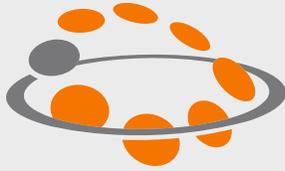


RUCKUS® Unleashed Multi-Site Manager

Manage unleashed networks across multiple sites



BENEFITS

MANAGE UNLEASHED AT MULTIPLE SITES WITH EASE

Manage your Unleashed networks and ICX switches deployed at multiple locations from anywhere using the intuitive, easy-to-understand web interface.

KEY INSIGHTS AT YOUR FINGERTIPS

Gain near real-time insights about your connected access-points (APs), switches and clients, map view of networks, and recent network activity from a customizable dashboard. In addition, create customized alerts to stay informed about ongoing events in the network.

ACCESS ANY SITES WITH SINGLE SIGN-ON

Get into the Unleashed dashboard of any individual site securely without logging again into the individual site.

PERFORM ADMINISTRATIVE TASKS EFFORTLESSLY

Perform key administrative tasks such as upgrading Unleashed networks, creating role-based access, managing SSL certificates with a click of the mouse.

BRING UP NEW UNLEASHED SITES IN MINUTES

Create a database backup file with all the configuration information for a site. Replicate the network at a different site leveraging the 'cookie-cutter' backup file. Also, restore a site in minutes in case of a disruption at any location.

SIMPLE YET SCALABLE

Manage up to 1000 locations or 10,000 APs. Growing even more? Move up to a controller- or cloud-based deployment with your existing Unleashed APs.

CREATE VARIETY OF REPORTS

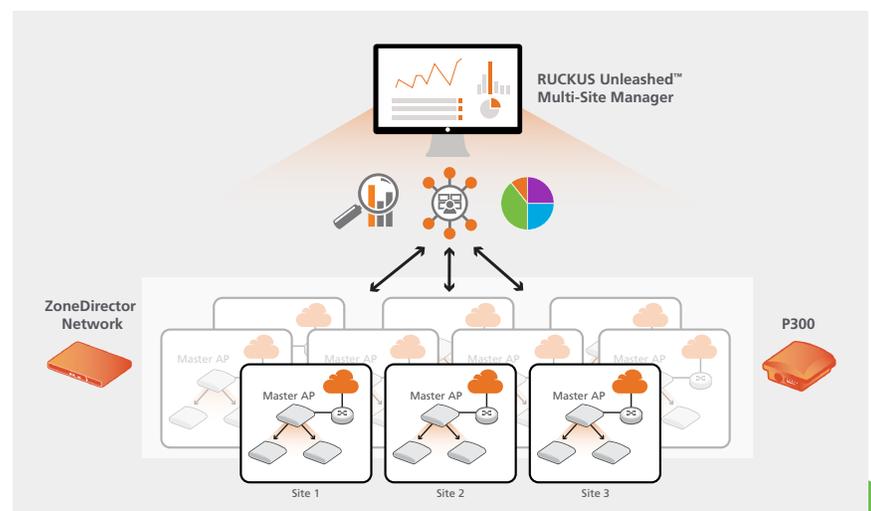
Create detailed and customizable reports about AP, WLAN, client connectivity trends, rogue APs or mesh changes for a specified time.

Organizations need fast, reliable, always-on Wi-Fi for dozens or even hundreds of devices. At the same time, most organizations don't have the time to wrestle with complex configurations and installations at each of their locations. In addition, they need a way to easily manage Wi-Fi networks and switches across all their locations.

RUCKUS Unleashed is a high-performance, simple-to-setup, easy-to-manage and affordable portfolio of access points (APs). Unleashed APs are designed for locations with up to 50 APs/1,024 concurrently connected clients per deployment.

RUCKUS Unleashed Multi-Site Manager is an intuitive and easy-to-use software for managing Unleashed networks, ZoneDirector networks and P300 devices deployed across multiple locations. You can manage up to 1000 Unleashed networks or 10,000 APs and 1,000 ICX switches. Unleashed Multi-Site Manager simplifies deployment, monitoring and management of geographically dispersed Unleashed networks.

