

Ruckus Wireless SmartLicense

User Guide

Part Number 800-70779-001 Rev A Published February 2015

www.ruckuswireless.com

Copyright Notice and Proprietary Information

Copyright 2015. Ruckus Wireless, Inc. All rights reserved.

No part of this documentation may be used, 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 CONSEQUEN-TIAL 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, Bark Logo, BeamFlex, ChannelFly, Ruckus Pervasive Performance, SmartCell, SmartZone, ZoneFlex, Dynamic PSK, FlexMaster, MediaFlex, MetroFlex, Simply Better Wireless, SmartCast, SmartMesh, SmartSec, SpeedFlex, ZoneDirector, ZoneSwitch, and ZonePlanner 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

About This Guide

Document Conventions	6
Related Documentation	6
Documentation Feedback	7

1 Introduction

Introduction to the SmartLicense Platform	9
About the Ruckus Support Portal	9
About RuckOS Controllers	9
About AP Capacity Licenses	9

2 Activating and Registering Your Purchases

Activating the RuckOS Controller's Licenses.	. 12
Before You Begin	. 12
Activating a RuckOS Controller's License/Support License	. 12
Synchronizing the RuckOS Controller with LiMAN	. 18
Syncing Licenses on an Offline RuckOS Controller	. 19

3 Managing Licenses Using LiMAN

Using the LiMAN License Management Portal
Viewing Your Pool of Activated Licenses
Adding and Removing Licenses
Manage Licenses from a Controller Device Page
Manage Licenses Using Action Icons
Adding Licenses to a Controller
Returning AP Licenses from a Controller to the License Pool

4 Using an LLS Server

Local Licensing Server Overview	32
Activating an LLS Server Right to Use License	32
Step 1: Activate your LLS right to use license	32
Step 2: Associate AP licenses with your LLS server	35
Step 3: Activate Tunnel Capacity licenses	37
Step 4: Activate Support Entitlement for the LLS Server	38

Step 5: Log into your LLS and download license information from the cloud server . . . 39

About This Guide

This *SmartLicense User Guide* provides step-by-step instructions for activating and binding controller right to use licenses, AP management and tunnel capacity licenses, Ruckus support entitlements and Local License Server (LLS) software licenses to a Ruckus RuckOS wireless LAN controller device. This guide is intended for use by those responsible for managing Ruckus Wireless network equipment. Therefore, it assumes basic working knowledge of Ruckus Wireless controller and Access Point products.

NOTE If release notes are shipped with your product and the information there differs from the information in this guide, follow the instructions in the release notes.

Most user guides and release notes are available in Adobe Acrobat Reader Portable Document Format (PDF) or HTML on the Ruckus Wireless Support website at https://support.ruckuswireless.com/documents.

Document Conventions

Table 1 and Table 2 list the text and notice conventions that are used throughout this guide.

Table 1. Text conventions

Convention	Description	Example
monospace	Represents information as it appears on screen	[Device name]>
monospace bold	Represents information that you enter	[Device name]> set ipaddr 10.0.0.12
default font bold	Keyboard keys, software buttons, and field names	On the Start menu, click All Programs .
italics	Screen or page names	Click Advanced Settings . The <i>Advanced Settings</i> page appears.

Table 2. Notice conventions

Notice Type	Description
NOTE	Information that describes important features or instructions
CAUTION!	Information that alerts you to potential loss of data or potential damage to an application, system, or device
WARNING!	Information that alerts you to potential personal injury

Related Documentation

In addition to this *User Guide*, each SmartLicense documentation set includes the following:

- SmartZone 100 Quick Start Guide: Provides a summary of the steps for activating and binding licenses to your Ruckus customer account, and applying them to a SmartZone 100 controller. The Quick Start Guide provides a summary of the information included in this User Guide, and is available for download on the Ruckus Wireless Support website at http://support.ruckuswireless.com.
- Local License Server User Guide: Provides comprehensive instructions for installing and managing a Local License Server at your site.

• Local License Server Quick Start Guide: Provides summarized steps for installing an LLS at your site.

Documentation Feedback

Ruckus Wireless is interested in improving its documentation and welcomes your comments and suggestions. You can email your comments to Ruckus Wireless at:

docs@ruckuswireless.com

When contacting us, please include the following information:

- Document title
- Document part number (on the cover page)
- Page number (if appropriate)

For example:

- Ruckus Wireless SmartLicense User Guide
- Part number: 800-70779-001
- Page 88

Introduction

1

In this chapter:

- Introduction to the SmartLicense Platform
- About the Ruckus Support Portal
- About RuckOS Controllers
- About AP Capacity Licenses

Introduction to the SmartLicense Platform

The Ruckus Wireless SmartLicense platform provides a web-based process to allow customers and partners to activate purchased Ruckus controller and Access Point products, bind AP licenses and support entitlements to their customer accounts, and manage those entitlements using a centralized, single sign-on portal.

Customers can access the SmartLicense license server portal via the support.ruckuswireless.com site. By using a single-sign on service, the user does not need to remember multiple user IDs, passwords and URLs for accessing various services.

About the Ruckus Support Portal

Each customer should have a Ruckus Support portal account (user name and password). This account can be used 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.

About RuckOS Controllers

Throughout this document, the term "RuckOS controller" or just "controller" refers to any Ruckus Wireless controller product running the RuckOS system firmware. Specifically, a RuckOS controller is one of the following Ruckus Wireless WLAN controller products:

- All SmartZone 100 controllers (SZ-100)
- virtual SmartCell Gateway (vSCG) virtual controllers running RuckOS 3.0 and higher

NOTE RuckOS controllers include a limited time period after which they must be registered with Ruckus Wireless. You have 90 days to register your RuckOS device after completing the configuration wizard.

About AP Capacity Licenses

AP Capacity Licenses are managed via the Ruckus Support Portal, which provides a single sign-on interface to the SmartLicense platform.

