



# **Ruckus Wireless™ SmartPositioning Technology (SPoT)**

**Release Notes for SPoT Version 3.4.3  
and vSPoT Version 2.4.3**

Part Number 800-71226-001  
Published March 2016

[www.ruckuswireless.com](http://www.ruckuswireless.com)

## Copyright Notice and Proprietary Information

Copyright 2016. Ruckus Wireless, Inc. All rights reserved.

No part of this documentation may be reproduced, transmitted, or translated, in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without prior written permission of Ruckus Wireless, Inc. ("Ruckus"), or as expressly provided by under license from Ruckus.

### Destination Control Statement

Technical data contained in this publication may be subject to the export control laws of the United States of America. Disclosure to nationals of other countries contrary to United States law is prohibited. It is the reader's responsibility to determine the applicable regulations and to comply with them.

### Disclaimer

THIS DOCUMENTATION AND ALL INFORMATION CONTAINED HEREIN ("MATERIAL") IS PROVIDED FOR GENERAL INFORMATION PURPOSES ONLY. RUCKUS AND ITS LICENSORS MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THE MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE MATERIAL IS ERROR-FREE, ACCURATE OR RELIABLE. RUCKUS RESERVES THE RIGHT TO MAKE CHANGES OR UPDATES TO THE MATERIAL AT ANY TIME.

### Limitation of Liability

IN NO EVENT SHALL RUCKUS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOSS OF PROFITS, REVENUE, DATA OR USE, INCURRED BY YOU OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, ARISING FROM YOUR ACCESS TO, OR USE OF, THE MATERIAL.

### Trademarks

Ruckus Wireless, Ruckus, the bark logo, SmartZone, ZoneFlex, FlexMaster, ZoneDirector, SmartMesh, ChannelFly, SmartCell, Dynamic PSK, and Simply Better Wireless are trademarks of Ruckus Wireless, Inc. in the United States and other countries. All other product or company names may be trademarks of their respective owners.

# Contents

## 1 SPoT 3.4.3 and vSPoT 2.4.3

### Release Information

Introduction . . . . .	4
Supported Controllers. . . . .	4
Supported Access Point Models. . . . .	5
Enhancements and Resolved Issues. . . . .	6
Enhancements. . . . .	6
System . . . . .	6
Venue . . . . .	7
vSPoT. . . . .	7
vSPoT Release Info . . . . .	8
Resolved Issues. . . . .	9
System . . . . .	9
Venue . . . . .	9
vSPoT. . . . .	9
Caveats and Limitations . . . . .	9
System . . . . .	9
Venue . . . . .	9
vSPoT . . . . .	9
Supported Pre-Engine API Versions . . . . .	10

## 2 Upgrading to a New Version

vSPoT on VMware Installation. . . . .	12
vSPoT on AWS Installation . . . . .	14

# SPoT 3.4.3 and vSPoT 2.4.3 Release Information

# 1

## Introduction

This document provides release information on the Ruckus SmartPositioning Technology (SPoT), release 3.4.3 and virtual SPoT (vSPoT) release 2.4.3

SPoT/vSPoT requires a Ruckus Wireless ZoneDirector or SmartZone wireless LAN controller to communicate between the SPoT location server and the access points.

Please refer to the ZoneDirector, SmartZone and Access Point *Release Notes* for information on Ruckus controllers and access points.

Most documents are available in PDF format from the Ruckus Support portal:

<https://support.ruckuswireless.com/>

## Supported Controllers

This SPoT release supports the following ZoneDirector and SmartZone Controllers:

- ZoneDirector 9.8 and above (ZD 1100, 1200, 3000, 5000)
- SmartZone 3.0 and above (SZ 100, SCG 200, vSZ)

---

**NOTE** To manage multiple vSPoT venues on a single ZoneDirector controller, use firmware 9.12.2 and above. This will allow the controller to manage multiple vSPoT Venue IDs using a single IP.

---

---

**NOTE** To manage multiple vSPoT venues on a single SmartZone controller, use firmware 3.1.1 patch 1 and above. This will allow the controller to manage multiple vSPoT Venue IDs using a single IP.

