



b.a.b-technologie gmbh

Control L (eibPort)

Dokumentation

Version 3.0
Typ LAN / LAN PL / EnOcean
Artikel Nr.: 10104; 11104, 10504

Documentation version VI
Actual state 02/2012
Date: 5. Juni 2013

EN



b.a.b – technologie gmbh

im INHOUSE Dortmund
Rosemeyerstr. 14
44139 Dortmund

info@bab-tec.de

Tel.: +49 (0) 231 – 476 425 - 30
Fax.: +49 (0) 231 – 476 425 - 59
www.bab-tec.de



TABLE OF CONTENTS

1	Visualisation.....	5
1.1	Control L (AJAX) Visualisierung	6
1.1.1	Requirements	6
1.1.2	Important notes	6
	Use hardware acceleration / CSS 3 animations	7
1.2	Autologin / Log Remember.....	8
1.2.1	Remember login for The Control L	8
2	Control L Support	9
3	Elements.....	10
3.1	Themes / Exchangeable Elements	10
3.2	Visualisation Elements	10
3.2.1	Dali Monitor.....	11
3.2.2	CubeVision.....	12
3.2.3	Embedded page (flip)	13
3.2.4	Web Container	14
3.2.5	Shape Element	14
3.2.6	SequenCE Push Button.....	15
3.2.7	Blinds And Status Indicator	16
3.2.8	Window Contact	17
3.2.9	RTR Display	17
3.2.10	Colour Selection	18
3.2.11	Top Consumer	18
3.2.12	Image	19
3.2.13	EIS 1 Objects / Switch, Button and LUminaire	20
3.2.14	Blinds.....	21
3.2.15	EIS 14 PushButton.....	21
3.2.16	Bit bar.....	22
3.2.17	Static and Dynamic Text.....	22
3.2.18	EIS 15 Text	23
3.2.19	EIS 15 Display	23
3.2.20	Temperature Control.....	24
3.2.21	Temperature display.....	25
3.2.22	Date/Time Display.....	25
3.2.23	AnalogUe Clock	26
3.2.24	Slider	27
3.2.25	Dimmer	27
3.2.26	Value Display.....	28
3.2.27	Telegram Time.....	29
3.2.28	Job Editor	30
3.2.29	Logic display	30
3.2.30	Page Link.....	31
3.2.31	RSS Feed	31
3.2.32	Camera.....	32
3.2.33	Graph	34
	Functionality within the visualization	36
	Control L functionality within the visualization	36
	Information about the recording table (ringbuffer)	37
3.3	Security Settings - user administration for the visualisation	38
3.3.1	Licence upload	40
4	Disclaimer.....	41
5	Appendix	42



List of figures

Figure 1: eibPort - Home - visualization	5
Figure 2: Apple iPad with Control L visualisation.....	6
Figure 3: Control L visualization - Context Menu.....	7
Figure 4: visualization Log out.....	8
Figure 5: Visualisation editor - tooltip Control L support.....	9
Figure 53: visualization Editor – Dali Monitor Element.....	11
Figure 55: Visu-Editor – Dali Monitor Element Configuration.....	11
Figure 53: visu Editor – CubeVision Element.....	12
Figure 6: Visualisation editor - Flip / Dialogue page out of distribution project.....	13
Figure 7: Visualisation editor - embedded page(flip) in distribution project.....	13
Figure 8: Web Container - parameter.....	14
Figure 9: Shape Element - Shape type.....	14
Figure 10: Shape Element - Add action.....	15
Figure 11: Shape Element - Actions.....	15
Figure 12: Sequence Button - specific parameters.....	15
Figure 13: Sequence Button - edit functions.....	16
Figure 14: Jalousie and Status indicator - Parameters.....	16
Figure 15: Window contact - parameters.....	17
Figure 16: RTR-Display - specific parameters.....	17
Figure 17: Colour selection - specific parameters.....	18
Figure 18: Top Consumer - specific parameters.....	18
Figure 19: Top Comsumer - editing consumers.....	19
Figure 20: Image Element Parameter.....	19
Figure 21: Example Cover Display.....	20
Figure 22: Jalousie - parameters.....	21
Figure 23: Bitbar - parameters.....	22
Figure 24: Static Text, Object style configuration.....	22
Figure 25: Enter font style.....	22
Figure 26: Dynamic Text - Parameters.....	23
Figure 27: EIS 15 Text - Parameters.....	23
Figure 28: EIS 15 Display - Parameters.....	23
Figure 29: Date / Time display - Parameters.....	25
Figure 30: Analogue Clock - Parameters.....	26
Figure 31: Slider - Parameters.....	27
Figure 32: Dimmer - Parameters.....	27
Figure 33: Value Display - Parameters.....	28
Figure 34: Telegram Time- Parameters.....	29
Figure 35: Job Editor element.....	30
Figure 36: Logic display - Parameters.....	30
Figure 37: Page Link - Parameters.....	31
Figure 38: RSS Feed - Parameters.....	31
Figure 39: Kamera Element - Parameter.....	32
Figure 40: Camera view - Copy URL.....	33
Figure 41: Graph - Parameters.....	34
Figure 42: Zoomed graph with curve information.....	36
Figure 43: ConfigTool - EIB record filter.....	37
Figure 44: Altering between user management and visu-editor.....	38
Figure 45: Editor - Create/Delete User Account.....	38
Figure 46: Editor – user management.....	38
Figure 47: ConfigTool - Licence upload.....	40



1 VISUALISATION

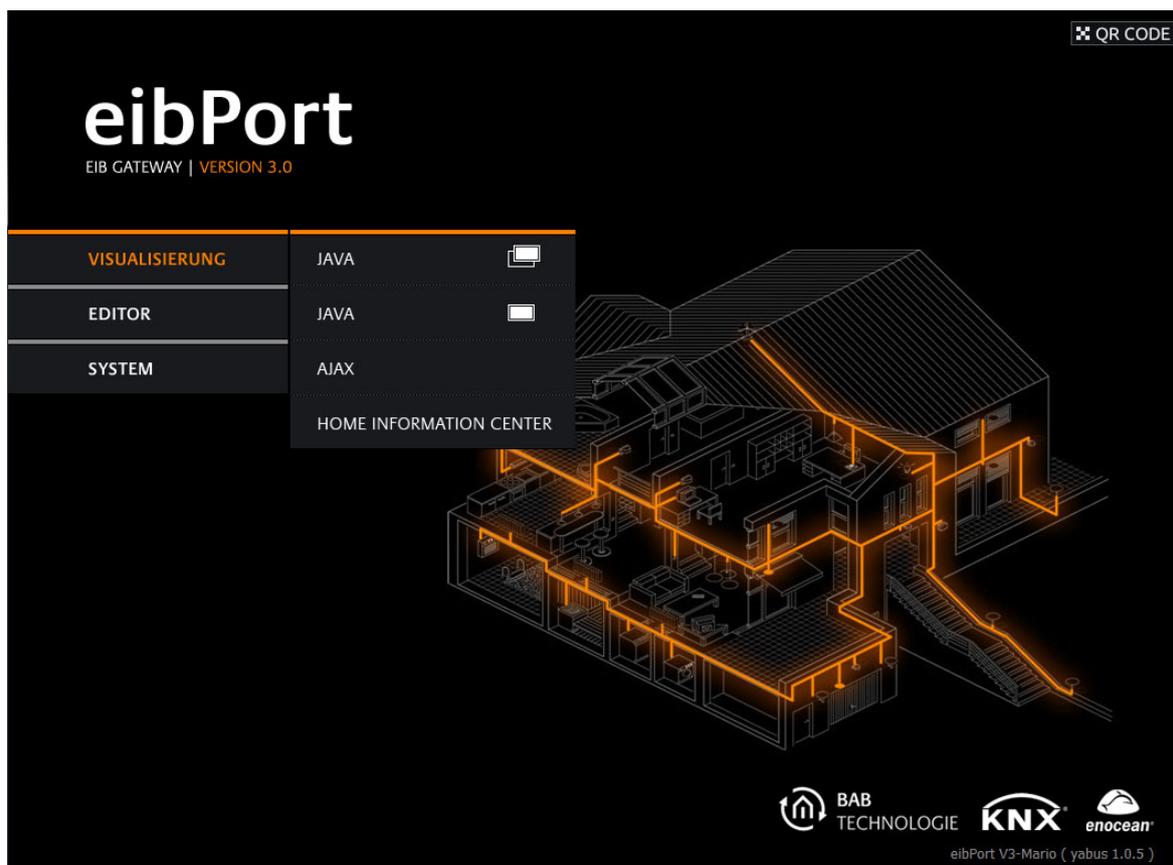


Figure 1: eibPort - Home - visualization

Use the button "visualization" to access the selection of the various visualization interfaces. Here are the two Java visualization interface ("External Window" and "Embedded"), and Control L - Visualization and the Home Information Center - visualization. Each visualization interface can be protected via the user management in visualization editor. As delivered, it is not enabled.

Note: To close the selection window again, simply click once on "Visualization".

1.1 CONTROL L (AJAX) VISUALISIERUNG

Control L is the name of a web technology. In *eibPort* this technology will be used for providing also “fully” visualisation to units, which normally offer no Java support. Control L works in a platform independent way, just like Java and can be used for web-pads like iPad, for mobiles or also for normal PCs. Control L visualisation will be generated out of the same data as Java visualisation will do. But at the moment, Control L visualisation still not yet support all elements and functions of Java visualisation.



Figure 2: Apple iPad with Control L visualisation

1.1.1 REQUIREMENTS

So that Control L visualisation could be shown on a client, it has to support Java script. Required data of *eibPort* will be created, while storing your visualisation project in editor. A query will appear, in which you can choose, to which project Control L visualisation should be generated. Control L visualisation utilize the same user account as the Java visualisation does.

1.1.2 IMPORTANT NOTES

Support of visualisation elements and functions

To get information about what visualisation elements and functions are supported by the Control L visualisation you will find information in the corresponding Tool Tipp. In the element list additionally is a blue bar which indicates the full resp. the half Control L support.

Connection establishment / simultaneous connection

The Control L technology is a server-heavy application. Unlike Java, it asks the client visualize the current status periodically from the server. They say that the client "polls". This polling is due primarily to the performance of the server, so the number of simultaneous connection is limited by the amount of other resource consumption.

Can be optimized for the browser to connect through so-called "WebSockets" support. This gives the possibility to visualize it in a special eibPort WebSockets port access (see "ConfigTool"> "Configuration"> "Advanced yabus (EIB) settings").



USE HARDWARE ACCELERATION / CSS 3 ANIMATIONS

The Mobile Safari browser on Apple devices like the iPad and iPhone uses simple animation, no hardware acceleration. Therefore, it may be committed by the slide effects to a jerky presentation. To circumvent this supports the visualization Ajax CSS 3 transformations. This animation will be displayed more smoothly, since use is made in this case the hardware acceleration. The activation is automatic once the Control L visualization detects an appropriate browser. The use of CSS 3, however, can cause some browsers or other devices to ensure that the operation is not optimal expires. In order to disable CSS 3 in this case, a context menu that is at the start of visualization during the first 10 seconds in the lower right area of visualization. This menu can also logout from the visualization can be initiated.