The user has the ability to assign AP licenses to a RuckOS controller and to release them back to the license pool for assignment to another controller. To physically manage the distribution of licenses from the Support Portal to the actual controller requires one of the following three methods:

- Connect the controller directly to the Internet, allowing the controller to automatically (or manually) synchronize its licenses with the SmartLicense platform.
- Download the license file from the Support Portal and manually upload it to the specific controller.
- Deploy a Ruckus Local License Server (LLS) within your network. The LLS must be able to communicate with your Controller(s) and it must be connected to the Internet.

These three methods are described in the following sections:

- Activating and Registering Your Purchases
- Using Manual Offline License Synchronization
- Using an LLS Server

Activating and Registering Your Purchases

2

In this chapter:

- Activating the RuckOS Controller's Licenses
- Synchronizing the RuckOS Controller with LiMAN

Activating the RuckOS Controller's Licenses

The following section describes the steps required to activate and assign the AP and Tunnel Licenses using the LiMAN (license management) portal on the Ruckus Wireless Support site.

Before You Begin

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.

Depending on the product, you may receive up to three (3) different SPA emails for all of your licenses. The first three characters of the activation code indicate the license type to which the code is applicable.

- LIC: AP Capacity License
- LIC: AP Tunnel License
- SUP: Support License

Activating a RuckOS Controller's License/Support License

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

Figure 1. The SPA email from Ruckus Wireless

	Purchased Lic	cense(s) Details
Distributor:	VAR:	End User:
Ruckus Test Disty	GH-VAR-1	Ruckus Wireless
Due Junet	Savial Number	Activation Code

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

Figure 2.	Ruckus	Wireless	Support	portal	logon	page
J · ·					- 0 -	1

Simply Better Wireless.	CASES F	SSETS DOCUM	ENTS DOWNLOADS KN	IOWLEDGE FORUM	PHODUCTS	LUGIN
			What do you need help with?		т	٩
lease log in						
					Hide Instru	ctions
Logging Into Your Su	port Account		Instructions			
If you have completed register	ng for a support accour	t, log in here to	1. Enter your login(usuall	ly email) and password	below.	
check the status of your warra	nty, RMA, your cases (ar	id status), and	2. Click "Login" button			
you can also milu answers to yo	ar questions in our dat	wase.		Alv	ays Hide Instru	ctions
📀 Login			Password			
customer@example.com			•••••			
Need an account? Register Now			Forgot your password? Recove	er Here		

- **3** Have the serial number of your controller device 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 controller serial number.
- 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 step #7 below.
- 7 After you finish 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 (see Figure 3).
 - If your device is listed, click its serial number and proceed to step #8.

 If your device is NOT listed, click the Register Smart Device button (see Figure 4), enter your device's serial number, and then click the Register Smart Device button (see Figure 5).

Activating and Registering Your Purchases

Activating the RuckOS Controller's Licenses

FEEDBACK TOO	LS PROGRAMS BUY CONTACT TRAINING ABOUT	SECURITY RETURN TO PARTNER 🧧 f 🗹 🛅
	DOCUMENTS DOWNLOADS KNOWLEDGE FOR	RUM PRODUCTS CASES ASSETS 上
	What do you need help with	2 Support Chat
Login Success.		
Technical Documents >	\bigstar Software Downloads \rightarrow	Activate Purchase 🛛 😔
ZoneFlex 7731 Release 9.2.0.0.174 Rel (14/12/30) ZD Remote Control 9.9 for iOS Release (14/12/29)	ZF7731 Firmware 9.2.0.0.174 (14/12/30) SCI 1.2 (GA) Software Release: ISO In (14/12/29)	Register Warranty 🥟
SmartCell Insight Version 1.2 User Guide (14/12/29)	SCI 1.2 (GA) Software Release (14/12/29)	Download Licenses 🧳
Choose A Product 🔹	Choose A Product 🔻	Submit A Case 🎽
-		View Customers 🛛 🙈
	Announcements & Forum Discussions → Ruckus Wireless Training Portal - D (2014/12/30) Ruckus Support Forums Server Mainte 'News to Buckus' resistration and II (2014/12/29)	C LIMAN
Choose A Topic 🔹	SWIPE update available in the Googl (2014/12/04) SAMs SCL vSCG and SPoT now avail (2014/11/21)	Recently Viewed Products
	ZD Remote Control (Android) 1.2 is (2014/10/27) (2014/10/24)	ZoneDirector 3000

Figure 3. Click the LiMAN button

Figure 4. Click the serial number of your device or click Register Smart Device

FEEDBHUK TOULS SUFFORT FRUGRAMS	S CONTACT US ABOUT NOCKUS SUFFORT SEC	
Engly Ratter Warkes	ETS DOCUMENTS DOWNLOADS KI	NOWLEDGE FORUM PRODUCTS .
	What do you need help with?	Q
Smart License Manager (LiMAN)	C Register RuckOS	S Hardware S Use Advance Portal
Smart Devices	Help & PAOs	lf your
	the map of map	device is not
Click the serial number to view the device. Click the action icons t	to configure.	
• Add licenses from license pool to device		listed
Remove licenses attached to device. License will return to pool	L	
 Download license file to use device offline. Upland license file 		
Constant internse me. 13 RMA Device. vSCG devices are self-serve. Hardware devices re	quires support approval.	
Search Registered Smart Devices If your device is li	isted	<u>م</u>
Serial Number		Action
98HOTWS6CRNG181XHPCHA3HONHNQ	vSCG Series Admin SKU -Smart Cell Line	00013
99S989WRCXQZ	vSCG Series Admin SKU -Smart Cell Line	0 0 0 tz
98H0T5KK7S55JN5MVNUATMA3WRD1	vSCG Series Admin SKU -Smart Cell Line	○ ○ ⊙ □ □

