ComBridge Studio
Visual Editor
V 1.6.6





User Manual

Revision: 2009-07-13

IPAS

Copyright Notice

Content

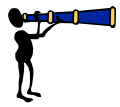
1. Preface

IPAS ComBridge Studio Visual Editor is part of the IPAS ComBridge Studio Suite Software. It is the engineering tool for the web-based EIB-visualisation ComBridge Studio Visual Director. Apart from network resources, web-based visualisations also use other resources, which are integrated in the operating system. Therefore the user should have knowledge of:

- Microsoft® Windows™
- FTP
- HTML
- IPAS ComBridge Studio Configuration Manager
- Internet Explorer and other web browsers

Text characteristics in this manual are to be understood as follows:

- Normal text: Arial 10p
- *File names* and *Directories: Bookman Old Style italics.*
- **Data entry: Bookman Old Style bold**.
- A frame marks a [selection button] .
- Window names “Arial 10p“.
- References to other parts of this documentation: ☞ .

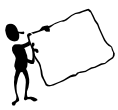


References to third party documentation are marked by this symbol.

Advice or tips.

Attention: Avoid errors

Error messages and related information



Information worth reading

2. Introduction

2.1. System requirements

ComBridge Studio Visual Editor requires the following operating systems and web browser:

- Microsoft® Windows 2000, XP;
- Microsoft® Internet Explorer from version 5.5 upwards

Attention: The use of ComBridge Studio Suite with Microsoft Windows VISTA is limited as special knowledge is required to install the operating system. IPAS recommends Microsoft Windows XP and XP Professional.

ComBridge Studio Visual Director requires:

- IPAS ComBridge Studio Core Services
- Microsoft® Windows 2000, XP
- Web Server (Apache)
- PHP4 (www.php.net)
- For the client:
    - Microsoft® Internet Explorer from version 5.5 upwards
    - Firefox from version 1.5 upwards

ComBridge Studio Suite, Web Server PHP, Java and Apache are, if necessary, automatically installed on the server during the installation of ComBridge Studio Suite.

2.2. What's new?

The Visual Editor software that is illustrated in this manual offers a range of new functions compared to the previous version 1.6.4. The following functions are new:

- Event-dependent playback of sound files
- Modified website for the setting of online scenes
- Projection of online weekly schedules
- Operating elements to create individual navigations
- New functions in the Tech Edition
- Configuration of the device series Linea Talento
- Live test function for IP devices
- Graphic module to display values

2.3. Basic settings

Before creating a visualisation project the following settings should be performed:

2.3.1. Microsoft® Internet Explorer "Text size"

Start Microsoft® Internet Explorer. Select View and then Text size / Medium. With this setting, function elements, pop-up windows, etc are usually displayed correctly on the browser. If any elements of the Visual Editor are not displayed correctly, you may have to adjust the text size.

2.3.2. Microsoft® Internet Explorer "Access to web pages"

Start Microsoft® Internet Explorer and select Tools and then Internet options. Select Settings in the window "Internet options / Temporary internet files". The window "Settings" opens. Under "Check for newer versions of stored pages" select "Every visit to the page". The standard setting is "Automatically". However, with this setting it is possible that changed web pages are not shown correctly as the previous version may be shown, which is saved on the computer as a temporary file.

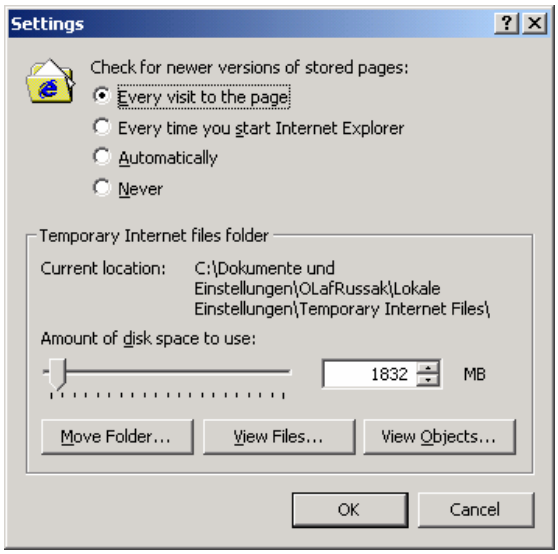


Figure 1: "Settings" in Internet Explorer

2.3.3. Microsoft® Windows display properties

To ensure that all control elements are displayed correctly in the browser, go to Internet Explorer Extras/Internet options and select the tab Advanced. The parameter "Activate visual styles on pushbuttons and control elements" in the settings field under Browser must not be selected. This will ensure that all operating elements provided by the Visual Editor, are displayed correctly on the browser.

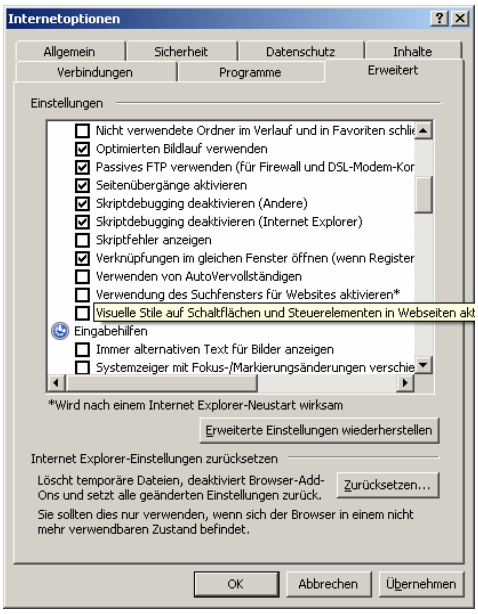


Figure 2: Activating visual styles on pushbuttons and control elements

2.3.4. Internet Explorer Web Browser Applet Control

In Internet Explorer certain settings need to be performed which ensure that Java (Sun) is active. Java is automaticall installed when installing ComBridge Studio Suite. Settings which are important for Java (Sun) are described subsequently.
Start Internet Explorer. Select Tools and then Internet options. Select “Advanced“.

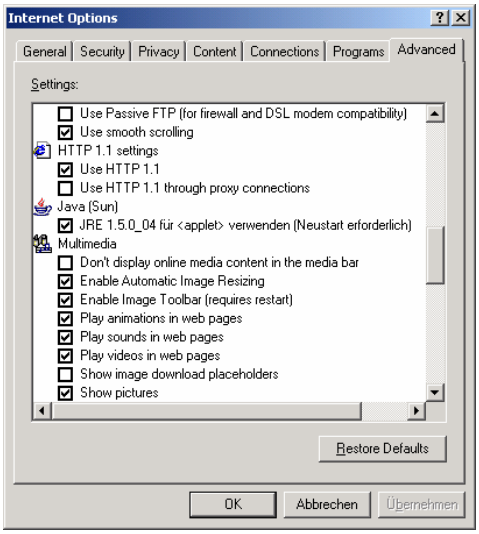


Figure 3: ”Internet options/Advanced“

Make sure that “Java (Sun)“ is selected in the settings.

Go to the window “Internet options/Security“ and select
Custom level... .

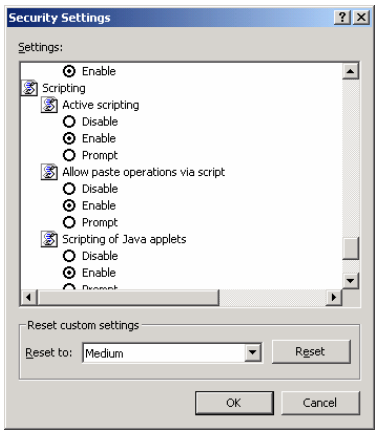


Figure 4: Internet options ”Security settings“

Make sure that “Scripting of Java-Applets“ is enabled.

2.3.5. Using special characters

Depending on the country setting of the operating system, different unicodes are used for the display of special characters. HTML editors usually use unicodes which do not contain an umlaut (ä,ö,ü) so that characters are displayed correctly. When web pages or navigation menus are created, no umlaut or special character must be used for names.

3. System overview

Modern visualisation concepts need to fulfill multiple requirements such as multiple site control, remote observation and remote control, intuitional operation, alarm and recording function. In addition, these concepts should be future proof. The web-based visualisation concept Visual Director meets all these requirements. Visualisation projects consisting of web pages are made available to the user on a server, similar to an internet provider. The pages are loaded with Internet Explorer exactly like web pages on the internet. As a result of the wide spread use of the internet, the loading and operation of such visualisations is usually very easy even for a lay person. Another major advantage of web-based visualisations is the unlimited number of users who can use the system at the same time.
IPAS ComBridge Studio Visual Director can be used for individual and local as well as for multiple and distributed EIB installations by using the EIB/KNX protocol EIBnet/IP.

See documentation of ComBridge Studio Suite

EIB installations are connected through the IP by using the IPAS ComBridge EIBnet/IP Gateways and compatible devices. Figure 5 shows the principal structure of such EIBnet/IP networks.

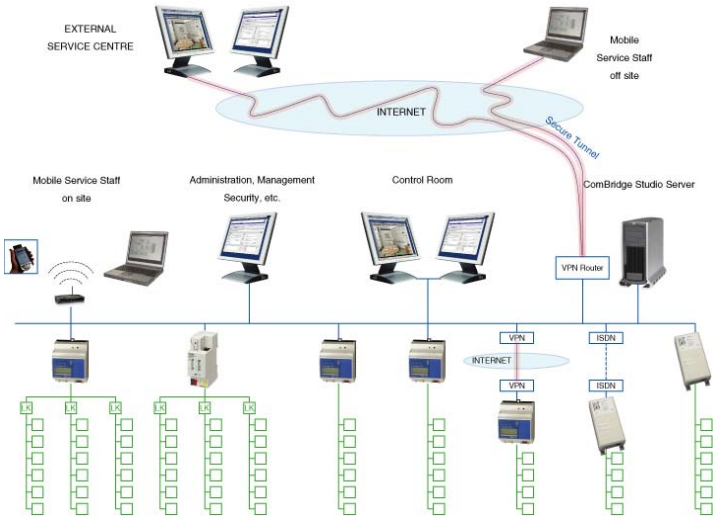


Figure 5: EIBnet/IP networksIPAS ComBridge Studio Visual Director

IPAS ComBridge Studio Visual Director is the user application, with which the object status is displayed and EIB functions are performed. This application is installed and performed on the web server. The application can be projected with the Visual Editor. The Visual Director Web Browser Client accesses the application from any network PC.

4. IPAS ComBridge Studio Visual Editor

IPAS ComBridge Studio Visual Editor is the engineering tool for the web-based EIB Visualisation ComBridge Studio Visual Director.

The ComBridge Studio Visual Editor enables in particular the following functions:

1: Project administration
2: Full graphic creation of visualisation pages
3: Creation of web site navigation
4: Integration of dynamic EIB operating and display objects
5: Allocation of EIB object names or group addresses
6: Creation of user guidance
7: User administration and access rights
8: Project provision via file manager or FTP

5. Visual Editor Installation

The installation of Visual Editor is part of the ComBridge Studio Suite installation.

See: ComBridge Studio Suite Setup

6. Working with Visual Editor

Start Visual Editor with “Start”, “Programme”, “ComBridge Studio Suite", “Visual Editor”.

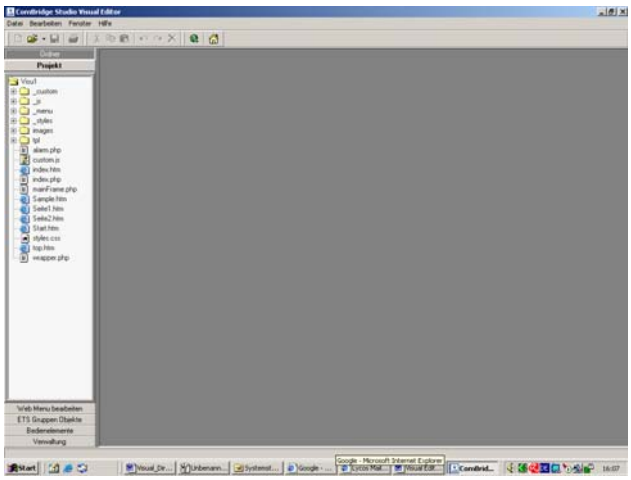


Figure 6: Program window Visual Editor

The screen is divided into two parts. On the left is the directory (Folder Bar), on the right the work space. The DEMO project is shown by default and corresponds to the path:
C:\Programme\IPAS GmbH\ComBridge Studio\VisualEditor\projects\demo
In this project, *top.htm* is available to the user as an empty start page.

6.1. Creating a new project

After selecting the project dialogue via “file” and then “project”, new projects can be added or deleted. Projects should be saved in the sub-folder:
C:\Programme\IPAS GmbH\ComBridge Studio Web

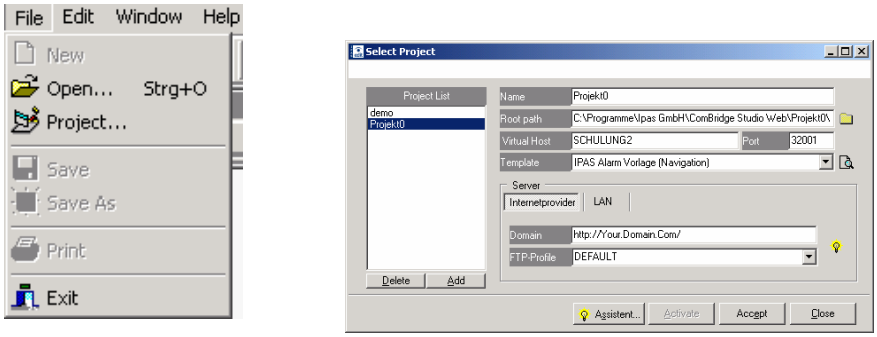


Figure 7: Creating new projects

After pressing Add the project name *Project0* is saved by default under the path:
C:\Programme\Ipas GmbH\ComBridge Studio\VisualEditor\projects\Project0
These standard values can be edited.

In Figure 7 the project name **IPAS01** has been allocated after pressing Add. After this the field Root path has been selected with the mouse. The system has automatically copied the path
C:\Programme\Ipas GmbH\ComBridge Studio Web\IPAS01
into the field. The path name can be edited directly via the browser dialogue box  if the project is to be saved in another location. No new folders can be created with the browser dialogue box. New folders can be created by entering text in the text field Root path. If they do not already exist, they are created automatically after pressing Accept.
The server settings in the “server“ dialogue box are used later on for data transfer and synchronisation, so that the projection environment can remain strictly separated from the application. The visualisation object created with Visual Editor is saved on a server. A web server is active on this server, which retains the project web pages for all authorised users. During the installation of ComBridge Studio Suite the web server Apache is also installed.

See: ComBridge Studio Suite Setup

The user starts the project from a browser (e.g. Internet Explorer) by loading the IP-Address of the server together with a port number. As previously mentioned, projects should be saved in the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web*. In ComBridge Studio Suite the port number range begins with 32000, as normal internet applications do not use this range.

The port number 32000 is reserved for the program ComBridge Studio MCG Configurator, so that port numbers from 32001 onwards are available for visualisation projects.

The project directory and the port number have to be set on the web server. These settings are performed in Visual Editor. Principally a distinction is made between projection and commissioning structures.

6.1.1. Visual Editor and Visual Director are located on a PC

Figure 8: Visual Editor and Visual Director are located on a PC

Figure 8 shows the structure of the network. In this case the project is both projected and started on the server PC. Accordingly root path and target path can be identical.

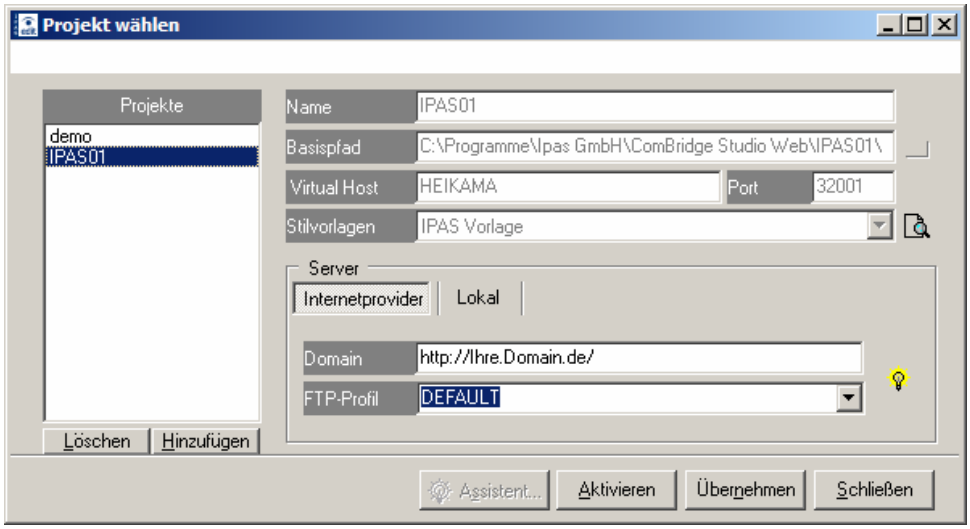


Figure 9: Root path equates to target path

In Figure 9 the project has been given the name **IPAS01**. It is saved in the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web* for projection. After entering the

project name, selecting the field Root path is enough to accept the standard settings. In the Virtual Host field the PC name is automatically entered. This is used to later start the visualisation in the browser with the url: http://localhost:<portnummer>. As *IPAS01* is the first project in this example, **32001** is defined as port number.
The style template chosen is the IPAS Template.

An already existing project can be read in Visual Editor with the use defined template. The IPAS template is chosen when a new project is created.

Under Server settings select Local . As projection and application are both saved and edited on the server, Root path and Target path are identical.

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Additional projects can be given consecutive port numbers, e.g. the project **Project2** is given port number **32002**, etc.

The settings are saved with Accept. Visual Editor creates the file *IPAS01.conf* in the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web__vhosts* with the settings for the virtual host and the corresponding port.

Visual Editor stops and starts Apache automatically, in order to accept the current settings on the web server. Sometimes Apache might have to be started manually.
(☛ Appendix 12.1. Apache Web Server)

The new project is initiated in Visual Editor with Activate.

Important: If Activate is not pressed after Accept, the project folder will keep showing the currently active project.

6.1.2. Visual Editor and Visual Director are located on a local network

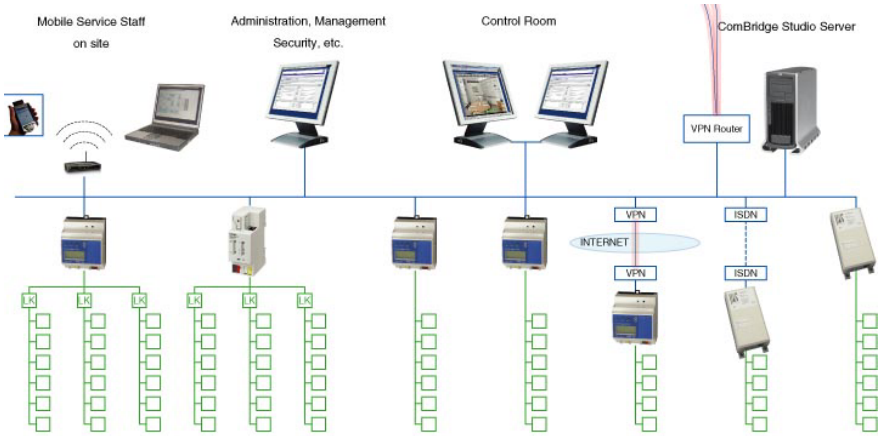


Figure 10: Projecting PC and server on the network

Figure 10 shows a common intranet network, which is connected with EIB systems via ComBridge MCG EIBnet/IP Gateways. The visualisation project *IPAS01* is to be created with the PC in the control room and executed on the ComBridge Studio Server. The network administrator has released the visualisation directory as a virtual drive so that it can be reached directly from the projecting PC via the network. ComBridge Studio Suite is installed on the ComBridge Studio Server. The directory for the project entitled *IPAS01* is to be saved on the server under

C:\Programme\Ipas GmbH\ComBridge Studio Web\IPAS01

The settings shown in figure 11 are performed on the projecting PC

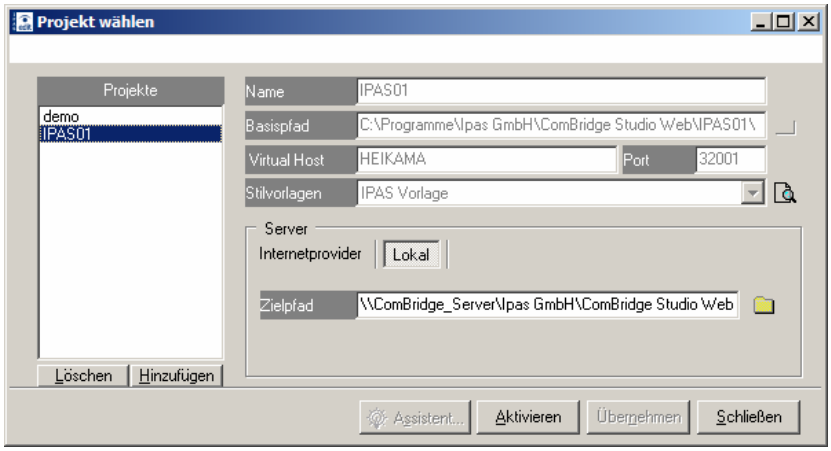


Figure 11: Root path does not equate to target path

With these settings the visualisation project is saved on the local projecting PC under the rootpath
C:\Programme\Ipas GmbH\ComBridge Studio Web\IPAS01
However, the visualisation is to be started on the ComBridge Studio Server. This means that the visualisation project with local settings needs to be transferred to
\\ComBridge_Server\Ipas GmbH\ComBridge Studio Web\IPAS01
After pressing Accept the target path is saved on the ComBridge Studio Server if the network is connected. By pressing  in the Visual Editor the projection files can now be transferred to the server.
For technical reasons, the web server file, which contains information for the Apache web server, cannot be transferred in this way. The web server file is located on the projecting PC in the directory
C:\Programme\Ipas GmbH\ComBridge Studio Web__vhosts and is called *Projektname.conf*, i.e. in our example *IPAS01.conf*. Before the visualisation can be loaded, the file *IPAS01.conf* needs to be copied to the directory *G:\Programme\Ipas GmbH\ComBridge Studio Web__vhosts* - this time, however, on the ComBridge Studio Server.

During the installation of ComBridge Studio the website ComBridge Studio Suite Configuration Upload was also installed which allows for copying processes to be performed easily. If the URL http://localhost:32100 is entered in the browser of the ComBridge Studio Server, the ComBridge Studio Suite Configuration Upload page is started.

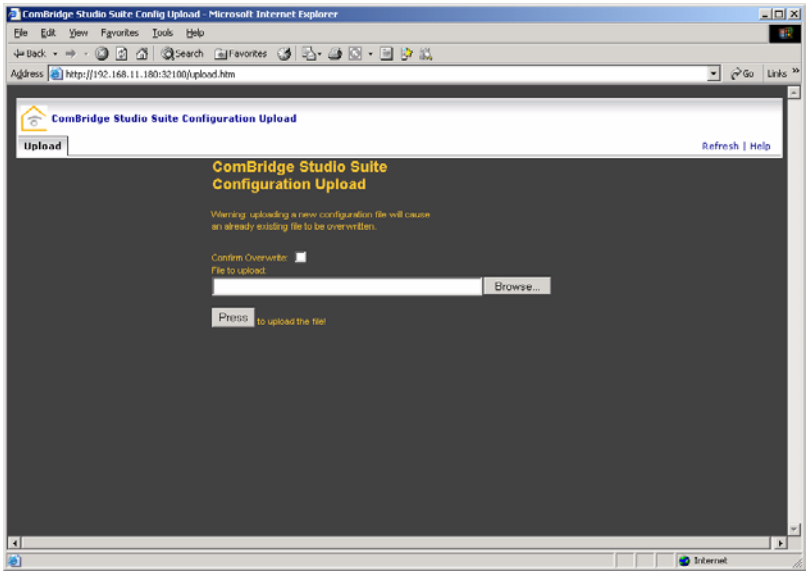


Figure 12: ComBridge Studio Suite Configuration Upload page

Click on Search and the file selection window opens. From the server, the file *IPAS01.conf* in the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web_vhosts* on the projecting PC is selected.

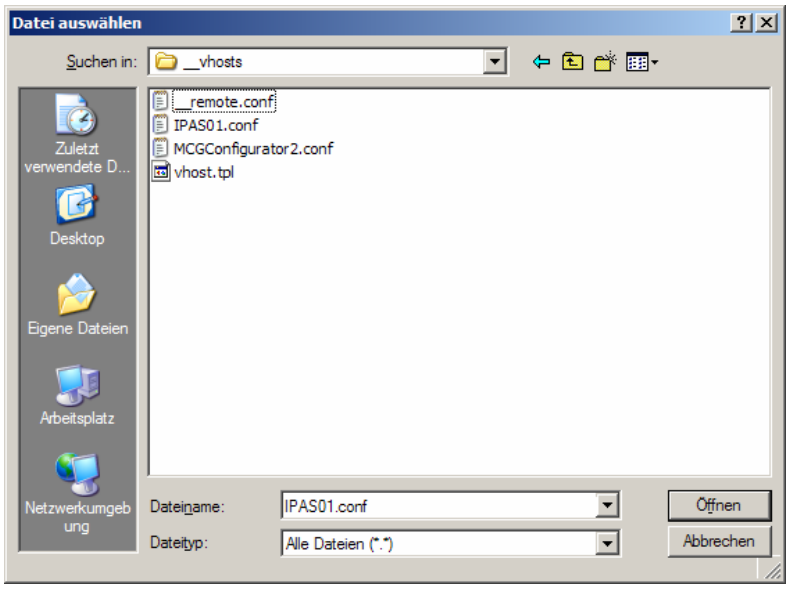


Figure 13: File selection window

Click on Open and the selection is accepted. By clicking on Press on the web page, the file is copied to the server.
The copying process is now completed.

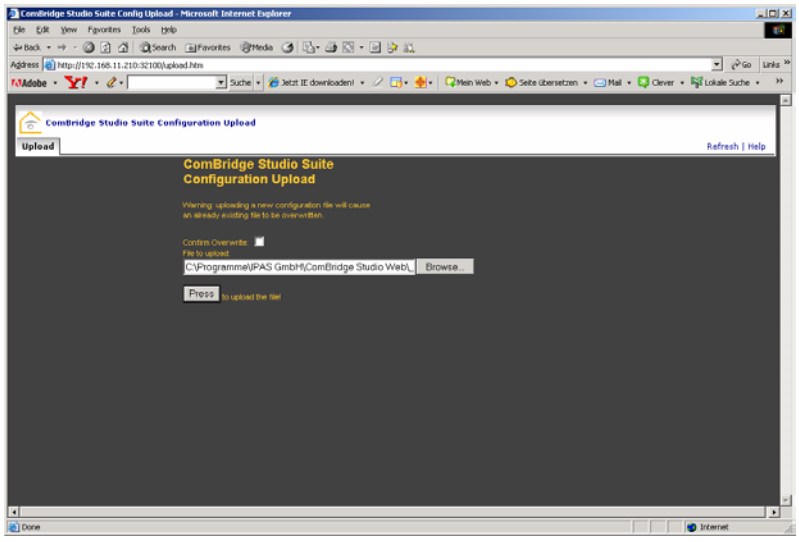


Figure 14: Press copies the system file

Apache needs to be started manually to activate the current settings on the web server. (☛ Appendix 12.1. Apache Web Server)

After pressing Activate the new project is initiated in Visual Editor.

6.1.3. Visual Director via Internet

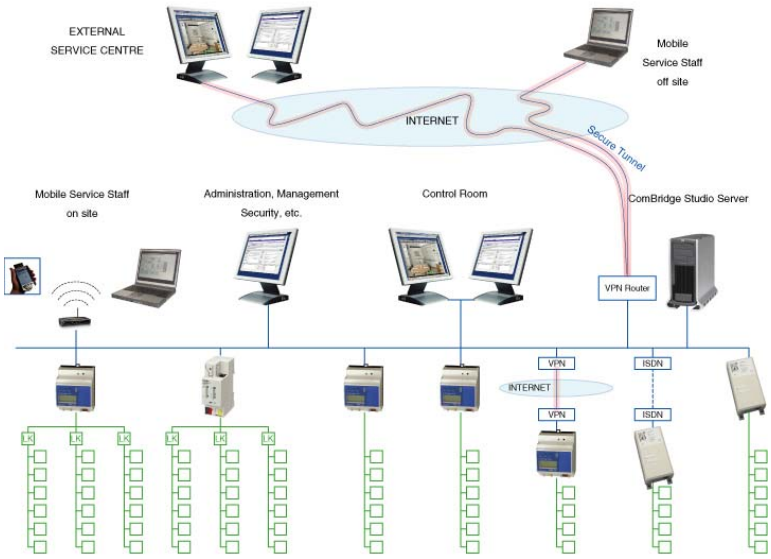


Figure 15: ComBridge Studio Server via Internet

Figure 15 shows the network structure if the projecting PC reaches the ComBridge Studio Server via the internet. In accordance with this structure, the following settings need to be performed in the window “Choose Project”. The project transfer to the ComBridge Studio Server via the internet is performed by means of File Transfer Protocol (FTP). Visual Editor is equipped with an FTP server. In the work environment of the FTP server connection profiles can be defined, which can be retrieved under the server settings. (☛ Appendix 12.3. Visual Editor FTP Service Program)
If the FTP server is configured, the file transfer is similar to the copying of files. If there is a connection to the server, choose the target directory and transfer the project from the root directory.

Figure 16 shows the settings: Chose Internet Provider in the “Server” window. Enter your target IP address or the DynDns address in the field Domain. Under FTP Profile enter the profile, which you have created on the FTP server of the Visual Editor

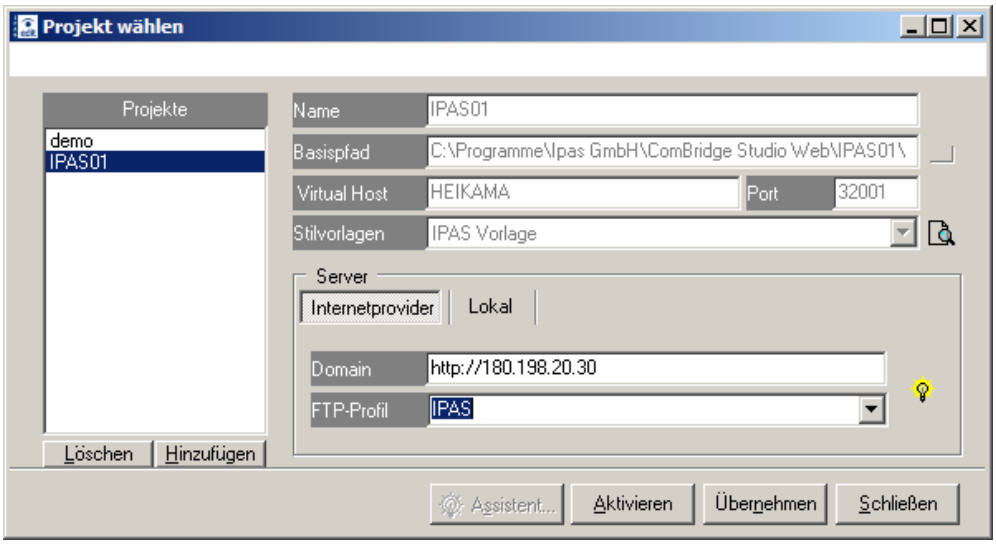
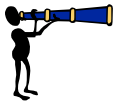


Figure 16: Accessibility of the ComBridge Studio Server via the Internet



(Appendix 12.3. Visual Editor FTP Service Program)

6.2. Deleting projects

Non-active projects can be selected and deleted. Activate a project, which you do not want to delete. Then use the mouse to select the project you would like to delete. Press Delete. The selected project is removed entirely from the projecting PC.

6.3. Creating and administering users

In general, different people operate a visualisation. Depending on access rights, some users can only observe, whilst others can observe and operate. Other users should perhaps operate the visualisation only at certain times. If you would like to set this mode, choose Administration from the directory. The window “WebAccess User Administration“ opens.

6.3.1. User “General“

Select “General“. Depending on the style template, standard users are set up in this window, which can be changed or deleted by the project designer. Should you wish to delete a standard user, for example Visu&Alarm, you must first select the user and then press Delete Selected User.

Should you wish to enter a new user, press Add New User. A new user with the name Anonymous appears in the entry field. You can select and rename the field. The new user is saved by pressing Enter.

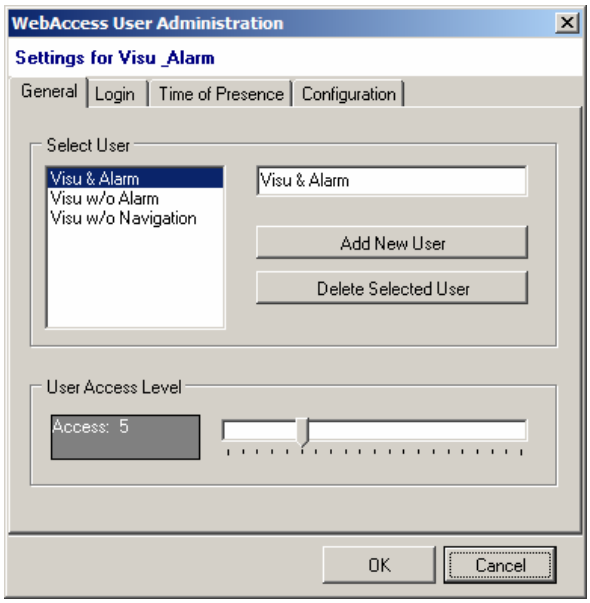
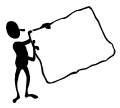


Figure 17: User administration “General“

In the user access control, a certain access level can be allocated to any selected user. The access level can be defined from 0 to 20. Thus, the possibility exists to create a scale of access rights for the visualisation project. The following rule applies: The higher the access level, the greater the user rights.
In Figure 17 two users, guest and administrator, have been created. Guest has access level 5 and Administrator has access level 20. The administrator has therefore more access rights than the guest.

