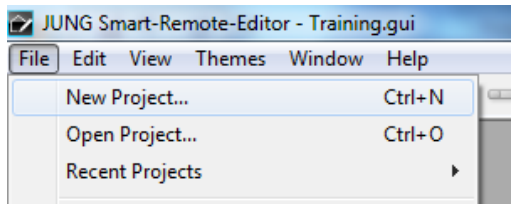


## Smart remote editor

With the smart remote editor, a visualization for an iPod-Touch, iPhone or iPad can be created in a simple way.

### 1. Creating a project.

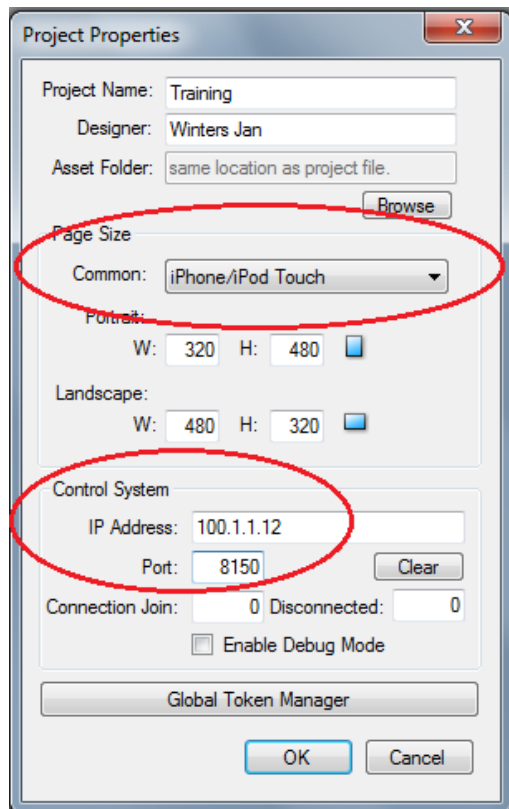
We consider to create a new folder for each project, were the project will be saved. All files used in the project will automatically be saved in the same folder. (Backgrounds, images,...)



Select “File – New project...” in the menu structure.

In the following dialogue the location and the name of the project is defined.

Then the general properties of the projects are to be filled in:



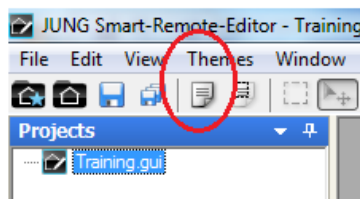
- Name of the project and the designer.

- Asset folder: Folder where the images should be saved. We recommend to use the folder where the project is saved in. This way all the project data stays together.

- The dimensions of the visualization system, in our case we chose iPhone/iPod Touch or 1024 x 768 for an iPad.

- The IP-address and the communication port of the controlling system, in our case the Facility Pilot. The communication port of the “smart remote server” in the Facility Pilot is fixed to 8150.

By confirming with OK, the project is created.

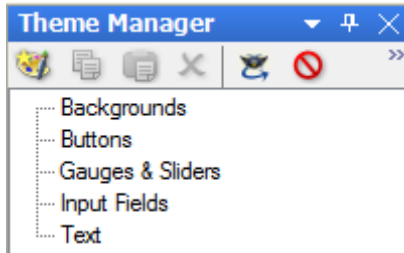


We select the project, and create a First page with the tool “Create new page”. We get a page with a vertical (Portrait) and a horizontal (Landscape) direction.

## 2. Theme manager

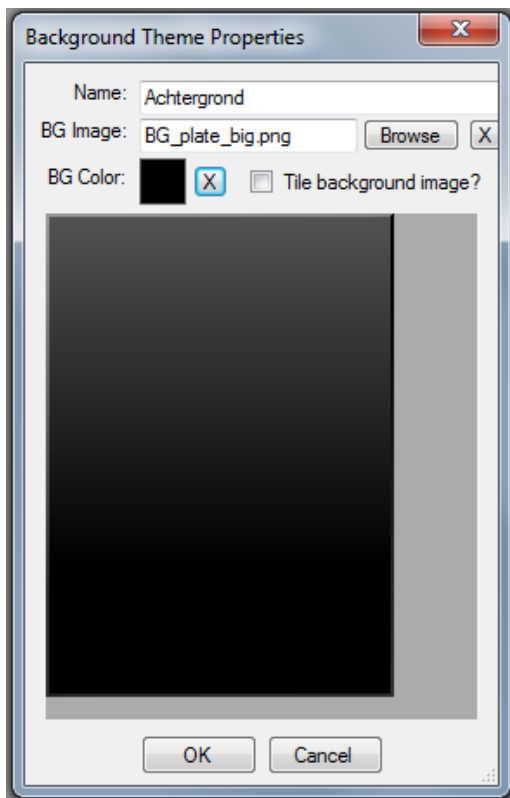
With the theme manager different designs for buttons, sliders etc are created and maintained. The big advantage of the theme manager is that we change between different themes while working on the project, without having to change the buttons, sliders etc it selves. The themes belongs to the basic configuration of a project, and can be used very easily in other projects as well.

