

Ruckus SmartCell Insight Release Notes, 5.3.1

Supporting SmartCell Insight 5.3.1

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SCI Introduction

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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/>

The SCI manuals that can be found there are:

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

NOTE

The Upgrade Guide was new beginning with SCI release 5.0.0. Refer now to this guide for upgrade instructions.

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	<ul style="list-style-type: none">• 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.

New Features and Enhancements

This section lists the new features and enhancements in this release.

New Features:

- Added Network Usage Overview bubble chart to Overview dashboard.
- UI revamped with changes that include:
 - Network Dashboard divided into Wireless and Wired dashboards.
 - Inventory Dashboard includes separate dashboards for APs, switches, and controllers.
 - New Switch Details dashboard introduced.
 - Buttons to toggle between graphical and table representation of the same reports.
- Added a GMT/UTC label for ease in locating applicable timezone.
- Increased JVM memory for Overlord and Coordinator.

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

Enhancements:

Data Explorer:

- Explain feature
- New tile content types:
 - Sankey chart
 - Tree map
 - Area stack
- Customer dashboard enhancements: Can apply global filters, default filters, and global measures for all the tiles in a customer dashboard at one time.
- New data cubes: Switch Network, Switch Inventory, WiFi Calling.
- New dimensions and measures:
 - Capacity measures added to Network data cube
 - Client dimensions added to Applications Data Cube (Hostname, Username, Client IP, OS Type)
 - Wifi calling dimensions and measures for new WiFi-Calling data cube

For more information, refer to the "Data Explorer" section of the SCI User Guide.

Resolved Issues

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

- Incorporated druid 0.14 version.
- runc Open-Source Container Vulnerability is fixed.
- Implemented a new filter that supports the wired network hierarchy.
- AAA authentication no longer fails if the password is 15 or more characters.
- Implemented the same license expiration behavior as for AP capacity licenses.
- PDF download no longer fails
- SmartCell Insight is now capable of consuming incremental values for Switch Tx and Rx traffic data
- The SmartCell Insight admin user will now be able to push ZoneDirector data to SmartCell Insight
- The Wi-Fi calling data cube will no longer show null values for Client MAC

Caveats, Limitations and 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)
- If you are using the "Time Compares" feature, there is one specific scenario where the feature is not currently working: You cannot use the **Absolute** tab for a customized comparison when "Time" is one of the dimensions you are using. For more information about how the Time Compares feature works, refer to the SCI User Guide, "Data Explorer" chapter.
- 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`
```

Meltdown Vulnerabilities

The kernel in a fresh install of SCI v 3.6.0 or later has been patched for Meltdown Vulnerabilities. If you are upgrading from an earlier version of SCI, and have not yet patched the SCI VM kernel, run the following commands to update your SCI VM version with the patch:

- **sudo yum update**
- **sudo reboot**

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).



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