RUT240 Routes

The information in this page is updated in accordance with firmware version **RUT2_R_00.07.06.16**.

***Note**: **click here** for the old style WebUI (FW version RUT2XX_R_00.01.14.7 and earlier) user manual page.*

□

Contents

Summary

The **Routes** page displays the router's ARP table and active IPv4 and IPv6 routes. This chapter is an overview of the Routes page of RUT240 routers.

If you're having trouble finding this page or some of the parameters described here on your device's WebUI, you should **turn on "Advanced WebUI" mode**. You can do that by clicking the "Advanced" button, located at the top of the WebUI.

General Routes

ARP

The **Address Resolution Protocol** (**ARP**) is a communication protocol used for mapping an Internet Protocol address (IP address) to a physical machine's link layer address (MAC address) belonging to the local network.

The ARP section displays the router's **ARP cache** (also known as ARP table) data. The ARP cache contains information on each known MAC address and its corresponding IP address. When the router receives a packet destined for a local host, the ARP program attempts to find a physical host or MAC address in the ARP cache that matches the IP address. If the ARP cache doesn't contain the

needed IP address, ARP broadcasts a request packet to all LAN machines in order to find the device with the IP address in question.

The figure below is an example of the ARP cache section:

Field name	Value	Description
IP address	ip; Default: **none**	IP address of a local host.
MAC address	mac; Default: **none**	MAC address of a local host.
Interface	string; Default: **none**	Interface through which the router is associated with the host.

You can also view the ARP cache via shell using the **arp** or **ip neigh** commands, depending on which output your prefer:

```
root@Teltonika-RUT240:~# arp
IP address       HW type     Flags       HW address            Mask
Device
192.168.1.151    0x1         0x2         18:d6:c7:00:00:00     *        br-
lan
```

```
root@Teltonika-RUT240:~# ip neigh
192.168.1.151 dev br-lan lladdr 18:d6:c7:00:00:00 REACHABLE
```

IPv4 Routes

The **IPv4 Routes** section displays the router's **routing table**. A routing table contains a list of routes to network destinations associated with and known by the router.

The figure below is an example of the Active IP routes section:

Field name	Value	Description
Network	string; Default: **none**	Associated network interface name.
Target	ip | ip/netmask; Default: **none**	Destination network address.
IPv4 gateway	ip; Default: **none**	Indicates the IP address of the gateway through which the target network can be reached.
Metric	integer [0..4,294,967,295]; Default: **none**	Metrics help the router choose the best route among multiple feasible routes to a destination. The route will go in the direction of the gateway with the lowest metric value.
Table	string | integer; Default: **none**	Name or number of the associated routing table.

You can also view the routing table via shell using the **route** or **ip route** commands, depending on which output your prefer:

```
root@Teltonika-RUT240:~# route
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
```

```
default         192.168.2.1     0.0.0.0         UG    0      0        0 eth1
192.168.1.0     *               255.255.255.0   U     0      0        0 br-
lan
```

```
root@Teltonika-RUT240:~# ip route
default via 192.168.2.1 dev eth1
192.168.1.0/24 dev br-lan  proto kernel  scope link  src 192.168.1.1
```

IPv6 routes

The **IPv6 Routes** section displays the router's IPv6 routing table.

The figure below is an example of the IPv6 routes section:

Field name	Value	Description
Network	string; Default: **none**	Associated network interface name.
Target	ip6 | ip6/netmask; Default: **none**	Destination network address.
IPv6-Gateway	ip6 | ip6/netmask; Default: **none**	Source of the network address.
Metric	integer [0..4,294,967,295]; Default: **none**	Metrics help the router choose the best route among multiple feasible routes to a destination. The route will go in the direction of the gateway with the lowest metric value.
Table	string | integer; Default: **none**	Name or number of the associated routing table.

You can also view the routing table via shell using the **route -A inet6** or **ip -6 route show** commands, depending on which output your prefer:

```
root@Teltonika-RUT240:~# ip -6 route
fdb2:7fc0:b88f::/64 dev br-lan  proto static  metric 1024
ff00::/8 dev eth1  proto kernel  metric 256
ff00::/8 dev br-lan  proto kernel  metric 256
ff00::/8 dev ath1  proto kernel  metric 256
```

IPv6 Neighbours

The **IPv6 Neighbours** section displays IPv6 associated neighbours.

The figure below is an example of the Active IPv6 Neighbours section:

Field name	Value	Description
IPv6 Address	ip6; Default: **none**	IPv6 address of the associated neighbour.

MAC Address	ip6; Default: **none**	MAC address of the associated neighbour.
Interface	string; Default: **none**	Name of the associated network interface.

Dynamic routes

The **Dynamic routes** page contains multiple sections, each of which displays the routing data of a Dynamic Routing protocol supported by the device. Data is only displayed once a protocol is configured and enabled. Else, each section is empty.