RELEASE NOTES

RUCKUS IoT Insights 2.0.0 GA Release Notes

Supporting IoT Insights Release 2.0.0

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Overview

This document provides release information about RUCKUS Insights 2.0.0. The RUCKUS IoT Insights is a collection of network hardware and software infrastructure components used to create an IoT access network that is comprised of four elements:

- RUCKUS IoT-ready Access Points (APs)—Accommodate RUCKUS IoT Modules, and provides Built-in IoT support to establish multi-standards wireless access for Wi-Fi and non-Wi-Fi IoT endpoints
- RUCKUS IoT Modules—Radio or radio-and-sensor devices that connect to a RUCKUS IoT-ready AP to enable endpoint connectivity based on standards such as Bluetooth Low Energy (BLE) and Zigbee.
- RUCKUS SmartZone Controller—A network controller that provides a management interface for the WLAN .
- RUCKUS IoT Controller—A virtual controller, deployed in tandem with a RUCKUS SmartZone OS-based controller, that performs connectivity, device, and security management.
- RUCKUS IoT Insights—A virtual controller, deployed in tandem with the RUCKUS IoT controller, that performs an application-level analysis, control, and logging of RUCKUS IoT Events with a focus on application-level solution.

This document provides a list of the release components, their versions, a link to documentation as well as caveats, limitations and known issues in this release.

Document History

Revision Number	Summary of changes	Publication date
A	This is the GA release.	March, 2022

New in This Release

This document provides a list of the release components, their versions, a link to documentation as well as caveats, limitations and known issues in this release.

Hardware and Software Support

The RUCKUS IoT Insights platform is a virtual machine that combines the Management and Data access capabilities for all IoT Sensors in the Network.

The RUCKUS IoT Insights can be deployed on a range of Hypervisors as described in the following table.

TABLE 1 Supported Hypervisors

Hypervisor	Vendor	Version
ESXi	VMware	6.0 and later
KVM	Linux	2.11.1 or later

Before you begin installing the RUCKUS IoT Insights platform on your hypervisor you must ensure that the following ports are accessible between RUCKUS IoT Insights and any and all external Sensor/Service providers.

- Port 443 (Primary Port for API and UI Access)
- Port 7002 (used for LoRa LNS connectivity on IOT controller
- Port 3001 (Default for Websocket/Webhook Communications)
  - May be changed in Setup adjust as needed
- 3883 (Default MQTT port used to connect to IOT controller)
  - May be changed in Setup adjust as needed

In addition to the Ports the VM for RUCKUS IoT Insights must have sufficient resources to operate. depending on the scale of the deployment the resources must be increased as follows.

1. **Small Scale** - This is defined as a Single IOT Controller with no additional 3rd party connected services or solutions with up to 1000 connected devices. Before you begin installing the RUCKUS IoT Insights on any hypervisor, consider the following prerequisites for small scale:
   - 1 x vCPU i7 compatible
   - 2 GByte of Memory
   - 10GByte of Fixed HDD Space
2. **Medium Scale** -

   This is defined as a Single IOT controller with external Device Partner Services, these could include - Axis Cameras, Rigado Gateways, LoRa Network Server, Samsung Device/Services. The external services are providing increased Device Count and connectivity, with an increased Device count of up to 2000 Devices and additional Location Based Service capability.

   Before you begin installing the RUCKUS IoT Insights on any hypervisor, consider the following prerequisites for medium scale:
   - 2 x vCPI i7 compatible
   - 4 GByte of Memory
   - 10GByte of fixed HDD Space
3. **Large Scale**

   Large scale is considered for deployments with a fully loaded IOT controller with a large AP count generating a lot of IoT Device Traffic and for deployments with a lot of BLE Tag's and BLE services. These deployments typically would be used where large BLE and Location services are taking place. In addition to the BLE services connected devices and AP counts would typically be up to 5000 Connected devices on up to 500 Access Points on a single IoT Controller.

Before you begin installing the RUCKUS IoT Insights on any hypervisor, consider the following prerequisites for medium scale:

- 4 vCPU i7 Compatible
- 8GByte of Memory
- 10GByte of fixed HDD Space

Release Information

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This section lists the version of each component in this release.

