

# Manual Eltako FVS





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## 1. Introduction

Thank you for purchasing the Eltako FVS-software. It is the control centre for the whole „Embedded-Intelligence“-infrastructure. Within this manual, you will find all necessary information to install and use the software.

**To complete the installation and configuration, basic computer knowledge is necessary. If you are an unexperienced user, please refer to a professional. Please take the time to set up your Eltako FVS infrastructure. It is recommended to do the installation and configuration of all devices with at least two people. Read this manual thoroughly and carefully! The following instructions are essential for the installation and configuration of your software:**

 **It is strongly recommended to pay attention to all instructions marked with this symbol, because these are necessary for an error-free functioning of your Eltako FVS-software.**

 This symbol indicates background information.

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Status: October 2011

## 2. System requirements

### Hardware:

- Pentium® or AMD® processors above 1 GHz or compatible
- At least 1 GB RAM
- 4 GB free hard disk space
- Graphics card capable of 1024\*768 resolution
- DVD-ROM drive
- 1 x BSC-BAP respectively FAM-USB (receiver/sender module)
- 1 x LAN port
- 1 x free USB port

### Software:

- Microsoft Windows XP with Service Pack 2 or Microsoft Windows Vista
- Java Runtime Environment 6 (included in delivery)

### Performance characteristics of Eltako FVS:

Characteristics	FVS-Home	FVS-Professional	Pro-Enterprise
Number of supported senders:	100	250	Unlimited
Number of supported actuators:	128 per BoR	128 per FAM-USB/BAP	128 per FAM-USB/BAP
Number of supported cameras:	5	25	Unlimited
Number of system functions:	Unlimited	Unlimited	Unlimited
Number of Timers:	25	250	Unlimited
Support of BSC-BAP (LAN):	---	Unlimited	Unlimited
SQL-Database included in delivery:	✓	✓	✓
Support of foreign SQL-compatible Databases:	---	---	✓
SMS- / E-Mail-Support:	✓	✓	✓
Support of Eltako FVS-ToGo:	✓	✓	✓
Support of Eltako FVS-Mobile :	✓	✓	✓
Support of Eltako FVS-Client:	✓	✓	✓
Inclusiv license of Eltako FVS-Client:	---	1	1
Eltako FVS-ToGo on Code-Meter-Stick:	✓	✓	✓
256Bit-encryption:	✓	✓	✓
Camera matrix	---	---	✓

### 3. Eltako FVS installation

The following installation guide for Eltako FVS refers only to Microsoft Windows operating systems. The installation guides for all other operating systems can be found in the related folder on the Eltako FVS-DVD.

Please put the Eltako FVS-DVD in the DVD drive of the computer you would like to install on. If your system supports autostart, the installation routine will show up after a few seconds. If this is not the case, please start the file “Start.exe” in the root directory of the Eltako FVS-DVD by double-clicking it.



Figure 1: Eltako FVS installation

Please close all other running programs and confirm with “Next”.

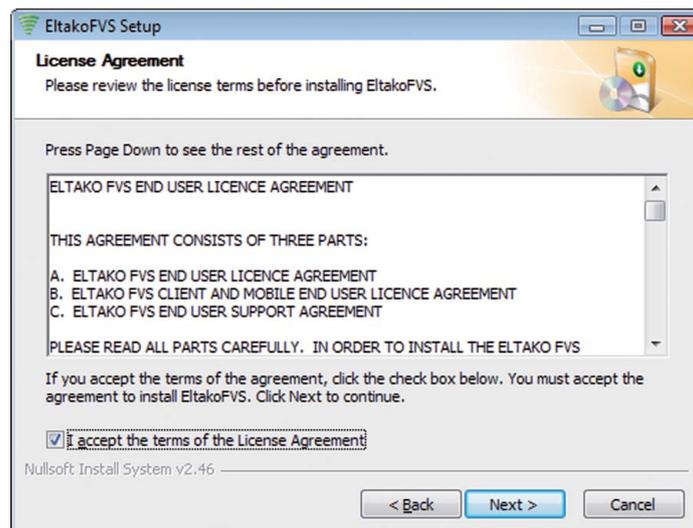
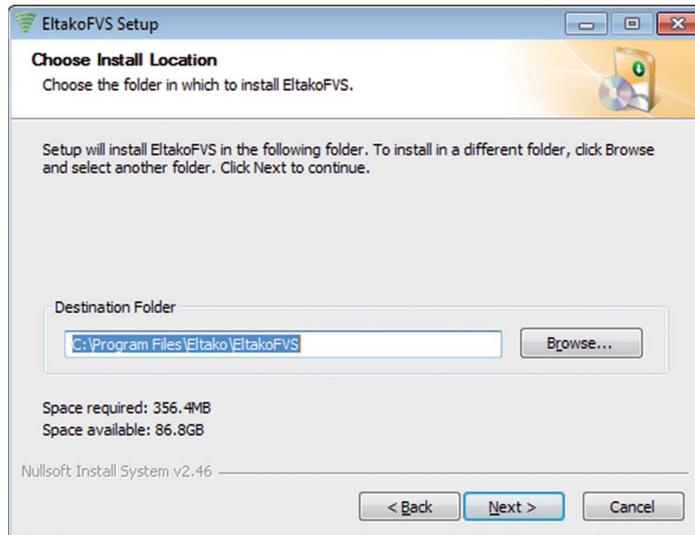


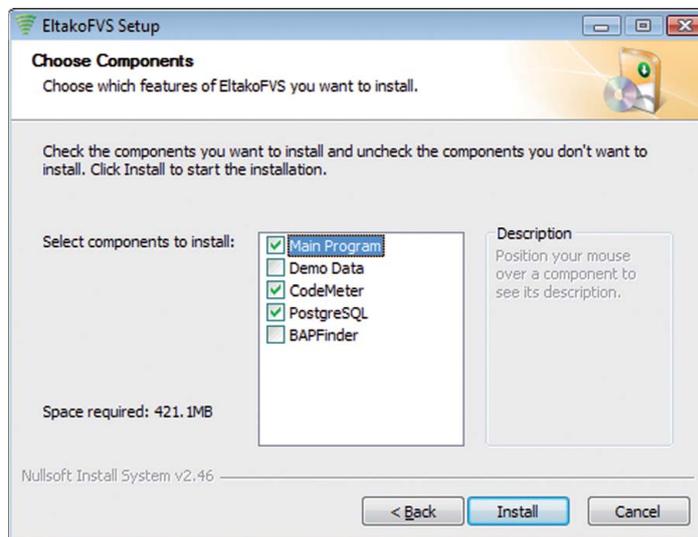
Figure 2: Licence agreement

Please read the licence agreement and confirm with “Accept”. If you do not agree, please click “Cancel”. Once you press “Cancel”, the installation will be terminated and Eltako FVS will not be installed on this machine. If you accept the licence agreement, the following dialog window appears:



**Figure 3: Destination folder**

Here you can specify the target directory. Go by clicking on „Next“ to the next window:



**Figure 4: Component selection**

Choose the components you would like to install:

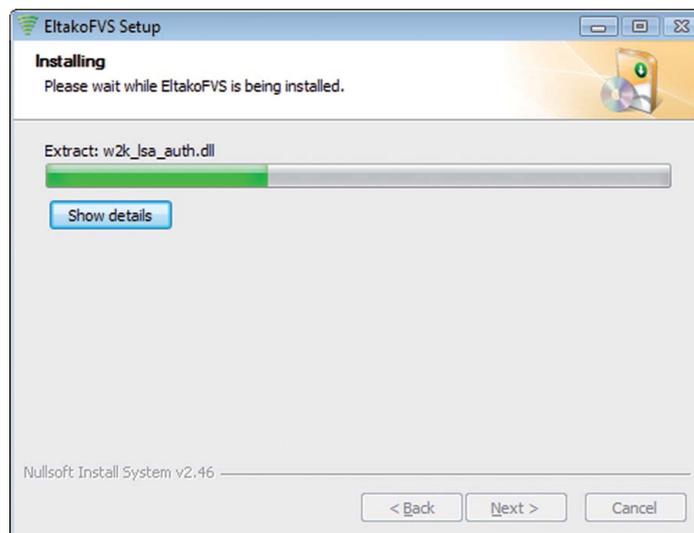
- **Eltako FVS Main Program:** installation files for Eltako FVS. (Obligatory!)
- **Eltako FVS Demo Data:** Demo Data for Demo-Version. (Do not check this Box during an update!)
- **CodeMeter:** installation files for the CodeMeter control centre (CodeMeter Runtime Kit). The CodeMeter control centre handles the licensing of your Eltako FVS Software. (Obligatory!)
- **PostgreSQL:** installation files for the included SQL Database (Optional! If you do not check this box, the integrated Derby-Database will be used.)
- **BAPFinder:** installation files for the BAPFinder. Obligatory to configure the BSC-BAP

**!** **Note: If you are unsure what to install, just keep the predefined standard settings.**

**!** **Note: If you have to reinstall your operating system, your licence has to be handed back beforehand using the CodeMeter control centre. This procedure assures that you will be able to reinstall Eltako FVS after you reinstall your operating system.**

**!** **Note: Do not install the Demo Data if you make an update. Otherwise it would be possible to delete your database.**

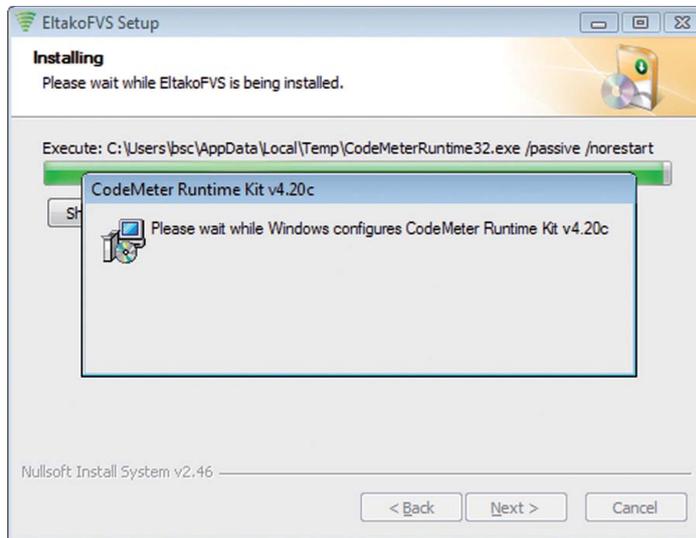
Finally, click on “Install“. Eltako FVS is now going to be installed on your computer.



**Figure 5: Installation progress**

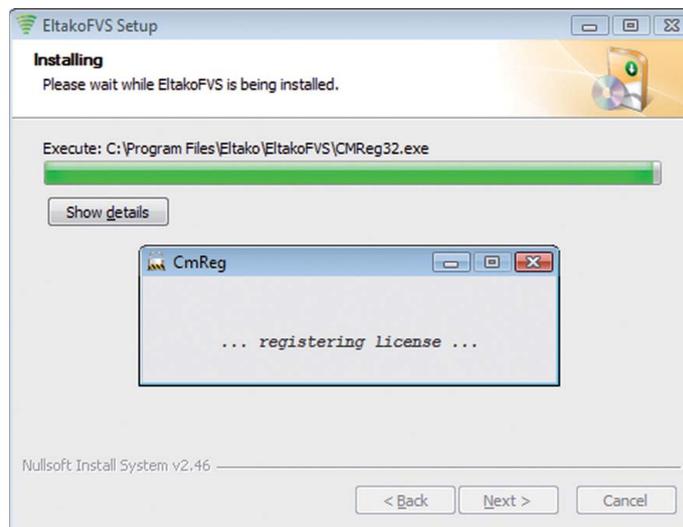
**i** **Note:** After an update or reinstall of Eltako FVS, the setup process ends at this point. Confirm the successful installation by pressing “Close“.

Within a complete installation, the setup process continues with the installation of the CodeMeter Runtime Kit.



**Figure 6: Installation of the CodeMeter Runtime Kit**

The next step is to register the licences:



**Figure 7: Installation of the CodeMeter Runtime Kit - register licences**

Wait until the installation is finished.



**Figure 8: Installation finish**

Please confirm the end of the installation by clicking on “Finish”.



**Note: Before you start the Eltako FVS software, please read chapter 4.1: The first start.**

## 4. Eltako FVS operation

### 4.1 The first Start

**!** **Note:** Before you start Eltako FVS Professional, assure that the BSC-BAP is connected, successfully installed and configured! (Refer to BSC-BAP manual).

**!** **Note:** If you want to use a FAM-USB for signal transmission, you have to specify a PC-Interface through "Configuration - PC-Interface".

#### 4.1.1 Licensing

You have the possibility to test your Eltako FVS Professional-software for 30 days in a demo version. To use this possibility, you have set your PC-Interface to Demo mode via „Configuration - PC-Interfaces“.

By clicking "Info - License - Enter licence key", you can enter your licence key to use your copy of Eltako FVS Professional in its entirety.

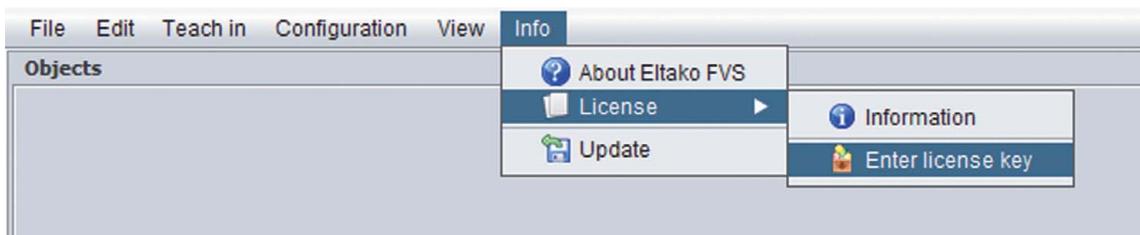


Figure 9: Enter licence key

After you entered your licence key, Eltako FVS Professional will exit.

#### 4.1.2 Database setup Eltako FVS Professional

In order to use Eltako FVS Professional, you need a database to administrate your data. The Eltako FVS Professional Editions use the PostgreSQL or Derby database included in delivery. The utilization of other types of databases is restricted to Eltako FVS Professional Enterprise.

By default, Eltako FVS installed with the Derby database. About „Configuration - Database - Database System“ you can change the database system afterwards.

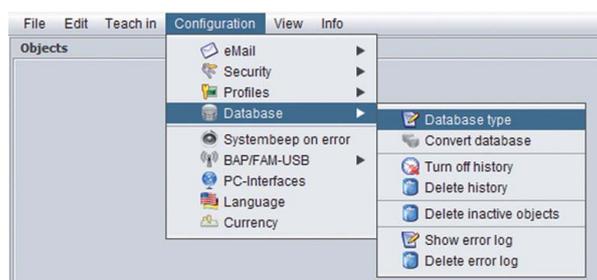


Figure 10: Database setup

**i** **Note:** To use PostgreSQL, it has to be chosen during the installation.

**i** **Note:** If you use Eltako FVS Professional Basis/Advanced, the database and user name are predefined.

Database name: visudb  
User: user  
Password: password

**i** **Note:** Every Eltako FVS-version has an automatically generated user. This user has the rights of a “superuser” and is allowed to administrate the PostgreSQL database system.

Database name: Not limited to a specific database, this user has access to all databases  
User: postgres  
Password: P@stgre\$

A new window appears. During this routine, the program searches for an already installed database. As soon as it is found, a first-time initialization begins.

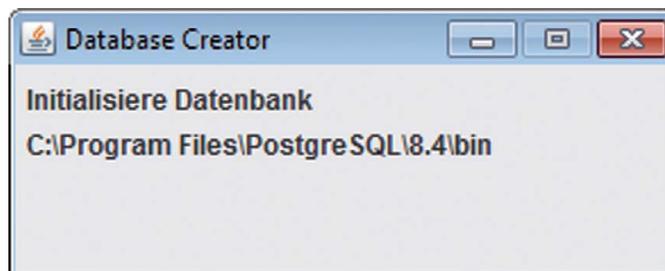


Figure 11: Initialization

### 4.1.3 Database setup Eltako FVS Professional Enterprise

During the first start of Eltako FVS Professional Enterprise, the database has to be installed. This function is available through “Configuration - Database”.

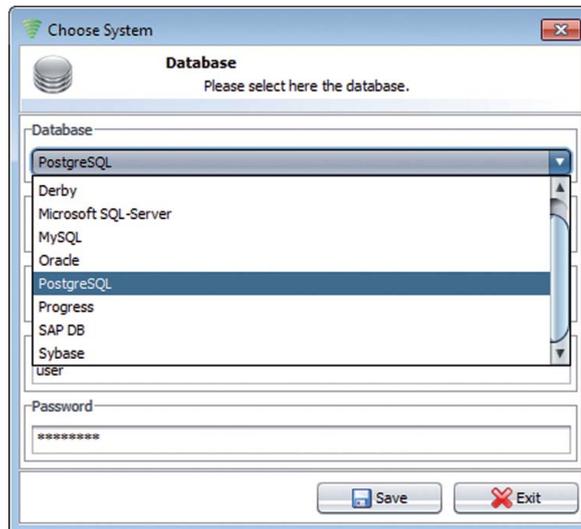


Figure 12: Opening the database system window

You can select your database by choosing one from the drop-down-menu. After your selection, the input fields “Driver” and “Database URL” are preallocated. Usually, it is sufficient to change the “Database URL” according to the specifications of your system.

Example:

You are using the delivery included PostgreSQL-Database and install it on a Server with IP Address 192.0.0.1 and Eltako FVS Professional was installed on another server. By default, you get the following text in the “Database URL”-field:

```
jdbc:postgresql://localhost:5432/visudb/?characterEncoding=UTF8
```

Due to the fact that your database is not on the same server as your Eltako FVS Professional-Software, you are forced to replace “localhost” with the IP Address of your database server. After you edited the field, it has to look like this:

```
jdbc:postgresql://192.0.0.1:5432/visudb/?characterEncoding=UTF8
```

Through “Configuration - Database - Database type”, you are enabled to edit your database retrospectively.

After adjusting the URL to ensure the availability of the database, you have to insert the user name and a password in the corresponding fields. The user has to exist as a database user and has to have access to the database instance "visudb".

After finishing the installation, click on "Save". Confirm the following dialog with "Ok" to exit the program. During the following restart of Eltako FVS Professional, the required database charts will be created and installed.

To go back to the system dialog, you have to select "Configuration - Database - Database type".

**i** **Note:** After the selection of a database system, the database URL as well as a driver name are automatically inserted. You may have to change these values if you use another jdbc driver for your database system.

**!** **Note:** jdbc drivers for database systems aside from PostgreSQL are NOT included in delivery! Usually, the jdbc driver is delivered with the purchase of your database system. If you have not received a driver, please call the support of your database vendor.

**If you have a jdbc driver for your database system, please copy it into the installation directory of Eltako FVS Professional under jre/ext.**

#### 4.1.4 PC-Interface selection

During the first start of Eltako FVS Home, you have to specify the PC-Interface for your FAM-USB (Refer to the FAM-USB installation manual).

**!** **Note:** Before you start Eltako FVS, assure that the FAM-USB is connected, successfully installed and configured. Without connection to the FAM-USB, there is no signal transmission or reception with the Eltako FVS software possible (Refer to FAM-USB manual).

In the configuration dialog you will find among others the menu item „PC-Interfaces“. What opportunities are behind each button, you will learn in subsequent chapters.

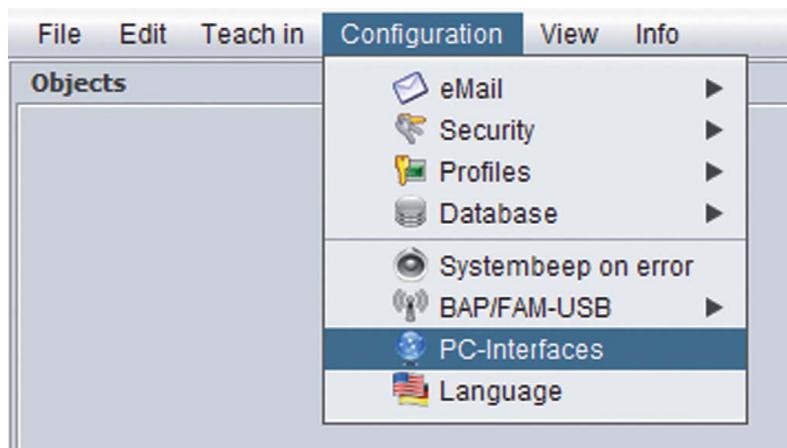


Figure 13: Configuration menu

Please press “Configuration - PC-Interface“.

In the upcoming window, choose “Autodetection“ and the system will search automatically for a connected FAM-USB. You can save your changes by pressing “Save“.



Figure 14: Selection of a PC-Interface

#### 4.1.5 Language

You can change the language over the menu item „Configuration - Language“.



Figure 15: Language choice

If you have changed the language choice, a restart of Eltako FVS is required.

#### 4.1.6 Currency

You reach the currency choice about „Configuration - Currency“. Here you can change the currency announced in the Energy cockpit.

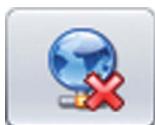


Figure 16: Currency choice

## 4.2 Main screen

After a successful installation of Eltako FVS, you are enabled to use the software to monitor and control your EnOcean equipment.

The button “overview” always has the color of the highest status of the handle or the reed contacts. “Highest status” means opened in case of a window handle, and it is defined as being red. The next status “toppled” will appear yellow. If at least one device is on (e.g. Light), new symbols will appear on the button. In addition, there are four quickselect-buttons on screen.



Eltako FVS-ToGo resp.  
Eltako FVS-Mobile On/Off



Notification On/Off



Doorbell On/Off



Alarm On/Off

In the following, the functions mentioned above will be explained.



Figure 17: Eltako FVS Home main window

**RED**

At least one door/window is opened

**YELLOW**

At least one door/window is toppled, but none is opened

**GREEN**

All doors and windows are closed

To get detailed full screen information about all activated and registered objects, please click on “Overview”.

### 4.3 Object overview

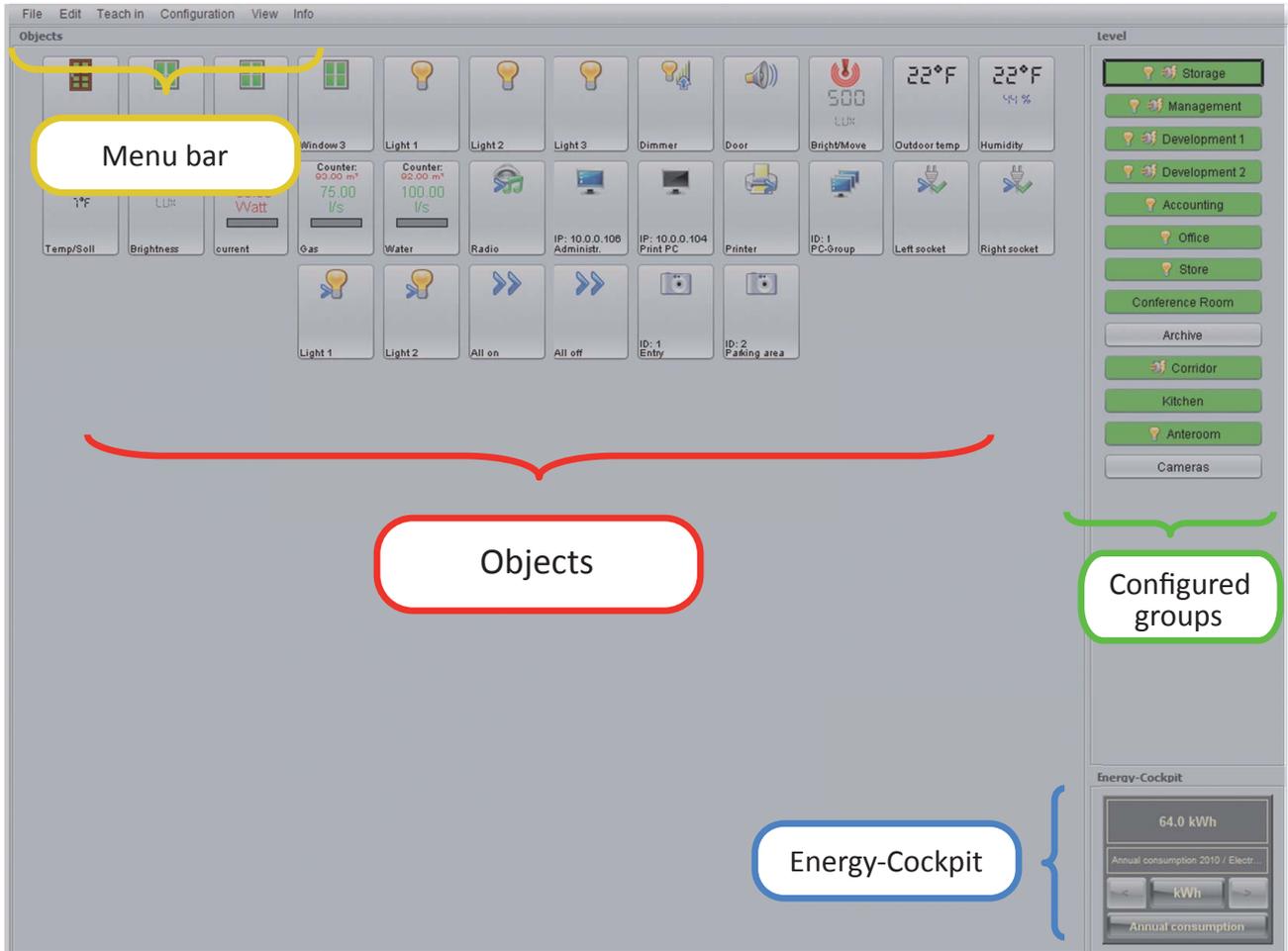


Figure 18: Object overview

#### Menu bar:

In the menu bar you will find all the options to configure and control your system. Such options may include, for example, the introduction of new sensors or actuators, adding cameras and the object of setting up notifications.

#### Objects:

Here you can see all semiskilled objects as well as cameras, actors, links and timers.

#### Configured levels:

This is where every created level appears. Chapter 4.10 tells you how to create levels. By clicking on one of the level buttons, the selected objects of this level will be displayed.

#### Energy cockpit:

With this quick view you have an eye for the fuel energy data. By clicking on the middle row you open the energy cockpit for using more features. Read chapter 4.12 to get more information.

The symbol colors show the current status of the corresponding objects.

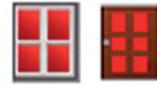
Doors/Windows:



Window/Door closed



Window/Door toppled



Window/Door opened

Devices:



Lamp



Dimmer



Socket



Actuator



TV



Multimedia



Air conditioner



Shutter



Room (universal)



PC on



PC Standby



PC-Group



Printer



IP-Camera



Radio chair



Doorbell switch



Card switch



Scene-sensor



Generisch



Miscellaneous

A disabled device appears colorless.

Example:



If a device executes a task, a symbol turns up.

Example:



Single actors are labelled by: ➤

Example:



If actors are combined in a link, the link is visualised by this symbol: ➤➤

Example:

If the BSC-BAP is not available, every object normally communicating with this BSC-BAP gets an exclamation mark.

Example:



This symbol means that a BSC-BAP was not available for some time, but has reconnected to the system. In this case, every object usually communicating through that BSC-BAP gets a little exclamation mark aside from the visualization of its last state. This exclamation mark indicates the last state before the connection loss. In this case, the user has to undertake a visual inspection of all objects.

Example:



When a BSC-BAP is not reachable during start up Eltako FVS the following symbol appears for all objects who communicates with this BSC-BAP.

Example:



Invisible objects are represented by a speech bubble. These objects lost their previous type (e.g. light) through an actor allocation and are therefore displayed with a placeholder symbol.

Example:



The user is able to assign pictures to switches or actors. If the selected picture is not available to the system, the "NF" (Not found) symbol turns up.

Example:



Sensors:



Motion sensor



Temp./Humidity inside



Temp./Set inside



Brightness



Temp. outside



Motion sensor / Brightness

Below every symbol, you can read the ID of the respective object and the ID of the FAM-USB/BAP that reported this status. If you have assigned (as mentioned in Chapter 4.5) a room and a short info to this object, the ID's will be replaced by room and/or short info.

#### 4.4 Information to learn objects

Objects are all broadcasting devices based upon the EnOcean radio technology which are “learnable” by the Eltako FVS software. Always teach in objects within the software one after another. Assure that there are no other persons around to activate different objects accidentally. This is the only way to ensure that objects are clearly identified and correctly allocated. It is recommended to carry out the breaking in mode by two persons.

#### 4.5 Learn and edit objects

In this chapter, the learning procedure is explained using the example of a handle.

In the main menu, click on “Teach in - Teach in dialog”. The dialog “Teach in sensors” appears. On the left side, under “Assigned sensors”, the available levels are shown. The right side shows “New objects”.

Use the handle you want to learn to the Eltako FVS Software. Below “New objects”, the handle with its Object-ID turns up. To assign it to the system (e.g. to the level basis level) you have to drag and drop it on a level folder on the left side of the dialog.

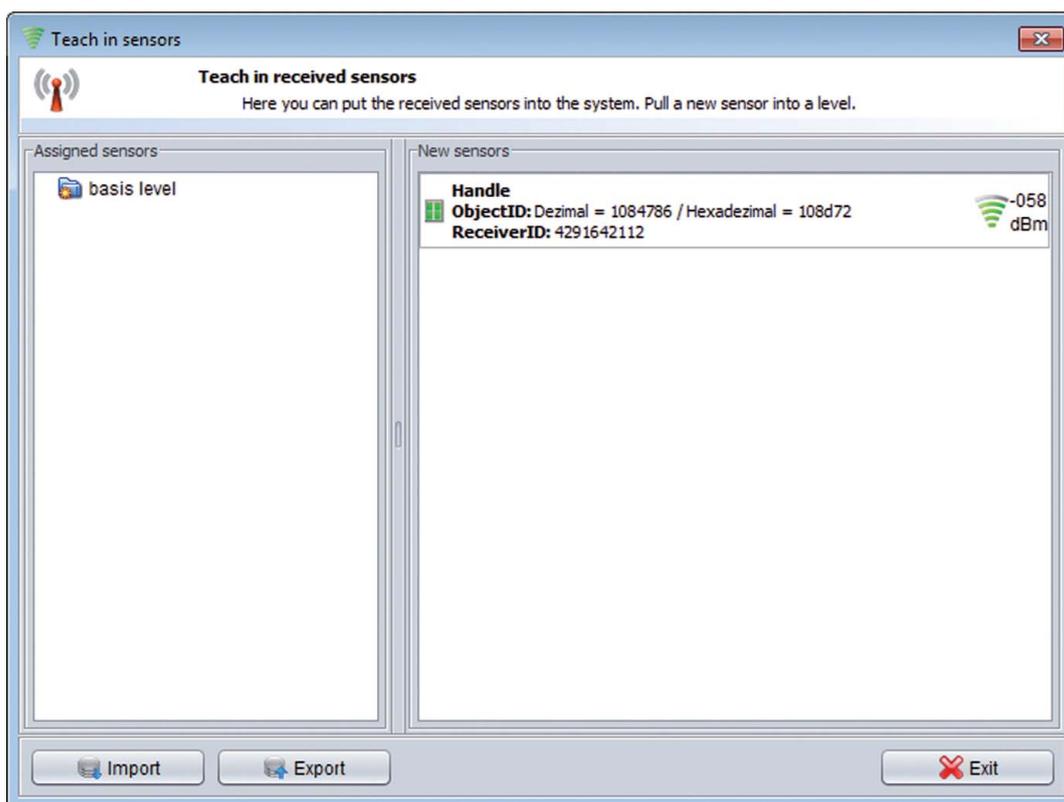


Figure 19: Learning and activating a handle

The learning operation for other objects like switches or reed contacts is similar.

- !** **Note:** Please notice that some objects like sensors or reed contacts independently broadcast signals in certain intervals! Thus, it is recommended to unpack them individually, learn them one after another and configure them individually to avoid mistakes. After a sensor or reed contact was recognized, the type of the sensor as well as its location should be manually added in the object overview.
- !** **Note:** Newer generation sensors are equipped with a learn button. If you press this button, the sensor sends a learning signal.

At this point, it is recommended to name the new object to clearly identify the handle. Right-click on the symbol of your handle and a context menu appears. Select "Edit" to open an object specific window for additional information.

There are different dialog windows, but they are all as easy to use as the described dialog to edit a handle.

The following information is visible:

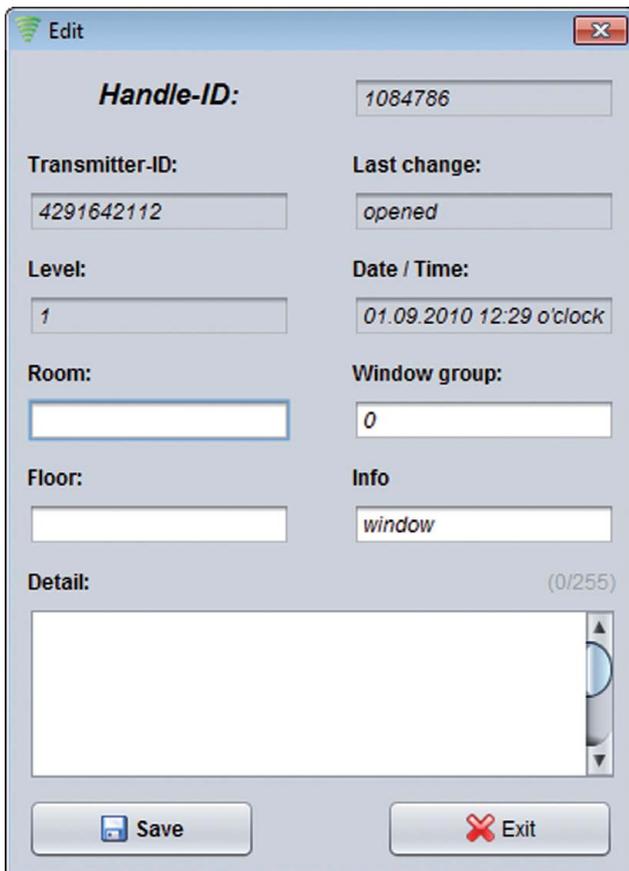


Figure 20: Edit handle details

**Handle-/Switch-ID:** These are determined and not changeable.

**Transmitter-ID:** The ID of the FAM-USB/BAP that transmitted the last state.

**Level:** The level the object is assigned to.

**Last Changes:** Shows the last state of the handle preliminary to the actual state.

**Date / Time:** Time of the last change.

Complete the following information fields:

**Room:** Enter the room where the object is located. (e.g. nursery)

**Floor:** Enter the floor where the object is located. (e.g. top floor)

**Window group:** Double objects (e.g. double windows) can be combined with this group.

**Info:** You can enter any optional short information regarding the object.

**Detail:** Enter detailed optional information.

After you completed the desired fields, please click on "Save" and afterwards on "Exit" to finish the configuration.

- !** **Note:** It is recommended to complete at least the fields "Room" and "Info", because these are displayed later in the object symbol within the object overview. Do the same for all other objects. This is the only way to assure that you will not lose sight among multiple objects!

By now, you get all available information for an object by clicking on the window symbol within the object overview window.

**i** Note: All other menu entries will be explained later in the corresponding chapter.

After a successful learning process, the semiskilled objects are displayed within the object overview:



Figure 21: Objects in object overview

The context menu opens by right-clicking on the desired object. Aside from the already known options from the breaking-in mode, it provides additional actors. These actors are explained in later chapters.

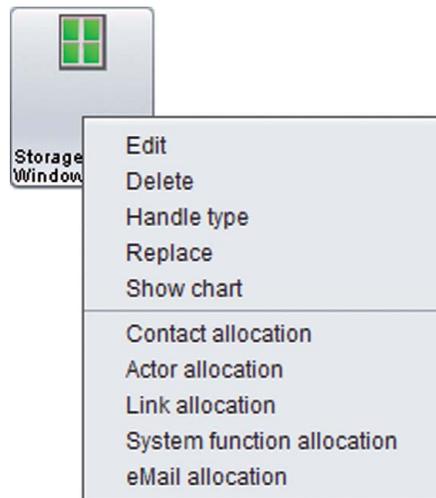


Figure 22: Context menu of a handle

## 4.6 Replace objects

You would like to replace a semi-skilled object (e.g. switch, handle, sensor) this is carried out with a right click on the desired object in the object overview.

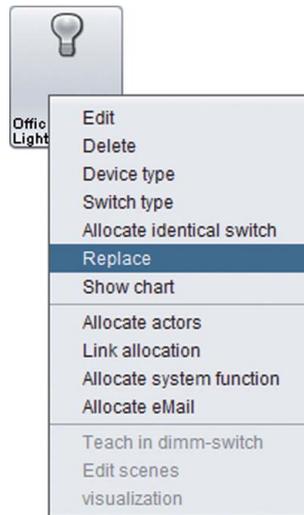


Figure 23: Replace a switch

A new dialog seems after you have voted in the context menu „exchanges“.

