

RUCKUS One

Al-driven converged network assurance, service delivery and business intelligence platform



RUCKUS One

- · Unified converged network management
- Al-driven network assurance
- AlOps to automate IT operations intelligently
- Secure network access and policy management
- Service catalog

RUCKUS One is an Al-driven network assurance and business intelligence platform that enables you to easily manage a converged multi-access public and private enterprise network, make better business decisions, and deliver exceptional user experiences. With flexible subscription, flexible deployment models, RUCKUS One enables you to deploy future-proof networks simply, reliably, securely and at cloud-scale.

UNIFIED CONVERGED NETWORK MANAGEMENT

RUCKUS One takes the complexity out of deploying and managing your multi-access public and private enterprise network. (Wi-Fi and wired). Intuitive, intent-based workflows enable expedited provisioning, management, and control of multiple access networks across multiple sites via a single pane of glass. Configure once, deploy everywhere model makes it simple and intuitive to provision and manage your network with speed and accuracy. Native mobile app lets you provision, manage, and monitor the whole network from anywhere, anytime.

AI-DRIVEN NETWORK ASSURANCE AND AIOps

Using advanced AI, RUCKUS One gives you the troubleshooting tools to react quickly to service-affecting issues and to stop network anomalies from rising to the service-affecting level. It classifies incidents by severity, so you know where to focus first. It not only identifies and surfaces incidents that are already service affecting but also provides root cause analyses and specific recommendations for resolving such incidents. Built-in AlOps functionality seamlessly combines big data, machine learning and visualization to intelligently automate IT processes. RUCKUS One deploys AI to deliver recommendations to improve performance metrics, key performance indicators (KPIs), and the user experience. Simply put, RUCKUS One enables you to meet SLAs that your business demands.



Figure 1

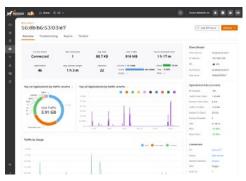


Figure 2



Figure 3



Figure 4

EXCEPTIONAL END USER EXPERIENCES

RUCKUS access points are known for exceptional Wi-Fi performance in the most challenging network environments. The low-latency, non-blocking architecture of multigigabit RUCKUS ICX switches ensures excellent throughput for the most demanding applications. RUCKUS One lets you address the end user experience challenge from both angles: Industry-leading Wi-Fi APs and multigigabit ICX switches give you a rock-solid foundation, machine learning and AI take care of the rest.

RUCKUS ONE HIGHLIGHTS

HIGH PERFORMANCE WI-FI 6E/6 (802.11ax) AND 802.11ac APs

- Patented BeamFlex® and ChannelFly® technologies in RUCKUS APs deliver better performance in challenging RF environments (high client density, high interference, and/ or high loss)
- Al-driven Radio Resource Management (RRM) minimizes co-channel interference by jointly optimizing Wi-Fi channel and channel width
- Superior capacity and coverage than competitive solutions (30% to 50% more clients supported per AP) lower total cost of ownership
- · Automatic client load balancing and band balancing ensure QoS for all clients
- SmartMesh, enabled with a click on the RUCKUS One UI, reduces cabling and installation costs

SIMPLE, SECURE AND SCALABLE FIXED FORM-FACTOR RUCKUS SWITCHES

- · Zero-touch deployment and configuration
- · Upgradable, flexible architecture
- · Industry-leading price/performance
- · Unique stacking capabilities simplify management
- · Switch stacking creation and management
- Multigigabit, high capacity power over ethernet switching enables next generation wireless deployment

CLOUD-NATIVE MICROSERVICES ARCHITECTURE

- Modern microservices architecture-based, event-driven RUCKUS One delivers superior scalability, availability, and better response times.
- Loosely coupled architecture enables rapid deployment and shorter release cycles thereby resulting in faster delivery of new features.

BUILT-IN SERVICE CATALOG

A built-in service catalog featuring services from RUCKUS Networks enables IT to easily extend the platform at the click of a button. This service catalog will feature a variety of services such as but not limited to:

- · Network connectivity
- security
- productivity
- industry specific solutions





Figure 5



Figure 6

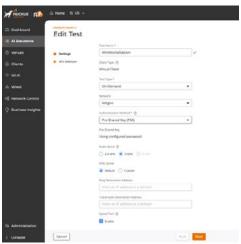


Figure 7



Figure 8

INTEGRATED SECURE NETWORK ACCESS AND POLICY MANAGEMENT

- Secure network access for every user, every device, on any network.
- Complete support for BYOD, guest, and IT-owned devices—including headless and IoT devices.
- Complete visibility and control over devices on the network via integrated policy management
- Security and network services at the edge to ensure more bandwidth, lower latency, higher fault tolerance, flexible deployment & runtime model, tighter security, and lower cost.

