

**Gira HomeServer**  
0529 00

**Gira FacilityServer**  
2075 00





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## 1. Introduction

The HomeServer AjaxVisu provides you with a browser-based operating interface for Gira HomeServer or FacilityServer. The visualisation is realized in HTML with the latest Ajax technology.

### 1.1 General Information

The information, data, values, etc. contained in these documents may be changed without prior notification. The illustrations are also non-binding.

Subject to technical modifications!



**Note: Up-to-date information is available on the Gira website.**

As the software for the device purchased by you is being continuously further developed and updated, information in this manual may no longer be up-to-date.

Current product information is always available on the Gira website:

<http://www.gira.com>

Current software updates and documentation for your product are also available.

### 1.2 System requirements

The following is required for using the AjaxVisu:

- HomeServer or FacilityServer.
- Expert software from Version 2.2.071114 (from 14/11/2007 or newer)
- HomeServer or FacilityServer firmware from Version 2.2.071114 (from 14/11/2007 or newer)
- Operating device with Internet browser (e.g. Windows PC or Apple computer)

The sample project has been tested on a Windows PC with Internet Explorer 7, Firefox 2 and 3 and Opera 9.25, as well as on an Apple computer with a Safari browser 3.0.4.

### 1.3 Area of application

The HomeServer AjaxVisu expands the existing HomeServer/FacilityServer visualisation functions. Any other use of the device and software is not permitted. Gira shall assume neither legal responsibility nor a warranty of any kind for errors and damage resulting from the improper use of the device and/or the related software.

The areas **Menu**, **Query** and **Seven-day time clock mask** are not included in the scope of the application.

### 1.4 Specifics

The HomeServer AjaxVisu comprises the option of defining different sized visualisation pages.

A visualisation page can be opened as a popup mask.

No additional design is required for the HomeServer AjaxVisu in a project. The layout is determined by the visualisation program.

### 1.5 Installation

The AjaxVisu is a component of the HomeServer/FacilityServer Expert software and is automatically installed with it.

## 2. AjaxVisu

### 2.1 Sample project

A sample project is included with the HomeServer/FacilityServer Expert software. The name of the sample project is:

**sample-yyyymmdd-avgi-en**

Here "yyyymmdd" stands for the date of the respective file.

#### 2.1.1 Scope of sample project

The sample project has a resolution of 1024 x 768 in the full-screen mode.

The following visualisation masks are available:

- UTC
- Buddy list
- Value entry
- Date+Time entry

#### 2.1.2 Several projects

If you work on several project simultaneously and transfer them alternately to the HomeServer or FacilityServer, you should be sure to do the following:

**Empty the cache of your browser each time before changing projects!**

As you use the same file names for different projects, however the contents of these files may differ, incorrect displays in the browser may result if the browser accesses the cache instead of the current page and attempts to display the page of the same name from a different project.

## 2.2 HSAjaxFramework (tool)

HSAjaxFramework is a Windows tool that starts the MS Internet Explorer (IE). In the process, no control element of the IE, e.g. navigation buttons etc., are displayed.

The window position, window size, edge width and window display can be set with parameters.

HSAjaxFramework can be run in two different ways: With or without parameters. The <key> described below can be transferred as a parameter. When run without parameters, a selection mask appears.

When a URL is entered in the selection mask, HSAjaxFramework is started in the full-screen mode.

### 2.2.1 Prerequisite

The condition for using HSAjaxFramework is Microsoft .NET Framework 2.0.

### 2.2.2 Location and scope

HSAjaxFramework can be found under **tools\hsav-gira\_en**.

Parameter definition list.hs

All parameters that can be set are created in the definition file **list.hs** (XML format). Use a text editor for this purpose.