Activating and Registering Your Purchases

Activating the RuckOS Controller's Licenses

· ·	FEED	IBACK TOOL	.s suppo	ORT PROGRAMS	CONTACT US A	BOUT RUCKUS SUPPOF	t securit	Y 🔽 🖬	🗹 in
	C/	ases as:	SETS I	Documents	DOWNLOADS	KNOWLEDGE	FORUM	PRODUCTS	1
				What do yo	u need help with?		٩		
	/								
							(Hide Instruct	tions
Registering Your Smart Devi	се			Instruct	tions				
If you've bought an SZ-100 class hardwai registered devices can download Smart L You do not need to register your device i Server with your device.	re, you must r icenses from y if you are usin	egister it her 70ur License g a Local Lic	re. Only Pool. sense	1. Enter 2. Click 1	your device serial Register Smart Do	number evice' button	A1	U.J. Tanaharat	
							Aiways	Filde Instruct	nons
Serial number Register Smart Device									

Figure 5. Enter your device's serial number and click Register Smart Device

NOTE For SZ-100 controllers, the serial number shall be 12 characters, for vSCG the serial number shall be 28 characters.

8 Click the **+** License button (see Figure 6), enter the number of licenses to add in **Qty to Add**, and then click the **Add License** button (see Figure 7). Repeat for all licenses.

Activating the RuckOS Controller's Licenses

	Figure	6.	Click +	License
--	--------	----	---------	---------



Figure 7. Enter the number of licenses to add in Qty to Add and click Add Licenses

							RETURN	TO SUP
us						SOFTWARE & SERVICES	DEVICES	GET
nter > Add Lice:	nse							
							You're c	urrently
ıse								
311426000031 STRING 1st SZ 100 - 4xGE	ports East Campus							
Entitlement	Expiration	Available Units in Line Item	Total Units in Line Item	Maximum Add-On Units Allowed on Device	Qty to Add			
LIC-00394959- ANT-CAP-AXE L09-0001-RXGW a1DW0000000fPn EMAU (93774253)	Permanent	5	10	5	5			
LIC-00394960- ANT-CAP-BAG L09-0001-SG00 a1DW0000000/PpJ	Permanent	50	100	50				
	Lic 2034920 Entitionent Lic 2034920 Entitionent Lic 2034920 ATT-26-263 Lid 201-8620 Control	Inter > Add License	Inter + Add Lienne Ise SE SING STR0 STR0 STR0 Ist 22 10 - 466 ports East Campus Entifement Expraint Una time Una time Lic2034890: Permanent S AttCAAASS Permanent S AttCAAASS Permanent S S S S S S S S S S S S S	Inter + Add Lionne Ise Ise Ise Ise Ise Ise Ise	Inter > Add Lienne Inter	Inter + Add Lionne Iter + Add L	SOFTWARE & SERVICES SOFTWARE & SERVICES SOFTWARE & SERVICES STRUE SEC SEC SEC SEC SEC SEC SEC S	SOFTWARE & SERVICES DEVICES Notice

You have completed activating a controller's licenses.

Synchronizing the RuckOS Controller with LiMAN

After you have activated the controller's licenses on the Ruckus Wireless Support Portal, the controller must be synced with the Smart License server. This will enable the user's ability to assign licenses to and back from a RuckOS controller or assign them to another controller.

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

 Connect the controller directly to the Internet. On the SmartZone web interface, go to the *Administration > License page*, and then click the **Sync License with Server** button to sync the controller with the SmartLicense server.

NOTE When RuckOS controllers are connected to the Internet, they will automatically synchronize license information with the SmartLicense cloud server once every 24 hours.

Ruckus				2014	v10/16 11:41:19 admin Su	per Admin	_{Nr Account} ∣ Lon Off SmartZone 1
					Administration	_	
Administration >> License							
Backup & Restore	License Manao	ement					
Configuration Backup & Restore	LICENSE Manag	ement					
Pestart	View the license server se unless the toese the toe	ittings, license usage summary ne system	and installed licenses. Click Sync	License with Server to manually syncy	your licenses with license serv	er. Click Uploa	dLicense to manually
	Sync License with Serv	er Icense with license	e server success.				
Upgrade	Linkad Liconce SW	to License with Server		Download License			
License	Columb Control Discon	TOLC		folget Costs 1 Plans 1 P	TOLO		
Diagnostics 👴	Select Control Plane.	1040	Browse	select control Plane.	TOPC		
	select Ekelise Fie.		DIOWSE	Download Cancel			
	upital tartes						
	License Summary			License Server Confi	iguration		
	This table shows total un	its, consumed units and availa	ble units for each license type.	Cloud License Server			
	License Type	Total Co	nsumed Available	C Local License Server	Domain or IP: *		
	AP Capacity License	100 0 (0	100 (100%)		Port: * 3333		
	AP Direct Tunnel Licens	e 100 0 (0	100 (100%)	Refresh Apply Canc	age 1		
	Installed Licenses (Customer: Jay Account)					
	This table shows the cur	rently installed licenses.					
	Refresh Search terms		🔆 🖲 Include al terms 🛛 🔘 Include i	any of these terms			
	SmartZone Node O	Feature	Capacity	Description	Start Date	Status	Expiration Date
	TOL	CARACITYLAR	100	8P Monorement Linense for 1 Pun	kue 2014/10/14	Vald	Permanent

Figure 8. Sync the controller with the SmartLicense server

- Deploy a Ruckus Wireless Local License Server (LLS) within your network. The LLS must be able to communicate with your controller and it must be connected to the Internet. See Using an LLS Server for information on how to setup an LLS.
- In the event that the controller is disconnected from the Internet and you have not deployed an LLS, you can download the actual licenses from the Support Portal and manually upload them to the specific controller. See Syncing Licenses on an Offline RuckOS Controller.