RESTful APIs

With a complete set of RESTful APIs, IT can automate repetitive network management tasks, deploy solutions programmatically, and build custom dashboards to easily meet the needs of key stakeholders. Open APIs also enable the customer to easily integrate RUCKUS One with external solutions to deploy bespoke/custom multi-vendor solutions.

TIERED SUBSCRIPTION LICENSING MODEL

RUCKUS One delivers a flexible subscription model with tiered subscription levels - Essentials and Professional - that enable customers to adopt features aligned with their business needs. RUCKUS One Essentials comes with everything needed to operate an optimized, scalable network efficiently and effectively. RUCKUS One Professional includes all the great features from Essentials and uplevels the platform with Al Assurance, longer term trend analysis and data retention, and easy to understand Al recommendations that make deploying and operating a world class network a breeze. Additional features will continuously be incorporated at both the Essentials and Professional levels, combining capabilities from across the RUCKUS portfolio into a single platform.

INTUITIVE UI AND INTENT-BASED WORKFLOWS

- Single-pane-of-glass web UI provides centralized visibility and network control across multiple venues and deployed technologies
- Real-time and historical client information, network health and network usage trends at a glance
- Intuitive UI makes management easy for administrators, reducing dependence on specialized IT
- · Wizard-guided, intent-based workflows save time on everyday tasks

REDUCED UNPLANNED DOWNTIME

- · Al-enabled detection and prioritization of complex network issues without IT intervention
- ML-powered network intelligence enables troubleshooting with speed and precision
- End-to-end client to AP to switch visibility and trace routing enable IT to quickly detect and react to potential user experience degradation
- Instant notification of network status via SMS, mobile app push notification, or email



EASY, FLEXIBLE GUEST AND EMPLOYEE NETWORK SETUP

- · Self-help or sponsored guest WLANs
- · Customized, branded captive portal for guests
- Guest captive portal can be customized in 20+ languages
- Integration with RUCKUS validated third-party captive portal solutions
- Multiple options to secure guest networks: Social login, SMS, email, click-through, passcode
- Secure access using PSK, DPSK, Cloudpath or 802.1X with AAA

NATIVE MOBILE APP

- Provision, monitor and manage networks using the RUCKUS One mobile app
- Push notifications to alert you of network issues or changes
- Scan network device barcodes with your camera to register devices
- Set up and configure new employee and guest networks
- Customize captive portal messages and images on the go

BUSINESS INSIGHTS REPORTING AND ANALYTICS

- Industry specific KPI reports and customizable dashboards via Data Studio
- Extensive report options, including traffic reports (by venue, AP, switch, SSID, radio), application visibility and unique clients
- Up to 12 months of stored data to support long-term trending analysis

AUTOMATIC SERVICE VALIDATION

- 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)

NETWORK HEALTH MONITORING

- The service automatically monitors network health providing a high-level summary view.
- Delivers metrics in specific health categories: connection, performance and infrastructure.
- · Provides instant visibility into metrics like AP

- service uptime, time to connect, connection success rate, client throughput and more.
- Define your own SLAs and measure against them.

POWERFUL CLIENT TROUBLESHOOTING

With simple and flexible search and a holistic client troubleshooting page, RUCKUS One 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:

