

# What's New in Unleashed Version 200.6?

This application note describes the new features available in Ruckus Wireless Unleashed version 200.6. This document assumes familiarity with the Ruckus Unleashed product line and the features of earlier release version 200.5.

## Highlights of this Release

Ruckus Unleashed is a controller-less Wireless LAN (WLAN) solution that enables Small-Medium Business (SMBs) to deliver an optimal wireless experience to their users at an affordable price.

Customers can expand their business to multiple locations seamlessly with Unleashed Multi-Site Manger. If the business scales even further, Ruckus Unleashed offers migration options to Ruckus ZoneDirector, SmartZone or Ruckus Cloud Wi-Fi.

Key features and enhancements in this release are:

Feature	Brief Description and Benefits
Same-WLAN support for multiple Social Media Logins	Existing Social Media login methods (Facebook, Google, LinkedIn and Microsoft) can now be used simultaneously on the same WLAN.
WeChat WLANs	A new social media WLAN type - WeChat - is now available.
Client Rename Feature	Connected wireless clients can now be renamed in the Unleashed web UI for easier identification. Manually renaming a client changes its display name in any locations where the client Host Name is displayed.
Zero Touch Mesh	Zero Touch Mesh eliminates the traditional configuration priming process where you plug and unplug the Ethernet cable and instead, use a far simpler approach where APs, installed in their permanent locations, auto-discover, auto-provision and auto-form a mesh network without priming.
Application Recognition & Control Enhancements	Application rate limiting and QoS traffic shaping rules can now be created, in addition to application denial rules.
Client Connection Troubleshooting	Client connection troubleshooting allows customers to diagnose wireless client connection issues to determine why a client fails to connect to the wireless network.

Unleashed Multi-Site Manager (UMM) Connectivity Enhancements	Allows connectivity from UMM to an Unleashed Master AP behind a NAT firewall. Unleashed will initiate an SSH tunnel when the "Enable management by Unleashed Multi-Site Manager" option is selected, allowing TR-069 protocol traffic to traverse the firewall.
Internet Status Enhancement	The Internet component on the Dashboard now provides details on the Unleashed Master AP's upstream connection to the Internet, including public IP address, DNS servers, Gateway address, and the Ethernet port being used as the WAN port.
Dashboard Refresh Performance Enhancement	Improved UI performance when refreshing Dashboard elements.
Local Upgrade Enhancement	Allows the user to upgrade a single AP at a time using an image file from a local PC. A new Local Upgrade button is displayed when the AP is blocked or disconnected due to version mismatch, and clicking this button launches an upgrade page with the option to upgrade each AP individually.
AP Ethernet Port Status	The web UI now provides information on AP Ethernet port status, including link status and link speed.
Password Recovery	The Unleashed Setup Wizard now provides an option to enter a Security Email, Security Question and Security Answer to allow you to reset your password in the event that your username or password are forgotten.
AP Reboot Cause Reporting	Additional reboot causes are provided when a member AP reboots after rejoining an Unleashed Master.

## Supported AP models in Unleashed 200.6

Unleashed version 200.6.10.1.300 supports the following Ruckus indoor Wi-Fi access point models:

Indoor Wi-Fi Access Points	
Unleashed R720	Indoor 802.11ac Wave 2 Wi-Fi Access Point with Multi-gigabit Backhaul for Ultra-Dense Device Environments (4x4:4)

Unleashed R710	Indoor 802.11ac Wave 2 Wi-Fi Access Point for Ultra-Dense Device Environments (4x4:4)
Unleashed R610	Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (3x3:3)
Unleashed R510	Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (2x2:2)
Unleashed H510	Indoor 802.11ac Wave 2 wall-mounted Wi-Fi Access Point for in-room in hotels or in condos/flats/apartments
Unleashed H320	Wall-Mounted 802.11ac Wave 2 Wi-Fi AP and Switch
Unleashed C110	Wall-Mounted 802.11ac Wave 2 Wi-Fi AP, Switch and Cable Modem
Unleashed R600	Indoor 802.11ac Wi-Fi Access Point for Dense Device Environments
Unleashed R500	Indoor 802.11ac Wi-Fi Access Point for Dense Device Environments
Unleashed R310	Indoor 802.11ac Wi-Fi Access Point

Outdoor Wi-Fi Access Points	
Unleashed T710 Series (T710, T710s)	Outdoor 802.11ac Wave 2 Wi-Fi Access Point family with Fiber Backhaul
Unleashed T610 Series (T610, T610s)	Outdoor 802.11ac Wave 2 Wi-Fi Access Point family
Unleashed T310 Series (T310c, T310d, T310n, T310s)	Outdoor 2x2:2 2.4/5GHz 802.11ac Wave 2 Wi-Fi access point family with omni and directed antennae
Unleashed E510	Embedded 802.11ac Outdoor Wave 2 Wi-Fi AP with External BeamFlex+ Antennas
Unleashed T301 Series (T301n, T301s)	Outdoor 2x2:2 2.4/5GHz 802.11ac Wi-Fi access point family with directed coverage
Unleashed T300 Series (T300, T300e)	Outdoor 802.11ac AP family with integrated omni or external antennas (5GHz)

## New Feature Details

Details for each new feature and enhancement in Unleashed 200.6 appears below.

