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 (WAN2) LTE and WiFi (WAN3) interface, all of which is based on priority.

For example, in the below image, a RUT950 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.

The same image also shows a third option, WiFi (WAN3) which in this case is not used, but it is entirely possible to set it up as a secondary failover option if both Wired (WAN) and Mobile (WAN2) are not available.

Either way, to set the priority of the WAN interfaces, you select the Main WAN, by enabling the blue dot, then tick the box to select as WAN Failover, and from there use the arrow icons to move up and down through the priorities.

The image below shows the same setup for a RUTX09, which has a completely different interface, but the underlying principle still applies.

You select a primary WAN interface and choose secondary WANs as failover options, and it should be noted that all 4G capable Teltonika routers have this functionality.

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 taking to a server, as it will enviably 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 router, it is possible to ensure redundancy when it comes to Internet connection by using a priority system of WAN inputs.