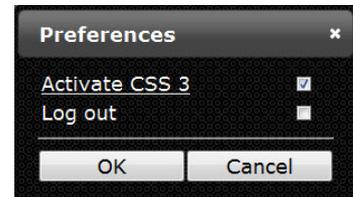


Figure 3: Control L visualization - Context Menu

1.2 AUTOLOGIN / LOG REMEMBER

In order to enter the user does not always have his access, there is the possibility of so-called "auto login" or "Remember Login" to use functions. Here, the application data when the visualization is transmitted to or stored on the client computer.

1.2.1 REMEMBER LOGIN FOR THE CONTROL L

For the visualization of Control L is to store it at the login dialog, the ability to logon to the affected client computer. The checkbox "Remember login" credentials are stored via a cookie in the browser and are valid for 4 weeks. During this time, the authentication data is not requested again.

If this option is no longer required or should the current user is logged out is up to 10 sec after the start of the visualization, a context menu available by which the log can be made out.

In addition to the activation of CSS3 and Deaktivierung for smoother display on Tablet PCs including the log is taken out. Once the dialog with "OK" has been confirmed are the credentials on the local PC and deletes the authentication must be given the next time.

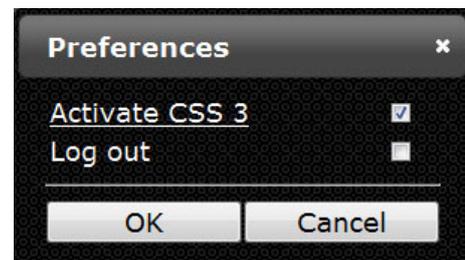


Figure 4: visualization Log out



2 CONTROL L SUPPORT

In what form visualisation elements and global parameters also are effective for Control L visualisation, we can find out quickly and simply by means of tooltips. Visualisation elements will get one optical marking (a blue bar). Control L support of the elements will be constantly developed and alters from firmware to firmware.

Color coding:

- Blue bar = Full Control L support
- Light blue bars = Partial support
- Orange bars = No Java support
- No bars = Only supports Java

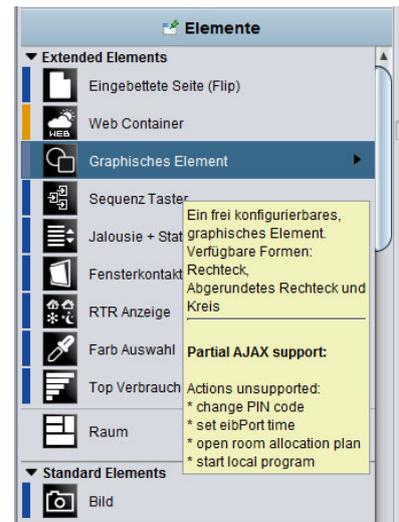


Figure 5: Visualisation editor - tooltip Control L support



3 ELEMENTS

All elements of standard library belong to visualisation elements and all the switches, that were created by the compenent builder. These are, however, optional. For placing the elements on visualisation , it will be sufficient to click on these elements. Then they will be placed in the centre of visualisation page, focussed by a frame and on the left hand side a corresponding element parameter will be displayed.

3.1 THEMES / EXCHANGEABLE ELEMENTS

Die Visualisierungs-, Bedien-, Job- und CONTROL S- Elemente können seit der Firmware 0.10.1 ausgetauscht werden. Dazu werden sogenannte Themes, die den kompletten Elemente Satz enthalten verwendet. Ein Theme bzw. die Einzelnen Elemente können dann mit einer Zusatzsoftware dem Theme Editor bearbeitet werden. Der Theme Editor wird in einem extra Dokument beschrieben und ist auf der Webseite www.bab-tec.de zu finden.

3.2 VISUALISATION ELEMENTS

All elements that are available for use in the visualization are displayed in the „Elements“ window. There are two different kinds of elements. On one hand you'll find the standard elements which can be modified and adjusted with the theme editor; on the other hand there are elements which can be generated with the *“Component Builder”* tool. Using this tool not just the look of the elements can be set freely but also their function. Both tools are described in additional documaentations. Just ask for them under info@bab-tec.de.

Note: All data types are still named as EIS values in the documentations. This is done due to the fact that they are still best known and widely spread. In the annex you find a matching table for the data types [EIN ↔ DPT](#)



3.2.1 DALI MONITOR

Visualization object Dali Monitor represents the display element of the Dali monitor job, which can be configured in job editor

Control L support

The element can also be used for Control L

Dali Monitor Job

By the help of this drop down menu, different Dali monitor jobs can be chosen, which were defined in job editor before.

Settings

Beside of object, the element has four different setting options.

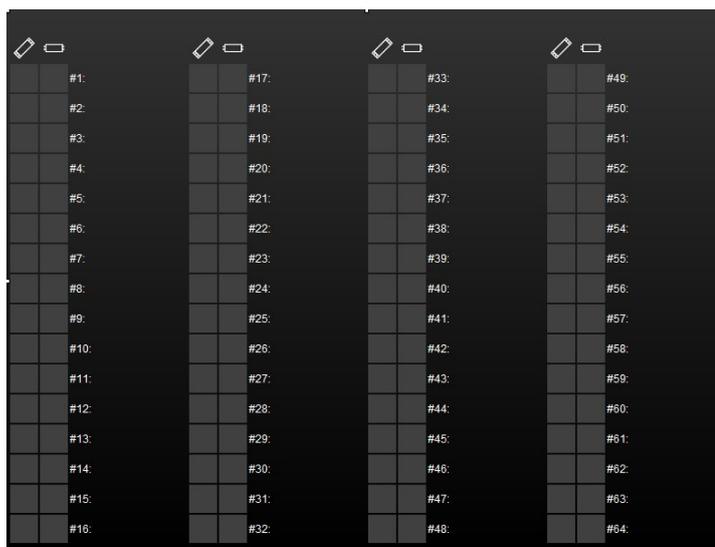


Figure 6: visualization Editor – Dali Monitor Element

- *Tooltip*: This text field defines which lettering are displayed, when the mouse pointer roll over the element
- *Color*: Please define a color for each of the states OK, defective, unknown and non-active.
- *Manual inspection*: By this check box, a Dali gateway can be separately required on demand.
- *Columns*: You can choose between a double-columned or a quadrifid presentation



Figure 7: Visu-Editor – Dali Monitor Element Configuration



3.2.2 CUBEVISION

The use of visualization gets access to CubeVision by this element. For configuration of CubeVision, an extra documentation exists, which is located on CD or can be downloaded over www.bab-tec.de.

CubeVision element is a new visualization element, which was announced first for eibPort with firmware 3.2.0.

Also for all eibPorts of version 3.0. (fourth generation,) CubeVision element does not pass by and it will be populated in the context of free firmware updates (firmware 3.2.0)



Figure 8: visu Editor – CubeVision Element

Control L support

The only exception to this element only works in the Control L visualization and NOT in the Java visualization.

Building selection

By button „Create a Building“, the CubeVision editor will be reached. If one or more buildings are still configured, different buildings can be selected by drop down menu, which were defined in CubeVision editor before.

Quick Navigation

See documentation (manual) CubeVision, chapter 2.2

Select between :

- No quick navigation
- Total area
- Bottom right corner



3.2.3 EMBEDDED PAGE (FLIP)

By this element, flip pages, which were created in folder “flip/dialogue pages” before, can be placed to a visualisation page. There you can determine, how many individual pages the flip page will imply and which function they will have.

Control L support

The element can also be used for Control L visualizations

Specific parameter:

Beside general element parameters, specific parameters of elements exist. These determine the flip element`s appearance and performance on visualisation page.

- *Page select:* Please select here the desired flip/dialogue page, which should be placed on visualisation page
- *Visible page:* Every flip page consists of 2 segments (single pages) at least. By the number field, you can adjust, how many segments could be regarded simultaneously. If only 2 segments are defined, only one segment should be visible, so that it can bring effect to slide into the other segment.
- *Fade-out area in pixel* In this place, at the left and right margin, you can enter a range in pixel, in which respective vanishing segment will be faded out slowly. Fade-out area will be added to the actual size of corresponding segment

Example

For example a flip page, like it is used in distribution project. It consists of 4 individual segments. And so the configured flip/dialogue page will look like.



Figure 9: Visualisation editor - Flip / Dialogue page out of distribution project.

On the right side, you can see the specific configuration. The page consists of 4 segments, whereas the first page works as a start page (numbered consecutively from left to right).

On the second figure you can see then, how this page was intergrated in visualisation by means of the embedded page (flip)-element.

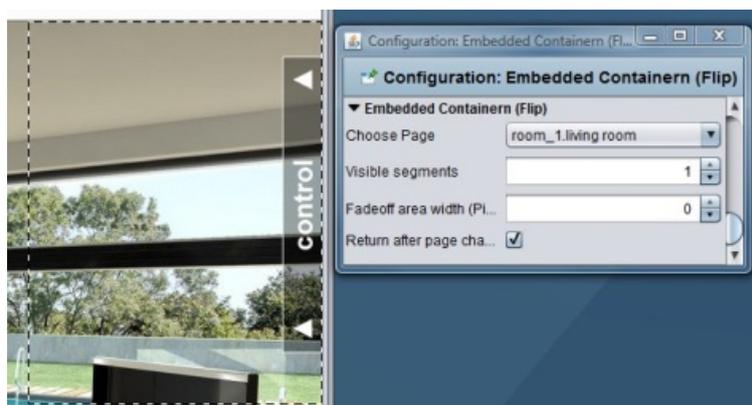


Figure 10: Visualisation editor - embedded page(flip) in distribution project

In case you don't have any distribution project, please order it under info@bab-tec.de



3.2.4 WEB CONTAINER

This element can be Web pages or HTML content into the visualization can be embedded. For technical reasons, this element will only work in the Control L visualization.

Hint: Web pages can prevent embedding.

Control L support

The only exception to this element only works in the Control L visualization and NOT in the Java visualization.

Specific parameters

The web container can relate its contents from two different sources. On the one hand from the specification of a URL, on the other from a field in which a full HTML code can be entered.

- URL: The URL can be loaded by means of foreign Web content in the container. It is simply the same URL needs to be registered also in the browser.
- HTML: In the big field "HTML code" can be loaded either own or other HTML code. Thus, for example Weather widgets are displayed.
- Updated (min): Determine the time in minutes when the content of the web container to be updated.



Figure 11: Web Container - parameter



3.2.5 SHAPE ELEMENT

The graphic element can be used for layout purposes as well as for different functionalities.

Control L Support

Not all functions of the element are supported in the Control L visualization. The following tasks are not supported:

- Change Page PIN
- Set eibPort clock
- Open Room Allocation Plan
- Local programm

Element Type (style)

The Shape element has 3 different characteristics (styles). The wanted style can be selected from a dropdown menu.

- *Rectangle*: The element is displayed as rectangle.
- *Rounded rectangle*: The element is displayed as rectangle with rounded edges
- *Circle*: The element is displayed as circle.



Figure 12: Shape Element - Shape type

Radius of the edges

If style „Rounded edges“ is selected the radius of the edges can be set here (unit = px)



Functions

The Graphic element offers beneath it's layout functionality some other functions which can be linked with the element directly. Therefor several actions can be defined. These actions will be executed when the element is pressed or released. Each function (press / release) just one action can be assigned to. It is not possible to define one action for „press“ and „release“ at the same time.

