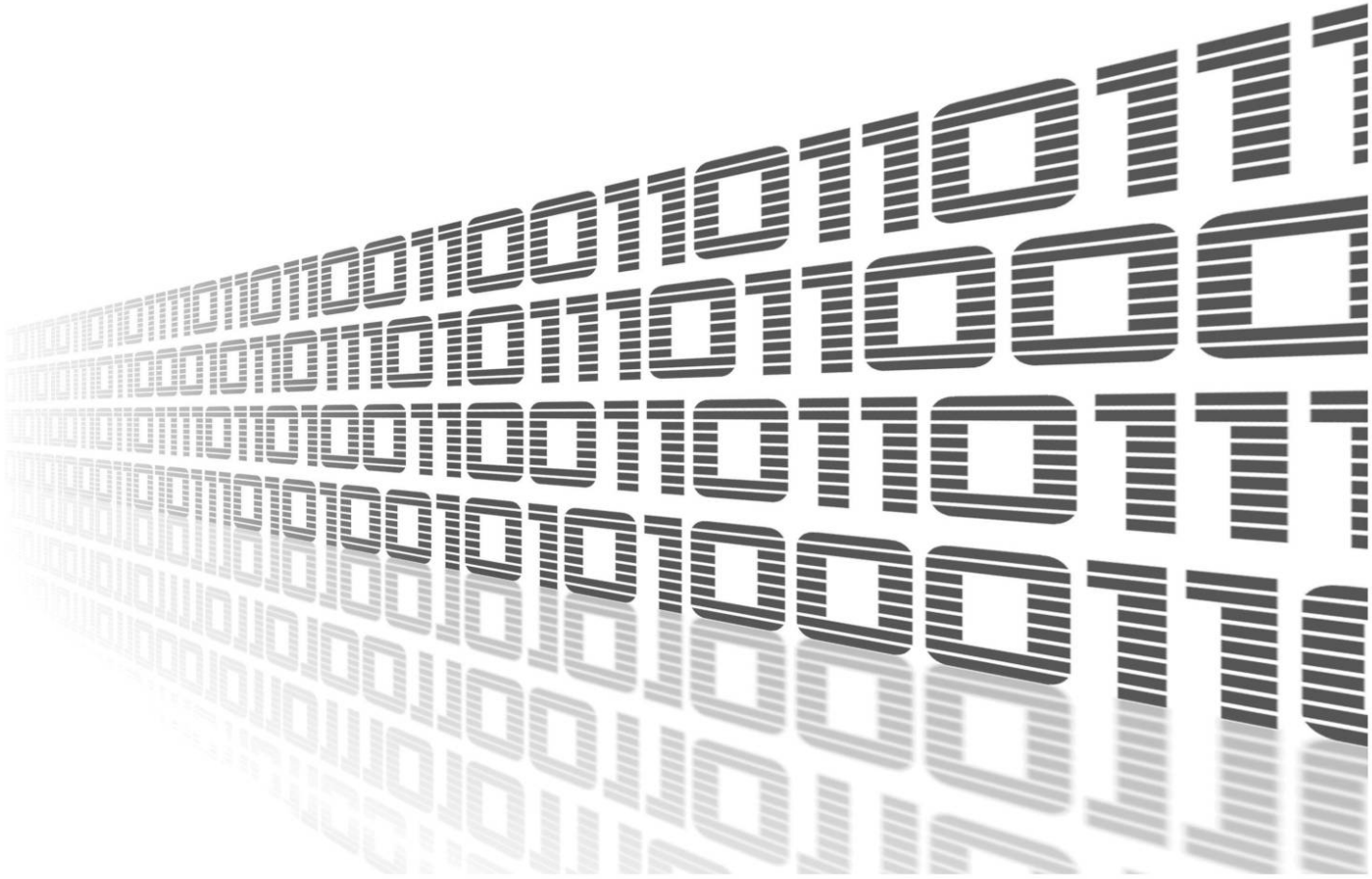
ADVANTECH

RouterApp

Guest Status Version



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Document No. APP-0116-EN, revision from 12th October, 2023.

Used symbols

Danger – Information regarding user safety or potential damage to the router.

Attention – Problems that can arise in specific situations.

Information – Useful tips or information of special interest.

Example – Example of function, command or script.

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1. Changelog

1.1 Guest Status Version Changelog

v1.0.0 (2023-05-23)

- First release

2. Description of user module

User module *Guest Status Version* is not contained in the standard router firmware. Uploading of this user module is described in the Configuration manual (see [1, 2]).

