RAPIDUS

RAPIDUS WIRELESS NETWORKS

RAPIDUS WIRELESS RL-SERIES USER GUIDE

COVERS INDOOR AND OUTDOOR SERIES MODELS

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About Rapidus Wireless Networks

The company's dedication to customer satisfaction provides comprehensive solutions with superior products. Whether you are in the market for connectors or a complete network of high speed wireless access points or mesh products, Rapidus is the answer. With over 75 years of combined experience in the wireless field, our team of experts have installed wireless systems worldwide. We provide product selection assistance and rapid product delivery backed by knowledgeable support.



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QUICK START

COMPUTER CONFIGURATION/INSTALL GUIDE

Step 1:

Connect an Ethernet cable from the PC/Laptop to the PC connector on the POE LAN port.

Step 2:

Connect an Ethernet cable from the RL-Series device (radio) to the POE port on the POE.

Step 3:



Connect a PC to the "LAN" port of the POE, with a straight through Ethernet cable

Note: Connect the device (radio) to the "POE" port and the "LAN" port to PC/switch/router. Power the POE unit

Step 4:

Connecting to the device (radio)

Before accessing the configuration interface, you have to change the network connection setting in your computer to be on the same subnet as the device (radio). Alternatively, you could use the RapiFind Utility program to assign the device (radio) a temporary IP alias that is on the same subnet as your computer.

Changing the IP address – Windows 8

1. In your computer, open Control Panel > Network and Sharing Center then click change adaptor settings on the left hand menu. Select and right click the Ethernet icon.



- 2. Then click Properties.
- 3. In the Ethernet Properties > Networking tab, select Internal Protocol Version 4 (TCP/IPv4)



Ethernet Properties	x				
Networking					
Connect using:					
Pealtek PCIe GBE Family Controller					
Configure					
This connection uses the following items:					
QoS Packet Scheduler					
Microsoft Network Adapter Multiplexor Protocol					
Microsoft LLDP Protocol Driver					
Link-Layer Topology Discovery Mapper I/O Driver	_				
Link-Layer Topology Discovery Responder	=				
Internet Protocol Version 6 (TCP/IPv6)					
Internet Protocol Version 4 (TCP/IPv4)	~				
< III >					
Install Uninstall Properties					
Description	— II				
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.					
	- 1				
OK Can	cel				

- 4. In the Internet Protocol (TCP/IP) properties > General, select Use the following IP address.
- 5. Enter your **IP address** and **Subnet Mask (255.255.255.0).** The default IP address of the radio is 192.168.1.99, which cannot be used here. Use anything else in the same subnet, the IP address of the computer can be any IP varied from 192.168.1.2 to 192.168.1.254

Internet Protocol Version	4 (TCP/IPv4) Properties	х			
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
Obtain an IP address automatical	у				
• Use the following IP address:					
IP address:	192 . 168 . 1 . 100				
Subnet mask:	255.255.255.0				
Default gateway:					
Obtain DNS server address autom	natically				
• Use the following DNS server add	resses:				
Preferred DNS server:					
Alternate DNS server:					
Validate settings upon exit	Advanced				
	OK Cance				

6. Click OK and Close

Step 5:

Configuration of RL-Series device features and option are accessible via the web page.

- 1. Open your internet browser (such as Internet Explorer, Chrome, or Firefox).
- 2. In the address bar, type your IP address (default IP: 192.168.1.99)
- 3. In the login dialog, enter your Username and Password. (default Username: Root; no Password is required)
- 4. Click OK, you will then access the configuration interface. Setup and Configuration via web GUI.

Default IP Address	192.168.1.99
Default Username	Root
Default Password	*No Password Required*



UPGRADE

UPGRADE FIRMWARE HOW-TO

The following steps will detail the process of updating/upgrading your current firmware to the latest released firmware supported by Rapidus Wireless Networks. This manual shows the process on how to update the firmware on your device.

To begin your firmware update please go System > Maintenance.

Rapidus Status - System	✓ Network		AUTO REFRESH ON
No password set! Adminis There is no password set Go to password configu Schedu LED Co Mainter	stration gure a root password to pro led Tasks onfiguration nance	tect the web interface and enable SSH.	
System			
Hostname	Rapidus		
Model	Rapidus Wireless RL Series		
Firmware Version	RL-K r3 r3311+7-fb18c3c / l	uCl branch (git-17.090.64489-eb806fb)	
Kernel Version	4.4.47		
Local Time	Wed Apr 12 20:24:08 2017		
Uptime	0h 2m 53s		
Load Average	0.42, 0.39, 0.17		
Memory			
Total Available	74996 kB / 125384 kB (55	996)	
Free	71748 kB / 125384 kB (5	796)	

You will be directed to the following page.

Rapidus Status - Sys	stem + Network + HotSpot Logout
Maintenance Actions Configuration	
Backup / Restore Click "Generate archive" to down with squashfs images). Download backup: Reset to defaults:	oad a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible Generate archive Perform reset
To restore configuration files, you Restore backup:	can upload a previously generated backup archive here. Choose File No file chosen Upload archive
Flash new firmware im Upload a sysupgrade-compatible firmware image). Keep settings: Image:	age image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires a compatible Choose File No file chosen Files himage



Under the "Flash new firmware image" section, click "Choose File" to select the new firmware that will be supplied by Rapidus Wireless Networks. Be sure to check the "Keep settings" box, your device will default to factory settings if this box is not checked. (The latest firmware updates will either be sent by email upon request or they can be downloaded from our website at www.rapiduswireless.com).

Rapidus Status - System - Network - HotSpot Logout	<u> </u>
Maintenance Actions Configuration	
Backup / Restore	
Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).	
Download backup: I Generate archive Reset to defaults: I Perform reset	
To restore configuration files, you can upload a previously generated backup archive here.	
Restore backup: Choose File No file chosen Upload archive	
Flash new firmware image	
Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires a compatible firmware image). Keep settings:	
Image: Choose File No file chosen	
Flash image	

Select the most current firmware update that you have downloaded or have been supplied by from the Rapidus Wireless Networks support team.

🌍 Open							×
G → 🕨 + Computer + Lo	ocal Disk (C:) 🔻 Program	nData 👻 Rapidus			👻 🐼 Search	Rapidus	2
Organize 🔻 New folder							
★ Favorites	Name 🔶			Data an dified	Tune	Size	
	🛛 📥 lede-ar71xx-ge	neric-wpj344-16M-squashf:	s-sysupgrade-39.bin	03/11/2016 2:59 PM	VLC media file (.bin)	4,545 KB	
🧮 Desktop							
ᇘ Libraries							
🚺 mrex							
🖳 Computer							
👝 RAMDisk (B:)							
🚰 Local Disk (C:)							
📰 Data (D:)							
🔮 BD-ROM Drive (E:)							
🙀 unlock_single_just_ip:							
🙀 Rapidus (\\192.168.1							
SFTP on 192.168.123							
👊 Network 🗾							
File <u>n</u> ame:	lede-ar71xx-generic	-wpj344-16M-squashfs-:	sysupgrade-39.bin		▼ All File	5	•
					Qp	en 🔻 🔿	Cancel



Once you have selected our latest firmware update click "Flash Image"

Rapidus Status - Sy	stem - Network - HotSpot Logout
Actions Configuration	
Backup / Restore Click "Generate archive" to down with squashfs images). Download backup: Reset to defaults:	load a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible Generate archive Perform reset
To restore configuration files, you Restore backup:	I can upload a previously generated backup archive here. Choose File No file chosen Upload archive
Flash new firmware in Upload a sysupgrade-compatible firmware image). Keep settings: Image:	Inage image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires a compatible Choose File rt-k-r3-r331sysupgrade Flash image

You will be directed to the following page. Please click "Proceed" to finish your update.

Rapidus Status - System - Network - HotSpot Logout
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration
Flash Firmware - Verify The flash image was uploaded. Below is the checksum and file size listed, compare them with the original file to ensure data integrity. Click "Proceed" below to start the flash procedure.
 Checksum MD5: 231c4ab423d31c65d2ef09103d314508 SHA256: db953680e231f505538269cc364dbb0977ac57bf9239e7f6c706c841f1601c0a Size: 4.75 MB (15.75 MB available) Configuration files will be kept.
Cancel
Powered by LuCl branch (git-17.090.64489-eb806fb) / RL-K r3 r3311+7-fb18c3c

You have now completed the process of updating your radio to our latest firmware. If you find you are having issues or the process is not configuring correctly contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.



WIFI/MESH

CONFIGURATION MOBILE MESH HOW-TO

Configure Wireless Settings

To getting started on configuring a Mobile Mesh network, begin by Clicking on Network > Wireless.

