



# WEBLOG 250 V2

Web-enabled M-Bus data logger



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### 1. Introduction

This manual describes how to set up and operate the devices in the WebLog family. The WebLog250 V2 is M-Bus data loggers with web server functionality. Up to 250 meters (= standard loads á 1.5mA) can be connected directly to the internal M-Bus level converter. The devices can manage and read out a total of up to 1000 devices if corresponding M-Bus repeaters (PW100 / PW250) are used as an extension.

The integrated web server enables complete set-up and operation via the network interface (LAN) or the optional WLAN module with a web browser. No additional software is required. Alternatively, the WebLog250 can also be set up and operated via the display with the touchscreen. Access to the Internet can be realised via LAN or WLAN using an additional DSL or mobile router. Access to the WebLog via the Internet generally requires a port forward or VPN connection.

The device offers structured user management with various access rights, from administrators to tenants who can only read their own meters.

Further features:

- M-Bus data centre for 250 end devices
- Integrated ARM-NXP i.MX 8M CPU (1.6GHz, Quad-Core) with 1GB RAM and 4GB eMMC-Flash
- Operation via integrated 7" colour touchscreen (WebLog250 only) or a web browser
- Hierarchical access management (administrator, meter reader, tenant)
- M-Bus remote meter display and data logger
- Automatic export of data to USB memory stick, FTP server or by e-mail
- Various export formats (CSV, XLSX or XML)
- Extensive range of interfaces (RS232, USB device, USB master, Ethernet, opt. WLAN)

Principle representation:



## 2. Data of the WebLog variants in comparison

Feature	WebLog250
Operating voltage	110 to 240 VAC, 47 to 63 Hz
Power consumption	max. 100W
Temperature range	0 .. 45°C
M-Bus voltage	42 V (mark without load)
Number of M-Bus meters	250
M-Bus quiescent current	max. 375 mA
Overcurrent threshold	500 mA
Housing	Light grey ABS plastic Protection class IP52 H x W x D: 264 x 234 x 86 mm Wall mounting, optional top-hat rail
LED status indicators	Front: 4 pieces Circuit board: 5 pieces
CPU and memory	integrated ARM-NXP i.MX 8M CPU (1.6GHz, Quad-Core) with 1GB RAM and 4GB eMMC Flash. The log database uses upto 750 MB of this.
Display	7" LED display with capacitive touch, 1024 x 600 pixels
Interfaces	1 x 10/100 Mbit Ethernet 2 x USB host, 1 x USB device, RS232C,  <b>optional:</b> WLAN

## 3. Operating instructions

### 3.1 Administrator mode

After the supply voltage is applied, the WebLog loads its operating system and starts the application programme. The WebLog can be operated via the touchscreen on the device (WebLog250 only) or via a web browser (e.g. Firefox) with HTTP or HTTPS protocol via the network. The two user interfaces are almost identical. Once the network configuration has been set, any PC from the network can establish a connection to the WebLog via the set IP address.

To operate and set up the device via the Ethernet interface, connect your PC to the Ethernet interface of the WebLog250 in a 1:1 connection with a network cable for the initial setup. For easy configuration, the WebLog provides a so-called Link-Local IP address, which you can use to access the device in the local network or directly in a 1:1 connection. Start the browser on your PC and enter this IP address in the address line of the browser:

<https://weblog250-SN.local> or <https://weblog120-SN.local> (SN  
= 5-digit serial number of the device)

As an example for the WebLog250 with serial number 10002: <https://weblog250-10002.local>

The WebLog250 displays the serial number (SN) and a user-definable name (ID) on the login screen.

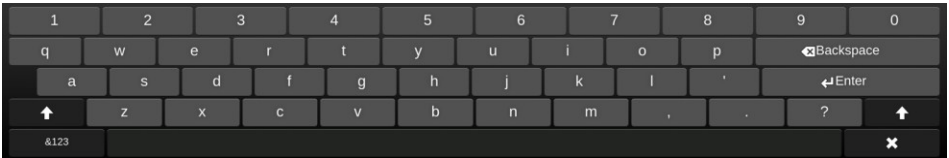


In the browser, enter the administrator password here and click on Log in. If you are working on the WebLog 250 screen, tap in the corresponding input field on the touchscreen and then enter the administrator password using the virtual input keyboard that opens and then click on the "Log in" button.

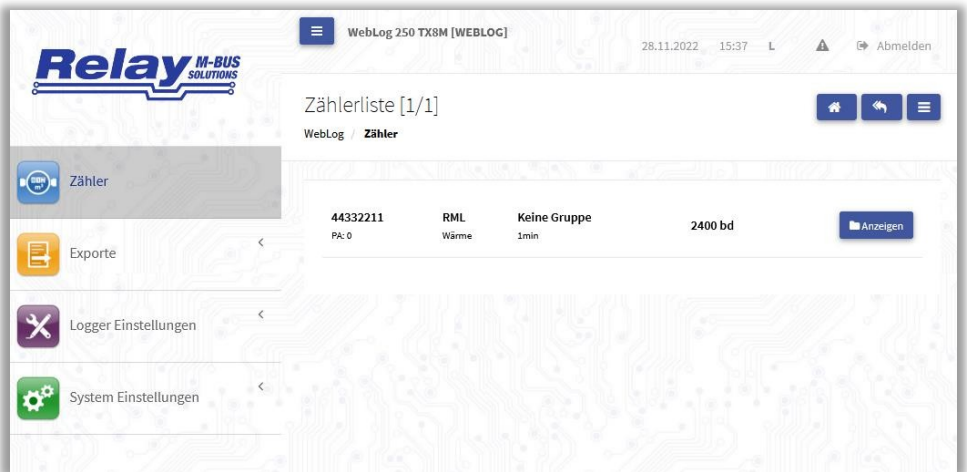
The password is preset at the factory as follows:

**00001767**

If you operate the WebLog 250 via the touch display, a virtual keyboard for entering the password appears after you have tapped in the input field. To switch the keyboard to upper case letters, press the **⇧** button. If required, you can switch to a second level of the virtual keyboard by tapping the **&123** button. This level essentially contains the numbers and other special characters. The backspace key is located on both levels in the top right-hand corner of the keypad. The input on the virtual keyboard of the touchscreen is confirmed with the Enter key **↵** or cancelled with the **✖** key.



The WebLog then initiates the password check. After successfully logging in, the administrator is taken to the main menu. It serves as the starting point for accessing the four main menu items: Counters, Exports, Logger and System Settings.



The most important controls for operating the interface are shown in the following graphic:



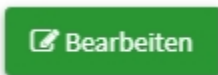
The context menu offers further actions / menu items depending on the active menu.