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

Syncing Licenses on an Offline RuckOS Controller

1 In LiMAN, click the controller's serial number. The *View Device* page appears (see Figure 9).

Figure 9. The View Device page

Asset Management , SmartCell Gabeway , Serial #	131426000014	at do you need help atth?	0	
		Open Support Case or	r Request RMA 🔊 Subscrit	×
Serial #: 431426000014		ype or click here to add tag		
Product Name: SZ 100 - 2x10GE & 4xGE	Tag	8:		
Product Type: SmartCell Gateway Support Type: End User	Aco	ount Owner: Ruckus Wireless, In I User: Ruckus Wireless, Inc	c	
Support Expires: 2015-12-02 Warranty Info: Click here for details.	VAI Dist	R: Ruckus Wireless, Inc tributor:		
This is a Smart Device. It can use licenses from yo	ur Smart License Pool. Click '+	License/- License' button above t	to configure licenses.	
Licenses		+ License - License	🕹 License 🔂 License	
Name	AP Count		\smile	

- 2 Click the Download License File button. The license file is saved to the client.
- 3 On the controller web interface, go to Administration > License. In the Upload License section (see Figure 8), click the Browse button, and then select the license file from your client to upload it to the controller.
- 4 On the controller web interface, go to *Administration* > *License*. In the *Download License* section, click the **Download** button to download the license file from the controller to your client.
- **5** Go back to the LiMAN portal on the Ruckus Wireless Support website, and then do the following:
 - **a** Go to the *View Device* page (see Figure 9).
 - **b** Click the **Upload License File** button (see Figure 10), and then select the license file from your client.
 - c Click Send to complete the offline License synchronization.

You have completed activating licenses on an offline controller.

Synchronizing the RuckOS Controller with LiMAN



Figure 10. Click the Upload License File button

Managing Licenses Using LiMAN

3

In this chapter:

- Using the LiMAN License Management Portal
- Viewing Your Pool of Activated Licenses
- Adding and Removing Licenses
- Adding Licenses to a Controller
- Returning AP Licenses from a Controller to the License Pool

Using the LiMAN License Management Portal

Use the LiMAN (License Management) portal to view a list of all your registered devices and device Add-ons, including AP management licenses, tunnel licenses, right to use licenses and support contracts.

Figure 11. Click the LiMAN button from the Support website to log into the LiMAN application



Clicking the **LiMAN** button opens the Smart License Manager (LiMAN) page. This page opens on the Smart Devices tab, which displays a list of all of the RuckOS controller devices registered to this customer account.

Figure 12. The Smart License Manager (LiMAN) page



Viewing Your Pool of Activated Licenses

You can view a list of all of your activated licenses that exist in your license pool by clicking the **License Pool** tab near the top of the page.

	FEEDBACK TOOLS SUPPORT PROGRAMS CONTACT US A	BOUT RUCKUS SUPPORT SECURITY RETURN TO PARTNER ୟ 🕄 😢 🛅
	CASES ASSETS DOCUMENT	s downloads knowledge forum products 🛓
	What d	o you need help with?
Smart License	Manager (LiMAN)	Register RuckOS Hardware Generation Use Advance Portal
Smart Devices	icense Pool 🗎 Local License Servers 📄 Help & FAQs	
If you do not see your pu	rchase listed, make sure you've registered it via the LIC Pur	chase Code you recieved in an email.
Search Smart Licenses		٩
D 1 10		
Purchased Oity.	License Description	Purchase Code
5.0	SZ/(v)SCG AP license for 1 AP	LIC-00393132-YAK-GAP-FEE
10.0	$\mathrm{SZ}/(v)\mathrm{SCG}$ GRE to GW tunnel lic. for 1 AP	LIC-00393069-YAK-FAT-CUT
10.0	SZ/(v)SCG GRE to GW tunnel lic. for 1 AP	LIC-00393068-YAK-PAT-CAB
10.0	SZ/(v)SCG AP license for 1 AP	LIC-00393067-YAK-FAT-BUS
20.0	SZ/(v)SCG AP license for 1 AP	LIC-00392292-YAK-FAR-FEB
10.0	$\ensuremath{\mathbb{SZ}}\xspace/(v)\ensuremath{\mathbb{SCG}}$ AP license for 1 AP	LIC-00391997-YAK-FAR-BAG
10.0	07//w/000 AD lissnan for 1 AD	TIC CORPORED VAL DRV AVE

Figure 13. The Smart License Manager (LiMAN) page

Adding and Removing Licenses

There are two ways to manage licenses using LiMAN:

- Manage Licenses from a Controller Device Page
- Manage Licenses Using Action Icons

Manage Licenses from a Controller Device Page

Click the controller's serial number link in the *Serial Number* column to view detailed information on and allocate licenses to/from a specific controller. From the controller's device overview page, you can perform several tasks including Adding Licenses to a Controller and Returning AP Licenses from a Controller to the License Pool.



Figure 14. Click the device's serial number to view the device overview page

Figure 15. Device overview page



Manage Licenses Using Action Icons

Use the icons in the *Action* column to manage licenses directly from the LiMAN main page. See Table 1 for actions available from this page.

lcon	Name	Description
0	Add Licenses	Add licenses from your pool of activated licenses to this controller. See Adding Licenses to a Controller.
0	Remove Licenses	Remove licenses from this controller and release them back into your unused license pool. See Returning AP Licenses from a Controller to the License Pool.
•	Download Licenses	Download a file to your local computer that can then be imported into an offline controller to sync licenses with LiMAN. See Syncing Licenses on an Offline RuckOS Controller.
•	Upload Licenses	Upload a file generated on the controller web interface for Syncing Licenses on an Offline RuckOS Controller.
t]	RMA Device	vSCG devices are self-serve. Hardware devices requires support approval.

Table 1. Li	MAN Action	icons
-------------	------------	-------

Adding Licenses to a Controller

You can distribute any number of activated licenses from your license pool to any registered controller from the LiMAN landing page.

