

## Ruckus Virtual SmartZone Quick Setup Guide

## Supporting SmartZone 5.1

This *Quick Setup Guide* provides basic instructions for setting up the Ruckus Virtual SmartZone (vSZ) on the network.

For information on advanced configuration and management options, see the Getting Started Guide and other appropriate documents, which are available for download from the Ruckus Support website

https://support.ruckuswireless.com/documents

## This Guide in Other Languages

请从以下网站获得该指南的简体中文版 https://

support.ruckuswireless.com.

Vous trouverez la version française de ce guide à l'adresse suivante https://support.ruckuswireless.com.

このガイドの日本語版は https://

support.ruckuswireless.com でご覧ください。

이 가이드의 한국어 버전은 웹 사이트 (https:// support.ruckuswireless.com) 에서 확인하시기 바랍니다.

Veja a versão em português (Brasil) deste guia em https://support.ruckuswireless.com.

Puede ver la versión en español (América Latina) de esta guía en https://support.ruckuswireless.com.

### **Important Notes**

**NOTE:** vSZ reserves subnets 10.255.0.0/16 and 10.254.0.0/16 for inter-process communications between the controllers/data planes. These subnets should not be used. Subnets are configurable using the CLI command.

## **Licensing Information**

The vSZ controller's "Right to Use" (RTU) license comes with one (1) instance license for 90 days from when the vSZ is first setup and must be activated to be eligible for future software updates beyond 90 days. From SmartZone release 3.2 and later, you get up to one (1) permanent and four (4) temporary AP licenses. To manage more APs, you must purchase additional AP Capacity Licenses and they must be activated for them to become valid.

Using the LiMAN (license management) portal on the Ruckus Networks Support website, you can assign licenses to or from a SmartZone controller to another purchased SmartZone controller (see a summary of LiMAN features in Table 1).

To physically manage the distribution of licenses from the Support website to the actual vSZ, you must connect vSZ directly to the Internet. In the event that the vSZ disconnected from the Internet, you can download the actual licenses from the Support Portal and manually upload to the specific vSZ.

For step-by-step instructions on how to activate the vSZ's licenses, see Step 5: Activate the vSZ's Licenses on page 2.

 $\ensuremath{\text{TABLE 1}}\xspace$  LiMAN features and how to activate them on the vSZ

LiMAN Features	vSZ Online (Connected to the Internet)	SZ300 Offline (Disconnected from the Internet)
<ul> <li>Register the vSZ RTU instance license, support entitlement.</li> <li>Add capacity licenses to SmartZone controllers.</li> <li>Remove licenses from SmartZone controller and add to another.</li> </ul>	No action required. The SmartZone controller syncs with LiMAN automatically once every 24 hours and applies the appropriate licenses.	<ul> <li>Three steps required:</li> <li>1. Download the license file from LiMAN.</li> <li>2. Log on to the vSZ web interface, and then upload the license file from LiMAN.</li> <li>3. Download the license response file from the vSZ, and then</li> </ul>

**TABLE 1** LiMAN features and how to activate them on the vSZ (continued)

LiMAN Features	vSZ Online (Connected to the Internet)	SZ300 Offline (Disconnected from the Internet)
		upload it to LiMAN.

To activate licenses on the vSZ controller, you will need the following:

- vSZ 3.6.1 image
- This Quick Setup Guide

## **Before You Begin**

The minimum memory and CPU requirements have changed in this release. You may need to upgrade your infrastructure before upgrading. Please read carefully. This is the minimum requirement recommended. Refer to the *Release Notes* or the *Getting Started Guide*.

Before deploying Ruckus products, please check for the latest software and the release documentation.

- Release Notes and other user documentation are available at http://support.ruckuswireless.com/ documents.
- Software upgrades are available at http:// support.ruckuswireless.com/software.
- Open source information is available at http:// opensource.ruckuswireless.com.
- Software license and limited warranty information are available at http://support.ruckuswireless.com/ warranty.

