

RUTXR1 Network

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The information in this page is updated in accordance with firmware version [RUTX_R_00.07.05.4](#).

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Summary

The **Network** page contains information related to the device's networking. This chapter is an overview of the Network page in RUTXR1 devices.

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.



Basic

Advanced

Mobile

The **Mobile** tab displays information about the mobile connection. The figure below is an example of the Mobile tab:

SIM card		Connection	
SIM card slot in use	SIM 1	Operator	Telia LT
SIM card state	Inserted	Operator state	Registered, home
Provider	Telia LT	Data connection state	Connected
IMSI	246012103403604	Network type	4G (LTE)
ICCID	89370010100034036043		

Data transmission		Cell info	
Carrier aggregation	Single	Cell ID	80034334
Connected band	LTE B3	LAC	8101
Signal strength (dBm)	-73 Good	Physical cell ID	123
Bytes received	84 B	EARFCN	3050
Bytes sent	84 B	Mobile country code	246
		Mobile network code	01

∨ BANDS

NAME	EARFCN	PHYSICAL CELL ID	RSRP	RSRQ	SINR
LTE B3	3050	123	-101 No signal	-11 Good	15 Good

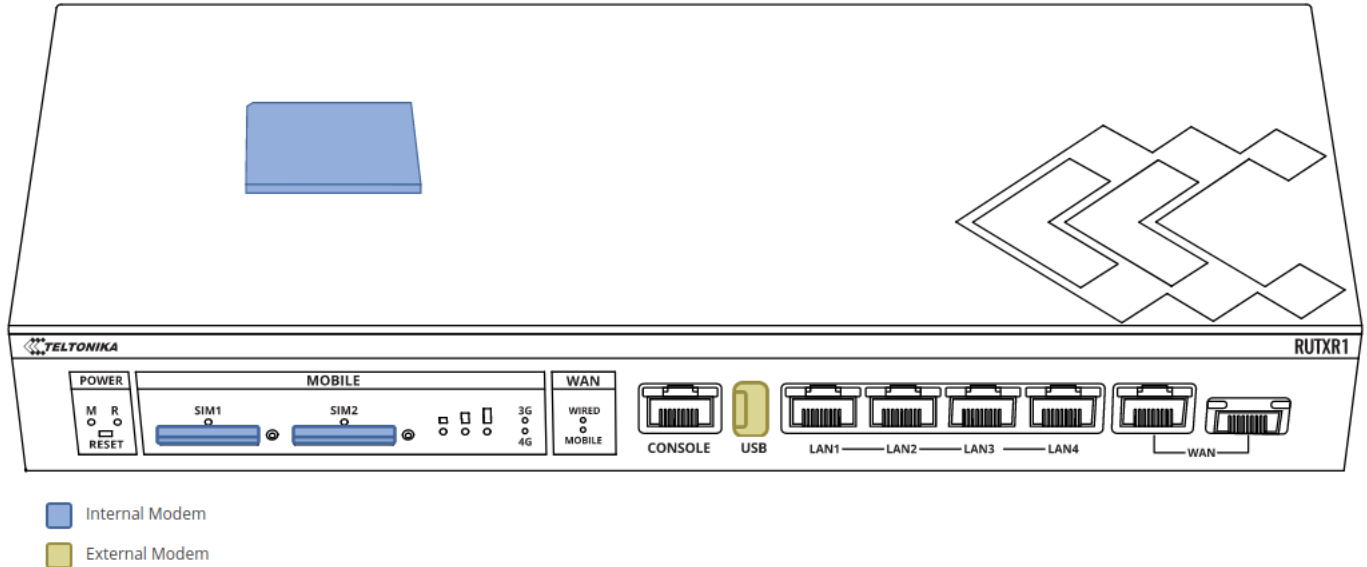
[RESTART CONNECTION](#)

