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RUCKUS LTE AP Management Release Notes, 20.02

Supporting Software Release 20.02

Contents

Overview

This release of Ruckus LTE AP Management has several new features including multiple PLMN ID with Cloud support, IPv6/LAN support, Access Restriction, AP LED OFF mode, TDD Configuration 6, user interface enhancements, and defect fixes.

LTE AP Management 20.02 Release Notes

New in this Release

Release Information

This section summarizes product information for the Ruckus LTE AP Management 20.02 release.

Product Name: Ruckus LTE AP Management

Release Version: 20.02_LTE

Release available: 16 August 2020

- **Management Service**: Feature enhancements and defect fixes

Server IP Addresses

Service	FQDN	Address	Protocol 1	Protocol 2	Protocol 3	Protocol 4
Qualcomm® Location (XTRA Predicted Satellite Data Service)	xtrapath1.izatcloud.net	Geo	TCP/80 HTTP			
Ruckus SC-Registrar	sc-registrar.ruckuswireless.com	34.211.175.172	ICMP Echo	TCP/443 SSL		
Ruckus SC-Registrar	sc-registrar.ruckuswireless.com	34.212.162.133	ICMP Echo	TCP/443 SSL		
CommScope SAS (STA)	https://stasas.sascms.net:8443	Geo	TCP/443 SSL			
CommScope SAS (Production)	https://cbsd-iot.sascms.net:8443	Geo	TCP/443 SSL			
Federated Wireless SAS	https://sc.federatedwireless.com:443/v1.2	Geo	TCP/443 SSL			
Google SAS (STA)	https://www.google-sas.com/vendor/	Geo	TCP/443 SSL			
Google SAS (Production)	https://sas.goog/v1.2/	Geo	TCP/443 SSL			
Ruckus NTP Server	ntp.cloud.ruckuswireless.com	104.154.107.129	UDP/123 NTP			
Ruckus NTP Server	ntp.cloud.ruckuswireless.com	146.148.32.216	UDP/123 NTP			
Ruckus Cloud HeMS SeGW 1	NA	104.197.44.198	ICMP Echo	UDP/500 IKE	ESP Protocol 50	UDP/4500 NAT-T
Ruckus Cloud HeMS SeGW 2	NA	35.225.228.188	ICMP Echo	UDP/500 IKE	ESP Protocol 50	UDP/4500 NAT-T
Ruckus Cloud HeMS SeGW 3	NA	35.202.152.35	ICMP Echo	UDP/500 IKE	ESP Protocol 50	UDP/4500 NAT-T
Ruckus Cloud HeMS SeGW 4	NA	35.232.65.10	ICMP Echo	UDP/500 IKE	ESP Protocol 50	UDP/4500 NAT-T

> **NOTE**
> This list does not contain a DNS server because the AP is using the customer DNS server and therefore doesn't require a special firewall rule.

> **NOTE**
> Geo = IP may change depending upon the geo-location. Please type "nslookup <FQDN>" on cmd/ Terminal prompt to detect the exact IP address.

> **NOTE**
> This list contains ports for IKE/EXP with or without NAT-T. This list does not contain an EPC SeGW; customer is using private EPC. Addresses marked "Geo" are using geographic DNS resolution and must be statically configured on the MEC DNS server.

How Do I Get Support?

For product support information and details on contacting the Ruckus Customer Services and the Support Team, go to the Ruckus Support portal: https://support.ruckuswireless.com, or https://www.ruckuswireless.com and select **Support**.

Supported APs

The following table lists the supported LTE APs in the current release.

TABLE 1 Supported LTE APs

APs	Category	Property

Q410	Indoor	• Plug-in LTE: Low power AP
		• Stand-alone or plugged with R510/R610 Wi-Fi AP models.
		
		    NOTE
		    Q410 always connects with PoE+ source only. Wi-Fi APs may derive power from "PoE out" port on Q410 when plugged-in.
		
		• Single RF Carrier, 2x2 @ 1/2 W EIRP
		• Ceiling or Wall mount

Q710	Indoor	• High-Capacity LTE • Dual RF Carrier 2x2 @ 1W EIRP • Ceiling or Wall mount
Q910	Outdoor	• Category A LTE • Dual RF Carrier 2x2 @ 1W EIRP • Pole, Wall, or Strand-mount
Q950	Outdoor	• High Power Outdoor • Category B CBSD • Up to 50/100W EIRP achievable with external antennas • 4T4R, 200Mbps (40MHz) • Fiber AND Ethernet w/daisy chaining • -48VDC

Feature List

The following sections lists new features for the LTE AP Management release.