This module restricts access to configuration via the web interface of the router and allows only access to monitoring part.

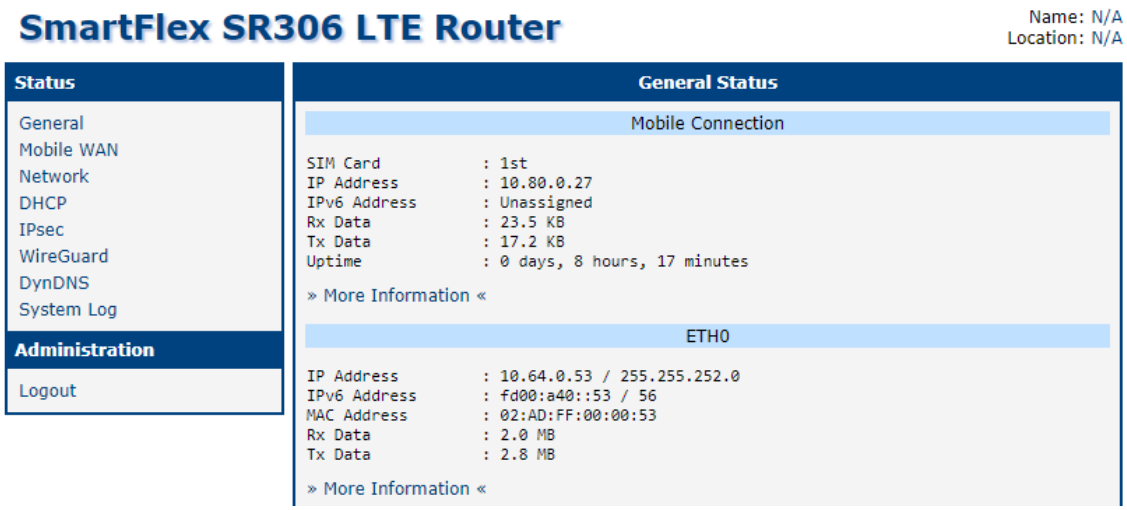


Figure 1: Web interface

3. Status

Depending on the router configuration the list of menu items can vary. Full list of items which the Status menu section can contain is:

- General
- Mobile WAN
- Network
- DHCP
- IPsec
- WireGuard
- DynDNS
- System log

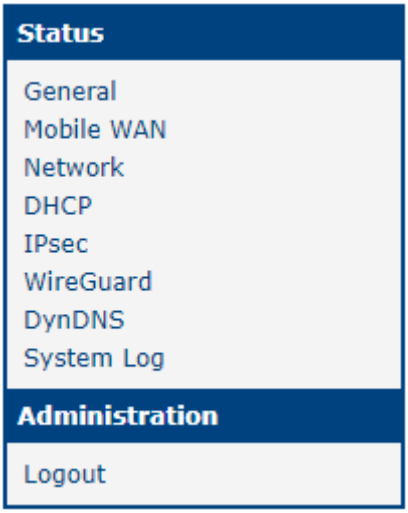


Figure 2: All available items

3.1 General

This section offers quick view of general information about the router.