To save time the whole theme of an existing project can be copied to another project. We recommend to make a standard project for each design. When creating a new project, templates of the standard project can be used.



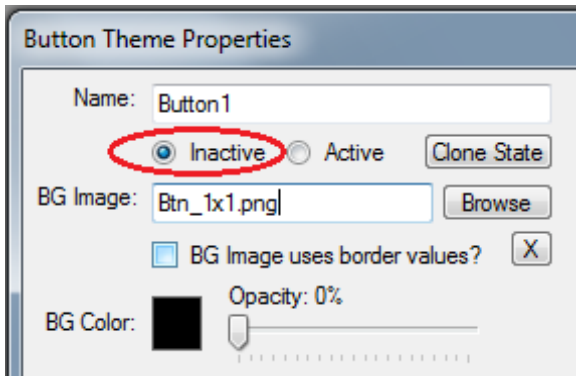
The theme manager consists 5 categories, where each time new elements can be created, just by right clicking on a category.

It is best to save the images that we will use in the project folder before creating the elements.



When inserting a new background, a corresponding name is asked, and a background image and/or color can be chosen.

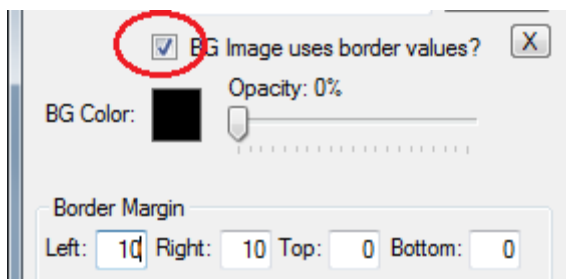
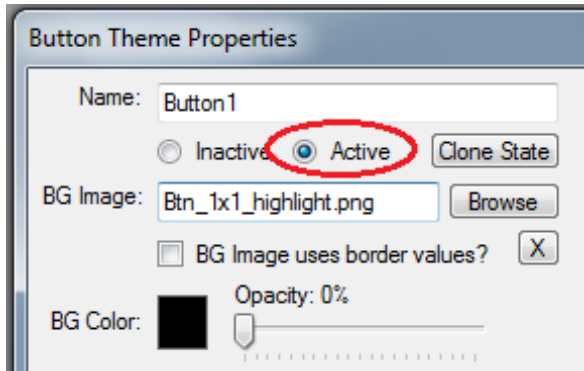
If a background image is chosen, the dimensions of the image have to be exact, since the image is not rescaled to fit in the background automatically.



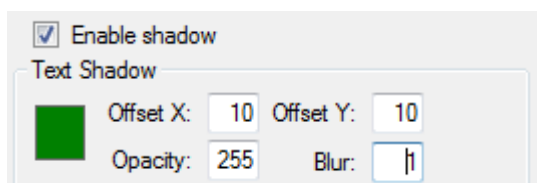
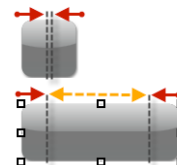
When creating a new pushbutton we need a background image for the active and inactive state.

If only a colored surface is needed, a color can be chosen, with a corresponding opacity.

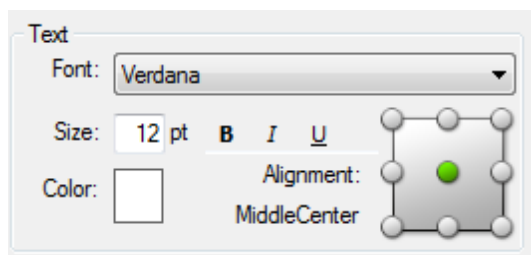
If the same image is to be used for the active and inactive state, we can activate the option "Clone state".



With the option "BG uses border values" we can enlarge the image. This depends on the border margin. The distance between the margins is multiplied when enlarging the button.

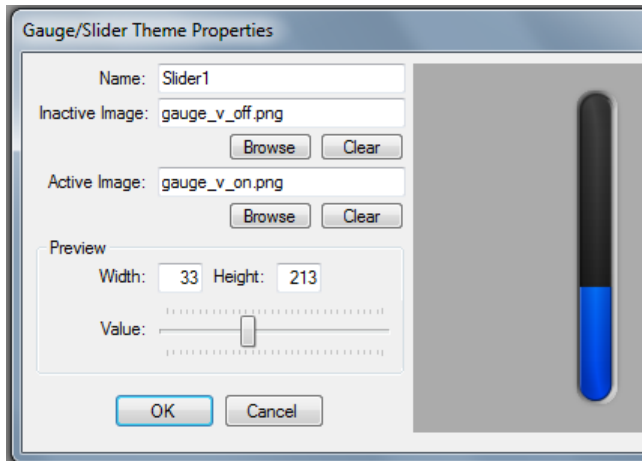


Enable shadow activates the shadow of the text that will be displayed on the button. The X and Y position of the shadow with respect to the original text, the opacity and the blur are defined.



