- **Network**—traffic and client trends, top devices, top SSIDs, traffic distribution and more
- **Client**—reports by OS and device manufacturer, top clients by usage, client trends, session details and more
- **Inventory**—AP, switch and controller count, models, firmware, status and more
- **Application**—top apps and their usage trends, top app groups and usage, top ports and more
- **Device-specific reports**—complete visibility and usage reports for clients, APs, and switches

The service lets you download reports as raw data, a PDF file, or a CSV file. Forward the results to stakeholders inside or outside the organization.

Occupancy Analytics

The Occupancy page provides insights into space utilization within a facility, such as the most heavily used area or the predominantly least used area within the facility along with network metrics. It includes Utilization rate, total In-Site visitors, average dwell time for each site along with the set of clients.

STREAMING TELEMETRY WITH A MODERN DATA STACK FOR ADVANCED NETWORK ASSURANCE

RUCKUS AI is designed for the unique data profile generated by network devices. RUCKUS access points and switches transmit network health information to SmartZone controllers. On-premises controllers securely connect to the cloud and stream lightweight health KPIs and telemetry, providing end-to-end visibility over network health. The high-performance data stack ingests and processes the data to serve as the basis for queries, reports and baseline metrics.

APP EXPERIENCE – VIDEO CALL QUALITY OF EXPERIENCE

RUCKUS AI provides the user insights linked to application outcomes by scoring an application quality of experience. This is especially useful to monitor collaboration application traffic, such as video conferencing tools, over the network and drive to administrators—incident notifications and corrective action steps within their network infrastructure in order to improve the end user experience with various applications.

AUTOMATIC SERVICE VALIDATION

RUCKUS AI works with your RUCKUS network to automatically validate service levels without the need for overlay sensors. Access points act as virtual clients to identify possible service disruptions, often before they affect users. The system can perform a variety of tests, including:

- WLAN, LAN and WAN connectivity
- EAP, RADIUS, DHCP and DNS
- Ping, traceroute and speed test (upload/download)

IT SERVICE MANAGEMENT INTEGRATION

RUCKUS AI integrates closely with leading IT service management (ITSM) products from ServiceNow and Salesforce to initiate helpdesk tickets automatically and let IT get a head start in resolving them. This ensures that, when a service issue occurs, it is flagged for the helpdesk to address. Without such a system in place many issues that affect user experience go unreported.

CLOUD DEPLOYMENT FOR SCALABILITY AND EXPANDABILITY

As a completely hosted service, without the need for any on-site data collectors, RUCKUS AI relieves you of the burden of managing an in-house network intelligence platform. Leveraging on the latest software technologies in scalable cloud microservices, databases and real-time data pipelines, RUCKUS AI constantly learns and improves its AI models to provide maximum insights and optimization for your network.

Customers can designate a third party—such as a RUCKUS networking solution provider—to administer their account. Managed service providers (MSPs) can manage multiple end-customer RUCKUS AI accounts from within their own account.

SPECIFICATIONS

RUCKUS AI has an industry-unique combination of attributes:

- Automated data baselining and insights driven by ML / AI
- Health and SLA monitoring
- Powerful, holistic troubleshooting
- Automatic classification of incident severity
- Service validation without the need for an on-site data collector or overlay sensors
- Granular access to raw data with deep exploration and custom dashboards
- 12 months of storage with flexible data reporting

IntentAI	• Equiflex: Reduced management traffic through AI-managed probe responses • AI-Driven Radio Resource Management: RF channel planning & management to reduce interference	• AIOps: AI-managed standard daily network operations & management
AI-Driven Network Assurance and Analytics	• AI Network Recommendations • Configuration Change Analysis	• Automated Service Assurance and Validation • Network Health and KPI management
App Experience	• Video Call QoE	
Troubleshooting	• Client Health and Connectivity Troubleshooting • Granular event logs by device, client, network, or location	• Realtime streaming packet capture • Remote ping and traceroute
GenAI NLP	• ChatGPT-driven Melissa provides user assistance in natural language format	
Reporting and Data Studio	• Prebuilt reporting included for venues, network devices, clients, applications, networks, etc.	• Custom reporting and dashboards available via Data Studio
Administration	• Webhooks	
Privacy and Data Protection	• All traffic to and from the cloud is encrypted. • Only AP, switch, and client management traffic are sent to the cloud. • Client data traffic stays local (broken out to local LAN and sent through existing firewall) • All data stored in RUCKUS AI is encrypted at rest. • RUCKUS offers EU-located data centers for European customers.	• Latest security patches are automatically updated. • Role-based access control is provided for administrative privileges • Role-based access for administrative privileges • Admin can grant and revoke access to partners and RUCKUS support
Cloud Datacenter	• Service hosted in North America, Europe, and Asia on world-class IaaS provider infrastructure • Hosting Facility has acquired: ISO27001 certification • SSAE-16, SOC-1, SOC-2, SOC-3 certifications	• Stringent physical, data and data disposal security measures • Green carbon neutral facilities • Dedicated inter DC fiber connectivity
SLA	• 99.9% network availability does not include planned maintenance, including periodic software upgrades and other pre-announced activities	
Technical Support	• Easy access to RUCKUS One support 24x7 via chat/online/phone support • RUCKUS One support for Access Points included with SKU • RUCKUS One support for Switch requires additional support SKU purchase	• ICX switches have limited lifetime warranty, except for extended temp. switches • AP hardware warranty is covered separately with AP purchase (refer to AP datasheet)
Support	• 24x7 chat/web/phone support included for the term of the subscription	
RUCKUS AI SKUs	CLD-ANAP-1001: RUCKUS AI 1-year subscription for AP or ICX switch managed by SmartZone controller CLD-ANAP-3001: RUCKUS AI 3-year subscription for AP or ICX switch managed by SmartZone controller CLD-ANAP-5001: RUCKUS AI 5-year subscription for AP or ICX switch managed by SmartZone controller CLR-ANAP-1001: RUCKUS AI 1-year renewal for AP or ICX switch managed by SmartZone controller CLR-ANAP-3001: RUCKUS AI 3-year renewal for AP or ICX switch managed by SmartZone controller CLR-ANAP-5001: RUCKUS AI 5-year renewal for AP or ICX switch managed by SmartZone controllers	

www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

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