Energy Web Server

Addendum (Fw version 3.14)
to User Manual (Fw version 3.11)

Supported Devices

Added the support for the following list of devices (data monitoring and energy storing):

- DPX³ + 4 23 890
- DMX³ + MP2.10
- DMX³ + MP4.10

Added the energy measure support to the following Green'Up devices:

059002, 059007, 058002, 059003, 059004, 059008, 059009, 059010, 059011, 059012, 059013, 059030, 059035, 059041, 059042, 059043, 059044, 059070, 059071, 058003, 058004, 058010, 058011, 058012, 058013, 058030, 058035, 058041, 058042, 058043, 058044, 059000, 059001, 059005, 059006, 058000, 058001, 059014, 059015, 059048, 059049, 058014, 058015, 058048, 058049.

Added the support for the liter unit of measure for the EMS CX³ counters.

EMS CX³

Date and time synchronization

Energy Web Server will check, each hour, the real-time clock embedded in the EMS CX³ / RS485 interface.

If the difference in time between the real-time clock of the Energy Web Server and the one on the interface is greater than ten minutes, the Energy Web Server will replace the date and time of the latter one with its own.

This feature can work together with the NTP feature of the Energy Web Server, guaranteeing that the system is always on the right time even after long power interruptions or faults of the real-time clocks.

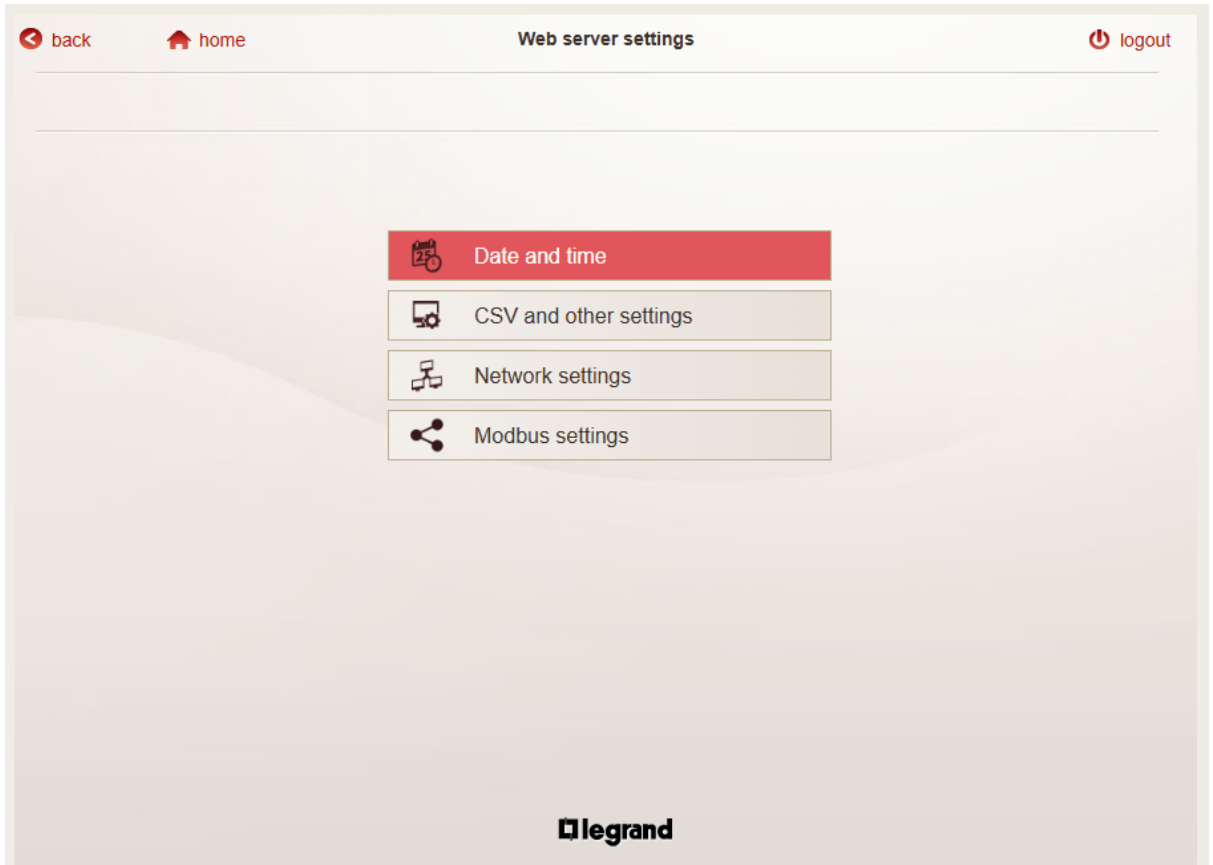To enable the date and time synchronization, the following steps are required:

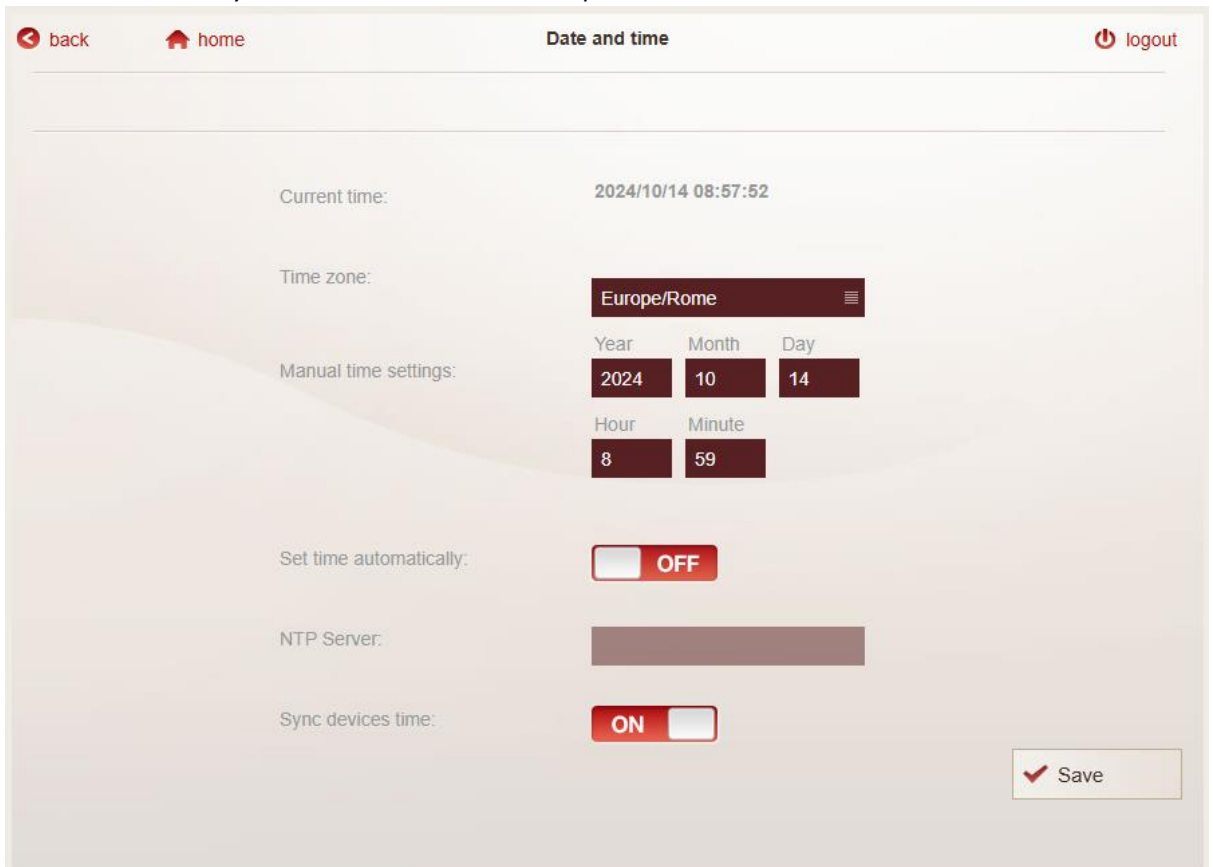1) From the home, click on "Web server configuration":
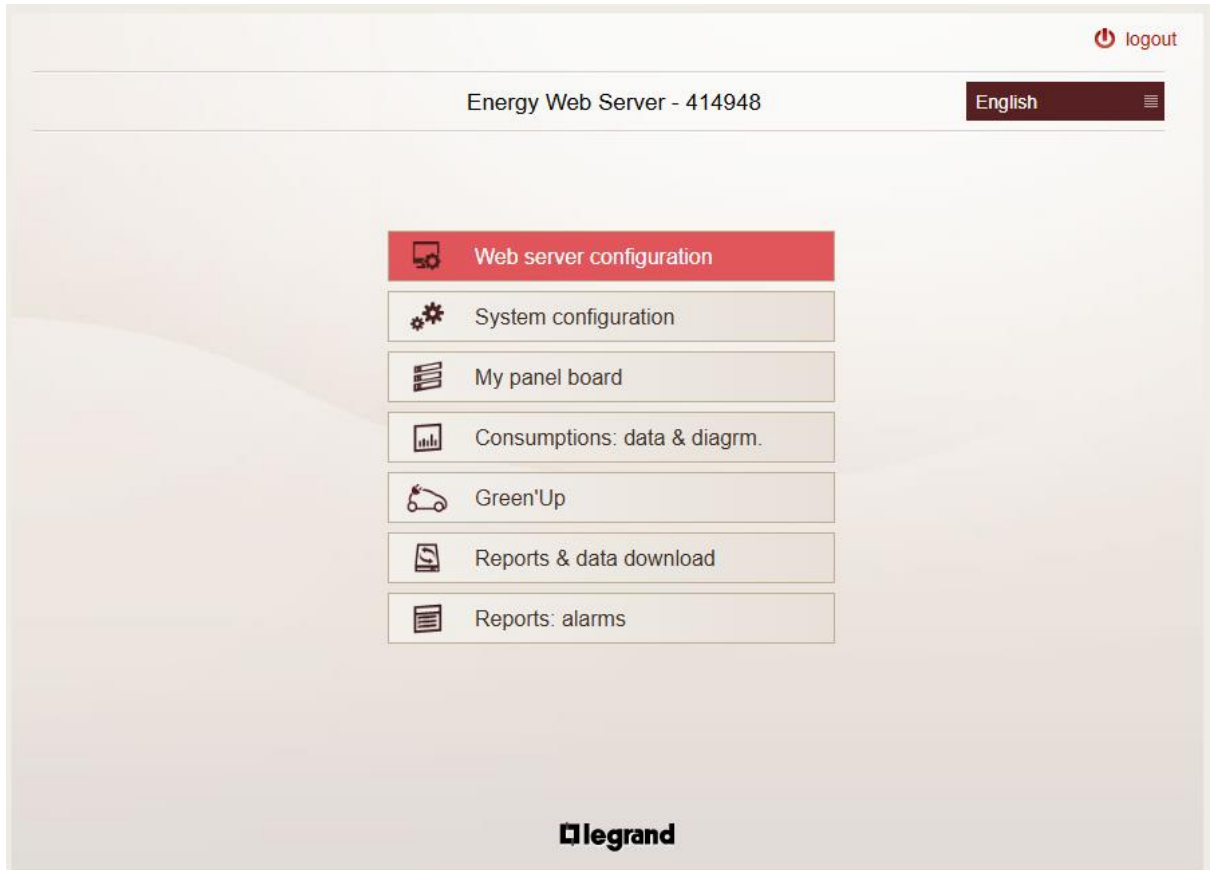
2) Then click on "Web server settings":
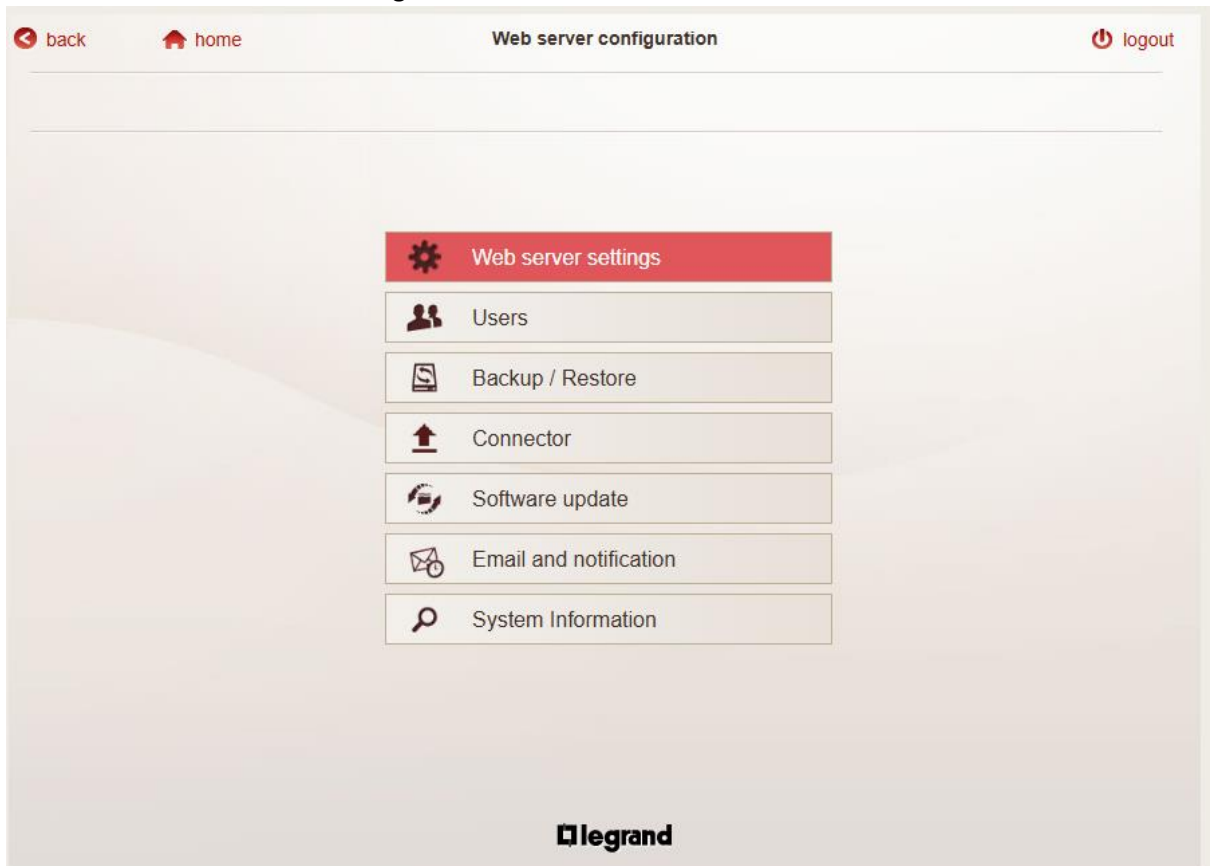
3) Then click on "Date and time":

4) Then enable the "Sync device time" feature and press "Save":

Green'UP management
DLM Improvement

Three new parameters have been introduced to improve the resilience and reliability of the DLM algorithm: Hold time (min), Waiting time (max) and Skip time (min). This allows to better manage charging stations that want to postpone their recharge procedures.