### 1. Support for 802.11ac Wave 2 Access Points C110, E510, and T310 Series

#### Unleashed C110

The Ruckus Unleashed C110 combines the industry's highest-performing 802.11ac Wave 2 wireless access point technology with a DOCSIS 3.0 cable modem and Ethernet switch – all in a sleek, wall-mounted form factor that can be discretely installed over a standard electrical junction box. Equipped with two Ethernet ports, it can connect IPTV set-tops, VoIP telephones, and other wired devices, while delivering blazing-fast Wi-Fi.

##### Key Features

- Deliver great in-room Wi-Fi and concurrent wired IP connectivity using an integral DOCSIS 3.0 cable modem for backhaul over coaxial cable.
- Combines the best of Wi-Fi with 802.11ac Wave 2 and a switch with two 100Mbps ports into one wall-mounted unit.
- Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing multi-directional antenna patterns.
- ChannelFly dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.
- Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing non-Wave 2 device performance.
- Multiple SSIDs and switch ports help support services such as VoIP, IPTV, and high-speed Internet access and in-room device connectivity.

#### Unleashed E510

The Ruckus Unleashed E510 802.11ac Wave 2 access point (AP) is designed with a unique, diminutive two element enclosure which separates the RF components from the antenna module.

The E510 can be placed unobtrusively inside metal-shielded signage at a bus or train stations, and within a vending machine and display kiosk. The low profile antenna module can be located externally and linked to the RF module via weather proof cabling.

##### Key Features

- Separation of the antenna from the small radio component provides deployment flexibility that supports location constraints and aesthetic requirements.
- Deploy high-performance outdoor 802.11ac Wave 2 Wi-Fi in harshest of the outdoor environments with IP-67 weather proofing.

- Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing up to 64 directional antenna patterns.
- Manage the E510 with physical or virtual appliances.
- ChannelFly™ dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.
- Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while also enhancing non-Wave 2 device performance.

## Unleashed T310 Series

The Ruckus Unleashed T310 Series of 802.11ac Wave 2 access points provides industry-leading Ruckus wireless performance in an economical, industrial-grade form factor designed for crowded outdoor locations. These ultra-lightweight, low-profile APs feature internal omni-directional or high-gain directional antennas for specific coverage, eliminating the need for bulky panel antennas and confusing and expensive external RF cabling.

Choose from either omni, 30-degree narrow beam or 120-degree sector antennas to enable fast, low-cost installation, extended range, and best-in-class throughput in the most challenging outdoor environments.

The T310d, s, n models have a USB 2.0 port to support additional RF technologies such as Bluetooth Low Energy (BLE) and optional DC power source for use with solar cell deployment.

### Key Features

- Ruckus APs make Outdoor WiFi deployments extremely simple to deploy, with one-touch technologies like SmartMesh.
- Experience high performance outdoor Wave 2 Wi-Fi with IP-67 weather proofing.
- One size does NOT fit all. The T310 series offers the broadest variety of APs in the market today with options of power, antenna design, and/or IoT support. All these enables customers to meet specific use cases that may not be possible with standard APs.
- Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing up to 64 directional antenna patterns.
- ChannelFly dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.
- Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing non-Wave 2 device performance.
- Manage the T310 Series from on-premises or remote physical/virtual appliances.

## 2. Unleashed WLANs simultaneously support multiple Social Media Provider Logins

Existing Social Media login methods (Facebook, Google, LinkedIn and Microsoft) can now be used simultaneously on the same WLAN.

The following video describes how to configure Social Media WLANs using the Unleashed user interface...

Video - <https://www.youtube.com/watch?v=avO7FIXlumc>

### Customer Benefits

- Provide a more simple and intuitive option for authenticating to the network
- Visitors authenticate using their preferred Social Media username/password
- Convenient access increases adoption and recurring use over time

### 3. WeChat WLANs

A new social media WLAN type - WeChat - is now available.

"WeChat Connects Wi-Fi" is a solution that allows clients to authenticate to a wireless LAN easily using a WeChat login instead of a username/password. The solution also allows business owners to easily serve advertisements to visitors, enabling convenient monetization of their Wi-Fi service.

### Customer Benefits

- WeChat is a very popular service in Asia
- Allows clients to authenticate using their WeChat login
- Enables monetization and advertising

### 4. Ability to Rename a Device

Connected wireless clients can now be renamed in the Unleashed web UI for easier identification. Manually renaming a client changes its display name in any locations where the client Host Name is displayed.