Attention, if the user does not make any more entries for 5 minutes, an automatic logout takes place for security reasons! After a further waiting period, the WebLog250 screen is switched off completely. A new login can then only be initiated by tapping the black screen.

### 3.1.1 Important system settings



Important system settings should now be made during the initial installation. To do this, use the "System settings" button to switch to the corresponding submenu.



**Note:** As a rule, you must first click on the Click "Edit" to be able to edit the settings!





Firstly, the network configuration is carried out so that the WebLog can be integrated into a network and export destinations for the logged data are available via FTP or e-mail.

Netzwerk

WebLog / System Einstellungen / Netzwerk

Netzwerkeinstellungen

Test Bearbeiten

**Netzwerk**

**Betriebsmodus:**  
Dynamisch (DHCP)

**IP-Adresse:**  
192.168.1.127

**Subnetzmaske:**  
255.255.255.0

**Gateway:**  
192.168.1.254

With wired Ethernet (RJ45 socket), a fixed IP address or address assignment by a DHCP server can be selected. A fixed IP address assigned by the network administrator is advantageous. The WebLog can then always be accessed via a web browser using the same known IP address (e.g. the URL address for the above setting is: <https://192.168.1.127>).

In most cases, the gateway address must be set to the IP address of the DSL router. Access to the WebLog can then be made possible from outside using Port Forward in the router. The entry "Nameserver" is set to the IP address of a DNS server. It is usually sufficient to enter the IP address of the router here.

DNS

**Domain:**

**Nameserver:**  
192.168.1.88

You can test the network connection by pressing the "Test" button. This involves a ping test to the preset website [www.relay.de](http://www.relay.de) or a host name or IP address of your choice.



Optionally, the WebLog can be equipped with a WLAN module, which must then be configured in the "Wireless" area. Here, we recommend first setting the operating mode to DHCP and configuring it with the "SCAN" to search for available WiFi networks. Then select a WLAN access point (AP) from the list and enter the password. The other fields correspond to the network configuration described above.

**Drahtlos**

Netzwerkname (SSID):  Scan

Netzwerkpasswort:

Betriebsmodus:

IP-Adresse:

Subnetzmaske:

Gateway:



The "Information" menu item provides information about the firmware version used, the network configuration and the internal memory for the M-Bus database.

**Systeminformationen**

WebLog System Einstellungen Systeminformationen

Log Einträge: 0

Verfügbare Speicherplatz: 1416 MB

WLAN Signalauslast: 0 %

**Netzwerk**

IP-Adresse: 192.168.1.27  
Netzwerkmaske: 255.255.255.0  
Gateway: 192.168.1.254  
MAC-Adresse: 00:C6:BB:CF:38

**Drahtlos**

IP-Adresse:  
Netzwerkmaske:  
Netzwerkname:

**System**

System-Version: 4.3.8\_20221126175422  
Anwendungs-Version: R4-4.1.4-20221128\_221518  
Seriennummer: 10002

The time of the internal clock of the WebLog should now be set:



The "Date and time" button leads to the time setting, the exact setting of which is important for the log and export times of the WebLog.

The screenshot shows the 'Datum und Uhrzeit' (Date and Time) settings page. At the top, there are navigation buttons for 'Home' and 'Back'. Below the title, there is a breadcrumb trail: 'WebLog / System Einstellungen / Datum und Uhrzeit'. A green 'Bearbeiten' (Edit) button is in the top right corner.

The settings are divided into two main sections:

- Automatische Einstellung (Automatic Setting):**
  - Datum und Uhrzeit automatisch beziehen. (Erfordert Netzwerkverbindung):
  - Zeitserver 1: 0.europe.pool.ntp.org
  - Zeitserver 2: 1.europe.pool.ntp.org
  - Zeitserver 3: 2.europe.pool.ntp.org
- Manuelle Einstellung (Manual Setting):**
  - Datum: 11/30/2022
  - Zeit: 15 : 47 : 22
  - Zeitzonen: GMT+0100: Amsterdam, Berlin, Bern, Rome, Stockholm, Vi...

If "Obtain time and date automatically" is ticked, the WebLog clock is synchronised once a day with the clock of a time server on the Internet. The three preset time servers can be changed if, for example, you are operating the device in a network with its own time server. The button "Save" saves the time settings.

### 3.1.2 Important logger settings

Before the automatic meter search is carried out with the WebLog, the M-Bus baud rate should be set. Can be cancelled. To do this, use the "Back" or "Home" button to navigate back to the main menu.



The "Logger settings" button takes you to the menu of the same name, which takes you to the M-Bus basic settings. From here, you can also branch to user administration or to create the M-Bus log intervals.

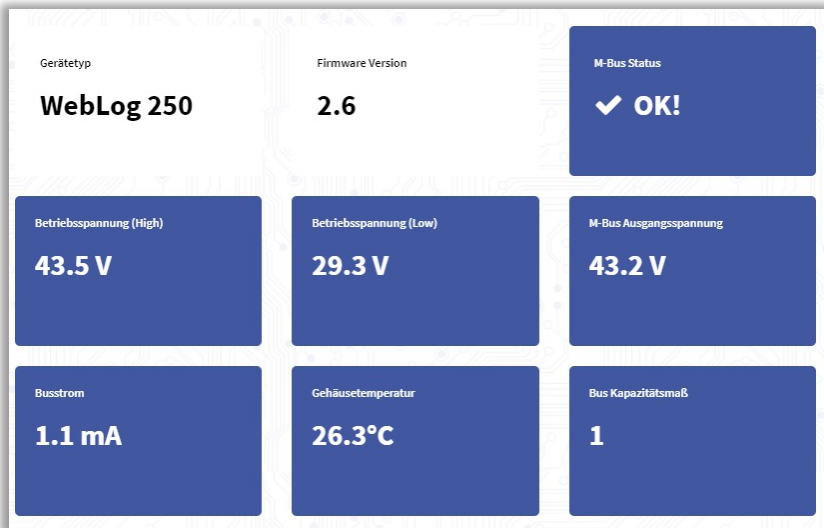


The "M-Bus settings" button takes you to the setting for the serial M-Bus interface and the global definition of the M-Bus base units:

The *logger ID* serves as the system identifier and for labelling the export files. The *master interface* for the internal M-Bus level converter is "/dev/ttymx1". The *standard baud rate* of an M-Bus meter is generally 2400 baud. Some older meters can only communicate at 300 baud. There are also meters that can also communicate at 9600 baud. Please note, however, that selecting a high baud rate can considerably limit the range of the M-Bus installation. Several *search baud rates* can be selected. The *master waiting time* is the time in milliseconds that the master waits for a meter response. The *collision wait time specifies* the time in milliseconds that the master waits in the event of a detected parity or break error (collision) before communicating with the meters again. There is also a global setting option for the *M-Bus units* to be output so that the export data can be further processed without conversion. The "Source" unit passes on the unit specified by the meter. Save saves the settings made.



