Technical Documentation



SECON-X

SECON-Vap Administrator



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1 Overview

1.1 SECON-X system components

SECON-X is a hardware-software-network system which comprises several components (see figure below) and performs the following tasks:

- Global data access to the SECON clients with web interface
- Remote diagnostics
- Remote display, evaluation and data storage
- Universal data format

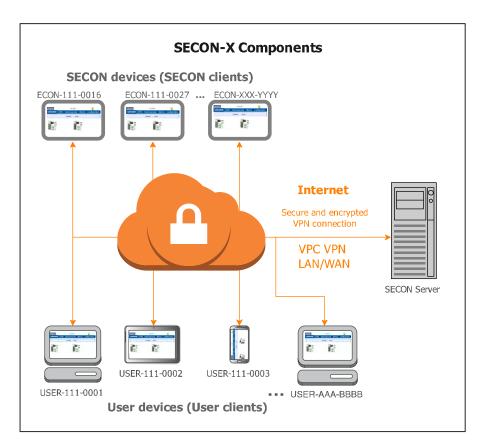


Figure 1: SECON-X system and components

SECON-Vap... is the operating software of the SECON devices with connection to the **VAPORIX System.**



1.2 SECON-Vap and SECON-Vap+

SECON-Vap is the operating software of the SECON devices with connection to the **VAPORIX System**, which monitors and evaluates the vapour recovery at fuel pumps. The SECON device serves as central signalling device for displaying the functional status of the vapour recovery and measured values of the VAPORIX system.

SECON-Vap+ is an extension of the operating software of the SECON devices, which also allows the pressure sensors to be operated via the SECON device. The pressure sensors make it possible to monitor the gas pressure in Otto fuel tanks.

The measured values are displayed on a TFT colour screen. All functions are accessible using the touch screen user interface. Alarms are signalled visually by the display module and also audibly by a buzzer.

SECON-Vap... stores the measured values and the evaluations based on it locally in a database and in archive files. The data can be kept for 10 years+ and displayed on site. The measured values can be displayed locally on the SECON device as well as via a secure VPN connection (remote access). Stored values can also be called up via the secure VPN connection with WebDAV. The synchronisation can be used to compare the locally stored data also with a server.

The SECON device is connected with the VAPORIX evaluation units (a maximum of 16 evaluations for 2 sensors / fuelling points each) as well as with VPS-V pressure sensors, see:

Technical Documentation, SECON Client, art. no. 350076
Technical Documentation, VAPORIX Flow/Control, art. no. 207083
Technical Documentation, VPS pressure sensors, art. no. 350204

1.3 About this document

This documentation describes the configuration of the SECON-Vap and SECON-Vap+ operating software as local application on the SECON devices (SECON clients), as well the remote access via a web browser (USER clients).

To use the operating software SECON-Vap..., see:

Technical Documentation SECON-Vap User Guide, art. no. 350113

For the installation and operation of the OpenVPN software (remote access), see:

Technical Documentation OpenVPN installation, art. no. 350199



1.4 Safety instructions

The operating software SECON-Vap... is intended for SECON devices. The software must be used exclusively for this purpose. Please observe and follow all product safety notes and operating instructions. The manufacturer accepts no liability for any form of damage resulting from improper use!

The SECON-X system has been developed, manufactured and tested in accordance with state-of-the-art technology and recognised technical safety regulations. Nevertheless, the system may be a source of danger. The following safety precautions must be observed in order to reduce the risk of injury, electric shocks, fire or damage to the equipment:

- Do not change or modify the system or add any equipment without the prior consent of the manufacturer.
- Only use original parts. These comply with the technical requirements specified by the manufacturer.
- The installation, operation and maintenance of the SECON, together with the SECON-Vap operating software, may only be carried out by expert personnel.
- Operators, fitters and service technicians must observe all applicable safety regulations.
 This also applies to any local safety and accident prevention regulations which are not stated in this manual.



If these safety instructions are not observed, it may result in the risk of accident or damage to the SECON-X system.



The SECON touch screen may only be operated using a finger or a stylus designed for this purpose. The use of pointed objects (e.g. screwdrivers, pens) may cause damage to the touch screen.



Useful tips and information in this manual that should be observed are written in italics and identified by this symbol.

