

RAPIDUS WIRELESS NETWORKS

WIFI/MESH

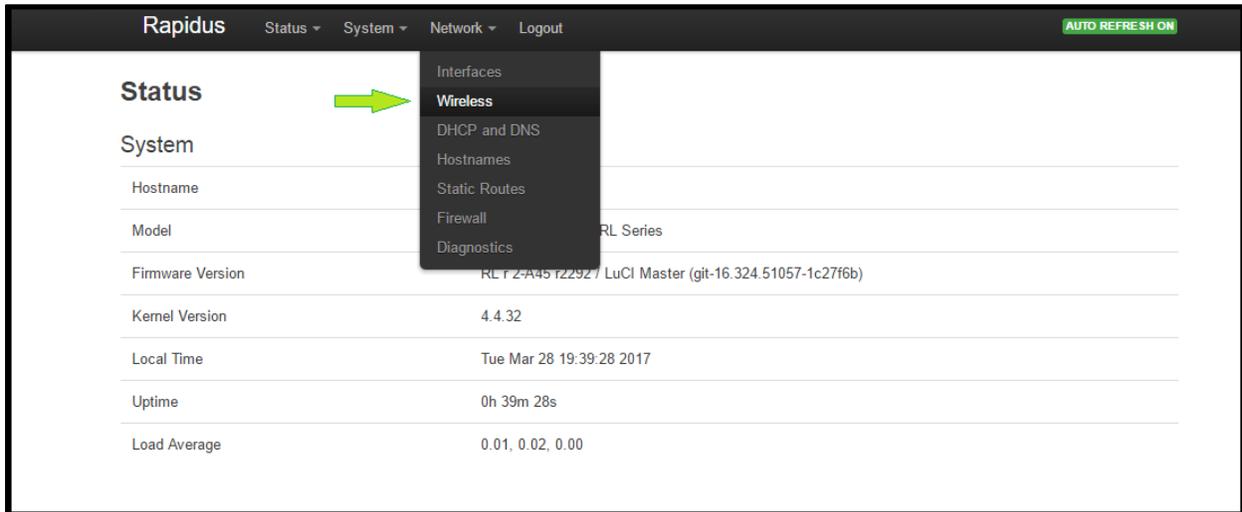
CONFIGURATION WIFI/MESH SETTINGS HOW-TO

WIFI/MESH

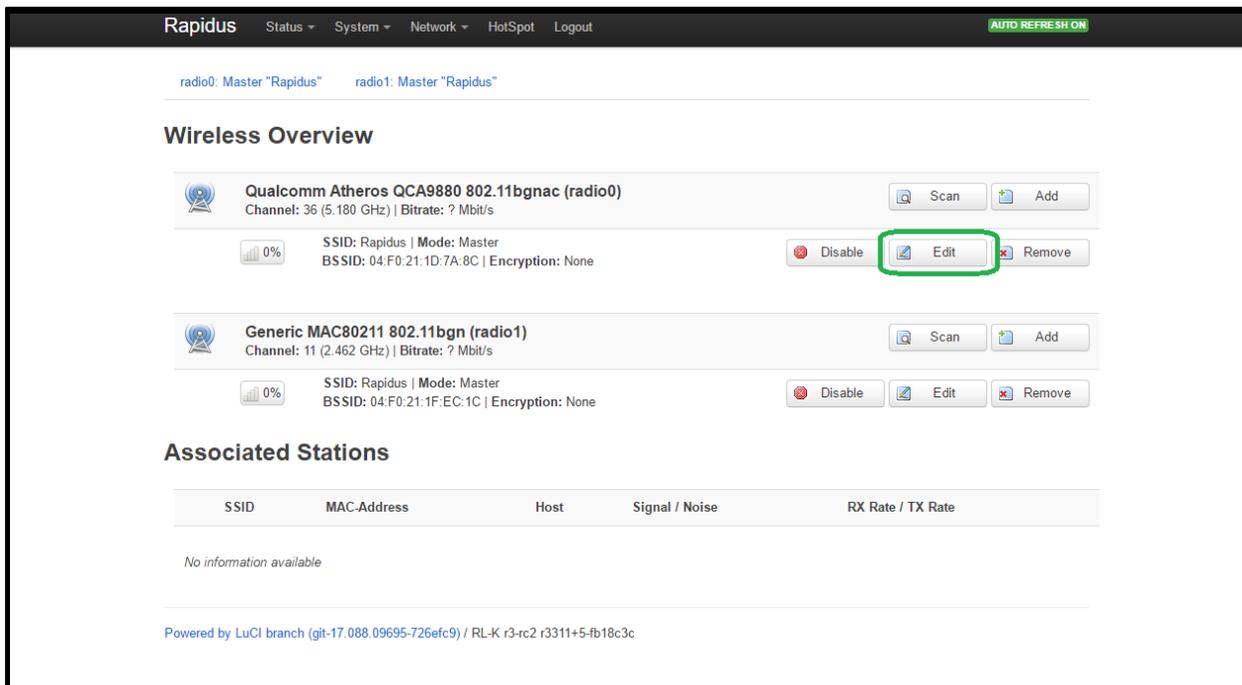
CONFIGURATION MOBILE MESH HOW-TO

Configure Wireless Settings

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



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



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

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 Disable

Operating frequency	Mode	Channel	Width
	AC	157 (5785 MHz)	40 MHz
			20 MHz
			40 MHz
			80 MHz

Transmit Power: auto dBm

Interface Configuration

General Setup **Wireless Security** MAC-Filter Advanced Settings

ESSID: Rapidus

Mode: Access Point

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

Interface Configuration

General Setup **Wireless Security** MAC-Filter Advanced Settings

ESSID: Rapidus

Mode: Access Point

Network: Mobile Mesh

mesh wan create

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

Back to Overview Save & Apply Save Reset

In the Network section you must unselect “Lan”.

The screenshot shows the 'Interface Configuration' page in the Rapidus web interface. The 'Network' section is expanded, and the 'lan' option is selected with a red circle around its checkbox. Other options include 'hotspot: (no interfaces attached)', 'mesh:', 'wan:', and 'create:'. The 'Save & Apply' button is visible at the bottom right.

Select “mesh” then click “Save & Apply” to save these changes

