

ProteiStyl' Photo/Video Gallery Plugin for krpano.

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Documentation for Versions 2.3.x

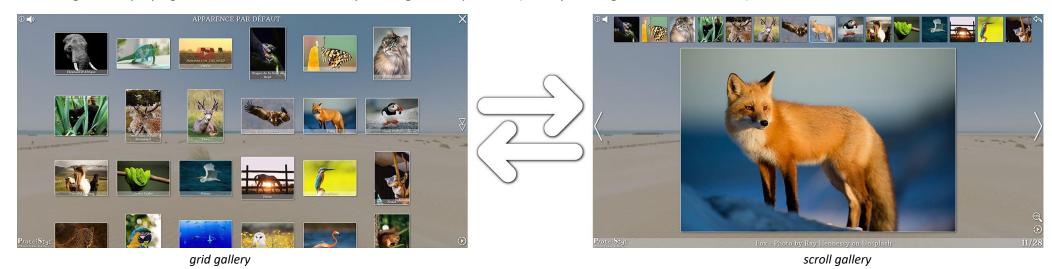
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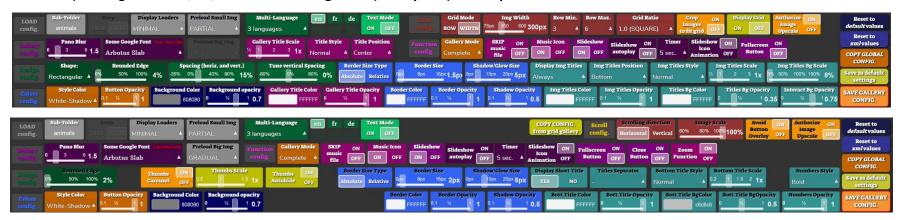
Short description

ProteiStyl' Photo/Video Gallery is a html5 plugin for krpano designed for displaying 'classic' photos and/or videos into a virtual tour.

The 'philosophy' of this plugin is to go over the classical "thumbnails + one-photo display" in a single layout. So the plugin offers two displaying modes: a grid gallery which displays only thumbnails but gives an overall vision of the pictures of the gallery, and a scroll gallery which display only enlarged images. Switching to a displaying mode to another is done by clicking on the pictures (and by clicking on the back button).



Another exclusive feature of this plugin is the possibility to customize almost all elements displayed on screen. Indeed, very different gallery appearances/ambiances can be easily created by using the EDITOR, which directly applies any changes of displaying parameters. Moreover, the EDITOR generates the corresponding xml code; so, almost no coding skills (for krpano) are required ©



Main Features

- Responsive layout for both grid gallery and scroll gallery.
- Video support in local hosting (built-in html5 player) and on-line video services (Vimeo, Youtube, other...) (see page 16).
- Advanced customization of the layout (positions, relative sizes, colors, opacity, and font for almost all the elements).
- Choose our preferred customization parameters by using an user-friendly graphical EDITOR. Generation of the corresponding xml by the EDITOR.
- Independent parameters for each gallery: very different gallery layouts can be used in the same tour.
- Can handle any size and ratio of image sources (automatic downscaling). In the scroll gallery, the images are (by default) never upscaled.
- Various orientation/ratio pictures can be used in a same gallery. Crop functionality can be used to make orientation/ratio uniform.
- Support of 3 image types: jpg (recommended), png and gif.
- 4 levels of resolution for source JPG/PNG/GIF images can be used: normal images (.ext) used for displaying enlarged images in the *scroll gallery*, thumbnails (_s.ext) used for displaying images in the *grid gallery*. On mobile devices, smaller images for mobile (_m.ext) used for displaying enlarged images in the *scroll gallery*, thumbnails for mobile (_ms.ext) used for displaying images in the *grid gallery*.
- Automatic generation of these 4 levels of resolution by using a DROPLET.
- Checking for existence of thumbnails and smaller images (if they are not existing, normal images are used instead). This checking is by default disabled. (If normal images are high resolution images, the existence of thumbnails is intensely recommended).
- Gradual preloading process of images; the default behavior is :
 - For the *grid gallery*: only thumbnails (_s.ext or _ms.ext) of the galleries present in the current panorama /scene needed for filling the displaying area are preloaded. The other thumbnails are gradually loaded when scrolling down the *grid gallery*.
 - For the scroll gallery: larger images (.ext or m.ext) are not preloaded (except the first image of the gallery); when opening an image from the grid gallery, the download of the image begins, then, on desktop devices, the 2 next and previous images are preloaded (on mobile devices, only the next image is preloaded).

 Preloading processes for grid gallery and scroll gallery can be independently activated/disabled (see page 14).
- Various ways for including galleries in the virtual tour (using layer, hotspot, map spot or scene) (see page 19).
- Virtually unlimited numbers of images per gallery; virtually unlimited numbers of galleries per pano/scene (possible hardware limitations cpu, memory from the playing device).
- Double image title management (short_title/second_title) with possibility to edit them within the EDITOR.
- Keyboard/mouse controls; Touch-sensitive controls.
- Helping messages (displayed once) with multi-language support (see page 11).
- Background music support (see page 15).
- Included slideshow function (automatic scrolling with customizable timer).
- Included zooming function.

Plugin Installation / Update

- krpano-1.20.7 minimum required (with an updated krpano license: https://krpano.com/buy/upgrade/)
- VIEWER installation: **Simply copy** the folder 'pspg_gallery_data' from the *example* into the main folder of your virtual tour.
- EDITOR installation: **Copy PSPG_EDITOR.html** from the *example* into the folder containing the html file of your tour (*modify if necessary the names of the .html files in lines 18*).

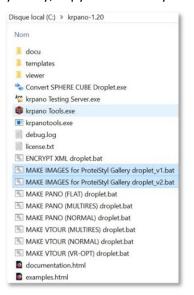
```
16
17 <body>
18 <iframe width="100%" height="100%" style="border-style: none;" src="tour.html?pspg_editor=true"> </iframe>
19 </body>
20
21 </html>
22
```

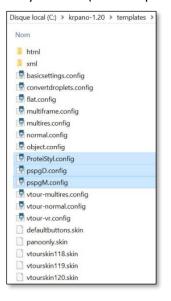
■ DROPLET 'MAKE IMAGES for ProteiStyl Gallery' (v.1 or v.2) installation:

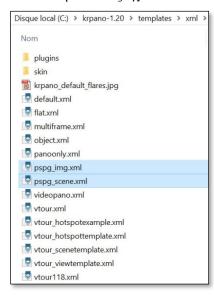
Copy the content of the folder DROPLET from the example into your local folder containing the krpano Tools (with merging the sub-folders 'templates' and 'xml').