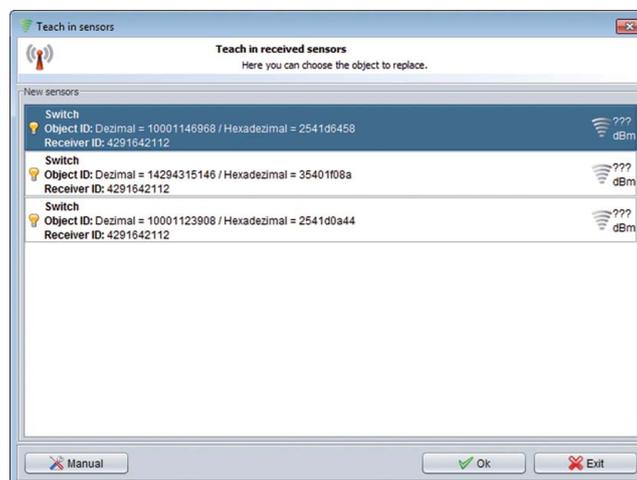


Figure 24: Choose a switch

If you operate the object now, it appears in the area of „New objects“. Select it and click on „Ok“ with a simple click to exchange it for the previous one.

With the badge „manually“ you show the system the new object of using the ID.

Successful exchanges are confirmed by a new dialogue window.

### 4.7 Show history of objects

Another option in Eltako FVS is the graphical illustration of the history of switches, handles, reed contacts and sensors.

By choosing “Show chart“ in the context menu of the handle, the following dialog opens:



Figure 25: History of a handle

Under period you can enter a period for which the trend is shown.

By right-clicking the diagram, you can open the context menu. It enables you to print or save the history and to change the visualisation.

You can choose by sensors which value should be shown. It is also possible to export data.

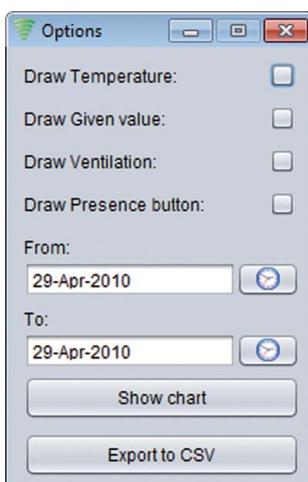


Figure 26: Trend options of a sensor

### 4.8 Activate and deactivate objects

The system automatically sets the status for a new object to “activated”, because only activated objects are visible to the system.

There are two ways to activate or deactivate objects.

On the one hand using the learning mode through the context menu of the corresponding object, on the other hand by clicking on “Edit - Object deactivation”.

By choosing the second possibility, the window “Object deactivation” opens. It shows all objects sorted by category in tabs. If required, you can deactivate objects here.

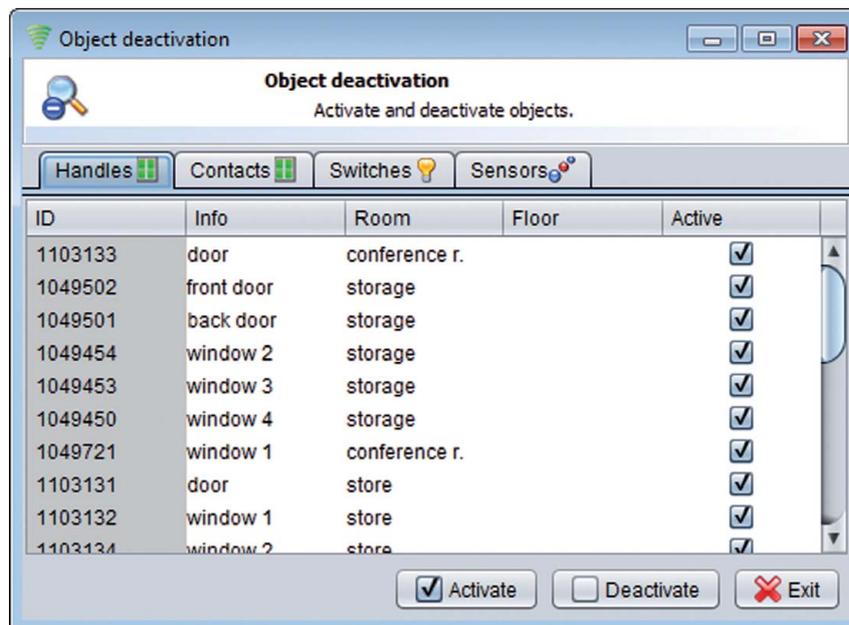


Figure 27: Activation and deactivation of objects

**i Note:** It is also possible to mark multiple objects and to activate or deactivate them at one time by using the context menu through a right-click.

### 4.9 Adjust the device type

Within the object overview, you are enabled to determine the device type of different switches (e.g. power strip, TV, Radio et cetera ), handles/reed contacts (door/window) as well as actors (e.g. PC/PC-Group). Right-click on a switch or actor and pick “Device type”. To edit handles or reed contacts, select the equivalent field “Handle type” from the context menu.

**i Note:** The object types switch and actor offer the possibility to exchange the standard images for your own images. Select “Device type” from the context menu. Further information is available in chapter 20.

#### 4.10 Create and assign levels

If you have a large number of objects, it is reasonable to pool them in levels (e.g. by floors, departments, et cetera). These levels get their own overview window, where only objects belonging to this level are displayed. To create a level, please click “Edit - Levels - Create/edit”.

Window “Level administration”:

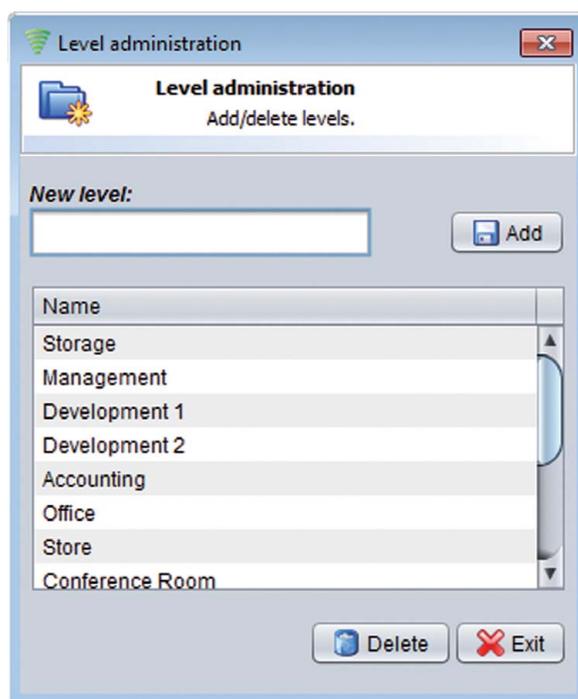


Figure 28: Create Levels

Here you can create new levels or delete existing levels. To create a new level, enter its name in the description field and press “Add”. The new level instantly appears in the upper half of the dialog window.

If you want to delete a level, select it and press “Delete”.

 **Note: Only levels without assigned objects can be deleted!**

 **Note:** If you want to rename a level, simply double-click on the corresponding level, and the level name will be ready for editing. If you have finished editing, confirm your changes by pressing “Enter”.

To assign objects to levels, please click on “Edit - Levels - Assign sensors/actors”.

Window “Level allocation” appears:



Figure 29: Level allocation

You will see a chart, containing the objects. These are categorized in tabs. By clicking on the column “level”, a drop-down menu appears and you can choose the level the object should belong to. The changes will be saved automatically.

## 4.11 Explanatory notes about certain object types

### 4.11.1 Allocate a handle to a reed contact

Eltako FVS gives you the possibility to establish a link between a handle and a reed contact. This is especially recommended in high precaution areas which deserve special security.

#### Example:

A high-security storage room has a window. To achieve maximum security, a reed contact is installed beside the already installed handle.

For the software, there are two different objects present. By establishing a link between handle and reed contact, there is only one object in form of a handle present in the object overview window. Additionally, the software gets the task to test both objects on plausibility if the status of one object changes. In case the handle reports the status closed (green) and the reed contact reports opened (red), alarm will be triggered.

In case of such an allocation, the highest status of one of the two objects will be visualized. You will read in the following chapter how to establish an allocation between these two different objects.

For a better understanding of the visualization, the following example shows the handle green (closed) and the reed contact red (opened). If you want to establish a connection, please assure that both object types have the same status.

Move your cursor to the handle (left object) and press the right mouse button. Please select “Contact allocation” from the context menu.

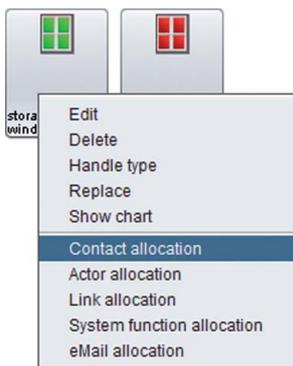
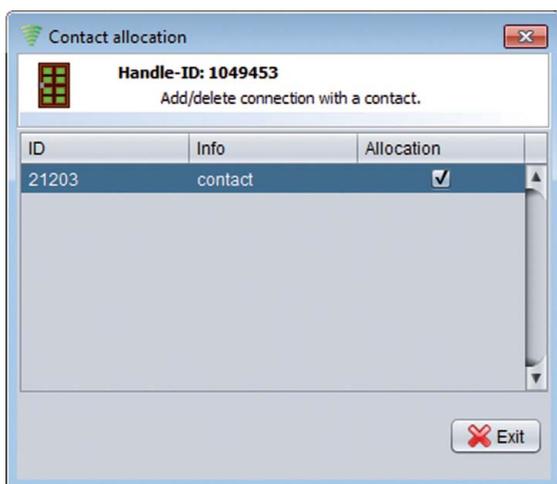


Figure 30: Context menu handle



The following dialog shows a list of all reed contacts within the system. One reed contact can only be allocated to one handle.

Select the desired reed contact from the list and check the associated box in column “Allocation”.

After a successful allocation, press “Exit” to close the window.

Figure 31: Reed contact - handle allocation



The object overview now shows only the handle. It has taken over its state from the reed contact, because the reed contact has a higher status.

Figure 32: Window object with allocated reed contact

**!** **Note:** This example was for demonstration only. Please assure always that your objects are in the same state if you want to allocate them.

#### 4.11.2 Allocate identical switches

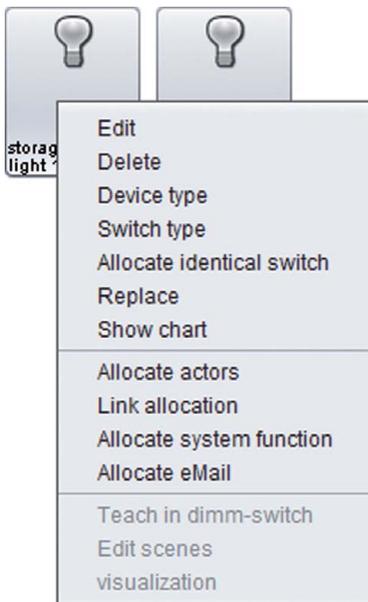
You will need the functionality “Allocate identical switch“ if you want to use three-way switching.

Example:

A building has a room with two accesses. Each of these accesses has a light switch. Both light switches have the same function, so that they both switch the light for the whole room. After their activation in Eltako FVS, either are individually visualized. Due to the fact that the room is planned with three-way switching, there has to be only one light switch visible in the software.

Without “identical switch allocation“, the single activated light switch would be visualized in the right way. In contrast to that, the second light switch would show “off“ in Eltako FVS.

In object overview mode of Eltako FVS, move your cursor to a switch object. Then open the context menu by right-clicking on the symbol.



By clicking on “Allocate identical switch“ you start the connection dialog.

**Figure 33: Allocat identical switch**

Within this dialog, you will get a tabular listing of all available, activated switches. To allocate an identical switch, you have to check the proper box in column "Choose". In this example, the identical switch is "Light 2".

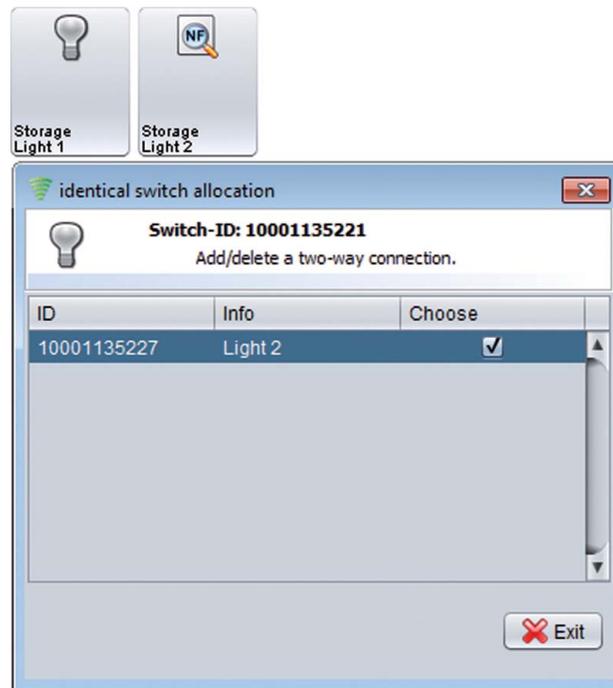


Figure 34: Dialog "Identical Switches"

"Light 2" is immediately removed from object overview after you set the check mark. This switch is only visible in the image above because "Invisible objects" are activated. After you finished this allocation, you have a three-way switching in your system and both switches are visualized within one symbol.

**i Note:** Before you start the allocation for "identical switches", you should reverse existing connections with actors or links. After a successful allocation of both switches, you can reattach the remaining object to the actor or link.

### 4.11.3 Dimm-switches

The dimm-switch is a special type of switch that is responsible for the visualization of an actuator. To be able to visualize a dim actuator through Eltako FVS, you have to select “Teach in dimm-switch” from the context menu.

**i Note:** This menu entry is not the same as “Allocate actor”.



Figure 35: Dimm-switch learn dialog

This dialog measures the time needed by an actuator to complete a dim process. A dim process means in this case that the light goes from on to off or the other way around.

Before you start the recording, you have to complete the following steps:

Switch is trained to the dim actuator

The dim actuator is in its minimal (off) or maximal (on) state

Now press the button “Recording” and Eltako FVS will wait for a signal of your switch (press the switch). Afterwards, the symbol color changes to red. This is your response that the time measurement is in progress. When the actuator has finished the dim process (contrary to your starting status), release the button. As a response, the colour of the dialog symbol changes again. The dim actuator will be visualized in Eltako FVS after the recording respectively the measurement is finished.

**i Note:** You can connect the dimm-switch to a correspondent dimmer actor. This means that always the last used component (actor or switch) will be displayed in your object overview.

**i Note:** If the recorded time for a dim process differs from the real time the process takes, you can always start a new recording.

#### 4.11.4 Multichannel sensors

Multichannel sensors measure values and report meter readings. Your Eltako FVS software gives you an overview about your sensor values or in case of an AMR-sensor about consumption values. Depending on the type of your sensor, it offers advanced configuration possibilities. Some of these possibilities will be explained on the basis of an AMR-sensor. The AMR-sensor can count meter readings as well as measured values (e.g. current, water).

The learning of the sensor is done by pressing the learn button in learn mode. After you added this sensor to your Eltako FVS software, it will be visualized in object overview.

You also have the opportunity to combine AMR sensors in the object overview to sensor combinations. Hold down the CTRL key, the values in the total count will be subtracted. Are the invisible objects hidden in the object overview, disappears the AMR sensor, which is drawn on a second one, and only the second AMR sensor and the total count to remain visible when the Alt key is pressed.

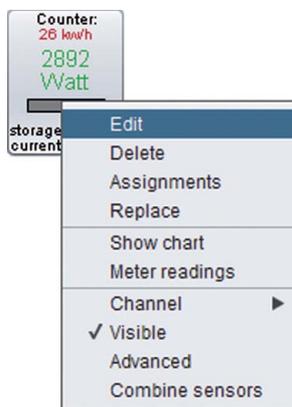


Figure 36: Context menu AMR-sensor

By pressing “Edit” in the context menu of the sensor, you can add additional information (see chapter 4.5). The button “Advanced” opens a new dialog window to edit the properties of every single channel.

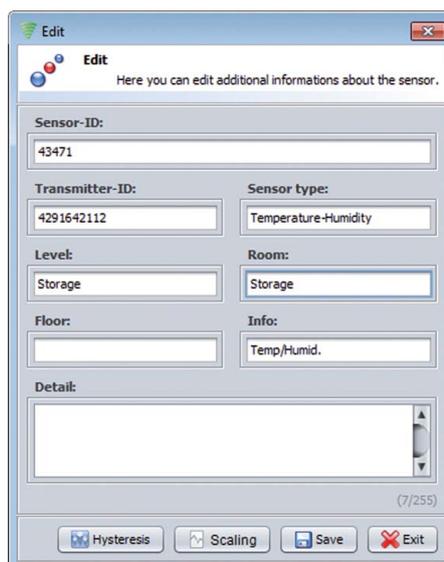


Figure 37: Advanced sensor edit

Further your meter readings will be displayed, if you choose “Meter readings” in the context menu of your sensor

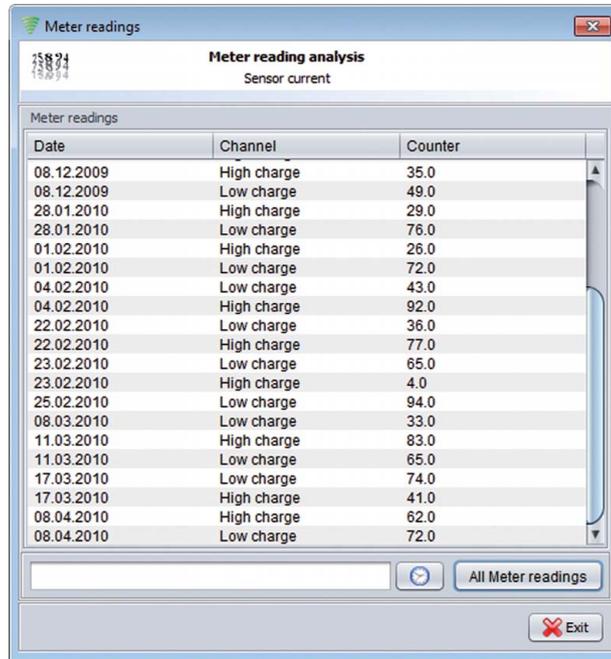


Figure 38: Meter readings

The object symbol in this illustration shows the meter reading as well as the current consumption and its context menu:

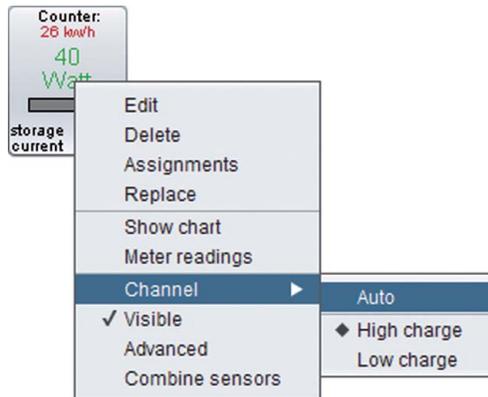


Figure 39: Channel selection in context menu

Via “Channel” in the context menu, you can choose the visualised value. If you choose “Auto”, the value changes as soon as there is a signal input aside from the current channel.

For a graphical illustration of meter readings, you will have to set a check mark before “Advanced” in the context menu.

Another functionality is the connection of meter readings and measured values with actors, links, system functions or e-mail notification by pressing "Assignments" in the context menu.

In this example, an e-mail will be sent if the meter reading of channel 0 reaches a value of 7000 kW/h.

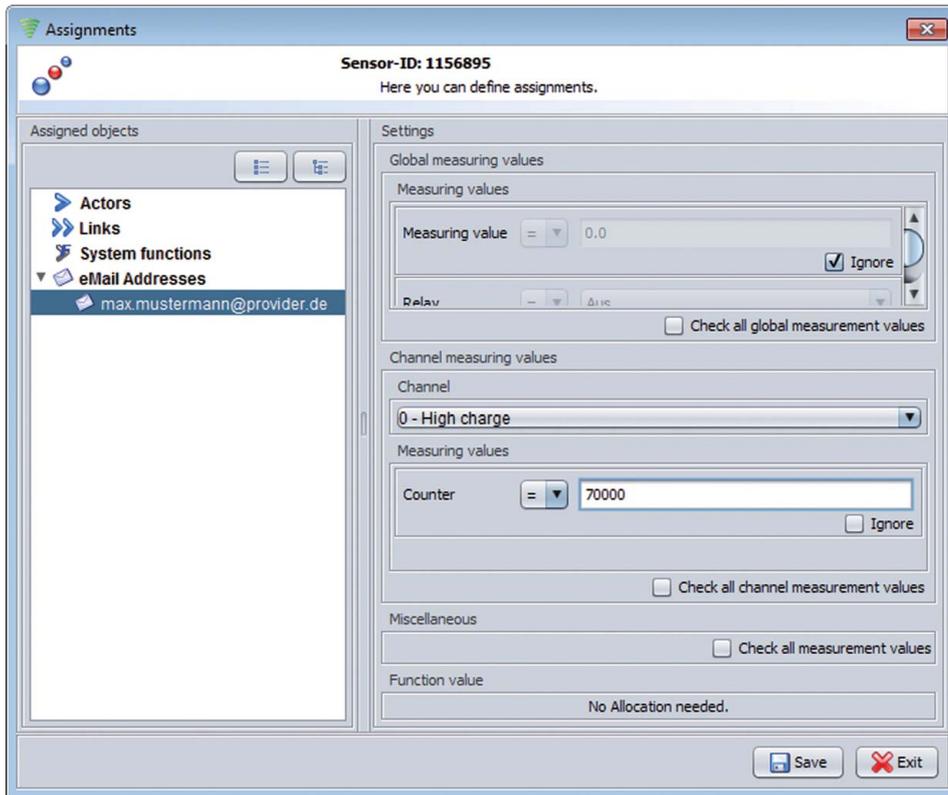


Figure 40: Define connections

Also on the context menu you have the possibility to combine sensors.

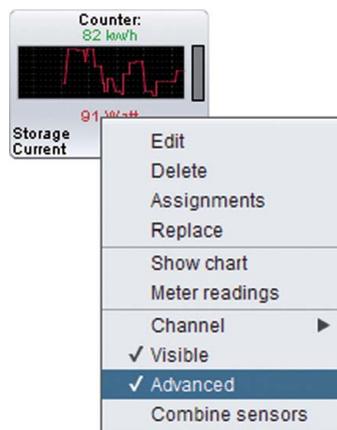


Figure 41: Context menu combine sensors

The following window is divided into several areas. All available sensors of the same type are listed on the left side. This dialogue was selected for example from the context menu of an AMR sensor that measures the electricity consumption, only sensors are listed, which measure the power consumption. In the „Settings“ you can enter additional information about your sensor combination. The actual allocation of sensors and operators is performed in the field „Assigned“. The button on the left side of this region are used to add and remove sensors to the desired combination. In the column „operator“ you can specify whether the sensor values are added, subtracted, multiplied or divided to be.

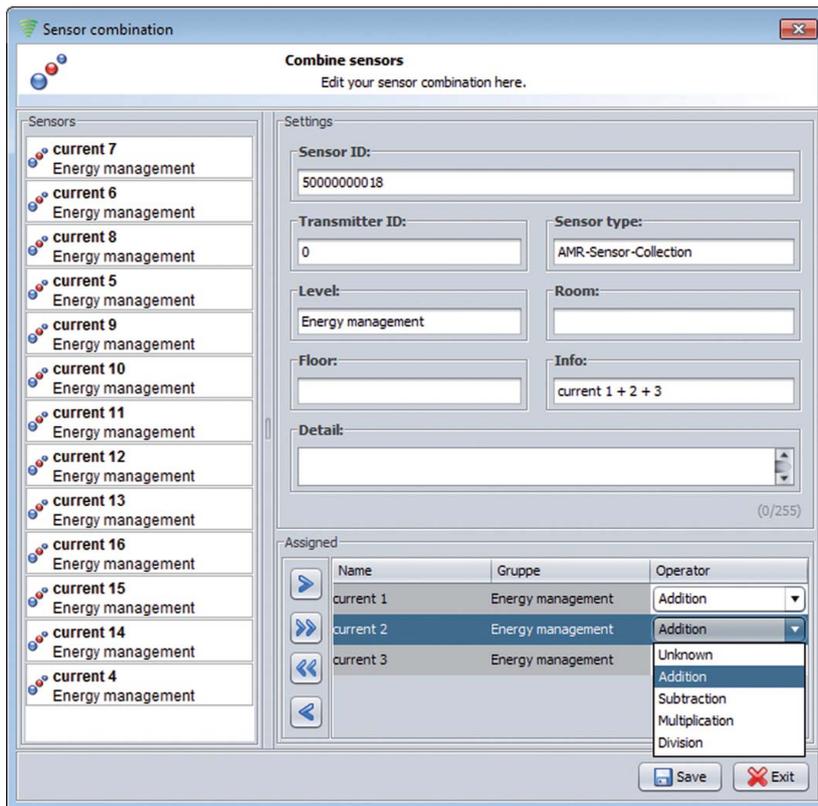


Figure 42: Sensor combination

### 4.12 Energy cockpit

The energy cockpit in the object overview gives you an overview about the annual consumption of the selected measure value.



Figure 43: Energy cockpit in object overview

The three rows below are controlling the displayed values. The lowermost row switch between annual, monthly or daily consumption. With a click of the button in the middle of the middle row you can change between kWh, m<sup>3</sup> or \$. A click of the upper row opens the dialog window. The button on the right and left side change the displayed measuring unit (e.g. water, electricity, gas).

The dialog window appears:

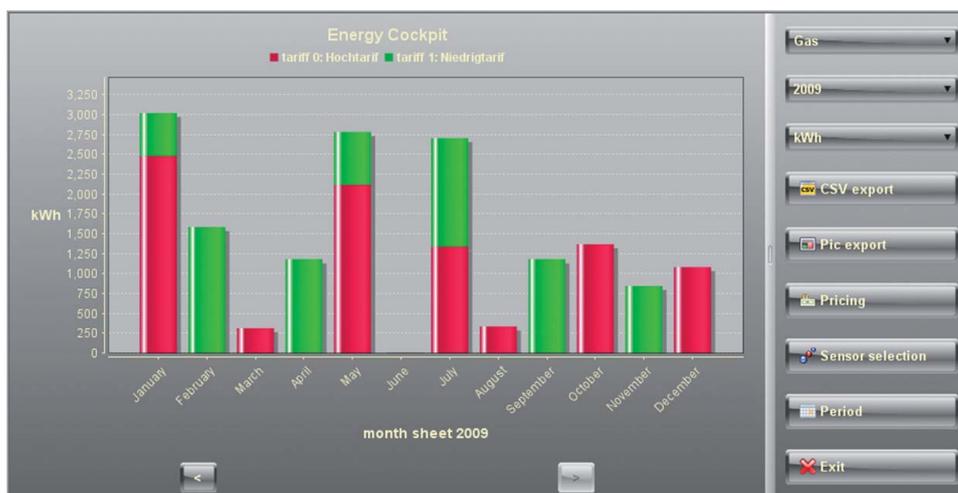


Figure 44: Energy cockpit

In the right pane of the window, change the values shown, the year and the unit. In addition, you can export the displayed data as a CSV file or as a graphic in PNG format. With the button „pricing“ is to set the prices of consumption units. If only certain sensors should analyzed, it can be set via „range sensors.“ Periods can be defined for the graphical analysis by clicking on „period“.

With a click on a bar of the annual view, you get to the month view. Another click shows the consumption for one month. Via the two buttons at the bottom you go back to annual or called the last month.

**Note:** The display in the object overview will not be refreshed automatically. Only after clicking a button the displayed values change.



#### **4.13 Systembeep on error**

In Eltako FVS you have the possibility to get notified by a systembeep if there is any system error. Mark the menu item and you and the PC on which Eltako FVS is running will beep.

## 5 Actors

### 5.1 Definition of an actor

Through actors, end devices (e.g. actuators and switches) can be connected to a sender. This enables you to use the software to operate these devices. Every sender has a unique and explicit ID to assure that only this semiskilled sender can switch the receiver. Furthermore, every FAM-USB/BAP is equipped with 128 of these IDs which can be linked to receivers. To maximize security, Eltako FVS is not able to “simulate” IDs - therefore, misuse is impossible. Every “software switch” creates an actor and uses an ID.

### 5.2 Create, edit and delete actors

To create, edit or delete an actor, please click “Edit - Create/edit actuators”:

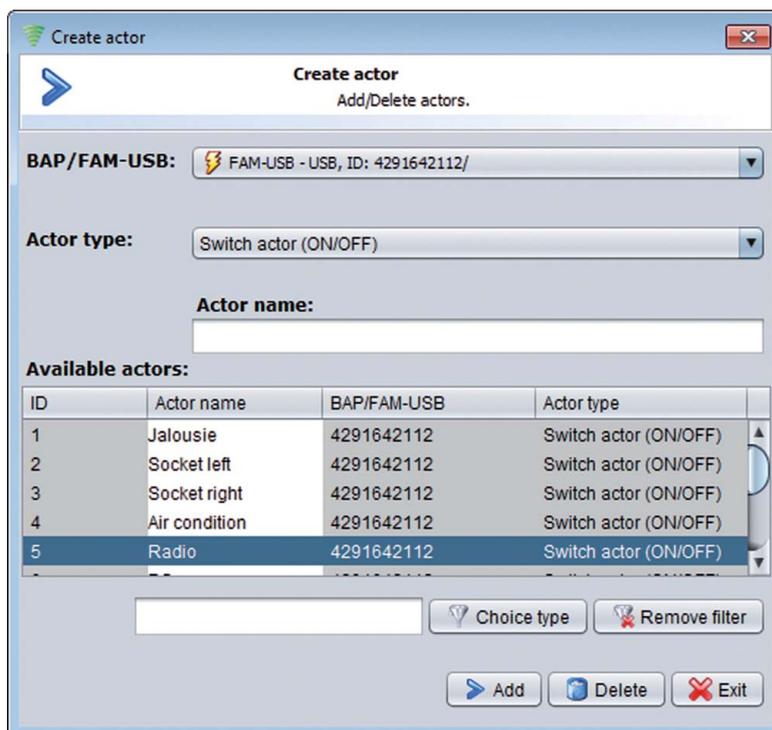


Figure 45: Create / Edit actors

In the upper area of this dialog box you can select the BAP/FAM-USB, where you want to teach-the actuator.

**i Note:** It is important to choose a BAP/FAM-USB that is within the radio range of your switching device.

You can choose the type of an actor in the upper part of the dialog. You have the following choices:

Switch actor (ON/OFF)	Switching of devices
Switch actor (OFF/ON)	Switching of devices
Switch actor (EEP2)	Switching and dimming of light
Absolute-Dimmer	Dimming of light
Relative-Dimmer	Dimming of light
Thermostat control	Changing of a room temperature via a thermostat actuator (see chapter 5.8).
Alarm display	Visualised status of the alarm system.
Heating control	Changing of a room temperature via a switch actuator.
Eltako FSB12 actor	Controlling of sun or roller blinds (see chapter 5.10).
Eltako FHK12 actor	Changing the temperature in a room.
Heating control MD15-FTL	Changing the temperature in a room.
Impulse actor	Switching of devices

Both switch-actors (ON/OFF and OFF/ON) exist to switch light on or off. The switch-actor (EEP2) can switch light on or off as well as dim it. The “Absolute dimmer” and “Relative dimmer” actors can control dimmers, and the “Alarm display” actor is used to control a HOPPE Holding AG SecuSignal-receiver. The alarm system sends its status to the SecuSignal-receiver, who visualises the status through its control lamps. Through the heating control actor, you are enabled to change the room temperature via software. The Eltako FSB12 actuator is used to control shutters or blinds. The Eltako FHK12 actuator and the heating control MD15-FTL regulate the temperature in a room. The impulse actor sends a signal to change state.

At first, you have to choose the type of actor (e.g. switch-actor) you want to create. Second, please enter a name in the field “Actor name” (e.g. left socket). After you pressed “Add”, the new actor appears in the bottom chart.

If you want to create a “Heating control” actor, pressing the button “Add” opens a new dialog.

The context menu in this dialog also enables you to learn in an actor (See chapter 5.4).

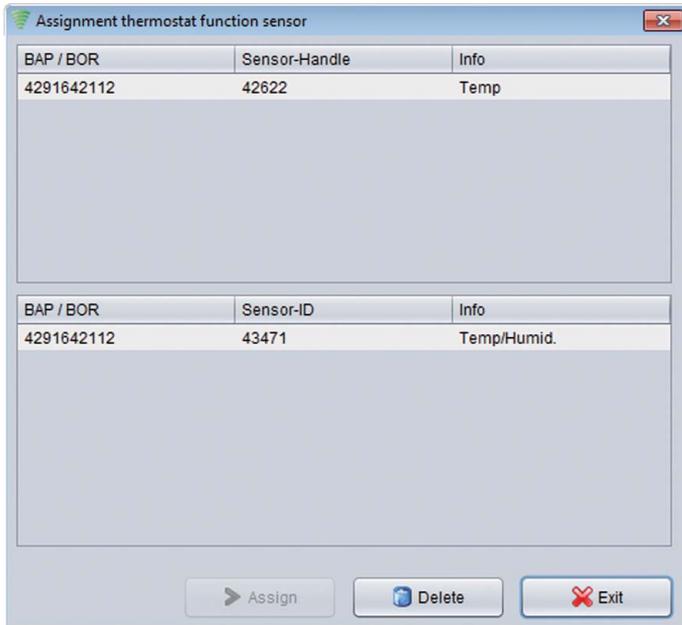


Figure 46: Assign heating control actor

A heating control actor is always linked to a sensor reporting the actual temperature in a room.

The chart at the bottom shows a list of available proper sensors.

You can link the new actor to a sensor by selecting the line which contains your favoured sensor.

The sensor can be deleted by selecting the corresponding line and pressing "Delete".

**i Note:** If you do not attach a sensor to this actor, the heating control actor will not be installed.

If you want to remove an actor from the system, select one or more actors in the chart (Figure 45) and press "Delete".

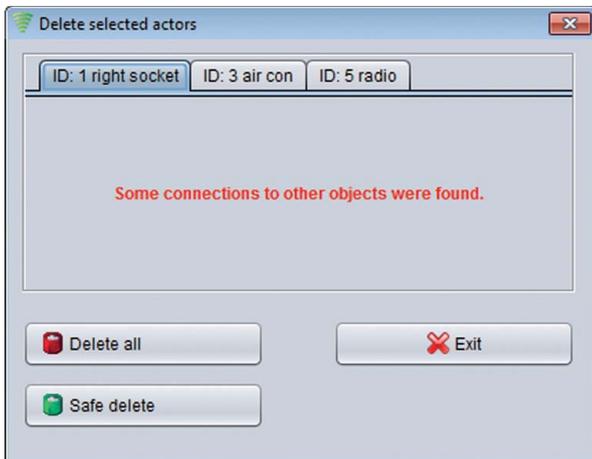


Figure 47: Delete actor

In the upcoming dialog, you have the following options:

"Delete all" deletes all actors. "Safe delete" deletes actors without connections and "Exit" closes the window.

**i Note:** Actors do not appear in the object overview until breaking-in is completed!

### 5.3 Allocate actors to levels

By pressing “Edit - Levels - Assign sensors / actors” you can allocate actors to levels (analogical to handles and switches - see chapter 4.10).

### 5.4 Learn actors

Before the actors can be displayed in the object overview, they have to be learned by the receiver. To do so, please click “Learn in - VenergyUI to relays”. In the appearing window, choose the BAP/FAM-USB that will switch the actor and click “Choose”. It is important that the chosen BAP/FAM-USB is within the range of the actuator. If this is not the case, the breaking-in of the actor will not be successful.



Figure 48: Learn actor menu

This window shows all created actors from chapter 5.2.

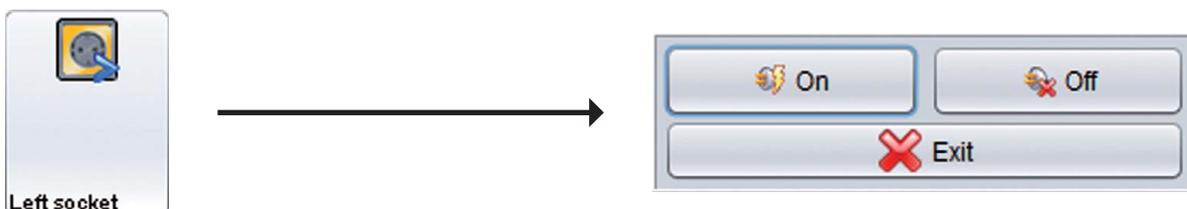
Please select the actor you would like to learn and click on “Learn”.

The signal will be sent once. Afterwards, an information pop-up appears. If the transmission fails, please repeat the process or check the distance between actuator and sending device.

**i** **Note:** Please refer to the device manual on how to learn devices.

## 5.5 Trigger actors

To trigger an actor via software, please click on its actor symbol in the object overview window. A window to trigger the actor appears:



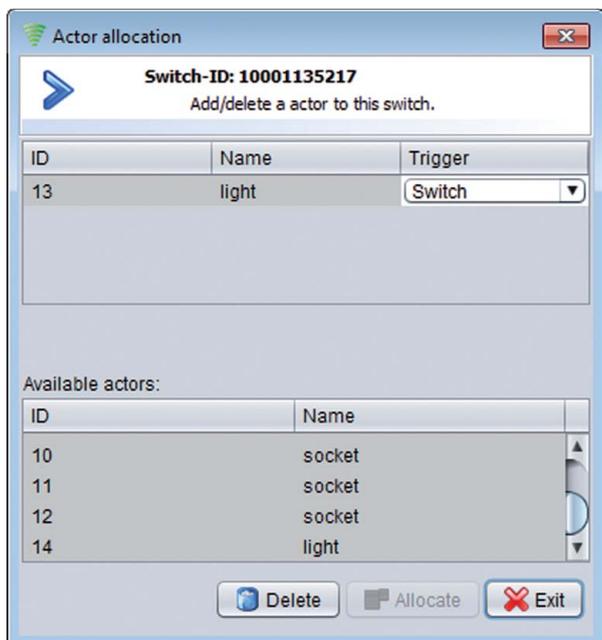
**i Note:** In chapter 4.3 “Object overview” it was explained to you how to enable user mode. Once this mode has been enabled a dialog for executing the actor will appear. The radio signal will be sent.

