What's New in Unleashed Version 200.2?

This application note describes the new features available in Ruckus Wireless Unleashed version 200.2. This document assumes familiarity with the Ruckus Unleashed product line and the features of earlier release version 200.1.

Highlights of this Release

Ruckus Unleashed is a controller-less wireless LAN solution that enables Small-Medium Business (SMBs) to deliver an optimal wireless experience to their users at an affordable price.
With easy migration options to the Ruckus ZoneDirector, or SmartZone platforms, or to Ruckus Cloud, Ruckus Unleashed scales with your business.

Key features and enhancements in this release are:

- Support for WAVE 211ac Access Points R710, T710, and T710s
- Election based enhanced resiliency
- Unleashed Management Interface for remote management
- Self-service guest pass
- Social-media login
- L7 (DPI) based Application Recognition & Control
- WLAN prioritization
- Local software upgrade
- Multi-language support
- Troubleshooting enhancement

Supported Platforms in Unleashed 200.2
- ZoneFlex Unleashed R710 802.11ac Dual-band Access Point
- ZoneFlex Unleashed R600 802.11ac Dual-band Access Point
- ZoneFlex Unleashed R500 802.11ac Dual-band Access Point
- ZoneFlex Unleashed R310 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T710 (omni) 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T710s (sector) 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T300 (omni) 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T300e 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T301n 802.11ac Dual-band Access Point
- ZoneFlex Unleashed T301s 802.11ac Dual-band Access Point

1. Support for 802 11ac Multi-User MIMO (MU-MIMO) WAVE 2 Access Points R710, T710, and T710s

Unleashed R710

The Unleashed R710 is industry's highest performance 802.11ac Wave 2 access point. It combines Ruckus patented technologies and best-in-class design with the next generation of 802.11ac features to deliver outstanding Wi-Fi performance and reliability.

With throughput capacities of 800 Mbps (2.4GHz) and 1733 Mbps (5GHz), the ZoneFlex R710 supports the highest available throughput for Wi-Fi clients. 802.11ac Multi-User MIMO (MU-MIMO) support allows the R710 to simultaneously transmit to multiple client devices, drastically improving airtime efficiency, overall throughput, and availability.

ZoneFlex R710 is purpose-built for high-capacity, high performance and interference-laden environments such as schools, public venues, hotels, and conference centers

Unleashed R710's Major Features

- o Link Aggregation on Ethernet Ports (LACP)
- o 802.3af PoE operating mode
- o MU-MIMO
- o Tx Beamforming
- o Background Scanning is supported, and the following features which rely on Background Scanning are also enabled:
  - WIDS/WIPS (Rogue detection on channels other than service channel on 5G
  - radio)
  - 802.11k Radio Resource Management
  - Channel Selection with Background Scanning
  - AP Neighbor List

Unleashed T710

The Unleashed T710 is the industry's first and highest performing 802.11ac Wave 2 Outdoor AP. The Unleashed T710 combines Ruckus patented technologies and best-in-class industrial grade design with next generation of 802.11ac features to deliver industry-leading Wi-Fi performance, reliability and coverage for challenging high density outdoor deployments. The Unleashed T710 is ideal for deployment in dynamic outdoor environments with high density utilization and interference, like public outdoor hotspots, outdoor enterprise and schools, where support for high client densities and/or data intensive streaming multimedia applications (like HD IP video) is imperative.

Key Features
- 802.11ac Multi-User MIMO (MU-MIMO)
- 2,533 Mbps maximum PHY rate (1733 Mbps in 5GHz; 800 Mbps in 2.4GHz)
- Antenna options: omni-directional and 120x30 degrees sector

- Dedicated dual band RF monitor enabling enhanced performance while providing Zero-Wait DFS capability
- 2 10/100/1000 Ethernet ports
- SFP Fiber Interface providing flexibility to backhaul to fiber
- AC power input (100-250 Vac, 50/60 Hz)
- 802.3at (PoE+) PoE Input mode of operation
- 802.3at PoE Output Power Sourcing Equipment (PSE) mode of operation, useful for daisy chaining and powering an additional Mesh AP or another device like an IP Surveillance Camera