Access levels from 0 to 20 can be allocated to all user elements in Visual Editor. A user with access level 5 cannot operate an element with access level 7. (☛ Chapter 10. Control and Function Elements in Visual Editor)



6.3.2. User “Login“

If you select Login, you can set the conditions, under which a user can operate the visualisation.

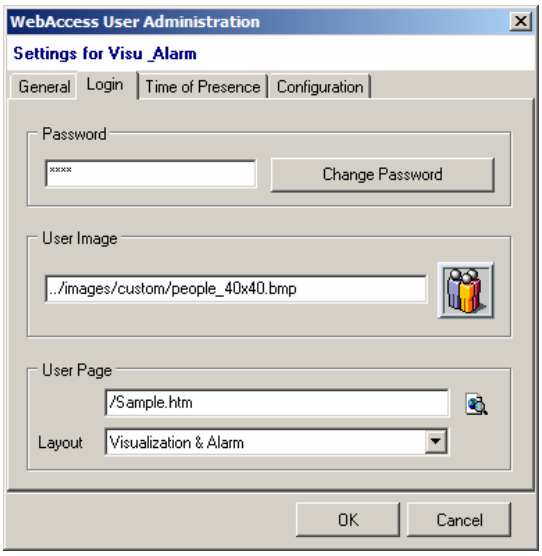


Figure 18: User administration “Login“

You can set a user password in the field Password . Only with the right password can the user operate the visualisation.
An individual image can be allocated to each user. This image should be saved in the corresponding project directory. A path to the image is entered in the field User image .

Images should be saved in JPG, GIF, WMF, BMP or PNG format. The image size must be adjusted to the resolution. The resolution should be low, so that the picture is uploaded rapidly.

In the field User starting page you can enter the web site, which is to appear after the user has logged in. Clicking on  opens an Explorer window, from which a starting page can be chosen.
You can choose from different style templates for the visualisation in the window “layout”. Visual Editor offers three different style templates:

Simple visualisation
This template contains an empty web page. The page is specifically prepared for EIB communication. You only need to define the design and the functions. This style template does not contain any site navigation as this needs to be created by the user.

Visualisation with menu
This style template offers an empty web page and the IPAS navigation layout which can be edited in Visual Editor. Main and sub-menus can be defined and a logo can be integrated (☛ Chapter. 8.3. Navigation Layout)

Visualisation with alarm

This template offers an empty web page and the IPAS navigation layout, which can be edited in Visual Editor. In addition, all alarms, which have been edited in Info Point Configurator, are displayed on a special alarm page and the last alarm is shown in a special alarm line of the menu layout. The alarms are equipped with an acknowledgement button. All alarms are saved in a data base.

See: ComBridge Studio Suite Alarm Service

6.3.3. User "Presence"

Select "Presence", in order to set the time window, within which the user can operate the visualisation.

In the example in Figure 19 the user has access rights from **10:00** to **14:00**. You can delete a time window by pressing Delete time period and define a new time window by pressing Add Time Period. If you enter **00:00** to **23:59**, the user has 24-hour access rights.

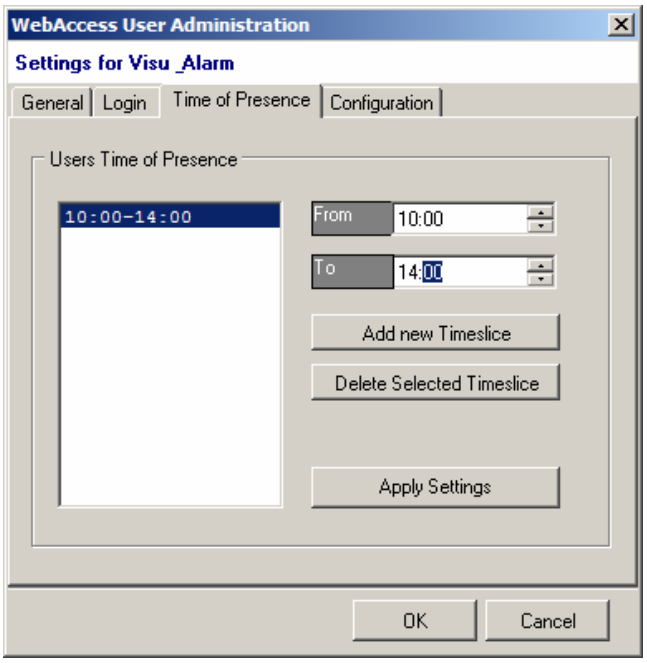


Figure 19: User administration "Presence"

The time window is saved by pressing Apply settings.

6.3.4. User administration “configuration“

Select “Configuration“, in order to determine system settings such as the start screen of the visualisation.

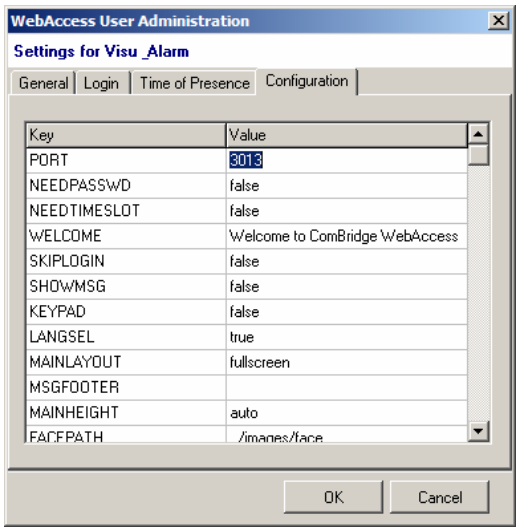
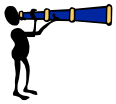


Figure 20: User administration “Configuration“

The entries in the field Key describe the function, the entries in the field Value correspond to the parameters. The individual meanings are as follows:

PORT — This entry defines the port for connection with the ComBridge Configuration Manager. The port for connection with the Client Manager is **3013**.



See: ComBridge Studio Suite Client Manager

NEEDPASSWD — **true**: User access is protected by password
false: User access is not protected by password

NEEDTIMESLOT — Decides whether the access time is limited

WELCOME — Includes the title of the welcome page.

SKIPLOGIN — **true**: Login via login page is not required
false: Login via Login page

SHOWMSG — **true**: error messages from Client manager are displayed
false: No error messages are displayed

KEYPAD — If the user has been allocated a password, a number field appears for the password when logging in. In this case the password can only be a number.

When operated via Touch Screen the key „KEYPAD“ **= true** has to be set, so that the password can be entered as a series of numbers via the keyboard number pad

LANGSEL	**true**: language selection active **false**: language selection inactive
MAINLAYOUT	**std**: The display does not use the full screen size, so that the IPAS standard logout function can be used **fullscreen**: The visualisation pages are displayed on the full screen. The standard logout function cannot be used.
MSGFOOTER	Footer on the login page
MAINHEIGHT	Height of the main browser window
TIMEOUT	Displays the time in minutes after which the visualisation jumps from a loaded web page to the one defined under FALLBACK. (Entry in minutes)
FALLBACK	Defines the action to be performed after TIMEOUT has expired. None: After the fallback time has expired, no action is taken. Logout: After the fallback time has expired, the user login is loaded. Back: After the fallback time has expired, the last open page is loaded. User: After the fallback time has expired, the user start page is opened. Page:/xxx.htm: After the fallback time has expired, the web page defined with page:/xxx.htm opens.
LANG	Shows the language in which the visualisation is started by default
FLAGSIZE	Shows the size of the country flag symbol for the choice of language
DBCONN	Shows the DSN Name of the ODBC data base, in which the alarm data are saved.

Press OK to accept settings.

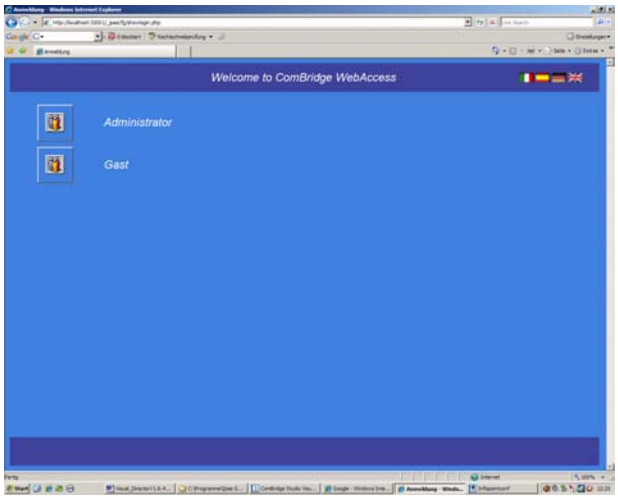


Figure 21: Start screen after users have been configured

Figure 21 shows the start screen after users have been configured. In the upper right hand corner of the screen the language for the visualisation can be chosen with the country flag symbol. Administrator and guest are the two users. By pressing the user image the projected web page (Start.htm in the example) is loaded.

7. Projecting an EIB visualisation

After a new visualisation project has been saved and the users have been defined, you can begin the actual visualisation. We will describe this process subsequently by using the example of a visualisation with “IPAS Navigation with Alarm”. Principally the projection is performed in four steps:

1. Importing the group addresses
2. Creating the planned empty web pages
3. Building the menu navigation
4. Web Design

If you use a style template other than the one with navigation and alarm, you should still follow the above steps. If no navigation is used, you must build your own. This requires knowledge of HTML programming. If you use the style template with navigation, the alarms defined in Info Point Configurator are not displayed.

See: ComBridge Studio Suite Alarm Service

7.1. Importing ETS group addresses

An ETS export has previously been performed with the ETS. (☞ Appendix 12.10. ETS group address)

With the right mouse button select ETS group objects and then Properties from the folder list on the left of the Visual Editor.

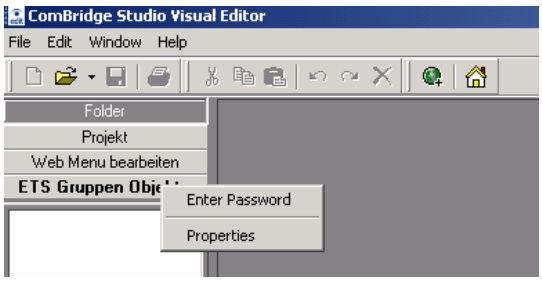


Figure 22: Loading group address properties

The window “Properties“ opens.

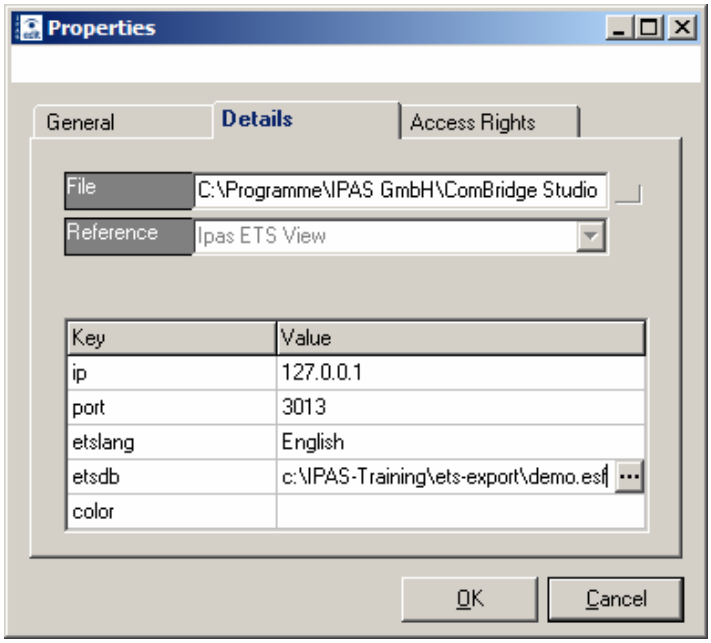


Figure 23: Importing ETS group addresses

Select “Details“. In this view you must enter the path and the file name as well as the ETS language of the export. All other settings remain unchanged.
In the value field next to the key field etslang you can select the language.

If you select the value field next to the key field etsdb, a file explorer window opens, in which you can choose the path and the file name of your ETS export. If you confirm your selection with OK, the group addresses are imported by the Visual Editor.

The Configuration Manager should be running actively, so that the connected and logged-in gateways can also be imported.

See: ComBridge Studio Suite Configuration Manager

Now the group addresses are read from the export file. The connected gateways are read via the Client Manager connection and displayed in the folder list on the left. By clicking on the 

symbol the group address tree is opened. Now the group addresses are available for further use.

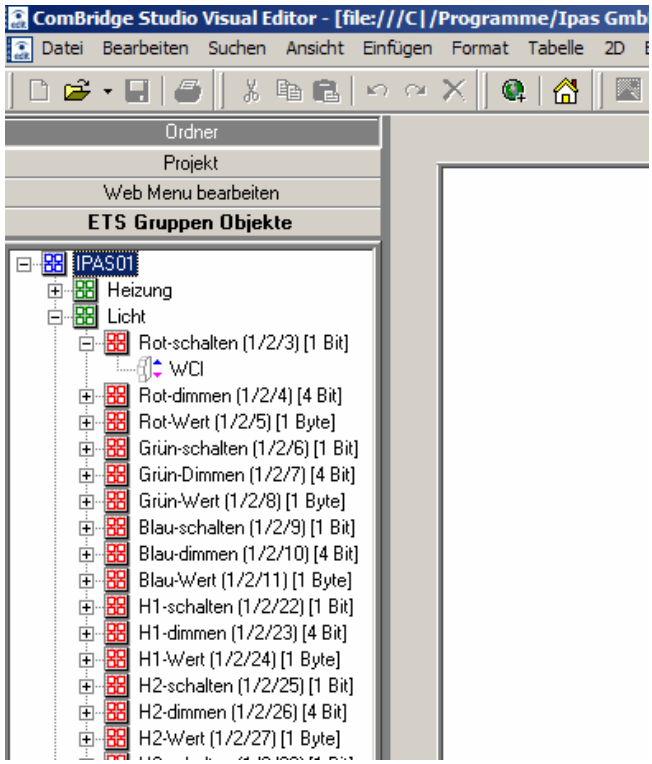


Figure 24: View of group addresses after being imported

7.2. Creating empty web pages

In general a visualisation consists of several pages, which can be loaded via a navigation. At first you must determine the number of pages required. ComBridge Studio Visual Director pages differ from other web pages because of certain program elements, which are important for EIB communication. The ComBridge Studio Visual Director concept is based on static pages (floor plans, images, etc.), which are supplemented by dynamic elements, such as switch units and status displays. This means: If the status of an operating element changes, not the whole web page is up-dated (as would happen usually) but only the changed element. This makes the page uploading very fast and avoids lengthy processing. Once you have created and activated a new project, this project will always contain the web site *top.htm*, which has been specifically prepared for EIB communication.

Select Project from the folder list and double click the file name *top.htm*. In the right editor window the file *top.htm* opens. This page serves as template for all other pages.

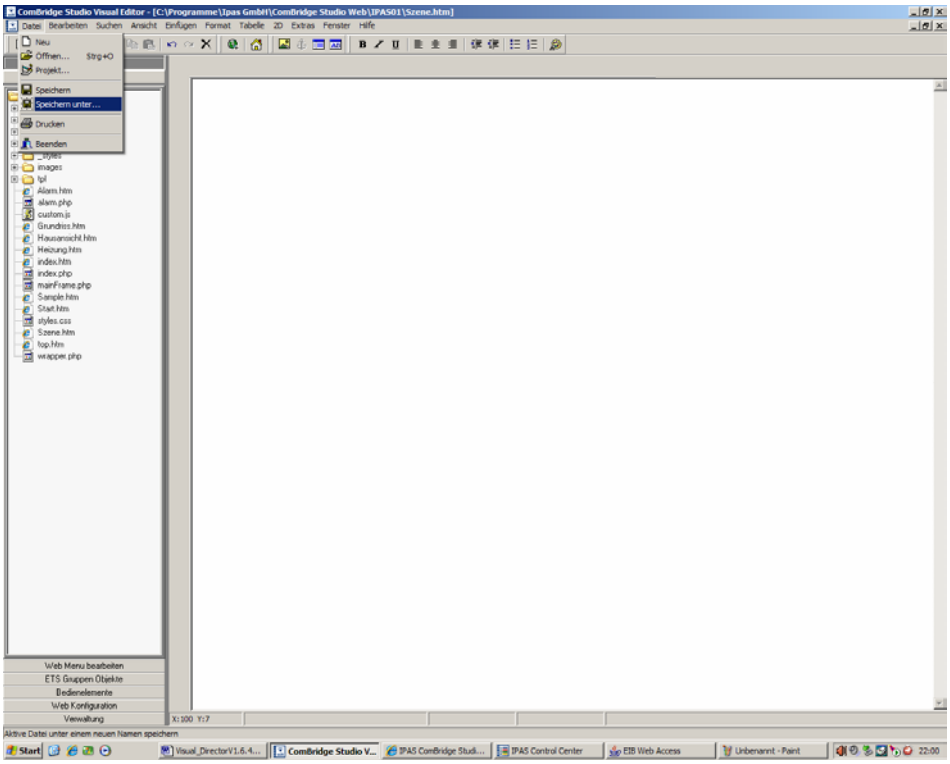


Figure 25: Folder list “Project“ with active *top.htm*

By choosing File and then Save as you can copy and save the file *top.htm* under a different name. For example the page may be called *Start.htm*. All required web pages are created in this way.

In Figure 25 the additional pages *Frontview.htm, Office.htm, Alarm.htm, Scene.htm* and *Heating.htm* have been created in the same way.

Attention! Do not use any umlaut in website and menu names.

It is always possible to add additional pages later on. Via “File” and New you can create a new web page and save it with “File” and Save as under any name.

7.3. The navigation layout

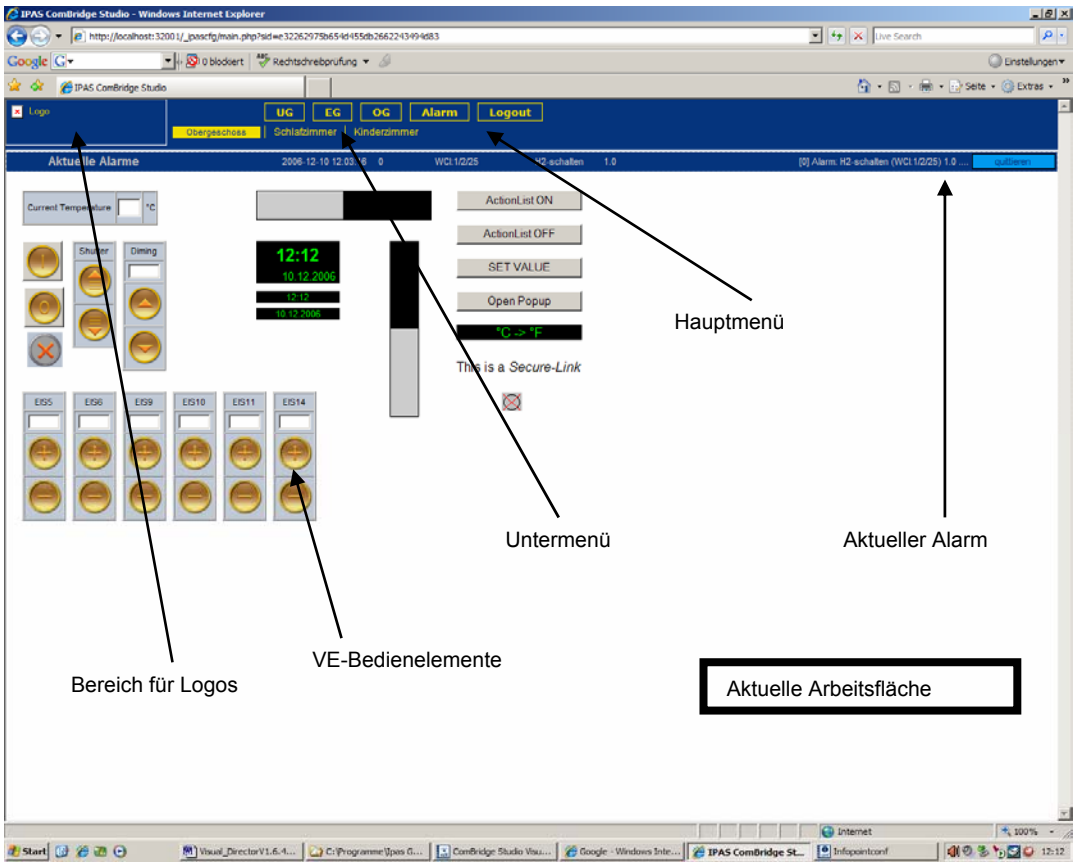


Figure 26: Visual Director Standard Navigation with Alarm

Figure 26 shows the standard style template Navigation with Alarm. The top left-hand corner contains a space for a project specific logo. The upper middle part contains a field for the navigation elements consisting of two lines. The top line is for the main navigation elements, for example the floors of a building. If an element of the main navigation is selected, a web page can be loaded and the corresponding sub-navigation (if available) appears. For better orientation within the navigation levels the text with yellow background provides a description (Obergeschoss). If, under "User administration" and "Configuration" the MAINLAYOUT is set on **std,** the screen appears in the standard display and the IPAS logout element  is shown.

(☛ Chapter. 7.3.4. User administration "configuration")

When pressing the logout element  , the start screen is displayed with the user access elements.

Individual site navigation can be built easily with the Visual Editor. Select Edit web menu

from the left folder list. The IPAS standard menu appears which can be changed to the desired navigation menu through simple editing.

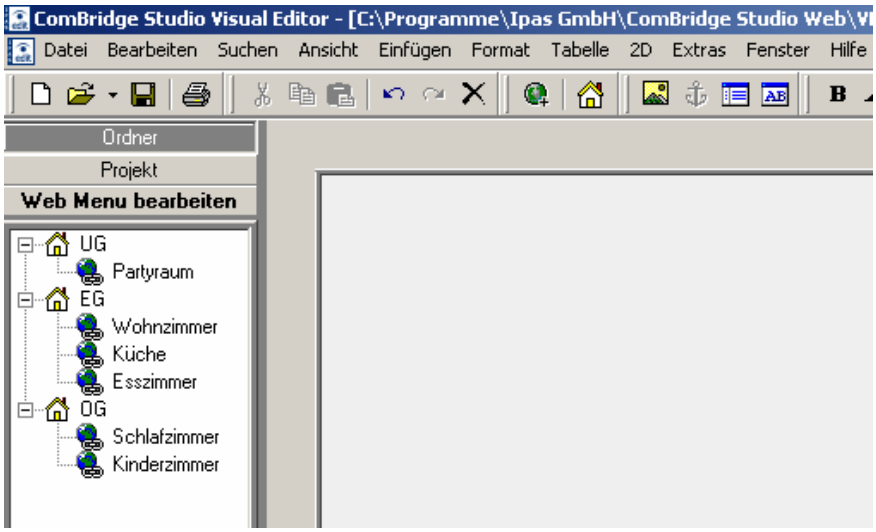
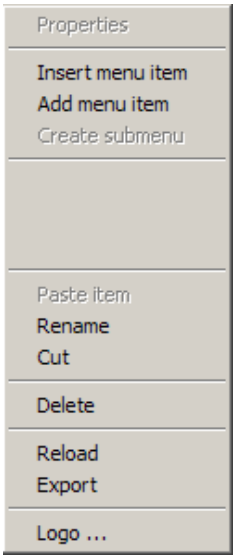


Figure 27: Folder list Edit Web Menu

A menu is edited in five steps, which are described in the following chapters.

7.3.1. Creating main menu and submenu



Move the mouse to the menu field and press the right mouse button. The window to the right of the text opens. It will be re-opened for each of the following steps. Select an existing menu entry with the right mouse button as shown in Figure 27 and choose Rename in order to edit the entry or Delete in order to delete it. If you choose Insert menu item, a new menu point is inserted below the position of the mouse. If you choose Add menu item, a new menu point is added at the end of the menu list. If you have selected a menu point and pressed the right mouse button, you can Add a sub-menu below the selected element. All elements can be edited by selecting the respective menu point with the right mouse button and then pressing Rename.

An alarm button on the main menu is added with Add alarm menu .
A click on Alarm opens the alarm report page, which lists all alarm events recorded in the database. The following figure shows the structure of the alarm page.

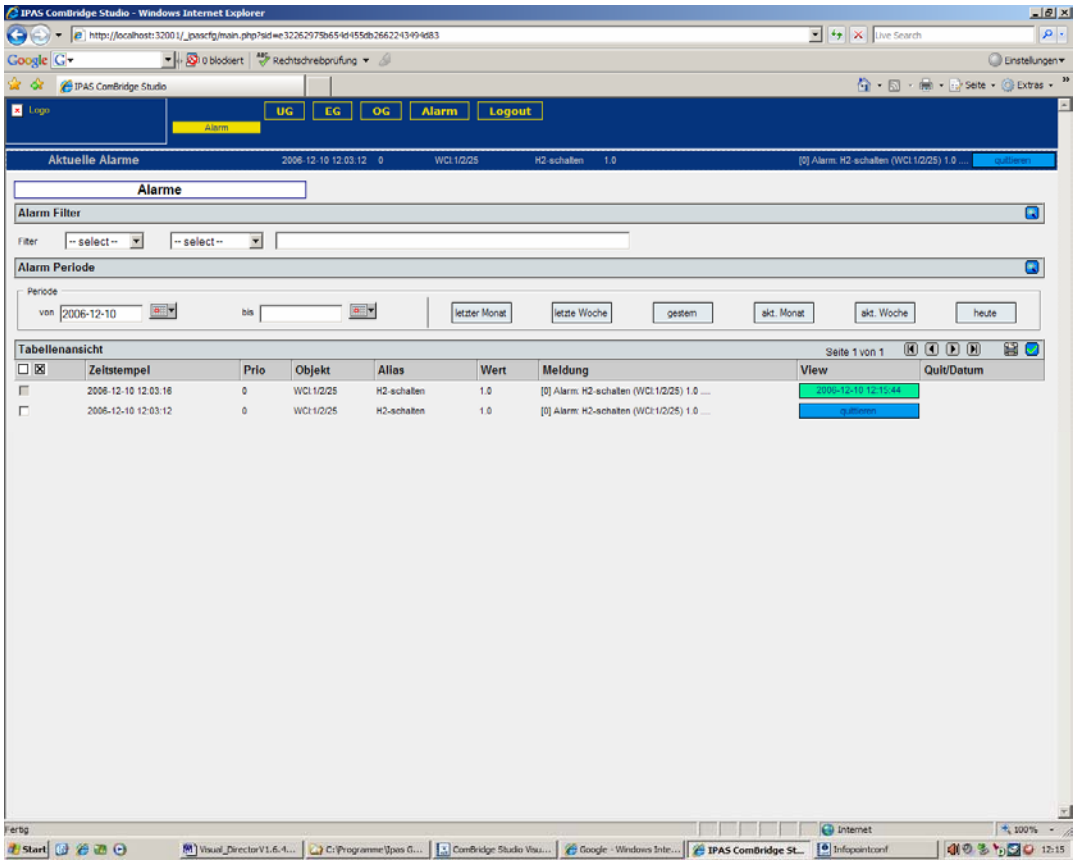


Figure 28: Alarm overview after pressing Alarm

All alarm events are listed line by line with their specifications. In the Quit/Date alarms can be acknowledged with a time/date stamp. Fields marked in blue show that alarms have not been acknowledged in this line. Fields marked in green show with their time/date stamp the point in time when the alarm was acknowledged. The line below the menu field shows the last alarm event with Current Alarms.

If Add Config Menu is selected, the scene configuration can be loaded in the visualisation (☛ Chapter 11.6. Online scene configuration).

If Add Logout Menu is selected, a logout button appears in the main menu. By clicking this button the login page is loaded.

The optimal navigation display is achieved if you use no more than one line for each the main navigation and the sub-navigation. This means that you should describe the menu points with short words or few letters. If you use more than one line for a menu point, the whole lay-out might change and the operation may not be performed correctly.

Open the navigation tree by clicking on the + symbols: EG.

7.3.2. Connecting the menu points with web pages

Select the top menu point with the right mouse button and select Properties. The window "Menu properties" opens.

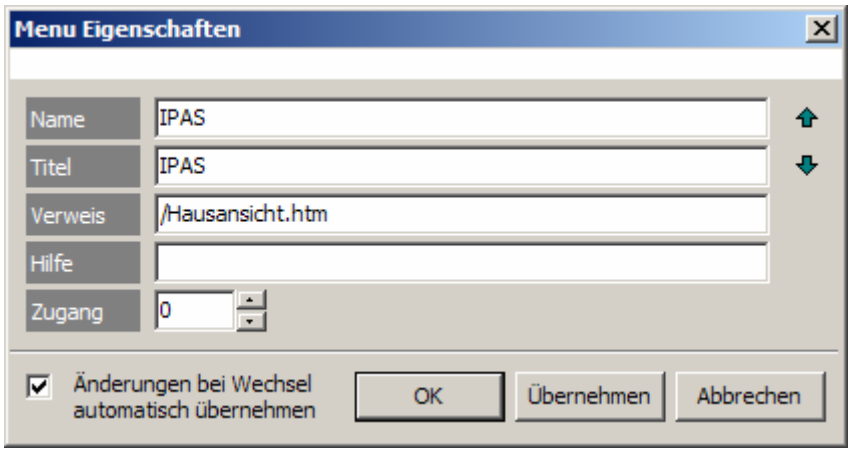


Figure 29: Menu properties

The field Name contains the name of the menu point. The name can be changed at this point. Title refers to the entry for a menu point, which is shown in the navigation with a yellow background. This entry has no meaning for submenus and only serves for commenting the entry. In the Reference field the web page is displayed which is to be loaded when pressing the menu point. In the Access field the access level is defined. It needs to be lower than the access level of the user for the page to open.
If the window "menu properties" is open, select Project from the folder list. On the left side of the Visual Editor the folder entries of the project are shown. In order to connect the already created web pages with the navigation menu, use the left mouse button to select the web site which is to be allocated to the menu point in the window "Menu Properties". Move the web site into the Reference field with the mouse button pressed down and then release the button. The file name of the selected website is now displayed in the Reference field. In Figure 29 this is the site *Frontview.htm*. Press Accept, in order to save the settings. In order to allocate the other sites, press the upwards arrow symbol in the window "Menu Properties" in order to move up one menu point or the downwards arrow symbol in order to move one menu point down.

Save your settings with Accept before you select the next menu point. Save the settings of the displayed menu point with OK before closing the window "Menu properties".

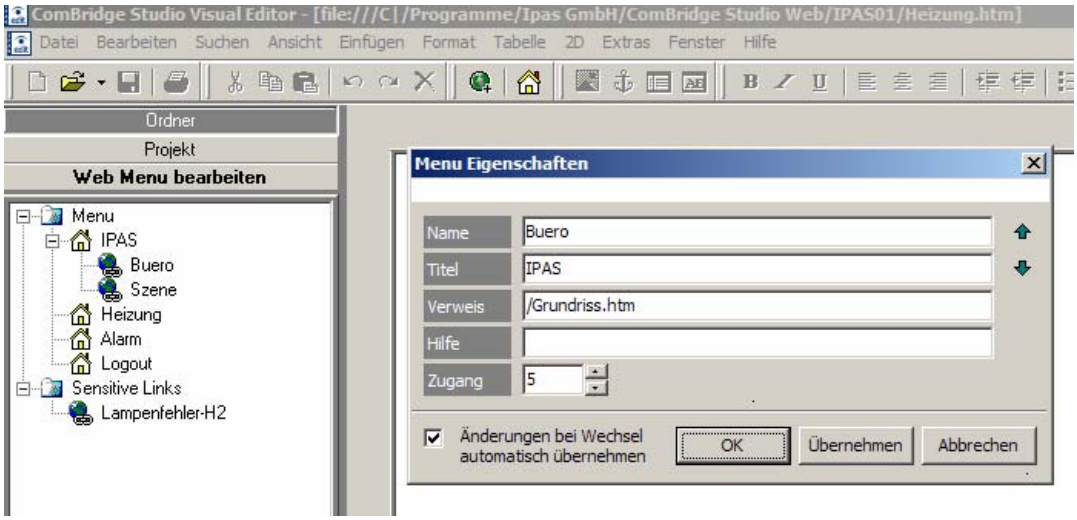
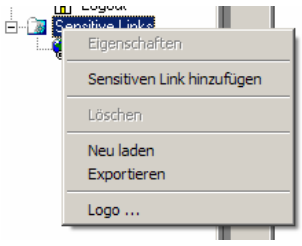


Figure 30: Example of a projected site navigation

In the example (Figure 30) the main menu IPAS was connected with the website *Frontview.htm*, the sub menu Office was connected with the website *Floorplan.htm*, the sub menu Scene with the website *Scene.htm* and the main menu Heating with the website *Heating.htm.*

7.3.3. Global sensitive link

In the web menu configuration a global sensitive link can also be projected. In contrast to the local sensitive link, which can be selected in the Tech-Edition and can only be activated on the web page where it was saved, the global sensitive link is active in the whole visualisation independent of the page that has been opened.



