



**BAB** TECHNOLOGIE GmbH

# **CUBEVISION 2**

## Documentation

**CUBEVISIONMODULE / EIBPORT V3 / FACILITYMASTER**

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EN



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# 1 INTRODUCTION

CUBEVISION 2 is a webbased visualization which generates itself automatically. CUBEVISION 2 is available in the devices **EIBPORT**, **FACILITYMASTER** and **CUBEVISIONMODULE**. In the **EIBPORT** / **FACILITYMASTER** it could either be embedded as a visualisation element within an existing CONTROL L visualisation, or can be used stand alone in the browser respectively in the CUBEVISION 2 APP for Android or iOS. In the **CUBEVISIONMODULE** it is available stand alone for the Browser and the CUBEVISION 2 APP.

## CUBEVISION 2 STANDALONE

In the **EIBPORT** / **FACILITYMASTER** by using the link “**EIBPORT** Startpage” – “**CUBEVISION**”, in the **CUBEVISIONMODULE** by using the link “**CUBEVISION**” on the startpage, CUBEVISION 2 is started directly. Initially the corresponding project choice is being displayed.

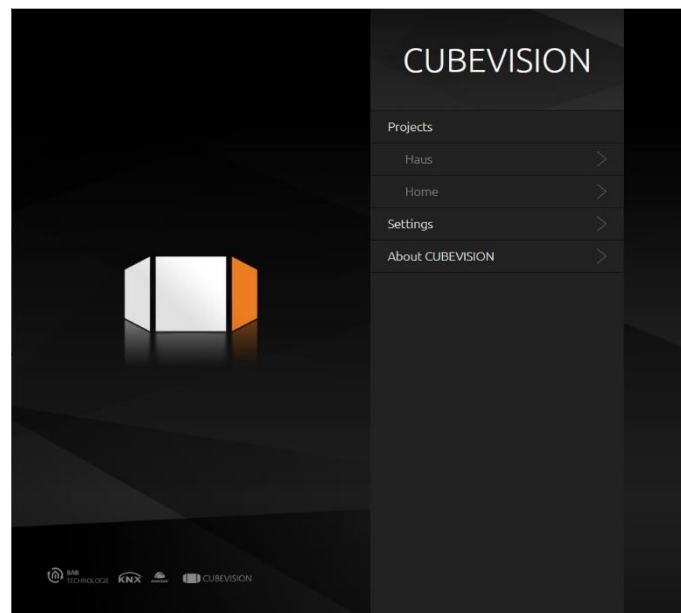


Figure 1: CUBEVISION 2 Project selection

Within the menu “Settings” the following options are parameterized:

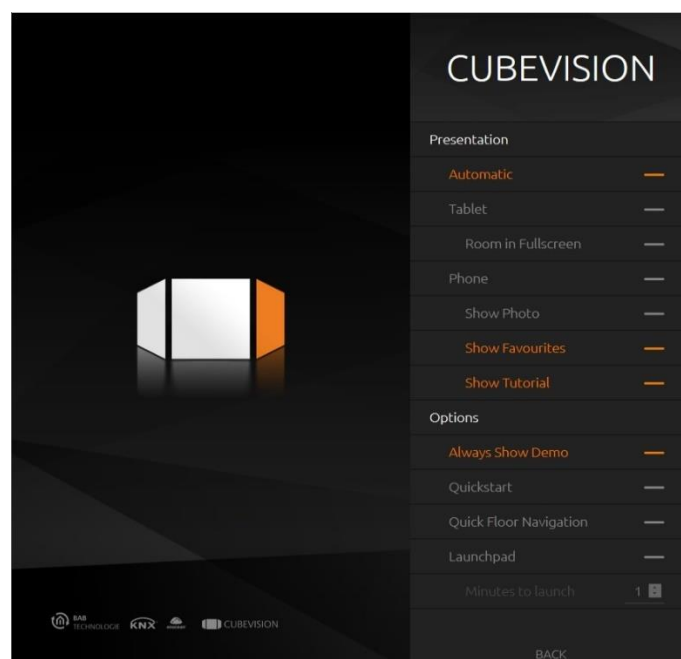


Figure 2: CUBEVISION 2 presentation options





### **Presentation – Automatic / Tablet / Phone**

CUBEVISION 2 provides two presentation styles: “Tablet” means the presentation of a 3-D cube on devices with a greater display, whereas “Phone” is meaning a presentation which is optimised for small displays like Smartphone-displays. Depending on the actual resolution, with the help of the option “Automatic”, CUBEVISION 2 choses the respective presentation on its own.

- Minimal size (less the respective status bars) to display the tablet presentation in the “automatic” mode = 950x700 (following DPR)

### **Show Photo**

Background images are also shown in the Phone presentation.

### **Show Favourites**

Favourites are also shown within the Phone presentation.

### **Show Tutorial**

The user is guided through the operation of the interface at the first start (only valid for the phone presentation).

### **Always Show Demo**

Only relevant for CUBEVISION 2 APP. Shows the Demo-Projects although there is no project entered.

### **Quickstart**

Only relevant for CUBEVISION 2 APP. Opens the recently started project directly by accessing CUBEVISION 2

### **Quick Floor Navigation**

With it, the navigation through the floors is not happening by scrolling vertically anymore, but with the help of a sidebar. (See chapter “[Quick Floor Navigation](#)”)

### **Launchpad**

Enables or disables the Launchpad. If the Launchpad is active, you can set a time in minutes for the Launchpad to appear automatically (1-65535 minutes).

## CUBEVISION EMBEDDED IN CONTROL L

In **EIBPORT** / **FACILITYMASTER** you can integrate CUBEVISION 2 with the help the visualisation element “CUBEVISION” into an individual CONTROL L visualisation. By this you can combine the functionalities of CONTROL L and CUBEVISION 2 with each other.

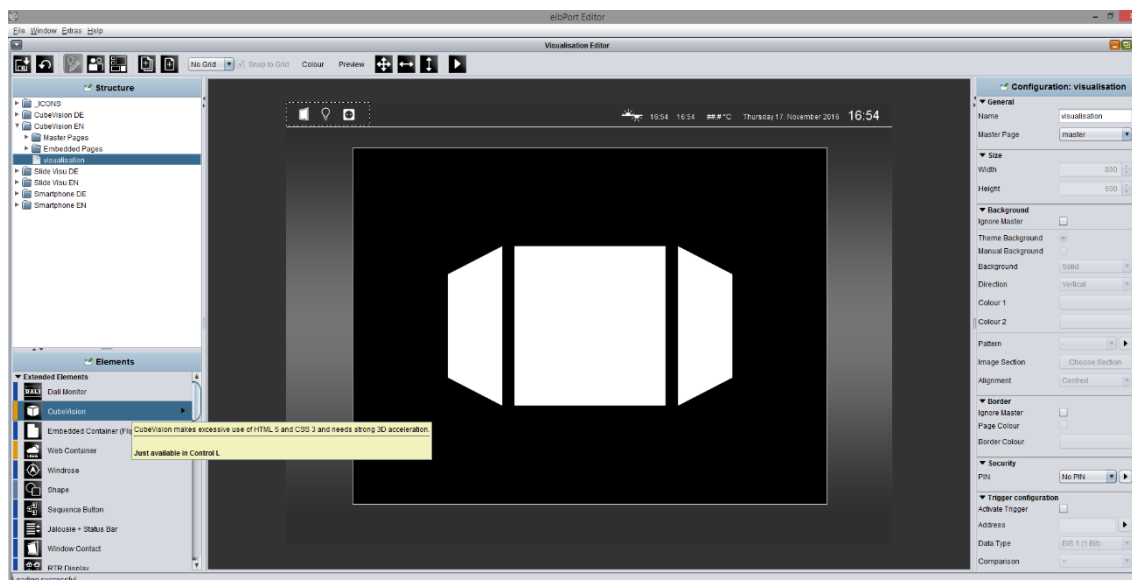


Figure 3: embedded CUBEVISION visualization element

**Please note: Please only use one CUBEVISION element for each (free) visualisation project. The CUBEVISION element is only working within CONTROL L and not within the Java visualisation (JAVA CONTROL).**

## CUBEVISION 2 APP

For using the CUBEVISION 2 on Android and iOS devices there is the CUBEVISION 2 APP available in the Google Play Store and the Apple App Store.



Figure 4: CUBEVISION 2 APP Icon



## 2 CUBEVISION 2 VISUALISATION

CUBEVISION 2 is one of the most innovative visualisations. The design and layout of the visualisation are created automatically and the user must only specify the building structure and link the functions. CUBEVISION 2 automatically scales to the screen size and opens up either in the "Phone" or in the "Tablet" presentation depending on the resolution.

### "Tablet" presentation



Figure 5: Tablet presentation

### "Phone" presentation

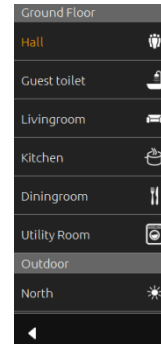


Figure 6: Phone presentation, room navigation

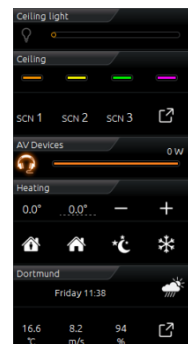


Figure 7: Phone presentation

## 2.1 USING CUBEVISION 2 IN A BROWSER

In order to start CUBEVISION 2 in the browser, call up the start page of the EIBPORT / FACILITYMASTER / CUBEVISIONMODULE and click on "CUBEVISION". You then access the project (building) selection.

Visualisation	CONTROL L
Editor	CUBEVISION
LOGIKEDITOR	JAVA CONTROL
System	JAVA CONTROL
Information	CONTROL S

Figure 8: Opening CUBEVISION 2 in the Browser

### ACCESS THE CUBEVISION VISUALIZATION WITH THE BAB STARTER

To call up the CUBEVISION 2 with the BAB STARTER start the bab starter.

**Note: The visualisation uses the most recent HTML 5 browser technology. For this reason, it is important to only use the recommended browsers for the CUBEVISION 2 presentation.**

**Overview of the recommended browsers and presentations on different terminal devices**

- |                            |   |
|----------------------------|---|
| <b>PC:</b>                 | <ul style="list-style-type: none"><li>▪ Browser: Google Chrome, Mozilla Firefox</li><li>▪ Possible presentation: Phone, tablet</li></ul>  |
| <b>MAC:</b>                | <ul style="list-style-type: none"><li>▪ Browser: Apple Safari</li><li>▪ Possible presentations: Phone, tablet</li></ul>                   |
| <b>Android tablet:</b>     | <ul style="list-style-type: none"><li>▪ Browser: Google Chrome</li><li>▪ Possible presentations: Phone, tablet</li></ul>                  |
| <b>Android phone:</b>      | <ul style="list-style-type: none"><li>▪ Browser: Google Chrome</li><li>▪ Possible presentations: Phone (tablet not recommended)</li></ul> |
| <b>Apple (iOS) tablet:</b> | <ul style="list-style-type: none"><li>▪ Browser: Apple Safari</li><li>▪ Possible presentations: Phone, tablet</li></ul>                   |
| <b>Apple (iOS) phone:</b>  | <ul style="list-style-type: none"><li>▪ Browser: Apple Safari</li><li>▪ Possible presentations: Phone (tablet not recommended)</li></ul>  |



## 2.2 CONFIGURING THE PRESENTATION

The presentation of CUBEVISION 2 is usually carried out automatically. This means that CUBEVISION 2 recognises automatically which resolution is to be presented and scales correspondingly. From a resolution of 1,024 x 768 pixels and above, the tablet presentation is chosen. In order to make manual adjustments to the presentation, please proceed as described below:

- Presentation in the browser: Open the CUBEVISION 2 Start menu
- Presentation in the APP: Close an already opened APP via the task manager of your mobile device and open it again so that you can access the start screen of the APP (see chapter """)
- Click "Settings" (see figure below, orange circle).

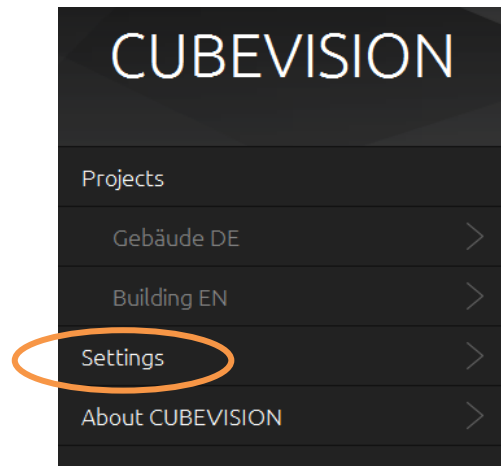


Figure 9: CUBEVISION presentation settings

- You can change the presentation in the following menu. You have the following configuration options:

<b>Automatic</b>	If you select "Automatic" presentation, presentation is adjusted automatically. If your visualisation device supports a resolution of 1,024 x 768 pixels, the visualisation adjusts to the tablet presentation.
<b>Tablet</b>	In this setting, the visualisation is always shown in the tablet presentation irrespective of the screen resolution.
<b>Phone</b>	In this setting, the visualisation is always shown in the phone presentation irrespective of the screen resolution.

- Confirm your selection with "OK" and call up the required visualisation project (building).

## 2.3 USING IN CUBEVISION APP

For iOS and Android devices, an APP for calling up CUBEVISION 2 is available in the respective stores. This APP is called "CUBEVISION 2 APP". The application is free of charge. In order to call up CUBEVISION 2 from **EIBPORT** / **FACILITYMASTER** / **CUBEVISIONMODULE** in the APP, please proceed as described below:

- Install the APP from the respective store (Google Play, Apple AppStore).



Figure 10: CUBEVISION 2 APP icon

- Start the application. The start screen of the APP opens up. If CUBEVISION 2-compatible end devices (**EIBPORT** / **FACILITYMASTER** / **CUBEVISIONMODULE**) have already been added before as favourites, they are listed here. They can be deleted again using the "Remove favourites" button. The start settings of the visualisation are changed using the "Settings" button

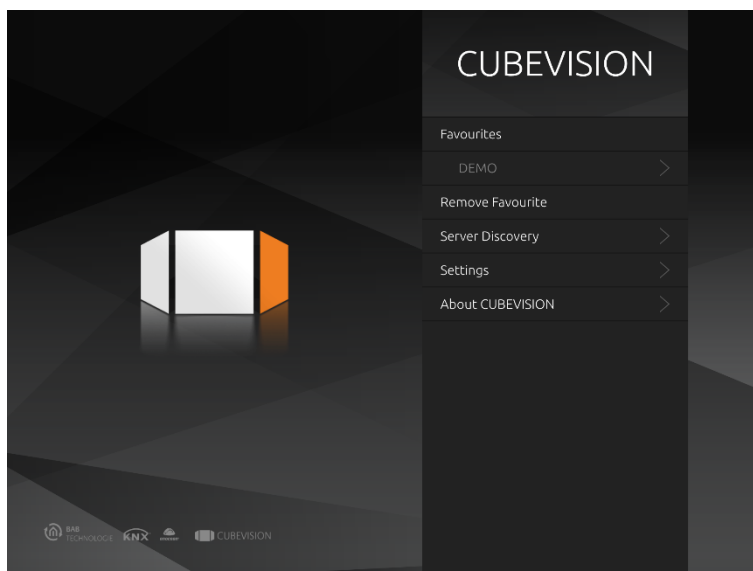


Figure 11: CUBEVISION 2 APP start screen

- In order to add a new server (device), click the "Server Discovery" button. A second screen opens up and shows you all devices available in the network are shown at "Discovered Servers" with their respective serial numbers. Both **EIBPORT** (Serial number is starting with "BT01") or **FACILITYMASTER** ("BT0101") and **CUBEVISIONMODULE** ("BT103") are displayed.

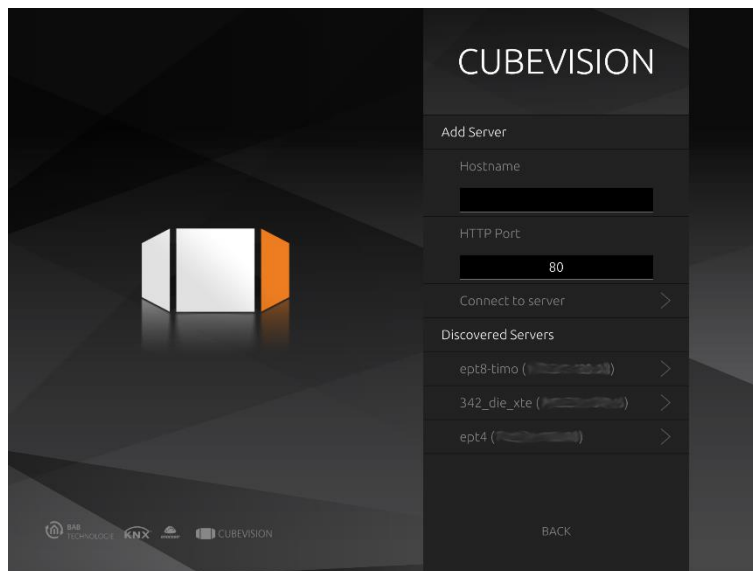


Figure 12: CUBEVISION 2 APP server selection

- If the required server (device) is not available, an additional server can be added using the “Add server” menu and entering the respective hostname and http port.
- If there are several CUBEVISION 2 projects (buildings) on the required server (device), a project (building) selection is shown after the server has been selected. In order to save the server as a favourite in the above-mentioned list of favourites, the "Save as favourite" check box must be activated.

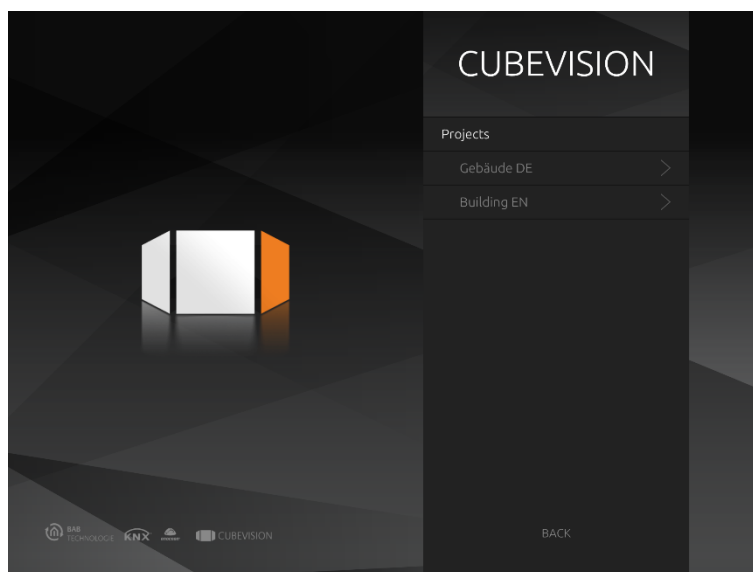


Figure 13: CUBEVISION 2 APP project (building) selection

After the required project (building) has been selected, the visualisation is started with the start page set and specified in the configuration.

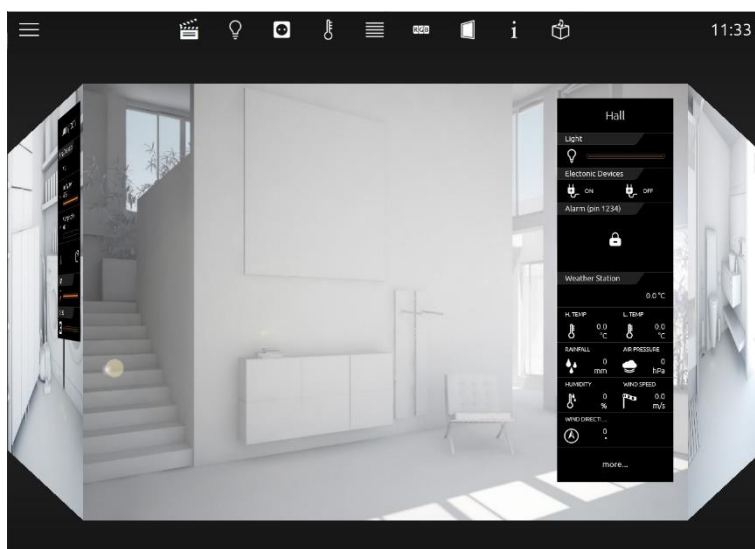


Figure 14: CUBEVISION 2 APP – First Visualization Page

### LIMITATION OF PROJECT SIZES ON MOBILE DEVICES

Because of the memory usage, the size of the CUBEVISION 2 project is limited. The limit on iOS devices is reached a bit earlier than on Android devices. If a critical memory level has been reached, a "Memory Warning" appears. Due to the fact that the CUBEVISION 2 APP shares the resources with other applications, the limit can also be reached earlier if a resource-intensive application is used.

#### **Optimising performance**

In order to optimise the performance of the CUBEVISION 2, please take the following aspects into account:

- Reduce rooms and floors as far as possible
- Use optimised background images
- Use the Quick Floor Navigation to ensure that only one floor at a time is loaded (see chapter "[Quick Floor Navigation](#)").





## 3 NAVIGATION AND COMPONENTS OF CUBEVISION 2

This chapter deals with operating and navigation of CUBEVISION 2. Furthermore, single components will be described to find out more about characteristics, techniques and automatisms of CUBEVISION 2.

As described in the chapter before, there two different presentations modes for CUBEVISION 2: “Tablet” and “Phone”.

Elements of the Tablet presentation:

- View of room and navigation
- Quick Navigation
- Quick Floor Navigation
- Central View
- Instant Control Panel [ICP]
- Extended Control Panel [ECP]
- Extended Element View [EEV]

Elements of the Phone presentation:

- Room navigation
- Central View
- Favourites
- View of room
- Extended Element View [EEV]

### 3.1 TABLET PRESENTATION OF CUBEVISION 2

Navigation through the building structure takes place by horizontally and vertically sliding in the mode room view.

#### Room view:

By room view, this sight will be intended, which shows a room, more precisely the front surface of a cube. This surface will be used for navigation.

#### Navigation:

As it will be shown in the following two figures, shifting from room to room by a horizontal finger movement is possible. In horizontal direction exits no limits. This means, that after the last room the first room will be displayed again.

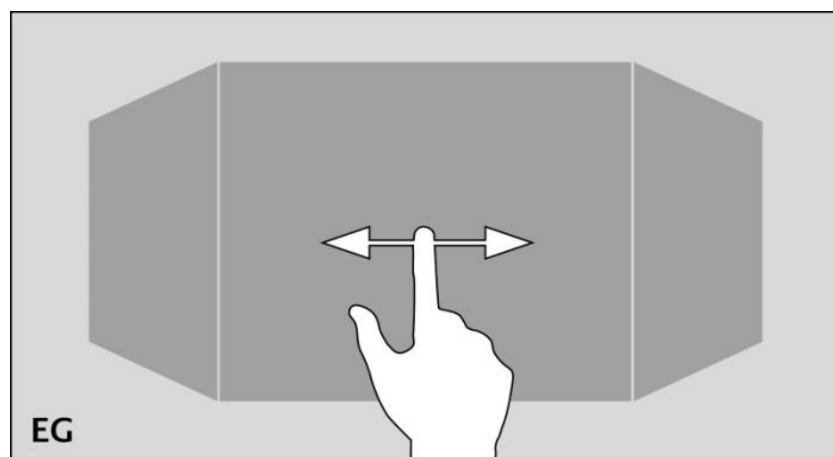


Figure 15: Horizontal finger movement for shifting the room

The vertical finger movement serves for navigation through levels resp. floors. If the end of vertical direction will be reached, an orange coloured corona appears at the border below or at the top end, according to which direction the user's moving takes place. This indicates the end of vertical direction.

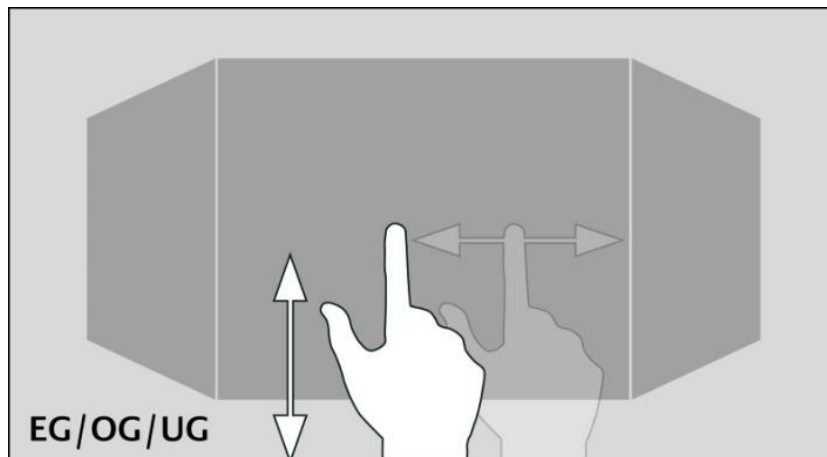


Figure 16: Vertical finger movement for shifting levels

One of the major advantage of CUBEVISION 2 is, that the user doesn't have to be worry about navigation between rooms or levels. Working with changeover elements, how its known in classical visualization, is cancelled completely. As well the testing of the navigation: if somewhere the user will be toddle into a deadlock, from which he can't get back to the front page, because a changeover element is simply absent on this visualization page.

**Please note: To reach a room directly and without detours (also in another level), quick navigation can be applied.**

### 3.1.1 QUICK NAVIGATION

In the mode Quick Navigation, all rooms will be displayed at one side for faster navigation. In this way, user can switch directly to each and every room. The creation of an overview for all rooms takes place automatically.

#### Opening of Quick Navigation:

Quick Navigation can be started in two different forms.

- Over the complete area of the room view
- By an arrow, this will be displayed downright in the room view.

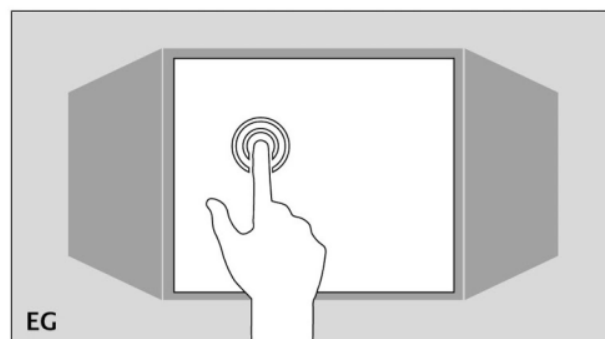


Figure 17: Starting Quick Navigation

**Closing Quick Navigation:**

By the exit symbol in *Quick Navigation*, the overview can be closed, to shift back to the room view.

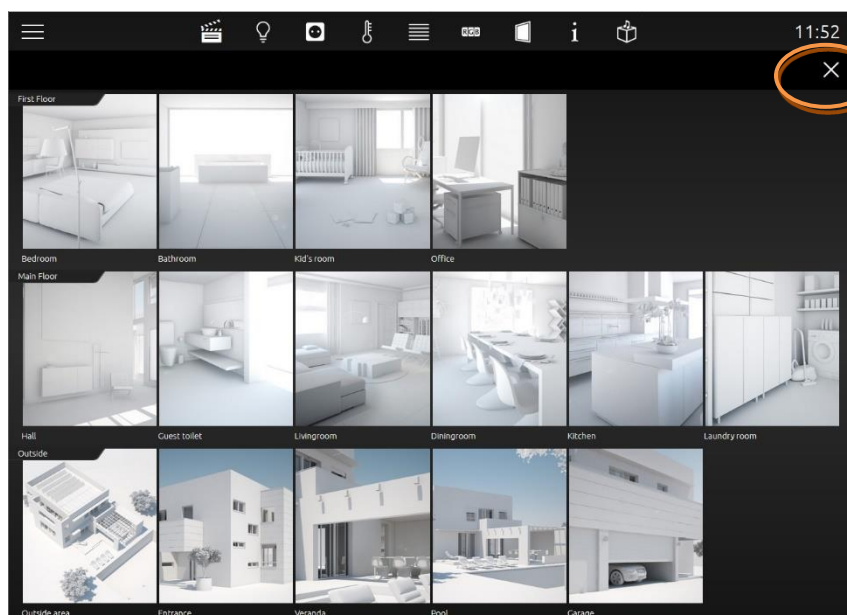


Figure 18: View of Quick Navigation

**Please note: Quick Navigation can be disabled completely when necessary**

### 3.1.2 QUICK FLOOR NAVIGATION

The Quick Floor Navigation is another type of navigation through the floors. Instead of pulling the cube in the "Tablet" view upwards or downwards to switch between floors, a navigation icon is displayed on the right-hand corner of the screen, via which you can select the floors directly.