In the part "Text", the font of the text and the position is asked.

Also here, another font can be chosen for the active and inactive state.

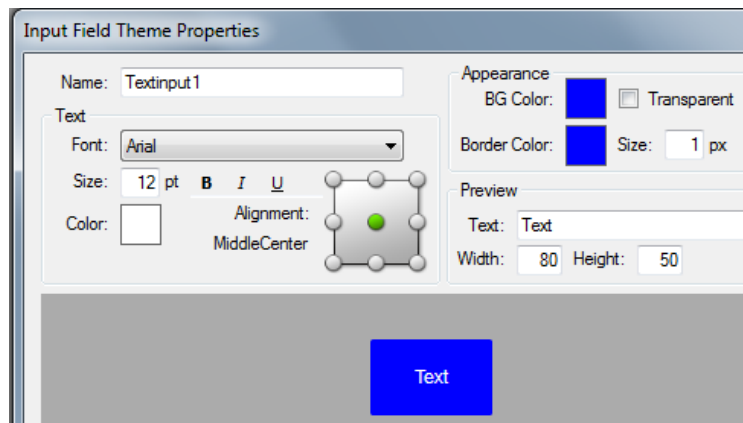


To create a gauge, we just have to give in the name, and select an image for the active and the inactive state.

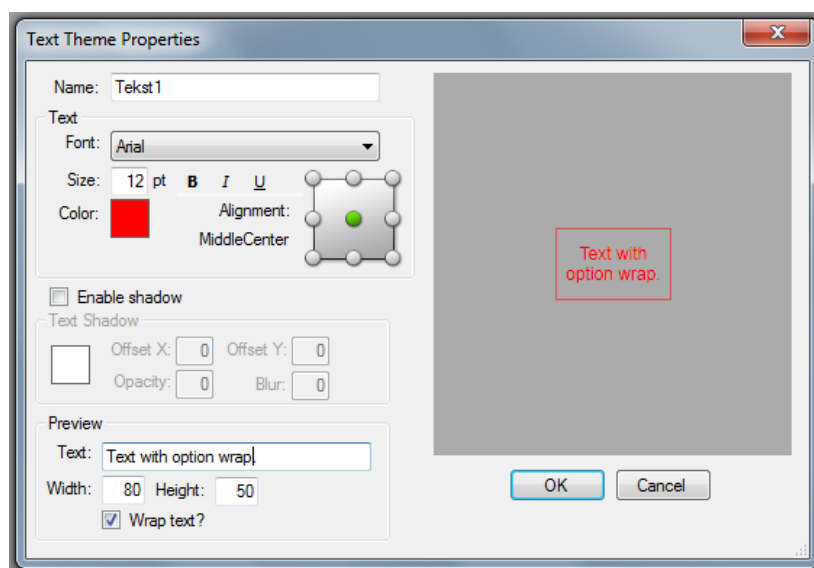
The theme manager puts the active image before the inactive image, depending on the received value.

Here we have to pay attention to the original size of the used images, since rescaling is not possible.

By inserting an input field – theme, the font of the text, the color and the background of the frame is configured. The background can also be transparent.

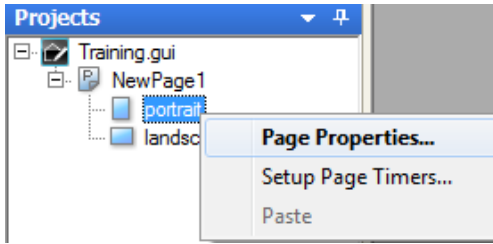


Also for texts a theme must be created. This way we can create a theme for titles, values, remarks, etc... With the option “Wrap text” a second line is used when the text exceeds the dimension of the text field.

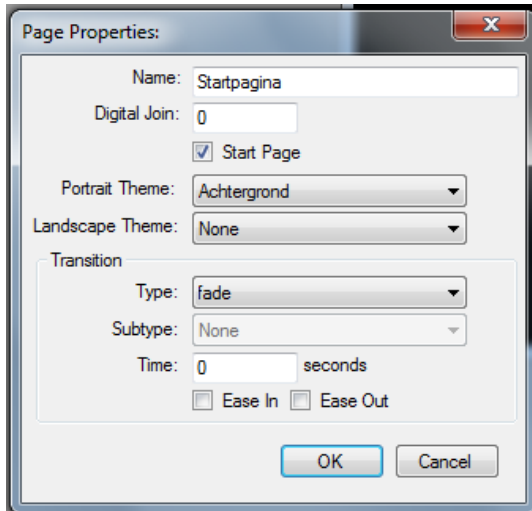


### 3. Building up a page.

#### 3a. Properties of a page



Open the properties of a page with a right click.