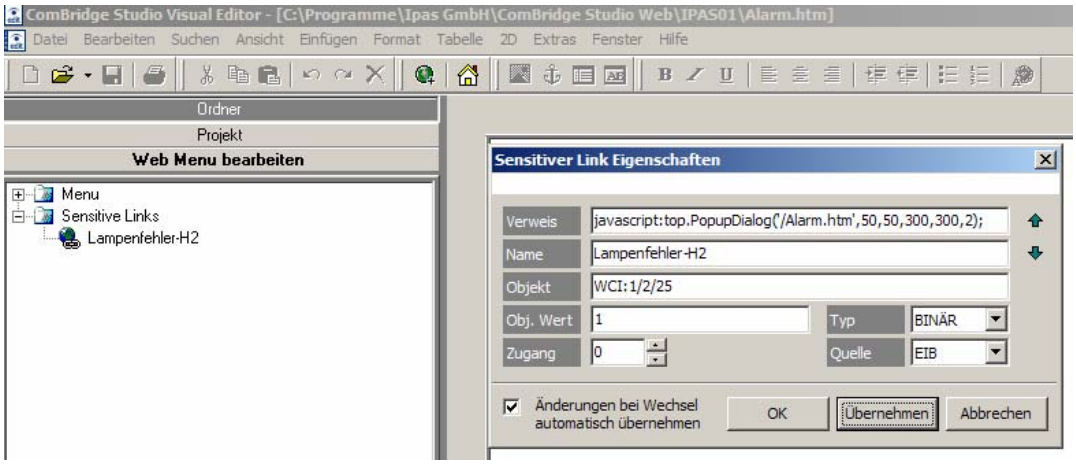


Figure 31: Projecting a global sensitive link

To create the link, select the menu point Sensitive Link with the right mouse button under Edit web Menu and then press Add Sensitive Link. To configure the sensitive link, select the newly created link with the right mouse button and choose the menu point Properties .

The field Reference is used to show the website from the Project menu, which is to be opened when pressing the sensitive link. Name and Object describe the group address or the object, which activate the sensitive link, if the value in the Obj. Value field is sent. In Figure 30 the site *Alarm.htm* is opened in a popup window if the group address 1/2/25 has the value 1.

Please remember that when pressing a global sensitive link a web page is opened which is not embedded in the standard navigation. You need to ensure that this page contains functions which make it possible to return to the original visualisation (e.g. fallback). The example in Figure 31 shows how the global sensitive link opens a popup window, which displays the desired web page. In order to load *Alarm.htm,* the code ***javascript:top.PopupDialog('/Alarm.htm',50,50,300,300,2);*** needs to be entered in the field Reference. If the sensitive link has been activated, the *Alarm.htm* opens at the position x= 50px and y=50px with a size of x=300px and y=300px for 2 seconds (☛ Chapter 10. Control and Function Elements in Visual Editor).

7.3.4. Playback of alarm sounds

A special global link is the playback of an event-dependent sound file. ComBridge Studio offers a range of sound files that are included in the delivery. The sound files are accessed from within a website. This means that the playback of a sound file under ComBridge Studio happens via a special website which is saved together with the sound files under *Projectdirectory/_sound*.

Sound files under ComBridge Studio are in the wave format *.swf and can be created with the appropriate programs. The sound files included in the delivery have been generated so that they can play infinite sounds. With the correct software, additional sound files can be created. However, the creation of sound files is not intended with ComBridge Studio. If you have questions about the creation of sound files, please contact support@ipas-products.com.

The playback time can be set as follows. In the Visual Editor open the HTML page with the desired sound.

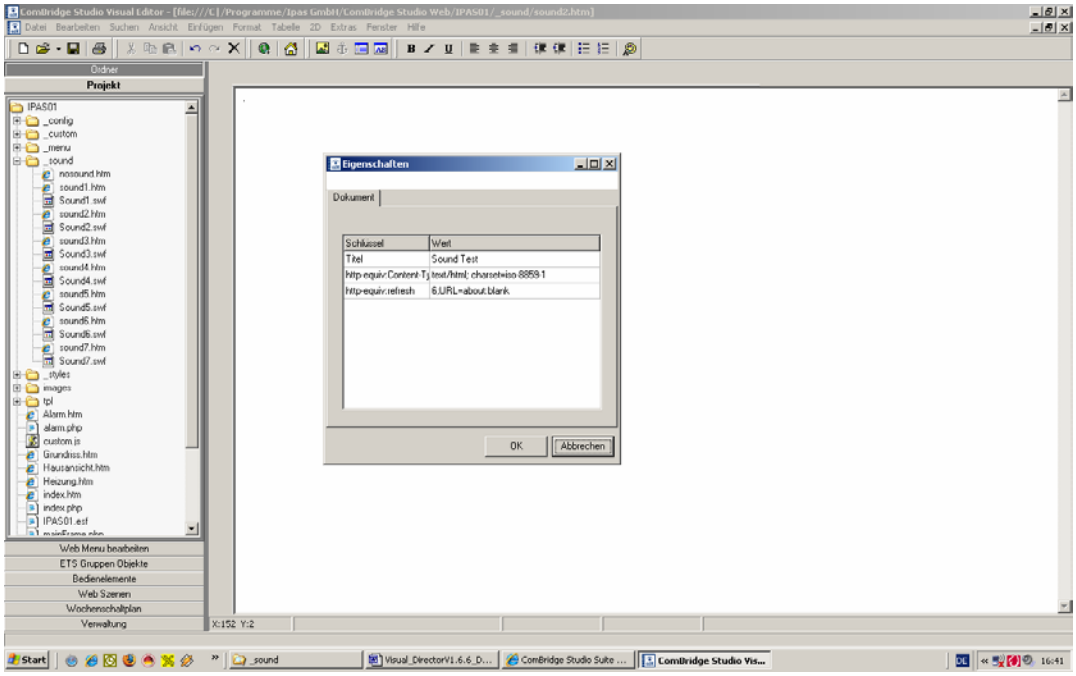


Figure 32: Open HTML page sound2.htm

Figure 32 shows the open HTML page Sound2.htm. Select Extras/Document Properties from the Visual Editor's menu bar to open the Properties Window. The value 6 in the key field http-equiv:refresh shows the play-back time in seconds (Figure 33, left). If the entry is deleted, the sound is played in an infinite loop (Figure 33, right).

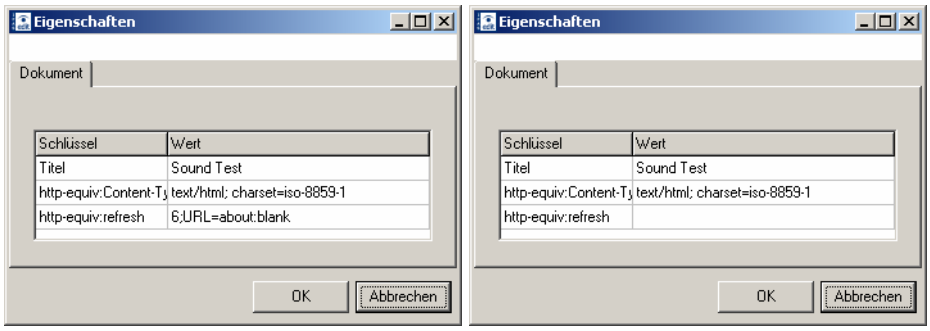


Figure 33: Setting the playback time: left 6 sec., right infinite

Figure 34 shows the properties window of a global sensitive link for sound playback.

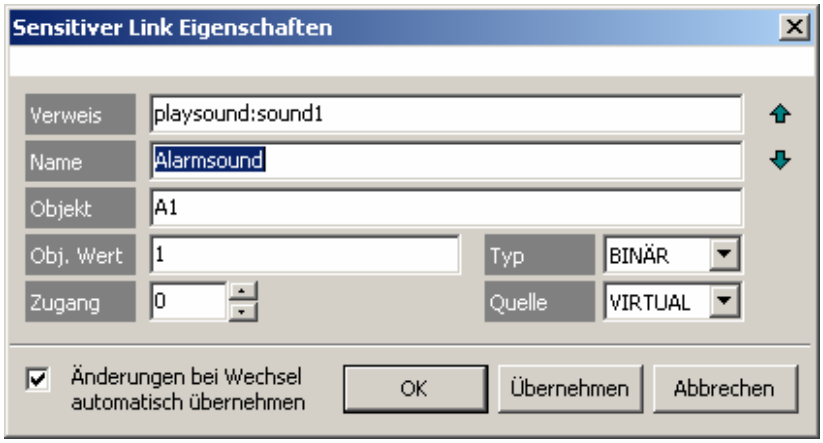


Figure 34: Properties to playback a sound file

The command “playsound:“ in the reference field starts the website sound1.htm. The name of the link is defined in the name field. In Figure 34 the sound with Obj.value 1 of virtual object ”A1“ is played. Figure 35 shows the settings to stop the sound with another global sensitive link. The virtual object A1 with value ”0“ executes the Stopsound command.

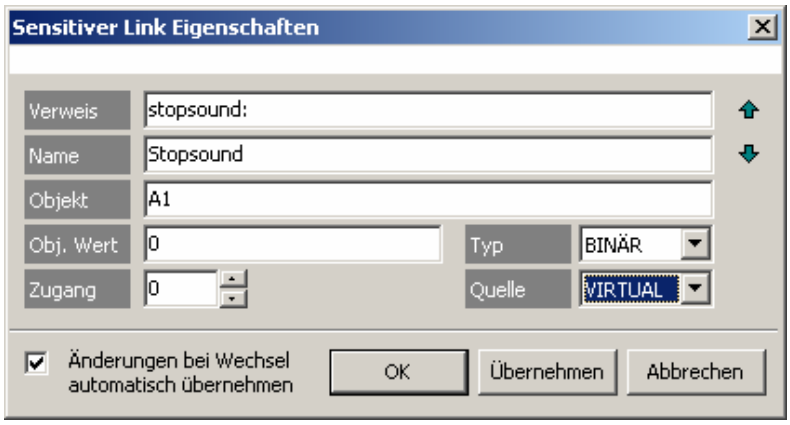


Figure 35: Settings to stop a sound

7.3.5. Integrating a logo

Before you integrate a logo in the visualisation, the logo should be adjusted to the format and saved in the project directory in an appropriate format, for example **.BMP*. An appropriate directory is:
C:\Programme\Ipas GmbH\ComBridge Studio Web\Vd1\images\custom
The standard size for a logo in the navigation menu is 193 x 55 pixels (x,y).
In order to integrate a logo in the layout, press the right mouse button in the field Edit Web Menu and then choose Logo.

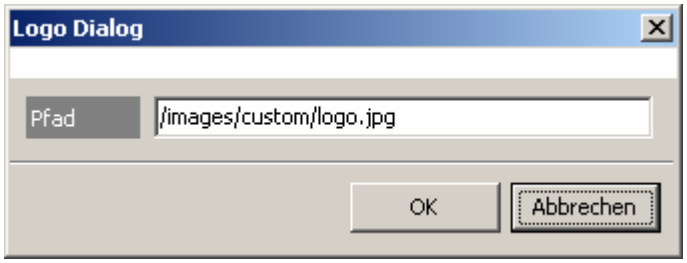


Figure 36: Logo Dialogue

You should now change to project view in order to drag the logo file to the field Path by keeping the left mouse button pressed down. Confirm your setting with OK.

7.3.6. Menu export

Once you have connected all menu points with the corresponding web sites and edited and named all menu points, you only need to export the menu. Press the right mouse button when the cursor is above the field Edit Web Menu and press Export in order to integrate the new menu into the lay out.

7.3.7. Testing the menu settings

Start Internet Explorer and enter http://localhost:32001 in the address line in order to start the visualisation.

32001 is the port number of the first project in this manual. If a different port number has been defined for your project, you must enter this number instead of the one used in this example.

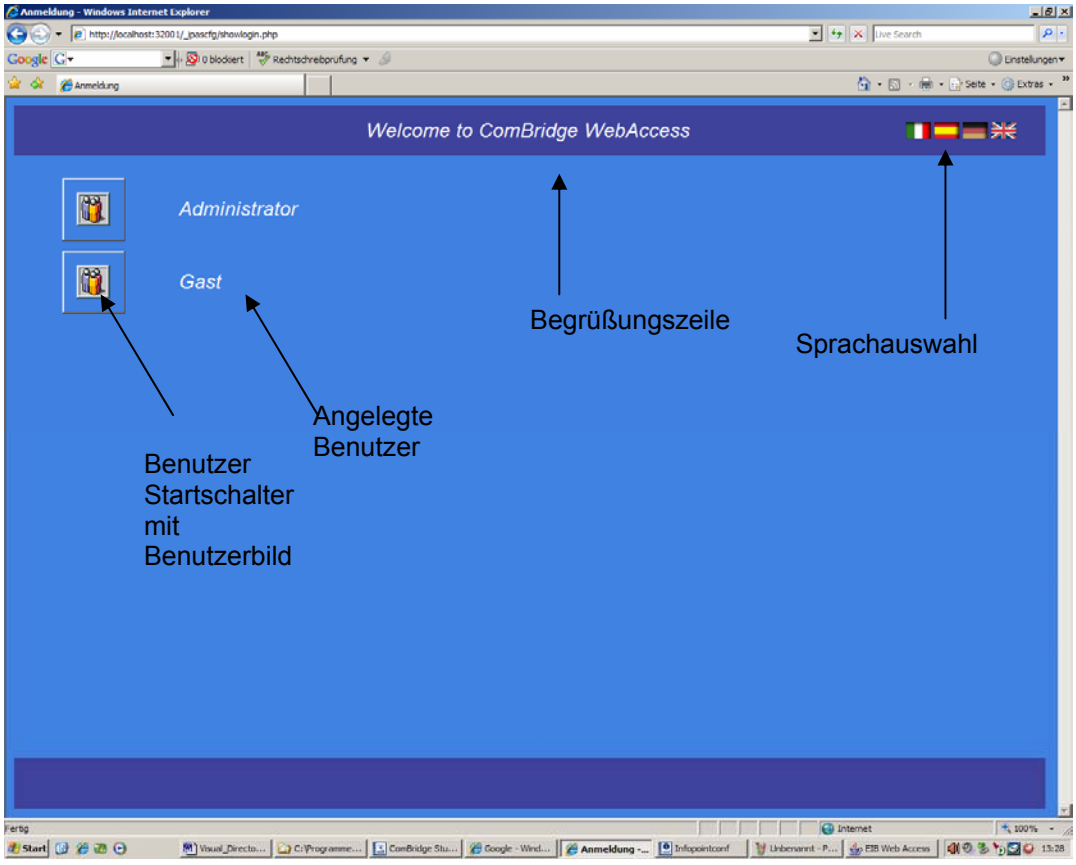


Figure 37: Visualisation login screen

Select the image of the user login in order to open the visualisation. After a few seconds the visualisation is started and you can test the current settings. Check the format of the logo, the navigation display and the corresponding web sites. Should you wish to make any changes, simply repeat the steps described above and check your changes in Internet Explorer.

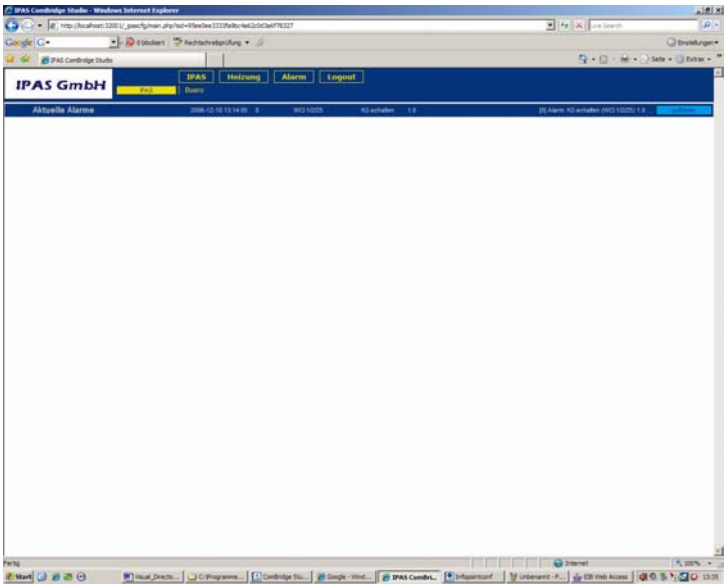


Figure 38: First test of the visualisation

Attention! Remember that the web sites are static and are not automatically updated. If you want to test your changes, you need to use the update function in Internet Explorer  .

7.4. Creating an individual navigation

If you prefer not to use the ComBridge Studio standard navigation, Visual Editor offers operating elements to create an individual navigation. The operating elements can be found in the menu Operating elements /Navigation.
Figure 39 shows the 4 navigation elements that are currently available.

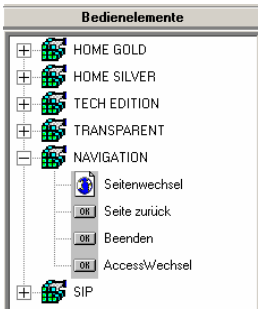
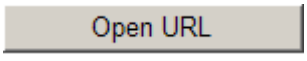
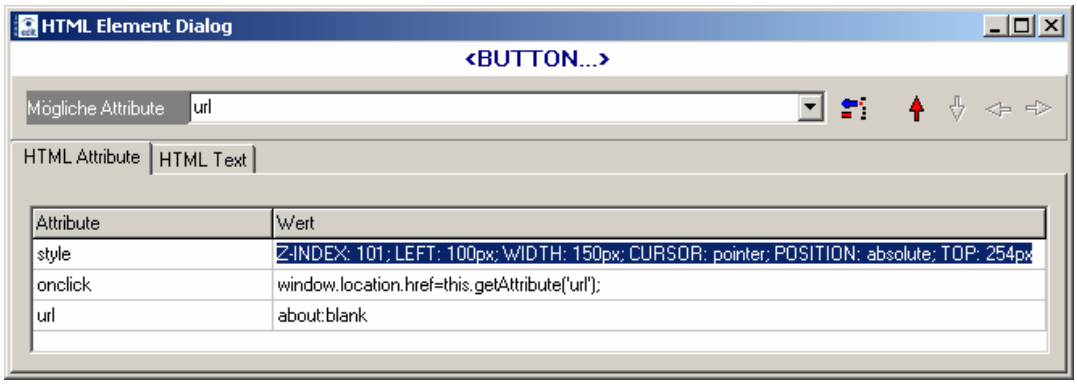


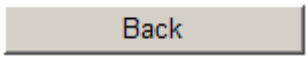
Figure 39: Navigation menu



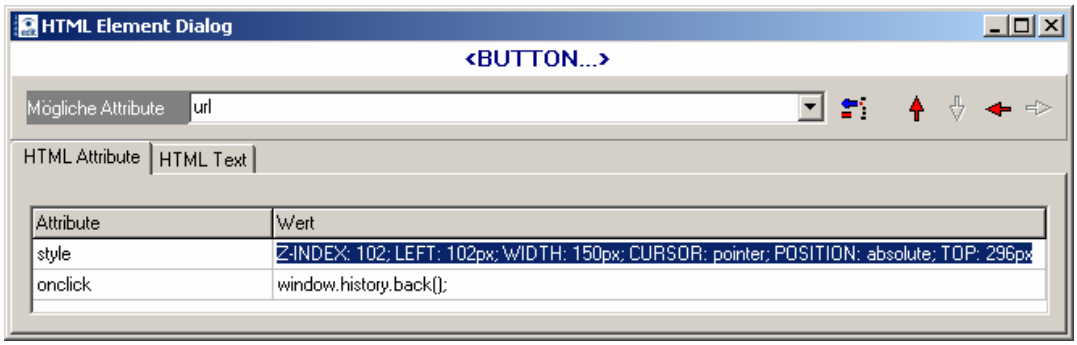
This button opens a new page



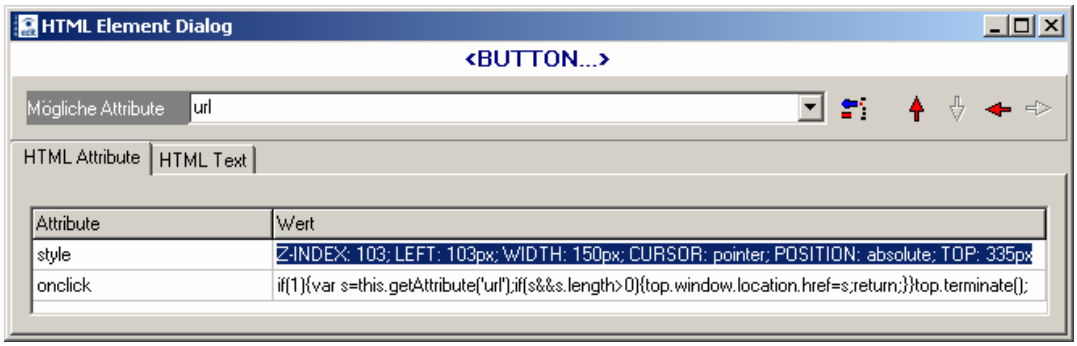
Go to HTML attributes and enter the page that is to be opened when pressing the button in the value field. Enter the page in the "/page.htm" format.



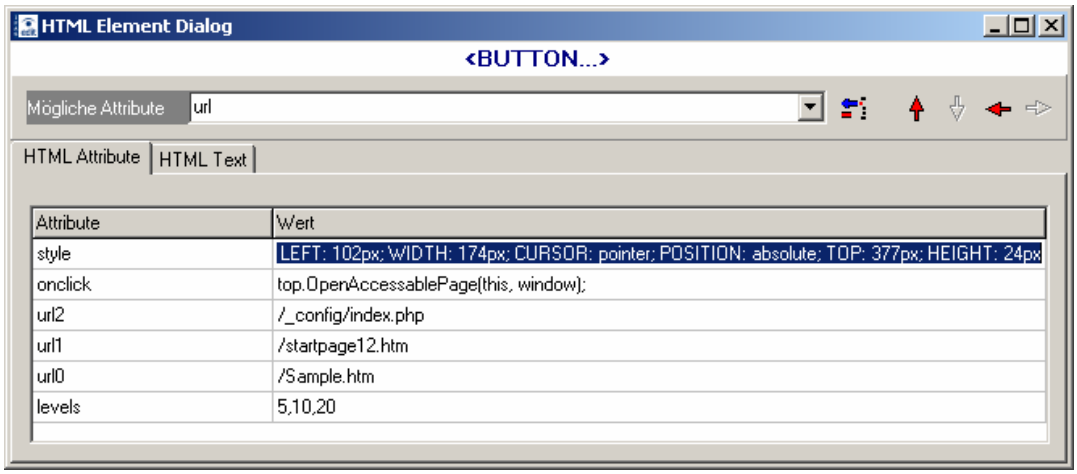
This element opens the previous page. No settings are required.



This button is used to log out. No settings are required.



This button changes the page depending on the user's access level.



The different access levels can be entered in the value field of Attribute levels. The pages that you wish to open on pressing the button can be entered in the value fields of Attributes url0, url1, url2.
Example: The current user has access level 10. On pressing the button, page "startpage12.htm“ opens.

If an individual navigation is created, the project designer needs to make sure that another page can be accessed from each page that is created.

7.5. Web Design

Now that you have saved the project, determined the users, created empty web pages and defined the navigation, your next step is the design of the individual web pages. This process can be described in three steps.

1. Web page design
2. Positioning the control elements
3. Connecting the control elements

7.5.1. Designing web pages

Before graphic or image files can be integrated in Visual Editor, they should be edited in such way that they are suitable for web application. The templates can have different formats which are suitable for web display such as GIF, JPG, BMP etc. It is particularly important that the resolution is adjusted to the screen resolution so that the picture file is not too large, which would prevent rapid image uploading, especially if the visualisation is

operated via the internet.
The image files can be located in any folder or drive. Select Insert/Picture in order to start the “Open picture file” dialogue.

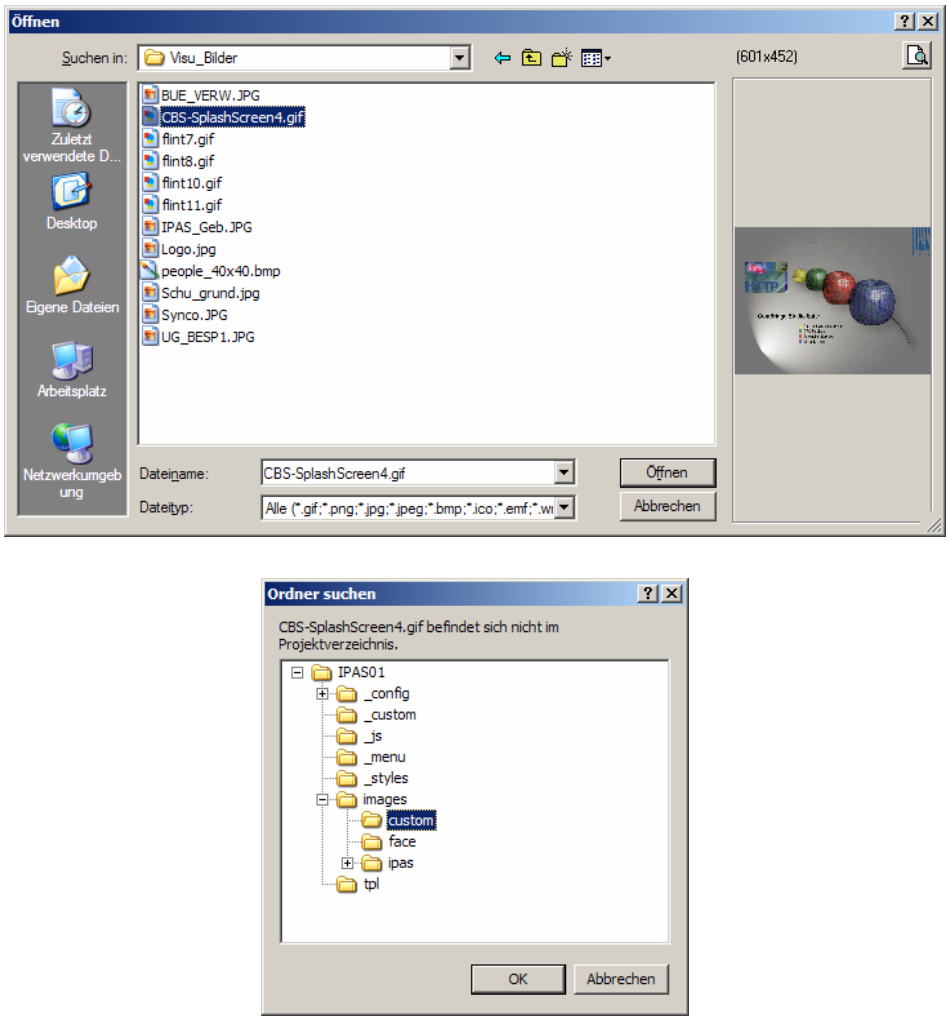


Figure 40: Dialogue box Open Picture File and Search Folder

A dialogue box appears and asks you to copy the image into the project directory. Select the respective folder. You can save it in *images* or in *images\custom*. You should try and avoid the folders *images\ipas* and *images\face*, which should be retained for animation graphics or framework graphics.
The image properties window opens. Please make sure that the path remains related to the document by selecting Reference Related to Document . The image dimensions can be adjusted if Retain Side Proportions is selected.. If you enter a different measurement in the field Width, the height changes proportionally.

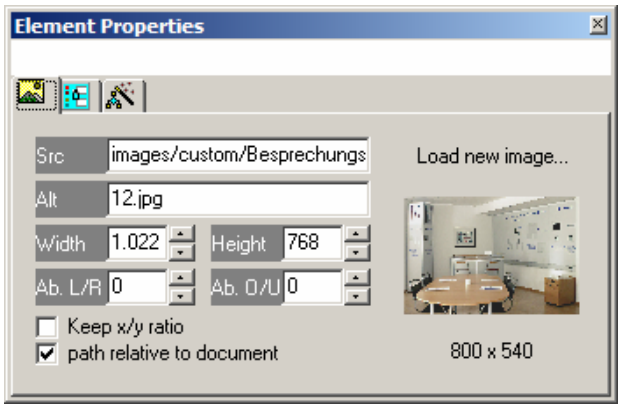


Figure 41: Element properties of the image on the *Start.htm* page

If you keep the window “Element Properties” open, the properties of the active (selected) element appear in the work space. If the window is not open, you can open it at any time by double clicking an element in the work space or via the context menu of the right mouse button.

The floor plan of the office is to be displayed on the website *Floorplan.htm.* In order to so, open the website *Floorplan.htm* and load the image *Office_floor.gif* The following example shows how to change the background colour of the image. Use the right mouse button to click the workspace outside of the currently loaded image.

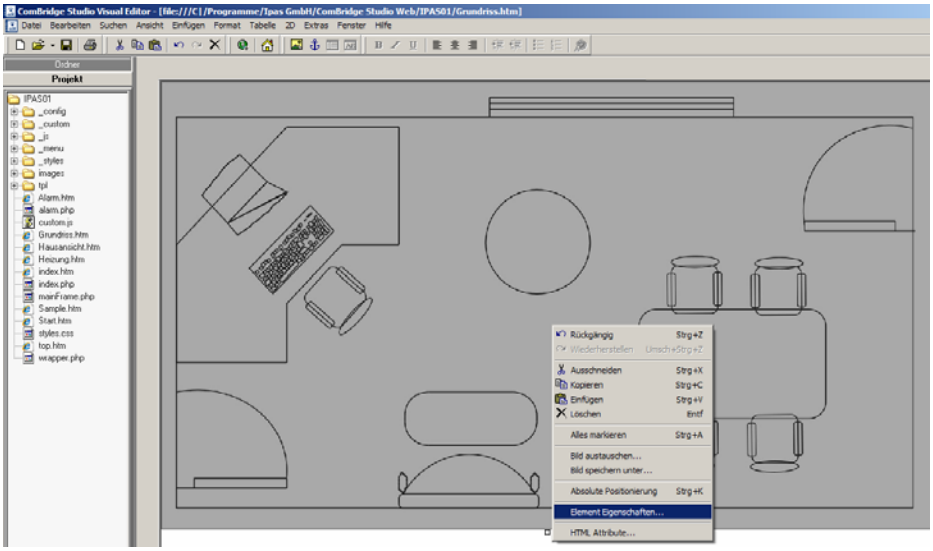


Figure 42: Element properties

The context menu appears, from which you select the entry Element Properties :
The “Element Properties” window reappears, in which you can now select, for example,

the button for background colour. You can now choose a suitable background colour and confirm it with OK.

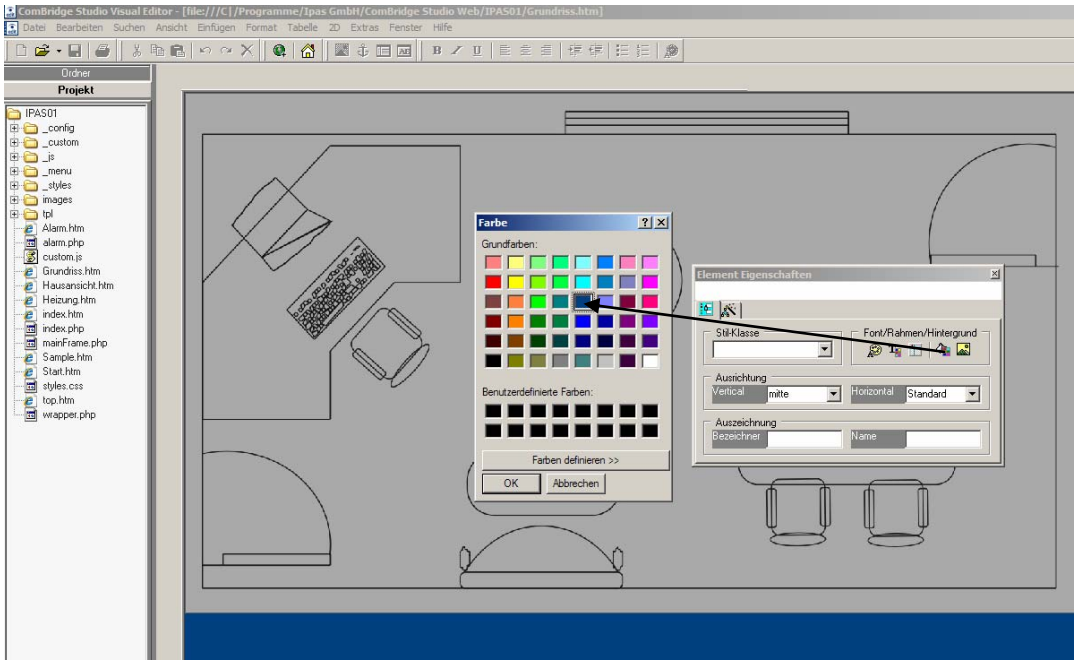


Figure 43: Choosing the background colour

To centre the floor plan, click once more on the image with the right mouse button. The context menu appears. Select the entry Absolute Positioning . The anchor point of the image remains the same but the image can be positioned freely and moved to the desired position by using the mouse.