1 On the Smart License Management (LiMAN) page, select the controller from the list by clicking its serial number.



Figure 16. Click the controller's serial number to manage licenses for the specific device

2 On the controller's device management page, click the + License button.

Figure 17. Click + License to add licenses to this controller

	FEEDBACK TOOLS SUPPORT PROGRAMS	CONTACT US ABOUT RUCKUS SUPPORT SECURI	TY RETURN TO PARTNER < f 🗹 🖻	
	CASES ASSET	S DOCUMENTS DOWNLOADS KNOW	WLEDGE FORUM PRODUCTS	
		What do you need help with?	٩	
	//////			
		Open Support Case	e or Request RMA 🔊 Subscribe	
Serial #: 431426	000014			
Product Name: SZ 10 Product Type: SmartC) - 2x10GE & 4xGE ell Gateway	Tags: Account Owner: Ruckus Wireless	, Inc	
Support Type: End Us Support Expires: 201	er 5-12-02	End User: Ruckus Wireless, Inc VAR: Ruckus Wireless, Inc		
Warranty Info: Click	sere for details.	Distributor:		
Licenses	t can use incenses from your smart License	+ License - License	e 💩 License 🎝 License	
Nama	AP C	Sount		
S Blog				

3 A list of activated licenses is displayed. In the **Qty to Add** column, enter the number of licenses to add to this controller.



			_	_		_		🤊 RETURN	TO SUPPORT
	KUS [®]						SOFTWARE & SERVICES	DEVICES	GET HELP
	enter * Add Lice	nse							
		/				You're current)	y logged in as: Login1 Ghue1 A	ccount: GH-E	U-1
Add Lice	nse								
Serial Number ID Type Device Description	IIIOOOO4343404 STRING SZ 100 - 2x10GE 8	3434 4xGE							
Add-On Name	Entitlement	Expiration	Available Units in Line Item	Total Units in Line Item	Maximum Add-On Units Allowed on Device	Qty to Add			
SZ/(v)SCG AP license for 1 AP	LIC-00365273- RAT-AGE-BAG L09-0001-SG00 a1D50000004sdBt EAI (93705093)	Permanent	100	100	100				
SZ/(v)SCG AP license for 1 AP	LIC-00385875- YAK-ADD-AID L09- 0001-SG00 a1D50000004svTv EAI (93705083)	Permanent	100	100	100		Letica Car IPDAH-570		
SZ/(v)SCG AP license for 1 AP	LIC-00392569- YAK-FAR-GUM	Permanent	100	100	100				

4 Scroll down to the bottom of the screen and click Add Licenses to save.

Figure 19. Add License - bottom

SUPPORT-EU Status 2000000000000000000000000000000000000							
SUPPORT-EU Str. SSUPCOS Permanent 1 1 1 SUPPORT-EU SSUPORT-EU SSUPORT-EU <td>SUPPORT-EU</td> <td>801-S20V-0001 550P00000000E7 TIAW (92086223)</td> <td>Permanent</td> <td>1</td> <td>1</td> <td>1</td> <td></td>	SUPPORT-EU	801-S20V-0001 550P00000000E7 TIAW (92086223)	Permanent	1	1	1	
SUPPORTEU \$01:S020-0000 Permanent 1 1 1 SUPPORTEU \$01:S020-0000 Permanent 1 1 1 SUPPORTEU \$01:S020-0000 Permanent 1 1 1 1 SUPPORTEU \$01:S020-0000 Permanent 1 1 1 1 1 SUPPORTEU \$01:S020-0000 Permanent 1<	SUPPORT-EU	801-S20V-0001 S50R00000000E7 OIAW (92086203)	Permanent	1	1	1	
SUPPORTESU (2):532/0001 Permanent 1 1 1 SUPPORTESU EAM Column 173	SUPPORT-EU	801-S20V-0001 550R00000000E7 JIAW (92086193)	Permanent	1	1	1	
SUPPORTEU 01530/00005 add add (2010/03)	3UPPORT-EU	801-S20V-0001 S50F00000000E7 EIAW (92086173)	Permanent	1	1	1	
	SUPPORT-EU	801-S20V-0001 550R00000000E6 atAG (92086093)	Permanent	1	1	1	
	cebook itter						
9 elbook tar De							
a abook D2 tov vexnta							
9 stock ter ≥ strocks Tube							
9 estock to Jenoris Tute eatin	tagram						

Alternatively, click the [•] (Add Licenses) icon to add licenses to this controller directly from the LiMAN page.

Returning AP Licenses from a Controller to the License Pool

If you need to release licenses bound to a controller and allow them to be used elsewhere (on a different device), you can do so using the following procedure.

- 1 Click the LiMAN button on the Support portal to view the **Smart License** Management (LiMAN) page.
- 2 Select your controller from the list of devices by clicking its serial number.

Figure 20. Choose a controller from which to release licenses

FEEDBAC	TOOLS SUPPORT PROGRAM	S CONTACTUS ABO	JT RUCKUS SUPPORT	SECURITY RETU	IRN TO PARTNER	382	in
	CASES ASS	ETS DOCUMENTS	DOWNLOADS	KNOWLEDGE	FORUM PI	RODUCTS .	1
		What do y	ou need help with?		Q		
	//						
Smart License Mana	iger (LiMAN)		C Register Ru	ckOS Hardware	🗢 Use Adv	ance Portal	
Smart Devices 📄 License Pool	Local License Servers	Help & PAQs					
Click the serial number to view the	device. Click the action icons	to configure.					
• Add licenses from license pool to	device						
 Remove licenses attached to dev 	ce. License will return to poo	1					
Download license file Download license file	ce ottline.						
RMA Device, vSCG devices are s	elf-serve. Hardware devices r	equires support appro	val.				
Search Registered Smart Devices						Q	
Serial Number		Description			Action		
98H0TWS6CRNG181XHPCHA3F	IONHNQ	vSCG Series Admin	SKU -Smart Cell Li	ine	0000	12	
995989WRCXQZ		vSCG Series Admin	SKU -Smart Cell Li	ine	0000	12	
98H0T5KK7S55JN5MVNUATM	ASWRD1	vSCG Series Admin	SKU -Smart Cell Li	ine	0000	13	

- **3** The device management page displays the list of licenses assigned to this controller.
- 4 Click the License link.



