

3DVISTA ESPAÑA S.L.

3DVista Virtual Tour Suite

Quick Guide

3dvista

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INTRODUCTION

This tutorial will teach you the basics of creating multimedia virtual tours with 3DVista Virtual Tour Suite. The tours that you create can be viewed online and offline on any device and without the need of having any special software or plugins installed. Feel free to try out the program with our 30-days full-feature trial version – We´re sure, you´ll like it.

A **virtual tour** lets you see a place on screen in a way that is most similar to actually experiencing it in real life. Virtual Tours can generally contain many different types of media and tools, such as photos, panoramas, videos and audio. Technically, a virtual tour is the transformation of a flat panorama image into a spherical format. The virtual tour allows the viewer to walk virtually through your scenery using his computer, TV or mobile phone. Within this virtual tour you can show panoramas, videos, photos, floor plans or maps and you can play different sounds depending on where your viewer looks (immersive audio).

A **panorama** is a ‘flat’ photo with a wider field of view than standard photos (up to 360°). They are usually created by stitching multiple photos together (see picture below). This can be done with 3DVista Stitcher, which is included in 3DVista Virtual Tour Suite (but can also be bought separately for those who only want to create flat panoramas, rather than entire virtual tours).



Transformation of individual photos into flat panorama

In order to bring your panorama to life, it needs to be projected inside a sphere. This can be done easily with 3DVista Virtual Tour Suite. It allows you to create and publish a spherical virtual tour that will give your viewers the impression of actually being there - They can then pan around, look up, down, left and right, and feel like they´re actually in the middle of the scene. On top of that you can add interactivity, audio, photos, videos and much more to enrich the experience (find detailed infos in our video tutorial).



Spherical virtual tour (360 degrees)

Once you have created your virtual tour with 3DVista Virtual Tour Suite, you'll want to produce it as a local file or upload it to the internet for your audience to see. This process is called publishing. The individual steps are explained below (How to create & publish a basic virtual tour).

REQUIREMENTS

- Any camera will work. Depending on quality demands, we recommend the use of DSLR cameras
- Computer and 3DVista software: You can download a 30-days trial function with all functions from our website.
- Optional: Auxiliary material to facilitate photographic process
 - Panohead
 - Tripod
 - Fish-eye lens

No special skills or knowledge are required. The program is designed to be as intuitive as possible.

BEFORE GETTING STARTED

For every virtual tour project, you should create a folder, where you store individual photos, stitched panoramas and the files of the final virtual tour. We recommend you open My documents and create a new folder called as your project. You can, of course, name these folders whatever you like and place them anywhere on your computer system, the important thing is that the names mean something to you and you know where the files are for easy retrieval later.

We encourage you to play around and try out all the features in the program. There is nothing that you can do wrong! You can always check your changes right away with the preview button (explained below).

We will shortly be launching more than 20 video tutorials and FAQs on our website, so stay tuned for more detailed guides and tips.

Enjoy!

HOW TO CREATE & PUBLISH A BASIC VIRTUAL TOUR

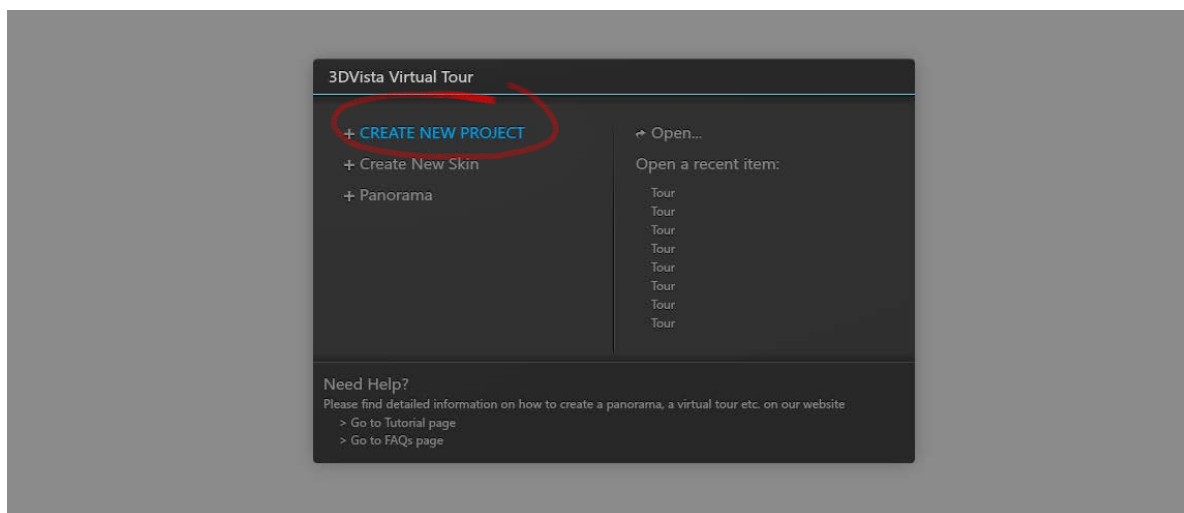
Step 1: Take pictures

Take several photos by turning around your own axis. The individual photos should overlap by approximately 20%. This is necessary for the program to find common *control points* between two photos, which are used to stitch them together. This is where the panohead comes into play because it will only let you rotate the camera up to the optimum point, making sure that you always maintain the right angle/distance between the photos. For more information on how to take the photos, watch our video tutorials.

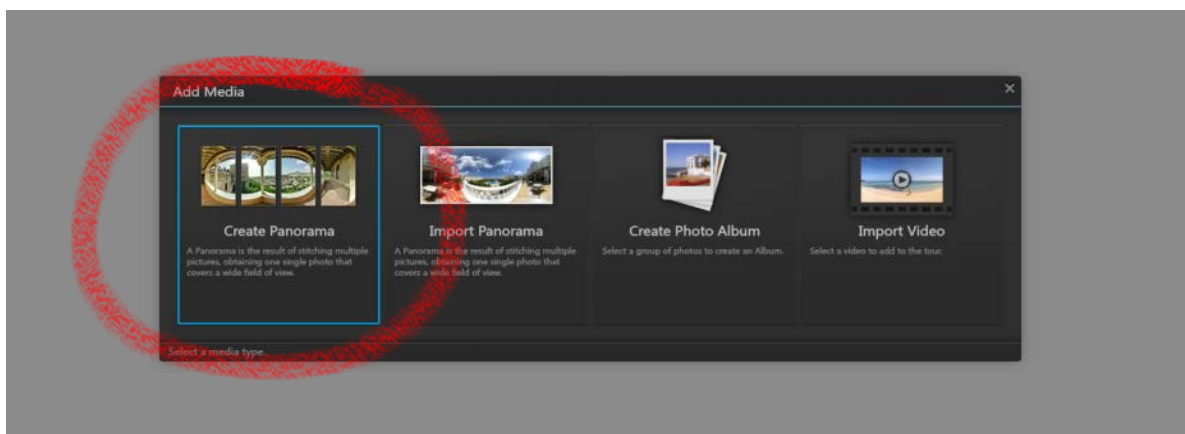
Store these photos in a folder on your computer.

Step 2: Open 3DVista Virtual Tour Suite

...and proceed as follows:



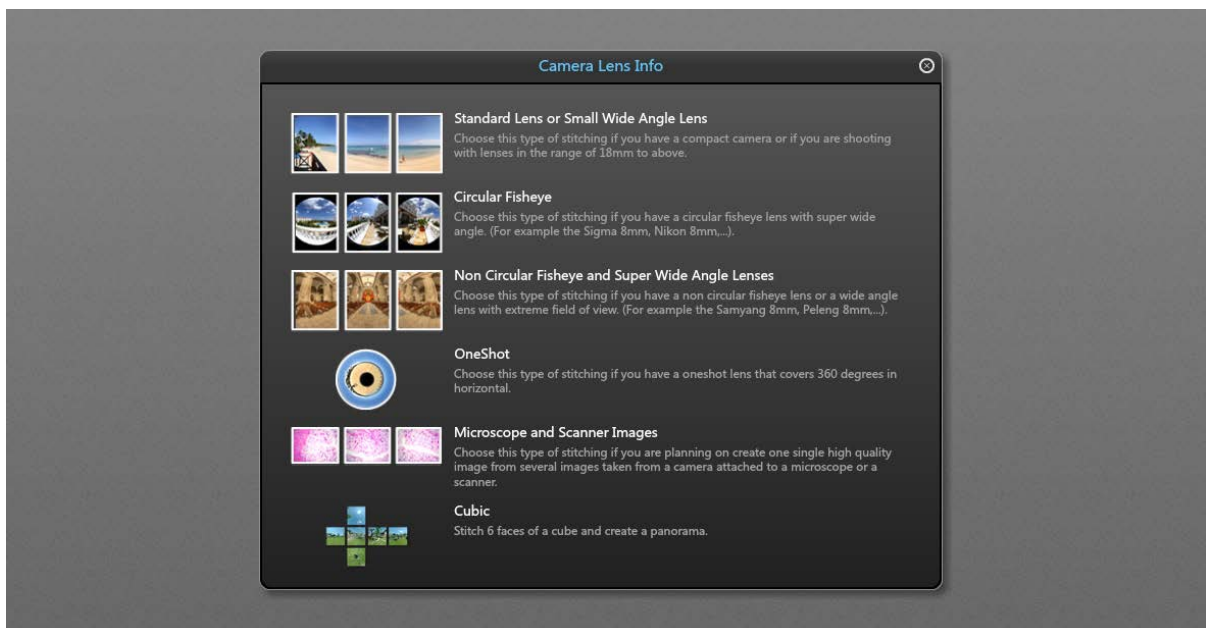
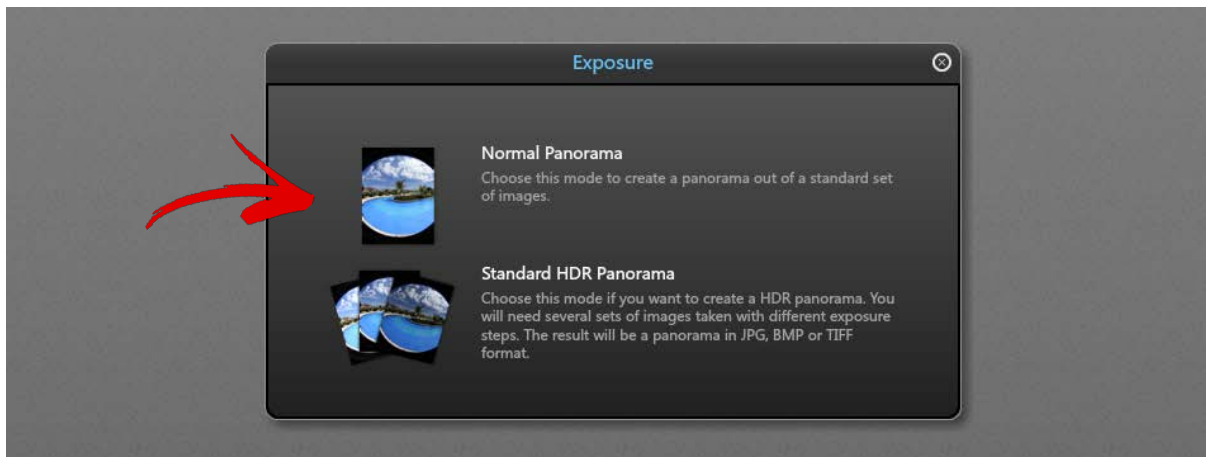
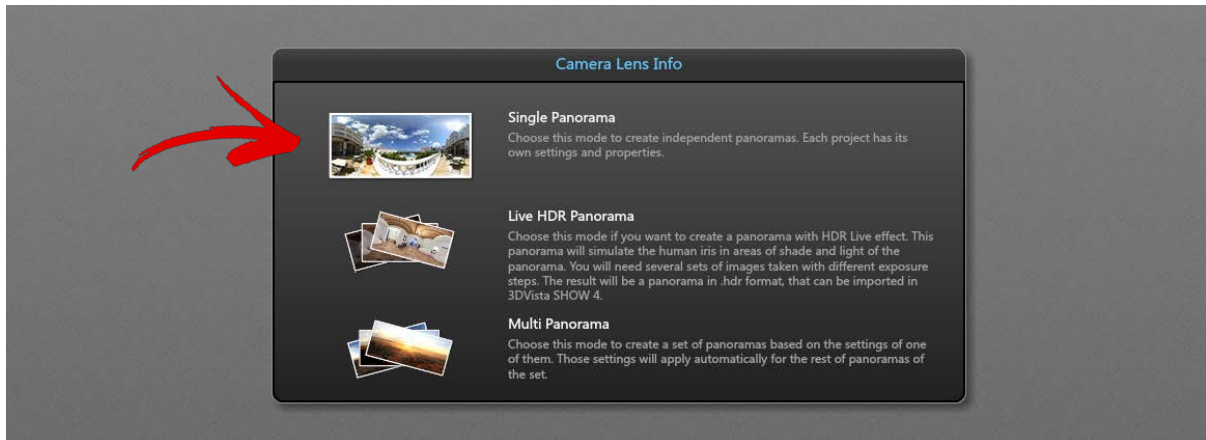
Click "Create new project".