Rapidus Status - System -	Network - Logout	AUTO REFRESH ON
Status 🗾	Interfaces Wireless	
System	DHCP and DNS Hostnames	
Hostname	Static Routes	
Model	Firewall RL Series Diagnostics	
Firmware Version	RL r 2-A45 r22927 LuCI Master (git-16.324.51057-1c27f6b)	
Kernel Version	4.4.32	
Local Time	Tue Mar 28 19:39:28 2017	
Uptime	0h 39m 28s	
Load Average	0.01, 0.02, 0.00	

Click the "Edit" button for the radio that you choose to be used for the Mobile Mesh

Rapidus Status -	- System - Network -	- HotSpot Logout				AUTO REFRESH ON
radio0: Master "Rapidu	s" radio1: Master "Rap	pidus"				
Wireless Ove	rview					
Qualcom Channel: 34	m Atheros QCA9880 6 6 (5.180 GHz) Bitrate: ? M	802.11bgnac (radio Ibit/s	0)		Scan	Add 🗎
df 0%	SSID: Rapidus Mode: M BSSID: 04:F0:21:1D:7A:8	laster 3C Encryption: None		Ø Disable	Z Edit	× Remove
Generic I Channel: 1	MAC80211 802.11bgn 1 (2.462 GHz) Bitrate: ? M	(radio1) Ibit/s			Scan	Add
0%	SSID: Rapidus Mode: M BSSID: 04:F0:21:1F:EC:1	laster 1C Encryption: None		Disable	Z Edit	Remove
Associated S	tations					
SSID	MAC-Address	Host	Signal / Noise	RX Ra	ate / TX Rate	
No information availabl	le					
Powered by LuCl branch (git-17.088.09695-726efc9) /	RL-K r3-rc2 r3311+5-fb1	8c3c			



In the Device Configuration > General Setup Tab, Select the channel that you will be operating on and choose between 20MHz, 40MHz or 80Mhz.

Rapidus Status - Syst	em - Network - HotSpot Logout
radio0: Master "Rapidus" r	adio1: Master "Rapidus"
Wireless Network	: Master "Rapidus" (wlan0)
The Device Configuration section of defined wireless networks (if the ra Configuration.	covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all dio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the <i>Interface</i>
Device Configuration	
General Setup Advanced S	Settings
Wireless network is enabled	Disable
Operating frequency	Mode Channel Width AC • 157 (5785 MHz) • 40 MHz • 20 MHz • •
Transmit Power	auto 40 MHz 80 MHz
Interface Configuration	
General Setup Wireless Se	ecurity MAC-Filter Advanced Settings
ESSID	Rapidus
Mode	Access Point v

In the Interface Configuration > General Setup Tab, Change your ESSID name to your preference and select "Mobile Mesh" from the "Mode" dropdown options.

Rap	bidus Status - Sys	stem + Network + HotSpot Logout
Inter	rface Configuration) Security MAC-Filter Advanced Settings
	ESSID	Rapidus
	Mode	Access Point •
	Network	Access Point Client Mobile Mesh Access Point (WDS) Client (WDS)
		mesh: 👳
		Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.
	Hide ESSID	
	WMM Mode	8
	🖷 Ba	Save & Apply Save Reset



In the Network section you must unselect "Lan".

Rapidus s	Status + System + Network + HotSpot Logout
Interface Col General Setup	Nfiguration Wireless Security Advanced Settings
	ESSID Rapidus
	Mode Mobile Mesh BSSID
	Network hotspot: (no interfaces attached)
	mesh: @ wan: 2
	 create: Choose the network(s) you want to attach to this wireless interface or fill out the <i>create</i> field to define a new network.
	Back to Overview Save & Apply Save Reset

Select "mesh" then click "Save & Apply" to save these changes

Rapidus Status - System - Network - HotSpot Logout	
Interface Configuration	
General Setup Wireless Security Advanced Settings	
ESSID Rapidus	
Mode Mobile Mesh v	
BSSID	
Network hotspot: (no interfaces attached)	
wan: 2	
Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.	
Back to Uverview Save & Apply Save Reset	
Powered by LuCi branch (git-17.088.09695-726efc9) / RL-K r3-rc2 r3311+5-fb18c3c	



Click Network > Interface

Rapidus Status	s - System -	- Network -	HotSpot	Logout				AUTO REFRESH ON
radio0: Mobile Mesh	"Rapidus"	Interfaces ra Wireless						
Wireless Ov	erview	DHCP and Hostnames Static Rou	DNS s tes					
Qualco Channel:	mm Atheros 157 (5.785 GH	C Firewall ^{Z)} Diagnostic		(radio0)			🖸 Scan	Add 📩
all 100%	SSID: BSSIE	Rapidus Mode 30:31:32:33:3	e: Mobile Me 4:35 Encry	esh yption: -		🙆 Disable	Z Edit	× Remove
Generic Channel:	MAC80211 11 (2.462 GHz)	802.11bgn (I Bitrate: ? Mbi	radio1) it/s				Scan	Add
(if) 0%	SSID: Rapi BSSID: 04:	dus Mode: Ma F0:21:1F:EC:10	ster C Encryptic	on: None		🙆 Disable	Z Edit	Remove
Associated	Stations							
	SSID	MAC-Address	\$	Host	Signal / Noise	RX Rat	te / TX Rate	
👳 wlan0	Rapidus	04:F0:21:30:A	F:65	?	-24 / -105 dBm	81.0 MI 81.0 MI	bit/s, 40MHz, MC bit/s, 40MHz, MC	S 4 S 4
Powered by LuCl brance	h (git-17.088.09	695-726efc9) / F	RL-K r3-rc2 r	r3311+5-fb18c3c				

When directed to the "Interfaces" page, click "Edit"

Rapidus Status - System	✓ Network ✓ HotSpot Logout	AUTO REFRESH ON
WAN MESH HOTSPOT	LAN	
Interfaces		
Interface Overview		
Network	Status	Actions
HOTSPOT	Harrison to Long to a Line	🛱 Connect 🔞 Stop 🛛 Edit 💌 Delete
hotspot	Install protocol extensions	
MESH	Uptime: 0h 1m 22s	🔗 Connect 🔞 Stop 🛛 Edit 💌 Delete
Mobile Mesh "Rapidus"	RX: 12.17 KB (163 Pkts.) TX: 16.04 KB (171 Pkts.)	
LAN	Uptime: 1h 44m 14s	💋 Connect 🔞 Stop 🛛 🛛 Edit 💌 Delete
5위 (콜콜య) br-lan	RX: 12.70 MB (112901 Pkts.) TX: 3.34 MB (19427 Pkts.)	
	IPv4: 192.168.123.44/24 IPv6: fd7a:7d4e:7630::1/60	
WAN		💋 Connect 🔞 Stop 🛛 Edit 💌 Delete
none	TX: 0 B (0 Pkts.)	



Please click on the "Physical Setting" Tab

Rapidus Statu	s - System -	Network - HotSpot L	Logout AUTO REFRESH ON	
WAN MESH	HOTSPOT	LAN		
Interfaces - On this page you can c network interfaces sepa	LAN onfigure the network rated by spaces. Y	k interfaces. You can bridge ou can also use <u>VLAN</u> nota	e several interfaces by ticking the "bridge interfaces" field and enter the names of several ation INTERFACE.VLANNR (e.g. eth0.1).	
Common Config	uration			
General Setup	Advanced Settings	Physical Settings	Firewall Settings	
	Status	Image: System Uptime br-lan MAC-A RX: 12 TX: 3.4 IPv4: 1 IPv6: fr	e: 1h 44m 42s Address: 04:F0:21:1D:7A:8C 2.78 MB (113609 Pkts.) 43 MB (19668 Pkts.) 192.168.123.44/24 fd7a:7d4e:7630::1/60	
1	Protocol Static a	address v	Y I I I I I I I I I I I I I I I I I I I	
IPv4	address 192.16	3.123.44		
IPv4 r	etmask 255.25	5.255.0 🔻	•	
IPv4 g	ateway			
IPv4 br	oadcast			

Then Select "Ethernet Adapter: "bat0"". Then save and apply by clicking "Save & Apply"

Rapidus st	atus - Sys	item 👻 🛚 N	letwork + HotSpot	Logout Logout	FRE 8H ON
WAN MESH	HOTS	РОТ	LAN		
Interfaces	- LAN				
On this page you car interfaces separated	configure the by spaces. Ye	e network ir ou can also	nterfaces. You can bridg use <u>VLAN</u> notation IN	ge several interfaces by ticking the "bridge interfaces" field and enter the names of several ITERFACE.VLANNR (e.g.: eth0.1).	network
Common Cor	figuratior	٦			
General Setup	Advanced	Settings	Physical Settings	Firewall Settings	
Bridge	e interfaces	🗹 🏮 cr	eates a bridge over spe	acified interface(s)	
E	nable STP	🗆 🕝 E	nables the Spanning Tre	ee Protocol on this bridge	
	Interface		themet Adapter: "bat0"	s t (len)	
		8 JE	themet Adapter: "eth1"	(lan)	
		0 <u>2</u> 6	thernet Adapter: "none"	" (wan)	
			thernet Adapter: "teql0"	r	
		🗆 👳 v	Vireless Network: Ad-He	loc "Rapidus" (mesh)	
		🗹 🙍 V	Vireless Network: Maste	er "Rapidus" (lan)	
		. 20	Custom Interface:		
DHCP Server					
General Setup	IPv6 Settir	ngs			
Igno	re interface	2 😨 D	sable DHCP for this int	terface.	
	B:	ack to Ove	view	Save & Apply Save R	eset



Please Click Status > Overview.