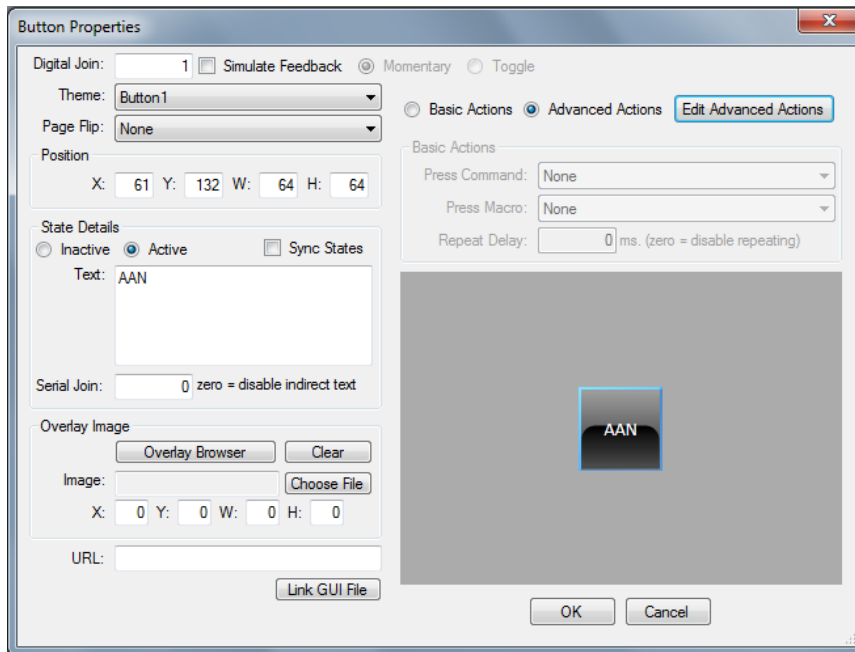
Here we give in the name of the page, and indicate if this is the start page.

Then, the background image for the vertical and horizontal position is selected.

The transition type defines how the page is opened from another page.

#### 3b. Adding a push button to a page

The most simple way to add a pushbutton, is to slide the desired button out of the theme manager into the worksheet. With a right click on the button the properties are opened.



Digital Join: Pushbuttons use digital joins, because they send only 2 commands to the server (Facility Pilot ) ON when pressed, OFF when released. The number defined in the properties, has to be used in the Facility Pilot afterwards.

Every button works as a pushbutton. When a button has to work as a switch it will be defined in the Facility Pilot later.

Simulate feedback: A feedback of the Facility Pilot will change the status of the push button. For testing purposes we can simulate the feedback with the option “Simulate feedback”. With the choice “Momentary” or “Toggle” we can chose for a simulation as push button or as switch.

Theme: One can always change the design of a button in another theme.

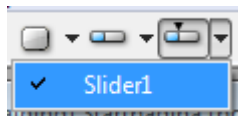
Page flip: If the button doesn’t have to send a command to the Facility Pilot, but is used to open another page on the iPod or iPad, we chose the corresponding page in the list “Page Flip”. In this case the digital join is set to 0 (= inactive).

Position: The position, height and width of the button.

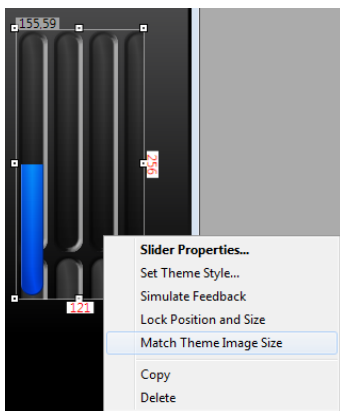
State details: The specific text in the button for active and inactive state. If a serial join is connected here, the text can even be changed with the Facility Pilot.

Overlay image: If we want to show the status of the push buttons with text instead of with text, an overlay image can be used. This is an image put on top of the button, again with a difference between the active and the inactive state.

### 3b. Adding a slider to a page



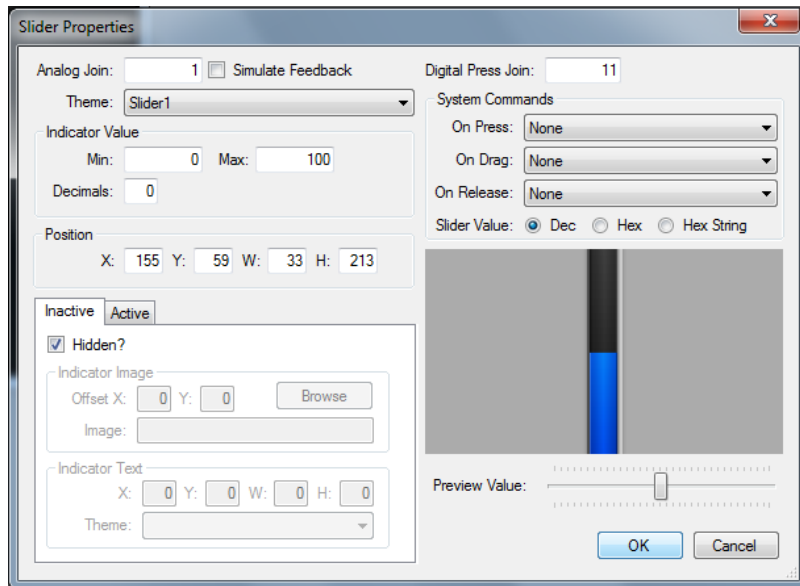
To add a slider to a page, we select the type of slider with the tool in the menu structure.