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2 SECON-Vap... as local application

2.1 Configuration - Settings

In the Configuration » Settings menu, the SECON can be configured for the particular prevailing conditions: Language, services, alarm volume, network, VPN, WLAN, 3G/UMTS, screen calibration, via browser.

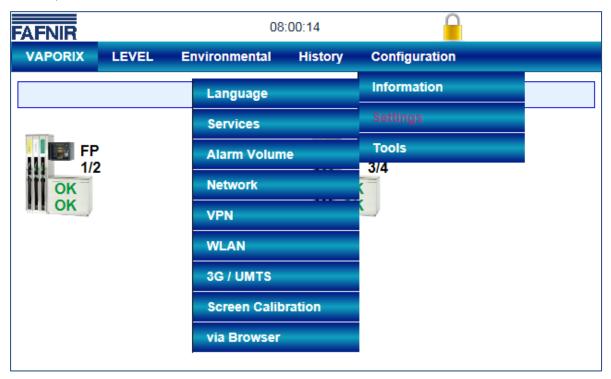


Figure 2: Configuration – Settings



The lock symbol indicates an existing VPN connection.



The yellow alarm symbol indicates a warning.



The red alarm symbol indicates an error.

2.1.1 **Login**

To configure the SECON, login is required:

User: admin Password: vap22765



After 5 minutes, if no configuration changes are made, access is automatically blocked.

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2.1.2 Virtual keyboard

When the user touches an empty field, a virtual keyboard is displayed automatically.

To switch between upper and lower case, use the key: [1]

To delete a character, use the key: [⇐]

To delete the entire field, use the key: [C]

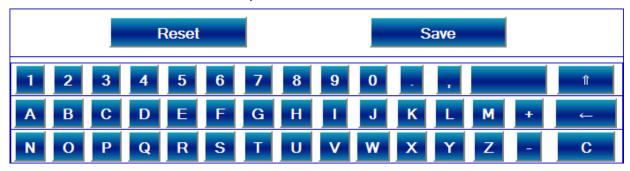


Figure 3: Virtual keyboard

2.1.3 Language

Here, select the language of the GUI to be displayed:



Figure 4: Configuration – Settings – Language



2.1.4 Services

The available services can be activated or deactivated here. Depending on the setting for these services, the appropriate menu options are shown.

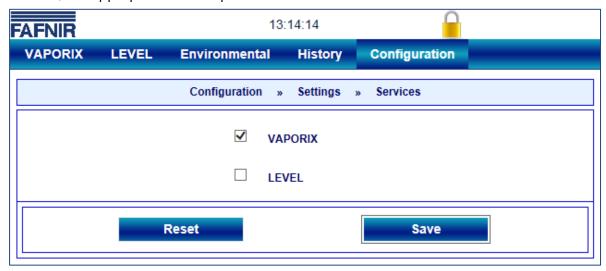


Figure 5: Configuration – Settings – Services

2.1.5 Alarm volume

The volume of the integrated loudspeaker can be changed here.

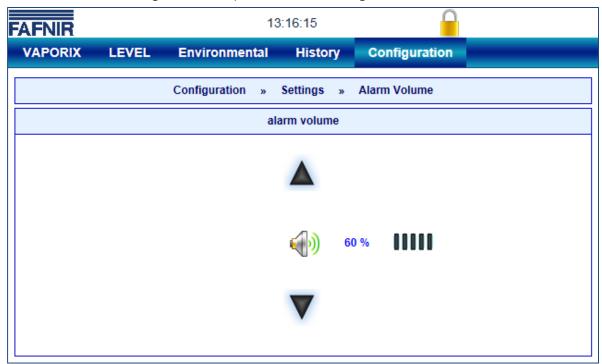


Figure 6: Configuration – Settings – Alarm volume

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2.1.6 Network configuration

The network can be configured automatically. To do this, select the "Automatic configuration" option and confirm by pressing the <Save> button.

