

RUCKUS SmartCell Insight Release Notes, 5.5.3

Supporting SmartCell Insight 5.5.3

Copyright, Trademark and Proprietary Rights Information

© 2021 CommScope, Inc. All rights reserved.

No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc. and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

Export Restrictions

These products and associated technical data (in print or electronic form) may be subject to export control laws of the United States of America. It is your responsibility to determine the applicable regulations and to comply with them. The following notice is applicable for all products or technology subject to export control:

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Disclaimer

THIS CONTENT AND ASSOCIATED PRODUCTS OR SERVICES ("MATERIALS"), ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMISSIBLE PURSUANT TO APPLICABLE LAW, COMMSCOPE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, FREEDOM FROM COMPUTER VIRUS, AND WARRANTIES ARISING FROM COURSE OF DEALING OR COURSE OF PERFORMANCE. CommScope does not represent or warrant that the functions described or contained in the Materials will be uninterrupted or error-free, that defects will be corrected, or are free of viruses or other harmful components. CommScope does not make any warranties or representations regarding the use of the Materials in terms of their completeness, correctness, accuracy, adequacy, usefulness, timeliness, reliability or otherwise. As a condition of your use of the Materials, you warrant to CommScope that you will not make use thereof for any purpose that is unlawful or prohibited by their associated terms of use.

Limitation of Liability

IN NO EVENT SHALL COMMSCOPE, COMMSCOPE AFFILIATES, OR THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUPPLIERS, LICENSORS AND THIRD PARTY PARTNERS, BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER, EVEN IF COMMSCOPE HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN AN ACTION UNDER CONTRACT, TORT, OR ANY OTHER THEORY ARISING FROM YOUR ACCESS TO, OR USE OF, THE MATERIALS. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, some of the above limitations may not apply to you.

Trademarks

ARRIS, the ARRIS logo, COMMSCOPE, RUCKUS, RUCKUS WIRELESS, the Ruckus logo, the Big Dog design, BEAMFLEX, CHANNELFLY, FASTIRON, ICX, SMARTCELL and UNLEASHED are trademarks of CommScope, Inc. and/or its affiliates. Wi-Fi Alliance, Wi-Fi, the Wi-Fi logo, Wi-Fi Certified, the Wi-Fi CERTIFIED logo, Wi-Fi Protected Access, the Wi-Fi Protected Setup logo, Wi-Fi Protected Setup, Wi-Fi Multimedia and WPA2 and WMM are trademarks or registered trademarks of Wi-Fi Alliance. All other trademarks are the property of their respective owners.

Contents

SCI Introduction	5
New in This Release	7
New Features.....	7
Changed Behavior.....	7
Hardware and Software Support	9
Compatibility Matrix.....	9
Supported Firmware.....	9
Known Issues	11
ZoneDirector.....	11
Saved Filters in Schedules.....	11
Hadoop Distributed File System (HDFS).....	12
Resolved Issues	13

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.....](#) 7
- [Changed Behavior.....](#) 7

New Features

This section lists the new features in this release.

- System Improvements:
 - Micro batch ingestion of RecvGPB messages from SZ
 - Improved system monitoring, resiliency and stability
 - Improved horizontal scaling and streamlined ETL pipeline
 - Improved data partitioning for efficient utilization CPU and RAM
 - Dynamic resource allocation
 - Database reliability is improved after upgrading to Imply 3.1.13
- New KPIs (dimensions and measures) are added:
 - AP Tx Power in Network data cube
 - Channel Bandwidth in Client data cube
 - Tx Avg Retry Rate and AP Resource metric measures in Airtime Utilization data cube
 - AP Client Latency to Network data cube
 - New AP wired client data cube
 - Total Session Count measure is included for Session data cubes
- Notifications and Licensing:
 - License Utilization Over Time graph is included in the Controllers Inventory report
 - Notifications section displays granular information about Alarms and Events triggered in the network to assess and take necessary actions for issues encountered

Changed Behavior

This section lists the changed behaviors in this release.

- AP inventory mapping in the hierarchy is now done every 24 hours instead of 15min earlier so that the AP hierarchy is update to date at all times even if there is a delay from controller to send configuration messages to SCI.
- SCI provides a license leeway of upto 10% of the total active APs or 500 APs; whichever is lower within the network environment. Users will not be able to login to SCI and view data if this limit (10% of APs or 500 APs) is breached.

For more information, refer to the SCI User Guide.

Hardware and Software Support

- [Compatibility Matrix.....](#)9
- [Supported Firmware.....](#)9

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

NOTE

SCI 5.5.3 is not recommended for deployments having only ZoneDirector controllers.

Supported Firmware

This release is compatible with the following Controller firmware:

- ZoneDirector release 9.5.3 build 45 and above, 9.7 and above (ZD1100, 1200, 3k, 5k).
- SmartZone 2.5 and above (SZ100, SZ200, vSZ)
- SmartZone managed ICX Switches in SZ 5.1.1 and above.

Known Issues

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

- In the **Admin > Settings** page, though search by filter operations are successfully, the results are overwritten after any of the check-boxes are selected.
- 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 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`
```
- Data migration in SCI clusters is not supported.
- SCI 5.5.3 would not work for ZoneDirectors out of the box; that is, if ZoneDirector devices are deployed with a self signed certificate and if it is configured in pull mode.

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.

Known Issues

Hadoop Distributed File System (HDFS)

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.

- Secure access vulnerability resolved by upgrading sudo to version 1_9_5p2 (RSA-5053)
- Alarm page now displays the following (RSA-5002, RSA-5009):
 - Raw Data Dropped: Future time data dropping
 - Spark Jobs Deleted
 - Disk Usage Storage Partition
- Security Vulnerabilities in the SCI web interface were resolved (RSA-4887)
- Resolved the issue where exporting data into PDF or CSV file after creating a dashboard in the Data Explorer page resulted in error (RSA-5008)
- Resolved erroneous PoE values displayed in the Switch Inventory page (RSA-5009)
- Resolve issue where the scheduler would hang when submitted druid APIs returned a bad request (RSA-4964)
- Some alarms were not getting obsolete even if the system had recovered (RSA-4951)
- ZoneDirector push data is not getting processed for SmartZone versions later than 3.5 and when ZoneDirector push systems are configured (RSA-4953)
- In the Data Explorer page, the button to download CSV files was disable for users with view-only access permissions (RSA-4840)
- Broken link to Data Explorer page (RSA-4699)
- Abnormality where Applications traffic was more than Network traffic (RSA-4732)
- Addressed security vulnerability issues (RSA-4615, RSA-4697)
- PDF version of reports downloaded from SCI are empty (RSA-4725)
- Error message displayed when editing schedules in the Data Explorer page (RSA-4687)

