

RAPIDUS WIRELESS NETWORKS

ROUTER

CONFIGURATION FOR ROUTER HOW-TO

Rafael Garrigo 4/4/2017



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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 – Nebwork – 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., 6in4-, 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: "teql0" Wireless Network: Master "LEDE" (lan) Wireless Network: Master "LEDE" (lan) Custom Interface I none
	lack to Overview

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

Rapidus Status – System –	Network - HotSpot	Logout UNSAVED CHANGES 3 AUTO REFRESH ON		
WAN MESH LAN				
Interfaces - WAN On this page you can configure the netw	DHCP and DNS Hostnames Static Routes	ge several interfaces by ticking the "bridge interfaces" field and enter the names of several		
network interfaces separated by space	Firewall Diagnostics	in Interface.vlannr (<u>e.g.</u> etha.1).		
General Setup Advanced Settin	gs 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 S	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 & App	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 _{statu}	s = System = Network = HotSpot Logout
General Settings	Port Forwards Traffic Rules Custom Rules
Firewall - Zo	ne Settings - Zone "wan"
Zono "wan"	5
This section defines co	mmon 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
<i>forwar</i> d option describe members of this zone.	es the policy for forwarded traffic between different networks within the zone. Covered networks specifies which available networks are
General Settings	Advanced Settings
	Name wan
	Input accept V
	Output accept V
	Forward accept T
Masqu	erading 🗹
MSS cl	amping 🗹
Covered r	networks 🔲 Ian: 🛃 🛃 🤓 🎯
	mesh: (no interfaces attached)
	🖉 🗰 wan: 📠
	create:
Inter-Zone Forw	arding
The options below con <i>Source zorres</i> match fo permission to forward fi	trol the forwarding policies between this zone (wan) and other zones. <i>Destination zon</i> es cover forwarded traffic originating from "war rwarded 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> imp rom wan to lan as well.
Allow forward to des	tination zones: Ian: Lan: 🛃 🖉 🙊
Allow forward from	i source zones: Ian: Ian: 🖉 🦉 👳
	Back to Overview Save Reset



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

Rapidus Status System -	Network – HotSpot	Logout UNSAVED CHANCES (
General Settings Port Forwards	Interfaces Wireless	om Rules
Firewall - Zone Settin	DHCP and DNS Hostnames	n"
ZONE "WAN" This section defines common properties <i>forward</i> option describes the policy for fo members of this zone.	Static Routes Firewall Diagnostics	out 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-	System – Network – HotSpot Logout	UNSAVED CHANGES 3 AUTO REFR	ESH ON					
WAN MESH L	AN							
Interfaces	Interfaces							
Interface Overview								
Network	Status	Actions						
MESH	Unsupported protocol type. Install protocol extensions	🦉 Connect 🥹 Stop 🕢 Edit 😠 Delet	e					
LAN (🖉 🖉 👷 🙊) br-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:7.44e:7630::1/60	🧟 Connect 🧕 Stop 🛛 🖉 Edit 😠 Delet	e					
WAN	RX: 0 B (0 Pkts.) TX: 0 B (0 Pkts.)	🦉 Connect 🧕 Stop 🛃 Edit 💌 Delet	e					
1 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 – N	etwork – HotSpot	Logout		AUTO REFRESH ON			
WAN MESH	H LAN							
Interfaces - WAN On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use <u>VLAN</u> notation INTERFACE.VLANNR (e.g.: eth0.1).								
General Setup	Inguration							
	Status	none	RX : 0 B (0 Pkts.) TX: 0 B (0 Pkts.)					
	Protocol Static ad	dress						
Really switc	h protocol?	h protocol						
	🖷 Back to Overv	iew		Save & Apply Sav	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 -	System = Network = HotSpot L	Logout	UNSAVED CHANGES: 4 AUTO REFRESH ON
Interfaces - WA On this page you can configu network interfaces separated t	N 'e the network interfaces. You can brid y spaces. You can also use <u>VIAN</u> not <i>i</i>	lge several interfaces by ticking the "bridge interface ation INTERFACE.VLANNR (<u>eng</u> : eth 3.1).	s" field and enter the names of several
Common Configurat	ion		
General Setup Advan	ced Settings Physical Settings	Firewall Settings	
Statu	s 🔎 none	R X: 0 B (0 Pkts.) TX: 0 B (0 Pkts.)	
Protoco	Static address	T	
IPv4 addres	s 192.168.123.54		
IPv4 netmas	k 255.255.255.0	5	
IPv4 gatewa	y 192.168.123.1		
IPv4 broadca:	t		
Use custom DNS server	s [192.168.123.1])	
IPv6 assignment lengt	disabled	of every public IPv6-prefix to this interface	
IPv6 addres	5		
IPv6 gatewa	¢		
IPv6 routed prefi	< O Public prefix routed to this dev	vice for distribution to clients.	
DHCP Server			
General Setup	ettings		
Ignore interfac	e 🕑 🥑 Disable <u>DHCP</u> for this inter	ıface.	
	Back to Overview		Save & Apply Save Reset