For v.1 of the DROPLET (win and mac): modify the values for images sizes in the 2 files 'pspgD.config' and 'pspgM.config' (located in the sub-folder 'templates').

For v.2 of the DROPLET (only for windows): double-click on the DROPLET to modify the jpg compression and/or the image sizes (values after '-resize='). Important note: your source images needs to be larger to the size specified for 'large images for desktop', otherwise they will be oversampled! [If your images are already ready, copy them directly into a folder of your tour (for example in the default path: img/)].







Creation of a 'by default' gallery

1- Drag'n Drop the images you want to display in the gallery into the DROPLET 'MAKE IMAGES for ProteiStyl Gallery' (v.1 or v.2). This droplet will generate the 4 sizes for images in a created folder img/, and it will also generate a part of the xml code in the file img.xml (located in folder img/).

Important note: with the v.2 for windows, file names of the images do not must contain underscore ()

```
C:\WINDOWS\system32\cmd.exe
MAKE IMAGES for ProteiStyl Gallery droplet v2.0
 rpano makepano tool 1.20 - 64bit (build 2019-09-02)
 using config: ProteiStyl.config
Output: HTML5=no Flash=no
processing 1/26 - African Elephant
 - input: African Elephant.jpg (flat, size=4854x3859, fov=1.000x0.795)
 output: scene, tiles
  multires: tilesize=10000 levels=1 - 64x51
  making images...
  done.
processing 2/26 - Boyd's Forest Dragon
 - input: Boyd's Forest Dragon.jpg (flat, size=3102x4577, fov=1.000x1.475)
  output: scene, tiles
  multires: tilesize=10000 levels=1 - 64x94
  making images...
```

- **2-** Move the folder *img*/ into the main folder of your tour.
- **3-** Copy the code from the file *img.xml* in the main xml of your tour:
 - > The following line must be copied only once out of a scene:

```
<include url="%VIEWER%/pspg gallery data/xmlcrypt/start.xml" />
```

Optional code to be copied only once out of a scene (See also section 'Execute actions at the opening and/or at the closing of a gallery:' in page 11):

> Copy code for the opening gallery default button (to be copied into a scene elements):

```
<layer name="default_gallery_button" url="%VIEWER%/pspg_gallery_data/png/default_icon.png" align="lefttop" edge="lefttop" x="5"
y="5" scale="0.8" zorder="99" />
```

Modify the attributes of this button/layer as you want, or you can also create a hotspot, for example:

```
<hotspot name="my button for gallery" url="my gallery icon.png" ath="-25" atv="15" />
```

Copy code for gallery configuration (to be copied *into a scene elements*):

Set the appropriate value for the attributes open_button_type and open_button_name according the type of button you want to use to open the gallery. [In the examples above, the appropriate value are open_button_type="layer" open_button_name="default_gallery_button" and open_button_type="hotspot" open_button_name="my_button_for_gallery"].

If there are several galleries in the same scene/pano, set custom different values for the attributes 'name', for example: name="gallery1", name="gallery2"...

For single pano, this code can be placed anywhere (but into the krpano element!) in the xml.

For virtual tour, this code must be placed into the scene elements of the xml (if out of a scene the code will be skipped if keep="false" or not defined; see also section 'Use an identical gallery in several panoramas/scenes:' in page 19).

At this stage, the gallery is already fully included in your tour, but it uses 'only' the default values for all the attributes

(See also section 'Change default values of gallery attributes:' page 11).

You can then fully customize your gallery with the help of the EDITOR: see next page ⁽³⁾

Customization of the layout and functionalities of the gallery

1- Open **PSPG_EDITOR.html** using your favorite navigator (on desktop devices; the EDITOR was not designed to be used on mobile/tablet devices): the EDITOR is loaded just before your tour.

Click on a gallery opening button. The EDITOR will open automatically.

Note1: use the krpano Testing Server to overcome local-file restrictions of some navigators (Google Chrome, Mozilla Firefox, Microsoft Edge, ...)

<u>Note2:</u> when the EDITOR is loaded, an automatic process for loading all the xml files (needed for the full functionalities of the plugin) is activated. This process implies an (invisible) re-load of the first scene of the tour containing a gallery (the message 'WARNING: RELOAD DONE' is displayed in the console log).

In debug mode, the list of xml files loaded is also displayed in the console log.

- 2- Change the layout and the functionalities as you want by using the various buttons of the EDITOR;

 If you switch on 'Crop images to fit grid', you can individually change the crop settings by switching on 'Crop Mode' (green button). When 'Crop Mode' is ON, click on image then click & drag image to choose crop area (switch off 'Crop Mode' to return to normal behavior of the plugin).
- 3- Change optionally the texts by switching on 'Text Mode' (green button). When 'Text Mode' is ON, click on the titles/texts in order to change them.
- **4-** Optional step to create a set of default settings: after choosing your desired layout and functionalities, **click on 'Save as default settings'**, write a name for this settings set in the dialog box, the generated code is directly saved in an xml file named 'default_settings_pspg_myname.xml'. The code <include url="default_settings_pspg_myname.xml" /> is also copied into the clipboard in order to be easily pasted in the xml of the tour. (See also section 'Change default values of gallery attributes:' in page 11)
- 5- Optional step to see the all the various global settings: click on 'COPY: GLOBAL CONFIG.' to generate an xml code containing all the global settings; it is directly copied into the clipboard, then paste it in the xml of your tour (outside a scene element to apply these settings to all the scene of the tour) by replacing the (previously pasted) line <include url="%VIEWER%/pspg_gallery_data/xmlcrypt/start.xml"/>

6- Click on 'SAVE GALLERY CONFIG.' to generate xml code containing the settings of the current gallery; the generated code is saved in an xml file named 'pspg_your_gallery_name.xml'. The code <include url="pspg_your_gallery_name.xml" /> is also copied into the clipboard in order to be easily pasted in the xml of the tour. Paste it in the xml of your tour to replace the following lines:

```
<gallery name="your_gallery_name" ... >
...
</qallery>
```

Note: Only the attributes for which the values are different than the default ones are added in this generated code.

7- Save the xml of your tour... and it's done!

Size in Ko of the plugin

The total size of the 'pspg_gallery_data' is ~1.41Mo but not all the files contained in it are used by the plugin in the same time.