Rapidus Status - System	ı ▼ Network ▼ HotSpot Logout		AUTO REFRESH ON	
WAN ME Firewall Routes Interface System Log Kernel Log	AN			
Processes				
Network Realtime Graphs	atus	Actions		
HOTSPOT	Unsupported protocol type. Install protocol extensions	🛿 Connect 🖉 Stop	Z Edit Delete	
MESH	Uptime: Oh Om 60s	Connect 🔯 Stop	Fdit Relete	
Mobile Mesh "Rapidus"	MAC-Address: 04:F0:21:1D:7A:8C RX: 26.81 KB (237 Pkts.) TX: 331.19 KB (2006 Pkts.)			
LAN	Uptime: 0h 1m 5s	🖉 Connect 🔯 Stop	Edit 🗙 Delete	
愛泽(<u>(二) 点、点、</u> 優) br-Jan	MAC-Address: 0E:108:95:34:65:5C RX: 212:98 KB (1810 Pkts.) TX: 224:31 KB (705 Pkts.) IPv4: 192.168.123.44/24 IPv6: fd7a:7d4e:7630::1/60			
WAN		🖉 Connect 🔯 Stop	Z Edit Delete	
none	TX: 0 B (0 Pkts.)			
Add new interface				

In the Section "Associated Stations" at the bottom of the page, you will see the devices that are connected to your mesh network. (2 or more devices need to be configured to MESH mode setting for you to be able to see them under "Associated Stations")

	o active leases.				
Wireless					
Generic 802	.11ac Wireless Controller (radio0) all SSID: Rapi 100% Mode: Mob Channel: 1 Bitrate: 30 BSSID: 30: Encryption	dus ile Mesh 57 (5.785 Gł 0 Mbit/s 31:32:33:34: I: -	Hz) 35	
Generic 802	. 11bgn Wireless Controller (radio	1) SSID: Rapi 0% Mode: Mas Channel: 1 Bitrate: 7 BSSID: 04 Encryption	dus ter 1 (2.462 GHz //bit/s F0:21:1F:EC I: None	:) 1C	
Associate	ed Stations	MACAUL	User	Circul (Notes	

You have now completed the process of creating your Mobile-Mesh Network setup and can continue to configure more units to your network. If you find you are having issues you can contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.



ACCESS POINT

CONFIGURATION AP HOW-TO

Configuring AP Settings

This section will show you how to set up and configure an AP on your desired radio unit.

To begin configuring your AP, please go to the "Network" Tab and select "Wireless" from the pull-down tab.

Rapidus Status - System - Ne	stwork - Logout Auto	REFRESHON
No password set! There is no password set on this router Go to password configuration	Nerfaces Vireless Vireless Vireless Vireless Vireless Vireless Vireless Vireles Virele	
System	lagnostics	
Hostname	Rapidus	
Model	Rapidus Wireless RL Series	
Firmware Version	RL r 2 r2292 / LuCl Master (git-16.324.51057-1c27f6b)	
Kernel Version	4.4.32	
Local Time	Tue Nov 22 09:52:43 2016	
Uptime	0h 1m 55s	
Load Average	0.44, 0.27, 0.10	
Memory		
Total Available	90188 kB / 125352 kB (71%)	
Free	87620 kB / 125352 kB (69%)	

You will be directed to the following page, once here click "Edit" on the radio you are configuring to be your AP.

Rapidus	Status - System - Network - Logout				AUTO REFRESH ON
No pass There is no Go to pass	word set! password set on this router. Please configure a root password to protect the web interface and word configuration	d enable	e SSH.		
Wireles	s Overview				
	Qualcomm Atheros QCA9880 802.11bgnac (radio0) Channel: 36 (5.180 GHz) Bitrate: ? Mbit/s			Scan	Add
la l	SSID: LEDE Mode: Master BSSID: 04:F0:21:1D:7A:8C Encryption: None		Disable	Edit	Remove
	Generic MAC80211 802.11bgn (radio1) Channel: 11 (2.462 GHz) Bitrate: ? Mbit/s			Scan	Add 🔰
a a	SSID: LEDE Mode: Master BSSID: 04:F0:21:1F:EC:1C Encryption: None		Disable	Edit	Remove



When directed to the following page, in the "Device Configuration" section under the "General Setup" tab, select a channel from the drop-down menu of the Operating frequency > Channel drop-down. Also select between 20 MHz and 40 MHz in the **"Width"** drop-down. (Best practice: select a higher channel to avoid interfering with other networks)

Rapidus Sta	atus - Sy	stem - Network -	Logout		AUTO REFRESH ON
No password There is no passw Go to password	set! vord set on t configuratio	his router. Please conf	igure a root password to p	rotect the web interface and	enable SSH.
Wireless N The Device Configure defined wireless netwo Configuration. Device Config	etworl	k: Master "L 1 covers physical setti radio hardware is mult	EDE" (wlan0 rgs of the radio hardware -SSID capable). Per netw) such as channel, transmit po ork settings like encryption o	wer or antenna selection which are shared among all r operation mode are grouped in the <i>Interface</i>
General Setup	Advanced	I Settings			
	Status	Mode: 0% BSSID: Channe Signal: Bitrate:	Master SSID : LEDE 04:F0:21:1D:7A:8C End I: 36 (5:180 GHz) Tx -Pd 0 dBm Noise : -105 dBn 0.0 Mbit/s Country: US	ryption: None wer: 23 dBm	
Wireless network	is enabled	Disable	4		
Operating	frequency	Mode Channel AC T 36 (518	Width 0 MHz) 20 MHz	4	
Trans	smit Power	23 dBm (199 mW)	40 MHz 80 MHz		

Create your own ESSID name that you will use for your AP. Be sure that the "Mode" is set to "Access Point" Click "Save & Apply" to save your settings

Rapidus Sta	atus - Sys	stem - Network - Logout Auto REFRESH ON
Interface Conf	figuratior	1
General Setup	Wireless S	Security MAC-Filter Advanced Settings
	ESSID	Sample-AP-5G
	Mode	Access Point
	Network	🖉 lan: 🖉 🦉 🙊
		mesh: (no interfaces attached) create:
		2 Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.
H	lide ESSID	
W	VMM Mode	
	💽 Ba	ack to Overview Save & Apply Save Reset

You have now completed the process of creating your AP. If you find you are having issues or the process is not configuring correctly, please contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.



CLIENT (STATION)

CONFIGURATION CLIENT HOW-TO

Configuring Client Access

Here we will guide you through the process of configuring your device into a Client (station). Be aware that certain settings have to align with your AP configured device, so that communication between the two devices can function.

To get started login to your device and select "Wireless" from the drop-down "Network" tab.

Rapidus Status - System -	Network - Logout	AUTO REFRESH ON
	Interfaces	
No password set!	Wireless	
There is no password set on this route	DHCP and DNS	ssword to protect the web interface and enable SSH.
Go to password configuration	Hostnames	
	Static Routes	
Status	Firewall	
System	Diagnostics	
Hostname	Rapidus	
Model	Rapidus Wire	less RL Series
Firmware Version	RL r 2 r2292	/ LuCl Master (git-16.324.51057-1c27f6b)
Kernel Version	4.4.32	
Local Time	Tue Nov 22 0	9:52:43 2016
Uptime	0h 1m 55s	
Load Average	0.44, 0.27, 0	10
Memory		
Total Available	90188 kB	/ 125352 kB (71%)
Free	87620 kB	/ 125352 kB (69%)

From here you will select the radio for which you will be using for your Client (station). The radio you choose here will depend on which radio you have chosen to make as your AP. Be sure when choosing which radio to use for your Client (station) that it is on the same frequency as the radio you configured for your AP device. (ei. If your AP device is operating in 5.8GHz then your Client (station) must also operate in 5.8GHz)

Rapidu	S Status -	System -	Network -	Logout						AUTO REFRESH	ON
No pas There is Go to pa	no password set! assword config	et on this router guration	r. Please conf	igure a root password to	protect the web interfa	ace and ena	ble SSH.				
Wirele	ess Ove	rview									
	Qualcom Channel: 36	(5.180 GHz)	CA9880 80 Bitrate: ? Mbi	02.11bgnac (radio0)				Scan	Add	
	11 0%	SSID: LEDE BSSID: 04:F0	Mode: Maste :21:1D:7A:8C	er Encryption: None			Disable		E·dit	Remove	
2	Generic N Channel: 11	AC80211 8 (2.462 GHz)	D2.11bgn (I Bitrate: ? Mbi	radio1) t/s					Scan	Add	
		SSID: LEDE BSSID: 04:F0	Mode: Maste 221:1F:EC:10	er : Encryption: None		0	Disable		Edit	Remove	
Assoc	ciated S	tations									
5	SSID	MAC-Addres	s	Host	Signal / Noise		RX F	Rate / TX	Rate		
No infor	mation availabl	e									



When you are directed to the following page you will need to select the same "Width" as so it matches the AP you will be trying to communicate with. (ei. If your AP "Width" is set to 40Ghz then your Client (station) "Width" must be set to 40GHz as well)

Rapidus Status	- System - Network - Logout	SH ON
No password set There is no password Go to password cont	t set on this router. Please configure a root password to protect the web interface and enable SSH. figuration	
Wireless Net The Device Configuration defined wireless networks Configuration. Device Configura	work: Master "LEDE" (wlan0) n section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared amor s (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the <i>Interface</i> ation	ng all
General Setup A	dvanced Settings	
	Mode: Master SSID: LEDE 0% BSSID: 04:F0:21:1D:7A:8C Encryption: None Channel: 36 (5.180 GHz) Tx-Power: 23 dBm Signal: 0 dBm Noise: -105 dBm Bitrate: 0.0 Mbit/s Country: US	
Wireless network is e	nabled 🕲 Disable	
Operating freq	Mode Channel Width quency AC ▼ 36 (5180 MHz) ▼ 40 MHz 20 MHz	
Transmit	Power 23 dBm (199 mW) 40 MHz 80 MHz Ø dBm 80 MHz	

Scroll down the page to the **"Interface Configuration"** section. Here you will type in the same **"ESSID"** name as you used for the AP that you want to connect to (ei. if your AP **"ESSID"** is Sample1 then your Client (station) **"ESSID"** must be Sample1). You must also change the **"Mode"** to **"Client (WDS)"** in the drop-down menu. Be sure to click **"Save & Apply"** before you leave this page. Note: ESSID is case sensitive.