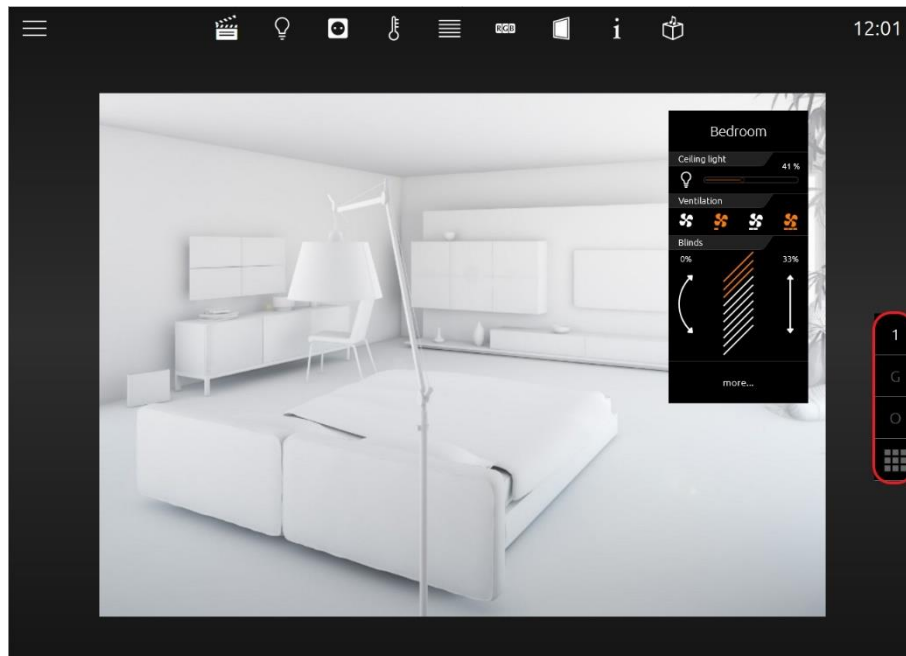


Figure 19: CUBEVISION 2 with Quick Floor Navigation

On mobile devices (smartphone, tablet), the Quick Floor Navigation optimises the performance of the CUBEVISION 2, as less memory is required.

#### CONFIGURATION OF THE FLOOR DESIGNATION

In order to change the display designations of the Quick Floor Navigation, the "Short Name" input field is available in the CUBEVISION 2 Editor when clicking on the respective floor. Here, a maximum of two (2) digits can be assigned to each floor. If no entry is made, the floors are numbered consecutively from top to bottom.

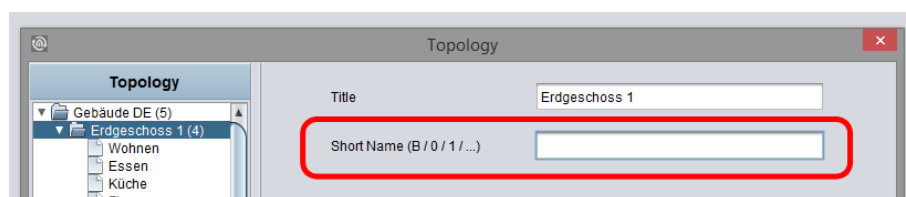


Figure 20: CUBEVISION 2 Editor – Floor designation for Quick Floor Navigation



## 3.2 INSTANT CONTROL PANEL [ICP]

Every room has an *Instant Control Panel* (shortened ICP), which always will be located on the right side. In the first place of *Instant Control Panel*, the name of the room appears. The position of *Instant Control Panel* can't be changed (see figure below).

*Instant Control Panel* provides space for max. 8 elements of visualization (the elements have a height from 1 to 8 units)

If there is not enough space in the *Instant Control panel*:

If for visualization elements of the room more than 8 height units will be required, the elements, which doesn't fit into the *Instant control Panel*, will be displayed in the *Extended Control Panel* (see next chapter).

It automatically appears a "more" – button below the *Instant Control Panel*, by which the *Extended Control panel* can be activated. (see figure below)

*Instant Control Panel* and favourite function:

*Instant Control Panel* has a particular function, which allows to arrange elements in order of their importance.

This means, that the most often used elements in one room can be displayed in the room view and therefore they could be operated directly.

The favourite function controls, how often the user will utilize particular elements and so it sorts the order of the elements on this basis in *Instant Control Panel*. This means in effect for example, that if in winter time Christmas illumination in the garden will be controlled often, this element will also be displayed in *Instant Control Panel*.

No configuration is necessary. Solely these elements have to be marked, which should be observed as favourite elements. This will be described more precisely in chapter "elements."

To position visualization elements manually in *Instant Control Panel*

As desired, even so elements of the room can be positioned manually. Therefore, the favourite function will be disabled and a place in the order in *Instant Control Panel* will be given to the element.



Figure 21: Instant Control Panel (seen on the right side)

### 3.3 EXTENDED CONTROL PANEL [ECP]

All elements, which are used in a room, will be displayed in the *Extended Control Panel* (shortened ECP). So all elements of the *Instant Control Panel*, too. The creation takes place automatically.

#### Extended Control Panel:

- In this view 4 columns are displayed always at least.
- Every column has 8 height units.
- If 4 columns doesn't be enough, a page can be added when necessary.
- By column break, elements can be arranged in the columns thematically.

#### Opening and closing of Extended Control Panel:

*Extended Control Panel* will be opened by the button "more...". This button will be displayed only on demand. By the exit-symbol (arrow at lower left, see figure) this view can be closed.

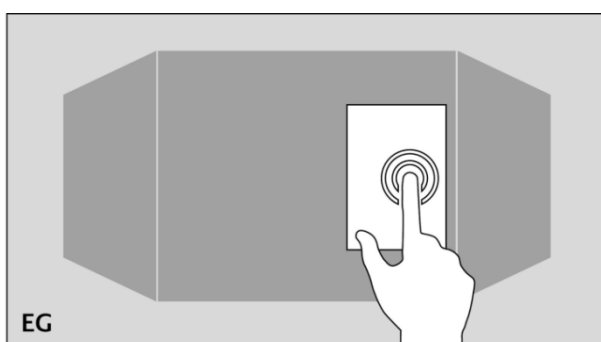


Figure 22: Opening of Extended Control Panel. Click on "more..."

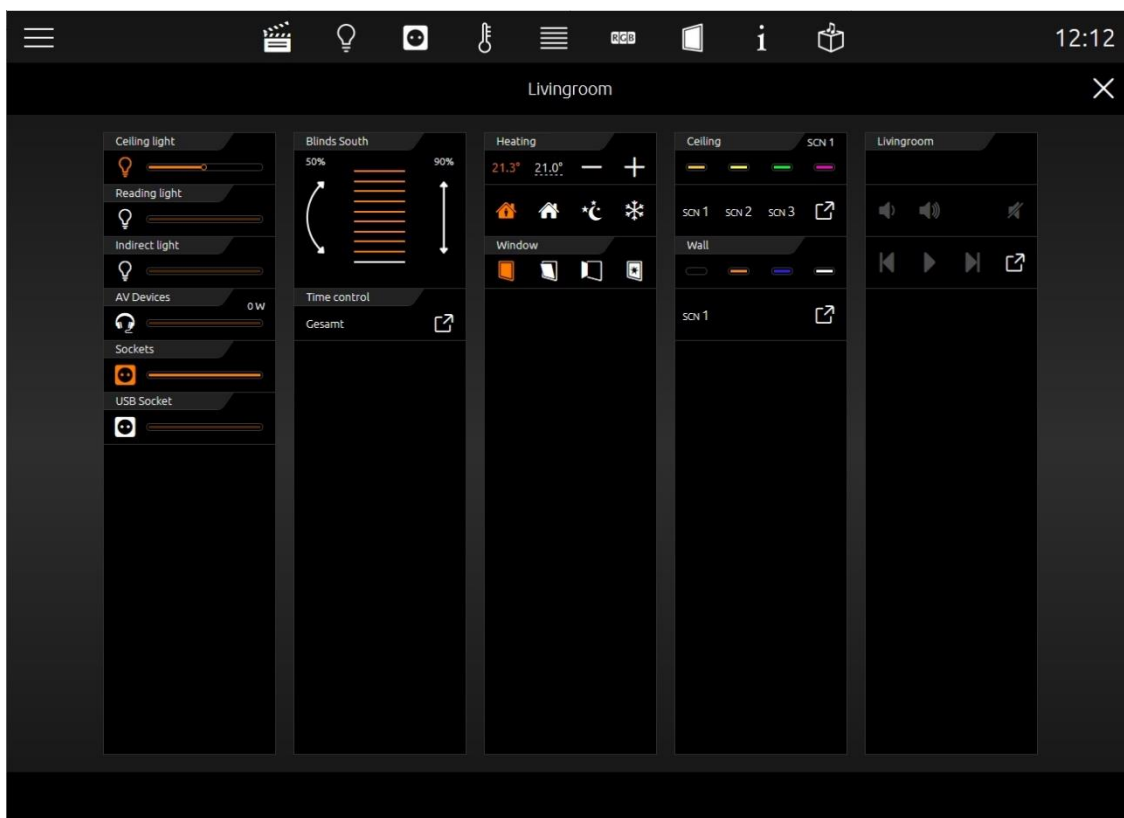
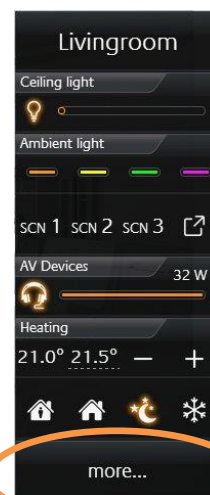


Figure 23: Extended Control Panel



## 3.4 EXTENDED ELEMENT VIEW [EEV]

*Extended Element View* (shortened EEV) offers another view of elements, in which more information (as cover, diagram, large pictures of cameras, ...) can be outlined.

*Extended Element View* has got 5 elements.

- RGB Control
- Camera
- Multimedia
- Weather (Internet)
- Values / diagrams

In visualization, the access to *Extended Element view* is illustrated by a rectangle, from which one arrow points upwards to the right. It is located inside the element on the bottom right (see figure).

### Example:

We will take the element “internet weather”. For the element “internet weather”, only a few weather data can be shown in view *Extended Control Panel* (see figure).

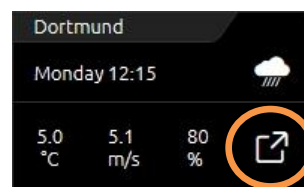


Figure 24: Example Internet Weather

A click on the symbol on the bottom right will open the extended view (*Extended Element View*). This extended view of internet weather will be shown in figure below.



Figure 25: Example „Internet Weather“ in *Extended Element View*

### If in a room several similar elements will be inserted with extended view


In our example, two internet weather elements have been inserted in the kitchen. The first shows the local weather (Dortmund) and the other displays the weather of New York. CUBEVISION 2 *Extended Element View* integrates both in a list on the left side (see figure). In this way, the user can switch between both elements back and forth.

## 3.5 CENTRAL VIEW

"Central View" is an additional function allows a room-independent central overview of the required functions. Each CUBEVISION 2 element includes the "Central View" menu item and can thus be assigned the required central view.

Here, it is possible to add categories to the "Central View" menu according to your own wishes and requirements.

To do this, please proceed as described below:

- Click the  symbol (see figure on the right-hand side, red circle).
- A new window opens up, in which you can now create new categories.
- Operations (see figure below, "Add category"):

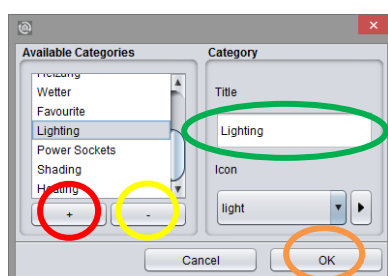


Figure 26: Adding category

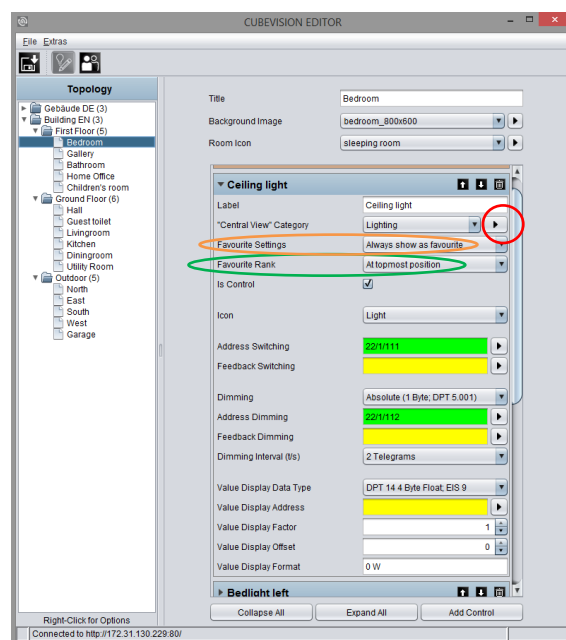



Figure 27: Central View

Symbol	Functions
"+"	By clicking "+", a category can be added.
"_"	By clicking "-", a category can be removed.
Title	Here, the category can be assigned a title.
Icon	Here, you select a specific icon for the category.
	Click this symbol to add an individual picture for the icon.
Cancel	By clicking "Cancel", you cancel the adding process.
OK	By clicking "OK", a new category is saved.

As soon as the control element has been assigned a required "Central View" category, the corresponding menu item is generated in a status line above CUBEVISION 2 in the tablet presentation.

In this way, it is possible to generate any group of control elements in the "Central View" menu.



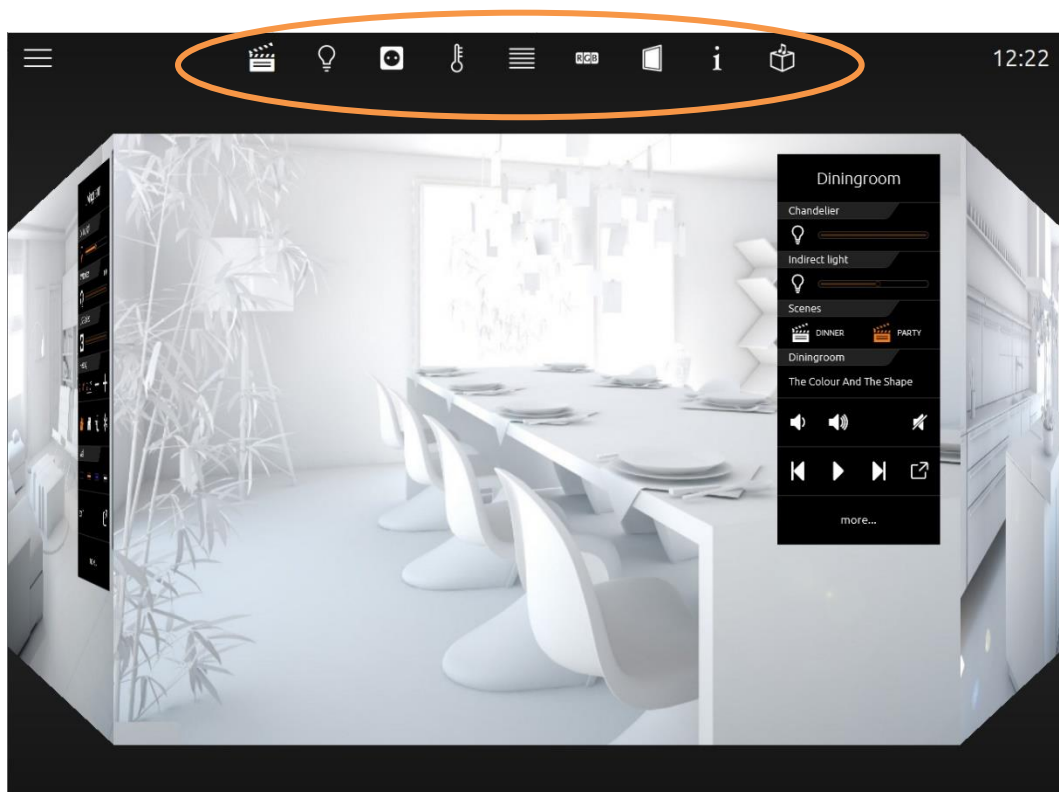


Figure 28: Central View visualisation

## 3.6 CUBEVISION 2 IN THE PHONE PRESENTATION

It is possible to navigate through the building structure by sliding horizontally, sliding vertically and touching. Thus, intuitive operation of the visualisation on the smartphone is ensured. The phone presentation is designed in such a way that so-called "one-thumb operation" is possible (depending on the screen size).

### 3.6.1 NAVIGATION

The navigation through the building structure in the phone presentation differs from that in the tablet presentation. In order to access the visualisation on different floors or in different rooms, you must touch the symbol (see figure below, orange circle).

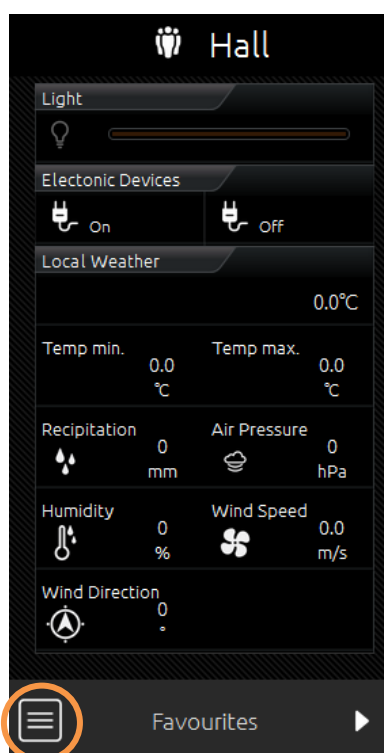


Figure 30: Opening room navigation

You can access the room navigation (see figure on the right-hand side). In general, it depends on how many floors and rooms were created in the topology.

In this example, there are four "layers":

- Central View (see chapter "Central View")
- First Floor
- Ground Floor
- Outside

In order to access the required page, just touch the corresponding menu item.

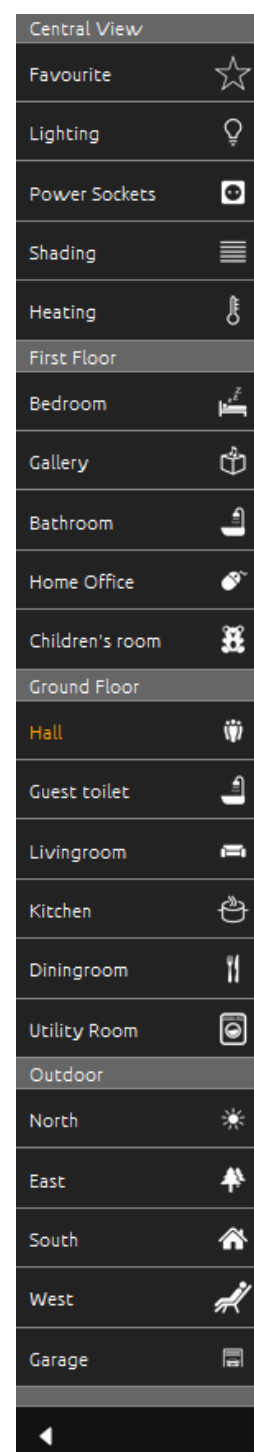


Figure 29: Room navigation



### Navigation within a room [room view]

If you have used the "Column Separator" element during configuration in order to categorise the elements, switch between the columns within a selected room by sliding horizontally.

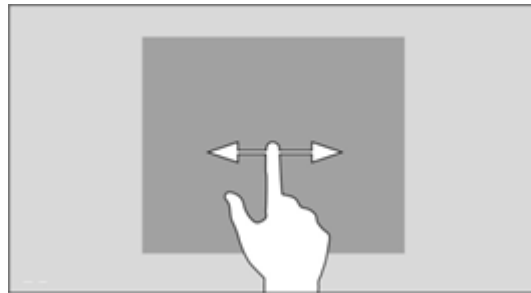


Figure 31: Sliding horizontally

### Navigation – within the columns of a room

The control elements within the columns are arranged one below the other. As of a certain number of control elements, they protrude from the visible area of the screen. In order to access the required control element, sliding vertically is required.

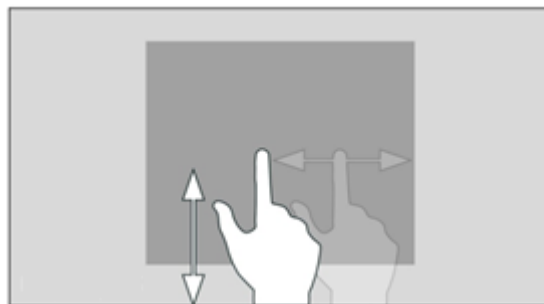


Figure 32: Sliding vertically

### Operating an element

By "touching" a control element, it is activated for the respective condition. The surrounding functions are shaded in order to visually mark the selection and make it clear. Only then can the control element be operated correspondingly. In order to exit this mode, it is necessary to touch the screen outside the operable area.

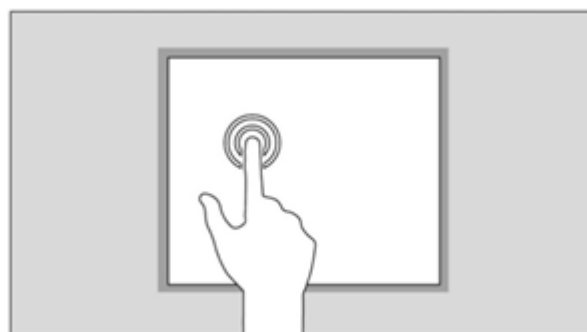


Figure 33: Touching

## 3.7 FAVOURITES FUNCTION

Upon request, the favourites function generates an automatic sorting of the control elements according to how frequently they are used (clicked). To do this, the control elements are sorted into the "Favourites" column provided in the phone presentation, whereas the respective control elements are sorted into the Instant Control Panel [ICP] in the tablet presentation.

In order to ensure that a control element is considered by the favourites function, the following settings must be taken into account in the control element configuration.

Option	Functions
Automatic	Here, functions are added to favourites according to the frequency of clicks.
Always show as favourite	Here, functions are always added to favourites.
Never show as favourite	Here, functions are never added to favourites.

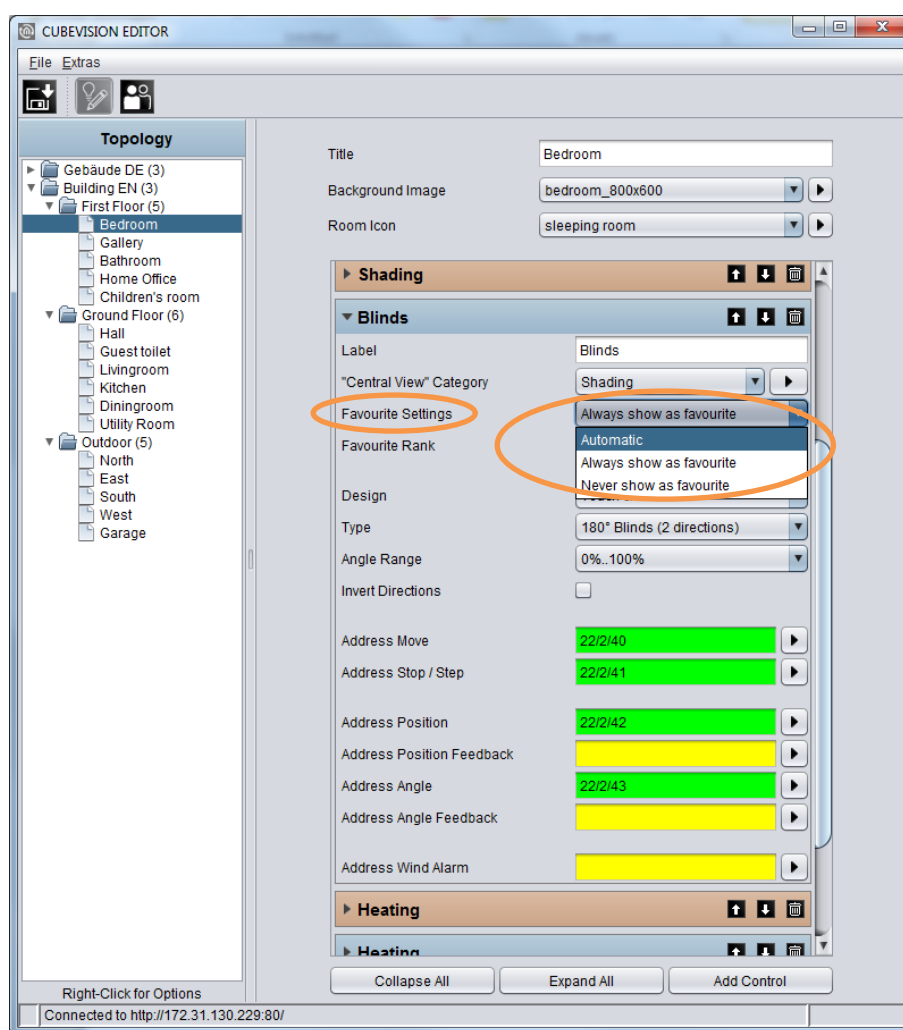


Figure 34: Favourites



## 3.8 COLUMN SEPARATOR

With the "Column Separator" control element, the user also has the option of influencing the assignment of the control elements to the individual columns in the phone presentation.

In the following example (see figure below), a "Column Separator" control element was inserted between "All Sockets" and "Blinds". Separating the columns, the "Blinds" control element is moved to the second column.

The column can be separated by clicking "Add" in the CUBEVISION 2 Editor. The following window now opens up (see figure below, orange rectangle).

Now the "Column Separator" function can be selected; at the same time, the column separator can be assigned a title (name). This title specifies the group generated by the separation more precisely.

Example: In the "Controlling" column separator element (see figure below, green rectangle), all control elements by means of which something can be controlled (ceiling light, ventilation etc.) have been inserted.

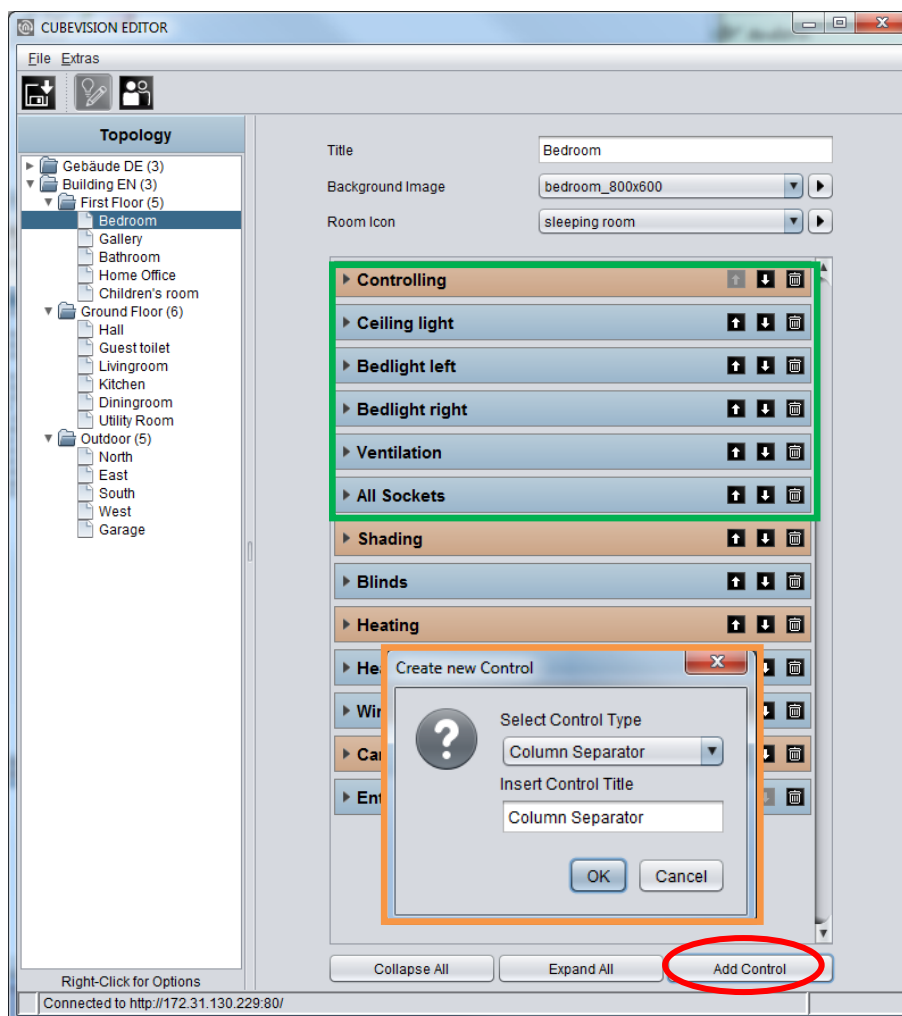


Figure 35: Column separator

## 4 CUBEVISION EDITOR

Because CUBEVISION 2 within EIBPORT / FACILITYMASTER can be used in two different ways (CUBEVISION 2 standalone within CUBEVISION 2 APP / Browser or embedded in the free visualisation CONTROL L), the configuration data can be accessed on two different ways, as well. Both ways are working with the same configuration data.

Within the CUBEVISIONMODULE the CUBEVISION 2 Editor is additionally extended with the necessary functions about localisation, address layers, History- & and State table, Image Upload, ESF data management and Sonos UPnP control. The CUBEVISION 2 Editor of the CUBEVISIONMODULE comprehensively described in the CUBEVISIONMODULE Documentation.

### 4.1 OPENING THE CUBEVISION EDITOR IN THE EIBPORT / FACILITY MASTER DIRECTLY

In order to open the CUBEVISION 2 Editor directly, please browse the EIBPORT / FACILITYMASTER Editor and open the "CUBEVISION Editor" with the help of the menu "window".

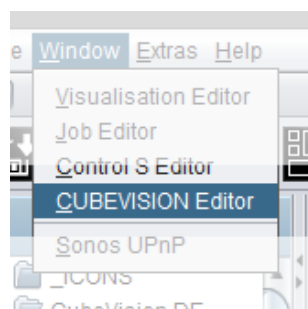



Figure 36: Open the CUBEVISION 2 Editor directly

### 4.2 OPENING CUBEVISION EDITOR IN THE VISUALIZATION ELEMENT

CUBEVISION 2 can be used within the free visualisation CONTROL L by placing the corresponding element on any visualisation page (see below for further information). Once the element on the visualisation page is marked, the CUBEVISION 2 Editor can also be opened over the parameters of the element.

This will be opened by the Icon  beside "selection dialogue" (see Figure 37). You can see CUBEVISION 2 element editor in Figure 38.

