

Ruckus Wireless™ SmartCell Insight™ Release Notes

Supporting SmartCell Insight™ 5.0.0

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SCI Introduction

This document provides release information on SmartCell Insight (SCI) Release 5.0.0.

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 5.0.0 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 is 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

This section lists the controller and AP firmware builds supported by SCI in this release.

SCI supports the following controller and AP firmware builds 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

New Features and Enhancements

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

New Features

- Role-based access control (RBAC)
- Multi-tenancy support
- New dimensions and measures for some data cubes in Data Explorer
- PII Hashing
- Pruning data instantly using CLI
- Rogue APs data cube
- Three new sections of the Clients dashboard
- Default SCI login password changed from “admin” to “password”

Refer to the SCI user and installation guides for more information.

Enhancements

- Raw-data exports can handle irregular time zones, such as GMT +530.
- Error messages are more descriptive when a raw-data export fails.
- Druid has been upgraded to release 0.12.0.
- Validation is performed on passwords for a minimum of eight characters; existing accounts are not affected unless a password is changed.
- Data Explorer UI has improvements, including a new sunburst chart.
- Data Explorer has improved performance for the "View Raw Data" functionality.
- Better job-queue management exists in Spark to minimize data-collection disruptions that are caused by deadlocks.
- Longer timeouts for queries have been added to achieve higher query-success rates.
- Notifications use the term "critical" now instead of "danger."
- A new Ruckus copyright has been added.
- The Ruckus logo has been updated.

Resolved Issues

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

- Fixed incorrect reboot count for Zone Directors.
- Fixed ER-6127 by allowing irregular timezones.
- Fixed ER-6105 by extending the query timeout, and optimizing the query for "View Raw Data" in Data Explorer.

Caveats, Limitations and Known Issues

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

- 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 Wireless 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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