Rapidus Sta	atus - Sys	tem - Network - Logout	UTO REFRESH ON
Trans	smit Power	23 dBm (199 mW) • Ø dBm	
Interface Cont	figuration	1	
General Setup	Wireless S	ecurity Advanced Settings	
	ESSID	Sample-AP-5G	
	Mode	Client (WDS)	
	BSSID		
	Network	 Ian: I I I I I I I I I I I I I I I I I I I	network.
	📻 Ba	ck to Overview Save & Apply Save	Reset
Powered by LuCI Ma	ister (git-16.32	24.51057-1c27f6b) / RL r 2 r2292	

You have now completed the step for setting up a Client (station). . If you find you are having issues or the process is not configuring correctly contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.



ROUTER

CONFIGURATION FOR ROUTER HOW-TO

The Rapidus Wireless RL-series model devices are factory set to default bridge AP. In this How-To manual we will go through the process of changing your device from a bridge AP into a Router. The following steps for configuring your product are for devices that are already in default mode or have been reset to default.

NOTE: Before you start you should have a plan outlined of which IP addresses you will be using in your network to be set for your router.

Setting Device to Router Mode

To begin you must first navigate to "Interfaces" in the drop down menu under "Network".

Rapidus	Status 👻	System -	Network 🔻	HotSpot	Logout UNSAVED CHANGES: 1) AUTO REFRESHON
Status		۲	Interfaces Wireless		
System			DHCP and Hostnames		
Hostname					
Model					less RL Series
Firmware Versi	ion			RL-K 13-ro	4 r3311+6-fb18c3c / LuCl branch (git-17.090.64489-eb806fb)

Once directed to the following page you will need to create a new interface by clicking "Add new interface...".

Rapidus status∓ s	ystern = Network = HotSpot Logout		AUTO REFRESH ON
MESH LAN			
Interfaces			
Interface Overview			
Network	Status	Actions	
MESH		🖉 Connect 👩 Stop 📝 Ed	it 💌 Delete
mesh	Install protocol extensions		
LAN	Uptime: Oh 3m 38s	🍠 Connect 👩 Ston 📝 Ed	it 💽 Delete
ø≇ (<u>22 22 ∞</u> ∞) br-lan	MAC-Address: F6:BB:87:BA:E1:E2 RX: 188.37 KB (1764 Pids.) TX: 162.78 KB (767 Pids.) IPv4: 192.168.1.99/24 IPv6: fd7a:7d4e:7630::1/60		
Add new interface			



You will first need to name your new interface (for our example we will name our interface **"wan**"). And select **"Custom Interface**" under the **"Cover the following interface**" options and type **"none**" in the available box. Click **"Submit**" once you're done.

Rapidus status≁ sy	stem → Network → HotSpot Logout
Create Interface	
Name of the new interface	wan
Note: interface name length	Maximum length of the name is 15 characters including the automatic protocol/bridge prefix (br., 8in4-, pppoe- etc.)
Protocol of the new interface	Static address 🔻
Create a bridge over multiple interfaces	
Cover the following interface	 Ethernet Adapter: "eth0" (lan) Ethernet Adapter: "eth1" (lan) Ethernet Adapter: "teq10" Wireless Network: Master "LEDE" (lan) Wireless Network: Master "LEDE" (lan) Custom Interface I none
	Back to Overview

Navigate back to "Firewall" in the drop down menu for "Network".

Rapidus Status = System =	Network = HotSpot	Logout	UNSAVED CHANGES S AUTO REFRESH ON
WAN MESH LAN			
Interfaces - WAN On this page you can configure the network interfaces separated by space -	DHCP and DNS Hostnames Static Routes Firewall	ge several interfaces by ticking the "bridge from INTERFACE • VLANNR (<u>e.g.</u> : et h9 • 1).	interfaces" field and enter the names of several
Common Configuration	Diagnostics s Physical Settings	Firewall Settings	



Scroll down the page to the "Zones" sections and click the "Edit" button for "wan".

Rapidus status Sys	tem + N	etwork≠ Hot:	Spot Logout	t			UNSA/ED CHANGE		
General Settings Port Fo	nvards	Traffic Rules	Custom R	iles					
Firewall - Zone Settings The firewall creates zones over your network interfaces to control network traffic flow.									
General Settings									
Enable SYN-flood protection	•								
Drop invalid packets									
Input	accept								
Output	accept		Ŧ						
Forward	reject		٣						
Zones									
Zone ⇒ Forwardings		Input	Output	Forward	Masquerading	MSS clamping			
lan: lan: 🧾 🦉 👰 ⇒	wan	accept 🔻	accept 🔻	accept 🔻			🛛 Edit 💌 Delete		
wan: wan: 🛃 ⇒ (REJECT		reject 🔻	accept 🔻	reject 🔻	Ø	×	🗾 Edit 🚺 Delete		
1 Add									
						Save & Appl	iy Save Reset		



Under the "General Settings" tab change the settings for "input" to "accept" and also change the settings for "Forward" to "accept" as well. Scroll down the page, under "Inter-Zone Forwarding" select "Lan" for both "Allow forward to destination zones:" and "Allow forward from destination source zones:". Click "Save & Apply" once you have made these changes and before you move away from this page.

Rapidus _{Status} -	System + Network + HotSpot Logout UNSA/EDICHAN
General Settings	Port Forwards Traffic Rules Custom Rules
Firewall - Zon Zone "Wan" This section defines comm <i>forward</i> option describes the	e Settings - Zone "wan" on properties of "wan". The <i>input</i> and o <i>utput</i> options set the default policies for traffic entering and leaving this zone while the re policy for forwarded traffic between different networks within the zone. <i>Covered retworks</i> specifies which available networks are
General Settings	Advanced Settings
N	ame wan
I	nput accept 🔻
0.	accept 🔹
For	ward accept
Masquera	ding 🗹
MSS clam	ping 🗷
Covered netw	vorks Ian:
Inter-Zone Forwar The options below control Source zones match forwa permission to forward from	ding the forwarding policies between this zone (wan) and other zones. <i>Destination zon</i> es cover forwarded traffic originating from "wa rded traffic from other zonestargeted at "wan". The forwarding rule is <i>unidirectional</i> , e.g. a forward from lan to wan does <i>not</i> im wan to lan as well.
Allow forward to des <i>tina</i> 20	ition nes: 💹 Ian: 🚛 🖉 🧶 🙊
Allow forward from so zo	uroe nes: Ian: 🔝 🖉 👳 👳
	Back to Overview Save & Apply Save Reset



Navigate back to the Interface page by clicking "Interfaces" in the drop down menu of "Network".

Rapidus Status System -	Network - HotSpot	Logout UNSA/EDCHANGES:S
General Settings Port Forwards	Interfaces Wireless	om Rules
Firewall - Zone Settin	DHCP and DNS Hostnames	n"
Zone "wan"		
This section defines common properties <i>forwar</i> d' option describes the policy for fo members of this zone.	Diagnostics	<i>cout</i> options set the default policies for traffic entering and leaving this zone while the erent networks within the zone. <i>Covered networks</i> specifies which available networks are

When you arrive at the Interfaces page, under "Interfaces Overview" click "Edit" for the "WAN" interface to edit the network zone.

Rapidus status - s	System – Network – HotSpot Logout		UNSAVED CHANGES: S AUTO REFRESHION
WAN MESH LAN			
Interfaces			
Interface Overview			
Network	Status	Actions	
MESH	Unsupported protocol type. Install protocol extensions	🦉 Connect 🥥 Stop	Z Edit Delete
LAN	Uptime: 0h 20m 23s MAC-Address: F6:BB:87:BA:E1:E2 RX: 858.75 KB (7978 Pkts.) TX: 621.04 KB (3009 Pkts.) IPv4: 192.168.1.99/24 IPv6: fd7a:7d4e:7630::1/80	🦉 Connect 🥥 Stop	Z Edit Elete
WAN	RX: 0 B (0 Pkts.) TX: 0 B (0 Pkts.)	🦉 Connect 🥥 Stop	🗾 Edit 🗴 Delete
Add new interface			



Under the "General Setup" tab for "Common Configuration" change the "Protocol" option to "Static Address" and click "Switch protocol".