CUBEVISION 2 element is a kind of container, to which it will be allocated a „building“. Figure 37 shows CUBEVISION 2 element in a visualization page und on the right side its related configuration window.

If a building, resp. the structure of a building was applied, in the pull-down menu (Select building) it will be listed and, in this way, allocated to CUBEVISION 2 element for visualization.

Several buildings can be applied in CUBEVISION 2 editor, but only one building can be assigned to CUBEVISION 2 element.

**Please note: Please do only use one CUBEVISION 2 Element per CONTROL L visualisation project.**

**Note: If the "Quick View Toolbar" is used in Control L, the elements at the upper edge of the image should have a minimum distance of 60 pixels from the upper edge, otherwise they will be covered by the "Quick View Toolbar".**



CUBEVISION 2 element doesn't be displayed in editor, when the Live Modus is activated.

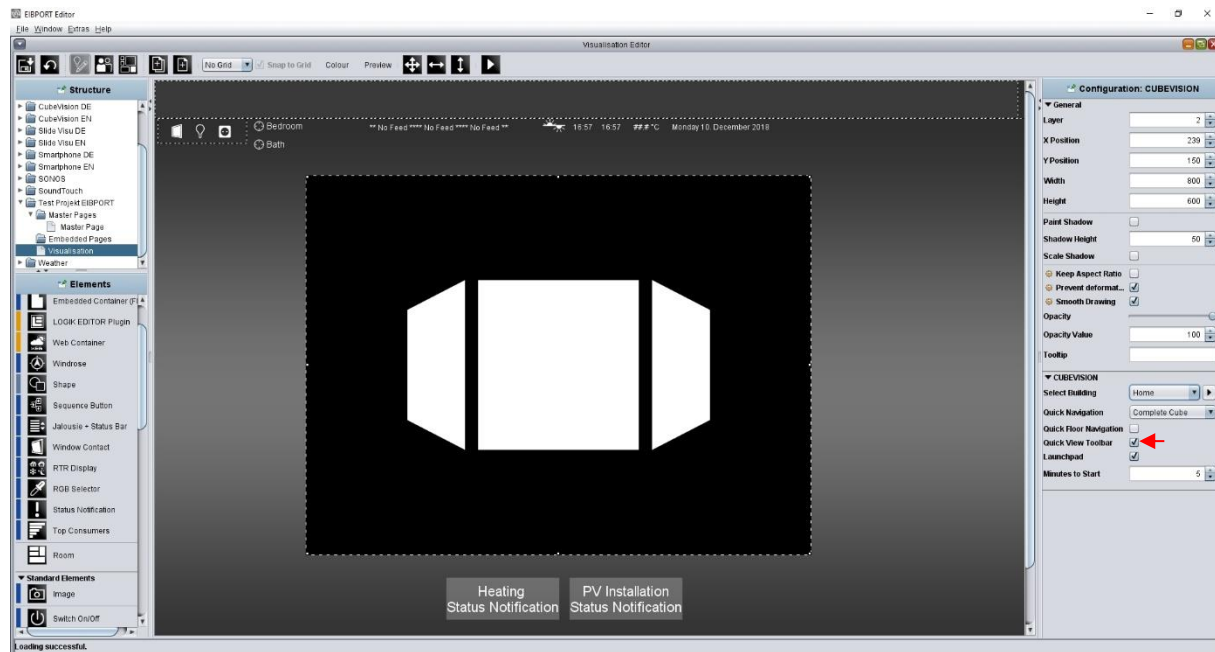


Figure 37: EIBPORT visualization editor with CUBEVISION 2 element

## 4.2.1 INSTRUCTIONS FOR PLACING THE CUBEVISION ELEMENT IN CONTROL L

### PLACING THE ELEMENT

In the EIBPORT Editor visualisation elements can be pulled to visualization by drag & drop with the mouse. Thereby CUBEVISION 2 element has to be positioned centrally by hand on the visualization page. But if a CUBEVISION 2 element will be added to visualization page by a click in the list of the visualization elements (in visualization editor), it automatically will be positioned centrally on visualization page by the editor. If necessary, only the vertical position has to be adjusted. This adjustment only will be required, if in visualization page a part of the height will be designated for other elements. The height of this area has to be subtracted from the total height, to define the vertical position for the CUBEVISION 2 element. See figure; at this visualization page a "status bar" was placed at the top edge, containing diverse information and visualization elements.

***Please note:** In order that the 3D effect will be shown to its best advantage, enough space should be included around the CUBEVISION 2 element. This is why if the visualisation page will not be large enough, three-dimensional effect will be lost by moving the cube. While moving the cube, the size of the front face changes perspective and cannot be seen completely.*

*If a level contains more than 4 rooms, rooms will be displayed right and left from the exposed room. Example: A level with 5 rooms constitutes a five-sided figure in cross section (6 rooms a six-sided figure et cetera) and therefore these rooms are seen left and right from the displayed room.*

## ELEMENT SIZE

To use CUBEVISION 2 element in a visualization, a visualization page with a recommended resolution of 1024 x 768 pixels is necessary. The CUBEVISION 2 element will be inserted in visualization by the editor in a size of 800 x 600 pixels. The size of CUBEVISION 2 element can be enhanced. That makes sense, in case the visualization client is about a display of 16:9 and 16:10. Placed optimally, Cube Vision element is situated in horizontal and vertical centre of visualization area.

*Please note: In case if CUBEVISION 2 element will be created for a wide screen (also 16:9 or 16:10), Cube Vision element uses the additional space for ECP. That means, that the four columns will not be spread in a wide range, but they will be displayed in so many columns as possible.*

## 4.3 CONFIGURE CUBEVISION

In order to configure the CUBEVISION visualization the CUBEVISION Editor is been used.

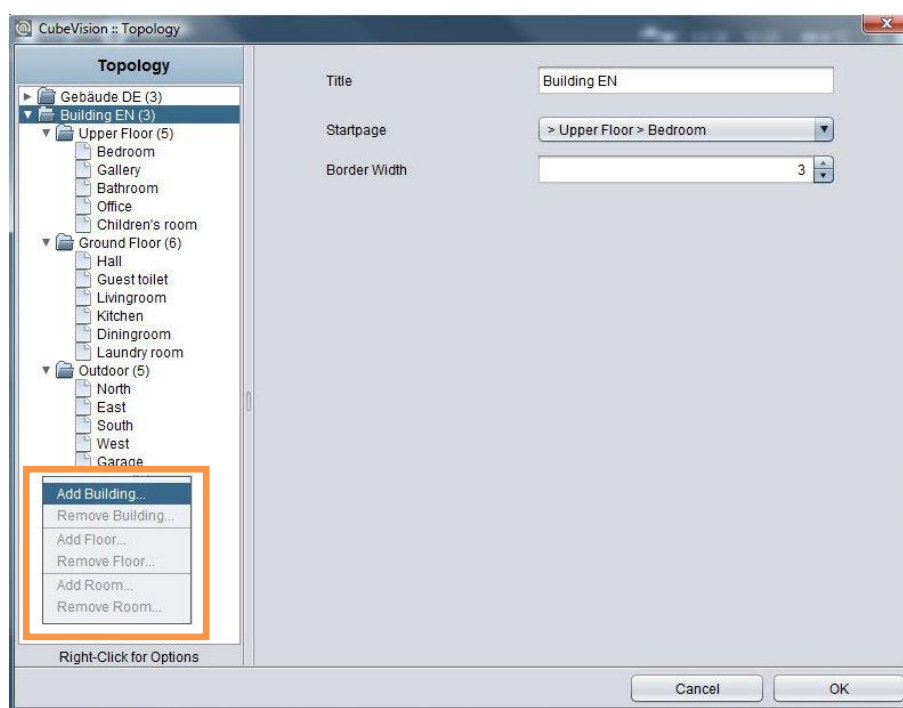


Figure 38: CUBEVISION 2 Editor

### Explanation

CUBEVISION Editor is divided in two areas. The left side shows the topology of the building. The topology is similar to a directory structure, as you can see in figure above.

As „building“, we describe a complete structure, which consists of floors (levels), rooms and elements. This structure will be described in form of a directory tree. This means that a directory depicts a level and a file presents a room. The elements (like switch, dimmer, jalousie, RTR, ...) will be added to the room in the form of a list.

The right half is reserved for configuration. That can be the configuration of a building, of a level, of a room and of operating elements. To call up respective configuration of these components, it would be enough to select them simply. Depending on selected component, in configuration window corresponding options will be displayed.





A little bit about topology of the buildings (see figure). The first directory represents a building; it stands for the “root directory” of the building structure. In other words: “here is the beginning of the building”. One directory level lower, below of the buildings, the building levels are being placed. They present the floors of a building. Below the last directory level, the rooms can be found.

In figure above, the topology of a complete building is laid out already. The name of the first directory “home cube” represents the building’s name and this name will be displayed for selection in the pull-down menu of the visualization editor. Three levels exist in the building. They carry the names “Upper Floor”, “Ground Floor” and “Outdoor”. At the end, below the levels, the rooms will be listed.

Buildings, level and rooms will be added or erased by a popup menu in the topology window. The popup menu can be opened by a right click. In figure above, an orange box encircles the popup menu.

### 4.3.1 BUILDING

By popup menu „Add building..., a new building will be created. An input window appears, in which the building’s name can be entered. Later on, this name will be displayed into a list in the selection dialogue of visualization editor in the CUBEVISION 2 element. After appending the building, the right side of the configuration window shows corresponding options, as shown in figure below. These are:

- The building’s name, which already has been entered before in “Insert a building”. This name can be altered in this field afterwards.
- Front page. This option confirms, which window will be displayed, when CUBEVISION 2 starts. In the pull-down menu, the entries will be shown in double figures. The rooms will be displayed after following scheme: > [level] > [room].

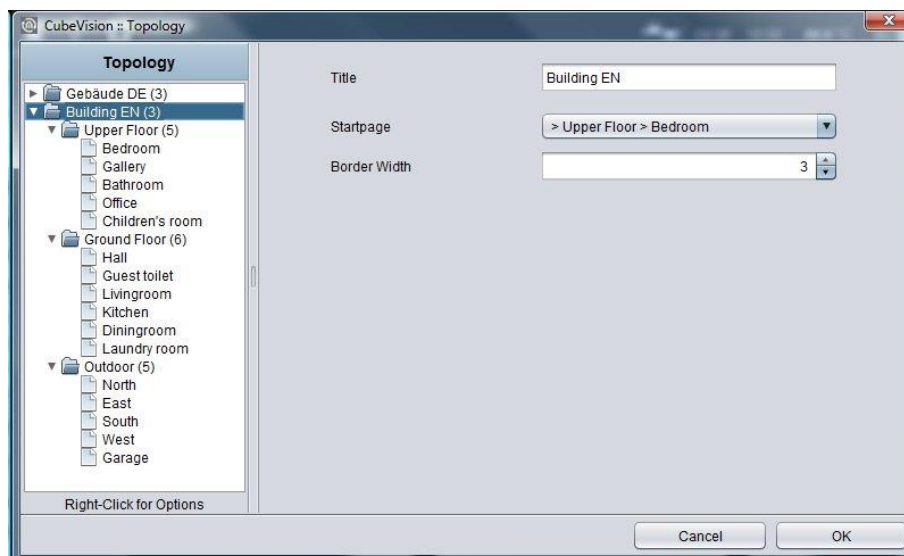


Figure 39: Configuration window for buildings

In case that the building will not be required anymore, it can be eliminated by the popup menu’s function „Delete building “. A right click has to be executed on the entry of the building, which should be erased.

## 4.3.2 LEVEL

For appending levels to buildings, you have to use also the pop-up menu with its function „Append levels“. The pop-up menu has to be opened over the building, to add a level to this building. Like the procedure in creating a new building, a window will open here, in which the name of the level has to be entered. If the level is appended, the right side of the configuration window shows the attendant options (figure below)

- *The level`s name.* The name of the level was entered already by the creating of the level. But it can be altered in this field afterwards. The Name of levels will be used in *Quick Navigation*. Every line of pictures in this view will be indicated with these names (see also previous figure).
- *Short Name (B / O / 1 / ...):* Enter a short name for the level description here. The short name will be displayed in the Quick Floor Navigation (see chapter “[Quick Floor Navigation](#)”).

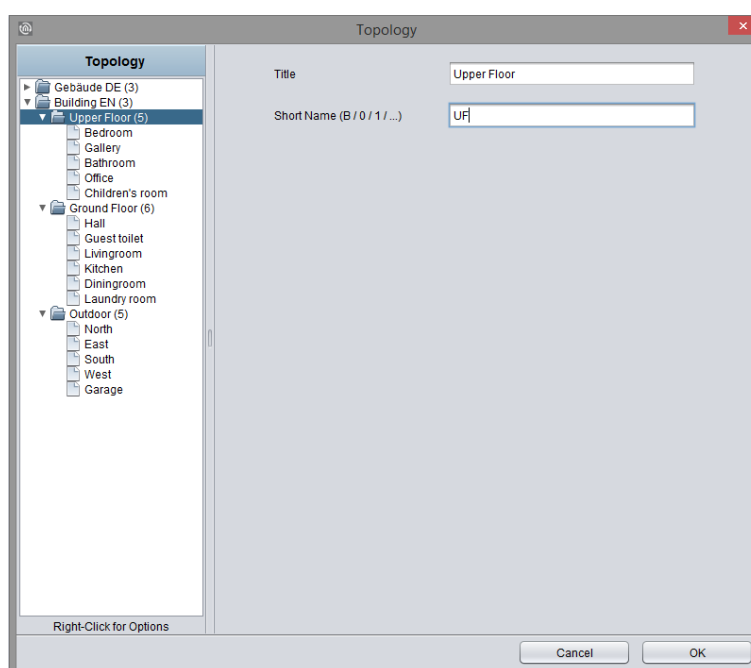


Figure 40: Configuration window for levels

If a level should be erased, this will happen by the pop-up menu`s function „Delete a level“. A right click has to be executed on the level`s entry, which should be deleted.



### 4.3.3 ROOM

By the same procedure as in buildings and levels, rooms will be added. An input window opens with the function “append a room”, in which the room`s name has to be filled in. The configuration window at the right side displays respective options. Possible options and configurations are the following (see figure below):

- The room`s name. The name of a room was entered by it creating already, but in this field, it can be changed afterwards.
- Background image. To every room a background image will be assigned. It fills out a complete face of the cube. (which illustrates a room) The image can be elected in the pull-down menu or by a selection dialogue. This image can also be used within the ‘Phone’-presentation if this is enabled in the starting credentials of the CUBEVISION 2.

**Please note: The recommended resolution for the background image of the room shall be the same as the resolution of the CUBEVISION 2 is. Like this the visualisation clients not need to render the visualisation when it is started.**

- *Room Icon:* Please chose an icon from the image folder of the EIB**PORT**. This icon will be shown in the ECP and in the room overview of the ‘Phone’ presentation.
- *Element configuration.* Below In the middle of the CUBEVISION 2 Editor the configuration window for the operating elements is displayed. For configuring the elements three different buttons are shown below.
  - Minimize all. Folding in all operating elements, which are located in the list.
  - Maximize all. Folding out all operating elements of the list.
  - Operating elements can be fold out or fold in, for getting a better overview or for controlling all group addresses. The elements could also be fold out or fold in separately.
  - Append. If an operating element will be appended, a dialogue with a list of 14 different operating elements opens and at the same time, a text field for the identifier, too. The configuration of operating elements is described detailed in chapter “[Detailed explanation of the operating elements](#)”.

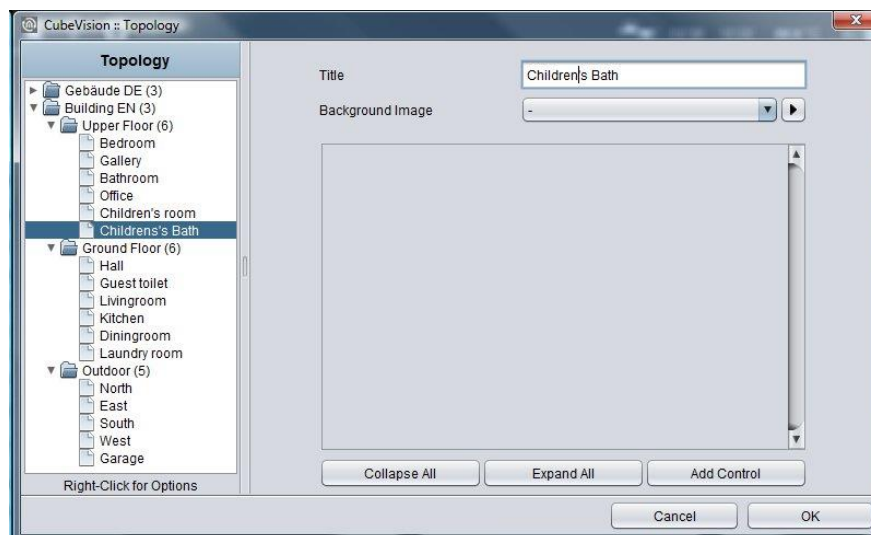


Figure 41: Configuration window for rooms

If a room should be erased, this will happen by the pop-up menu`s function „Delete a room“. The right click has to be executed on the room`s entry, which should be deleted

## ARRANGEMENT OF THE OPERATING ELEMENTS

If an operating element should be appended, several possibilities are still available. So, the operating elements can be relocated in list or be deleted. Also, it will be convenient for proofing the sequence of the elements, to blank out the configuration of operating elements. In this case, only the headline with name und control element will be shown.

Figure below exposes the operating elements of the child`s room.

Header operating element. All operating elements are folded in, so that you can only see the header of this element. On the left side, the name of operation element will be shown. On the right side, three buttons are located. Two of them will move this operating element up and down in the list. The third button will delete this element

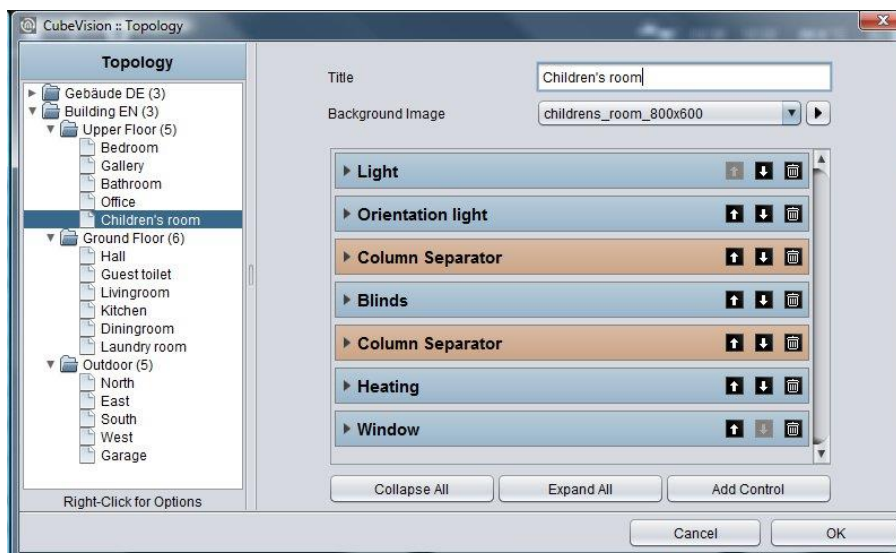


Figure 42: Operating elements



## 5 USER ADMINISTRATION FOR CUBEVISION

The user administration for the CUBEVISION 2 is managed in the visualization editor of the EIBPORT. Open the user management via the icon “Security Settings” in the visualization editor (see figure below).



Figure 43: User administration

Here you can make the settings for each user.

1. User with full access to the project

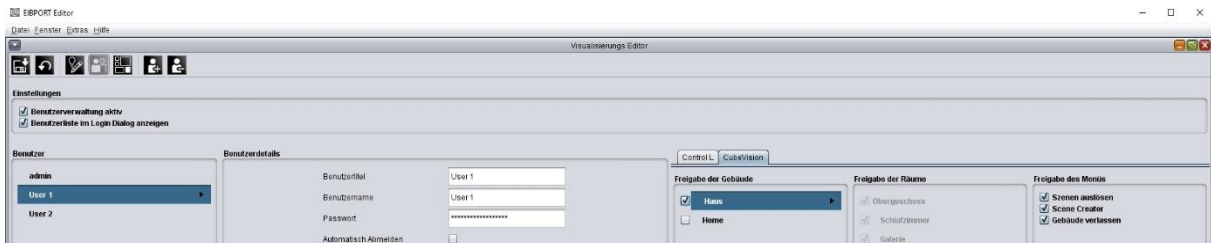


Figure 44: User administration

2. Users with limited access

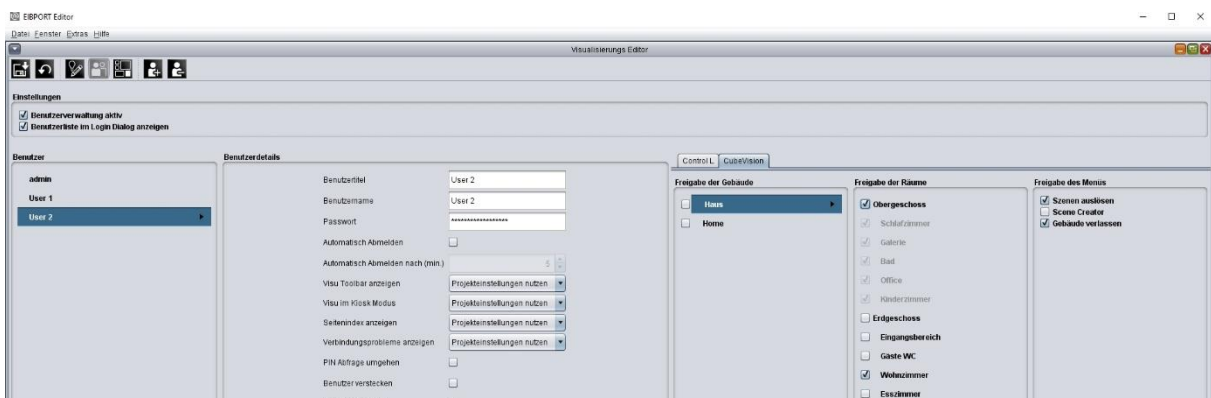


Figure 45: User administration

This user may only use the selected levels or rooms.

3. Release of the menu: Here are assigned the rights for leaving the project, the user may create scenes and functions with the Smart Function Creator and that the user is allowed to operate scenes.

*Trigger Scenes:* Enables / disables the manual triggering of scenes.

*Scene Creator:* Enables / disables the ability to create scenes and functions with the Smart Function Creator.

*Exit building:* Enables / disables the authority to leave the building (project).



## 6 DETAILED EXPLANATION OF THE OPERATING ELEMENTS

For CUBEVISION 2 (Visualisation-) element, 14 operating elements are available. The size of these elements is stated in height units, because elements will be placed in always equal broad columns. These columns are always 8 height units high. CUBEVISION 2 elements have a height between 1 and 8 height units. Beside this “column-view”, some elements own a second “extended view” (Extended Element View, EEV). In this view, more functions and information will be displayed. “Expanded View” occupies always a complete page. For the “Phone” presentation the related EEV is adapted. „Column-view“ will be shown in ICP and ECP and in EEV. These shortcuts have been explained in chapter “[Navigation](#)”.

### 6.1 STANDARD OPTIONS FOR ALL ELEMENTS

Following three options exist equally in all 13 elements und will be treated at this place. Here the options:

- **Labelling.** This name will be displayed in the title bar of the element (CUBEVISION 2).
- **“Central View” Category:** Here you can determine to which central view category the respective element is assigned. The “Central View” menu bar is displayed top of the CUBEVISION 2 (within the “Tablet” presentation, see chapter “[Central View](#)”) and offers the central access onto a group of elements. By this for instance all light switches or all heating controller can be gathered together behind a central menu item. The categories can be configured with a separate menu, accessible by the arrow buttons right beside the selection menu.
- **Favourite setting. By this menu item it is defined, whether this element will be quoted in ICP as a favourite or if it will be displayed at all.**
  - *Automatically.*  
Adding this element in favourite setting. This means, that CUBEVISION 2 defines itself the position of one element in ICP (favourite ranking) and if necessary, modifies its position. The more often the element will be used, the higher it will be placed in list.
  - *Never showing as a favourite.*  
By this selection element will not be displayed in ICP, but also only in ECP.
  - *Always showing as a favourite.*  
This choice causes the deactivation of favourite ranking for this element and that the position could be defined manually. The element always will be displayed in ICP.
- **Favourite-Rank:** This option only will be enabled, if favourite setting „always showing as a favourite“ is selected. The option offers the choice to select which strong position the element will take place in ICP. A position value from 1 to 8 can be assigned.
- **PIN Code:** (at the moment only available for CUBEVISION 2 in EIBPORT) The code which is entered here, is used as the PIN protections for the related operating element. Only available for 1bit and 1Byte switchable elements.
- **Lock element again:** Determines the time in minutes after which the element is again protected with the PIN code again.



- **Is Control:** This parameter defines, whether the element can be operated or if it should only serve as an indicating element. In this case, this element sends out no telegram, but it will receive telegrams only.

Please note: Favourite list is 8 height units high at a max. Depending on the space, which every single element needs, not always 8 elements will fit in ICP (according to the element, 1 to 8 height units will be necessary)

## 6.2 LIST OF AVAILABLE ELEMENTS

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Following the configuration and the function of all 13 elements are explained. Here the list:

1. Column Separator
2. Switch/Dimmer
3. Push Button
4. Temperature/RTR
5. Jalousie
6. Window Contact
7. RGB Selector
8. Camera
9. Media Control
10. Weather (local KNX)
11. Weather (Internet)
12. Values / Diagrams
13. Text Display
14. Button Group / Scenes
15. Tuneable White

## 6.2.1 COLUMN SEPARATOR

CUBEVISION 2 elements automatically will be inserted in ECP by the editor. So above all, the user only has a bearing on the sequence of elements.

By the help of column break, the user has the possibility to interfere additionally in the distribution of elements in the single column in ECP.

This element possesses no configuration and cannot be seen in visualization.

In following example (figure on right), a column break element was set between the elements „wall cabinet“ and „AV consumer“. Thus the elements „AV consumer“, „socket“ and „charge station“ will be moved in the second place. (Although they would fit the first column)

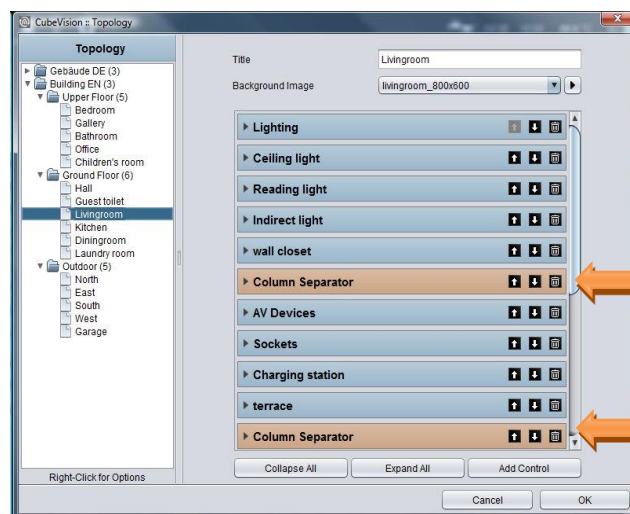


Figure 46: Column element of CUBEVISION configuration window

It also will be possible to insert several columns breaks consecutively for putting elements to the next ECP page.

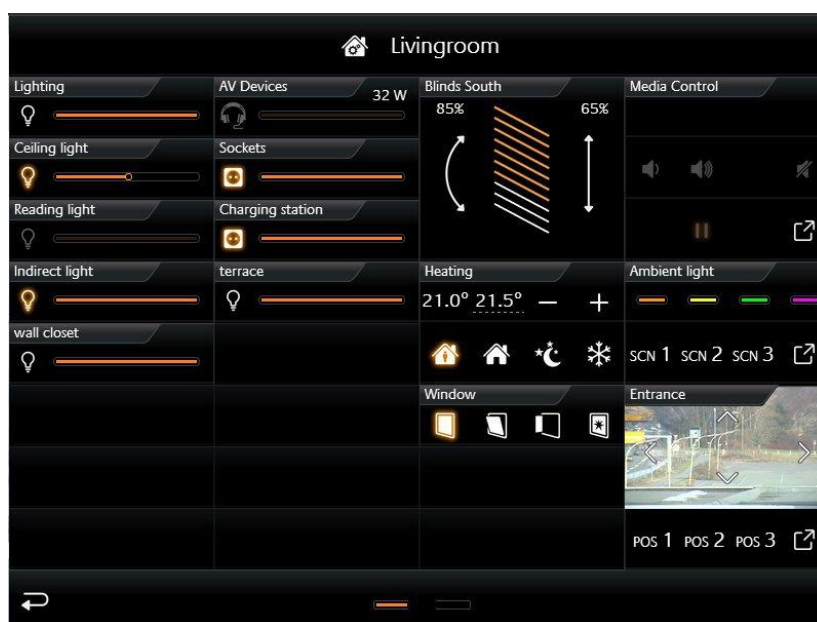


Figure 47: Extended Control Panel [ECP]





## 6.2.2 SWITCH/DIMMER

- Option: Operability? Yes
- Extended View: No
- Height units: 1

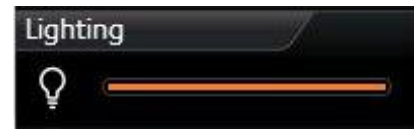


Figure 48: Element Switch/Dimmer

The element switch/dimmer disposes of a switch and a dimming function (see figure on right). The dimming function offers the feature sending telegrams to the bus already by „sliding“, to watch the change of lightness for example. For the element, 34 different symbols are available for selection. For giving a clear hint to the function, a combination with the symbol and a short identifier exists. Furthermore, element offers a value object (top right in element), to display additional information. This is useful for example to keep one eye always on the actual dimming value, operating hours or power consumption of this participant.