2. Election based enhanced resiliency

In Unleashed 200.2, the new "Election based resiliency" is being introduced whereby all Ethernet connected member APs are Standby APs. The Master AP periodically syncs up with all the Ethernet connected member APs. If Master AP goes down then one of the Ethernet connected member APs will become new Master AP. Typically, recognition of Master AP failure and electing new Master AP takes approximately one minute or less. This phenomenon will continue until the last AP with Ethernet connection stays alive. So, the Unleashed 200.2 introduces much more robust resiliency.
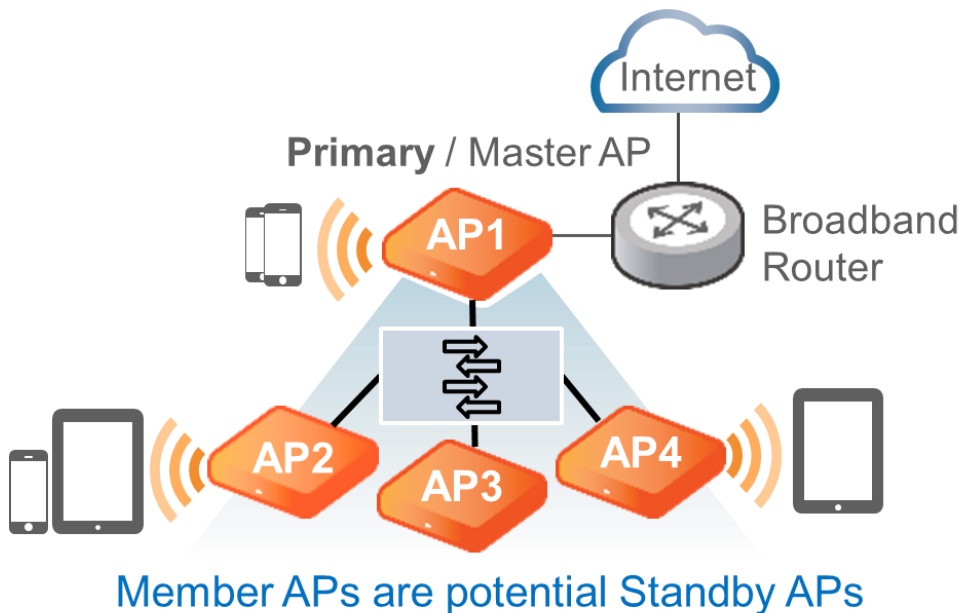

During Master APs failure and election process all the clients that are connected to Member APs will continue to function without any service disruption.

Customer Benefits
- Robust resiliency
- Higher network availability

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3. Unleashed Management Interface for remote management