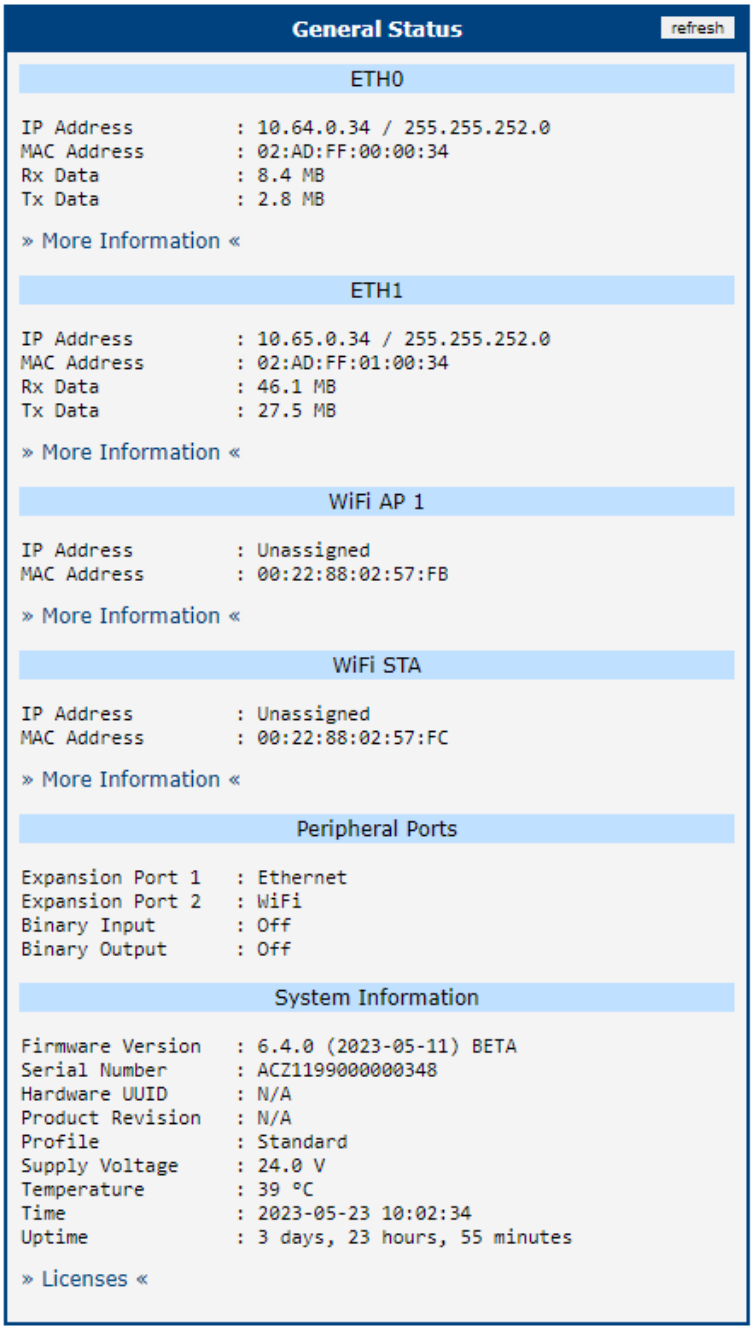


Figure 3: General status

3.2 Mobile WAN Status

The *Mobile WAN* menu item contains current information about connections to the mobile network. The first part of this page (*Mobile Network Information*) displays basic information about mobile network the router operates in. There is also information about the module, which is mounted in the router.

Item	Description
Registration	State of the network registration.
Operator	Specifies the operator's network the router operates in.
Technology	Transmission technology.
PLMN	Code of operator
Cell	Cell the router is connected to.
LAC	Location Area Code – unique number assigned to each location area.
Channel	Channel the router communicates on. • ARFCN in case of GPRS/EDGE technology, • UARFCN in case of UMTS/HSPA technology, • EARFCN in case of LTE technology.
Signal Strength	Signal strength of the selected cell, for details see the Table 2.
Signal Quality	Signal quality of the selected cell: • EC/IO for UMTS and CDMA (it's the ratio of the signal received from the pilot channel – EC – to the overall level of the spectral density, ie the sum of the signals of other cells – IO). • RSRQ for LTE technology (Defined as the ratio $\frac{N \times RSRP}{RSSI}$). • The value is not available for the EDGE technology.
CSQ	Cell Signal Quality, relative value is given by RSSI (dBm). 2–9 range means Marginal, 10–14 range means OK, 15–16 range means Good, 20–30 range means excellent.
Neighbours	Signal strength of neighboring hearing cells (GPRS only)[1].
Manufacturer	Module manufacturer
Model	Type of module
Revision	Revision of module
IMEI	IMEI (International Mobile Equipment Identity) number of module
ESN	ESN (Electronic Serial Number) number of module (for CDMA routers)
MEID	MEID number of module
ICCID	Integrated Circuit Card Identifier is international and unique serial number of the SIM card.

Table 1: Mobile Network Information

[1] If a neighboring cell for GPRS is highlighted in red, router may repeatedly switch between the neighboring and the primary cell affecting the router's performance. To prevent this, re-orient the antenna or use a directional antenna.

The value of signal strength is displayed in different color: in black for good, in orange for fair and in red for poor signal strength.

Signal strength	GPRS/EDGE/CDMA (RSSI)	UMTS/HSPA (RSCP)	LTE (RSRP)
good	> -70 dBm	> -75 dBm	> -90 dBm
fair	-70 dBm to -89 dBm	-75 dBm to -94 dBm	-90 dBm to -109 dBm
poor	< -89 dBm	< -94 dBm	< -109 dBm

Table 2: Value ranges of signal strength for different technologies.

The middle part of this page displays information about mobile signal quality, transferred data and number of connections for all the SIM cards (for each period). The router has standard intervals, such as the previous 24 hours and last week, and also period starting with *Accounting Start* defined for the MWAN module.