**Following configuration fields this element possesses (Identifier see figure below):**

1. **Icons.** These 34 symbols are located on the left side and can display one active or inactive state (see figure, left).
2. **Address switching (EIS1).** Therewith the group address is meant, on which the EIS1 telegram will be sent. By activating, the digit „1“ and by breaking, the digit „0“ will be transmitted.
3. **Feedback switching (EIS1).** To the function „switching“, a separate feedback address can be applied. Then the symbol and the bar are showing the registered state.
4. **Address Dimming (EIS6).** The group address of the function „dimming“ supports absolute dimming (data type EIS6, value range 0-255). To modify the dimming value, bar (slider) will be used, thereto you can slide on the bar with mouse or finger, from left to right. The left side of the bar represents the dimming value „0“ and the right side the value „255“. The orange circle indicates a) that it is about a dimmer and b) the position of the slider (actual state of dimming).
5. **Feedback Dimming (EIS6).** This is the separate feedback object for the dimming function. Received state of dimming will be displayed proportionally. In case a group address was specified, value „Address dimming“ has no influence to the bar graph (see also TIPPS, item 4).
6. **Dimming Interval (T/s).** Enables periodic sending with up to 4 telegrams per second. This means, while the dimming state is altering, telegrams will be sent just in time. This function can be disabled to reduce the bus load. In this case, dimming level will be sent only then, when the slide will be released.
7. **Value display data type.** For value display, data type of the group address will be selected at this point. For selection are available EIS5, EIS6 and EIS9.
8. **Value display address.** The value of a group address is shown in the value display (see for example figure top right). This example displays the actual dimming value as a value object).
9. **Value display format.** Here the display format will be defined, which includes the unit, the pre- or post-decimal place of the value object (see TIPPS item 6).

### TIPPS:

- The element of a dimmer or a switch can be distinguished by an orange circle in the bar. If a circle is seen there, it is about a dimming element and if the circle is absent in the bar, it is about a pure switch.
- In a switching element, the complete area of the element reacts as a switching button.
- A combined switching and dimming element will be switched by a short typing on the complete surface. Dimming takes place by moving the circle of the bar, starting with the actual position. A longer hitting to an arbitrary position in the bar causes „jumping“ at this dimming value. As long as the bar doesn't be released, dimming value can be changed.
- If to the feedback objects no group addresses were assigned, so the values of switching and dimming group addresses will be displayed in a feedback state.
- While dimming, the value object will be blinded out and the actual dimming value appears. After dimming, dimming value will be blinded out and the value object comes out again.
- Formatting of the value display. The digit „0“ implies a fixed digit and will be displayed always. „#“ is one optional digit (as it will usually use as a post-decimal digit) and it will be displayed

only if it is necessary. The “.” stands for a decimal separator. After that formatting, you still can append the unit.

For example: 00.0 watt will always be shown with two digits before the decimal separator und one digit after it. The letters “watt” will appear after the displayed value and will serve as the value`s unit.

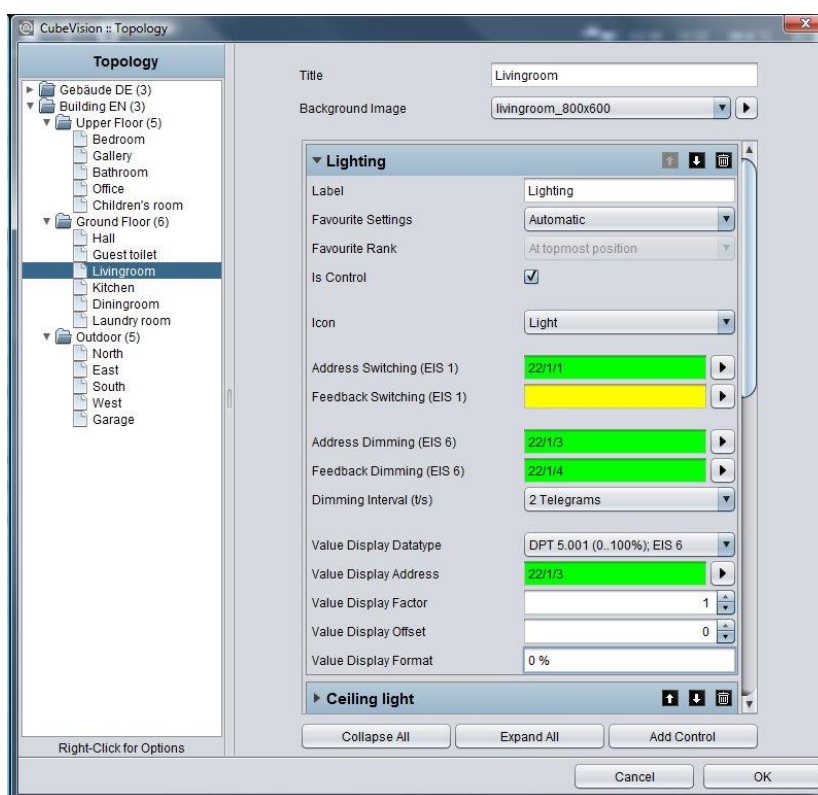


Figure 49: configuration window of switching/dimming



## 6.2.3 PUSHBUTTON

- Option: Operability? Yes
- Extended View: No
- Height digits: 1



Figure 50: Element pushbutton

This element is a pure switching element, without a dimming function. But on the other hand, you can select the function of the pushbutton. At choice there are switch, pushbutton and a value sending function. Telegram values and data types are selectable freely. The options feedback and value object are available for the states “ON”, “OFF” and “button free selectable”. The options feedback and value object are similarly available, as in the switching and dimming element. Also, for these elements different symbols are selectable, too (here they are 34)

This element has got following configuration fields (identifier see figure below).

1. **Icons.** These 34 symbols are located on the left side and can display one active or inactive state (see figure above, left).
2. **Data type.** For switching function, data type of the value, which has to be sent, will be selected at this place. At choice there are EIS1 (0,1) and EIS14 (0-255).
3. **Address switching (EIS1 or EIS14).** Group address, on which the switching telegram will be sent.
4. **Feedback switching (EIS1 or EIS14).** A separate feedback, which displays the actual state of the element. The symbol and the bar show the confirmed state.
5. **Function.** Hereby it is determined what will happen, if the pushbutton is actuated. Here the options:
  - a. **Changing (Toggeln).** Every push of a button changes the state between ON and OFF and will hold it. Only a telegram will be sent. Exception, values can be assigned freely for every state (also not only “0” or “1” are possible).
  - b. **Pushbutton.** Actuating this button, two telegrams will be sent. The first telegram by pushing the button (for example ON) and the second by releasing the button (for example OFF). Here also values for ON and OFF can be assigned and inverted freely.
  - c. **Fixe Value “ON” / “OFF”:** A freely selectable value can be chosen, which has to be sent by actuating the pushbutton.
6. **Value „ON“/mouse-pushing and value „OFF“/mouse-releasing.** These two fields define values, which will be sent by ON or OFF. They are freely selectable.
7. **Value display of data type.** For the value display, data type of the value will be displayed and selected here. For selection are available EIS5, EIS6 and EIS9.
8. **Value display of address.** Value of this group address is shown in the value display (see for example figure, on the right. This element displays the actual power). Data type of this group address will be selected in field *value display data type*.
9. **Value display of format.** Defines the display format. In other words, the unit, the pre- and the post- decimal places can be specified.  
 Formatting of value display. The digit “o” implies a fixed digit and will be displayed always. “#” is one optional digit (as it will usually use as a post-decimal digit) and it will be displayed only if it is necessary. The “.” stands for a decimal separator. After that formatting, you still can append the unit. For example: “00.0 watt” will always be shown with two digits before the decimal separator und one digit after it. The letters “watt” will appear after the displayed value and will serve as the value`s unit.

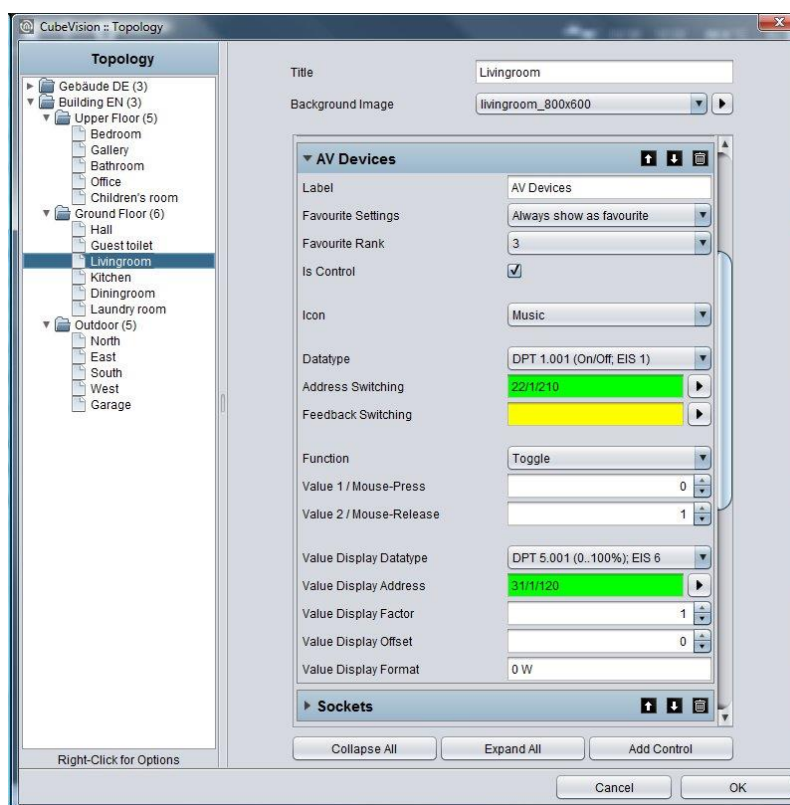


Figure 51: Configuration window of pushbutton



## 6.2.4 TEMPERATURE/RTR

- Option: Operability? Yes
- Extended view: No
- Height digits: 1 or 2

Temperature/RTR element undertakes the control of the heating in CUBEVISION 2 element. So, this element offers the opportunity to display the actual value of temperature, the operating mode and to set the nominal temperature value or the mode of operation. The two temperature values, which will be shown in the first line (figures on right side), display on the left side the actual temperature and on the right side a nominal value.

Nominal value can be adjusted by a PLUS and MINUS symbol. If this element will be configured as a substation, the base nominal value will be modified by PLUS and MINUS symbols. In addition, the actual temperature value indicates also, if just heating or cooling is working.

Both states differ from each other by colour orange and blue. Blue means cooling and orange signifies heating. If temperature will be displayed in white, neither of both modes is enabled or the display was not configured before.

Another feature is the control of operation modes. These are *comfort*, *standby*, *night reduction* and *frost protection*. Switching can take place optionally by three group addresses or by one group address with four different values. For this element three different views are for selection:

- Temperature und RTR display (Figure 52)
- Temperature Display (Figure 53) and
- RTR Display (Figure 54)

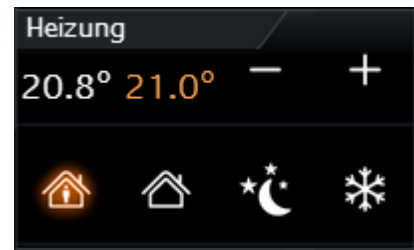


Figure 52: Element RTR/Temperature

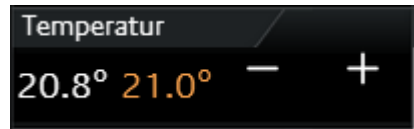


Figure 53: Element Temperature



Figure 54: Element RTR

**This element has got following configuration fields (identifier see figure below).**

1. **Type.** This choice defines the control element's view. For selection are *temperature and RTR*, *only temperature* and *only RTR* (only the symbols of operation modes).
2. **Address of actual temperature (EIS5).** Group address of a temperature sensor for actual temperature.
3. **Address nominal temperature (EIS5).** Group address for the actual temperature. If the control element isn't configured as a substation, adjusted nominal temperature will be displayed on this group address. In this case, the modified nominal temperature (with PLUS and MINUS) will also be sent on this address. But if the control element is configured as a substation, only the NOMINAL temperature will be shown.

**Note: Please do not connect the setpoint adjustment output of an RTR as listening group address.**

4. **Control setpoint by.** The address of the RTR via the setpoint temperature is to be set. Your selection in which way the setpoint temperature can be controlled:
  - Setpoint current operation mode
  - Basic setpoint presetting
  - Basic setpoint shift
5. **Basic Setpoint presetting.** The input field is active if selected in previous menu item and it is address for setting the basic setpoint.
6. **Basic Setpoint Shift.** The input field is active if selected in previous menu item and this is input address for the basic setpoint shift temperature. The datatype is DPT 6.010 (EIS14).
7. **Data Type External Unit.** Usually the external unit changes the „Basic Setpoint Shift“ value with an DPT 6.010 value (-128, +127) multiplied with a configured step width. If the setpoint is changed in a different way (e.g. directly using the basic setpoint temperature), the data type DPT 9.001 (EIS5) can be selected here.



8. **Min and Max basic set point adjustment (-/+).** This value defines the maximal negative resp. positive basis set point adjustment. In case you fill in here a value of +/-6 for example and the configured step range is 0.5°C, so a possible set point adjustment from up to +/-3°C is the result of.
9. **Address Heating Display (EIS14u).** In order that the actual temperature is able to display the state of heating (value is coloured in orange), the group address of RTR will be filled in here, on which RTR will send, when RTR switches to the state of heating.
10. **Value heating active (0-255).** At this place, the value will be defined, which will be sent by the group address heating display, if this state was activated. Possible values are 0-255.
11. **Address Cooling Display (EIS14u).** In order that the actual temperature is able to display the state of cooling (value is coloured in blue), the group address of RTR will be filled in here, on which RTR will send, if RTR switches to this state of cooling.
12. **Value cooling active (0-255).** At this place, the value will be defined, which will be sent by the group address cooling display, if this state was activated. Possible values are 0-255.
13. **Data type operation mode (EIS1 und EIS14u).** Das RTR/Temperature control element offers the possibility to control operation mode in two different ways:
  - a. *Over EIS1.* In this setting, the configuration window displays three (EIS1) group addresses, each for **comfort/standby, night reduction and frost protection**. If also a "1" will be received on the group address Comfort/standby, the control element will highlight the symbol *comfort*, in case of a "0", the symbol *standby* will show as active. Operation modes night reduction and frost protection will be displayed each other as active by receiving a "1". Only one symbol can be highlighted or displayed as active.
  - b. *Over EIS14u.* At this choice, the configuration window displays a field for the group address **address mode input** and in addition four lines, in which the values of the operation modes *comfort*, *standby*, *night reduction* and *frost protection* will be defined. The value range of these fields extends from 0 to 255. In figure, switching of operation mode by EIS14u is configured. If the user switches to the mode comfort for example, the control element will send the value "1" to the group address 22/3/16. The other way round, if the control element receives value "2" on the group address, the RTR display will switch to standby.

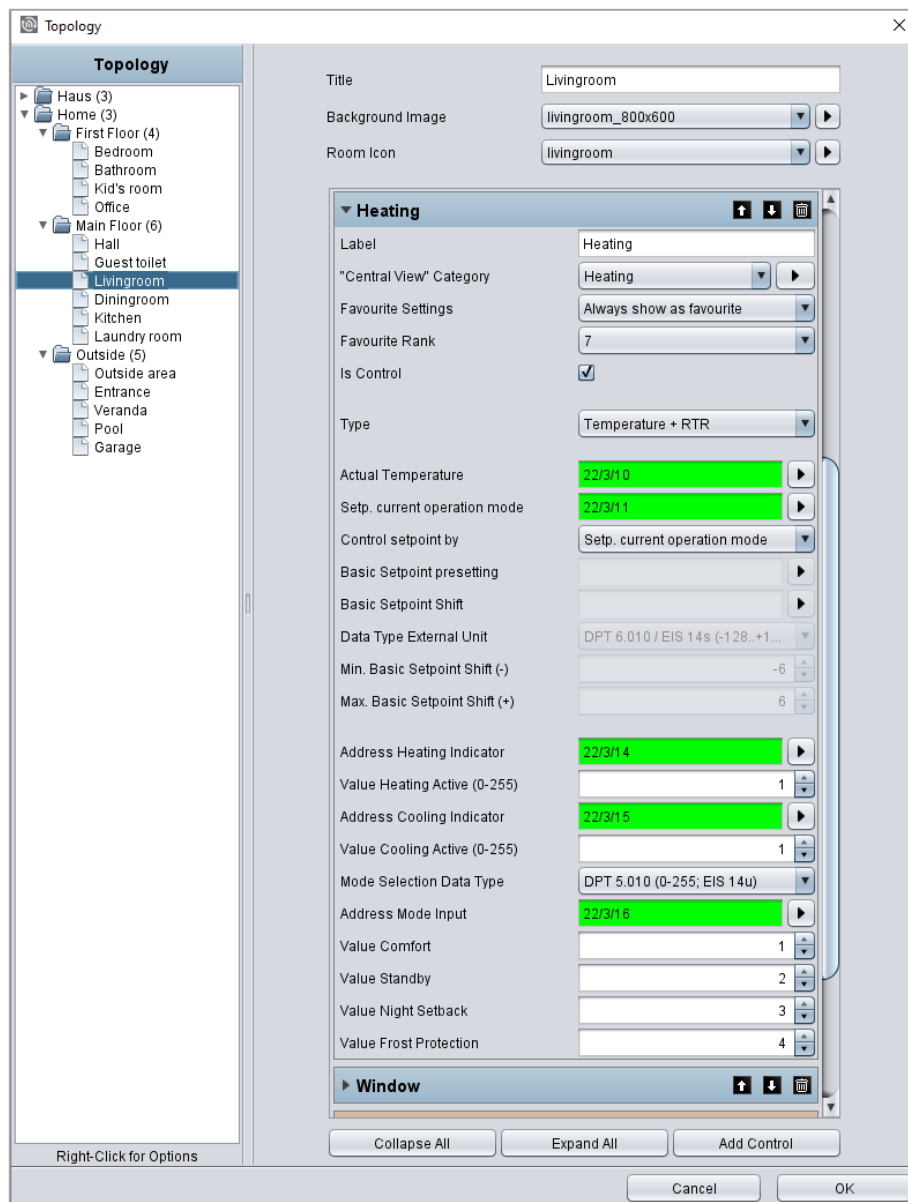


Figure 55: Configuration window of RTR/temperature



## 6.2.5 JALOUSIE

- Option: Operability? Yes
- Extended view: NO
- Height units: 3

Shadowing will be controlled by the element jalousie. The element shows graphically the vertical position und the angel of the jalousie.

In addition to the graphical display, positions will be shown as values. These values are displayed in percentage terms for position (right value) and angel (left value) of the jalousie. In figures on right side, two types of jalousie element are illustrated. The control of these elements takes place in two ways:

- Standard (for push-button; Figure 57)
- Touch & Slide (for sliding; Figure 56)

As its name implies, you can use in type „standard“ a button and in type „touch & slide“ a slider. Figure shows how to control the element by “touch & slide” and figure displays the controlling of “standard”

In mode „touch & slide“, you will simply position your finger on the left side to the angel control or on the right side to the position of jalousie and then you move the finger in the desired direction. While moving the finger, you get an optical feedback over the angel or the position of the jalousie. If the desired position will be reached, jalousie will approach to it, just as you will release the element.

Three different modes of shadowing can be controlled:

- Jalousie. Classical jalousie with lamellae, which can be inclined in both directions.
- Roller blind. It can only be moved high and low.
- External blind (venetian blind). Similar to the classical jalousie, but with the different, that the lamellae can be inclined in only in one direction out of its horizontal position.

Depending on selected types of jalousie, element displays only these controls, which are required actually. So it will be displayed no button or no arrow for adjustment of an angel in the element type roller blind. Also this element possesses feedback objects. In this element they are position and angel (which can be enabled or disabled according to the type of shadowing). Also one input for wind alarm is available of course.

**This element has got following configuration fields (identifier see figure below):**

1. **Display.** This choice defines the type of control unit for the jalousie element. You can choose between a typical control and an intuitive gesture control (touch and slide). While a typical control displays buttons, the touch & slide control depicts two arrows. The different to the typical control is the fact, that the desired position can be defined as well as by tapping directly or by sliding with the finger from an arbitrary position to the desired position. Furthermore, positive is the effect, that the position, which will be approached after releasing, at the same time will be displayed in the element, also a kind of preview.
2. **Type.** This element optionally can be predefined to the three different types of jalousie, which were explained detailed in previous chapter.
3. **Angel area.** This feature was implemented to fit the angel area according to the type of jalousie. This is necessary, so that the angel can be displayed correctly in visualization. Depending on the manufacturer, the angel will be specified in 0-100% from left-hand or right-hand hinge of lamellae. Also the alternative (-100% to +100%) exists, in which the value 0% describes the horizontal lamellae position.
4. **Direction inverting.** For the reason, that the direction of the jalousie will be interpreted differently again and again, movement direction of the jalousie can be defined by this option. With this option can be selected, whether jalousie will be run up by “1” or “0”.



Figure 56: Element jalousie touch & slide



Figure 57: Element jalousie standard





5. **Address move (EIS7).** This group address controls the up and down of the jalousie.
6. **Address stop/step (EIS7).** This group address sends the order for stop or step.
7. **Address position (EIS6).** One desired position of the jalousie can also be approached directly by an entered value (0-255). If the user touches the middle of the right arrow (touch & slide type) for example, to this group address the value 127 will be sent, and thereby the jalousie automatically moves to this value (position). If in field *feedback position* no group address was entered, jalousie element uses this value for displaying the position of the element.
8. **Address feedback position (EIS6).** If in this field a group address is filled in, so the element doesn't show the position, which was adjusted by address position, but it will display the actual position, which this group address will receive.
9. **Address feedback angel (EIS6).** If in this field a group address is entered, the element doesn't show the angel, which was sent over *address angel*, but the value of the angel, which this group address will receive.
10. **Address wind alarm (EIS1).** In jalousie element an optical message for wind alarm will be displayed, if this group address will receive value „1“. So the jalousie will block and the controlling of the jalousie will not be possible anymore, as far as value "1" is applied to this group address.

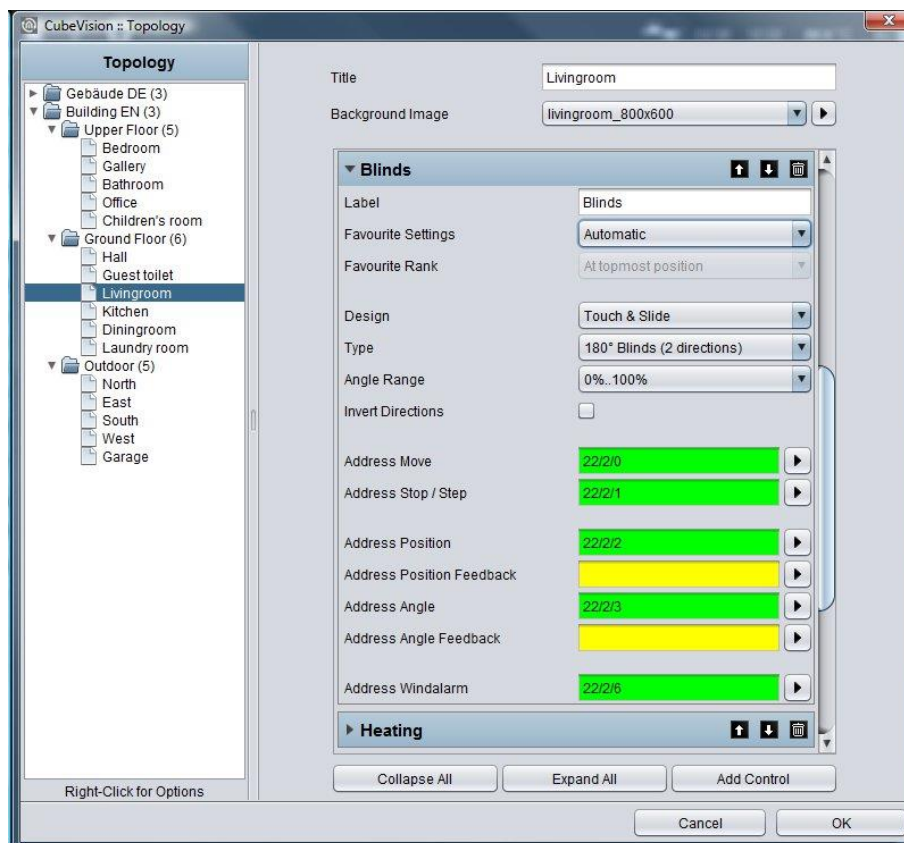


Figure 58: Configuration window of jalousie

## 6.2.6 WINDOW CONTACT

- Option: Operability No
- Extended view: No
- Height units: 1



Figure 59: Element "window contact"

To illustrate the state of windows, element window contact is used. It shows following positions resp. states:

- Closed
- Open
- Tilted
- Glass breakage

Every position und the glass breakage has got its own symbol, which can be displayed in the element. If one position is activated, corresponding symbol will be highlighted in orange. In case no group address was applied for a position or a state, corresponding symbol will not be shown.

The position of the window can be displayed by two different data types. There are data of type EIS14 (0-255) and EIS1 (0 or 1). The different between both data types is the number of group addresses. This means, that in data type EIS 1 the position by the group address and in data type EIS14 the position by values have to be defined. Furthermore, this element can announce glass breakage. Independent from the data type, this element always has its own group address.

**This element has got following configuration fields (identifier see figure below):**

1. **Data type input.** You can select, which position of the window will be evaluated. The functionality of both types was explained in previous chapter.
2. **Data type EIS14.**
  - a. **Address position.** By this one group address, the window position will be received.
  - b. **Values closed/tilted/open.** These three values define, when the positions closed, tilted, and open are activated in visualization. These values can be assigned freely.
3. **Data typ1 EIS1.**
  - a. **Address tilted.** By this group address the state of the position "tilted" / "closed" will be received. In case of value „1“, the symbol of the titled and closed windows with Value "0" will be highlighted.
  - b. **„Titled“ inverted.** But if the window contact announces position „titled“ with the value „0“, this option can invert the evaluation.
  - c. **Address open.** On this group address, the received value „1“ for the position „open“ will be shown in visualization.
  - d. **„Open“ inverted.** Just as in field *titled inverted*, evaluation can be inverted here also.

By the way: This type has got no group address for the window position "closed". This position will be shown, if the group addresses (open, titled) have got the value "0".
4. **Address glass breakage.** Address of glass breakage. If a glass breakage sensor exists, so an optical warning of glass breakage can be displayed by this address. Value „1“ signifies glass breakage and '0' stands for no glass damage.
5. **Glass breakage inverting.** Also here, evaluation can be inverted, so that value „0“ will be interpreted as a glass breakage.

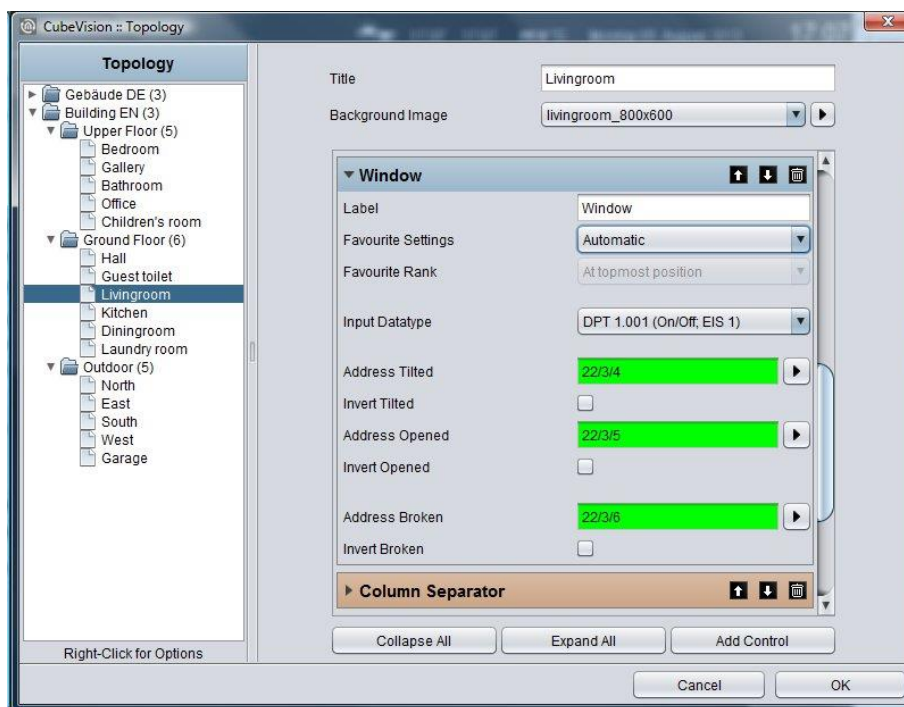


Figure 60: Configuration of window contact

## 6.2.7 RGB CONTROL

- Option: Operability? No
- Extended View: Yes
- Height units: 2

Of course, a control of RGB lighting must not be absent in CUBEVISION 2 element. The element RGB control undertakes this task. The possibilities are given to call up light scenes and predefined colours and to blend colours over visualization freely.