Rapidus St	atus - System -	Network – HotSpot	Logout		AUTO REFRESH ON
WAN MESH	H LAN				
Interfaces On this page you ca names of several ne	- WAN an configure the network twork interfaces separa	interfaces. You can bridg ted by spaces. You can a	ge several interfaces by ticking also use <u>YLAN</u> notation INTER	j the "bridge interfaces" field FACE.VLANNR (<u>e.g.</u> ∶eth0.1).	and enter the
General Setup	figuration				
	Status	none	RX : 0 B (0 Pkts.) TX : 0 B (0 Pkts.)		
	Protocol Static a	ddress			
Really switc	:h protocol?	tch protocol			
	Back to Ove	rview		Save & Apply Save	e Reset



Enter in the IP, netmask, gateway and DNS server addresses that you will be using to for your network. Click "**Save**" once done. (Refer to your IP address outlined plan for your required needs as to which IP addresses to use to connect back to your network)

Rapidus status	s≖ System≖ Ne	twork≖ HotSpot Lo;	gout	UNSAVED CHANGES: 4 AUTO REFRESH ON
Interfaces - On this page you can c network interfaces sepa	WAN configure the network rated by spaces. You	nterfaces. You can bridge can also use <u>VLAN</u> notati	: several interfaces by ticking on INTERFACE.VLANNR (<u>e.g.</u> : et	the "bridge interfaces" field and enter the names of several he.1).
Common Config	guration			
General Setup	Advanced Settings	Physical Settings	Firewall Settings	
	Status	none	R X: 0 B (0 Pkts.) T X: 0 B (0 Pkts.)	
F	Protocol Static ad	Iress 🔻		
IPv4	address 192.168.	23.54)	
IPv4 r	netmask 255.255.3	:55.0 🔻	j –	
IPv4 ç	gateway 192.168.	23.1	J	
IPv4 br	roadcast			
Use custom DNS	S servers 192.168.	23.1	•	
IPv6 assignmen	t length disabled	•		
IPv6	address	a part of given length of	every public IPvG-prefix to th	is interface
IPν6 ç	gateway			
IPv6 route	ed prefix 😰 Public	prefix routed to this devic	e for distribution to clients.	
DHCP Server General Setup	IPv6 Settings nterface	able <u>DHCP</u> for this interfa	ce.	
	📄 Back to Overv	ew		Save & Apply Save Reset



Next click the "Physical Settings" tab under "Common Configuration".

Rapidus st	atus – System – Netwo	nk∓ HotSpot Lo	ogout	UNSAVED CHANGES S AUTO REFRESH ON
WAN MESH	LAN			
Interfaces	- WAN			
On this page you ca network interfaces se	n configure the network inter eparated by spaces. You can	rfaces. You can bridg also use <u>VLAN</u> notat	e several interfaces by tickin tion_INTERFACE.VLANNR (e.g.: 6	g the "bridge interfaces" field and enter the names of several eth@.1).
Common Cor	nfiguration			
General Setup	Advanced Settings	Physical Settings	Firewall Settings	
	Ctatur	Æ	RX:0 B (0 Plds)	
	Juarus		KX. 0 D (0 I KD.)	

In the "Physical Settings" tab, select "Bridge Interfaces" and for the "Interface" options select both "Ethernet Adapter: eth0 and eth1". Then <u>unselect</u> "Ethernet Adapter: none" and click "Save".

Rapidus sta	itus = System = Net	work≖ HotSpot I	_ogout	UNSAVED CHANGES: 3 AUTO REFRES
WAN MESH	LAN			
	1478 BI			
Interfaces On this page you can network interfaces se	• WAN n configure the network in parated by spaces. You c	iterfaces. You can brid an also use VLAN not	ge several interfaces by ticking the ation INTERFACE.VLANNR (e.g.: eth8.:	"bridge interfaces" field and enter the names of sever 1).
Common Con	figuration		Yunku	*
General Setup	Advanced Settings	Physical Settings	Firewall Settings	
Bridge	interfaces 📝 🕘 crea	tes a bridge over spec	ified interface(s)	
Er	nable STP 🔲 🙆 Ena	bles the Spanning Tre	ee Protocol on this bridge	
	Interface 📧 🗾 🖉 Eth	ernet Adapter: "eth0"	(lan)	
	💌 🖉 Eth	ernet Adapter: "eth1"	(lan)	
	🛄 🖉 Eth	ernet Adapter: "none"	(wan)	
	🔲 🗾 Eth	ernet Adapter: "teql0"		
	🔲 👳 Wir	eless Network: Master'	"LEDE" (lan)	
	💷 👳 Wir	eless Network: Master'	"LEDE" (lan)	
	🔲 💒 Cus	tom Interface:		
DHCP Server				
Gaparal Satur	IDv& Cottings			
General Setup	IFVO Settings			
Ignore	e interface 🕑 🔞 Disa	ble <u>DHCP</u> for this inte	rface.	
	📄 Back to Overvie	200		Save & Apply Save Reset



At the top of the page click the "LAN" tab to edit the network zone for LAN.

Rapidus	Status 🔻	System =	Network 👻	HotSpot	Logout	UNSAVED CHANGES: 10 AUTO REFRESH ON
WAN M	ESH 🖸	AN				
Interfac	es - W/	AN				

Edit the addresses under the "General Setup" tab. (Refer to your IP address outline plan for your required needs as to which IP addresses you will use for your networking)

Rapidus _{sta}	tus 🕶 Sys	stern ≖ Network ≖ Ho	otSpot La	ogout	UNSAVED CHANGES: 10 AUTO REFRESH ON
WAN MESH	LAN				
Interference	1.0.1				
On this page you can	- LAN 1 configure t	the network interfaces. Yo	u can bridg	e several interfaces by ticking th	e "bridge interfaces" field and enter the names of several
network interfaces sep	parated by s	spaces. You can also use	VLAN notat	tion INTERFACE.VLANNR (e.g.: ethe	. 1).
Common Cont	figuratio	'n			
General Setup	Advance	d Settings Physical	Settings	Firewall Settings	
	Status	53	Uptime:	0h 39m 15s	
		br-lan	MAC-Ado	dress: F6:88:87:8A:E1:E2	
			TX: 1.07	MB (5639 Pkts.)	
			IPv4: 19	2.168.1.99/24 7.7.7.44o:7620::1/60	
			11 90.10	a., d+e., 000 100	
	Protocol	Static address		,	
IPν	/4 address	10.0.0.1		J	
IPv	4 netm <i>as</i> k	255.255.255.0	v		
IPv4	4 gateway		_	5	
IPv4	broadcast				
Use custom Dt	NS servers)	
IPv6 assignm∢	ent length	60	v		
		(2) Assign a part of give	en length of	f every public IPv6-prefix to this	interface
IPv6 assign	ment hint				
		🕘 Assign prefix parts u	sing this he	xadecimal subprefix ID for this i	nterface.
DHCP Server					



Unselect "Ignore interface" to enable DHCP. And click "Save".

General Setup Ad	vanced Settings IPv6 Settings
Ignore inter	rface Disable <u>DHCP</u> for this interface.
	Start 100 O Lowest leased address as offset from the network address.
I	Limit 150
Lease	time 12h 2 Expiry time of leased addresses, minimum is 2 minutes (2m).

Scroll back up the page and click the "Physical Settings" tab.

Rapidus status -	System – Network – HotSpot L	ogout	UNSAVED CHANGES: 13 AUTO REFRESH ON
WAN MESH LAN	4		
Interfaces - LAI	N		
On this page you can configu network interfaces separated !	re the network interfaces. You can bridg by spaces. You can also use <u>VLAN</u> nota	je several interfaces by ticking the "bridge interfac tion INTERFACE.VLANNR (<u>e.g.</u> : eth 8.1).	es" field and enter the names of several
Common Configurat	tion		
General Setup Advar	nced Settings Physical Settings	Firewall Settings	



In the "**Physical Settings**" tab under the "**Interface**" options unselect both "**Ethernet Adapter: eth0 and eth1**". Once you have done so click "**Save & Apply**".

Rapidus status - sys	stem * Network * HotSpot Logout UNSAVEDCHARGES IS AUTO REFRESHOW
WAN MESH LAN	
Interfaces - LAN On this page you can configure t network interfaces separated by s	the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several spaces. You can also use <u>VLAN</u> notation INTERFACE.VLANNR (e.g.: eth0.1).
Common Configuratio	in .
General Setup Advance	d Settings Physical Settings Firewall Settings
Bridge interfaces	🗹 🔞 creates a bridge over specified interface(s)
Enable STP	🔲 👩 Enables the Spanning Tree Protocol on this bridge
Interface DHCP Server General Setup Advance	d Settings IPv6 Settings
Ignore interface Start	 Disable <u>DHCP</u> for this interface. 100 Output the set of the
Limit	150 Maximum number of leased addresses.
Leasetime	12h Expiry time of leased addresses, minimum is 2 minutes (2m).
B	ack to Overview Save & Apply Save Reset



You will need to reboot your device for your changes to be taken into effect. Click "**Reboot**" from the drop down menu of the "**System**" tab at the top of the page.

Rapidus status -	System – Network – HotSpot L	ogout	AUTO REFRESH ON
WAN MESH L	System Administration		
Interfaces	Startup Scheduled Tasks		
Interface Overview	LED Configuration Maintenance		
Network	Reboot	Actions	

Your device is now configured to operate in router mode. If you find you are having issues or the process is not configuring correctly contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.