The file consists of the following parameters (XML tags):

Parameter definition list.hs	
<b>Section</b> A HomeServer or FacilityServer is defined within this XML tag. Several HS/FS can be defined in this file; each one with its own <device> XML tag.	<device>
<b>Unique key</b> The program can be run with this parameter. Then all other parameters are automatically taken into account. Example: See 2.2.3 Example <key> on page 9	<key>
<b>Window size</b> 0 = Normal 1 = Maximised	<windowstate>
<b>Window heading</b> 0 = borderless (entire screen, no Windows bar) 1 = with border (window has a heading line and the Windows bar is visible)	<border>
<b>Window display</b> 0 = Normal 1 = Window always in the foreground	<ontop>
<b>Description</b> Designation of the HS/FS for the selection list in the program	<text>
<b>URL for run HS/FS</b> Please note here that characters not conformant with XML must be masked. For example: "&" must be written as "&amp;".	<url>
<b>Horizontal window position when called</b> Position at which the left-hand upper corner of the window is located. (Right/Left) This is only taken into account if <windowstate>=0.	<pos_x>



Parameter definition list.hs (continuation)	
<b>Vertical window position when called</b> Position at which the left-hand upper corner of the window is located. (Top/Bottom) This is only taken into account if <windowstate>=0.	<pos_y>
<b>Window width</b> This is only taken into account if <windowstate>=0.	<width>
<b>Window height</b> This is only taken into account if <windowstate>=0.	<height>