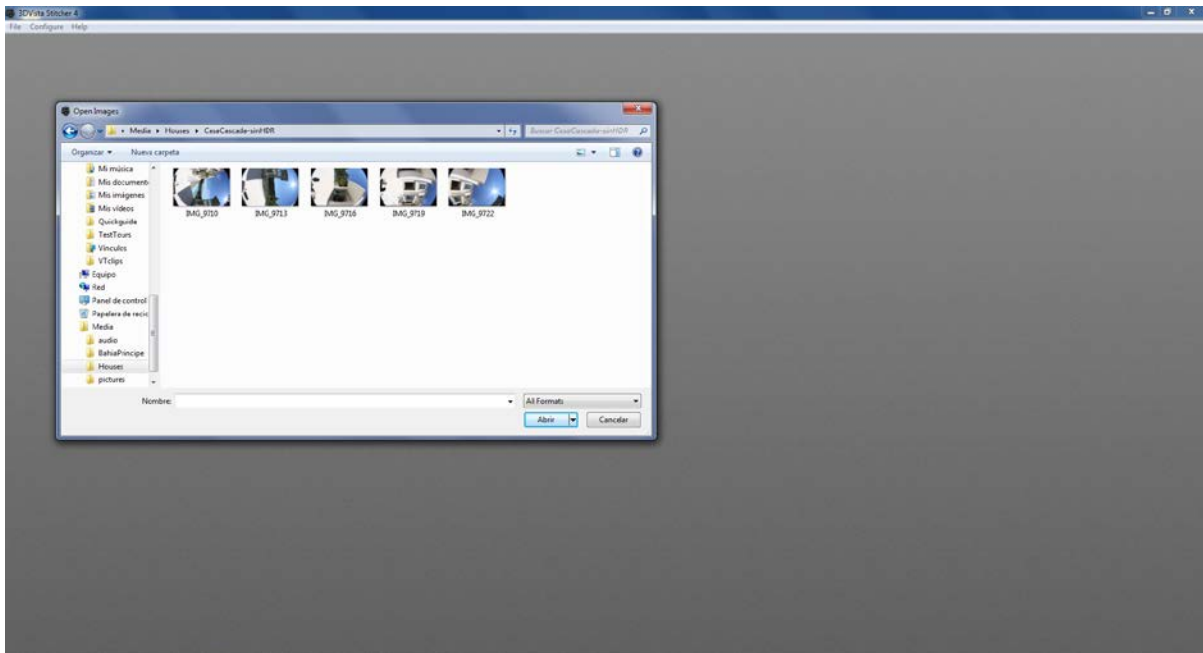
Click "Create Panorama", which will automatically open the integrated 3DVista Stitcher. Alternatively, select "Import panorama" if you already have a stitched panorama ready for importing.

Step 3: Stitch a panorama

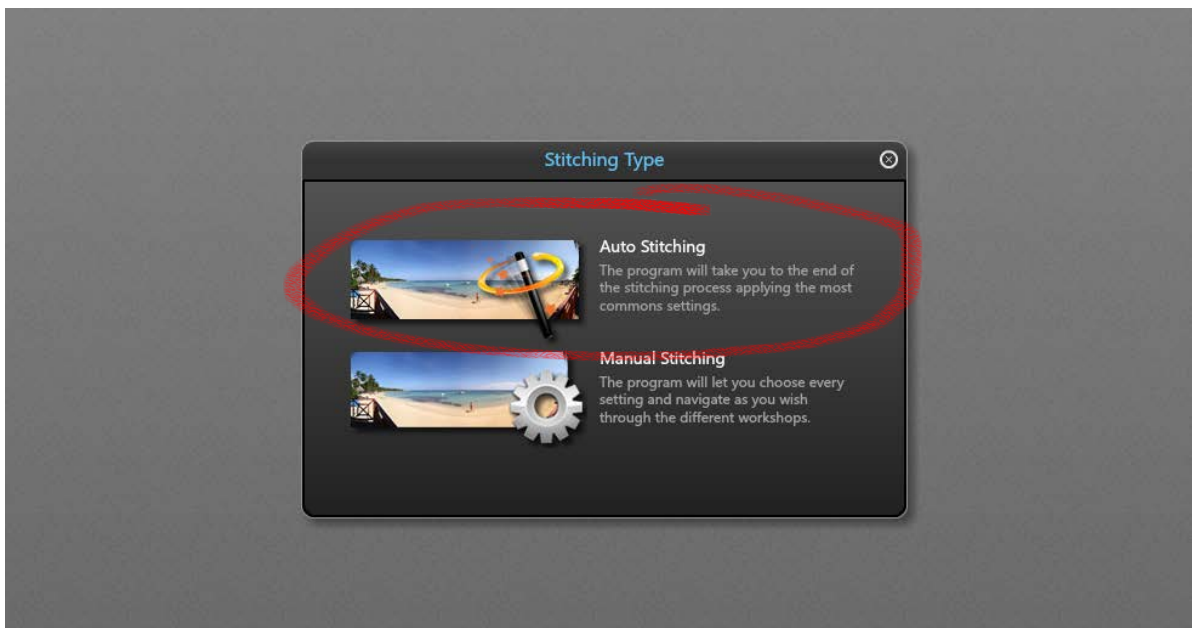
The following images refer to the option of creating a panorama (see above) and display the interface of the integrated 3DVista Stitcher. They show how to create a basic panorama.



Select the type of lens that you used when taking the photos. If you are not sure which lens you used, select "standard lens" or contact us and we'll help you: info@3dvista.com.



After having selected the lens type, this finder window (with the files that you have stored on your computer) will automatically open. Go to the folder where you stored the individual photos (see Step 1) and select those that pertain to the one panorama that you want to achieve (avoid selecting more or missing one). You can only create one panorama at a time, so make sure you select only those photos that pertain to one panorama. Depending on your lens type, this can be between x and y photos.

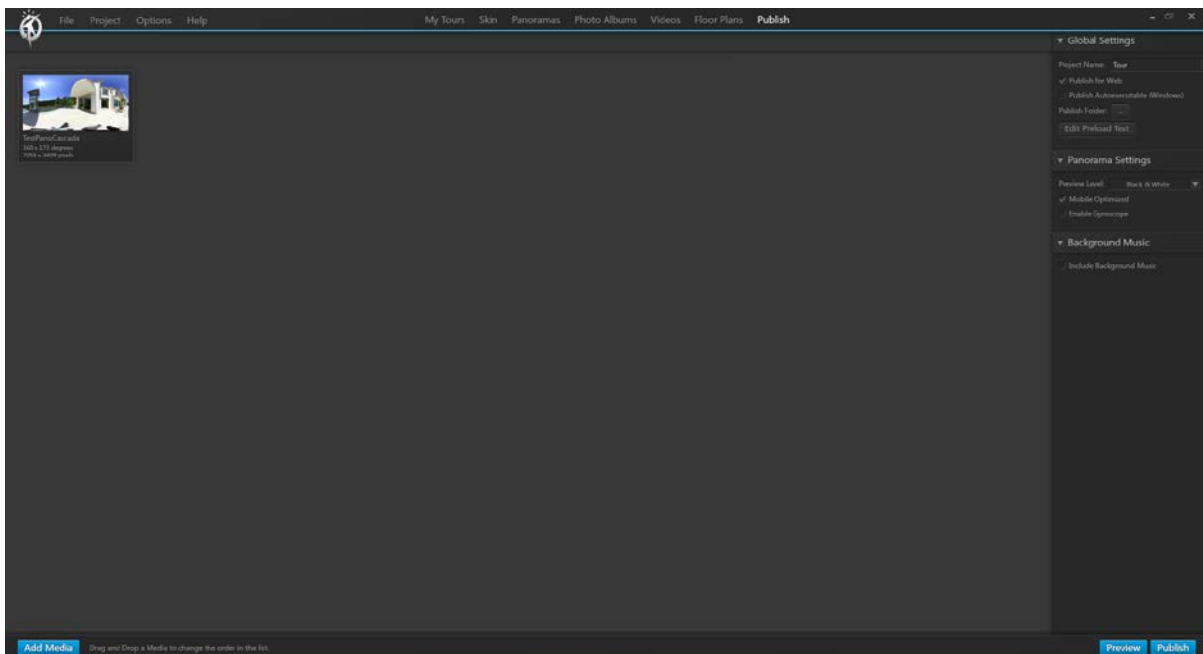


By selecting "Auto Stitching", the program will automatically calculate where your photos overlap and stitch them together accordingly. After a couple of moments, the final result will show and that's it - you have your panorama ready!