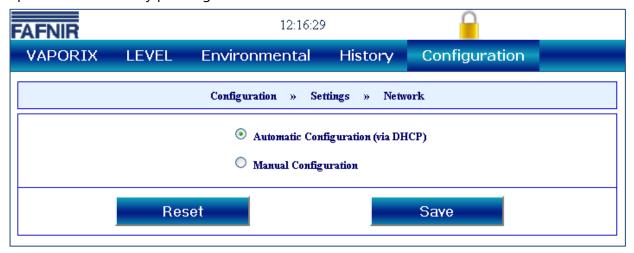


Figure 7: Configuration – Settings – Network – Automatic Configuration



Network configuration is set to DHCP by default.

With this configuration, the client calls up the IP address from the DHCP server directly. A functional DHCP server must be available in the network for this.

The network can be configured manually. For this, please contact your network administrator. To do this, select the "Manual configuration" option, enter the appropriate network data and confirm by pressing the <Save> button (for an example, see the figure below).

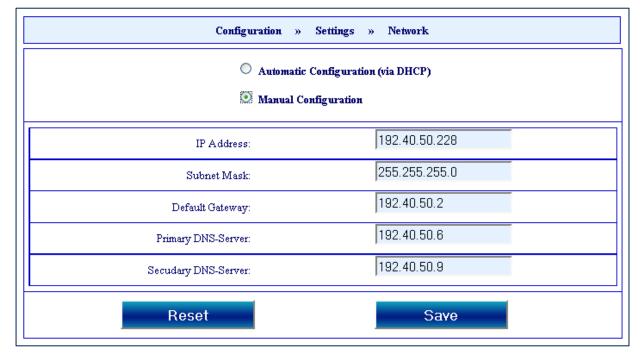


Figure 8: Configuration – Settings – Network – Manual Configuration



2.1.7 VPN

The network data for the VPN connection are entered here. For this, please contact your network administrator (for an example, see the figure below).

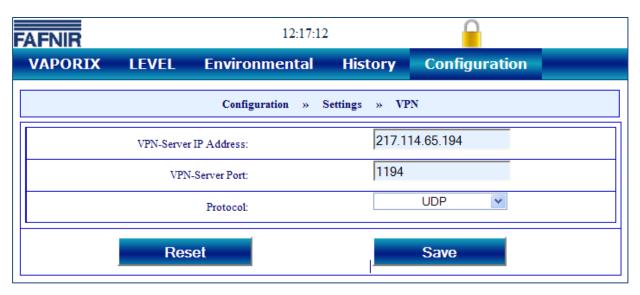


Figure 9: Configuration - Settings - VPN

2.1.8 WLAN

The WLAN function is currently not supported with an internal module.

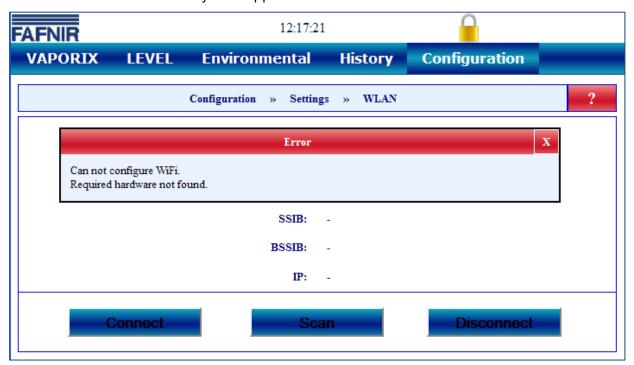


Figure 10: Configuration - Settings - WLAN

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2.1.9 3G/UMTS



The 3G/UMTS function is currently not supported with an internal module.

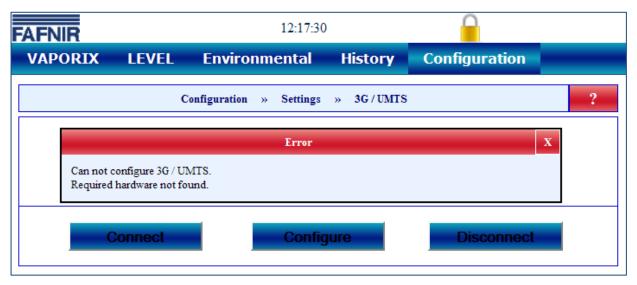


Figure 11: Configuration – Settings – 3G/UMTS

2.1.10 Screen calibration

The touchscreen precision is calibrated here.

Press the <Start> button and touch the 5 calibration crosses using the touchscreen stylus.