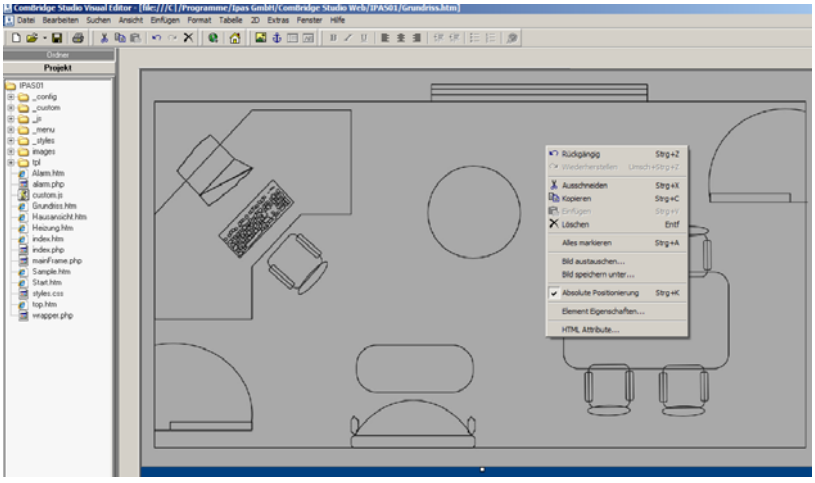


Figure 44: Absolute Positioning

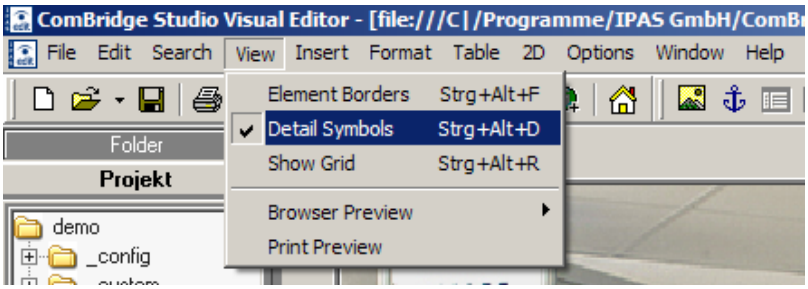


Figure 45: Detail Symbols

With “view”, Detail Symbols, the HTML symbols become visible. As shown in the picture below, 3 HTML carriage returns are visible. Between the first two (upper) carriage returns a small picture is shown.

This picture symbolises the anchor point of the image. The HTML Code for the image is contained in it. If it is deleted, the here anchored image is deleted at the same time. This needs to be remembered even if the image is freely positioned on the desktop through absolute positioning

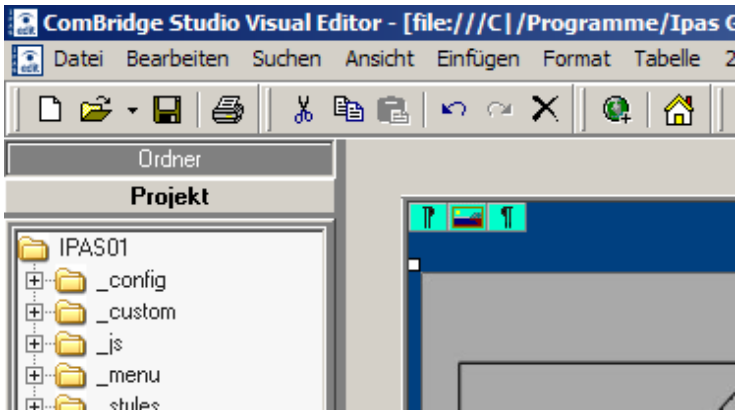


Figure 46: Anchor point of an image

The length of time that it takes to open a website is primarily determined by the image size. An image in JPEG format often has a size of several Mbyte. Screens with VGA resolution can only display 840x640 pixels with a resolution of 90 DPI. Images that have a higher resolution can therefore not be displayed in their original quality. It is better to convert images or artwork to the above resolution. An image in VGA resolution has a size of less than 100 Kbyte. An image whose resolution has been adjusted greatly reduces the time it takes to open a page.

7.5.2. Positioning control elements

Change to the folder User Controls in the left folder column in order to place a title on the image and insert EIB objects.
Choose the object Label in the Tech Edition and move it to the work space. Objects can only be deposited where an HTML marking permits positioning, e.g. between two carriage returns, within text, tables, DIVs, etc. On other surfaces, the cursor changes accordingly and dropping the object is not possible.

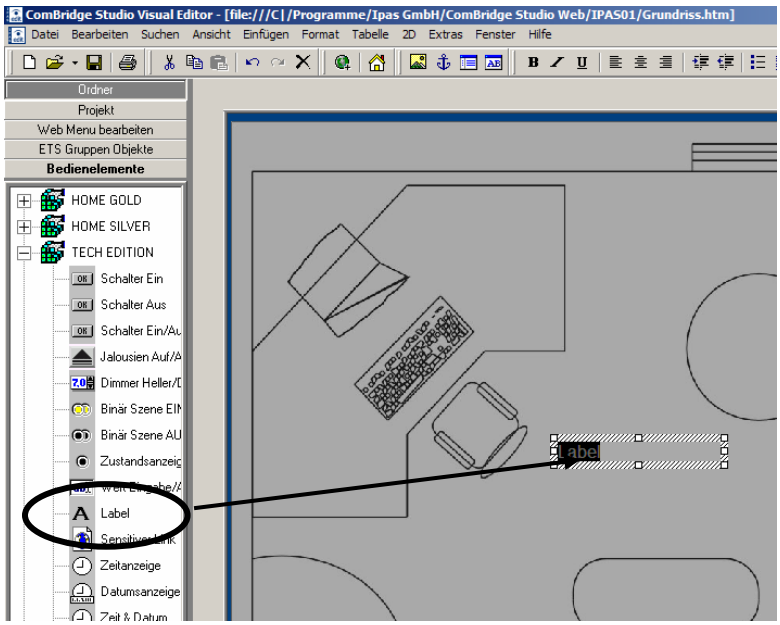


Figure 47: Editing an object with element properties

If the object is positioned, the text can be edited. Text properties are set via the “Element Properties“ window. The properties can be selected easily.

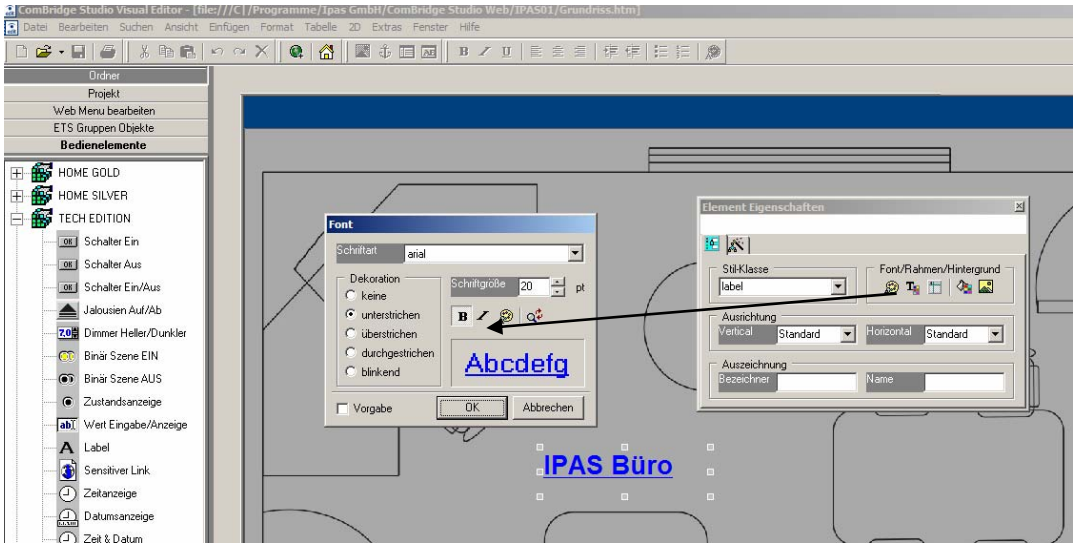


Figure 48: Changing font properties

Binary reporting: Open the HOME SILVER series and move the status display (yellow/grey) into the work space, for example close to the window.

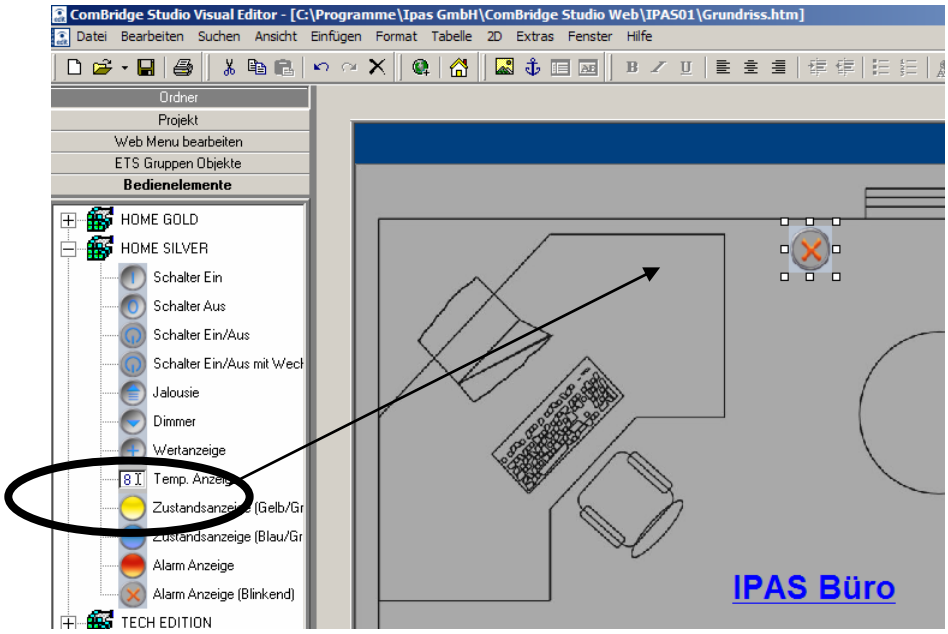


Figure 49: Inserting control elements

Please make sure that absolute positioning is selected. In order to do so, click on the object with the right mouse button and double-check the entry Position absolute Now a control switch and a value display for the actual dimming value are to be projected. A label field gives these elements the name H1. Figure 45 shows the result:

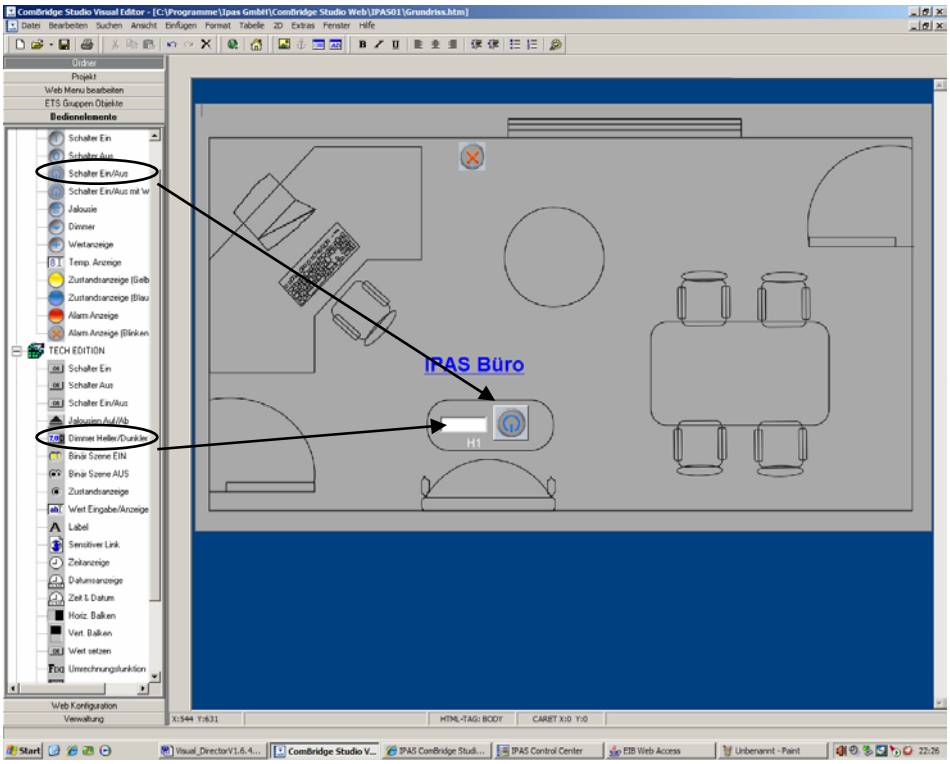
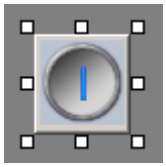
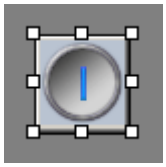


Figure 50: Projecting a control switch and value display

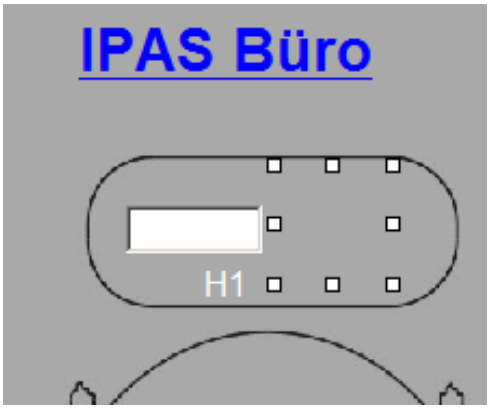
Attention! Buttons and other EIB control elements consist of several HTML elements. Make sure that you always select the whole object. In order to be sure that the whole object has been selected, you can choose View/Frame or <Ctrl + Alt + F> to make the element frame visible.

For the switch-on button, the control element consists of a button and a graphic. If you wish to select it, you need to select the button and not the graphic. Then the element can be moved around freely.

Here the whole object has been selected correctly.	Here only the graphic has been selected.
	

Tip: If the selection does not work with the mouse, use the TAB key or SHIFT + TAB - combination in order to change the selection from object to objects.

If an object disappears beneath another during the positioning process, this is not an error but an HTML property, which can be managed via the z-Index. Browsers work with levels and therefore need information about the level on which the element is to be displayed.



Here is an example: The element appears to have fully disappeared but, in fact, it is only on a lower level than the floor plan. Therefore the level of the element can be raised or the level of the floor plan lowered. Under menu point 2D, you can define the level on which the element is to appear. Choose Forward to move the element to an upper level.

Die Funktionen der verschiedenen Bedienelemente sind im Anhang beschrieben. (☛ Chapter. 10. Control and Function Elements in Visual Editor)

7.5.3. Connecting the control elements

In Figure 46 switches and a status display are positioned.

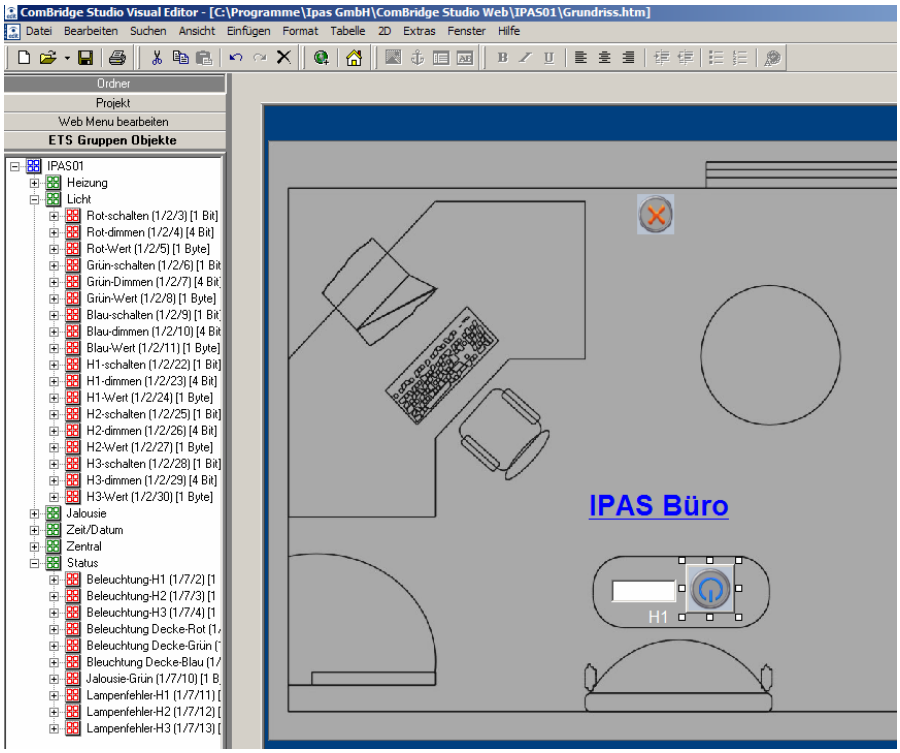


Figure 51: Position of control elements

Now the control elements are connected with EIB objects. First the control element is selected and the properties window is opened with a double click or by using the right mouse button and the context menu.

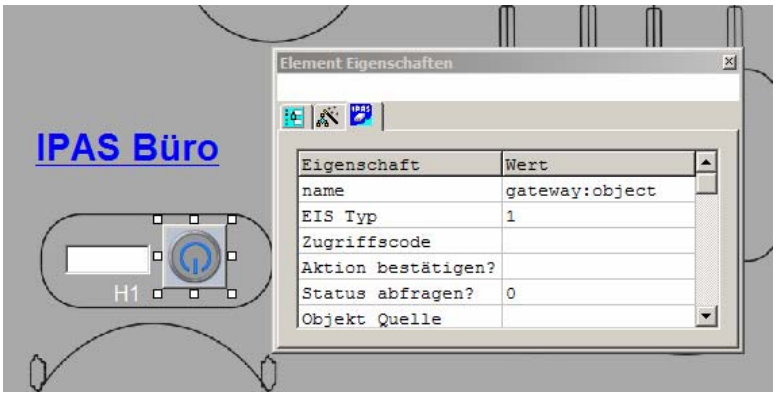


Figure 52: Control element properties

In this properties window, control elements are connected with the installation's EIB

objects. The group addresses have been imported so that the group address of the current project is listed in the left folder list under ETS Group Objects.

(☛ Chapter. 8.1. Importing ETS group addresses)

If you open the group address tree down to the lowest level all gateway names connected to the configuration manager are displayed. If a group address with a valid gateway name is selected, the object can be moved into the Name field of the properties window by keeping the mouse button pressed down.

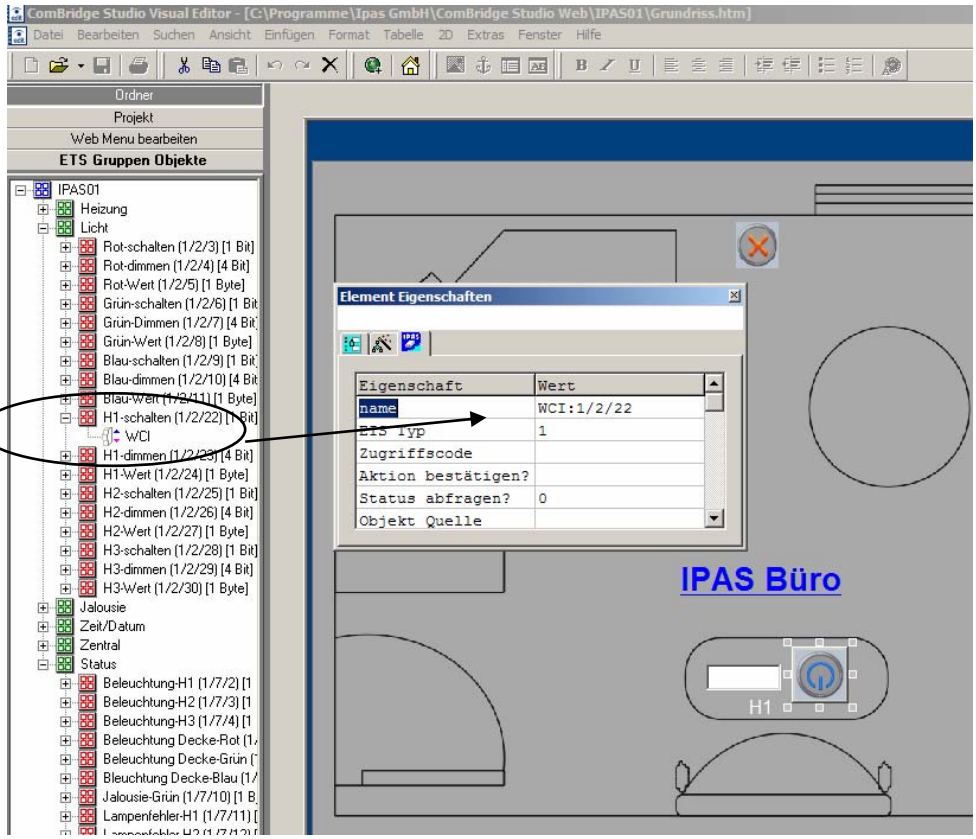


Figure 53: Connecting group addresses

All information can also be entered manually in the element properties window by using the following procedure:

- name: The group address is entered together with the gateway name
- EIS Type: Depending on the object type, the EIS Type (DP) is entered automatically. A dimming object consists of three group addresses: Switching, dimming, value setting.

Attention! For functions such as dimming or blinds, the EIS type needs to be double-checked after connection.

- Access code: If the access code is lower than the user level, the element can be operated and observed (otherwise only observed)
- Confirm Action?: Is the operation to be confirmed once more with YES/NO. (0=No, 1=Yes)
- Check Status?: Is the status to be checked when the visualisation page is loaded? (0=No, 1=Yes)

Tip: Dimming objects (EIS2) and blind objects (EIS7) consist of several group addresses. These need to be entered as follows:
A dimming object consists of 3 group addresses: Switching, dimming, value setting. Enter the objects for switching, dimming, value or status one after the other in the field Name whilst keeping <Ctrl> pressed down. The separator is inserted automatically.

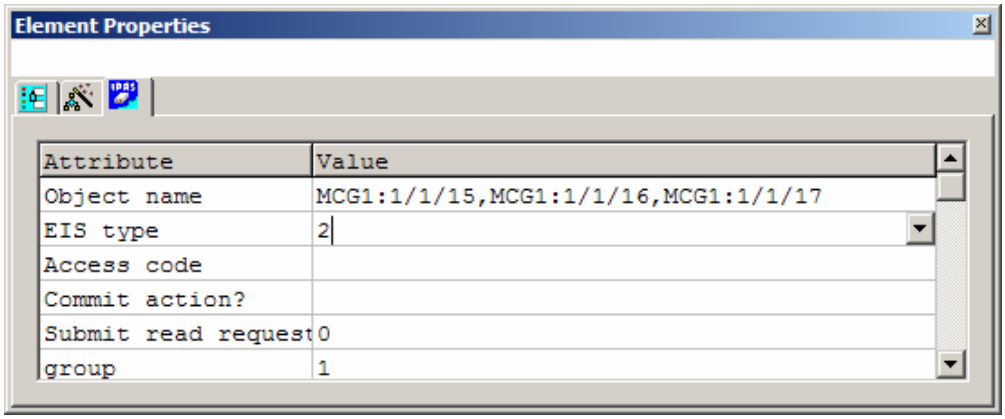


Figure 54: Allocation in the case of dimming objects

If you wish to assign a blind function (EIS7), do this manually..

An overview of the different EIS types can be found in the appendix. (☛ Chapter 12.12. Overview of EIS types)

The connection of EIB object and operation or control element is now completed. Save the project and start the browser. If you wish to start the visualisation, enter *http://localhost:32001* in the address line of the browser. The result is shown in figure 50.

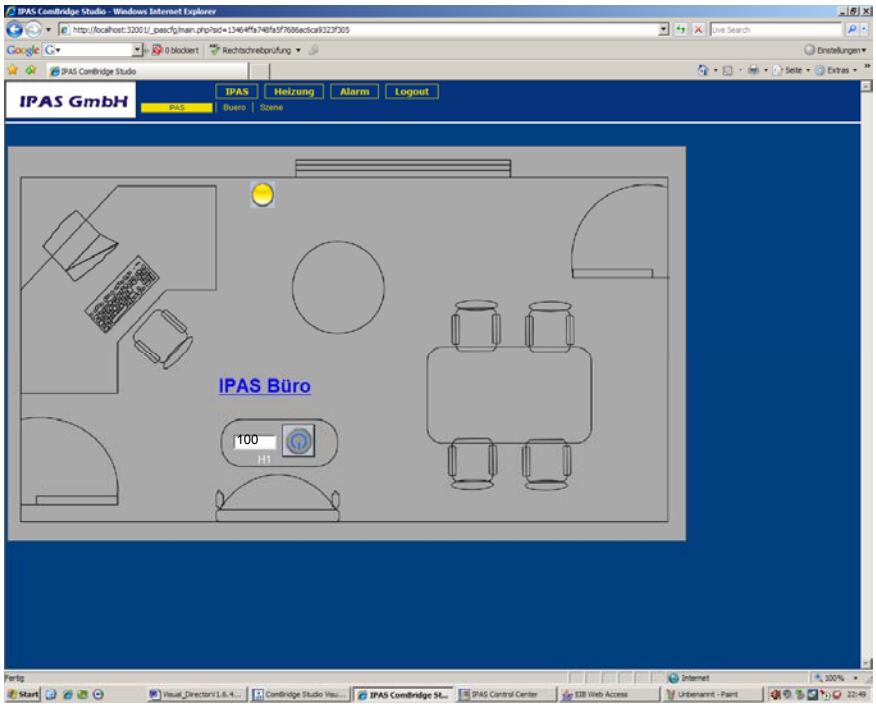


Figure 55: Browser view of the visualisation

If the opening status of a window changes, the current status is shown in the status display. If the light H1 is switched on, the current dimming value is shown in the value display. In Figure 50 the current dimming value is 100% and the window is open. Please pay attention to the display of the control element Status Display (yellow/grey).

	Status “ON“ (Light on)
	Status “OFF“ (Light off)
	Status undefined; (the object does not exist in the EIB system or the subscriber does not respond)

Figure 56: Status display

8. Project installation on the target PC

After the project has been completed, it needs to be transferred to the web root directory of the target PC in order to be executed. There are different ways of doing this:

1.) Manual copying of the files into the desired web-root directory
2.) Automatic copying of the files through Visual Editor
    1: Copying data via FTP to an internet provider (☛ Chapter 7.1.3. Visual Director via Internet)
    2: Copying data within a local network or on the same PC (☛ Chapter 7.1.2. Visual Editor and Visual Director are located on a local network)

We recommend automatic copying with support of the Visual Editor.

The following section describes the file transfer within a local network. (☛ Appendix 12.3. Visual Editor FTP Service Program).
At the beginning of the project you need to define the corresponding web server as well as the later web-root directory as shown in the following figure:

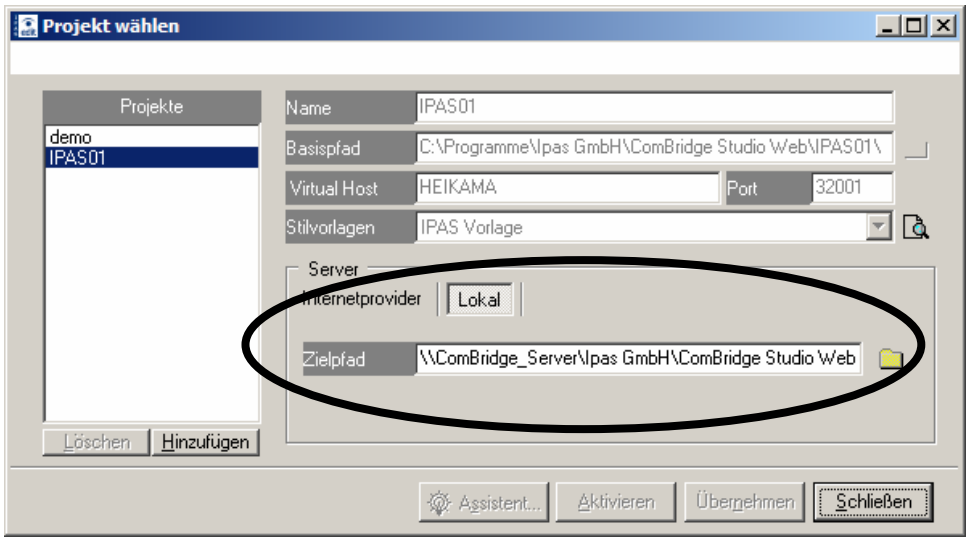


Figure 57: Target path to the network PC

You have the possibility to update the web-root directory at any time. To start this process, use the globe in the upper tool bar.

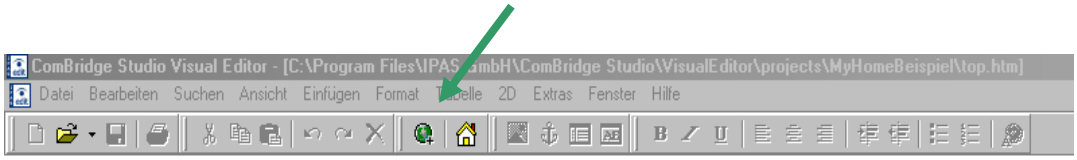


Figure 58: Updating a project

After clicking on the symbol, the following dialogue box appears:

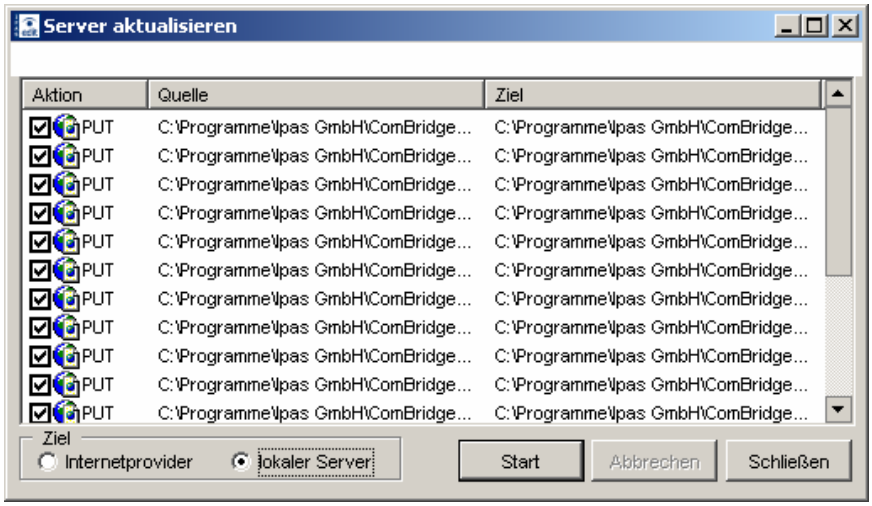


Figure 59: Updating the start server

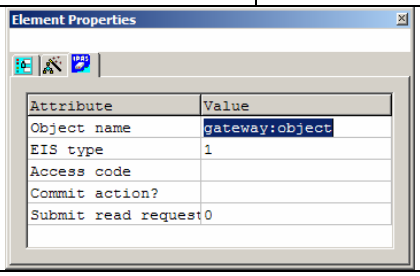
All data that have changed since the last update are listed in this dialogue box. By pressing the start button the selected files are copied into the target directory.

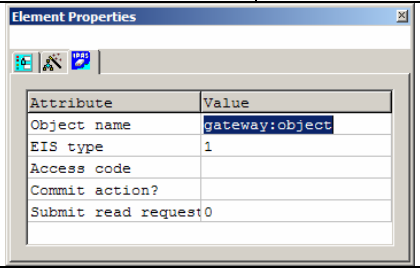
Apache needs the corresponding file (e.g. *IPAS01.conf*) in order to be able to perform the visualisation on the server. This file needs to be copied manually via the network into the corresponding directory on the server.