IoT Insights and IoT Controller

- IoT Insights Version: 2.0.0.104
- RUCKUS IoT Controller version: 2.0.0.0.82
- VMWare ESXi version: 6.0and later
- KVM Linux virtualizer version: 1:2.5+dfsg-5ubuntu10.42 and later
- Hyper-V version - 6.2 and later
- Google Chrome version: 78 and later
- Mozilla Firefox version: 71 and later

TABLE 2 Release Build Compatibility Matrix

Release	IoT Controller	IoT Insights
IoT – 2.0	2.0.0.104	2.0.0.0.82

Supported Upgrade Path

The release 2.0.0.0 is a fresh installation.

Known Issues

The following are the caveats, limitations and known issues.

Component: RUCKUS IoT Insights

- IOTC-5488 - Device alerts window in Dashboard page has alignment issues.

  Workaround - None

- IOTC-5487 - Insights Realm Name parameter is accepting special characters, numbers and unlimited number of characters as realm name, While Insights Installation.

  Workaround - None

- IOTC-5486 - Able to add site using invalid values

  Workaround - None

- IOTC-5477 - Back button is not present in IOT insights installation wizard.

  Workaround - None

- IOTC-5476 - Telkonet EcoContact+ show open/close in hex values in the Devices table

  Workaround - None.

- IOTC5456 - Expanded Devices view shows the data that is extended beyond the table in Windows 10

  Workaround - Right Click on desktop -> Display Settings -> change 125% to 100% for Change the size of text, apps, and other items under Scale and Layout.

Best Practices

Following are the best practices that mus tbe considered.

- It is recommended to install IoT controller in a host (hypervisior/KVM/Hyper-V) which has 60% CPU and 60% MEM free
- For information on clusters, refer to this externally available Zigbee Alliance Zigbee Cluster Library 6 document at http://www.zigbee.org/~zigbeeor/wp-content/uploads/2014/10/07-5123-06-zigbee-cluster-library-specification.pdf
- IoT controller should be UP and RUNNING with the CDS Plugin enabled.
- IoT controller should have the INSIGHT License

Caveats and Limitations

Limitations

- CDS Plugin in IoT controller should point to the controller and external endpoint cannot be configured
- Windows 10 Display settings at 125% (default) causes alignment issues in Insights
- Non-Standard Zigbee attributes and values cannot be defined and used in Rules
- Bulk gateway/device addition is not supported.

Supported Devices

This section documents the supported IoT end devices. Multiple other devices may work with this release but they have not been validated.

TABLE 3 Bulbs

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
Lightify (RGB) Model 73674	Bulb	Zigbee	Osram	OSRAM	LIGHTFY A19 RGBW
Lightify Model 73693	Bulb	Zigbee	Osram	OSRAM	LIGHTIFY A19 Tunable White45856
Lightify Model 73824	Bulb	Zigbee	Osram	OSRAM	
Element Color Plus	Bulb	Zigbee	Sengled	sengled	E11-N1EA
Bulb - LED	Bulb	Zigbee	Sengled	sengled	Z01-A19NAE26
E11-G13	Bulb	Zigbee	Sengled	sengled	E11-G13
Lux	Bulb	Zigbee	Philips	Philips	LWB004
Bulb	Bulb	Zigbee	Cree		BA19-08027OMF-12CE26-1C100
Bulb	Bulb	Zigbee	Philips	Hue White	840 Lumens

TABLE 4 Locks

Device	Type	Model	Manufacturer	Basic Name	Basic Model
Vingcard Signature	Lock	Zigbee	Assa-Abloy	AA_LOCK	
Vingcard Essence	Lock	Zigbee	Assa-Abloy	AA_LOCK	
RT+	Lock	Zigbee	Dormakaba	Dormakaba	79PS01011ER-626
Yale YRD220/240 TSDB Display	Lock	Zigbee	Assa-Abloy	Yale	Yale YRD220/240 TSDB
Yale YRD210 Push Button	Lock	Zigbee	Assa-Abloy	Yale	YRD210 Push

