

Deployment Guide

RUCKUS WAN Gateway – Bare Metal Installation

June 2023

Rev. 1



Table of Contents

Changes	į
INTENDED AUDIENCE	
OVERVIEW	
PREPARING A BOOT DISK	ļ
Download the RWG ISO File	Ļ
Rufus)
Balena Etcher	
RWG INSTALLATION)
nstallation Pre-Requisites)
Network Interfaces)
Disable Hardware Based RAID	1
Booting from the USB Drive	
Installer Wizard	
System Initialization	
nitial Configuration Tool	,
RWG LICENSING	,
Generating and Applying the License	,
INITIAL RWG CONFIGURATION	
Creating the First Admin Account	



Changes in Revision 1

- Added slide about where to get the RWG .ISO images.
- Added slide about the Resource Calculator.
- Added slides around using Asset Manager to generate licenses.
- Minor changes on the slides text.

Intended Audience

This document provides an overview of how to configure a RUCKUS product for bare metal installation on an approved hardware platform. Step-by-step procedures for configuration are demonstrated. Some knowledge of the tools used to prepare installation is recommended.

This document is written for and intended for use by technical engineers with background in Wi-Fi design and 802.11/wireless engineering principles.

For more information on how to configure RUCKUS products, please refer to the appropriate user guide available on the RUCKUS support site at <u>https://support.ruckuswireless.com/</u>



Overview

This guide describes how to prepare and install the RUCKUS WAN Gateway in bare metal. It is divided into the following sections:

- Preparing a Boot Disk
- RWG Installation
- RWG Licensing
- Initial RWG Configuration

Preparing a Boot Disk

Download the RWG ISO File

Navigate to the RUCKUS support site at <u>https://support.ruckuswireless.com/software</u>, and select RUCKUS WAN Gateway (RWG) in the dropdown list. The **Downloads** tab will show the recommended ISO images. Download the latest recommended image to your computer.







The next section will cover how to create a bootable disk using the RWG image for a bare metal installation. A USB 3.0 flash drive with at least 8GB of storage space is required.

Rufus

Rufus is a Windows utility used to format and create bootable USB flash drives. Download Rufus at <u>https://rufus.ie</u>. After Rufus is downloaded and extracted to a directory, launch the executable.



FIGURE 2 - THE RUFUS UTILITY

When prompted, click on **Yes** to allow the utility to make changes to the device.



FIGURE 3 – ALLOW RUFUS TO MAKE CHANGES

When the application opens, confirm that the correct USB device is selected under **Device**.

🖋 Rufus 3.21.1949	-		\times
Drive Dreparties			
Drive Properties			_
Device			
rwg_boot_disk (D:) [16 GB]			\sim
Boot selection			
Disk or ISO image (Please select)	~ 📀	SELECT	-
Partition scheme	Target system		
MBR	BIOS (or UEFI-CSM)		
 Show advanced drive properties 			
Format Ontions			
Format Options			_
Volume label			
rwg_boot_disk			
File system	Cluster size		
NTFS	4096 bytes (Default	:)	\sim
➤ Show advanced format options			
Status			
REAL	Y		
S ① 葦 Ⅲ	START	CLOSE	
1 device found			

FIGURE 4 - DRIVE PROPERTIES



Click on Select to find the .ISO file image, then click Open to load it.

		e r beskep r		~	Search Deskt	00
rganize • New fo	older					H • 🛄
DL DL	^	Name	Date modified	Ту	pe	Size
💄 sw-isos		Activation Software	10/5/2022 9:36 AM	Fil	e folder	
This PC		RWG BM Install RUFUS assets	2/2/2023 4:22 PM	Fil	e folder	
3D Objects		SE Demo Mockups	11/3/2022 5:10 PM	Fil	e folder	
Deskton	1.	sos-imagotag docs	8/29/2022 1:25 PM	Fil	e folder	
		13.1-RELEASE-amd64-rwg-14.566	1/31/2023 1:23 PM	Di	sc Image File	2,731,733
Documents	11	scd-daemon-accesspoint-master	8/29/2022 12:45	zip	o Archive	1,126 KB
Downloads		VMware-VMvisor-Installer-6.7.0.update0	12/8/2022 6:07 PM	iso	o Archive	318,740 KB
J Music		VMware-VMvisor-Installer-201908001-1	7/27/2020 1:34 PM	iso	o Archive	323,718 KB
Nictures						
🔛 Videos						
Local Disk (C:)						
	~					
					150.1	

FIGURE 5 - RWG IMAGE SELECTION

Click **START**, then click **OK** at the warning prompt.