The "M-Bus Info" button shows, among other things, an overview of the M-Bus voltages. The bus current should correspond approximately to the number of meters multiplied by a standard load (1.5 mA). Warning current or overcurrent is displayed in addition to the LEDs in the "M-Bus status" field.



### 3.1.3 Meter search

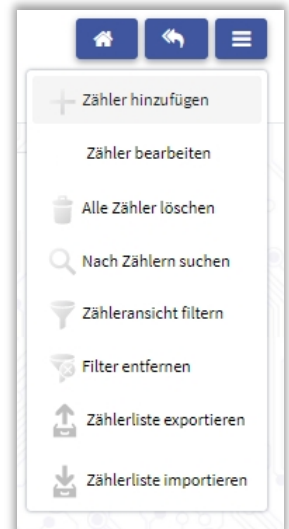



From the main menu, the "Meter" button takes you to the M-Bus meter list. This does not yet contain any entries during the initial installation. The administrator should first start an automatic meter search. Meters that are not found can be added later.



After pressing the menu button in the top right-hand corner of the screen, a context menu opens. The "Search for counters" entry leads to the automatic counter search.

Before the search, you can select whether to search for secondary or primary addresses. A fast search and an intensive search with more repetitions and more tolerant timing (slower but more promising, especially for extensive M-Bus networks with many meters) are available for both methods.



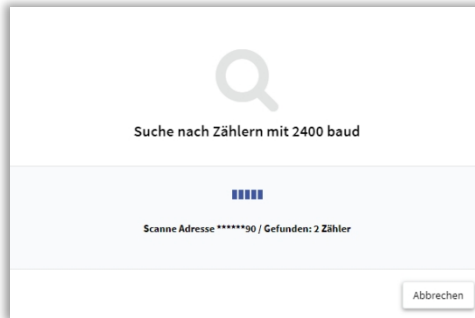


Wie soll gesucht werden?

- Primäradressen (schnell)
- Primäradressen (intensiv)
- Sekundäradressen (schnell)
- Sekundäradressen (intensiv)

If the installed M-Bus meters have not been programmed with a unique primary address, a secondary address search must be carried out.

The progress of the meter search is displayed in a window.



Once the meter search is complete, all meters found are entered in the meter table. Meters found during a secondary address search are assigned the primary address (PA) 0. The first column contains the 8-digit ID (part of the secondary address) and the primary address. This is followed by a column with the manufacturer code (MAN) and the medium (device type). The third column shows any affiliation to a group of meters and the log interval. The fourth column is initially empty for new meters, but displays two freely editable text fields Text1 and Text2. The far right column provides information about the M-Bus baud rate of the meters and any additionally activated M-Bus commands:

N: SND-NKE activated

A: Application reset activated

Zählerliste [19/19]

WebLog / Zähler

01282040 PA: 0	LUG Wärme	Keine Gruppe DEAKTIVERT	Text 1 Text 2	2400 bd N, A	Anzeigen
12345670 PA: 0	REL Gas	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen
13061190 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen
00101390 PA: 0	SVM Wärme	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen
05000101 PA: 0	NZR Wasser	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen
00358501 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen
12345671 PA: 0	REL Warmwasser	Keine Gruppe DEAKTIVERT		2400 bd	Anzeigen

The counter list can be scrolled through as usual using the web browser. The same applies to the touch display of the WebLog250, e.g. by clicking and then moving your finger up or down.

Clicking on the "Show" button opens a detailed view of the selected meter with the index cards "Parameters" and "Values". The parameters can be edited by clicking on the "Edit counter" button. Under Parameters, texts can be entered in the "Text 1" and "Text 2" fields to describe the meter in more detail. In the "Group" selection field, for example, the affiliation to a tenant can be defined. A created log interval can be selected under Log interval. The selection fields "SND\_NKE" and "Application reset" define whether a corresponding command is sent to the meter before the readout. In the case of multi-telegram meters, this ensures that the base telegram is available for the next readout. "Save" writes the changed settings to the configuration database. The "Delete" button can be used to remove the meter from the meter list.

The screenshot shows the configuration page for meter 'Zähler 01282040'. The page is titled 'Parameter' and contains several input fields and dropdown menus. At the top right, there are buttons for 'Zähler bearbeiten' (green) and 'Löschen' (red). The parameters are organized into two columns:

- Left Column:**
  - Primäradresse: 0
  - Version: 2
  - Medium: Wärme (dropdown)
  - Baud: 2400 (dropdown)
  - Gruppe: --- (dropdown)
  - Text 1: Text 1
  - Text 2: Text 2
- Right Column:**
  - ID: 01282040
  - Hersteller: LUG
  - SND\_NKE: Ja (dropdown)
  - Application Reset: Ja (dropdown)
  - Logintervall: DEAKTIVIERT (dropdown)

At the bottom left, there is a 'Werte' button, and at the bottom right, there is a 'Lese Werte' button (green).

**Attention:** The variables are only changed in the WebLog counter list. There is no programming of variables such as the primary address, the baud rate or the medium in the counters themselves!

Selecting the values tab and pressing the "Read values" button provides a current readout of the meter's data records.

Werte
▶ Lese Werte

Name	Wert	Einheit
Energie	40	kWh
Datum	2000-12-31 00:00:00	
Durchflussmenge	0	m <sup>3</sup> /h
Rücklauftemperatur	0	C
Temperaturdifferenz	0	K
Leistung	0	kW
Volumen	0.7	m <sup>3</sup>
Betriebsdauer	0	h
M-Bus Status	0x10	
Rohtelegramm	68 3D 3D 68 08 00 72 33 67 20 64 68 50 25 04 E4 10 00 00 0C 07 04 00 00 00 4C 07 00 00 00 00 02 6C 1F 0C 0B 3D 00 00 00 0A 5F 00 00 0B 61 00 00 00 0C 2D 00 00 00 00 0C 15 07 00 00 00 02 26 00 00 16 16	

### 3.1.4 Filter counter view

There is often a desire to reduce the meter list to a selection of meters that fulfil certain criteria. Possible selection criteria are e.g:

- Meter type (e.g. electric meter)
- Meters from a specific manufacturer
- Counter of a specific primary address range



To do this, select the "Filter meter view" entry in the context menu of the meter list. Up to four selection criteria can then be created line by line in the mask displayed. The example shows a filter for electric meters.