Then we make a rectangular selection on the page where the slider should be placed. The slider is showed several times.

To adjust the size of the selection frame to the original size of the slider, we chose with a right click “Match theme image size”.

We open the properties of the slider with a right click.

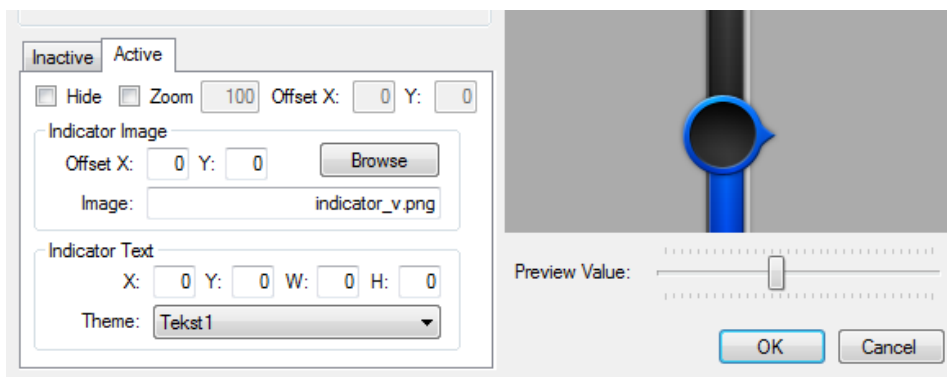


Analog Join: The analogue connection with the Facility Pilot. This number will return in the smart remote server of the Facility Pilot.

Simulate feedback: Only for testing purposes, to change the position of the slider when using it. In the final configuration, the feedback of the Facility Pilot will change the position of the slider.

If we want to add an indicator to the slider, an image for the active and inactive state must be chosen, that follows the position of the slider.

Eventually a text can be activated, that indicates the actual position of the slider.



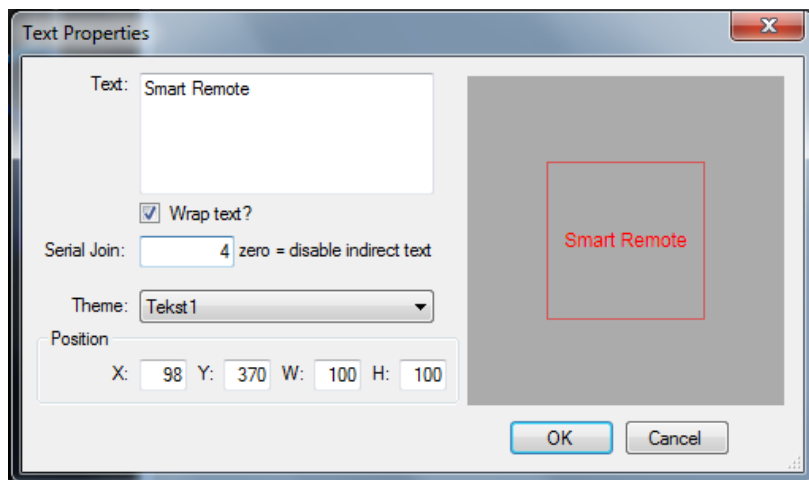
### 3c. Adding text to a page

The easiest way to add text, is by sliding the text field from the theme manager to the desired place on the page.

With a right click we can open the properties. The text field contains the standard text, for instance for a title or description. With the option “Wrap text”, more lines are used to show the text.

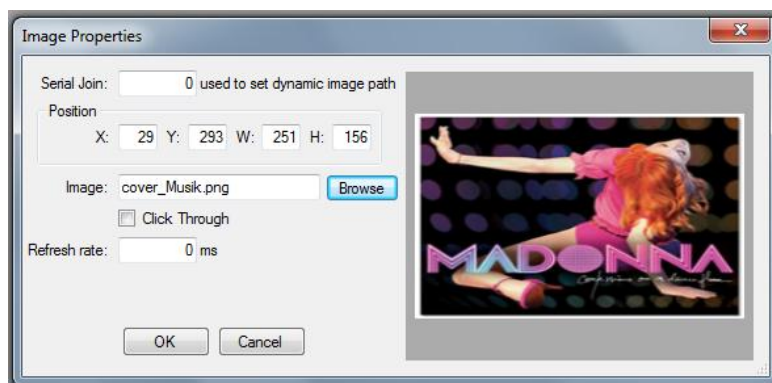
If the text has to be dynamic, for instance to show music titles or the actual temperature, a serial join is used. This gets a value from the Facility Pilot.

Finally the position, the height and the width of the text field can be adjusted.