Period	Description
Today	Today from 0:00 to 23:59
Yesterday	Yesterday from 0:00 to 23:59
This week	This week from Monday 0:00 to Sunday 23:59
Last week	Last week from Monday 0:00 to Sunday 23:59
This period	This accounting period
Last period	Last accounting period

Table 3: Description of Periods

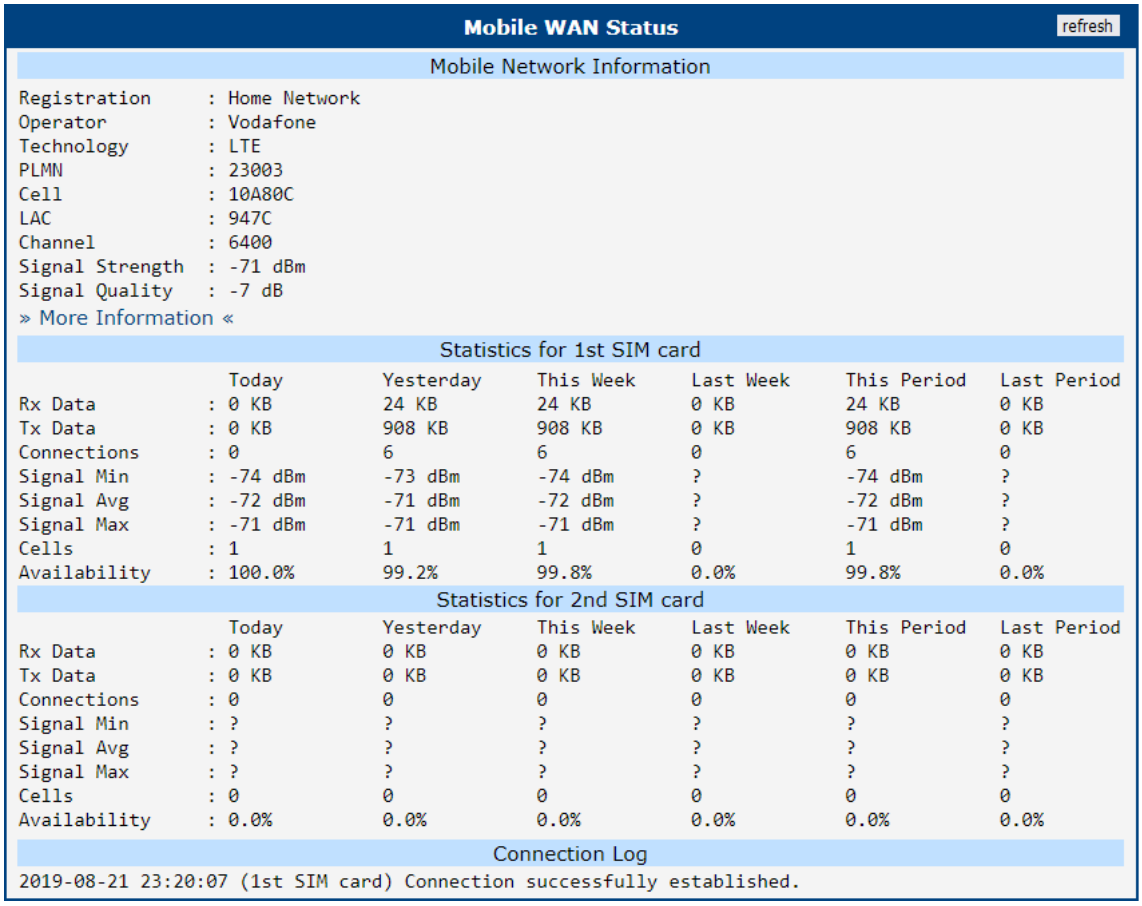
Item	Description
RX data	Total volume of received data
TX data	Total volume of sent data
Connections	Number of connection to mobile network establishment
Signal Min	Minimal signal strength
Signal Avg	Average signal strength
Signal Max	Maximal signal strength
Cells	Number of switch between cells
Availability	Availability of the router via the mobile network (expressed as a percentage)

Table 4: Mobile Network Statistics

Tips for *Mobile Network Statistics* table:

- *Availability* is expressed as a percentage. It is the ratio of time connection to the mobile network has been established to the time that router has been is turned on.
- Placing your cursor over the maximum or minimum signal strength will display the last time the router reached that signal strength.

The last part (*Connection Log*) displays information about the mobile network connections and any problems that occurred while establishing them.