## What You Will Need

- A hypervisor on which to install vSZ (see the following supported hypervisor table).
- The vSZ distribution package (.OVA file), which is available for download from the Ruckus Networks Support website.
- The IP address, netmask, gateway and DNS server addresses assigned to the vSZ controller—if it has a static network address (recommended).
- A virtual machine that meets the recommended system resources for the number of APs and wireless clients that you plan to manage (see the "Determining the System Resources That the Virtual Machine Requires" chapter in the *vSZ Getting Started Guide*.

TABLE 2 Hypervisors that vSZ supports

Vendor	Hypervisor	Version
VMWare	ESXi	6.7 and later
Windows	Windows Server Hyper-V	Windows Server Hyper-V (2012 R2)
KVM	CentOS	7.4 (64 bit)

vSZ also supports Google Compute Engine (GCE) and Amazon Web Services (AWS).

## Step 1: Install the vSZ on the Hypervisor

Using the .OVA file that you downloaded from the Ruckus Networks Support site, install an instance of the vSZ on the hypervisor. For step-by-step instructions, see the vSZ *Getting Started Guide*.

# Step 2: Power On the vSZ Virtual Machine and Configure Its Interfaces

After you power on the vSZ virtual machine, you need to configure its interface or interfaces. For step-by-step instructions, see the vSZ Getting Started Guide.

There are two options you can choose before proceeding to the initial setup mentioned in the next task, "Step 3: Start and Complete the Setup Wizard."

- You can use the VM CLI Console and go through the setup wizard. This will provision operating profile interfaces, network settings, and other details. You can complete the setup using the Web UI wizard specified in the next task. **OR**
- You can reboot the system using default network settings. This action obtains an IP address using DHCP on the Management Interface. You can use this IP address to go through the Web UI and complete the setup wizard outlined in the next task without using the CLI.

### Step 3: Start and Complete the Setup Wizard

- Start your web browser, and enter the following in the address bar: https://{management-IPaddress}:8443 where management-IP-address is the address you assigned to the management interface.
- 2. Select your preferred language, and click Next.

- 3. Select the profile configuration (High Capacity or Essentials) that corresponds to the virtual SmartZone (vSZ) license that you purchased, and click **Next**.
- 4. Configure the management IP settings, and click **Apply**.
- 5. Configure the cluster settings by selecting whether you are creating a new cluster with this vSZ or this vSZ is joining an existing cluster. Click **Next**.
- 6. Set the administrator password for the web interface and the enable password, which lets you enter the privileged EXEC mode of the command line interface. Click **Next**.

The next wizard page displays all of the settings that you configured on the previous pages.

7. Verify that all of the settings are correct, and click **Finish** to apply the settings and activate the vSZ on the network.

A progress bar appears and displays the progress of applying the settings, starting the vSZ services, and activating the vSZ on the network. When the process is complete, the progress bar shows the message "100% Done." The page also shows the IP address through which you can access the vSZ web interface to manage the controller.

**NOTE:** Take note of this IP address. You will need this later to log on to the vSZ web interface.

FIGURE 1 Take note of the IP address of the web interface



**Step 4: Connect the APs to the Network** 

2. Record each AP's Ethernet MAC address (printed on

the bottom of every AP), and note each device's exact

1. Distribute the APs around your worksite.

3. Connect the APs to a local power source.

worksite.

## 4. Using an Ethernet cable, connect the APs to the switch or router on the same network as the vSZ.

Some APs are PoE-capable. If connected to a Power over Ethernet switch, the APs can draw power through the Ethernet cables.

When the APs are powered on, they discover the vSZ on the network.

The AP must have some way of obtaining an IP address (IPv4 DHCP or IPv6 Auto Configuration). For more information see the "Ensuring That APs Can Discover the Controller on the Network" section.

## Step 5: Activate the vSZ's Licenses

Activate and assign the AP and Tunnel Licenses using the LiMAN (license management) portal on the Ruckus Networks Support site.