### 3d. Adding an image to a page.

To add an image to a page, we select this function in the menu structure, and draw a selection rectangle in the page.

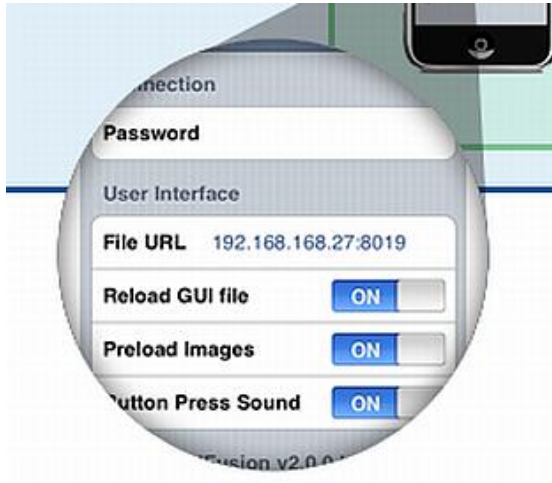


In the properties the image is selected. If the image has to be dynamic, a serial join can be linked. This way the pad for the image can be changed by the Facility Pilot. If the image is a camera, a refresh rate is useful.



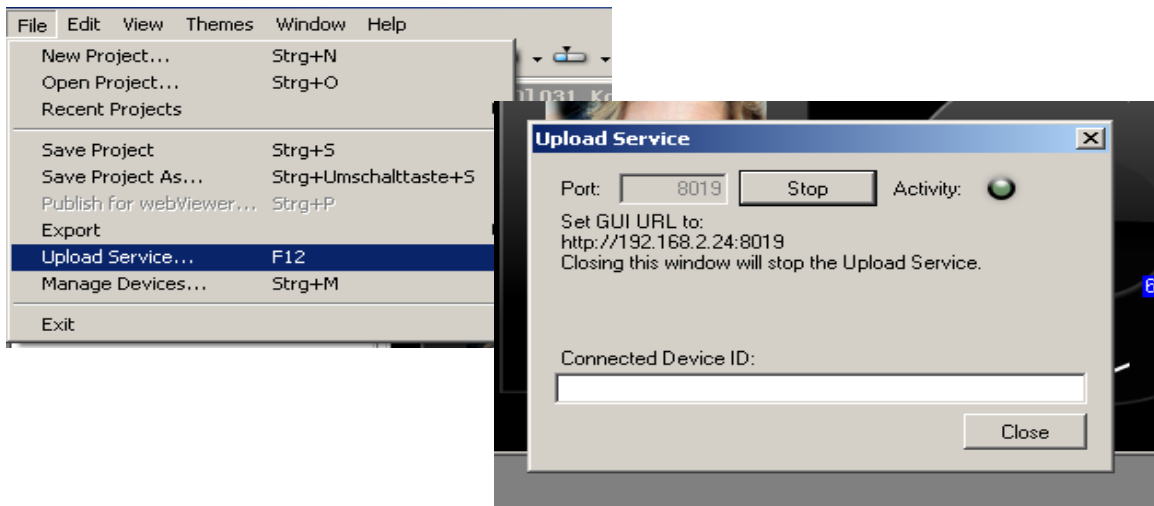
#### 4 Upload of the project to iPod / iPhone / iPad

1. Open the properties of the Smart Remote App at your iPhone / iPod Touch and insert the file URL from where the program should be uploaded. (IP address of the computer on which the JUNG Smart Remote Editor is installed). Turn the switch „Reload GUI file“ to „ON“.



The port for the project upload is independent of the communication port of the FAP (control system). This port is only used for the upload from the Smart-Remote-Editor onto the iPhone / iPod Touch / iPad.

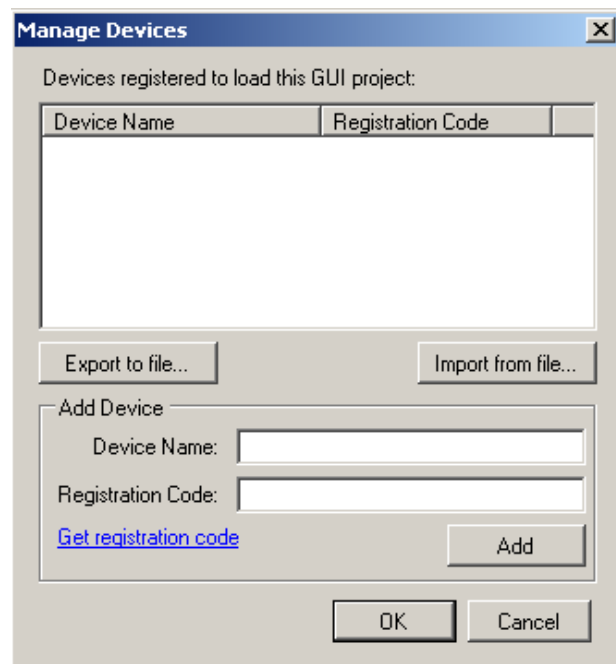
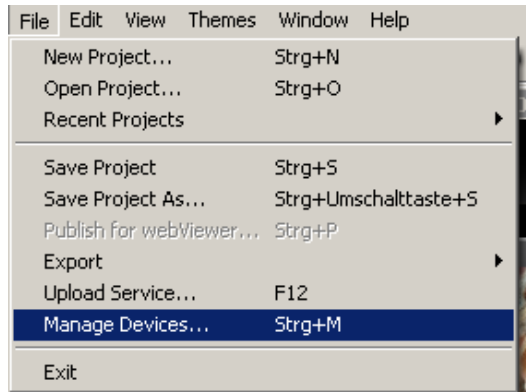
2. Start the Upload Service in the JUNG Smart-Remote-Editor. The string (UDID) in the window “Connected Device ID:” is used to generate a possible registration code and should be saved. This device ID you will find also in iTunes if the iPhone / iPod Touch / iPad are connected. To find it, please click on the line “serial number” on the tab “Overview”. Now it will display the Identification (UDID).