This video describes how to rename wireless clients using the Unleashed user interface.

Video - <https://www.youtube.com/watch?v=MRt7LjIzW8Q>

This video describes how to rename wireless clients using the Unleashed Mobile App.

Video -

<https://www.youtube.com/watch?v=rCNRUQIiFt8>

### Customer Benefits

- Ability to rename clients to a more meaningful and recognizable name - especially suitable for IoT devices
- Makes information more usable and understandable

## 5. Zero Touch Mesh

Zero Touch Mesh allows customers to skip the mesh configuration priming process, enabling Mesh APs already installed in their permanent locations to auto-discover, auto-provision and auto-form a mesh network without priming.

This video describes how to use Zero Touch Mesh to onboard an Unleashed Access Point using the Unleashed user interface.

Video - <https://www.youtube.com/watch?v=-g0xsZBSa9o>

This video describes how to use the Unleashed 200.6 Mobile App and Zero Touch Mesh to onboard an Unleashed Access Point.

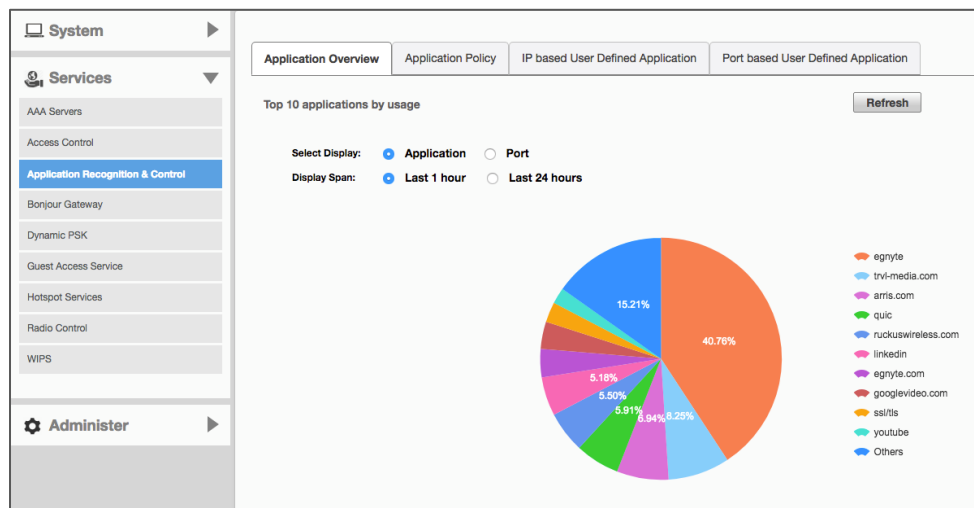
Video - <https://www.youtube.com/watch?v=fOS1noZQjUs>

### Customer Benefits

- Makes it really easy to install a Mesh AP
- Mesh is far more usable since Zero Touch makes is very fast and simple
- Reduces/eliminates the Ethernet cable since Mesh just works better

## 6. Application Recognition & Control Enhancements

Application rate limiting and QoS traffic shaping rules can now be created, in addition to application denial rules.



### Customer Benefits

- Provides an understanding of application usage and bandwidth to help shape and tune the performance of the network

- Ability to create a broad range of rules to recognize and management enhancements
- Gives you greater control and management of network bandwidth

## 7. Troubleshooting Tools for Client Connection

Client connection troubleshooting allows customers to diagnose wireless client connection issues to determine why a client fails to connect to the wireless network.

This video demonstrates how to troubleshoot client connectivity and download the share log feature of Unleashed 200.6 user interface

Video - <https://www.youtube.com/watch?v=-YGrv2dq5pl>

This video describes how to use the Unleashed 200.6 Mobile App to troubleshoot a client connectivity issue.

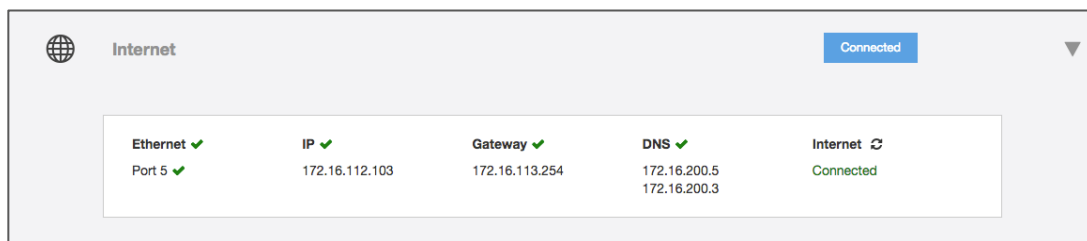
Video - <https://www.youtube.com/watch?v=LUXS6t2D1LA>

### *Customer Benefits*

- Provides insight into understanding and troubleshooting connectivity issues
- Simplifies the challenge to achieve faster resolution

## 8. Internet Status Enhancement

The Internet component in the Unleashed Dashboard provides details on the Unleashed Master AP's upstream connection to the Internet, including public IP address, DNS servers, Gateway address, and the Ethernet port being used as the WAN port.