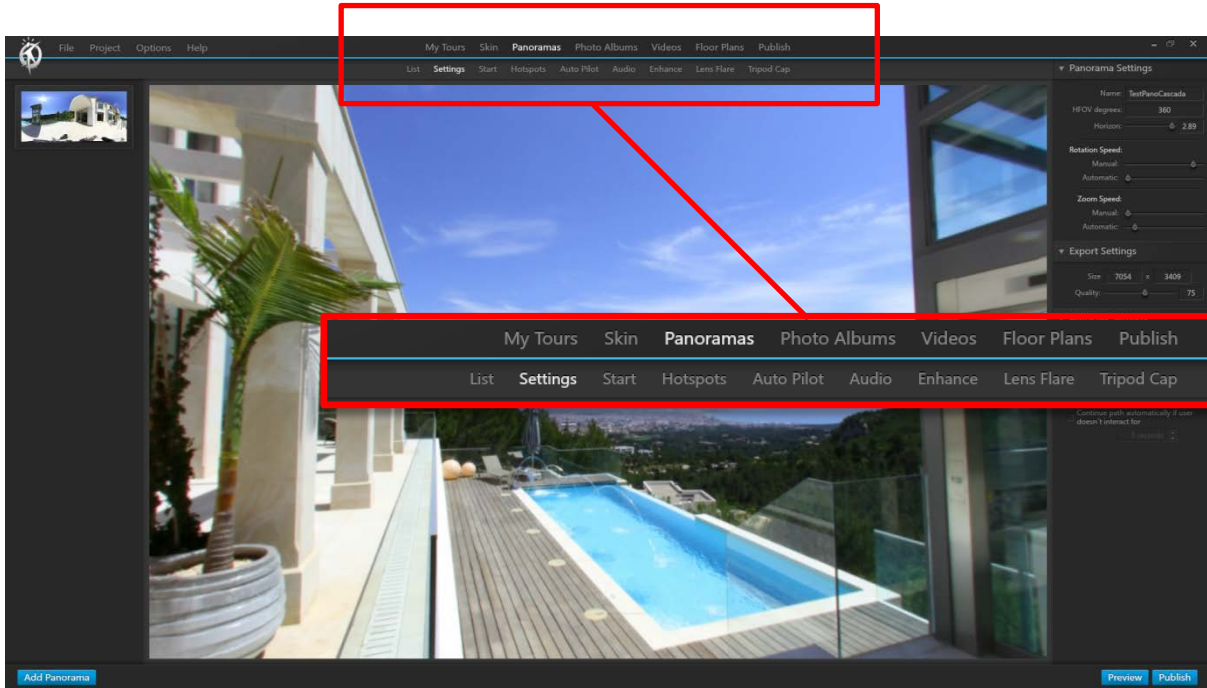


Should you find any mistakes in stitching (e.g. misaligned lines), you can click on the tab “Control Points” (upper right corner) and check the common points between adjacent photos, yourself (for more details, check our video tutorials). Otherwise, you can enhance the picture with the controls on the right hand side and finish by clicking “Stitch and Import to 3DVista Virtual Tour Suite”. This will automatically open your panorama in the Virtual Tour Suite interface, where you can transform it into a spherical format and add extras.

Step 4: Transform panorama into (spherical) virtual tour



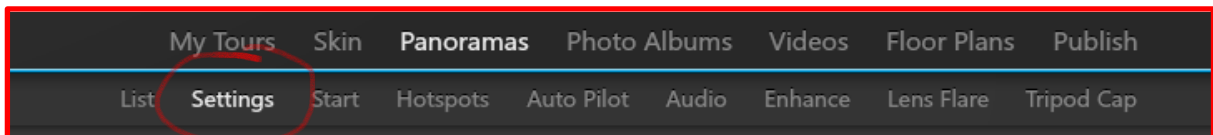
Back in the actual 3DVista Virtual Tour Suite, you´ll find yourself in this mask. **Double click** on the panorama that you want to edit (if you create or import more than one, you´ll find them listed here). This will show the panorama in the immersive 360 degree player (see next picture) and open the editing mask for the selected panorama:



Having double-clicked on your panorama in the list mask, you automatically enter the menu tab “Panoramas” (upper row in red box). For changing settings of the panorama, simply stay within this menu tab and switch between the sub-menu tabs underneath (“List”, “Settings”, “Hotspots”, etc.).

Here, you can change all settings and add effects regarding this particular panorama (e.g. terrace / room). Select a sub-menu tab (lower row in red box) and change its settings on the right hand side. All sub-menu tabs are explained below (A-H).

A) SETTINGS



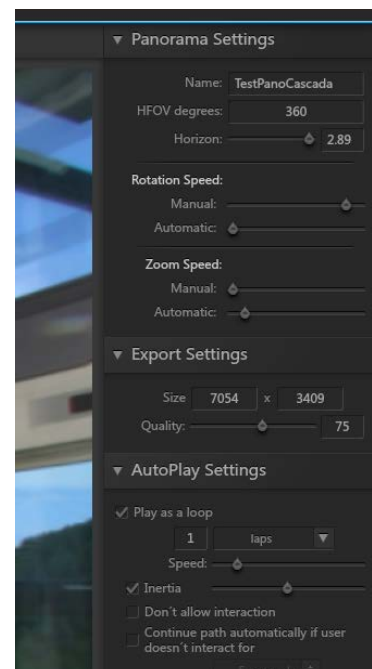
On the right hand side, you can change settings that belong to the sub-menu tab “Settings”.

First, you can change the name of your panorama.

Second, you can change the *rotation speed*, both for when your panorama spins automatically and for when your audience interacts with the virtual tour and moves around the panorama manually (by using the mouse - or fingers for tablets).

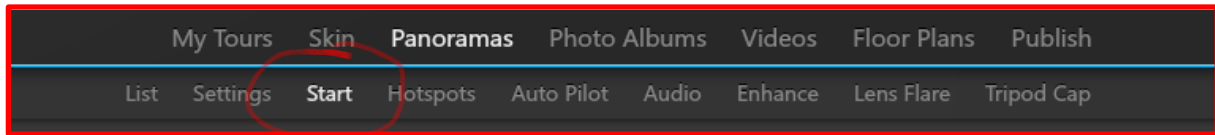
Similarly, you can change the *zoom speed*, meaning how fast you can zoom in or out the panorama. Again, you can set this speed individually for the automatic zoom (that you pre-set in the tab “Auto Pilot”) and for the zoom that your audience applies manually to the panorama (by using the mouse - or fingers for tablets).

In the export settings you can establish the final picture’s size and quality (which will influence the final file’s size and loading speed).

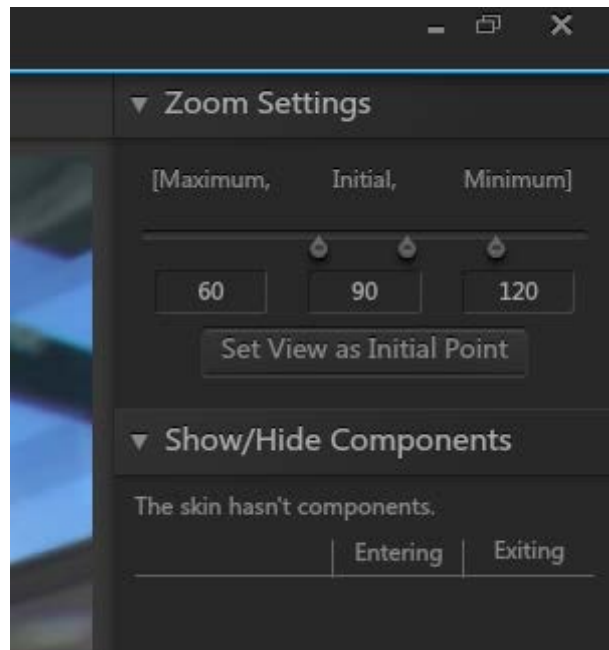


Auto Play Settings refer to how the panorama shows or plays until you user interacts (if you allow interaction). Tick *play as a loop* if you want the panorama to spin when opening it (so that your users will see every corner and angle of the scenery). "Speed" refers to how fast it will spin around and the "Number of laps" determines after how many full laps, this automatic spin will stop.

B) START



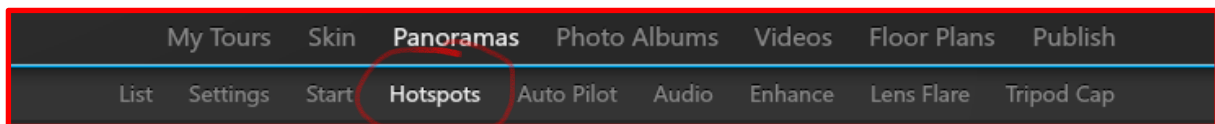
Zoom Settings contains three control switches: The left one refers to the maximum zoom that you allow your users to apply (limit this value especially if your picture has limited quality). Similarly, the right control refers to the minimum zoom refers to how much your audience can zoom out of the panorama (limit this value in order to avoid distortion). The middle control determines at which zoom level your panorama starts (and stays until your audience or your waypoints apply zoom).



If you want to fix the initial viewpoint (the field of view with which your panorama starts), move and pan towards this exact view in the viewer and click "Set view as Initial Point". This will set the chosen field of view and initial zoom (middle control) as initial field of view.

Show/Hide components: In the skin, you can add components or texts that are normally hidden and will only show up when entering a panorama or certain media. This allows you to integrate great effects. With the "Show/Hide Components" part, you can select, which of the components that you previously established in the skin, you want to show when entering and when exiting the selected panorama.