The nature, number and size of files loaded by the web browser are depending on the settings defined for a gallery; there is a chart that summarize the various total size (in Ko):

		only thumbs as functionalities	only thumbs + slideshow + zoom as functionalities	with full functionalities
license type	color of interface buttons			
	white	160	180	280
	white_shadow	198	251	352
branding free	white_glow	189	233	333
license	black	158	178	282
	black_shadow	194	237	341
	black_glow	200	254	358
	gray	160	179	278
	gray_shadow	195	249	349
	gray_glow	188	235	335
	white	179	199	299
	white_shadow	239	293	394
	white_glow	234	278	379
	black	177	197	301
normal license	black_shadow	233	276	380
(logo is loaded)	black_glow	248	303	407
	gray	175	194	294
	gray_shadow	234	289	388
	gray_glow	233	280	380

^{*} external video support + local video player + music support + slideshow support + zoom support + keyboard help displayed

So, with a branding free license, the size of the (player part of the) plugin is ranging from 158Ko to max. 358Ko

Keyboard/Mouse Controls

input	Action in grid gallery	Action in scroll gallery	Action in zoomed image
Mouse			
scroll wheel	Move up/down	Previous/Next image	Change zoom level / Quit zoom mode when zoom level is minimal
Keyboard			
enter ← □	Open scroll gallery (with the first image)	Open zoomed images (if possible) / Play video (if video and autoplay="false")	Return to scroll gallery
Esc	Close gallery	Return to grid gallery (or Close gallery if gallery_mode="scroll")	Return to scroll gallery
	Move up	Previous image	Move up/left image
$ \begin{array}{c c} \hline & \hline $	Move down	Next image	Move down/right image
+			Change zoom level / Quit zoom mode when zoom level is minimal
space	Play slideshow (from the first image)	Play slideshow (from the current image)	
M	Toggle Pause/Play background music		

Advanced customizations

Change default values of gallery attributes:

The default values are defined in the file 'default_settings.xml' (in the folder 'pspg_gallery_data'); this file contains several sets of settings: pspg_default, pspg_minimal, pspg_full. The default set is (of course) 'pspg_default'.

default_settings_name	Visual effect (borders, shadows)	Functionalities (slideshow, zoom,)
pspg_minimal	Not activated	Not activated
pspg_default	activated	Not activated
pspg_full	activated	activated

You can create new personalized sets within the EDITOR with the yellow button 'Save as default settings' (see step 4 in page 8).

Change the set of default value by using the global parameter 'default settings name':

For example: <pspg settings default settings name ="pspg minimal" />

Customize helping messages:

By default, the helping messages are not displayed (<pspg settings help duration="0"/>)

If you want displayed it, set your desired value (in sec.) for the display duration of helping messages by adding:

<pspg_settings help_duration="5" help_keyboard="false" />

Set help keyboard="true" to display keyboard controls during the helping message (always on 'false' on mobile devices) (default value is false).

How to add another language for the displayed messages:

All the messages displayed within the plugin are located in the file 'languages.xml' (located in the folder 'pspg_gallery_data').

You can modify it and/or add a new language: copy from an existing language, rename the node 'pspg_text_XX' where XX is the html language code of the new language, and then translate all the messages.

(It would be welcome to send the translated messages to contact@maelbathfield.net in order to be included in the next version of the plugin ©)

If the global parameter 'pspg_settings.language' is empty or not defined, the plugin uses the language of the browser (in debug mode, the detected language code is displayed in the console log). If the detected language does not exist in the file languages.xml, English messages are displayed by default.

When global parameter 'pspg_settings.language' is defined, it forces to use the specified language (but if it does not exist in the file *languages.xml*, English is again defined by default).

How to use multi-language support for gallery titles and images:

Add <mls ... /> nodes for each of the desired languages. You can also use the EDITOR to automatically add empty <mls ... /> nodes with the button 'Multi-language'.

• Example for gallery titles and/or info:

• Example for images titles:

WARNING: the structure of the nodes is modified by .

If no <mls ... /> nodes are defined for an image, the 'classic' attributes short title and second title are used as usual.

Execute actions at the opening and/or at the closing of a gallery:

Optionally, you can add some actions to be executed at the opening and at the closing of a gallery:

As example, there is series of actions that mask all elements of the interface (*from default vtourskin.xml*) what could be (partially) visible (if the background of the gallery is not 100% opaque):

```
<action name="enter_pspg_personalized_actions" scope="local">
skin_hideskin(instant); set(layer[skin_btn_show].visible,false);
set(layer[skin_btn_prev_fs_icon].visible,false); set(layer[skin_btn_next_fs_icon].visible,false);
</action>
```

There is series of actions that restore all the previously masked elements:

```
<action name="exit_pspg_personalized_actions" scope="local">
skin_showskin(instant); set(layer[skin_btn_show].visible,true);
set(layer[skin_btn_prev_fs_icon].visible,true); set(layer[skin_btn_next_fs_icon].visible,true);
</action>
```

You can add all customized actions what you want inside these two <action> elements ©

Customize *Depth/'Z' ordering* of the galleries:

To change Depth/'Z' ordering of the galleries from the default value (which is 10), add the following code line in your main xml:

```
<pspg settings zorder="10"/>
```

It set the zorder value for the background of the galleries (the max. zorder of a layer element within the gallery depends on the number of images).

Customize images path/folder:

To change images path/folder from the default value (which is img/), add the following code line in your main xml:

```
<pspg settings images path="my customized path/" />
```

This setting can be empty if images are directly in the root folder of the tour *or* if multiple folders are used. In latter case, full path must be noticed in the url attribute for each image:

```
<img name="img_Butterfly" url="path1/Butterfly.jpg" .../>
<img name="img_Deer" url="../path2/Deer.jpg" .../>
<img name="img Fox" url="path3/Fox.jpg" .../>
```

You can also arrange images for different galleries into various sub-folders. Define these sub-folders with the gallery attribute 'folder':

```
<gallery name="gallery1" open_button_type="layer" open_button_name="gallery_button1"
folder="animals" >
<img name="img_1" url="African_Elephant.jpg" short_title="African Elephant" second_title=" " />
...
</qallery>
```

Customize loading/preloading of images:

	gallery_mode="complete" (default mode)	gallery_mode="grid"	gallery_mode="scroll" **
preload_images="all" (default mode within the EDITOR)	All thumbnails images (_s.ext ou _ms.ext) are p of the panorama is finish		Same as opposite except if preload_images_scroll="true" (no thumbnails loading)
preload_images="true" (default value)	The thumbnails images (_s.ext ou _ms.ext) needed to fill the screen are preloaded when the loading of the panorama if finished. The other thumbnails are gradually loaded when scrolling the gallery down.		Same as above
preload_images="false"	The thumbnails images (_s.ext ou _ms.ext) needed to fill the screen are loaded only at the moment of the opening of the gallery. The other thumbnails are gradually loaded when scrolling the gallery down.		Except if preload_images_scroll="true", all thumbnails images (_s.ext ou _ms.ext) are loaded only at the moment of the opening of the gallery.
preload_images_scroll="true"	All normal images (.ext ou _m.ext) are preloaded after the opening of the grid gallery. (a white progress bar is displayed at the bottom of the screen)	-	All normal images (.ext ou _m.ext) are preloaded when the loading of the panorama if finished. (a progress bar is displayed on the gallery opening button)
preload_images_scroll="gradual" (default value)	Only the first normal image is preloaded after the opening of the grid gallery. In the scroll gallery, the 2 next and/or previous images are gradually preloaded. *	-	Only the first normal image is preloaded when the loading of the panorama if finished. The 2 next images are gradually preloaded.
preload_images_scroll="false"	Normal images (.ext ou _m.ext) are loaded only on demand.	-	Normal images (.ext ou _m.ext) are loaded only on demand.