You must have a Ruckus Support portal account (including user name and password). You can use this account to access general Support site content including software upgrades, knowledge base articles and technical documents. If you do not have a Support portal account, you will be required to register one before continuing with your product and license activation.

Every capacity and support license that you have purchased will have its own unique activation code and each must be activated for the license to become valid. You will receive the activation code in a separate Support Purchase Acknowledgment (SPA) email for each license/ support license.

For the vSZ product, you may receive multiple SPA emails for all your licenses. The first three characters of the activation code indicate the license type to which the code is applicable:

- RTU: Right to Use License
- LIC: AP Capacity License
- LIC: AP Tunnel License
- SUP: Support License

## Activating a vSZ/RTU Support License

Activate and assign the AP and Tunnel Licenses using the LiMAN (license management) portal on the Ruckus Networks Support site.

1. Open the SPA email that you received from Ruckus Networks.

#### FIGURE 2 The SPA email from Ruckus Networks RTU

Enclosed is a copy of the License(s) purchased.

Ruckus Wireless, Ir	nc Ruckus Wireless, Inc
ial Numbers	Activation Code
Instance	
Clic	k here <u>RTU-00427567-ANT-JAY</u>
	Instance

#### 2. Log on to https://support.ruckuswireless.com.

#### FIGURE 3 Ruckus Networks Support portal logon page

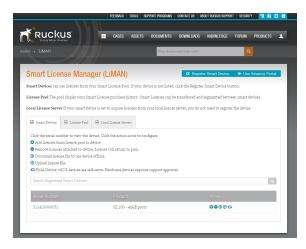
FEEDEMOX TOOLS SUPPORT PRO	ERAMIS BUY SUPPORT CONTACT US ABOUT FUCKUS SUPPORT ୟ 🖬 🖬 🖬
	ents downlaads knowledge forum products <mark>login</mark>
	What do you need help with?
Logging Into Your Support Account If you have completed registering for a support account, log in here to shock the status of your wants, RAA, your cases fand status), and	This instructions Instructions . Ence your loginizedly enails and passweed below Click Taplic's terms
check the status of your sourcery, RMA, your cases (and status), and you can also find answers to your questions in our database.	2. Cana Logar Damon Always Hide Instructions
() Login	() Password
customerserample.com Need an account? Register New	Fergot your password? Recover Here
Login	

- 3. Have the serial number of your virtual SmartZone (vSZ) installation ready.
- 4. Click the link in the SPA email.
- 5. Follow the onscreen instructions to activate the licenses purchased. When required, you will be prompted for your vSZ's serial number (28 characters in length).
- 6. It is important that you repeat steps 1 to 5 above for all licenses that you have purchased as this will simplify the "+License" workflow in the next step.
- 7. After you complete activating all of your licenses, you need to assign them to your LiMAN account. Click the LiMAN button, which appears after a license has been successfully activated as shown below. If your device is listed, click its serial number and proceed to the next step. If your device is NOT listed, click the Register Smart Device button (see Figure 5), enter your device's serial number, and then click the Register Smart Device button (see Figure 6).

#### FIGURE 4 Click the LiMAN button

FEEDBACK TO	ILS PROGRAMS BUY CONTACT TRAINING ABOUT SECURITY RETURN TO PARTNER	380
	NOCUMENTS DOWNLOADS KNOWLEDGE FORUM PRODUCTS CASES ,	ASSETS 🔔
	What do you need help with?	
ogin Success.		
Technical Documents ->	Software Downloads → Activate Purchase	⊘
ZoneFlex 7731 Release 9.2.0.0.174 Rel (14/12/90) ZD Remote Control 9.9 for (OS Release (14/12/29)	ZE7731 Firmware 9.2.0.0.174 (14/12/80) SCI 1.2 (GA) Software Release: ISO In (14/12/29) Register Warranty	Ø
SmartCell Insight Version 1.2 User Guide (14/12/29)	SCI1.2 (GA) Software Release (14/12/29) Download Licenses	Ø
Choose A Product •	Choose A Product	P
Ø Knowledge Base Articles     →	Announcements & Forum Discussions. →     View Customers	
Common Administration Questions Common Hardware Questions Common Software Questions	Ruckes Wheeles Tsaining Bertal - D (2014/2016) Burkes Support Forums Server Mainte. "Never Ruckes" registration and IL. (2014/2016) WDFB mudae and Mills in the Good Calvid 2014	
Choose A Topic 🔹	SAMo, SCI, v6CG, and SPOT novranal	