- *Change Page PIN:* By clicking the corresponding graphical element the user is been requested to change the page PIN. Which PIN will be changed can be determined in the menu.
- *Page Link:* By “mouse-press” or “mouse-release” the page will be skipped. The target page is been defined in the pull down menu.
- *Page History:* It is possible to navigate apage forward or backwards. This function is similar to the navigation in a internet browser. The navigation in the “forward” direction” only works if “backwards” is used before. “Page backwards” is depending on the chronic a user creates.
- *Flip Page:* Using this function a specific segment of a flip page can be called. So it can be navigated without using the flip- element.
- *Open URL in Broswer:* The desired URL will be requested if the element is been clicked.
- *HTTP-Request:* A predefined request is been sent. This can be used to control an IP-camera for example. Does not depend on the Job „HTTP-Request“.
- *Open Room Allocation Plan:* The shape element is been used to open the visualisation element for the room allocation plan.
- *Set eibPort clock:* The dialogue for setting the eibPort clock is been displayed. It is able to enter time and date by hard or use the local machine's time to set it.
- *Local programm:* This function allows to start a locally installed programm on the client PC. For this the command and the file to be executed can be selected.

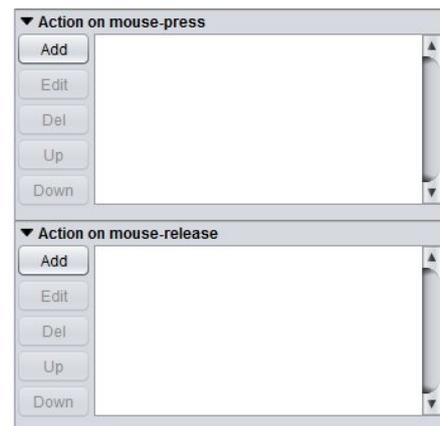


Figure 13: Shape Element - Add action

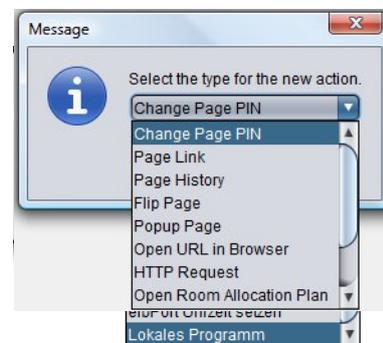


Figure 14: Shape Element - Actions



3.2.6 SEQUENCE PUSH BUTTON

This push button is able to execute different actions by repeated. So after a second release in a defined period, not the same action will be executed, but also another one. This push button will be used for example in handicapped accessi ble homes.

Control L support

The element can also be used for Control L visualizations

Spezific parameter:

Beside general element parameter, some specific parameters of elements exist. These parameters determine the sequence push button`s performance und

- *Standard colour:* Defines the colour, which button will carry in standby mode.
- *Standard title:* The title is placed in centre and it is optional. Standard title will be displayed, when push button is in standby mode. Font style can be defined separately by a corresponding menue

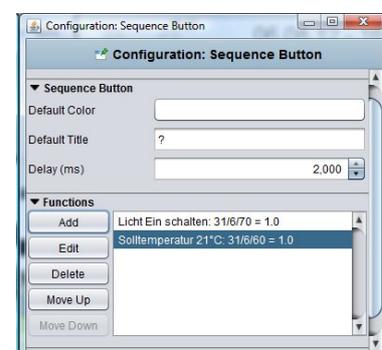


Figure 15: Sequence Button - specific parameters

- *Delay (ms):* Delay determines the period, which has to pass by, in order that sequence push button will return to standby mode. If it will be pushed a second time within this period, button will execute the next respective action
- *Function:* By menu item function, several actions could be defined, which the push button should perform. These actions will be executed from top to bottom. Configuration:
 - *Colour:* Please define here the colour, which sequence push button should accept by executing of this action
 - *Title:* title will be shown in sequence push button by executing this action. Font style is the same like you have defined in standard
 - *Adresse:* Group addresses can be enter neither by keyboard, nor they can be chosen out of a ESF file, loaded up before.. Therefore the arrow button, beside address input field, will serve. How you can load up one ESF file to your unit, you will learn in chapter "ETS".
 - *Data type:* To every address a data type has to be assigned. Following types are possible in here, EIS1, EIS5, EIS6 and EIS 14 (unsigned).
 - *Value:* Here you determine the value, which has to be sent. This value conforms to adjusted data type.

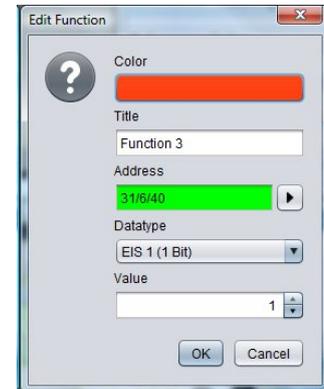


Figure 16: Sequence Button - edit functions

3.2.7 BLINDS AND STATUS INDICATOR



The blinds and status indicator serves as a control element for blinds. Specific positions can be driven and the tilt angle is displayed.

Control L support

The element can also be used for Control L visualizations

Objects

The element provides different objects. Not all of them have to be used.

- *Up / Down:* EIS 1 Object as 'Move' command.
- *Position:* EIS 6 Object to drive and display a specific blind's position directly
The scaling within the element is controlled dynamically. If parameter „aspect ratio“ is deactivated the scaling will become more precise.
- *Ribs:* EIS 1 Object for blinds "Step" command.
- *Wind control:* EIS 1 object for wind control. If a telegram is sent on this object the operation elements turn to red and cannot be used any more.
- *Angle:* EIS 6 Object for controlling and displaying the angle of the ribs.



Figure 17: Jalousie and Status indicator - Parameters

Settings

The element provides some more options:

- *Show Step:* "active" as default setting. Assigns if an operational element for the step command is displayed within the element or not.
- *Use ESF data:* if this flag is activated ESF data (out of the ETS) are used as tooltip resp. mouse-over-help.
- *Invert:* For use in some special controls it is necessary to invert EIS 1 objects



3.2.8 WINDOW CONTACT

Element window contact displays the actual status of one or more windows. Therefore as well EIS 1 (1Bit) as EIS 14 (1 Byte) object can be used.

Control L support

The element can also be used for Control L visualizations

Status EIS 14

The window contact is monitored by an EIS 14 object. In this case a value for each status "Open", "Closed", "Tilted" is set. The object for „Broken“ is the only one which is active in "Status EIS 1" even if in selection "Status EIS 14".

Status EIS 1

If this status is activated there are three objects each for "Open", "Tilted" and "breakage of glass". Using the „Invert“ flag the objects can be inverted.

Settings

The parameters serve for more specific settings:

- *Use ESF data:* if this flag is activated ESF data (out of the ETS) are used as tooltip resp. mouse-over-help.

Mirror Image: If this flag is enabled, the representation of the item displayed mirrored.

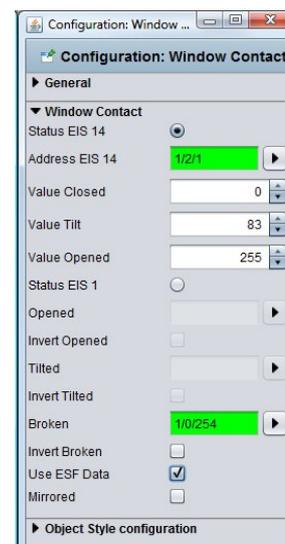


Figure 18: Window contact - parameters



3.2.9 RTR DISPLAY

RTR display serves for room temperature control. In this process, switch offers the functions standby / comfort / night reduction and frost protection. This element can be operated with EIS 1 or EIS 14. .

Control L support

The element can also be used for Control L visualizations

Specific parameter

Beside general element parameters, some specific parameters of elements exist. These parameter define, which data type and which address RTR-display will use

- *Typ EIS 14 / EIS 1:* G Fundamental RTR-display can be operated with EIS 14 or EIS 1 values. Depending on which data type is chosen, one or the other display will be activated.
- *Status Adresse:* If EIS 14 as data type is chosen, address data has to be entered here. This could happen either by hand nor by the dialogue for address input, which offers the access to data of ETS (see also: upload ESF-file)
- *Value Standby/comfort/night reduction/frost protection:* for every status, you have to enter necessary EIS14 values in the corresponding input fields. .
- *Adr. Standby/comfort:* If EIS 1 is defined for data type, so it will be switched between standby and comfort by this communication object
- *Adr. Night reduction:* By the help of this address, it will be switched to night reduction.
- *Adr. Frost protection* By the help of this address, it will be switched to frost protection.

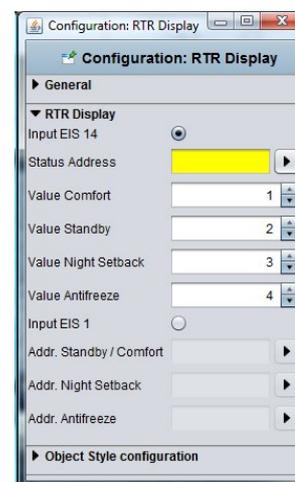


Figure 19: RTR-Display - specific parameters



3.2.10 COLOUR SELECTION

Colour selection circle serves for combination of colours out of RGB colour space. Thereby it will be possible to control LED coloured light by visualisation, with the help of so called „DMX-dimmer“. Necessary values will be sent from *eibPort* by EIS 14 telegrams.

Control L support

The element can also be used for Control L visualizations

Specific parameter

Beside general element parameters, some specific parameters of elements exist. These parameters determine, to which groupaddresses necessary values will be sent.

- *EIS 14 red/green/blue*: Here communication objects of EIS 14 values of red, green and blue will be entered. Addresses can be filled in either by keyboard, nor by entering in the address dialogue, where you can also find data from ETS, in case they were imported before. (see chapter ETS)
- *EIS 1 sending complete*: to this group address a EIS confirmation telegram will be sent, if entering of colour was completed.

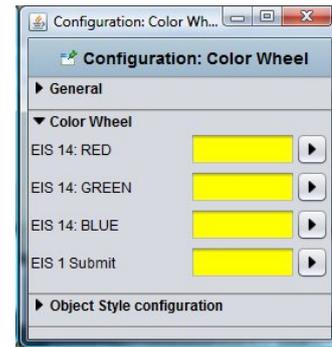


Figure 20: Colour selection - specific parameters



3.2.11 TOP CONSUMER

Top consumer is an element of display, which compares 4 incoming values and which list them automatically according to their amount. Thereby values will be compared by means of a horizontal bar graph. So that display is suited excellently for making visible the top consumer in a building for one view. To measure this consumption, KNX-actuators with current value detection will be applied ideally. These will deliver momentary electricity (ampere), which will convert by the integrated job to energy consumption (for example watt-hours) umgerechnet wird.

Control L support

The element can also be used for Control L visualizations

Specific parameter

Beside general element parameters, some specific parameters of elements exist. These parameters define which unit the top consumer will display and how many consumers will be reflected.

- *Bar colour*: Determines the colour of the bar, which displays the amount of consumption
- *Value format*: To influence the value`s format, you can place following inputs here: Integer and fractional digits are controlled by characters „0“ and „#“. „0“ stands for a forcing digit, that means, even if there is no value, character „0“ will be displayed. All characters, which are marked with „#“, will be optional, that means, that if there is a „0“ or no value, this character will not be displayed. For example:
 - Value should be 0,2. In case of value format 0.0, value 0.2 will be displayed. But if you enter #.#, only digit ,2 will be shown, because there is no value (=0) on the first digit.
 -
- *Data source*: At present unique selectable option “Momentary (EIB)”. That implies that information about consumption will be extract out of current EIB telegrams.