🖋 Rufus 3.21.1949		×]		
Drive Properties					
Device					
rwg_boot_disk (D:) [16 GB]		\sim			
Boot selection					
13.1-RELEASE-amd64-rwg-14.566.img	✓ ✓ SELECT	-			
Partition scheme	Target system		Rufus		\times
MBR	BIOS (or UEFI-CSM)	~ ?			
➤ Show advanced drive properties				WARNING: ALL DATA ON DEVICE 'rwq_boot_disk (D:) [16 GB]'	
Format Options			🔼	WILL BE DESTROYED.	
Volume label				o continue with this operation, click OK. To quit click CANCEL.	
rwg_boot_disk					
File system	Cluster size			OK Cancel	
NTFS	4096 bytes (Default)	\sim			
 Show advanced format options 					
Status					
Status —					
READ	Y				
§ ① ≇ ■	START CLOSE	:			
Using image: 13.1-RELEASE-amd64-rwg-14.5	66.img				

FIGURE 6 – START CREATING THE BOOTABLE THE USB DRIVE



The process should take approximately 5 minutes, depending on the USB drive's data transfer rate. When the process is complete, click **CLOSE**.

Rufus 3.21.1949	- 🗆 X	A Rufus 3.21.1949	- 0
Drive Properties		Drive Properties	
Device		Device	
rwg_boot_disk (D:) [16 GB]		NO_LABEL (D:) [16 GB]	
Boot selection		Boot selection	
13.1-RELEASE-amd64-rwg-14.566.img	V SELECT V	13.1-RELEASE-amd64-rwg-14.566.img	 SELECT
Partition scheme	Target system	Partition scheme	Target system
MBR	BIOS (or UEFI-CSM)	MBR	BIOS (or UEFI-CSM)
➤ Show advanced drive properties		✓ Show advanced drive properties	
Format Options		Format Options	
Volume label		Volume label	
rwg_boot_disk		16 GB	
File system	Cluster size	File system	Cluster size
NTFS	4096 bytes (Default) ~	FAT32 (Default)	8192 bytes (Default)
♥ Show advanced format options		✤ Show advanced format options	
Status		Status	
Writing im	age: 8.4%	REA	ADY
© (i) ≵ III	START CANCEL	S) () 🌫 🖬	START CLOS
laine impact 12.1 DELEASE and 64 are 14		41.5.6.1	

FIGURE 7 – IMAGING PROCESS COMPLETED

Balena Etcher

Balena Etcher is a MacOS tool to flash OS images to SD cards and USB drives. Download Balena Etcher at <u>https://www.balena.io/etcher</u>. After Balena Etcher is installed onto the computer, launch the application.

Click on **Flash from file**, then find the RWG image and click **Open**.



FIGURE 8 - FLASH FROM FILE

Click **Select target** to select the USB drive. When prompted, select the correct drive to deploy to and click **Select(1).**

				🌱 balei	naEtcher	.	0
•••	🌍 balena Etcher	¢ 0	Select target a found				
			Vame	Size	Location		
			SanDisk Cruzer Blade Media	15.6 GB	/dev/disk4		
÷ —		- 4	✓ Show 2 hidden				
13.1-RELE4.566.img	Select target	Flash!	1				
Remove							
2.8 GB							
				Cancel	Select (1)		

FIGURE 9 - SELECT TARGET



Click on **Flash** to begin the process. The process should take approximately 5 minutes, depending on the USB drive's data transfer rate.