<u>VLAN</u>

CONFIGURING VLAN HOW-TO

A virtual LAN (VLAN) allows network administrators to group host together even if the hosts are not directly connected to the same network switch. This can greatly simplify network design and deployment. A VLAN could be used to separate traffic within a business due to users, and due to network administrators, or between types of traffic, so that users or low priority traffic cannot directly affect the rest of the network's functioning.

Configuring VLAN Settings

To begin navigate to the VLAN configuration page by clicking the "Network" Tab and selecting the "VLANs" in the drop down menu.

Rapidus	Status -	System +	Network 👻	HotSpot	Logout
•			Interfaces		
Status			Wireless		
System			DHCP and	DNS	
System			Hostnames		
Hostname			Static Rout	es	
Model			VLANs		ess RLK Series
moder			Firewall		
Firmware Vers	ion		Diagnostics		-vlan-A107 r3311+36-fb18c3c / LuCl branch (git-
Kennel Mension				4 4 47	



Once directed to the following page you will be able to configure your VALNs using the following sections. Configure **Management:** to restrict access to the current device to hosts on the configured VLAN ID, **WiFi Data:** to use the configured VLAN ID for Wi-Fi traffic and **Tiered WiFi access:** to use configured VLAN IDs for tiered access to your network from the WiFi interface.

Management VLAN

Under "**Management**" click the checkbox to enable the management VLAN, then enter the VLAN ID used for the management VLAN on your network. Optionally, you may edit the description box.

Note: When enabled, the internal changes in the unit are immediate, so the unit will subsequently only be accessible on the management VLAN. Be ready with a VLAN switch which handles the management VLAN ID. Plug the Ethernet cable from the unit into the trunk port, and your PC into the access port.

Then click **"Save & Apply"** to commit the configuration.

VLAINS These tables speci	fy how this devic	e's interfaces pa	rticipate in	your network's	VLANs.				
Below are some pr Note: the WiFi Dat The descriptions a	e-configured VL/ a and Tiered Wif e for notational p	ANs for common Fi use cases are purposes, and ar	use cases mutually e ren't used i	, and an Advan xclusive and ca n VLAN operati	ced section for in't both be enab on	special cases. bled.			
Managemen	t access to this de	evice to hosts on	the config	ured VLAN id.					
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wlan
management		99	trunk	trunk	trunk	trunk	trunk	trunk	trunk
WiFi Data	VLAN id for Wi-	Fi traffic							
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wlan
Description wifi-data	Enabled	VLAN id 100 tiered access to iorporate 2-tiered at be set up first	eth0 trunk your netwo	wlan0 access	wlan1 access i interfaces. and "guests", or	wlan0-1 access	wian1-1 access	wlan0-2 access	wlan acce
Description wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description	Enabled	VLAN id	eth0 trunk your netwo d scheme r eth0	wlan0 access ork from the Wii might be "staff" wlan0	wlan1 access Fi interfaces. and "guests", or wlan1	wlan0-1	wlan1-1	wlan0-2	wlan acce ors", "tead
Description wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description	Enabled	VLAN id	eth0 trunk your netwo d scheme r eth0	wlan0 access ork from the Wii might be "staff" wlan0	wlan1 sccess Fi interfaces. and "guests", or wlan1	wlan0-1 sccess n a university 3-tie wlan0-1	wlan1-1	wlan0-2	wlan acce ors", "teat
Description wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1	Enabled	VLAN id 100 tiered access to torporate 2-tierec st be set up first VLAN id 100	eth0 trunk your netwo d scheme r eth0 trunk	wlan0 access ork from the Wil might be "staff" wlan0 access	wlan1 access Fi interfaces. and "guests", or wlan1 access	wlan0-1 access r a university 3-tie wlan0-1 ignore	wlan1-1 access ared scheme mig wlan1-1 ignore	wlan0-2 access ht be "administrat wlan0-2 ignore	wlan scce ors", "teat wlan igno
Description wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2	Enabled CCCESS ad VLAN ids for escriptions of a c I virtual APs mu Enabled	VLAN id 100 tiered access to scorporate 2-tiered st be set up first VLAN id 100 200	eth0 trunk your netword d scheme r eth0 trunk trunk	wlan0 access ork from the Wil might be "staff" wlan0 access ignore	wlan1 access Fi interfaces. and "guests", or wlan1 access ignore	wlan0-1 access r a university 3-tie wlan0-1 ignore access	wlan1-1 access acces access acces access access access access access access access access acc	wlan0-2	wian scor ors", "tea wian igno
Description wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2 wifi-tier3	Enabled CCCESS ad VLAN ids for escriptions of a co i virtual APs mu: Enabled	VLAN id 100 tiered access to corporate 2-tiered st be set up first VLAN id 100 200 300 300	eth0 trunk your netwo d scheme r eth0 trunk trunk trunk	wlan0 access ack from the Wii might be "staff" wlan0 access ignore ignore	wlan1 sccess Fi Interfaces. and "guests", or wlan1 access ignore ignore	wlan0-1 access access a university 3-tie ignore access ignore ignore	wlan1-1 access	wlan0-2 access wlan0-2 ignore ignore access	wian according wian igno igno



WiFi Data VLAN

Click the checkbox to enable the Data VLAN and then enter the VLAN ID used for the data VLAN on your network. Optionally, you may edit the description box. Once you've done so click **"Save & Apply"** to commit the configuration.

Derow are some pr	e-configured M	ANs for commer	articipate in	your network's	VLANs.	special costor			
Note: the WiFi Dat The descriptions a	a and Tiered Wil e for notational	Fi use cases are purposes, and a	e mutually e ren't used i	x and an Advan xclusive and ca in VLAN operati	in't both be ena	bled.			
Managemen	t access to this de	evice to hosts on	the config	ured VLAN id.					
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wlan1-
management		99	trunk	trunk	trunk	trunk	trunk	trunk	trunk
WiFi Data									
Use the configured	VLAN id for Wi-	-Fi traffic							
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wlan1-
			terret.						
wifi-data Tiered WiFi a Use these configur For example, the d and "students".	access ed VLAN ids for escriptions of a d	tiered access to corporate 2-tiere	your netwo	access	Fi interfaces. and "guests", o	r a university 3-tie	access	access	acces
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description	aCCOSS ed VLAN ids for escriptions of a il virtual APs mu Enabled	tiered access to corporate 2-tiere ust be set up first VLAN id	eth0	access	Fi interfaces. and "guests", o	r a university 3-tie	access ared scheme migl wlan1-1	nt be "administrate	ors", "teach wlan1-
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description	access ed VLAN ids for escriptions of a u Il virtual APs mu Enabled	tiered access to corporate 2-tiere ist be set up first VLAN id	eth0	access	access Fi interfaces. and "guests", o wlan1	access r a university 3-tie wlan0-1	access ared scheme migl wlan1-1	nt be "administrative" wlan0-2	wlan1
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1	access ed VLAN ids for escriptions of a i il virtual APs mu Enabled	tiered access to corporate 2-tiere ast be set up first VLAN id	your netwi d scheme i tunk trunk	access ork from the Wi might be "staff" wlan0 access	Fi interfaces. and "guests", o wlan1 access	r a university 3-tie wlan0-1	access ared soheme migl wlan1-1 ignore	wlan0-2	wlan1
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2	aCCeSS ed VLAN ids for escriptions of a r il virtual APs mu Enabled	tiered access to corporate 2-tiere ast be set up first VLAN id	trunk o your netwi ki scheme i e trunk trunk	access ork from the Wi might be "staff" wlan0 access	Fi interfaces. and "guests", o wlan1 access ignore	access r a university 3-tie wlan0-1 ignore access	access ared scheme migl wlan1-1 ignore access	wlan0-2	wlan1- ignore
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2 wifi-tier3	ACCESS ed VLAN ids for escriptions of a id al virtual APs mu Enabled	tiered access to corporate 2-tiere stat be set up first VLAN id 100 200 300	vyour netwi ed scheme i eth0 trunk trunk trunk	access ork from the Wi might be "staff" wlan0 access ignore	Fi interfaces. and "guests", o wlan1 access ignore ignore	access r a university 3-tie wlan0-1 ignore ignore	ered scheme migl wian1-1 ignore sccess ignore	wlan0-2 ignore ignore access	wlan1- ignore ignore
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2 wifi-tier3 Advanced Use this to configur	access ed VLAN ids for escriptions of a u ul virtual APs mu Enabled	tiered access to corporate 2-tiere ist be set up first VLAN id 100 200 300 use cases.	trunk o your netwi kd scheme t trunk trunk trunk	access ork from the Wi might be "staff" wlan0 access ignore ignore	Fi interfaces. and "guests", o wlan1 access ignore ignore	access r a university 3-tic wlan0-1 ignore access ignore	access ared scheme migl wlan1-1 ignore access ignore	wlan0-2 ignore ignore access	wlan1- ignore ignore
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2 Advanced Use this to configu Description	ACCESS ed VLAN ids for escriptions of a r il virtual APs mu Enabled	tiered access to corporate 2-tiere ast be set up first VLAN id	eth0 eth0 eth0 eth0	access ork from the Wi might be "staff" wlan0 access ignore ignore wlan0	access Fi interfaces. and "guests", o wlan1 access ignore ignore wlan1 wlan1	access r a university 3-tie wlan0-1 access ignore ignore	access ared scheme migl wlan1-1 ignore ignore wlan1-1 wlan1-1	wlan0-2 w	wian1 ignore access
wifi-data Tiered WiFi a Use these configur For example, the d and "students". Note: the additions Description wifi-tier1 wifi-tier2 wifi-tier3 Advanced Use this to configu Description This section cont	ACCESS ed VLAN ids for escriptions of a u ul virtual APs mu Enabled	tiered access to corporate 2-tierer ist be set up first VLAN id 200 300 use cases. VLAN id et	eth0 trunk trunk trunk trunk	access ork from the Wi might be "staff" wlan0 access ignore ignore wlan0	Fi interfaces. and "guests", o wlan1 access ignore ignore wlan1	access r a university 3-tic wlan0-1 ignore ignore wlan0-1	ered scheme migl wlan1-1 ignore access ignore wlan1-1	wlan0-2 w	vian1- ignore ignore ignore