Filter Bearbeiten

WebLog / Zähler / Filter / Neu

Filter Bearbeiten Speichern Abbrechen

Name:

Spalte	Bedingung	Wert
<input type="text" value="Typ"/>	<input type="text" value="EQUAL"/>	<input type="text" value="Elektrizität"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

"Save" also saves the created filter with a name. It can then be used if required or when creating exports. After saving, one of the existing filters can be selected with

"Apply" can be applied to the meter list. In the example, only the electric meters are displayed. The name of the active filter and the number of meters selected with it (here: 6/19 = 6 of 19 meters correspond to the active filter) are displayed in the title bar. "Delete filter" in the context menu deletes the filter.

Zählerliste [Elektrozähler] [6/19]

WebLog / Zähler

13061190 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen
00358501 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen
00358502 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen
00358503 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen
00358504 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen
12345679 PA: 0	REL Elektrizität	Keine Gruppe DEAKTIVIERT	2400 bd	Anzeigen

The "Remove filter" item in the context menu of the counter list resets the filtered view.

### 3.1.5 Log intervals



In the "Logger settings" submenu, the "Log intervals" button takes you to the Configuration of the readout times.

This example shows a daily log interval.  
The readout takes place at 0 o'clock.

In addition to the daily, weekly, monthly or annual interval, a user-defined interval (manual interval) can also be created.

Logintervalle 1day

WebLog / Logger Einstellungen / Logintervalle / Logintervalle 1day

Parameter

Name: 1day

Type:  Manuelles Intervall  Stunde  Minute  Sekunde

Täglich  
 Wöchentlich  
 Monatlich  
 Jährlich  
 Deaktiviert

Beginn: Zeit: Stunde Minute Sekunde  
0 0 0

Wochentag: Samstags

Tag des Monats: 1

Monat: January

The 2nd example shows an hourly log interval.  
In this example, logging takes place on the hour.

Logintervalle 1hour

WebLog / Logger Einstellungen / Logintervalle / Logintervalle 1hour

Parameter

Name: 1hour

Type:  Manuelles Intervall  Stunde  Minute  Sekunde

1 0 0

Täglich  
 Wöchentlich  
 Monatlich  
 Jährlich  
 Deaktiviert

Beginn: Zeit: Stunde Minute Sekunde  
0 0 0

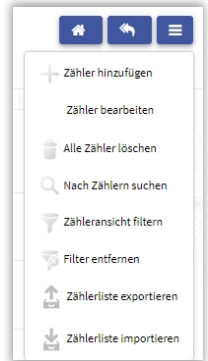
Wochentag: Samstags

Tag des Monats: 1

Monat: January

The log intervals created can now be assigned individually to each counter (Counter -> Parameters -> Log interval). In most cases, the same log interval is assigned to all meters or a filtered view. By selecting an already created filter (example: electricity meter), it is easy to assign the same log interval to these meters. This operation can be carried out in one step. To do this, open the context menu in the meter list and select the "Edit meter" entry. Here you can also make use of the defined filters, e.g. to assign a log interval to all electrical meters.

**Attention:** Please use this function carefully, as the changes made apply to all displayed counters!



The counter parameter screen with wildcard entries then opens. An interval that has already been created is selected in the "Log interval" field. The setting is then activated for all counters using the "Save" button. An "L" in the status bar at the top indicates that logging has been activated.

A screenshot of the 'Edit meter parameter' screen. The title is 'Bearbeite 19 Zähler'. The breadcrumb is 'WebLog / Zähler / Bearbeite 19 Zähler'. The main heading is 'Parameter'. There are two buttons at the top right: 'Speichern' (Save) and 'Abbrechen' (Cancel). The form contains the following fields:

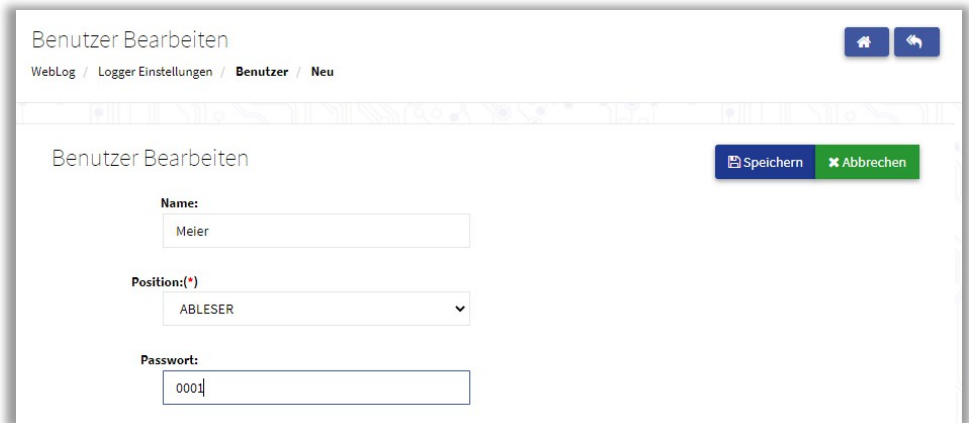
- Primäradresse: 0
- Version: (empty)
- Medium: (dropdown menu, value: ...)
- Baud: 2400
- Gruppe: (dropdown menu, value: ...)
- Text 1: (text input, value: ...)
- Text 2: (text input, value: ...)
- ID: (text input, empty)
- Hersteller: (text input, empty)
- SND\_NKE: (dropdown menu, value: ...)
- Application Reset: (dropdown menu, value: ...)
- Logintervall: (dropdown menu, value: 1day)

### 3.1.6 User groups



In the "Mbus settings" submenu, the "User" button takes you to the configuration of the user groups.

An "Admin" user with the highest rights already exists. In the next step, the Administrator e.g. create the tenants, the group with the least rights.

A screenshot of a web application interface for editing a user. The title is "Benutzer Bearbeiten". The breadcrumb trail is "WebLog / Logger Einstellungen / Benutzer / Neu". There are two blue buttons in the top right: a home icon and a back icon. Below the title, there are two buttons: "Speichern" (Save) and "Abbrechen" (Cancel). The form contains three fields: "Name:" with a text input containing "Meier"; "Position:(\*)" with a dropdown menu showing "ABLESER"; and "Passwort:" with a text input containing "0001".

Users who belong to the meter reader group can view all tenants' meters and can carry out predefined exports from the administrator. The respective tenants only see their own meters and have no rights to create exports or carry them out independently. The distinction between administrator, meter reader and tenant is made by the password on the login screen. If an administrator wants to change passwords, they must first delete the user of a group and then create a new one. Meter readers and tenants cannot change their passwords independently. The admin can also create additional users with admin rights.