field name	description
Sim card slot in use	Shows which sim card slot is currently in use
SIM card state	The current SIM card state. Possible values are: <ul style="list-style-type: none"> Inserted - SIM card is inserted and ready to be used Not inserted - SIM card is not inserted Unknown - unable to obtain SIM card state value. Possible communication issue between the the device and the modem
Provider	Network operator's name
IMSI	The IMSI (international mobile subscriber identity) is a unique 15 decimal digit (or less) number used to identify the user of a cellular network
ICCID	SIM card's ICCID - a unique serial number used to identify the SIM chip
Operator	Network operator's name
Operator state	Shows whether the network has currently indicated the registration of the mobile device. Possible values are: <ul style="list-style-type: none"> Unregistered - not registered to a network and the device is not currently searching for a new operator to register to Registered (home) - registered, home network Searching - not registered to a network, but the device is currently searching for a new operator to register to Network denied - registration to network denied by operator Unknown - operator state is currently unknown Registered (roaming) - registered to network, roaming conditions
Data connection state	Indicates whether the device has a mobile data connection or not
Network type	Mobile network type. Possible values are: <ul style="list-style-type: none"> 4G: 4G (LTE) 3G: 3G (WCDMA), 3G (HSDPA), 3G (HSUPA), 3G (HSPA), 3G (HSPA+), 3G (DC-HSPA+), 3G (HSDPA+HSUPA), UMTS N/A - not possible to determine at the moment
Carrier Aggregation	LTE Advanced Carrier Aggregation, CA, is one of the key techniques used to enable the very high data rates of 4G to be achieved. By combining more than one carrier together, either in the same or different bands it is possible to increase the bandwidth available and in this way increase the capacity of the link.
Connected band	Currently used mobile frequency band.
Signal strength	Received signal strength indicator (RSSI) measured in dBm. Values closer to 0 indicate a better signal strength
Bytes received	Amount of data received through the mobile interface
Bytes sent	Amount of data sent through the mobile interface
Cell ID	The ID of the cell that the modem is currently connected to
LAC	The Location Area Code, abbreviated as LAC is the unique number given to each location area within the network. The served area of a cellular radio access network is usually divided into location areas, consisting of one or several radio cells.
Physical cell ID	Physical Cell ID is an identification of a cell at physical layer.
EARFCN	In GSM cellular networks, an absolute radio-frequency channel number (ARFCN) is a code that specifies a pair of physical radio carriers used for transmission and reception in a land mobile radio system, one for the uplink signal and one for the downlink signal.
Mobile country code	The Mobile Country Code, abbreviated as MCC, is the code uniquely identifying the home country of a (Glossary:Mobile network operator (MNO) mobile network operator (MNO).

Modem layout

The **Modem layout** section visually indicates where the internal and external modems are positioned.

^ DEVICE MODEMS LAYOUT



Bands

bands information

Name	Connected band
Other signal level measurements	<p>Overall signal quality for different network types is defined by different measurements. Short explanations and recommendations are provided below. Click here for more in-depth information or click on one of the links below:</p> <ul style="list-style-type: none"> • 4G <ul style="list-style-type: none"> - RSRP - reference signal received power, measured in dBm. Values closer to 0 indicate better signal strength - RSRQ - reference signal received quality, measured in dB. Values closer to 0 indicate a better rate of information transfer - SINR - signal-to-interference-plus-noise ratio, measured in dB. Higher values indicate a better rate of information transfer • 3G <ul style="list-style-type: none"> - EC/IO - downlink carrier-to-interference ratio. Values range from -20 to 0 (closer to 0 indicates better signal quality/cleanliness) - RSCP - received signal code power. Values range from -124 to 0 (closer to 0 indicates better signal strength)

LAN

This tab displays information about the device's local network(s). The figure below is an example of the **Network** window:

^ LAN INFORMATION

NAME	IP ADDRESS	NETMASK
lan	192.168.1.2	255.255.255.0

^ DHCP LEASES

HOSTNAME	IP ADDRESS	MAC ADDRESS	LEASETIME REMAINING
	192.168.1.163		11h 40m 36s
	192.168.1.122		11h 49m 3s

lan information

Name	LAN interface name
IP address	IP address of the LAN interface
Netmask	Netmask of the LAN interface. In a sense, a netmask specifies the size of a network. In other words, it indicates which part of the IP address denotes the network, and which denotes the device

dhcp leases

Hostname	Hostname of a LAN client
IP Address	IP address of a LAN client
MAC Address	MAC address of a LAN client
Leasetime Remaining	Remaining lease time for a DHCP client. Active DHCP lease holders will try to renew their DHCP leases after a half of the lease time passes.

Firewall

This tab displays information about the device's firewall. Info is shown of IPv4 and IPv6 traffic. The figure below is an example of the **Firewall** page tables:

^ NAT TABLE

Name	Traffic	Packets	Policy	Rules	References	
PREROUTING	154.72 MB	551.74 K	ACCEPT	3	0	INFO
INPUT	141.96 KB	1.26 K	ACCEPT	0	0	INFO
OUTPUT	11.19 KB	51	ACCEPT	0	0	INFO
POSTROUTING	712 B	7	ACCEPT	3	0	INFO

^ RAW TABLE

Name	Traffic	Packets	Policy	Rules	References	
PREROUTING	161.95 MB	601.84 K	ACCEPT	1	0	INFO
OUTPUT	17.52 MB	33.1 K	ACCEPT	1	0	INFO
zone_lan_helper	0 B	0	-	10	2	INFO

▼ MANGLE TABLE

Name	Traffic	Packets	Policy	Rules	References	
PREROUTING	165.52 MB	622.11 K	ACCEPT	0	0	INFO
INPUT	10.48 MB	102.43 K	ACCEPT	0	0	INFO
FORWARD	0 B	0	ACCEPT	2	0	INFO
OUTPUT	23.21 MB	42 K	ACCEPT	0	0	INFO
POSTROUTING	23.21 MB	42 K	ACCEPT	0	0	INFO