Mobile WAN Status refresh

Mobile Network Information

Registration	: Home Network
Operator	: Vodafone
Technology	: LTE
PLMN	: 23003
Cell	: 10A80C
LAC	: 947C
Channel	: 6400
Signal Strength	: -71 dBm
Signal Quality	: -7 dB

» More Information «

Statistics for 1st SIM card

	Today	Yesterday	This Week	Last Week	This Period	Last Period
Rx Data	: 0 KB	24 KB	24 KB	0 KB	24 KB	0 KB
Tx Data	: 0 KB	908 KB	908 KB	0 KB	908 KB	0 KB
Connections	: 0	6	6	0	6	0
Signal Min	: -74 dBm	-73 dBm	-74 dBm	?	-74 dBm	?
Signal Avg	: -72 dBm	-71 dBm	-72 dBm	?	-72 dBm	?
Signal Max	: -71 dBm	-71 dBm	-71 dBm	?	-71 dBm	?
Cells	: 1	1	1	0	1	0
Availability	: 100.0%	99.2%	99.8%	0.0%	99.8%	0.0%

Statistics for 2nd SIM card

	Today	Yesterday	This Week	Last Week	This Period	Last Period
Rx Data	: 0 KB	0 KB	0 KB	0 KB	0 KB	0 KB
Tx Data	: 0 KB	0 KB	0 KB	0 KB	0 KB	0 KB
Connections	: 0	0	0	0	0	0
Signal Min	: ?	?	?	?	?	?
Signal Avg	: ?	?	?	?	?	?
Signal Max	: ?	?	?	?	?	?
Cells	: 0	0	0	0	0	0
Availability	: 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Connection Log

2019-08-21 23:20:07 (1st SIM card) Connection successfully established.

Figure 4: Mobile WAN status

3.3 Network

To view system information about the router operation, select the *Network* item in the main menu. The upper part of the window displays detailed information about active interfaces:

Interface	Description
eth0, eth1	Network interfaces (ethernet connection)
ppp0	Interface (active connection to GPRS/EDGE)
tun0	OpenVPN tunnel interface – if configured
ipsec0	IPSec tunnel interface – if configured
gre1	GRE tunnel interface – if configured
usb0	USB interface

Table 5: Description of interface in network status

By each of the interfaces is then shown the following information:

Item	Description
HWaddr	Hardware (unique) address of networks interface
inet	IP address of interface
P-t-P	IP address second ends connection
Bcast	Broadcast address
Mask	Mask of network
MTU	Maximum packet size that the equipment is able to transmit
Metric	Number of routers, over which packet must go trought
RX	• **packets** – received packets • **errors** – number of errors • **dropped** – dropped packets • **overruns** – incoming packets lost because of overload • **frame** – wrong incoming packets because of incorrect packet size
TX	• **packets** – transmit packets • **errors** – number of errors • **dropped** – dropped packets • **overruns** – outgoing packets lost because of overload • **carrier** – wrong outgoing packets with errors resulting from the physical layer
collisions	Number of collisions on physical layer
txqueuelen	Length of front network device
RX bytes	Total number of received bytes
TX bytes	Total number of transmitted bytes

Table 6: Description of information in network status

It is possible to read status of connection to mobile network from the network information. If the connection to mobile network is active, then it is in the system information shown as a ppp0 interface.