Unleashed Multi-Site Manager provides a 'single pane of glass' view of all the Unleashed networks and ICX switches. Unleashed Multi-Site Manager enables administrators to perform remote monitoring, centralized management and detailed reporting of all Unleashed networks from an intuitive web interface.



Manage Unleashed networks, ZoneDirector networks and P300 devices in multiple locations

THREE PILLARS OF UNLEASHED MULTI-SITE MANAGER

Monitoring	Reporting	Management
<ul style="list-style-type: none"> • Overview of all the Unleashed sites on Dashboard • Customized alerts and alarms • Detailed Client or AP insights • Public API support* 	<ul style="list-style-type: none"> • Create a wide variety of reports <ul style="list-style-type: none"> – AP – WLAN • Rogue APs and more • Schedule and device rich reports <ul style="list-style-type: none"> – RSSI – PCI – SLA and more 	<ul style="list-style-type: none"> • Manage Licenses • Manage ICX switches • Manage Licenses • Role Based Access • Backup and Restore to deploy multiple sites • Edit WLANs** • Edit Tasks

Single pane of glass Visibility and Management of Unleashed networks, ZoneDirector networks and P300 devices deployed across multiple locations

* Public API support for data collection

** Edit WLAN SSID name and PSK information

Customizable dashboard

REMOTE MONITORING

- Gain near real-time insights about your connected access-points (APs), switches and clients, map view of networks, and recent network activity from a customizable dashboard.
- Create customized alerts to stay informed about ongoing events in the network.
- Drill down into AP-level or client-level monitoring to get detailed visual insights about the traffic, AP-Client association and mesh view.
- Get into the Unleashed dashboard of any individual site securely with the single sign-on without logging again into the individual site.

CENTRALIZED MANAGEMENT

- Manage your Unleashed networks deployed at multiple locations from anywhere using the intuitive, easy-to-understand web interface.
- Create a database backup file with all the configuration information for a site. Replicate the network at a different site leveraging the 'cookie-cutter' backup file. Also, restore a site in minutes in case of a disruption.

- Perform key administrative tasks such as editing WLAN info, upgrading APs and switches, creating role-based access, creating SSL certificates with a click of the mouse.
- Register and manage RUCKUS P300 devices—point-to-point/multipoint bridge for long range backhaul

DETAILED REPORTING

- Create detailed and customizable reports about AP, WLAN, client connectivity trends, rogue APs or mesh changes for a specified time in a clearly understandable format.
- Schedule and derive rich reports on RSSI, PCI, resource monitoring and SLA.

Unleashed Multi-Site Manager can manage ZoneDirector (ZD) based networks in addition to Unleashed networks and ICX switches.

The screenshot displays the 'AP' management page in the Ruckus Unleashed Multi-Site Manager. The interface includes a sidebar with navigation options like Dashboard, Devices, Tasks, Reports, AP, WLAN, Client, Rogue, Saved Reports, Administration, System, and System Info. The main content area shows a table of APs and a bar chart for traffic analysis.