If calibration is not performed correctly, it may become impossible to use the touchscreen!

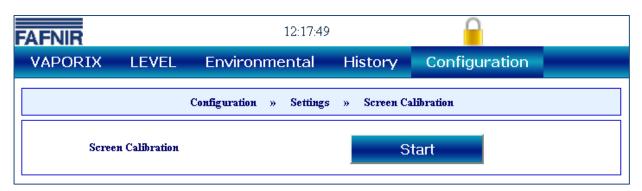


Figure 12: Configuration – Settings – Screen Calibration



2.1.11 Browser



Station data, VAPORIX controller and pressure sensors can only be configured via a web browser and a network connection with a PC/laptop that is connected to the SECON device.

- If this has not been done already, connect the SECON device and PC/laptop with an RJ45 network cable.
- In menu item Browser on the SECON device enter the IP address of your PC/laptop (see figure below). To determine the IP address for your PC laptop, simply enter the Windows command "ipconfig".

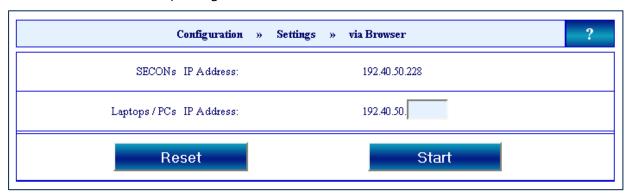


Figure 13: Configuration - Settings - Via browser

- Save the configuration by clicking on the <Start> button.
- This is then confirmed with the https-IP address that can be used to set up a connection to the SECON device via a browser (see figure below):



Figure 14: Configuration – Settings – Via browser – Confirmation



The IP address for the PC/laptop must not be the same as the IP address for the SECON. The configuration process may only be carried out from a single PC/laptop. During configuration, a tool symbol is shown on the display. Configuration must be completed by pressing the "Stop" function key.

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2.1.12 Configuration wizard

With the web browser of a PC/laptop that is connected to the SECON, the following data can be configured via the "Configuration wizard":

- Station data (address, etc.)
- VAPORIX-Control (device number, fuelling points Page A / Page B)
- Pressure sensors (device number, position, connection, fuelling points)



Other SECON configurator menus have no functions as yet.

- (1) Establish the network connection described in chapter 2.1.11.
- (2) For access to the configurator, enter the https address there determined in the address line of your browser.
- (3) In the password entry form, enter "admin" as the user and the password "Fafnir22765Altona" and confirm the entry.



Figure 15: Configuration wizard

(4) Start the wizard by clicking on the <Next> button. In the first wizard step, the station data is preset. For the SECON-Vap, also select the "VAPORIX" option. For the pressure sensors, also select the "Pressure" option.



Figure 16: Configuration wizard - Step 1



(5) In step 2, enter the station data (address, etc.)



Figure 17: Configuration wizard – Step 2

(6) In step 3, enter the VAPORIX controller data (controller ID, device number, FP/fuelling points).



Figure 18: Configuration wizard – Step 3

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(7) In step 3 (or step 4), enter the pressure sensor data.

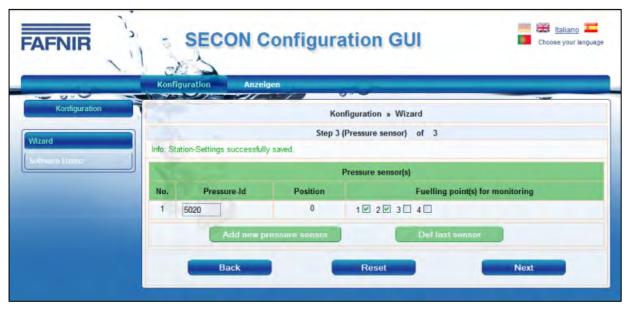


Figure 19: Configuration wizard - Step 3 or 4

No: Consecutive number assigned by the program

Pressure-Id: Device number:

Position: Logical position of sensor. During the exchange it should be ensured that

the replacement sensor receives the same position, since the data will be

continued independent of the changing device number.

Connection: Type of connection. Wireless must be selected if the sensor is to be con-

nected via a combination of VISY-RFT-L/VISY-RFR. If the sensor is wired

via a VISY-VPI, the appropriate VPI Ch[X] channel must be selected.