The screenshot shows the 'Interface Configuration' page in the Rapidus web interface. The 'Network' section is expanded, and the 'mesh' option is selected with a green circle around its checkbox. The 'lan' option is now unselected. The 'Save & Apply' button is highlighted with a green circle at the bottom right.

Click Network > Interface

The screenshot shows the Rapidus web interface. At the top, there is a navigation bar with 'Rapidus', 'Status', 'System', 'Network', 'HotSpot', and 'Logout'. A dropdown menu is open under 'Network', with 'Interfaces' highlighted and a green arrow pointing to it. Below the navigation, the 'Wireless Overview' section is visible. It contains two interface cards: 'Qualcomm Atheros C' (radio0) and 'Generic MAC80211 802.11bgn (radio1)'. The 'radio0' card shows a 100% signal strength and details like SSID: Rapidus, Mode: Mobile Mesh, and BSSID: 30:31:32:33:34:35. The 'radio1' card shows a 0% signal strength and details like SSID: Rapidus, Mode: Master, and BSSID: 04:F0:21:1F:EC:1C. Below this is the 'Associated Stations' section with a table:

	SSID	MAC-Address	Host	Signal / Noise	RX Rate / TX Rate
wlan0	Rapidus	04:F0:21:30:AF:65	?	-24 / -105 dBm	81.0 Mbit/s, 40MHz, MCS 4 81.0 Mbit/s, 40MHz, MCS 4

At the bottom, it says 'Powered by LuCI branch (git-17.088.09695-726fc9) / RL-K r3-rc2 r3311+5-fb18c3c'.

When directed to the “Interfaces” page, click “Edit”

The screenshot shows the 'Interfaces' page in the Rapidus web interface. At the top, there is a navigation bar with 'Rapidus', 'Status', 'System', 'Network', 'HotSpot', and 'Logout'. Below the navigation, there are tabs for 'WAN', 'MESH', 'HOTSPOT', and 'LAN'. The 'Interfaces' section is titled 'Interface Overview' and contains a table with columns for 'Network', 'Status', and 'Actions'.