^{*} for desktop; for mobile devices, only the next image is preloaded.

^{**} Except if preload_images_scroll="true", thumbnails images are loaded in order to display a preview image during the loading of the normal image.

How add background music for a gallery:

The plugin use the audio interface soundinterface.js from krpano (more info here).

To add a background music, just add the attribute music_file="my_audio_file.mp3" into a <gallery> element.

Music is play in infinite loop. It is automatically pause if a video is started.

A 'speaker' icon is displayed in top left of the screen, it provides a pause/play interaction.



[Add the attribute music icon="false" in order to not display this icon].

Optionally, if you want temporarily (3 sec.) display the music title and/or artist name alongside the 'speaker' icon, you can add music_title and/or music_artist attributes.

Example:

```
<gallery name="gallery1" open_button_type="layer" open_button_name="gallery_button1"
music_file="Myuu-TenderRemains.mp3|Myuu-TenderRemains.ogg" music_title="Tender Remains" music_artist="Myuu"
title="title_of_your_gallery"
</pre>
```

Important note: *if a sound interface is already set* in your virtual tour, the plugin will use this sound interface, but in order to correctly use it, it needs to be named 'soundinterface'.

Moreover, all music/sounds need to be in the same folder defined as rootpath of the sound interface (the parameter pspg_settings.music_path is skipped in such a case).

```
<plugin name="soundinterface"
    url.html5="plugins/soundinterface.js"
    preload="true"
    rootpath="%FIRSTXML%/sounds/"
    volume="1.0" mute="false"
    />
```

Another note1: identification name for the music played by the plugin is 'pspg_musicX' where X is the 0-based index of the gallery element (X=0 for the first gallery of the scene, X=1 for the second gallery of the same scene...).

Another note2: add the line <pspg_settings sound_interface="false" /> in order to disabled sound management by the plugin. In this case, the attributes music file, music icon, music title and music artist will be skipped.

Another note3: automatic playing of the music is disabled in EDITOR mode.

How to include a video into a gallery

Add the following line in your main xml: <include url="%FIRSTXML%/pspg_gallery_data/pspg_video_support.xml" /> (There will be an error message if video is detected and this line is missing)

Then, it is just needed to add the attribute 'video url' into any element.

Use of the built-in video player:

The video player is videoplayer.js, it is the one of krpano, see here for information about supported video formats.

Optionally, add the line <pspg_settings video_path="my_video_path/" /> (default path is "video/").

Use the url of the video file as value for attribute 'video_url'.

For example, if you want to play a mp4 video file located in the folder video (into the local root folder of your tour): video_url ="my_video_file.mp4"

Or with several formats: video url ="my video file.webm|my_video_file.mp4|my_video_file.mp3"

Other additional video attributes:

- video Hmax: Vertical max. resolution of the video (If not defined, the video window will not be limited in size).
- video ratio: Width/Height ratio of the video (If not defined, the default value is 16/9).
- autoplay="true": the video player is automatically loaded, then the playing of the video begins (if possible; some 'video autoplay' limitation exists on mobile devices and/or with some navigators).

Colors of the video control bar is automatically defined by the colors of gallery background (attributes 'g_bgcolor'et 'bgopacity') and images borders (attributes 'border_color_scroll' et 'border_opacity_scroll').

Use external in-line video services (Youtube, Vimeo, other...):

The external player is included into the plugin via an iframe.

Use 'service name: video code' as value for attribute 'video_url'.

For examples: Youtube video -> video_url="youtube:GId5nhK9y3Q"

Vimeo video -> video url="-vimeo-:14967518"

Other video service -> video url="-other-:x320nzq"

Player parameters and definition of the -other- service can be found in the 'external_videoplayer_settings.xml' file.

Other additional video attributes:

- video_Hmax: Vertical max. resolution of the video (If not defined, the video window will not be limited in size).
- autoplay="true": the video player is automatically loaded, then the playing of the video begins (if possible; some 'video autoplay' limitation exists on mobile devices and/or with some navigators).

Use the plugin as alone video player

The plugin can be use in video mode (gallery_mode="video") in order to be use as a player of alone video (only 1 element into the <gallery > element). This mode provides a minimalistic video player.

Exemple:

```
<layer name=" video1_button" url="video_icon.png"/>

<gallery name="video1" open_button_type="layer" open_button_name="video1_button"

title="Play Video"

gallery_mode="video"

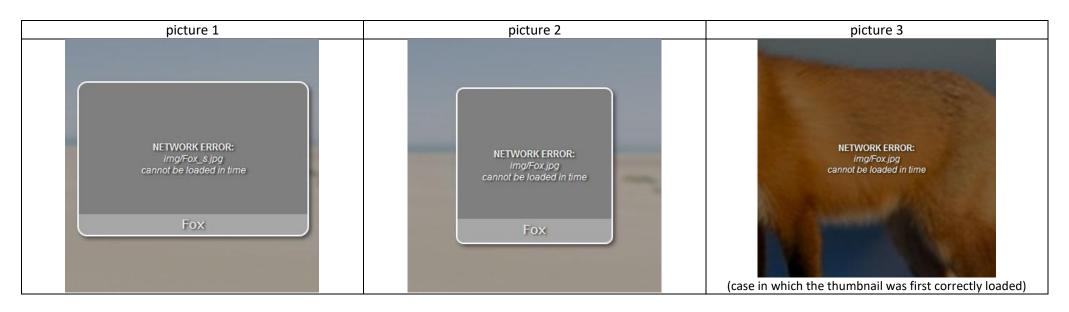
> 
<img name="video1" url="video_poster.jpg" video_url="video/fichier_video.webm" video_Hmax="720" autoplay="true" />
</gallery>
```

Customize loading time-out:

Set your desired value (in sec.) for the loading time-out by adding:

<pspg_settings load_timeout="30" /> (default value is 20 sec)