Unleashed 200.2 introduces the support for Management interface. Up on configuring the management interface customers/VARs etc can manage their Unleashed network remotely. The management interface stays the same regardless of which AP acts as a Master AP in a given Unleashed network.
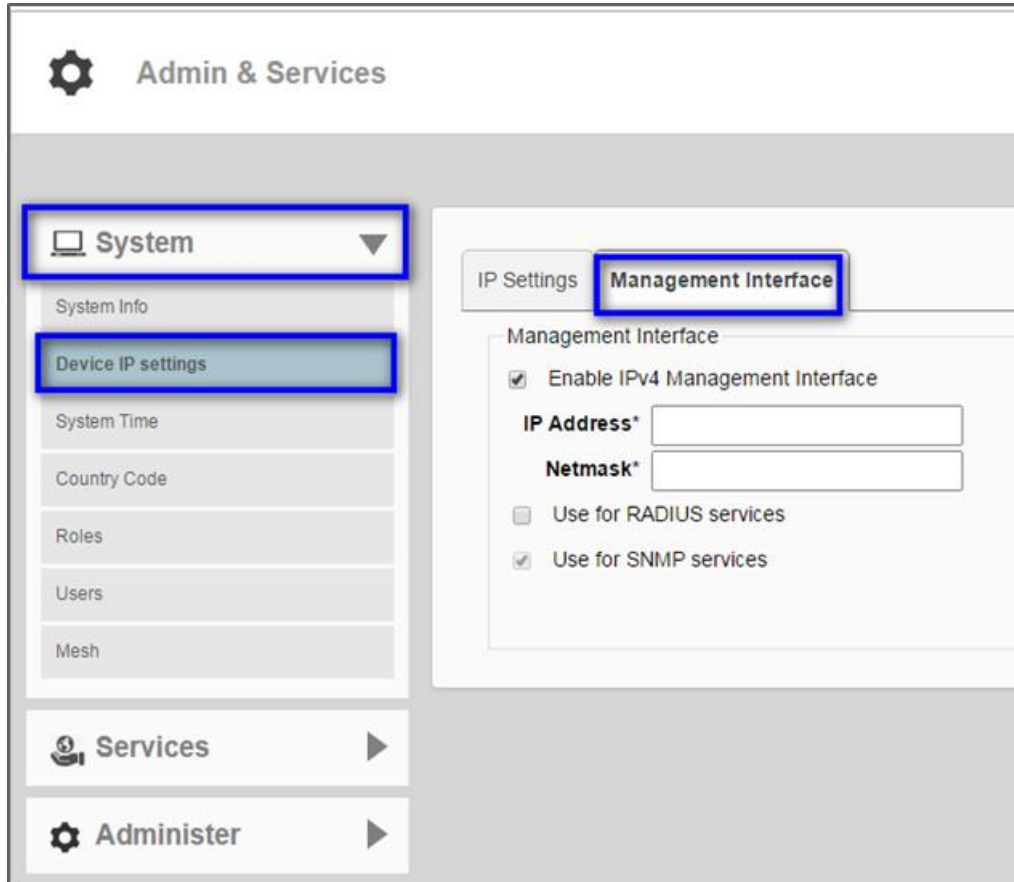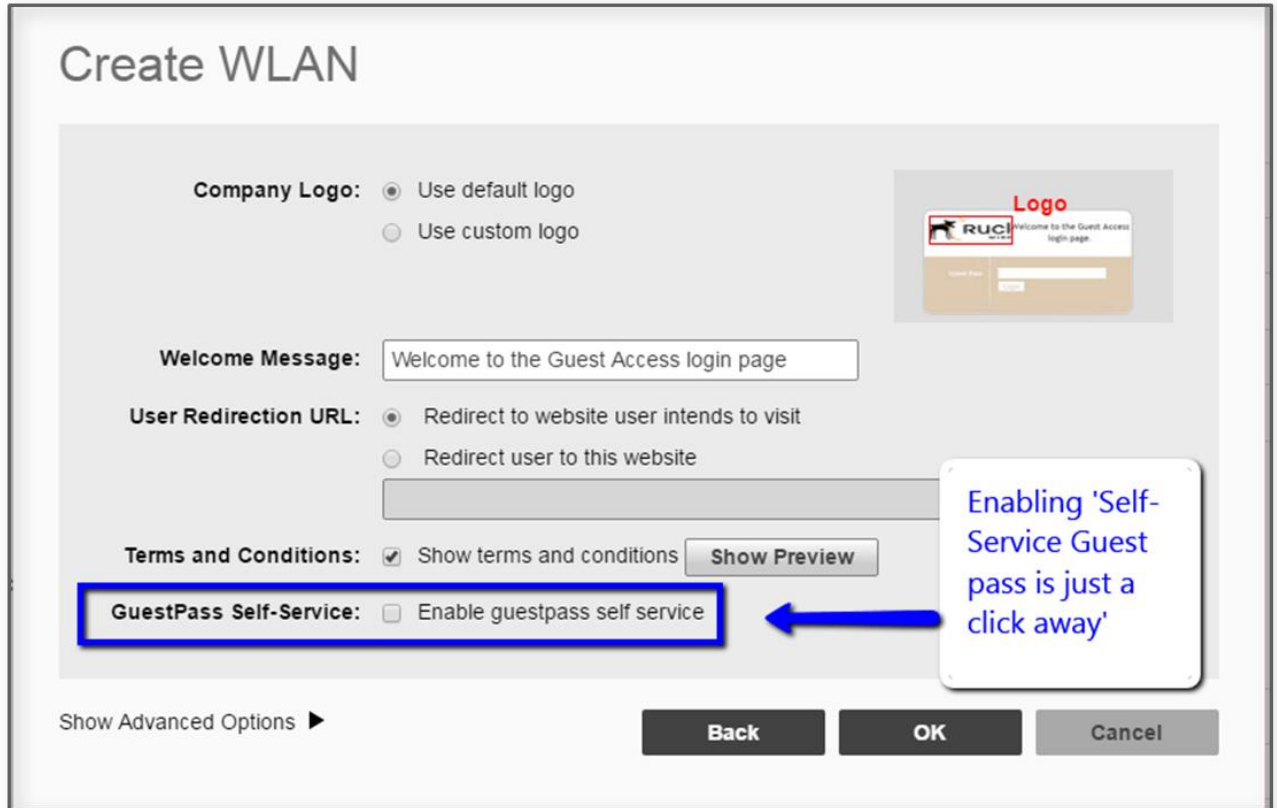