Fuelling points: Selection of the monitored fuelling points

(8) After the data has been entered and the <Next> button is pressed, a message is displayed confirming successful SECON configuration.

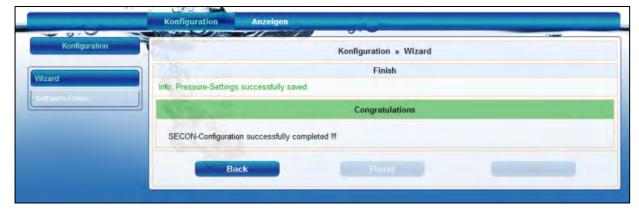


Figure 20: Configuration wizard – Message confirming successful configuration



2.2 Configuration – Tools

The Configuration > Tools menu contains the following functions for checking the network connection: Ping, traceroute, nslookup, self-test, log files.

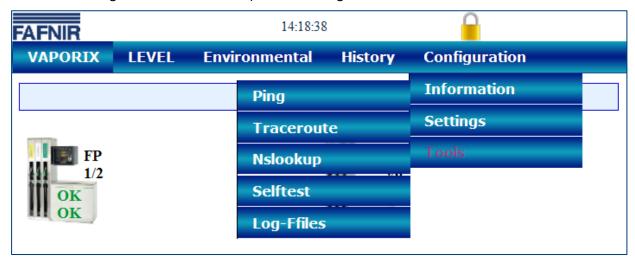


Figure 21: Configuration – Tools

2.2.1 **Ping**

With this option, you can test the network connection by pinging the IP address entered using the virtual keyboard (for an example, see the figure below).

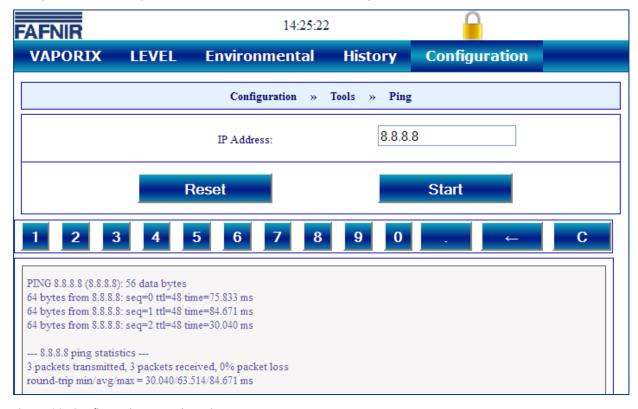


Figure 22: Configuration – Tools – Ping

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2.2.2 Traceroute

With the Traceroute tool, you can enter the destination address and then have the individual stations through which a packet passes to reach the destination address displayed (for an example, see the figure below).



Figure 23: Configuration – Tools – Traceroute

2.2.3 Nslookup

To determine whether the set DNS resolution is working properly, one of the available addresses can be resolved (for an example, see the figure below).



Figure 24: Configuration – Tools – Nslookup



2.2.4 Self-test

In the self-test, a comprehensive system test is carried out and the results obtained are output in tabular form (for an example, see the figure below).

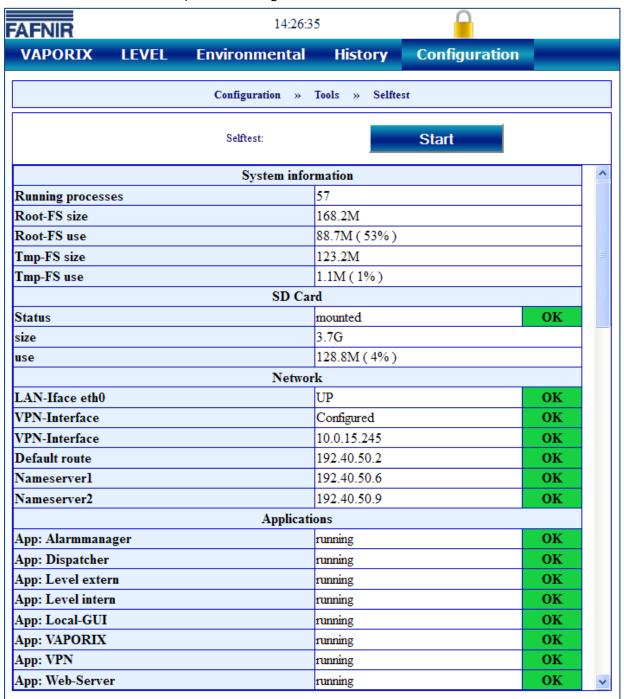


Figure 25: Configuration – Tools – Self-test

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2.2.5 Log files

The "Time" monitors time synchronisation, the "Watchdog" monitors the ongoing processes. The results are saved and can be output in the log files (for an example, see the figures below).