Network	Status	Actions
HOTSPOT hotspot	Unsupported protocol type. Install protocol extensions...	Connect Stop Edit Delete
MESH Mobile Mesh "Rapidus"	Uptime: 0h 1m 22s MAC-Address: 04:F0:21:1D:7A:8C RX: 12.17 KB (163 Pkts.) TX: 16.04 KB (171 Pkts.)	Connect Stop Edit Delete
LAN br-lan	Uptime: 1h 44m 14s MAC-Address: 04:F0:21:1D:7A:8C RX: 12.70 MB (112901 Pkts.) TX: 3.34 MB (19427 Pkts.) IPv4: 192.168.123.44/24 IPv6: fd7a:7d4e:7630::1/60	Connect Stop Edit Delete
WAN none	RX: 0 B (0 Pkts.) TX: 0 B (0 Pkts.)	Connect Stop Edit Delete

The 'Edit' button for the LAN interface is highlighted with a green circle.

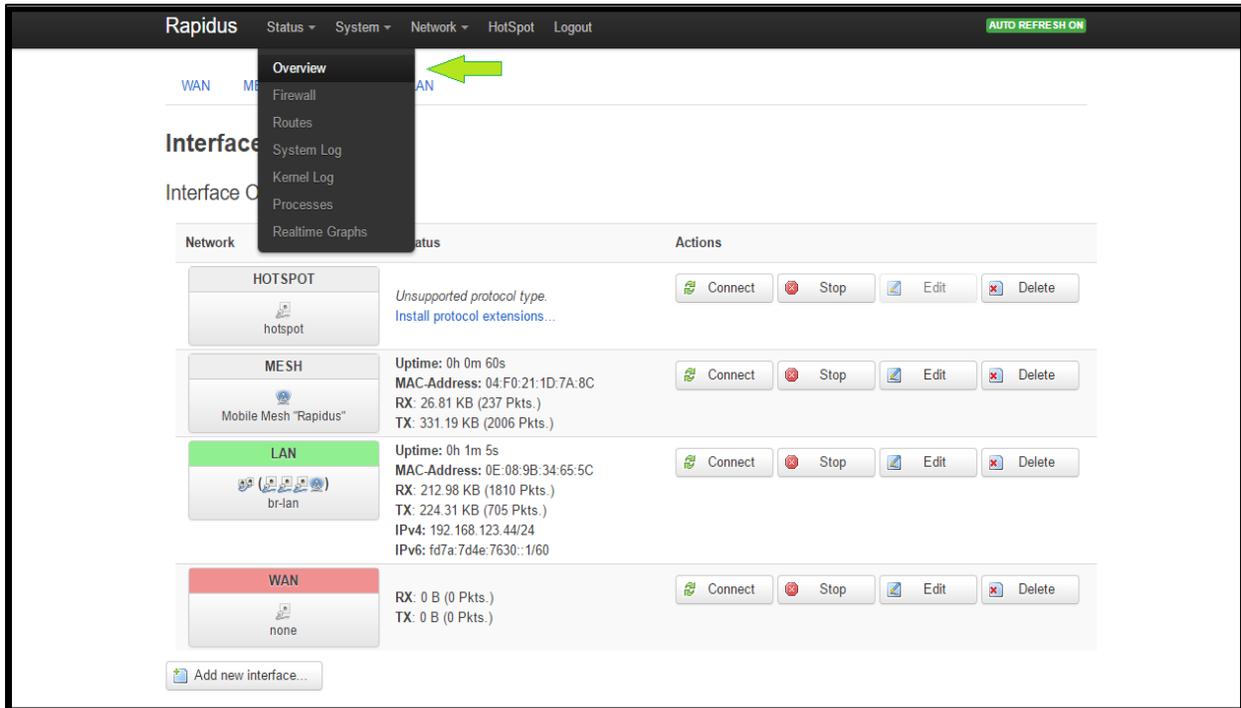
Please click on the “Physical Setting” Tab

The screenshot shows the 'Rapidus' web interface. At the top, there are navigation tabs: WAN, MESH, HOTSPOT, and LAN. Below this is the 'Interfaces - LAN' section. A sub-section titled 'Common Configuration' has four tabs: General Setup, Advanced Settings, Physical Settings (highlighted with a green box), and Firewall Settings. Under 'Physical Settings', the 'Status' is 'br-lan' and 'Uptime' is '1h 44m 42s'. Other details include 'MAC-Address: 04:F0:21:1D:7A:8C', 'RX: 12.78 MB (113609 Pkts.)', 'TX: 3.43 MB (19668 Pkts.)', 'IPv4: 192.168.123.44/24', and 'IPv6: fd7a:7d4e:7630::1/60'. Below this, there are input fields for 'Protocol' (set to 'Static address'), 'IPv4 address' (192.168.123.44), 'IPv4 netmask' (255.255.255.0), 'IPv4 gateway', and 'IPv4 broadcast'.