Figure 21. Click - License to release a license from a controller

- 5 The Remove Licenses page appears.
- 6 In **Quantity to Remove**, enter the number of AP licenses to release back to your license pool.
- 7 Click Remove Licenses.

Figure 22. Release AP licenses to the license pool

			OUT TRAIL & OLIVIOLO DEVIOLO ULT TILLI	^
Home » Download Center » Remove License				
		You'n	e currently logged in as: nikita chawla Account: nruck	
Remove License				
Serial Number <u>898976751YTYTRTR</u> ID Type STRING Device SZ 100 - 4xGE ports Description				
Add-On Description Internal Use Only E	ntillement Expiraton	Currently on Device Quantity to Remove		
SZ/(v)SCG AP license 52C6-428B-8862- for 1 AP E928 a (f)	09-0001-SG00 Permanent 1000000000toLMA 33355183)	100 100 X		
SZ/v)SC3 GRE to AE15-31F0-8B8D- GW tunnel lic. for 1 AP C840	09-0001-RXGW Permanent 10R00000000toQMA 13355163)	100		
Remove incense	iOns.ifs			≪ € 100% ▼

8 An "Addons were successfully removed" message is displayed, and the device management screen is refreshed to display the updated list of allocated licenses.

Alternatively, click the • (Remove Licenses) icon to remove licenses from this controller directly from the LiMAN page.

You have finished returning licenses to the license pool. You can now associate these licenses to another controller as described in Adding Licenses to a Controller, or view them along with other licenses in your license pool as described in Viewing Your Pool of Activated Licenses.

Using an LLS Server

4

In this chapter:

- Local Licensing Server Overview
- Activating an LLS Server Right to Use License

Local Licensing Server Overview

The Local Licensing Server (LLS) provides an option for customers who prefer to maintain licenses on-site, rather than allowing the controller to connect to the SmartLicense cloud server for license activation.

For details on the LLS server installation, administration and maintenance, please refer to the *Local License Server User Guide*, available from support.ruckuswire-less.com.

This guide describes the steps required to activate and bind licenses to an LLS server only, and is not intended to replace the LLS User Guide.

Activating an LLS Server Right to Use License

The majority of steps required for license activation with an LLS server are the same or similar to those described in the cloud-based SmartLicense activation procedures. The differences are mainly that you will need to perform one additional step - activating the LLS itself - and that once you have completed the activation, you can manage your licenses from the LLS web interface rather than using the LiMAN section of the Ruckus support site.

Step 1: Activate your LLS right to use license

If you purchased an LLS right to use license, the first step you must perform is to activate the LLS RTU license. You should have received the LLS RTU email along with your other purchase confirmation emails. Open this email, and click the link to activate the right-to-use license.

Figure 23. Click the Activation Code link to activate your LLS right to use license

STEP 2 – "Download" your License for the Ruckus product(s) Click $\underline{\text{Here}}$ Or the individual link(s) associated with each code below

Problems with the link above? Copy and paste this into your browser https://support.ruckuswireless.com/

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

Distributor:	VAR:	End User:
		Jay Account 2
Product	Serial Numbers	Activation Code
Product	Serial Numbers	Activation Code

Ways to contact Ruckus Customer Support:

Clicking this link redirects you to the Support portal login page. Login as usual, and you will be redirected to the "Activate Purchase Code" page.

Accept the Terms and Conditions, and click Activate Purchase.

Figure 24. Activate Purchase Code page

	What do you need help with?	Q	
login Success.			
	N	④ Hide Instructions	
Activating Your Purchase Code	Instructions		
Whenever you buy add-on products such as support or additional license, you will have received a purchase code in an email from support.ruckumvireless.com. Purchase codes either begins with "LIC" "SUF" or "RTU".	 Enter your Purchase Code below. Click 'Validate" button. Pollow all additional instructions. 		
Please Review The Order			
Click the 'Activate Purchase' button at the bottom of the page.			
Oty Part ID Description	ition		

On the next page that appears, "Associating Your License with Your Product, Step 1 of 2," select **Bind to Local License Server with MAC address**, enter the **MAC address** of your LLS server in the field provided, and click **Validate**.

Figure 25. Select Bind to LLS with MAC address, enter MAC address and click Validate



The next page that appears, "Associating Your License with your Product, Step 2 of 2," asks you to enter a name for the LLS server. Enter a recognizable name for the LLS server in the **Server Name** field, and click **Register Server & Bind Right to Use**.

Figure 26. Enter a name for the LLS server and click button to register

	 Hide Instruction
Associating Your License With Your Product	Instructions
Your license is valid. You can now apply your license to your product. Once this is completed, you will be able to download your license. It may take 15 minutes to generate the binary license file.	 Enter the serial number of your product below. Click "Submit" button
Step 2 Of 2	
Register Your Local License Server (Mac Address: 000C29AD9017)	
Once registered, your license will be bound to this server. Change Mac Ac	Idress
• Server Name LLS Server 1	Register Server & Bind To Right To Use

Once activated, the LLS server appears in the list of servers associated with your Support account.



			RETURN TO SUPPORT
		SOFTWARE & SERVIC	ES DEVICES GET HELP
ne » Download Center » Search Servere			
		•	
Search Servers			
License Server ID ID Type	Device Description		
Filter			
to 1 of 1 🕨 Entries per p	age: 25 🔻		
License Server ID	ID Type	Device Description	

Step 2: Associate AP licenses with your LLS server

Open your AP Management activation email, and click the Activation link.