**Attention:** Never delete the last user with admin rights or lower their rights! Otherwise you will no longer have access to the configuration of the device.

### 3.1.7 Set up exports

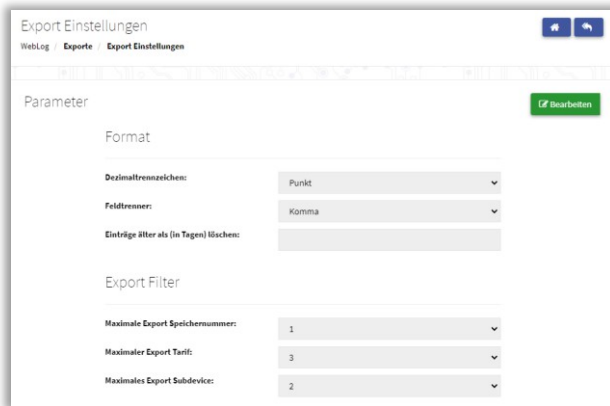
Exports are used to send meter data that has been logged over a certain period of time to a USB storage medium, to an FTP server, to an e-mail address or via download in the browser.



From the main menu, you can access the "Exports" in the export submenu.



The "Export settings" button opens a dialogue in which you can select the decimal separator for numbers in the "Format" area. You can choose between the "comma" and the "point". Please select the correct settings for the decimal separator (DE: comma) and the field separator (DE: semicolon) for your country in the "Format" area.



You can also automatically limit the size of the database to a certain number of days. The device then automatically deletes older entries from the database. Please make use of this to prevent the database from becoming too large and therefore the SQL queries and the execution of exports of the logged data from becoming too slow.

In the "Export filter" area, you specify the maximum values for the data in the exports, i.e. up to which key date number, tariff no. and sub-device no. the data should be output in the exports. The default value for the memory number is 1, which means that the data with memory number 0 (current value) and 1 (usually the value on the annual cut-off date) is output. The default value for tariff is 3 and for subdevice 2.



The "Export" button takes you to the export configuration. The first step here is to specify what is to be exported.

The screenshot shows the 'Export bearbeiten Export1' configuration page. At the top right, there are home and back navigation icons. Below the title, a breadcrumb trail reads 'WebLog / Exporte / Export / Bearbeite Export1'. A toolbar contains four buttons: 'Starten' (blue), 'Speichern' (dark blue), 'Abbrechen' (green), and 'Löschen' (red). The main form includes:

- Name(\*):** A text input field containing 'Export1'.
- Auswahl:** Three radio button options: 'Alle' (selected), 'Filter', and 'Gruppe'. To the right of 'Filter' and 'Gruppe' are two grey dropdown menus.
- Ereignisprotokoll:** A checkbox labeled 'Mitsenden' which is currently unchecked.
- Einheiten(\*):** Three stacked dropdown menus. The first contains 'Energie', the second contains 'Volumen', and the third is empty.

In the example, the two most important measured variables of energy and volume are defined. It is also possible to select whether the measurement data of all meters (All), specific meters (filter, e.g. electric meters) or only meters assigned to a specific tenant (group) should be exported.

There is an option to activate the creation of an additional file with the messages from the event log, which is then transferred when exporting. Click "Save" to save the created export under a name. Click "Start" to execute the export immediately.

If you perform an export manually using the "Start" button, you can either export the logged data from the database (Export from Database) or perform a direct readout of all meters (Direct Export) with subsequent export of the current data.

Export ausführen

WebLog / Exporte / Export / Exp1 / Starten

Starten "Exp1"

Ausgabtyp:  Datenbank Export  Direkter Export

Zeitspanne: 2022-01-01 - 2022-05-01

Ereignisprotokoll:  Mitsenden

Export Format: Comma separated values (CSV)

Export nach: USB Storage Device

Starten Abbrechen

The manual export from the database is described below:

In a calendar view, the start and end time from the saved logger data for the export is defined in the Time period field.

A comma-separated CSV format, the Microsoft Excel XLSX format, a structured XML format or a specific CSV format (Ecosmart) can be selected as the export format.

The export destination is then specified (USB stick, FTP server, e-mail dispatch or download in the web browser).

No further entries are required for the export to USB stick or via download in the browser and a click on the "Start" button immediately executes the export with the selected options.

An export via e-mail dispatch or FTP transfer requires further entries: When

sending export data by e-mail, the E-mail destination address and the SMTP server used must be specified. When using an in-house Microsoft Exchange server, its IP address and the Exchange user with password must be specified and the connection security is "Plain" (unencrypted). The example shows the use of the GMX SMTP server, which requires an e-mail account with GMX. The e-mail is sent via GMX in encrypted form (connection security "SSL").

**Email Einstellungen**

An:

Von:

SMTP-Server:

SMTP-Benutzer:

SMTP-Passwort:

Encryption Type:

Port 587 is used by default to send the e-mail. If the SMTP server to be used requires a different port, e.g. 465,

write this after the SMTP server, separated by a colon, e.g. "mail.gmx.net:465".

Clicking on the "Test Mail Server" button sends a test e-mail without a file attachment with the settings entered and provides feedback as to whether the e-mail could be sent successfully.

For e-mail service providers such as GMX, you must allow access via POP3 and IMAP in the settings of your e-mail account:

**GMX Mail über POP3 & IMAP**

Wenn Sie Ihre E-Mails mit Outlook oder einem anderen E-Mail-Programm abrufen möchten, müssen Sie dazu POP3 und IMAP aktivieren. Bitte verwenden Sie die angezeigten Zugangsdaten.

POP3 und IMAP Zugriff erlauben



When exporting to an FTP server, the user name and password must be entered in addition to the URL of the server. Port 21 is the default port for the FTP service. An additional input line is provided for the file path on the server. If you want to send to an SFTP server, normally enter port 22 and activate the switch

"SFTP". An encrypted SSH connection to the server is then established. Please note that FTPS is not supported. Here you also have the option of testing the FTP access and thus the access data entered (button: Test FTP).

**FTP Einstellungen**

Benutzername:

Passwort:

Server:

Port:

Pfad auf dem Server:

sFTP verwenden:

[▶ Test FTP](#)

During the export to an FTP server or when sending the data by e-mail, a pop-up window opens with the export information.



### 3.1.8 Export schedules

Export schedules must be set up and activated for automatic exports at specified times.



The "Export schedules" button allows you to set the time at which a schedule that has already been created export is to be executed automatically.