This element has got to views: A compact one with two height units for the *ICP*, resp. for the *ECP* and another one in *EEV*. The compact view shows 4 freely selectable colours at a max in the first line and maximal 3 buttons for scenes in the second line. The second view shows the RGB element in *EEV* with more possibilities of operation. Beside the choice of colours and light scenes, *EEV* will use also colour channels (up to four RGBW) and a colour circle. Figure below displays the RGB element in *EEV* view. In the right column, the slider is situated, by which the single DMX channel can be controlled.

By the way, if no group address is entered for the channel “white”, this channel will not be displayed in visualization. In the center of this view, the colour circle is located, by which colours are chosen by fingertip. Just below, 2 lines with each 4 buttons of predefined colours and light scenes are situated. In the line of the light scenes, an additional reserved button is located to stop the running light scene.

To send a colour value to an RGB lamp, different methods exist, depending on the lamp's type. They differ either in having one group address for all colour values or in offering a separate group address for every colour value. Data types:

- 4x1byte values (one object for each R, G, B und W; EIS6; 0-255; for the most applications)
- 1x 2Byte & 2x 1Byte value (Value for H, S & B) one trigger channel (EIS 1) additionally
- 1x 4byte value (one object for each R, G, B und W; similar to DTP232.600 plus an extra channel for white)
- 1x 3byte value (one object for R, G und B; DPT 232.600)

In order that, the possibility exists finding out the correct control mode for nearly every RGB lamp type. Configuration of light scenes consists simply in allocation of the group addresses. If the group address for a light scene is absent, so this address will not be displayed in Cube. If one of the light scenes will be released, **EIBPORT** transmits to this group address “1”. By a click once more to an active/running light scene, **EIBPORT** sends the value “0” to this group address. In RGB control element, there is a place for 4 light scenes at a max. The lettering of the light scenes are “Scene 1” up to “scene 4” and can't be modified.

Just right to the light scenes, the button “scene blocking” is located. This button is a light scene as well and will be reserved in case, a scene will not be desired at all and a simple stop of the light scene will not be enough. Therefore, a separate light scene can be arranged, which dims down the RGB lamps as long as they are turned off or they have changed to a selected colour.

In addition to the four buttons for the light scenes, another four buttons of the favoured colours exist. For configuration of the colours, it is only necessary to select the desired colour by the colour selection dialogue.

Also, there is no handling with colour values needful. CUBEVISION 2 editor uses this colour out of the colour selection dialogue of visualization. The colour values come from the colour selection dialogue and the group addresses of colour values from the RGB control element.



Figure 61: Element RGB control

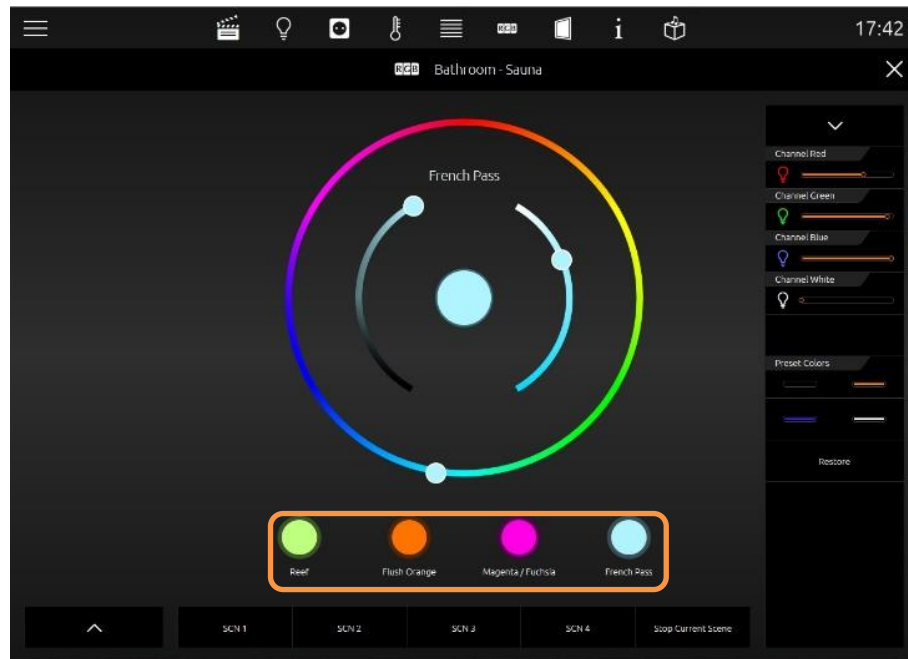


Figure 62: Extended element view of RGB control

This element has got following configuration fields (identifier see figure below):

1. **Output type.** Types differ from, if all colour values (red, green, blue and white) will be sent to a single group address or if every colour value should be sent with a separate group address. Thereby it is about a 1 byte data type with a value range of 0-255 resp. 0-100%. The chapter before explains these data types.
  - a. Separate HSB outputs: Hue = 2 Byte (EIS 10), Saturation & Brightness = 1 Byte, HSB Values Sent = 1 bit.
2. **Address channel red, green, blue and white.** At data type 4x1byte, configuration mask shows four fields for group addresses. These fields are labelled with the respective channel colour. In case another data type will be used, configuration mask displays accordingly only one field for a group address. These group addresses are used also in the colour circle (in *EEV*) and for the favourite colours.
3. **Scene starting #1 ... #4.** Light scenes will be started by this field with value "1" and will be blocked with value „0“.
4. **Scene blocking.** Also, a scene button that is reserved for a light scene, which will be activated if a running scene will not be desired anymore or a lighting has to be shut off. This button works exactly as the other scene buttons, but it is only labelled with "scene blocking" in contrast to the others.
5. **Favourite colour #1 ... #4.** Opens a colour selection, in which desired colour can be chosen. CUBEVISION 2 editor cares for colour value, group address und colour fields.
6. In addition to the favourites colours that can be set in the CUBEVISION 2 Editor and are binding for all clients, you can set additional favourites colours for each client in the orange highlighted area.

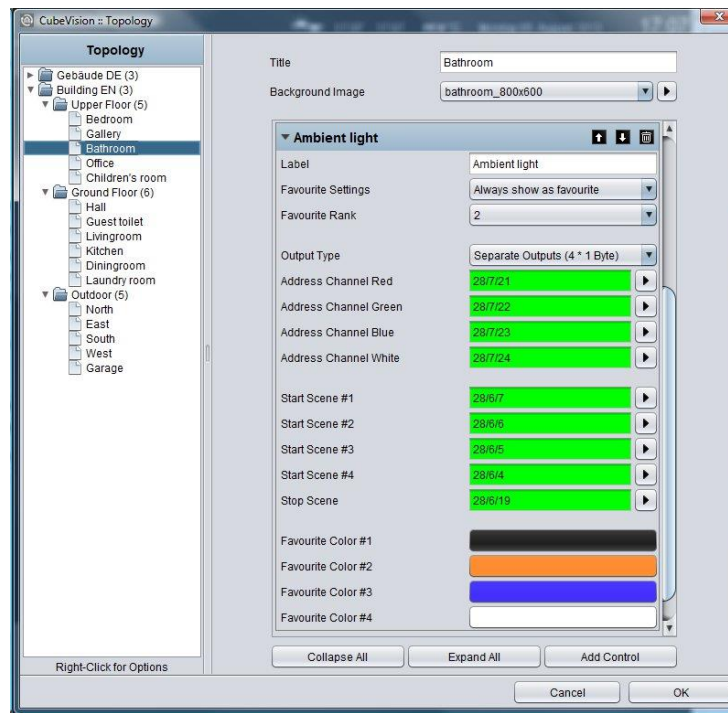


Figure 63: Configuration window of RGB control

## RGB CONTROL IN THE PHONE PRESENTATION

The extended element view ([EEV]) of the RGB control has a different structure in the phone presentation of the CUBEVISION 2 due to the optimisation on smaller displays.

### EEV view 1

If the control element is opened in the extended element view ([EEV]), only the colour circle and the scene control are displayed at first.



Figure 64: RGB element phone presentation - EEV view 1



### EEV view 2

In order to display the individual channel control and the default colour settings instead of the colour circle, it is possible to switch between the different views using the "View" symbol.

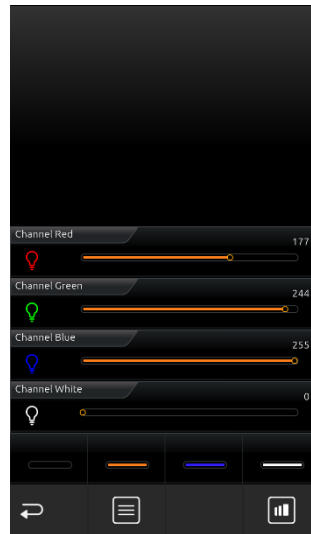


Figure 65: RGB element phone presentation - EEV view 2

### List view

Touching the "List" symbol displays a list with all RGB controls created in the room. In this way, further control element can be accessed without having to navigate through the rooms in a time-consuming manner.

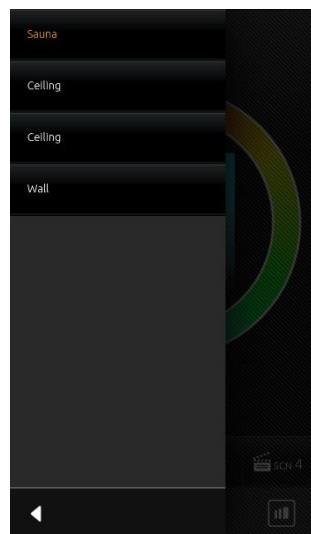


Figure 66: RGB element phone presentation - further elements



## 6.2.8 CAMERA

- Option: Operability? No
- Extended view: Yes
- Height units: 3

The camera element also has got two kind of views. A small camera view (preview), with a small choice of functions for ICP and ECP (see figure). EEV displays the second view, in which additional options and functions are situated, beside a larger display of camera view. To the functions of the smaller camera view belong Pan, tilt control and three fixed positions, which can be activated. The movements can be controlled directly by the arrow symbols in the camera picture itself. Just below the camera picture, three position buttons are situated, to call up confirmed positions. In the view of EEV however, there is space for a fourth button, for a zoom function and for the possibility, to switch between the formats motion JPEG and static JPEG. (see figure below). The configuration will be very simple. Start will be the "base URL", which typically consists of the IP-camera's address and if necessary, of the http-port. After that, paths to the JPEG camera pictures (motion and static), positions and PTZ orders will be filled in. Here it is about a so called http-request. These will be composed on demand out of the basis URL and the corresponding path.

*Example: In case arrow symbol "left" will be released in visualization, visualization assembles basis URL and path of action "left" to a http-request and transmits it.*

A configuration of http-request control is optional. If paths of functions will be left off, the element also will not display these in visualization. As a feature, camera element offers the possibility to display the three different display formats 4:3, 16:9 and 16:10.



Figure 67: Camera element

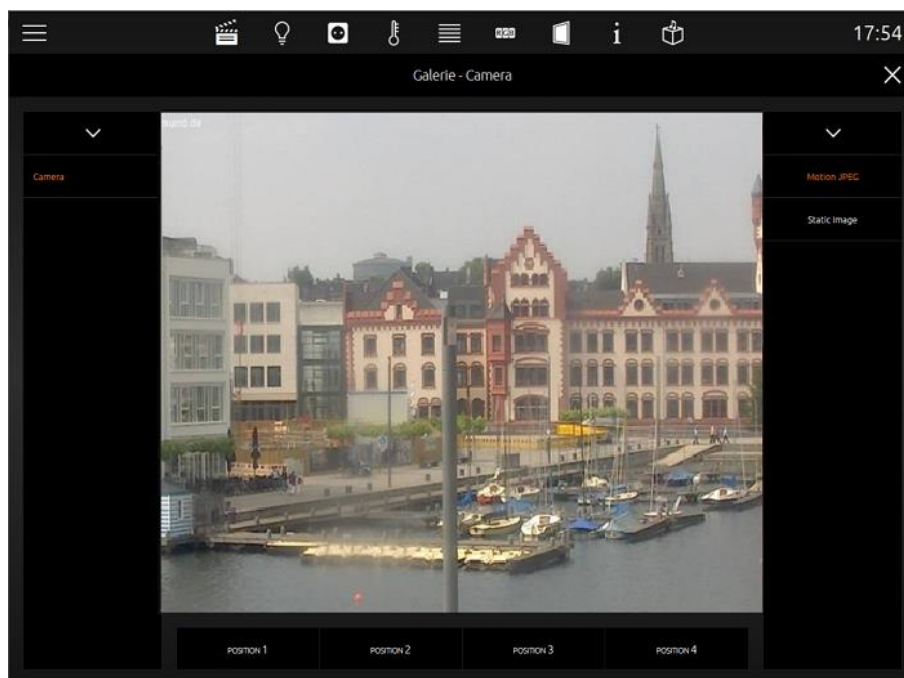


Figure 68: Extended element view of camera element





This element has got following configuration fields (identifier see Figure 69):

1. **Base URL:** The URL you are using here is used as the basis for the path in the following arrays. In this process the Base URL and the path information will be combined by the camera element in order to retrieve the camera image. If the combination of both do not result in a valid URL, the image cannot be called.

#### Special characteristic when accessing over the internet

In order to forward the camera image to an external visualisation client you have to enter a port forwarding rule for the camera. The camera or the EIBPORT thereby have to use a different HTTP Port, because from an outside perspective not both devices can use the same http port.

While the path of the camera image is simply handed over to the visualisation client, the http-requests commands for controlling distinctive camera functions are executed by the EIBPORT itself. If camera control commands shall be used, please only enter "http://" into the "Base URL"-array. The path extension for the camera image then has to contain the external address of the installation, whereas the path extensions for the control commands have to contain the internal IP-address of the camera.

2. **Username / Password:** Please enter the authentication data of the camera here. The camera element is using "http basic auth".

#### Special characteristic of the authentication

The success if the authentication method is dependent on the browser resp. on how the CUBEVISION 2 is invoked (in the browser, in the CUBEVISION 2 APP or in CONTROL L). If you ascertain problems with displaying the camera image, the authentication data can be entered alternatively into the URL, for instance:

"http://[username]:[password]@[camera-IP]/[additional path]"

Enter the path either into the Base URL or the path extensions (see above).

3. **Aspect ratio of picture.** In order that, the aspect ratio of the picture can be adapted to the camera. Formats 4:3, 16:9 and 16:10 can be selected
4. **Path Motion JPEG.** In this field a direct path to stream will be filled in. This pattern of display is very fluent in a simultaneous quality, but it also needs more resources.
5. **Path JPEG Image.** Nearly all IP-cameras possess a path to a static picture. It is about the picture, which the camera records in the moment of calling. In case this path will be used for visualization, it attempts to call up the picture several times, so that a motion picture will be created.
6. **Path Zoom in/out.** These fields are connected with the plus and minus symbols in the camera view. Paths contain the orders for scaling down and for scaling up the camera picture.
7. **Path Move up/down/left/right.** These fields are connected with the arrow symbols in camera view. The paths contain the orders for the left, right, up and down movement of the camera picture.
8. **Path position #1 to #4.** Paths for configured and stored positions of the camera.

**Please note: Path for configuration fields 3 to 7 may not contain basis URL. Basis URL will be completed by CUBEVISION 2.**

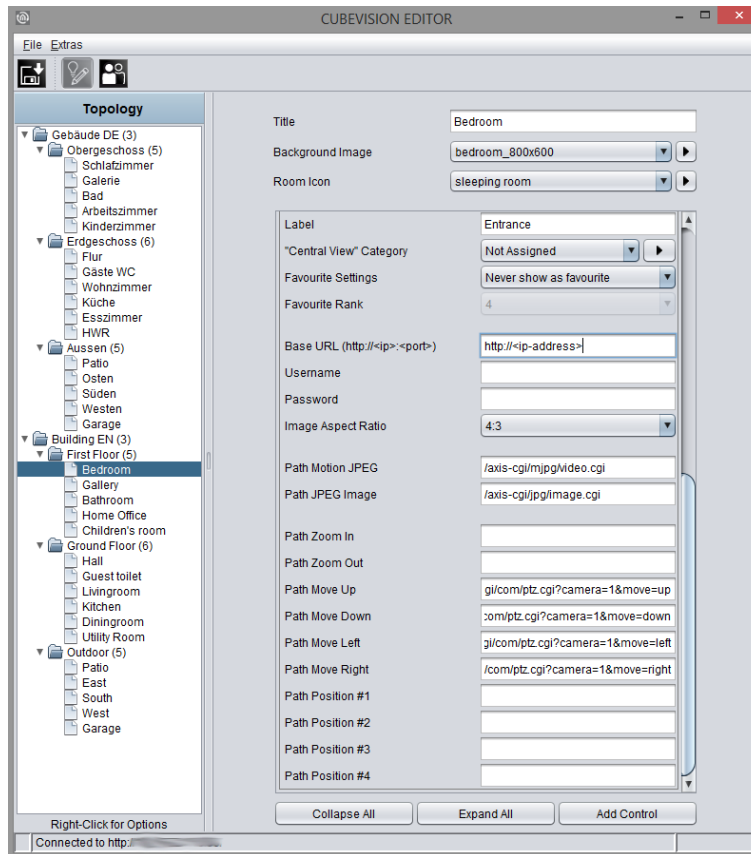


Figure 69: Configuration window of camera

## CAMERA CONTROL IN THE PHONE PRESENTATION

The extended element view ([EEV]) of the camera control has a different structure in the phone presentation of the CUBEVISION 2 due to the optimisation on smaller displays.

### EEV (Extended Element View)

The camera control element has a simplified view in the EEV of the phone presentation. It consists of the camera picture including the (optional) control elements and the position keys.



Figure 70: Camera control phone presentation - EEV



## 6.2.9 MEDIA CONTROL

- Option: Operability? No
- Extended view: Yes
- Height units: 3

Of course, a multimedia control in the CUBEVISION 2 element should not be missing. In the view in ICP and ECP the functions "Volume up / down", "Mute", "Playlist Forward/Back" and "Play/Pause" are located. The first line displays music information. See figure.

If the EEV is opened for this item, a cover will also appear. A click on the cover opens a dynamic playlist selection. Alternatively, the playlist can also be opened with the Open/Close Playlist button. Click on the playlist to play it. As multimedia client Squeezebox Player, AUDIOMODULE ("Squeezebox Controller") and the SONOS system are supported. As soon as these devices are available in the network, they can be selected in the configuration for linking.

In case another multimedia client is to be used, there is also the possibility of a manual configuration. For each multimedia function (pause/play, louder/ quieter, ...) a separate field is displayed for a group address.

In addition to the control options, the multimedia control element also displays information. This includes the artist, album, title and cover (if the music information is available).

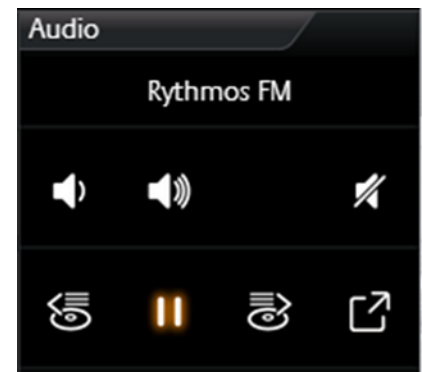


Figure 71: Elements multimedia



Figure 72: Advanced element view multimedia element

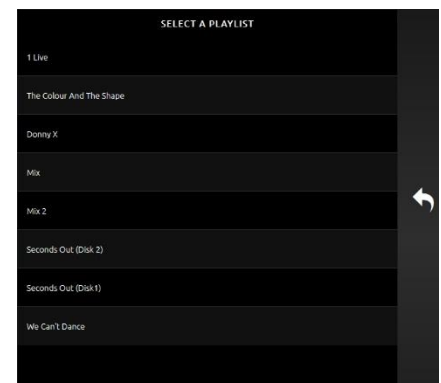


Figure 73: Element playlisten

This element has got following configuration fields (identifier see figure below):

### System

What kind of type should be controlled by Media Control element? Available is:

- a. Manual configuration
- b. UPnP (Sonos) and
- c. Squeezebox Controller

### MANUAL CONFIGURATION

If this choice is selected for the system, the element displays a list of group address fields (see figure below). This precept will be used for controlling different media (RS232, http-request, infrared, group addresses etc.) for example. Functions, which can be linked with group addresses:

- a. Play/Pause. EIS1
- b. Prev / Next Playlist. EIS1
- c. Prev / Next Track. EIS1
- d. Volume Absolute. EIS1
- e. Mute. EIS1
- f. Info Title. EIS15
- g. Info Artist. EIS15
- h. Info Album. EIS15
- i. Cover URL. URL of the album cover information
- j. Info Playlist #1 - #4. EIS 15
- k. Select Playlist. Selecting a playlist from the “Info Playlist #1 - #4” list by sending a 1byte telegram with value 1, 2, 3 or 4.
- l. Scroll Playlist Info. Scroll the list “Info Playlist #1 - #4” up and down by EIS 1 telegram.

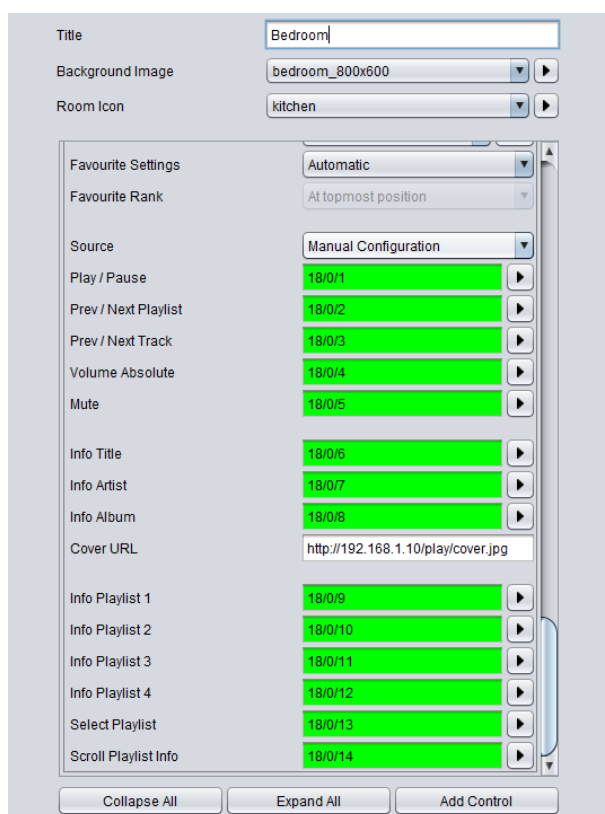


Figure 74: Media Control element with manual configuration



## UPnP (SONOS)

If UPnP (Sonos) has been selected as a system, the SONOS radio stations can be controlled using the multimedia control element. In the "System" selection, the "Select UPnP Device" menu item is displayed. With this menu item, it is possible to select the SONOS device to be controlled.



Figure 75: Multimedia element - UPnP configuration

### Requirements for controlling SONOS devices

In order to be able to control the radio stations of SONOS devices using the multimedia control element, it is necessary to first assign the respective SONOS players the required radio stations in the **CUBEVISIONMODULE**. To do this, please open the "Sonos (UPnP)" configuration as described in chapter "Extras".

## SQUEEZEBOX CONTROLLER

In order to control a Squeezebox or an **AUDIOMODULE** using the multimedia control element, "Squeezebox Controller" must be selected in the "System" menu. After the selection has been made, the "Select Squeezebox" button displaying the Squeezebox devices and **AUDIOMODULE** available for linkage in the network appears. Select the required device and confirm the dialog with "OK".

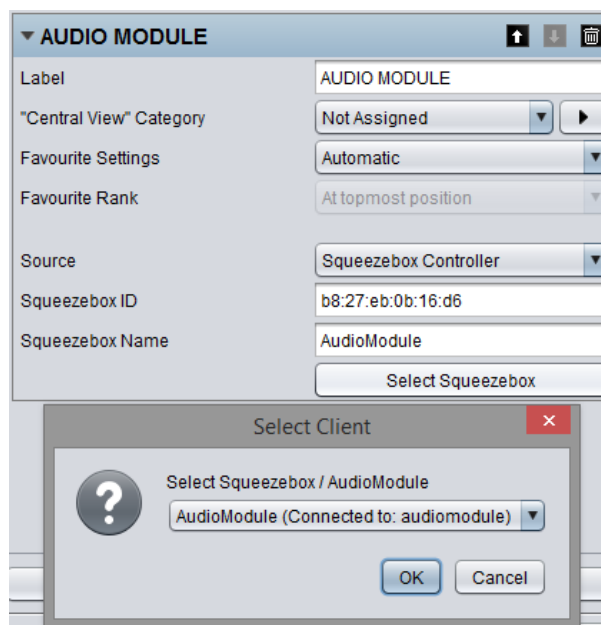


Figure 76: Multimedia element - Squeezebox Controller configuration

### Requirements for the control of Squeezebox players and the AUDIO MODULE

Please note that at least one Squeezebox player instance and a Logitech Media Server with xPL Hub and ExPL Plugin must be available in the network in order to control Squeezebox players and the **AUDIOMODULE**. For further information, please refer to the **AUDIOMODULE** documentation.

## MULTIMEDIA CONTROL IN THE PHONE PRESENTATION

The extended element view of the multimedia control element in the phone presentation of CUBEVISION 2 differs from that in the tablet presentation.



Figure 77: Multimedia EEV in the phone presentation

### EEV view 1

In the first layer of the phone EEV view, the Cover Art and the "Play/Pause", "Volume Up/Down", "Mute" (bottom) and "Next Title/Previous Title", "Title" (top) control elements are shown.

### EEV view 2

Use the "View" symbol to switch to the second layer of the EEV. In the second layer of the phone EEV view, additional information such as "Artist", "Title" and "Album" is displayed.

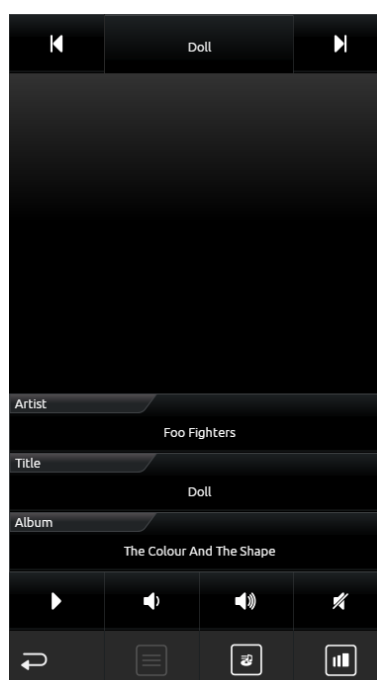


Figure 78: Second layer of the Multimedia EEV in the phone presentation



### Playlist selection

A playlist selection is called using the "Playlist" symbol. If a SONOS device has been linked to the multimedia control element, the radio stations linked in the "Sonos (UPnP) Configuration" can be chosen here (see above or in chapter "Extras"). If an **AUDIOMODULE** or a Squeezebox has been linked, the playlists created in the Logitech Media Server are available here.

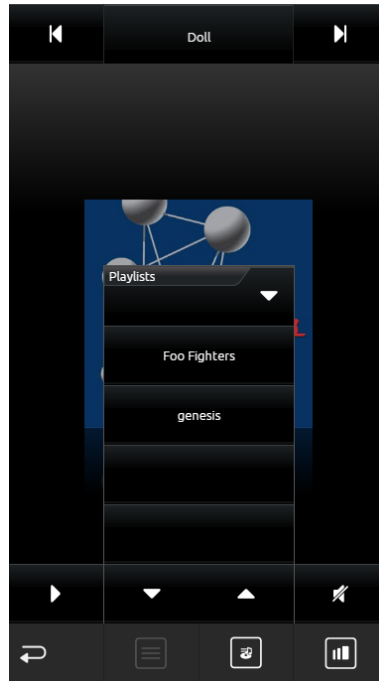
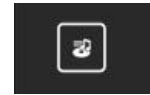


Figure 79: Multimedia EEV - playlist selection

## 6.2.10 WEATHER (LOCAL KNX)

- Option: Operability? No
- Extended view: No
- Height units: max. 5

This is an element for simply showing measured data of the home weather station, in the CUBEVISION 2 element. The element standardly displays (across the complete width of the element) the outdoor temperature in the first line. Following lines are divided in two columns. Every field shows beside of the measured value, an identifier, the unit of the measured value and a suitable symbol. (see figure).

Beside the temperature indicator, following measured values are applied with symbols: These are:

- Temperature
- Wind speed and direction
- Brightness
- Air pressure and humidity
- Precipitation

If the desired type will not be displayed, the eighth type is ready, which can be used universally. The only difference to the other types is, that this type displays no symbol in visualization.