Tiered WiFi access VLAN(s)

Up to 3 tiers can be configured in Tiered WiFi access. Each tier consists of 2G and 5G APs that can be configured on the Wireless page and a corresponding VLAN configured on the VLAN page. For the first tier, the default APs are used. For the second and 3rd tiers, additional 2G/5G APs are added to the 2G and 5G radios on the wireless page.

You will first need to configure the APs. Navigate to the Wireless configuration page by selecting the "**Network**" tab and clicking "**Wireless**" in the drop down menu.

Rapidus stat	tus 👻 System 👻	Network -	HotSpot	Logout
Status		Interfaces Wireless		
System		DHCP and Hostnames	DNS 5	
Hostname		Static Rout	les	
Model		VLANs Firewall		less RL K Serie
Firmware Version		Diagnostic	5	-vlan-A107 r33

Once directed to the following page. For each of the 2G and 5G default APs, navigate to editing the wireless setting by clicking **"Edit"**

Filmen and Filmen Fi	Rapidus Status - System - Network - HotSpot Logout	AUTO REFRESH ON
	radio0: Master "Rapidus" radio1: Master "Rapidus"	
v	Nireless Overview	
	Qualcomm Atheros QCA9880 802.11nac (radio0) Channel: 149 (5.745 GHz) Bitrate: ? Mbit/s	👩 Scan 🎦 Add
	SSID: Rapidus Mode: Master BSSID: 04:F0:21:30:AF:94 Encryption: None	able Z Edit Remove
	Generic MAC80211 802.11bgn (radio1) Channel: 11 (2.462 GHz) Bitrate: ? Mbit/s	Scan 👌 Add
	SSID: Rapidus Mode: Master BSSID: 04:F0:21:1F:EC:20 Encryption: None	able 🗾 Edit 🔀 Remove



Note: The internal names of the APs are circled in Orange. They are the names shown on the VLAN page.

The default APs are named wlan0 and wlan1, the second tier APs will be named wlan0-1 and wlan1-1, and the 3rd wlan0-2 and wlan1-2.

Edit the radio and AP settings ae required. Be aware that the SSID can be the same for 2G and 5G APs in the same tier, but must be different for each tier. Make sure the checkbox for **"Separate Clients"** is **selected.** Click **"Save"** before you continue.

Rapidus	Status - Sy	stem ▼ Network ▼ HotSpot Logout
radio0: Maste	er "Rapidus"	radio1: Master "Rapidus"
Wireless The Device Cor defined wireless Configuration.	6 Networ figuration section in networks (if the	k: Master "Rapidus" (wlano) covers physical settings of the radio haroware such as channel, transmit power or antenna selection which are shared among all radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the <i>Interface</i>
Device Co	nfiguration	
General Setu	p Advanced	Settings
Wireless net	work is enabled	Oisable
Oper	ating frequency	Mode Channel Width AC V 49 (5745 MHz) V 40 MHz V
	Transmit Power	auto 🔻
Interface C	Configuration	N Security MAC-Filter Advanced Settings
	ESSID	Rapidus
	Mode	Access Point 🔻
	Network	 Ian: D D D D D D D D D D D D D D D D D D D
	Hide <u>ESSID</u>	
	WMM Mode	×
s	eparate Clients	Prevents client-to-client communication
	B	ack to Overview Save & Apply Save Reset



Then set the wireless security and click "Save & Apply" to commit the wireless settings.

Rapidus Status - System - Network - HotSpot Logout
radio0: Master "Rapidus" radio1: Master "Rapidus"
Wireless Network: Master "Rapidus" (wlan0) The Device Configuration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the Interface Configuration.
Device Configuration
General Setup Advanced Settings
Wireless network is enabled
Mode Channel Width Operating frequency AC ▼ 149 (5745 MHz) ▼
Transmit Power auto 🔻
Interface Configuration
General Setup Wireless Security MAC-Filter Advanced Settings
Encryption Vo Encryption
Back to Overview Save & Apply Save Reset



Navigate back to the wireless configuration page by selecting the "**Network**" tab and clicking "**Wireless**" in the drop down menu. For each of the 2^{nd} and 3^{rd} tier, and for each of the 2G and 5G radios, click "Add" to add another AP.

Rapidu	IS Status ▼ System ▼ Network ▼ HotSpot Logout	AUTO REFRESH ON
radio0:	Master "Rapidus" radio1: Master "Rapidus"	
Wirel	ess Overview	
2	Qualcomm Atheros QCA9880 802.11nac (radio0) Channel: 149 (5.745 GHz) Bitrate: ? Mbit/s	💽 Scan 🎦 Add
	SSID: Rapidus Mode: Master BSSID: 04:F0:21:30:AF:94 Encryption: None	Z Edit Remove
@	Generic MAC80211 802.11bgn (radio1) Channel: 11 (2.462 GHz) Bitrate: ? Mbit/s	🔯 Scan 🎽 Add
	SSID: Rapidus Mode: Master BSSID: 04:F0:21:1F:EC:20 Encryption: None	Z Edit Remove

Note: While adding and configuring the additional APs, a temporary name is used (circled in Orange). The APs will get the permanent names mentioned earlier (page 35).

Under the **"Interface Configuration"** section, in the **"General Setup"** tab, set the mode to **Access Point.** The page will change to the AP settings format, edit as required as described earlier for the first tier APs.

Rapidus Status - System - Network - HotSpot Logout	IN SAVED CHANGE S: 11
radio0: Master "OpenWrt" radio0: Master "Rapidus" radio1: Master "Rapidus" radio0: Master "OpenWrt"	
Wireless Network: Master "OpenWrt" (radio0.network3) The Device Configuration section covers physical settings of the radio hardware such as channer, transmic power or antenna selection which are defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in th Configuration.	+ shared among all ne <i>interface</i>
Device Configuration	
General Setup Advanced Settings	
Wireless network is enabled	
Mode Channel Width Operating frequency AC Ide (5745 MHz) Ide MHz	
Transmit Power auto 🔻	
(2) dBm	
Interface Configuration	
General Setup Wireless Security Advanced Settings	
ESSID OpenWrt	
Mode Mobile Mesh 🔻	
BSSID Access Point Client	



When finished, the Wireless Overview page should appear like this.

F	Rapidus	S Status 🕶	System • Network •	HotSpot Logout				AUTO REFRESH ON
_	radio0: M	laster "tier2"	radio1: Master "tier2"	radio1: Master "tier1"	radio1: Master "tier3"	radio0: Master "	tier3" radi	io0: Master "tier1"
v	Virele	ess Over	rview					
		Qualcomr Channel: 14	n Atheros QCA9880 8 19 (5.745 GHz) Bitrate: ? N	02.11nac (radio0) ^{Abit/s}			🖸 Scan	Add
		0%	SSID: tier1 Mode: Master BSSID: 04:F0:21:30:AF:94	r Encryption: None		Ø Disable	Z Edit	Remove
		dii 0%	SSID: tier2 Mode: Master BSSID: 06:F0:21:30:AF:94	r Encryption: None		Ø Disable	Z Edit	Remove
		0%	SSID: tier3 Mode: Master BSSID: 02:F0:21:30:AF:94	r Encryption: None		🍘 Disable	Z Edit	Remove
	@	Generic N Channel: 11	IAC80211 802.11bgn ((2.462 GHz) Bitrate: ? Mb	radio1) ^{bit/s}			👩 Scan	Add
		0%	SSID: tier1 Mode: Master BSSID: 04:F0:21:1F:EC:20	r) Encryption: None		Oisable	Z Edit	Remove
		0%	SSID: tier2 Mode: Master BSSID: 06:F0:21:1F:EC:20	r] Encryption : None		Ø Disable	Z Edit	Remove
		0%	SSID: tier3 Mode: Master BSSID: 02:F0:21:1F:EC:20	r) Encryption: None		🎯 Disable	Z Edit	Remove

The internal names of the APs can be verified by re-accessing the edit page for the AP.