Figure 28. Click the activation link from the AP Management license purchase confirmation email

Purchased License(s) Details VAR: End User: Instributor: VAR: Low Account 2	nclosed is a copy o	of the License(s) purchase Purchased License VAR:	d. (s) Details End User:
	nclosed is a copy o	of the License(s) purchase	d.
	TEP 2 – "Downloa dividual link(s) ass	d" your License for the Rud ociated with each code be	ckus product(s) Click <u>Here</u> Or tl Iow
TEP 2 – "Download" your License for the Ruckus product(s) Click <u>Here</u> Or th dividual link(s) associated with each code below	TEP 1 – Get your s ctivation code as m	serial numbers ready (SAM nentioned below.	ls customers may skip this). Yo
'EP 1 – Get your serial numbers ready (SAMs customers may skip this). Yo tivation code as mentioned below. 'EP 2 – "Download" your License for the Ruckus product(s) Click <u>Here</u> Or the fividual link(s) associated with each code below	ank you for purch	asing Ruckus Wireless Lic	ense(s)!
TEP 1 – Get your serial numbers ready (SAMs customers may skip this). tivation code as mentioned below. TEP 2 – "Download" your License for the Ruckus product(s) Click <u>Here</u> O dividual link(s) associated with each code below	hank you for purch	asing Ruckus Wireless Lic	ense(s)!

The first page that appears after clicking the AP license activation link is the "Activating Your Purchase Code" page. Click the check box to accept the Terms and Conditions, and click **Activate Purchase** to continue.



Figure 29. Click Activate Purchase to confirm your AP license activation

When the "Associating Your Licenses with a Product (Step 1 of 2)" page appears, select **Bind to LLS with MAC address**, enter the LLS server's MAC address and click **Validate**.

Figure 30. Bind to LLS with MAC address

l (Simply Better Wireless.	MENTS DOWNLOADS KNOWLEDGE FORUM PRO	puers 🛓 🔺
		What do you need help with?	
Plea	se apply your license to an asset.		×
		G Hide	Instructions
	Associating Your License With Your Product	Instructions	
	Your license is valid. You can now apply your license to your product. Once this is completed, you will be able to download your license. It may take 15 minutes to generate the binary license file.	 Bnter the serial number of your product below. Click "Submit" button 	
	Step 1 Of 2 Validate your device		
	Bind To Local License Server With MAC Address Bind To Device With Serial Number	99017 Va	idate
	1:		

At this point, the AP licenses are now bound to the LLS server. The Search Servers screen displays a link to your LLS server. Click this link to view the licenses bound to this LLS server, and you will see the AP license entry in the list.



			🤊 RETURN	TO SUPPORT
		SOFTWARE & SERVICES	DEVICES	GET HELP
Home » Download Center » Search Servers				
Search Servers				
License Server ID	Device Description			- 1
Filter				
Filter				
Filter	25 •			_

Figure 32. Click the link for the LLS server to view licenses bound to this server

	1. 111				🤊 RETU	RN TO SUPPORT
				SOFTWA	RE & SERVICES DEVICES	GET HELP
me » Download Center » View	Server					
View Server						
License Server ID 0000C29AD901 ID Type ETHERNET Device LLS Server 1 Description	7					
lug	odate Alias					
SelectAdd-On Remove Add-Ons	Mew History View S	erved Clients Download Capab	Ility Response			
Add-Ons						
Add-On Name S	Status	Entitlement	Units Mapped	Expiration	Downloadable Iter	ns
AP Management License for 1 L Ruckus AP	license not generated	P09-0001-SG00 a1DR0000000VVizMAE (114928031)	100	Permanent	None	

Step 3: Activate Tunnel Capacity licenses

Repeat the same procedure, beginning with clicking the link from the purchase confirmation email, for the Tunnel Capacity licenses, if you have purchased Tunnel Capacity licenses. When finished, clicking the LLS server link again will display the Tunnel Capacity licenses also bound to the LLS server.



View Server						
License Server ID 000C29AD ID Type ETHERNE	9017 T					
Device LLS Serv	ver 1					
Description						
Description						
Description	Update Alias					
Description	Update Alias	and Oliente Developed Constitu	h-Decessor			
SelectAdd-On Remove Add-O	Update Alias	rved Clients Download Capabil	ity Response			
SelectAdd-On RemoveAdd- Add-Ons	Update Alias Ons Mew History View Se	rved Clients Download Capabil	ity Response			
Description SelectAdd-On Remove Add-4 Add-Ons Add-Ins Name	Update Alfas Ons <u>Mew History</u> <u>View Se</u> Status	rved Clients Download Capabil	I <u>iv Response</u> Linits Mapperl	Fasiration	Dewnloadable items	
Description SelectAdd-On Remove Add- Add-Ons Add-Ons Add-On Name AP Management License for 1 Recture AP	Update Alias Ons <u>Mew History</u> <u>View Se</u> Status License not generated	red Clients Download Capabil Entitiement PB9-0001-SG00 at DR0000000rrtM45	It Resonse Units Mapped 100	Expiration Permanent	Downloadable items None	
Description SelectAdd-On Remove Add- Add-Ons Add-Ons Add-On Name AP Management License for 1 Ruckus AP	Updiste Alias Ons Mew History View Se Status License not generated	Entliement P09-0001-SC00 a1DF00000007/TAVE (11422031)	It Response Units Mapped 100	Expiration Permanent	Downloadable items None	

Step 4: Activate Support Entitlement for the LLS Server

Perform the Support Entitlement activation procedure described in Step 4: Activate Support Entitlement for the LLS Server to bind Support entitlement to your LLS server. The one difference in the procedure is, when you get to the "Associating Your License with Your Product" page, choose **Bind to Local License Server with MAC Address**, rather than *Bind to Device with Serial Number*, as shown in Figure 34.



Figure 34. Bind to Support Entitlement to Local License Server

When finished, the View Server screen will display the Support Entitlement, along with AP Management and Tunnel Capacity licenses, bound to your LLS server.