- **Multiple PLMNID with Cloud Support**

Until the RUCKUS Cloud LTE 20.02 release, LTE APs supported multiple PLMN IDs via CLI only. In this release, LTE Cloud UI enables the tenants to configure multiple PLMN IDs per network, if desired.

RUCKUS LTE Cloud support up to 6 PLMNIDs per LTE Network. One PLMNID must be set as primary (by default, the first one is set as primary).

- **AP LED OFF mode**

In certain venues, you can now turn all LEDs to OFF / ON. The option for turning the LEDs OFF / ON is also available at the AP level. By default, AP LEDs are set to ON.

- **TDD Configuration 6**

In this release, under the **Venue -->LTE Setting**, there is a new option TDD Configuration 6. Use this option for better uplink performance.

- **LTE Network Enhancement**

A new configuration (optional) is added to LTE Network, related to EPC SecGW. This configuration indicate the AP if EPC SecGW should be reached out in IPv4 only or if both IPv6/IPv4 are OK. By default, this potion is enabled (both IPv4 and IPv6).

- **IPv6 /LAN support Beta**

The new configuration (optional) is added to the LTE Network, which enables and disables the IPv6 DHCP allocation. This option is added to the Venue level LTE settings and once enabled, it sets IPv6 mode on the venue's APs. When the IPv6 is enabled, Cloud SecGW IPv4 address will be converted into the IPv6 format.

By default, IPv6 DHCP allocation is disabled (OFF).

- **Enabling or Disabling the Access Restriction, both at tenant and at venue level**

The Access Restriction feature restricts or prevents certain UEs from attaching to the network. Enabling access restriction will limit the access to the venue's networks only to subscribers with Ruckus provided USIMs (Universal Subscriber Identity Module) activated by this tenant. Disabling access restriction will allow anyone with Ruckus provided USIMs to gain access to the venue's networks.

By default, access restriction is enabled for both tenant and venue.

- **Updated URLs for predefined SAS configurations**

Updated the default values for the predefined SAS accounts.

Issues and Fixes

Resolved Issues

The following table provides information on the known issues in the current release.

Resolved Issues	Description
LTE-6930	AP Cannot be Configured due to Synchronization error.
LTE-6964	ECGI Records field is missing in NETWORK creation screen.
LTE-6600	RSC not coming operational because timing master IP is not pushed to RSC from Cloud.
LTE-6987	Select the "Disable IPv6 tunnel allocation" check-box doesn't create any ACS task and the check-box state is not saved.
LTE-7145	"Sync-tenant" request doesn't work.
LTE-6954	No Alarms in tenant (only events are listed).
LTE-7162	Cloud not sent SPV for few parameters after factory reset resulting AP not came operational.
LTE-7164	With access restriction disabled UEs are not able to attach.
LTE-7172	Enable Crypto not working.
LTE-7076	Failure in Moving Timing master AP between Venues (with MAX TM APS).
LTE-6982	AP alarm not visible in TPS3 Cloud.
LTE-7157	AP events not updated on tps2 Cloud after upgrade.
LTE-6947	Soft deleted Mechanism: AP are back one by one instead of all at once.
LTE-6923	PTP Slave is not getting Master AP IP.
LTE-6631	smallcell-demo@arris.com can't see software images tab.
LTE-6949	Add AP/Update Venue/Check checkbox - IPv6 configuration "E_IPv6" in Venue level : Set parameter InternetGatewayDevice.LANDevice.1.LANHostConfigManagement.X_001392_nwAddressType to "E_IPv6" failed with error 9003 in ACS.
LTE-6986	IPv4/IPv6 configuration should be reflected in the Network Settings panel on the Network Overview page.
LTE-7035	Analytics Screen does all ow user to choose venue for Reports or Plots
LTE-6937	"APs" page - "Edit AP" : AP LEDs in AP is not updated according Venue level when update venue.
LTE-7042	"Administration" page - "Access Restriction" tab + "Venues" page - "Venue LTE Settings" window: "Ruckus Private LTE Network Service Access Restriction" toggle is "OFF" instead of "ON" (Default configuration).
LTE-7067	"Venue LTE Settings" window - Create new venue : Ruckus Private LTE Network Service Access Restriction toggle is "OFF" (Administration level the toggle is "ON").
LTE-6946	"APs" page - AP LEDs : Configuration is set according Venue AP LEDs after change venue and venue turn on/off AP LEDs.
LTE-7121	Crypto profile cannot change list parameters, and sending wrong value.
LTE-7053	Irrelevant task with IPv4/IPv6 configuration of EPC SecGW is sent to the AP follow enable/disable AP service.
LTE-7098	User not warned about remove certification due to edit floor number for calibrated floor plan
LTE-5987	There is no warning message regarding the replacing of existing network on venue during the network create.
LTE-7029	"Networks" page - "Edit LTE Network" + "Create New LTE Network" window : "Save" button is disabled when IPv6 checkbox is check + IPv4/FQDN is configured in "Security Gateway" text box.
LTE-7091	Clearing Alarms (Alarm Bell) throws an exception (randomly).