Customer Benefits
- Enables remote management for Unleashed network

4. Self-service guest pass

The Self-Service guest pass feature allows guests to connect to a guest SSID using their own device and submit basic information (name, email address and mobile phone number) to receive a guest pass code. The guest then enters this code to gain access to the WiFi network to access internet.

Self-service guest passes can either be automatically generated or require "Sponsor Approval." With Sponsor Approval enabled, guest pass keys are delivered to the guest users only after approval by a sponsor.
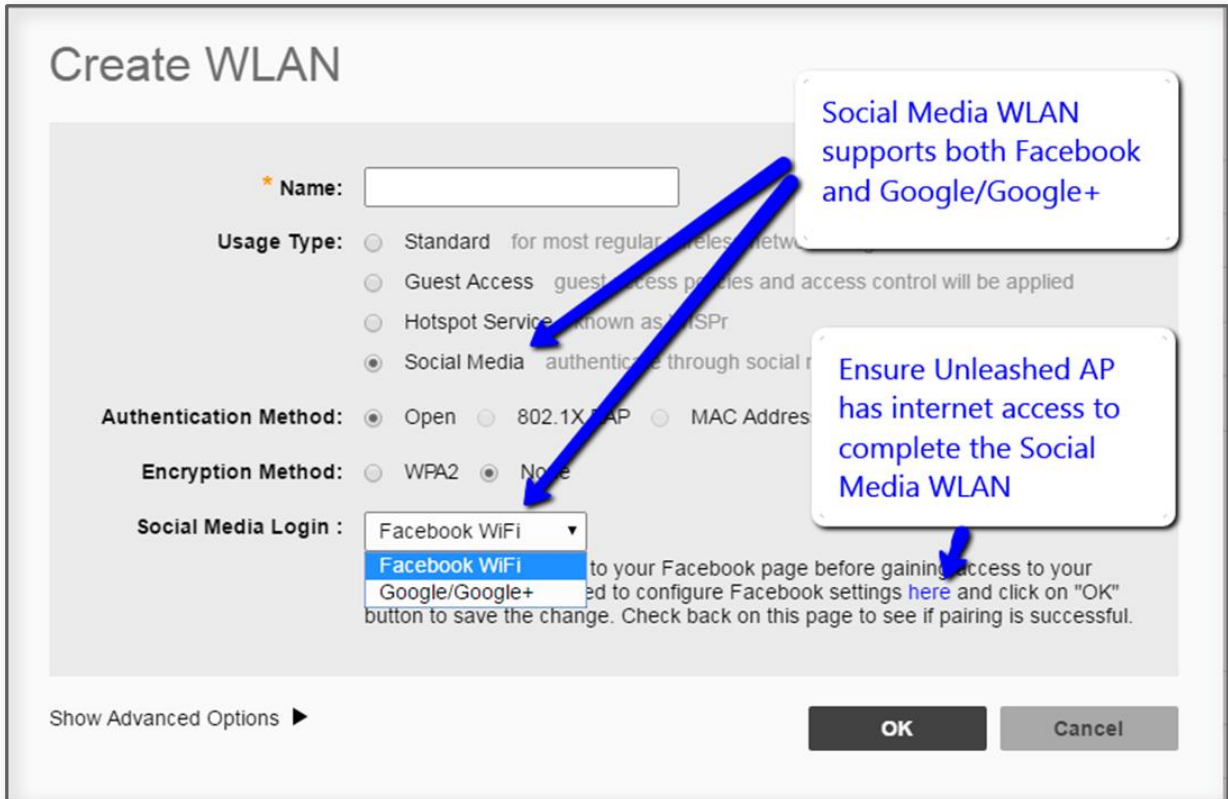
Customer Benefits
- *Significantly improves guest user experience*
- *Improves security for guest network as every guest gets an unique guest pass*
- No need to provide pre-generated passcode/key to guests' to access the network