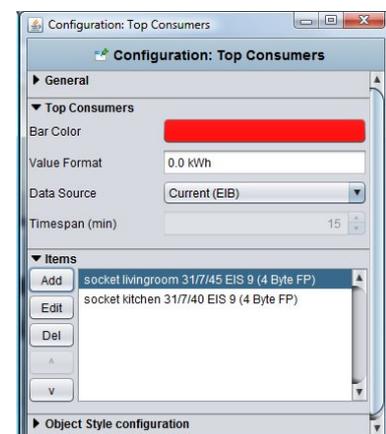


Figure 21: Top Consumer - specific parameters



- *Consumer:* By this menu, particular consumer will be allocated to the element. Therefore you will find the buttons „Append“, „Edit“ and „Delete“ on the side. With arrow keys, the sequence can be changed. With the help The button „Append“ opens another menu:
 - Title: The title will be shown also in corresponding element. The name should be unique.
 - Address: Input address of consumption data. This address can't be entered by keyboard, but it has to be chosen out of one ESF file. ESF-dialogue will open by pushing the arrow key near the address entry.
 - Data type: The element supports following EIS types: EIS 5, EIS 6, EIS 9, EIS 10 (s + u), EIS 11 (s + u), and EIS 14 (s + u).
 - Factor und Offset: Value will be multiplied with Factor and be added with Offset.

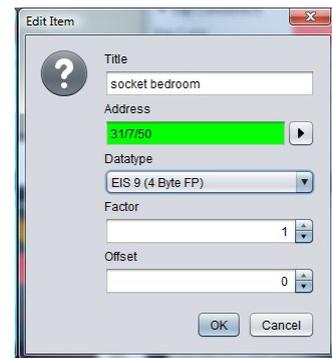


Figure 22: Top Consumer - editing consumers

[Please note: For integrate job`s configuration please read more in chapter „JobEditor“](#)



3.2.12 IMAGE

Element “Image” allows to place any graphic on the visualization surface. Not just graphics from the eibPort’s buffer but even from other sources (server etc) can be uploaded. Moreover the display mode (yes / no) can be linked with an event.

Control L support

The element can also be used for Control L visualizations

Image from internal memory

Via dialogue “Image” all graphics being loaded into the eibPort can be selected. Dialogue „Graphic Transfer“ serves for uploading graphics into the device. The dialogue can be called via „Extras“ > „Image transfer“, or alternatively using the arrows beside the drop down menu “Image”. Graphic files also can be drawn by drag and drop directly onto the visualization surface and are also available in the dropdown list.

- *Adopt size:* If the Image’s size was changed this button resizes it to the original gauge

External image

This element provides graphics being located on the client PC or on any server. So it is possible to display an actual cover graphic while playing the music.

- *External URL:* The absolute path of the wanted file or web page has to be typed in. If the file is located on the visualization PC the path has to begin with file:// In case of displaying a webpage the complete URL beginning with http:// has to be typed in.
- *refresh in (sec.):* defines the time period for the automatic refresh of the webpage Entering a „0“ means „no refresh“
- *background refresh:* if activated the URL will be refreshed in the background even if the visualization page is not active at the moment
- *Display last frame:* If an external URL cannot be reached temporarily the last successfully loaded picture is displayed
- *Check URL:* the reachability/ accessibility of the URL will be checked.

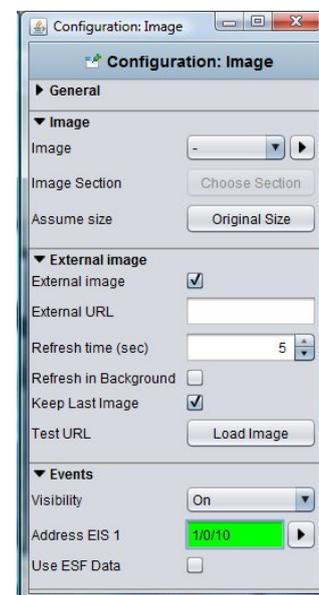


Figure 23: Image Element Parameter

Event configuration

The visibility of each image can be controlled by an input object EIS1.

- *Visibility*: defines the condition for visibility; „permanent“, „on“ or „off“.
- *Address EIS 1*: If variant „on“ or „off“ are selected the address array will be released and can be configured
- *Use ESF data*: if this flag is activated ESF data (out of the ETS) are used as tooltip resp. mouse-over-help.

Realizing cover display in visualisation

By the external function call screen, there is the possibility that actual cover picture to the Squeezebox™ Server abgespieltem piece of music show. If the image exists, the server can be found at the following picture is available:

```
http://<server>:<port>/music/current/cover.jpg?player=<playerid>
```

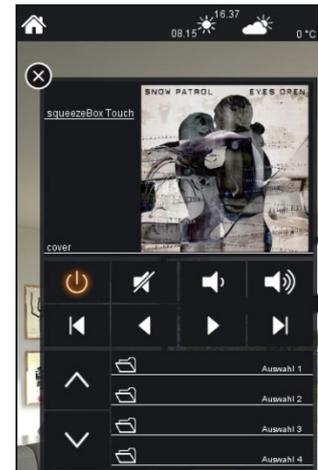


Figure 24: Example Cover Display

This URL is extracted from http-API of SqueezeCenter™ resp. SqueezeboxServer™ software. For a player ID, the assigned name of Squeezebox™ will be used. Assume SqueezeCenter™ resp. SqueezeboxServer™ software works on a server with the ip-address 192.168.1.10 on port 9002 and it is about a cover image of a song, which is just played on Squeezebox™ Boom (named sqbboom), the URL will be:

```
http://192.168.1.10:9002/music/current/cover.jpg?player=sqbboom
```

By adjustment of the picture element it is to consider, that the picture could be refreshed indeed, but it will not have to reflect cover of the actual song, because displaying cover is not connected directly with music control. In the event of that a music album doesn't contain any information of cover, server software displays a wildcard



3.2.13 EIS 1 OBJECTS / SWITCH, BUTTON AND LUMINAIRE



The Standard library provides three standard elements for data type EIS 1. These elements only can display 1 Bit values. Using the theme Editor it is possible to insert additional style sets for button and luminaire.



Control L support

The elements can also be used for Control L visualizations.

Switch On / OFF

Element switch toggles an EIS 1 object. The switch's style cannot be modified.

Button

Button contains different functions within one element. Moreover it is possible to use different style sets via the "Theme editor".

- *Toggle (On/OFF)*: each trigger on the element sends out an ON or OFF signal.
- *Button (ON/OFF)*: each trigger on the element sends an ON signal and after this returns with an OFF signal into its original status.
- *Button (OFF/ON)*: each trigger on the element sends an OFF signal and after this returns with an ON signal into its original status.
- *ON*: each trigger on the element sends out an ON signal.
- *OFF*: each trigger on the element sends out an OFF signal.



Luminaire

The luminaire displays the status of EIS1 objects. This element cannot be operated, but it is possible to use different style sets via the “Theme editor”.

Style set

Button and luminaire have different style sets which can be extended individually using the „theme Editor“. Basically both style sets provide:

- *Power Jack*: The element shows a power jack. In case of being used for the button it can be operated as switch, if used as luminaire it just displays
- *Corona*: The element pictures a corona. The element is suitable for being placed on “real” lamps (without background)



3.2.14 BLINDS

The blinds element serves as a control element for blinds. Blinds are controlled by EIS 7 (1Bit).

Control L support

The element can also be used for Control L visualizations

Objects

The element provides different objects. Not all of them have to be used.

- *Up / Down*: EIS 7 Object as ‚Move‘ command.
- *Ribs*: EIS 7 Object for blinds „Step“ command.
- *Wind control*: EIS 1 object for wind control.
If a telegram is sent on this object the operation elements turn to red and cannot be used any more.



Figure 25: Jalousie - parameters

Functions

The element provides two more options:

- *Use ESF data*: if this flag is activated ESF data (out of the ETS) are used as tooltip resp. mouse-over-help.
- *Invert*: For use in some special controls it is necessary to invert EIS 1 objects



3.2.15 EIS 14 PUSHBUTTON

This button sends out 1 Byte values (EIS 14) Werte instead of 1 Bit. The wanted value (0-255) has to be set before.

Control L support

The element can also be used for Control L visualizations.



3.2.16 BIT BAR

Bit bar is a bit-depending indicating device. Each of the 8 Bits may have the status 0 or 1. It reacts on previously set bits within a telegram value. It will be displayed coloured if this bit is set when receiving a telegram.

Control L support

The element can also be used for Control L.

Object

The element has an input object EIS14 (1 Byte).

Settings

Beneath the input object there are 4 more settings possible:

- *Use ESF data:* if this flag is activated ESF data (out of the ETS) are used as tooltip resp. mouse-over-help.
- *Colour ON/ OFF:* Here a colour for each status can be set.
- *Send value:* the element changes from a displaying to a sending element when activating this checkbox



Figure 26: Bitbar - parameters



3.2.17 STATIC AND DYNAMIC TEXT

eibPort provides 2 types of text elements: a static and a dynamic one. Both serve for lettering whereat the dynamic text is able to show different texts depending on KNX events.

Control L Support

Both elements can be used for the Control L visualisation.

Static text

Element „static text“ is „unlimited“ regarding the number of characters. Beginning with firmware version 0.1.1.4 the element can even display multiline text. Moreover the alignment (left, centered, right) can be set. The font style (size, type, colour) are set via menu item „Object Style configuration“.

Object Style Configuration

Font style, size and colour are set here. Using the dialogue „style“ individual styles can be defined and used later on within the project. If the individual style is changed these changes are automatically executed on all elements using the same style.

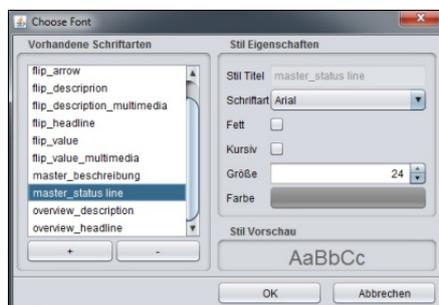


Figure 28: Enter font style

- *Ignore style / colour:* If the selected text shall get another colour as defined in the style set this can be done by activating the checkbox „ignore style“. A new colour can be selected from the array below.

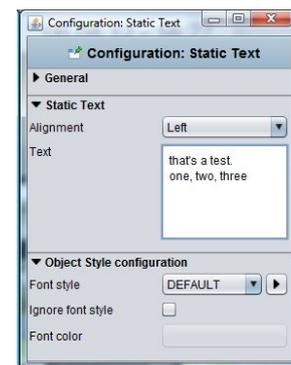


Figure 27: Static Text, Object style configuration



Dynamic Text

The basic settings are equal to the static text. Additionally it is possible to define a text for status ON and one for status OFF. For each status a different style can be defined. The input object determines the status.

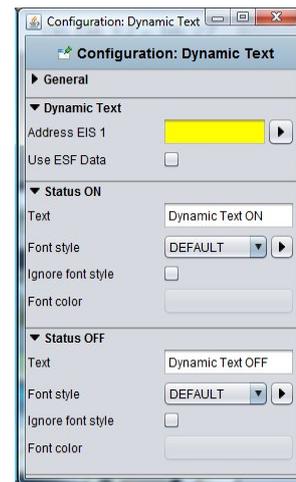


Figure 29: Dynamic Text - Parameters



3.2.18 EIS 15 TEXT

Element ,EIS 15 Text displays the text being received on a group address. Data type is EIS15, so the telegram uses 14 bytes and contains 14 characters as maximum. Character encoding is ASCII.