▼ FILTER TABLE

Name	Traffic	Packets	Policy	Rules	References	
INPUT	0 B	0	DROP	10	0	INFO
FORWARD	0 B	0	DROP	11	0	INFO
OUTPUT	0 B	0	ACCEPT	5	0	INFO
forwarding_lan_rule	0 B	0	-	0	1	INFO

Field name	Description
Name	Name of the chain
Traffic	Size of traffic that was matched to the chain
Packets	Count of packets that were matched to the chain
Policy	Policy for traffic entering the zone.
Rules	Count of rules the chain has
References	Count of times the chain was referenced in other chains

For more information about specific firewall chain, **INFO** button can be pressed. Window like this should pop up:

▼ PREROUTING CHAIN

Traffic	Packets	Target	Protocol	In	Out	Source	Destination	Options	Comment
187.52 MB	667.2 K	prerouting_rule	*	*	*	*	*	-	?
2.04 MB	11.81 K	zone_lan_prerouting	*	br-lan	*	*	*	-	-
185.48 MB	655.39 K	zone_wan_prerouting	*	eth1	*	*	*	-	-

▼ PREROUTING REFERENCES

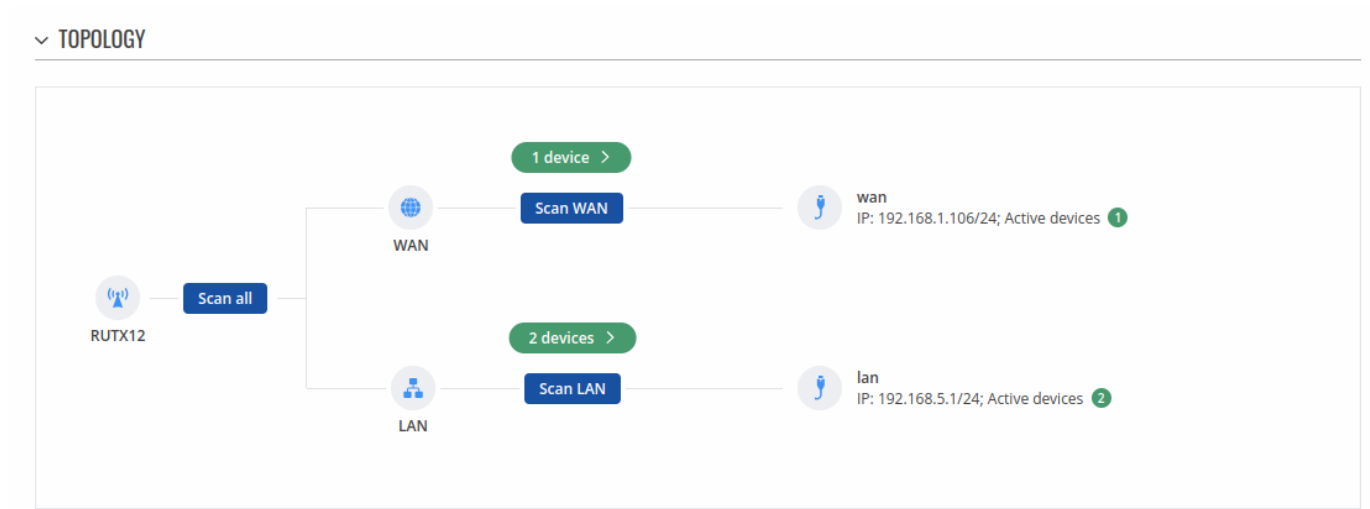
Name	Traffic	Packets	Policy	Rules	References
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This chain is not referenced by other chains

Field name	Description
Traffic	Size of traffic that was matched to the rule
Packets	Count of packets that were matched to the rule
Target	Name of the rule (if highlighted you can click it to open modal to it)
Protocol	Filters by Internet protocol
In	Filters by inbound interface
Out	Filters by outbound interface
Source	Filters by source address
Destination	Filters by destination address
Options	Additional iptables options
Comment	Filters by comment

Topology

The **Topology** tab allows scanning of WAN, LAN or both interfaces via arp scan to check active connected devices. After scan it shows how many active devices were found and on which interface.



All active devices

This section displays the results of the scan.

▼ ALL ACTIVE DEVICES

Devices per page:

HOSTNAME (VENDOR)	IP ADDRESS	MAC ADDRESS	TYPE ⇅	INTERFACE ⇅
[REDACTED]	192.168.5.213	[REDACTED]	wired	lan
[REDACTED]	192.168.5.112	[REDACTED]	wireless	RUT [REDACTED]
[REDACTED]	192.168.1.1	[REDACTED]	wired	wan

field name	description
Hostname (Vendor)	Hostname of scanned device
IP Address	IP address of scanned device
MAC Address	MAC address of scanned device
Type	The type of connection
Interface	The interface the scanned device is connected