Template:Networking rut manual routes

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

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Contents

Summary

The **Routes** page displays the ARP table and active IPv4/IPv6 routes.

This chapter of the user manual provides an overview of the Routes page for {{{name}}} devices.

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-{{{name}}}:~# arp
IP address       HW type     Flags       HW address            Mask
```

```
Device
192.168.1.103    0x1         0x2         ac:e2:d3:00:00:00     *        br-
lan
192.168.1.151    0x1         0x2         18:d6:c7:00:00:00     *        br-
lan
```

```
root@Teltonika-{{{name}}}:~# ip neigh
192.168.1.103 dev br-lan lladdr ac:e2:d3:00:00:00 REACHABLE
192.168.1.151 dev br-lan lladdr 18:d6:c7:00:00:00 REACHABLE
```

Active IP routes

The **Active IP 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.
IP 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.

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

```
root@Teltonika-{{{name}}}:~# route
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
default         10.1.179.213    0.0.0.0         UG    0      0        0 wwan0
10.1.179.208    *               255.255.255.248 U     10     0        0 wwan0
10.1.179.213    *               255.255.255.255 UH    10     0        0 wwan0
192.168.1.0     *               255.255.255.0   U     0      0        0 br-
lan
```

```
root@Teltonika-{{{name}}}:~# ip route
default via 10.1.179.213 dev wwan0
10.1.179.208/29 dev wwan0  proto static  scope link  metric 10
10.1.179.213 dev wwan0  proto static  scope link  src 10.1.179.212  metric 10
192.168.1.0/24 dev br-lan  proto kernel  scope link  src 192.168.1.1
```

Active IPv6 routes

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

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

Field name	Value	Description
Network	string; default: **none**	Associated network interface name.
Target	ip6 | ip6/netmask; default: **none**	Destination network address.
IP gateway	ip6; default: **none**	Indicates the IPv6 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.

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-{{{name}}}:~# ip -6 route
fe80::/64 dev wwan0  proto kernel  metric 256
```

[[Category:{{{name}}} Status section]]