Parameter

Name:

Intervall:  Niemals  Manuell

Täglich  Wöchentlich  Monatlich  Jedes Quartal  Jährlich

Stunde:  Minute:

Beginn Zeit: Stunde:  Minute:

Wochentag:

Tag des Monats:

Monat:

Quartals-Monat:

Export Einstellungen Export: (\*)

Export Format:

Export nach:

EMail Einstellungen

Recurring export times can be daily, weekly, monthly, quarterly or annually. The "Manual" interval offers shorter intervals up to a minimum of 15 minutes. An already configured export is selected in the "Export" selection field. Please specify the desired time of the export so that the export time is after the log time. Possible output formats are a text format with comma-separated data fields (CSV), a Microsoft EXCEL XLSX file or a structured XML file. A USB memory device, an FTP server or an e-mail address can be selected as the output destination. In the "FTP settings" or "E-mail settings" area, you can set the access data for an FTP server or for sending e-mails. The FTP and e-mail configuration has already been described in the "Exports" chapter. As soon as the export schedule is saved and active with the "Save" button, an "E" appears in the status bar and the export is active. The "L" next to it indicates that logging is active.

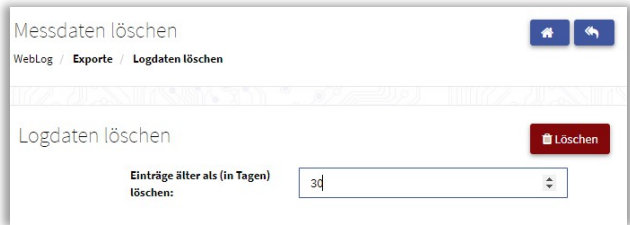
### 3.1.9 Delete old entries in the database



You can delete data that is no longer required with the

Remove the "Delete log data" button from the meter database. Please enter a time period in days. Data older than this period will be deleted.

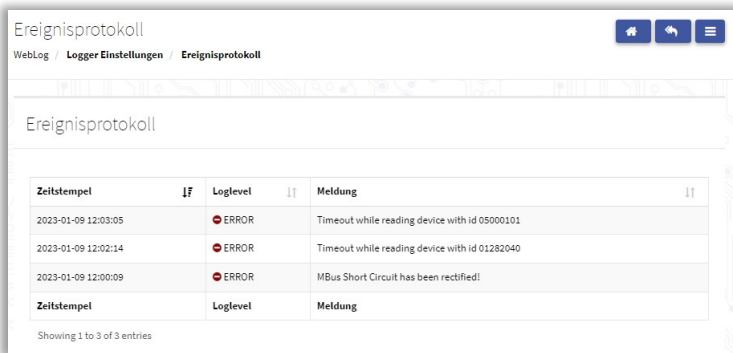
deleted. Please note that the size of the database is not reduced for a period > 0 days because the memory is only marked as deleted and later overwritten with new data. However, if you specify 0 days, the database and the storage space will be completely deleted.



### 3.1.10 The event log



A bright yellow warning triangle in the status bar indicates that one or more entries have been written from the WebLog to the event log.



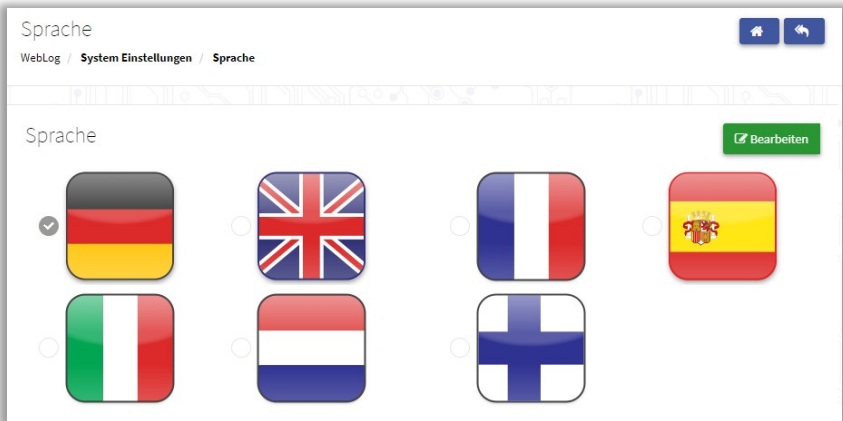
The event log can be opened for reading by clicking on the warning triangle or the "Event log" menu item in the "Logger settings". The entries in the event log can indicate M-Bus errors, for example. The example above shows two M-Bus meters that could not be read several times during logging. Another possible error would be, for example, a short circuit (overcurrent) on the M-Bus. However, a failure to synchronise the system clock time with the time of a time server on the Internet could also be displayed here.

### 3.1.11 Further system settings

System settings can only be made by a user with administrator rights.



The "**Language**" button takes you to the language settings menu. The desired language is selected by pressing the "Edit" button and the appropriate country flag. The application programme is then restarted automatically. The switchover takes some time. Please wait at least 30 seconds before updating the browser content!

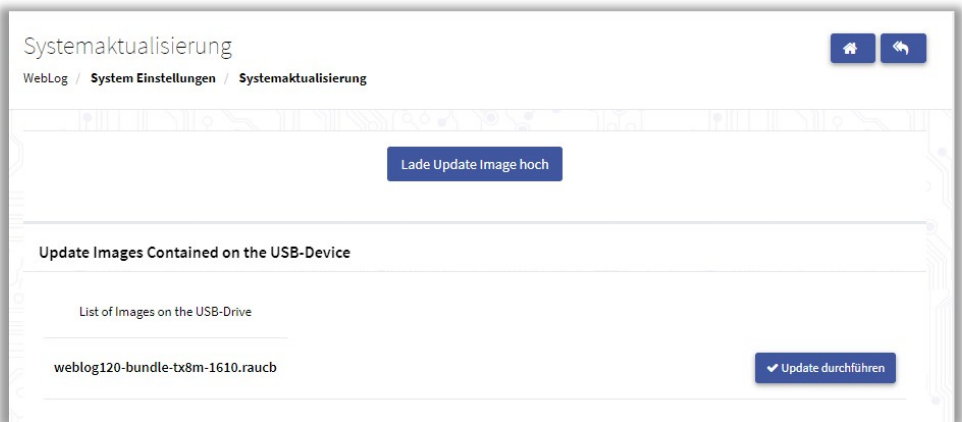


Please note that the language "Dutch" is not yet available and temporarily uses the English texts.

To eliminate software errors and to introduce new features, it is necessary from time to time to carry out **firmware updates** on the WebLog. Firmware updates are provided by Relay as image files of approx. 75 MB in size on our homepage: <http://www.relay.de/de/produkte/m-bus-master/weblog-250.html>. You will need a user name and password to access these files, which you can request from us. The update can be installed either by uploading from the browser or using a USB stick via one of the two USB-A sockets. If the update is to be carried out using a stick, the image file must first be transferred to an empty, FAT32-formatted USB stick. The USB stick is then inserted into the USB master socket on the front of the WebLog.