**Example:**

The actor “left socket” above is enabled and can be disabled by left-clicking the actor. Clicking the actor again will enable it again.

## 5.6 Connect actors to switches

If you have broken-in a switch at the receiver in addition to an actor, you can connect the switch to the actor. By doing so, you can directly operate actuators with the software. You can do this by right-clicking the switch icon. Choose “Actor allocation” from the context menu.



In the top part of the dialog you can see the actors that have already been allocated to this switch.

In the bottom part all actors that can be allocated to this switch are listed. You can only allocate one actor to a switch.

To allocate an actor, select it from the list and press the “Allocate” button. The allocated actor will be removed from the list of “available actors”.

Figure 49: Assign actor to switch

In the “Trigger” field of the respective channel there are two possible ways to send the radio signal. By choosing “switch” the radio signal will be sent directly from the switch to the broken-in actuator (e.g. shutter). If you choose “Eltako FVS” the radio signal will be sent to the Eltako FVS software which will handle controlling the actuator. (→The actuator does not have to be learned to the switch to establish a connection).

After the assignment, the switch icon or actor icon will be removed from the object overview window (depending on the trigger) and the icons will be merged. In this example the switch is directly connected to the end device and therefore the actual trigger. The actor icon disappears and will be integrated into the detailed view of the switch.



Figure 50: Detailed view - switch with actor

To get to the detailed view of the switch you have to left-click the switch in the object view to open the window for triggering the actor and press the button labelled "Show additional information" in the lower right corner.



Figure 51: Window to trigger an actor

While the two light bulb-buttons on the left enable or disable the actor, the arrow-buttons on the right are for dimming e.g. lights.

**i Note:** If you have activated the user mode in the object overview, clicking switches will send the radio signal instead of opening the detailed view. The window for triggering the actor will appear if you click the object and hold the mouse button for a second and release.

### 5.6.1 Detailed information to allocate actors to switches

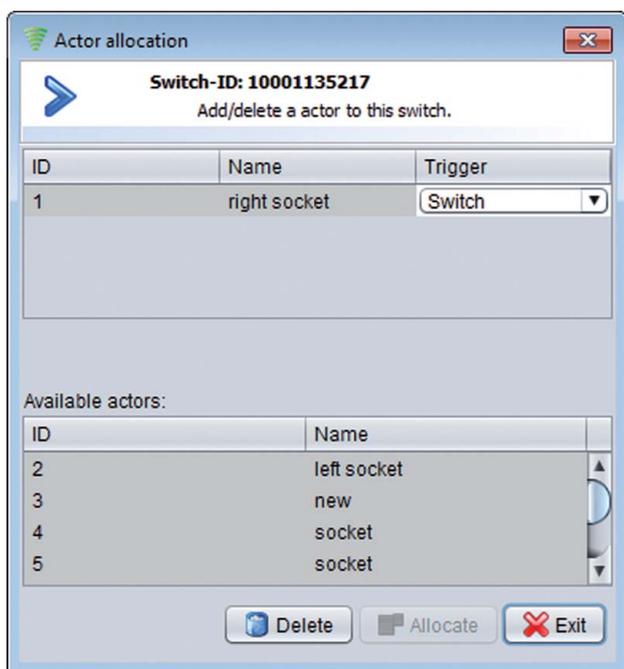
Basically, every switch that has been registered with the Eltako FVS system will be visualized. That means it will be represented by the switch icon (light bulb).



Figure 52: A switch

If an actor has been allocated to a switch, it will control the actuator directly by default.

Click “Actor allocation” in the context menu of the switch.



In this picture, the actor “left socket” is being allocated as an example.

Figure 53: Dialog “Actor allocation”

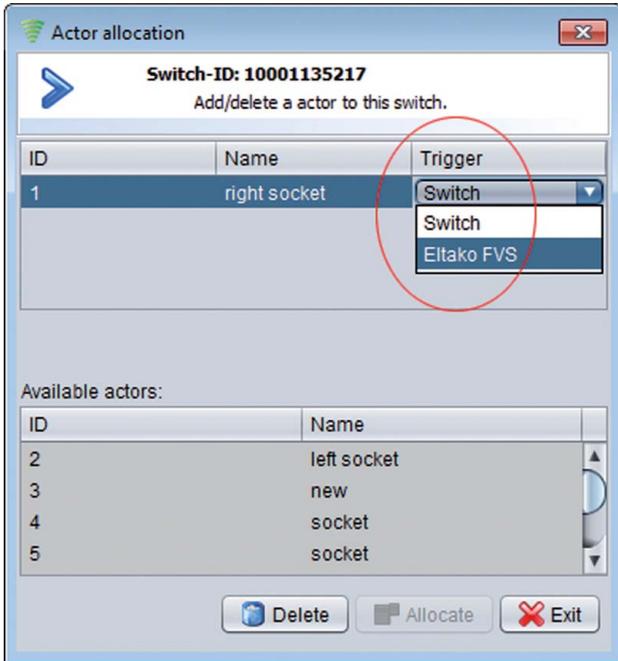


Figure 54: Edit trigger of an actor

While allocating an actor there are two choices in the “Trigger” field. Choosing “Switch” will send the radio signal directly to the actuator. If the switch has not been broken in to the actuator, the radio signal will be sent to the Eltako FVS software where the allocated actor will control the actuator. You can do this by choosing „Eltako FVS“ in the trigger field.

If you choose „Eltako FVS“ as the trigger, the switch icon will be hidden and only the allocated actor icon will be shown.



Figure 55: Actor symbol

If you have enabled the visualisation of invisible objects in the object overview, the switch icon will change.



Figure 56: Invisible object

You can revert an allocation by clicking the “Delete” button.

**!** **Note:** To remove an allocation you have to refer to the “Actor allocation” dialog of the respective object. If you have chosen „Eltako FVS“ as a trigger during the allocation process, you have to enable the visualisation of “Invisible objects”.

### 5.6.2 Allocate actors to switches via drag-and-drop

You can allocate actors to switches in the object overview via drag-and-drop. The trigger is dependent on the order. If you drag the actor to the switch the switch would stay the trigger. If you drag the switch to the actor, „Eltako FVS“ would trigger the actor (Figure 54).

If the allocation is possible the object icon in the object overview becomes green. Is the allocation not possible, the object icon becomes red.

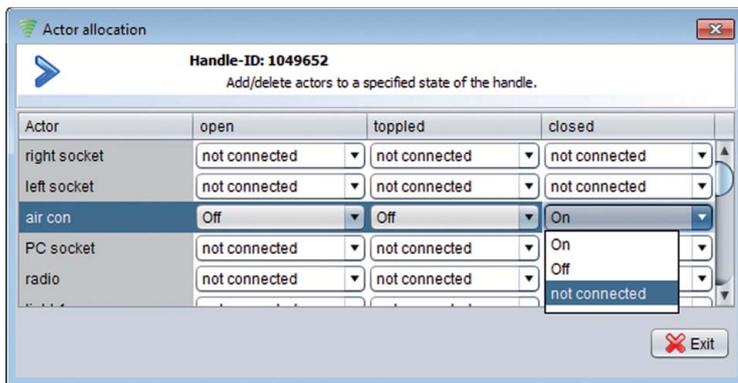
## 5.7 Allocate actors to other objects

Allocating actors is not exclusive to switches. You can allocate them to other objects. The various options will be explained in the following subsections.

### 5.7.1 Allocate an actor to a handle

In contrast to allocating an actor to a switch there is no logical assignment with this connection type (switch on -> actor on // switch off -> actor off). To allocate an actor to a handle please right-click on the handle icon in the object overview and click “Actor allocation”.

The window to allocate actors will appear:



In this allocation dialog you can allocate one or multiple actors to the states “open”, “toppled” and “closed”.

Available allocation parameters:

On: enable actor  
 Off: disable actor  
 no connection: no trigger

If you want to assign a heating-control or dim actor to your handle you have to enter a value in the condition columns.

Figure 57: Actor allocation with a handle

**!** **Note:** Allocating an actor to an object (e.g. a handle) can only occur if that object has not been allocated to a link.

#### Example:

To connect an air conditioning system to a window, set the states “open” and “toppled” to “off”. The air conditioning system will be disabled when the window is opened or toppled, if you want to automatically re-enable the air conditioning system set the state “closed” to “on”. If the air conditioning system should stay disabled after closing the window and only be re-enabled after pressing a switch manually set the state closed to “no connection”.

### 5.7.2 Allocate an actor to a reed contact

Allocating an actor to a reed contact is similar to allocating an actor to a handle. The difference is that a reed contact has only two states.



Figure 58: Actor allocation with a reed contact

In this allocation dialog you can allocate one or multiple actors to the states “open” and “closed”.

Available allocation parameters:

On: enable actor  
 Off: disable actor  
 no connection: no trigger

### 5.7.3 Allocate an actor to a sensor

In contrast to allocating an actor to a handle or a reed contact, allocating an actor to a sensor can have more available settings. This is because a sensor is built entirely differently compared to other objects.

Open the context menu by right-clicking the sensor. Afterwards, press “Actor allocation” and the actor dialog will appear.

At first, you have to choose the desired actor and to select “Allocate”. The chosen actor appears in the upper chart of the dialog.

In this example, a sensor with multiple features was chosen. In particular, it is able to report humidity and temperature. The column “Sensor type” gives you the possibility to decide on behalf of which report of the sensor the actor should be triggered.

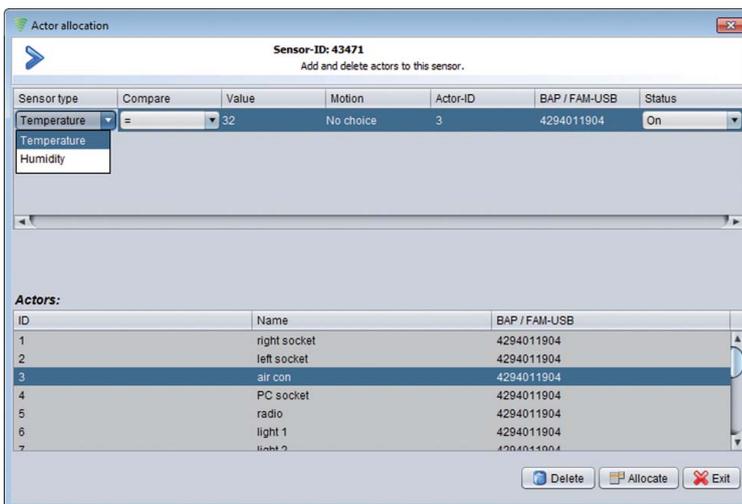


Figure 59: Actor allocation with a sensor

The second column provides you with multiple relational operators. These operators always reference to the values in the next column. The possibilities are:

- = check on analogousness
- > check on higher than input value
- < check on lower than input value

If you want to assign a heating-control or dim actor to your reed contact you have to enter a value in the condition columns.

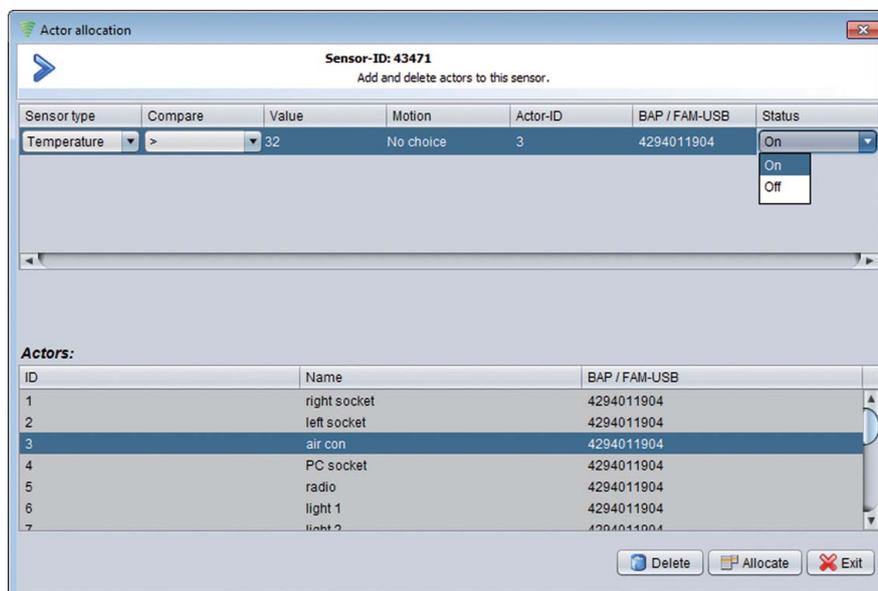
You have to fill in the column “Value”. Please assure that you enter valid data.

**Example:**

You chose the sensor type temperature. This sensor is able to display temperatures between 0 and 40°C. Therefore, you should enter a value between 0 and 40 in the column “Value”.

**i Note:** If you are unsure which range of values your sensor supports, please refer to the sensor manual.

**i Note:** Entered values will be converted by the Eltako FVS system into real sensor values. This ascertained real sensor value will be reconverted into a user-friendly display value the next time you open the dialog. This can lead to deviations from your previous entered values.



**Figure 60: Editing the status of a sensor**

Finally you have to allocate how this actor is supposed to be triggered. This setting can be assigned to “On” and “Off” in the “state” column.

After configuring the allocation close the dialog by pressing the “Close” button.

**i Note:** In case of a motion sensor, the columns “Compare” and “Value” are blocked, and the column “Motion” will be activated. This column defines the allocation, possible parameters are “Motion” and “no Motion”.

### 5.8 Thermostat- and heating control actors

Basically, the thermostat- and heating control actors are responsible for the regulation of a room's temperature. Only the actuators differ. The thermostat actor has to be learned to a thermostat actuator, and the heating control actor similarly to a switch actuator.

In chapter 5.2 it was explained to you how to create a heating control actor. In this chapter it will be illustrated to you how to integrate this in your system and which options are available to you.

After creating the heating control actor and breaking it into the actuator of your heating system, this functionality will be at your disposal in Eltako FVS. By clicking the assigned sensor in the object overview you will be supplied with a view of additional information about this object.

<b>Sensor-ID:</b>		43471
<b>Present temperature:</b>	<b>Set value:</b>	
26.04°	+21	
<b>Air humidity in %:</b>	<b>Last change</b>	
28.80		
<b>Transmitter-ID:</b>	<b>Current/Humidity</b>	
4291642112	26.04° / 29.20%	
<b>Level:</b>	<b>Date / Time:</b>	
Corridor	08.04.2010 12:56 Uhr	
<b>Room:</b>	<b>Sensor type:</b>	
	Temperature-Humidity	
<b>Floor:</b>	<b>Info:</b>	
	Temp./Hum.	
<b>Detail:</b>		
<div style="border: 1px solid gray; height: 50px;"></div>		
 Exit		

Figure 61: Additional information of a sensor

In contrast to sensors that are not linked to a heating control actor you will see an extra button. It is right of the “target value”. By pressing this button another dialog will appear.

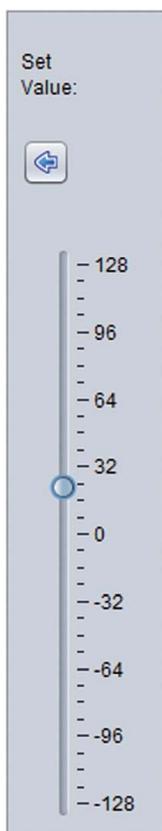


Figure 62: Set value thermostat control

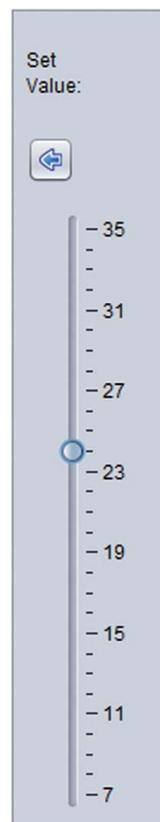


Figure 63: Set value heating control

In this dialog you can see a vertical slider. By clicking and holding the left mouse button you can change the target value.

**i** **Note:** In case of a heating control actor, the set value bases on degree Celsius. They are the basis for the on or off-switching of a switching actuator.

Open the dialog „Edit sensor“ by right-clicking the sensor and choosing “Edit”. Now you have the possibility to change further options.

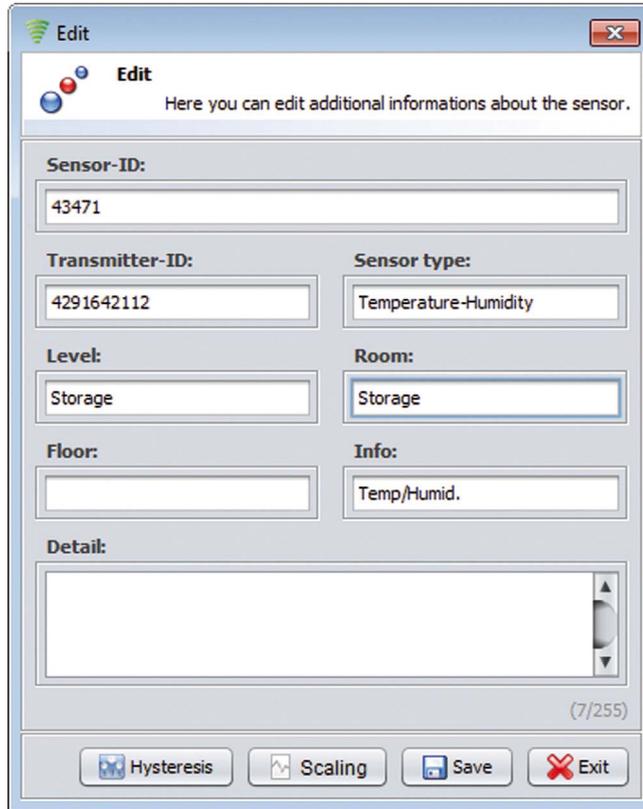


Figure 64: Edit sensor

The button “Scaling” opens the dialog to adjust the scaling. You can either stick to the standard settings or enter your won sensor-specific values.

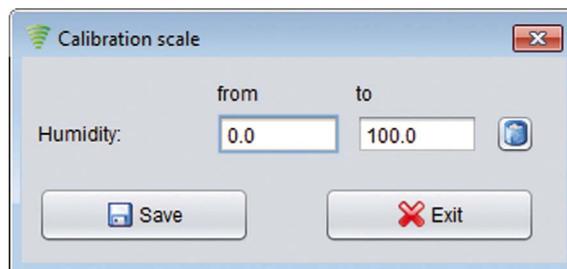


Figure 65: Scaling adjustment

Additionally, the heating control actor allows you to add a hysteresis to the temperature.

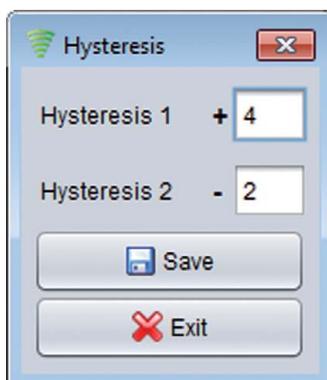


Figure 66: Adjusting the hysteresis

In this example, hysteresis 1 has a value of 4 and hysteresis 2 has a value of 2. The set value (see Figure 61) is 21°C. This means that the actuator gets a switching signal if the temperature falls under 19°C (set value - Hysteresis 2) to switch the heating on. If the temperature reaches 25°C again (set value + hysteresis 1), the actuator gets the signal to switch the heating off.

**i Note:** After learn in a heating control the hysteresis have to be saved equal if you have entered data.

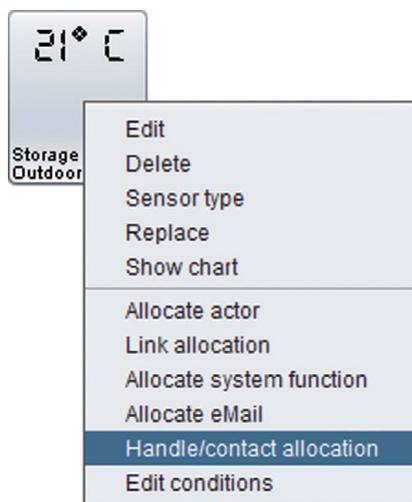


Figure 67: Context menu of a sensor with heating control

You can allocate a heating control also with handles or reed contact via the context menu. If one of these allocated handles or reed contacts open, the heating control would start the frost protection mode. Then the heating control would only heat to hold 7 °C.

Also on the context menu conditions can assigned to a thermostat or heating control. With the button „Add verification“ may be a condition added to the actuator. If this is met, the temperature is kept between the fields in the „From“ and „Up“ entered values. Is set a hook at „checking for equality“, the temperature is kept constant at a value.

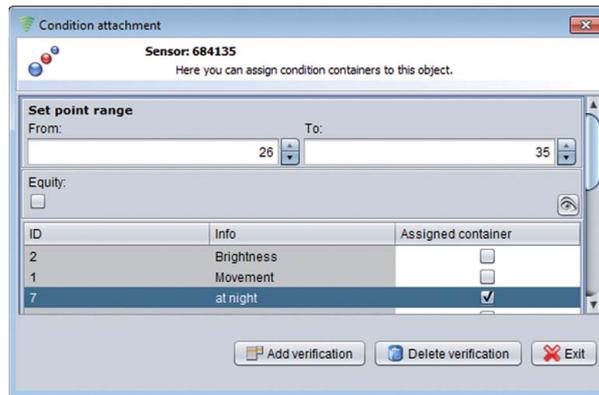


Figure 68: Condition attachment sensor

### 5.9 Dimmer actors

There are two kinds of dimmer actors. They differ by the method of transmission of dimmer values.

The absolute dimmer dims by a precise percentage while the relative dimmer dims by a relative value that deviates from the actual percentage.

To create a dimmer actor please refer to chapter 5.2.

There are several options. You can specify a desired value with the slider and then click “dim”. Or you can specify three quick choice values. In this example 30%, 50% and 80% have been chosen.

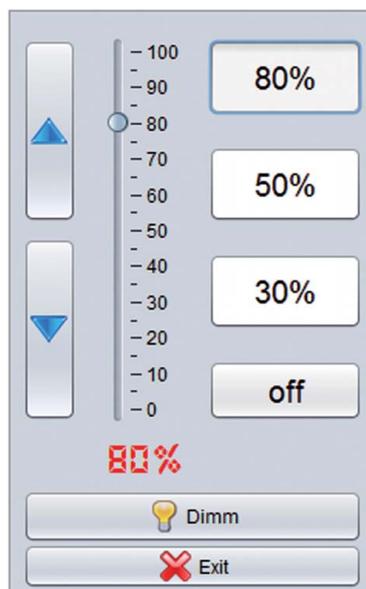


Figure 69: Dimmer actor with quick choice

### 5.10 Eltako FSB12 actuator

The Eltako FSB12 actuator is a special actuator type for the control of sun or roller blinds. To create this actor see chapter 5.2 to instalment. You come into the learndialog over the menu item „initialization“ in the context menu:



Figure 70: Learndialog FSB12 actuator

There is the possibility of typing the relapse delay and the total runtime in. The relapse delay stops the device after expiry of the entered period of time within seconds. The value typed in here should agree with the value adjusted at the actuator. The total runtime indicates the period of time which the shading element or the shutters needs to come from a terminal job into the other one.

With the badge „note“ the time is measured in terms of the actuator needs this one to one drive terminal job to the others. The two badge indicates the double arrows during the note whether the Venetian blind with up or down drives.

- i** **Note:** Only after fixing of return pipe delay and total runtime or after the note the actuator is visualized correctly in Eltako FVS.
- i** **Note:** If the recorded time should not agree with the real running time, you can carry out a renewed note any time.
- i** **Note:** It has to be taken care that the return pipe delay agrees with the attitude at the actuator.

The FSB12 actuator can either be steered over the push asiding regulator or the speed calling badge. Put the push asiding regulator on the desired value and regard the badge as pushed for some seconds for adjusting the speed calling values. The badge carries away the Venetian sun or roller blinds up or down with the double arrows on basis of the period of time indicated in the relapse delay.

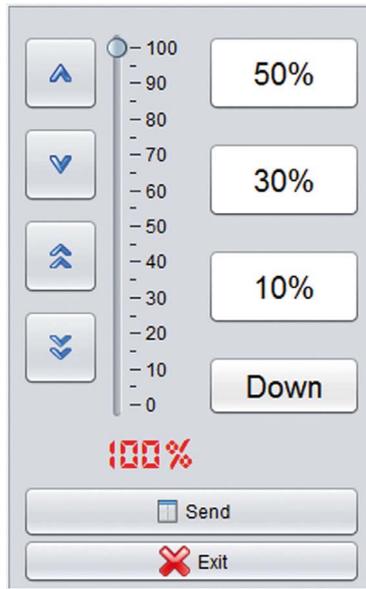


Figure 71: FSB12 actuator with speed calling badge

## 6. Links

### 6.1 Definition of links

Links can combine single actors. Thereby, you can trigger many actors with a single click or after a specified amount of time.

**Example:**

You define the link “Everything off“. To this actor, you add all already created actors in your infrastructure. Every single actor sends a signal to its learned actuator and switches the corresponding device off, respectively disconnects the power supply. This link could be useful if you are leaving your house and you want to shut down all devices.

### 6.2 Create, edit and delete links

To create, edit or delete a link, please click on “Edit - Links“:

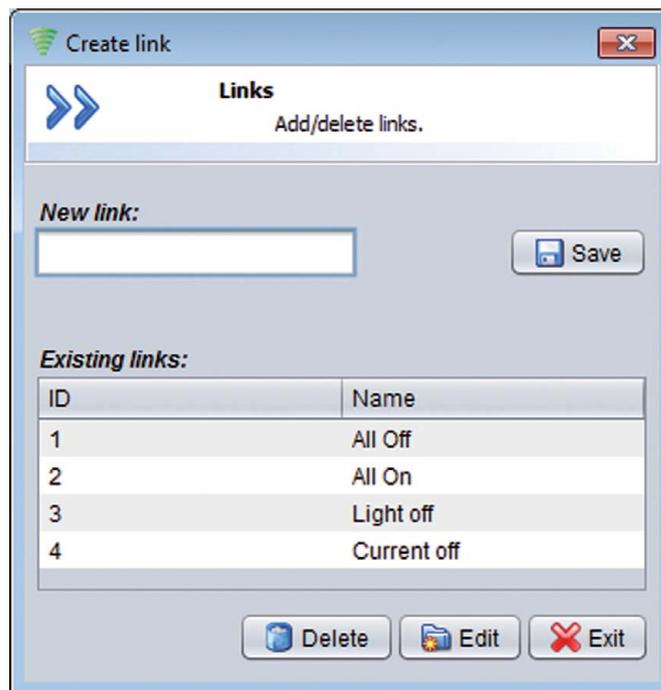


Figure 72: Create a link

To create a link entering a name into the field „New Link“ and click on „Save“. The dialogue „Edit link“ appears .

You can copy a link by selecting an existing link and click on the button „Copy“. To delete a shortcut, and this is also marked with a click on the button „Delete“ away.

Alternatively, you can copy a link in the object overview on the context menu, edited or deleted.

**i Note:** Within this dialog, you are also enabled to change the name of a link. By double-clicking the desired link in the column “Name“, you enter the edit mode. After you finished your changes, please confirm with enter.

If you enter the name of a new link and click on “Save”, the “Edit link” dialog appears. In this window, you are enabled to add single actors to your new link.

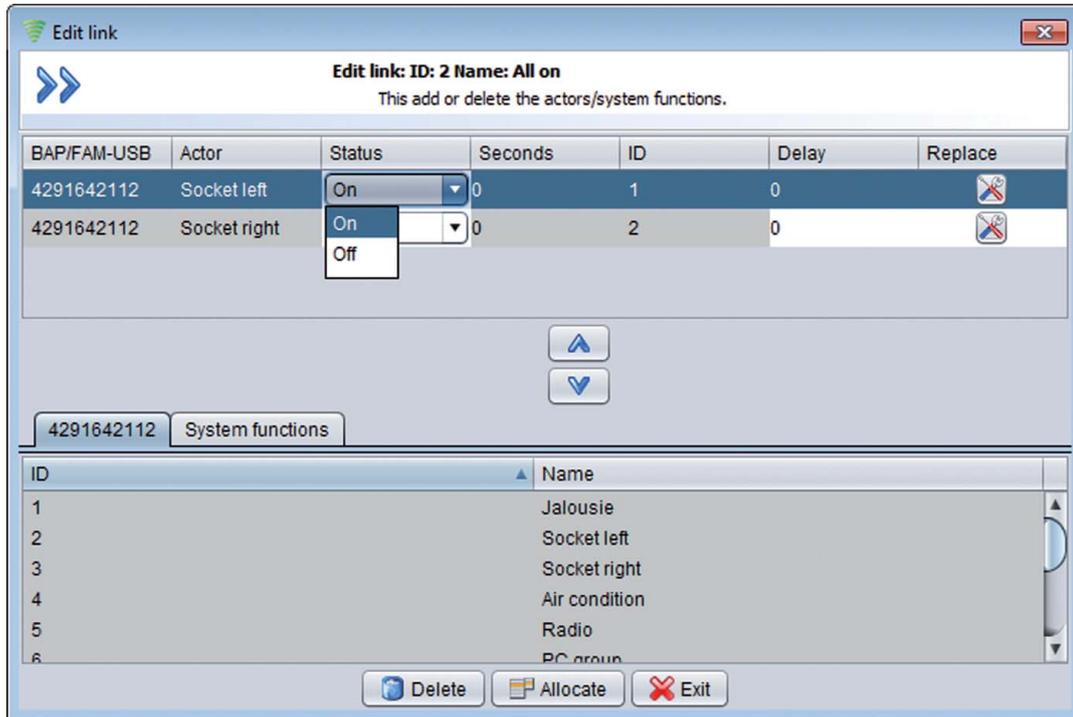


Figure 73: Edit links

In the bottom part of your “Edit link” dialog, all actors are tabularly listed. For a better overview, they are sorted depending on their affiliation to a BAP/FAM-USB and to system functions. Select the actors you want to add to your link and press “Allocate”. The selected actors now appear in the top chart of the window.

Please select the desired switching state of your single actor that shall be send when the link is triggered. The actors Heating-control and relative as well as absolute dimmer need a value input e.g. „0” for Lights off.

Furthermore, it is possible to trigger the actors according to a sequence. If the triggering sequence has to be changed, the allocated actor has to be selected by left-clicking. Afterwards, it can be positioned by using the arrow keys. The field “Delay” gives you the possibility to trigger this actor the specified amount of seconds later than the previous actor.

**i Note:** If several actuators are switched on the same BAP/FAM-USB from the second actuator a „delay” of at least 1 second can be determined. So the correct processing of the signals is guaranteed.

After the allocation process, the link is shown as a symbol in object overview and can be triggered by left-clicking.

### 6.3 Add links to levels

By clicking “Edit - Levels - Assign sensors / actors” you can add your link to one of your previously installed level (analogical to handles and switches - see chapter 4.10).

### 6.4 Trigger links

To trigger a link, open the object overview. Choose the level of your desired link and select it by left-clicking.

If you have not activated the user mode, a new dialog appears:

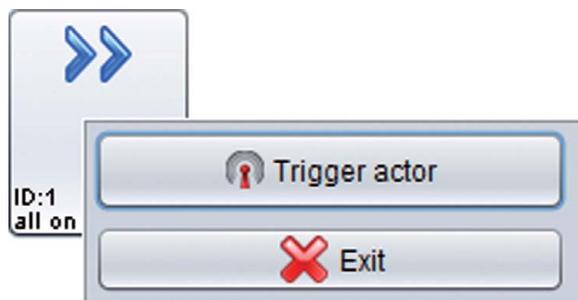


Figure 74: Link trigger dialog

To trigger a link, press the button “Trigger actor“. Thereby, the assigned actors will be processed and every actor sends its allocated radio signal. The color of the link changes to blue during the operation. You will only notice this color change if you have at least one delayed actor in your link.



Figure 75: Visualisation of a link

You can stop the link untimely with a single left-click.

**i Note:** If you have activated the user mode in object overview, the link is instantly triggered by left-clicking it.

### 6.5 Allocate links to switches

You can also assign a link to a switch. This switch then triggers the link. You are e.g. enabled to install a switch directly at your front door and triggering a link from there that switches all lights in your house to off.

**i Note:** If you assign a link to multiple objects, another triggering while the link is active will shutdown the process and restart it.

To allocate a link, select the desired switch from object overview and open its context menu by right-clicking it. Afterwards, select "Link allocation".

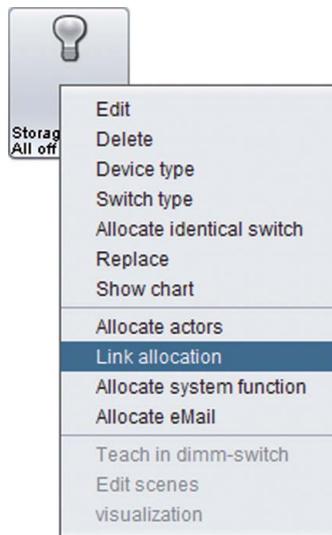


Figure 76: Assign switches to links

The upcoming dialog gives you an overview of all available links in your system.

The real allocation happens through the column "Condition".

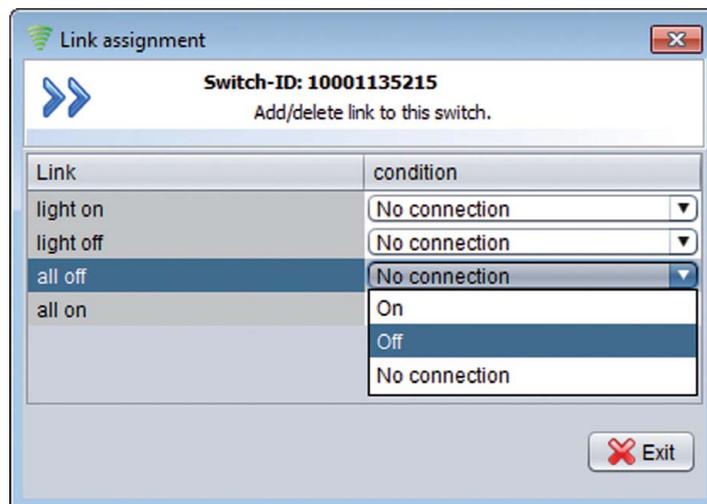


Figure 77: Allocate a switch to a link

In this window, the switch can be connected to an unlimited amount of links.

- On: Link is triggered when the switch is switched on
- Off: Link is triggered when the switch is switched off
- No connection: No connection switch/link

**i Note:** Switches that are connected to links are no longer visualized in object overview. To show the hidden switches in the overview please activate invisible objects in the object overview. Through this, the switches are visible again and you can use its context menu to dissolve the link allocation.

### 6.6 Allocate links to scene switches

The previous chapter informed you on how to allocate one or more links to a specific switch. This procedure always triggers one or more links, if a predefined radio signal of a switch is recognised by Eltako FVS. The connection of links and scene switches gives you a different possibility of triggering a link. Scene switches trigger links according to the number of times they were pressed. If you want to use this possibility, change the device type to “Scene switch”. Afterwards, open the context menu again and select “Edit scenes”.

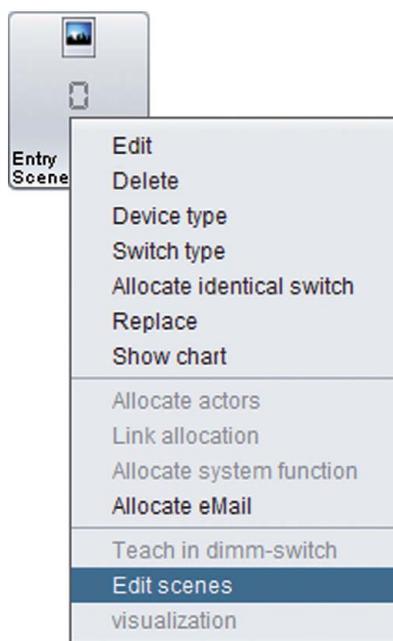


Figure 78: Context menu of a scene switch

The following dialog opens:

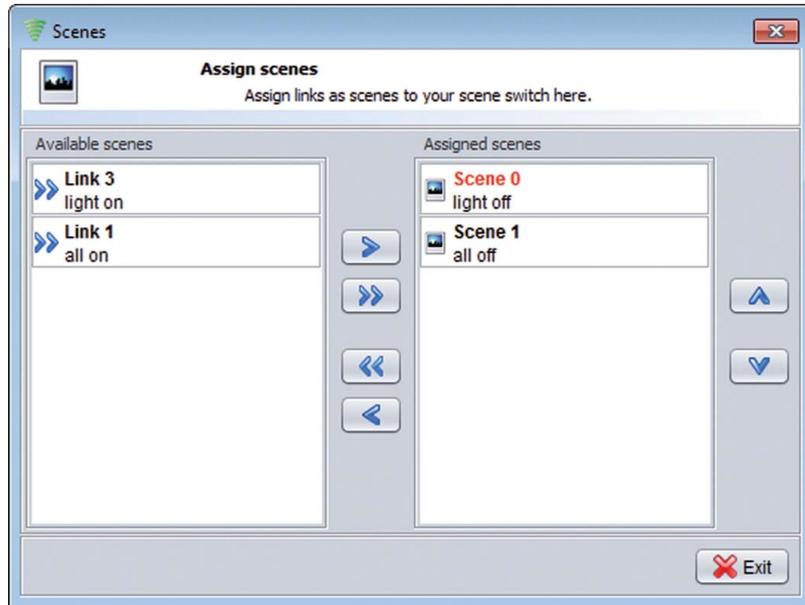


Figure 79: Edit scenes

To the left, you see all available links. By marking a link and pressing the buttons in the middle of the window, you assign the link to this scene or delete them. The buttons on the right side of the window change the triggering order.