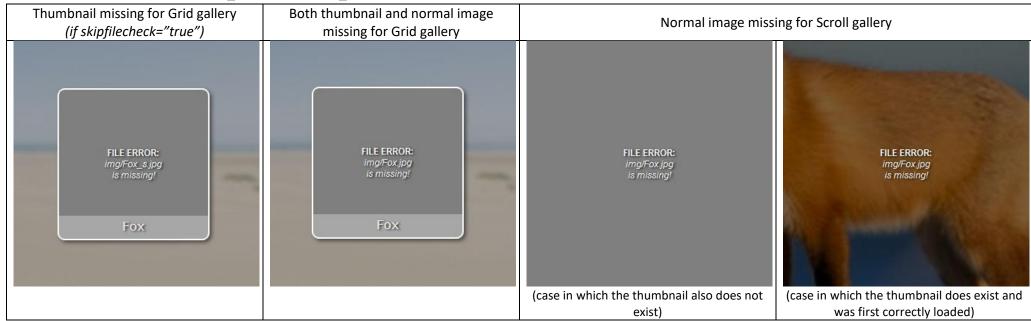
Type of gallery	Type of images loaded	Load time-out value defined by	With default value	Type of error message
	Thumbnails (_s.ext) or thumbnails for mobile (_ms.ext)	pspg_settings.load_timeout/3* (nbr of simultaneous loading + total img nbr/2 -1)/ (total img nbr/2)	7 sec. to 20 sec.	(if skipfilecheck="true") See picture 1 below
Grid gallery	Normal image (.ext) or normal image for mobile (_m.ext) (loaded if thumbnails do not exist and skipfilecheck="false")	pspg_settings.load_timeout* (nbr of simultaneous loading + total img nbr -1)/ (total img nbr)	20 sec. to 40 sec.	See picture 2 below
Scroll gallery	Normal image (.ext) or normal image for mobile (_m.ext)	pspg_settings.load_timeout*(nbr of simultaneous loading +2)/3 (generally 0 <nbr loading<5)<="" of="" simultaneous="" td=""><td>20 sec. to 40 sec.</td><td>See picture 3 below</td></nbr>	20 sec. to 40 sec.	See picture 3 below



Set spg_settings load_timeout="0" /> to disable any time-out (not recommended because it can cause plugin 'freezing' if some images cannot be loaded).

Error messages on missing images:

Independently to the setting of pspg_settings.load_timeout, if some images do not exist on the hosting server the following errors messages are displayed:



Use a map spot to open a gallery:

Create (dynamically) a map spot by adding in the action which create the spot (for example: skin_addmapspots in the default vtourskin.xml) the following: caller.addspot(spot_name, lat, lng, heading, false, null, null);
or
caller.addstylespot(spot_name, lat, lng, heading, spotstyle, false, null, null); (see here for more info).
(Replace the parameters spot_name, lat and lng by desired values).

Then, set open button type="spot" and open button name="spot name" to the gallery you want to open using this map spot.

Include a gallery as a scene:

Create a scene for displaying one of the image of the gallery as flat panorama (for example, by drag/dropping the image on the MAKE VTOUR (MULTIRES) droplet.bat of the krpano Tools).

Copy this scene in the xml of your virtual tour and add the attribute type="proteistyl gallery":

```
<scene name="gallery_as_scene" title="PHOTO GALLERY" type="proteistyl_gallery"
thumburl="panos/my image.tiles/thumb.jpg" lat="42.481885131" lng="3.839721680" heading="">
```

Then, add the code for the desired gallery into the scene. By this way, this gallery will be automatically open when starting the scene.

Note: if this scene contains several <gallery> elements, only the last one (in the order of the xml) will be used for the automatic opening of the gallery.

Use an identical gallery in several panoramas/scenes:

Place a gallery element outside the scene elements and set the attribute 'keep' to true:

With keep="true", gallery data will not be deleted when changing scene.

Use an identical button/layer to open different galleries:

Because <gallery> elements located in <scene> elements are independent from the others, a same name of layer/button can be used for the attribute 'open_button_name' of several galleries located in different panos/scenes. So, by creating a layer/button with this name (and with the attribute keep="true"), at every scene change, this button will be automatically linked to the gallery located in the current pano/scene.

Open a gallery via JS action:

```
Follow the instructions to correctly 'activate' the krpano Javascript Interface <a href="here">here</a>. 
JS action to open a gallery when its name is known:
```

```
function openGalleryByName(galleryname)
 if (krpano)
   var galleryOpen = krpano.get("galleryOpen");
     if (galleryOpen)
     krpano.call("hide pspg gallery(get(activeGallery));");
     setTimeout(function () { krpano.call("show pspg gallery(get(gallery["+ galleryname +"].index));"); }, 300);
     else
     krpano.call("show pspg gallery(get(gallery["+ galleryname +"].index));");
JS action to open a gallery when its index is known:
function openGalleryByIndex(galleryindex) {
 if (krpano)
   var galleryOpen = krpano.get("galleryOpen");
     if (galleryOpen)
     krpano.call("hide pspg gallery(get(activeGallery));");
     setTimeout(function () { krpano.call("show pspg gallery("+ galleryindex +");"); }, 300);
     else
     krpano.call("show pspg gallery("+ galleryindex +");");
To be sure that the desired gallery is available in the current scene, use 'keep' attibute (see above).
JS action to close any opened gallery:
function closeGallery()
 if (krpano)
   var galleryOpen = krpano.get("galleryOpen");
     if (galleryOpen)
     krpano.call("hide pspg gallery(get(activeGallery));");
```

How mask the logo 'ProteiStyl':

A branding free license is required to automatically hide the logo 'ProteiStyl'. It also removes the link to the plugin web page from the contextual menu (right-click). It can be purchased <u>here</u>.

Other possible customizations:

- Values of gallery attributes can be modified manually if necessary (see complete description below).
- The files 'style.xml' and 'external_videoplayer_settings.xml' located in the folder 'pspg_gallery_data' are not encrypted, so their content can be modified if necessary.
- The .png files located in the folder 'pspg_gallery_data/png/' (images for interface buttons and others) can be replaced by customized files (if original resolutions and .png extension are kept).

Complete Description of Plugin Attributes

Global Attributes (affect all galleries).

The global settings 'pspg_settings' are generally defined once and located outside a <scene> element in order to affect all galleries in all the scenes of the virtual tour.

But they also can be included into a <scene> element in order to change the settings for the current scene (and it will affects all the galleries of this scene).

