RELEASE NOTES

Ruckus SmartCell Insight Release Notes, 5.4

Supporting SmartCell Insight 5.4

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SCI Introduction

The document provides release information on SmartCell Insight (SCI).

SmartCell Insight (SCI) is a Big Data analytics and reporting engine that provides deep visibility into the performance and operational statistics of your Ruckus Wireless WiFi infrastructure.

This document provides release information about the SCI features with notes on known issues, caveats, and workarounds.

Additional documentation on SCI can be found at: https://support.ruckuswireless.com/products/54-smartcell-insight-sci#documents

The SCI manuals that can be found there are:

- SCI User Guide
- SCI Installation Guide
- SCI API User Guide
- SCI Upgrade Guide

New in This Release

New Features

This section lists the new features in this release.

- **Compare Filters** helps compare sets of data within the networks against one another to provide a better understanding of network health based on various dimensions such as network deployments, brand, region and so on.
- The **Client Health Report** page calculates and displays a client health score to quickly assess the health of client connections.
- **Top Switches by Errors** chart is included under Wired Reports.
- **Error Trend** chart is included under Wired Reports, which displays the In Errors, Out Errors, CRC and In Discard measures.
- Some Dimensions and Measures in the Data explorer are renamed and reordered.
- The rsa-assembly-0.1.0.jar files that are periodically copied into the "/storage/rsa-slave/" directory are cleaned up to save space.
- Following new dimensions are included:
  - Added Geo Location for Zone, AP Group and AP to AP Inventory , Network and Client cubes.
  - Added client capabilities in Client and Sessions cube.
  - Added Client VLAN info in Clients and Sessions cube.
  - Added Client Spatial Stream Capability
- Following AP Connection measures are added into Network Cube:
  - Auth Success (count)
  - Auth Failure (count)
  - Auth Success (%)
  - Assoc Success (count)
  - Assoc Failure (count)
  - Assoc Success (%)
  - RADIUS Success (count)
  - RADIUS Failure (count)
  - RADIUS Success (%)
  - EAP Success (count)

- EAP Failure (count)
- EAP Success (%)
- DHCP Success (count)
- DHCP Failure (count)
- DHCP Success (%)

For more information, refer to the chapters named for the corresponding dashboards in the SCI User Guide.

Changed Behavior

This section lists the changed behaviors in this release.

- Saved Filters: have been integrated in to the custom **AP, Switch, SSID, Radio Filters** and integrated into one pane. It is now a global filter and shows all the report filters, however it is not related to the context of the page and applies to the entire application now; both AP and Switch filters are displayed. The filter name is also displayed. It also comes with options to update, delete and clear selections. Search inside saved filters is newly added.
- The Download button to export reports into CSV and PDF formats is now renamed to Export.
- Saved filter and schedule name is now alphanumeric (use alphabets, numbers and underscore).

For more information, refer to the SCI User Guide.

Hardware and Software Support

Compatibility Matrix

The following is the compatibility matrix between SCI and the SmartZone and ZoneDirector controllers.

TABLE 1 Compatibility Matrix

SCI Release	SmartZone (controller) Release		ZoneDirector (controller) Release
Version	**Version 3.4 or lower**	**Version 3.5 or higher**	• **Branch 9.5.3.0, build 45 and above** • **All branches starting from 9.7.0.0 and above**
1.x	Yes	No	Yes
2.x (Up to 2.4)	Yes	No	Yes
2.5 and above	Yes	Yes	Yes

If you have a ZoneDirector 9.13 or lower version, the only option available to bring data into SCI is the polling mechanism, meaning that once the ZoneDirector is added to SCI, SCI regularly polls the ZoneDirector for data.

If you have Zone Director version 9.13 - MR1 or higher, version, you can choose the polling option or the ZoneDirector push mechanism, meaning that ZoneDirector will push data to the SCI.

Ensure that you use only one of the methods (poll or push) to avoid duplicate data.

NOTE
The ZoneDirector "push" model usually does not require firewall changes, whereas the "pull" model may need firewall changes.

Supported Controller and AP Firmware Builds and ICX Switches

SCI supports the following controller and AP firmware builds and ICX switches in this release. If you are running a build not included in this list, update your controller/AP firmware to a supported build before connecting to SCI as a data source.