5. Social-media login

The Unleashed 200.2 introduces a new WLAN type called "Social Media" which supports popular social media logins Facebook and Google. With social media login feature Ruckus customers will be able to provide easy WiFi access to their users. The following Social Media login types.

- [Facebook WiFi](#)
- Google Oauth 2.0 (Google/Google+)

With Facebook WiFi customers now can turn their businesses into a WiFi hotspot. Once this feature is enabled,

- End users simply check into Small Business location via Facebook to connect to Wi-Fi
- Wi-Fi access codes aren't necessary and there are no new accounts to create
- End users can manually check in or choose a setting that lets them automatically check in whenever they visit the same location again.

When end users/customers check in to your (Small Business) location, you can share offers and other announcements with them. For more information visit [Facebook WiFi](#)

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Similarly, with Google Oauth 2.0, students/users/customers can login using their Google credentials to access Wi-Fi network without needing additional access codes. This will also allow students access their Google docs without having to re-login again.

Customer Benefits
- *Ease of access for Wi-Fi users*
- *Small Business will be able to get end user insights from social media site*
- *Single Sign-On to connect to WiFi network and to access Google Apps*

6. L7 (DPI) based Application Recognition & Control

Unleashed 200.2 introduces Deep Packet Inspection (DPI) based Application Recognition & Control (ARC). DPI based ARC can recognize over 2200 applications.
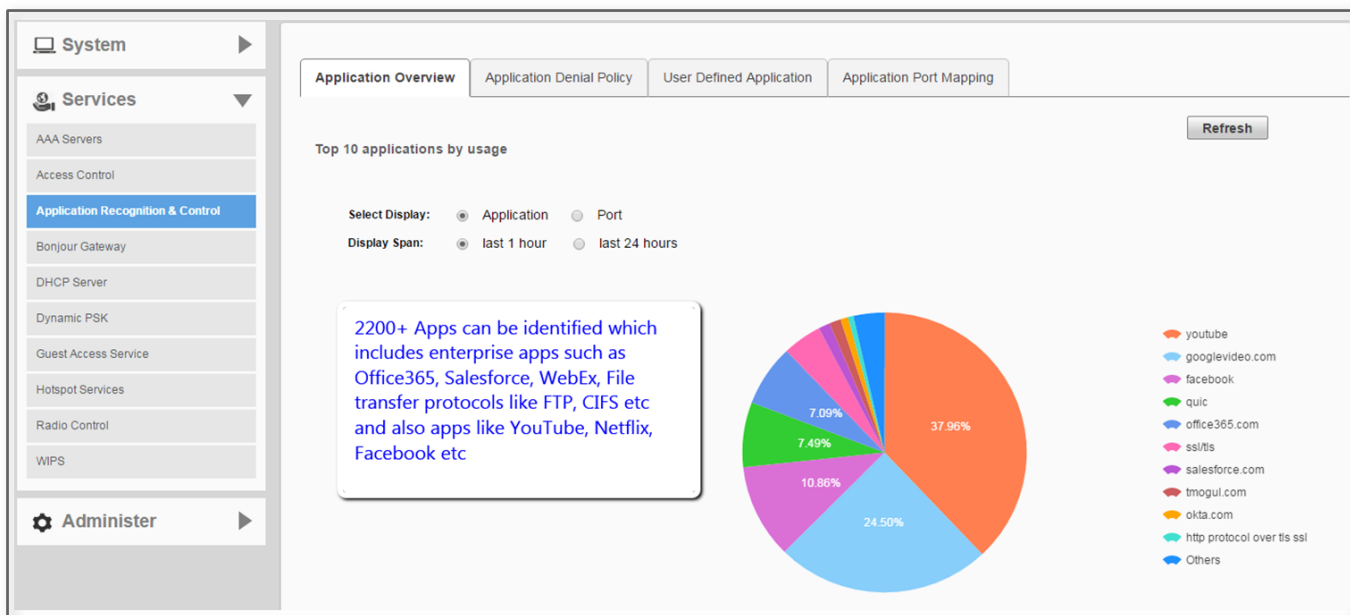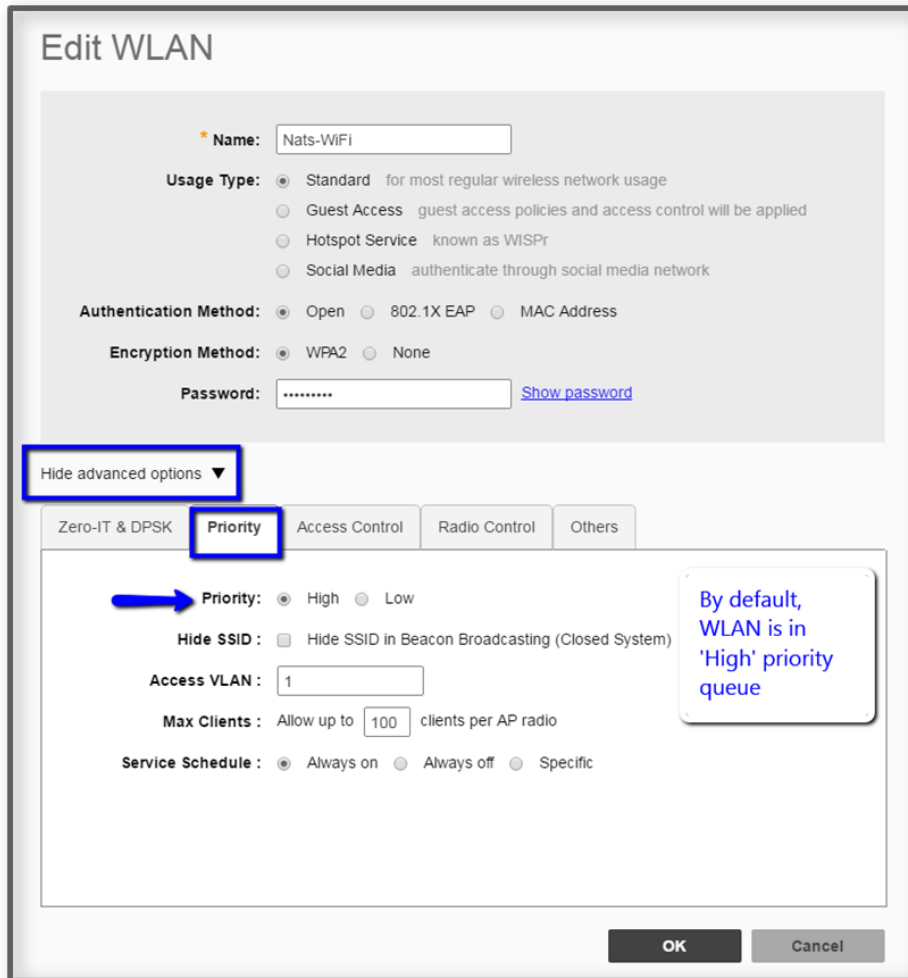

Customer Benefits
- 2200+ applications can be recognized more accurately
- Once recognized those applications can be controlled by applying policies

7. WLAN prioritization

WLAN prioritization allows customer to prioritize one WLAN over the other WLAN. For example, in a typical enterprise or school higher preference could be given to internal /employee/ teachers WLAN over guest/students WLAN.