2.2.3 Example <key>

Source code **list.hs**:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<devices>
  <device>
    <key>Gira</key>
    <text>Gira sample project</text>
    <url>http://192.168.0.11/opt/hsav-gira_en/startguest.htm</url>
    <windowstate>1</windowstate>
    <border>1</border>
  </device>
</devices>
```

2.2.4 Parameter transfer

The program can also be started with a parameter transfer. Example:  
**HSAjaxFramework.exe Gira**

**Gira** is the <Key> described above

If no parameter is transferred, a selection mask appears.

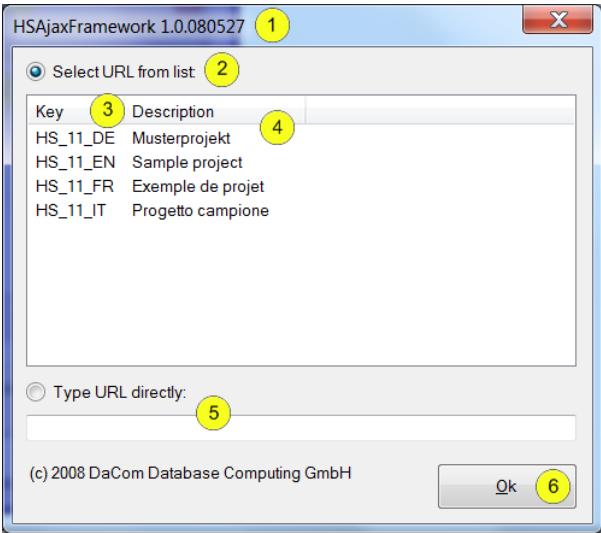


Figure 2.1: Selection mask for parameter transfer

Description of elements of selection window	
<b>Window heading</b> Name of the program with the version number.	Item 1
<b>Radio button</b> Click here to select an HS/FS from the list.	Item 2
<b>"Key" column</b> Unique code for the designation of an HS/FS. This value can also be transferred to the HSAjaxFramework as a parameter when running.	Item 3
<b>"Description" column</b> Brief description of the HS/FS.	Item 4
<b>Radio button</b> Click here to view a URL in the input field. <b>Examples:</b> - <a href="http://192.168.0.11/opt/hsav-gira_en/startguest.html">http://192.168.0.11/opt/hsav-gira_en/startguest.html</a> - <a href="http://192.168.0.144:88/hshtm?user=u1&amp;pw=u1&amp;cl=D1024V&amp;ref=R3">http://192.168.0.144:88/hshtm?user=u1&amp;pw=u1&amp;cl=D1024V&amp;ref=R3</a>	Item 5

Description of elements of selection window	
<b>OK button</b> Click here to confirm your entries.	Item 6

2.3 Start-up

2.3.1 Setup

Existing projects can be expanded with the HomeServer AjaxVisu without an additional design. Open the menu item **Setup in the Expert**. Create the following two symbols in the **Project settings** mask (see Image 2.2). The image ID is decisive for the definition.

- Image ID: XXPAGE
- Image ID: XXPOPUP

The symbols can be assigned any name. However, using expressive names is advisable.

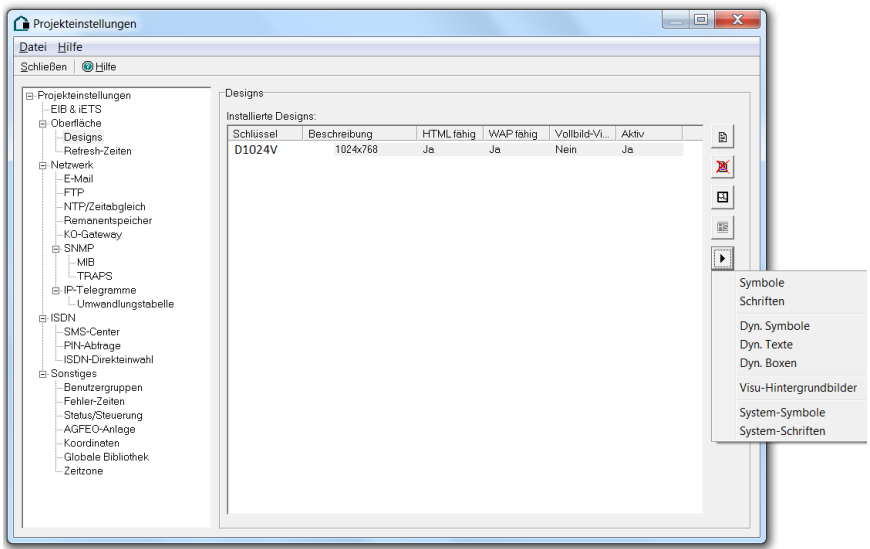



Figure 2.2: Creating two symbols under "Project settings"

**Note:** Do not create by copying or duplicating.

Please note that the two symbols cannot be created by copying or duplicating another symbol!

### 2.3.2 User rights

To be able to use the HomeServer AjaxVisu, the effected users have to be granted access under

#### Users / User rights / Interface / Client program

in the Expert software

### 2.3.3 Page size

If the area of a standard visualisation page is to be limited, this is possible with the XXPAGE symbol. If this symbol is set on a visualisation page, it defines the lower right-hand corner. All information which lies outside the limited area is not shown.



**Figure 2.3: Example of setting page size**

Create the symbol as described above:

Image ID: XXPAGE

Designation (name): "Ajax\_Page\_Size".

The symbol can be used as an option. If this symbol is not used, the browser shows the entire area of the visualisation page.

Using a small, square symbol is advisable. The upper left-hand corner of the symbol defines the page size. The size and colour of the XXPAGE symbol are not significant, as it of course lies outside the defined display area.

### 2.3.4 Mask size and visualisation area

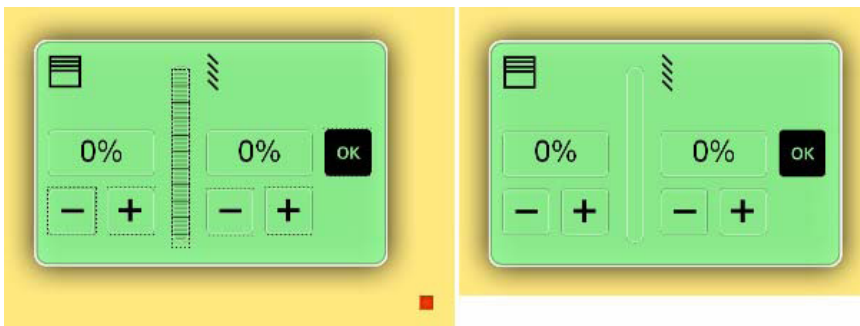
The largest HTML mask included with the sample project is 331 pixels wide and 240 pixels high.

If you define the size of the visualisation area with the XXPAGE symbol to be smaller than the size of the HTML masks, the HTML masks cannot be completely shown.

### 2.3.5 Popup page

The HomeServer AjaxVisu offers popup visualisation pages.

If a visualisation page is to be laid over the visualisation page to be called (popup), it is possible with the XXPOPUP symbol. If this symbol is set on a visualisation page, it defines the lower right-hand corner and at the same time it defines this page as a popup. All information which lies outside the limited area is not shown. The page is laid centred over the existing page when it is called.



**Figure 2.4: Creating a symbol for a popup Left: Draft of popup page. Right: Called popup in the visualisation**

Create the symbol as described above:

Image ID: XXPOPUP

Designation (name): "Ajax\_PopUp".

Using a small, square symbol is advisable. The upper left-hand corner of the symbol defines the page size.

In addition, the popup page should be surrounded by a transparent frame so that the frame around the popup is not visible.

A mask (e.g. message archive) can be called from a popup page. However, it is not possible to call another visualisation or popup page within a popup page.

Therefore, a navigation element must be defined on each popup page (e.g. "Navigation: Back" or "Navigation: Starting point"). A draft of the later popup can be seen together with the small red XXPOPUP symbol, which limits the area to be shown, in the left-hand image (see Image 2.4). The result which can then be seen as a popup in the HomeServer AjaxVisu is shown on the right.

With a popup page it is possible, for example, to realise device-specific popups, e.g. a popup for blind control.

### 2.3.6 Transferring a project

The project must always be completely (images+data+voice messages) transferred to the HomeServer or FacilityServer.

## 2.4 Start files

There are three standard files:

- startguest.htm
- start2.htm (variant of startguest.htm)
- start3.htm (alternative to startguest.htm with different touch technology)

Code listing using the file **startguest.htm** as an example:

### Line Code