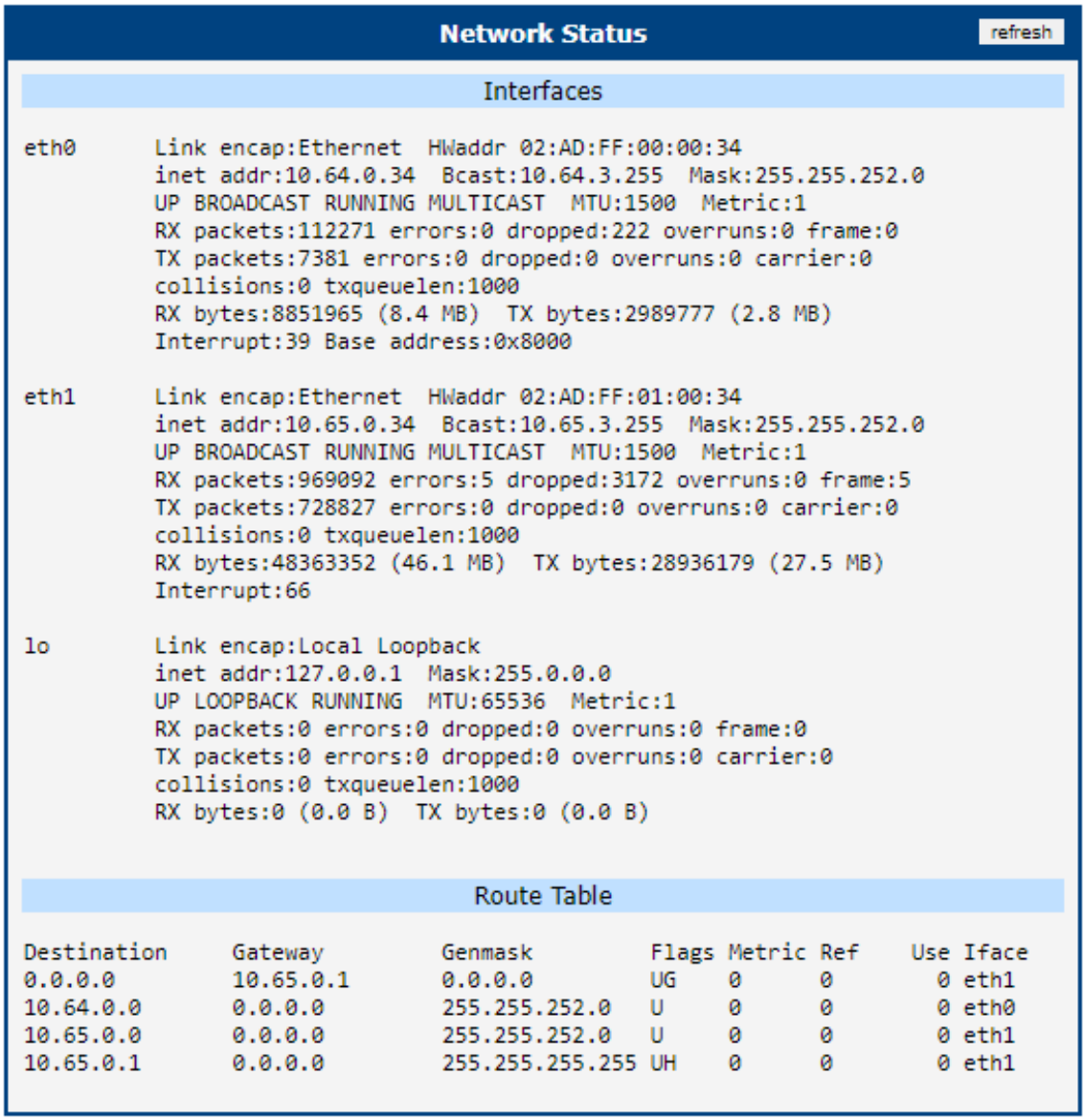


Figure 5: Network status

3.4 DHCP

DHCP Status menu section contains information about active DHCP leases.

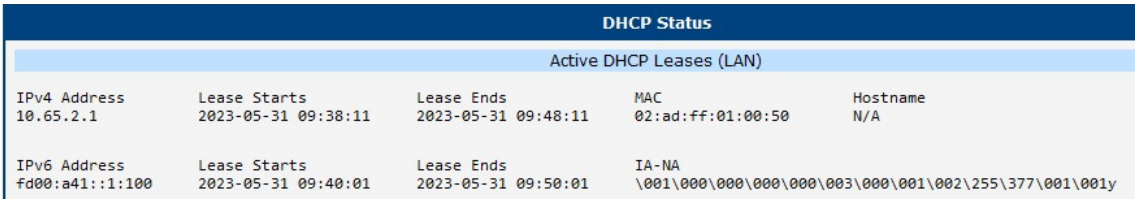


Figure 6: DHCP status

3.5 IPsec

IPsec Status menu section contains information about currently used IPsec tunnels.