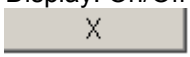
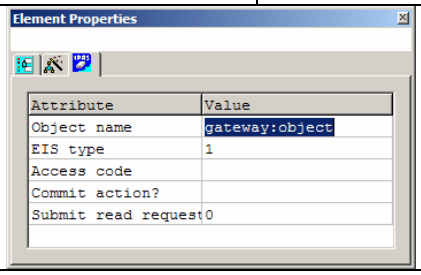
(☛ Chapter 7.1.2. Visual Editor and Visual Director are located on a local network

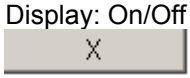
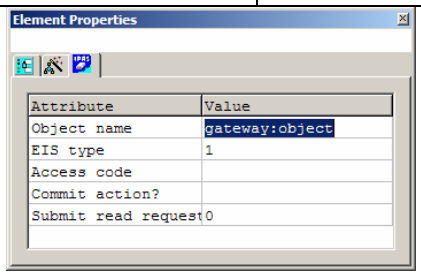
9. Control and function elements in Visual Editor

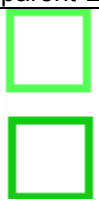
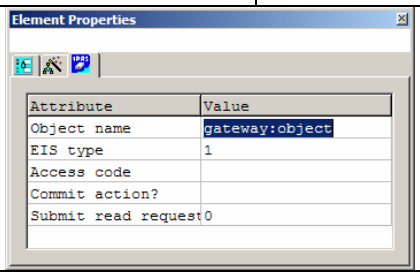
All functions that are required in EIB can be visualised with Visual Editor. Four design templates are available for this, which differ in the Transparent, Gold and Silver editions only in appearance. In the Transparent edition, the control elements can be fully hidden, so that for example photos can be animated. The Tech-Edition contains additional elements, which are independent of the design. The elements are described subsequently:

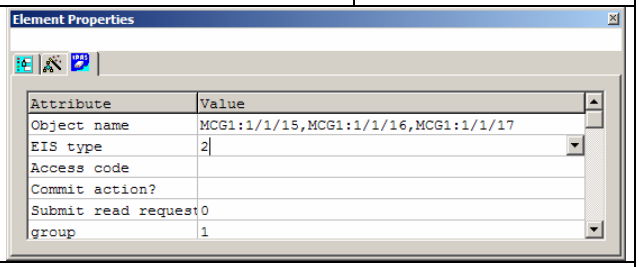
ON – switch			
EIS-Type: 1: 1Bit	**Value:** 1	**Function:** Switch ON	
Gold-Editon	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties / description: Setting EIB-status to the value 1. e.g. to switch on light or extractor fan			
HTML Attributes	None		

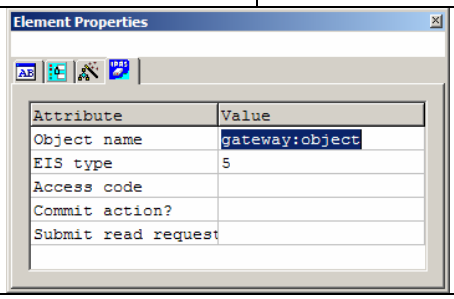
OFF – switch			
EIS-Type: 1: 1Bit	**Value:** 0	**Function:** Switch OFF	
Gold-Editon	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties / description: Setting EIB status to the level 0. e.g. switch OFF centrally			
HTML Attributes	None		

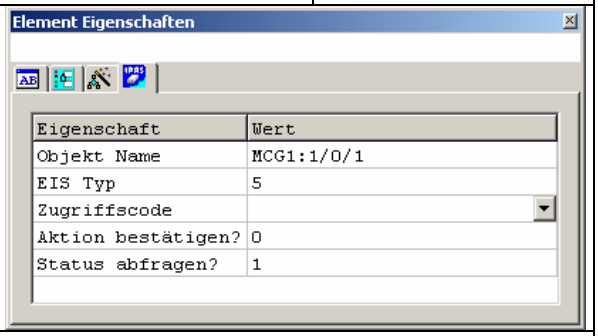
Controller switch			
EIS-Type: 1: 1Bit	**Value:** 0 or 1	**Function:** Controller switch	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Display: On/Off 	
Object properties / description: Setting EIB status to the value 0 or 1 e.g. to switch on or switch off lights, extractor fan etc. Set status request to 1, in order to obtain current status of the next value			
HTML Attributes		None	

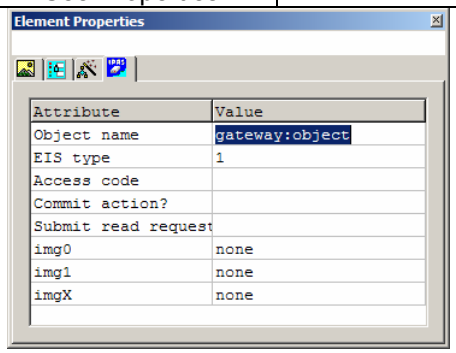
Controller switch with status display			
EIS-Type: 1: 1Bit	**Value:** 0 or 1	**Function:** Controller switch	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Display: On/Off 	
Object properties / description: Setting EIB status to the value 0 or 1, e.g. switch on and switch off lights, extractor fan, etc. Set status request to 1 in order to obtain current status of the next value Current status is displayed			
HTML Attributes		None	

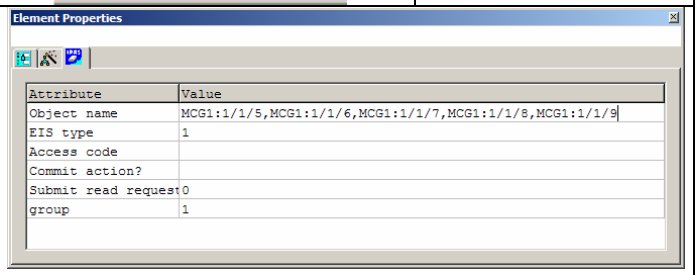
Blinds			
EIS-Type: 7: 1Bit	**Value:** 0 or 1: up/down 0 or 1: slats	**Function:** Shutter, Blinds Control	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties / description: 1. Object OPEN/CLOSED, 2.Object: slats , StepCode: Number of brief key strokes to change the slats			
HTML Attributes	None		

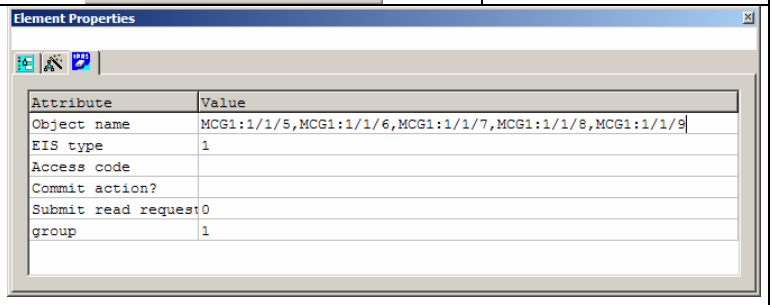
Dimming			
EIS-Type: 2: 1Bit 4 Bit 1 Byte	**Value:** 0 or 1: ON/OFF Dimming with Stop Value setting 0-100%	**Function:** Light switching, dimming value setting	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties/ description: 1. Object ON/OFF, 2.Object: Dimming with stop telegram, 3. Object: Value setting or status display, Status request = 1 to obtain dimming status (1 Byte)			
HTML Attributes	None		

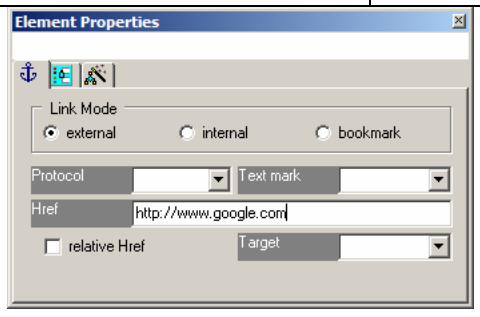
Value Display and Value Setting			
EIS-Type: 5: 2 Byte 6: 1 Byte	**Value:** All analogue values 0-100%	**Function:** Value setting and value display	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Entering value and setting with “ENTER“	
Object properties / description: Stepcode shows the step size for value setting. e.g. when setting the dimming value.10 corresponds to a step size of 10% Request status =1: the current value is displayed			
HTML Attributes	None		

Value display			
EIS-Type: 5: 2 Byte 6: 1 Byte	**Value:** All analogue values 0-100%	**Function:** Value setting and value display	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Entering value and setting with “ENTER“	
Object properties / description: The values displayed correspond to the EIS Type			
HTML Attributes	None		

Status display			
EIS-Type: 1: 1 Bit	**Value:** 1 or 0	**Function:** Display of binary status	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		 See Properties	
Object properties / description: Tech-Edition: Each status is displayed through individual images, which are integrated under img0/1/X. Appropriate template formats: JPG, GIF Gold / Silver Edition: three types of status reports: ON/OFF = yellow/grey ON/OFF = blue/grey Alarm = Red Alarm display blinking			
HTML Attributes		None	

Binary scene ON			
EIS-Type: 1: 1 Bit	**Value:** 1	**Function:** Sending several 1 Bit objects	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		ActionList ON	
Object properties / description: Any number of 1 bit objects can be entered in the field Object Name. If the button Action On is pressed, the objects are sent one after the other to the bus with the value 1.			
HTML Attributes		None	

Binary scene Off			
EIS-Type: 1: 1 Bit	**Value:** 0	**Function:** Sending several 1 Bit objects	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		ActionList OFF	
Object properties / description: Any number of 1 Bit objects can be entered In the field Object Name. If the button Action On is pressed, these objects are sent one after the other to the bus with the value 0.			
HTML Attributes	None		

Label field			
EIS-Type:	**Value:**	**Function:** Name field	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Label	
Object properties / description: If you press a label field, you can for example change web sites or build an internet connection in the browser window. The corresponding link is set in the field Target Address. External Reference: e.g. internet connection. Internal Reference: link is within the project In order to create the hyperlink, the text in the label field must be selected. (☛ See Info Box below)			
HTML Attributes	None		

Info Box

If you enter ***top.PopupDialog(,/Link',X1,Y1,X2,Y2,t)*** in the Target Address field, you can open the hyperlink in the popup window.

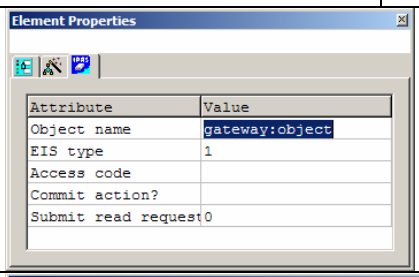
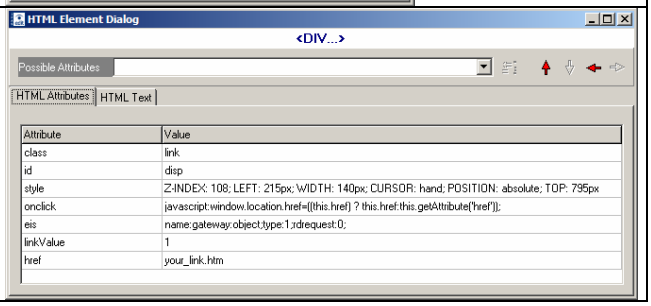
,/Link': Shows the hyperlink, which is to be opened in the popup window

X1,Y1: Left upper corner of the popup window

X2,Y2: Window size in direction x and y

T: Time in seconds after which the popup window closes automatically

This syntax can also be used for other elements such as Sensitive Link or Security Code Lock.

Sensitive Link			
EIS-Type: 1: 1 Bit	**Value:** 1	**Function:** Opens a website or a link depending on a binary EIB event	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		This is an *EIB-Link*	
Object properties /description: If the value of the projected object is 1, a new hyperlink is loaded. Like the hyperlink, the link is loaded in the label field.			
HTML Attributes linkValue: shows the value (1 or 0), when the link is to be performed. Href: Shows the link, which is to be loaded for the valid event.			

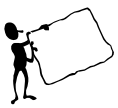
If you want to open a popup window through a "sensitive link", you need to enter the following syntax in the field onclick :

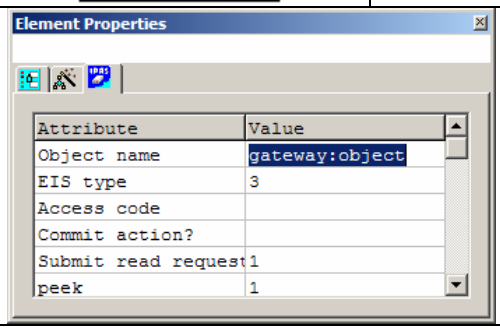
Javascript:top.PopupDialog(http://Link,x1,y1,x2,y2,t)

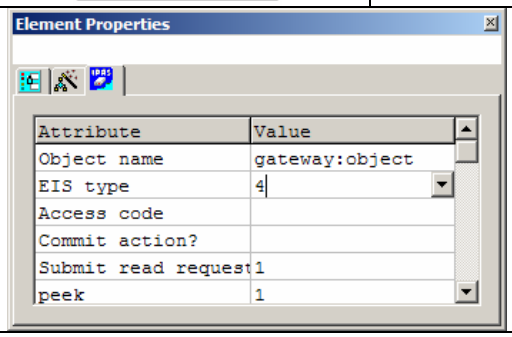
X1,Y1: Left upper corner of PopUp window.

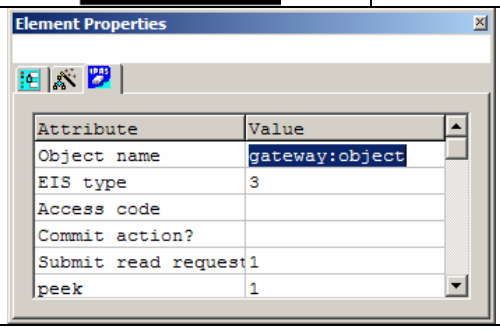
X2,Y2: Window size in direction x and y.

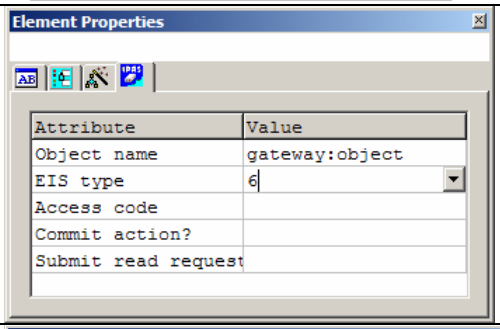
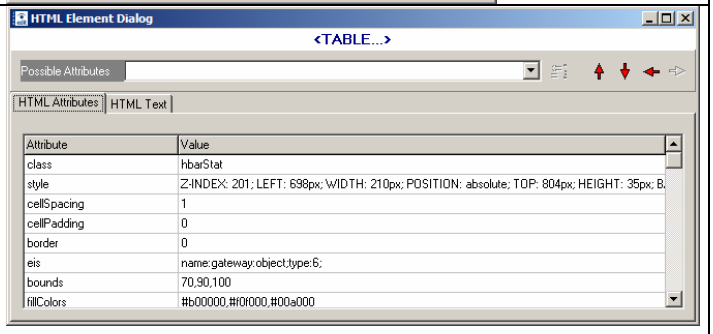
T: Time in seconds after which the popup window closes automatically

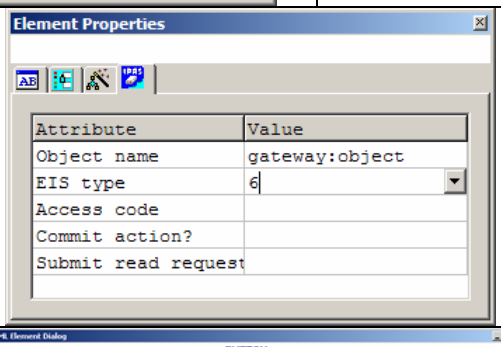


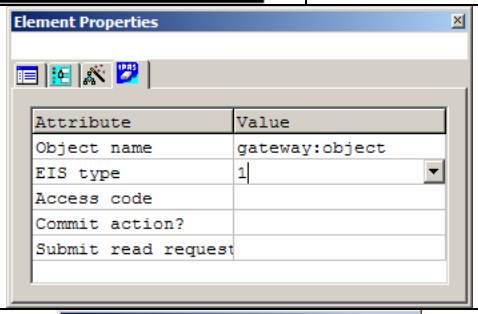
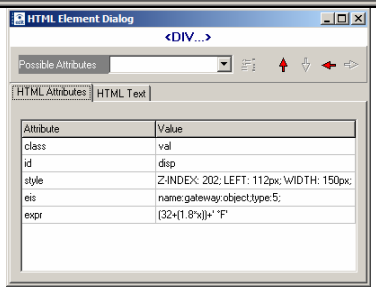
Time display			
EIS-Type: 3: 3 Byte	**Value:** Time	**Function:** Displays the time	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		00:00	
Object properties / description: The EIB time is displayed via the projected object			
HTML Attributes	None		

Date display			
EIS-Typ: 4: 3 Byte	**Wert:** Date	**Function:** Displays the date	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		01.01.1970	
Object properties / description: The EIB date is displayed via the projected object.			
HTML Attributes	None		

Date and time display			
EIS-Type: 3 and 4: 3 Byte	**Value:** Date	**Function:** Displays date and time	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties / description: The EIB date and time are displayed via the projected objects			
HTML Attributes	None		

Vertical and horizontal display bar			
EIS-Type: 6: 1 Byte	**Value:** 0-100%	**Function:** Displays the current percentage value in a bar chart	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
			
Object properties / description: The fill colour of the bar changes in line with the value of the EIB object.			
HTML Attributes Up to 3 threshold values are shown in the field “BOUNDS“. In the field “FILLCOLOURS“, colours are displayed according to the thresholds. If the value is smaller than the threshold, the respective colour is displayed in the bar.			

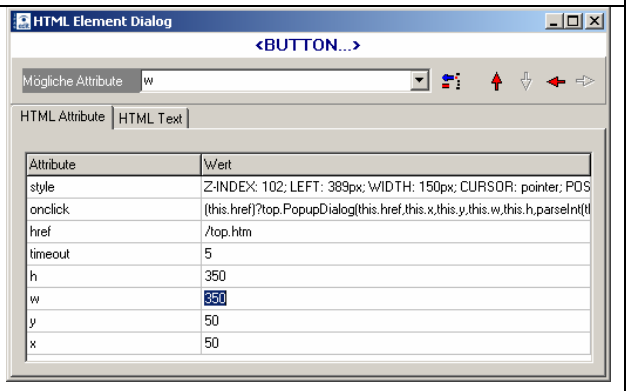
Value setting			
EIS-Type: 6: 1 Byte	**Value:** Date	**Function:** Sends a pre-set value to the bus	
Gold-Editon	Silver-Edition	Tech-Edition	Transparent-Edition
		SET VALUE	
Object properties / description: The pre-set value of the projected object is sent to the bus			
HTML Attributes The desired value is entered in the field xvalue. In the example the value 30% is sent to the bus.			

Conversion Function			
EIS-Type: 5: 2 Byte	**Value:** Date	**Function:** Calculates a value	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		°C -> °F	
Object properties / description: A value is calculated in reference to a function. The variable is the value of the object.			
HTML Attributes The function used to calculate the value is entered in the field “expr”. “X“ is the value of the object. In the example °C is converted to °F.			

Popup Window			
EIS-Type:	**Value:**	**Function:** Opens Popup Window	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		Open Popup	

Object properties / description:
A value is calculated in reference to a function. The variable is the value of the object.

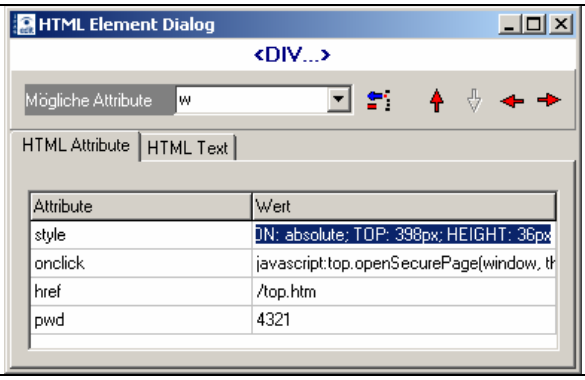
HTML Attributes
The hyperlink is entered in the field "href", Timeout shows the time in seconds after which the popup window closes if no action is taken. h=height, w= width denotes the size of the window. y,x, denote the coordinates of the left upper corner of the window



Security Code Lock			
EIS-Type:	**Value:**	**Function:** Opens a popup window when entering a code number	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		This is a *Secure-Link*	

Object properties / description:
If you press the field, the code number window opens. If the correct code is entered and  is pressed, a popup window opens.

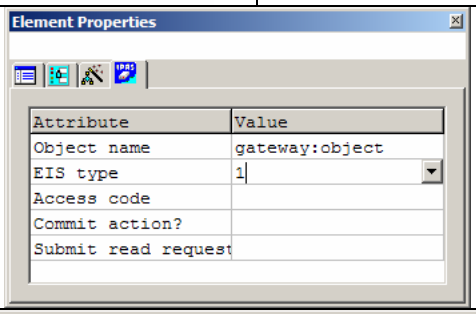
HTML Attributes
The hyperlink is entered in the field "href". The number code is entered in the field "pwd".



Pulse Switch			
EIS-Type: 1: 1 Bit	**Value:** 1 or 0	**Function:** Performs a value sequence	
Gold-Edition	Silver-Edition	Tech-Edition	Transparent-Edition
		This is a *Secure-Link*	

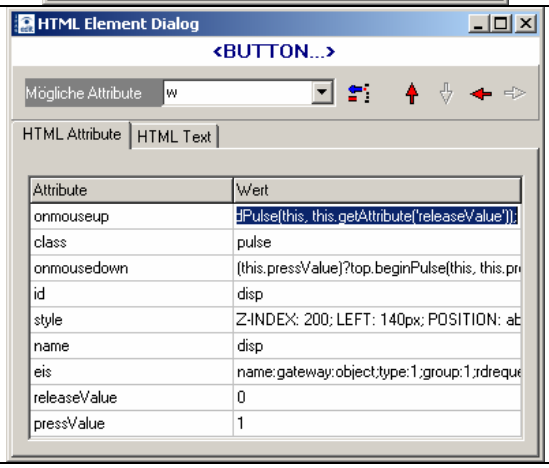
Object properties / description:

If you press the switch, a value sequence of the projected object is sent

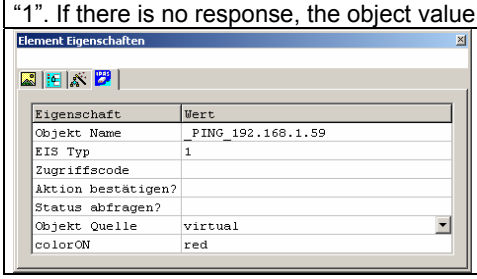


HTML Attributes

The value entered in the field “releaseValue“ is sent after releasing the switch. In the field “pressValue” the entered value is sent to the bus. In the example, 1 is sent when the switch is pressed, 0 when the switch is released. “Delay“ shows the time in ms after which the value is reset.



Live Test for IP Devices
The ping file can be found in the directory *C:\Programme\Ipas GmbH\ComBridge Studio\Automation\tasks*. To edit the IP address that is to be monitored in the visualisation, open the file with an Editor. For example a status report can be built into the visualisation. The virtual object *_PING_* IP-Address is projected under Properties. The automation service sends the ping command periodically to the projected IP addresses. If there is a response, the value of *_PING_*IP-Address is “1”. If there is no response, the object value is “0“.



10. Non-EIS objects

Some KNX devices use manufacturer specific data types which do not have a standardised KNX data format. These could be 1 Byte status objects which define the status of a controller or the maximum values of a test result which are transferred together with the time and date stamp. ComBridge Studio Suite makes it possible to visualise such specific data types. Via the Automation Service such data objects can be broken down into any form. They can then be re-defined as KNX EIS types and made available as virtual objects in the visualisation. In order to work with these specific objects, the integrator needs to create a netlist that can be accessed by the Automation Service. During the installation process an example netlist *generic.net* is installed which the integrator only needs to adjust. The file *generic.net* is located in the directory *C:\Programme\Ipas GmbH\ComBridge Studio\Automation\netlists*
and can be edited with any text editor. Figure 60 gives an example of the content of netlist *generic.net*.

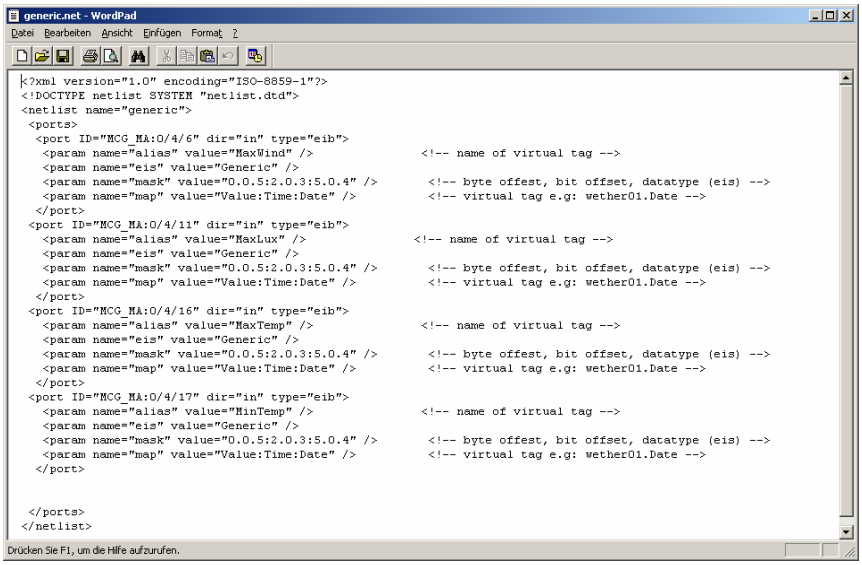


Figure 60: Netlist generic.net

The following example of a data object that contains the maximum values of a weather station together with the date and time, illustrates the working of a Non-EIS type. In the example, 4 group addresses are used, each of which has a data length of 8 Bytes. All group addresses are transferred to the Automation Service via a KNXnet/IP interface called MCG_MA. Definitions are set with Ports, which describe the breaking up of objects into different data types that can be interpreted by the Automation Service. In the following Port an object (MCGA_MA:0/4/6) with a data length of 8 Bytes is broken down.

```
<ports>
<port ID="MCG_MA:0/4/6" dir="in" type="eib">
```

```
<param name="alias" value="MaxWind"
<param name="eis" value="Generic" />
<param name="mask" value="0.0.5:2.0.3:5.0.4"
<param name="map" value="Value:Time:Date" />
</port>
```

The following table shows the meaning of the individual port parameters: the group address MCG_MA:0/4/6 has a data length of 8 Bytes and contains information about the date and time at which the maximum wind speed was measured. It is assigned the alias name MaxWind.
The 8 Bytes of data is broken down into 3 new data objects with the parameter “mask“. The latter gives the Byte and Bit position and the new data type. The new data types are separated by a “:“ . In the parameter “map“ the new data types are assigned names in the same order in which the parameters “mask“ are listed.

Port ID	MCG_MA:0/4/6			alias				MaxWind			
mask	0.	0.	5	:	2.	0.	3	:	5.	0.	4
Description	1.Byte	1.Bit	EIS5		3.Byte	1.Bit	EIS3		6.Byte	1.Bit	EIS4
map	Value			Time				Date			
Vir. Objekt	MaxWind.Value			MaxWind.Time				MaxWind.Date			

The corresponding virtual object that can be displayed in the visualisation consists of the alias name and the new object name.
In the example the data type EIS 5 is assigned the name “Value”, the data type EIS 3 the name “Time“ and the data type EIS 4 the name “Date”. This means that in the visualisation the maximum wind speed value can be displayed with the virtual object “MaxWind.Value“.
This way of breaking down data types and allocation to virtual objects means that the integrator is free to create and display the Non-EIS data types in any way in the visualisation. The following illustrates a possible visualisation of the maximum wind speed.
In the Automation Service the object with the maximum wind speed is made available through three virtual objects called MaxWind.Value (EIS 5), MaxWind.Time (EIS 3) and MaxWind.Date (EIS 4). These objects are visualised as follows:

The date is displayed in the Tech.Edition’s date display element and is configured as follows: The object name is “MaxWind.Date“. The corresponding source is “virtual“ and the EIS type is 4. To make sure that the date display remains static and is not triggered by the PC’s system time, “fixval“ = 1 and “peak“ = 0 need to be set.

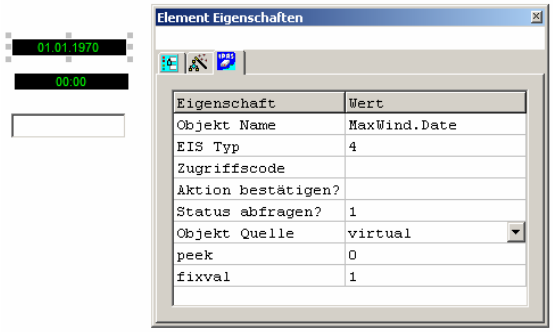


Figure 61: Configuration of MaxWind.Date

The time is displayed in the Tech.Edition‘s time display element and is configured as follows: The object name is “MaxWind.Time“. The corresponding source is “virtual“ and the EIS type is 3. To make sure that the time display remains static and is not triggered by the PC’s system time, “fixval“ = 1 and “peak“ = 0 need to be set.

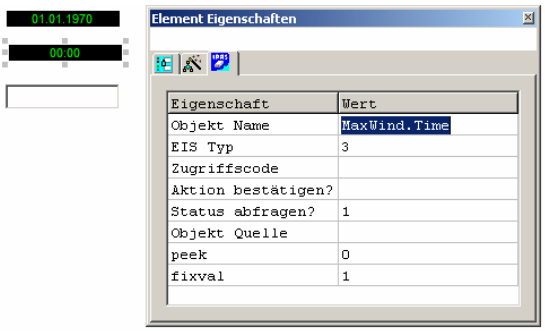


Figure 62: Configuration of MaxWind.Time

The value of the maximum wind speed time is displayed in the Tech.Edition‘s value entry element and is configured as follows: The object name is “MaxWind.Value“. The corresponding source is “virtual“ and the EIS type is 5.

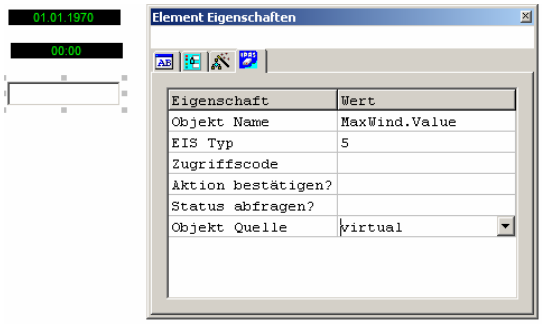


Figure 63: Configuration of MaxWind.Value

Standard EIS types can also be broken down in the Automation Service. In many controller applications, for example, the operating status of the controller is coded in a 1

Byte object, as shown below:

Status Controller
Bit 0: 1: Comfort operating mode active
Bit 1: 1: Standby operating mode active
Bit 2: 1: Night operating mode active
Bit 3: 1: Frost/heat protection (T < 5 °C)
Bit 4: 1: Controller disabled active
Bit 5: 1: Heating; 0: Cooling
Bit 6: 1: Controller active
Bit 7: 1: Frost alarm

To analyse the status information in the visualisation, the 1 Byte status object is broken down into bits in the Automation Service. The corresponding port definition is listed below:

```
<ports>
  <port ID="MCG_MA:0/5/6" dir="in" type="eib">// Gatewayname:Gruppenadresse
   <param name="alias" value="RegStat"  // Name für den Reglerstatus
   <param name="eis" value="Generic" />
   <param name="mask" value="0.1.1:0.2.1:0.3.1:0.4.1:0.5.1:0.6.1:0.7.1"
   <param name="map" value="Kom:Sta:Nacht:Frost:Regaccess:Mode:RegStat:Frostalarm"
/>
  </port>
```

The data types are defined in the line “mask“. For example, 0.2.1 means that the 3 Bit of the 1 Byte is assigned the data type EIS 1. In the visualisation, this value can be displayed in the virtual object Object RegStat.Night.

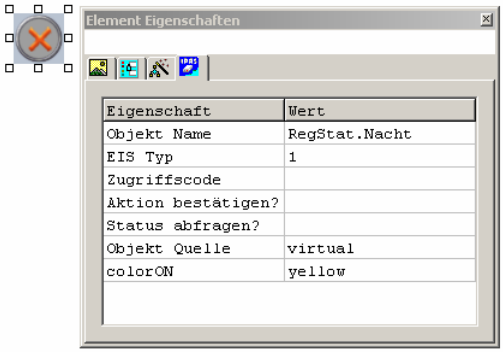


Figure 64: Configuration of RegStat.Night

1 Byte objects can be either of type EIS 14 or EIS 6. The format of a 1 Byte status object is manufacturer-specific.

Attention! Once the file *generic.net* has been created and saved, the Automation Service needs to be re-started (☛ CBSUserManualCore, 4.2. Service Control Panel)

11. ComBridge graphic module

A user who has a ComBridge Studio alarm and database license, can use the graphic module that is included in the standard setup to display recorded values. The alarm and database service uses a Microsoft Access database where alarms or data points that have been configured with InfoPoint configurator are saved in alarm or event tables (☛ see Combridge Studio Suite manual). The ComBridge Studio graphic module only accesses the event table of the Microsoft Access database. Figure 60 gives an example of a Microsoft Access database.

EVENTS : Tabelle

ID	STAMP	GATE	NAME	ALIAS	EIS	VAL	UNIT	RW
121	30.01.2009 12:03:20	axesso	6/5/7	Wirkleistung L3	9	732		R
122	30.01.2009 12:03:20	axesso	6/5/6	Wirkleistung L2	9	1242		R
123	30.01.2009 12:03:20	axesso	6/5/5	Wirkleistung L1	9	503		R
124	30.01.2009 12:03:20	axesso	6/5/4	Gerät	9	150000		R
125	30.01.2009 12:03:20	axesso	6/5/3	Wirkenergie	9	41311120		R
126	30.01.2009 12:04:25	axesso	6/5/3	Wirkenergie	9	41311280		W
127	30.01.2009 12:04:25	axesso	6/5/5	Wirkleistung L1	9	502		W
128	30.01.2009 12:04:25	axesso	6/5/6	Wirkleistung L2	9	740		W
129	30.01.2009 12:04:25	axesso	6/5/7	Wirkleistung L3	9	736		W
130	30.01.2009 12:13:59	axesso	6/5/3	Wirkenergie	9	41311610		W
131	30.01.2009 12:13:59	axesso	6/5/5	Wirkleistung L1	9	505		W
132	30.01.2009 12:13:59	axesso	6/5/6	Wirkleistung L2	9	753		W
133	30.01.2009 12:13:59	axesso	6/5/7	Wirkleistung L3	9	684		W
134	30.01.2009 12:23:32	axesso	6/5/3	Wirkenergie	9	41311940		W
135	30.01.2009 12:23:32	axesso	6/5/5	Wirkleistung L1	9	504		W
136	30.01.2009 12:23:32	axesso	6/5/6	Wirkleistung L2	9	913		W
137	30.01.2009 12:23:32	axesso	6/5/7	Wirkleistung L3	9	740		W
138	30.01.2009 12:33:05	axesso	6/5/3	Wirkenergie	9	41312290		W
139	30.01.2009 12:33:05	axesso	6/5/5	Wirkleistung L1	9	503		W
140	30.01.2009 12:33:05	axesso	6/5/6	Wirkleistung L2	9	925		W
141	30.01.2009 12:33:05	axesso	6/5/7	Wirkleistung L3	9	695		W
142	30.01.2009 12:42:39	axesso	6/5/3	Wirkenergie	9	41312620		W
143	30.01.2009 12:42:39	axesso	6/5/5	Wirkleistung L1	9	501		W
144	30.01.2009 12:42:39	axesso	6/5/6	Wirkleistung L2	9	855		W
145	30.01.2009 12:42:39	axesso	6/5/7	Wirkleistung L3	9	519		W
146	30.01.2009 12:52:11	axesso	6/5/3	Wirkenergie	9	41313020		W
147	30.01.2009 12:52:11	axesso	6/5/5	Wirkleistung L1	9	500		W
148	30.01.2009 12:52:11	axesso	6/5/6	Wirkleistung L2	9	765		W

Figure 65: Example of an Access database

Popup windows for the graphic display of data from the Microsoft Access database can be configured with Visual Editor. In the Tech Edition use the button Trending Popup, which can be found under operating elements, to configure the windows. The button can be built into any page of the ComBridge Studio visualisation. The button is configured in the HTML Attributes menu. Figure 61 shows the HTML Attributes window. The size of the popup window is defined via the attributes w and h. In Figure 61 the size of the popup window is 550x400 Pixels. The position of the window's upper left-hand side corner is x=50 Pixel and y=50 Pixel. The parameters for the display of values are set in the value field of the attribute href. The database values of the group addresses that are displayed are those that have been entered in the value field href with Gatewayname:groupaddress.