(nena e	settinas	attribute1="xx"	attribute2="xx"	\
<pre> < pspa s</pre>	settings	attributei="xx"	attributez="xx"	>

<pre> <pre> <pre>pspg_settings</pre></pre></pre>	attributer- xx	attributez- xx /	
Attribute name	Default value	Possible value/range	Description
load timeout	30	0 or >20	Load time-out for images loading.
load_timeout	30	0 01 >20	(See also 'Customize loading time-out:', page 17).
help_duration	0	Any value	Display duration of helping messages. Set to 0 to disable.
		,	('Customize helping messages:', page 11).
help_keyboard	false	true/false	true = display keyboard controls during the helping message.
images_path	img/	Empty or Any string finishing by /	Relative path of the image files
mages_path		Empty of Any string missing by 7	(See also 'Customize images path/folder:', page 13).
music_path	music/	Empty or Any string finishing by /	Relative path of the background music files.
	ŕ	1, , , , , , , , , , , , , , , , , , ,	(Attribute skipped if a sound interface is already set outside the plugin)
video_path	video/	Empty or Any string finishing by /	Relative path of the video files
zorder	10	0 – 99	Depth/ 'Z' ordering of the background of the galleries
20.00		0 33	(See also 'Customize Depth/'Z' ordering of the galleries:', page 13).
google_font	true	true/false	true = Automatically request fonts from Google server.
			(See also the gallery attribute 'titles_font' in page 26).
disable_current_the	umb true	true/false	true = deactivation of the thumb of the current scene to avoid to reload the same
			scene (it can induce a freezing of the galleries of the scene!).
thumb_name	skin_thumb_	Any string	Name of the layer defining the thumbs of your skin.

sound_interface	true	true/false	Set to 'false' to disabled sound management by the plugin.
_			(See also 'How add background music for a gallery:', page 15).
buttonscale_offset	1	0.1 – 5	Factor for changing the interface buttons scale (the size of the button cannot
buttonscale_onset	1	0.1 – 3	oversize the original size from the .png files).
			When fn_zoom='true', define the minimal value of image displayed ratio for which
			the zoom action is disabled and zoom icon is not displayed:
	80	0 – 100	0 = zoom function always disabled (almost identical as fn_zoom='false')
zoom_min	80	0 – 100	80 = if the image is displayed at a ratio above 80% of its original size, the zoom
			function is disabled.
			100 = zoom function never disabled.
			Relative size of the borders in the zoom window. Set to 0 in order to not display
zoom hordore sizo	5	>0	borders.
zoom_borders_size			(Color and opacity of the borders are defined by the attribute 'bottom_title_bgcolor' and
			'bottom_title_bgopacity')
icontip	true	true/false	true = display gallery title when mouse is onover gallery icon.
thumbs_scrollbuttons	true	true/false	true = display scroll buttons on the carousel thumbs (in the scroll gallery).
thumbs_scrollindicator	false	true/false	true = display scroll indicator below the carousel thumbs (in the scroll gallery).
	1.6.1	pspg_default / pspg_minimalist /	Define the set of default settings among the sets defined in the file
default_settings_name	pspg_default	pspg_full /or another created	default_settings.xml
		default settings	
		An html language code	If empty, it use the language of the browser. Otherwise, force to use a specified
language	empty		language; In both case, if the language does not exist in the file languages.xml,
		(cx cii, ii, ic, ac ,cs)	English is used by default.

Gallery Attributes

<gallery name="xx" attribute1="xx" attribute2="xx"... >

Attribute name (for gallery element)	Default value	Possible value or range (in the editor)	Description
name	No default value	Any string** beginning by a letter	Required attribute. Name of the <gallery> element.</gallery>
open_button_type	No default value	layer / hotspot / spot/none	Required attribute. Type of button used to open the gallery. layer / hotspot = use a layer / hotspot to open the gallery. spot = use a map spot to open the gallery (the layer defining the map must be named 'skin_map', which is the default name in the vtourskin.xml). Set display_preload="false" (see below) if spot is chosen. none= do not use any button to open the gallery (for opening via JS action)
open_button_name	No default value	-	Required attribute (except if open_button_type="none"). Name of the layer/hotspot/spot used to open the gallery. The plugin will automatically set the appropriate onclick and onhover actions to the corresponding layer/hotspot/map spot.
folder	empty	Any text name	Define a sub-folder located in the folder defined by <i>pspg_settings. images_path</i> for the relative path of the image files. (See also 'Customize images path/folder:', page 13).
title	empty	Any html text	Title of the gallery displayed on top of the gallery, and also displayed as tooltips when mouse is onhover the corresponding gallery button.
info	empty	Any html text	Gallery attribute in order to display complementary information about the gallery. An icon 'info' appears on the left top when this attribute exists.

music_file	empty	Any string finishing by .mp3/.mp4/.ogg/.wav	Name of audio file for background music. (see also 'How add background music for a gallery:' page 15)
music_icon	true	true/false	False = do not display the 'speaker' icon (on top left). (see also 'How add background music for a gallery:' page 15)
music_title	empty	Any html text	Title of background music.
music_artist	empty	Any html text	Artist/author of background music.
style_color	white_shadow	white/white_shadow/ white_glow/black/ black_shadow/black_glow/ gray /gray _shadow / gray_glow	Define the color and the style of the interface icons.
keep	false	true/false	true = keep the gallery element when changing scene. false = do not keep the gallery element when changing scene. (see also 'Use an identical gallery in several panoramas/scenes:', page 19)
preload_images	true	all/true/false	all = enabled thumbnails <i>complete</i> preloading process for the grid gallery. true = enabled thumbnails <i>partial</i> preloading process for the grid gallery. false = disabled thumbnails preloading process for the grid gallery. (attribute skipped if gallery_mode="scroll" and preload_images_scroll="true"). (See also 'Customize loading/preloading of images:' in page 14)
display_loader	false	true/false/never	true = Display preload message and rotating loaders. false = Display only one rotating loader. never = nothing is displayed when loading images.

			true = for a faster download, skip the checking for the existence of _s images, _m images and
skipfilecheck	true	true/false	_ms images before trying to load them.
Skipineeneek	truc	trac, raise	Set to 'false' if you do not use smaller _s images, _m images and _ms images.
			complete = use full functionality of the plugin.
			grid = use/display only the grid gallery (for showing only small images).
			scroll = use/display only the scroll gallery (can be more adequate for showing only few images,
gallery_mode	complete	complete/grid/scroll/video	which do not require a grid layout). In this case, the preload process loads directly larger images
			(.ext or _m.ext).
			video = video mode (see 'Use the plugin as alone video player ' page 17; not available in the
			EDITOR).
blur_value	1.5	0 – 6*	'Blur level' by pp_blur.js to blur the pano in the background of the gallery. Set to 0 to not use it.
button_opacity	1	0.1 – 1	Opacity of the interface buttons (close, scrolling, slideshow,fullscreen).
			Font used to display gallery title, image titles and image numbers.
			List of some Google fonts available in the Editor:
		any html compatible font	- 4 Serif fonts: BioRhyme; Gentium Basic; Arbutus Slab; Suez One.
titles_font	Arbutus Slab,	[see	- 4 Sans Serif fonts: Raleway; Nunito; Montserrat Alternates; Seymour One.
_	serif	https://fonts.google.com/ for	- 4 Display fonts: Almendra Display; Oregano; Skranji; Corben.
		using Google fonts]	- 4 Handwriting fonts: Caveat; Dancing Script; Merienda; Berkshire Swash.
			- 4 Monospace fonts: Source Code Pro; Nova Mono; Ubuntu Mono; Cousine.
			(See also the global setting 'pspg_settings.google_font' in page 22).
title_scale	1	0.33 – 3*	Scale for adjusting size of gallery title.
Ctitle nec	contor	left/ halfleft/ center/	Position of the gallery title on top of the grid gallery.
Gtitle_pos	center	halfright/ right	Note: gallery title is displayed on top of the scroll gallery only when gallery_mode="scroll".