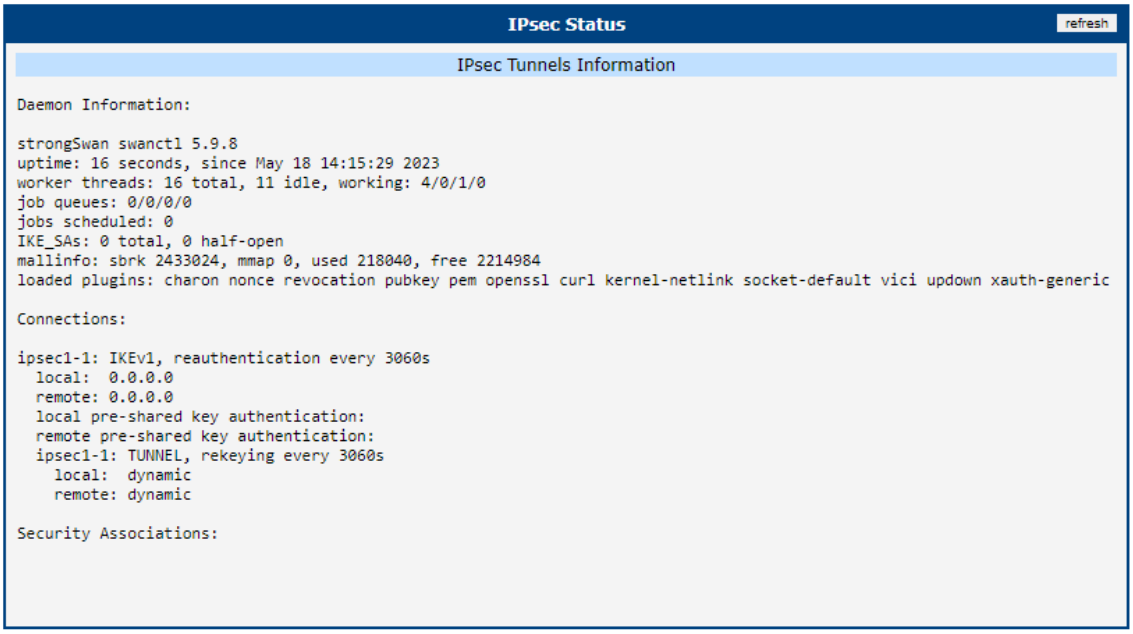


Figure 7: IPsec status

3.6 WireGuard

WireGuard status section contains information about active WireGuard tunnels.

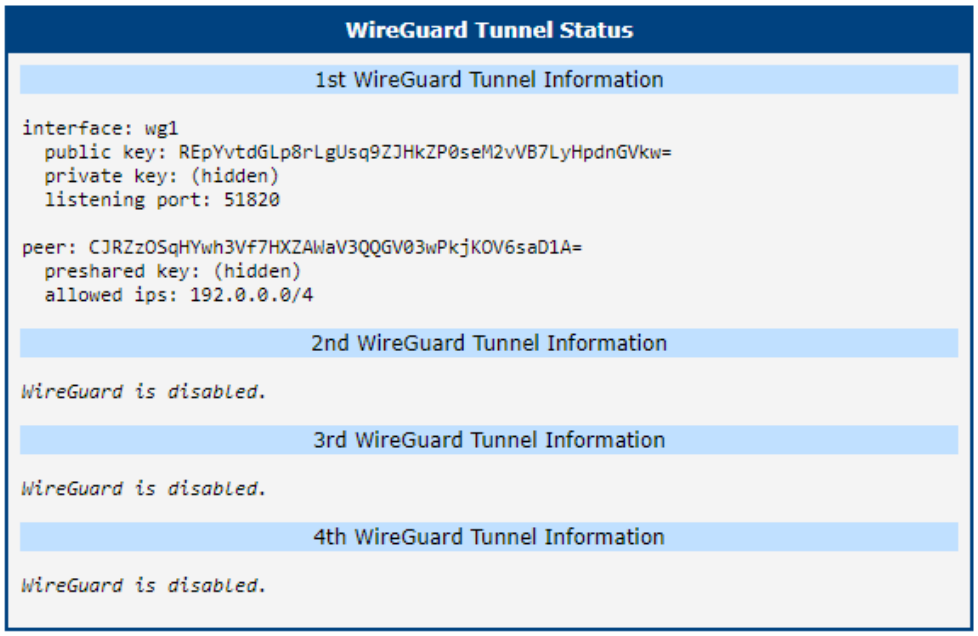


Figure 8: WireGuard status

3.7 DynDNS

DynDNS status contains brief information about DynDNS service.