Rapidus	Status - System - Network - HotSpot Logout
radio0: Mast	er "tier2" radio1: Master "tier2" radio1: Master "tier1" radio1: Master "tier3" radio0: Master "tier3" radio0: Master "tier1"
Wireles	s Network: Master ''tier3' (wlan1-2)
The Device Co defined wireles	ifiguration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all a networks (if the radio hardware is multi-SSID canable). Per network settings like encryption or operation mode are orouged in the <i>Interface</i>



Navigate back to the VLAN page by clicking the "Network" Tab and selecting the "VLANs" in the drop down menu.

R	apidus	Status 🕶	System -	Network -	HotSpot	Logout	
	radio0: Master	"tier2"	radio1: Mas	Interfaces Wireless		er "tier1"	
v	Vireless	Overv	view	DHCP and I Hostnames	DNS		
				Static Route	25		
	QU QU	alcomm	Atheros 🤇	VLANS		dio0)	
	Ch Ch	annel: 149	(5.745 GHz)	Firewall			
		0% S	SID: tier1 I SSID: 04-E0-	Diagnostics		None	

Click the checkbox to enable the **"WiFi Tiered access"** VLANs, then enter the VLANs used on your network for that tier. Optionally, edit the description box, then click **"Save & Apply"** to commit the configuration.

VLANS These tables specify	y how this devic	e's interfaces pa	rticipate in	your network's	VLANs.				
Below are some pre Note: the WiFi Data The descriptions are	-configured VL and Tiered Wif for notational (ANs for common Fi use cases are purposes, and ar	use cases mutually e en't used i	s, and an Advar exclusive and ca in VLAN operati	nced section for an't both be ens ion	special cases. Ibled.			
Management	coess to this de	wice to hosts on	the config	ured VI AN id					
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wla
management		99	trunk	trunk	trunk	trunk	trunk	trunk	tru
WiFi Data	VLAN id for Wi-	Fi traffic							
Description	Enabled	VLAN id	eth0	wlan0	wlan1	wlan0-1	wlan1-1	wlan0-2	wla
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional	CCESS d VLAN ids for iscriptions of a c	10D tiered access to corporate 2-tiered st be set up first	trunk your netwo	access	Fi interfaces.	access	access	access	tors", "
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional	CCESS d VLAN ids for iscriptions of a c	100 tiered access to corporate 2-tiered st be set up first	trunk your netwo	access ork from the Wi might be "staff"	Access Fi interfaces. and "guests", o	access	access	access	tors", "t
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional Description	CCESS d VLAN ids for scriptions of a c virtual APs mu Enabled	tiered access to corporate 2-tiered st be set up first VLAN id	trunk your netwo d scheme n eth0	access ork from the Wi might be "staff" wlan0	Fi interfaces. and "guests", o wlan1	access or a university 3-tie wlan0-1	access ared scheme mig	access	tors", "te
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional Description wifi-tier1	CCESS d VLAN ids for soriptions of a d virtual APs mu Enabled	100 tiered access to corporate 2-tiered st be set up first VLAN id	trunk your netwo d scheme of eth0 trunk	access ork from the Wi might be "staff" wlan0 access	Fi interfaces. and "guests", o wlan1 access	access or a university 3-tic wlan0-1 ignore	access ared scheme mig wlan1-1 ignore	access ht be "administrat wlan0-2 ignore	tors", "t wl
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional Description wifi-tier1 wifi-tier2	CCCESS d VLAN ids for scriptions of a c virtual APs mu Enabled	100 tiered access to corporate 2-tiered st be set up first VLAN id 100 200	trunk your netwu d scheme i eth0 trunk trunk	access ork from the Wi might be "staff" wlan0 access ignore	Fi interfaces. and "guests", c wlan1 sccess ignore	er a university 3-tie wlan0-1 ignore access	access ared scheme mig wlan1-1 ignore access	access the "administrate wlan0-2 ignore ignore	tors", "t wi
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional Description wifi-tier1 wifi-tier2 wifi-tier3	CCESS d VLAN ids for scriptions of a c virtual APs mu Enabled	100 tiered access to corporate 2-tiered st be set up first VLAN id 100 200 300	trunk your netwo d scheme r eth0 trunk trunk trunk	access ork from the Wi might be "staff" access ignore ignore	Fi interfaces. and "guests", o wlan1 access ignore ignore	access or a university 3-tic wlan0-1 ignore ignore ignore	access ared scheme mig wlan1-1 ignore access ignore	access ht be "administrat wlan0-2 ignore ignore access	tors", "i wi ig
wifi-data Tiered WiFi at Use these configure For example, the de and "students". Note: the additional Description wifi-tier1 wifi-tier2 wifi-tier3 Advanced Use this to configure Description	CCESS d VLAN ids for soriptions of a c virtual APs mu Enabled	100 tiered access to corporate 2-tiered st be set up first VLAN id 100 200 300 300	trunk your netwy d scheme r eth0 trunk trunk trunk	access ork from the Wi might be "staff" wlan0 access ignore ignore	Fi interfaces. and "guests", o wlan1 access ignore ignore	vian0-1	access ared scheme mig wlan1-1 ignore ignore ignore wlan1-1	access ht be *administrat wlan0-2 ignore access	er tors", "t ig ig ec
wifi-data Tiered WiFi a Use these configure For example, the de and "students". Note: the additional Description wifi-tier1 wifi-tier2 wifi-tier3 Advanced Use this to configure Description	CCESS d VLAN ids for scriptions of a co virtual APs mu Enabled	100 tiered access to corporate 2-tiered st be set up first VLAN id 200 300 300 Use cases. VLAN id	trunk your netwy d scheme i trunk trunk trunk trunk eth0	access ork from the Wi might be "staff" access ignore ignore wlan0	Fi interfaces. and "guests", o wlan1 access ignore ignore wlan1 wlan1	access or a university 3-tion wlan0-1 ignore ignore wlan0-1	access ared scheme mig wlan1-1 ignore ignore wlan1-1 wlan1-1	Access the administrative wian0-2 ignore access wian0-2	a tors", "i ig ig a wian1-2
wifi-data Tiered WiFi at Use these configure For example, the de and "students". Note: the additional Description wifi-tier1 wifi-tier2 wifi-tier3 Advanced Use this to configure Description This section conta	CCESS d VLAN ids for scriptions of a c virtual APs mu Enabled image of the scription of a c interpretation o	100 tiered access to corporate 2-tiered st be set up first VLAN id 100 200 300 300 300 4 4 4 4 4 4 4 4 4 4 4 4 4	trunk your netwy d scheme i eth0 trunk trunk trunk eth0	access ork from the Wi might be "staff" wlan0 access ignore ignore wlan0	Fi interfaces. and "guesta", o wlan1 access ignore ignore wlan1	vian0-1	access ared scheme mig wlan1-1 ignore ignore wlan1-1 wlan1-1	access ht be "administrat wlan0-2 ignore ignore access wlan0-2	er tors", "t ig er wtan1-2

Note: This page uses the internals names (circled in Orange), to refer the APs.



Your device is now configured to operate in VLANs. If you find you are having issues or the process is not configuring correctly contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.

To reset, just the VLANs settings to the default of disabled, but keep all other settings intact. Uncheck all the enable boxes and then click **"Save & Apply".**

Management Use this to restrict access to this device to hosts on the configured VLAN id. Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan management Imagement	D-2 wlan
Use this to restrict access to this device to hosts on the configured VLAN id. Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan1 management Imagement Imagement	0-2 wlan c truni
management ØØ trunk trunk trunk trunk trunk trunk WiFi Data Use the configured VLAN id for Wi-Fi traffic Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan1 wifi-data 100 trunk access access access access access	¢ trun
WiFi Data Use the configured VLAN id for Wi-Fi traffic Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan wifi-data 100 trunk access access access access access	
WiFi Data Use the configured VLAN id for Wi-Fi traffic Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan wifi-data 100 trunk access access access access access	
Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan1 wifi-data 100 trunk access access <th></th>	
wifi-data)-2 wlan
	255 800
Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan	0-2 wlan
wifi-tier1 🗹 100 trunk access access ignore ignore igno	re igno
wifi-tier2 200 trunk ignore ignore access igno	re igno
wifi-tier3 300 trunk ignore ignore ignore acce	155 800
Advanced Use this to configure vians for new use cases.	
ŭ	
Advanced	
Description Enabled VLAN id eth0 wlan0 wlan1 wlan0-1 wlan1-1 wlan0-2	wlan1-2



Navigate to the **"System"** tab and click **"Reboot"** from the drop-down menu.

Rapidus	Status -	System + Network	▼ HotSpot Logout
VLANS These tables	s specify how thi	System Administration Startup	ate in your network's VLANs.
Below are so Note: the Wi The descript	ome pre-configu iFi Data and Tie ions are for nota	Scheduled Tasks LED Configuration Maintenance	cases, and an Advanced section for spec ually exclusive and can't both be enabled. used in VLAN operation
Manage	ment I	Reboot	

When directed to the following page, click "Preform Reboot".

Rapidus	Status ×	System +	Network 🔻	HotSpot	Logout
Reboot					
Reboots the ope	rating syste	m of your dev	vice		
Perform reb	poot				

The unit will reboot with VLANs disabled, but all other settings will be reserved. If you find you are having issues or the process is not configuring correctly contact us by phone at 855-864-9488 or visit our website <u>www.rapiduswireless.com</u>.