

Template:Networking rutos manual troubleshoot rut2 rut9



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Logging Settings

The **Logging Settings** section is used to configure how and where the device stores system log data. The system log is a file that contains information on various system related events and is useful to engineers for troubleshooting the device.



Field	Value	Description
System log buffer size	integer; default: 128	System log buffer size in kibibytes (KiB).
External system log server	ip; default: none	IP address of an external server that will be used to store device logs.
External system log server port	integer [0..65535]; default: none	TCP/UDP port number of the external log server.
External system log server protocol	UDP TCP; default: UDP	Communication protocol used by the external log server.
Save log in	RAM memory Flash memory ; default: RAM memory	Specifies which type of memory to use for storing system logs.
System log file size	integer [10..500]; default: 200	Maximum size (in kilobytes) of a log file. When threshold is reached, log rotation is performed. Can be set to value from 10kB to 500kB. Smaller the file, larger amount of old logs is saved.
Compress	off on; default: off	Compress old rotated logs using GZ format.
Delete	- (interactive button)	Deletes log file from router.
Show hostname	off on; default: off	Show hostname instead of IP address in syslog.

Troubleshoot

The **Troubleshoot** section is used to download various files that contain information used for troubleshooting the device. Refer to the figure and table below for information on the Troubleshoot page. 

Field	Value	Description
System log	- (interactive button)	Displays the contents of the device system log file. The system log contains records of various system related events, such as starts/stops of various services, errors, reboots, etc.
Kernel log	- (interactive button)	Displays the contents of the device kernel log file. The kernel log contains records of various events related to the processes of the operating system (OS).
Troubleshoot file	- (interactive button)	Downloads the device Troubleshoot file. It contains the device configuration information, logs and some other files. When requesting support, it is recommended to always provide the device Troubleshoot file to Teltonika engineers for analysis.
TCP dump file*	- (interactive button)	Downloads the device TCP dump file. TCP dump is a program used to capture packets moving through network interfaces. By default, the device does not store TCP dump information. You must enable TCP dump and save the changes before you can download the file.
Enable TCP dump*	off on; default: off	Turns TCP dump packets capture on or off.

* As of {{{series}}}_R_00.07.00, TCPdump is not part of core functionality anymore. To see these options, the TCPdump package must be downloaded from [{{{name}}}_Package_Manager|Package Manager].

TCP dump

TCP dump is an *optional* downloadable functionality* used to capture packets moving through network interfaces. By default, the device does not store TCP dump information. You must enable TCP dump and save the changes before you can download the file.

If you enable TCP dump, you will notice additional configuration fields appear. Refer to the figure and table below for realted information.

* You can download the TCPdump package from [{{{name}}}_Package_Manager|Package Manager].



Field	Value	Description
Enable TCP dump	off on; default: off	Turns TCP dump packet capture on or off.
Select interface	network interface; default: br-lan	Only captures packets that move through the specified network interface.
Select protocol filter	All ICMP TCP UDP ARP; default: All	Only captures packets that match the specified protocol.

Select packets direction	Incoming/Outgoing Incoming Outgoing; default: Incoming/Outgoing	Only captures packets coming from the specified direction.
Host	ip host; default: none	Only captures packets related to the specified host.
Port	integer [0..65335]; default: none	Only captures packets related to the specified communication port.
Select storage	RAM memory; default: RAM memory	Specifies where the TCP dump file will be stored.

Diagnostics

The **Diagnostics** section is used to execute simple network diagnostic tests, including *ping*, *tracert* and *nslookup*.



Field	Value	Description
Method	Ping Traceroute Nslookup; default: Ping	<p>Selects diagnostic method.</p> <ul style="list-style-type: none"> • Ping - sends ICMP requests to the specified address. • Traceroute - displays the path that packets have to take in order to reach the specified address. • Nslookup - obtains domain name address and IP address mapping information.
Protocol	IPv4 IPv6; default: IPv4	Selects IP address family for diagnostic test.
Address	ip host; default: none	IP address or hostname on which the diagnostic test will be performed.
Perform	-(interactive button)	Performs diagnostic test when clicked.