Figure 26: Configuration - Tools - Log file "Time"



Figure 27: Configuration – Tools – Log file "Watchdog"



3 SECON-Vap... in remote access

3.1 Connection to the SECON Server

3.1.1 Requirements

The connection of the user clients to the SECON server (see Figure 1) is established by a secure encrypted Internet connection (VPN Virtual Private Network).

- (1) For the encrypted Internet connection the *installation of VPN software OpenVPN* on the PC, mobile phone or tablet used (user clients) is necessary. OpenVPN is an Open Source software with GNU General Public License, see:
- Technical Documentation SECON-X OpenVPN installation, art. no. 350199.
 - (2) Key and configuration files are required, which are provided by the FAFNIR company.
 - (3) For remote access, "Mozilla Firefox", "Opera", "Chrome" or "Safari" are the *preferred* web browsers.



Remote access is currently not possible with Internet Explorer.

3.1.2 Connection setup

- (1) Test connection / disconnection
- Start the program "OpenVPN GUI" with administrator access rights.
 Then, the OpenVPN icon is displayed in the info area of the task bar.
- Right-click on the OpenVPN icon and select
 "Connect" for connection or "Disconnect" for disconnection.

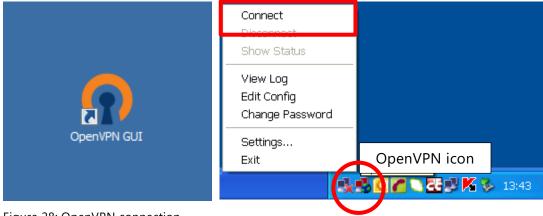


Figure 28: OpenVPN connection



After successful connection, the colour of the icon will change to green.

(2) Start the browser



- (3) Enter the following address for the FAFNIR server: *http://10.0.8.1* (for the user's own server, please enter the user's own address)
- (4) Confirm by pressing [Enter]
- The profiles created will vary depending on the user rights (configuration is carried out on the SECON server). These grant certain users access to configured items (petrol stations).
 - (5) In your browser, you will now see all the petrol stations released for you. Any petrol station with "Online" "Connect" status can be called up by clicking on "Connect".



Figure 29: SECON Server home page

3.1.3 Email Client Configuration

(1) Select "E-Mail Alarms" under the main menu "Configuration":

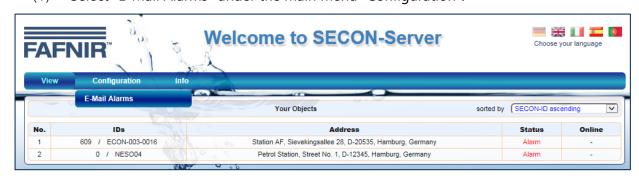


Figure 30: SECON Server - Configuration - E-Mail Alarms



(2) Log in as Administrator using:

User ID: admin Password: vap22765



Figure 31: SECON Server - Configuration - Login

(3) Enter the access data of your E-Mail account:



Figure 32: SECON Server - Configuration - E-Mail account

With the last field you can determine the times of E-Mails to be send: never / only at warnings / only at alarm / always. After saving a test email will be send automatically.



3.2 Connection to the SECON device

3.2.1 Connection setup

- (1) Any petrol station with "Online" "Connect" status can be called up by clicking on "Connect".
- (2) An access check for access to the petrol station is then carried out:



Figure 33: Verification on the SECON client

Please enter your user name and password here. In the case of the FAFNIR server, this is "fafnir" and "fafnir22766"

If verification is successful, the system connects to the SECON client selected and the data recorded for the petrol station can be viewed via the browser.



Figure 34: Remote access to SECON client



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