

# How to Set Up Multiple WANs In Teltonika Routers

A useful feature of the Teltonika range of routers is that you can specify different WAN inputs.

For example, you can set the primary WAN input as the Ethernet wired connection, and if that is not available, switch to an LTE wireless connection or nearby WiFi connection instead.

But before we discuss how that is done, let's define what a WAN is?

## What is a WAN?

A WAN or Wide Area Network, technically speaking is a telecommunication network that extends over a large geographical area for the sole purpose of computer networking.

The most famous example of this is the Internet, or on a smaller scale, when you connect to your Internet Service Provider (ISP) using your network router.

## How It Works?

As mentioned earlier, the Teltonika range of routers can be configured to use either a Wired (WAN) Ethernet, Mobile (MOB1S1A1) or WiFi (2.4GHz/5GHz) interface as the WAN input. These differing WAN inputs can failover onto each other in order to guarantee network continuity, and this failing over is based on ranked priority.

For example, in the below image, a RUX09 has been configured to use the Wired (WAN) connection as the primary connection, but if that is not available then it will failover to the Mobile (WAN2) connection instead.

WiFi WAN is not an option with routers like the RUTX09 which don't support 2.4GHz/5GHz WiFi.

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MODE

ADVANCED

USER

ADMIN

FW VERSION

RUTX\_R\_00.02.05.2

LOGOUT

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NETWORK INTERFACES

1	LAN	<div>Status: Running</div> <div>Failover: Disabled</div> <div>Type: Wired (br-lan)</div>	<div>IP: 192.168.1.1/24 ?</div> <div>Protocol: static</div>	<div>Uptime: 0h 9m 56s</div> <div>RX: 25.5 MB</div> <div>TX: 1.5 GB</div>	<div></div> <div></div>	<div></div> <div>off on</div>
2	WAN	<div>Status: Running</div> <div>Failover: Disabled</div> <div>Type: Wired (eth1)</div>	<div>IP: 192.168.27.104/24</div> <div>Protocol: dhcp</div>	<div>Uptime: 0h 7m 59s</div> <div>RX: 1.5 GB</div> <div>TX: 32.1 MB</div>	<div></div> <div></div>	<div></div> <div>off on</div>
3	WAN6	<div>Status: Stopped</div> <div>Failover: Disabled</div> <div>Type: Wired (eth1)</div>	<div>IP: -</div> <div>Protocol: dhcpv6</div>	<div>Uptime: -</div> <div>RX: -</div> <div>TX: -</div>	<div></div> <div></div>	<div></div> <div>off on</div>
4	MOB1S1A1	<div>Status: Running</div> <div>Failover: Disabled</div> <div>Type: Mobile</div>	<div>IP: 10.157.188.44/29</div> <div>Protocol: wwan</div> <div>SIM: 1</div>	<div>Uptime: 0h 9m 35s</div> <div>RX: 33.0 KB</div> <div>TX: 27.2 KB</div>	<div></div> <div></div>	<div></div> <div>off on</div>
5	MOB1S2A1	<div>Status: Stopped</div> <div>Failover: Disabled</div> <div>Type: Mobile</div>	<div>IP: -</div> <div>Protocol: wwan</div> <div>SIM: 2</div>	<div>Uptime: -</div> <div>RX: -</div> <div>TX: -</div>	<div></div> <div></div>	<div></div> <div>off on</div>

To set the priority of the WAN interfaces, you just drag the tabs into the order you want, with the #1 tab at the top being the highest priority and the bottom tab being the lowest priority.

## **Real Life Example**

Imagine you are running a business from home, that requires a permanent connection to the Internet, and if that connection ever drops it would negatively impact your business.

In that scenario, you would need to ensure that you have a backup Internet service in case the primary one fails. For example, the primary service could be a wired connection from your ISP, and the backup service could be a connection to a 4G service.

That way, if the ISP connection drops, the router would notice, and within a short time period, often within 30 seconds, swap to use the 4G connection instead.

However due to the nature of networking, it would be nearly impossible to have immediate failover, especially if the router is talking to a server, as it will inevitably have to disconnect and reconnect to said server. Either way, this setup would minimise the downtime of business.

## **Conclusion**

So, by using a Teltonika 4G/5G router, it is possible to ensure redundancy when it comes to Internet connection by using a priority system of WAN inputs.