In this example, the link “Everything off” is installed as scene 2. If you have not pressed the switch for about 20 seconds, you are on a scene 0 level. On this level, you have to press the switch two times to execute the link “Everything off”.

You can now either press your link symbol in object overview to execute the software, or you click on your scene-switch symbol to select the desired scene.

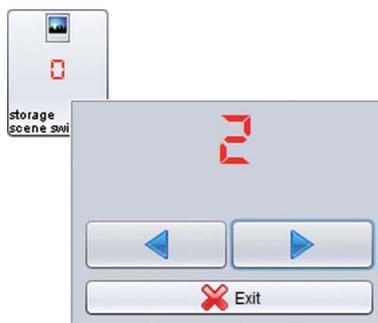


Figure 80: Trigger scenes

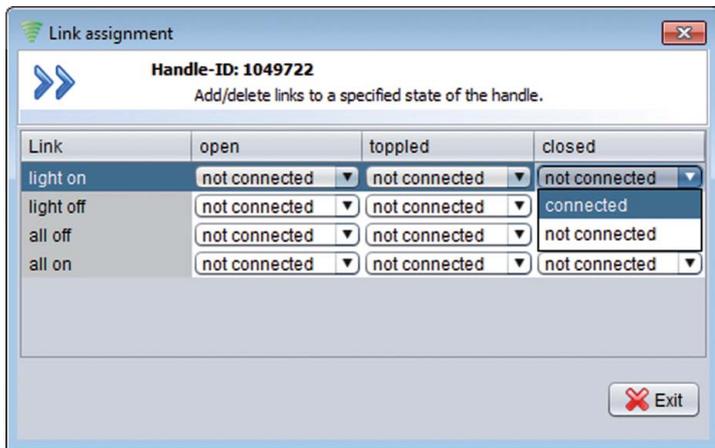
## 6.7 Allocate links to other objects

Links are not restricted to switches, you can assign them to other objects as well. In the following subsections, your available options are explained.

### 6.7.1 Link allocation of a handle

To allocate a link to a handle, open the context menu of the handle and select “Link allocation”.

The dialog “Link assignment” opens:



This assignation dialog enables you to assign one or more links to the states “open” , “toppled” and “closed”.

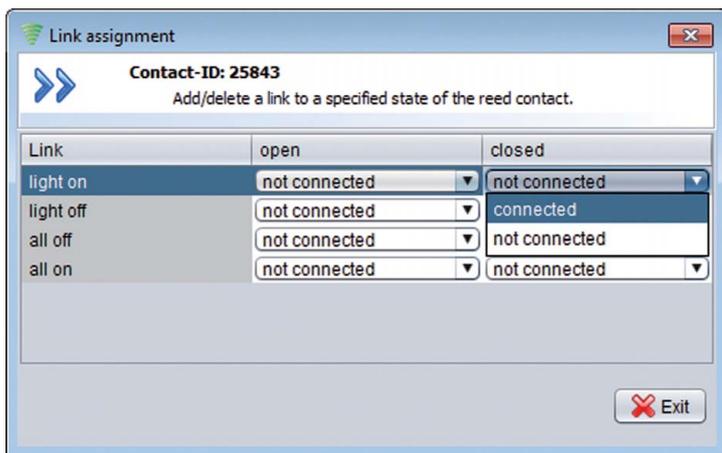
Possible parameters:

Activated:                      Triggering link  
 Not connected:                No triggering

Figure 81: Link allocation of a handle

### 6.7.2 Link allocation of a reed contact

The allocation procedure of a link to a reed contact is analogical to this process with a handle. However, a reed contact has only two states.



This assignation dialog enables you to assign one or more links to the states “open” and “closed”.

Possible parameters:

Activated:                      Triggering link  
 Not connected:                No triggering

Figure 82: Link allocation of a reed contact

### 6.7.3 Link allocation of a sensor

As you have read in the previous chapter about allocating actors to sensors (chapter 5.7.3), a sensor provides multiple adjustments. These adjustments are also available in a link allocation.

Open the context menu of the sensor by right-clicking on it. Select the menu entry “Link allocation” and press the left mouse button. The link assignment dialog appears:

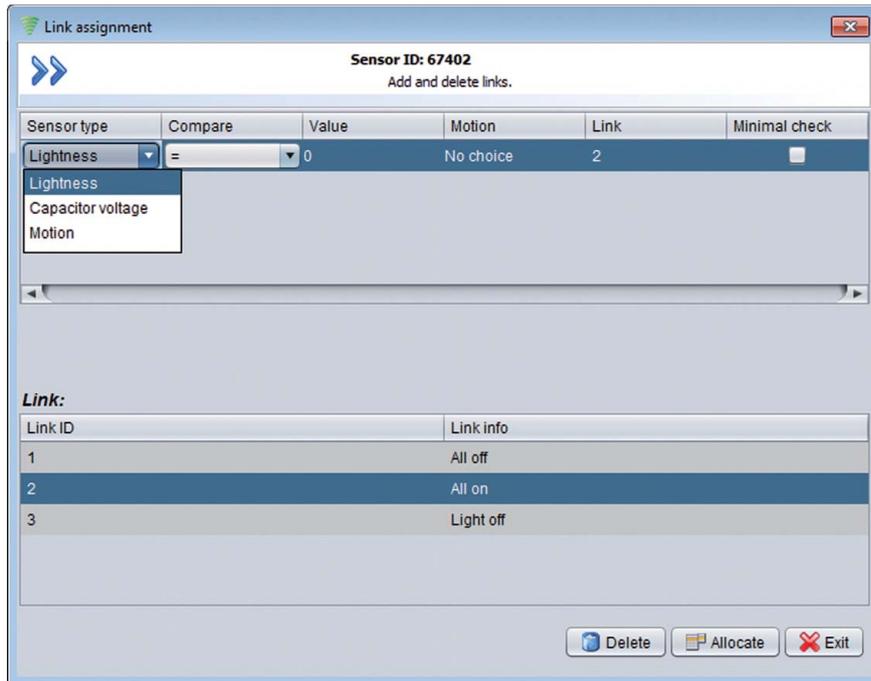


Figure 83: Link allocation of a sensor

The dialog is divided in two sections. In the upper chart, all already assigned links are visible, the lower chart contains all links that are available to allocation.

To start an allocation, select a link in the lower chart by left-clicking on it. The selected link appears highlighted, and by pressing “Allocate”, it moves to the upper chart.

After you assign the link to the sensor, you have to define when to activate the link. This means that you have to define a status of the sensor that should trigger the link.

In this example, the lightness parameter of the sensor shall trigger the link. Because of that, the first column has to be set to “Lightness”.

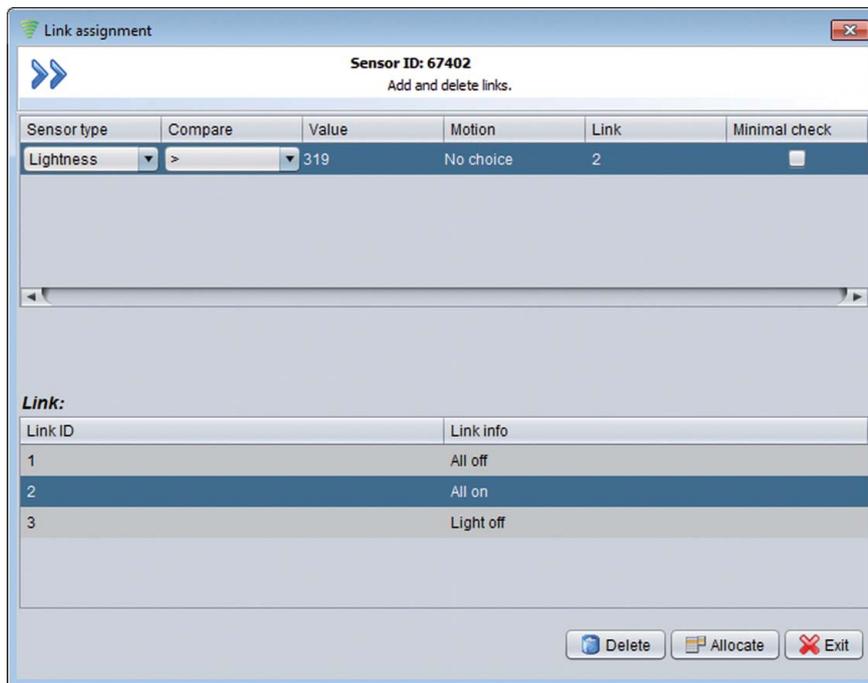


Figure 84: Link allocation of a sensor II

Furthermore, a specified value to trigger the link has to be set.

In this example, the link shall be executed if the lightness parameter is above 319 Lux. To do so, you have to complete two columns in the upper chart.

The column “Compare” has to be set to greater than “>” and the column “Value” has to be set to 319 Lux.

A set hook in the „simple test“ means that the link is executed when the value changes and the condition is met. If the hook is not set, the link is executed only when the condition was not met in the meantime, ie the brightness value in this example had fallen below 319 lux.

If the definition for a successful link triggering was set, the dialog can be closed by pressing “Exit”.

**i Note:** Entered values will be converted by the Eltako FVS System into real sensor values. This ascertained real sensor value will be reconverted into a user-friendly display value the next time you open the dialog. This can lead to deviations from your previous entered values.

**i Note:** In case of a motion sensor, the columns “Compare” and “Value” are inaccessible. Instead, the column “Motion” will be activated. You can choose between “motion” and “no motion”.

## 7. System functions

### 7.1 Definition of system functions

Contrary to actors, system functions are not responsible for sending EnOcean radio telegrams. They offer an interface to further internal software functionalities.

One possible use for a system function would be a recording stop of multiple cameras, or the allocation of a handle or reed contact with a message function.

### 7.2 Create, edit and delete system functions

To create, edit or delete a system function, please click on “Edit - System functions”. You can create a new system function by right-clicking on the empty space on the left of the window.

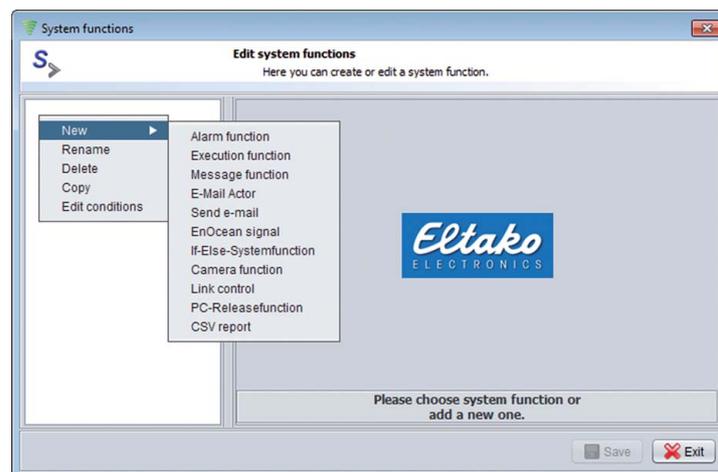


Figure 85: Create/edit a system function

System functions can be distinguished in the following classes:

- The alarm function enables objects to trigger the alarm independently from object surveillance.
- The executing function starts a program of your choice.
- The message function shows on-screen information as soon as a state or value changes.
- With the e-mail function you can activate sending and receive of e-mails or deactivate.
- Send e-mail offers you the possibility to link objects with a specific e-mail notification.
- The EnOcean Signal send defined signals to a BAP/FAM-USB.
- The If-Else-Systemfunction triggers actuators on basis from conditions.
- A camera function enables you to allocate multiple functions to a camera.
- With the link control you can release or cancel links.
- The PC-Releasefunction startup or shut down PCs or PC groups.
- With the CSV report course data or meter readings can be exported.

### 7.2.1 The alarm function

Here you can either enable or disable the alarm. This system function could be connected to a switch near the entrance, to enable or disable the alarm while entering or leaving the building.

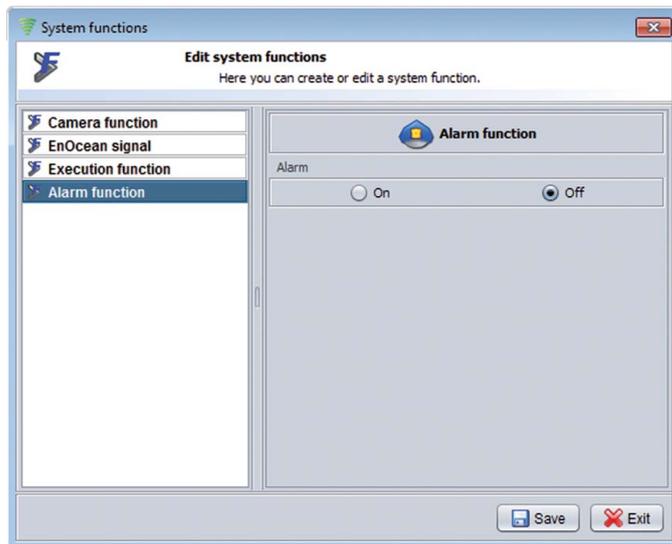


Figure 86: Alarm function

### 7.2.2 The message function

The message function serves the purpose of assigning a report to a change of status. You can choose between an information icon, warning icon and an error icon. Provide your text in the "Title" and "Message" fields. Additionally you can link an audio signal to the notification which can be repeated if necessary. Furthermore you can assign a required password for closing the notification. You should specify whether the window should automatically close after a certain amount of time.

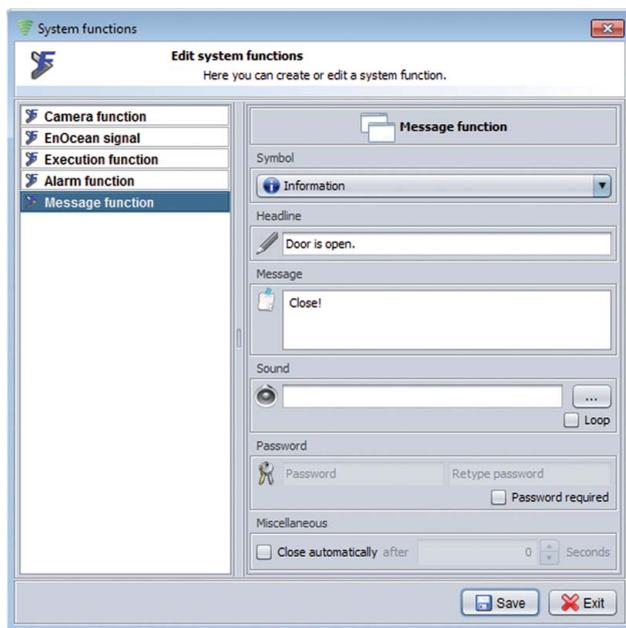


Figure 87: Notification function

### 7.2.3 The executing function

With the aid of the executing function, you can start programs. Choose the desired program under “Program” and the desired file under “Arguments”. It is also possible to open a specified web page in a browser.

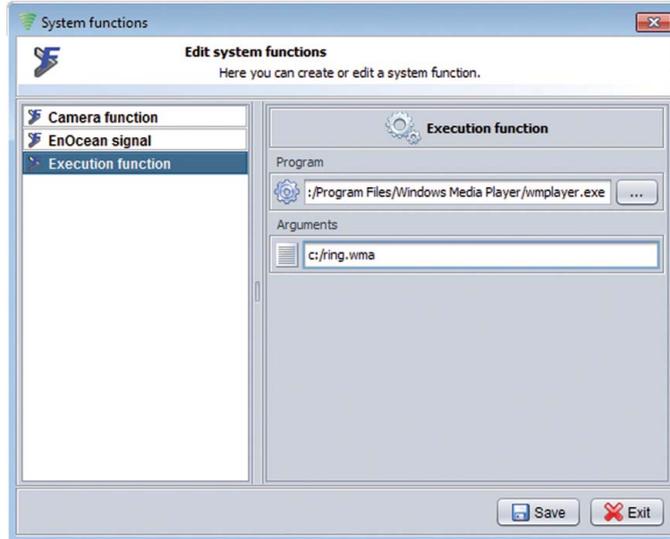


Figure 88: Executing function

#### Example:

If you would liked to run a program file with the ending “.exe”, write following in the line “Program” in the window “Execution function”:

C:/Program/Program.exe

With a Batch file this is not sufficient. It is necessary with the addition “cmd start” the input console to start. The parameter “/c” serves the visualization of the input console. To start “Programm.bat” in the folder “C: / program folder”, write the following in the line „program” in the window “Execution function”:

cmd /c start "" "C:/Program/Program.bat"

### 7.2.4 The E-Mail Function

With this feature the reception and the notification can be activated by e-mails or deactivate. Furthermore you can select whether e-mails only are received or only are sent.

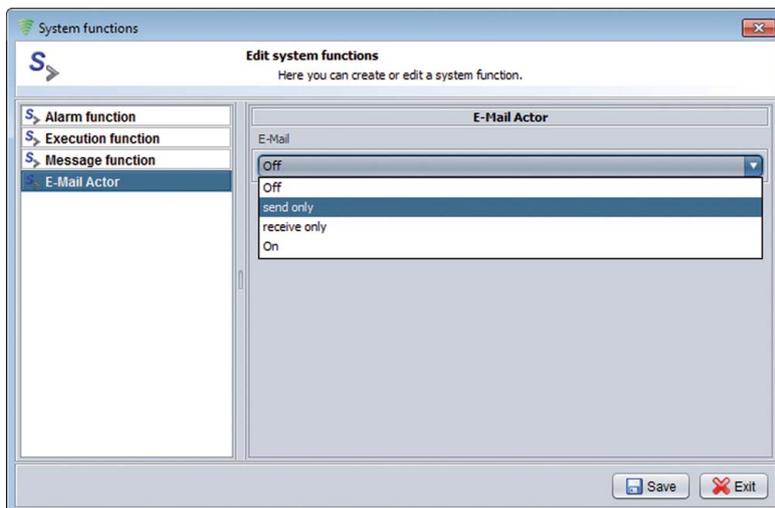


Figure 89: E-Mail Function

### 7.2.5 Send e-mail

Herewith you have to link the possibility objects with a specific e-mail notification. The button beside the input line for the recipient serves the choice of a stored recipient (see chapter 14.2.1).

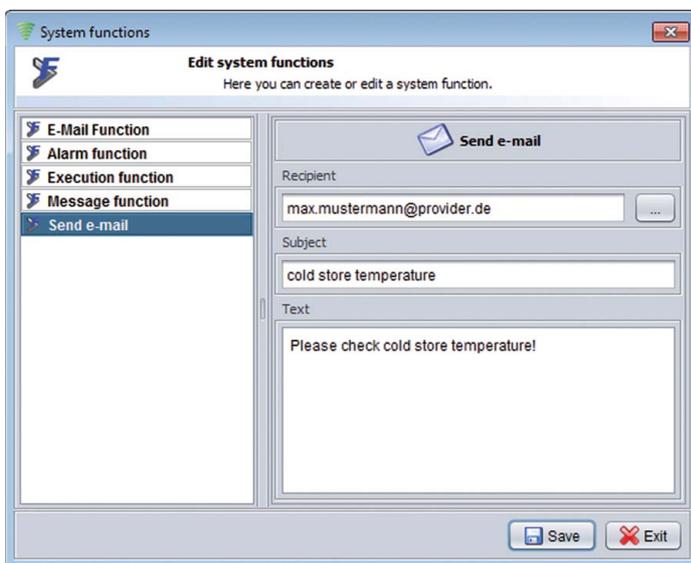


Figure 90: Send e-mail

### 7.2.6 The EnOcean telegram

This system function provides you with the ability to define your own EnOcean telegrams.

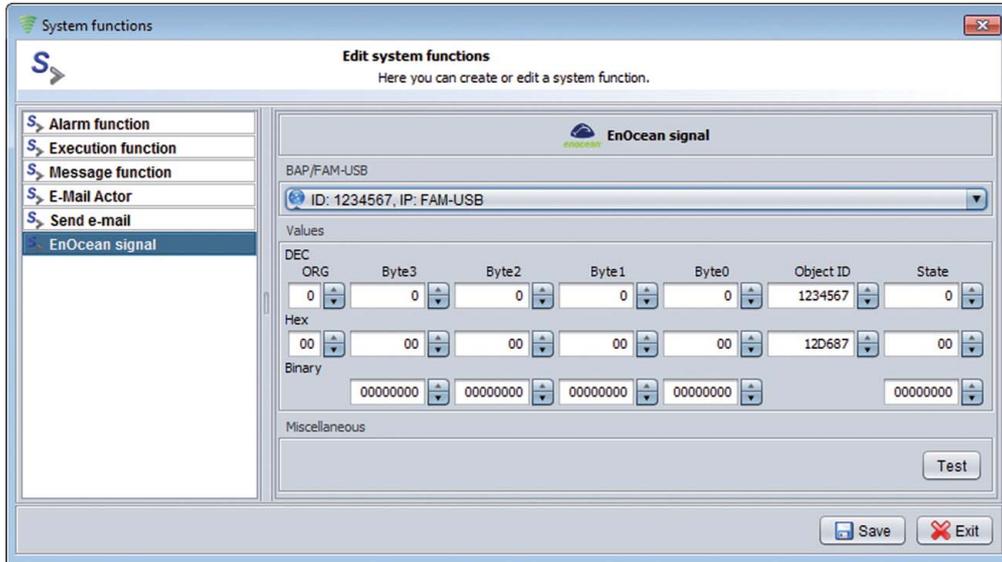


Figure 91: EnOcean telegram

### 7.2.7 If-Else-Systemfunction

The If-Else-Systemfunction makes it possible to trigger actuators, links or system functions on basis from conditions. All available conditions are displayed in the upper area of the window. In the area under this actuators can, on the left or assign to system functions if the conditions are filled or not filled. In the area under this you can assign actuators, links or system functions if the conditions are filled or not filled.

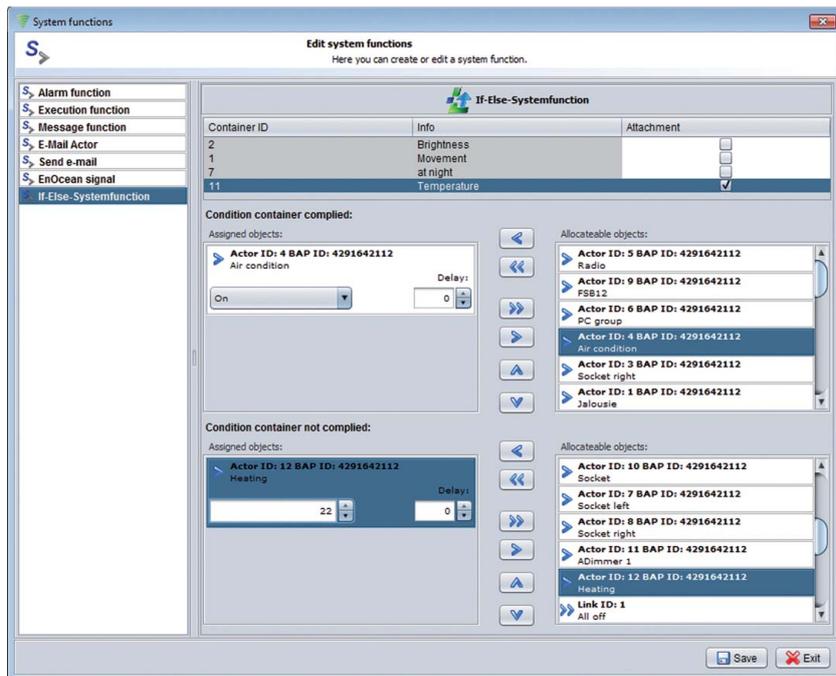


Figure 92: If-Else-Systemfunction

### 7.2.8 The camera function

To install the camera function, please choose your camera on the right side of the window. You can select between “Single picture”, “Video stream”, “Motion detection” or “Off”. If you chose “Single picture”, you can enter an interval under “Configuration”. The recording settings will be explained in chapter 9.3.

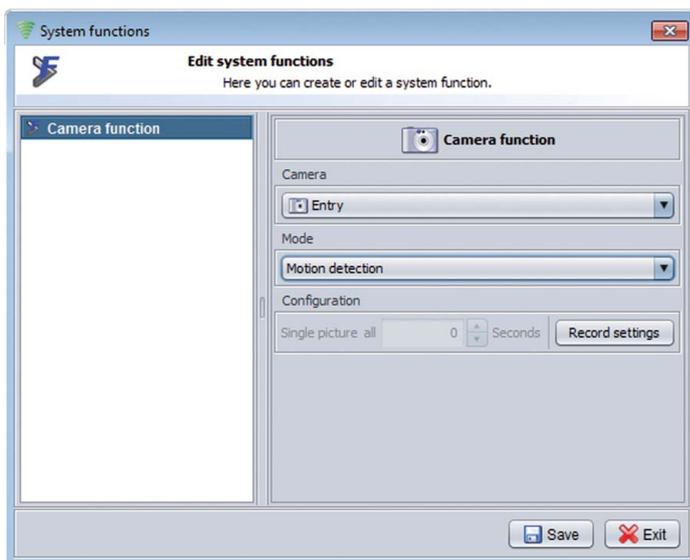


Figure 93: Camera function

### 7.2.9 The link control

With this system function you can release or cancel links.

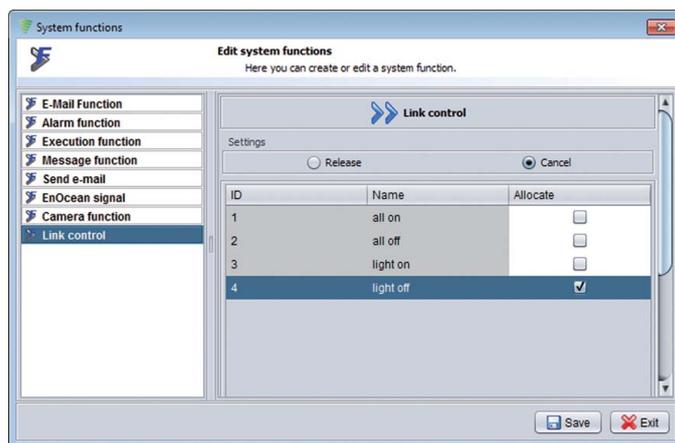


Figure 94: Link control

### 7.2.10 PC-Releasefunction

The PC-Releasefunction offers the possibility of combining PCs or PC groups to a system function to startup or shut down these.

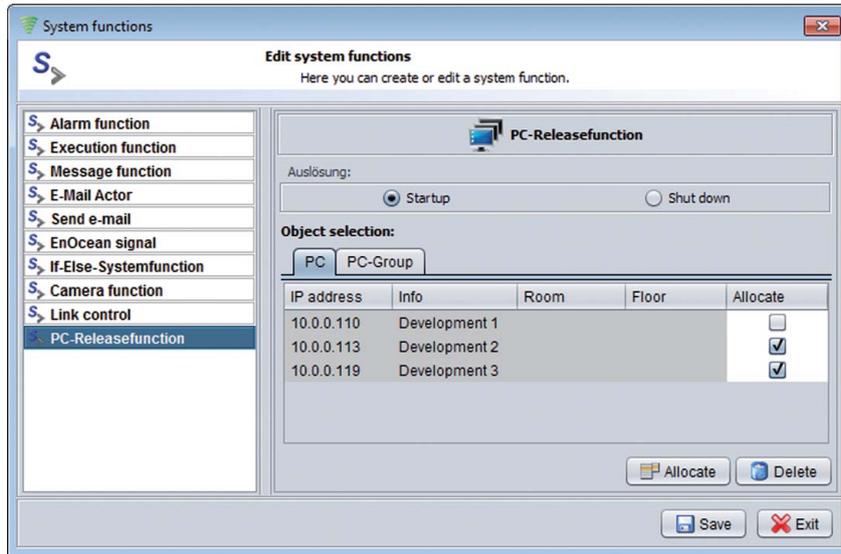


Figure 95: PC-Releasefunction

### 7.2.11 CSV export

You hereby have the possibility of exporting course data of objects as a CSV report. After choice of the analysis period, the target directory and the objects can in connection with time functions regularly reports be made.

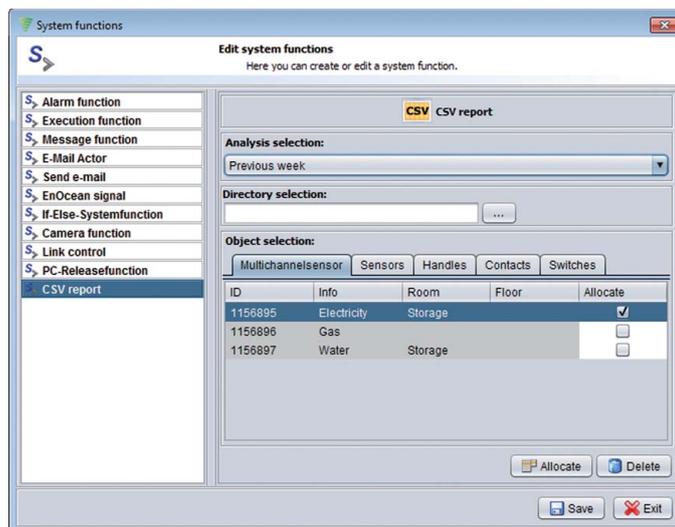


Figure 96: CSV report

### 7.3 Trigger system functions

System functions can be triggered by linked objects. For Example, a switch that has been linked to a system function could enable or disable the alarm near the entrance.

### 7.4 Allocate system functions to switches

For the allocation to a system function chose the desired switch in the object overview and open its context menu by right-clicking it. Pick the menu choice "Allocate system function" afterwards.

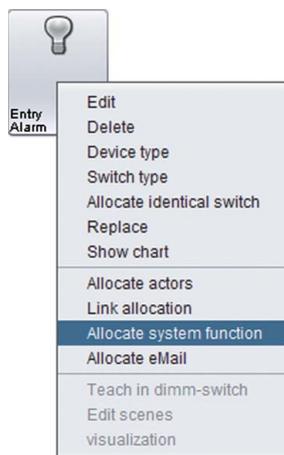


Figure 97: Allocate a switch to a system function

In the newly opened dialog you can choose the system function and the trigger state.

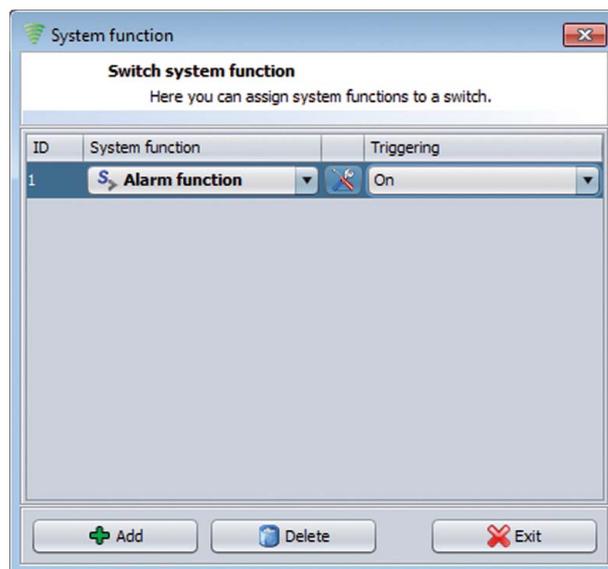


Figure 98: System function - switch assignment

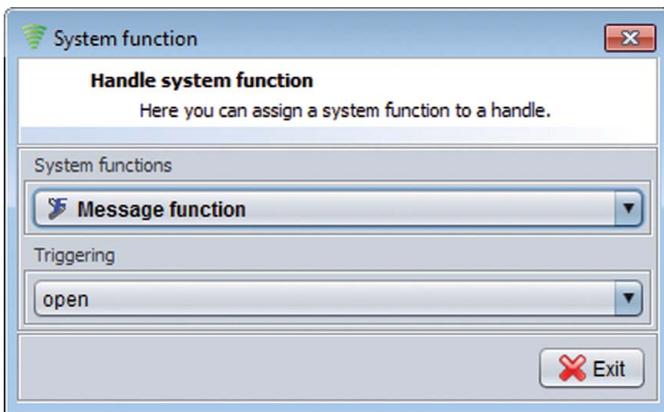
## 7.5 Allocate system functions to other objects

Linking system functions is not exclusive to switches. They can be linked to other objects as well. Several options will be illustrated in the next subsection.

### 7.5.1 Allocate a system function to a handle

To allocate a handle to a system function right-click the respective handle object. Click “Allocate system function” in the following dialog.

The dialog “System function” will be opened:



In this allocation dialog you can link a system function and a trigger state (“open”, “toppled” or “closed”) to the handle.

Figure 99: Allocating a system function to a handle

### 7.5.2 Allocate a system function to a reed contact

Allocating a reed switch to a system function is similar to the allocation of a handle to a system function. The difference is that a reed contact can only be in one of two states.



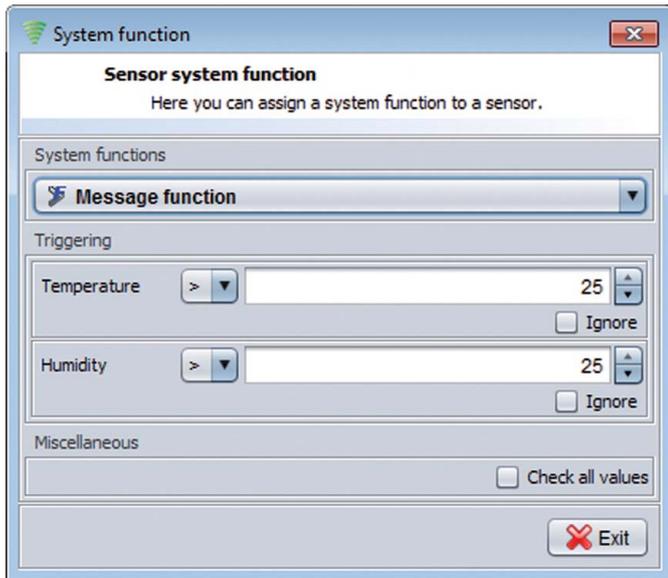
In this allocation dialog you can link a system function and a trigger state (“open” or “closed”) to a reed contact.

Figure 100: Allocating a system function to a reed contact

### 7.5.3 Allocate a system function to a sensor

As you have learned from the allocation of a sensor to an actor, a sensor has several configuration options. These configuration options are also available during the allocation of a sensor to a system function.

Open the context menu of the sensor by right-clicking it. Pick the menu choice “Allocate system function” next. The allocation dialog will appear:



The dialog is separated into several areas. You can choose the system function you want to trigger under system function.

In the trigger area you have to define at least one state of the sensor that leads to triggering.

If you do not need all functionalities you can set the rest to “Ignore”.

If you mark the “check all values” box all parameters have to be met for triggering.

In this example a notification will appear when the temperature rises above 25° C or if the humidity rises above 25%.

Figure 101: Allocate a system function to a sensor

**i Note:** Supplied values will be converted into real sensor values by the Eltako FVS system. Opening the dialog again will re-convert the calculated real sensor value into a user-friendly display value. This can lead to small deviations from the original input.

## 8. Conditions and containers

### 8.1 Definition of conditions and containers

By defining conditions you can prevent actors from switching.

**Example:**

Your exterior lights are not supposed to be switched on during the day. Define a condition basing on a light sensor. Enter a certain value that provides the basis for the check. Then link the created condition to the actor for your exterior lights.

To create one or several conditions you need at least one container. All conditions that are deposited in a container will be linked to a logic "AND". This means that upon checking, all conditions must be met to trigger the actor.

In addition you can tie several containers to an actor in parallel. For the check this means if conditions of one container have been met, the actor will be triggered. Consequently all containers are linked with a logical "OR".

**Example:**

Enabling the air conditioning system shall only be possible after the interior temperature or the humidity have passed certain values. To perform these plausibility checks two different containers are required. Deposit a condition basing on a temperature sensor in the first container and a condition for checking the humidity in the second container. Both containers will be added to the switching actor "Air conditioning system". If the actor is supposed to be triggered, it will be checked if one of the two containers' conditions are met.

#### 8.1.1 Create containers for conditions

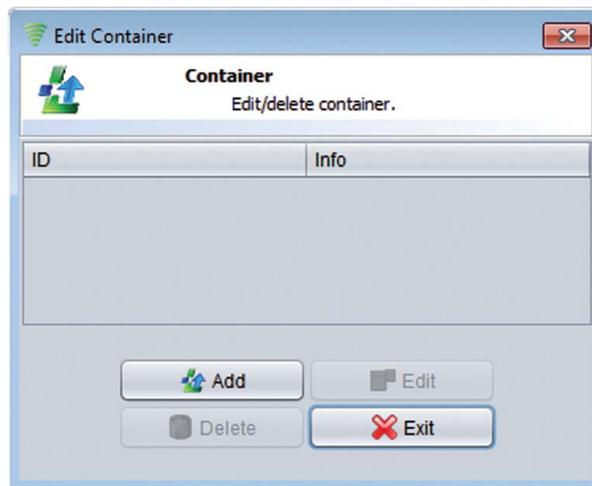


Figure 102: Edit containers

To create new containers go to the menu and click "Edit - Conditions". The following dialog "Edit containers" lets you create, edit and delete containers.