Figure 35. View Server screen with all (AP, tunnel, support) licenses bound

ID Type ETHERNE Device LLS Ser Description	T ver 1				
SelectAdd-On Remove Add- Add-Ons	Update Alias	rved Clients Download Genebil	In Response	Extration	Developidatio Bowe
AP Management License for 1 Ruckus AP	License not generated	P09-0001-SG00 a1DR00000000/vizMAE (114928031)	100	Permanent	None
Tunnel Capacity License	License not generated	P09-0001-RXGW a1DR0000000Vys4MAE (114928121)	100	Permanent	None
	License not generated	801-8104-1000 550R00000000H7bla0	1	Oct 22, 2015	None

Step 5: Log into your LLS and download license information from the cloud server

The final step is to log into your LLS server, sync the LLS data with the cloud SmartLicense server, and confirm that the licenses have been allocated to your LLS successfully.

Log into your LLS server (see *Local Licensing Server User Guide* for instructions), and go to the **Properties and Status page**. Scroll down to the bottom of the page and click **Save**.

NOTE If the LLS is connected to the Internet, the LLS will automatically sync with the Smart License Cloud server once every 24 hours.

Figure 36. Click Save on your LLS server Properties and Status page to sync with cloud server

Sync to back office page size	50	Number of deduction records to include per synchronization message to the back-office server.
Sync to back office retry count	4	Number of times to retry sending synchronization messages to the back-office server after a failed attempt.
Sync to back office retry interval	5.0 min	Interval between attempts to re-send synchronization messages to the back-office server after a falec attempt.
Historical usage data enabled	Yes	Indicates whether this FNE server sends historical usage data to the back-office server.
Sync from back office properties		
Sync from back office enabled	Yes	Indicates whether this FNE server attempts to synchronize its license distribution state from the back- office server when restarting after server failure.
Sync from back office page size	100	Number of device records to include per synchronization message from the back-office server.
Sync from back office retry count	4	Number of times to retry sending synchronization-request messages to the back-office server after a failed attempt.
Sync from back office retry interval	100	Interval, in seconds, between retrying failed attempts to contact the back-office server for synchronization messages.
Sync to FNE properties		
Sync to FNE enabled	⊜Yes ⊛No ∯	Select Yes to synchronize this FNE server's license distribution state to a backup FNE server.
Fallover properties		
Main server URI	ø	If using failover, main server in format "server:port/fne/bin/capability".
Backup server URI	ល	If using fallover, backup server in format "server:port/fne/bin/capability".
Error log properties		
External destination of log messages	Syslog (Linux only)	Destination of log messages.
Log level	🖉 Error 🖉 Warn 🖉 Info 💷 Debug	Select the log levels you want to include in the logs.
Access log properties		
External destination of log messages	Syslog (Linux only)	Destination of log messages.
🖉 – Requires FNE Server restart.		SANG
		Converte (c) 2010-2014 Elevera Software LLC Al Birble Re

Next, go to the **Feature Usage** page to verify that the licenses have been properly synchronized with the SmartLicense server in the cloud.

Figure 37. Click Feature Usage

2 such bene wreter						
	ENE Server Pro					
E Server						
levices	Properties Status					
contrare Likence	Property	Value		Description		
Offic Server Upd tes	Server host ID	000C29AD9017 (ETHERNET)		Server's host ID used when fulfilling served licenses with the back office. If multiple IDs are available select the one registered with the back-office server.		
roperties and Status	General properties					
01701.0045	Listen TCP/IP address(es)	0::0;0.0.0.0	Ø	Semicolon-separated list of IPv6 and IPv4 addresses used for listening to device requests. Default "0::0;0.0.0.0" accepts any address.		
	Listen part	3333	ø	Port number (Range: 1-65535) for listening to device requests.		
levice Manager About Satthan	Back-office server	ruclus wireless.flex.netoperat		Host name or IP address of the back-office server from which licenses are obtained.		
	Back-office server port	443		Back-office server port number (1-65535).		
	Back-office server endpoint	/control/rkus/deviceservices		Back-office server URI where requests are sent.		
	Refresh interval	300	ø	Refresh interval (in seconds). Minimum value is 60 seconds.		
	XML access permission	Remote *		Simple security setting indicating permissions for XML-based server access. "Remote" allows XML endpoint access from remote systems, while "Local" restricts access to the local system.		
	Server name		ø	Current server name. Used only for display and logging purposes.		
	Server infomsg usage enabled	No		Is server infomsg usage enabled?		
	Virtual clients enabled	Yes		Indicates whether this FNE server supports clients running on a virtual machine.		
	Virtual host enabled	Yes		Indicates whether this FNE server can be run on a virtual machine.		
	Overage control enabled	No		Indicates whether server accepts back-office updates containing a license count less than the outstanding served-buffer license count.		
	Back-office pol properties					

Sirredy Better Wireless.						
	Feature Usag	e				
NE Server Devices				Sea	arch (case-sensitive):	Search by: Feature 🔻 🔍
Reservations	Features Overage					
Feature Usage	Continues assured to an error	mund fan dauisan. Clisk a	6	na dataila		
Offine Server Updates	reatures served to or rese	rveu for devices. Click a	reature name for use	ge uecans.		
Properties and Status	Feature	Version	Count	Available	Expiry	
perior Loup	CAPACITY-AP	1.0	100	100	permanent	
	CAPACITY-RXGW	1.0	100	100	permanent	
	SUPPORT-EU	1.0	1	1	Oct 22, 2015 11:59:59 PM	
evice Manager	Page 1					
About						
Seconds					Conversion (a) 2010 201	I Charles Coffman II C. all Disks Dee
					copyright (c) 2010-20.	14 Hexera Sortware LLC. All roghts kes

Figure 38. Go to Feature Usage to verify all licenses have been activated

Congratulations! You have successfully activated and bound your purchased licenses to your LLS server.

For more information on LLS administration and management, see the *Local Licensing Server User Guide*.



Copyright © 2006-2015. Ruckus Wireless, Inc. 350 West Java Dr. Sunnyvale, CA 94089. USA www.ruckuswireless.com