C) HOTSPOTS



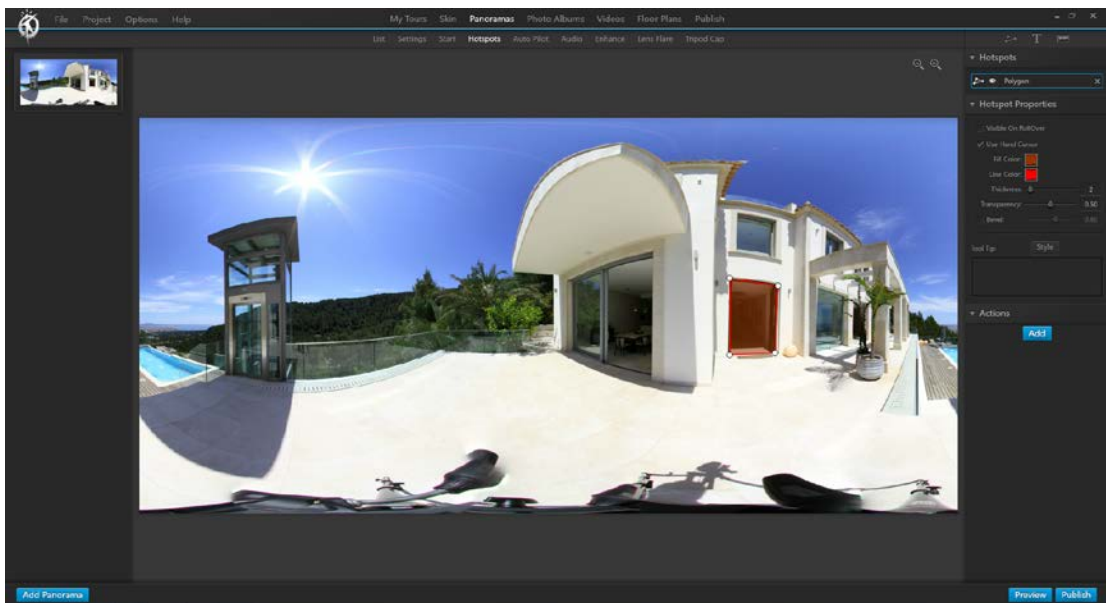
A hotspot is an active field within your panorama. It can trigger various actions (usually when the viewer clicks on it), such as opening a new panorama (e.g. go to the adjacent room), playing video or audio, opening an info window, opening a URL and many more. Hotspots are indispensable for linking two or more panoramas (e.g. going from one to the next room).

First, you need to select one of the three hotspot display types: A *Polygon* allows you to paint in your panorama. *Text* allows you to enter text as the active field (for audience to click on). And lastly, you can import a *picture* to place as the hotspot in your panorama.



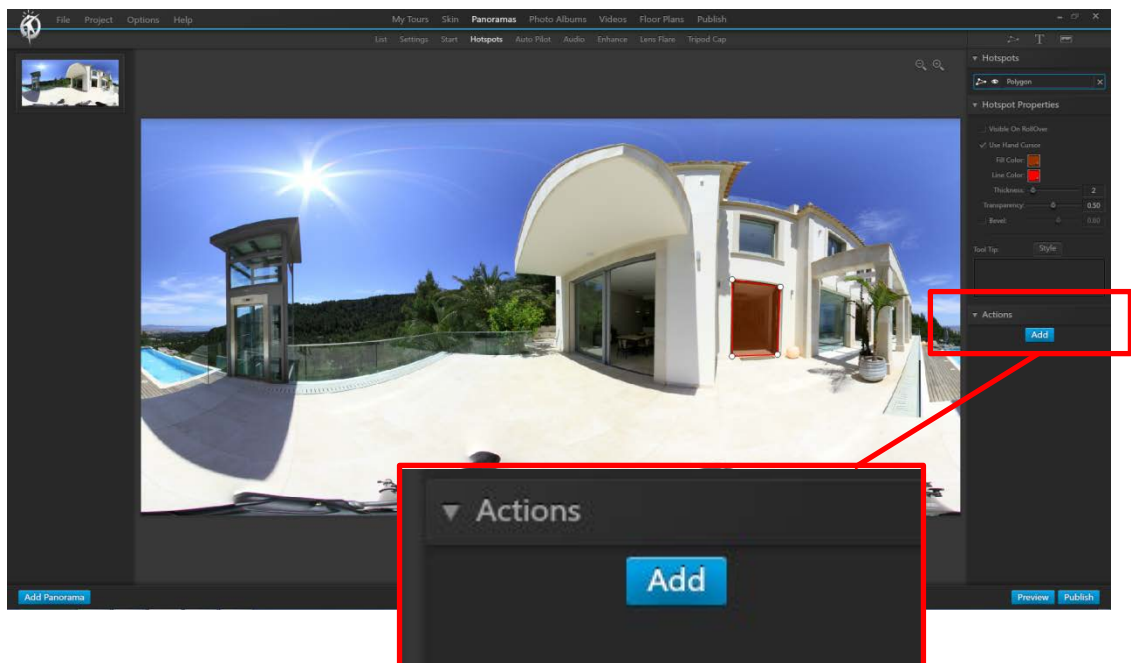
Example: Creating a hotspot that (when clicking on it) takes me to the next room

- 1) Click preferred type of hotspot (We chose Polygon) and start painting it where you want to place it in the panorama viewer:



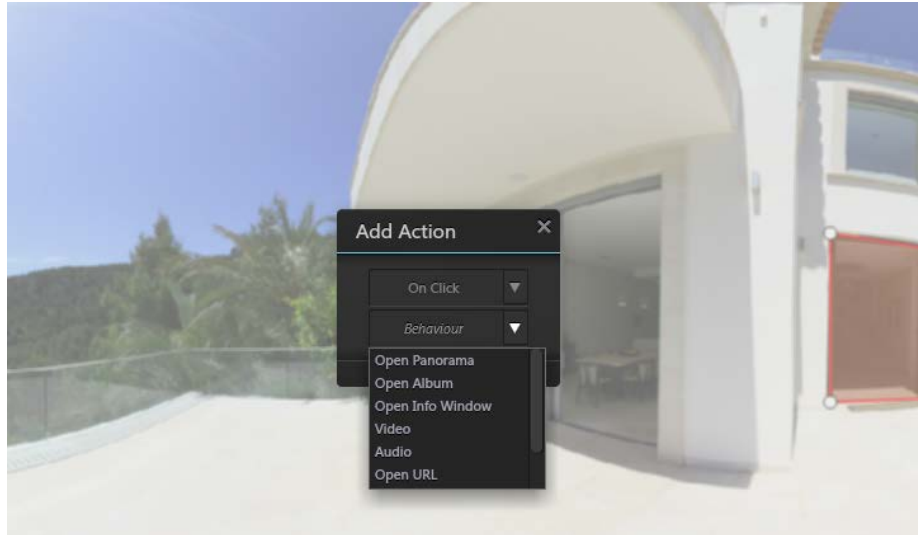
Change settings, such as Line and Fill color, thickness and opacity, as well as visibility options (hotspot is visible only on roll over with mouse or always) on the right hand side. You can add a tooltip, which is a description that appears when the audience rolls over the hotspot (you could put "Click here.").

- 2) Add the action to be triggered:

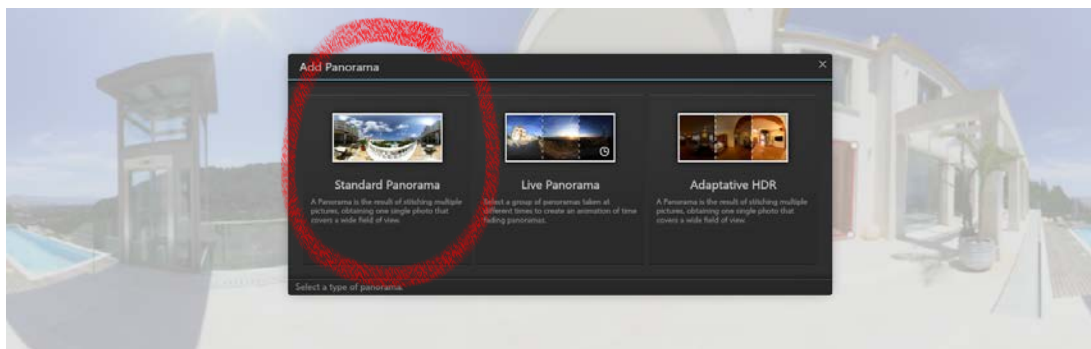


Click "Add" under "Actions" on the right hand side.

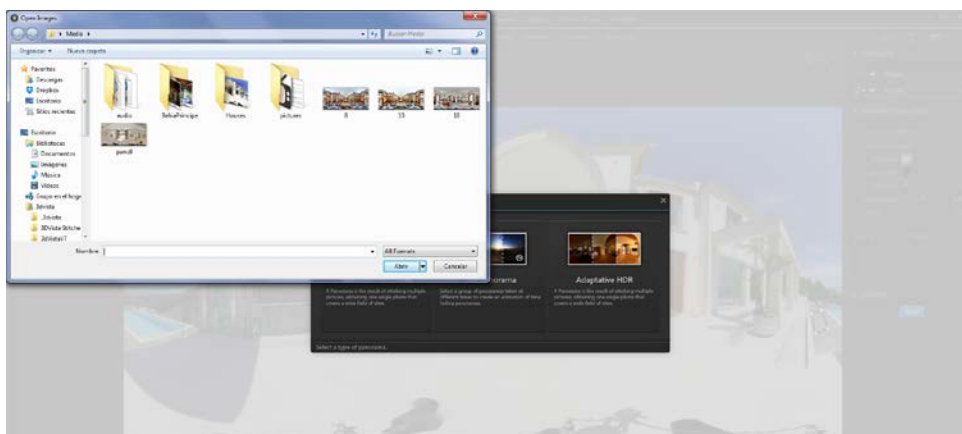
- 3) In the pop-up window, choose:
 - a) **When** you want the action to be triggered (when your audience clicks on it, when they roll over it etc.).
 - b) **What** action you want to trigger.