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Customer Benefits
- Prioritize user traffic as per the need

8. **Local software upgrade**

When Unleashed APs are deployed behind non-transparent proxy or firewall they may not have access to Ruckus' software upgrade server. So, Unleashed APs can't be upgraded to newer versions to take advantage of deploying new Unleashed APs and/or new features. To address this issue, Unleashed 200.2 provides support for local software upgrade whereby customer could download the Unleashed software from https://support.ruckuswireless.com and then upgrade the Unleashed APs from their PC where the downloaded software is located.
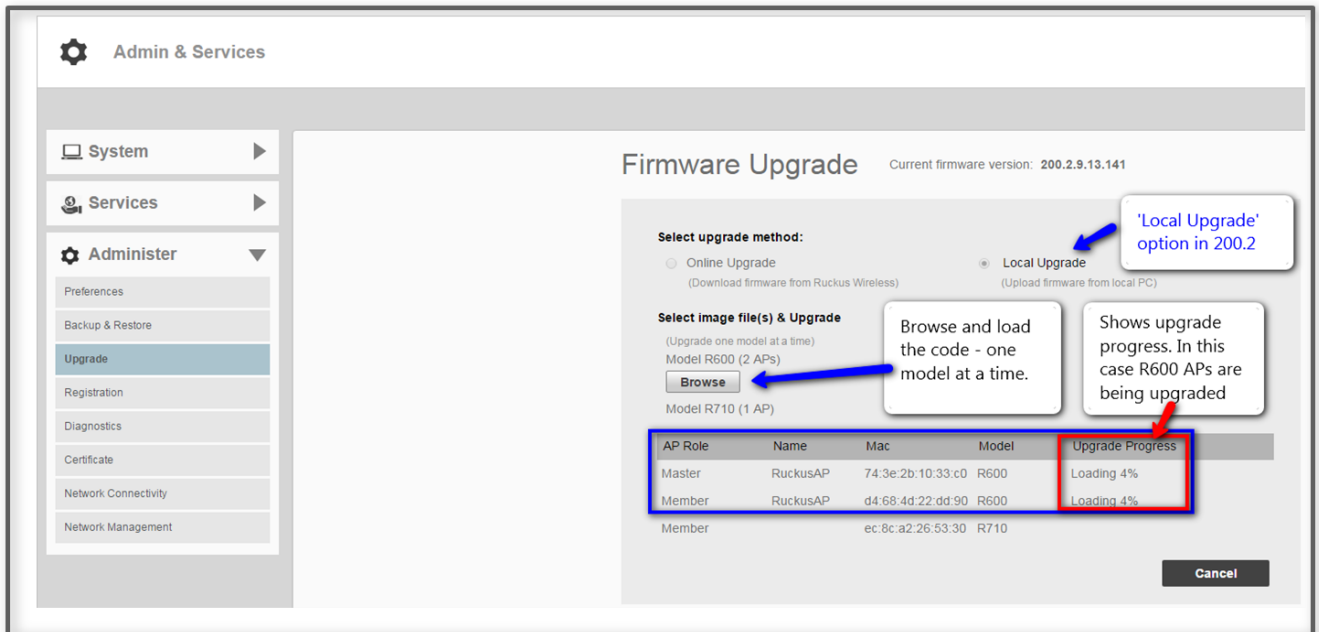
Customer Benefits
- Enables software upgrade on Unleashed APs even if they are behind firewall or non-transparent proxy

9. Multi-language support

Unleashed 200.2 introduces language localization by supporting the following languages.

- **English (Default)**
- **Brazilian Portuguese**
- **Chinese (Simplified)**
- **Chinese (Traditional)**
- **Czech**
- **Dutch**
- **French**
- **German**
- **Japanese**
- **Spanish**
- **Swedish**
- **Turkish**

10. Troubleshooting enhancement

To ease the troubleshooting of Unleashed, such as the resiliency, Unleashed 200.2 has introduced additional debugging capabilities. When 'Auto Election' is enabled (as shown below) whenever Master AP election process starts appropriate logs are generated.

All of the logs can be exported to a remote server using either FTP or TFTP.

Unleashed GA build 200.2.9.13.186