---

## Supported Access Point Models

This SPoT release supports the following ZoneFlex and SmartZone Access Points:

- H500
- R300
- R500
- R600
- R700
- R710
- T300
- T301n
- T301s
- SC8800-S
- SC8800-S-AC
- ZF7025
- ZF7055
- ZF7321
- ZF7321-U
- ZF7341
- ZF7343
- ZF7351
- ZF7351-U
- ZF7352
- ZF7363
- ZF7363-U
- ZF7372
- ZF7372-E
- ZF7441
- ZF7761-CM
- ZF7762
- ZF7762-AC
- ZF7762-S

- ZF7762-S-AC
- ZF7762-T
- ZF7781CM
- ZF7782
- ZF7782-E
- ZF7782-N
- ZF7782-S
- ZF7962
- ZF7982

---

**NOTE** SPoT support on the 5 GHz radio of 802.11ac APs is available as of ZoneDirector firmware version 9.10 and SmartZone version 3.x

---

## Enhancements and Resolved Issues

This release includes the following enhancements and bug fixes:

### Enhancements

#### System

- Added the message, *Use the vSPoT IP address that is reachable by the controller* to **Admin Dashboard > Venue Config > Controller Settings > Server FQDN**
- Removed the tab/ page in **Admin Dashboard > Settings > Network configuration** and **NTP configuration** as these functions has been re-factored into the VM Host OS CLI command and scripts
- Unlimited APs for out of the box inbuilt vSPoT license
- API documentation update in **SPoT Push API** tab/section
- Updated the *Access Point* model validation to reflect permissible quantity count when adding or updating a venue's access points
- Updated Google Maps API Java script for compatibility with deprecated features
- Enhanced the database connection adapters for long running connections

## Venue

- Added new pre-engine API messages (supports version 3.0 format without integrating it to the venue server behavior)
  - Added query and sync time messages
  - Added application statistics messages

## vSPoT

- Enhanced SPoT AIO application server to run as a docker container
- Added vSPoT CLI commands for network, NTP, support and SPoT AIO application server management
- Updated the installation procedure on AWS (Amazon Web Services)
- Updated swap and storage volumes from VMDK ((Virtual Machine Disk) to VDI (Virtual Desktop Infrastructure)
- Upgrade vSPoT base image with CentOS security fixes
- Upgraded Ruby to version 2.1.8
- Upgraded Redis to version 3.0.6
- Upgraded Mosquitto to version 1.4.7
- Upgraded Nginx to version 1.8.1
- Upgraded Passenger to version 5.0.24

### ***vSPoT Release Info***

- The following table maps the vSPoT release numbers to the corresponding cloud SPoT releases.

Table 1. vSPoT vs. SPoT release numbering

<b>vSPoT Release</b>	<b>SPoT Release</b>
1.0	2.0
1.0.1	2.0
1.1.0	2.1
1.2	2.2
1.3.1	2.3.1
1.4	2.4
1.5	2.5
1.6	2.6
1.7	2.7
1.7.1	2.7.1
1.8	2.8
2.0	3.0
2.3.4	3.3.4
2.3.7	3.3.7
2.4.0	3.4.0
2.4.2	3.4.2
2.4.3	3.4.3



## Resolved Issues

### System

- Resolved an issue by removing the option **Disable Swagger Validator** in **SPoT API Explorer**.
- Resolved an issue by skipping **Import Locations Resque** batch jobs for AWS SPoT venue server instances that has been terminated.

### Venue

- None

### vSPoT

- Resolved an issue of Nginx version 1.8.1 security update
- Resolved an issue where the user is now able to save new APs (no MAC address) when creating a new radio map even if the number of APs across all venues has reached the maximum license limits
- Resolved an issue of system administration dashboard of CYOM AP license limitation
- Resolved an issue by removing the DNS server name to check for venue server cluster availability in vSPoT instances.
- Resolved an issue of venue identifier when new vSPoT venues other than the default are created.

## Caveats and Limitations

### System

- None

### Venue

- None

### vSPoT

- None

## Supported Pre-Engine API Versions

- 1.0
- 2.0
- 2.1

# Upgrading to a New Version

# 2

This chapter lists important information that you must be aware of when upgrading to this release.

- [vSPoT on VMware Installation](#)
- [vSPoT on AWS Installation](#)

The following is the upgrade procedure based on the installation type.

- 1 [vSPoT on VMware Installation](#)
- 2 [vSPoT on AWS Installation](#)

## vSPoT on VMware Installation

Step-by-step instructions for performing the upgrade are provided.