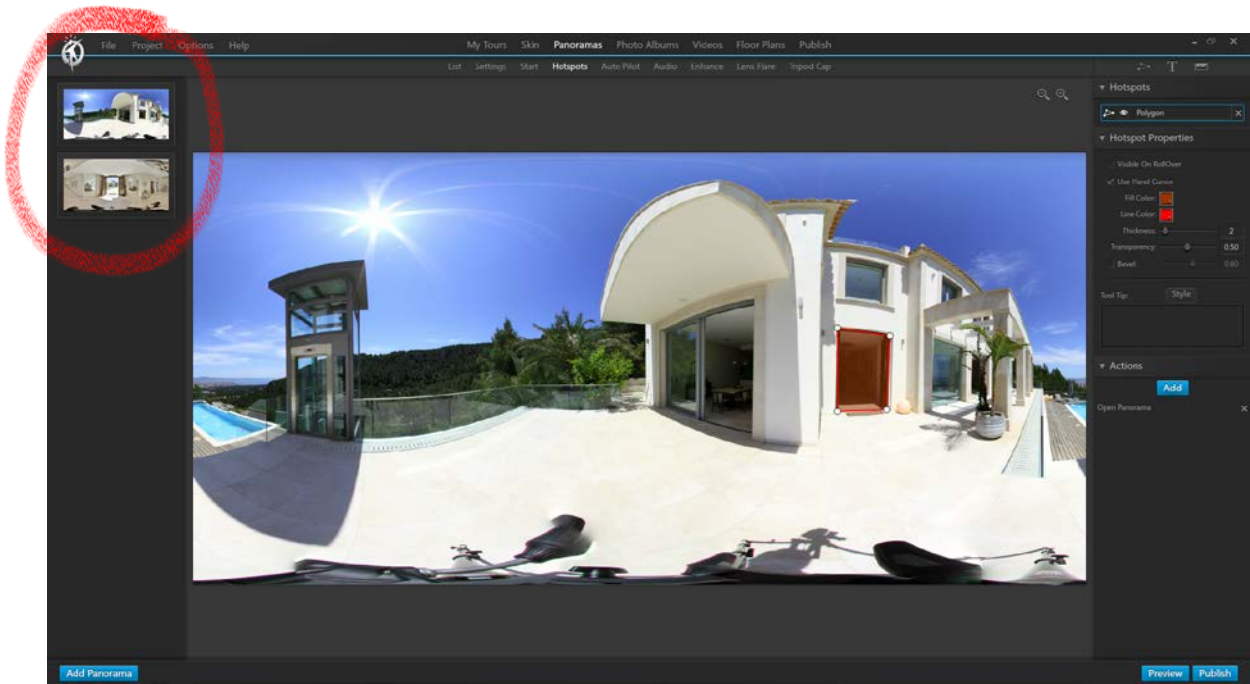


We will click “Open Panorama” in this example. This will open a mask that you already know:



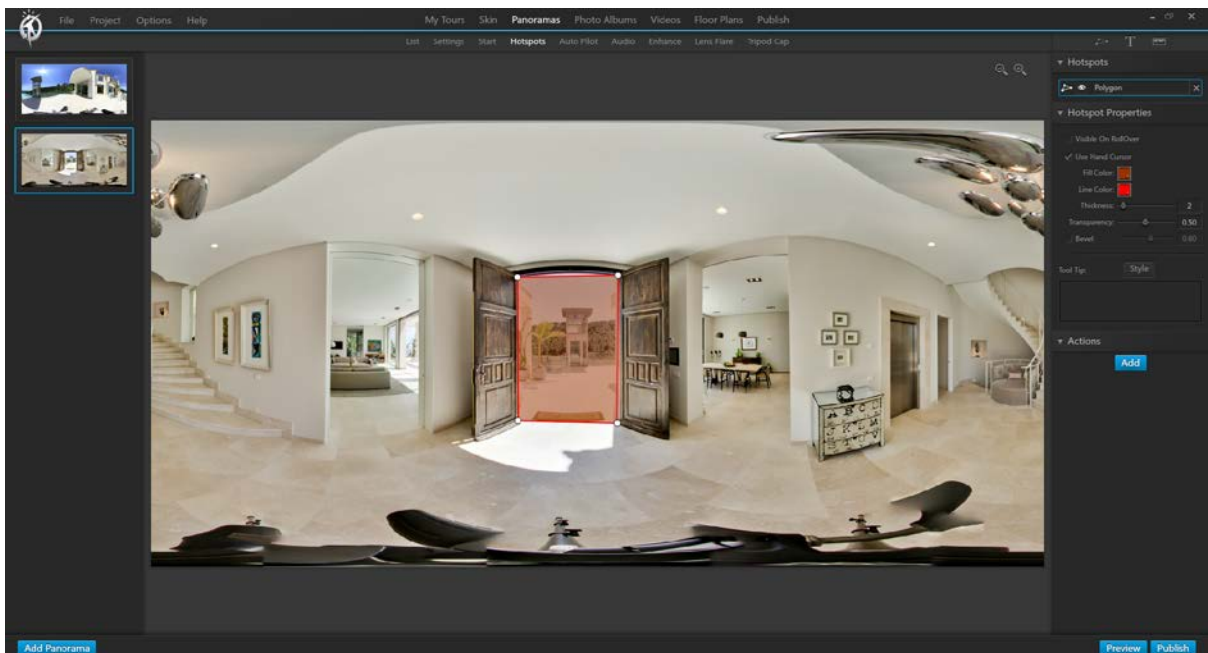
Click “Standard Panorama”. This will open your finder window as shown below (with the files that you have stored on your computer), where you should select the ready-stitched panorama of the respective room you want to link to. At this point, you cannot start stitching individual photos to a panorama from scratch, so make sure that you have the respective panorama stitched and ready.



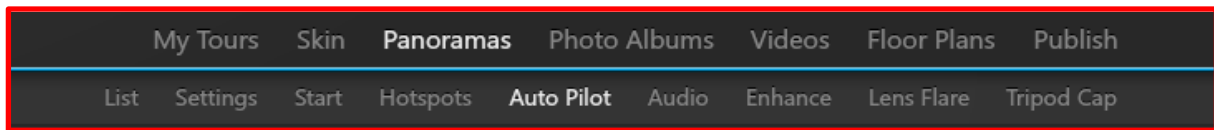


Now, you have both panoramas showing up on the left. When previewing your virtual tour, you will be able to go from the terrace to the hall by clicking on the red door hotspot.

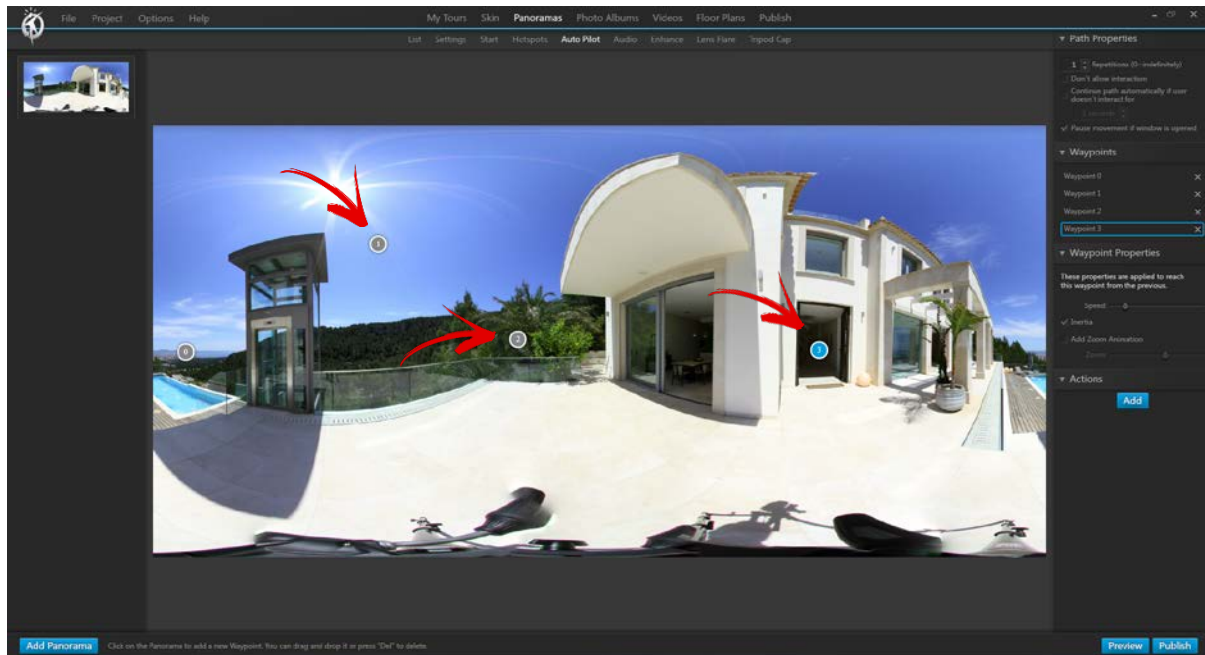
Important: If you want to enable your audience to go back from the hall to the terrace, remember to place a separate hotspot in the hall-panorama, that leads to the terrace. Therefore, click on the hall-panorama on the left. This will open the hall-panorama in your viewer. Repeat the steps from before to place the hotspot:



D) AUTO PILOT

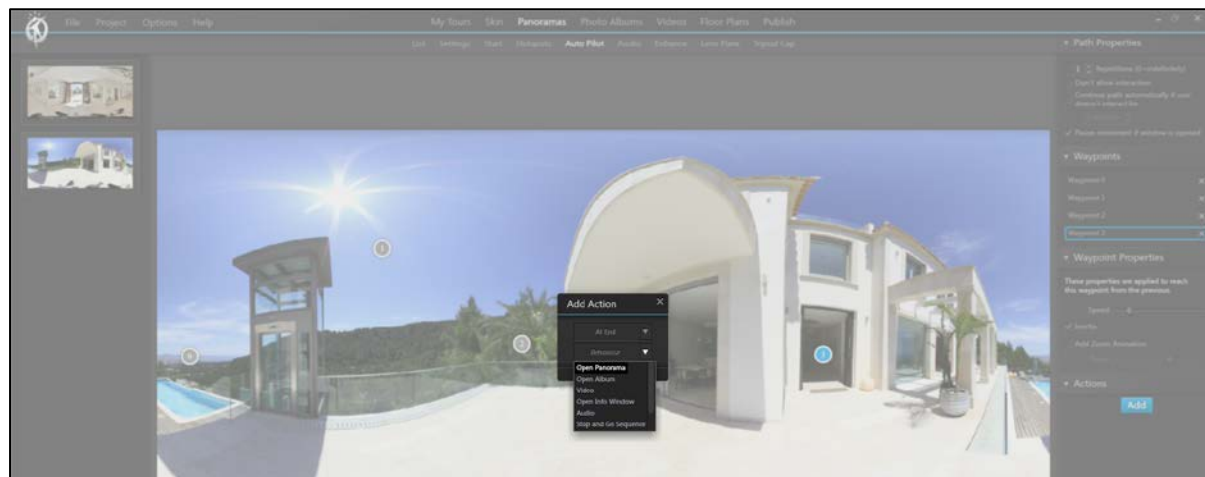


In the Auto Pilot sub-menu you can place waypoints by clicking on the panorama. The Auto piloted virtual tour will then move from one waypoint to the next until having shown all the waypoints you placed.