To create a new container press the "Add" button. The "Edit condition" dialog will appear.

### 8.1.2 Create conditions

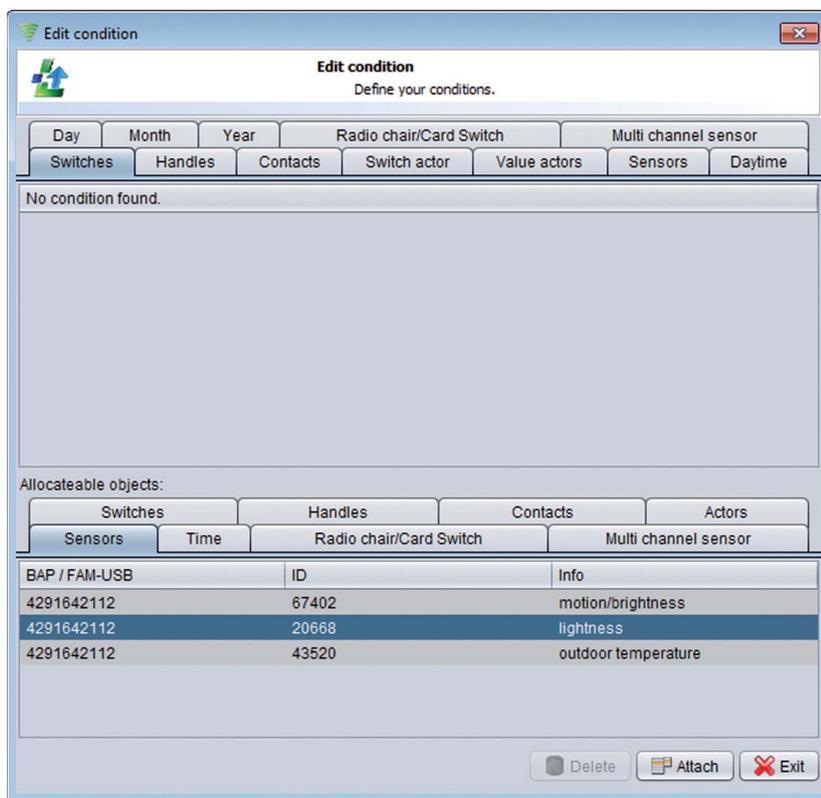


Figure 103: Edit conditions

The window is separated into two registers. The upper register lists all conditions you have defined in that container. The lower part contains a selection of objects with which you can create conditions.

If you want to add a condition to the container choose an object from the lower register by clicking it. Press the “Allocate” button next. The selected object (e.g. a sensor) will be added to the register as a condition in the upper part of the window.

You have to fill in the columns comparison and state or respectively value.

**i Note:** Add a new object as condition to automatically change to the corresponding tab. In addition the “Remove” button will become available.

Below you get an overview of configurable columns if you have generated a condition from an object.

Object	Column	Possible selection	Description
Switches	Switches	<ul style="list-style-type: none"> <li>• left Switch</li> <li>• right Switch</li> </ul>	Which switch channel has to be checked.
Switches	Switch status	<ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> </ul>	If the selected switch channel has to be on or off to fulfil the condition.
Handles	Comparison	<ul style="list-style-type: none"> <li>• =</li> <li>• &lt;&gt;</li> </ul>	How the checking on this condition shall happen. Checking on equal(=) or unequal(<>)
Handles	Status	<ul style="list-style-type: none"> <li>• open</li> <li>• closed</li> <li>• toppled</li> </ul>	Nominal condition while checking the condition.
Reed contacts	Status	<ul style="list-style-type: none"> <li>• open</li> <li>• closed</li> </ul>	Nominal condition of the reed contact at the time of the checking.
Switch function	Switch status	<ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> </ul>	If the selected switch channel has to be on or off to fulfil the condition.
Value function	Comparison	<ul style="list-style-type: none"> <li>• =</li> <li>• &gt;</li> <li>• &lt;</li> <li>• &lt;&gt;</li> </ul>	How the value should be checked. Checking on equal(=), greater than(>), less than(<) or unequal(<>).
Value function	Value	Entry of an integer, e.g. 59	Which value has to be checked. Entry of an integer, e.g. in case of a heating control function a value between (127) and 128

Object	Column	Possible selection	Description
Sensor	Type of sensor	<ul style="list-style-type: none"> <li>• temperature</li> <li>• humidity</li> <li>• set value</li> <li>• ventilation</li> <li>• motion</li> <li>• lightness</li> <li>• CO2</li> </ul>	The possible selection depends on the sensor. This field determines which functionality shall be checked.
Sensor	Comparison	<ul style="list-style-type: none"> <li>• =</li> <li>• &gt;</li> <li>• &lt;</li> </ul>	How the entered value shall be checked. Checking can be done on equal(=), greater than(>) or less than(<).
Sensor	Value	Entry of an integer.	<p>Here you enter the value that should be checked e.g. the temperature</p> <p><b>i</b> <b>Note:</b> In case of a motion sensor, the entry of a value is impossible.</p>
Sensor	Motion	<ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> <li>• No selection</li> </ul>	<p>The selection of “on” or “off” can only be done if the sensor is a motion sensor.</p> <p><b>i</b> <b>Note:</b> Every other sensor apart from the motion sensor says “No choice” in this column and you cannot select it.</p>
Time	Hour	Value from 0 to 23	Entry of the hour to check.
Time	Minute	Value from 0 to 59	Entry of the minute to check.
Time	Comparison	<ul style="list-style-type: none"> <li>• =</li> <li>• &gt;</li> <li>• &lt;</li> </ul>	How the value should be checked. Checking on equal(=), greater than(>), less than(<) or unequal(<>).

Object	Column	Possible selection	Description
Day	Day of the week	<ul style="list-style-type: none"> <li>Monday</li> <li>Tuesday</li> <li>Wednesday</li> <li>Thursday</li> <li>Friday</li> <li>Saturday</li> <li>Sunday</li> <li>Day</li> </ul>	Selection of the day to check. In case of a specified day, you have to fill in the column "day of the month" as well.
Day	Day	Value from 1 to 31	Entry is only necessary in case if the column "Day of week" was selected.
Day	Comparison	<ul style="list-style-type: none"> <li>=</li> <li>&gt;</li> <li>&lt;</li> </ul>	How the value should be checked. Checking on equal(=), greater than(>), less than(<) or unequal(<>).
Month	Month	<ul style="list-style-type: none"> <li>January</li> <li>February</li> <li>March</li> <li>April</li> <li>May</li> <li>June</li> <li>July</li> <li>August</li> <li>September</li> <li>October</li> <li>November</li> <li>December</li> </ul>	Selection of the month to check.
Month	Comparison	<ul style="list-style-type: none"> <li>=</li> <li>&gt;</li> <li>&lt;</li> </ul>	Which operator has to be inserted to check the month. Checking on equal(=), greater than(>), less than(<) or unequal(<>).
Year	Year	Entry of a year	Which year has to be checked.
Year	Comparison	<ul style="list-style-type: none"> <li>=</li> <li>&gt;</li> <li>&lt;</li> </ul>	Which operator has to be inserted to check the year. Checking on equal(=), greater than(>), less than(<) or unequal(<>).
Radio chair	Condition	<ul style="list-style-type: none"> <li>occupied</li> <li>not occupied</li> </ul>	Definition if the chosen status is "occupied" or "not occupied" to fulfil the condition.

**i Note:** If you added a multichannel sensor to a condition a new dialog will appear above the “Settings“ button in the “Summary“ column. Consult chapter 4.11.4 for configuring sensor values.

If you have defined your conditions for this container, leave the dialog by clicking the “Close“ button. The newly created container will be shown in the following dialog “Edit container“.

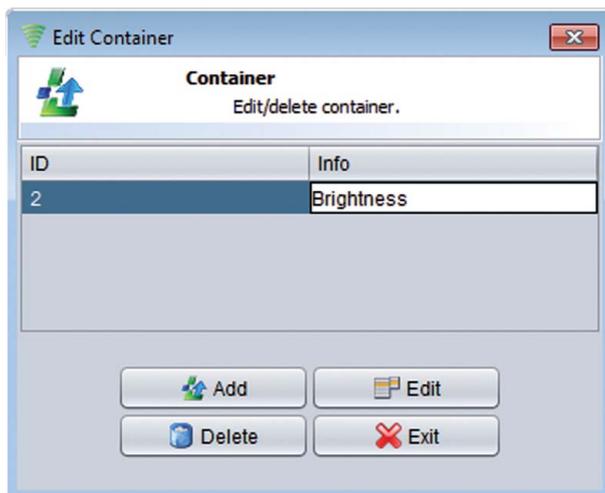


Figure 104: Edit container name

**! Note:** Without providing a condition the container will be discarded and not shown in the “Edit container“ dialog.

Via the “Info“ column you can add a name to the container. Giving distinct names helps to distinguish among various containers. Adding or editing a name is done by double-clicking the “Info“ column of the respective container.

Deleting or editing a container is done by selecting the relating line and clicking the respective button.

### 8.1.3 Delete conditions

By selecting the container in the “Edit container” dialog and clicking the “Edit” button the “Edit condition” dialog will appear. After selecting a condition you want to remove in the upper tab and clicking the button labelled “Remove” the condition will be discarded.

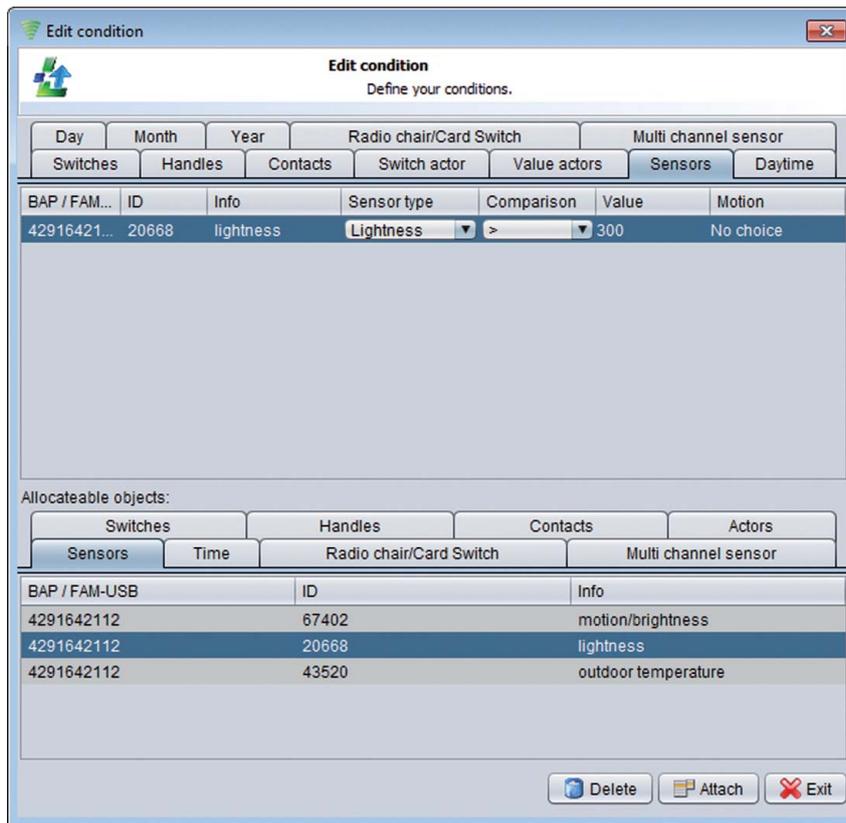


Figure 105: Delete conditions

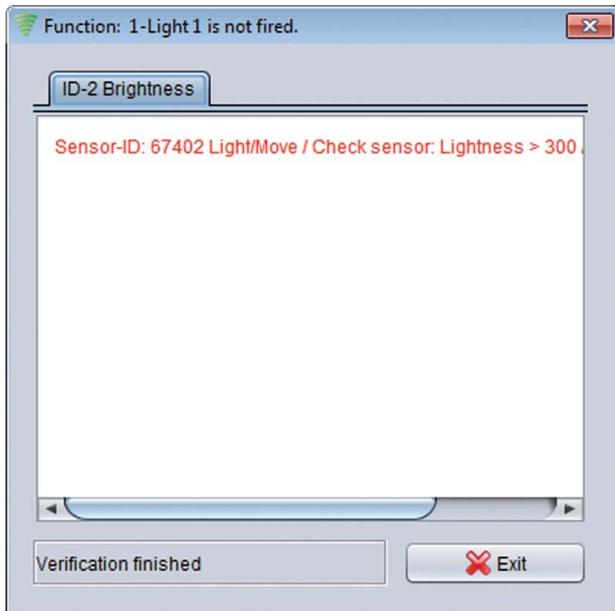
## 8.2 Allocate a condition to an actor

If you have created containers and defined their conditions you can allocate them to one or more actors. This means that an actor triggering starts a condition checking. If the condition is not fulfilled, the actor will not be enabled. Icons of disabled actors will have a red background.



Figure 106: Actor was not triggered

As long as an icon is highlighted in red, you can gather additional information about its “non-triggering”. To do so click the actor object and the following dialog will open:



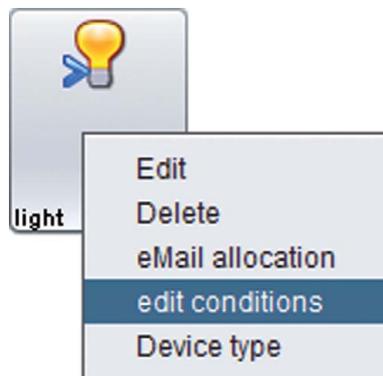
Via the respective registers you can select the relating container that holds the conditions that are not met at the moment. The evaluation of conditions is organized in the following pattern:

- ID of the object and potentially available names.
- Method of checking the object.
- Present state of the object.

Using this itemisation you can identify at a glance why the actor has not been triggered.

**Figure 107: Analysis actor will not be triggered**

To use checking of conditions on an actor, at least one container with conditions has to be added to the actor. Right-clicking will provide you with a context menu of the actor.



**Figure 108: Allocating a condition and a actor**

After you picked “Edit conditions”, a new dialog appears.

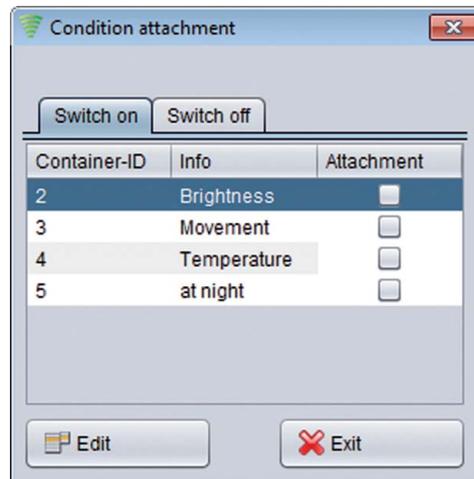


Figure 109: Condition assignment

Conditions can be added to an actor via two different switch states. Due to that, these states are displayed in separate tabs. Both tabs list the available containers (in this example: container lightness). You can add a container to this actor by setting a check mark on the object in the column “Attachment”. If you want to remove the assignment, uncheck the corresponding box in the column “Attachment”.

**i Note :** You can assign more than one sensor to an actor. If these conditions are checked, at least one container has to fulfil the condition to trigger the actor. These containers are connected with a logical “OR”.

Furthermore, you can change the content of a container within this dialog. You get the possibility to subsequently add, edit or delete conditions. To do so, please select your container by clicking on its row and press “Edit”. The dialog “Edit conditions” appears. Please read chapter 8.1.2 on how to adjust conditions to containers.

### 8.3 Allocate a condition to a link

You assign a condition to a link with a right click in the object overview on a link. The following dialog opens:

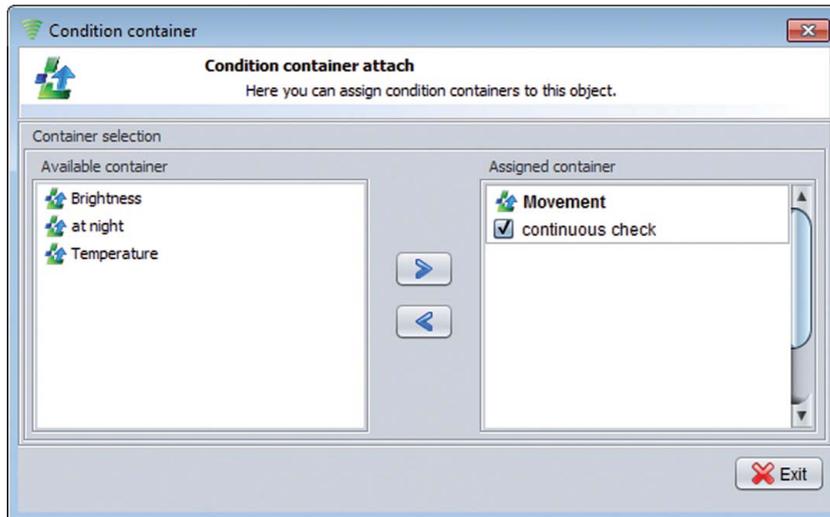


Figure 110: Condition assignment to a link

You see all available conditions in the right area of the window. With the button in the middle you assign or remove conditions.

To abort a link if the conditions change during the execution, you must put a hook in front of „continuous check“. The conditions are checked permanently during the execution of the link after that. If the hook is not set, the conditions are checked only once before triggering the link.

Click „Exit“ to left this dialog.

### 8.4 Allocate a condition to a system function

You can as well allocate conditions to system functions. Right-click on the corresponding system function and press “Edit conditions”.

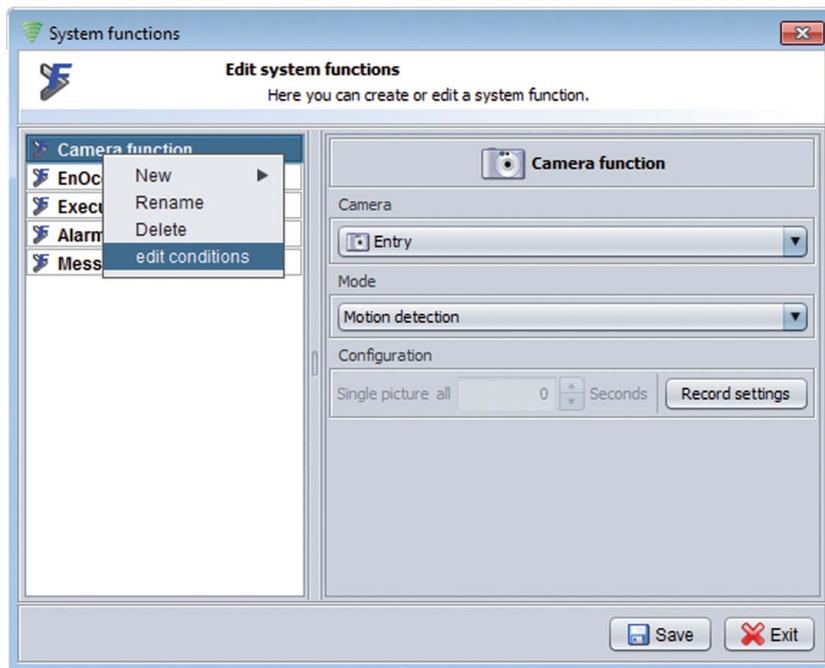


Figure 111: Allocating conditions to system functions

You can add your favoured condition in the appearing dialog.

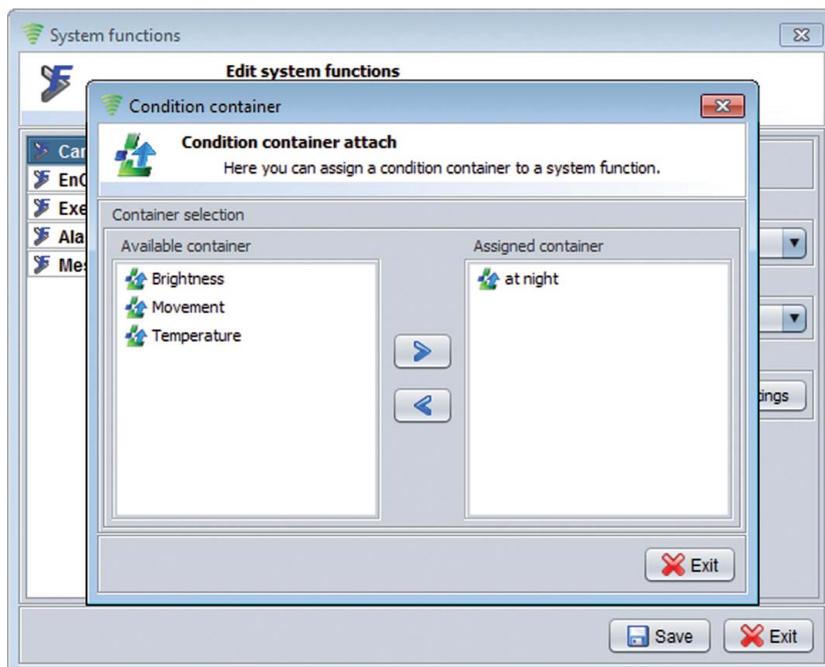


Figure 112: Add conditions

You leave the dialog by pressing “Exit”.

### 8.5 Allocate condition to heating or dim actuator

As in the case of „normal“ switching actors you can configure a condition examination also for heating actors. The call of the assignment dialog is always carried out via the accompanying sensor of the heating actor.

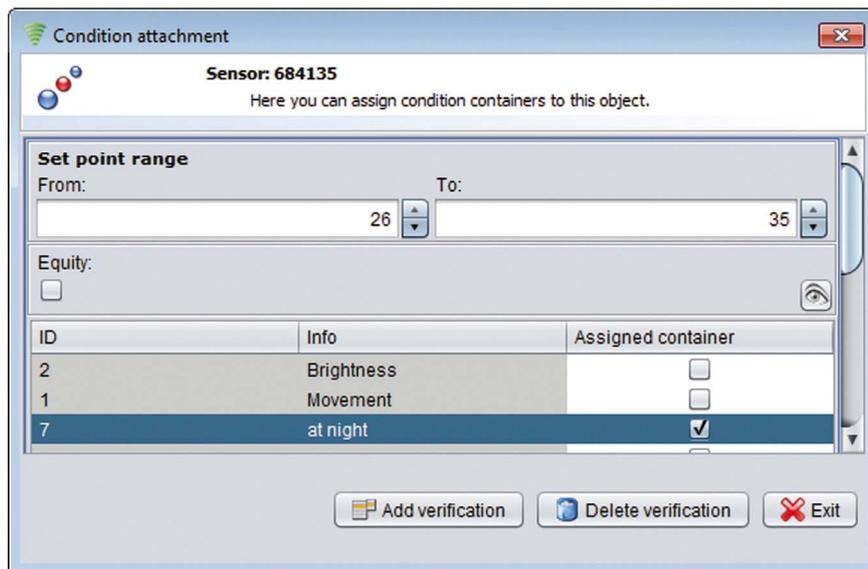


Figure 113: Condition assignment to a sensor

A new configuration field will „add verification“ displayed by pushing the badge in the dialog. The upper area refers to the assigned condition. If you push the „eye badge“ you will see the available conditions. By putting the hook in the check box this condition is checked if the desired set point is in the range of values defined before.

**Example:**

You want to reach this a set point over 25° degrees Celsius in the night cannot be adjusted. For this, „at night“, you have already defined a condition. As next the condition is connected with the heating actor about the dialog „condition assignment“. You push the badge „add verification“. After production of the examination field you enter in the field „of“ 26° degrees Celsius and in the field „to“ the maximum of 35°. (Pushing and holding the „above“ arrow fills the „to“ field up to the maximum.) Then you put the hook at the condition „at night“.

**i Note:** If you need an examination that only shall be applied to a certain set point, you then use the check box „examination on equality“.

## 9. Cameras

### 9.1 Configure IP-cameras

To add a camera to the Eltako FVS system, you have to press “Edit - Cameras”. The camera dialog appears:

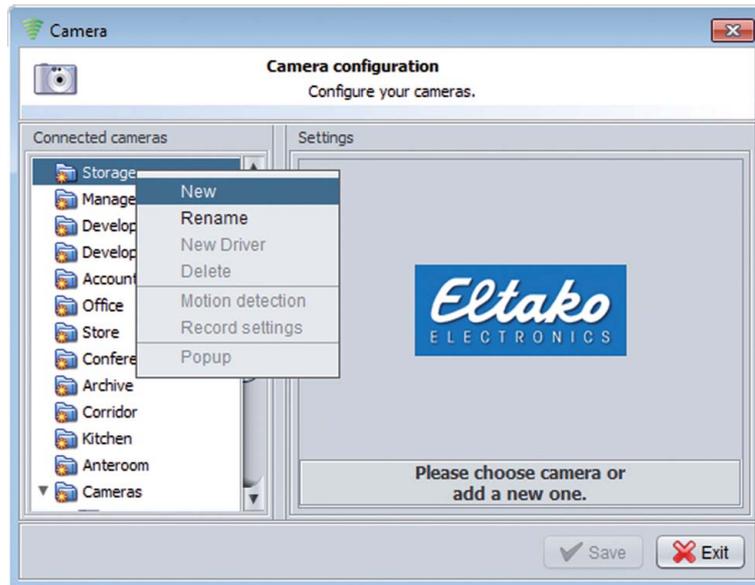


Figure 114: Camera menu

To add a new camera to the system, please right-click on the designed level and select “New”. Please select the camera driver in the next window.

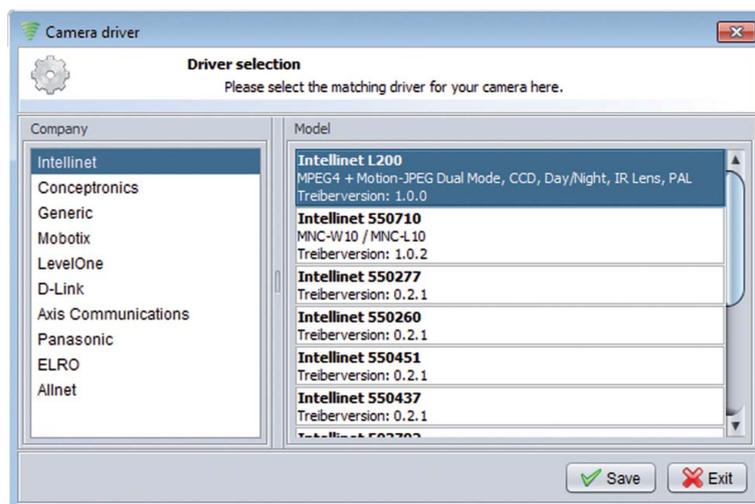


Figure 115: Camera driver choice

You have to enter the IP-address, the user name and the password for your camera under “Settings”. Depending on the camera model, you can also choose the resolution, the color palette, and you can blend in date and time. If you have finished your configuration, click on “Save”. By using the context menu or by pressing F2 on your keyboard, you are enabled to assign another name to your newly installed camera.

If you want to assign your camera to another level, simply drag & drop it there.

Furthermore, the context menu provides you with the ability to change the recording settings (see chapter 9.3) or to install motion detection (see chapter 9.4)

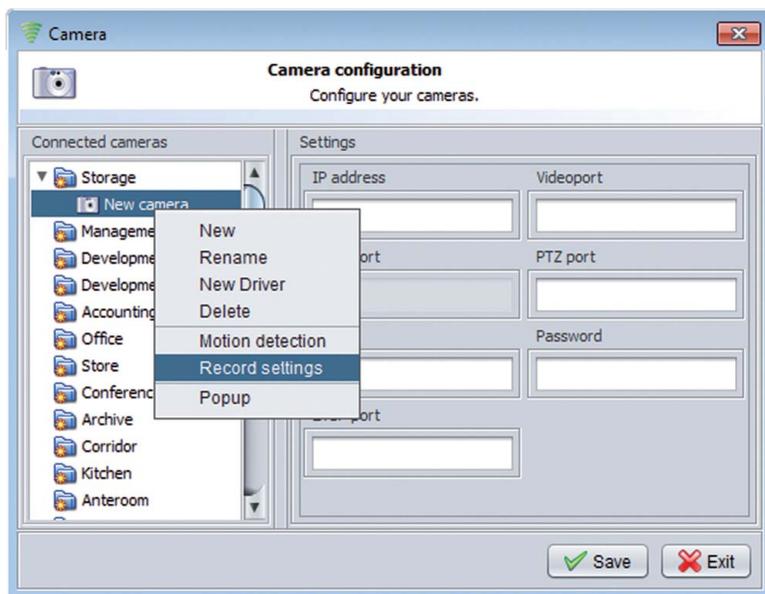
**i Note:** You can see the supported cameras in the “Camera driver” window. By updating your Eltako FVS software, you will get new types of cameras. You can start an update of your Eltako FVS installation by pressing “Info - Update” in the main menu.

## 9.2 Live picture

To see the live picture of a camera, click on the corresponding camera symbol in object overview. If you want to close it again, double-click in the camera window.

## 9.3 Record settings

By pressing “Record settings” in the context menu, you can change the recording path as well as the type of compression of the selected camera.



You open the context menu of your camera by right-clicking it. In this menu, you pick “Record settings”.

Figure 116: Recording settings

A new dialog with multiple types of recording options opens.

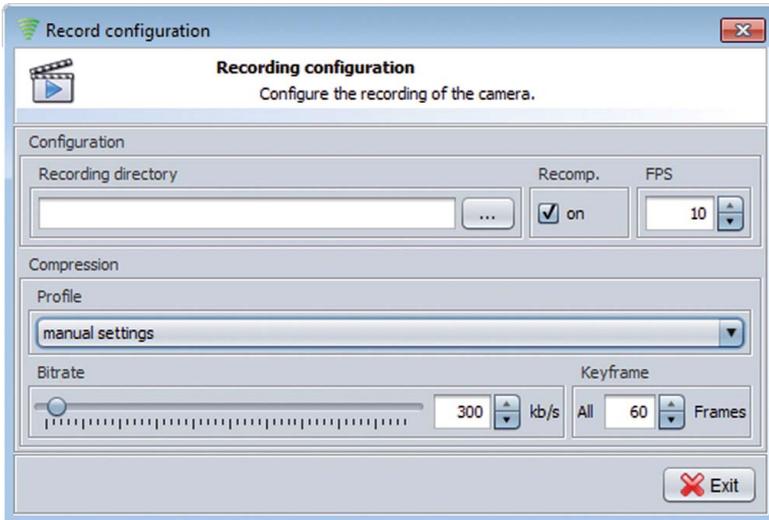


Figure 117: Recording settings

You can enter the path where your recorded videos have to be stored under “Recording directory”. By activating compression, you can access further settings to define the quality and size of your videos. The field “FPS” (frames per second) determines how many frames per second shall be made by your camera. If you decide to change the values under “Compression”, this will influence the size of your recording.

**i Note:** If the compression is not active, Eltako FVS will use the compression procedure included in the delivery of your camera.

If you activate compression, the MPEG4-standard will be used to compress your recordings. By activation of “Compression” you can choose under “Profiles” between predefined profiles for data compression.

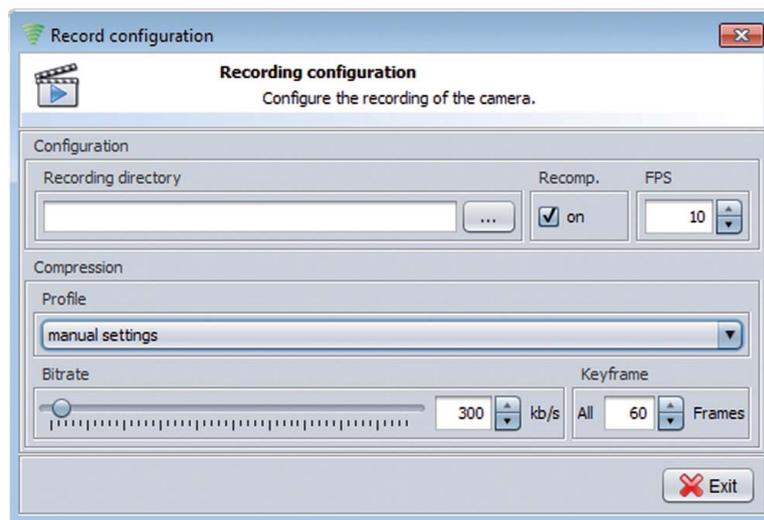


Figure 118: Compression profiles

The Drop-Down menu offers you the following options:

- Predefined settings  
standard settings of Eltako FVS.
- High compression  
This setting produces a little file size at the expense of image quality.
- Middle compression  
This setting produces medium file size with medium image quality.
- Low compression  
This setting produces a great image quality and big files.
- Manual settings  
With this profile, you can adjust your settings according to your wishes.

If you choose “Manual settings”, you can adjust the bit rate as well as the key frames according to your demands.



**Figure 119: Manual settings**

The bit rate can be changed via the slider or by entering a value in the box “kb/s”. The higher the bit rate, the bigger the file. To get smaller files, you will have to lower the bit rate.

You can adjust the amount of frames between a keyframe in the field “Keyframe”. The MPEG4-standard is based on a frame, named the keyframe. The following images only consist of changes regarding the keyframe. After a specified amount of key frames, the next keyframe will be made. You can change the frames between a keyframe in this field. Therefore, a bigger interval between your key frames will result in a better compression of your recording.

**! Note: If you choose an interval that is too big between your key frames, there artefacts in your recording can occur.**

## 9.4 Motion detection

With your Eltako FVS software, you have the possibility to activate motion detection. It is possible to trigger an alarm, to record videos or to switch actors if any motion is detected. You can adjust these settings in the dialog “Motion detection”. You enter this dialog by clicking “Configuration - Cameras” and then opening the context menu of your favored camera by right-clicking on it. Then select “Motion detection”.

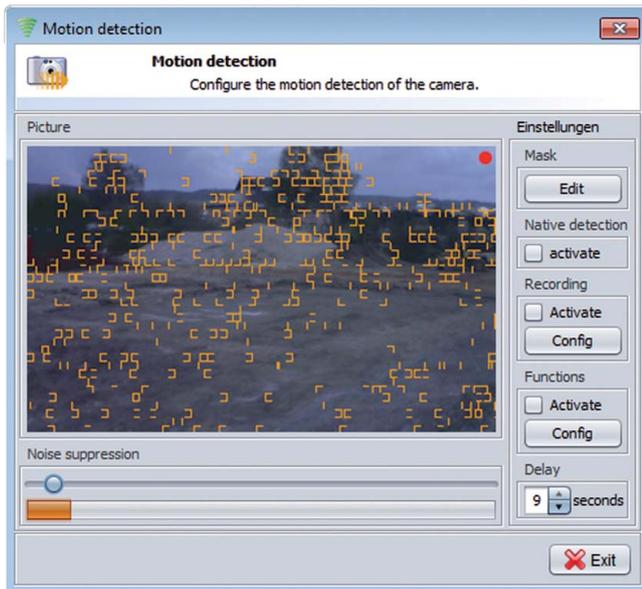


Figure 120: Motion detection menu

If you open this dialog for the first time, there are a lot of orange fragments to see. These orange fragments indicate motion in the picture.

Due to the fact that every picture has a certain amount of noise (interferences), the noise suppression has to be adjusted. Please move the slider “Noise suppression” to the right until the orange fragments are no longer visible. The red dot in the upper right corner has to be green. Please assure that there is no movement in front of the camera as long as you are adjusting noise suppression.

The scale under the slider shows the changing pixels in per cent. If your adjustment is correct, you will only see orange fragments on moving objects.

### 9.4.1 Edit mask

Naturally, you can observe only certain parts of your camera picture by the software. To do so, you can create masks. On the right side of the motion detection dialog, you can adjust additional settings. Press “Edit” in the field “Mask”. A new menu bar with different tools to create a mask appears.



#### Free hand:

Use your cursor like a pencil.



#### Ellipse:

Draw circles or ellipses in your picture.



#### Rectangle:

Draw rectangles in your picture.



#### Clear:

Press this button to clear parts of your mask using “Ellipse” or “Rectangle”.



#### Reverse:

Reverse the mask by pressing this button.

The software will observe bright areas, whereas dark areas will be ignored. Exit your mask editing by clicking “Edit” again.

### 9.4.2 Automatic motion recording

You can activate the automatic motion recording by setting a check mark under “Recording” in the field “Activate”. Under “Config”, you can specify a path where your recordings shall be stored. If the “Recording directory” is left empty, your videos will be stored in a “Recordings” folder in your Eltako FVS folder. Additionally, you can specify the amount of frames per second. The standard is ten frames per second. Close the dialog by clicking “Exit” when you are finished. The changes will be saved automatically.