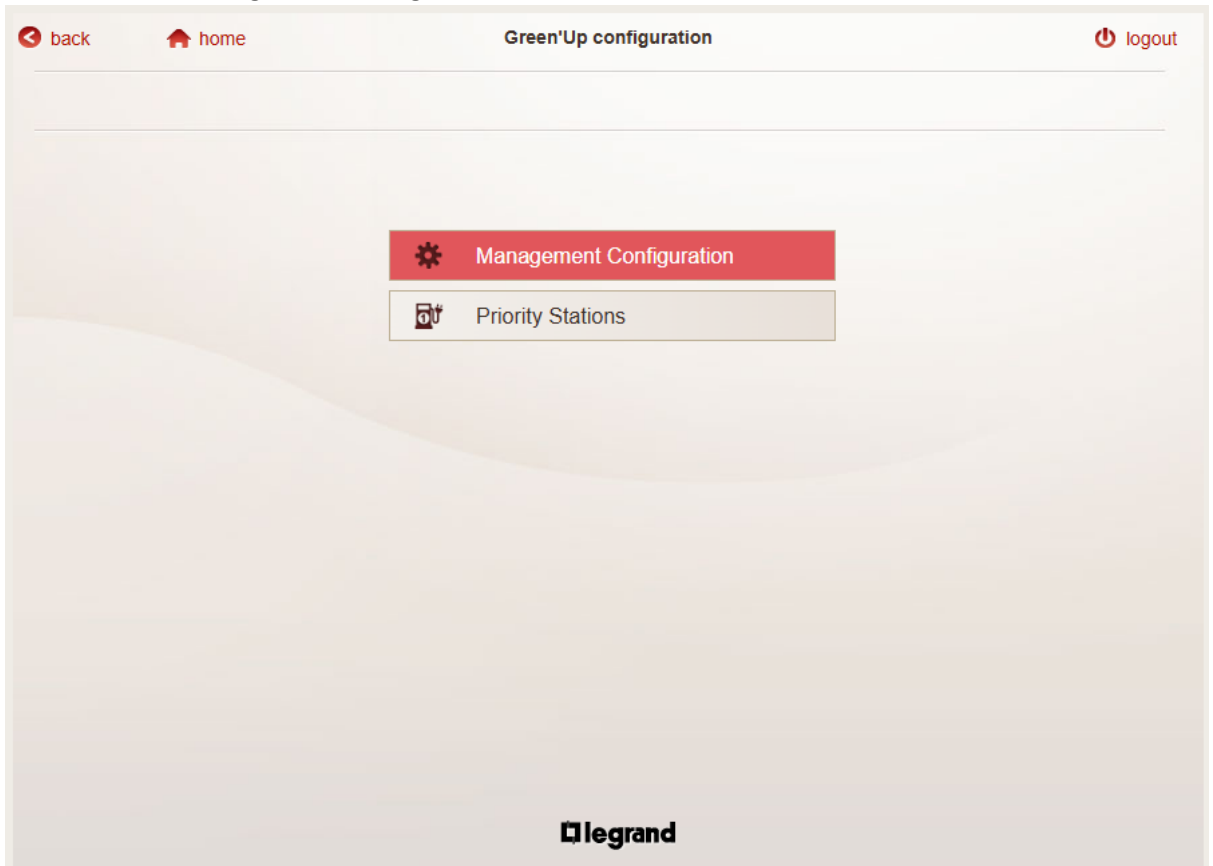These parameters can be set by following these steps:

1) From the home, click on "System configuration":
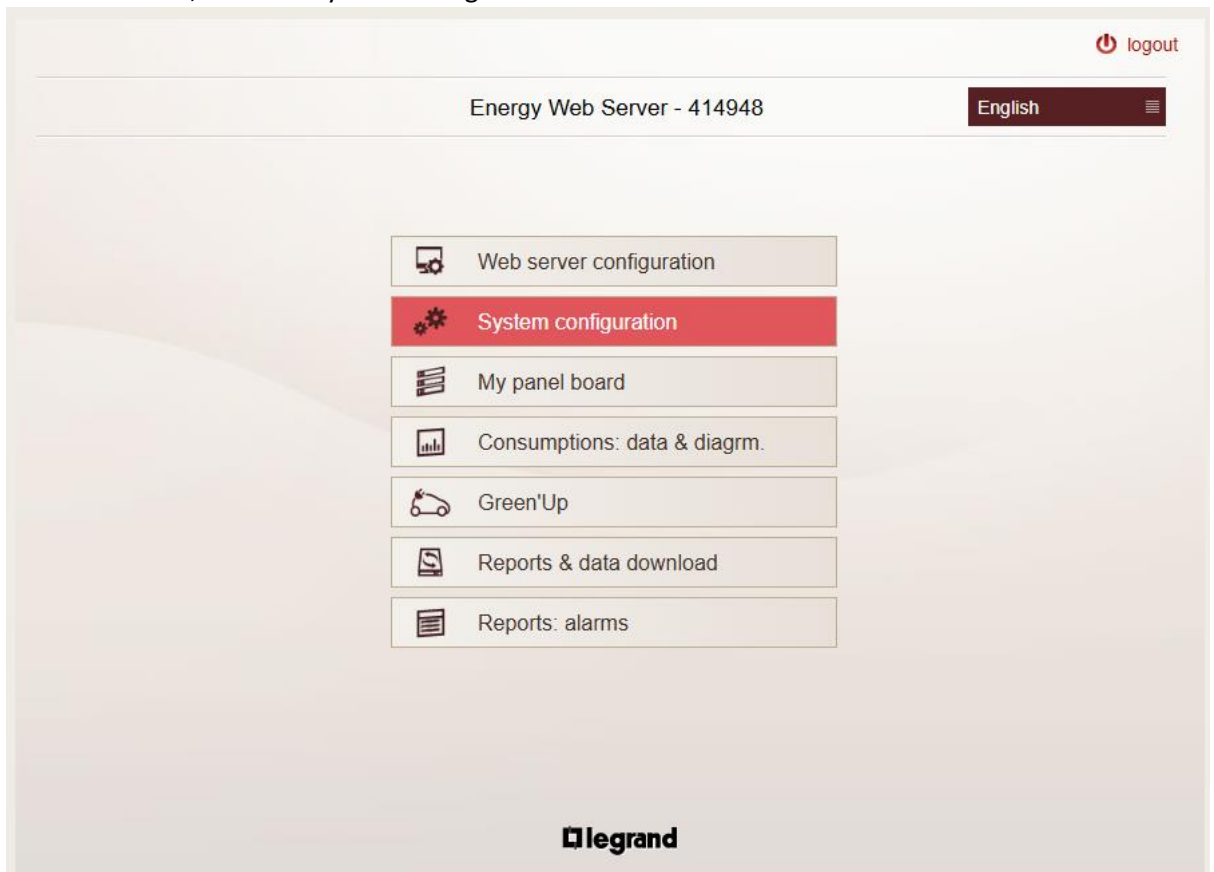
2) Then click on "Green'Up configuration":
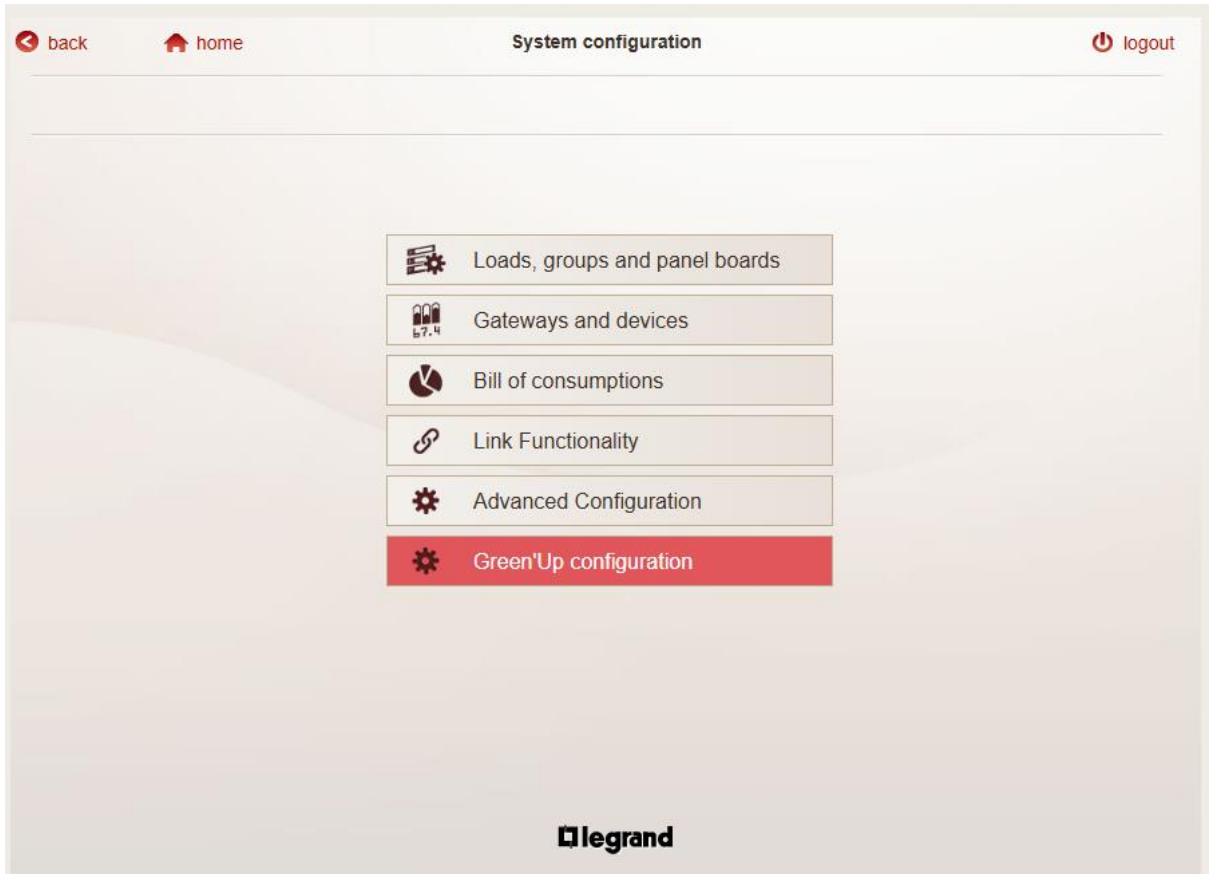
3) Then click on "Management Configuration":