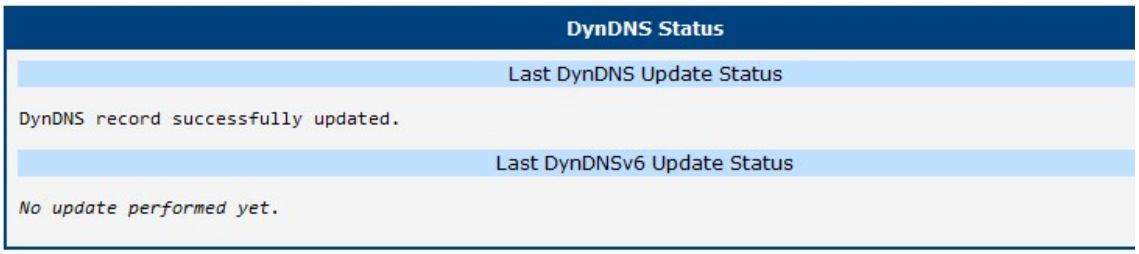


Figure 9: DynDNS status

3.8 System Log

In case of any problems with connection to GPRS it is possible to view the system log by pressing the *System Log* menu item. In the window, are displayed detailed reports from individual applications running in the router. Use the *Save Log* button to save the system log to a connected computer.

The Syslog default size is 1000 lines. After reaching 1000 lines create a new file for storing system log. After completion of the 1000 lines in the second file, the first file is deleted and creates a new one.

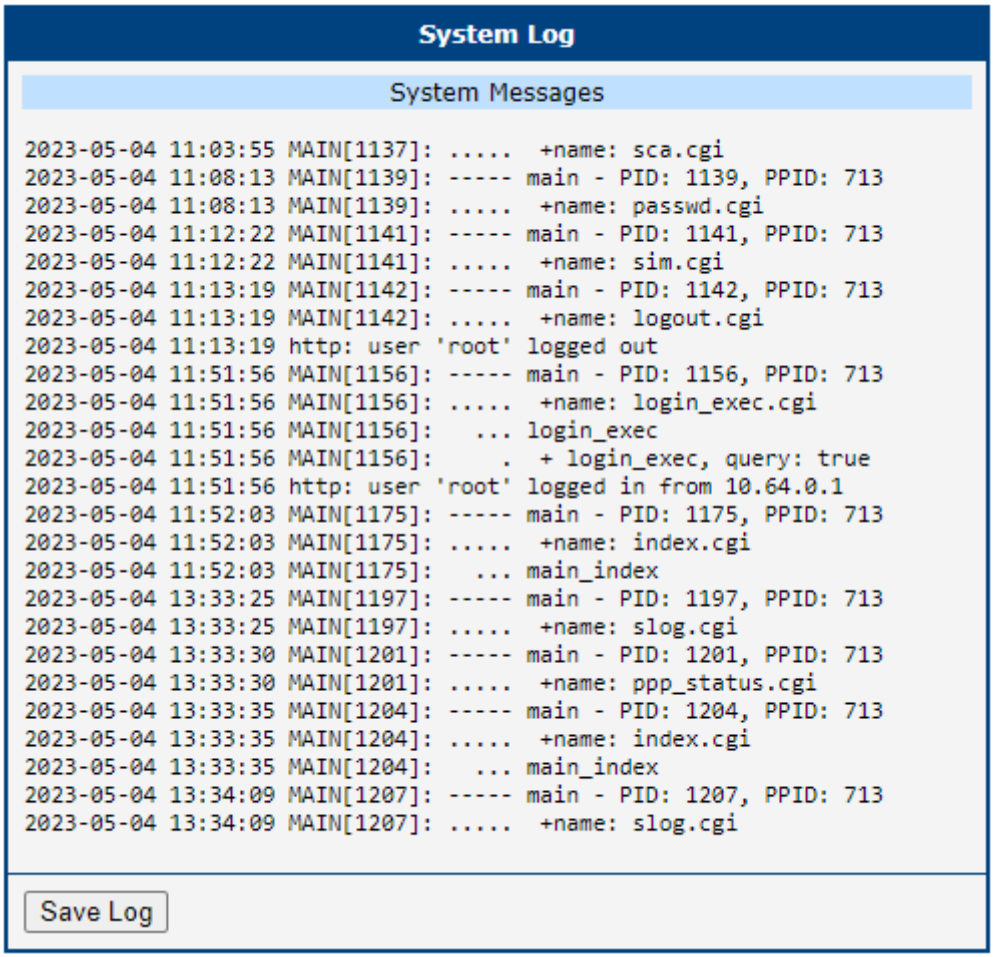


Figure 10: System log

4. Related Documents

You can obtain product-related documents on *Engineering Portal* at *icr.advantech.cz* address.

To get your router's *Quick Start Guide*, *User Manual*, *Configuration Manual*, or *Firmware* go to the *Router Models* page, find the required model, and switch to the *Manuals* or *Firmware* tab, respectively.

The *Router Apps* installation packages and manuals are available on the *Router Apps* page.

For the *Development Documents*, go to the *DevZone* page.