3. Start the JUNG Smart Remote at your iPhone / iPod Touch / iPad and the project will be uploaded indicated by the flashing green activity LED.
4. After the upload close the JUNG Smart Remote (Press the home button at your iPhone / iPod Touch iPad) and switch the „Reload GUI File“ button in the settings to „OFF“, otherwise it will try to upload a GUI again when the Smart Remote is started next time.

- You only need a registration code (license fee) for using an interface with multiple pages. This code you request with the device-UDID per device. The registration must be added to the project (File - Manage devices). Device-ID = enter device name and registration code, click “add” save the project and upload it, as described above. For using a project with multiple devices all registrations have to be added.

The registration code of a device is valid for a random number of projects, whereas only one project could be uploaded to the relative device. Registrations can be saved via the button “Export to file“. This allows time-saving working on new projects for a group of already registered devices. Check the device-ID carefully, before you send a request for registration !



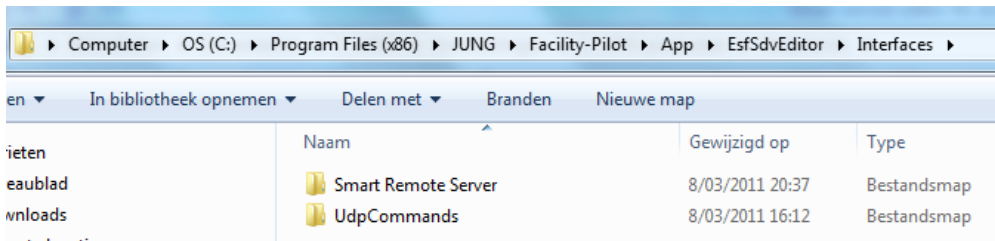
5 Facility Pilot – Smart remote server.

The smart remote server is an interface that is added to the modular structure of the Facility Pilot via the Device Editor. We do this by inserting the files of the smart remote server in the system files of the Facility Pilot.

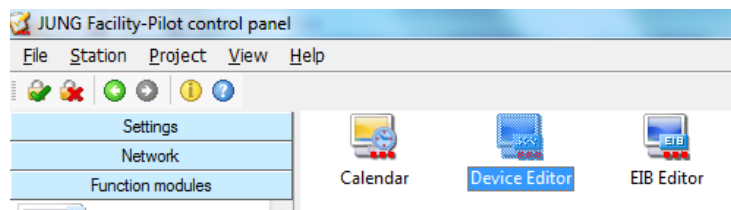
- Open windows explorer, and the following path:

C:\Users\Public documents\Facility-Pilot\App\EsfSdvEditor\Interfaces

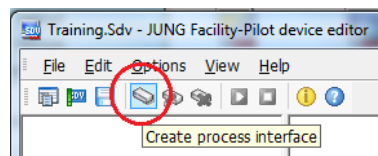
- In this folder we place the folder “Smart remote server”, that contains all the information for the interface with iPod/iPhone/iPad.



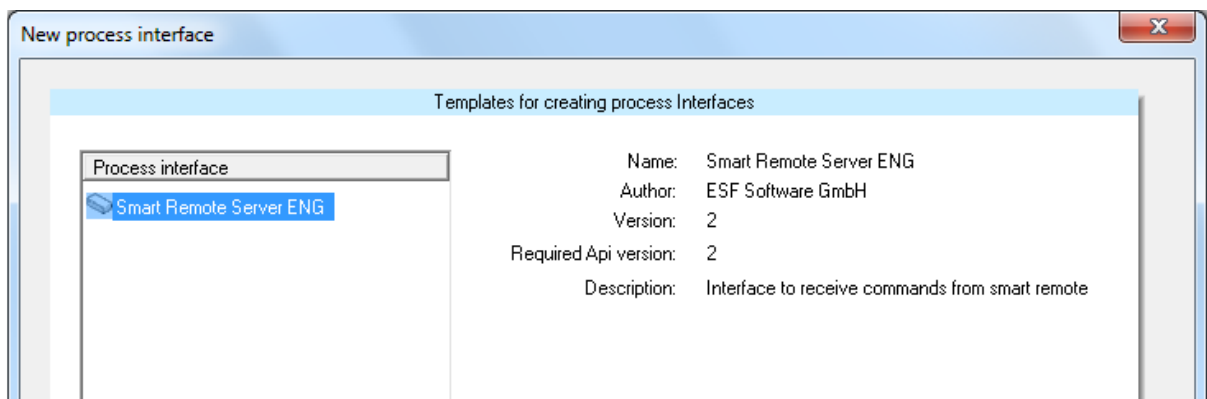
- Next we open the control panel of the Facility Pilot and the device editor, where we create a new project.