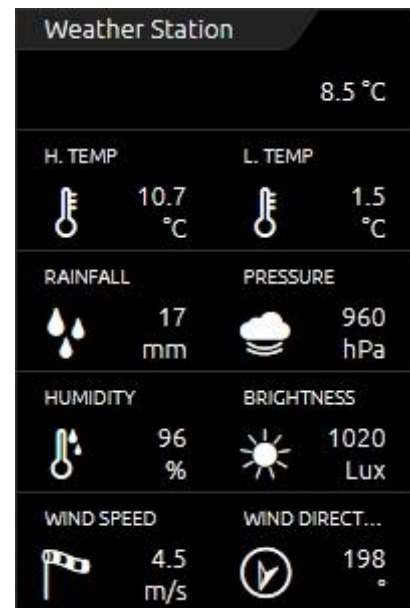


Figure 80: Element Weather (Local KNX)

This element has got following configuration fields (identifier see figure below):

1. **Temperature Data type.** For temperature value, data types EIS5 and EIS9 are selectable.
2. **Temperature Address.** This group address is designated for outdoor temperature. The value will be displayed in the first line of the element.
3. **Append/modify/delete.** By these buttons, additional measured values can be appended, deleted or modified. If deleting, marked values of the list will be erased. By appending and modifying, another configuration window will open (see figure), in which new measured values can be applied or existing values could be modified. Options:
  - a. **Type.** For weather element, the six most usual measure values are deposited with a symbol. These are the types: wind speed, wind direction, brightness, air pressure, humidity, precipitation and the universal value. If one of the types will be selected, following the two fields "name" and "unit" will be filled in automatically. But these entries can be modified afterwards.
  - b. **Name.** Identifier for this measured value, which are placed in CUBEVISION 2 element below the measured value
  - c. **Unit.** The unit, which will be entered here, will be shown in CUBEVISION 2 element under the measured value.
  - d. **Value format.** In this field the formatting of the measured values takes place. The Pre- and post decimal places of the value object can be defined as follows. A "0" means a fixed digit and will be displayed always. A "#" is one optional digit (as it is used commonly for post-decimal places) and only will be displayed on demand. The "." signifies the decimal point.
  - e. **Address.** The real group address of the measured value.
  - f. **Data type.** For value display, at this place data type will be selected, which has to be shown. For selection are DTP1.002, DTP5.001, DTP5.010, DTP7.001, DTP9.001 and DTP 14.



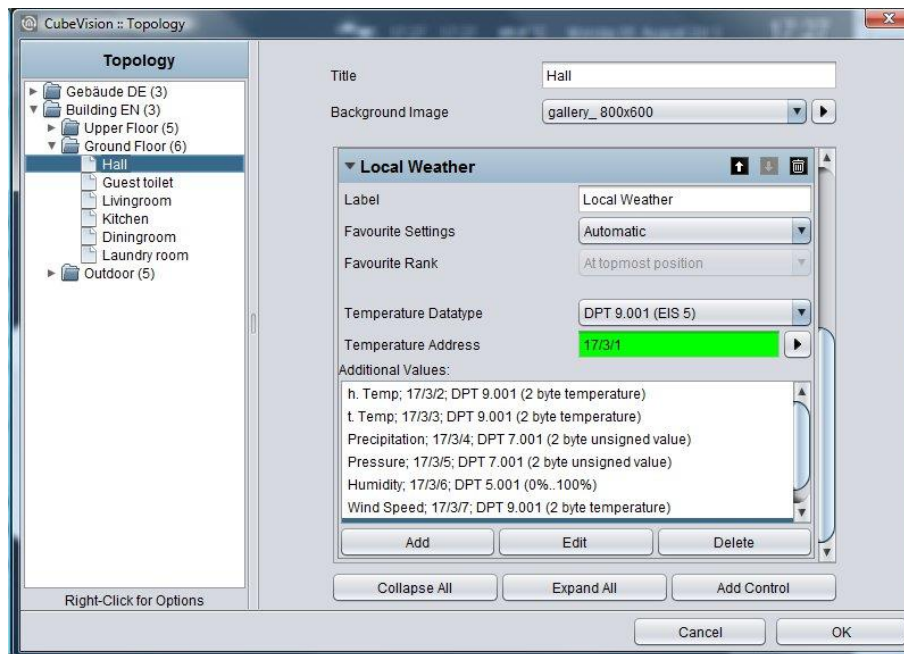


Figure 81: Configuration window WEATHER (local KNX)

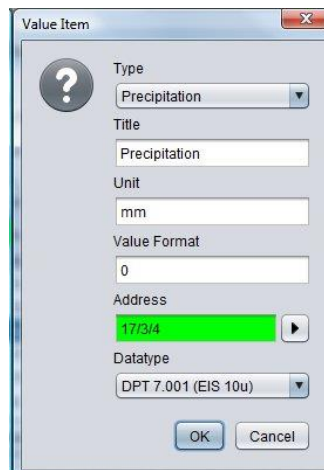


Figure 82: Configuration of measured value

## 6.2.11 WEATHER (INTERNET)

- Option: Operability No
- Extended view: Yes
- Height units: 2

If there is no local weather station or weather data should be displayed from a certain place, CUBEVISION 2 element is able to download weather data out of the internet. The element has got two types of a view. In view for ICP and ECP, actual time, day of the week, actual temperature, actual wind speed, rain probability and a icon, which shows the actual weather conditions (see figure).

In the second view, additional to the stated data, air pressure, time, time of sunrise and sunset, a four days weather forecast (incl. lowest and highest temperature) and four diagrams (illustrating temperature [incl. highest and lowest temperature], humidity, wind speed and precipitation) will be displayed (see figure below). Accurate values will be shown by “tracing” the diagram with finger or mouse. The values will be displayed in a kind of a speech balloon.

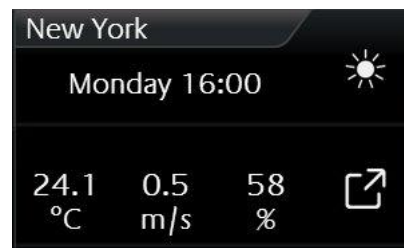


Figure 83: Element Weather (INTERNET)

**Please note: In order to request the weather data from the internet, EIBPORT / FACILITYMASTER / CUBEVISIONMODULE need a working internet connection.**



Figure 84: Extended element view of weather (INTERNET)

In spite of the enormous information and the comfortable display of data, the configuration of this element only consists of two fields, which have to be filled in. There are: 1. These will be: 1. time zone (necessary for displaying the time of sunrise and sunset correctly) and 2. the name of the town, which weather data should be displayed. The town, whose weather data should be displayed. When these details are done, editor will search for the desired town. By the help of a hit list, desired town will be selected and confirmed. That`s all. Figure below shows configuration of element and figure below displays the hit list of searched town „Dortmund“.

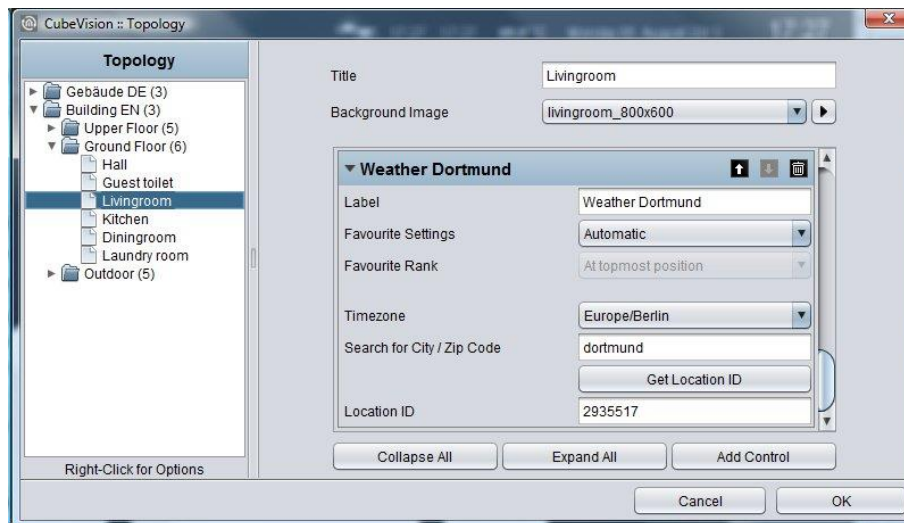


Figure 85: Hit list. Selection Configuration window of WEATHER (INTERNET)

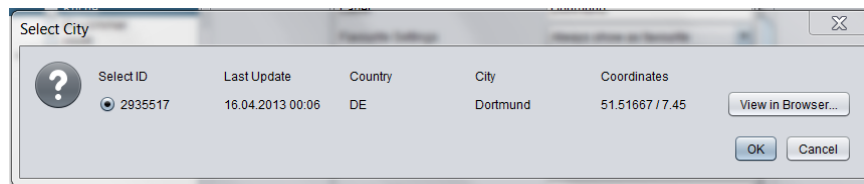


Figure 86: Hit list. Selection window of town

## WEATHER (INTERNET) IN THE PHONE PRESENTATION

The visualisation in the phone presentation differs from the visualisation in the tablet presentation on a number of points.

The figure on the right-hand side (weather (Internet)) shows the current time, the day of the week, the current temperature, the current wind speed, the rain probability and an icon displaying the current weather conditions (see figure on the right-hand side, marked yellow).

By clicking the symbol circled in orange, you can access the EEV phone presentation of the weather (Internet) control element (see figure "Weather (Internet) EEV")

By clicking the symbol circled in red, you can access a list in which all weather (Internet) diagrams are listed (see figure "List of all weather (Internet) control elements").

By clicking the symbol circled in green, you can return to the menu.

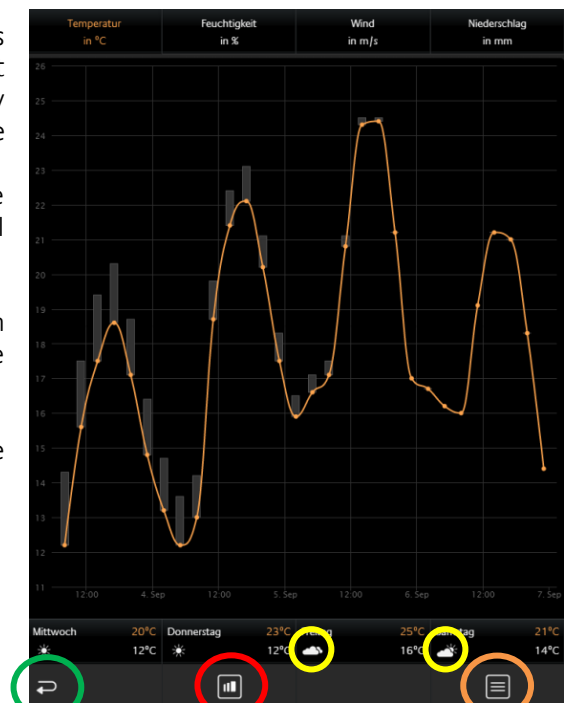


Figure 87: Weather (Internet)

In the EEV phone presentation as well as in the tablet presentation, the current day including time, temperature, wind speed, humidity, atmospheric pressure and sunrise / sunset is displayed.

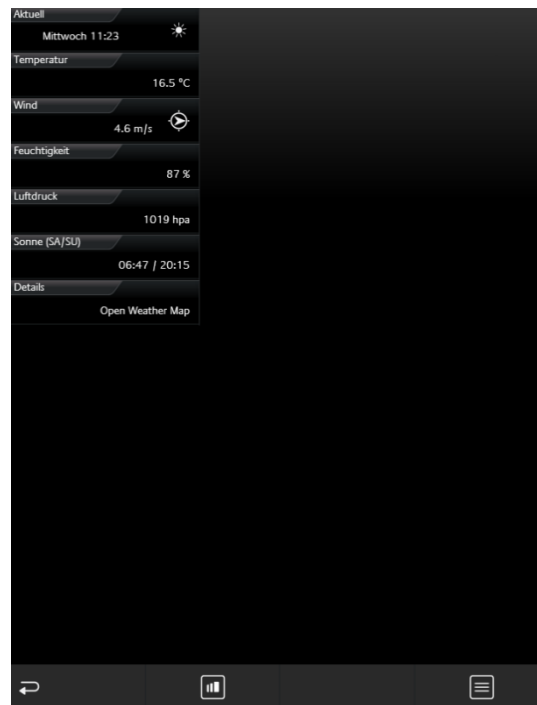


Figure 88: Weather (Internet) EEV

In the figure below, it is possible to choose between all weather (Internet) control elements in the room. Thus, tedious and unsystematic searching for different weather (internal) control elements is no longer necessary.

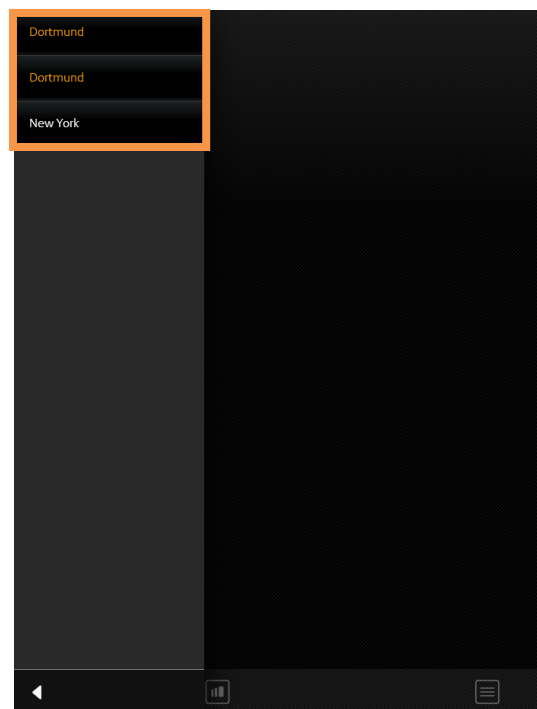


Figure 89: List of all weather (Internet) control elements



## 6.2.12 VALUES / DIAGRAMS

- Option: Operability? No
- Extended view: Selectable
- Height units: 2-8

Behind the element “values and diagrams”, a lot of capabilities for visualization, comparing, sending and charting of values are situated. A function for trend and ranking completes the range of functions. For configuration, only a group address of the value has to be entered.

The element has got one compact and one diagram view. The compact view is shown in ICP and ECP. At this place, only values are displayed (see figure). In EEV, one large diagram and further information additionally are situated. This extended view will be created by the editor, in case this option was activated before (see figure).



Figure 90: Element of values/diagrams

**Compact View:** Following possibilities are situated in this view: (see figure as well).

**Trend** function means, that in front of every value a symbol stands, that depicts, in which “direction” this value is in move within the hit list.

A triangle with the top up signifies, that the value has increased within the sequence (value is gone up). If the top points downwards, value has decreased within the sequence (value is gone down). A circle points out, that this value did not move within the sequence.

**Ranking** function has a bearing on sorting of values in the list. In case this function is activated, value will sort in decreased order, top down. The advantage is, that the biggest value always stands in the first place and doesn't have to search in the list of values. If this function is disabled, values don't change their order and will be displayed in the order, in which they were applied in the element.

Option **bar graph**. This option extends every value with a bar graph. The bar of the highest value will be filled out totally, while the remaining bars will be filled out as a percentage (to the highest value). So, you can recognize at a glance, as far as values differ from each other.



Figure 91: Extended element view of values / diagrams

Because the element will be used as a value display also, it **can send out values**, too. This option can be activated for all values. In visualization, this option will be shown by a “notepad and pen” symbol, which is always situated right beside the value. By a click on this symbol, within the value/diagram element, a numeric field opens, by which value can be entered and transmitted conveniently

**Extended (diagram) View:** Here the functions and hints to the diagram.

To open the diagram, a click on the symbol in the lowest line of the element (see figure) will be enough. By the way, this line with the diagram symbol only will be displayed, if the diagram was activated for this element.

**Value for diagram selecting** Always if the diagram will be opened (see figure), also the list of applied values will be displayed. Out of this list, the user selects these values, which should be shown in the diagram. This list is placed on the right of the diagram (see figure). Selection takes place by a simple click on desired values. By a click on the header, the list will be folded in.

Selected values will be listed below the diagram. There also the assigned colour of the value will be shown (see figure). In case, one of the selected values should be erased out of diagram again, this can happen by dragging out the selected value upwards out of the list (below diagram). While dragging out the value, a symbol of a trash barrel will appear.

To read more precise values out of a diagram, it will be enough to move a finger over the desired graph. In this way a **speech balloon** opens, which will show the point of time, the identifier, the unit and the value. In figure below (or figure) such a speech balloon is seen. Also possible is to tap the position in the graph; this option is more suitable for touch visualization clients. Graphs also allow zooming, which enables to scale for a detailed view. Zoom area simply will be drawn up by the mouse (with pushed button) or by a finger (horizontal movement). Figure below shows a blue arrow, which marks, how far the time range was drawn up. Figure below displays, how desired time range has been enlarged afterwards. By the button “Reset Zoom”, enlargement will be cancelled. This button only will be displayed in the centre above diagram, if the time range was enlarged.

**Time range modify.** By the help of the two arrows above the diagram, you can page up (to the right) or page down (to the left) the displayed time range. The current date is shown on the left side above the diagram.



Figure 93: Zoom area enlarged



Figure 92: Diagram area enlarged





Figure 94: Compare values

**Value comparison.** On the right side, above diagram, the **freeze function** (Date comparison) is located. This function makes possible to “freeze” the current pointed graph. These freeze graphs still will be shown, if now the time range will be modified. So, it is possible to make a comparison between the values out of different time ranges. In figure above temperatures from “server room” and “server” will be compared with temperatures of the previous day. Time ranges are displayed above the diagram, on the left (current date, that can be modified; solid graph) and on the right side (confirmed (reference) date; “freeze” graph will be pointed out in a spotted line)



Figure 95: Comparison of different values with different units.

### Compare diagrams with different units.

Even if values with different units are inserted in a diagram, the diagram control element has a solution ready. In another example (see figure below), two values are compared, but they have different units (temperature and power). Here the diagram control element shows a second Y-axis with the unit of the second value. In the example, both axes are placed on the left side. The side on which the axis is placed can be configured.

**TIPP:** These units can be applied in the editor, configured and used again in other diagrams. This ensures, that always the same unit, formatting and identifier will be displayed.

**This element has got following configuration fields (identifier see figure below):**

1. **Description of values.** This text will be used for the headline in visualization and in diagram.
2. **To display as a diagram.** This option activates the diagram of an element. In doing so, an additional line will be inserted, by which the diagram can be opened. (see figure, last line)
3. **With bar graph.** This option blends a bar graph below every value. The bar of the highest value will be filled out totally, while the remaining bars will be filled out as a percentage to the highest value. (see figure)
4. **To sort values.** Thereby, the function will be activated for sorting the values in a descending order top down. If this function is disabled, element displays the values in that order, in which they were applied.
5. **Values.** In this field, applied values resp. group addresses will be listed, applied and arranged, which should be displayed. To do this, three buttons are located below the field.
  - a. Delete. For erasing marked group addresses resp. values off the list.
  - b. Modify. Opens configuration window of marked group address.
  - c. Append. Opens configuration window to append a new group address resp. value.

Figure 93 shows the configuration window, in case a new value was appended or modified (modify button). The options:

#### Value

- Title. This identifier will be shown in visualization element above the value or in diagram above the colour.
- Address. This is the group address of the value, which is displayed. Group address can be selected by ESF selection dialogue (button with a triangle, which points to the right). If option „data entry“ is enabled, element also will send to this group address.
- Data Type. Data type which describes the value. Possible choices are: DTP1.001 (EIS1), DTP5.001 (EIS6), DTP5.010 (EIS14u), DTP6.010 (EIS14s), DTP7.001 (EIS10u), DTP8.001 (EIS10s), DTP9.001 (EIS5), DTP12.001 (EIS11u), DTP13.001 (EIS11s) and DTP14 (EIS9).
- Factor. Received group address will be multiplied by this factor.
- Offset: Offset value will be added to the received value, before it will be displayed in visualization. Hint for factor und offset: The result of this calculation will be used solely in visualization. Order of calculation: First, the factor will be calculated and afterwards the offset value will be added, before the result will be shown in visualization or in diagram.
- Format. Enter the format for floating points values here. “0” is representing a fixed digit, “#” a variable one. Beneath that, you can enter unit information here. For instance: “0.# °C” would display a temperature value optional with one digit after the decimal point.

#### Value Input

- Is Control: This option permits the user, to send values to this group address. Thereto a symbol will be blended beside the value, which opens a numeric field for entering desired value.
- Min. Input / Max. Input Value. There to a value range with an upper or lower limit can be defined for entering values.

#### Diagram

- Y-Axis and selection dialogue: Herewith the unit for the y-axis can be chosen. Units, which often will be used, can be “applied”, to avoid configuration of them for every element again and again. Applied units will be listed in a pull-down menu and can be selected easily. In another configuration window (see figure), which will be opened with the selection dialogue, units can be administrated. In this configuration window, units are configured centrally. Possibilities of configuration:





On the left, existing y-axis configurations are listed. By + and – button below this list, new configurations will be appended or deleted.

- Title. This name will be displayed vertically combined with y-axis and in the tooltip
- Unit. Unit will be displayed in brackets after the unit's name.
- Orientation. Defines, whether axis will be shown left or right of diagram.
- Minimum/Maximum Limit. This option activates the min or max border of y-axis. In this way, a fixed scaling of y-axis will be achieved. If no limits were set, diagram element scales automatically the y-axis.
- Minimum/Maximum Value. These data represent the upper and lower border of y-axis.
- Reverse. With this option activated the graph will reverse the direction of the value on the axis. It will decrease from bottom to top.
- Diagram Trace Colour. The colour, which is selected here, will be used for the graph.
- Trace Design: Selection of the presentation between “Line”, “Area”, “Spline” and “Column”.
- Draw as steps. If this option is enabled, graph will be drawn in grades. This is useful for example, when it is about an EIS1 data type.
- Trace Type. The type of graph determines the method of data processing for the graph.
  - Absolute: The absolute value is pointed out. Generally, temperatures or other actual measured data.
  - Difference: The difference curve can be used to create day profiles of steadily increasing actual counts.
- Interval. If for type of the graph the option difference will be selected, the interval time can be specified in minutes by this parameter, in which the difference to the last interval will be calculated. The larger the interval time, the more smoothed the graph will appear.
- Timeout. If a sensor will send out no value for a certain time, graph can be blanked out for this period. The parameter timeout defines, after how many minutes the graph will be blanked out.

### Long Term Database

The long-term recording is only available if the value/diagram element is active as diagram element (see figure "Display as diagram element").

- Active Long-Term Database

**If the recording is deactivated, all previously recorded data of this value will be deleted. Please use the CSV export in the visualization to save already recorded data.**

- Record Interval. Here you can set the time at which interval a group address is recorded.
- Interval Calculation. Here you can set the way in which the group address is recorded.
  - Latest Value. The last value is recorded at the set time.
  - Maximum Value. Only the maximum value is recorded.
  - Minimum Value. Only the minimum value is recorded.
  - Average. The average value is recorded.
  - Interpolated Value. The interpolated value is recorded.
  - Telegram Count. The number of telegrams is recorded.

**Note: The long-term recording always saves only the data in the selected interval calculation. If the type of interval calculation is changed, all previously recorded data of this value will be deleted. Please use the CSV export in the visualization to save already recorded data. Alternatively you can start another recording for the same value with different settings.**

Note: In the case of long-term recording for minimum value and maximum value, if a factor  $< 0$  is used under "Value" for the interval calculation, it must be noted that the maximum value is set for recording the minimum value and the minimum value is set for recording the maximum value.

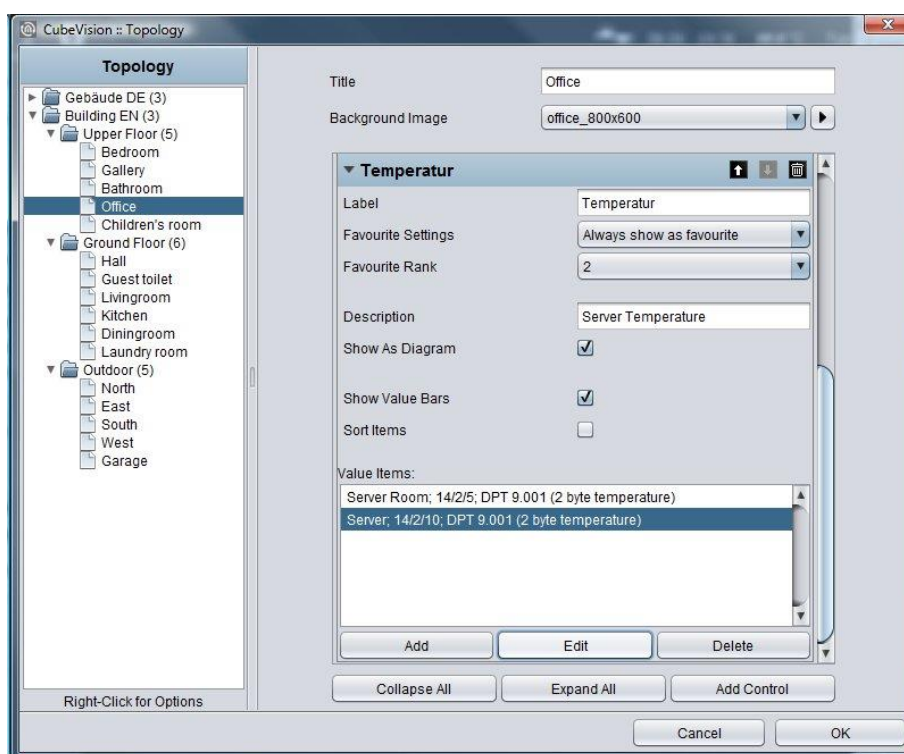


Figure 96: Configuration window of value/diagram element



Figure 97: Configuration window Values

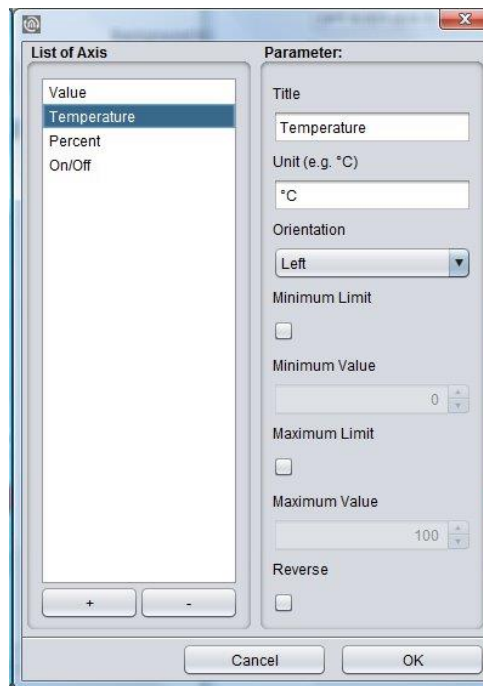


Figure 98: Configuration window units



Figure 99: Long-term data

In the visualization, the view of the long-term recording can be selected between recording for 1 day, recording for 1 week or recording for 1 month.

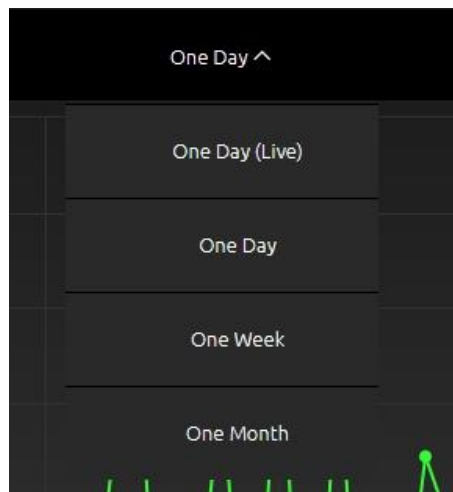


Figure 100: View of the long-term recording

## SAVING LONG-TERM RECORDING IN VISUALIZATION

To save the long-term, call the values/diagram element in the EEV in the CUBEVISION 2 visualization.



Press the CSV Export button.

Then select the data to be saved



## VALUES / DIAGRAMS IN THE PHONE PRESENTATION

The visualisation in the phone presentation differs from the visualisation in the tablet presentation on a number of points.

By clicking the symbol circled in orange, you can access the EEV phone presentation of the "Value / Diagram" control element.

By clicking the symbol circled in red, you can access a list in which all diagrams are listed.

Clicking the symbol circled in green, you can return to the menu.

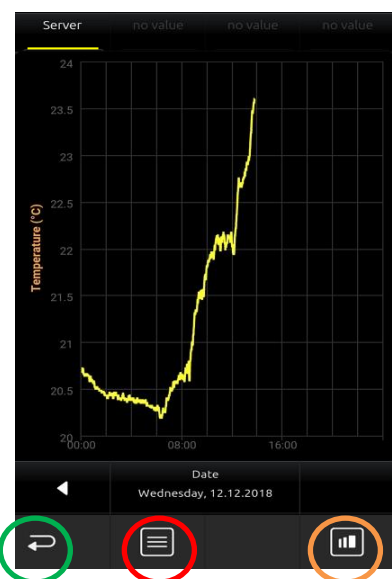


Figure 101: Phone View – Diagramm

In the EEV phone presentation, further details about the respective diagrams can be found, just like in the tablet presentation.

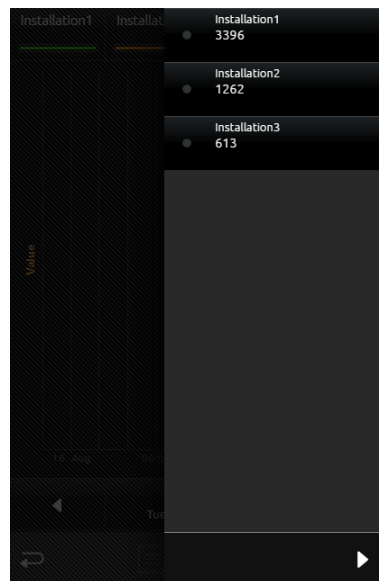


Figure 102: Diagrams, extended element view

In the figure below, it is possible to choose between all diagram control elements in the room. Thus, tedious and unsystematic searching for different diagram control elements is no longer necessary.