TABLE 5 SWITCHES/PLUGS/THERMOSTAT/ALARM/BLINDS

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
GE Smart Dimmer	Switch	Zigbee	GE	Jasco Products	45857
GE Smart Dimmer	Switch	Zigbee	GE	Jasco Products	45856
Smart Plug	Plug	Zigbee	CentraLite	CentraLite	
Smart Plug	Plug	Zigbee	Smart things	Samjin	
Smart Plug	Plug	Zigbee	INNR		
Zen Thermostat	Thermostat	Zigbee	Zen Within	Zen Within	Zen-01

TABLE 6 Sensors

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
Garage Door Tilt Sensor	Sensor	Zigbee	NYCE	NYCE	NCZ-3014-HA
Curtain Motion Sensor	Sensor	Zigbee	NYCE	NYCE	NCZ-3045-HA
Door / Window Sensor	Sensor	Zigbee	NYCE	NYCE	NCZ-3011-HA
Temperature and Humidity Sensor	Sensor	Zigbee	Aqara	LUMI	WSDCGQ11LM
Motion Sensor	Sensor	Zigbee	Aqara	LUMI	RTCGQ11LM

TABLE 6 Sensors (continued)

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
ERIA Smart Door/ Window Sensor	Sensor	Zigbee	AduroSMART ERIA	ADUROLIGHT	81822
ERIA Smart Motion Sensor	Sensor	Zigbee	AduroSMART ERIA	ADUROLIGHT	81823
Multipurpose Sensor	Sensor	Zigbee	Smart things	Samjin	IM6001-MPP01
Button	Sensor	Zigbee	Smart things	Samjin	IM6001-WLP01
Motion Sensor	Sensor	Zigbee	Smart things	Samjin	IM6001-MTP01
Water Leak Sensor	Sensor	Zigbee	Smart things	Samjin	IM6001-BTP01
EcoSense Plus	Sensor	Zigbee	Telkonet	Telkonet	SS6205-W
EcoContact Plus	Sensor	Zigbee	Telkonet		SS6255-W
Temp, Humidity Sensor	Sensor	Zigbee	Heiman	HEIMAN	HS1HT-N
Gas detector	Sensor	Zigbee	Heiman	HEIMAN	HS3CG
Contact Sensor/Door Sensor	Sensor	Zigbee	CentraLite	CentraLite	3300-G
3-Series Motion Sensor	Sensor	Zigbee	CentraLite	CentraLite	3305-G
Temperature Sensor	Sensor	Zigbee	CentraLite	CentraLite	3310-G
3-Series Micro Door Sensor	Sensor	Zigbee	CentraLite	CentraLite	3323-G
Door Sensor	Sensor	Zigbee	Ecolink	Ecolink	4655BC0-R
Temp & Humidity Sensor	Sensor	Zigbee	Sonoff	Sonoff	SNZB-02
Celling Motion Sensor	Sensor	Zigbee	NYCE	NYCE	NCZ-3043-HA
Ecolink Flood Detection Sensor	Sensor	Zigbee	Ecolink	Ecolink	FLZB1-ECO

TABLE 7 BLE

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
Card Tag	Beacon	BLE	Kontakt.io		CT18-3
Beacon Pro	Beacon	BLE	Kontakt.io		BP16-3
Asset Tag	Beacon	BLE	Kontakt.io		S18-3

TABLE 8 Device not QA tested but supported

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
Vingcard Sigma	Lock	Zigbee	Soter	Assa-Abloy	AA_LOCK
Vingcard Alpha	Lock	Zigbee		Assa-Abloy	AA_LOCK
Vingcard Classic	Lock	Zigbee		Assa-Abloy	AA_LOCK
Vingcard Allura	Lock	Zigbee		Assa-Abloy	AA_LOCK

TABLE 9 Wired

Device	Type	Mode	Manufacturer	Basic Name	Basic Model
Vape/Sound Sensor	Sensor	Wired	Soter	-	FlySense

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