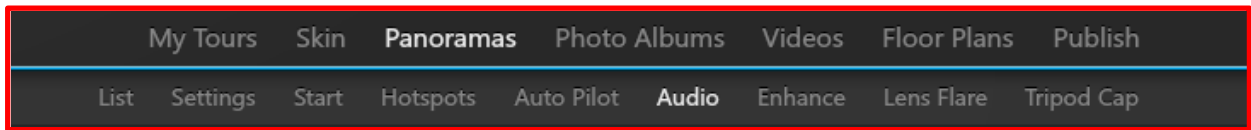


A waypoint can merely serve to predetermine a path (field of view moves from waypoint 0 to waypoint 1, then to waypoint 2 etc.) or you can add behaviors that will be triggered when arriving at this waypoint. These behaviors are the same ones that can be selected as Hotspots (Open panorama, play audio or video, open info window etc.).

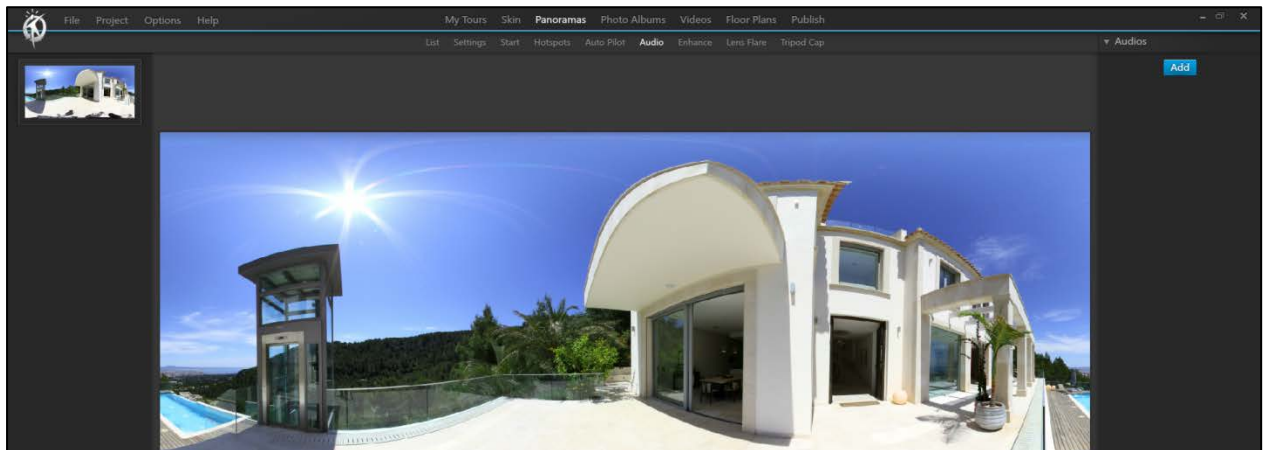
To assign a behavior, select the waypoint that you want to assign the behavior to (click on it) and click "Add" under "Sections" on the right hand side. This will pop up the "Add Action" window that you already know from setting hotspots. Proceed as described previously.



E) AUDIO



This sub-menu tab allows you to add background music, as well as Immersive Audio. Immersive Audio is audio that varies according to the current field of view. This means that when looking towards the ocean, for example, your audience would hear wave sounds and when turning towards the beach restaurant they hear sounds of people talking.



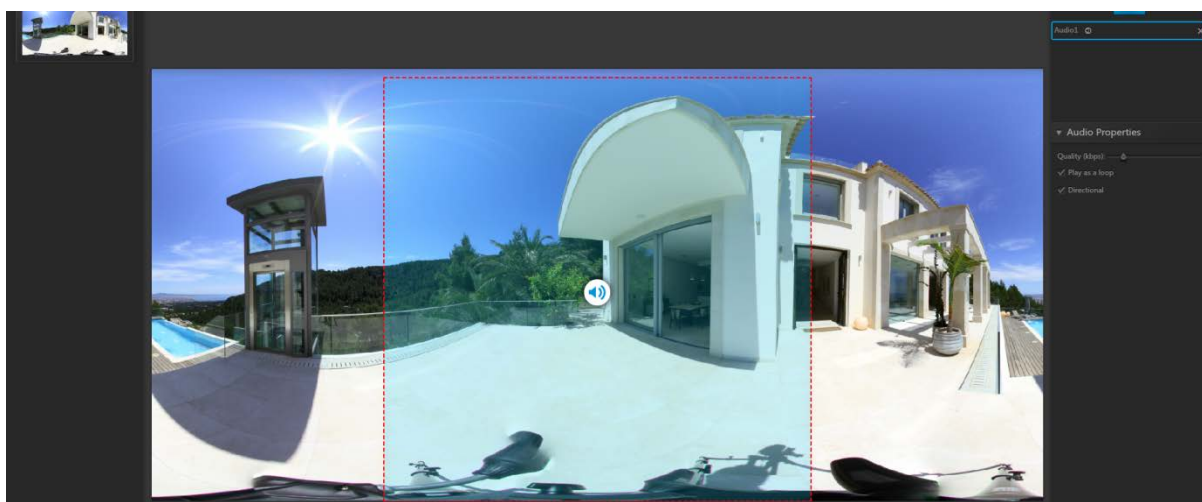
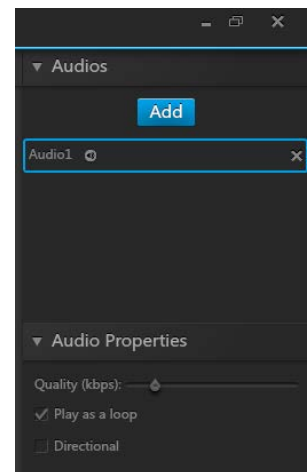
You add audio by clicking on "Add" (right). This will pop up your finder window (with the files that you have stored on your computer), where you should select the music file that you want to play.

If you selected a music file, the right column will change to look like this:

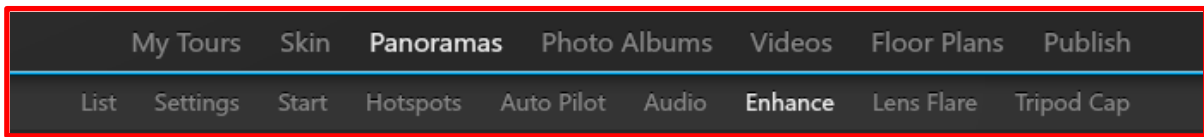
Audio 1 is the audio file that you imported. Unless you specify differently or add additional audio files, this file will play as background music, no matter where your audience looks.

By ticking "Directional", you can determine areas, where the selected audio file (indicated by the blue frame) should play. In the areas that are not assigned to the audio file, no audio will play. You could add further audio files and assign areas to it in order to create an immersive audio experience (different sounds depending on where your audience looks).

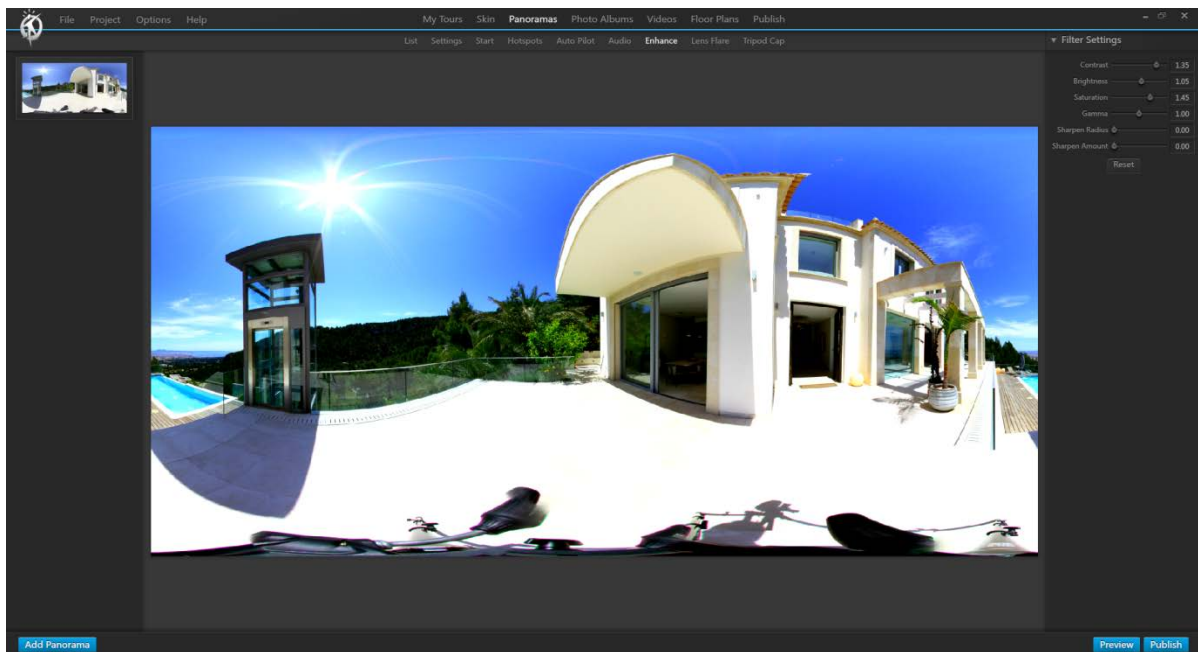
You assign the audio active area by dragging the red lines, making the area bigger or smaller:



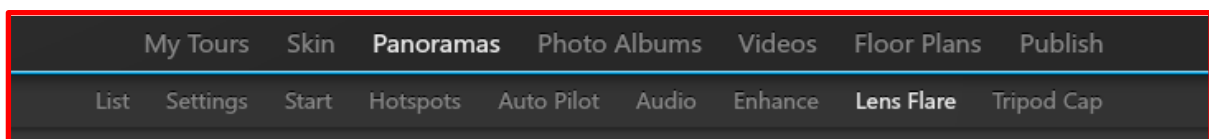
F) ENHANCE



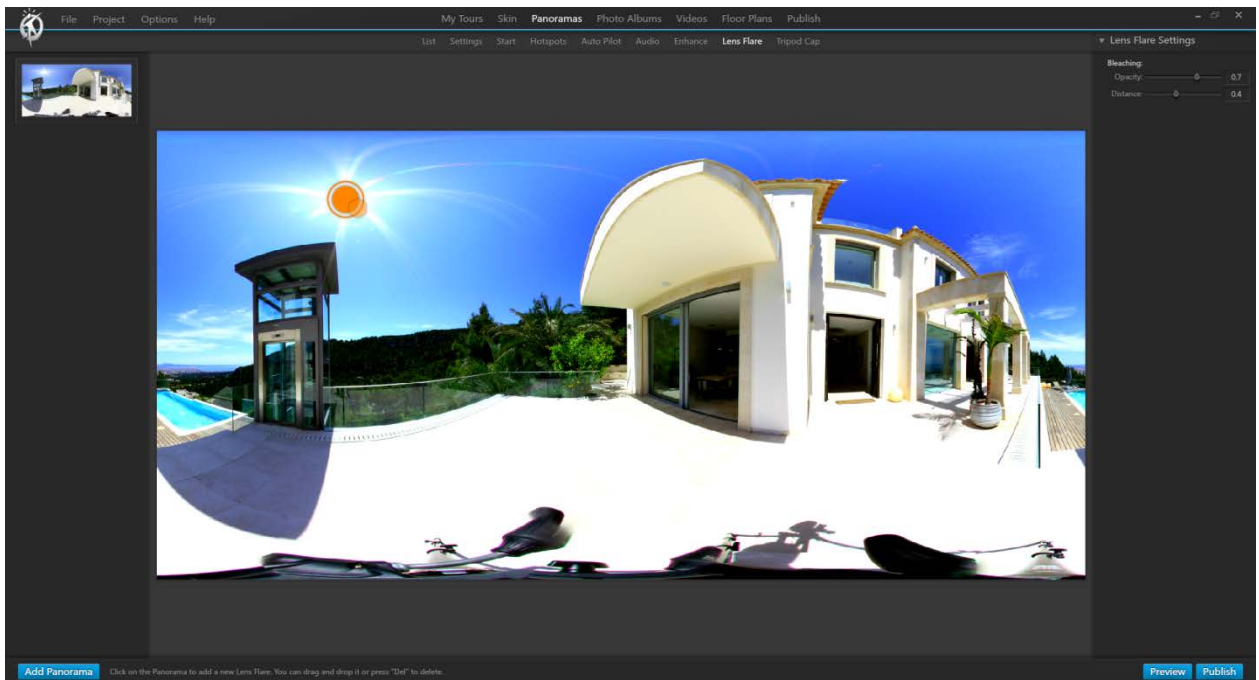
In the “Enhance” sub-menu tab you can enhance the picture itself. Change contrast, brightness, saturation or gamma as you wish. You can see the changes right away in your main panorama viewer.



G) LENS FLARE



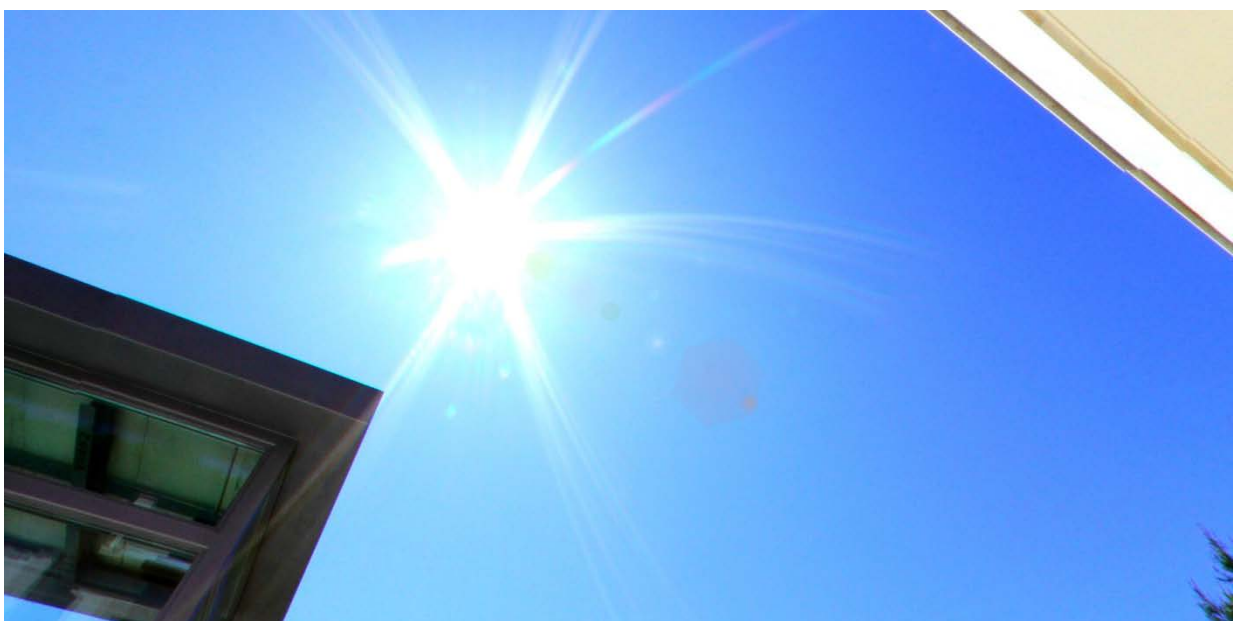
The sub-menu tab Lens Flare allows you to place lens flares to your panorama simply by clicking to the spot where you want it. A lens flare is a natural effect that you achieve when pointing towards a light source with a camera. The area where the light source is appears overexposed, so that the picture becomes white-ish and you can see reflections. With 3DVista Virtual Tour Suite you can imitate this natural phenomenon. By panning through your virtual tour, your audience can see this effect when looking towards the light source. This will make your virtual tours even more realistic.



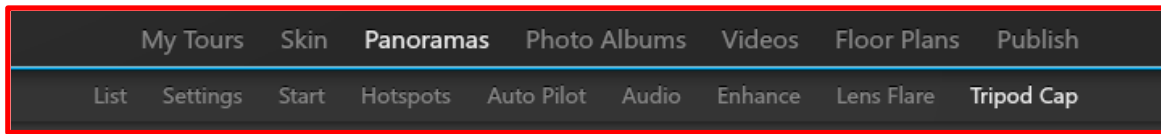
By clicking on the sun, the program automatically places a lens flare there. On the right hand side, you can change detailed settings of this lens flare, such as the opacity of the white veil that appears when looking towards the light source and the distance, which refers to the size of the radius where this effect appears (i.e. Does it only appear when I look right into the sun or does it already start a little further away / while panning towards the sun).

Click preview in order to check whether you like the effect you placed. Should you have placed lens flares, where you don't want them (e.g. no light source), simply click on them and press delete on your keyboard.

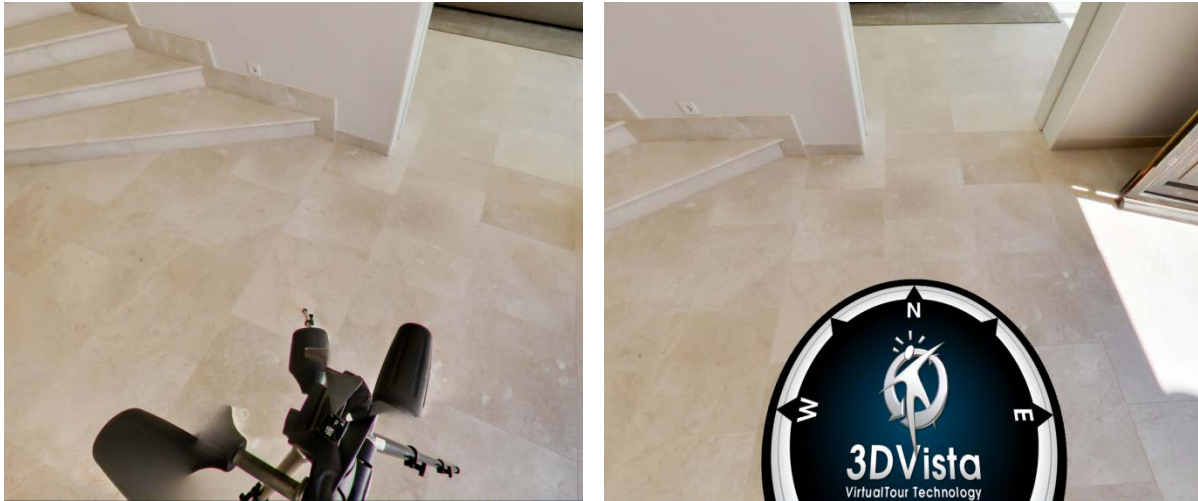
This is how a typical lens flare effect looks like in the final virtual tour (for the entire effect, you need to see this effect in moving images, this merely shows the reflections):



H) TRIPOD CAP



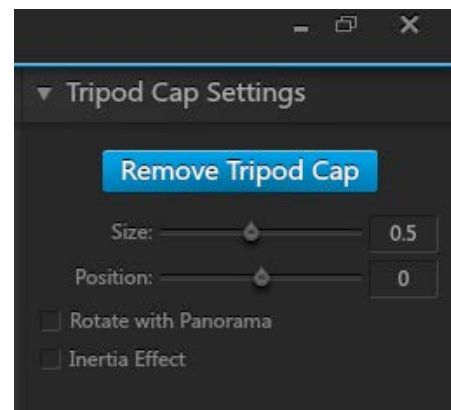
Considering that for a 360x180 degree virtual tour, you need to capture every spot of the scenery, you won't be able to avoid having the tripod show in your final panorama. In order to cover the tripod and as a chance to place your logo, you can place a tripod cap on top of the tripod:



Select the sub-menu tab Tripod Cap and click "Add Tripod Cap" on the right hand side. This will pop up your finder window (with the files that you have stored on your computer), where you can select your own tripod cap (if you have one) or select the tripod cap that comes with the program (the folder where this tripod cap is saved opens automatically).