Figure 103: List of all diagrams

## 6.2.13 TEXT DISPLAY

- Option: Is Control? No
- Extended Element View: No
- Height unit: No

This element serves for displaying EIS 15 (DPT 16) Text strings within the CUBEVISION 2

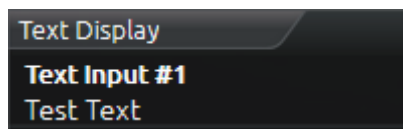


Figure 104: CUBEVISION 2 Text Display

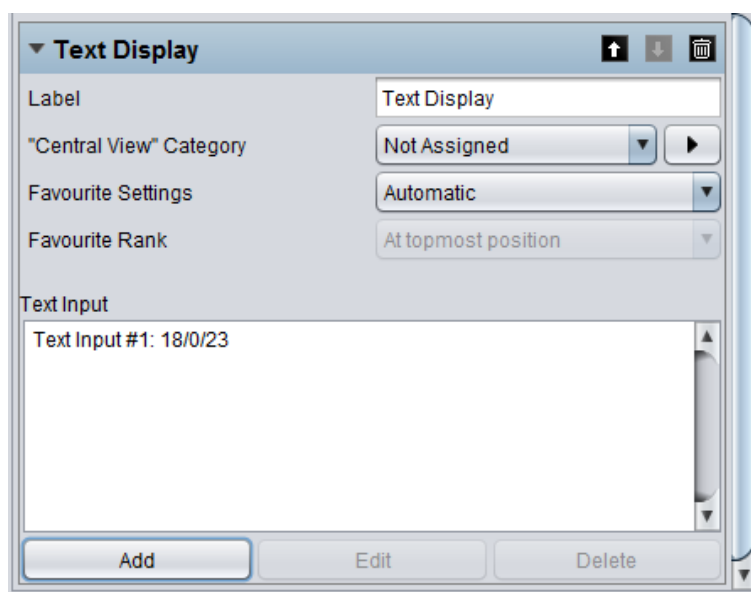


Figure 105: Configuration of the Text Display Element

The element allows to set up several text inputs. A text input is set with the help of the button "Add".

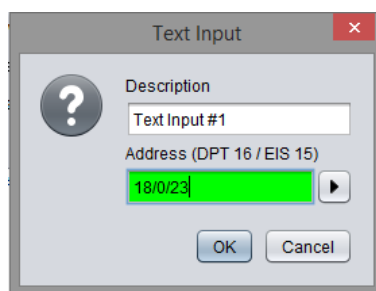


Figure 106: Add a text input



## 6.2.14 GROUP SWITCH / SCENES

- Option: Operability? No
- Extended view: No
- Height units: 1 und 2

Sense and purpose of this element is, that a group of symbols, which contain different group addresses (four at a max), can be collected/placed in one element. The function behind it (that's

the actual feature) but will show only one of the symbols as active. Independent from that is, whether the symbols carry the same group address or not.

In brief, the Figure 109 shows a group switch with two functions, at one point the gate and at another point the barrier. If now for every function a different group address will be used, it has to be assured, that always only this group address will be displayed as active, which was released at last. In a regular channel, such a function has to be ensured lavishly, that always only one group address resp. symbol may be shown as active. In the scene

element, this function already is implemented.

Layout of the element's outline will be selectable freely. Figure 109, Figure 108 und Figure 107 display several layouts. In a height unit, it can be utilized four function inclusive symbols at a max, but without lettering. The other two layouts offer a display over two height units. On the one hand for two functions with symbol and a long lettering and on the other hand with four functions with symbols and a short lettering. For selection there are 30 several symbols available.

Beside the different group addresses, values and data types can be selected certainly.



Figure 107: Element group switch – only icons



Figure 108: Element group switch - icons and a long text



Figure 109: Element group switch - Icons and a short text

**This element has got following configuration fields (identifier see figure below):**

1. **Width for function.** With it, the layout of the element will be determined. For selection are available "Icons" (figure), "icons and a short text" (see figure) and "Icons and a long text" (figure).
2. **Highlight active.** One option, whether the symbols in active state also will be highlighted.
3. **Functions.** This window lists the group addresses for the functions. For administrating of group addresses, buttons „Append“, „Modify“ and „Delete“ are available below the list
4. **Configuration window functions.** Figure 111 show the possibilities of configuration.
  - a. Icon. Here are situated over 30 different icons, for realizing an optical hint to a function.
  - b. Name. The name will be displayed with its icon, except the single-line layout, which only shows the icons.
  - c. Address. Group address, on which it will be transmitted, if this function is released.
  - d. Data type. Choice of data type (DTP 5.010 (EIS14u) and DTP 1.001 (EIS1)) of the value, which will be sent and received.
  - e. Value. The value, which should be sent to the group address, can be entered here.

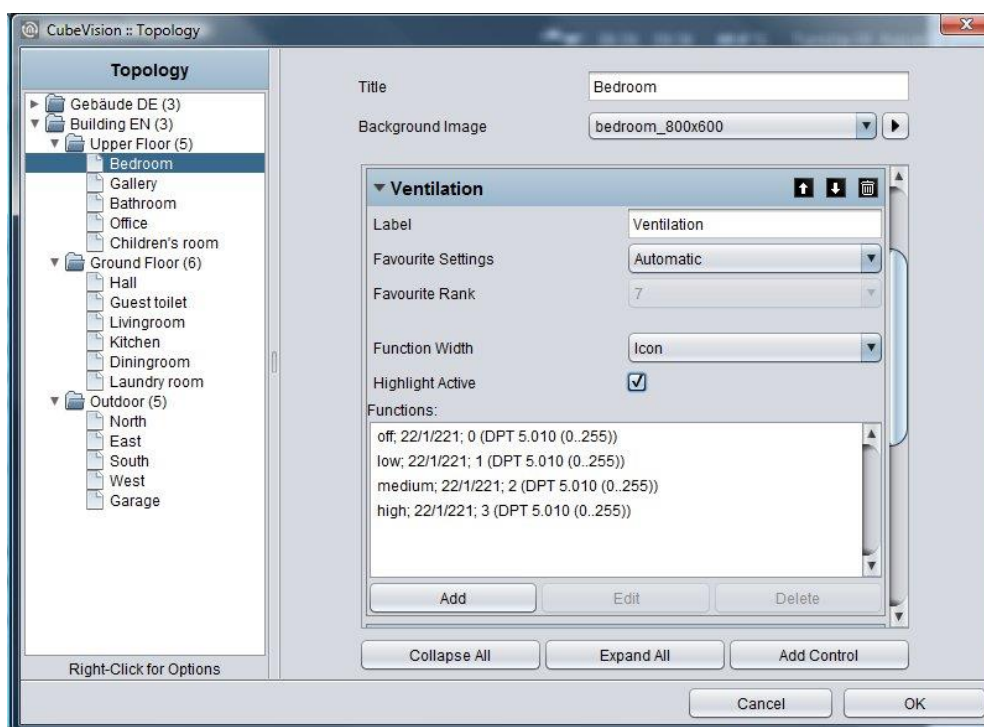


Figure 110: Configuration window of „group switch/scene“

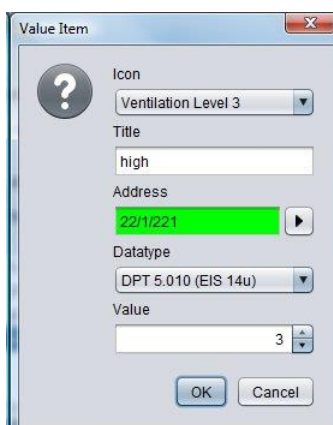


Figure 111: Scenes element “appending group address”





## 6.2.15 LOGIKEDITOR PLUGIN

- Option: Operability? No
- Extended view: No
- Height units: 1 und 2

The element is used to access the “week timer” logic elements of **LOGIKEDITOR**.

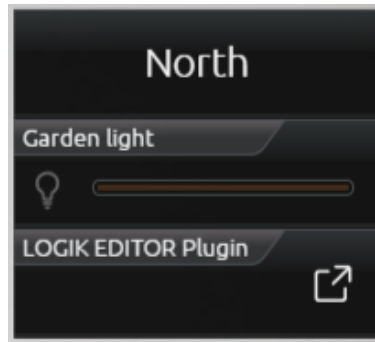


Figure 112: LOGIK EDITOR Plugin – Presentation in the visualisation

### Specific parameters

- *Logic group*: Select the group in which the desired logic element is located.
- *Logic element*: Select the desired element within the group which should be accessible through the visualisation.

**Please note: The parameters “Is Control” and “Icon” does not have any function here.**

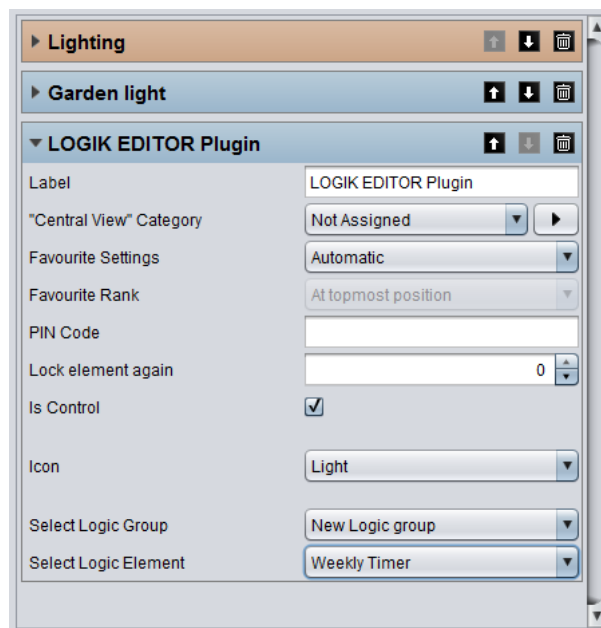
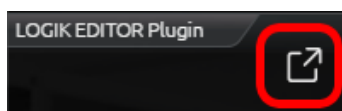


Figure 113: LOGIK EDITOR Plugin – Plugin configuration

### BEHAVIOUR IN THE CUBEVISION 2

In CUBEVISION 2 the element is shown as a one-line element including the extension symbol. If the user clicks on the element, a modal dialogue which allows for access to the week configuration of the weekly timer appears



### Week overview

The overview shows the 24 hr time lines for all weekdays at a glance. Here, the switching times and periods are shown marked accordingly in colour. The colour representation is individually defined in LOGIKEDITOR for each output.

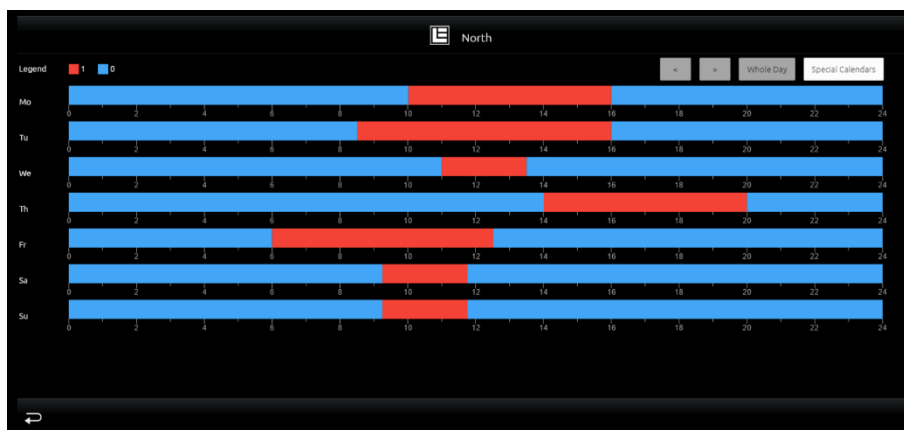


Figure 114: LOGIK EDITOR week timer – week overview

### Detailed view

By clicking on any point in the week overview you can open the detailed view for the corresponding period, with the option of setting switching points by the minute. A box is displayed per minute. The view can be moved to the left or right using the arrow buttons at the top. The “whole day” button opens the week overview again.

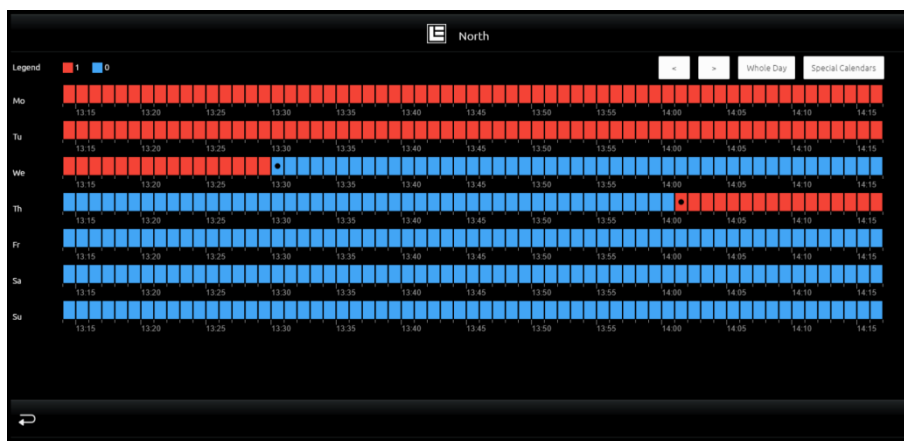


Figure 115: LOGIK EDITOR week timer – detailed view

### Setting switching times

To set the switching time, you need to click on one of the boxes in the detailed view. A further dialogue will appear which allows for selection of the actions (switches). Predefined actions can be selected. An action can be removed using “Don't send value” and there is the option of defining another value for the week timer output using “Send other value”.

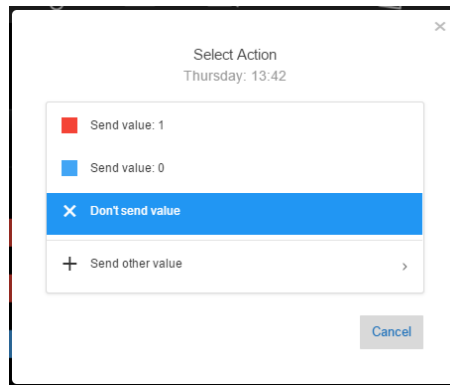


Figure 116: LOGIK EDITOR week timer – setting a switching time

### Special calendars

The week timer can be added for special days here. To this end, predefined special day profiles can be accessed or a new profile can be created. The switching times defined here are executed if the special day input for the logic element is activated (see “week timer” description in the **LOGIKEDITOR** documentation) or a special calendar is defined in the calendar (see “calendar” description in the **LOGIKEDITOR** documentation).

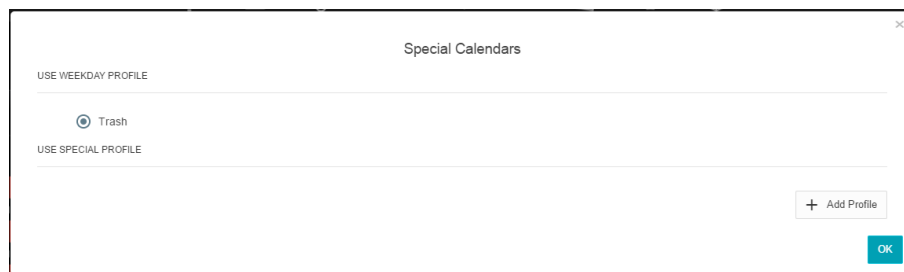


Figure 117: LOGIK EDITOR week timer – configuring the special calendar

### Saving the configuration

In order to save the configuration, you just have to leave the configuration by the “back” Button. If changes were made, saving must be acknowledged additionally. If no changes were made the presentation will be simply closed.

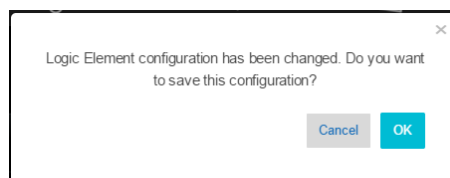


Figure 118: LOGIK EDITOR Plugin – save the configuration

If the dialogue is acknowledged with “OK”, the changes will be submitted. A green notification in the upper right side of the screen confirms the action.

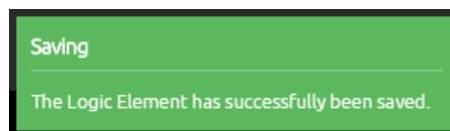


Figure 119: LOGIK EDITOR – Saving confirmation

In the **LOGIKEDITOR** the changes are available as soon as the button “Update of the configuration” is been used.

## 6.2.16 TUNEALBE WHITE

- Option: Operability? No
- Extended View: Yes
- Height units: 2

This Tuneable White visualization element is used to control lamps via the CUBEVISION, where it is possible to set the colour temperature from warm to cool white. In addition, four predefined

colour temperatures and brightness value combinations are available as preselection that can be called up directly. Via the CUBEVISION visualization itself, it is also possible to mix up to four of these combinations and save them as favorites.

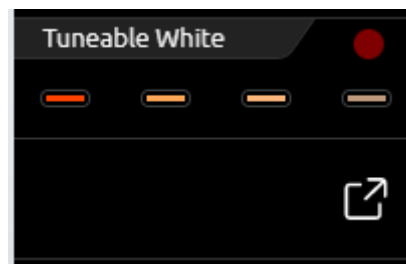


Figure 120 Tuneable White

This control element has two views. A compact one with two height units, for the ICP or for the ECP and another one in the EEV. The compact view shows a maximum of four combinations in the first line (see illustration above right).

In addition, the current set colour temperature and brightness value combination is displayed in the upper right corner of the element as feedback.

The second view shows the Tuneable White control element in the EEV further control options. In addition to the selection of preset colour temperatures and brightness values, the EEV also offers the user-selected favorite combinations for selection.

The illustration below shows the Tuneable White control element in the EEV view. In the right column there are two "sliders" with which the colour temperature and brightness value can be set.

In the center of this view there are two circles that can be used to comfortably select the colour temperature and brightness value with a tap of the finger. Directly below there is a line with 4 buttons each for the favorite combination. Below these buttons, the respective value for the colour temperature and brightness value is also displayed for each colour temperature and brightness value combination. In the middle of the two circles, the round area shows the currently set combination.

A currently set combination can be saved as a favorite simply by dragging and dropping it onto one of these buttons.

To send the colour values to a Tunable White lamp, enter the group address for all colour temperature and brightness values a separate group addresses. Here are the data types:

- Colour temperature as 2byte value
- Brightness as 1byte value

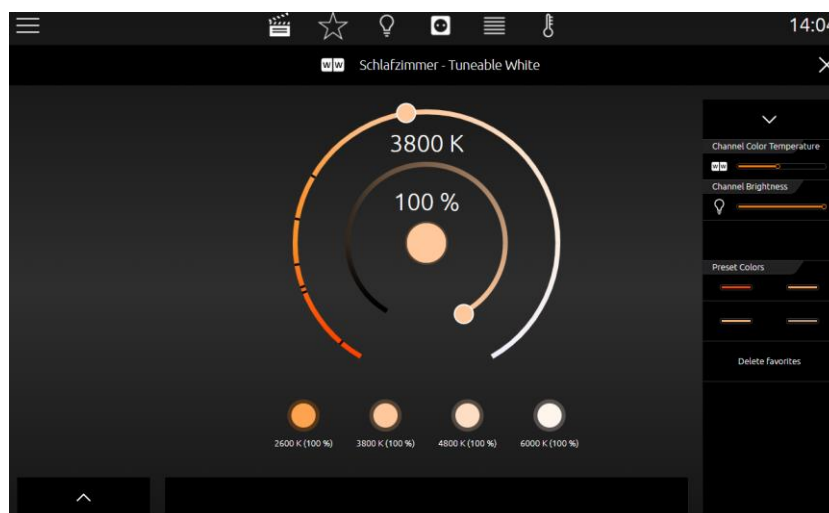


Figure 121 Tuneable White Element in the Visualisation



This control element has the following configuration (see illustration below):

1. **Colour temperature (2 bytes).** Communications object for controlling the colour temperature.
2. **Brightness (1 byte).** Communications object for controlling the brightness.
3. **Minimum colour temperature.** Determine which minimum value may be set via the visualization.
4. **Maximum colour temperature.** Determine which maximum value may be set via the visualization.
5. **Colour temperature step width.** The value set here defines the "step width" of the colour temperature when adjusted by the user. For example, you can define that the colour temperature can be changed in 100K steps by the user.
6. **Discrete colour temperature control.** Activates the discrete colour temperature control. In this mode, the value range of the colour temperature control is limited to up to 10 set values. The set colour temperature values are displayed as markers in the visualization.
7. **Values for the discrete colour temperature control.** The window is displayed if the option §Discrete colour temperature control§ is activated. Here you can define the colour temperature values that are jumped to directly during operation.
8. **Favorite settings.** Favorite settings for colour temperature (Kelvin) and brightness (percent). These settings are displayed as a separate button and can be activated with a click.

Figure 122 Configuration Tuneable White

## 7 SMART FUNCTION CREATOR

### 7.1 SCENES AND SMART HOME FUNCTIONS DIRECTLY IN THE VISUALIZATION.

With the »Smart Function Creator«, you can create scenes and smart home functions very easily and intuitively. Simply add visualization elements to a scene with drag & drop and use clocks and events as triggers. You can combine multiple triggers with AND resp. OR connections. That's how easy it is to create smart home functions with **CUBEVISION 2**.

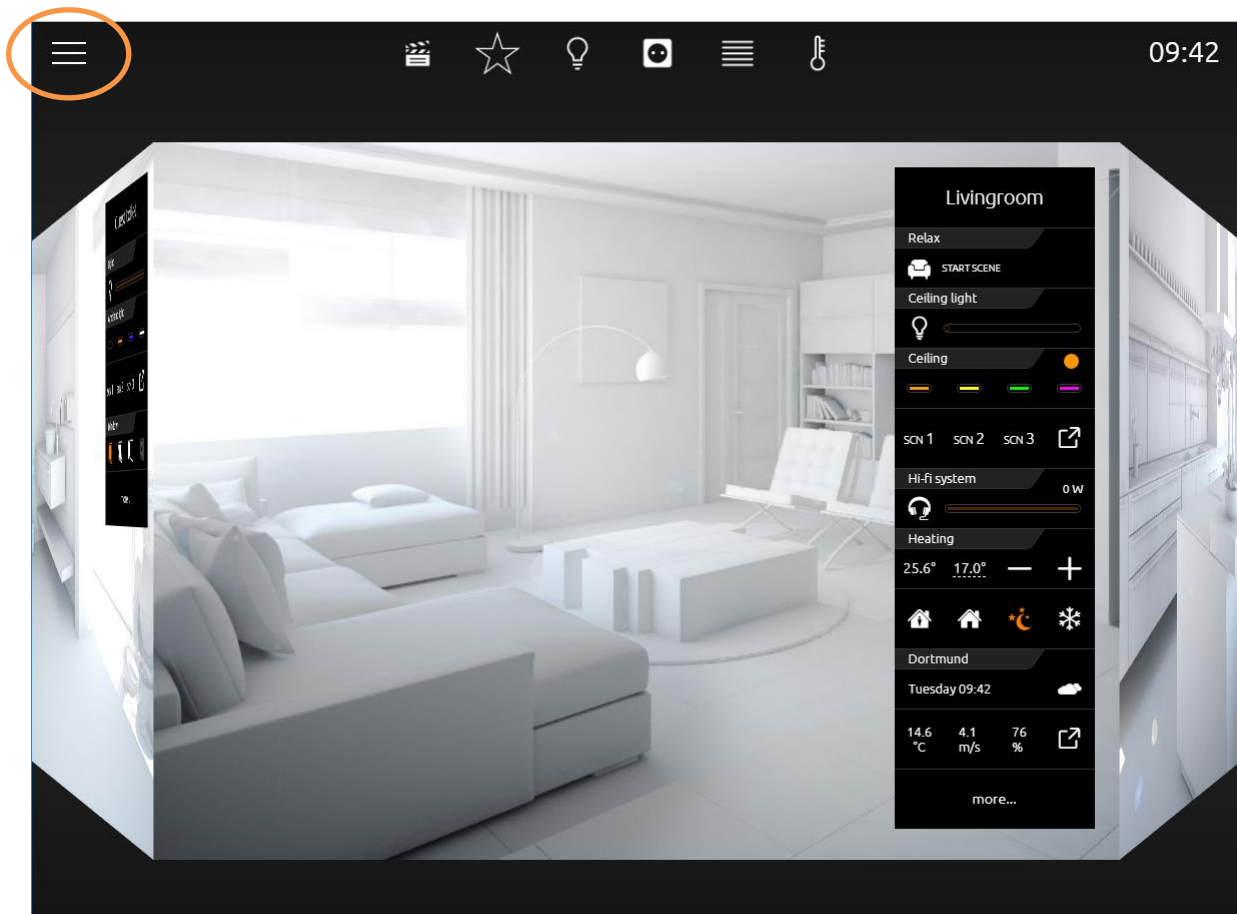


Figure 123: Open Smart Function Creator

Pressing the „burger menu icon“ will open the menu. Pressing „Smart Function Creator“ will enable the drop zone (see figure).

You can drag & drop the desired elements from the Instant Control Panel [ICP] or Extended Control Panel [ECP] into this drop zone (see figure).



## 7.1.1 DROP ZONE

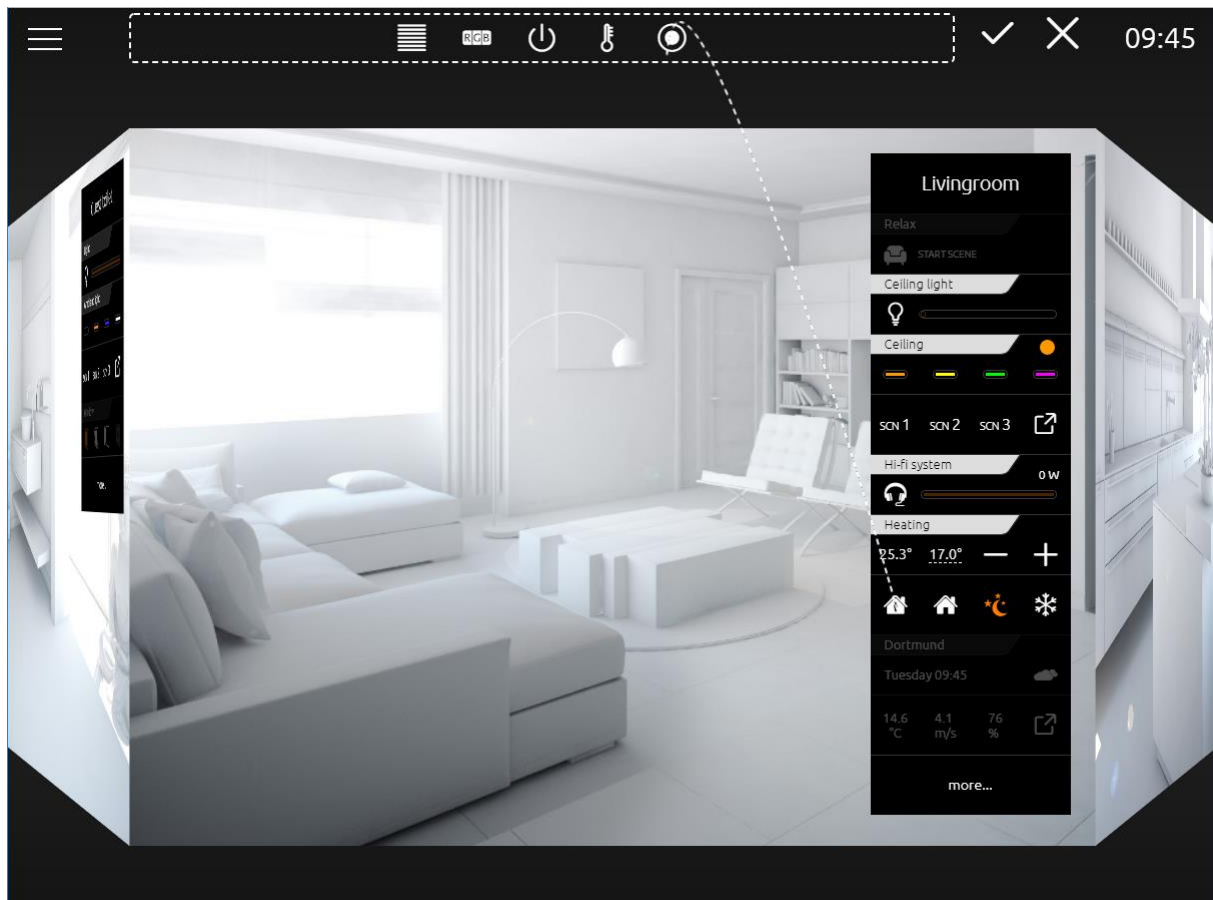


Figure 124: Drop Zone

Drag & drop the desired elements from the Instant Control Panel [ICP] or Extended Control Panel [ECP] into the drop zone. You can still navigate to any room and gather all desired elements. When you are done adding elements, check out the scene by pressing the checkmark icon . You will be led to the scene overview (see figure).

## 7.1.2 SCENES OVERVIEW

The scene overview lists all the elements you added to the drop zone (cf figure). The order corresponds to the order in which you added them.

Choose Scene Icon

Please enter a scene title

×

Active	Floor	Room	Title	Function	Value	Delay	Move	Delete
<input checked="" type="checkbox"/>	Ground	Livingroom	Ceiling light	Switch	Off	0 Seconds	✚	🗑
<input checked="" type="checkbox"/>	Floor			Absolute Dimmer	0%	0 Seconds		
<input checked="" type="checkbox"/>	Ground	Livingroom	Ceiling	Color	Orange Peel	0 Seconds	✚	🗑
<input checked="" type="checkbox"/>	Floor							
<input checked="" type="checkbox"/>	Ground	Livingroom	Heating	Mode	Night Setback	0 Seconds	✚	🗑
<input checked="" type="checkbox"/>	Floor			Setpoint Temperature	17°	0 Seconds		
<input checked="" type="checkbox"/>	Ground	Livingroom	Heating	Mode	0	0 Seconds	✚	🗑
<input checked="" type="checkbox"/>	Floor			Setpoint Temperature	17°	0 Seconds		
<input checked="" type="checkbox"/>	Ground	Livingroom	South	Position	70%	0 Seconds	✚	🗑
<input checked="" type="checkbox"/>	Floor			Angle	20	0 Seconds		

Continue Editing

Continue to Triggers

Figure 125: Scenes Overview

You can edit individual elements in the scene overview at any time.