Name	MAC Address	Controller Name	Serial Number	IP Address	IPv6 Address	External IP	Model	Last Seen	Location	Software
RuckusAP	0c14:d5:13:35:60	Freddy_r720	921703000040	192.168.197.80		192.168.197.80:12225	r720	Apr. 25 2019 16:40:35		200.7.10.2.339
R720-DVT-Club	0c14:d5:13:38:10	corporate-network1	921703000083	10.223.19.28	fc00::1	10.223.19.28:12223	r720	Apr. 25 2019 16:35:57		10.1.2.0.210
R510FQ	0c14:d5:1c:91:50	Kenneth-Unleashed-T310s-2000.a	501602016840	10.223.87.57		10.223.87.57:12225	r510	Apr. 25 2019 16:29:14		200.7.10.102.64
RuckusAP	18:4b:0d:1e:1f:60	Freddy_20060310	361803000388	192.168.15.50		192.168.15.50:12225	l310d	Apr. 25 2019 16:42:40		200.6.10.1.312
DVT-LAB-7982-Mesh	2c:e6:cc:06:16:60	corporate-network1	2813030000438	10.223.18.123	fc00::1	10.223.18.123:12223	r7982	Apr. 25 2019 16:36:04	DVT-LAB	10.1.2.0.210
RuckusAP	34:8f:27:18:83:70	Freddy_e510	401706000037	192.168.11.50		192.168.11.50:12225	e510	Apr. 25 2019 16:39:06		200.7.10.102.64
K-E510	34:8f:27:18:89:00	Kenneth-Unleashed-T310s-2000.a	421706000041	10.223.87.56		10.223.87.56:12225	e510	Apr. 25 2019 16:29:14		200.7.10.102.64
T310s-K	34:5a:9f:1d:60:60	Kenneth-Unleashed-T310s-2000.a	421703004597	10.223.87.58		10.223.87.58:12225	l310s	Apr. 25 2019 16:29:14	China	200.7.10.102.64
RuckusAP	44:1e:98:21:48:71	Kenneth-M510	941802001249	11.12.0.1		11.12.0.1:12225	m510	Apr. 25 2019 16:32:42		200.7.10.102.17
RuckusAP	74:3e:2b:2a:5c:w0	Freddy_T710mlab	941604805569	192.168.12.50		192.168.12.50:12225	l710	Apr. 25 2019 16:37:35		200.7.10.102.64

Below the table, a bar chart titled 'Top 10 APs' Traffic' shows traffic volume for various APs. The Y-axis represents Traffic (Byte) from 0 to 1,000M. The X-axis lists AP MAC addresses. The chart shows Tx (blue) and Rx (black) traffic for each AP.

KEY FEATURES

Dashboard

Dashboard provides a near real-time view of all the connected APs, ICX switches, clients and distribution of client OS. It also presents map view of all the Unleashed networks and list of recent events. All the information is color coded to quickly understand connectivity status and number of networks, APs or clients connected.

Single sign-on

Devices tab on the home page provides a high-level overview of all the connected Unleashed networks and ICX switches. Drill down into individual Unleashed networks without worrying about the need to know each network's credentials with the single sign-on access.

Upgrade your networks

Schedule an upgrade of all your devices across the locations easily. You can also create groups of devices and plan upgrades of groups.

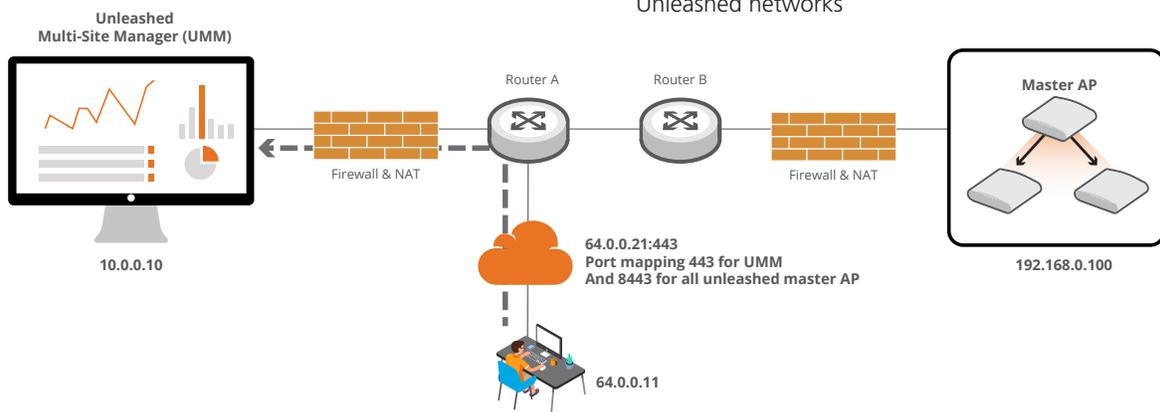
Public APIs

Integrate third-party applications for data management. You can currently access data collection and edit the SSIDs to change name and PSK.