Control L support

The element can also be used for Control L visualizations

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

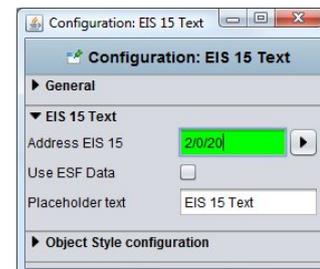


Figure 30: EIS 15 Text - Parameters

Wild card

Here a default text can be typed in. This text will be displayed as long as no telegram is received.

Font style

The font style can be defined as already described for elements static and dynamic text.



3.2.19 EIS 15 DISPLAY

Based on the ,EIS 15 Text' -element the EIS 15 display offers some more possibilities of use. So several messages can be buffered and messages can be sent. The element background can be customized.

Control L support

The element can also be used for Control L visualization.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Wild card

Here a default text can be typed in. This text will be displayed as long as no telegram is received.

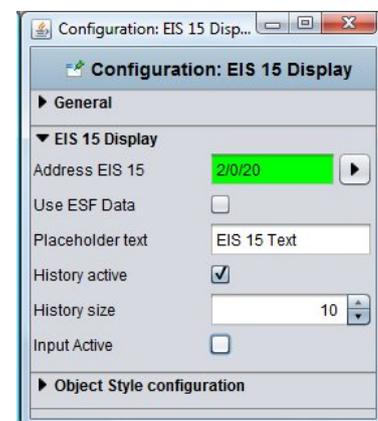


Figure 31: EIS 15 Display - Parameters

Recording

If this option is selected the element records incoming telegrams. The number of recordings is set by the input line „recording length“. Default setting is „10“.

Input active

If the checkbox is activated the element is able to send EIS 15 text messages. Therefore the element has to be activated by mouseclick. An input box opens and the text can be typed in.

Object Style Configuration

Not just the text itself but also background can be designed individually. Possible opportunities are depending on global element settings (compare chapter „general element parameters“)



3.2.20 TEMPERATURE CONTROL

The temperature switch serves for changing temperature values. The user is enabled to increase or decrease the values in predefined steps. By defining a background or using a graphics set the switch can be designed individually.

Control L support

The element can also be used for Control L visualization.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Data type

Possible data types are EIS 5 (DPT9.0xx, 2Byte values) or EIS 14 (DPT 6.010 1 byte values). The wanted data type can be selected from a dropdown menu.

Step width

Here it is defined by which value the default/ last value will be changed. Because the values are floating point values, also decimal places can be used. The default setting for the increment is 0.5.

Min. / Max. value

These two values define the range between minimum and maximum temperature. Even negative values are possible.

Object Style Configuration

Not just the text itself but also background can be designed individually. Possible opportunities are depending on global element settings (compare chapter „general element parameters“)

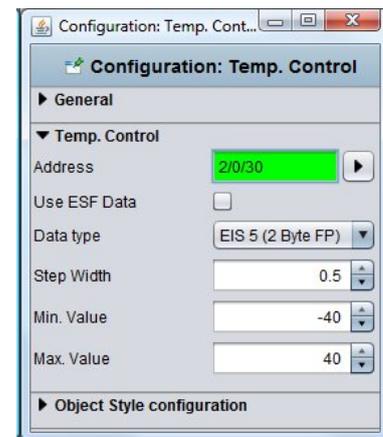


Figure 32: Temp. control-Parameters



3.2.21 TEMPERATURE DISPLAY

The temperature display shows the scheduled value and the actual temperature. For changing the scheduled value the element can be linked with the temperature switch. Background and font style can be set individually.

Control L support

The element can also be used for Control L visualizations

Use ESF Data

if this flag is activated ESF data (out of the ETS) are used as tooltip

Input objects

Both input objects have data type EIS 5. According to the KNX object structure several addresses can be joined to one object (=> chapter Object structure).

Text

The text being displayed within the element can be edited in these two arrays. For instance instead of „actual temperature“ it can be edited to „temperature“.

Object Style Configuration

Not just the text itself but also background can be designed individually. Possible opportunities are depending on global element settings (compare chapter „general element parameters“)



3.2.22 DATE/TIME DISPLAY

This element displays date and/or time within visualization. Time information is sent by the respective group address to the element. The display style can be changed in several ways.

Control L support

The element can also be used for Control L visualizations

Format

Is about the size setting determines what is displayed. There are four choices:

- *DATE – TIME*: First the date and then the time is been displayed
- *TIME – DATE*: Vice versa, first the time is displayed in front of the date
- *DATE*: Only date is been displayed
- *TIME*: Only the time appears.

Address arrays

Here the group addresses are typed in. For date information it will be EIS4 and for time information EIS3. If the eibPort jobs „send time“ and „send date“ are active, the eibPort provides the information to the element.

Note: Please bear in mind that it is not necessary to send time/date information too often. Moreover virtual addresses should be used in case of internal linking eibPort ↔ visualization.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

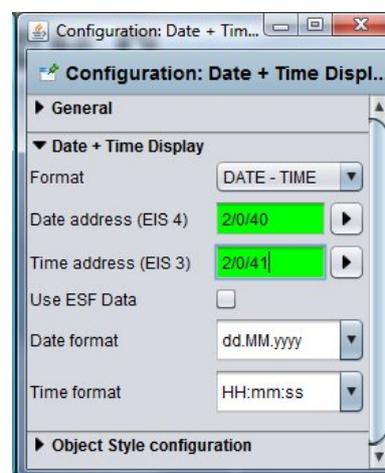


Figure 33: Date / Time display - Parameters

Date format / time format

In addition, you can determine this format in which the two values to be displayed. For this, the order in which the days, months and years to minutes, hours and seconds will be displayed by itself an abbreviation set. See also the Internet, keyword "SimpleDateFormat".

Object Style Configuration

Font style, size and colour are set here. Using the dialogue „style“ individual styles can be defined and used later on within the project. If the individual style is changed these changes are automatically executed on all elements using the same style.

- *Ignore style / colour:* If the selected text shall get another colour as defined in the style set this can be done by activating the checkbox „ignore style“. A new colour can be selected from the array below.



3.2.23 ANALOGUE CLOCK

This element displays the time as an analogue clock within the visualization. No date information is available. The clock's design can be changed using the Theme Editor.

Control L support

The element can also be used for Control L visualizations

Address arrays

The analog clock stops on an EIS 3 time frame. This eibPort from itself (job "time transmitter") or from the KNX bus system.

Note: Please bear in mind that it is not necessary to send time information too often. Moreover virtual addresses should be used in case of internal linking eibPort ↔ visualization.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Offset

Using the offset functionality different time zones can be displayed. The offset unit is „hour“.

Style set

The clock's style can be adjusted by using another graphic style set. Therefore the free additional tool "Theme Editor" is needed. With this it is possible to replace all of the graphics eibPorts with your own.

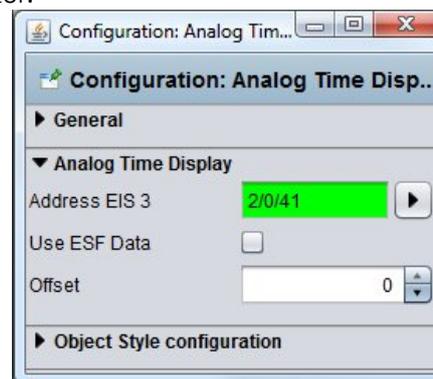


Figure 34: Analogue Clock - Parameters



3.2.24 SLIDER

The Slider element serves for adjusting several data types infinitely variable. Additionally the element's style can be changed in many ways. The graphics also can be replaced.

Control L support

The element can also be used for Control L visualizations

Data type

The functionality mostly applied to the slider is absolute dimmer for lighting. So the data type used are EIS 5 and EIS 6.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Min. / Max. value

These two parameters margin the adjustable values. Usually the dimmer function uses the range from 0- 100%; so these two values are set as default.

Style

The appearance of the element can be changed at various points. There seems to be whether you are a member by means of the visualization editor's features a different look, or if you load using the theme editor other graphics, or both.

The alignment can be horizontally or vertically. Moreover it can be selected between graphic style (picture) and drawing style (drawed). Changing the icons of an element the will only take place in case of UI style "Image" is chosen.

Sending rate when Sliden

The slider sends the setting of "0" is always only one value when the motion comes to be. The element should also send values, while it is in motion, here the number of frames per second is determined that the slider During the adjustment sent.

Object Style Configuration

Not just the graphics but also the background of the element can be designed individually. These configurations are depending on the global element settings.

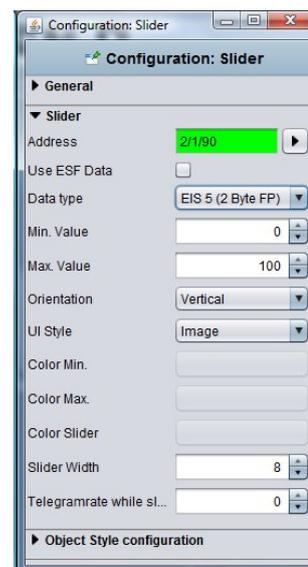


Figure 35: Slider - Parameters



3.2.25 DIMMER

The Dimmer element serves a switch for ON/OFF and as a relative dimmer. The dimmer's design can be adjusted using the Theme Editor.

Control L support

The element can also be used for Control L visualizations

Data type / Output

The Dimmer element has two output objects. On one hand for switching ON/OFF EIS1 on the other hand dimmer output (EIS2).

The switching command is sent when the buttons are pressed shortly. If held down down for a longer time the element sends out brighter- command or darker- command.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

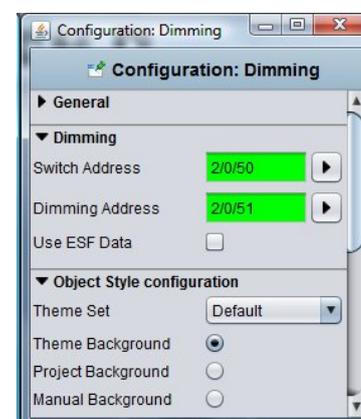


Figure 36: Dimmer - Parameters

Object Style Configuration

The element's graphics can be changed (the arrows) and also the background. These configurations are depending on the global element settings.

123

3.2.26 VALUE DISPLAY

Element „value display“ as well serves as displaying element as also as operational element. It is possible to send out values. Nearly all EIS types are available.

The values can be formatted freely and the element can be designed individually.

Control L support

The element can also be used for Control L visualizations

Adresse / Data type

Nearly all within the KNX Standard existing data types (acc.to EIS) are available. These are:

- EIS 5 (2 Byte FP), floating point digit
- EIS 6 (1 Byte), percent value
- EIS 9 (4 Byte FP), floating point digit acc to IEEE
- EIS 10s (2 Byte, signed)
- EIS 10u (2 Byte, unsigned)
- EIS 11s (4 Byte, signed)
- EIS 11u (4 Byte, unsigned)
- EIS 14s (1 Byte, signed)
- EIS 14u (1 Byte, unsigned)
- DPT 29 (8 Byte signed)
- DPT 6.010 (1 Byte signed)

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Format

Here the received value can be formatted as wanted. Additionally a unit can be added. Therefore the following parameters have to be used:

= optional

0 = obliging

So if a „0“ is set this digit is displayed whether if the input value is existing or not.