## **FIGURE 5** Click the serial number of your device or click Register Smart Device

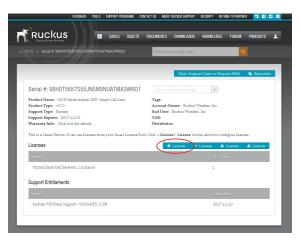


## **FIGURE 6** Enter your device's serial number and click Register Smart Device

	CASES	ASSETS	DOCUMENTS	DOWNLOADS	KNOWLEDGE	FORUM	PRODUCTS
			What do you	1 need help with?		٩	
						0	Hide Instructio
Registering Your Smart Devic	е		Instruct	ions			
If you've bought an SZ-100 class hardware registered devices can download Smart Lic You do not need to register your device if Server with your device.	enses from your L	lcense Pool.		our device serial legister Smart De			
						Always	Hide Instructio
O Serial number							

8. Click the + License button (see Figure 7), enter the number of licenses to add in Qty to Add, and then click the Add License button (see Figure 8). Repeat for all licenses.

#### FIGURE 7 Click + License



**FIGURE 8** Enter the number of licenses to add in Qty to Add and click Add License



You have completed activating the vSZ's licenses.

### Step 6: Sync the vSZ with LiMAN

After you have activated the virtual SmartZone (vSZ) licenses on the Ruckus Wireless Support Portal, the vSZ must be synced with the SmartLicense server. This will enable the User's ability to assign licenses to and back from a SmartZone controller or assign them to another vSZ.

To manage the distribution of licenses from the Support Portal to the actual vSZ, do one of the following:

 On the vSZ web interface, go to the Administration > Licenses page, and click the Sync Now button to sync the vSZ with the SmartLicense server.

Jashboard	Installed Licenses License	Servers							
iystem +								View Alode: List Eurowar	
Access Points	C Syna New Dipload	± Deveload					search table	Q C Refresh	
Hireless LANs	Name	SCG Hode	Start Date	Exploration Date	Capacity	Description			•
	CAPACITY-AP-BUNDLED	controller		Personet		Default AP Capacity License for vSI			
lients 🕨	CARACITY-AP-DEDUCT	controller	2217/01/24	3017/04/24	4	Default AP Capacity License for HSZ			
pplications	CARACITY-RIGH-BUNDLED	controller		Personet		Default AP Direct Tunnel License for vS2			
,,	CAPACITY-RIGH-DEFAULT	controller	2017/01/24	3217/04/24	4	Default AP Direct Tunnel License for vS2			
ervices & Profiles +	CRANDER-VS20-DEGAULT	controller	3817/01/24	3317/04/24	10	befault vS2-D Capacity License			
	FEATURE-SICM-DEFAULT	controller	2017/01/24	2017/04/24		Default License for CALER Mirroring			
eport »	INSTANCE-VSCG-DEFINILT	controller	2017/01/24	2017/04/24		befault Instance License for vQ			
	SUPPORT-EU-DEFAULT	controller	2017/01/24	2017/04/24		Default, End User Sepport License for HSZ			
Troubleshooting								d total records - 5	
dministration x	Last Sync: 2017-02-07 19:440	24							
Admins and Roles									

• In the event that the vSZ is disconnected from the Internet, download the actual licenses from the Support Portal and manually upload them to the

specific vSZ. See the "Syncing Licenses on an Offline vSZ" task.

You have completed activating the capacity or support license for the vSZ device.