- 1 Log in to the vSphere Client:
  - a Launch an instance of VMWare vSphere Client (e.g. Windows VMWare vSphere Client).
  - b In the VMWare vSphere Client, enter the IP Address (or Hostname) and administrative credentials to login to your instance of ESXi server running the source and target vSPoT instances where you want to migrate the data storage volume.
- 2 Power Off Source and Target vSPoT instances:
  - a On the left panel, expand the list of installed VM instances, and locate the source and target vSPoT instances that will be swapping data storage volumes.
  - b Right click on each and **Power-Off** each instance successively (shortcut: **Ctrl-E**).
- 3 Detach source vSPoT instance data storage volume:
  - a Once both source and target instances have been Powered Off, navigate to the source VM instance (note the name of the source vSPoT instance - this will be used to relocate and mount the storage from the source to the target vSPoT instance in later steps). Right-click and choose the '**Edit Settings...**' menu item.
  - b On the child window that appears, on the left panel, locate and identify the item under the 'Hardware' column, named '**Hard disk 3**', and click to select it.
  - c From the same child window, with the 'Hard disk 3' item selected, locate the '**Remove**' button at the top of the left panel of the child window.

---

**CAUTION!** On the Removal Options displayed on the right panel, select 'Remove from virtual machine' ONLY. (The other option would wipe out the data and therefore make it impossible to migrate the data volume to the new target instance.)

---

- d Notice that the 'Hard disk 3' item is struck out and the 'Summary' column indicates it as 'Removed'; Click **'OK'** at the bottom right hand corner of the child window to proceed.
- 4 Remove target vSPoT instance data storage volume:
  - a From the list of VM instances on the parent window left panel, locate the target vSPoT instance item, and select and right click on the **'Edit Settings...'** menu item.
  - b Repeat Steps (3b) to (3d) above but for the target vSPoT instance, and click **'OK'** to end the disk removal process, so that the data storage volume to be attached may take its place.
- 5 Attach source vSPoT instance data storage volume to target vSPoT instance:
  - a From the list of VM instances on the parent window left panel, again locate the target vSPoT instance item, right-click and select the **'Edit Settings...'** menu item.
  - b On the 'Virtual Machine Properties' child window, now locate and click the **'Add...'** button at the top of the left panel of the child window.
  - c On the new 'Add Hardware' child window, select the **'Hard Disk'** item in the middle panel of this child window and click on the **'Next'** button located at the bottom of this child window.
  - d In the 'Select a Disk' option under the 'Add Hardware' child window, select the option **'Use an existing virtual disk - Reuse a previously configured virtual disk'** in the 'Disk' option, then click on the **'Next'** button located at the bottom of this child window.
  - e On the 'Select Existing Disk' option under the 'Add Hardware' child window, click on the **'Browse...'** button next to the 'Disk File Path' text entry field,
  - f From the new Windows file explorer dialog, locate and select the **'Data-stores'** file type that was created for your ESXi server, (e.g. esxi-local-storage-1), select the item, then click **'Open'**.
  - g From the expanded list in the 'Browse Datastores' dialog, scroll to and locate the 'Name' identical to your source vSPoT instance that you recorded in Step (3a) above (e.g. vSPoT-version-187\_vmx), and select the item, then click **'Open'**.
  - h From the refreshed 'Browse Datastores' dialog, locate and select the item ending with **'\_vmx\_2.vmdk'**, and click **'OK'**.

- i Back in the parent **'Add Hardware'** -> **'Select Existing Disk'** child window, notice the filled out **'Disk File Path'** file based on your selections from the above steps, then click the **'Next'** button.
- j On the **'Add Hardware'** -> **'Advanced Options'** child window, right side panel, locate the **'Virtual Device Node'** section, and select the item directly beneath the **'SCSI (0:1) Hard disk 2'** item (e.g. **'SCSI (0:2)'**), then click the **'Next'** button.
- k Review the **'Add Hardware'** -> **'Ready to Complete'** -> **'Options'** summary information, and click the **'Finish'** button to complete the data storage volume transfer action, OR, click **'Back'** to alter/edit any previously entered values/choices, OR, click **'Cancel'** to ABORT the operation.
- l Finally, click the **'OK'** button at the bottom right-hand corner of the **'Virtual Machine Properties'** window to finish the VM settings changes applied/changed/aborted.

Power On your target vSPoT instance VM and verify the data volume migration action has successfully completed.

## vSPoT on AWS Installation

Virtual SPoT in AWS can be updated with the following steps.

- 1 Delete the current vSPoT installation on AWS. The delete step will automatically keep the storage volume with the collected data
- 2 Install the vSPoT and specify the storage volume identifier during the creation process.

---

**NOTE:** Ruckus Wireless ensures that the CloudFormation template contains the AMI identifier of the latest vSPoT release.

---



Copyright © 2006-2016. Ruckus Wireless, Inc.  
350 West Java Dr. Sunnyvale, CA 94089. USA  
[www.ruckuswireless.com](http://www.ruckuswireless.com)