If a „#“ is set the digit is only displayed when an input value is existing.

Example

The input value is 23,4 (degrees). The value display shall show 2 digits behind the comma and the unit symbol. The settings have to look like this:

##.00 °C

So the value display element shows 23,40 °C .

Factor / Offset

The value can be multiplied with a factor and an offset can be added. Incoming values can be converted in the desired format / unit.

Send value

The element can be used as operational element. In this case the labelling „Edit“ occurs on the element. The user is enabled to interfere into operation.

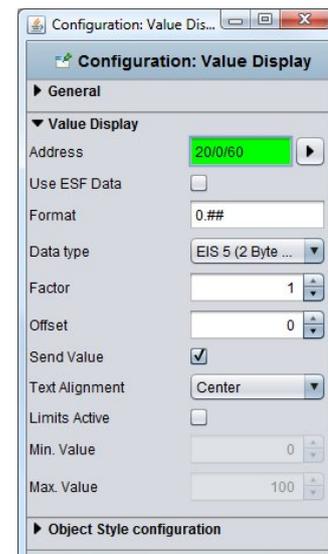


Figure 37: Value Display - Parameters



Text alignment

Sets the position on which the value is displayed; the „edit“ labelling remains on the original position.

Activate limits

This limits the value range the user can send out. An example for use is shifting temperatures.

Object Style Configuration

Not just the text itself but also background can be designed individually. Possible opportunities are depending on global element settings (compare chapter „general element parameters“)



3.2.27 TELEGRAM TIME

The element shows the last time stamp of the telegram(s) an address object has received. Each telegram received or leaving the eibPort the last time stamp is buffered in the internal address table. The time stamp element scans the address table and returns the result.

Control L support

The element can also be used for Control L visualizations

Address / Address object

The address object listens according to the defined object structure within the eibPort to up to 5 group addresses independent from the data type format.

Use ESF Data

Check this box if you want to see in the visualization of the identifier used by the group address from the ETS as a tooltip.

Format

The displayed format for date and time can be set here. The definition follows the „Simpledateformat“ providing three different versions; additionally an individual format can be typed in.

Object Style Configuration

Font, size and colour are set in this menu. Using the dialogue „Font“ own font styles can be defined and used in the project. If the individual style is changed these changes are automatically executed on all elements using the same style (compare chapter „general element parameters“).

- *Ignore style / colour:* If the selected text shall get another colour as defined in the style set this can be done by activating the checkbox „ignore style“. A new colour can be selected from the array below.

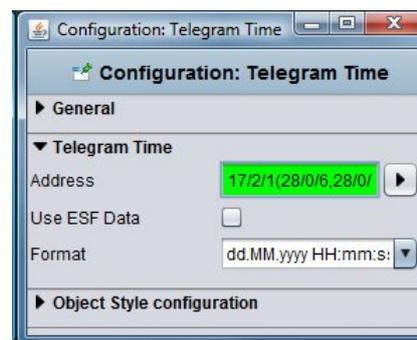


Figure 38: Telegram Time- Parameters



3.2.28 JOB EDITOR

This element enables the user to access and edit several jobs. So f.i. the user may configure the settings of autotimers or change the outputs of a light scene. In order to do this the user gets a limited access to the job mask.

Control L support

The element can also be used for Control L.

Job

The dropdown menu provides all actually available jobs. The possible job types are:

- Annual timer
- Weekly timer
- Light scene

The job name being selected in the Job Editor will be displayed as labelling within the visualization element.

Tooltip

This text array defines the labelling being displayed in case of mouseover.

Integrated Editor

If this checkbox is activated the limited job mask will not be opened in a new (external) window but will be embedded into the visualization page. Especially for client PCs with a visualization running in the foreground permanently this is an important feature.

Object Style Configuration

Not just the text itself but also background can be designed individually. Possible opportunities are depending on global element settings (compare chapter „general element parameters“)



Figure 39: Job Editor element



3.2.29 LOGIC DISPLAY

This element displays the actual status of logics. The element shows just the status of the output or the status of all affected group addresses (input, release).

Style and functionality can be set arbitrarily.

Control L support

The element can also be used for Control L.

Colour ON / OFF

These colour arrays define the status colour for status ON and OFF. The settings are valid for input and output.

Send value

Similar to the value display element the logics display element can be adapted to an operational element. The user is enabled to click onto the logics' colour arrays to trigger a telegram for the wanted group address.

External Window

If this function is activated on the visualization surface just a one-line element is displayed. This element shows the status of the output by a colour array. When clicking on the element an external window opens and displays a complete overview (input, output, parameter....) for the logics element.

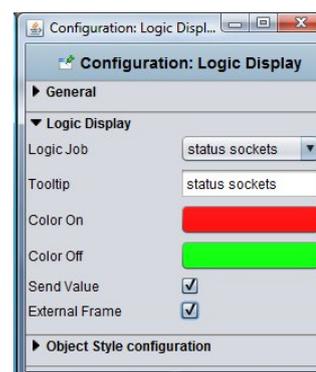


Figure 40: Logic display - Parameters



3.2.30 PAGE LINK

The element can be linked with any wanted page. On mouseclick a changeover to the linked page is triggered.

Control L support

The element can also be used for Control L visualizations

Text

Here the text being displayed in the element can be typed in. Default setting is the name of the target page but any individual text can be entered too.

Target Page

Dropdown list of all pages contained in the project.

Note: If the element should be used in transparent mode please care that it is levelled before all other elements.

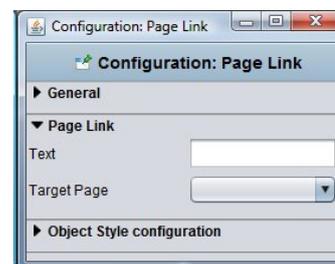


Figure 41: Page Link - Parameters



3.2.31 RSS FEED

The element displays the content of RSS Channels. Celerity of scrolling and refresh rate can be set. Moreover the element allows to search RSS Channels from a specific domain.

Control L support

The element can also be used for Control L visualizations

Feed URL

here the path for the RSS Feed will be typed in

Search Feed

a seperate dialogue window opens. Type in the wanted domain name / address of webpage. The automatic search starts. The selection will be taken over automatically by clicking „OK“

Scrolling Speed

Defines the speed the text scrolls. The scale ranges from 1 to 5, whereat 1 = slow and 5 = fast

Refresh Interval

Defines the interval the RSS Feed reloads. The interval ranges from 1 to 60 minutes.

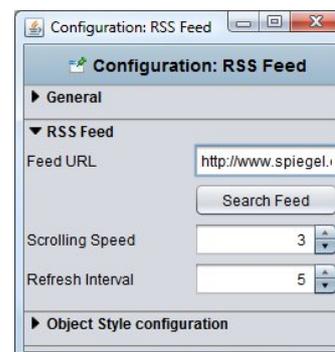


Figure 42: RSS Feed - Parameters



3.2.32 CAMERA

The Camera element allows to display pictures/ streams from an IP-camera. Both a freeze image and a MJPEG stream can be handled. The element can be used as icon or external window. Moreover an event configuration is possible. For authentication purposes „http basic access“ is available.

Control L Support

Not all functions are supported by the Control L- visualization. These functions are not supported:

- Event mode.
- Motion JPEG Streams.

MJPEG Stream URL

In this array the direct path to the stream has to be typed in. Many IP cameras already provide so called MJPEG Stream. It works by streaming jpeg pictures. This kind of transmission and displaying usually works fluently and with high quality. The Java visualization has an motion JPEG Decoder of ist own which is able to embed camera pictures..

URL: Static Picture

Each IP-camera has a direct path to its static picture. This static picture is the one being displayed in the moment the camera is being called. If this mode is used the camera is called several times per second – so an animated stream is build up.

Especially for Axax visualizations or in case of slow-rate internet connection this feature should be used.

Iconify

If this option is activated the camera picture will not be embedded but displayed as icon. By clicking the icon the camera picture is displayed in a new window.

Authentication

If the camera is secured by the „http – basic_Access“ method, the access data can be entered in here. The element, thereby changing their appearance. If the camera uses another method it has to be deactivated!

User Name / Password

Type in the requested information

Event mode

It is possible to display the camera picture/stream triggered by an KNX event (alarm, switching etc)

Play time

Defines the duration of rendering. After expiry the camera picture freezes.

Address / Data type

The address object listens according to the defined object structure within the eibPort to up to 5 group addresses with several data type formats:

- EIS 1 (1 Bit)
- EIS 5 (2 Byt FP)
- EIS 6 (1 Byte)
- EIS 9 (4 Byte FP)
- EIS 10s (2 Byte value)
- EIS 10u (2 Byte unsigned value)
- EIS 11s (4 Byte value)
- EIS 11u (4 Byte unsigned value)
- EIS 14s (1 Byte signed)

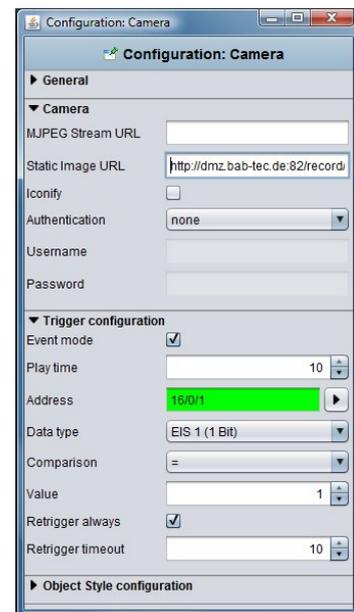


Figure 43: Kamera Element - Parameter



- EIS 14u (1 Byte unsigned)

Comparison / Value

The value of the object input is routed automatically to a comparator and is compared with a fixed value. The following comparative operators are available:

- At each alteration „*“
- Equal to „=“
- Less than „<“
- larger than „>“
- less than or equal „<=“
- larger than or equal „>=“
- Unequal to „<>“

Retrigger always

If activated the event is triggered by each result sent out by the comparator. If deactivated just in case of changes an event is triggered.

Retrigger Timeout

Defines the time range (unit = sec) after which the trigger is available again

How to find out the correct URLs

Due to the fact that there are existing different camera types and manufacturers there are also different syntaxes for the correct URL. Usually it works like this to find out the correct URL:

- Set the camera to the wanted modulation (MJPEG or static picture).
- Switch to the „Live View“ view on the camera’s configuration page and right- click onto the picture.
- Select „copy file location“ and insert the address in a new browser window.
- Now you should see just the camera stream without menue bar or another elements.

If this doesn’t work please refer to the camera’s manual or the manufacturers webpage.

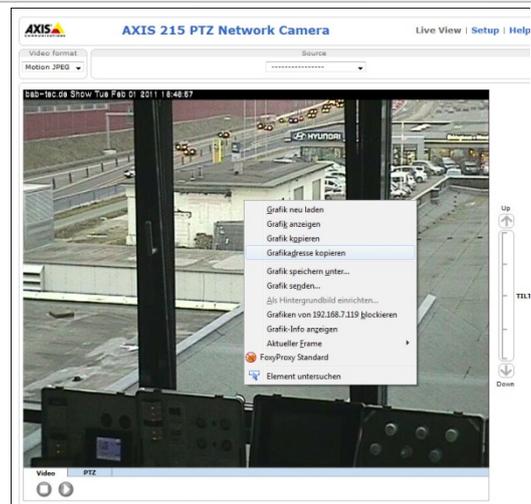


Figure 44: Camera view - Copy URL



3.2.33 GRAPH

Element **Graph** displays the progression of values in a certain time range (like a line recorder). Example of use are temperatures, counters, power consumption etc.