After pressing the "System update" button, both options can be selected. If a USB stick is inserted, valid update images are displayed with your file name.



### Method 1 (USB stick):

By clicking on the file name of the update image, the administrator can start the firmware update after a further prompt.

### Method 2 (Upload):

By clicking on "Upload update image", you can select a file with the browser.

The Flash process takes a few minutes. A progress bar on the WebLog touchscreen shows the progress of the update. Once the Flash process is complete, the system is restarted and the login screen of the application programme appears.

Should the rare event occur that the WebLog can no longer be operated, a system restart can be forced by pressing the **reset button** on the left in the terminal compartment.

If a WebLog that has already been used for a property is to be set up again, it can be reset to the **factory settings**. This deletes the configured log intervals, exports, automatic export orders and the counter table. If desired, the entire log database can also be deleted if the entries are no longer required. This makes the system perform better again because the SQL database queries take less time.



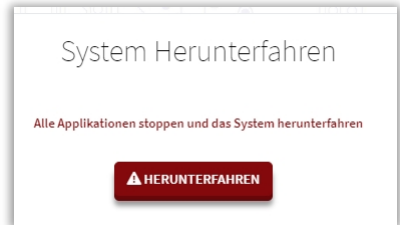
The "Restore factory settings" button resets the WebLog settings to the factory settings. Return to factory settings.

Please note that the menu item "Restore factory settings" is not available in the web browser! After an additional security enquiry and the decision as to whether the entire log database should be deleted, the system is restarted.



The "**Shut down**" button is used to safely end the running application tasks and then shut down the operating system.

If the WebLog is to be disconnected from the operating voltage, e.g. for service work or relocation, this can be done by pressing the "Shutdown" can be initiated. As soon as the touchscreen turns black and the red front LED lights up, the mains voltage can be removed. If the mains voltage is not removed, the operating system is reloaded and the application programme is then started.



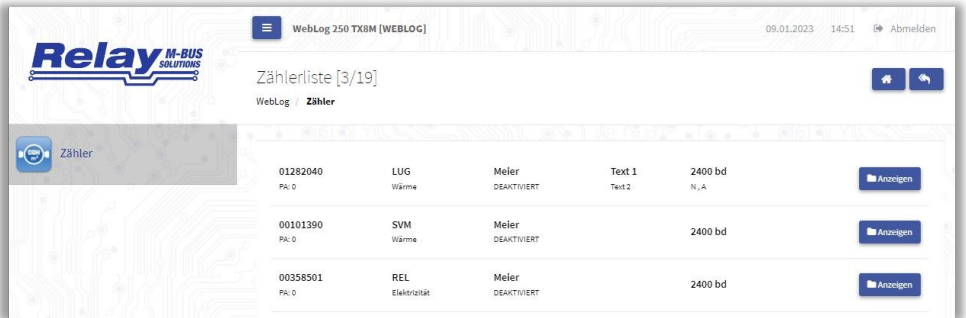
### 3.1.12 The deregistration process

The user is automatically logged out if they have not used the weblog for 5 minutes. The user can log out immediately by clicking on the "Log out" button in the top menu bar.

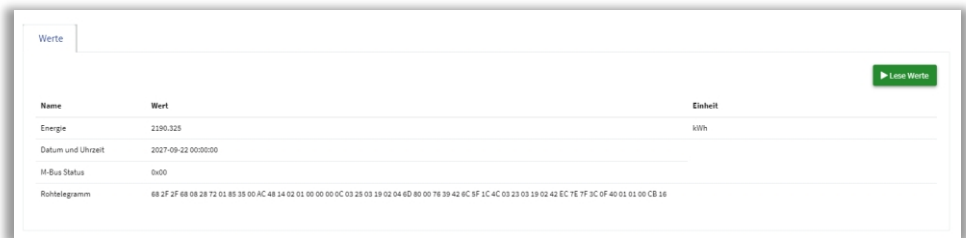


## 3.2 Tenant mode

Tenants who were created by the administrator when configuring the WebLog can log in with their password using a touchscreen or a web browser (e.g. Firefox). Web browser login is also restricted to one user only. A second user cannot connect to the WebLog at the same time. After successfully logging in, a tenant is taken directly to the list of their own meters.



Clicking on the "Display" button to the right of a counter takes the user to the view of the individual counter. All setting items are locked. He can only read out the current data of the counter in the "Values" area by clicking on the "Read values" button.



### 3.3 Reader mode

If a user who belongs to the meter reader group successfully logs in with their password, they will be taken to the meter reader main menu.

From the main menu, the meter reader can only carry out exports created by the administrator or view the event log in the "Logger settings" menu.



In the "Meter menu", he can see all the meters that have been assigned to the tenants or the meter reader.

Zählerliste [7/19]  
WebLog / Zähler

01292040 PA 0	LUG Wärme	Meler DEAKTIVERT	Text 1 Text 2	2400 bd N/A	Anzeigen
12345670 PA 0	REL Gas	HausmeisterKrause DEAKTIVERT		2400 bd	Anzeigen
00101390 PA 0	SVM Wärme	Meler DEAKTIVERT		2400 bd	Anzeigen
00358501 PA 0	REL Elektrizität	Meler DEAKTIVERT		2400 bd	Anzeigen
12345671 PA 0	REL Wärmeasser	HausmeisterKrause DEAKTIVERT		2400 bd	Anzeigen
96015555 PA 0	PAD Wasser	HausmeisterKrause DEAKTIVERT		2400 bd	Anzeigen
02982287 PA 0	EFE Wärme	HausmeisterKrause DEAKTIVERT		2400 bd	Anzeigen

By clicking on the "Display" button to the right of a counter, the user accesses the view of the individual counter and can read out the data of this counter there.



## 4. Export files

The WebLog can export logged M-Bus data in XLSX, CSV and structured XML file format.