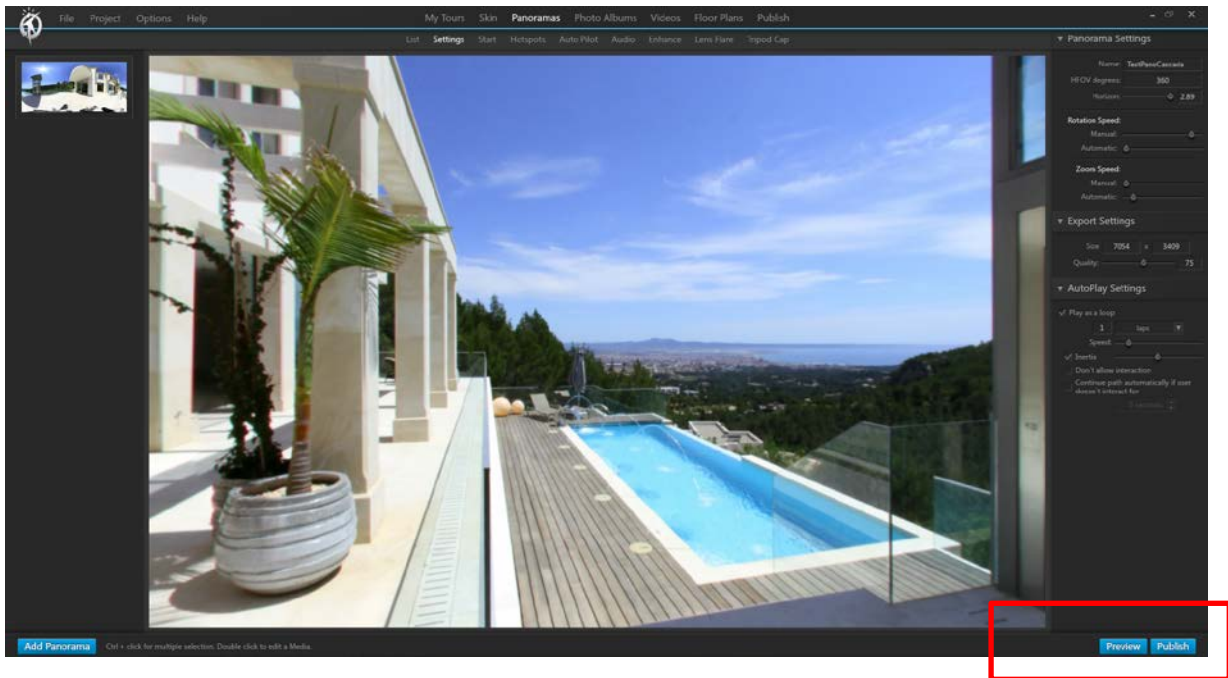
Selecting the tripod cap in the finder folder will place the tripod cap on top of your panorama. On the right hand side, you can change settings, such as the cap's size (in order to make it just cover the tripod) and its position. Furthermore, you can select whether you want the tripod cap to be

- *Fixed*: Tripod Cap will stay fixed while you spin the panorama. This is especially useful if you want to integrate a compass in your tripod cap – place North where North is in the panorama and it will always stay this way. For this setting, don't tick *Rotate with panorama*. Change the position control to place the cap as you wish.
- *Rotating with Panorama*: This means that the panorama will rotate with you, when you rotate the panorama. This makes sense, if you always want to show your logo upright.
- *Inertia*: Additionally, for both fixed and rotating tripod cap you can select inertia effects. Just try it out and decide whether you like it.

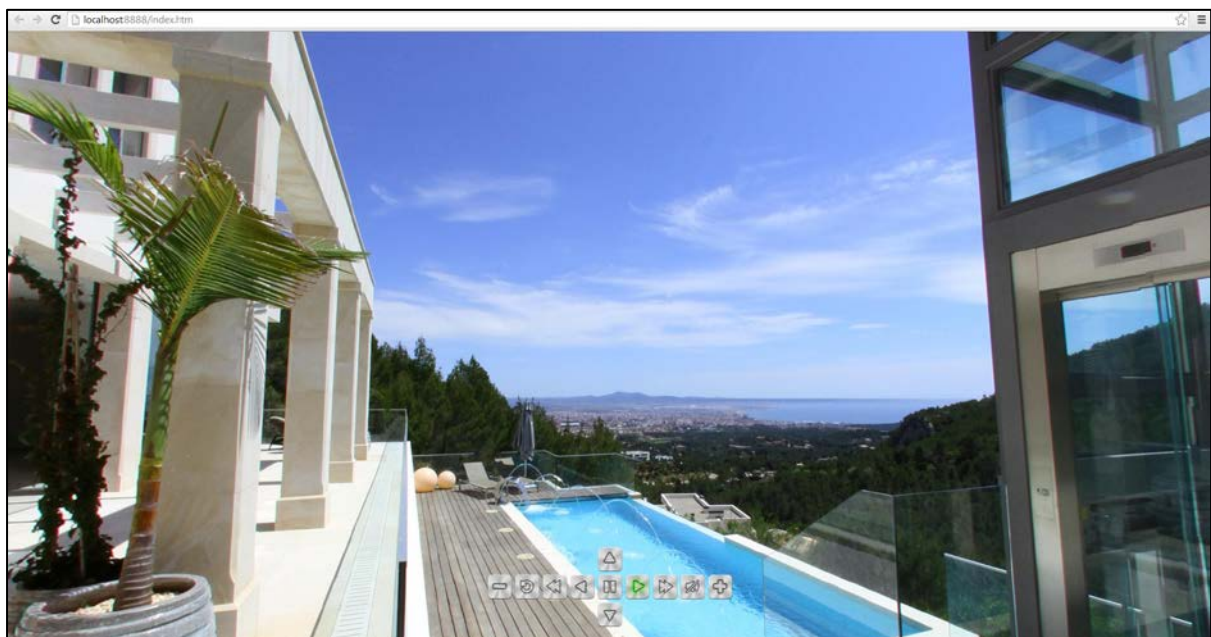
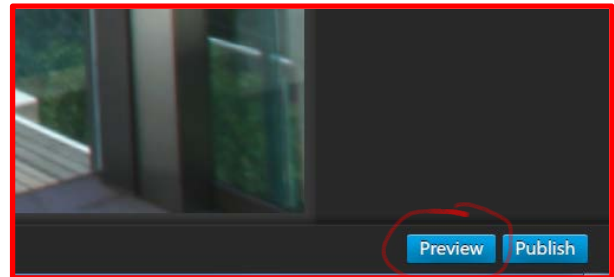


Step 5: Preview Virtual Tour

You can check your changes immediately with the Preview tool. This will automatically open the virtual tour in your browser window. The preview is identical to how the published version would look like later



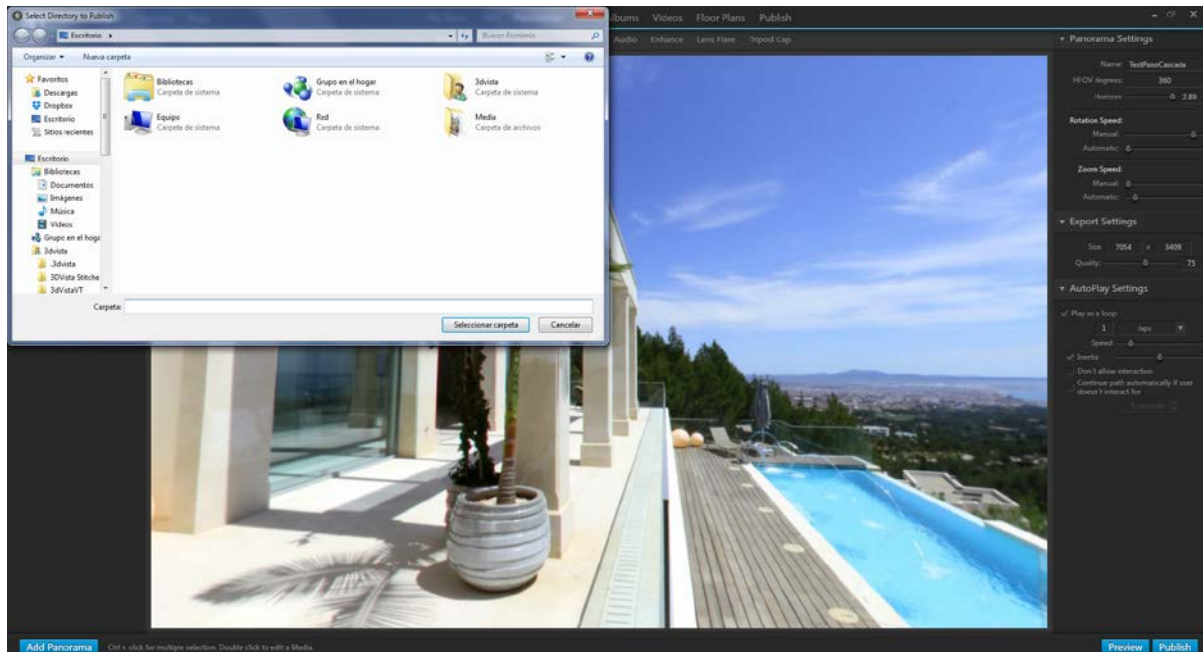
The preview combines all settings and changes from the different sub-menu tabs ('Settings', 'Start', 'Hotspots', 'Auto Pilot' etc.). This is useful, as you won't be able to see the combination of all your settings in the viewer from within the program (i.e. you won't be able to see both hotspots and lens flare effects at the same time, unless you click 'Preview' or you publish your virtual tour).



Step 6: Publish Virtual Tour

In order to show your virtual tour to clients, friends and others, you need to publish it.

Click on "Publish" in the lower right corner. This will pop up your finder window (with the files that you have stored on your computer). We suggest you create a new folder (right click in the finder window → new folder) to store your virtual tour (the web version is composed of multiple files).



You have two formats for publishing your virtual tour. Select the ones you wish on the right hand side.

1. For web: Needs to be uploaded to the internet – either your server or our optional hosting service. It consists of a few files and folders and you need to make sure that you upload all of them. This format will not work offline, so you cannot play it straight from your hard drive.
2. Auto-executable: This format is intended for using it offline. It consists of one single file that includes all necessary files and folders required for the tour to run. This format is ideal for showing the tour in your computer, sharing via email or CD, DVD, USB drive.

"Select a Splash" allows you to select your own graphic/image as the Splash Screen (the screen that shows while loading the virtual tour).

While a panorama is loading, you have the choice to pre-display it in black and white or just show a snapshot of it. Choose accordingly in the dropdown menu under "Preview Level".

Tick "Enable gyroscope" if you want to permit your users to pan and move around the virtual tour by moving their phones or tablets.