Gtitle_style	normal	normal/italic/bold/italic-bold	Style for the gallery title.
title_color	0xFFFFFF or 0x000000	any html hex. color	Text color for the gallery title. The default color (white or black) depends on the value of the attribute 'style_color'.
title_opacity	1	0-1	Text opacity for the gallery title. Set to 0 to mask gallery title.
fn_slideshow	true	true/false	true = Enabled the slideshow functionality and show play button (on right bottom of the screen).
slideshow_time	3	1 – 10* (sec.)	Timer in second for the slideshow.
silucsilow_time	3	1 – 10 (sec.)	Note: Any action executed after 1 cycle timer will stop the slideshow.
slideshow_autoplay	false	true/false	true = the slideshow is automatically started when entering in the scroll gallery.
slideshow_anim	true	true/false	true = the play button is converted in a pause animated button when slideshow is playing.
Siluconori _u.iiii	acsnow_annin true	tracy raise	false = the play button is only convert in a pause button.
g_bgcolor	0x808080 or	any html hex. color	Color of the background of the gallery.
5_25000	0x404040	any namina. color	The default color (dark grey or darker gray) depends on the value of the attribute 'style_color'.
bgopacity	0.7 or 0.85	0 – 1	Opacity of the background of the gallery. Set to 0 to mask background.
bgopacity	0.7 01 0.05	0-1	The default value depends on the value of the attribute 'style_color'.
display_FSbutton	false	true/false	true = display fullscreen icon at the bottom right of the screen.
aispiay_i soutton	iaise true/taise	false = do not display fullscreen icon at the bottom right of the screen.	

^{*} it is always possible to set manually a value out-of-range of the editor if necessary. ** but cannot contain any brackets [or].

Attribute name (for gallery element)	Default value	Possible value or range (in the editor)	Description		
		Attribu	ites for the 'grid gallery'		
showtext	empty	empty Any html text Use the <u>showtext plugin</u> to display a small text when mouse is onover the thumbnails.			
fixed_length	true	true/false	true = width of thumbnails in the grid gallery is set according to the attribute "maxlenght" independently to the width of the screen. The number of rows varies in respect to the width of the screen. false = The number of rows in the grid gallery is set according to the attribute "column_nbr" independently to the width of the screen. The width of thumbnails varies in respect to the width of the screen.		
maxlength	300	75 – 600* (pixels)	Width in pixels of thumbnails in the grid gallery when fixed_length="true".		
column_nbr	6	2 – 20*	Number of rows in the grid gallery when fixed_length="false".		
row_min	3	2 – 6*	When fixed_length="true" , minimal number of rows displayed in the grid gallery: if the width of the screen is too small to display this minimal number of rows with the thumbnails width determined by the attribute " maxlenght ", so the width of thumbnails is decreased accordingly. (attribute skipped when fixed_length="false")		
row_max	6	3 – 16*	When fixed_length="true" , maximal number of rows displayed in the grid gallery.		
ratio	1	0.25 – 4*	Ratio width/height of cells of the grid. List of ratio available in the Editor: 4.0, 3.0, 2.5, 2.0 (Panoramic), 1.5 (Landscape), 1.0 (Square), 0.75 (Portrait), 0.5 (Vertical pano), 0.4, 0.33, 0.25.		
croptofit	false	true/false	true = crop source images to fit the ratio of the grid cells.		

upscale_enabled	true	true/false	true = enable upscale of source images in case of lack of resolution.
shape	rectangular	rectangular/square/circle	Shape of the displayed image. In the Editor, select square will automatically set ratio="1", croptofit="true" and lock rounded="0"; select circle will automatically set ratio="1", croptofit="true" and lock rounded="100"; select rectangular will automatically unlock the attribute "rounded" but changing manually the attribute "shape" will not change anything.
rounded	4	0 – 100	Relative level (in respect to the minimal dimension of the image) for rounded edge of the thumbnails. $0 = \text{squared edge; } 100 = \text{half-circle.}$
spacing	15	-35 – 80	Define the relative spacing (in respect to width of cells). Affect both horizontal and vertical spacing between thumbnails. Negative value = overlaying of thumbnails. 0 = no space between thumbnails. 50 = width of thumbnails is half the one of the cells.
line_space	0	-80 – 80	Tune only vertical spacing between thumbnails by defining vertical space between cells. Negative value = vertical overlaying of cells (if spacing="0"). 0 = no vertical space between cells (if spacing="0"). Positive value = defining vertical space between cells (if spacing="0").
border_type	absolute	absolute/relative	absolute = border size will be a fixed number of pixels (determined by the attribute "border_size"). Adequate setting for thin border of few pixels relative = border size will be relative to cell sizes (adequate setting for large border, in which thumbnail title can possibly be displayed).
border_size	1.5	0 – 16*px OR 0 – 25*%	Size of border of thumbnails. (in pixels or % according to value of "border_type").

			Set to 0 to mask border.
border_color	0xFFFFFF or 0x000000	any html hex. color	Color of border of thumbnails. The default color (white or black) depends on the value of the attribute 'style_color'.
border_opacity	1	0.1 – 1	Opacity of border of thumbnails.
shadow_blur	5	0 – 20*	Shadow/Glow size (in pixels). Set to 0 to mask shadow/glow for thumbnails.
shadow_opacity	0.5	0-1	Opacity of shadow/glow.
display_image_title	always	never/ oninteraction/ always	always = permanently display a short title on thumbnails. oninteraction = display short title only when mouse is onover thumbnails. never = never display short title.
image_title_pos	bottom	top-out/top/ halftop/center/halfbottom/ bottom/bottom-out	Position of the short title on the thumbnails. top/ halftop/center/halfbottom/ bottom = title inside the thumbnails top-out, bottom-out = title inside the border of thumbnails (requiring border_type="relative" and border_size>4%).
image_title_style	normal	normal/italic/bold/italic-bold	Style for the thumbnail titles.
image_title_scale	1	0.33 – 3*	Scale for adjusting size of thumbnail titles.
image_title_bgscale	8	5 – 150	Relative height of background of thumbnail titles (in respect to thumbnail height) 50 = the background covers ~50% of the thumbnail 100 = the background covers the totality of thumbnail 150 = display background but mask thumbnail title (if image_title_pos="top" or "bottom")
image_title_color	0xFFFFFF or 0x000000	any html hex. color	Text color for thumbnail titles. The default color (white or black) depends on the value of the attribute 'style_color'.

image_title_opacity	1	0.1 – 1	Opacity for thumbnail titles (affect opacity of background).
title_bgcolor	0xFFFFFF (white)	any html hex. color	Color for background of thumbnail titles.
title_bgopacity	0.35 or 0.2	0-1	Opacity for background of thumbnail titles. The default value depends on the value of the attribute 'style_color'.
title_interact_opacity	0.75	0-1	Opacity for background of thumbnail titles when mousse in onover the images.