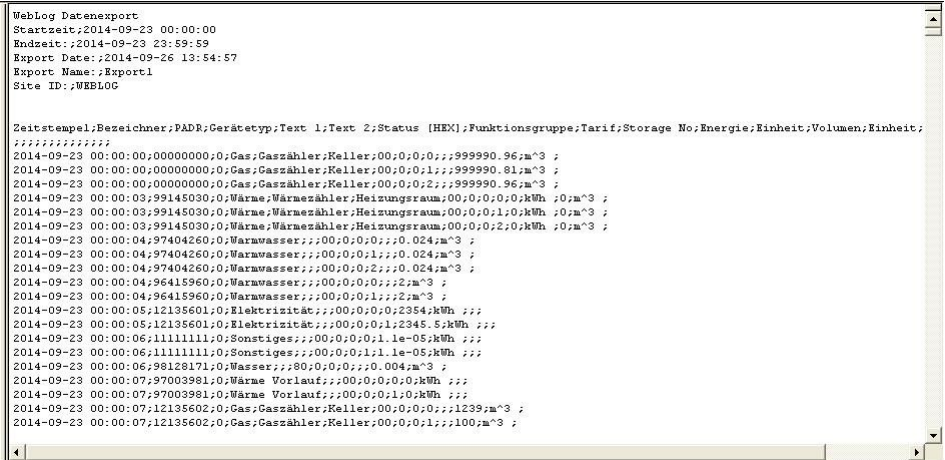
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	WebLog Datenexport													
2	Startzeit:	2014-09-23 00:00:00												
3	Endzeit:	2014-09-24 00:00:00												
4	Export-Datum:	2014-09-24 00:33:40												
5	Export Name:	Export1												
6	Anlagenkennung:	WEBLOG												
7														
8														
9	Zeitstempel	Bezeichner	PADR	Gerätetyp	Text 1	Text 2	Status [HEX]	Funktionsgruppe	Tarif	Storage No	Energie	Einheit	Volumen	Einheit
10														
11	2014-09-23 00:00:00	00000000	0	Gas	Gaszähler	Keller	00	0	0	0			999990.96	m³
12	2014-09-23 00:00:00	00000000	0	Gas	Gaszähler	Keller	00	0	1				999990.81	m³
13	2014-09-23 00:00:00	00000000	0	Gas	Gaszähler	Keller	00	0	2				999990.96	m³
14	2014-09-23 00:00:03	99145030	0	Wärme	Wärmezähler	Heizungsraum	00	0	0	0	0	kWh	0	m³
15	2014-09-23 00:00:03	99145030	0	Wärme	Wärmezähler	Heizungsraum	00	0	1	0	0	kWh	0	m³
16	2014-09-23 00:00:03	99145030	0	Wärme	Wärmezähler	Heizungsraum	00	0	2	0	0	kWh	0	m³
17	2014-09-23 00:00:04	97404260	0	Warmwasser			00	0	0	0	0		0.024	m³
18	2014-09-23 00:00:04	97404260	0	Warmwasser			00	0	1				0.024	m³
19	2014-09-23 00:00:04	97404260	0	Warmwasser			00	0	2				0.024	m³
20	2014-09-23 00:00:04	96415960	0	Warmwasser			00	0	0	0	0		2	m³
21	2014-09-23 00:00:04	96415960	0	Warmwasser			00	0	1				2	m³
22	2014-09-23 00:00:05	12135601	0	Elektrizität			00	0	0	0	2354	kWh		
23	2014-09-23 00:00:05	12135601	0	Elektrizität			00	0	1		2345.5	kWh		
24	2014-09-23 00:00:06	11111111	0	Sonstiges			00	0	0		1.1e-05	kWh		
25	2014-09-23 00:00:06	11111111	0	Sonstiges			00	0	1		1.1e-05	kWh		
26	2014-09-23 00:00:06	98128171	0	Wasser			80	0	0	0	0		0.004	m³
27	2014-09-23 00:00:07	97003981	0	Wärme Vorlauf			00	0	0	0	0	kWh		
28	2014-09-23 00:00:07	97003981	0	Wärme Vorlauf			00	0	1	0	0	kWh		
29	2014-09-23 00:00:07	12135602	0	Gas	Gaszähler	Keller	00	0	0	0			1239	m³
30	2014-09-23 00:00:07	12135602	0	Gas	Gaszähler	Keller	00	0	1				100	m³

The example shows a section of the XLSX counter export opened in Microsoft EXCEL with the file name "export\_WEBLOG\_Export1\_20140924\_003416.xlsx". All export file names are formed according to the scheme "export\_Anlagenkennung\_Exportname\_Exportdatum\_Exportuhrzeit.Dateityp". The export date, the export name and the system identifier are specified again in the header of the export file. The start time and end time of the logged meter readings are also specified.

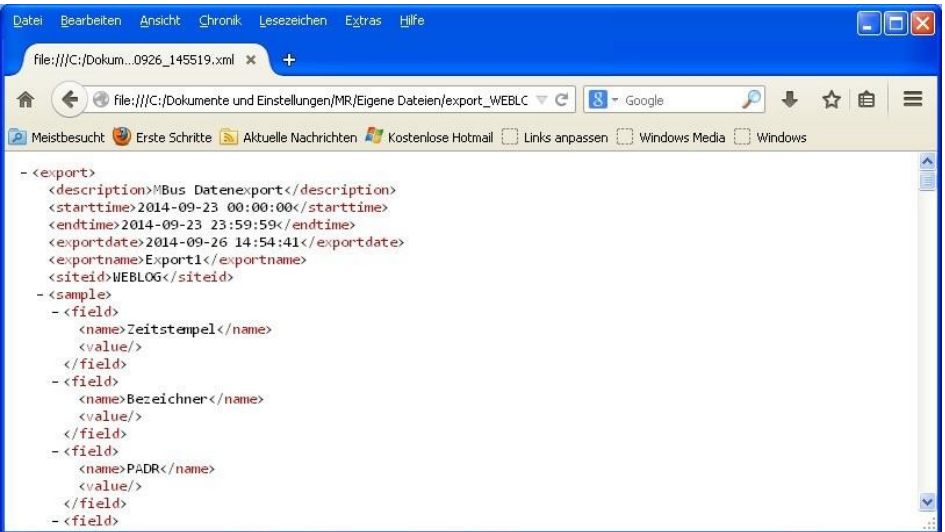
The column headings of the output values follow below the header. In the example, the "Export1" Energy and volume values of the meters, which are displayed next to each other together with the unit. If a meter also contains historical measured values (Storage No > 0), tariff values (Tariff > 0) or values from subunits = subdevice (function group > 0), these are output as additional lines. However, only up to the specified maximum values for these characteristics (see chapter 4.1.7 "Export filter"). The vertical sorting of rows is determined by the log times.

CSV export files are pure text files. The fields in the table are separated line by line by a semicolon. In addition to a large number of programmes, EXCEL can also import and export CSV files.

in tabular form as usual. Large CSV files can be created with the freeware programme "CSVED" can be edited.



The screenshot above shows the beginning of a CSV export file that has been opened with a text editor.



This screenshot shows the start of a structured XML export opened in the Firefox browser.