		•		😚 balena Etcher	¢ 0
•••	😚 balena Etcher	\$ 0			
+ 13.1-RE566.img 2.8 GB			4	Task	Solution
SanDiske Media			13.1-RELEAS14.566.img	Flash device	😚 balena Etcher
				Update and manage devices	🍞 balena Cloud
7			Flash Complete!	Etcher is just one tool in	your kit
Validating 604 Chia				We also build tools to deploy, manage, and remotely upda Provision, deploy, manage, update and m	te fleets of small devices at any scale. Jaintain with balena.
38.70 MR/s FTA: 1m7s				Find out more	
50.10 MD/3 ETA. 11113			Flash another		

FIGURE 11 - FLASH COMPLETE!

When the process is complete, close the application and eject the drive, which is now ready for use.



RWG Installation

Installation Pre-Requisites

The installation requirements can be calculated using the **Resource Calculator Tool** available at <u>https://store.stage.rgnets.com/configure</u>. You need an user account and password to login.

Proposed Network Architecture	Configuration
Expand/collapse full diagram	RUCKUS
Recommended Specs	Calculate SUL based on:
 8-core CPU 32 GB of RAM 800 GB disk space 	SUL Only SUL x Units
1000 SUL Standalone	1000 Mbps Throughput Potential •
Vour Equipment	High Availability High Availability Max Policies
Control Plane Combined CP+DP	O 3 Years ● 1 Year ● O Customer Discount ●
Itemized Summary	Support Type: • Watchdog • Bulldog •
Part Number Quantity List Price Extended Price	Other License Specifications
Total: \$36,000.00	 Max Identities: 125000 Max Uplinks: 11 Max Per-Uplink Bandwidth: 1000 Mbps
Title this quote (required)	Max VLANs: 1500 Max Local IPs: 3000 Max States: 100000 Max States: 100000
Add a description (optional)	Max Policies: 100 Max Groups: 200 Max Custom Portals: 20 Maximum Concurrent Devices: 1000

FIGURE 12 – RESOURCE CALCULATOR

There are some additional points to ensure a successful installation:

- At least two network interfaces
- Hardware-based RAID is disabled



Network Interfaces

A minimum of two ethernet interfaces is required, but four are recommended for broader RWG deployment scenarios. The first network interface on the server is a DHCP client (named **ix0**, **igb0** or **em0** on bare metal machines). That interface will be utilized for the WAN uplink to the ISP. Connect it to your ISP's modem/router uplink. The last network interface on the server is a DHCP server (named **ix5**, **igb5** or **em5** on the mini-server shown below, which has six interfaces). That interface will be utilized for the total total

Note: The RWG license is tied to the hardware configuration. If the hardware changes, a new license is required.



FIGURE 13 – MINI-SERVER WITH 6 INTERFACES

Disable Hardware Based RAID

RWG employs a fully automated ZFS software RAID service, which requires all physical disks to be used upon installation, and all drives should be identical to guarantee consistent performance. ZFS is optimized for working with direct disk access, and will perform poorly in cases when used with a combined volume.

It is therefore considered best practice to <u>disable any hardware RAID</u> if there is a physical RAID controller present on the system. Please refer to your RAID Controller vendor or OEM server vendor for instructions on how to disable the physical RAID controller.



Booting from the USB Drive

Connect a monitor, keyboard and mouse to the **bare-metal** server. Insert the USB boot disk that was created earlier into a USB port on the server.

Most servers will boot from the hard disk by default, so you must change the boot order, or temporarily select the USB boot device. This is typically achieved by pressing **F1**, **F11**, **F12** or **DEL** at boot or **POST**. Consult your system's documentation for the correct key selection.

Aptio Setup Main Advanced Chipset	Utility – Copyright (C) 2021 American Security Boot Save & Exit	Mega	trend	is, Inc.	
Boot Configuration Setup Prompt Timeout Bootup NumLock State Quiet Boot	1 [On] [Disabled]	Sets	the	system boo	t order
Boot Option Priorities Boot Option #1					
Boot Option #2	Boot Option #1 UEFI 13.1-RELEASE (P1: SSE128GMLCT-SBU	c-2S)			
Boot Option #4	UEFI: SMI USB DISK 1100, Partition 1 Disabled		c	t Screen t Item	
Hard Drive BBS Priorities		F1: 0 F2: F F9: 0 F10: ESC:	e n iener Previ Dptim Save Exit	lect ge Opt. al Help ous Values ized Defau. & Exit	lts

FIGURE 14 - BOOT CONFIGURATION

Save and exit the boot configuration.

