IT teams often lack the tools to ensure required network service levels in an environment of ever-increasing user connectivity demands and network complexity. Helpdesk tickets from user connectivity issues pile up while IT struggles to glean insight from network data. When service issues affect user experience, IT often lacks a way to identify root causes and define a course of action to fix the problem.

RUCKUS Analytics from CommScope is a cloud service that delivers robust reporting, informative dashboards and machine-learning-powered analytics for your RUCKUS network. The service aggregates raw data and automatically transforms it into meaningful insight into network operations. Machine-learning-powered analytics free you from manually reviewing network data and let you focus on other projects. Comprehensive network intelligence helps you to deliver on network service level agreements in support of users, devices and applications.

This detail from the main dashboard shows a circle packing chart. It provides a graphical representation of the network hierarchy, with color coding that indicates where network incidents have occurred. You can easily zoom in for a closer view by double clicking on an area of the chart.
The service scales to support the largest deployments, expanding capacity transparently to meet your requirements. RUCKUS Analytics supports SmartZone™ 5.1.2 and higher.

RUCKUS Analytics has an industry-unique combination of attributes:

- Automated data baselining and machine-learning-driven insights
- Health and SLA monitoring
- Powerful, holistic troubleshooting
- Automatic classification of incident severity
- No requirement 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

**Streaming Telemetry with a Modern Data Stack for Advanced Analytics**

RUCKUS Analytics is designed for the unique data profile generated by network devices. On-premises controllers securely connect to the cloud and stream lightweight health KPIs and telemetry. The high-performance data stack ingests and processes the data to serve as the basis for queries, reports and baseline metrics.

**Network Health Monitoring**

The service lets you easily 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 like AP service uptime, time to connect, connection success rate, client throughput and more. You define the service levels that you want to measure against. For example, you might want to set the “time to connect” goal at five seconds—RUCKUS Analytics will tell you what percentage of the time the network meets that goal. The service lets you not only monitor—but also readily demonstrate to others in your organization—performance to SLAs.
Incident Analytics Powered by Machine Learning

RUCKUS Analytics enables machine-assisted proactive networking for your RUCKUS deployment. It automatically establishes a normal range of behavior for each network element, without requiring any input from IT. Then it uses machine learning to automatically identify service incidents related to connectivity, performance and infrastructure that affect user experience. IT administrators can view incidents by type, severity and impact.

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

Advanced client troubleshooting lets you investigate and resolve issues that have impacted a specific client on the network.

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.
Customizable Dashboards with Data Explorer

The RUCKUS Analytics Data Explorer tool lets you create customized dashboards 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 dimensions—including time, device type, traffic type, application, AP group, controller, access point, band, SSID and more. Use multiple visualization methods to view your data, including pivot tables, line charts, bar charts, sunbursts, sankey diagrams, stacked charts and heat maps. Data Explorer puts your full data warehouse at your fingertips so that you can answer any number of network questions.

Cloud Deployment for Scalability and Expandability

As a hosted service, RUCKUS Analytics relieves you of the burden of managing an in-house network analytics platform. Because the system stores data in the cloud, capacity is virtually limitless and expands instantly as your network environment generates more data. You don’t have to worry about running out of capacity, forecasting disk utilization or figuring out when to add resources. RUCKUS Analytics does that for you transparently using containers and microservice orchestration. The software does not require an on-site data collector.