```
1  <html>
2  <head>
3      <title>HomeServer AjaxVisu</title>
4      <script type="text/javascript" src="js/ajax.js"></script>
5      <style class="text/css">
6          body { background-color:black; }
7          div {}
8          img {}
9          input {padding:0px; margin:0px; }
10     </style>
11 </head>
12 <body>
13     <!-- Visu -->
14     <div id="xbase" style="position:absolute; top:0px;
15         left:0px; width:320px; height:480px; overflow:hidden;
16         border:0px;">
17
18     <!-- Marking -->
19     <div id="xmark" style="position:absolute; top:0px;
20         left:0px; visibility:hidden;">
21
22     
24
25     </div>
26
27     <!-- Reconnect -->
28     <div id="xreconnect" style="position:absolute; top: 0px;
29         left: 0px; width:320px; height:480px;
30         background-color:#404040; text-align:center;
31         overflow:hidden; visibility:hidden;">
```

```
24     <div style="position:absolute; top:323px; left:371px;
    width:282px; height:132px; background-color:white;">
25         <div style="position:absolute; top: 1px; left:
    1px; width:280px; height:130px;
    background-color:#ff8080;">
26             <div style="position:absolute; top: 15px; left:
    1px; width:278px; padding:0;
    background-color:#ff8080; text-align:center;
    font-family:arial; color:black;">
27                 <span style="font-size:14pt; font-weight:bold;">
28                     HomeServer AjaxVisu
29                 </span>
30                 <br/><br/>
31                 <span style="font-size:10pt;
    font-weight:normal;">
32                     Restore connection
33                 </span>
34                 <br/><br/>
35                 <span id="tryCnt" style="font-size:18pt;">
36                     *****
37                 </span>
38                 <!-- <span id="tryState">&nbsp;</span> -->
39             </div>
40         </div>
41     </div>
42 </div>
43
44 <!-- Start -->
45 <script language="JavaScript">
46     startClientEx(", ", ", ", 0);
47 </script>
48 </body>
49 </html>
```

## Explanations

The explanations refer to the setting options in this file. It is assumed that the standard HTML commands are known.

Line	Explanation
3	Page heading or tab heading in the browser.
5 to 10	CSS settings for Login and Reconnect masks.
6	Background settings. Current: colour.
14	<div> "xbase". This container contains the entire visualisation.
18 to 20	<div> "xmark" with img "xmarkimg". The image entered here ( <b>img/hide.png</b> ) is required for the click display.
23	<div> "xreconnect". Container for the Reconnect-Display mask.
24 to 41	This <div> defines the message box in the Reconnect-Display mask.  The <span> with the IDs "tryCnt" and "tryState" must be present, as otherwise it is possible to design freely with HTML here.
45 to 47	Client is started with JavaScript. Some things can be set:
46	Running the client. In this line startguest.htm and start2.htm differ from each other. See the following chapter for additional information on this topic.



## 2.5 Starting visualisation

The HomeServer AjaxVisu is started by calling the file startguest.htm in an Internet browser:

**Example:** "http://192.168.0.51/opt/hsav-gira\_en/startguest.htm"

There are three run variants which can also be combined with each other:

- A.) Modification of the included startguest.htm in which you permanently enter the information
- B.) Use of parameters, which you add on when calling in the browser
- C.) Neither A.) nor B.)



**Note: The start file can be assigned any desired name.**

Of course, any desired name can be assigned to the start file (startguest.htm). However, you should retain the file ending (.htm) and you should not use any blank spaces.

The possible parameters for the call variants A and B are (in brackets the abbreviation for the call via Variant B):

1. User (user)
2. Password (pw)
3. Design abbreviation (cl)
4. Refresh time (ref)
5. Login behaviour (not possible with Variant B)

A detailed description of the fields is provided in Chapter "Login mask, fields" on page 20.

### 2.5.1 Call variant A

When using Variant A, the parameters must be placed in single quotation marks and specified separated from each other with commas. In the code listing using the file **startguest.htm** as an example, the line concerned is marked with a blue font.

Here is an **example** of the call variant A with permanently entered parameters in line 46:

```
startClientEx('admin','admin','D1024V','R2',1);
```

If all information is correct, the HomeServer AjaxVisu starts with the specified visualisation page. Otherwise the Login mask is called.



**Note: 5th parameter.**

The 5th parameter can only be modified here; it does not exist as an call parameter.



**Note: Permanently entered parameters are overwritten.**

Permanently entered parameters are overwritten by call parameters (Variant B)!

### 2.5.2 Call variant B

When using Variant B, a question mark (?) is added onto the file name, which is then followed by the individual parameters (with abbreviations) each separated by an ampersand (&). Here is an **example** of call variant B with call parameters:

```
http://192.168.0.51/opt/hsav-gira_en/  
startguest.htm?pw=admin&user=admin&cl=D1024V&ref=R2
```

If all information is correct, the HomeServer AjaxVisu starts with the specified visualisation page. Otherwise the Login mask is called.



**Note: 5th parameter.**

The 5th parameter can only be modified here; it does not exist as an call parameter.



**Note: Permanently entered parameters are overwritten.**

Call parameters overwrite permanently entered parameters (Variant A)!

### 2.5.3 Call variant C

When using Variant C, the file **startguest.htm**, is used as described in Chapter "Start files" on page 14 and no parameters are added onto the call.

The HomeServer AjaxVisu starts with the Login mask.

#### 2.5.4 Variant mix

You can also combine the various variants. For example, if you only permanently enter the design and the refresh rate in the **startguest.htm**, you can include the user and/or password as call parameters.

You can also permanently enter all information as described in Variant A. If you then also include individual (or all) parameters as call parameters, the permanently entered parameters will be overwritten by the call parameters!

If you have specified all parameters in one or the other form, the HomeServer AjaxVisu starts with the specified page. Otherwise the Login mask is called in which all known fields (except the password) are shown already filled out.

#### 2.5.5 Cookies

If, as described in Variant A, not all parameters are permanently entered, the entries from the login are saved and the next time the Login mask is called, the fields are automatically filled in with this information in advance.

**Note: Overwriting parameters.**

Permanently entered parameters overwrite the parameters saved in this way. Call parameters in turn overwrite permanently entered parameters!

#### 2.5.6 Safety

As with Variant A the login data are saved unencrypted, we only recommend only using this variant for users, who only have an internal access authorisation. Otherwise it is possible for someone to obtain access to this file and misuse the data.

In general, it is recommended that at least the password not be permanently entered in the file **startguest.htm** so that it is not saved in unprotected areas, but is instead requested during each login and each reconnection.

#### 2.5.7 QuadClient

For persons commissioning, it is advisable to use Variant B.

In the QuadConfig an entry is structured in the "Navigations button - URL" so that a URL is stored there with call parameters (as described in Variant B). However, so that no critical data are entered in the startguest.htm, the user of the QuadClient can nevertheless also log into the visualisation without an additional login procedure in this way.

### 2.5.8 Reconnect and Refresh

If the connection to the HS/FS is disconnected, e.g. due to restarting the HS/FS, a reddish information window with the heading "HomeServer AjaxVisu" and a note that an attempt is being made to re-establish the disconnected connection are displayed. This attempt at reconnection is repeated at intervals that are determined by the refresh time.

A number of asterisks are shown in the information window, each of which stands for a reconnection attempt already carried out.

As soon as the connection has been restored, the information window disappears.

Then the user is on the page again that was active before the connection failed.

Exception: Popup pages. The user is on the page again from which the popup page was called.

## 2.6 Login mask, fields

The Login mask contains the fields and buttons listed in the following.

The data are created in the Expert software.

**Example** from the startguest.htm file: `startClientEx('admin', 'admin', 'D1024V', 'R2',1);`

### 2.6.1 User name

Input field, in example **admin**. Observe use of uppercase/lowercase characters!

User name for the login on the HomeServer or Facility Server.

This user is assigned the start page in the visualisation.

### 2.6.2 Password

Input field, in example **admin**. Observe use of uppercase/lowercase characters!

Password for the login on the HomeServer or Facility Server.

### 2.6.3 Design

Input field, in example **D1024V**.

Abbreviation.

Indicates which design or which visualisation page is to be displayed. Otherwise it has no further effect on the HomeServer AjaxVisu.

#### 2.6.4 Refresh time

Input field, in example **R1**. Abbreviation.

If a change is caused with an element in the visualisation, for example a light is switched on, an automatic refresh of the page (the status of the object concerned is determined and shown on the visualisation) is carried out at intervals that double each time. This takes place until a period of time has passed which was entered under the refresh time in the HS/FS Expert.

##### **Example:**

5 minutes (= 300 seconds) are entered as a refresh time. Then an automatic refresh is carried out after 2, 4, 8, 16, 32, 64, 128 and 256 seconds.

#### 2.6.5 Save information

Checkbox. If this checkbox is activated, the user name and password, as well as all other settings are saved on the device as a cookie