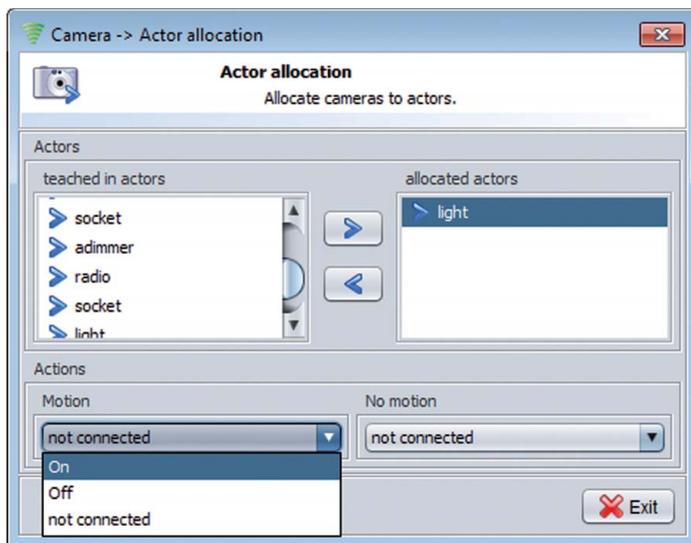
**!** **Note: Do not activate the automatic recording if you prefer a permanent recording. The motion detection will shut down the recording in favour of space consumption if it detects no motion.**

### 9.4.3 Native detection

The activation of “Native detection” leads to the use of the internal motion detection of your camera (if it is supported). By deactivating it, Eltako FVS will provide you with motion detection.

### 9.4.4 Trigger actors due to movement

To trigger an actor when motion is detected, set a check mark under “Actors” on “Activate”. Press “Config” to assign actors to the camera.



In the left column, you can see all learned actors. To assign actors to a camera, select them with a left click and press the arrow to the right side. The selected now appear in the right column. There are two drop-down menus in the bottom part of the window, containing the possible options (On, Off, no connection).

You can choose an action in the left drop-down menu if there is movement in the selected part of the camera. The right menu enables you to shut down the actor if there is no movement.

**Figure 121: Actor settings in case of motion**

The following settings are possible:

On: Actor is switched on.

Off: Actor is switched off.

Not connected: The actor will not be triggered.

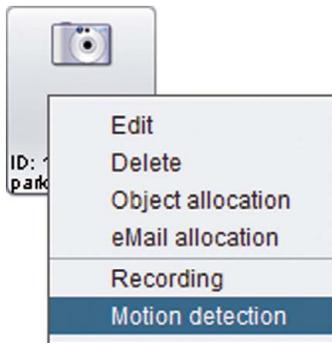
Close the dialog by pressing “Exit” when you are finished. The changes will be saved automatically.

### 9.4.5 Adjust the delay

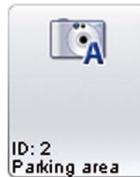
Due to the fact that movements in a picture occur suddenly and may end suddenly, there has to be a delay time in which the system tests if there is still movement. The standard delay is 10 seconds. That means that the camera checks 10 seconds after the last movement if there is still movement. If this is not the case, the system reports “no motion”. This could stop an automatic recording or trigger a connected actor. If there is still motion, the system checks again after another 10 seconds. This procedure assures that a recording is at least 10 seconds long or that an actor is at least 10 seconds active (e.g. light on for 10 seconds). You can change the standard delay in the dialog “Motion detection” under “Delay”.

### 9.4.6 Activate motion detection

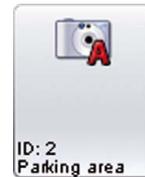
If you are finished with your setup as explained in the previous chapters, you can activate motion detection. Right-click on your camera in object overview and select “Motion detection”.



Set a check mark in this menu to start motion detection.



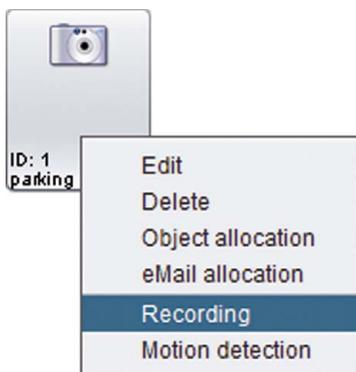
Camera symbol while motion detection is active.



Camera symbol while motion detection is active and recording.

## 9.5 Recordings

You can start or stop a recording in object overview by right-clicking a camera. These recordings will be stored as AVI-files in your Eltako FVS directory, or in your preferred directory if you set it up (chapter 9.3). The compression used is MPEG4.



Click on “Start recording” to start a recording.

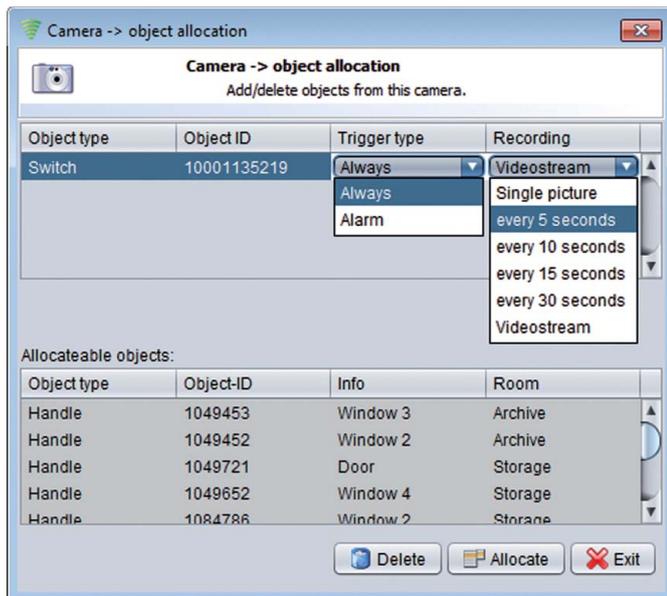


Camera symbol while recording.

## 9.6 Allocate objects to a camera

If you want your camera to record after a switch or handle was used, you can allocate the switch or handle to the camera. Please do the following:

Open the object overview and right-click on your camera. In the context menu, pick “Allocate object”.



The lower chart shows you all objects that can be assigned to a camera. Choose the favoured objects and press “Allocate”. Due to this, the selected objects move to the upper chart.

In the field “release type”, you can choose when to record a photo or a video. The field “Recording” lets you choose between single pictures, a sequence of single pictures or a video.

These pictures and videos will be stored in your preferred directory or in your Eltako FVS directory.

Figure 122: Allocate camera actors to objects

To save the changes, close the dialog by clicking “Exit”.

**i Note:** If you have activated the option “Popup”, and the camera is connected to an object, the camera view will be automatically shown in object overview for 30 seconds. The activation or deactivation of the “Popup” option has to be done through the camera context menu.

### 9.7 Camera motion detection notification via e-mail

If you wish to get an e-mail as soon as there is motion in your camera picture, please open the context menu of your camera in object overview by right-clicking it and select “eMail allocation”. The following dialog opens:

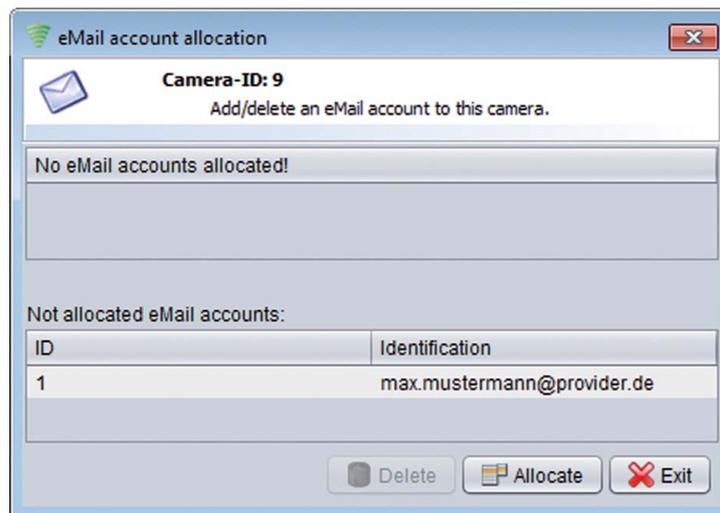


Figure 123: Menu camera-e-mail allocation

Choose your e-mail accounts you want to connect to the camera from the lower chart. Press “Allocate” to assign an e-mail account to your camera, and it will appear in the top chart “Allocated e-mail accounts”.

Activate the motion detection (see chapter 9.4.6) to be informed about motion in the camera picture.

**i** Note: You can read how to install an e-mail account in chapter 14.2.1.

## 9.8 Camera matrix

The camera matrix is a special view of camera images. Through using this feature, you are enabled to watch multiple camera pictures in one interface. You can as well change the resolution of the videos.

**!** **Note:** The camera matrix is restricted to a special version of Eltako FVS Home and to the Eltako FVS Professional Enterprise.

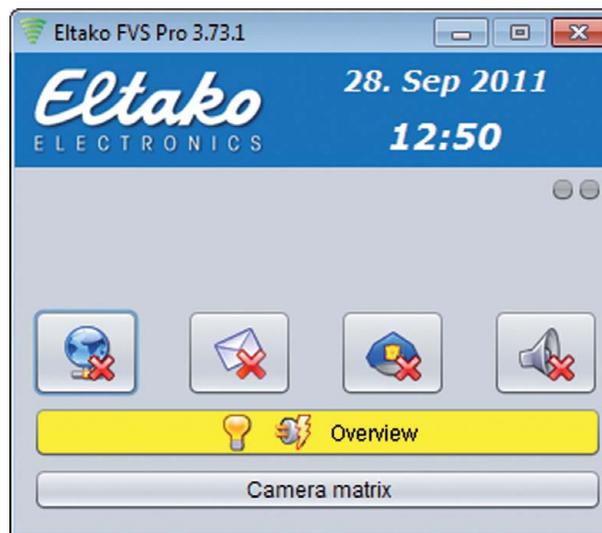


Figure 124: Eltako FVS with camera matrix

By clicking on the button camera matrix, a new dialog opens:

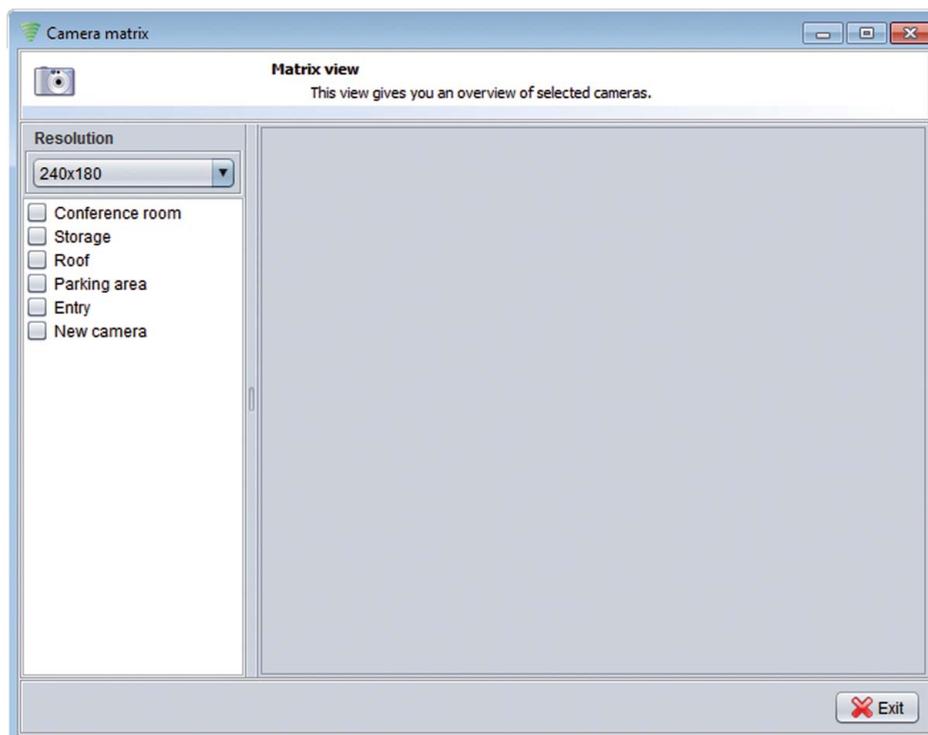


Figure 125: Camera matrix

On the left side of the screen, you find a drop-down menu to set up the camera resolution. Underneath this field, you can see a list of all installed cameras in your system.

You can add the favored camera picture by clicking on the camera. Subsequently, a connection to the camera is made and the live camera screen appears on the right side of the dialog.

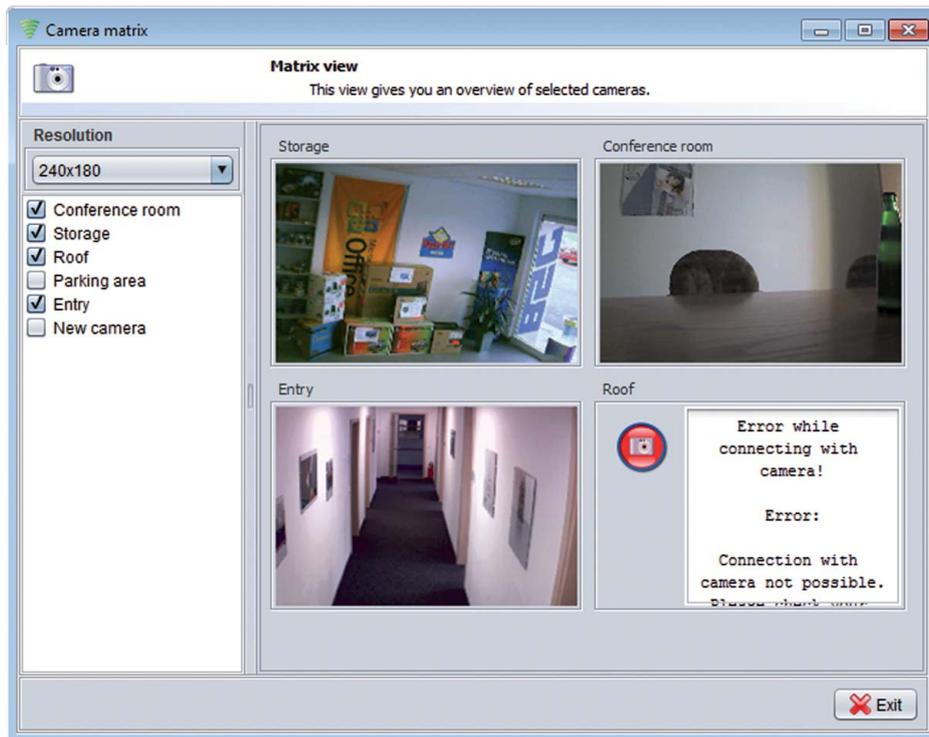


Figure 126: Camera matrix

By adding new cameras to your matrix, it will automatically expand. If the connection cannot be established, the corresponding camera screen shows an error message (see picture). In this case, please refer to chapter 9.1 to control your camera settings.

The chosen camera as well as the resolution will be automatically saved.

## 10. User creation and security

Your Eltako FVS software can be remotely accessed and administrated from any computer that is connected to your network. Additionally, you have the possibility to access your system worldwide via Internet with Eltako FVS-ToGo. To use Eltako FVS-ToGo, you have to create users and to assign access profiles to them. It is also necessary to break in an authorized CodeMeter-Stick. To activate remote access, please click on the globe on your main screen. You can read more about Eltako FVS-ToGo in chapter 15.

Another option is the use of Eltako FVS-Mobile, which is a client-software on a smartphone. Eltako FVS-Mobile was designed to connect internally and externally to your system.



Remote access inactive



Remote access active

**!** **Note:** To switch the remote access on or off, you have to break in at least one CodeMeter-stick. You can read how to break in an CodeMeter-Stick in Chapter 15.2.

### 10.1 Create users

Click on “Configuration - Security - Clients” and afterwards on “Eltako FVS-Client” to create a new user:



Enter the login name of the authorized user in the input box “Username”. Under “Domain”, you have to enter the domain of the PC network the user belongs to. If the target is a single PC, please enter the Computer’s name . Click on “Add” to add this user to your list of access authorized persons.

Figure 127: Edit client user

## 10.2 Create user profiles

Needless to say that you define which objects or actors a user can access. To do so, you can create user profiles to restrict or allow access to different parts of your Eltako FVS system. Open the profile manager by clicking “Configuration - Administration - Profiles - Profile manager“:

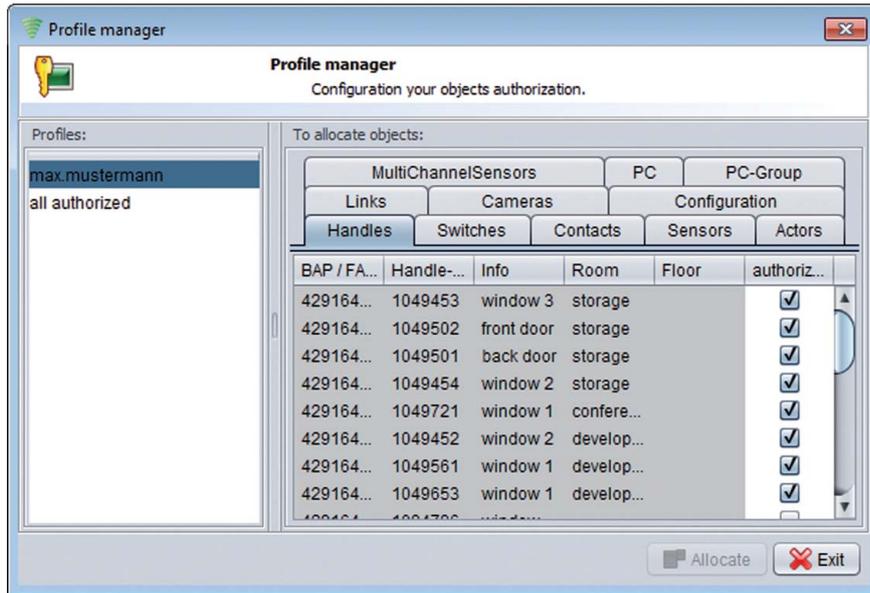


Figure 128: Profile manager menu

Under “Profiles”, right-click on the free space and select “New” from the context menu to create a new user. A new profile will be created. You can change the profile name by double-clicking on it. You can see all of your system objects on the right side, in tabular form and grouped in tabs. Just set a check mark at “authorized” to give your newly created profile access to this object.

## 10.3 Reorganize profiles

Profiles save the access rights of users towards objects. If there are deactivated objects, they will not automatically be deleted from the appropriate profile. To assure that profiles do not contain unnecessary data, the menu point “Profile reorganization” exists. This actor searches for deactivated objects in all profiles and deletes them. You can access “Profile reorganization through “Configuration - Profiles - Profile reorganization“.

### 10.4 Assign profiles to a user or a CodeMeter stick

After you created at least one user and one profile, you have to assign it to a user. Open the dialog “Profile allocation” by pressing “Configuration - Profiles - Profile allocation”.

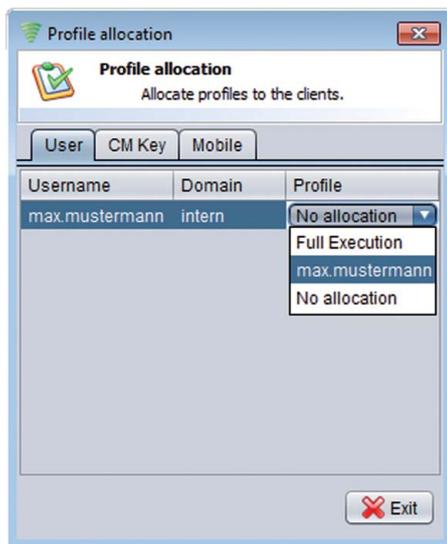


Figure 129: Menu “Profile allocation”

You can see all of your created users in this chart. Allocate a user to a profile by selecting the user by left-clicking and choosing the favored profile in the column “Profile”. The register “CodeMeter” allows you to assign a profile to a previously imported memory stick. To find out more about CodeMeter, Eltako FVS-ToGo and Eltako FVS-Mobile, please refer to chapter 15 respectively chapter 16.

### 10.5 Lock object configuration

Your Eltako FVS-Software and its objects as well as actors offer a lot of configuration possibilities. To prevent unauthorized access, you can install a configuration password. You can do so by clicking “Configuration - Security - Passwords - Configuration password”. To lock the object configuration, please click on “Lock object configuration”.



If you have locked the object configuration, you have to enter your password prior to editing an object or opening the configuration menu.

### 10.6 Edit alarm passwords

To end a triggered alarm, you need a password.

Standard password alarm:               alarm1  
 Standard password silent alarm:       alarm2



Figure 130: Alarm message

If you enter the silent alarm password in case of an alarm instead of the normal alarm password, the acoustical and visual alarm will end, and silent alarm will be triggered. The silent alarm simply sends an e-mail to a predefined e-mail address with an alarm notification (see chapter 14).

To change these passwords click “Alarm password” in the security menu. In the following dialog fill in the default password and click “enter”. Via the dialog field “password” you can set a new password for “alarm – OFF” and for “Silent alarm”. Repeat the respective entries.

**!** **Note: Change both passwords immediately to ensure that no unauthorized person can disable the alarm.**

### 10.7 Object surveillance

If you have enabled the alarm via the quick choice button in the main view (see chapter 4.2) every object that is modified will trigger the alarm by default. In case you want certain objects to refrain from doing this, go to “Configuration – Security – Object surveillance” where you can disable the alarm triggering of certain objects in the dialog window “alarm allocation”.



Uncheck the field “Alarm active” of the object you do not want to trigger the alarm.

Figure 131: Menu object surveillance

## 11 Timed function

### 11.1 Timed function

Timed functions are able to switch actors, links or cameras time-controlled. The execution can be done:

- Once
- Daily
- Weekly
- Monthly
- On individual work days
- periodical

If a device has to run a certain amount of time, there are two timed functions necessary (one for “On” and one for “Off”).

### 11.2 Create, edit and delete timed functions

To create a timed function click “Timed functions” in the Eltako FVS edit menu. The timed function dialog will appear. You can create a new timed function using the context menu of the desired level in the “Timed functions” field. After clicking “new” a new timed function called “new timed function” will appear in the list.

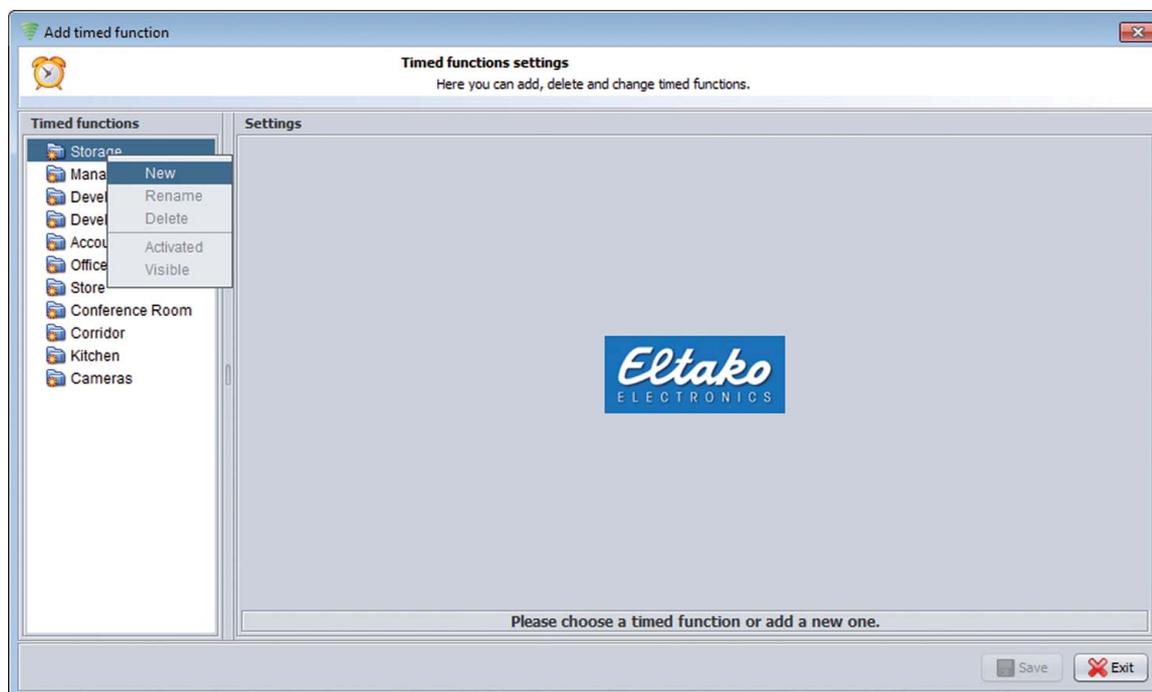


Figure 132: Timed function menu

**i Note:** Created timed functions can be moved to other levels by left-clicking and holding, then dragging them to the desired level.

To rename a timed function click “Rename” in the context menu.



Figure 133: Rename a timed function

Being all actuators, combinations, cameras, PCs and PC groups shown to you under „assignable objects“ in the right area of the window. You can assign objects, remove or the order change over the badges in the middle.

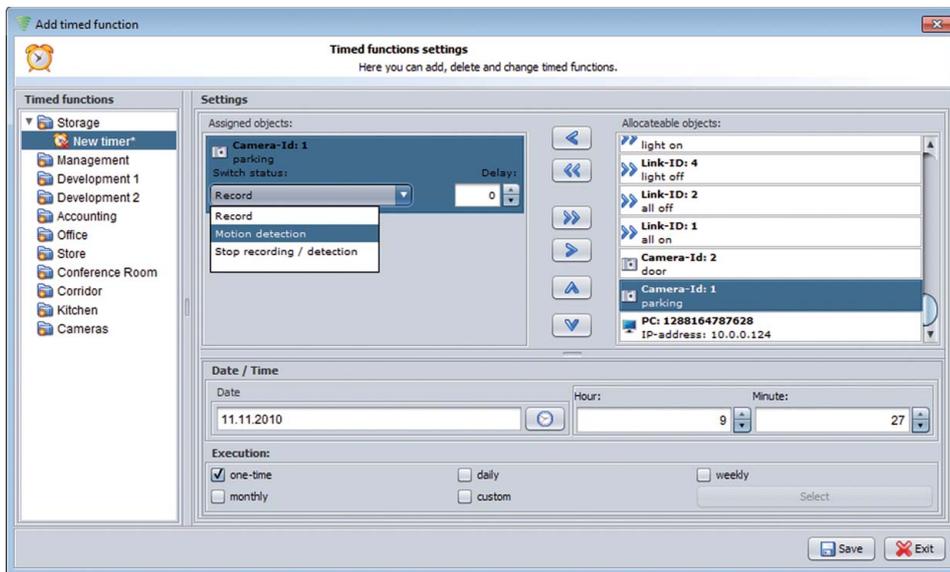


Figure 134: Camera allocation to a timed function

At first select, which object shall be connected with the temporal function. You can assign several objects to a temporal function and define different conditions. After the assignment the action which shall be executed as soon as the temporal function is triggered must be defined.

The end solving conditions queue and „be“ due at an actuator oroon as the temporal function is triggered must be defined.

The following actions are available at a camera:

- Record  
Starts recording as soon as the timed function expires.
- Motion detection  
Starts motion detection as soon as the timed function expires.
- Stop recording/detection  
Stops active recording or motion detection as soon as the timed function expires.

With a PC or a PC group the following actions are available, in which the conditions are „on“ and „off“ available only at assigned actuators.

- On  
The actuator is „on“ switched, as soon as the temporal function is triggered.
- Off  
The actuator is „off“ switched, as soon as the temporal function is triggered.
- Shut down  
The PC shut down as soon as the temporal function is triggered.
- Startup  
Becomes started up the PC as soon as the temporal function is triggered.

A time delay can want to indicate for the wiring of the actuators in seconds in the field besides that.

In the date field you can enter day and time of the desired execution.

The manner of the execution can be defined more exactly be over the badge „Select“ in the area of „Execution“. Individual temporal function attitudes can be chosen with a hooklet at a „custom“. The start time date for the periodical temporal function is the adjusted date or the adjusted time.

You can specify the type of execution in the field labelled “Execution”. By clicking the “Save” button the timed function will be saved and can be activated if desired. In addition the timed function will be displayed on the object overview if you click “Visible” via the context menu.

To enable a timed function retroactively pick “active” from the context menu.



Active timed function



Inactive timed function

Caption illustration:

**New timed function\***

Timed function has not been set

~~New timed function~~

Timed function has been set but is expired

New timed function

Timed function has been set and is running

To delete a timed function select and right-click it. Pick “Delete” from the context menu next.

## 12. The file menu

This menu gives you different possibilities to administrate your database in Eltako FVS Professional Enterprise.

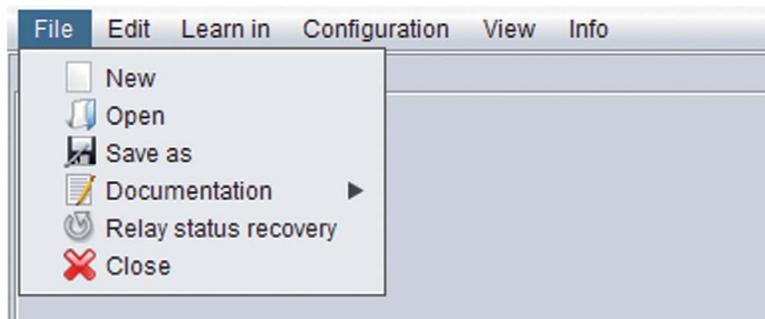


Figure 135: Configuration of Eltako FVS Home

### 12.1 Save and restore an Eltako FVS Home configuration

Eltako FVS Home enables you to save your configuration and to restore it.

To save your configuration, choose “Save” from the configuration menu. A save-file dialog opens, and you can decide where to store your database. Press “Save” to compress and store your database in a zip-archive at your desired location.

To restore your database, pick “Restore” from the configuration menu. A file dialog opens where you can select your backup file. Choose “Open” to start the recovery operation. The following information will be displayed:

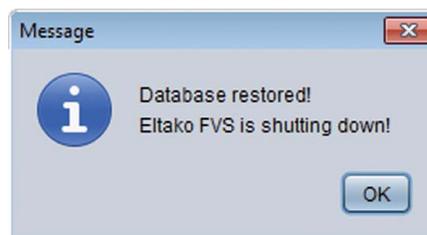


Figure 136: Database restored

After the recovery is finished, the program will end.

**!** **Note:** The options “Save configuration” and “Restore configuration” are only available in Eltako FVS Home, Professional Basis and Professional Advanced with a Derby-based database. In case of another database type, these operations will be done through PostgreSQL respectively the chosen database system.

## 12.2 Print the configuration

Eltako FVS offers the functionality to print the current configuration in an organized way or save it. This is especially useful for administrators if the logging of installation procedures is required.

Press the “Print” button in the configuration menu. The printing dialog with various configuration options will appear.

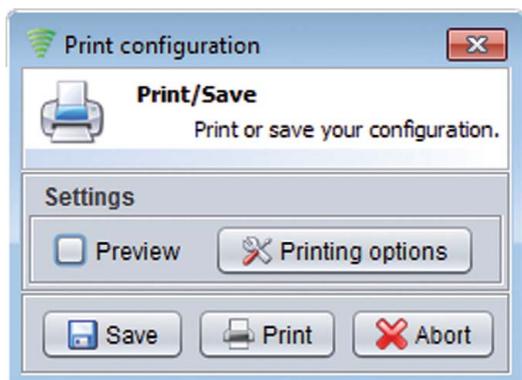


Figure 137: Dialog “Print configuration”

The “Preview” option will display the configuration before printing or saving on screen.

The option below labelled “Save” will save the current configuration to a file.

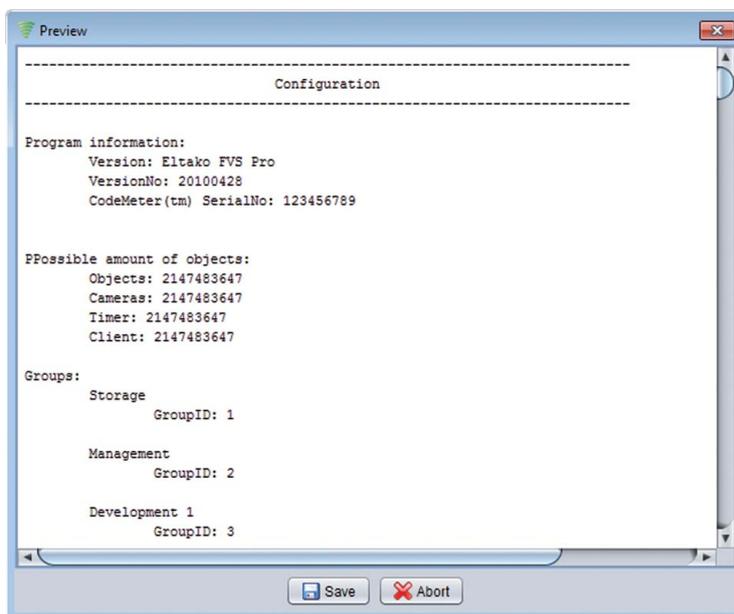


Figure 138: Output file analysis

In case you decide to save the configuration you have to specify a storage location. Press the “Save” button and the following window will appear:

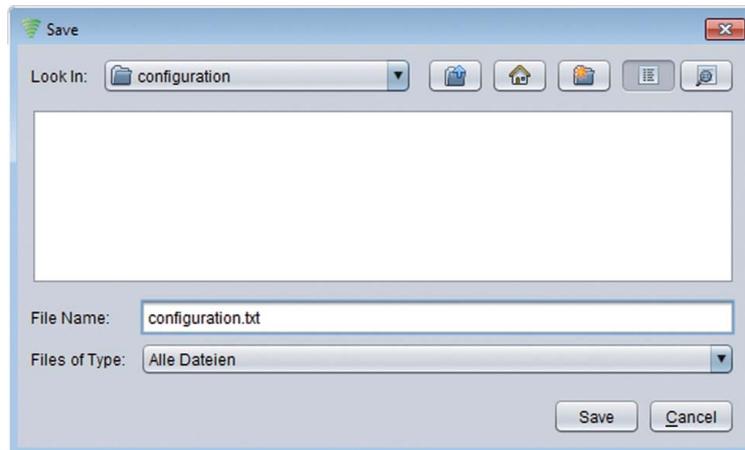


Figure 139: Specify file name

First of all you will choose the directory where the file will be stored. In this example the folder configuration was chosen. Enter the name of the file you want to save in the field “file name” next. The file name field is not tied to a certain file extension. This is especially important if your operating system is not Windows.

Finally press the “Save” button to accept your entries and close the window.

Before you begin printing the configuration you should specify the printing options. Here you can define the configuration data you want to print.

You can check options with a click which will incorporate them in the print. If you want to exclude certain objects from the print remove the checkmarks accordingly.



Figure 140: Print options



**Note on the options:**

Print sensitive data:

Activating this option will print all passwords.

Learned objects:

Checking this option will include all objects. Below this option all types of objects are listed. By unchecking e.g. actors, all objects of this type will be excluded from the print.

Relations:

All links among objects will be printed.

Containers and conditions:

Checking this option will print all created conditions and their relating containers as well as their relations to actors.

The dialog labelled “Print options” can be closed by clicking “OK”.

After all preparatory actions for printing the configuration have been completed press the “Print” button. Afterwards

a new dialog will appear and ask you to set up the page.

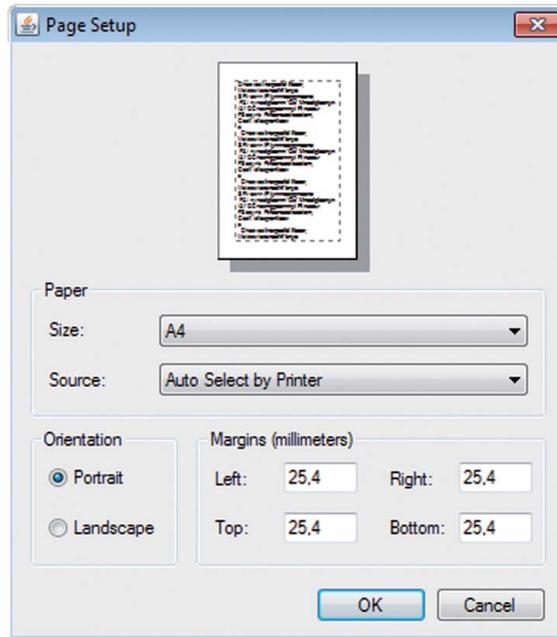


Figure 141: Dialog "Page setup"

Confirm with "OK". The following dialog is visually similar to printing dialogs of several operating systems and will therefore not be looked at any closer. Choose your desired printing device and press the "Print" button in conclusion.

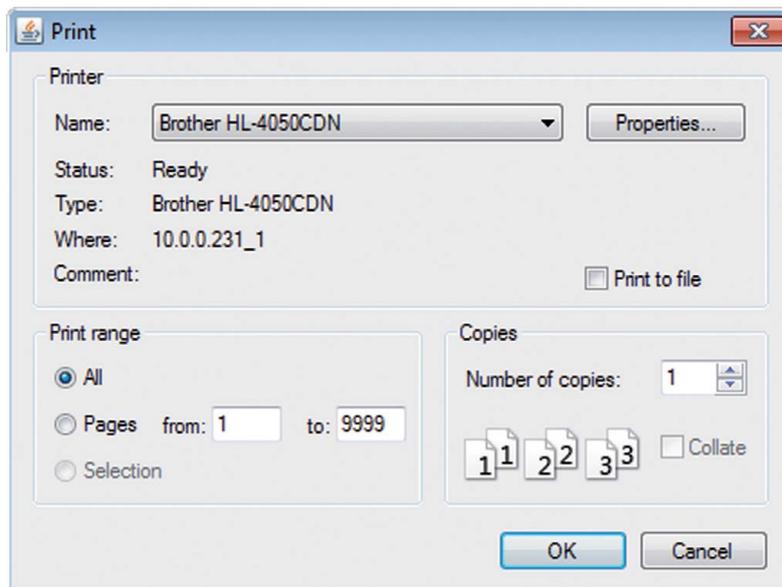


Figure 142: Dialog "Print"

### 12.3 Match states

The menu choice “Matching states” is for restoring the most recently saved states.