Attributes such as Label or Title can be used to describe the values in the display.

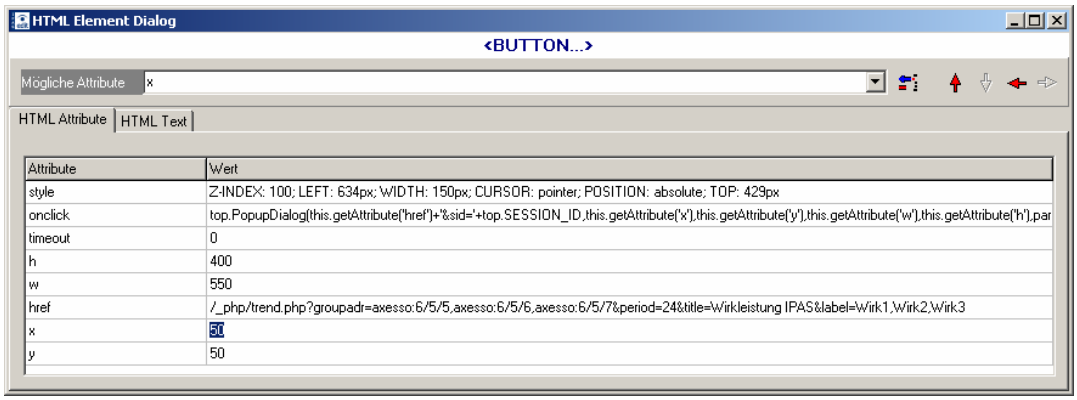


Figure 66: Attribute Element Dialogue of Trending Popup

The following attributes can be configured:

groupadr=: This parameter specifies the group address that is to be displayed. The group address is entered in the format Gatewayname:groupaddress. Several values can also be displayed in one graph. In this case the data points are separated by a comma. For example, for two values in one graph the data points are entered as follows: groupadr=WCI:0/4/10,WCI0/4/15.

label=: This attribute describes the data points in the graphic. The first entry is assigned to the first data point. The second entry is separated by a comma and assigned to the second data point, etc. In the example, the group address 0/4/10 shows brightness levels and the group address 0/4/15 temperature. The label=Brightness,Temperature is used to describe the plots in the graphic. If no name is entered, Gatewayname:Groupaddress appears as description.

title=: This attribute is used to name the the graphic.

period=: This attribute illustrates the time period in hours. The period shown is based on the current date. Entering the number 24, for example, will display the results of the last 24 hours.

since=: This attribute shows the date, from which onwards results are displayed (up to the current date). For example, Since=12/1/2009 shows all values from 12th January 209 up to the current date. If no date is entered, the values since the last period will be shown.

Figure 62 shows a possible graphic display of brightness and temperature values.

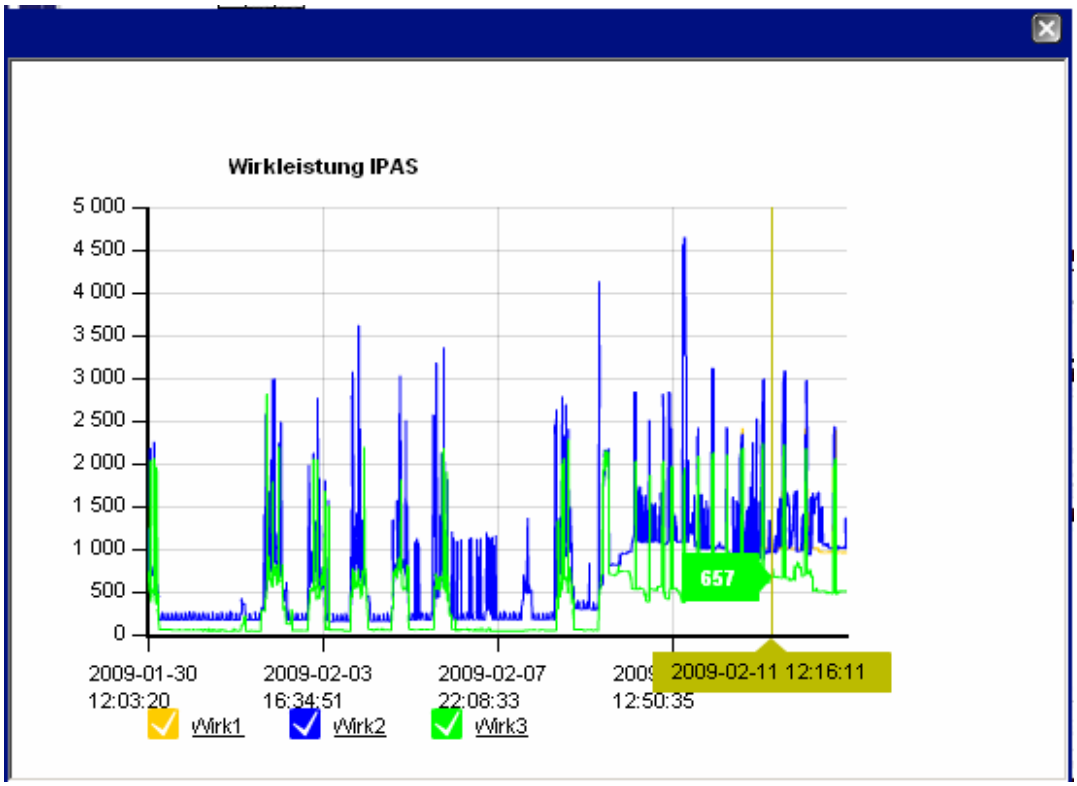


Figure 67: Value display using the ComBridge Studio Graphic Module

The name of the graphic is entered through the attribute “title“.
For each power phase values were entered in the database. The graphic shows the values in three phases. The ticks at the bottom indicate that the corresponding plot is displayed. A mouse click on the ticks will hide the corresponding plot. If the cursor touches the plot, the corresponding value and time-stamp are displayed.

Figure 68: Display of the zoom range

If a specific range of the graphic is selected with the cursor, the section is enlarged. A click on Show all will bring back the whole graphic.
Figure 64 shows such a section for the graph Wirk2. The position and the section that has been enlarged are displayed above the graphic.

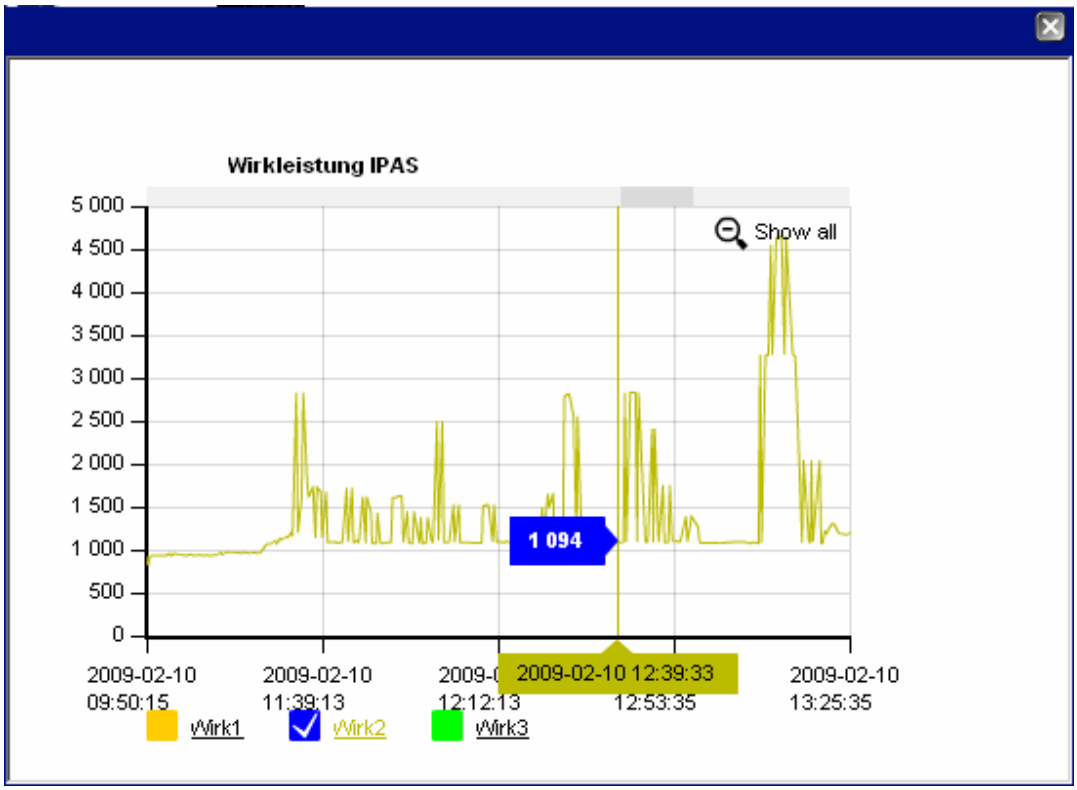


Figure 69: Enlarged section of a plot

12. Online scene module

From the Visual Editor version 1.6.4 onwards the first of three additional modules is available: the online scene module. Further modules will be the online time switch module and the logic module. It is often desirable that light scenes can be changed online by the user directly in the visualisation. However, the operational security must not be endangerd by erroneous operation. The system integrator therefore principally determines the objects, which can be allocated to scenes, in the Visual Editor. The user can then change certain settings and allocations online in the visualisation.

The scene projection in the Visual Editor is performed in two steps:

1. step: web configuration
   definition of the scene trigger and selection of EIB objects, which are to be used in scenes. Allocation of EIB objects in scenes.
2. step: definition of scene loading in the visualization

To use the scene module, a configuration manager license is necessary..

12.1. Web configuration scene trigger

As soon as a new project has been created in Visual Editor, the start configuration is performed under menu point web configuration. If this menu point is selected, the configuration menu opens with the two basic elements trigger and action elements.

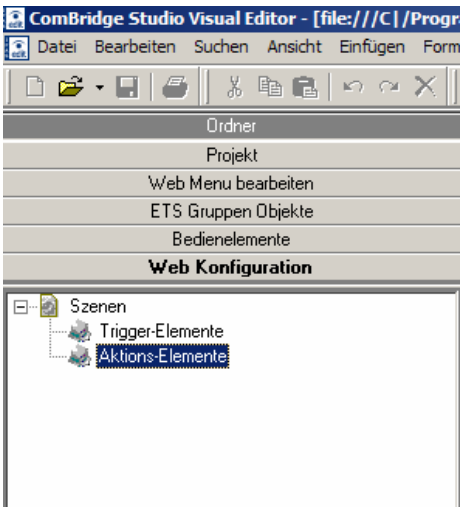


Figure 70: Web configuration trigger elements

The trigger elements define the conditions for loading a scene. Scenes can be loaded through EIB objects, virtual objects and Modbus objects. If the trigger elements are selected with the right mouse button, new triggers can be inserted by selecting New Action.

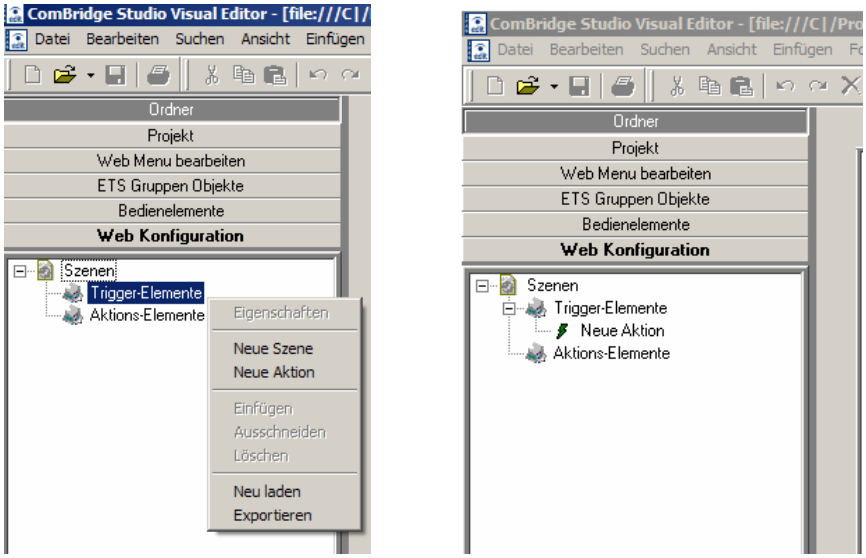


Figure 71: Creating a new trigger

If instead of New Action , Add Elements is chosen, the following window opens:

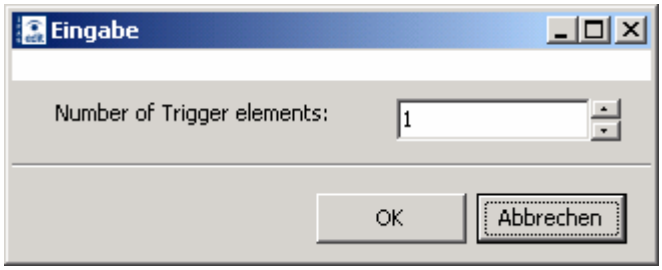


Figure 72: Number of Trigger elements

If several scene triggers are required, the number of elements, which are to be created, can be entered under Number Trigger Elements . If all trigger elements are created, select the first element with the right mouse button and go to Properties .

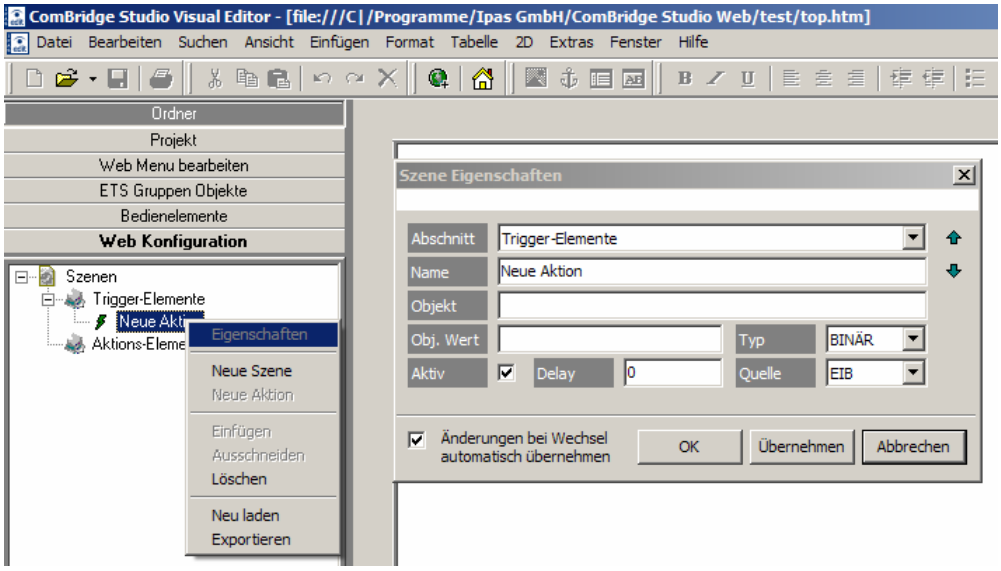


Figure 73: Trigger properties

The field Section shows that trigger properties are defined in this window.
The name of the trigger is entered in the Name field.
If you now open the menu ETS Group Objects , you can connect an ETS group address with the trigger. This is done by selecting the respective group address with the gateway name and dropping it in the Object field.

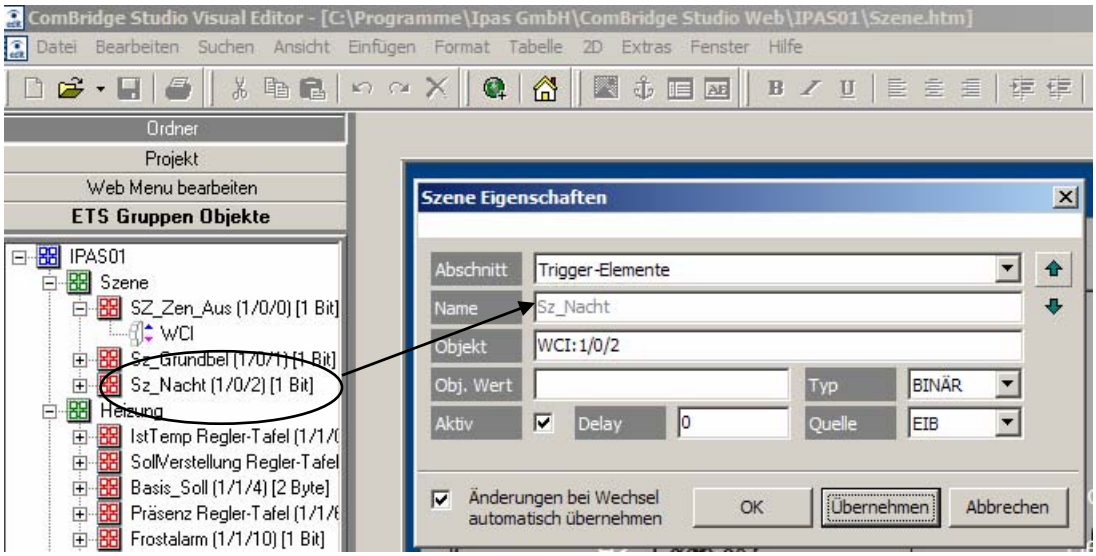
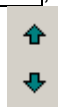
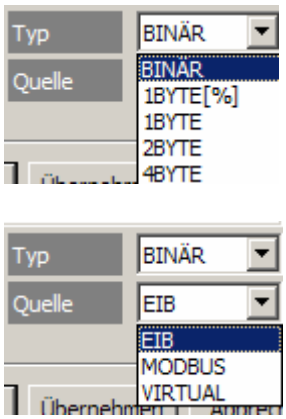


Figure 74: Connecting a trigger with a group address

In Figure 59 the 1 Bit Object **Sz_Nacht** was connected with the gateway name WCI. In the Type field **Binary** for a 1 Bit Object is automatically set. Therefore the object source in the field Source is automatically **EIB.**

If a virtual object with the name **Szene1** is entered in the Object field, you must select **VIRTUAL** in the Source field and the corresponding type in the Type field.

The fields Obj. Value, Active and Delay are not configured as this step is performed during the actual scene definition.
If several scene triggers are required, they must first be created in the Web Configuration menu and then opened in the Trigger Properties window (Figure 58). Now open the ETS Group Objects menu. Now you can connect the fields Object and Obj. Value, as previously described. If all fields have been connected, you can use the arrows  to retrieve the next trigger. If the field Automatically Accept Amendments on Change is selected, the current settings are saved when changing to the next trigger. The settings are also saved with Accept . If you want to cancel the process, press Cancel. OK saves the last setting and terminates the process.



Use the Type field to select the data type, with which a scene is to be loaded. According to EIB/KNX a scene can be loaded, for example, via a 1 Bit as well as a 1 Byte Object.

The object source is selected in the field Source: In addition to EIB as data type virtual objects can be defined with **VIRTUAL** and modbus objects with **MODBUS** in order to trigger a scene.

12.2. Web configuration action elements

After having defined the scene triggers, the next step is to define the action elements. Group addresses, which are to be used in all scenes, are configured in the Action Elements menu.

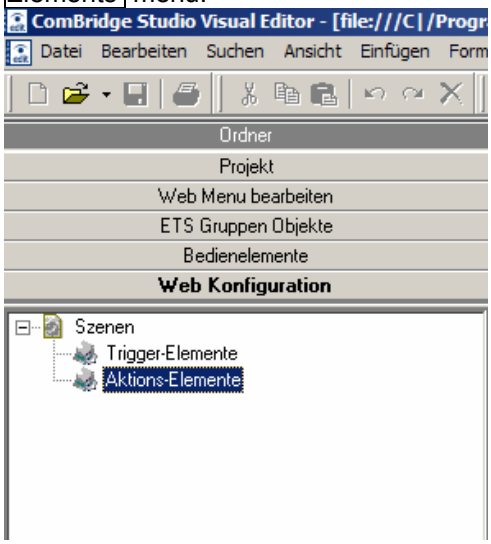


Figure 75: Web configuration action elements

Select the menu point Action Elements with the right mouse button, so that the selection window opens as in Figure 61.

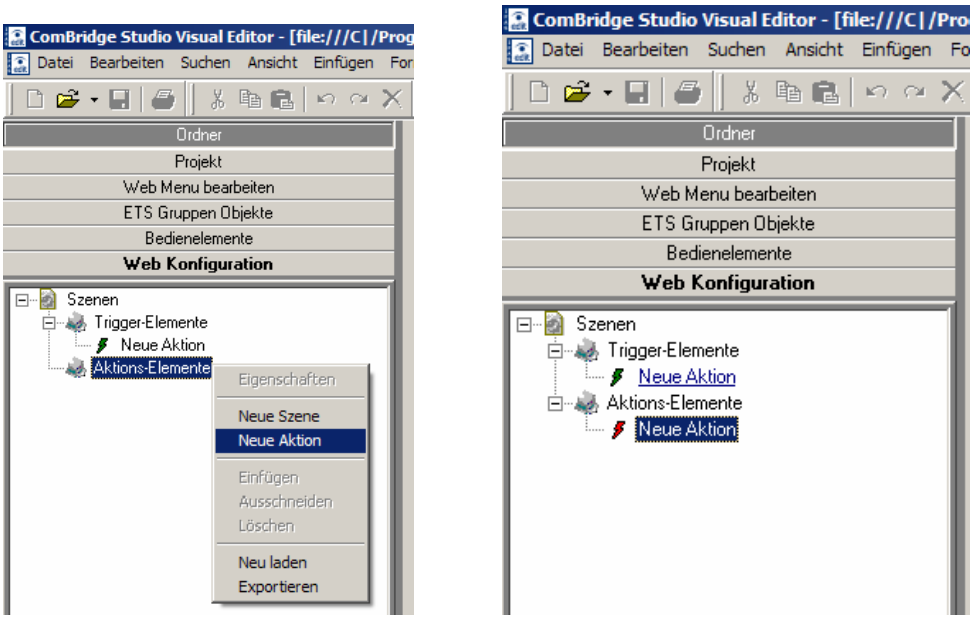


Figure 76: Creating new action elements

If [New Action] is selected, a new action element is inserted.
If instead of [New Action], [Add Elements] is selected, the following window opens:

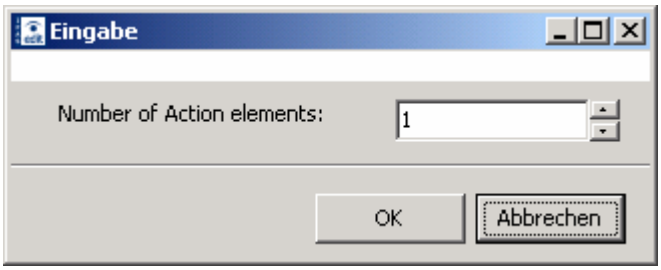


Figure 77: Number of action elements

If several scene elements are required, the number of elements, which are to be created, can be entered under [Number Action Elements]. If all action elements have been created, select the first action element with the right mouse button and go to [Properties].

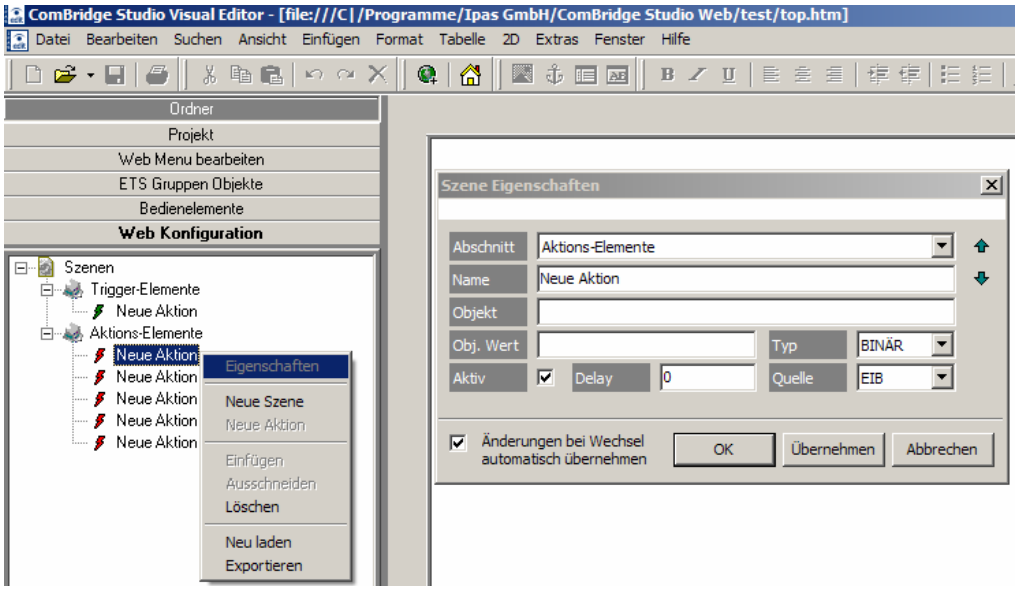


Figure 78: Opening the scene properties window

The field Section shows that action elements are defined in this window.
The scene element's name is entered in the Name field.
If you now open the menu ETS Group Objects , you can connect an ETS group address with the action element. This is done by selecting the respective group address with the gateway name and dropping it in the Object field.

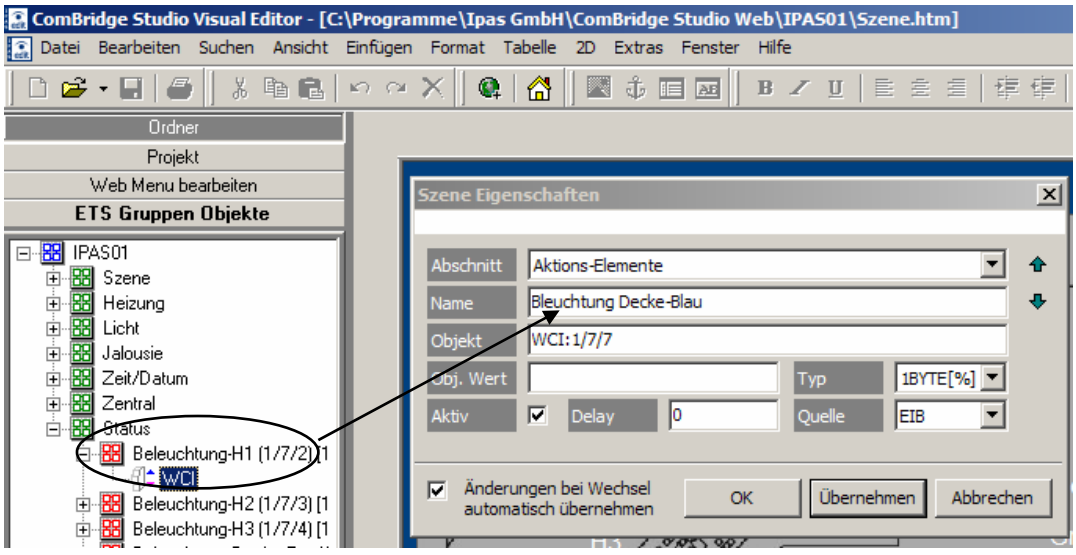
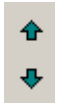


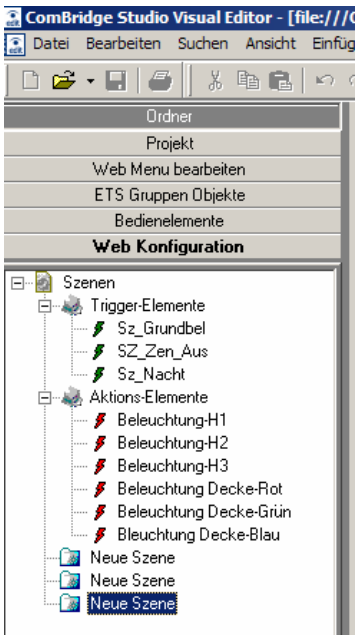
Figure 79: Connecting a trigger with a group address

In Figure 64 the Object field with the1 Byte Object **Lightning Ceiling-Blue** has been connected with the gateway name WCI. . In the Type field **1BYTE[%]** for a 1 Byte

Object is automatically set. Therefore the object source in the field Source is again automatically **EIB.**
The fields Obj. Value, Active and Delay do not need to be configured at this point.

To configure the next action elements, use the arrows  to retrieve the next action element. If the field Automatically Accept Amendments on Change is selected, the current settings are saved when changing to the next action element. The settings are also saved with Accept . If you want to cancel the process, press Cancel . OK saves the last setting and terminates the process.

12.3. Web configuration scene definition



If all scene triggers and action elements have been defined, the actual scenes can be put together. Press the right mouse button in Web Configuration field to create scenes by selecting New Scene.
In Figure 65 three triggers have been used (Sc_Groundbel, Sc_Cen_Off und Sc_Night), as well as six action elements of Type 1 Byte (H1-H3, Red, Green and Blue).
In addition three new scenes have been created, which now need to be connected with the individual scene elements and triggers.

Figure 80: Creating new scenes

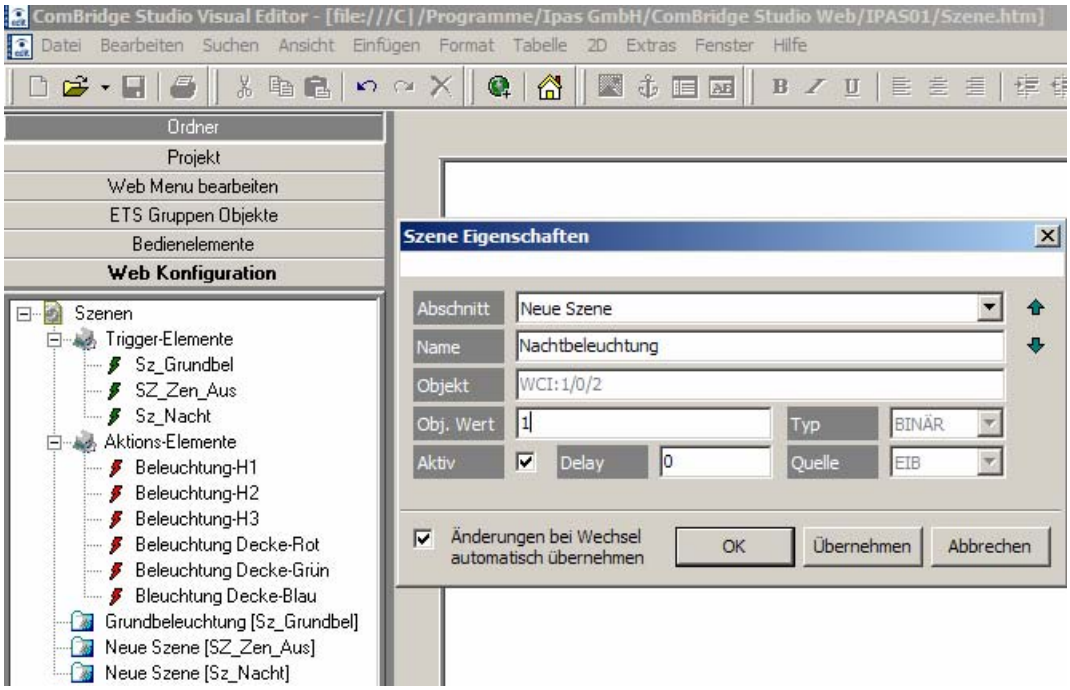
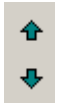


Figure 81: Connecting scene triggers with scenes

The configuration of the actual scene is performed in two steps by means of a drag-and-drop function. The first step is to connect the scene triggers with the scenes. For example, Sc_Night is to be connected with the third scene. To do so, select Sc_Night with the mouse and drag and drop the object onto the third New Scene . The name of the scene trigger now appears in brackets next to the name of the scene. If you select the name with the right mouse button, you can open the properties window (Figure 66).
In Figure 66 the scene was given the name **Night lights** in the field Name . As the value **1** has been entered in the field Obj. Value, the scene will be started when the scene trigger with value 1 is sent.
This process is repeated for each scene.

To configure further trigger elements, you can use the arrows  to retrieve the next trigger element. If the field Automatically Accept Amendments on Change is selected, the current settings are saved when changing to the next element. The settings are also saved with Accept . If you want to cancel the process, press Cancel . OK saves the last setting and terminates the process.
The second step is to connect the action elements with the scenes. In the same way as happened with the scene triggers, the action elements are now selected and dragged and dropped to the respective scene with the mouse button pressed down. As with the scene triggers, the object name of the action element now appears next to the scene object name.

If the action element is selected in the scene with the right mouse button and the properties window is opened, the scene properties can be set.
In connection with the ctrl key, several action elements can be selected and dragged to the desired scene with the mouse button pressed down.