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

Rapidus st	atus – System – Netwo	ork∓ HotSpot Lo	ogout	UNSAVED CHANGES 3 AUTO REFRESH ON					
WAN MESH	LAN								
Interfaces	Interfaces - MAN								
On this page you ca network interfaces se	n configure the network inte eparated by spaces. You car	erfaces. You can bridg n also use <u>VLAN</u> nota'	ge several interfaces by ticking tion INTERFACE, VLANNR (<u>e.g.</u> : e	g the "bridge interfaces" field and enter the names of several the .1).					
Common Cor	nfiguration								
General Setup	Advanced Settings	Physical Settings	Firewall Settings						
	C+ atur		RX:0 B (0 Plds)						

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	tus - System - Net	work≖ HotSpot l	Logout	
WAN MESH	LAN			
Interfaces On this page you can network interfaces sep	- WAN configure the network in parated by spaces. You c	iterfaces. You can brid an also use <u>VLAN</u> not.	lge several interfaces by tickin ation INTERFACE JULANNR (<u>e.g.</u> : c	g the "bridge interfaces" field and enter the names of several the.1).
Common Conf	figuration			
General Setup	Advanced Settings	Physical Settings	Firewall Settings	
Bridge	interfaces 📝 🛛 orea	tes a bridge over spec	cified interface(s)	
En	able STP 🔲 🔞 Ena	bles the Spanning Tre	ee Protocol on this bridge	
DHCP Server	Interface	ernet Adapter: "eth0" ernet Adapter: "eth1" ernet Adapter: "none" ernet Adapter: "teq10" eless Network: Master eless Network: Master tom Interface:	(lan) (lan) ' ''LEDE" (lan) ''LEDE" (lan)	
Ignore	: interface 🛛 🕘 Disa	ble <u>DHCP</u> for this inte	iface.	
	📄 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					
On this page ye	u ozo oopfi	uuo tho note	uode interface	- You oan h	vidao covoral interfaceo	by ticking the "bridge	a interfaced" field and onter the names of several

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	atus 🖛 🛛 Sys	tem = Network = Ho	tSpot Lo	gout	UNSAVED CHANGES: 10 AUTO REFRESH ON
WAN MESH	LAN				
Interfaces	- LAN	he network interfaces. Yo	u can brida	e several interfaces by ticking the	"bridge interfaces" field and enter the names of several
network interfaces se	parated by s	paces. You can also use ?	VLAN notat	ion INTERFACE.VLANNR (e.g.: ethe.	1).
Common Con	fiauratio	n			
General Setup	Advance	d Settings Physical S	Settings	Firewall Settings	
	Status	83	Uptime: (Dh 39m 15s	
		br-lan	MAC-Add	fress: F6:BB:87:BA:E1:E2	
			TX: 1.07	MB (5639 Pkts.)	
			IPv4: 19: IPv6: fd7	2.168.1.99/24 /a:7d4e:7630::1/60	
	Protocol	Static address	Ŧ]	
			_		
IP	v4 address	10.0.0.1		J	
IΡν	4 netmask	255.255.255.0	Ŧ		
IPv	4 gateway			Ĵ	
IPv4	broadcast				
Use custom D	NS servers			•	
IPv6 assignm	ent length	60	٣]	
		(2) Assign a part of give	n length of	every public IPv6-prefix to this ir	terface
IPv6 assign	nment hint]	
		🔞 Assign prefix parts u:	sing this he	xadecimal subprefix ID for this in	terface.
DHCP Server					



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

General Setup Advan	ed Settings IPv6 Settings
Ignore interface	Disable DHCP for this interface.
Star	100 lowest leased address as offset from the network address.
Limit	150 Maximum number of leased addresses.
Leasetime	12h 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 LAI	4		
Interfaces - LAI	N		
On this page you can configu network interfaces separated l	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 Configura	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 UNSAVEDCHANGES IS AUTO REFRESH ON
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.: eth@.1).
Common Configuratio	n
General Setup Advance	d Settings Physical Settings Firewall Settings
Bridge interfaces	Image: Image over specified interface(s)
Enable STP	Enables the Spanning Tree Protocol on this bridge
Interface DHCP Server General Setup Advance	Ethernet Adapter: "eth0" (lan, wan) Ethernet Adapter: "eth1" (lan, wan) Ethernet Adapter: "teql0" Wireless Network: Master "LEDE" (lan) Wireless Network: Master "LEDE" (lan) Custom Interface:
lgnore interface Start	 Disable <u>DHCP</u> for this interface. 100 Output the set of the
Limit	150 (2) 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 Logout	AUTO REFRESH ON
WAN MESH L			
Interfaces			
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>.