### Active

Every element is active by default. If an element has multiple functions, they all will be active. Uncheck the box here to deactivate an element or individual function of an element.

Deactivated elements or functions will be ignored when executing the scene. You can reactivate them at any time by checking the box again.

### Floor

The name of the floor in which the room with the element is situated. This name is assigned in the CUBEVISION 2 Editor.

### Room

The name of the room to which the element belongs. This name is assigned in the CUBEVISION 2 Editor.

### Title

The name of the element itself. This name is assigned in the CUBEVISION 2 Editor.



**Function**

Lists the functions of the element.

**Value**

Lists the values of the elements as they will be set in the scene. You can edit these values here, with the exception of the RTR element. The values of RTR Elements can only be changed in the Instant Control Panel [ICP] or Extended Control Panel [ECP] prior to adding them to scenes.

**Delay**

You can configure a delay between individual elements of your scene. The delay is set in seconds.

Example: You configure a 5 seconds delay between switch „Reading Lamp“ and switch „ind. lighting“. If you start the scene now, the first two elements will be executed without delay, then the scene pauses for 5 seconds before continuing to execute the other elements.

**Move**

Drag and drop this icon to change the order of the elements.

**Delete**

Press this icon to remove elements from your scene.

Give your scene a title. This will help you distinguish between scenes later on. Press or left-click into the field „Please enter a scene title“. In addition to a title, you can also assign an icon to your scene. Press „Choose scene icon“ and choose one of the 450 provided icons. The icon will appear in manual triggers and the Launchpad, if configured.

If you need to add additional elements to your scene at this point, press the button „Continue editing“. The cube and the drop zone containing the elements you added so far will be visible again, you can add more elements and check out the scene once more.

Otherwise, press „Continue to triggers“, to configure how your scene should be triggered (cf. figure).

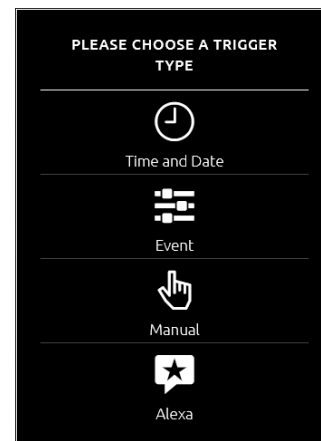
## 7.1.3 SCENES TRIGGER

There are available 4 types of scene triggers:

- “Time and Date”
- „Event“
- „Manual“
- “Alexa”

You can use individual triggers or combine them with „AND“ as well as „OR“. If a scene for instance should run automatically on a schedule, provided some conditions are met, you must combine the time and event triggers with „AND“. You could however additionally configure a „Manual“ trigger. This trigger is then combined with the first trigger in „OR“ way.

The scene will start either automatically, if time and event conditions are all met, or it can be started manually, independent of the event conditions of the time trigger.



a

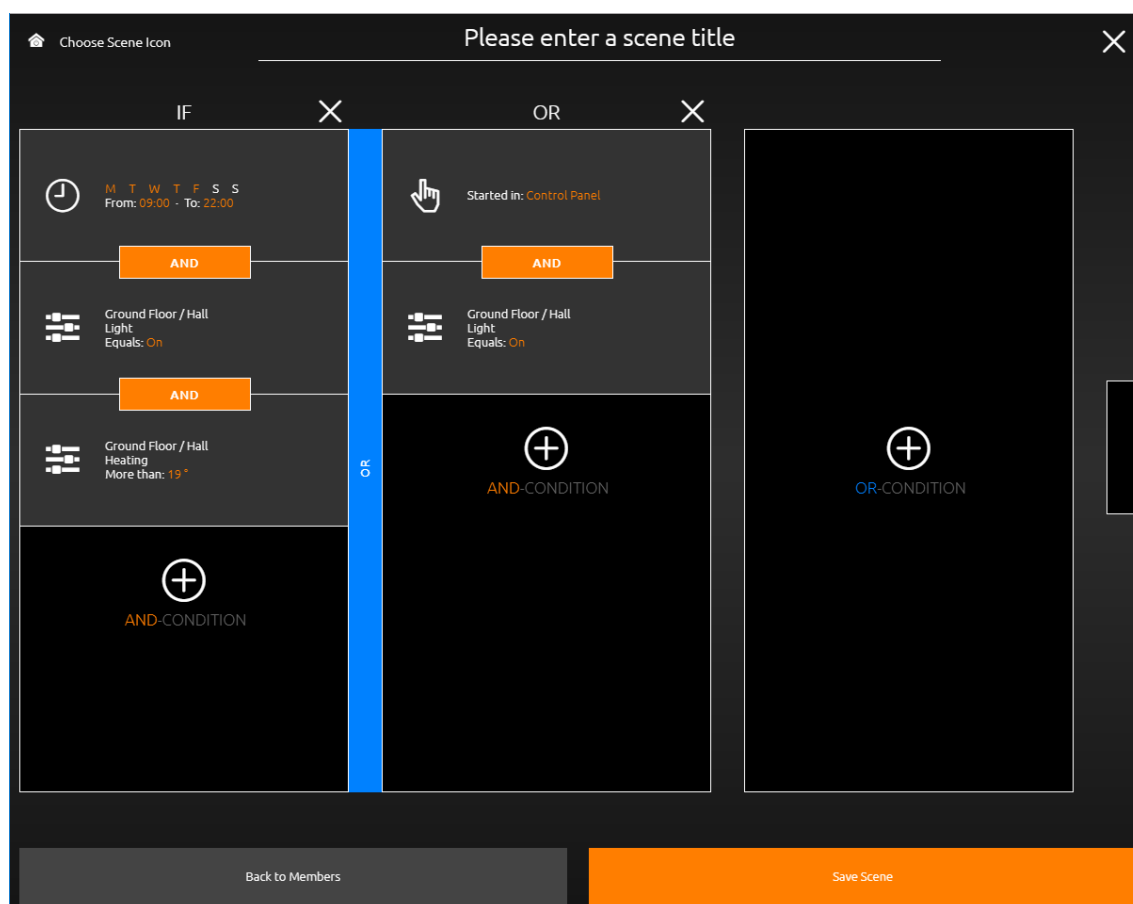


Figure 126: Scenes Trigger



## 7.1.4 TRIGGER TYPES

### 7.1.4.1 TIME AND DATE

This trigger type is a simple weekly timer, with optional “astro” timer functionality.

- **At:** In this mode, the scene will be triggered at the exact configured time, on the selected days of the week. Selected weekdays are highlighted in orange. At least one weekday must be selected in order to activate the timer.

- **From/To:** Use this setting to combine events and time restraints with „AND“.

For example, the front door light can be turned on sometime between 7 and 10 pm, if the ambient brightness falls below a threshold configured in an event trigger. Should the ambient brightness only fall below the threshold sometime after 10pm, the scene will not be triggered anymore.

- **Astro:** The time you configure here denotes the scene start time at this exact day. It represents the position of the sun at your configured location at this time on the day you configure this element. Every day the scene start time is adjusted to ensure the position of the sun is as it was at the time you wanted the scene to start on the day of the configuration. If you open the configuration weeks later, the time here will differ from what you configured, because the sun is at the desired position at a different time of day.

Example:

Your blinds should open at dawn. You configure the time by choosing the time dawn occurred that very day. Dawn varies every day, thus the scene start time shifts every day, with possibly multiple hours difference throughout the year, depending on your location.

**Time Span:** You can curb the variation using this function

Example:

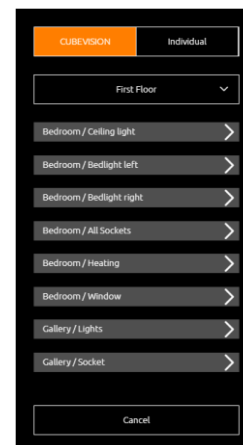
Your blinds should open at dawn. Yet, during summer dawn is too early for you. Using time span limits, you can force the scene not start before 7am.

### 7.1.4.2 EVENT

This trigger type starts a scene when a predefined condition is met. All available conditions of all the elements which you configured in the CUBEVISION 2 Editor will be automatically listed.

Individual events can also be configured.

For this purpose, a group address from the KNX project is entered in the "individual" area. The correct data point type must be observed.



### 7.1.4.3 MANUAL

You can manually start scenes with this trigger type.

The scene button with which to trigger the scene can be assigned to the Launchpad (see [Launchpad](#)), the Control Panel, or both.

If you enable „Show in Control Panel“, you can then select one or more rooms in which you want the scene button to appear. Scene buttons are automatically placed at the top of the Instant Control Panel [ICP]. If you add more than one scene to a panel, they will be sorted alphabetically. Each button will show the title and icon you configured for the scene (see following figure).

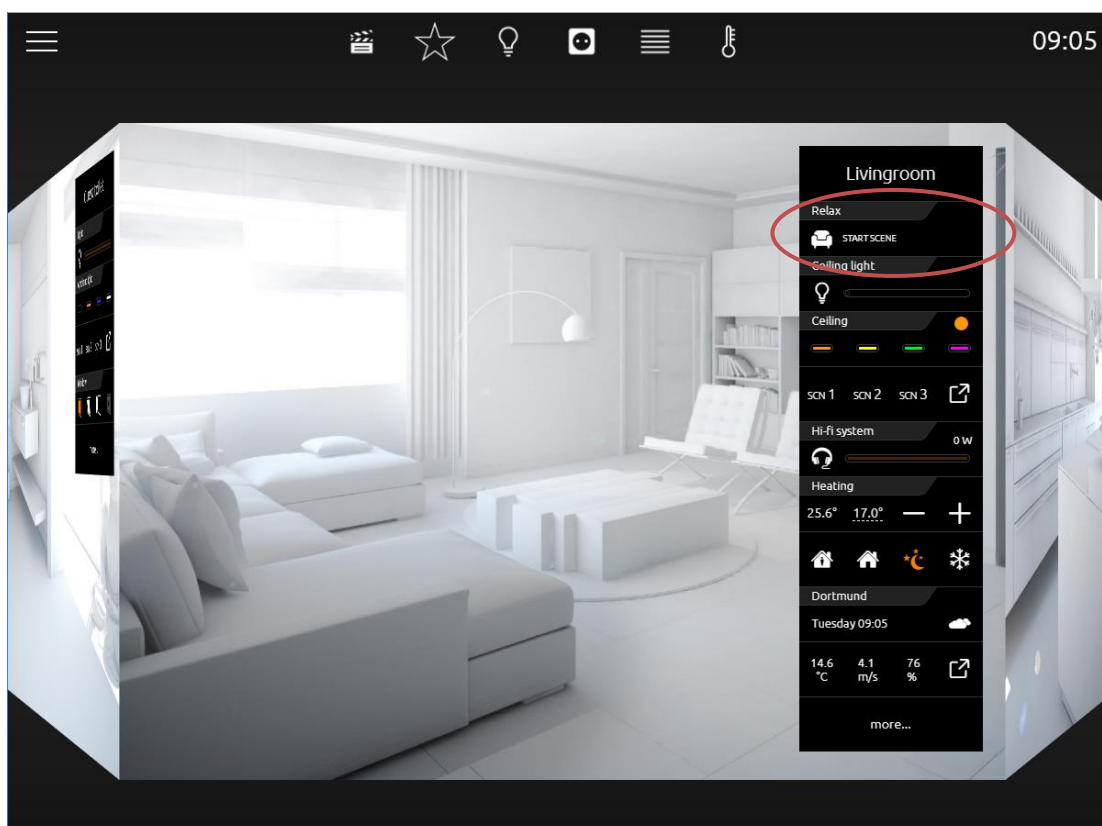
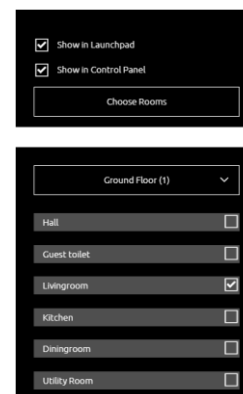


Figure 127: Control panel with scene button

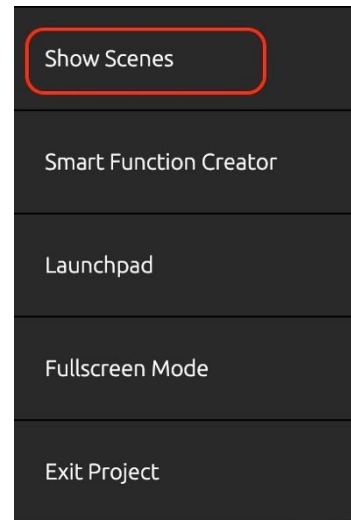


#### 7.1.4.4 SHARE SCENES WITH OTHER PROJECT USERS

Scenes and smarthome functions are assigned to users. If a scene is created, it belongs to the user who created it. The scene is only displayed to the owner and can be operated, edited and deleted by the owner. The owner of a scene / Smarthome function can release it for other project users so that other users can also execute it. The release for other users is made in the scene overview.

##### Open scene overview

Click on "Show scenes" An overview of all created scenes / Smarthome - functions including the shared scenes of other users is displayed.



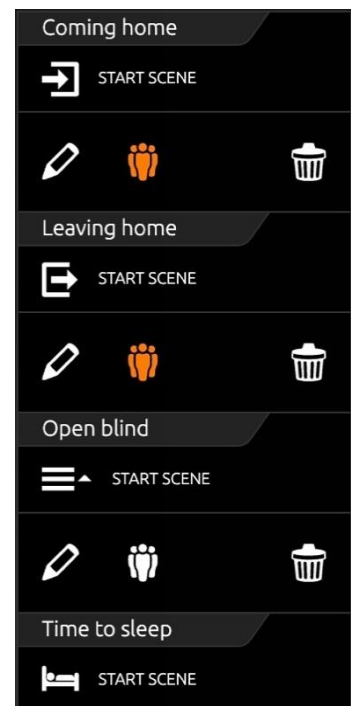
##### Share scenes and Smarthome functions.

A scene / smarthome function is enabled by clicking on the group icon



Scenes that are released are highlighted ->

Scene of another project user



### 7.1.4.5 ALEXA

This trigger type starts a scene that is triggered via ALEXA. To get that trigger in operation the settings ALEXA must be correctly configured in the **LOGIKEDITOR** and connected to your ALEXA account.

For further information how to configure a connection to the ALEXA account in the **LOGIKEDITOR**, please use the separate documentation for this editor.

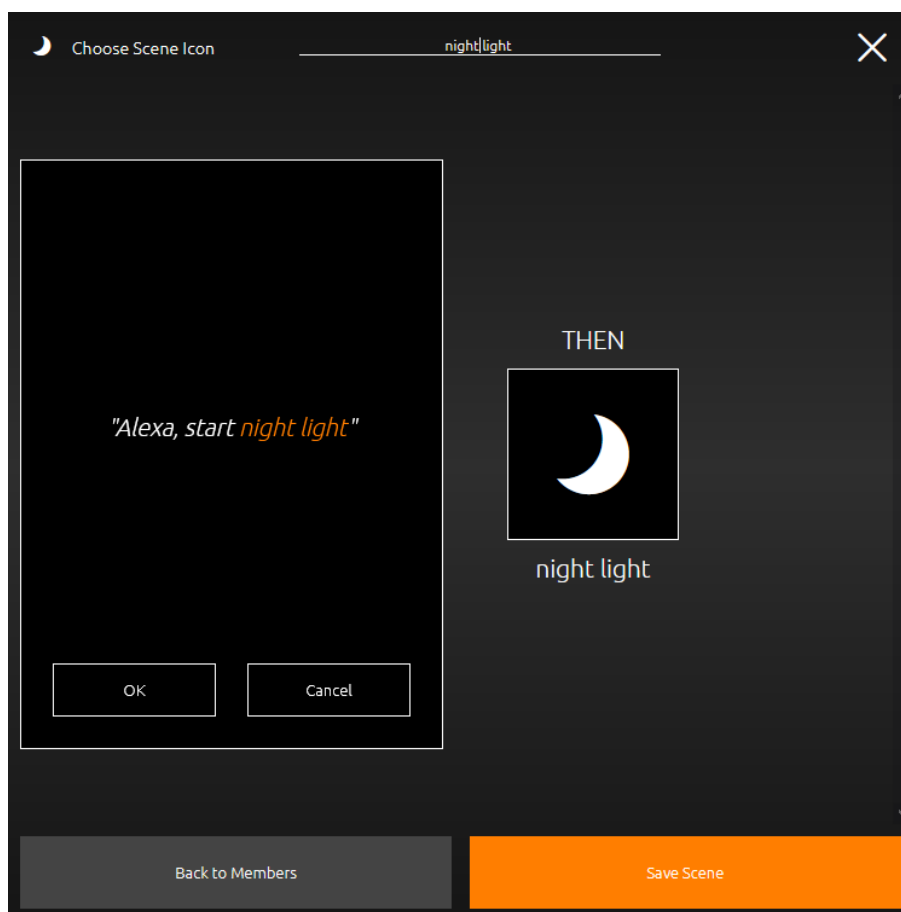
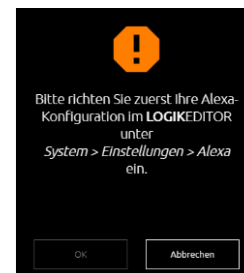


Figure 128: Scene with trigger Alexa

The trigger is now activated with ALEXA via the already assigned scene name. You can combine this scene with other triggers, set links and define conditions individually. Save your scene settings. For further scenes, you can configure further ALEXA triggers in this way so that you can control your system via ALEXA.



The number of created ALEXA triggers is displayed in the **LOGIKEDITOR**, in total with the ALEXA devices created in the **LOGIKEDITOR**.

### Alexa

Configuration Connection Proactive Reports

Devices provided to Alexa: 1

☒ Send device status changes to Alexa proactively

Proactive sending means that every state change of an Alexa device will be sent to Amazon immediately, which shortens response times if you ask Alexa for values. If disabled, Alexa needs to retrieve the value when asked.

Access Token to connect to the BAB TECHNOLOGIE Service



## 8 LAUNCHPAD

The Launchpad provides quick access to up to 6 scene triggers. It can be enabled in the settings section of the CUBEVISION 2 start page.

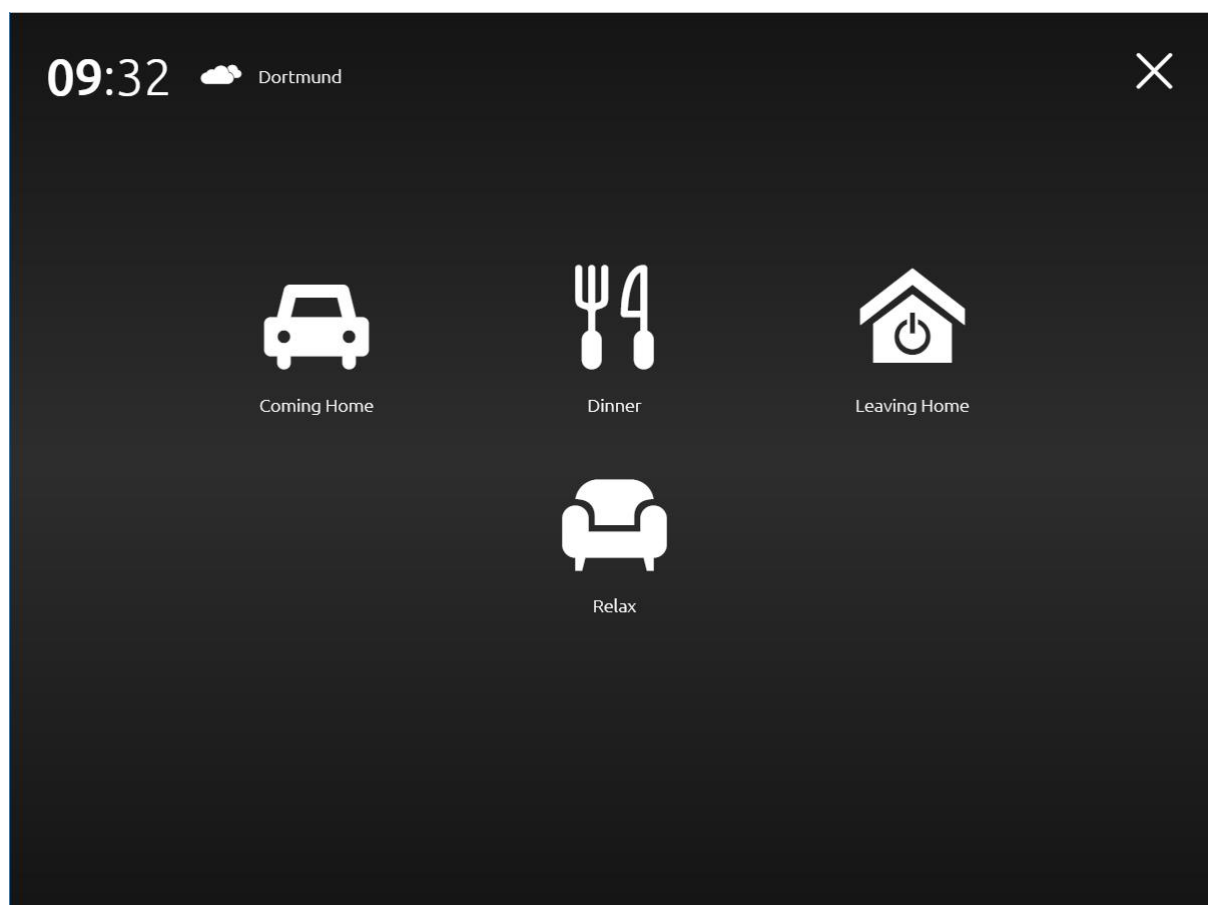


Figure 129: Launchpad



*Launchpad disabled:*

The menu entry is greyed out if the Launchpad is disabled.

*Launchpad enabled:*

If the Launchpad is enabled, the menu entry is orange, and you can set the time of inactivity in minutes after which the Launchpad will automatically appear. You can also open it at any time by accessing the menu and pressing the Launchpad entry.

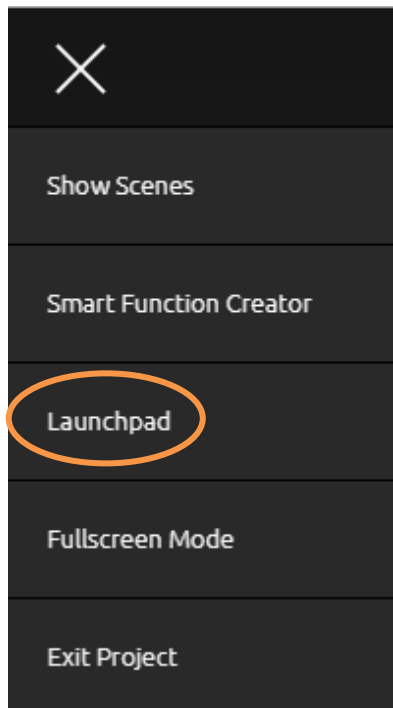


Figure 130: Menu

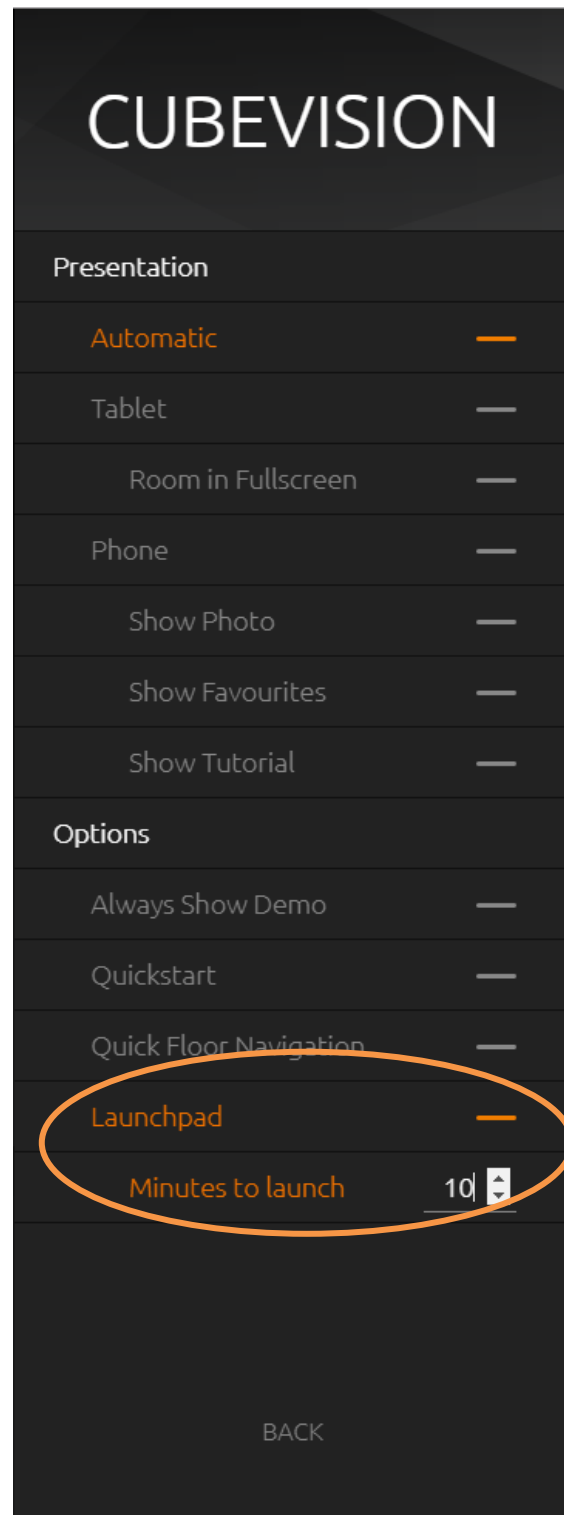


Figure 131: CUBEVISION Settings

## 9 APPENDIX

### 9.1 ICONS FOR CONTROLS

In the following figure, all 34 icons of controls are displayed:

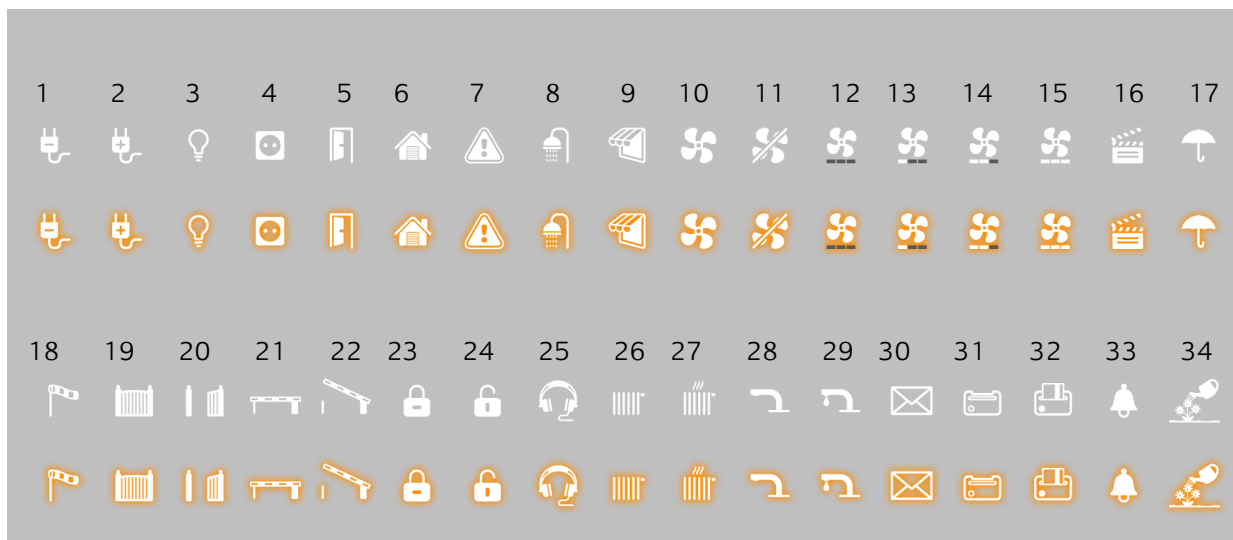


Figure 132: Icons for controls

For following function, icons are available, each for active and inactive (sequence from left to right):

- |                    |                            |
|--------------------|----------------------------|
| 1. "Central ON",   | 18. "Wind",                |
| 2. "Central OFF",  | 19. "Door open",           |
| 3. "Lighting",     | 20. "Door closed",         |
| 4. "Socket",       | 21. "Barrier open",        |
| 5. "Door",         | 22. "Barrier closed",      |
| 6. "Garage",       | 23. "Locked",              |
| 7. "Caution",      | 24. "Unlocked",            |
| 8. "Bath taken",   | 25. "Music",               |
| 9. "Sunblind",     | 26. "Heating ON",          |
| 10. "Fan On",      | 27. "Heating OFF",         |
| 11. "Fan off",     | 28. "Water faucet open",   |
| 12. "Fan level 0", | 29. "Water faucet closed", |
| 13. "Fan level 1", | 30. "Mail",                |
| 14. "Fan level 2", | 31. "Keycard present",     |
| 15. "Fan level 3", | 32. "Keycard absent",      |
| 16. "Scene",       | 33. "Bell" and             |
| 17. "Rain",        | 34. "Watering",            |