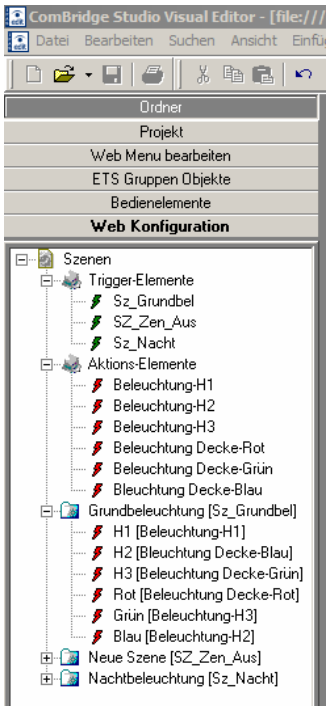


Figure 82: Allocation of action elements in scenes

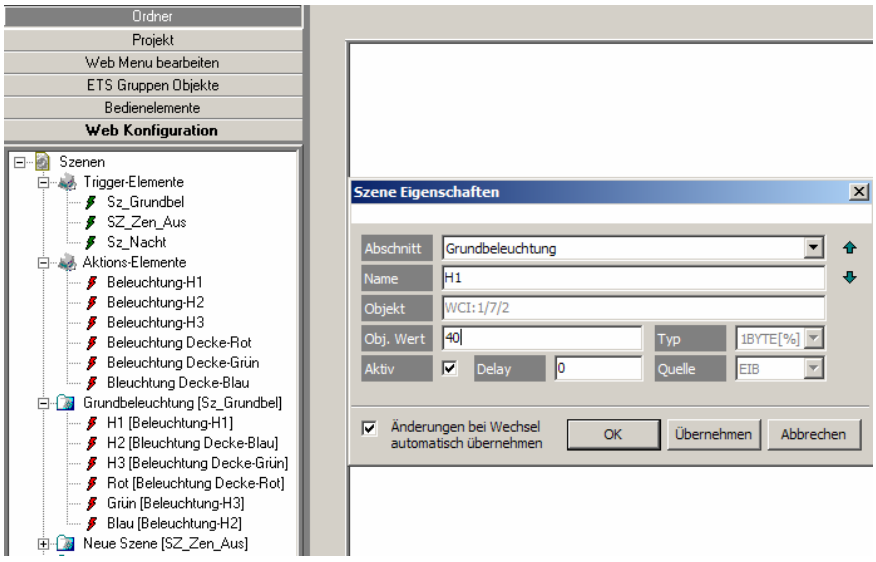
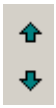


Figure 83: Setting scene properties

The name of the scene element, in our example **H1**, is set in the Name field and the

scene value, in our example the light value of **40**%, is set in the Obj. Value field. If the next scene value is to be set with a time delay, you can enter the required time in seconds in the Delay field.
This process is repeated for each action element in a scene.

To configure further scene properties, you can use the arrows  to retrieve the next scene element. If the field Automatically Accept Amendments on Change is selected, the current settings are saved when changing to the action element. The settings are also saved with Accept . If you want to cancel the process, press Cancel . OK saves the last setting and terminates the process.

Object values and delays can be changed online by authorized users at any point later on via a special configuration page.

12.4. Web config export

If all scene triggers, action elements and the actual scenes have been configured as described, the configurations are exported. After the export the scenes are activated and can be loaded for example from the installation with the respective scene trigger.

To export a scene configuration, press the right mouse button in the menu Web Configuration and select Export .
The settings are exported to corresponding XML-files, which are processed by the automation services in Client Manager.
With Load New the currently existing configuration can be read.

Figure 84: Web config export

12.5. Creating the configuration page for scenes

The scene settings can be changed online in the visualisation at any time. In order to make this possible, a configuration menu needs to be activated in the menu Edit Web Menu.
Open the menu Edit Web Menu . Press the right mouse button in the menu window to

open the selection window. If you select Add Config Menu , a new menu point called Config is created.

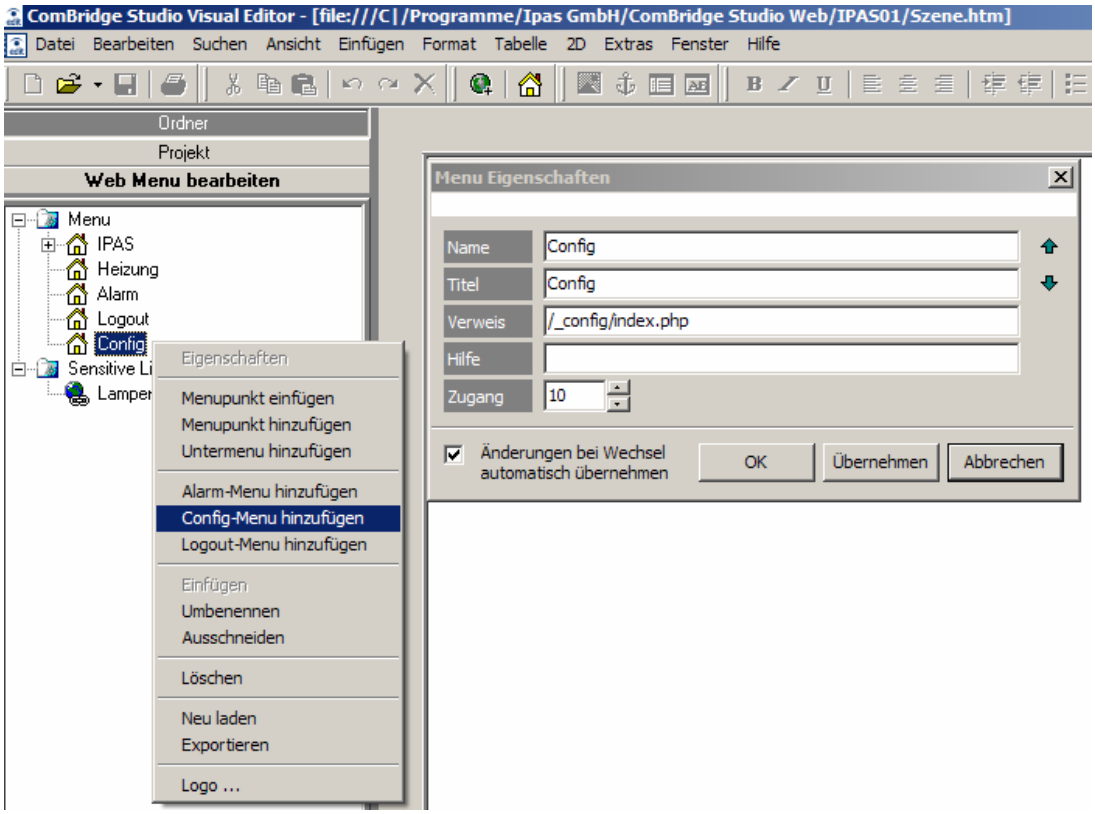


Figure 85: Creating the web config page in the web menu

If the configuration menu has been created and selected with the right mouse button, you can open the properties window. You can edit the menu point name in the field Title. Use the Access window to enter the user level which authorizes opening the configuration page (☛ Chapter 7.3.1. User ”General“).
The settings are saved with Accept If you want to cancel the process, press Cancel. OK saves the last setting and terminates the process.
The web menu now needs to be exported (☛ Chapter 8.3.5 Menu export).

12.6. Online scene configuration

Once the configuration menu has been configured, scene parameters can be changed and saved online by authorized users within the web visualisation. Figure 71 gives an example of the configuration page view after the configuration menu has been selected.

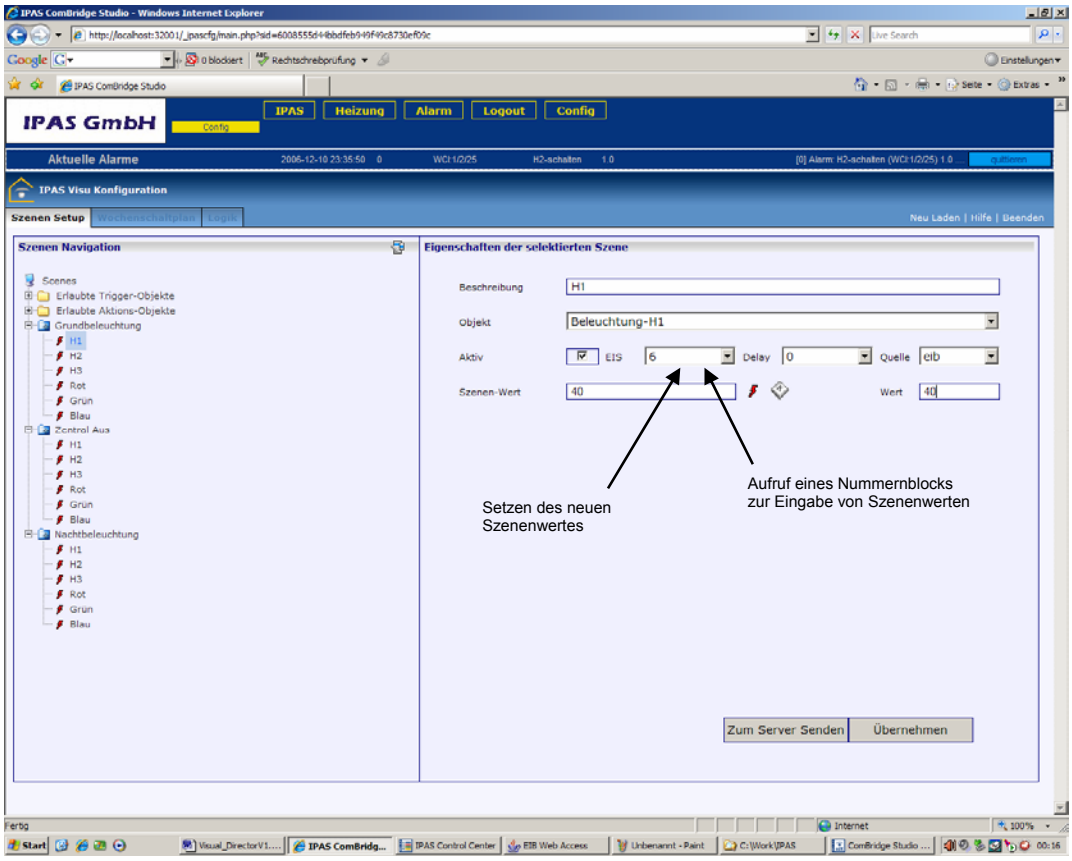


Figure 86: Online scene configuration

In the “scene navigation“ window on the left-hand side the structure is the same as in the Visual Editor. Under Scenes the permitted triggers and action elements are listed, which can not be changed in this application. The projected scenes are listed below. If the navigation tree below a scene is opened (e.g. Basic Lightning in Figure 71), all scene object become visible. If a scene element is selected (in our example H1), the properties of the selected scenes are displayed in the right window. In this view the user can change the name of the object in the field Description . Other scene objects from the pool of permitted action elements can also be allocated in the field Object . Moreover, the object can be activated or deactivated in the field Active. The period of time, which is to pass before the next scene value is set, can be determined in the field Delay in seconds. In the Scene Value field a changed value can be entered. This value is set online by clicking onto the symbol . Thereby the user has the opportunity to control the set scene value. The currently set scene value of the object is displayed in the field Value. If all settings have been performed, they are saved by pressing Accept so that the next object can be set. If through this process all scene settings have been performed, settings are saved permanently in the project by pressing Send to Server.

Attention! If for example the name of a scene object is changed in the properties window, the change is only displayed after the website has been updated. (in Explorer)

12.6.1. Online Scenes update

From ComBridge Studio Version 2.4.0 upwards an additional online scenes page is available, which makes the updating of scenes easier.

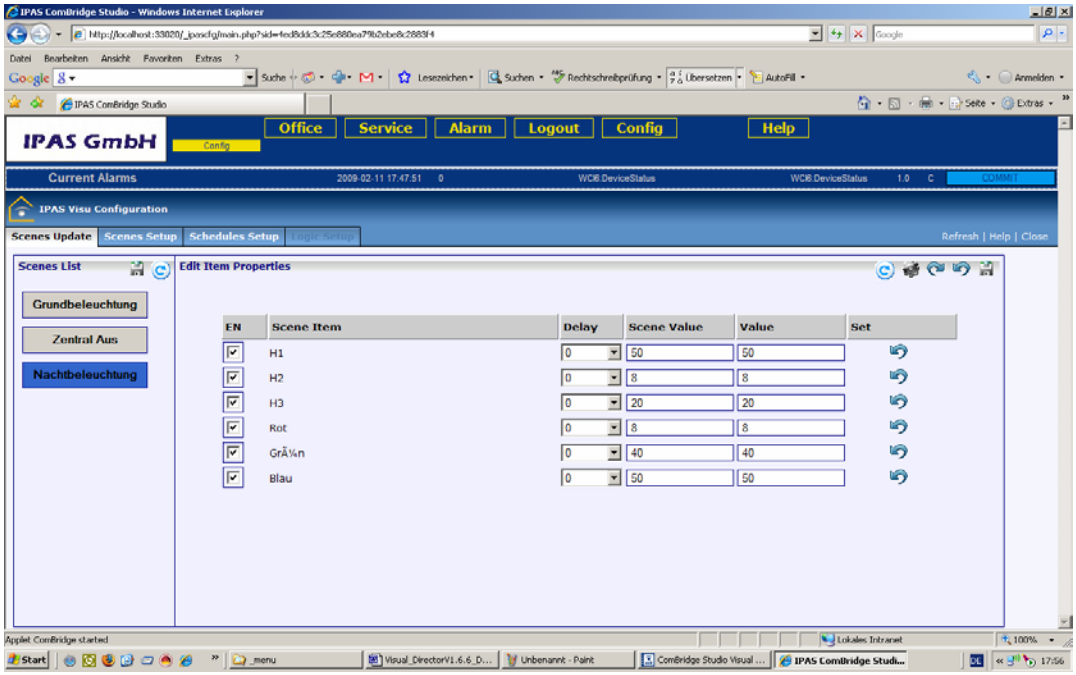


Figure 87: Alternative online scene display

Figure 82 shows the additional page. The projected scenes can be selected in the left-hand column. A clearly laid out table shows a list of the individual scene objects. The tab „EN“ activates or de-actives the object for the scene. As on the Scene Setup page, use Delay to enter the time in seconds by which the sending of the object value is to be delayed. To enter a number, click on the value field. A new entry needs to be confirmed with Enter. To accept the value as a scene value, press . If new values have been set this way, the scene can be invoked by pressing . The settings are confirmed with so that further scenes can be changed. Scenes are saved with and refreshed with .

12.7. Loading scenes from a website

If scenes are defined with EIB trigger objects, they can be loaded from the installation with the projected group address. If the scenes are also to be loaded from a website, special control elements need to be projected.

The process for this is as follows: The TECH EDITION is opened under menu point Control elements in the left menu.

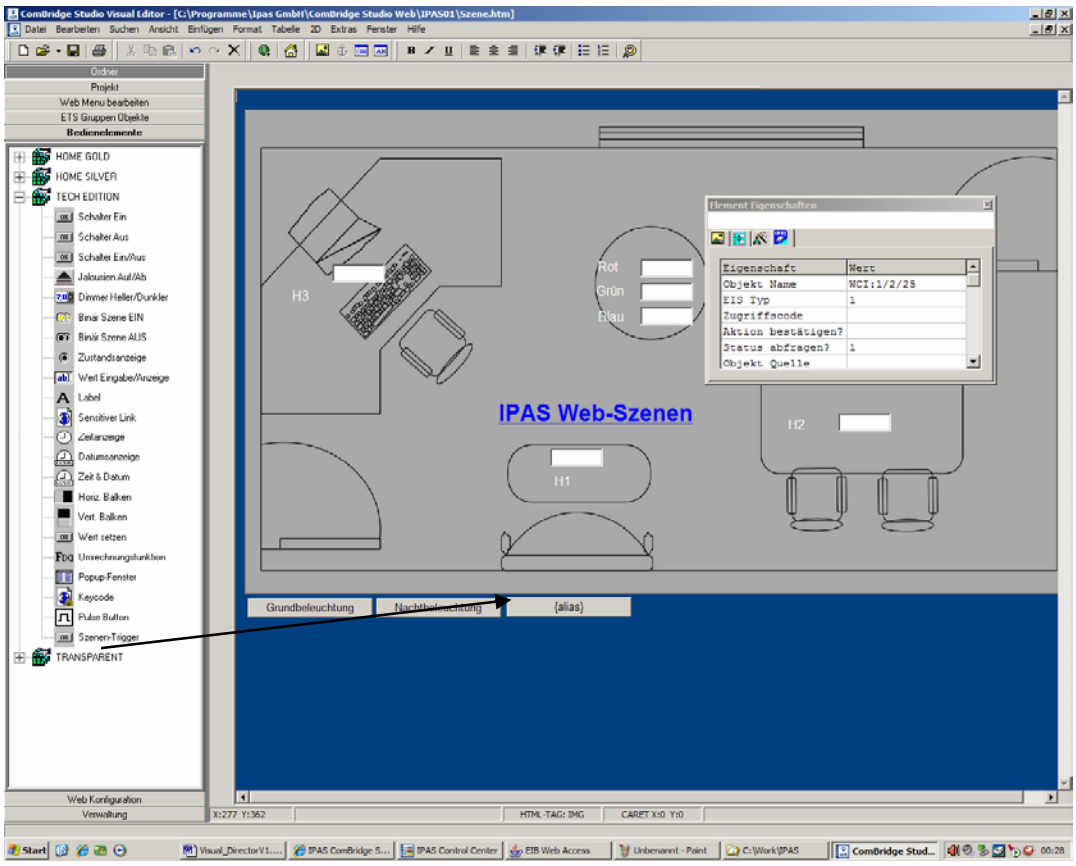


Figure 88: Inserting control elements to load scenes

A scene trigger element is selected with the left mouse button, dragged into the work space and moved to the desired position. In Figure 72 three scene triggers have been projected. Afterwards the scene menu on the left hand side is opened again. The new scene trigger on the work space is selected and the properties window opened. Now select a scene (in Figure 73 this is SC_ Cen_Off) from the left window of the web configuration and drag it into the field Name (the  folder must be selected).

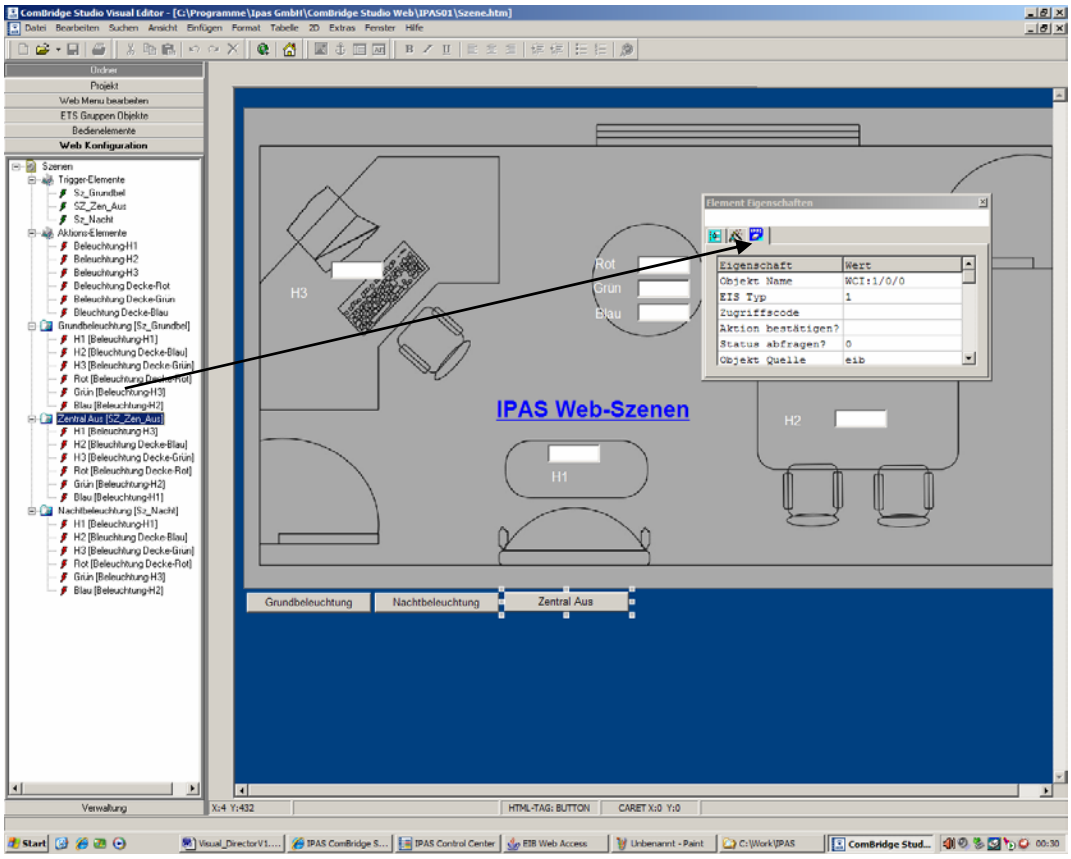


Figure 89: Projecting a scene trigger on the website

The gateway name together with the group address, which is to start the scene, is automatically copied to the field Name . The settings such as Object Source and fixval from the scene settings are also copied. The name of the scene is entered in the control element through this process, so that the control element has a description. Now the control element scene trigger is configured. After saving and exporting the settings, the projected scene can be loaded from the website.

12.8. Scene installation on the server

If the projecting PC and the server are different systems, a number of system files need to be transferred to the server in addition to the project data in order to ensure that the projected scenes will run on the server. With regard to the scene control the file *scene_SCENE.env* from the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web_ext* needs to be transferred to the server.

During the installation of ComBridge Studio the website ComBridge Studio Suite Configuration Upload has also been installed sol that necessary copying processes can be

performed easily.

If the URL http://localhost:32100 is entered in the browser of the ComBridge Studio server, the ComBridge Studio Suite Configuration Upload page is loaded.

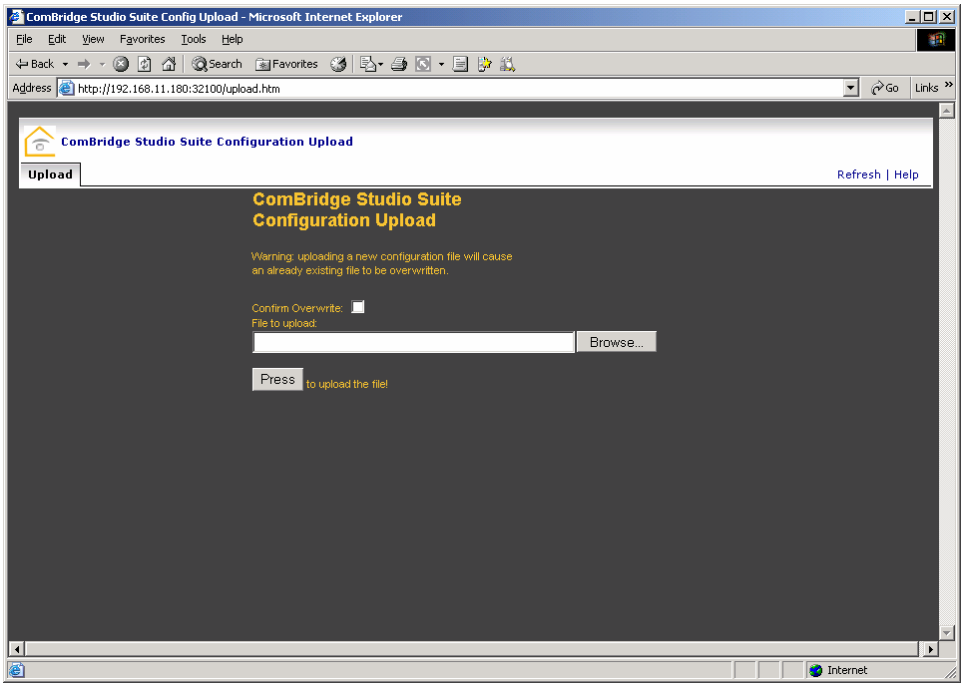


Figure 90: ComBridge Studio Suite Configuration Upload page

By clicking on Search the file selection window opens. From the server the file *scene_SCENE.env* in the directory *C:\Programme\Ipas GmbH\ComBridge Studio Web_ext* on the projecting PC is selected.

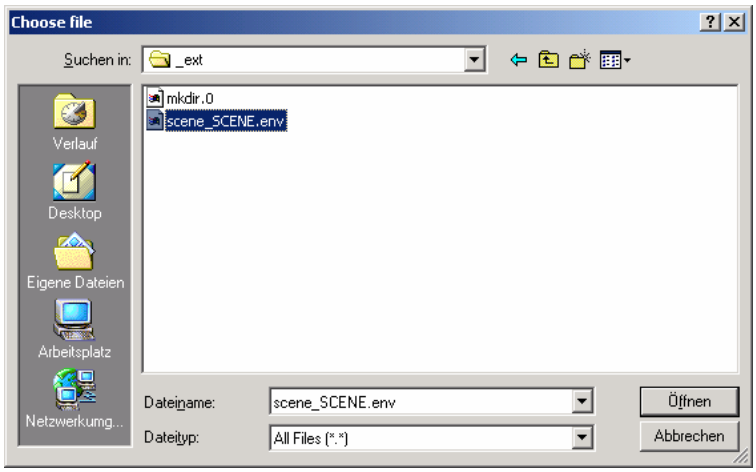


Figure 91: File selection window

By clicking on Open the selection is accepted. By clicking on Press on the webpage, the file is copied to the server.
Now all system requirements are met and the online scene control is activated.

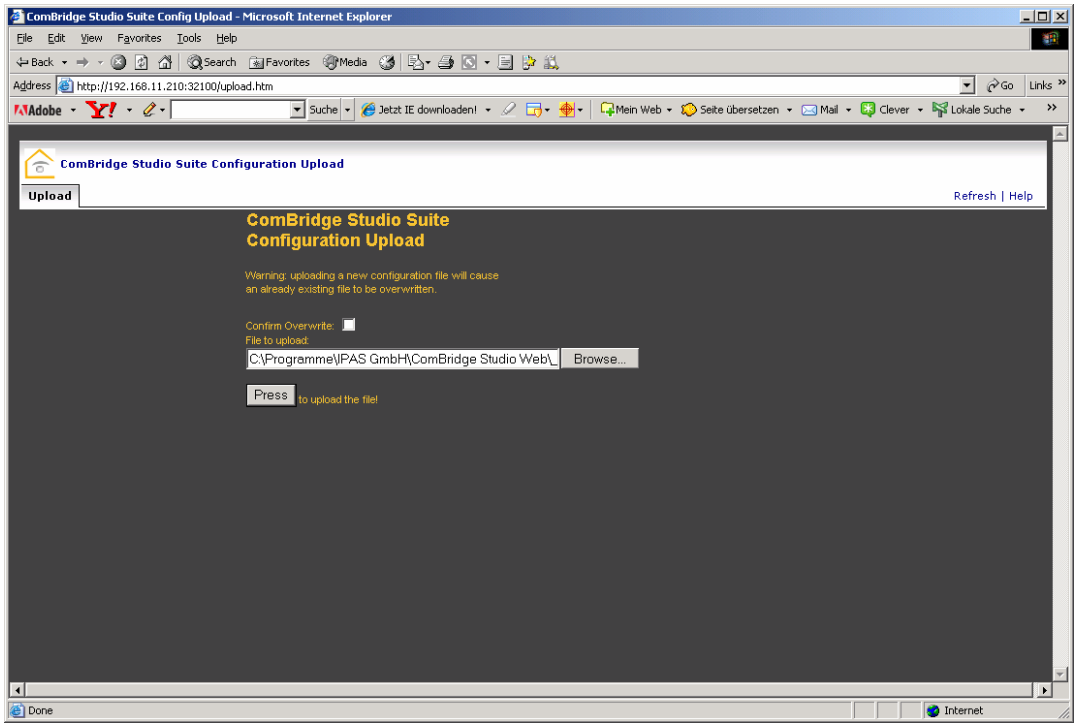


Figure 92: Press copies the system file

13. Online scheduling programmes

Visual Ediitor can be used to project online weekly schedules which can be changed at any time on the visualisation's config page. The project designer determines the objects that are to be switched on certain days and at certain times.

Go to the menu point Weekly Schedule to open the configuration window.

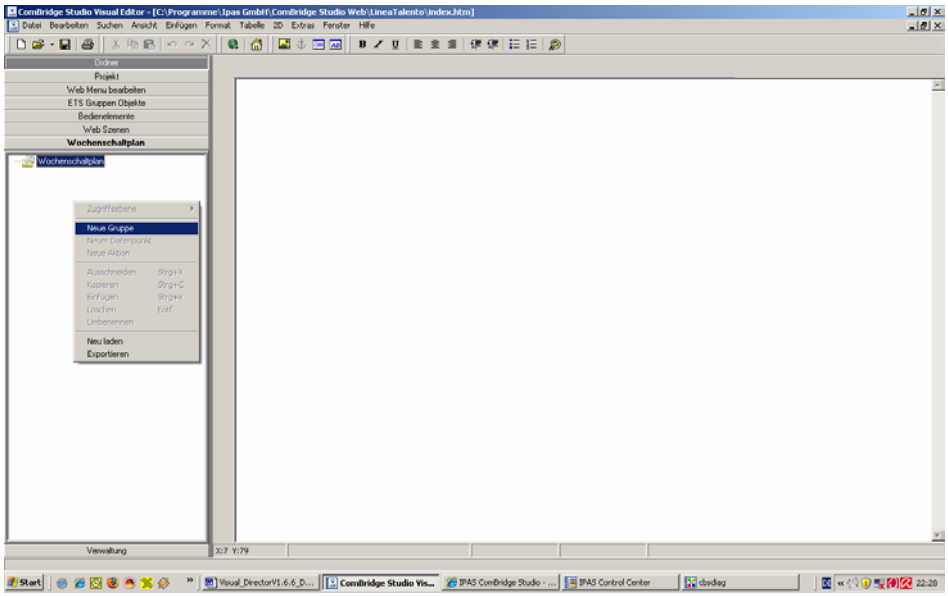


Figure 93: View of the weekly schedule menu

The tree structure allows for the individual objects to be aranged in groups. To create new groups, click on the right mouse button in the Weekly Schedule window. To name the group, select the group and use the right mouse button to choose the menu point Rename. The same process is used to assign data points to the groups and events to the data points. This way a tree structure is created. The following is an example of a possible tree structure: Data points for night turn down and presence are assigned to the group heating. Data points for exterior lighting and corridor lighting are assigned to the group lighting. Several events can now be assigned to the data points. Night turn down for example, requires an event to activate, and a data point to deactivate.

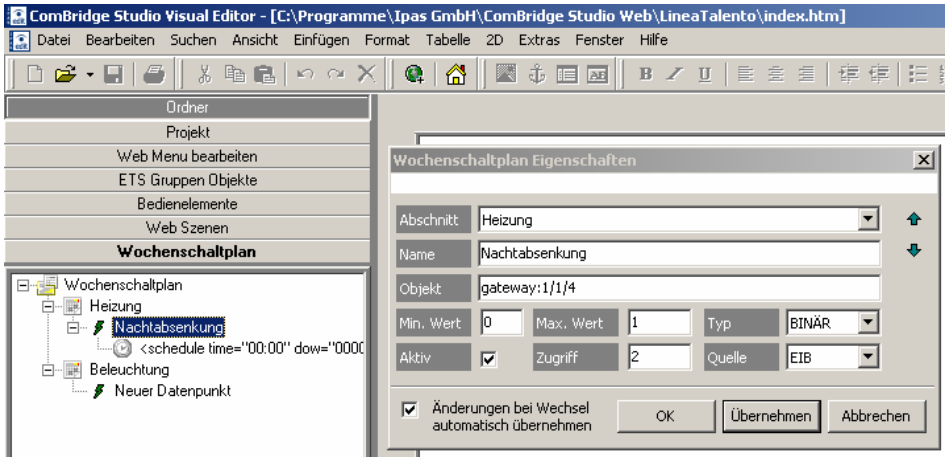


Figure 94: Data point properties

Select the data point and use the right mouse button to open the properties window and configure the parameters. If the ETS group addresses are open, they can be dragged into the object field via Drag&Drop. The name of the datapoint is taken over from the group addresses. Min. and Max. Value limit the values of the data point. As is the case with web scenes, the Type field defines the data format and the Source field defines the communication.
Select the event underneath the data point to enter a day and time to switch the required value.

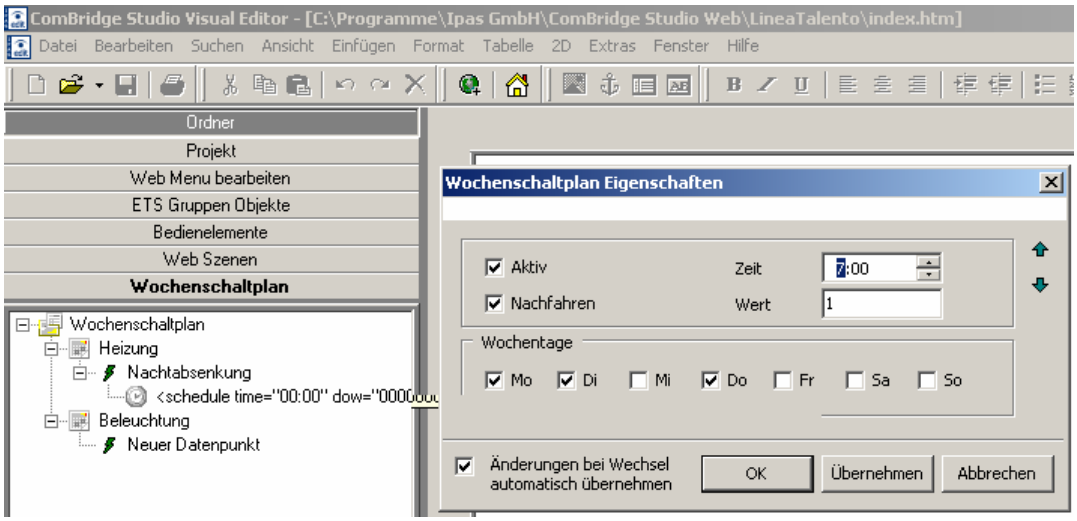
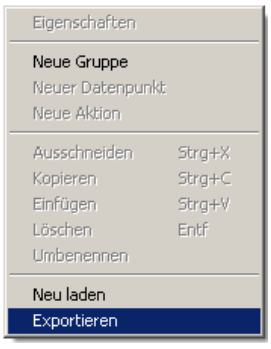


Figure 95: Event properties

The Active flag activates the event. If the Retrace flag is selected, the system will check for example whether an action needs to be repeated after a power cut.