### Syncing Licenses on an Offline vSZ

1. On the **Add License** page of LiMAN, click the vSZ serial numbers. The **View Device** page appears, as shown in the following figure.

FIGURE 9 The View Device page

View Dev	rice					
Return Device Ubl	load License File					
Device Serial Number	98207562153LXNC	44XDNTVFLR09				
Device Description	vSCG Series Adm	in SKU				
Status	ACTIVE					
Series Part Number	v903 Selles P01-521/4WW00					
Virtualization	Ware					
Orbusilization						
Details	View					
	View (None) Update Device	l.				
Detalis Additional Detalis	(None) Update Dovice more License   View	History Download License	Ele			
Additional Details Add Litense Ban Current Lice	(None) Update Dovice more License   View				Perceitor	
Details Additional Details Add Litense Ran Current Lice Ucorae Name	(Nore) Updatio Dovice more Likense   View PIISE	Internal Use Only	Ertilloment	Linits Mapped	Eginten	
Additional Details Add Litense Ban Current Lice	(Nore) Updatio Dovice more Likense   View PIISE			Linih Mapped 1	Depinten Pernanet	_
Details Additional Details Add Litense Ran Current Lice Ucorae Name	(Nore) Update Device more Litense   Max 20158 alterray, 1 Instance	Internal Use Only	Entifiement ETU 00000010 VAX CAR EVE Pro- VSCO-WWW 0100000004941 E40	1		

- 2. Click **Download License File**. The license file is saved to the client.
- 3. On the vSZ web interface, go to **Administration** > **License**. In the **Upload License** section (see Figure 11), click the **Browse** button, and select the license file from your client to upload it to the vSZ.
- 4. On the vSZ web interface, go to Administration > License. In the Download License section (see Figure 12), click the Browse button, and select the license file from your client to download it to the vSZ.
- 5. Go back to the LiMAN portal on the Ruckus Networks Support website, and do the following:
  - Go to the **View Device** page, see Figure 9.
  - Click Upload License File.
  - Click the **Choose File** button (see Figure 10), and select the license file from your client.
  - Click **Send** to complete the offline License synchronization.

#### FIGURE 10 Click the Choose File button

			Dad License File	pt you to save the response fil		Yo
View Dev Return Device		Choose	File No file chosen Send			
Device Serial Number	98207562153LXN	44XDR0TVFLRGK				
Device Description	vSCG Series Adl	nin SKU				
Status Series Part Number Virtualization	ACTIVE VSC0 Series P01-5211/-WW00 VMeans		Da			
Vehalization	View					
Virtualization Details Additional Details						
Vetualization Details Additional Details	View (Nore) Updato Dovice more License   Vie	N History   Download Liker	a file			
Vrhalization Details AddUkense Rec Current Lice Ucense Name	View (None) Updato Dovice more Likense   Vie 9NSB	Internal Use Only	Estillement	Linits Mapped	Dynnien	
Vetualization Details Additional Details AddUkense   Ber Current Lice	View (None) Updato Dovice more Likense   Vie 9NSB	vHistory Download Liken		Units Mapped	Dgrinken Pernanert	_
Vehasilization Details Add Litense Rec Current Lice	View (Nore) Up5Attle Docket move License   Vie 20158 attensity, 1 Instance	Internal Use Only	Ext Bornert BTL 0020210 VAX: CAR EVE POD VS COMMON DISSUMMENT F20	1		_

You have completed activating licenses on an offline vSZ.

## Related Documentation

If you need more information about the vSZ or the SmartLicense platform, refer to the following documents, which are available for download on the Ruckus Networks Support website:

- For information install the vSZ and how to complete the essential configuration tasks, refer to the vSZ *Getting Started Guide* for this release.
- For information on how to perform advanced configuration tasks and AP management and monitoring, refer to the corresponding vSZ *Administrator Guide* for this release.
- For a complete list of documentation available for the vSZ, refer to the *Release Notes*.
- For more information on how to manage your vSZ licenses, refer to the *SmartLicense User Guide*.

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