The telegrams are provided by the ringbuffer of the eibPort which stores the last 20000 telegrams.

Special settings are:

Control L support

This item appears in the Control L visualization. The graph provides some additional functions there in the Java visualization can not be used. The relevant features are identified in the parameter window with a "*" (asterisk).

Refresh on Start

The Graph element is actualized when the visualization starts.

Grid colour / Axes Colour

Here the colours are defined.

Axis Format

This text array sets the displayed value format of the y- axis. The number of decimals is set. The following syntax is used:

- „0“ means enforced value; the digit is displayed even if now value is available.
- „#“ means optional value!; the digit is displayed just if a value is available. The number of digits is limited by the settings.
- „.“ = Comma
- If units or other characters should be displayed they have to be put into tickmarks (').

Example:

A value of „21,2“ shall be displayed. If the format is set to „00.00“, „21,20“ will be displayed. If the format is set to „0.##“, „21,2“ will be displayed. F.i. a percent sign is added like this: „0.##%“.

Axis Limit

If activates the axis is limited within a specific range. Settings can be made in the arrays below.

Graph data by time / by count

Values displayed by the graph will be filtered by time or by count. The time period is set in hours.

Note: Please have in mind that the graph element is only able to display values if it finds any data in the recording table. If the data is a group address as appropriate by a broken clock eibPort with a time stamp well before the present, the data will not be shown in the graph (or graph must be scrolled back up to that date)!

Auto Refresh

If the visualization has started once the graph automatically updates the data displayed within this interval. This means that the elements gets new data from the eibPort recording table and recalculates the measuring points.

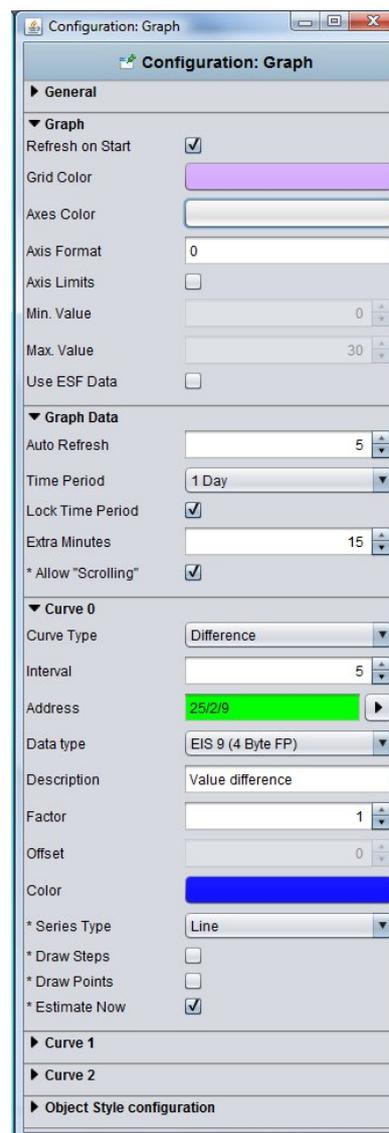


Figure 45: Graph - Parameters



Time domain

Determines the time frame that the graph is based. Selections are:

- 1 hours
- 3 hours
- 6 hours
- 12 hours
- 1 days
- 2 days
- 1 weeks

Fixed time period

When activated, the time range will always be displayed from beginning to end. If the option is disabled, the time range we always back-calculated from the present time.

First / follow-up time

Be taken into account determines the number of minutes in the data and before and after the beginning or end of the time domain. If for example The time range is set on a particular day, considered in this way, values that were active just before or after 0:00 clock. Otherwise, the graph would assume at this point, no value ("0") and misrepresent.

The "leaves" (also available in Java)

With this option the user can visualize in each case by the set time range browse forward or back, is always set in case there are any data at this time.

Calculation

There are two different types possible:

- *Total*: the value is displayed as absolute value by time. In case of meter readings the graph would increase continuously
- *Difference*: The difference between two values is displayed by time. The frequency between the measurements can be set by „interval“ (Unit = min). The smaller the time gap the more exact the curve will be.

Data type

Several EIS formats are supported:

- EIS 1 (1 Bit)
- EIS 5 (2 Byte FP)
- EIS 6 (1 Byte)
- EIS 9 (4 Byte FP)
- EIS 10s (2 Byte Value)
- EIS 10u (2 Byte unsigned Value)
- EIS 11s (4 Byte Value)
- EIS 11u (4 Byte unsigned Value)
- EIS 14s (1 Byte Value)
- EIS 14u (1 Byte unsigned Value)
- DPT 29 (8 Byte signed Value)

The appendix provides an overview of types of EIS in conjunction with DTP data types.

Description

Enter a legend for the curve. The text is displayed below the graph in the selected color curve.

Factor / Offset

Using factor and offset, the input value to be formatted as desired. The value is multiplied by a factor and added to the offset.

Color

Defines the colour of the curve and the labelling.

Curve type (only possible for the CONTROL L visualization)

When the curve type is determined which form of a diagram is displayed. The following is available:

- line: There is a line drawn diagram
- area: It creates a surface plot in the area below the line marked accordingly.

Levels draw (only possible for the CONTROL L visualization)

When activated, there will be drawn no curves there were drawn Levels. This is for example Interest in the presentation of an EIS values.

Points draw (only possible for the CONTROL L visualization)

On the line of the graph, when activated, the different measuring points are plotted.

FUNCTIONALITY WITHIN THE VISUALIZATION

Within the visualization the element provides some more functions. These functions can be called by right-button mouseclick.

- *update*: updates the value
- *Export as graphic...*: Opens the file browser for saving the graph as file (*.png).
- *Export as CSV...*: Opens the file browser for saving the graph as csv file

CONTROL L FUNCTIONALITY WITHIN THE VISUALIZATION

In contrast to the graph in the Java Visualisierung has the graph at Control L a zoom function and curve information.

Zoom Function

The mouse is inside the graph element can be in and zoomed out again with the mouse wheel in the graph. Can also hold down the mouse button to select one area to be marked on the graph, which is then enlarged. With a double click anywhere in the field of graph unmagnified view is restored.

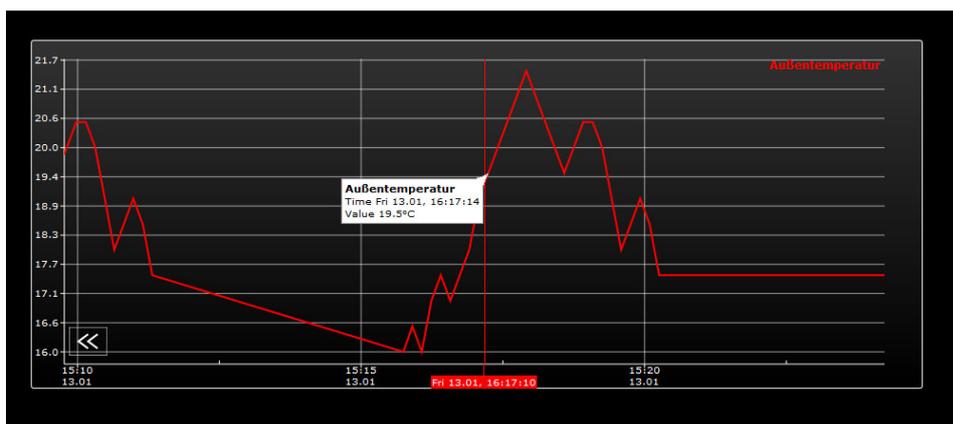


Figure 46: Zoomed graph with curve information

Curve information

If you use the mouse pointer moves along the curve recording, useful information related to the measurement point are shown: curve name, time / date and the measured value.



INFORMATION ABOUT THE RECORDING TABLE (RINGBUFFER)

The Graph element uses values from the past, so it has to access data from the ring buffer of the eibPort (EIB recording table). This buffer contains about 500.000 telegrams. The eldest telegram is replaced by the latest one. Within a KNX/EIB installation 500.000 telegrams possibly may be transmitted within some hours. So the Graph is provided just with data from this time range. In this case the recording filter serves as remedy.

If the Graph should be enabled to display f.i. consumption data for a longer time range the recording filter has to be used. This filter defines the group address(es) which should be stored in the buffer. The filter can be called and rules can be defined under „System“ > „Configuration“ > „EIB Recording filter“. Either group addresses or group address ranges can be selected. In case of address ranges a wildcard (*) should be used:

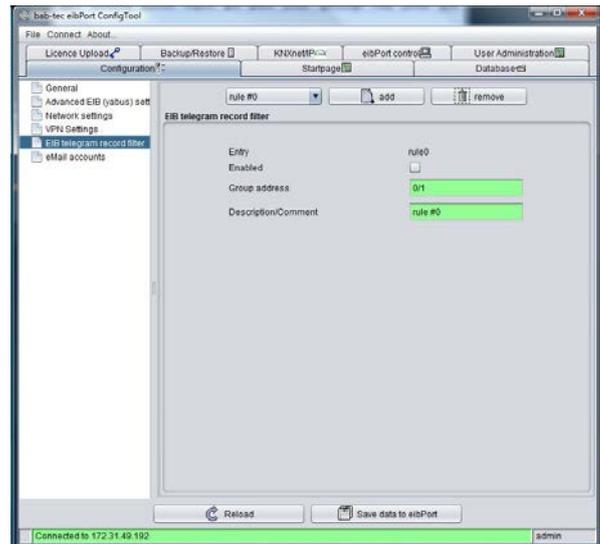


Figure 47: ConfigTool - EIB record filter

Example: „1/*/*“ (without quotation mark) means that just data from the main line „1“ will be buffered. If the filter is set to 1/1/*“ the middle group is filtered. Alternatively the wanted address is typed in.

3.3 SECURITY SETTINGS - USER ADMINISTRATION FOR THE VISUALISATION

In the security settings of the access to all the visualization interfaces is administrated (Java, Control L and CONTROL S). The access is controlled individually for each user. For Java and Control L the visualization, entire projects or selected pages to be released.

Please note: User settings for editor and system will be defined with menu bar „user administration“ in configTool.

Switch to security settings

The security settings are accessed through the appropriate button in the menu bar of visualization editor. There, between "visualization", "Security Settings" and "Availability" will be changed. Button of chosen sight always will be marked.



Figure 48: Altering between user management and visu-editor

Settings

User administration can be activated or not. In case it is disabled, no kind of user registration will appear. In delivery condition user administration is not activated. Showing the user list during the registration can be prevented additionally. This will require that the username must be entered manually.

Create/Delete User Account

New user account will be create with the help of the corresponding symbol. As a first step an unique name have to be assigned, which will accept automatically in the arrays „name of user“ and „title of user“. To delete an user account it has to be marked in user overview. Deleting an user account will happen without any safety warning.



Figure 49: Editor - Create/Delete User Account

User

All applied user will display among each other.