Attribute name (for gallery element)	Default value	Possible value or range (in the editor)	Description
		Attribut	es for the 'scroll gallery'
preload_images_scroll	gradual	true/gradual/false	true = enabled larger images preloading process for the scroll gallery. gradual = gradual preloading of images. false = disabled larger images preloading process for the scroll gallery. (See also 'Customize loading/preloading of images:' in page 14)
direction	horizontal	horizontal/vertical	Scrolling direction of the scroll gallery.
image_scale	100	20 – 100	Scale for tuning image displaying size. 100 = use maximum area available on screen to display image ; < 100 = use less area.
fn_zoom	false	true/false	true = enabled zooming possibility.
fn_thumbs	false (true if gallery_mode= "scroll")	true/false	true = display a carousel of squared thumbs in the top of the scroll gallery.
thumbs_scale	1	0.5 – 1.5	modify the size of the thumbs
thumbs_autohide	true	true/false	true = automatically reduce the alpha of the carousel (only on desktop device).
no_overlay	true	true/false	true = reduce image size for avoiding overlay of image with interface buttons (and with gallery title when gallery_mode="scroll"). false = interface buttons can sometimes be displayed over images (in particular with mobile devices).

display_closebutton	false	true/false	true = The close button from the <i>grid gallery</i> is kept. (the return button appears below it) false = The close button from the <i>grid gallery</i> is replaced with a return button in the <i>scroll gallery</i> . Note: The close button is always displayed when <i>gallery_mode="scroll"</i> (attribute skipped)
upscale_enabled_scroll	false	true/false	true = enable upscale of source images in case of lack of resolution. false = images will be displayed at their source size even if displaying area is bigger.
spacing_scroll	1.25	1-3	Set the space between images of the scroll gallery. 1 = minimum space; >1 = more space. (not available in the EDITOR)
rounded_scroll	2	0 – 100	Relative level (in respect to the minimal dimension of the image) for rounded edge of the image. 0 = squared edge; 100 = half-circle
border_type_scroll	absolute	absolute/relative	absolute = border size will be a fixed number of pixels (determined by the attribute "border_size_scroll"). Adequate setting for thin border of few pixels relative = border size will be relative to cell sizes (adequate setting for large border).
border_size_scroll	2	0 – 16* px OR 0 – 25*%	Size of border of images. (in pixels or % according to value of "border_type_scroll"). Set to 0 to mask border.
border_color_scroll	0xFFFFFF or 0x000000	any html hex. color	Color of border of images. The default color (white or black) depends on the value of the attribute 'style_color'.
border_opacity_scroll	1	0.1 – 1	Opacity of border of images.
shadow_blur_scroll	8	0 – 20*	Shadow/Glow size (in pixels). Set to 0 to mask shadow/glow behind images.
shadow_opacity_scroll	0.5	0-1	Opacity of shadow/glow.
display_short_title	true	true/false	true = use <i>short title</i> in the 'bottom title'.

			false = do not use <i>short title</i> in the 'bottom title' (only the secondary title).
bottom_title_symbol	-	none [br] ;	Separator symbol between the short title and the second title (only if display_short_title='true')
bottom_title_scale	1	0.33 – 3*	Scale for tuning size of image titles displayed below images, and size of image numbers. The titles by default are: <i>short title - second title</i> (see element attribute below).
bottom_title_style	normal	normal/italic/bold/italic-bold	Style for the 'bottom title'.
bottom_title_color	0xFFFFFF or 0x000000	any html hex. color	Text color of 'bottom title' and image numbers. The default color (white or black) depends on the value of the attribute 'style_color'.
bottom_title_opacity	1	0-1	Opacity of 'bottom title'. Set to 0 to mask 'bottom title'.
bottom_title_bgcolor	0xc6c6c6 or 0x808080	any html hex. color	Color of background of 'bottom title'. The default color depends on the value of the attribute 'style_color'.
bottom_title_bgopacity	0.5 or 0.25	0-1	Opacity of background of 'bottom title'. The default value depends on the value of the attribute 'style_color'.
numbers_opacity	1	0-1	Opacity of image numbers. Set to 0 to mask image numbers
numbers_style	bold	normal/italic/bold/italic-bold	Style for the numbers.

Images Attributes

Attribute name (for img elements)	Default value	Possible value/range	Description			
name	No default value	Any string** beginning by a letter	Required attribute. Name of the img elements			
url	No default value	Any string** finishing by .jpg/.JPG/.png/.PNG/.gif/.GIF	Required attribute. Name of image sources. Note: the folder path is defined by the parameter pspg_settings. images_path and the attribute 'folder' but set here full path in case of use of multiple folders.			
short_title	url string without extension	Any html text	Set a custom short title to override the default value.			
second_title	empty	Any html text	Set a second title if necessary (displayed only in the scroll gallery).			
crop_x / crop_y	empty	-10 – 10	Horizontal/vertical shift of the cropping area of the image: Negative value = left/up shifting Null/zero value = no shift (centered cropping area) Positive value = right/down shifting (attribute skipped when croptofit="false").			
action	empty	Any krpano-xml action.	Action to be executed when clicking on the images only available when gallery_mode="grid".			
showtext	empty	Any html text	For the grid gallery only, use the <u>showtext plugin</u> to display a small text when mouse is onover the images. Override text defined in the attribute "showtext" of the gallery element.			
	Attributes for video support					

video_url	empty	'Local' url or video code.	See 'How to include a video into a gallery' in page 16
video Hmax	empty	Any value	Vertical max. resolution of the video.
_	. ,	·	If not defined, the video window will not be limited in size.
video_ratio	16/9	Any other value	Width/Height ratio of the video if different than 16/9.
video_radio	10/5	Arry other value	(attribute skipped for Vimeo, Youtube)
			true = the video player is automatically loaded, then the playing of the video begins (if
autoplay	false	true/false	possible; some 'video autoplay' limitation exists on mobile devices and/or with some
			navigators).

^{**} but cannot contain any brackets [or].

</gallery>