ZoneDirector

- ZD branch 9.5.3.0, build 45 and above
- All ZD branches starting from 9.7.0.0 and above

SmartZone (SmartZone and SmartCell Gateway)

NOTE
As of release 3.1.1, all Ruckus controller products previously called “RuckOS” is now called “SmartZone” controllers. Therefore, the following applies to existing RuckOS products, which is called “SmartZone” (SmartZone 100, SmartCell Gateway 200 and Virtual SmartZone).

- SmartZone branch 2.1.1.0, build 126 and above
- SmartZone branch 2.1.2.0, build 96 and above
- SmartZone branch 2.1.3.0, build 20 and above
- All SmartZone branches starting 2.5.0.0 and above

SmartZone Access Points

- SZ AP FW branch 2.1.1.0, build 106 and above
- SmartZone branch 2.1.1.0, build 106 and above
- SmartZone branch 2.1.2.0, build 110 and above
- SmartZone branch 2.1.3.0, build 10 and above
- All SmartZone Access Point branches starting 2.5.0.0 and above

SmartZone-Managed ICX Switches

SmartZone-Managed ICX Switches starting in SZ release version 5.1.1 are supported.

Known Issues

This section lists the caveats, limitations and known issues in this release, along with workarounds if applicable.

- SCI APIs will not be backward compatible beginning with SCI 5.3 and going forward.
- When an AP migrates from one controller to another controller, SCI counts the AP twice. Also, if a controller is removed, all APs that were previously associated with this controller are shown as "unknown" in the SCI. (ER-6877)
- rxFail_r sometimes has large negative values.
- Channel 0 may incorrectly get displayed in SmartZone versions earlier than SZ 3.2.
- When you upgrade to SCI 3.5 or later, the anomaly list in the Overview page is removed. It becomes available and operates normally starting at 3 a.m. UTC the following day.
- Scheduled reports will be sent out one hour after the scheduled time, even if no data exists.

- CSV export from the Data Explorer (data cubes as well as dashboard CSV downloads) will always export in UTC.
- For raw data export, selection of local time zone for querying data is supported, but the exported data will be in UTC. For example, if you specify time range for export as 11-11-2017 13:00 PST to 11-11-2017 14:00 PST, the data exported will be for this time range, but the timestamps in the exported data will be in UTC, which means that the timestamps will show values between 11-11-2017 21:00 UTC and 11-11-2017 22:00 UTC.
- If you first installed this SCI instance at version SCI 2.0 or SCI 2.0.1, please run the following command (***exactly*** as shown below, including the back-tick marks) on that instance to receive an accurate display of the Custom Dashboards, even if you periodically updated this instance to later versions of SCI 2. x:

  `docker-compose up -d --remove-orphans`

ZoneDirector

- Migration of ZoneDirector data is not supported.
- Airtime utilization: All versions of ZD below 9.12.1 have a known issue whereby the airtime utilization percentages can be above 100%.

  Workaround: Ruckus recommends that you update ZD to version 9.12.1 or later to resolve this issue.
- ZoneDirector PushXML supports up to 200 ZoneDirector controllers.
- ZoneDirector Push XML is supported only by ZD 9.13-MR1 and above and ZD10-MR1 and above.
- In SCI, there is no application data pertaining to the ZoneDirector.

Saved Filters in Schedules

- Selecting a schedule loads the saved filters, but does not preserve the currently selected filters.
- Saved filters created prior to version 2.4 will not be loaded when a schedule is selected.

Hadoop Distributed File System (HDFS)

- HDFS replication factor of existing files is not changed to 2 (remains at 3).

Resolved Issues

This section lists previously known issues that have been resolved in this release.

- The Top Switches by PoE Usage tile in the Network Wired Report page now displays the PoE usage in milli watts.
- In the Switch Details page, all the reports now honor the switch filter changes.
- Admin users can set up an external authentication server.
- Other user profiles cannot be modified without proper authentication.
- The AP Details page and Client Details page do not throw an exception and display appropriately when accessed from Ruckus Analytics user interface.
- Avg Capacity for both 5 GHz and 2.4 GHz are calculated based on time instead of number of APs
- In Data Explorer, from Export, you can now download the CSV format of the data based on the resource filter options chosen.
- Group admins are able to save filters.
- Metrics involving calculating averages such as Average Throughput, is more accurate.
- Application data is now available in SCI (MQTT) for 5 GHz radio.

- Switch Details report displays the IP address of the switch.
- Schedule entries are not duplicated.
- SSIDs are now reported against the correct authentication method.
- Traffic trends are now observed for switch stacks.

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350 West Java Dr., Sunnyvale, CA 94089 USA
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