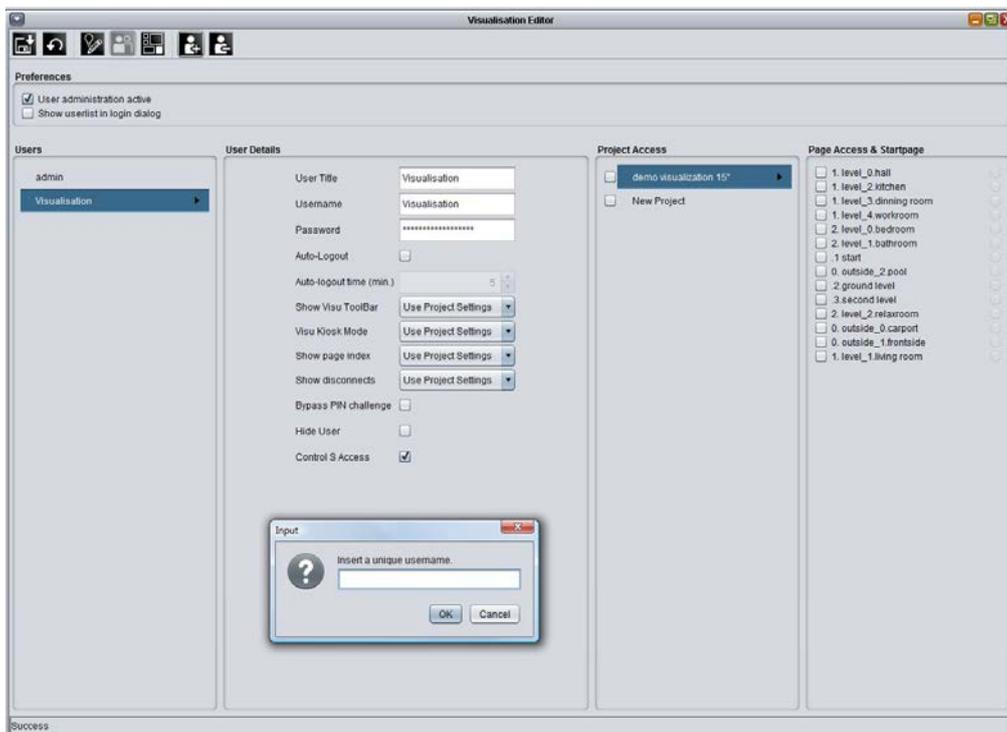


Figure 50: Editor – user management



Userdetails

Each user account will be allocated general settings:

- *User Title:* Title will be shown in selection menu. User will be identified with it by starting visualisation.
- *Username:* The name of user will be requested by log-in. In case list of user is activated during log in, name of user will be transferred to dialogue from register, after selecting title.
- *Password:* With the aid of this password, user has to identify himself.
- *Auto-Logout:* After finishing adjusted period of time, user will be asked for a new identification, if this function is activated.
- *Project Settings Parameters* Every user you can assign individual settings, according to project parameters „Visu-Toolbar“, Kiosk mode“, „Index of pages“ and “Connection problems”. Administration can assign individual settings (yes/no) to user, or those settings of the project (using project settings). Preferences „yes/no“ overwrite project settings.
- *Bypass PIN challenge:* If this box is activated, user will not be asked for his PIN.
- *Hide User:* This user will not be displayed in the list of user.
- *Home Information Center:* The user data is requested in the case, when logging on to the HIC visualization. The Control S visualization is achieved via the "Home Information Center Editor" from the menu "Window" parameter.

Project Access

All defined projects are displayed. A complete project will be attached to a user, if you mark corresponding control box. In case several projects are connected with one user, a selection of the projects will be displayed after log in.

Page Access & Startpage

Attaching only individual project pages to a user, you can mark desired project in column. All pages of a project can be attached separately, by marking the corresponding control box. Behind the page name, homepage will be chosen, which the user should achieve. If pages of several projects will be involved, user will get a selection of projects as well after log in.

Saving settings

Created user settings will be stored by a click on button „Storing“ in menu bar (symbol of diskette)

3.3.1 LICENCE UPLOAD

In order that Room Allocation Plan can be used unrestrictedly, a licence will be necessary. Room Allocation Plan acts as controller of greater objects, like schools or hotel plants.

The Room allocation plan could be applied, but without a licence it will not be able to generate data. Licence file (*.dat) has to be uploaded to **eibPort** at this place. For HIC, you will find a demo licence on enclosed CD. Beside from that, you can demand such HIC demo-licence over info@bab-tec.de

Licence data will be chosen by using the file-browser opening with "Choose Licencefile". And will be uploaded by using the button „Start Upload“. Under it, display array of the licence information is located.

Under „licences“ type of licence is shown. Following types exists:

- *HIC J2ME visualisation*: For display on PDA with own Java installation (Java 2 mobile edition)
- *HIC Ajax (Web-) Visualisation*: For display on windows media center edition PC
- *HIC iPhone Visualisation*: For display on iPhone/iPod or other current mobiles (with Java script)).
- *Room Allocation Plan*: For enabling the Room allocation plan module to generate the switching data out of the projected data.

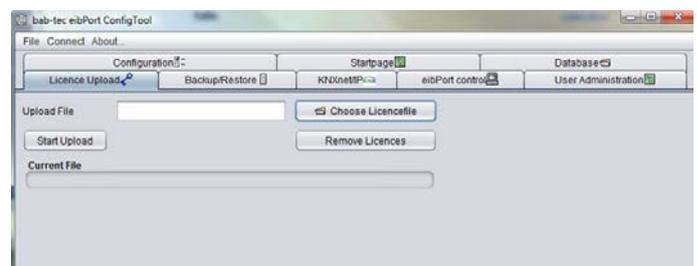


Figure 51: ConfigTool - Licence upload

Note: The types of licenses for the HIC visualization since the firmware version 0.11.5 is no longer needed because the HIC has since been released from the outset. It does not matter but if the licenses are still available in older versions.



4 DISCLAIMER

1. Although bab-technologie gmbH always ensures with necessary accuracy, that information and content will be correct and on actual state of technology, information could contain technical inaccuracies and/or literal mistakes. bab-technologie gmbH gives no guarantee or warranties with regard to accuracy and correctness of information. bab-technologie gmbH can not assume any liability and responsibility for mistakes or omissions in the content of technical documentations (especially data sheets, documentation, assembly instructions, manuals etc.)

2. All informations, which can be extracted from technical documentation, will be granted – as far as permitted by law – without any explicit, conclusive or tacit responsibility of defects or warranty. Informations contain no agreement of quality, describe no commercial quality and constitute no assurance of properties or no assurance with regard to applicability for a particular purpose.

3. Because our products will be developed and actualised constantly, informations of this documentation could deviate and no longer be adequate to current status. We are attempted to provide current innovations and modifications in our website. All used product designations of this manual are registered trademarks of respective companies.

4. Manufacturer can not assume responsibility for results of unit programming/parametrization; these will lie within responsibility of commissioning engineer.

5. bab-technologie gmbh gives no guarantee and will not be responsible for lost data or pictures, which are stored to a product (including returned products). Reasons for lost doesn't play a part in this case. bab-technologie gmbH assumes no warranty, that products of bab-technologie gmbH always will work faultlessly. Products of bab-technologie gmbh must not be used in life sustaining systems or be used in other applications, in which malfunction could cause injuries or will lead to death.

5 APPENDIX

Appendix 1: EIS types

Pos.	EIS-Type	Description	Resolution	Datatype	Range
1	EIS 1	switching	1 Bit	DPT 1.001	[0 .. 1]
2	EIS 2	switching	1 Bit	DPT 1.001	[0 .. 1]
3	EIS 2	dimming relatively	4 Bit	DPT 3.007	[brighter .. darker .. stop]
4	EIS 2	dimming value absolut	1 Byte	DPT 5.001	[0% .. 100%] (step size 0,4%)
5	EIS 3	time	3 Byte	DPT10.001	
6	EIS 4	date	3 Byte	DPT 11.001	
7	EIS 5	number of floating points	2 Byte	DPT 9.xxx	[-671088.64 .. 670760.96]
8	EIS 6	scale	1 Byte	DPT 5.xxx	[0x .. 255x] (step size x)
9	EIS 6	percent	1 Byte	DPT 5.001	[0% .. 100%] (step size 0,4%)
10	EIS 6	angle	1 Byte	DPT 5.003	[0° .. 360°] (step size 1,41°)
11	EIS 7	drive control drive (direction)	1 Bit	DTP 1.008	[up (0) .. down (1)]
12	EIS 7	drive control step (direction) / stop	1 Bit	DTP 1.007	[up (0) .. down (1)]
13	EIS 9	number of floating points, (high accuracy)	4 Byte	DPT 14.xxx	[- 3.4028*10 ³⁸ .. 3.4028*10 ³⁸]
14	EIS 10	unsigned integer	2 Byte	DPT 7.001	[0 .. 65535]
15	EIS 10	integer with sign	2 Byte	DPT 8.001	[-32768 .. 32767]
16	EIS 11	unsigned integer (high range)	4 Byte	DPT 12.001	[0 .. 4294967296]
17	EIS 11	integer with sign (high range)	4 Byte	DPT 13.001	[-2147483648 .. 2147483647]
18	EIS 14	unsigned integer (small range)	1 Byte	DPT 5.010	[0 .. 255]
19	EIS 14	integer with sign (small range)	1 Byte	DPT 6.001	[-128 .. 127]
20	EIS 15	character string (14 ASCII digity)	14 Byte	DPT 16.000	



Appendix 2: DTP (data point type)

Pos.	Datatype	Description	Resolution	EIS Type	Range
1	DPT 1.001	switching	1 Bit	EIS 1	[0 .. 1]
2	DPT 1.001	switching	1 Bit	EIS 2	[0 .. 1]
3	DTP 1.007	drive control step (direction) / stop	1 Bit	EIS 7	[up (0) .. down (1)]
4	DTP 1.008	drive control (direction)	1 Bit	EIS 7	[up (0) .. down (1)]
5	DPT 3.007	dimming relative	4 Bit	EIS 2	[brighter .. darker .. stop]
6	DPT 5.xxx	scale	1 Byte	EIS 6	[0x .. 255x] (step size x)
7	DPT 5.001	dimming value absolut	1 Byte	EIS 2	[0% .. 100%] (step size 0,4%)
8	DPT 5.001	percent	1 Byte	EIS 6	[0% .. 100%] (step size 0,4%)
9	DPT 5.003	angle	1 Byte	EIS 6	[0° .. 360°] (step size 1,41°)
10	DPT 5.010	unsigned integer (low range)	1 Byte	EIS 14	[0 .. 255]
11	DPT 6.001	integer with sign (low range)	1 Byte	EIS 14	[-128 .. 127]
12	DPT 7.001	unsigned integer	2 Byte	EIS 10	[0 .. 65535]
13	DPT 8.001	integer with sign	2 Byte	EIS 10	[-32768 .. 32767]
14	DPT 9.xxx	number of floating points	2 Byte	EIS 5	[-671088.64 .. 670760.96]
15	DPT 10.001	time	3 Byte	EIS 3	
16	DPT 11.001	date	3 Byte	EIS 4	
17	DPT 12.001	unsigned integer (high range)	4 Byte	EIS 11	[0 .. 4294967296]
18	DPT 13.001	integer with sign (high range)	4 Byte	EIS 11	[-2147483648 .. 2147483647]
19	DPT 14.xxx	number of floating points (high accuracy)	4 Byte	EIS 9	[-3.4028*10 ³⁸ .. 3.4028*10 ³⁸]
20	DPT 16.000	Character string (14 ASCII digits)	14 Byte	EIS 15	