4) The controls for the parameters are shown on the right. After any modification, press "Save":

back	home	Management Configuration	logout

Total power consumption meter: _____ ☰   Load control: [OFF]

Maximum current available: _____ A   Control logic: [ON]

Maximum current available for charging: _____ A

Current consumption hysteresis: 0% ☰

First current reduction step: 75% ☰   Hold time (min): 60 s

Second current reduction step: 50% ☰   Waiting time (max): 90 s

Minimum guaranteed charge quantity: 32 ☰ Ah   Skip time (min): 300 s

✔ Save

NOTE: the "Load control" switch enables/disables the checks made by the DLM algorithm on the "Maximum current available" and "Maximum current available for charging" parameters (if set to OFF, it will be assumed to have "infinite current" available for charging).
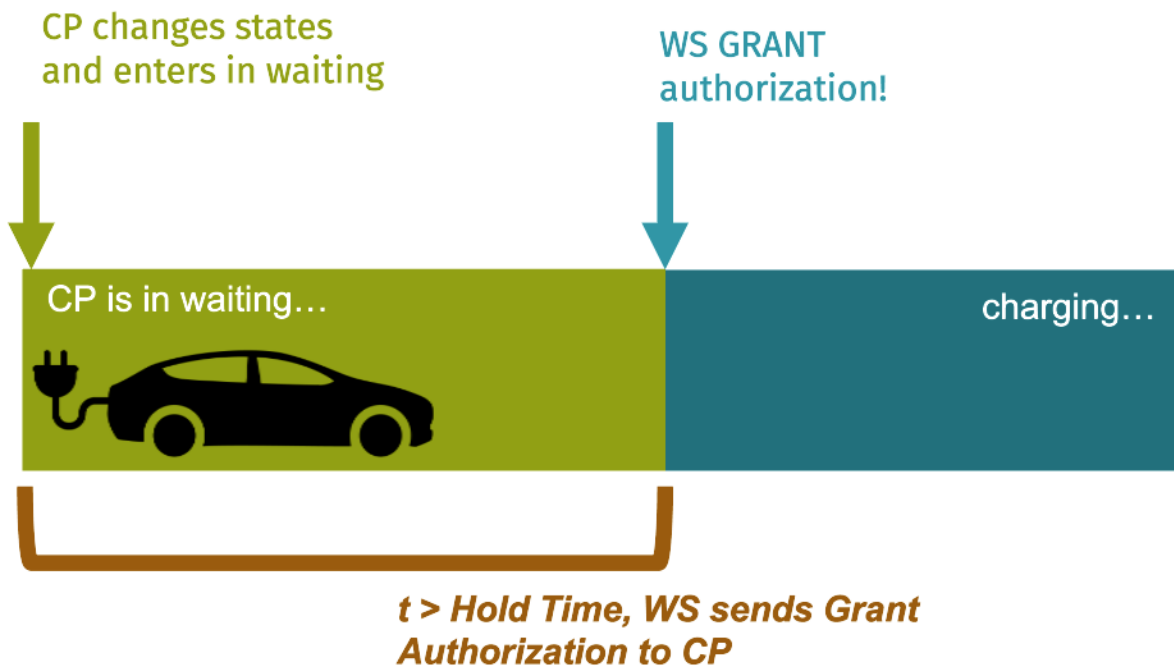
NOTE: the "Control logic" switch enables/disables the possibility of the Energy Web Server of granting/denying charging authorizations and managing the current reduction steps. This function could be useful during commissioning, in being able to test global communication.

Hold time

The hold time is the minimum time that the Energy Web Server waits before granting the authorization to a Green'Up charging station when this reports that is waiting for the charge.

It is needed to guarantee that the charging station is ready to accept the authorization, avoiding the risk of skipping it during the granting procedure.

We recommend a default value of sixty seconds.

CP changes states and enters in waiting | **WS GRANT authorization!**

CP is in waiting… | charging…

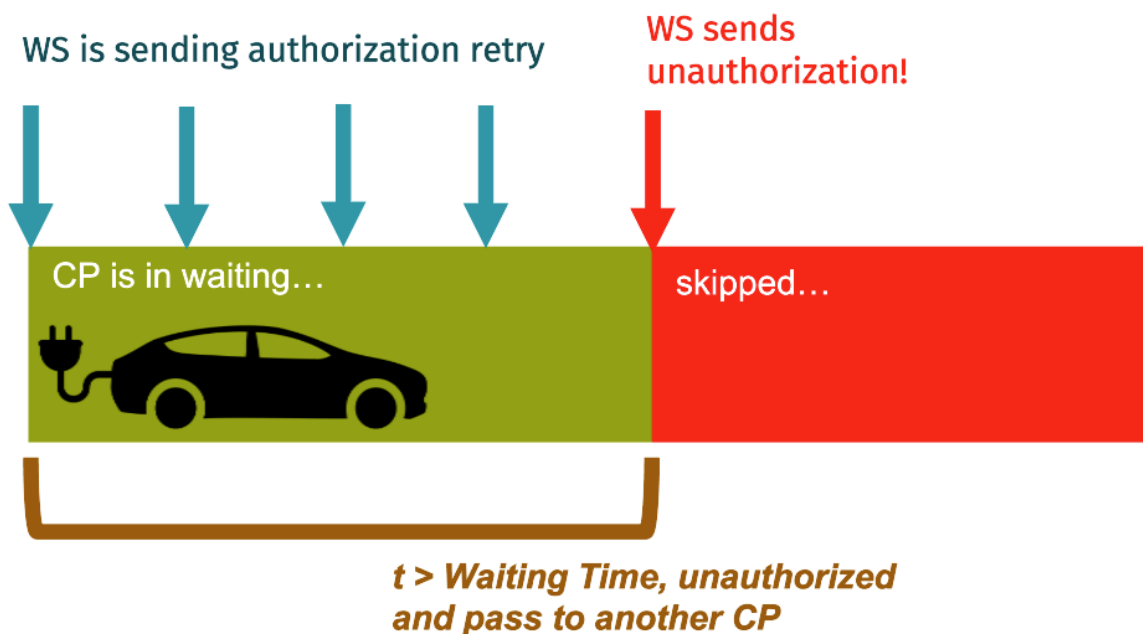*t > Hold Time, WS sends Grant Authorization to CP*

Waiting time

The waiting time is the maximum time that the Energy Web Server can continuously authorize the same Green'Up charging station.