You should run this actor if there were unpredictable interferences of infrastructure (e.g. power outage). After enabling this option all actuators (that have been broken in to an actor) will reset to their most recently saved states. This will ensure that the actuator’s visualisation will match its real state in the software.

**Example:**

In case of a power outage the actuators (e.g. power strips) automatically set their state to off. To reset all actuators to their previous states before the outage you access the menu item “Restore”. By using this menu item all actuators that have been broken in to an actor or respectively a heating system function, will revert to their most recently saved states.

## 13. The database manager

You can get to the database manager via “Configuration – Database”. The menu items differs depending on the version. Amongst others it is possible in Eltako FVS Home in use with a derby database to delete those. In the Enterprise version you can change the database system via the menu item “database” additional.

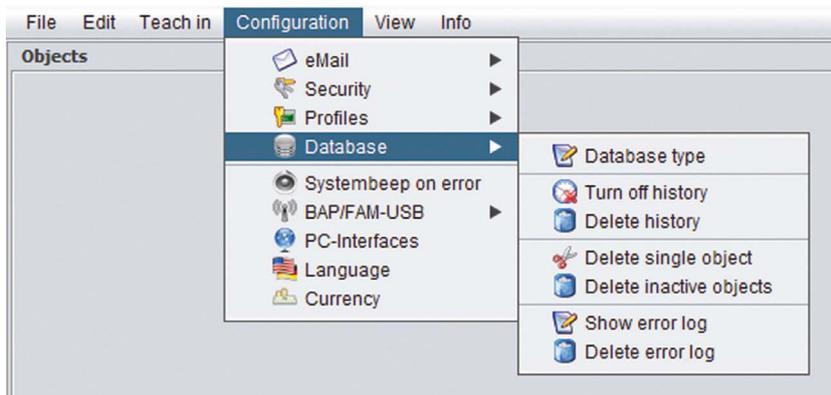


Figure 143: Database menu

### 13.1 Database type

Here you can later change the database system. In Eltako FVS Home and Professional, you have the option to choose between a Derby or PostgreSQL database. In the FVS Eltako Enterprise version are still other database systems available.

Contrary to the menu item „Convert database“, here is a new, empty database created.

### 13.2 Convert database

This option converts the current database to another database system. This will retain the data sets if you change the database system. Objects must not be programmed again.

**i Note:** If you use Eltako FVS Professional Basis/Advanced, the database and user name are predefined.

Database name: visudb  
 User: user  
 Password: password

### 13.3 Enable or disable the history

Eltako FVS can save all object changes in its database. This enables you to reconstruct changes later on. If you want to disable the history function click “Disable history” in the “database manager” menu. This will disable the function. To re-enable this function again click “Enable history”.

### 13.4 Delete the history

To remove an “old” record of the history from the database click “Delete history” in the “Database” menu.

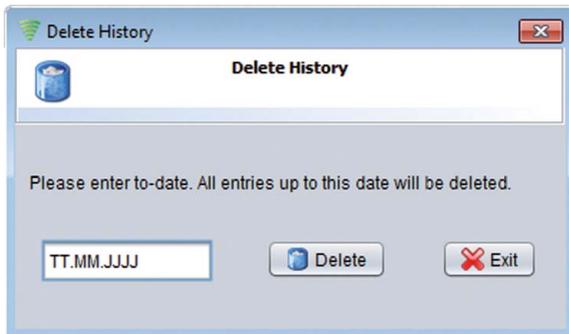


Figure 144: Delete history

Entering a date (e.g. 31.12.2006) will delete all records older than the given date.

### 13.5 Delete inactive objects

Via this menu item you can remove all objects that have not been enabled. This ensures that no links to other objects remain in the database. Because removing an activation (see chapter 4.8) deletes all links and only the actual object remains in the dataset.

### 13.6 Create an error file

If your system encounters errors you cannot comprehend and cannot solve respectively, we provide you with the option of creating an error file. By clicking the menu item “Create error file” all recorded errors will be plotted and written to a file. You can then send this file to the appropriate support. You will find the file in the Eltako FVS directory under the name “error.log”.

If no errors have occurred in your system no file will be created and a notification will appear on your screen.

### 13.7 Delete errors

Via this menu item you can remove saved errors from the database. This is especially useful if for example an update of Eltako FVS has been installed or an existing problem has been solved by you or a third party.

## 14. E-Mail

Another functionality of Eltako FVS is to inform you of status changes of objects via e-mail. In addition you can control the software by e-mail. The usage of these functionalities can be enabled or disabled via the quick choice button in the main menu.

Overview of the possible visualisation of the e-mail button:



### Notification off / Reception off

This setting prevents object changes from being sent to the predetermined e-mail address. Additionally no commands will be accepted by e-mail.



### Notification on / Reception off

This setting will send object changes to the predetermined e-mail address. Receiving commands will be disabled.



### Notification off / Reception on

No notifications will be sent but commands for controlling objects will be accepted.



### Notification on / Reception on

This setting will send e-mails in case of object changes. E-mails with commands will be accepted and executed accordingly.



### Notification off / Reception deactivated

The system received several wrong or undefined commands. This will disable the reception of additional e-mails. By clicking the e-mail button you can re-enable the reception of e-mails.

### 14.1 Incoming e-mail

By using the menu item "Configuration – e-mail – Incoming" you can define commands for switchable objects (e.g. actors) and send these commands to the software by e-mail. Eltako FVS will evaluate the e-mail and trigger the appropriate actor or link if the command is valid. Before you determine the definitions for the switch actors you have to attach an e-mail account that Eltako FVS can access.



**Note:** It is advisable to set up an exclusive e-mail address for Eltako FVS with your Provider.

### 14.1.1 Edit e-mail accounts

Open the “e-mail accounts” dialog via “Configuration – e-mail – Incoming”. Here you can create or edit e-mail accounts. Additionally you can define commands for actors or respectively links.

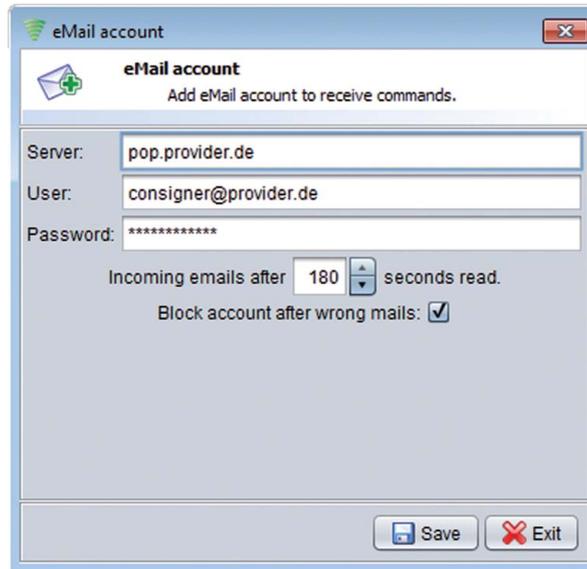


Figure 145: Create an e-mail account

Enter the e-mail server, providing the Post Office Protocol (POP) for your e-mail account, into the “Server” field. Enter the e-mail account you want to receive your e-mails from into the “User” field. The “Password” field is for entering the e-mail account’s password.

**i Note:** Please consult your provider’s information to learn the exact address of the POP-server. This information can usually be found in the provider’s FAQ section.

### 14.1.2 Command configuration

After attaching the e-mail account you can create commands for your switch actors. The dialog will appear by pressing the “commands for functions” button.

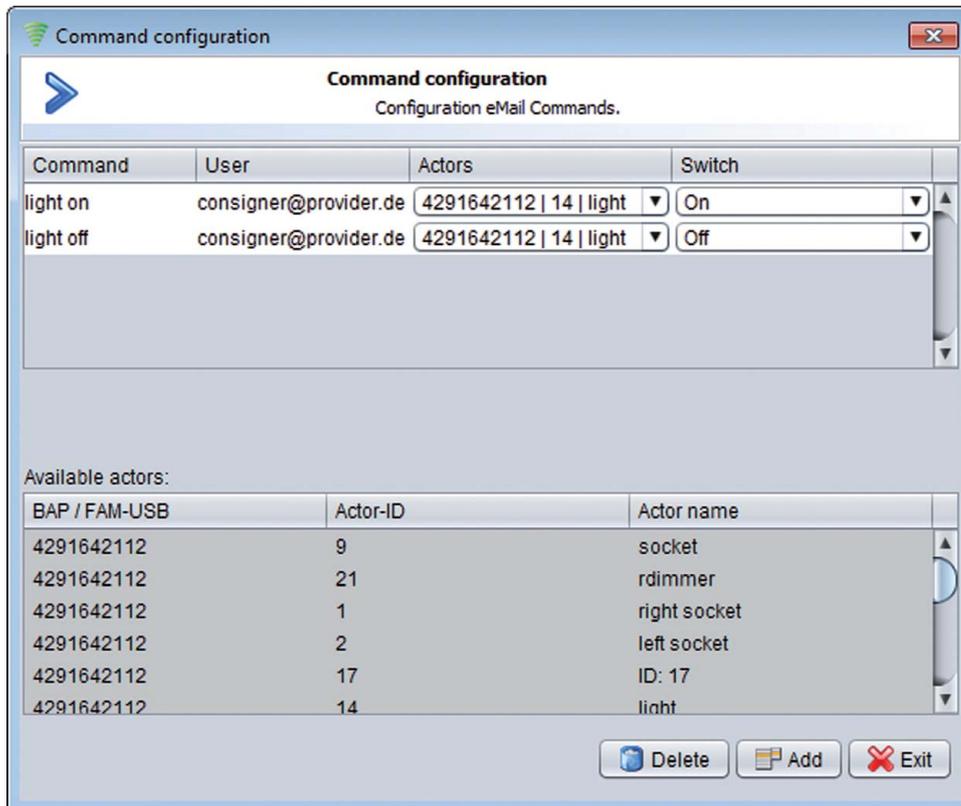


Figure 146: Command configuration

The lower chart of the dialog displays all available actors. In this example the user has defined an actor labelled “Lights”. By selecting this actor and clicking the “add” button the selected actor will appear in the upper chart. The upper chart lists all actors that can be switched via e-mail. In the “Command” column you can define a name for your switching. You have to enter this name in the subject of the e-mail later on.

**i Note:** While choosing a command name keep in mind the case sensitivity!

In this example the first command “LightsOn” was assigned to an actor that enables the lights. In the “User” field you have to enter the e-mail address from which you send the commands. This e-mail address is not the one you entered in chapter 14.1.1.

Via the column “Actors” you can choose other broken-in actors as well. By doing so you can retroactively modify particular commands without discarding previously created definitions. The last column “Switch” determines how the actor is triggered. You can choose between “On” and “Off”.

### 14.1.3 Command links

The layout of the dialog “Editing commands for links” is very similar to the dialog for creating commands for actors (Chapter 14.1.2).

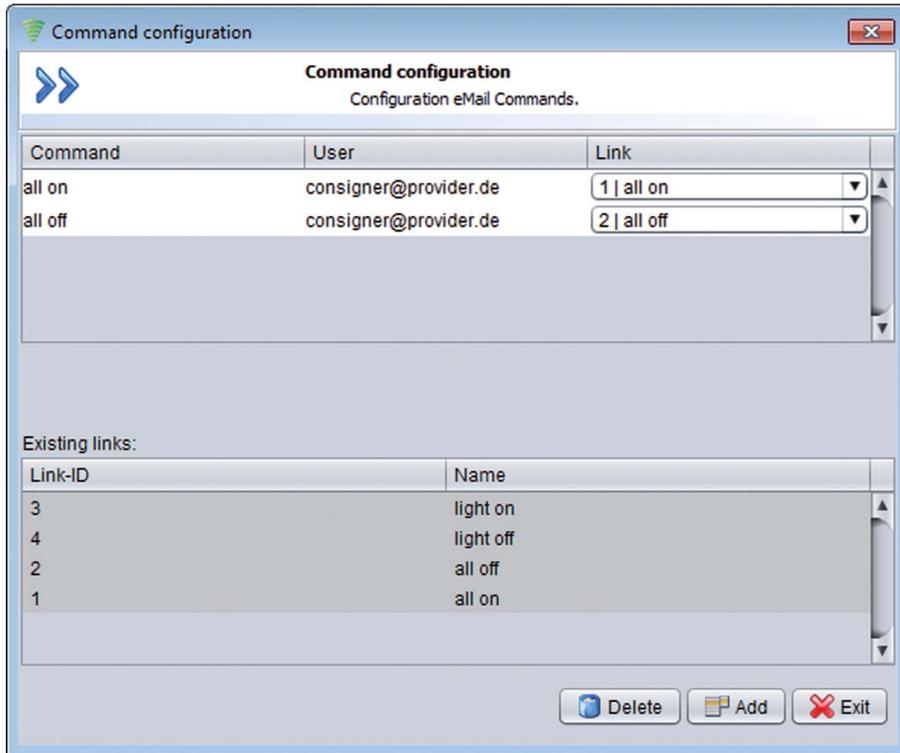


Figure 147: Link command configuration

In contrast to creating a actor command you will not find a column labelled “switch” because links can only be triggered. The switching of the particular actor happens by definition in the respective link (Chapter 6).

### 14.1.4 Send e-mail commands

In this section we will illustrate this functionality with an example. As foundation for the following example the settings of Figure 145 and Figure 146 will be used.

If the lights are to be enabled in the entrance area by e-mail you have to create an e-mail with the following contents:

From: sender@provider.com  
 To: consigner@provider.com  
 Subject: Light on

**i Note:** Consider that the address of the consigner is not masked. Masking the address would lead to Eltako FVS Professional not accepting the command and interpreting it as an error. An existing masking can be recognised by seeing the following in the “From” field: “sender name” <sender@provider.de>.

## 14.2 Outgoing e-mail

Via the functionality “Outgoing” you can obtain information by e-mail in case of object changes. You can decide which objects you wish to be informed about (Chapters 14.2.3 to 14.2.4).

### 14.2.1 Set up e-mail accounts

To set up an e-mail account click on “e-mail”, “Outgoing” and then “Add account” in the Eltako FVS configuration. The e-mail configuration menu will appear:



Figure 148: Add an e-mail account

Enter the data of the e-mail account you want to send e-mails from:

- |                  |   |
|------------------|---|
| SMTP-Server:     | Outgoing mail server. By default the port 25 will be used. With a colon and a port number behind the address you can change this. |
| User & password: | Most servers require authentication for sending e-mail. If there is no authentication required leave these fields blank.          |
| Sender:          | Sender address that will be displayed upon reception.   |
| Recipient:       | The e-mail address that will receive the notification.  |
| Notification:    | By marking this checkbox you can enable notification for this account.  |
| Test:            | By using this button you can send an e-mail to test if your settings are correct.   |

Only by marking the checkbox in the field “Notification Activated” all status changes of objects will be sent by e-mail.

### 14.2.2 Edit e-mail accounts

To edit, delete or change the activation of a previously created account click on “Configuration – eMail – Outgoing” and then on “Edit account” in the Eltako FVS configuration. Select the corresponding account and the e-mail configuration will appear. Here you can modify or delete the account.

### 14.2.3 Set up object notifications

Eltako FVS can link each object with an e-mail individually. Notifications of various objects can be sent via different SMTP services to multiple recipients. You can connect objects to a particular e-mail account via the object overview. By right-clicking the object a context menu will appear. Select the menu item “Allocate e-mail account” there.

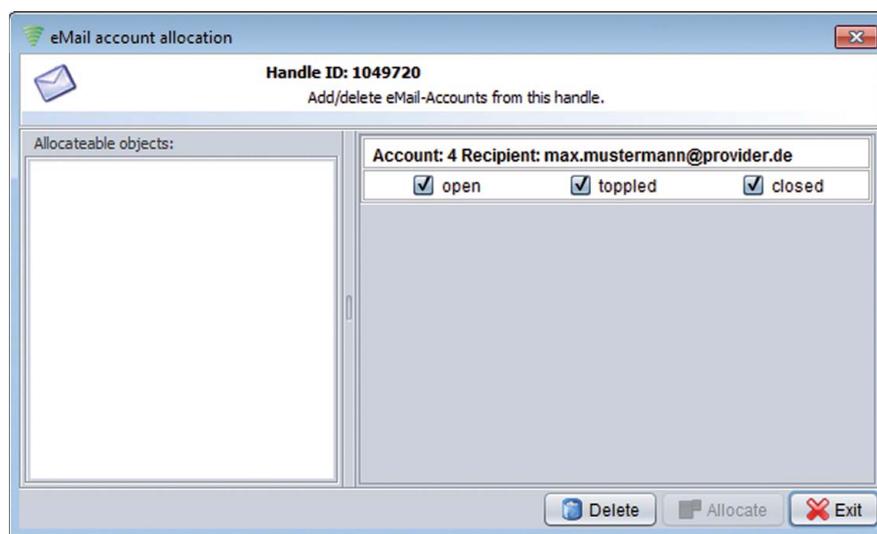


Figure 149: Allocate a e-mail account to an object

The “e-mail account allocation” dialog will open afterwards. In the lower part of the dialog you can find all allocatable e-mail accounts.

By selecting the e-mail account and pressing the “Allocate” button you can allocate the desired account to the object. Through this allocation you will be notified of all changes of the object (e.g. handle is operated) by e-mail.

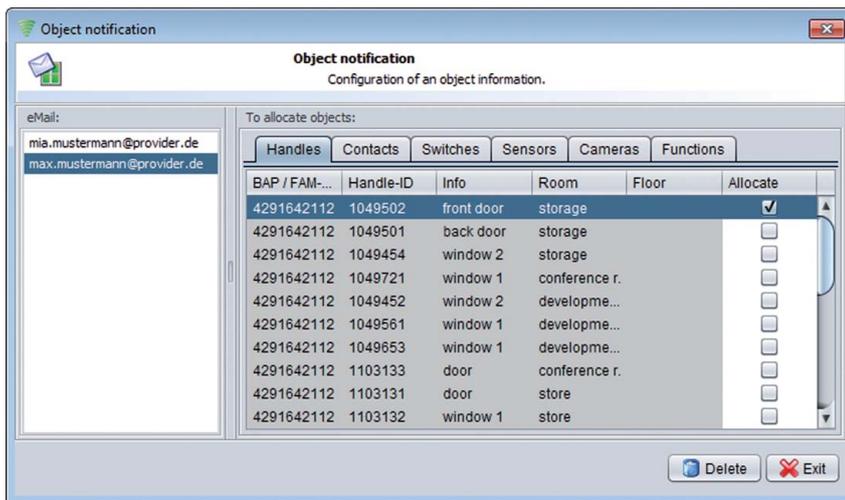
**i** **Note:** The notification will only occur when the e-mail account is activated.

**i** **Note:** You can assign several e-mail accounts to an object.

### 14.2.4 Alternative allocations to set up object notification

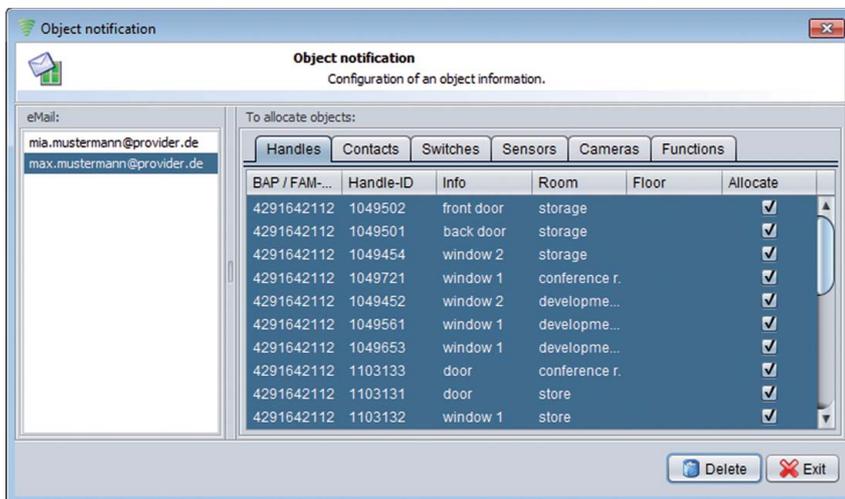
In the previous chapter (Chapter 14.2.3) it was illustrated to you how to set up notification for a single object. In addition there is an alternative procedure for connecting an e-mail account with objects. This version of allocation is mainly used if conditions of multiple objects are to be sent to different e-mail accounts.

The alternative dialog “e-mail object notification” is opened by selecting “Configuration – E-mail – Outgoing - Notifications”. After clicking the button “On status change” the following window will open:



The left side of the dialog shows all attached e-mail accounts. On the right side you can see all available enabled objects of the system. These objects are separated by tabs and summarized into main groups (e.g. main group switches).

Figure 150: Allocating e-mail accounts to single objects



Allocation of objects is done by marking the checkbox in the column “Allocate”. You can mark several objects and press the “Allocate” button. After a successful allocation the visualization and functionality of the button will change. This changing enables you to remove the connection by pressing the button again.

Figure 151: Allocated e-mail accounts to multiple objects

**!** **Note:** All objects of the sensor type can not be allocated with this dialog. A desired connection with an e-mail account can only occur via the sensor object (See chapter 14.2.3) because additional settings are required for the notification.

### 14.2.5 Alarm notification

In the alarm notification, you can specify the e-mail address to which the alert will be sent. This allocation of the e-mail address to the alert is especially important if you want to use actors like the silent alarm.



Figure 152: Assign alarm notification

The allocation dialog is reached by pressing the button “on alarm” from the e-mail notification.

The lower part of the window lists all e-mail accounts which alerts can be allocated to. The connection is established by selecting the line of the added account and pressing the “Allocate” button.

**i Note:** You can assign multiple accounts to the alert.

If you want to discard the Allocation select the e-mail account in the upper chart and press the “Delete” button.

### 14.2.6 Set up system error notification

Beside status changes of objects you can be notified of system errors via e-mail. Please click on “Configuration – E-mail – Outgoing – Notifications” in the Eltako FVS configuration. Please select “system error notification” in the next window. Afterwards the allocation menu will appear:



Please choose which e-mail account should be notified of system errors here.

To do so mark the e-mail account in the lower chart. Afterwards click “Allocate”. The selected account will appear in the upper chart. This is the e-mail account that will be notified of error messages.

**i** **Note:** The notification will only occur if the e-mail account is activated.

**!** **Note:** With continuous errors one e-mail per error will be sent. This can lead to increased load on the SMTP server.

If you want to discard the allocation select the desired e-mail account in the upper chart and press the “Delete” button.

Figure 153: Assign system error notification

### 14.2.7 Notification via SMS

With the aid of e-mail notification you can notify yourself of status changes or errors by SMS as well. For this you need an e-mail account from your mobile network provider. For further information ask your network provider or go to the according website:

- [www.t-mobile.com](http://www.t-mobile.com)
- [www.vodafone.com](http://www.vodafone.com)
- [www.o2.com](http://www.o2.com)

You can obtain all necessary information for sending and receiving e-mails there.

**!** **Note:** Your mobile network provider will usually charge you for sending e-mails via SMS.

### 14.2.8 Failed eMail dispatch

On a failed e-mail dispatch the following “error” button will appear in the main view:

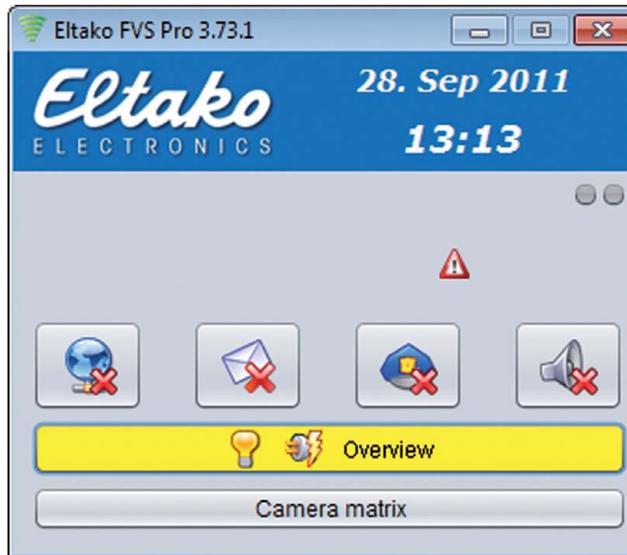


Figure 154: E-mail system error

By clicking the button a dialog with an accurate description of the system error will open.



Figure 155: E-mail error message

In this example the SMTP server could not be found. To resolve the issue deactivate the e-mail notification in the main view (Chapter 14) first of all. Open the dialog again afterwards and delete the error message by using the “Delete” button.

After the error message has been deleted check the settings under the menu item “Edit account” (Chapter 14.1.1) in the configuration menu. You can re-enable the notification again in the main view after changing the e-mail account settings.

## 15. Eltako FVS-ToGo

### 15.1 Definition of Eltako FVS-ToGo

With the aid of Eltako FVS-ToGo you can check the status of your objects worldwide via Internet and trigger actors and macros. All you need is your Eltako FVS-ToGo software and a distinct “key” to your system. This key is provided together with the Eltako FVS-ToGo software on a code meter stick. Eltako FVS-ToGo requires no installation and is therefore applicable everywhere.

**i Note:** To use Eltako FVS-ToGo you need MS Windows®.

### 15.2 Learn the CodeMeter stick

To be able to use Eltako FVS-ToGo with your system you have to activate your CodeMeter-Stick. To do this click “Configuration – Security – Eltako FVS-ToGo” and press “Learn” in the configuration menu.



Click the “Read” button to let your system know the CodeMeter-Stick’s serial number.

If the reading was successful an appropriate message will appear.

Figure 156: Learning of a CodeMeter stick

Now that your system knows the CodeMeter-Stick you can name and activate it. Click the “Edit” button in the Eltako FVS-ToGo menu.



All CodeMeter-Sticks known to the system will be listed here. By double-clicking the name cell enables you to change the name. In the status field you can choose whether to activate the stick or not. If the stick is deactivate it cannot be used with your system.

By pressing the “Delete” button you can remove the stick from your system.

Figure 157: Editing a CodeMeter stick

Now assign a profile to the stick. You can learn how to create and assign a profile in chapter 10. Lastly activate the remote access to be able to use Eltako FVS-ToGo.

**!** **Note:** To be able to use Eltako FVS-ToGo, it is assigned compelling necessarily to the Code-Meter-Stick a profile (see chapter 10).

## 16. Eltako FVS-Mobile

### 16.1 Definition of Eltako FVS-Mobile

By using Eltako FVS-Mobile you gain additional means of access to your existing Eltako FVS system. This means you can supervise particular available objects and control them. The advantage of this software client is that you do not need a personal computer to check your system. You are locally independent. The sole requirement for this is a java capable mobile phone (at least MIDP 2.0).

Apart from controlling objects you can access video streams of your integrated cameras with your mobile phone. Keep in mind that even compressed video streams use larger data volumes than just sending control commands to Eltako FVS. You should therefore check the associated costs with your mobile network provider if you plan on using Eltako FVS-Mobile in the future. If the usage is generally in the external area (independent of locale) you should consider a flatrate for data communication.

**i Note:** At least MIDP 2.0 has to be installed on your mobile phone.

**i Note:** The mode of data transmission is usually decided by your mobile phone. This means if your mobile phone resides in a WLAN network this type of connection will be preferred.

**i Hinweis:** Die angegebenen Bezeichnungen variieren zwischen den unterschiedlichen Mobileclinten (BlackBerry, Android, iPhone, J2ME). Lesen Sie bitte die Kurzanleitung zum jeweiligen Clients um genauere Informationen zum Einrichten zu erhalten.

### 16.2 Integrate the mobile client into the system

To be able to use Eltako FVS-Mobile with your system the mobile phone with the client software has to be acquainted with your Eltako FVS software. Open the dialog "Eltako FVS-Mobile" via "Configuration – Security – Clients".

Here you will find all tools for administrating the Eltako FVS-Mobile software:

To include a new mobile phone in the Eltako FVS system press the right mouse button. This will open a context menu in which most menu items will be deactivated at this time. Select the “New” item to create a client. Afterwards you will be prompted to enter a name for the mobile phone. Here you can choose a term freely.

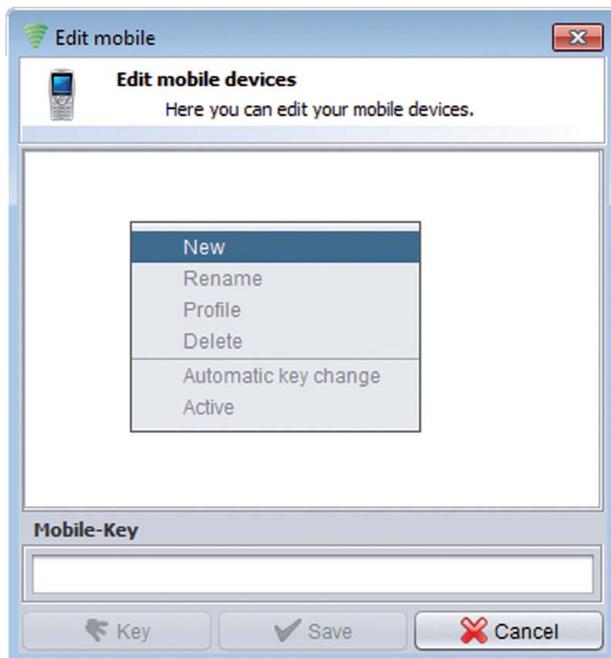


Figure 158: Create a new mobile device

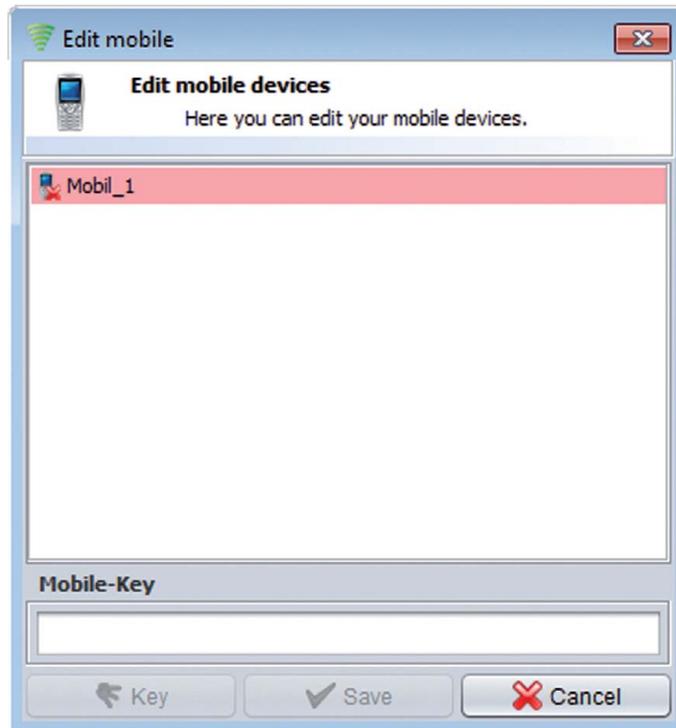
After accepting the entry a new dialog will appear:



Figure 159: Allocate profile

The created mobile phone in this dialog is already visualized with a red background. In addition the mobile phone icon is marked with a red cross. This means that the mobile phone has not been activated yet.

Before activating the mobile phone you have to decide if you want to assign a profile immediately or at a later date. Creating and allocating profiles has already been illustrated to you in chapter 10 so it will not be elaborated further at this point.



**Figure 160: Mobile device created**

To be able to use the mobile phone you have to activate it first. Start the Eltako FVS-Mobile application on your mobile phone and operate the “Activate” option. You will be shown the device’s key on the display. Enter this key into the Mobile-Key field in Eltako FVS. By doing so Eltako FVS will calculate a key. After calculating the key it will be shown in a new dialog.

Enter this displayed key into your Eltako FVS-Mobile application. The mobile phone is now activated in Eltako FVS and ready for use.



Figure 161: Mobile Device integrated

**i Note:** To improve security you have the possibility to change keys. This means that every login of Eltako FVS-Mobile will negotiate a new key between the systems. This does not require manual allocation of new keys and will happen automatically. To use this option you just have to select the menu item “Key change” in the context menu of the respective mobile phone in Eltako FVS.

If you want to deny access to Eltako FVS for an activated mobile phone you can either delete it or cancel the activation. By selecting the menu item “Delete” in the context menu the entire device will be removed from the Eltako FVS system. A deactivation will deny access to your system from this mobile device and you can unlock it by activating it again via the context menu.

## 17. Eltako FVS Shutdown Service

### 17.1 What is the Eltako FVS Shutdown Service?

Install the Eltako FVS Shutdown service on all computers, which you would like to automatically shutdown or startup.

**i Note:** Automatic boot up requires a network card and a PC which supports „Wake-On-LAN“ functionality.

**i Note:** To use the automatic shutdown service, it is required to create a link to the file “BSC-ServiceGUI.exe” in your startup folder.

There are the following symbols for the visualization of the states of a PC or a PC group:



PC has gone down and distinguished from the network.



PC group has gone down and distinguished from the network.



PC has gone down and not distinguished from the network.



PC group has gone down and at least one PC is not separated from the network.



PC operates.



At least one PC of this PC group operates.



All PCs of this PC group operate.

## 17.2 Detect PC with the Eltako FVS Shutdown Service in the Eltako FVS Software

There are two ways to detect PCs in Eltako FVS. The automatic PC learn in can be activated under “Learn in - PCs to Eltako FVS – Automatic PC learn in” and detects all PCs with installed ShutDown service. With the use of „PC Learndialog“, PCs will just be detected as long as the dialog is opened.

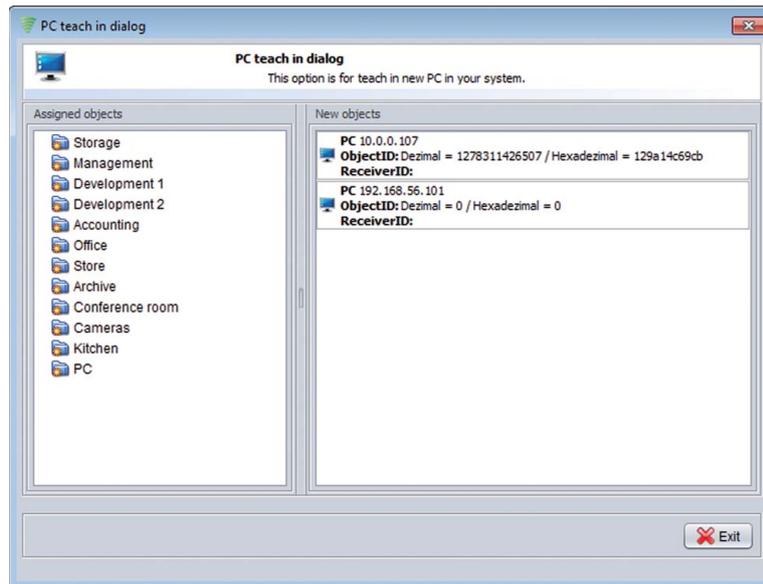


Figure 162: PC Learndialog

On the right page in this dialog window all PCs appear on which the Shutdown service is installed. By Drag & drop you pull them in the desired level.

With a click on “Edit“ in the context menu you open a new dialog, in which further information can be added.

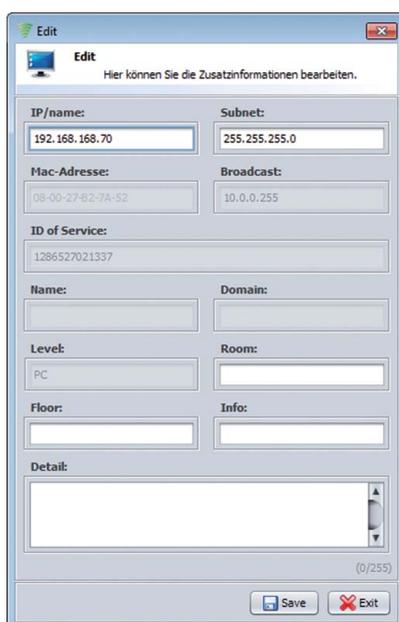


Figure 163: Edit PC

The data in the grey fields are automatically determined by Eltako FVS. It is recommended to enter the data for the fields “Room” and “Info“. This information will be displayed on the main screen.

After you have configured the feature, restart the client computer.

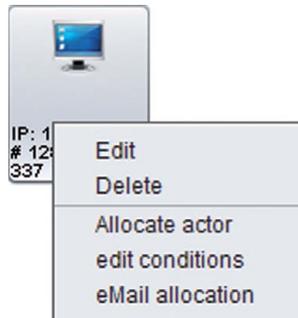


Figure 164: Context menu of a PC

After assigning an actor in the object overview to the PC, the PC will be turned off after the successful shutdown procedure.