NAT Traversal

Access all the Unleashed networks as a central management system. SSH tunnels are established between Unleashed Multi-Site Manager and the APs behind the NAT server.

- Customized Dashboard View settings
- Single sign-on access to Unleashed networks
- Trending reports and customized graphs such as bandwidth utilization per application or per user, AP airtime utilization and the APs with the most associated clients
- Service level agreement graphs and reports that include percentage uptime for AP groups and specific clients, backhaul uptime and client potential throughput
- NAT traversal
- Create custom device groups. Perform administrative tasks for a group.
- Geographic representation of devices on the networks using Google maps
- Multi-tiered management access (RBAC)
- Secure access with remote SSL
- Client throughput data such as connectivity throughput, connectivity status, signal quality, etc.
- Connection and association reports
- Audits of user actions and system logs
- Unleashed Multi-Site Manager is decentralized from the Unleashed networks



NAT Traversal support

Name	Member Count	Serial Number	Connection	Management IP	IP Address	Model
Ruckus-Unleashed	24 0 1	un032160220547201	●	10.11.32.44	10.11.46.129:443	Unleashed
Sunnyvale1	7 0 0	un043150360299801	●		172.18.126.12:443	Unleashed
Sunnyvale2	1 0 6	un43160450742915C	●		172.18.42.110:443	Unleashed
Ruckus-Unleashed	22 0 3	un24170200312315C	●		10.112.0.10:443	Unleashed

Snapshot of all networks

MINIMUM SYSTEM REQUIREMENTS

Here is a guidance of system requirements for installing Unleashed Multi-Site Manager software.

Up to 80 Unleashed networks with a total of 2,000 APs Up to 300 Unleashed networks with a total of 600 APs	
CPU	• 4 core processor/3.3 GHz
Memory	• 8 GB
Hard Drive	• 300 GB
Purge Policy	• 7 days
O/S	• Red Hat Linux Enterprise Edition 6.5 or higher • CentOS Release 6.5 or higher

Up to 400 Unleashed networks with a total of 10,000 APs Up to 1,000 Unleashed networks with a total of 2,000 APs	
CPU	• 32 core processor/2 GHz
Memory	• 48 GB
Hard Drive	• 1 TB
Purge Policy	• 7 days
O/S	• Red Hat Linux Enterprise Edition 6.5 or higher • CentOS Release 6.5 or higher

PRODUCT ORDERING INFORMATION

SKU	DESCRIPTION
L09-UMM1-WW00	Unleashed Multi-Site Manager software— comes with ONE Unleashed AP management license
L09-0001-UMM0	Unleashed Multi-Site Manager Single Unleashed AP management license SKU
L09-0001-UMCX	Switch management license for UMM, 1 RUCKUS ICX switch. Order this when you intend to run software version from UMM2.2 onwards.

SKU	DESCRIPTION
Purchase below SKU's for managing ZoneDirector networks and P300 AP	
909-0100-FMEU	UMM license upgrade for supporting up to 100 AP's
909-0250-FMEU	UMM license upgrade from supporting 100 to supporting up to 250 AP's
909-0500-FMEU	UMM license upgrade from supporting 250 to supporting up to 500 AP's
909-1000-FMEU	UMM license upgrade from supporting 500 to supporting up to 1000 AP's
909-2500-FMEU	UMM license upgrade from supporting 1000 to supporting up to 2500 AP's
909-5000-FMEU	UMM license upgrade from supporting 2500 to supporting up to 5000 AP's
909-0000-FME1	UMM license upgrade from supporting 5000 to supporting up to 10000 AP's

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

COMMSCOPE®

commscope.com

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

© 2020 CommScope, Inc. All rights reserved.

Unless otherwise noted, all trademarks identified by © or ™ are registered trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is committed to the highest standards of business integrity and environmental sustainability with a number of CommScope's facilities across the globe certified in accordance with international standards, including ISO 9001, TL 9000, and ISO 14001. Further information regarding CommScope's commitment can be found at www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability.

PA-114505-EN (04/20)