It is needed to avoid that a car with a postponed charge blocks the granting procedure: if this threshold is exceeded, the charging station will be skipped (see next section).

We recommend a default value of ninety seconds.

WS is sending authorization retry | **WS sends unauthorization!**

CP is in waiting… | skipped…

*t > Waiting Time, unauthorized and pass to another CP*

Skip time

The skip time is the minimum time in which the Energy Web Server will ignore a Green'Up charging station that has been continuously authorized without success.

It is needed to allow the Energy Web Server to take care of other waiting charging stations if the skipped one has no intention to start the charge procedure.

We recommend a default value of three hundred seconds.
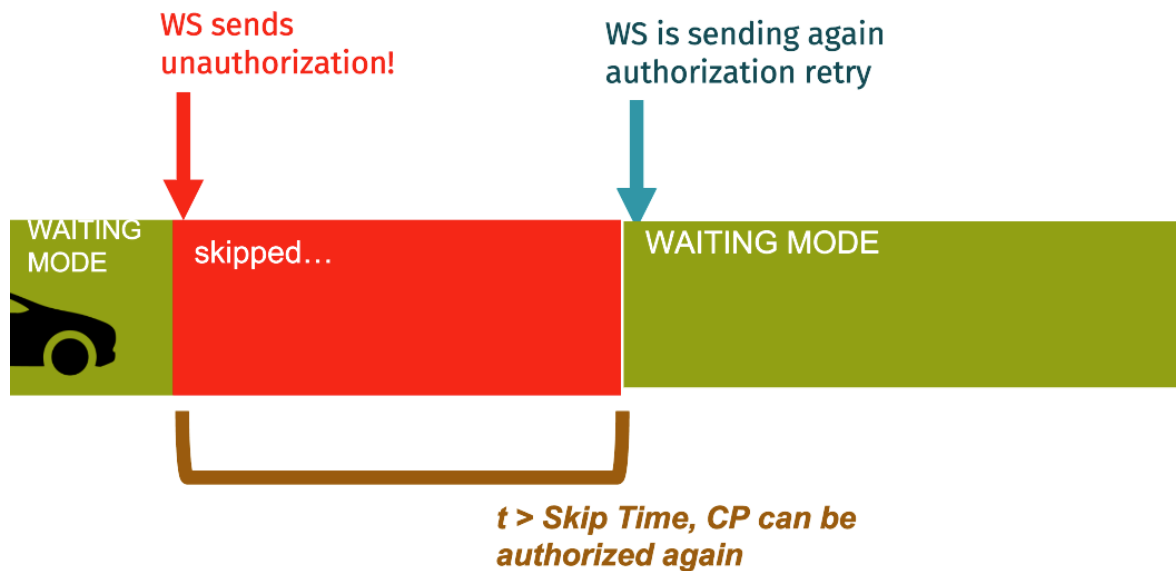

Modbus Communication

Status Poll Time

Added the possibility to fine tune the frequence of the polling procedure for the status of the breakers (open/tripped/closed) and changed its default value from 3 to 60 seconds. The user can arbitrarily set it to 3, 5, 10, 15, 30, 45, 60, 90, 120 seconds.
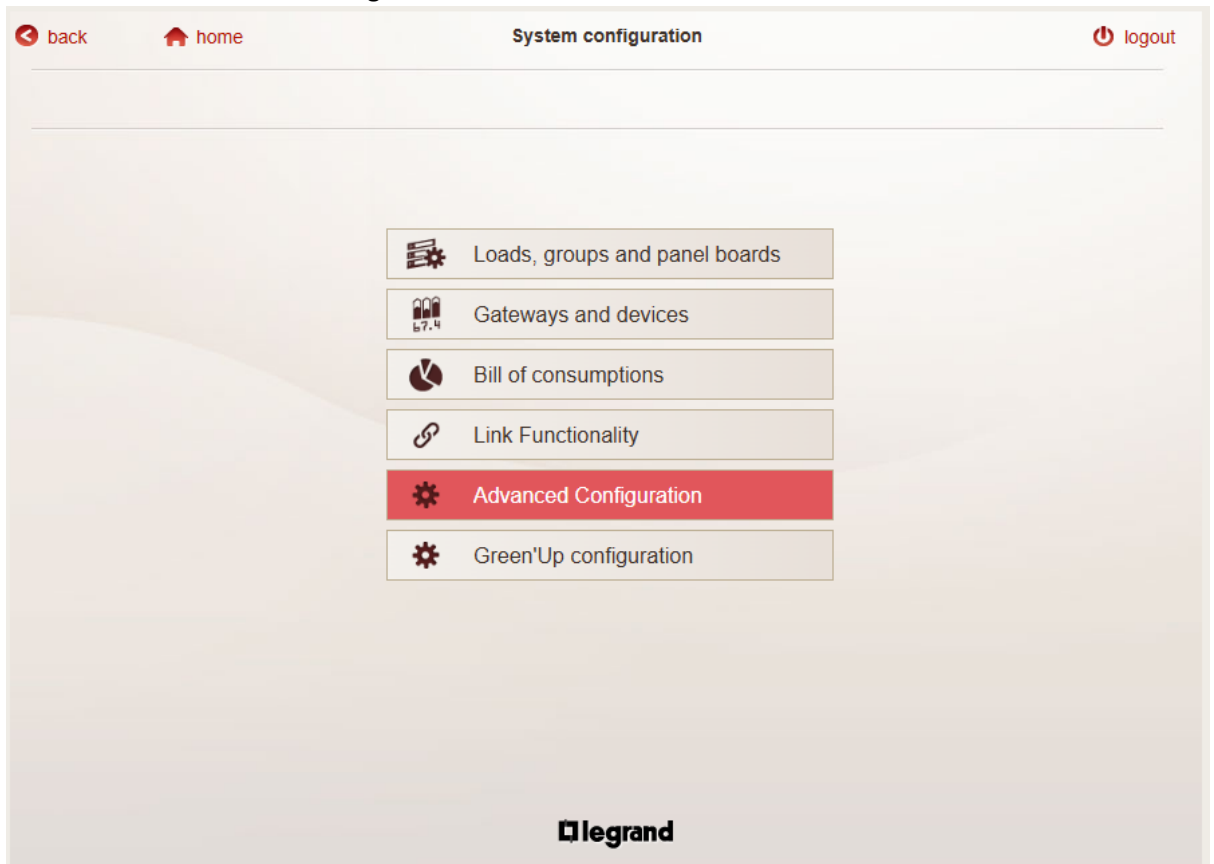
We recommend a default value of 60 seconds.
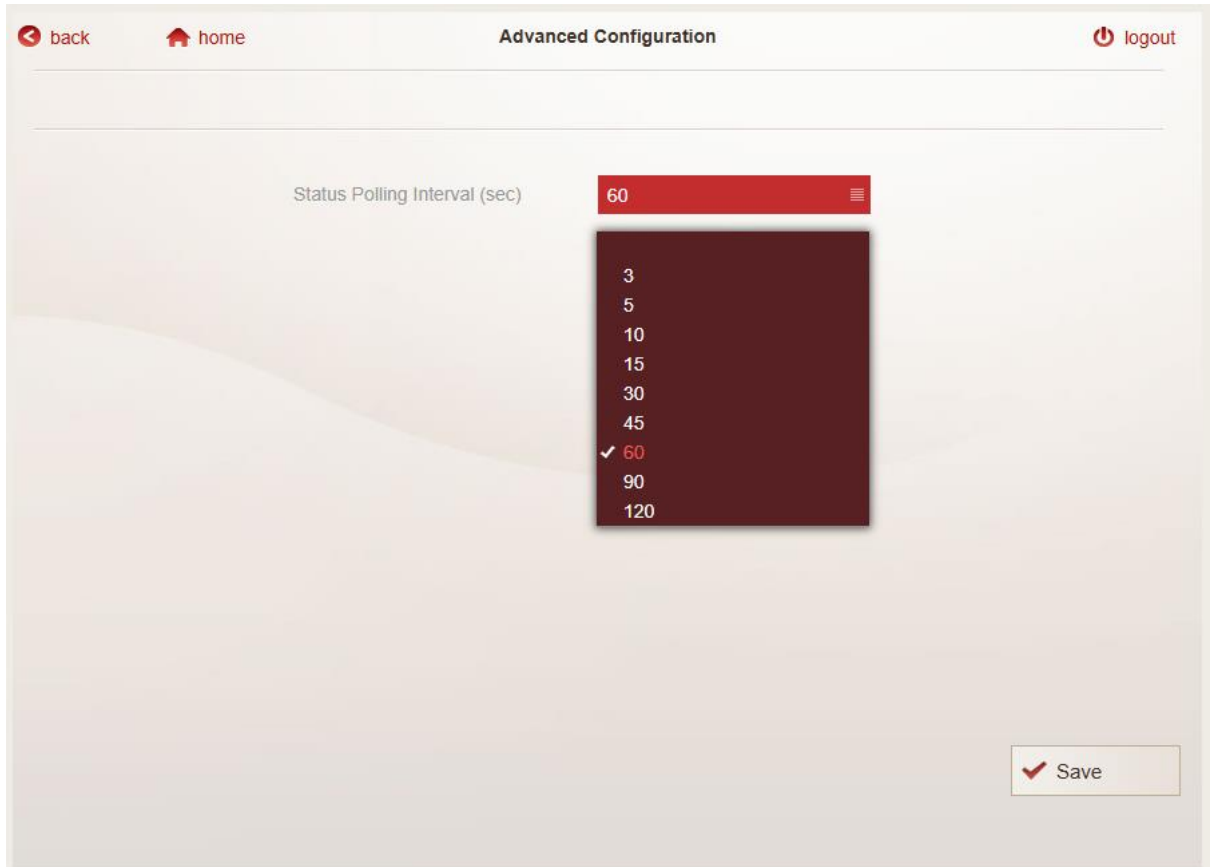
This parameter can be set by following these steps:

1. From the home, click on "System configuration":
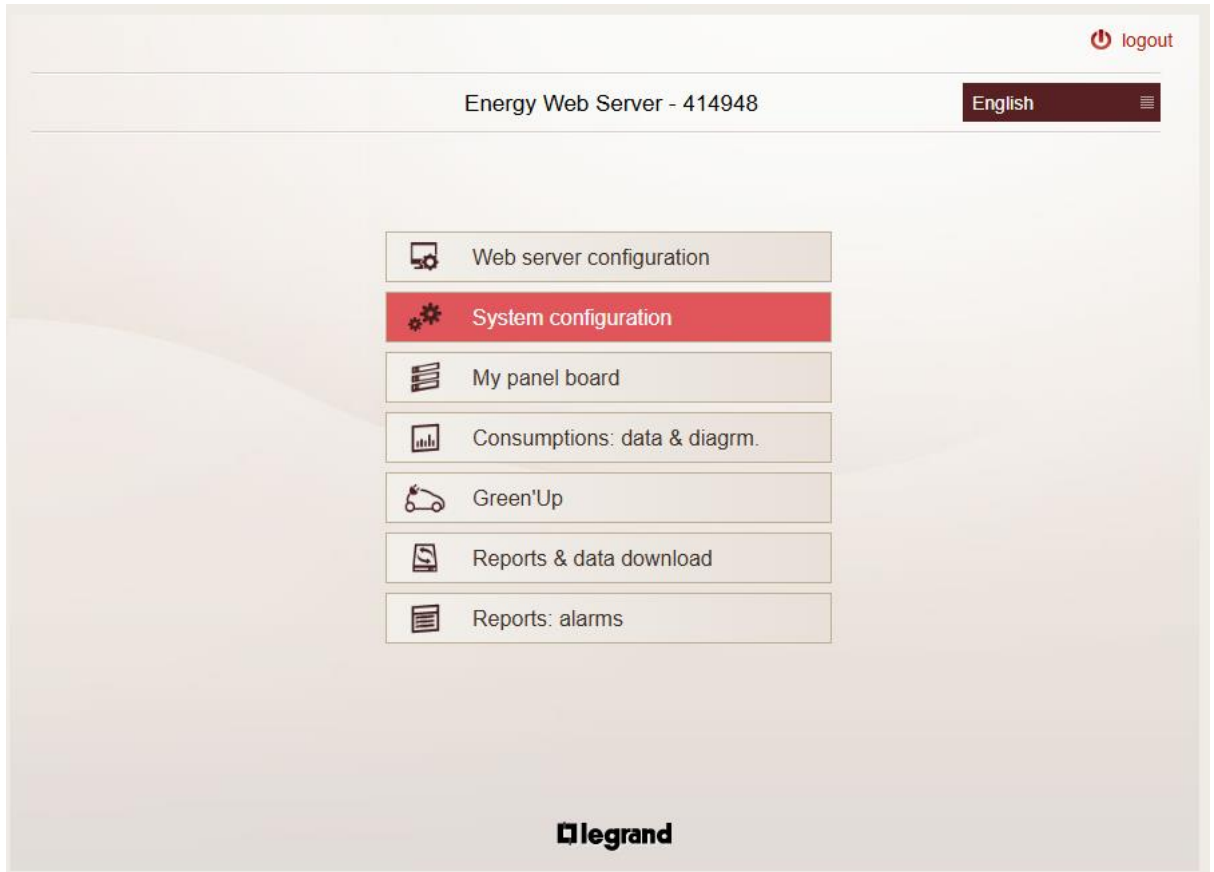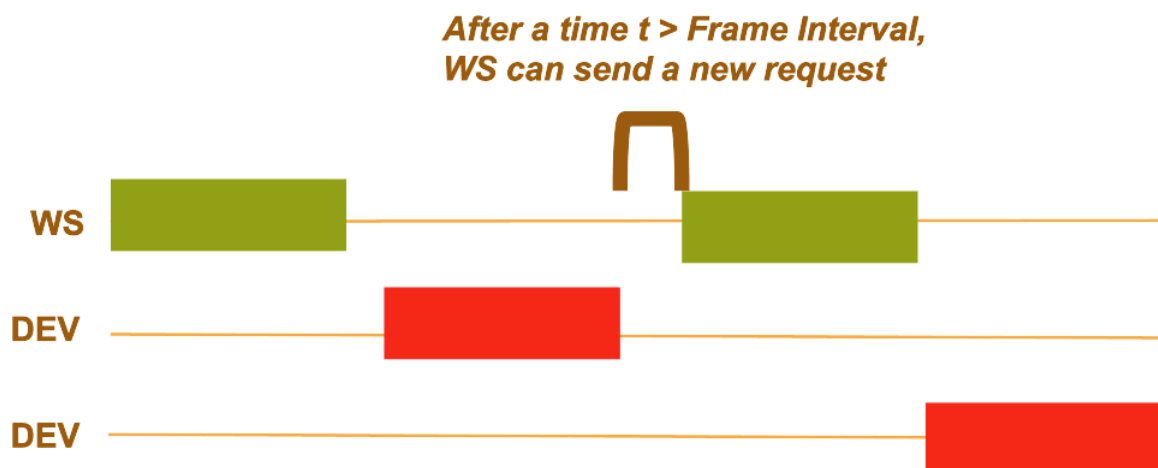