Resolved Issues	Description
LTE-6799	Column title cannot be clearly viewed follow incorrect default (fixed) wight and no tool-tip displayed on several screens.
LTE-7118	Technical error message is showing when we are doing any operation in Cloud.
LTE-7036	Custom venue profile not displaying in venue type drop down of venue lte configurations.
LTE-7150	With AP LEDs off "EPC (S1) Connection status" showing Disconnected even when s1 is up.
LTE-7031	Cloud events and notification are delayed or missing.
LTE-7143	Unable to set IPSec crypto profile params in network settings.
LTE-7115	Cloud API error-message: Network Element Driver error edit error for device acs1.
LTE-7079	User does not have certify/save button.
LTE-7149	Technical error while configuring PTP external master in IPv6 venue.
LTE-7058	PLMN List for secondary PLMNs are not sent while triggering factory reset from Cloud.
LTE-7142	Range for fragment size param not defined in Crypto Profile settings.
LTE-7066	Not able to delete APs from Kumodev14 QA cloud instance
LTE-7077	Dashboard -> Alarms -> Expand AP Link (Source column) .
LTE-7138	Unable to add AP to Cloud, throwing error "serial number already exist".
LTE-7116	Seeing duplicate records being send out to EPC for the access restriction feature.
LTE-7074	APs stuck in the never contacted state.
LTE-6918	Unable to add AP to any instance after deleting AP.
LTE-7104	SAS URL when configured as IPV6 address, says invalid URL.
LTE-7086	Access restriction feature not working in tps2.flash environment.
LTE-6959	Users cannot certify APs.
LTE-7147	Unable to create any new LTE network.
LTE-7166	EPC restriction tenant name is wrong.
LTE-6970	Predefined SAS URL is sometimes cut, due to fixed URL size.
LTE-7109	Available ECGI Records are not displayed (when creation date is older).
LTE-7140	AP cannot be configured due to SAS tasks failure.
LTE-7144	Cannot replace between Timing M APS (when moving between Venues).
LTE-6969	Events are delayed by hours or missing entirely.
LTE-6917	Certify AP option is disable; works after factory reset AP again.
LTE-6980	Partner Authentication Failure Error observed on TPS2 cloud .
LTE-7094	Remove PLMN SPV failing in ACS) and same not becoming Enable=false in CBSD.
LTE-7127	Enabled feature Crypto Profile in network is failed.
LTE-7106	Unable to configure IPv6 address of the external PTP master.
LTE-7158	Network switch to new created network failed due to empty value sent for crypto params.
LTE-7148	No AP events are updated on Cloud.

Open Issues

Following is a list of unresolved issues in this release.

Open Issues	Description
LTE-5165	An unexpected technical error access denied appears while navigating for the AP view.
LTE-6127	In certain corner cases, the available ECGI count shows lower than expected.

Open Issues	Description
LTE-6504	Not removing invalid e-mail addresses causes Amazon to lock our account
LTE-6981	Invalid date is displayed for alarms
LTE-7141	CMP re- enrollment should not be initiated on updating crypto parameters from cloud, and on AP reboot
LTE-7146	Throughput is not getting updated on the Cloud
LTE-7159	A customer inherits the privileges from the superuser account instead of the customer account.
LTE-7160	The delete AP operation fails (error - the configuration database is locked).
LTE-7163	AP is not operational after a software downgrade.
LTE-7171	Cloud is sending the venue level LED parameter during changing any venue level parameter or software upgrade and downgrade causing the AP level LED OFF state change to ON.
LTE-7173	GPV is failing when adding AP.
LTE-7178	Errors when adding AP/Factory Reset AP and not become operational.
LTE-7181	Adding PLMN ID and re-order PLMN IDs failed with Error Code 9003.

Limitations

Band Change

NOTE
We are changing the default AP configuration to Band 48 (CBRS Band). You can check the band of operation for your AP by clicking on **AP** -> **AP Properties** -> **More**.
If your Venue was previously customized to operate on Band 42/43, and you want to continue to do so, do get in touch with your Ruckus Representative for help, or open a support case.

Adding AP After Deletion

Following the deletion of AP from a Venue, you must wait for a few minutes before adding back to the Venue to prevent a scenario where the delete operation is not completed prior to the add operation.

CBSD- SAS Communication

The AP registration with SAS cycle (CPAS) may take up to 24 hours; thus, grant may not be available for up to 24 hours.

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