### 17.3 Setting up a PC group

To create a new “PC-Group“, please right-click on a level in the PC Learndialog and select „PC-Group“ and „new“

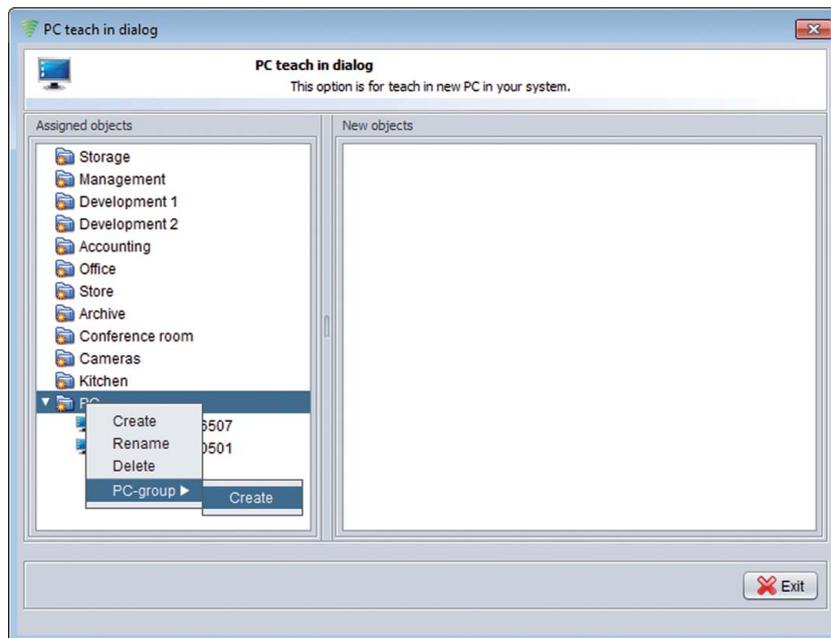


Figure 165: Create PC group

In the object overview the group allocation dialog occurs by choosing the point „PC assign“ in the context menu:

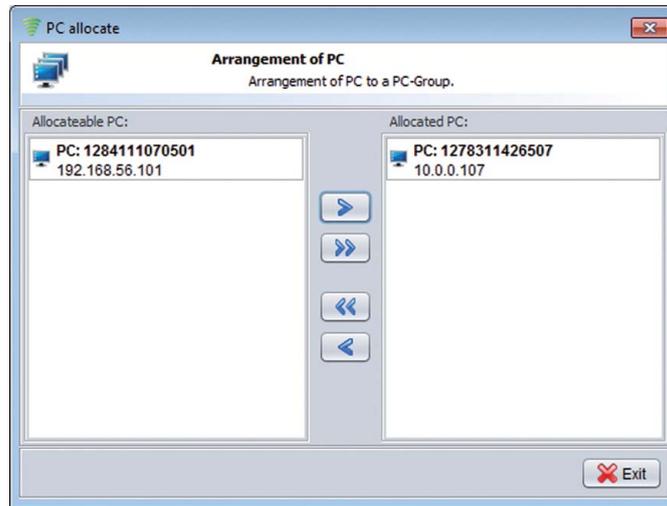


Figure 166: Assign PC to a PC group

Using the buttons in the middle you can assign PCs to the PC group. The assigned PCs appear in the right page of the window. The assigned PC will disappear in the object overview.

To add or edit further information about the PC, please click on “Edit” in the context menu in the PC group.

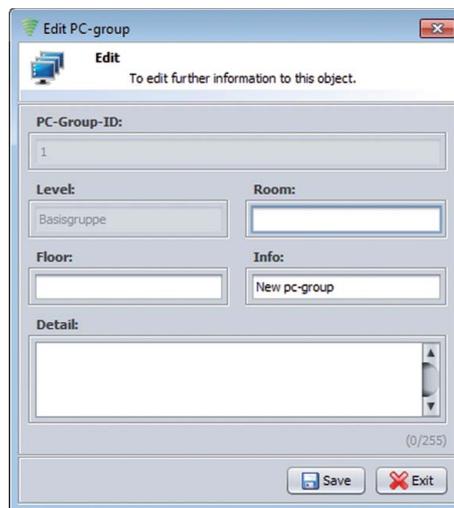


Figure 167: Edit PC group

With the pop-up menu of the PC group in the object overview, you can add PCs to the group. You can also assign an actor to the PC-group. All PCs in this group can be turned of with a single relay in this case.

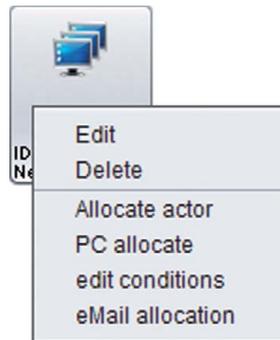


Figure 168: Context menu of PC group

### 17.4 ShutDown the PC

By a click on the PC you receive the switch dialog. With the use of buttons “On” or “Off” the relay can be turned on or off. Eltako FVS will check if the PC is already shut down, before it sends out the signal to terminate the power. Otherwise Eltako FVS will shut down the PC before turning it off.



Figure 169: Switching of a PC feature

As soon as the „Shut down“ command is sent from Eltako FVS, the ShutDown dialog will appear on the client PC:

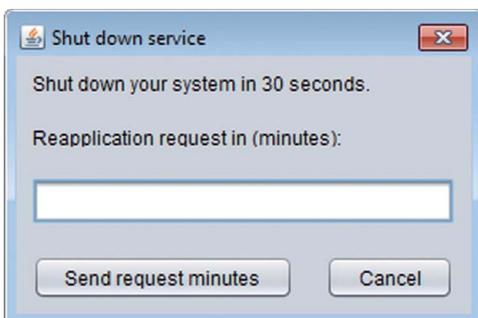


Figure 170: Dialog „Shut down service“

If you want to continue using the client PC, please enter the additional time in minutes or cancel the shutdown. After 30 seconds without reaction, the client PC will be shut down.

Prerequisite for the remote shutdown is a link in the „Startup“ folder to the file „BSC ServiceGUI.exe“ in the program folder.

### 17.5 ShutDown a PC of a PC group

With a click on a PC group the following window opens:

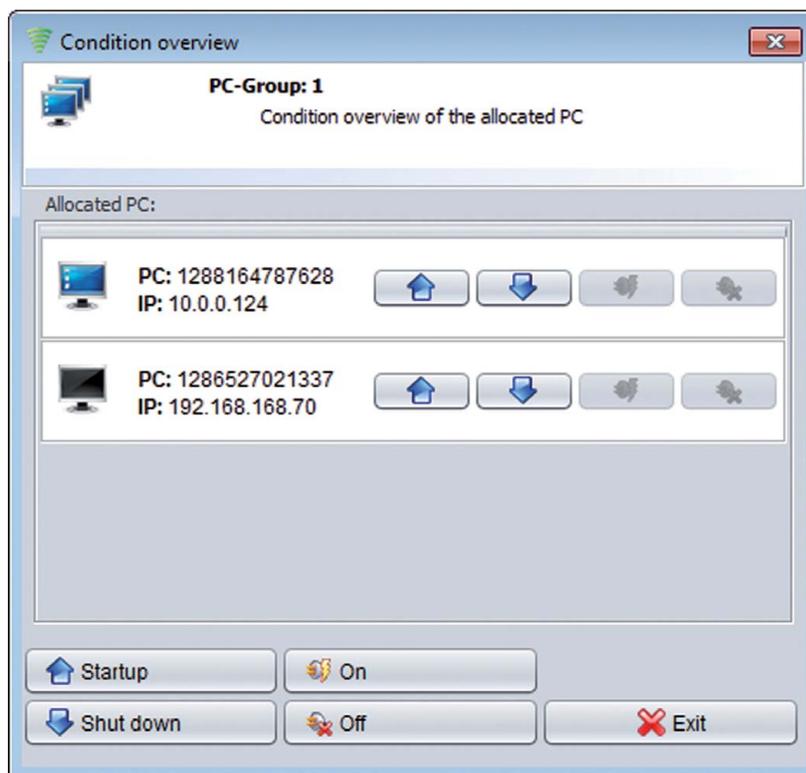


Figure 171: Release of a PC from a PC group

In this dialog you receive an overview of all PCs of this group with its present state. The arrow buttons besides the PCs are for booting up or shutting down the PCs individually. The buttons at the bottom are for switching the whole group.

Eltako FVS will check if the PC is already shut down, before it sends out the signal to terminate the power. Otherwise Eltako FVS will shut down the PC before turning it of.

The actuator of the PC group should switched „off“, Eltako FVS checks whether the PC is shut down and if the actuator is already switched „off“. Not so, the Eltako FVS shut down the PCs and switch „off“ the actuator. Only then will the actuator of the PC group switched „off“. Would you like to boot up a PC group, first Eltako FVS switches the corresponding actuators „on“ and then boot up the PCs. of this PC group.

To remove a PC from the group, please use the allocation dialog.

## 18. The view menu

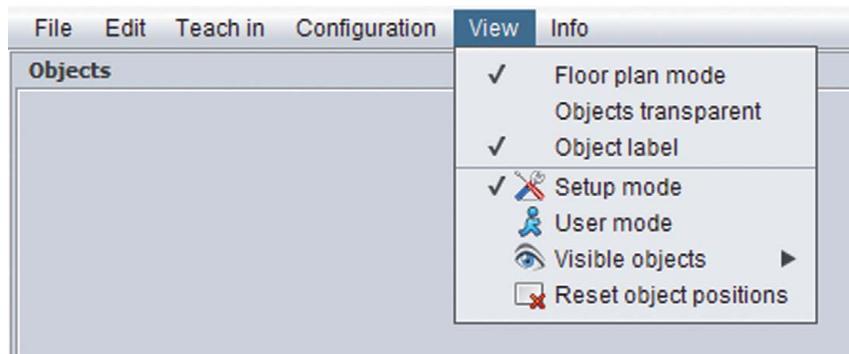


Figure 172: view menu

Set a hook in the line to activate the „Floor plan mode“. Now you can move the individual objects in the object overview at a specific location on the surface.

„Objects transparent“ represents all objects transparent. This means that the frames and the background of each object are hidden.

Specify with the „object label“ whether the labels (eg ID, info ...) are displayed in the object overview.

In the „setup mode“ you will get a dialog box after clicking on a device, actor or link.

If the „User mode“ is activated, appears no dialog by clicking on an actuator or link. After clicking one of the actuator the opposite switching state in relation to the current switching state is triggered. That means is the device at the time switched off by tapping the corresponding actuator generates a radio signal that the device turns on.

The menu item „Visible objects“ offers you the ability to view only certain object types. By default, all objects are displayed. In the submenu you can see which objects are visualized at the time. By selecting an object type, the hook is removed and all objects of that type are removed from the overview. You will also find in this context menu „invisible objects“. This is a special type that is generated when, for example a switch is connected to an actuator. At this point we do not want to look closely at this type.

To reset all the object positions in the overview, please click on “Reset object position“.

The menu item “Visible objects“ lets you configure which objects are displayed or hidden in the overview.

## 19. Alternative display options for object overview

The object overview allows you to install different backgrounds for different levels. These pictures have to have the JPG (Joint-Photographic-Experts-Group) or PNG (Portable-Network-Graphics) format to be used by the software. The following example shows one way on how to use these options in your system.

### Example:

In your Eltako FVS-Software, levels were created according to the segmentation of the rooms. Every room has a floor plan in form of an JPG picture. These floor plans were assigned to their level. After all levels were equipped with these background pictures, it is possible to pin objects on a certain point in the object overview. This point equals of course the position of the object in the room.

By positioning of the objects, even unexperienced users who are not familiar with the system can locate the exact location of an object.

### 19.1 Activate floor plan mode

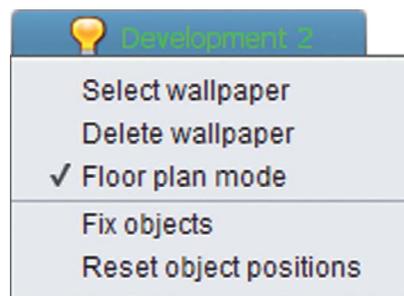


Figure 173: Context menu level

To activate the floor plan mode, please set a check mark in the corresponding check box. After the check mark was set, you are enabled to move your objects to certain points in object overview.

The option “fix objects” fixes the objects at their current position and should be used after you have finished the positioning of your objects in object overview.

If you want to reset the objects in object overview, click on “Reset object positions”.

## 19.2 Background pictures for levels

You can assign a background picture to every level. The desired background picture has to have JPG (Joint-Photographic-Experts-Group) or PNG (Portable-Network-Graphics) format and the color space has to be RGB (Red-Green-Blue).

To assign a background picture, open object overview and right-click on the desired level to open the context menu.

In the appearing context menu, you choose the option “Select wallpaper”. Afterwards, a new dialog opens. In this dialog, you can choose your desired picture and save it by pressing “Open”.

Eltako FVS compresses the image and saves it in a separate folder. This folder is located in your Eltako FVS installation folder and is named “groupPics”. After a correct implementation of the favoured picture, it is displayed in your object overview.

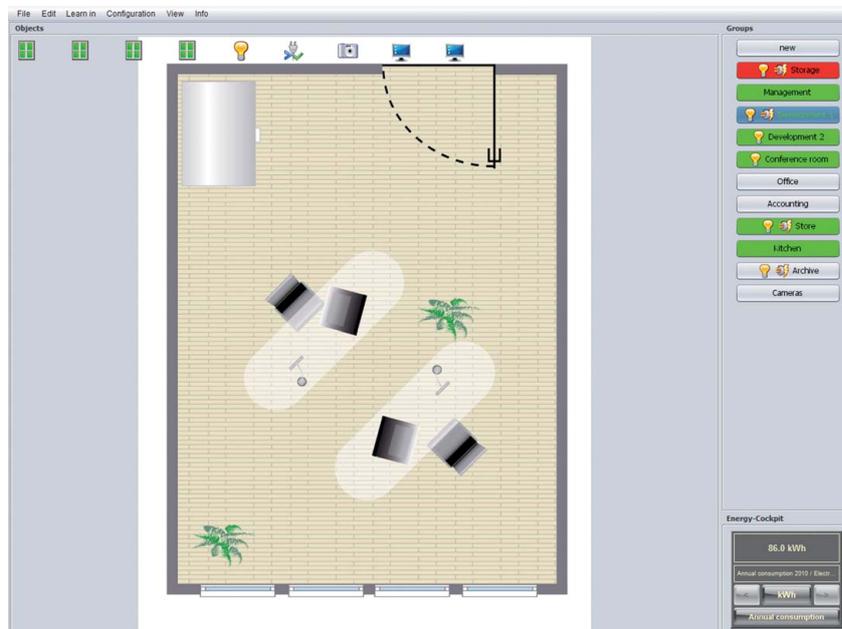


Figure 174: Level with background picture

To delete a background picture, open the Eltako FVS context menu again and pick “Delete background”. The picture will be deleted from object overview and no longer visualized.

**i Note:** You can assign background pictures to Eltako FVSs without activating the floor plan mode.

### 19.3 Object overview with activated floor plan mode

As you have seen in the previous picture, all objects of a level are situated on the top boundary (Figure 174). You are now enabled to position your objects in object overview. Drag and drop your objects to a position of your choice. While you are dragging, the object is displayed transparent. This is a visual help to help you positioning your object. Drag the object to your desired position and the object overview will be updated.

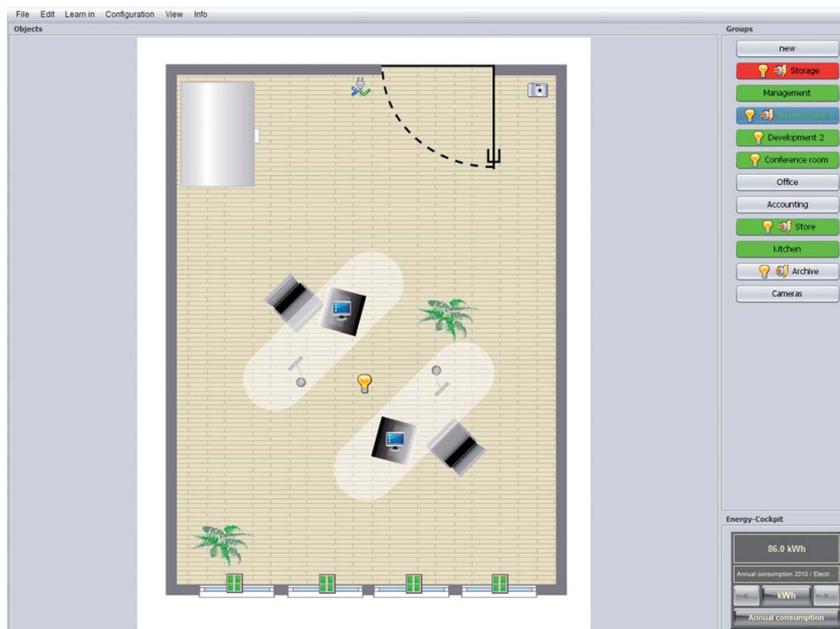


Figure 175: New object positions were defined

The screenshot above shows an example of a possible floor plan. Besides the new positioning, transparency is enabled and the labelling is disabled.

**i Note:** If you want to move transparent objects, you can see a border around your objects by pressing and holding down shift.

**i Note:** We recommend that you do not start the change of your visualization until you have a completely configured system (e.g. all switches learned, links created etc.).

When you have moved all your objects to their destinations, you can fix their positions. This means that you cannot change the object overview any more. To do so, set a check mark in "Overview - Fix objects" in the main menu. By unchecking the check box, the objects are free to move again.

**!** You have to pay attention to the following rules to create and embed your own pictures:

- file format PNG or JPG.
- If you want to use transparency, your file has to have the PNG format.
- color space always RGB.
- The picture will be scaled automatically during the import.

## 20. Alternative display possibilities for single objects

You can assign your own pictures for the objects switch and actor. These arbitrary pictures have to be in JPG or PNG format and the color space has to be RGB. The dimensions have match 32 x 32 pixels.

### 20.1 Change the icon of a switch

Eltako FVS offers different visualization styles for the switch object. If you would like to change your visualization, you can adjust it according to your needs. The following example shows you the aim of these changes:

**Example:**

There is a meeting room in an administrative building that is visualized as a level in Eltako FVS. This level has a certain amount of light switches that are allocated to many different light sources. In addition to that, a switch to switch the beamer on and off exists as well. To have a better visualisation of the beamer, a new picture shall be attached to its switch.



Figure 176: Switch overview example

You can change the visualization by opening the dialog “Device type” through the context menu of the switch.

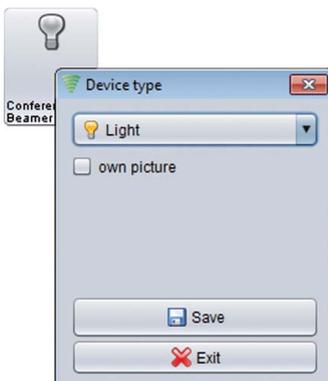
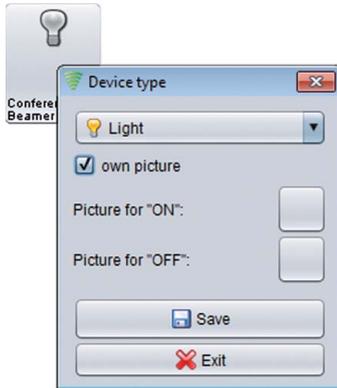


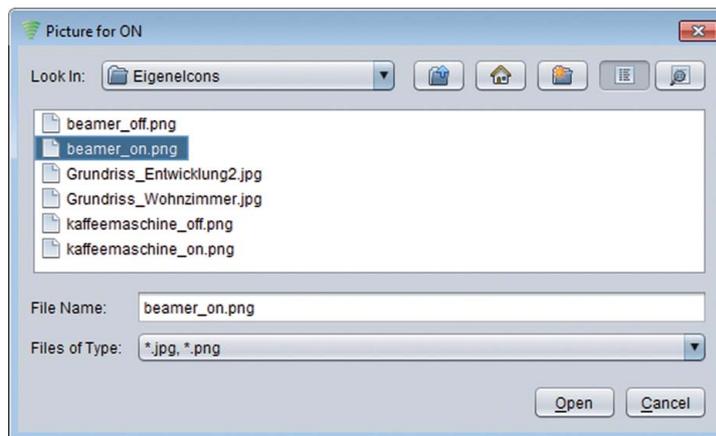
Figure 177: Change device type

At this time, the switch object “Beamer” is still visualized as a light switch. To change the visualization, set a check mark in the checkbox “Own picture”.



After you have set the check mark, two new buttons appear. Click on the upper button to assign a new picture for the object with status "On".

**Figure 178: Assign own picture**



**Figure 179: Picture allocation switch status on**

The opening dialog asks you for a picture to visualize the switch status "On". Choose your picture by navigating through your file system, select it and press "Open".

The picture will then be installed and saved in the folder "ownPics" in your Eltako FVS install directory. It appears as well under "Device type".

Go on analogically to change the picture for the status “Off”.

The selected picture will be added to the system as well and saved in your “ownPics” directory. Afterwards, both pictures appear in the dialog “Device type”.

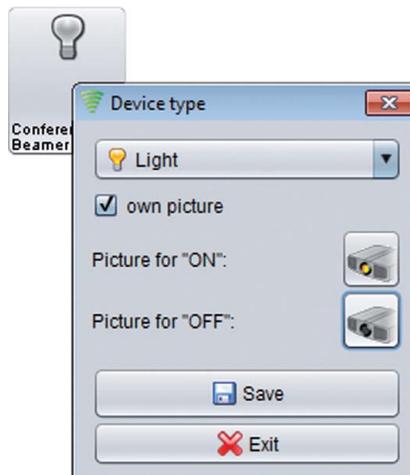


Figure 180: Allocation of switch status “Off”

**i Note:** If you use Eltako FVS-ToGo for external access, you can copy the folder “ownPics” in the program directory of your CodeMeter stick. By doing so, all self-defined visualizations will be displayed correctly in Eltako FVS-ToGo. If you do not copy the folder to your CodeMeter stick, all self-defined switches will be visualized with the symbol “not found”.

**i Note:** With an Eltako FVS-Client, copy the folder in the installation folder of your Client-Software.

Every switch status has an individual picture now. The changes are accepted instantly and the switch object is visualized with its new icons.

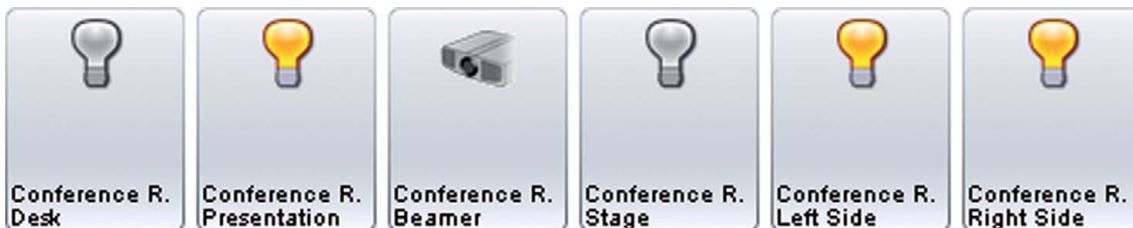


Figure 181: Beamer off

The screenshot above shows you the updated visualization. According to this example, a shut down beamer shows the picture file “beamer\_off.png”.



Figure 182: Beamer on

If the beamer is on, the picture “beamer\_on.png” will be shown.

**!** You have to pay attention to the following rules to create and embed your own pictures:

- file format PNG or JPG.
- If you want to use transparency, your file has to have the PNG format.
- color space always RGB.
- Picture dimensions: 32x32 Pixel

## 20.2 Delete an individual icon

If you have defined your own picture for a switch, you can delete it anytime. Open the context menu of the switch object by right-clicking it. Please select “Device type”. Afterwards, remove the check mark from the option “own picture” and press “Save”. The individual visualization will be removed and the corresponding standard symbol for this device type will be displayed in your object overview.

## 20.3 Change an actor or link icon

The allocation and deleting of a self-created picture is analogical to a switch object. Proceed correspondingly as explained in chapters 20.1 and 20.2.

## 21. Further options for the BSC-BAP/FAM-USB in Eltako FVS Professional

In this section, the configuration dialog for the BSC-BAP/FAM-USB will be explained in detail.

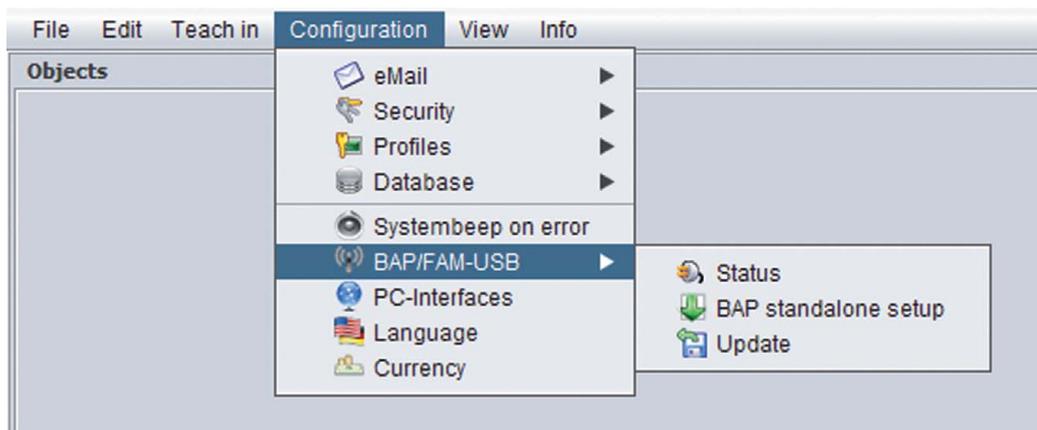


Figure 183: Configuration BSC-BAP/FAM-USB in Eltako FVS Professional

**i Note:** If any changes to the IP-Address or your BSC-BAP are necessary, you can adjust it by using the BAP-Finder.

## 21.1 Identify current status

Click “Configuration - Administration - BSC-BAP/FAM-USB - Status” to get an overview about all BSC-BAP/FAM-USBs in your system.

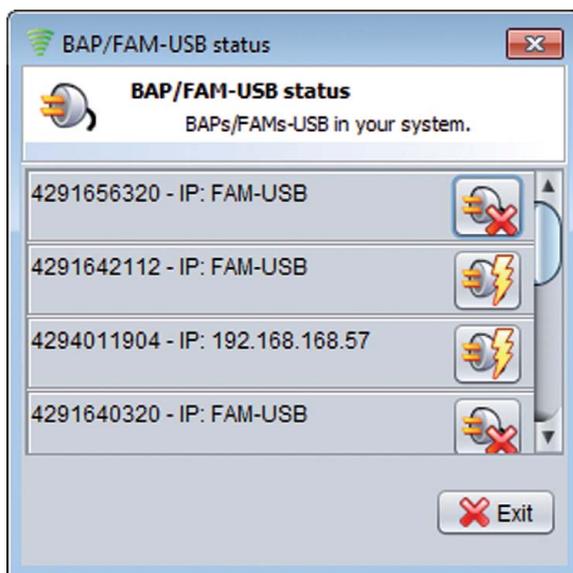
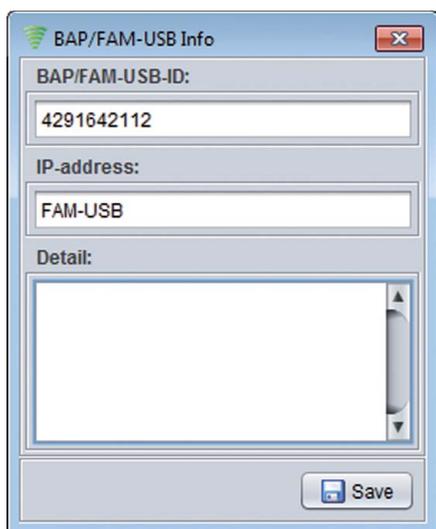


Figure 184: BAP/FAM-USB status

The availability of every BSC-BAP/FAM-USBs is visualized by a plug with a bolt. If the specific BAP/FAM-USB is not accessible, a red X instead of the bolt appears. If you want to have additional information about a specific BAP/FAM-USB, left click its plug symbol to open a new dialog.



You will get a visualization of the most important data about your BSC-BAP/FAM-USB. The first field shows you the unique ID of a BAP/FAM-USB, the second field tells you the IP address. Both fields are not editable, what means that you cannot change the IP address in this dialog.

The input box “Detail” allows you to enter an arbitrary text about this BAP/FAM-USB. You can enter e.g. the room or location of it.

The button “Save” will save your text in the field “Detail”. By using the “Reset” button, you can send the command to restart your BAP/FAM-USB.

Figure 185: BAP/FAM-USB detailed information

## 21.2 BAP standalone setup

This menu item offers you the possibility to switch features regardless of the Eltako FVS software.

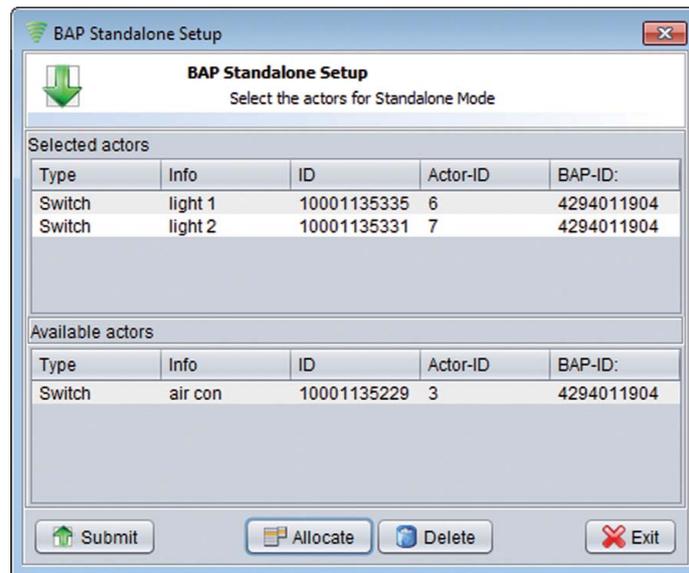


Figure 186: BAP standalone setup

In the lower area of the window you select the features which the BAP should switch independently. Only features who trigger Eltako FVS are displayed(see chapter 5.6.1). By selecting the button “adding” you take over the elective features in the choice. By clicking the button „transferred“ the chosen features will be transfered to the BAP.

## 21.3 Update of your BSC-BAP software

The update of all BSC-BAPs is done by a click in your Eltako FVS software. Please press the button “Update“, and a request to the update server will be sent. The version numbers of your BSC-BAPs will be compared to the version numbers on the update server. If a newer version is available, the BSC-BAPs will be automatically updated one after another.

The successfully updated BSC-BAPs will appear in a new dialog. If an update has failed, you get a report about it.

**i Note:** As soon as an update of an BSC-BAP was successful, it will be restarted and the update process continues with the next BSC-BAP.

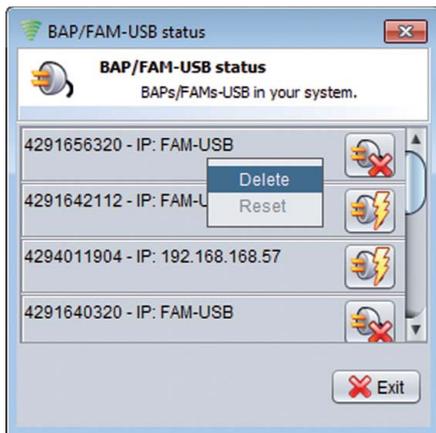
## 21.4 Restart BSC-BAP

Should it be necessary to restart a BAP, open about “configuration – administration – to BAP/BoR“ the window “status“. With a click on the desired BAP you open the pop-up menu and choose the menu item “Reset“.

## 21.5 BSC-BAP/FAM-USB removal

This section explains how to proceed in case of an removal or replacement of your BSC-BAP/FAM-USB.

Click “Configuration - Administration - BSC-BAP/FAM-USB - Status” again to open the list of installed BSC-BAP/FAM-USB.



Choose the BAP/FAM-USB to remove and open its context menu by right-clicking it. The only point in this context menu is “Delete”. Left-click on “Delete” to open a security query.

The security query asks you to confirm the deletion. If you accept, a new dialog appears.

Figure 187: BAP/FAM-USB status context menu

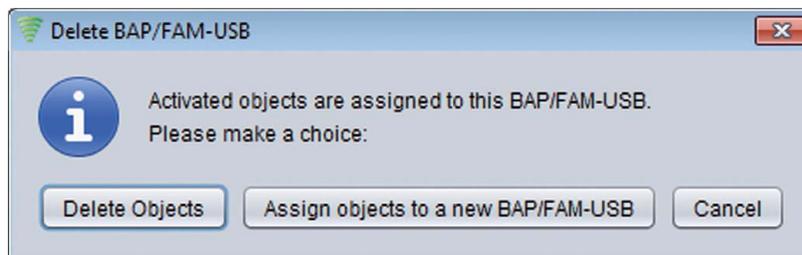


Figure 188: Delete BAP/FAM-USB

Due to the fact that objects are attached to a specific BSC-BAP/FAM-USB always use the same one to communicate, you have to decide on how to treat these connections.

One option is to delete all objects from the system. This possibility is useful if you move your whole infrastructure and you want to install a new setup for your actuators, sensors, BSC-BAP/FAM-USBs. If you want to delete these objects from your system, click on “Delete objects”.

The button “Assign objects to new BAP/FAM-USB” should be used if the existing connections should be maintained. If you want to replace your BSC-BAP/FAM-USB, you have to delete the old BAP/FAM-USB from your system and to enter the ID of the new one. After your input, all objects connected to the old BAP/FAM-USBs will be updated to connect to this new ID. A BSC-BAP has to get a new IP-address via BAP-Finder before you can add it to your system. After a successful update, all existing actors that were connected to this BAP/FAM-USB have to be learned-in again to the corresponding actuators.

**!** **Note:** In case of a replacement, the BAP/FAM-USB that takes over the connections of the old BAP/FAM-USB has to be unknown to the system.

By pressing “Cancel”, the selected BAP/FAM-USB will not be deleted.

## 22. Update of your Eltako FVS-Software

Eltako FVS software is permanently refined and new sensors or actors that enter the market will be integrated into the system. Therefore, you should update your system regularly. The update can be started from the info menu.

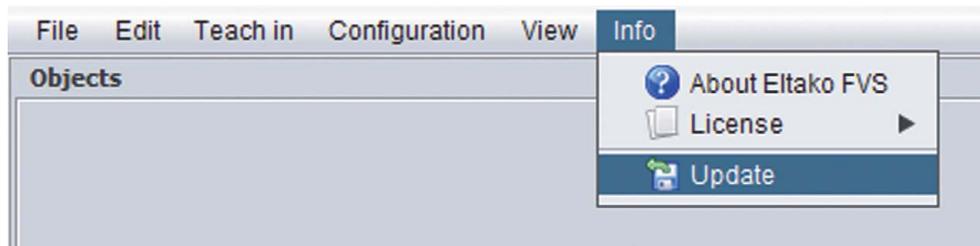


Figure 189: Update

Press the button “Info - Update“. By clicking this button, a connection to the update server will be established and the version numbers will be compared. If your version is not up-to-date, the following dialog opens:

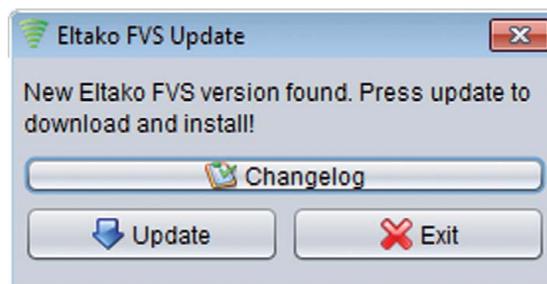


Figure 190: Eltako FVS-Update

The button “Update“ starts the download. After the update is finished, you can restart Eltako FVS and enjoy your new features.

If there is no newer version available on the server, the connection will be shut down and you get a message to inform you about the status of your software.

**i Note:** Save your database before you start an update.

**i Note:** Before you download the new program files, assure that you have read the change log to this version. By pressing the “Change log” button, you get a list of all new features. You can also copy or save the change log on your computer.

## 23. Information about Eltako FVS

You can determine your version of Eltako FVS by clicking “Info - About Eltako FVS”.



Figure 191: Informations about your system

The opening dialog “License information” lists all details about your Eltako FVS license. The next subsection explains how an upgrade of your license will be technically realized.

### 23.1 Upgrade of your Eltako FVS license

As already mentioned, this article deals only with the technical side of your license upgrade. For any further questions about the purchasing, please contact an authorized dealer.



Figure 192: Enter license key

After you purchase a new license, open the dialog “Enter license key” by pressing “Info - License - Enter license key”. When you are finished, confirm with “OK”. Afterwards, Eltako FVS will shut down. After a restart, the upgrade is active. Control this by opening the dialog “license information”.

## 24. Informations for the network administrator

### 24.1 Port opening

Port	Reason
2001, 2100	Communication with BSC-BAP.
2020	Communication with Eltako FVS-ToGo.
2021	Communication with Eltako FVS-Mobile.
2022	Transmission of the video stream to Eltako FVS-ToGo.
2023	Transmission of the video stream to Eltako FVS-Mobile.
3000	Communication with an Eltako FVS-Client.
2025, 2026, 7	To be opened if you want to shut down PCs via Eltako FVS Shutdown Service.



## 25. Support

To get support for your Eltako FVS software, please contact:

**ELTAKO GmbH**

**Hofener Straße 54**

**70736 Fellbach**

**Tel. 0711 94350002**

**Fax 0711 5183740**

**Mobil 0173 3180382**

Or via E-Mail to:

[fvs@eltako.de](mailto:fvs@eltako.de)



## 26. Explanatory notes

The Eltako GmbH is very thankful for user information about mistakes or falsities in this documentation. We also appreciate suggestions for improvement and criticism.

If you have any further comments on our products, please take your time to write them down below.

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Please send this page to the following address:

**ELTAKO GmbH**  
**Hofener Straße 54**

**70736 Fellbach**

Or write us on our support website:

[www.eltako.de](http://www.eltako.de)