Aptio Setup Utility – Copyright (C) 2021 American Main Advanced Chipset Security Boot Save & Exit	Megatrends, Inc.
Save Options Save Changes and Exit Discard Changes and Exit Save Changes and Reset	Exit system setup after saving the changes.
Discard Changes Save Changes Discard Changes	
Default Options Restore Defaults Save as User Defaults Restore User Defaults	+: Select Screen
Boot Overnide UEFI 13.1-RELEASE (P1: SSE128GHLC UEFI 05 (P1: SSE128GHLCT-SBC-2S) P1: SSE128GHLCT-SBC-2S SMI USB DISK 1100, Partition 1 UEFI: SMI USB DISK 1100, Partition 1	L: Select Item nten: Select /-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit

FIGURE 15 – SAVE THE BOOT CONFIGURATION

The system should restart and boot using the USB Boot disk.



Installer Wizard

The next screens will ask for confirmation to install RWG's Base OS and software. Click **Yes** to start the process.







FIGURE 17 - CHECKING DISTRO ARCHIVES



FIGURE 18 - DISTRO FILES EXTRACTION



FIGURE 19 - INSTALLING RWG KERNEL





FIGURE 20 - PREPARING TO INSTALL RWG SOFTWARE



FIGURE 21 – INSTALLING SOFTWARE AND DEPENDENCIES

After the installation is complete, the system will reboot automatically.



FIGURE 22 - REBOOTING AFTER INSTALLATION



System Initialization

After rebooting, the system will come back up with an initializing screen and ask that you wait at least ten minutes for the process to complete.



FIGURE 23 - WAIT FOR FIRST COMPLETE INITIALIZATION

The network interfaces will be shown, as well a **License Required** message.

rxg.local 13.1-RELERSE build 14.566
Complete initialization for the first time can take up to 10 minutes
Started At: Mon Feb 13 22:36:11 UTC 2023 Message At: Mon Feb 13 14:39:39 PST 2023 Finish ETR: Mon Feb 13 22:51:11 UTC 2023
FreeBSD/amd64 (rxg.local) (ttyv0)
Please wait while the environment is loaded
Lizanza Required
https://rxg.local/admin
Monokrom Bane build 14.566 13.1-RELEASE #74
Default string 4 2900 16384 102 XKHJYMOJHQCVXUGICJRDHCHU
Standalone
igb1
igb2
igb3
igb4
igb5
FreeBSD/amd64 (rxg.local) (ttyv0)
Please wait while the environment is loaded

FIGURE 24 – LICENSE REQUIRED



The system will acquire an IP address on the WAN interface from the DHCP server in the ISP router and the default address 192.168.5.1/24 will be assigned to the LAN interface.

Please choose from the foll 1: Configure LMM 2: Configure LMM 3: Reboot 5: Shutdown 6: Enable Built-in Admin S 7: Display JUU 8: Exit Enter cobice (1-8):	owing: Nync
Lizen	se Required
https://rxg.local/admin	
Monokrom Bane build 14.566 13.1-RELEASE #	74
Default string 4 2900 16384 102 XKHJYMOJHO	
Standalone	
igb0 <1000baseT <full-duple< th=""><th>x>>> Uplink 192.168.1.180/24</th></full-duple<>	x>>> Uplink 192.168.1.180/24
igb1	
igb2	
igb3	
igb4	
igb5	Management LAN 192.168.5.1/24
FreeBSD/amd64 (rxg.local) ((ttyv0)
Please wait while the envir	ronment is loaded
Welcome to the configuratio	on tool!

FIGURE 25 – WAN AND LAN IP ADDRESSES

Initial Configuration Tool

The WAN and LAN IP address can be changed with the RWG configuration tool that loads after installation. Select the option **1** for WAN IP configuration changes, and option **2** for LAN IP configuration changes.