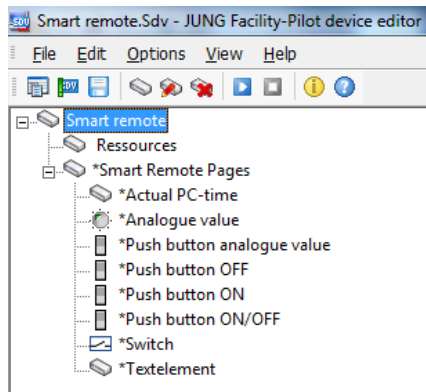


- In this project we add a new interface with the tool “Create process interface”.



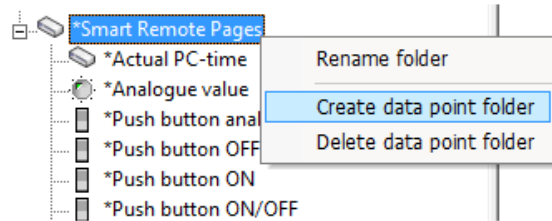
- We chose the Smart Remote Server, and confirm with “Create”, next we give in a name for the new interface.





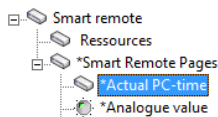
A basic set of datapoints is automatically generated.

With a right click on the interface, we can always add new datapoints of every type.



### 5a. Actual PC time

With this datapoint, the actual PC time is send out over a serial join, in order to show it in the iPod/iPad visualization.



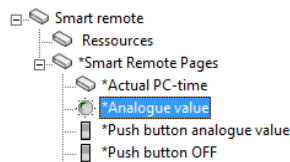
No.	Name	Type	Value	Export	Save	Access	
1	Format	Text		<input type="checkbox"/>	<input checked="" type="checkbox"/>	None	Format for date / time
2	s?	Text		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Read	Actual PC time as text

### 5b. Analogue value

The datapoint “Analogue value” is connected with an analog join, that can send and receive values to the iPod/iPad visualization. During a movement of the slider, the actual value is indicated in the field “Actual value”. When releasing the slider, this value is written in the field a1 en passed further to the process model of the Facility Pilot.

The datapoint d1 indicates if the slider is in use or not, and with the option “Send when released” the actual value is only copied to a1 when releasing the slider.

The maximum and minimum value determine the range of the slider, and are essential.



No.	Name	Type	Value	Export	Save	Access	
1	a10	Analog		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Analogue datapoint
2	Actual value	Analog		<input type="checkbox"/>	<input checked="" type="checkbox"/>	None	Actual value
3	d10	Binary		<input type="checkbox"/>	<input checked="" type="checkbox"/>	None	Signalizes push/release
4	Maximum	Analog	100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Maximum value
5	Minimum	Analog	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Minimum value
6	Send when released	Binary	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None	Controls sending

### 5c. Analogue push button

With the analogue push button, a digital join is converted to an analogue value. With this datapoint a different value is given to the process model by pressing or releasing the push button.

No.	Name	Type	Value	Export	Save	Access	
1	d?	Analog		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Write	Push button, sends analogue value at ON and OFF
2	Value for 0	Analog		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Value to send for 0
3	Value for 1	Analog		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Value to send for 1

### 5d. Push button on, off, on/off

These datapoints are all connected with digital joins, and are only different in behavior.

This way a “push button off” will only send out a 0 after a command, a “push button on” only a 1, and a “push button on/off” a 1 when pressing and 0 when releasing.

No.	Name	Type	Value	Export	Save	Access	
1	d?	Binary		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Write	Push button, sends only OFF

### 5e. Textelement

This datapoint is connected with a serial join, and can send or receive text values to the iPod/iPad visualization.

No.	Name	Type	Value	Export	Save	Access	
1	s?	Text		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Text datapoint

### 5f. Switch

A switch changes its state after each impulse of the digital join. The option “Enable” authorizes the sending behavior to the process model, and must be at 0 when we just want a status indicator and not a command.

No.	Name	Type	Value	Export	Save	Access	
1	d?	Binary		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Switch, sends ON and OFF
2	Enable	Binary		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read/Write	Controls sending to process model