#### 2.6.6 Log in

Button. By clicking on this button, the user logs in on the HomeServer or FacilityServer with the information previously entered and starts the visualisation following a successful login process.

#### 2.6.7 5th parameter

There is one additional parameter in the **startguest.htm** file which, however, has no input field on the Login mask.

## 2.7 Installed files

The details of the HomeServer AjaxVisu are described in the following. These files can be adapted to the user's own needs (colours etc.) with a minimal knowledge of HTML.

The installed files are divided into several sections, each of which can be found in a separate subdirectory.

Sections:

- Graphics files, see Chapter "Graphics files", page 22.
- Javascript files, see Chapter "Javascript files", page 24.
- HTML files, see Chapter "HTML files", page 24.

## 2.8 Graphics files

The graphics files are stored in the **img** subdirectory of the **hsav-gira\_en** folder.

The files are used to enable, to prevent or only to display certain actions (e.g. clicks). They are expanded or compressed in the horizontal and vertical direction in accordance with the required area.

The graphics files described in the following can be replaced by you with your own should those contained in the sample project do not appeal to you. They may not simply only be deleted, but rather a file with the corresponding name must always be present!

### 2.8.1 Transparent .png files

Internet Explorer in the versions lower than Version 7 does not support transparent graphics of the type **.png**.

These graphics are first correctly displayed from Internet Explorer Version 7.

### 2.8.2 Action area for buttons (transparent)

Designation: **ax0.gif**

Transparent area, i.e. it has no colour and is therefore 100 percent transparent.

This file is used to be laid over all visualisation elements defined as clickable. It makes functioning buttons out of purely graphic elements.

### 2.8.3 Click display (red area)

Designation: **hide.png**

Only partially transparent, red-coloured area, i.e. it is not completely transparent.

This file is used to be laid over a visualisation element for a short time after the user has clicked on it. With it the click is made visible to the user. After one to two seconds the red area disappears again. However, this only occurs in the visualisation; the masks are excluded from this. Also see Chapter "Start files", page 14.

### 2.8.4 Inactive buttons (white area)

Designation: **hide2.png**

Only partially transparent, white-coloured area, i.e. it is not completely transparent.

This file is used, for example, to both display inactive buttons in the masks and to make them inactive for clicking.

### 2.8.5 No background clicks in masks (grey background)

Designation: **hide3.png**

Semi-transparent (grey) full-screen background, which is underlaid after a system mask (e.g. TCL, value entry, etc.) is called. This avoids clicks on the background.

### 2.8.6 No background clicks in popups (grey background)

Designation: **hide4.png**

Semi-transparent (grey) full-screen background, which is underlaid after a visualisation popup page is called. This avoids clicks on the background.

### 2.8.7 Creating semi-transparent backgrounds

With the Paint.NET program (freeware from Microsoft), semi-transparent backgrounds can be created for the visualisation. Proceed as follows for this purpose:

1. Create new (empty) image
2. Mark everything and delete: **CTRL-A, DEL**
3. Select a colour in "Colours" window
4. Completely colour everything with "Paint can" tool
5. Click on the "Properties" button in the "Levels" window (at the lower edge of the window, on the right)
6. Set the opacity as desired in the popup window now displayed

## 2.9 Javascript files

The Javascript files are stored in the **js** subdirectory of the **hsav-gira\_en** folder.

The files are used to breathe life into the HTML files, as it were. These files contain the program code which, for example, turns a drawn button or the transparent area which lies over it into a button that actually reacts to clicking.

The file currently used is called **ajax.js**.

## 2.10 HTML files

The HTML files are stored in the **tpl** subdirectory of the **hsav-gira\_en** folder.

These files define the appearance of the predefined visualisation masks. With them the system integrator can make his/her own adjustments to the mask design.



### **Note: Using the universal time clock.**

The seven-day time clock is not included with the HomeServer AjaxVisu.



### **Note: Changed entry option.**

The Graph and Camera masks are not required (any longer) in the HomeServer AjaxVisu, as the same thing and even more in a larger range of variations can be achieved via embedding in the visualisation area.



### **Note: Changed entry option.**

Some masks of the universal time clock are no longer required in the HomeServer AjaxVisu, as use has changed compared to the default view. The complete functionality has nevertheless been retained.





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