2. Then click on "Advanced Configuration":

3. The value of the parameter will be shown. After any modification, press "Save":

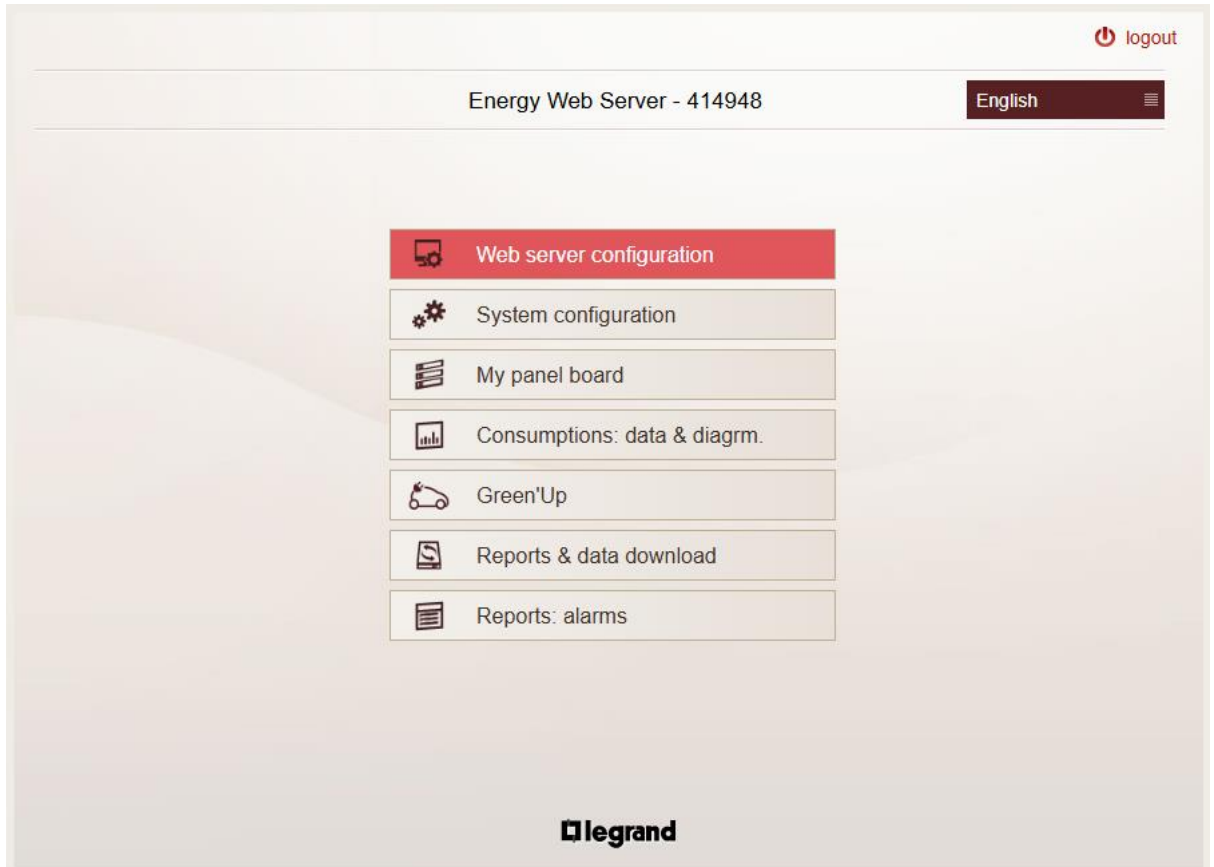
Frame Interval

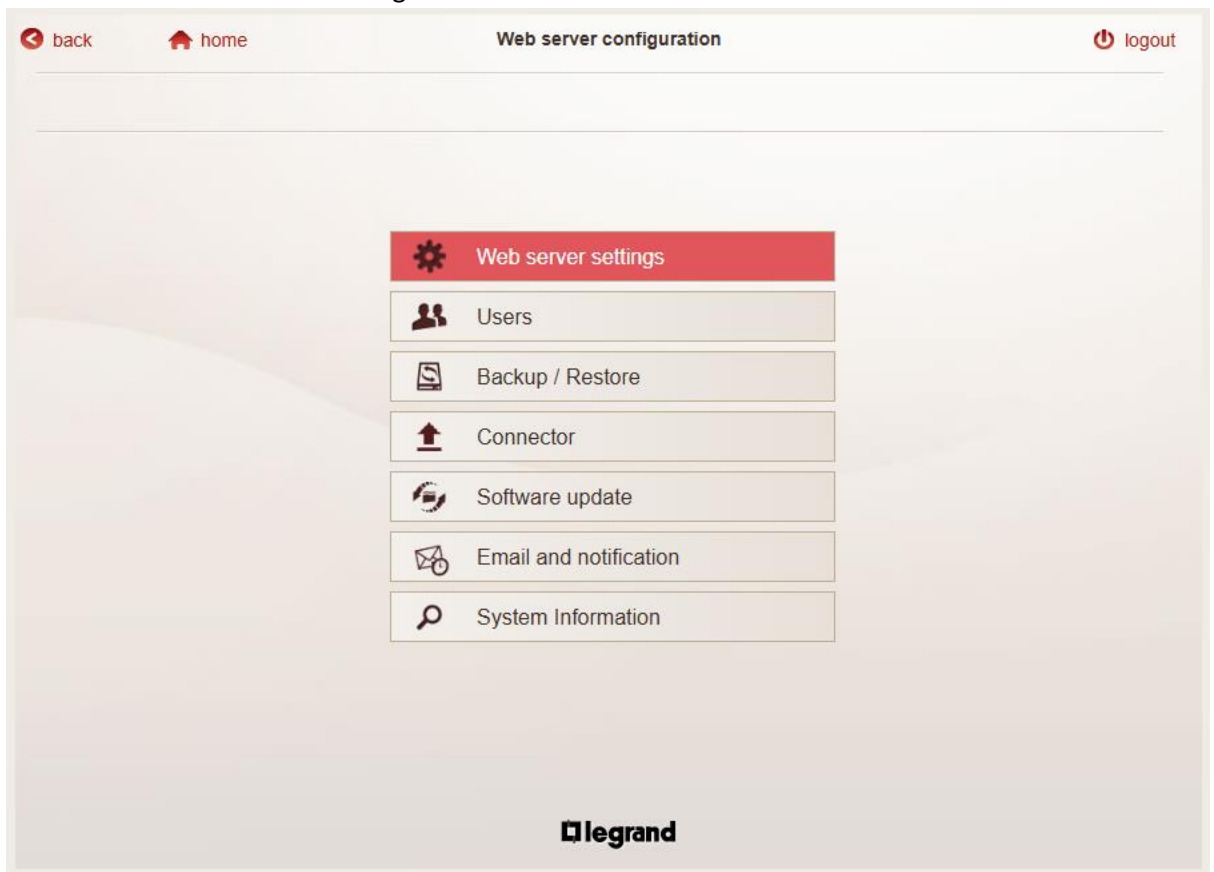Added the possibility to fine tune the quite time between a Modbus reply and the next Modbus request (default 50ms).