FreeBSD/amd64 (rxg.local) (ttyv0)
Please wait while the environment is loaded
Welcome to the configuration tool!
Current primary WAN configuration: Interface: igb0 [20:7c:14:a2:7c:be] CIDR: DHCP 0.0.0.0/8 Gateway: DHCP
Current first LAN configuration: Interface: igb5 [20:7c:14:a2:7c:c3] CIDR: 192.168.5.1/24 DHCP Start IP: 192.168.5.10 DHCP End IP: 192.168.5.254
Please choose from the following: 1: Configure WAN 2: Configure LAN 3: Shell 4: Reboot 5: Shutdown 6: Enable Built-in Rdmin Sync 7: Display IUI 8: Exit
Enter choice (1-8):

FIGURE 26 - CONFIGURATION TOOL



In this example we changed the LAN configuration. You will be prompted to enter a CIDR IP address and DHCP range.

igb0 (1000baseT <fu igb1 igb2</fu 	11-duplex>> Uplink 192.168.1.180/24
igb3	
igb4	
igb5	Management LAN 10.100.70.1/24
FreeBSD/amd64 (rxg.	local) (ttyv0)
Please wait while t	he environment is loaded.
Welcome to the conf	iguration tool!
Current primary WAN Interface: igb0 [2 CIDR: DHCP 192.168 Gateway: DHCP	configuration: 10:7c:14:a2:7c:be] 0.1.180/24
Current first LAN o Interface: igb5 [2 CIDR: 10.100.70.1/ DHCP Start IP: 10. DHCP End IP: 10.	onfiguration: 10:7c:14:a2:7c:c3] 124 100.70.50 100.70.150
Please choose from 1: Configure WAN 2: Configure WAN 3: Shell 4: Reboot 5: Shutdown 6: Enable Built-ir 7: Display IUI 8: Exit Enter choice (1-8):	the following: n Admin Sync :

FIGURE 27 – CHANGING THE LAN IP ADDRESS



RWG Licensing

The **Installation Unique Identifier (IUI)** is required to generate the RWG license. From the configuration tool, choose option **7** and copy the IUI.

Alternatively, you can open a web browser on a separate system and navigate to <u>https://192.168.5.1/admin</u> to view the GUI and copy the IUI. The web server may take a short while to display the page but will eventually show up. When the webpage loads, you can click on the **Copy** button under the IUI to copy it.



FIGURE 28 - COPY IUI FOR LICENSING PORTAL

Generating and Applying the License

The **Asset Manager** is available for RUCKUS SEs to create licenses for demos and POCs. Navigate to <u>https://store.rgnets.com/asset_manager</u>. You need an user account and password to login.

Asset Manager If you would like to manage your assets programatically, check out	the Assets API.					
Search						
		Re	enew All U	pcomir	ng Renev	w All Expired
Active (231) Pending (10) Disabled (14) Duplicate FG	DN (32)					
« 1 2 3 4 5						
Asset 🗸 FQDN / IUI	Sales / Order / PO Number	Product	Capacity	Label	Expiration	Actions
ASSET7631 nasir.ahmed.commscope.com	Sales Force Number	RXG-SUB	99 SUL	1	2027-03-31	😾 Get License
4 3390 8192 51 ZKOJXHKFFMVOZUNIBENZFYFR GZQQJUKUSYOH	Sales Order Number					License Tra
	Purchase Order Number					Notes
ASSET7630 FQDN (Fully Qualified Domain Name)	Sales Force Number	RXG-SUB	99 SUL	1	2027-03-31	😌 License Tra
IUI (Installation Unique Identifier)	Sales Order Number					📋 Notes
	Purchase Order Number					





Enter the following information:

- FQDN: Enter the FQDN for your instance. If it is not defined yet, enter rxg.local. Click Set FQDN to complete.
- IUI: Paste the IUI you copied from your instance. Click **Set IUI** and the confirmation to complete.





Scroll right, then click Get License to see your license. Click Copy to Clipboard to copy it.