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



ADDITIONAL FEATURES AND SPECIFICATIONS

High Performance Networking	 RUCKUS One supports a wide range of indoor, outdoor, and specialty RUCKUS Access Points RUCKUS One supports high speed, low latency ICX switching from wiring closet to core 	Easy-to-configure, secure and reliable mesh networking
Switch management	Management via API, CLI, or RUCKUS One UI	Automatically detect member switch addition, removal and replacement
Network devices supported	 See https://www.ruckusnetworks.com/cloud-supported-network-devices for a list of supported devices Wi-Fi 5 and 6/6E APs ICX 7xxx and 8200 Series switches Requires FastIron ICX 8.0.90d or later 	
Al-Driven Network Assurance and Analytics	Al Network Recommendations Automated Service Assurance and Validation	Network Health and KPI management Client Health and Connectivity Troubleshooting
Service Catalog	 Easily deploy services across multiple venues with service catalog RUCKUS services include: captive portal, DPSK, DHCP, syslog, snmp, etc. Future expansion includes delivery of 3rd party services. 	
Zero-touch device provisioning	 Zero-touch AP provisioning and bulk addition Zero-touch switch deployment Scheduled, automatic firmware updates Per venue AP firmware control Per switch/switch stack firmware control 	
Dynamic Pre-Shared Key (DPSK)	 Automatically generate and provision DPSKs at scale DPSK supports MAC binding or unbound configuration Up to 50 MAC addresses bound to a single DPSK Unlimited MAC Addresses supported with unbound DPSK 	Easy DPSK management
Native Mobile App	 Easily scan to onboard APs and Switches Simple provisioning of common tasks for network devices Remotely monitor network and client status 	Remotely troubleshoot and test network connectivity Create and share Guest Passes and DPSKs with QR Code support
Troubleshooting	 Client connectivity diagnostics Granular event logs by device, client, network, or location 	Realtime streaming packet captureRemote ping and traceroute
Reporting and Data Studio	Prebuilt reporting included for venues, network devices, clients, applications, networks, etc.	Custom reporting and dashboards available via Data Studio
Rich API capabilities	 Easily manage and deploy networks at scale using RESTful APIs Automate common or complex tasks. All UI features supported via API. 	 Full API documentation available in app Postman and Python collections available via github
Partner Delegation for VAR support	Easily delegate management support to Authorized RUCF	KUS Reseller



ADDITIONAL FEATURES AND SPECIFICATIONS

Security, Privacy, and Data Protection	 All Client traffic is switched locally. Only control and management traffic is sent to RUCKUS One. All control traffic to/from RUCKUS One is encrypted in transit. All data stored in RUCKUS One is encrypted at rest. RUCKUS One leverages role based access for administrative privileges. Multi-factor authentication for administrative privilege is supported. 	
Cloud Datacenter	 Service hosted in North America, Europe, and Asia on world-class laaS 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) 	
RUCKUS One SKUs	CLD-ESNT-APSW-REC1 Essentials AP/Switch Device 1-Year for End Customers CLD-ESNT-APSW-REC3 Essentials AP/Switch Device 3-Year for End Customers CLD-ESNT-APSW-REC5 Essentials AP/Switch Device 5-Year for End Customers CLD-ESNT-APSW-EDU3 Essentials AP/Switch Device 3-Year for Education CLD-ESNT-APSW-EDU5 Essentials AP/Switch Device 5-Year for Education CLD-PROF-APSW-REC1 Professional AP/Switch Device 1-Year for End Customers CLD-PROF-APSW-REC3 Professional AP/Switch Device 3-Year for End Customers CLD-PROF-APSW-REC5 Professional AP/Switch Device 5-Year for End Customers	
	CLD-PROF-APSW-EDU3 Professional AP/Switch Device 3-Year for Education CLD-PROF-APSW-EDU5 Professional AP/Switch Device 5-Year for Education CLD-PROF-APSW-MSP1 Professional AP/Switch Device 1-Year for MSP CLD-PROF-APSW-MSP3 Professional AP/Switch Device 3-Year for MSP CLD-PROF-APSW-MSP5 Professional AP/Switch Device 5-Year for MSP CLD-R1-TMP090-REC RUCKUS One Trial 90-Day for End Customers CLD-R1-TMP090-MSP RUCKUS One Trial 90-Day for MSP	



RUCKUS One Subscription Tiers

RUCKUS One Essentials	RUCKUS One Professional
Wired and Wireless network management	All the Features of Essentials PLUS:
Dynamic Preshared Keys	Service Validation
Custom Captive Portal	Video QOE
Client Troubleshooting	• 12 month Data Studio
Al Incidents and Insights	
Al Health and Custom SLAs	
Built in Reporting	
• 1 month Data Studio	
Service Catalog	

A PARTNER AND PLATFORM FOR THE FUTURE

RUCKUS One is our platform for innovation—with planned support of breakthrough multi-access public and private network assurance and continued advances in management automation. Our open architecture also allows us to integrate a wide variety of complementary third-party services that enhance the value of your network and provide greater user insight. We're working on every level—on the ground and in the cloud—to support your business initiatives.

About RUCKUS Networks

Open API support

RUCKUS Networks builds and delivers purpose-driven networks that perform in the demanding environments of the industries we serve. Together with our network of trusted go-to-market partners, we empower our customers to deliver exceptional experiences to the guests, students, residents, citizens and employees who count on them.





www.ruckusnetworks.com

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

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