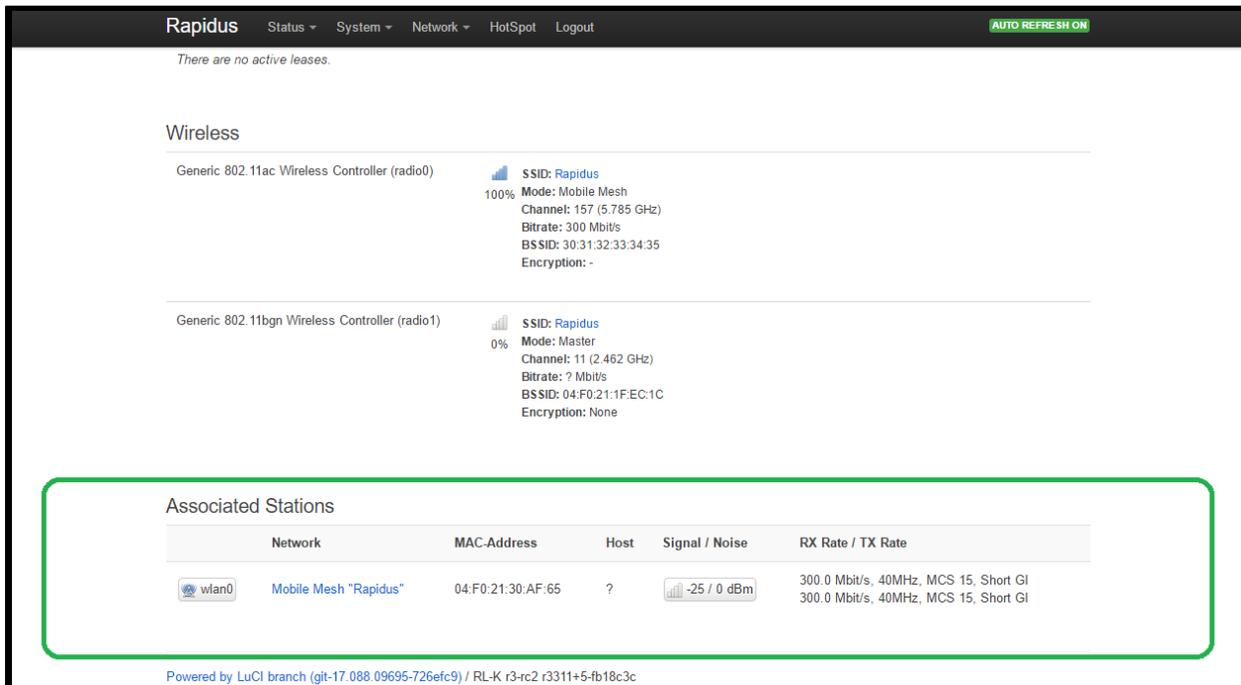
Then Select “Ethernet Adapter: “bat0””. Then save and apply by clicking “Save & Apply”

This screenshot shows the same 'Rapidus' web interface, but with the 'Interface' dropdown menu open. The dropdown lists several options: 'Ethernet Adapter: "bat0"' (highlighted with a green circle), 'Ethernet Adapter: "eth0" (lan)', 'Ethernet Adapter: "eth1" (lan)', 'Ethernet Adapter: "none" (wan)', 'Ethernet Adapter: "teq0"', 'Wireless Network: Ad-Hoc "Rapidus" (mesh)', 'Wireless Network: Master "Rapidus" (lan)', and 'Custom Interface:'. Below the dropdown is the 'DHCP Server' section with a sub-tab for 'IPv6 Settings' and an option to 'Ignore interface' (checked) with a note to 'Disable DHCP for this interface.'. At the bottom of the page, there are three buttons: 'Back to Overview', 'Save & Apply' (highlighted with a green box), 'Save', and 'Reset'.

Please Click Status > Overview.



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”)



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 www.rapiduswireless.com.