					License		
RXG-SUB	99 SUL	Free RWG	2024-02-28	 ✓ Get License ◆ License Transfer ▲ Notes 	n2Y2v7/v pdQAzCS0 169nZqfc 6PaSMpH, c7znk9Ju m6/01520 nfcQC c2g7+b1u X7MB4fc dPagaPU DfqrPLY bHChSMAL 255ex2n CcfcTc3 xcqLy27 /vcCBn95 DZ/4560	skRc 2 J0-2 J3EC (0'Y s vH5 r sn 1 shTW / kcX / zhyñ/2 h. a 880 cm/ l shTW / kcX / zhyñ/2 h. a 880 cm/ l sh / shSW / a 30 km 2 sn 2 sh / shSW / a 30 km 2 f r / 381 h. 449 r j n 1 V r / F05 km 7 f r / 381 h. 449 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / F05 km 7 f r / 381 h. 494 r j n 1 V r / 581 h. 1 s / 2 km 7 f r / 381 h. 1 f r / 3	AukdE z xbGeBTDs OPwrtu CXD: 1 Tm+hg opp (x) z ZAF F0Hts (9KL zm Z Adva JDS 9W PW 1 z opst (1) z zm Zadwa JDS 9W opt (z opst (1) z zm Zadwa JDS 9W opt (z opst (2) z zm Zadwa JDS 9W opt (z opt (2) z zm Zadwa JDS 9W opt (2) z dy 20 zm Zadwa JDS 9W opt (2) zm Z
						Copy to C	lipboard
						Max Login Sessions: 99 Max Uplinks: 10 Max IPs: 297 Max VLANs: 149 Max States: 100000 Max Throughput: 99 Max Identities: 12375 Max Policies: 10 Max Groups: 20	Min CPUs: 4 Min Memory: 8 GB Min Storage: 26 GB



If the RWG server has internet connectivity, you do not need to perform any additional steps, as the system will reach out to the Asset Manager server and apply the license automatically.



If the RWG server does not have internet connectivity, you need to paste the license manually. Navigate to <u>https://192.168.5.1/admin</u>, go to the **License Keys** section and click on **Edit**.

\leftarrow \rightarrow C C	🔿 🔒 https	://192.168.1.'	admin/menu/first_ne	w_admin	☆	\bigtriangledown		2 😳	ර ම
	an E] <u>⊈</u> 3	Ξ.		★ Restore Backup				
Administrators				lib Sł	ow Remote 🐻 Columns 🖏	Refresh ‡ Z	oom ?He	elp 🛈 Cro	eate New
🗹 Login 🗠	Service Account	Em	ail Role F	First name	Last name Comp	any	SSH Keypa	airs	
			No E	intries					
0 Found									
License Keys					1	Columns 🕻	Refresh	-‡-Zoom	? Help
License Keys	$\overline{\nabla}$	Started	Ехр	ires	Lifetime	Columns	Refresh	-‡-Zoom	? Help
Created		Started	-	ires -	Lifetime	Columns C	Refresh	-‡-Zoom Edit	? Help Show

FIGURE 32 – EDIT LICENSE KEYS

Paste the license copied from the Asset Manager into the empty field and click **Update**.

Created		Expires
Update License Key		
License	hmVAauuJC7lxJ5YRwuqVP4vOthJ0svj v	vgyfojoEkDGKWvPTXdDclx2HnWn
	LAOcc7K6guQk8/gmyKJu43mQDB8oD7g R	Asu3EKpTkgIUqZa8+Wga4Ignfy5
	<pre>ina6TclzeJXSI0+/ye/AaEGLU/DllbM /rIedV</pre>	ldzwNhzXzMgkWw48ZZvun0FS
	0mcRPwHTAEHpQCe8B7dwrrd+hGdNp9p	rdqpX0lQ37N2Q+AZTwGW5cUMRDT/
	9 yAHBFCcg+6B6WwRecShTH5vfSQGa7xw	/laKPiM6vVT+cHWsGD4h44FHaBdP
	j jnv2/q2jQh5dIyPxGl1FvlyrXih9Ehk	LkRpeeubb3eW0wsnplXp0Vf6MLa
	H bI/cGxamEzaZ+Nkb9JopwUHMilkGc6T	TJbZaszmqQEDG7AG0zsg4FdiTKT
	F iysdFaTxT9BbJ3QoXVc3SDeFPGbvS9U	JyVF1Ved73AvWXEQAB+mDRjL78qv
	F Iqrj4fhnx2HINoJh5Yq5A2UqQWPHukk	Qv7Dk+vk6vLYiu8UaEjf9u3xZi9
	S 8SpMezKMCGIng9y3g00jZYzbEeYIfJ8	QZynhImpDTzNZTjXCqxU8zGjzIN
	n jAVWJ4DHxXQQZp493V625Rrhd2d2oWD) fFmebE0xpPFMNwbZ0SLdsFcEBt3
	6	

FIGURE 33 – PASTE THE LICENSE

RWG will reboot, the GUI will update and show the RWG logo, and the license file information will display in the **License Keys** section.

