https://wiki.teltonika-networks.com/view/Template:Networking_rutos_manual_data_to_server

Template:Networking rutos manual data to server

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

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Contents

Summary

The **Data to Server** feature provides you with the possibility to set up data senders that collect data from various sources and periodically send it to remote servers.

Note: On {{{name}}}, Data to Server is additional software that can be installed from the **System → [[{{{name}}} Package Manager|Package Manager]]** page.

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.

Data Senders

A **Data Sender** is an instance that gathers and periodically sends collected data to a specified server. The Data Senders list is empty by default so, in order to begin configuration you must add a new data sender first. To add a new data sender, click the 'Add' button.

After this you should be redirected to the newly added data sender's configuration page.

Sender Settings

Refer to the table below for descriptions on data sender configuration fields.

Note: these tables have coloring schemes to indicate which fields can be seen with different configuration.

General

Field	Value	Description
Name	string; default: **none**	Name of the data sender. Used for easier data senders management purposes only (optional).
Type	Base | ; default: **Base**	Source of the data to be sent to server.
Format type	Json | Custom; default: **Json**	Arranges the format of the sent JSON segment.
Format string	string; default: **none**	Specifies custom format string.
Empty value	string; default: **N/A**	A string which will be placed if any value cannot be received.
Delimeter	string (Maximum length of value is 1 bytes); default: **N/A**	Specifies delimiters for multiple data segments.
Segment count	integer [1..64]; default: **1**	Max segment count in one JSON string sent to server.
Send as object	off | on; default: **off**	When turned on, sends JSON segment as object and not as an array element.
Server address	Default: **empty**	Hostname or ip address of the broker to connect to.
Port	integer [0..65535]; default: **1883**	Port number for connecting to MQTT.
Keepalive	integer [1..640]; default: **60**	MQTT Keepalive period in seconds.
Topic	string; default: **none**	MQTT topic to be used for publishing the data.
Client ID	string; default: **none**	Client ID to send with the data. If empty, a random client ID will be generated
QoS	integer [0..2]; default: **0**	MQTT Quality of Service. Allowed values: • 0 - when we prefer that the message will not arrive at all rather than arrive twice, • 1 - when we want the message to arrive at least once but don't care if it arrives twice (or more), • 2 - when we want the message to arrive exactly once. A higher QoS value means a slower transfer.
Enable secure connection	off | on; default: **off**	Enables the use of TLS certificates.
On: TLS type	Certificate based | Pre-shared key based; default: **Certificate based**	Select type of TLS.
Certificate based: Allow insecure connection	off | on; default: **off**	Allow not verifying server authentication.

Certificate based: Certificate files from device	off | on; default: **off**	Specify where the certificates will be used from.
Certificate based: CA File	.ca file; default: **none**	**Certificate authority** is an entity that issues digital certificates. A digital certificate certifies the ownership of a public key by the named subject of the certificate.
Certificate based: Client certificate	.crt file; default: **none**	Certificate file is a type of digital certificate that is used by client systems to make authenticated requests to a remote server. If client certificate is not needed, leave both client certificate and client key fields empty.
Certificate based: CLient private Key	.key file; default: **none**	File containing private key for this client. This file needs to be not encrypted.
Pre-shared key based: Pre-Shared-Key	string; default: **none**	The pre-shared-key in hex format with no leading "0x".
Pre-shared key based: Identity	string; default: **none**	The identity of this client. May be used as the username depending on the server settings.
Username	string; default: **none**	Username used in authentication.
Require password	on | off; default: **off**	Enables password for authentication.
Password	string; default: **none**	Password used in authentication.

* This is additional software that can be installed from the **System → [[{{{name}}} Package Manager|Package Manager]]** page.

Collection settings

Field	Value	Description
Enabled	off | on; default: **on**	Enables data to server collection instance.
Format type	Json | custom; default: **Json**	Data collection objects formatting.
Format string	Default: **Instance name**	Specifies custom format string
Empty value	Default: **N/A**	A string which will be placed if any value cannot be received
Period	Default: **60**	Interval in seconds for collecting/sending data to destination.
Retry	off | on; default: **off**	In case of a failed attempt, retry to send the same data to destination later.
Retry count	Default: **10**	Retry to send the same data N times
Timeout	Default: **1**	Timeout in second between retry attempts

Server configuration

Field	Value	Description
Type	HTTP | MQTT; default: **HTTP**	Interval in seconds for collecting/sending data to destination.
Server address	Default: **empty**	Hostname or IP address of the broker to connect to.
HTTP headers	Default: **empty**	Allows to add custom headers to the HTTP requests.
Enable secure connection	on | off; default: **off**	Enables the use of TLS certificates.
Port	integer [0..65535]; default: **1883**	Port number for connecting to MQTT.
Keepalive	integer [1..640]; default: **60**	MQTT Keepalive period in seconds.
Topic	string; default: **none**	MQTT topic to be used for publishing the data.
Client ID	string; default: **none**	Client ID to send with the data. If empty, a random client ID will be generated
QoS	integer [0..2]; default: **0**	MQTT Quality of Service. Allowed values: • 0 - when we prefer that the message will not arrive at all rather than arrive twice, • 1 - when we want the message to arrive at least once but don't care if it arrives twice (or more), • 2 - when we want the message to arrive exactly once. A higher QoS value means a slower transfer.
Enable secure connection	off | on; default: **off**	Enables the use of TLS certificates.
On: TLS type	Certificate based | Pre-shared key based; default: **Certificate based**	Select type of TLS.
Certificate based: Allow insecure connection	off | on; default: **off**	Allow not verifying server authentication.
Certificate based: Certificate files from device	off | on; default: **off**	Specify where the certificates will be used from.
Certificate based: CA File	.ca file; default: **none**	**Certificate authority** is an entity that issues digital certificates. A digital certificate certifies the ownership of a public key by the named subject of the certificate.
Certificate based: Client Certificate	.crt file; default: **none**	Certificate file is a type of digital certificate that is used by client systems to make authenticated requests to a remote server. If client certificate is not needed, leave both client certificate and client key fields empty.
Certificate based: Client Private Key	.key file; default: **none**	File containing private key for this client. This file needs to be not encrypted.
Pre-shared key based: Pre-Shared-Key	string; default: **none**	The pre-shared-key in hex format with no leading "0x".
Pre-shared key based: Identity	string; default: **none**	The identity of this client. May be used as the username depending on the server settings.
Use credentials	off | on; default: **off**	Enables use of username and password for authentication.

On: Username	string; default: **none**	Username used in authentication.
On: Password	string; default: **none**	Password used in authentication.

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