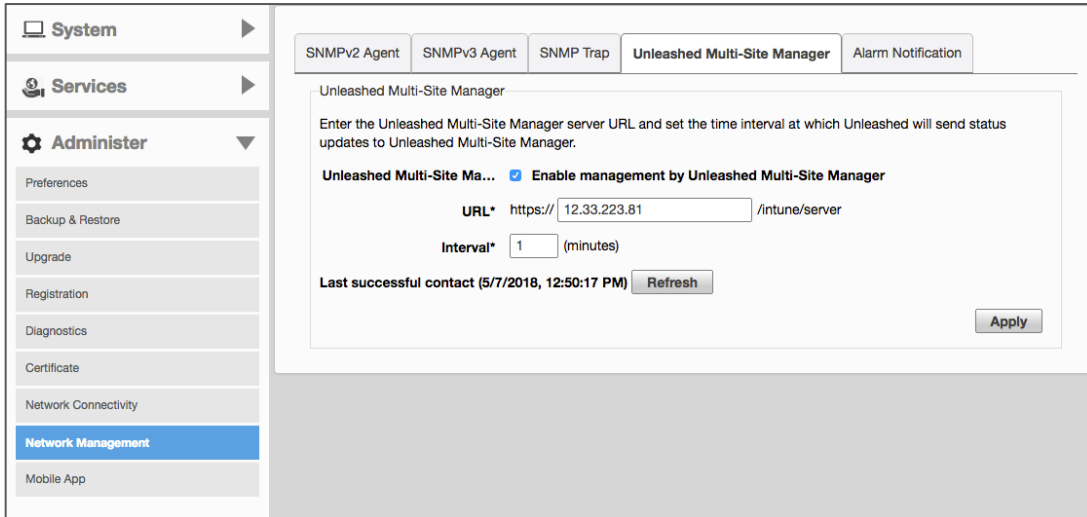
### *Customer Benefits*

- Provides visibility and insight into a very important connection for your network
- Details various important elements critical to the Internet status



## 9. Unleashed Multi-Site Manager (UMM) Connectivity Enhancements

Allows connectivity from Unleashed Multi-Site Manager to an Unleashed Master AP behind a NAT firewall. Unleashed will initiate an SSH tunnel when the "Enable management by Unleashed Multi-Site Manager" option is selected, allowing TR-069 protocol traffic to traverse the firewall.



### Customer Benefits

- Makes it far simpler and easier for UMM to access an Unleashed Master AP
- Ensures communication can easily comply with and traverse the firewall

## 10. Dashboard Refresh Performance Enhancement

The performance for the Unleashed Dashboard has been enhanced when refreshing Dashboard elements.

### Customer Benefits

- Greatly improves the responsiveness of the Unleashed Dashboard
- Ensure a real-time perspective for viewing information aggregated by Unleashed

## 11. Enhancement to Local Access Point Firmware Upgrade Process

Allows the user to upgrade a single AP at a time using an image file from a local PC. A new Local Upgrade button is displayed when the AP is blocked or disconnected due to version mismatch, and clicking this button launches an upgrade page with the option to upgrade each AP individually.

This video demonstrates how to perform a local firmware upgrade to an Unleashed AP using the Unleashed user interface.

Video - <https://www.youtube.com/watch?v=-LpAbT60aFU>

### *Customer Benefits*

- Provides another more practical mechanism for updating your APs
- Compliments the real-time cloud-based update with the local PC approach

## **12. Password Recovery**

The Unleashed Setup Wizard now provides an option to enter a Security Email, Security Question and Security Answer to allow you to reset your password in the event that your username or password are forgotten.

This video describes how to configure password recovery with the Unleashed user interface.

Video - <https://www.youtube.com/watch?v=bygb5faobKo>

### *Customer Benefits*

- Ensures greater security for managing passwords
- The Security question/answer provides an individualized and secure model for resetting your passwords

## **13. AP Ethernet Port Status**

The Unleashed user interface has been updated to provide information on AP Ethernet port status, including link status and link speed.

### *Customer Benefits*

- An insightful and practical way for understanding the status for the AP's Ethernet ports
- Especially useful when troubleshooting an issue to identify the source of the problem

## **14. AP Reboot Cause Reporting**

Additional AP reboot causes are reported when a member AP reboots after rejoining an Unleashed Master.

### *Customer Benefits*

- Helps with understanding the scope and magnitude when the AP reboots