RUCKUS WAN Gateway – Bare Metal Installation



					Invalid Date rxg.ld	ocal help build 14.	66 Q Search
System	Network	Services	Identities	Policies	Billing	Archives	Instruments
		please c	reate at least one administra	tor, or restore a prior back	up or template		
WARNING igb2 is offline							
>		Installation Unique Identit	fier (IUI)		System Switches		
First Admin		4 2900 16384 XKHJYMOJWQCVXUGIC	102 JRDWCMU		C Reboot		
					Brewen		
Administrators						🗈 Show Remote 🐻 Columns 🔇	Refresh 💠 Zoom ? Help O Create New
Z Login	Service Account	Email	Role	First name No Entries	Last name Co	mpany SSF	Keypairs
0 Found							
License Kevs							🐻 Columns 🖏 Refresh 💠 Zoom 🥐 Help
Created	⊽ \$	tarted	Expire	5	Lifetime		
02/14/2023 09:47 AM	a	2/14/2023 05:47 AM	12/31/20	K5 0359 PM	22 years and 10 r	nonths	Edit Show
Found							

FIGURE 34 – LICENSE IS APPLIED



Initial RWG Configuration

Creating the First Admin Account

In the Admin GUI a message asking you to create at least one administrator account. To create the account, click on **Create New** in the **Administrators** section.

	please cre	ate at least on	e administra	ator, or restore	a prior backup o	or template	
RNING igb3 is offline							
	Installation 4 290 XKHJYMOJV	n Unique Identifi 00 16384 1 VQCVXUGICJ	er (IUI) .02 IRDWCMU		System St C Ret	vitches poot	
	回读				Resto Browse No file se or sele	re Nected. ct	
	Little Color				<u></u> ≜ Restore	Backup	
dministratore	84., j		<u> </u>		Show Remote	Columns 🖏 Refresh	Zoom 7 Help Create N
ummistrators							
Cogin 🛆	Service Account	Email	Role	First name No Entries	Last name	Company	SSH Keypairs
Found							

FIGURE 35 – CREATING A NEW ADMINISTRATOR

Enter the Administrator account information and apply the **Super User** role to the administrator account. Scroll down and click **Create** to finish.

Create Administrator		
Login	first_admin	
Service Account	if checked admin will be used only for API key and will not have adr	min gui access
Password and Confirmation		[]
Email		
Role	Super User	
Session Timeout (minutes)		optionally override the Admin Role's session timeout value (if the role all
Contact (Hide)		
First and Last name	First	Admin
Company]
Department]
Mobile]
Office]
Preferred	email ~	
Create Cancel		

FIGURE 36 – CREATE ADMINISTRATOR ACCOUNT

This concludes the bare metal installation. Other documents will cover the RWG's basic setup, adoption of devices, and step-by-step guides for different use cases.

RUCKUS solutions are part of CommScope's comprehensive portfolio for Enterprise environments (indoor and outdoor).

We encourage you to visit commscope.com to learn more about:

- RUCKUS Wi-Fi Access Points
- RUCKUS ICX switches
- SYSTIMAX and NETCONNECT: Structured cabling solutions (copper and fiber)
- imVision: Automated Infrastructure Management
- Era and OneCell in-building cellular solutions
- Our extensive experience about supporting PoE and IoT

www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

© 2023 CommScope, Inc. All rights reserved.

All trademarks identified by $^{\rm TM}$ or $^{\otimes}$ are trademarks or registered trademarks in the US and may be registered in other countries. All product names, trademarks and registered trademarks are property of their respective owners.