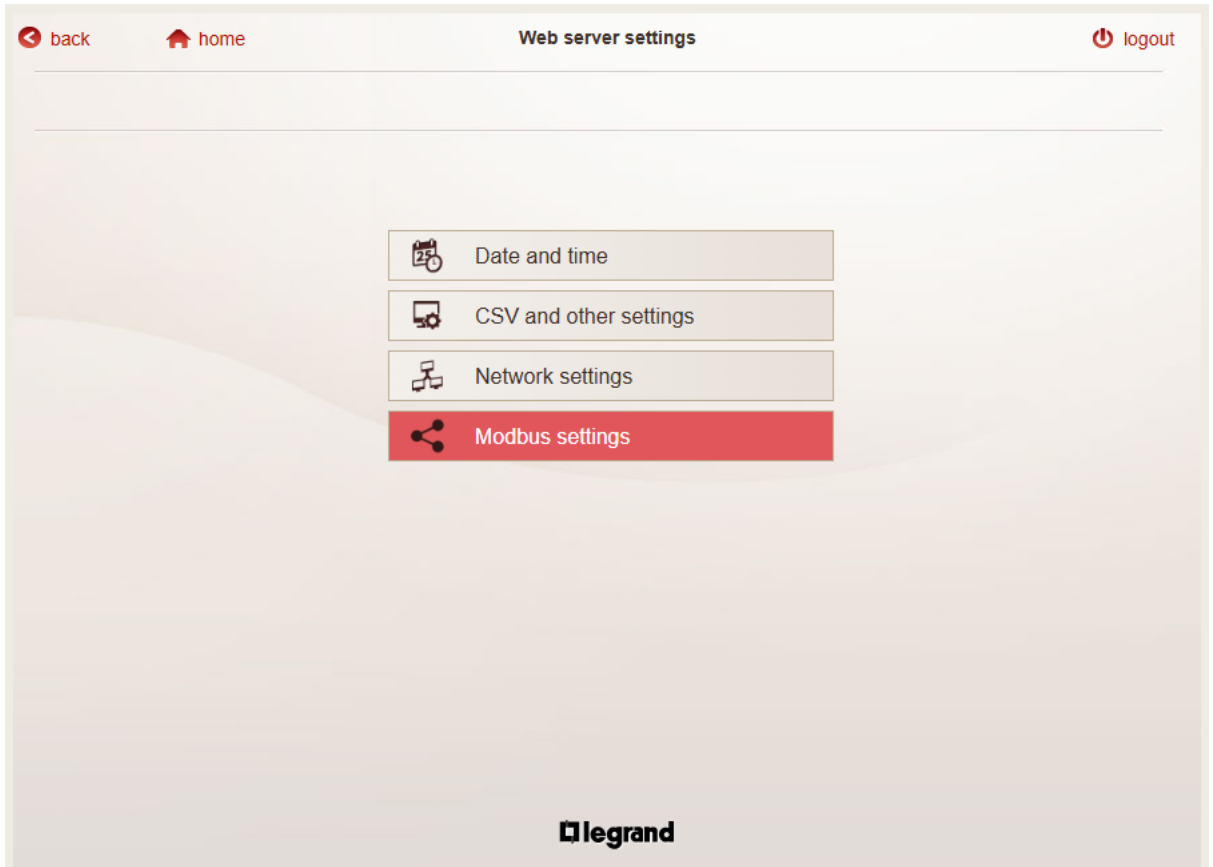This parameter can be set by following these steps:

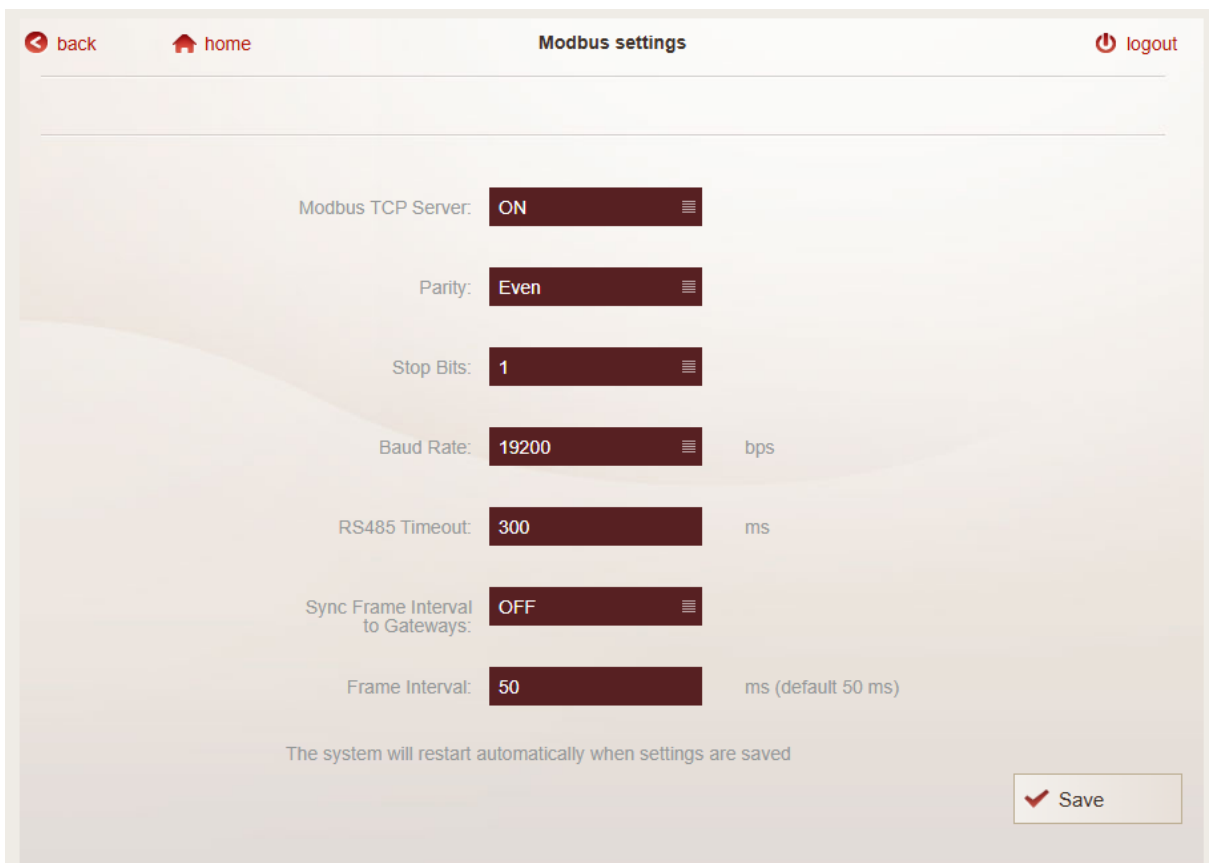1. From the home, click on "Web server configuration":

2. Then click on "Web server settings":

3. Then click on "Modbus settings":

4. The parameter can be set in the bottom part of the page. After any modification, press "Save":

It has been added the possibility to automatically synchronize this frame interval value on each our Modbus/TCP supported gateways configured in the Energy Web Server. It is enabled by default, and it is recommended to turn off this feature when using third part gateways.

This improvement allows to keep the frame interval parameter set on our Modbus/TCP supported gateways (included the local one on Energy Web Server 10/32 points of measure versions) consistent with:

- what the user sets for this parameter on the master Energy Web Server
- which devices are present under that specific gateway.

This allows a better management of the Green'Up charging stations (devices that require a carefully set of this parameter), improving the reliability of their communications with the Energy Web Server without asking the user for an extra effort.

The value for the frame interval on a specific gateway, if this feature is enabled and no Green'Up charging stations are set on that gateway, will be the maximum between 50ms and the value set by the user in the "Modbus Settings" page.

The value for the frame interval on a specific gateway, if this feature is enabled and at least one Green'Up charging station is set on that gateway, will be the maximum between 200ms and the value set by the user in the "Modbus Settings" page.

To enable this feature, in the "Modbus Settings" page, select "ON" for "Sync Frame Interval to Gateways" and press "Save":