https://wiki.teltonika-networks.com/view/LAN\_as\_WAN

# LAN as WAN

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# Introduction

This article provides a guide on how to configure the LAN ports as WAN. It can be useful as wired ISP redundant connection or even to change the port for physical damage or a custom mounting.

### **Configuration overview and prerequisites**

Before we begin, let's overview the configuration that we are attempting to achieve and the prerequisites that make it possible.

#### **Prerequisites**:

- One RUTxxx series router (excluding <u>RUT850</u>).
- At least two wired Internet connections.
- An end device for test the configuration.

#### **Configuration scheme:**

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# WebUI Router configuration

Connect to the router's WebUI navigate to Network  $\rightarrow$  VLAN  $\rightarrow$  LAN Network and create a new interface by entering name and clicking Add New.

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After you clicked **Add New** new configuration window will pop-up, there you leave as default and press **Save.** 

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After saving settings, you will be redirected back to  $Network \rightarrow VLAN \rightarrow VLAN Networks$ , now you

need to open VLAN Network tab in the same window and you will need to:

- Select VLAN mode: Port based
- Current LAN interface:
  - Enable wireless access
  - Select your current LAN interface.
  - Turn off LAN port 3 (which will be used as WAN port)
  - Press Save.

*Note:* Make sure that you are not connected to that LAN port which you going to disable.

- New LAN\_WAN interface:
  - Click  $\boldsymbol{Add}$  and a new row will appear.
  - Turn off LAN ports 1-2 and leave only LAN port 3 on.
  - Select your newly created interface in the LAN section and click  $\ensuremath{\textbf{Save}}$  .

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# **CLI/SSH Router configuration**

For the next part you will be configuring router via SSH. For this you need to use the command line interface (CLI) or a SSH software if you're using Windows or iOS. In this example software **putty** will be used. Open **putty** enter routers LAN IP address and press **Open**.

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After clicking **Open** you will need to enter router credentials.

- 1. Login as: **root**
- 2. Password: routers admin password (by default admin01)

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Now when you are connected you will need to make changes to network settings, this will be achieved via SSH command: **vi**, which allows you to edit settings in the router. Enter following command in SSH:

#### vi /etc/config/network

Then press the 'I' button on your keyboard to enable editing.

### **Using DHCP**

Using the arrow keys on your keyboard, navigate and find **config interface 'lan\_wan'** erase the current configuration and write these options:

- option proto 'dhcp'
- option ifname 'eth0.1'
- option backup '1'
- option metric '10'
- option enabled '1'
- option disabled '0'

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- Press the **Escape (ESC)** button on your keyboard; type **:***wq* and press **Enter** to close the editor and save the changes.
- $\circ\,$  Restart the network service on the router in order to apply the changes by executing this command:

/etc/init.d/network restart

- You can exit PuTTY after this return to the WebUI; navigate to the Network → Firewall → General Settings page.
- Scroll down to the *Zone Forwarding* section, find *source zone:* <u>lan\_wan</u>.
- Change Default forwarding action from reject to accept, tick the Masquerading checkbox and save the changes.

### **Using Static IP**

If you're using DHCP, jump to the next section of this guide

Use the arrow keys to navigate the file and find the *config interface 'lan\_wan'* section. Add these four options to the configuration:

- option gateway '192.168.10.1'
- option dns '8.8.8.8'
- option backup '1'
- option metric '10'
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- Press the **Escape (ESC)** button on your keyboard; type *:wq* and press **Enter** to close the editor and save the changes.
- $\circ\,$  Restart the network service on the router in order to apply the changes by executing this command:

```
/etc/init.d/network restart
```

• You can exit PuTTY after this return to the WebUI; navigate to the Network  $\rightarrow$  Firewall  $\rightarrow$  General Settings page.

• Scroll down to the *Zone Forwarding* section, find *source zone:* <u>lan\_wan</u>.

• Change Default forwarding action

from **reject** to **accept**, tick the **Masquerading** checkbox and save the changes.

### **Testing the configuration**

If everything went well, your device should now have two wired WAN connections. To test this go to the *Network*  $\rightarrow$  *WAN* page and check if the new interface is enabled and if it has an IP address.

- $\circ~$  Set the Wired (WAN) interface as the main WAN connection.
- $^\circ\,$  Set the new interface as WAN failover and save the changes.  $\fbox$
- Go to [www.whatsmyip.com] and check your public IP address.
- Then unplug the main WAN cable and check again. If the interface failed over correctly, the website should a different IP address than before.
- Plug the main WAN cable back in and wait a bit. Refresh the website; the IP should have change back to the one shown in the first place.