Once all settings have been performed, the weekly schedules need to be exported, like the scenes. After the export, the weekly schedules are active on the server.

13.1. Online page weekly schedules

If the config menu is activated in the visualisation, the Schedules Setup page can be opened.

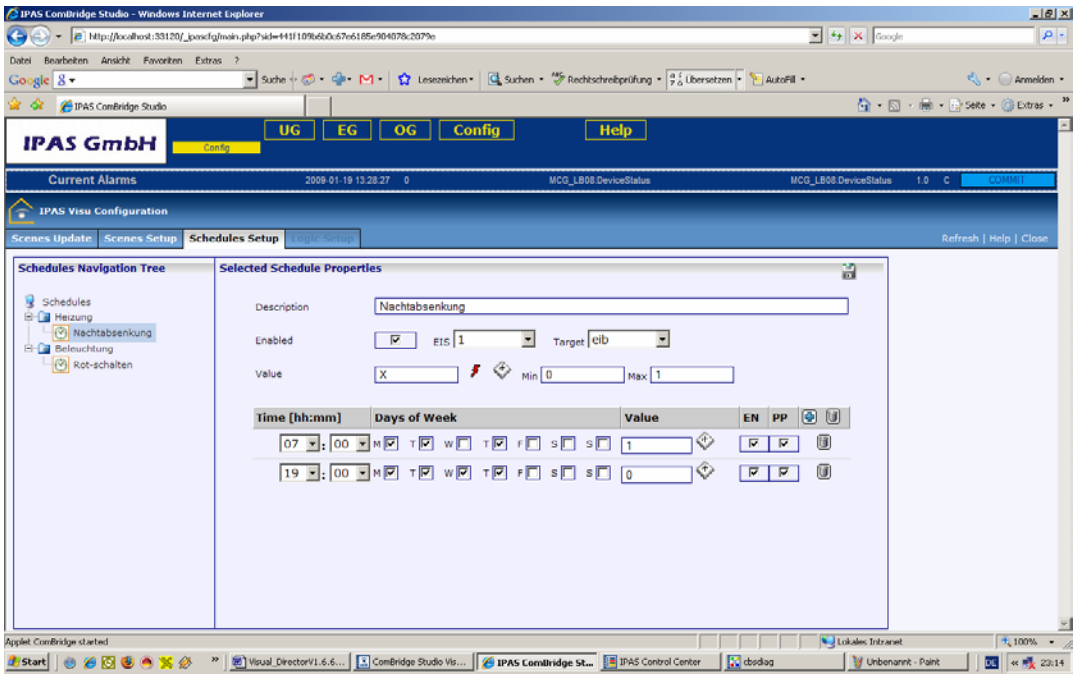


Figure 96: Setup page weekly schedules

Select a data point in the left-hand column to display the projected actions. This view can also be used to change the settings. By pressing the  symbol the settings will be saved and executed at the set time.

14. Appendix

14.1. Apache Web Server

Apache is an http server. The internet browser connects with this sever in order to obtain HTML pages. When installing IPAS ComBridge Studio Suite the web server Apache is installed at the same time. Its configuration file *httpd.conf* is already prepared for providing IPAS ComBridge Studio Visual Director web pages. Only the project specific settings are performed in Visual Editor. Visual Editor creates port addresses depending on the project name of the virtual host and defined by the project designer. These definitions are saved on the projecting PC in the directory

C:\Programme\Ipas GmbH\ComBridge Studio Web__vhosts

The file is called *Projektnamen.conf.* Apache reads the project specific file with the Apache configuration file *httpd.conf* when the PC is started. In general Apache is automatically restarted, when changes are made with Visual Editor. If the restart does not happen automatically, it needs to be performed manually. The status of Apache can be observed in the task bar of the PC.

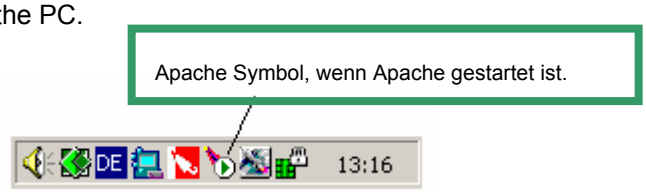


Figure 97: Status of Apache started

A double-click on the Apache symbol in the task bar opens the Apache service monitor. If changes have been made, Apache can be restarted by pressing Restart.

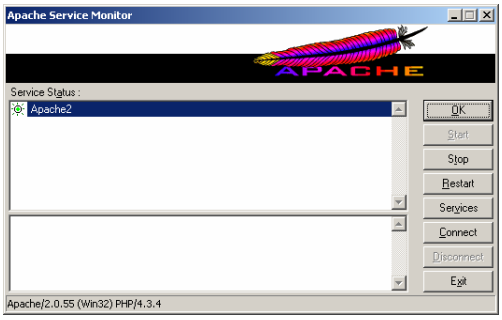


Figure 98: Apache Service Monitor

If Apache has been stopped, the symbol changes as in figure 79.

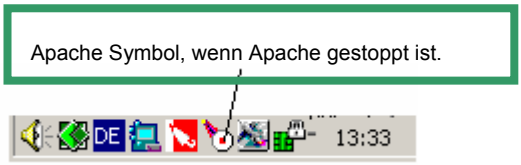


Figure 99: Status of Apache stopped

The file *httpd.conf* can be opened in the directory *C:\Programme\Apache Group\Apache2\conf\httpd.conf* if further settings need to be performed.

14.2. Windows Firewall

Depending on the configuration of the operating system, port numbers can be blocked for security reasons so that web applications cannot be started. In this case the ports, which use the ComBridge Studio Suite, need to be cleared. Open the configuration window with Start/System Control/Windows Firewall . In the “Exceptions“ window the ports can be defined which are to open the Firewall.

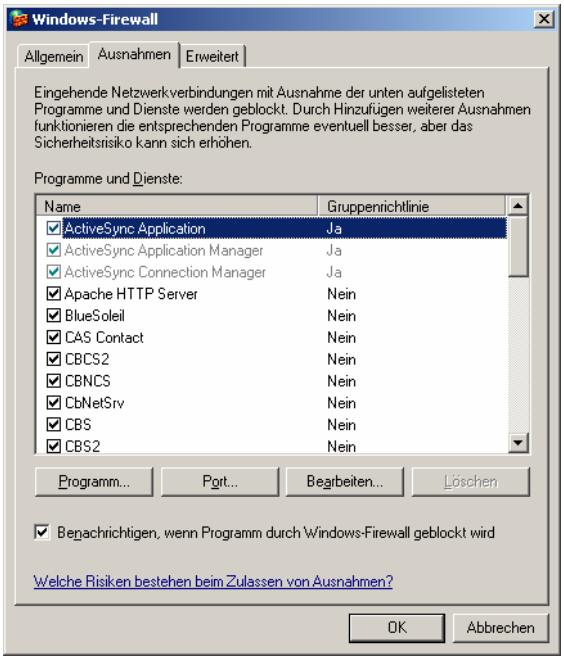


Figure 100: Windows Firewall

If you select Port... , the following window opens:

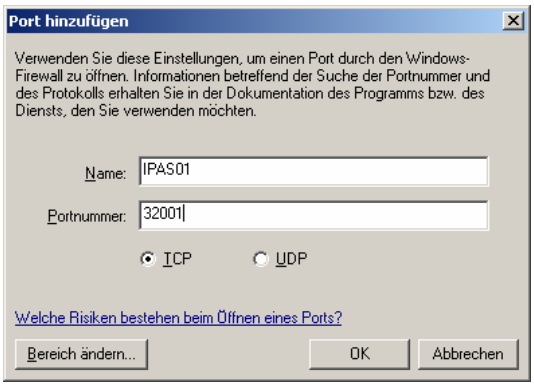


Figure 101: Port clearance in the Windows Firewall

In Figure 81 the port **32001** has been cleared for the visualisation project **IPAS01** ComBridge Studio Suite uses the following ports, which might have to be cleared in Firewalls:

Connection between Configuration Manager and EIBnet/IP Gateway	Port 3671
Connection to the Client Manager	Port 3013
Connection to web visualisations	depending on project
Connection to the web configurator	Port 3011

14.3. Visual Editor FTP Service Program

The FTP service program (**F**ile **T**ransfer **P**rotocol) supports the data and file transfer to standard FTP servers. It helps in cases in which there is no automatic data transfer via the upload function or where advanced functions such as for example download, create/delete additional folders, etc. are needed. To start this component, click the FTP function key in the administration folder list.

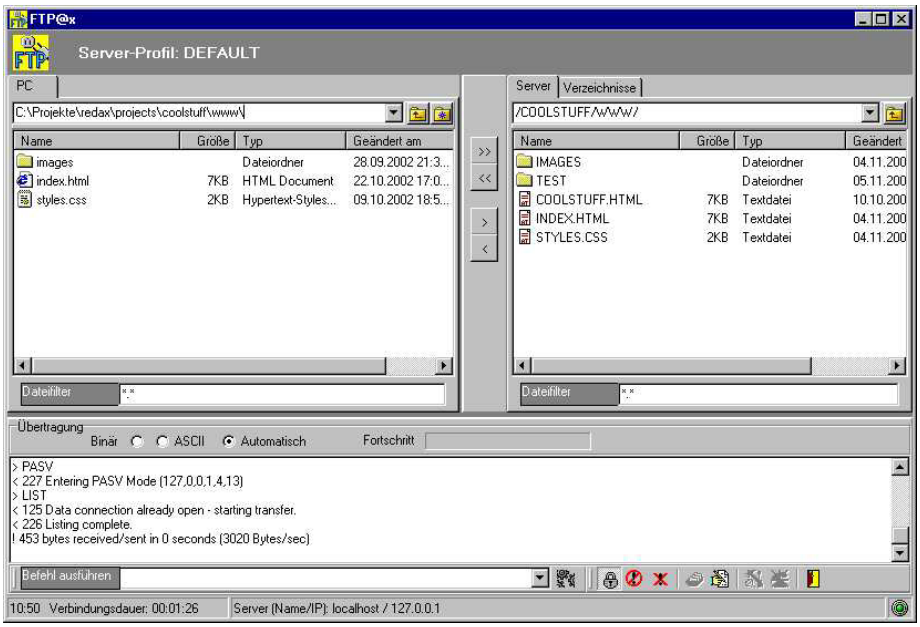


Figure 102: User surface FTP service program

The FTP service program's user surface consists of three parts. The local directory is listed in the upper left part. The current server directory is listed in the upper right part. The bottom part contains command keys and message windows. The size of each part can be adjusted according to requirements. In order to do so, move the cursor to the dark grey window frames until the cursor symbol changes. Click the left mouse button and increase or reduce the window size as required.

Time and duration of the connection as well as name and IP address of the contacted server are shown in the status list. The lamp symbol on the right side of the status bar signals either an active connection (green) or an inactive connection (red) to a server.

14.4. Connect / disconnect server

Connection with the FTP server is made by pressing the command key with the open lock symbol . When connected, the symbol changes to a closed lock symbol. The connection can be stopped again with the same command key.

The last activated server profile is used for the connection. The active server profile is shown in the header of FTP@X. If no profile has been defined or if you would like to contact another server, choose the desired server profile via the command key .

14.5. Starting data transfer from and to the server

The data transfer is initiated via the command keys between the directory views. The transfer is performed in direction of the pressed arrow button. The double arrow buttons transfer the entire directory without considering any prior selection. Potentially existing sub-directories are transferred at the same time. The single arrow buttons only transfer the files/directories which have been selected in the respective window. Please remember that they will also be transferred inclusive of all their sub-directories.

In addition to the transfer functions you can perform further functions via a popup menu. Click on one of the directory windows with the right mouse button. The popup menu appears as shown in figure 82. The following additional functions can be performed via the menu:

- Create directories
- Rename files / directories
- Delete files / directories
- Open files

If you press *Open File* of a server file (the function is performed in the right list view), the file is transferred from the server to the local work station and opened with a program registered for this type of file. After closing the program, you will be automatically asked to confirm the transfer back to the server.
If you press *Open File* of a local file (the function is performed in the left list view) the program registered for this type of file in Windows is started to edit the file. If no registration for this type of file exists, the file is opened in text editor.

14.6. Befehlstasten im Überblick


Open and execute FTP@x Script file


Open and close a server connection


Send ABOR command to the sever


Disconnect socket connection and thereby cancel transfer


Start server profile dialogue


Display log file via connection or disconnection


Start FTP@X configuration dialogue


Create internet connection via remote data transfer, if available


Terminate FTP@x

14.7. Configuring FTP@x

FTP@x is configured via a dialogue which is loaded by pressing the command key . The dialogue which appears subsequently can be seen in figure 83.
The configuration dialogue for FTP@x is divided into several panes which are displayed via the tabs “General”, “Transfer”, “File Code” and “Remote Data Transfer Connection”. The entries for each dialogue pane are described in detail below.

14.7.1. General

In the “General” pane in figure 83 you can enter details regarding the e-mail address, the standard file display program, the proxy server and the log preferences. The e-mail address is needed in case you would like to contact an FTP server anonymously (guest access). In this case the server usually requires the E-mail Address as a password. The Display Program serves to display files if the command Open has been activated and no application program is registered for this type of file. Should you wish to connect to the target PC via an FTP proxy server, activate the control box Use Proxy and enter the Port and Host of the proxy server in addition.

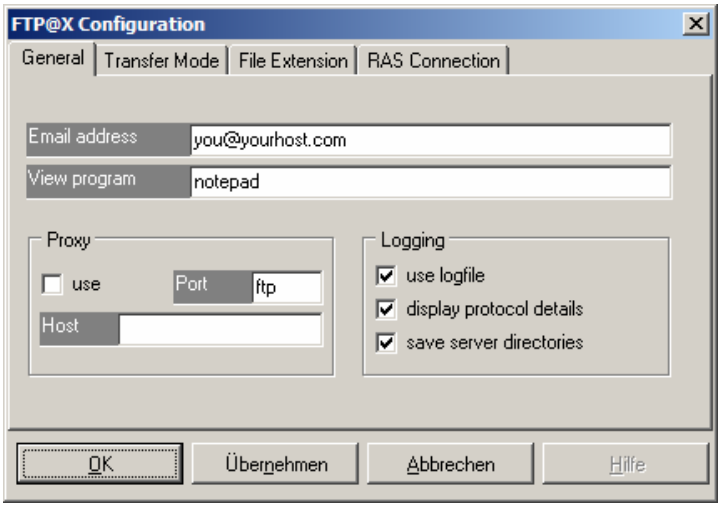


Figure 103: **FTP@x** configuration

14.7.2. Transfer

The „transfer“ pane in figure 84 is used to set the general transfer protocol. By using the start mode you can set the position which the switch is to adopt for data transfer when starting up the FTP component.

Figure 104: Data transfer settings

14.7.3. File extension

The “file extension“ is used to distinguish in the automatic transfer mode between binary data transfer (e.g. image files) and ASCII text data transfer. No distinction is made between small and capital letters in the file extensions. Enter all file extensions, which describe an ASCII text file and are to be transferred in ASCII mode, in the list.

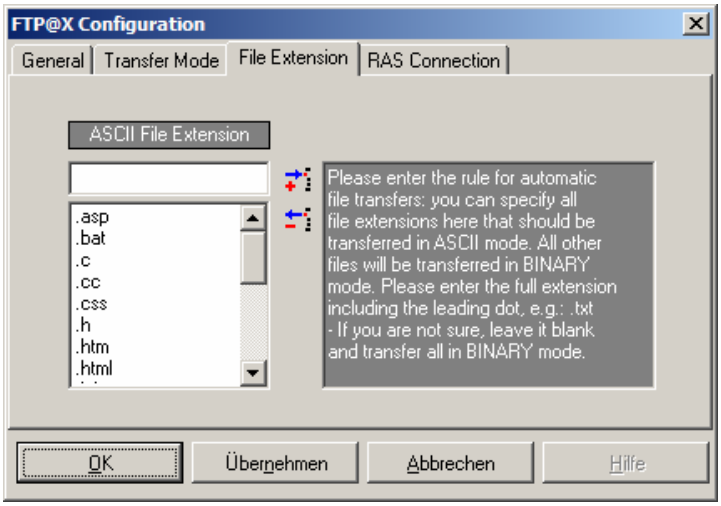


Figure 105: **FTP@x** configuration file extension

Depending on the operating system of the server the end of line symbols CR+LF (DOS/Windows) are changed to simple LF (Unix) symbols in ASCII mode.

If you do not wish to transfer any data in the ASCII mode, delete all ASCII file extensions and set the start mode to Binary. See figure 85.

14.7.4. Remote Data Transfer connection

You will only need the dialogue pane “Remote Data Transfer connection” if you have a dial-up connection to the internet and would like FTP@X to automatically start this when connecting to the server.

14.8. Server profile

A so-called server profile needs to be created for every server which you would like to contact with FTP@x. FTP@x is able to administer any number of server profiles.

14.8.1. Server-Profile Erstellen/Auswählen

The server profile dialogue is started via the command key and is used for profile administration. This means you can add new profiles or rename, copy or delete existing profiles. The dialogue is also used to change the server profile for connection. Select the desired server profile and press Connect as in figure 86. The server profile remains active until you choose a new profile via the same form.

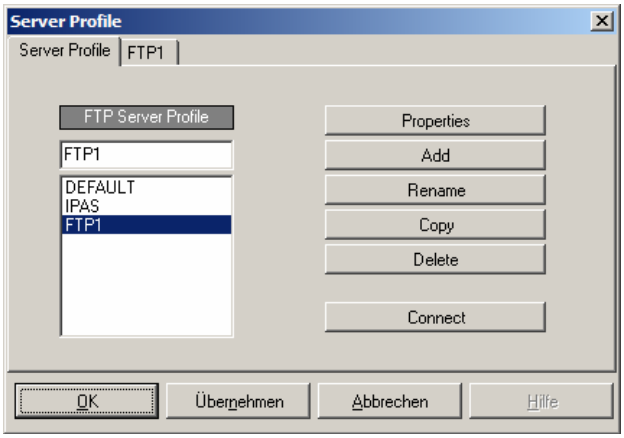


Figure 106: Creating a server profile

If you click inside the server profile list (i.e. select a server profile) you will see that the name of the last tab changes to the name of the selected server profile. If you select this tab you will be able to set the properties of the selected server profile.

14.8.2. Server profile login settings

If you select the server profile tab (in the following figure 87 this is the “DEFAULT” tab) the following additional tabs become accessible at the bottom of the pane: “Login”, “Initialising”, “Firewall” and “Extras”. Server address, user name, password and port number (initial port 21 = ftp) are entered in the “Login” form as essential access data to the server.

Via the control box Anonymous you can determine whether you would like to create guest access to the server. In this case the e-mail address entered in the “General” form of the FTP@X configuration dialogue is sent to the server as access password. With the control box Save you determine whether the password entered is to be saved. Even though the password characters are hidden, you should avoid saving the password in a multiple user work environment, as the profile may be misused to obtain access to the server.

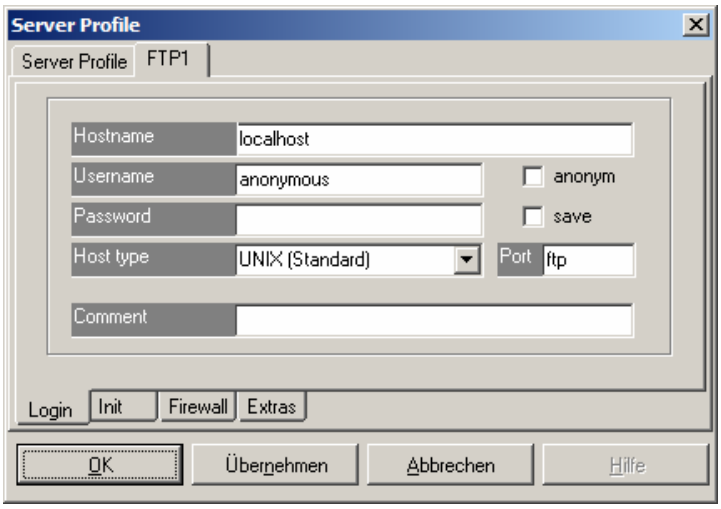


Figure 107: Server profile settings

14.8.3. Server profile initialisation settings

You can enter file filter and initial folders, which will be set when connecting to the server, in the initialization form. See Figure 88. Please pay particular attention to the box Use Passive Transfer. In this mode the client (FTP@X) and not the server initiates the data transfer. If there are frequent errors during data transfer, activate the passive transfer mode.

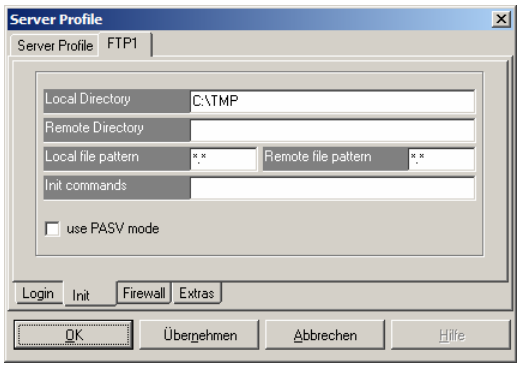


Figure 108: Server profile initialisation

14.8.4. Server profile Firewall

You will need the “Firewall“ form in Figure 89 in case your PC is located in a LAN-environment (LAN = Local Area Network) and contacts the internet via a computer that acts as Firewall. If login details for the firewall are needed, tick the control box Use Firewall and complete the access details.

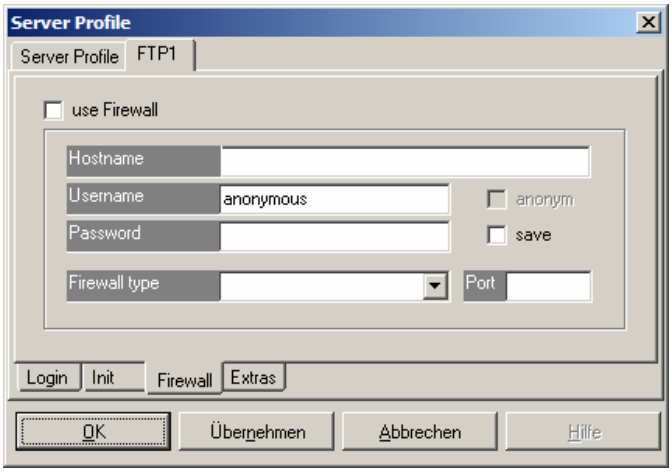


Figure 109: Server profile Firewall

14.8.5. Server profile Extras

Additional optional transfer properties can be set with the configuration pane “Extras”.

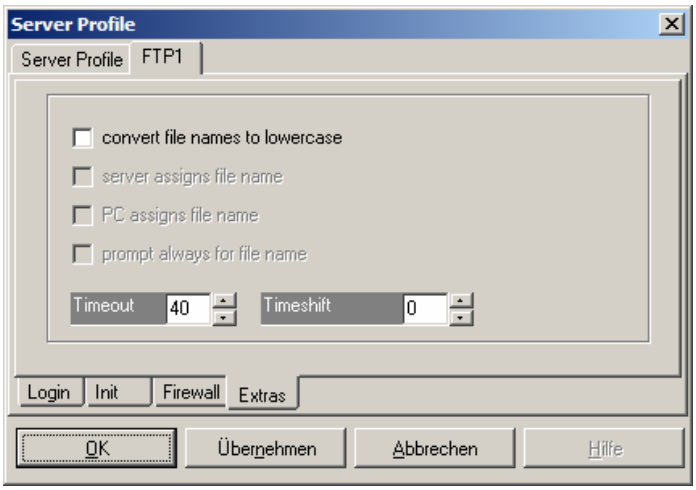


Figure 110: Server profile Extras

14.9. Language selection

At present two languages are available. The user can choose between German and English. See the following figure.

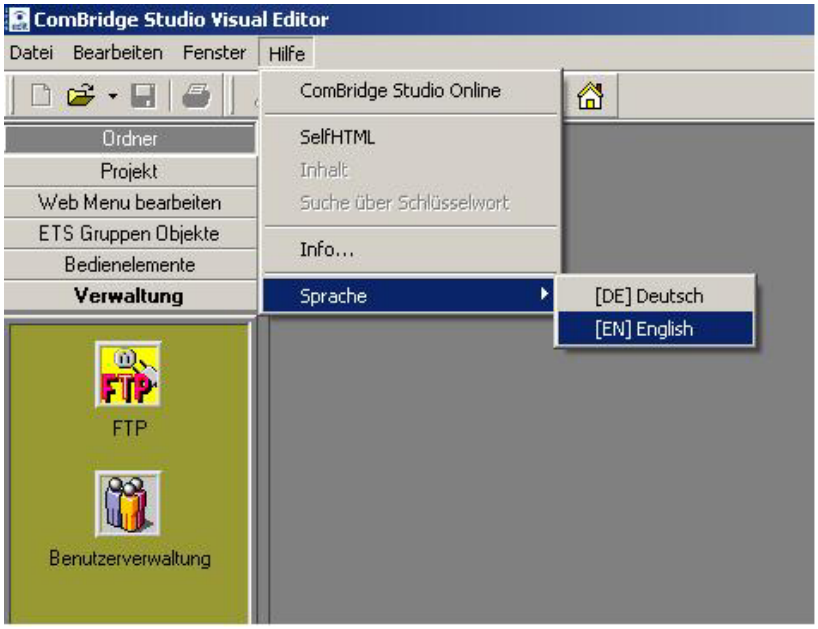


Figure 111: Language selection

14.10. ETS export of group addresses

A group export is created in ETS 2 V1.3 by selecting in the group address window the main path of the addresses and choosing the command Project/Print. In the print window choose Divert Export to File and enter the name and the path under which the export file is to be saved.

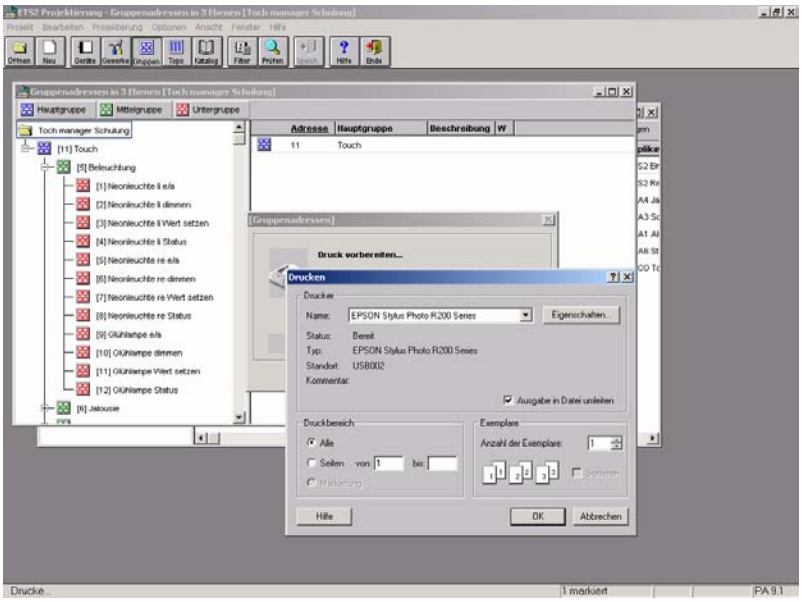


Figure 112: Creating a group export in ETS 2 V1.3

The export window is loaded in ETS 3 with the command File/Data Exchange.
If OPC Export is chosen, the group addresses are saved in an ESF file.

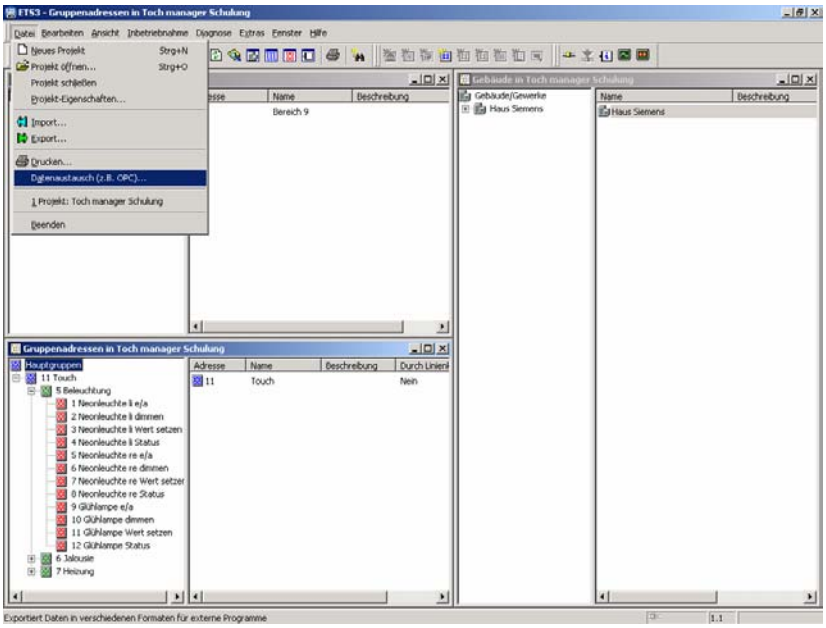


Figure 113: ETS 3 surface

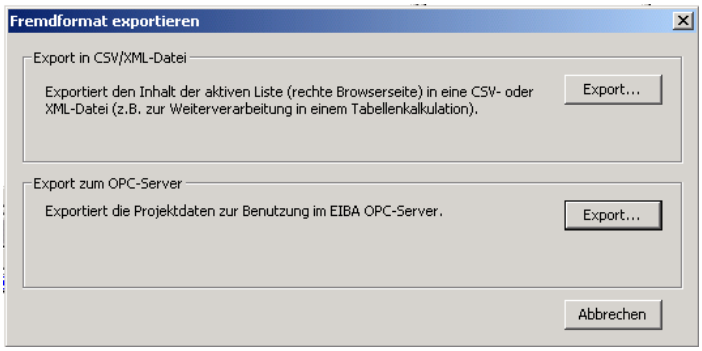


Figure 114: OPC export in ETS 3

A file explorer window opens in which the location for saving the export can be set.
ETS2 text and ETS3 OPC export can be read in Visual Editor.

14.11. Explorer display

The Internet Explorer window can be opened in different display formats. In standard mode certain function menus are visible which are hidden in the full screen mode (key F11). In order to start the visualisation without Explorer functions, you can create a shortcut for loading your visualisation. To do so click on the active login page with the right mouse button and select Create connection

Figure 115: Explorer information

Internet Explorer informs you that a shortcut has been created on the desktop.
With iexplore –k URL, Explorer is started in full screen mode. In order to close Explorer, press the key combination [ALT]+[F4].

14.12. Overview of EIS types

EIS 1

Description	Data Type	Data length	Unit	Function
binary		1 Bit		Switch On/Off

EIS 2

Description	Data Type	Data length	Unit	Function
Switch		1 Bit		Switch On/Off
Dimming		4 Bit		4 Bit Dimming
Percentage	5.001	1 Byte	%	Value setting, 8 Bit status

EIS 3

Description	Data Type	Data length	Unit	Function
Time		3 Byte	H:M:S	Time

EIS 4

Description	Data Type	Data length	Unit	Function
Date		3 Byte	DD.MM.YYYY	Date

EIS 5

Description	Data Type	Data length	Unit	Function
Temperature	9.001	2 Byte	° C	e.g. temperature
Temperature	9.002	2 Byte	° K	Temperature conversion
Light	9.004	2 Byte	Lux	e.g. brightness
Speed	9.005	2 Byte	m/s	e.g. speed
Pressure	9.006	2 Byte	Pa	e.g. water pressure

EIS 6

Description	Data Type	Data length	Unit	Function
Percentage	5.001	1 Byte	%	0 – 100 % e.g. relative dimming value
Degree °	5.003	1 Byte	°	0 – 360 ° e.g. wind direction

EIS 7

Description	Data Type	Data length	Unit	Function
Blinds		1 Bit		Blinds up/down
Slats		1 Bit		Slats open/close

EIS 9

Description	Data Type	Data length	Unit	Function
Energy	14.031	4 Byte	Joule (J)	e.g. energy
Frequency	14.033	4 Byte	Hz	e.g. frequency
Mass	14.051	4 Byte	Kg	e.g. weight
Power	14.056	4 Byte	W	e.g. electrical power

EIS 10

Description	Data Type	Data length	Unit	Function
Meter without plus/minus sign		2 Byte	-	e.g. meter
Meter with plus/minus sign		2 Byte	-	e.g. meter

EIS 11

Description	Data Type	Data length	Unit	Function
Meter without plus/minus sign		4 Byte	-	e.g. meter
Meter with plus/minus sign		4 Byte	-	e.g. meter

EIS 14

Description	Data Type	Data length	Unit	Function
Meter without plus/minus sign		1 Byte	-	e.g. meter
Meter with plus/minus sign		1 Byte	-	e.g. meter

14.13. Table of Figures