VRDL: Vista Software Windows pC

Stitcher
Skin
Show
FloorPlan

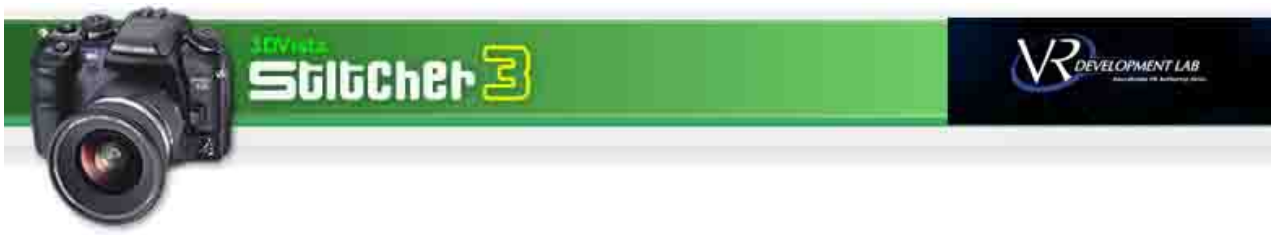
Instruction Manual

DIGITAL
TECH FRONTIER LLC

Stitcher

NEW SOFTWARE 2008

VRDL Vista Stitcher
(PC Version Only)



Welcome to 3DVista Stitcher 3.0
VR Development Lab Edition

As a first time user, when stitching multiple images, we recommend you to take a few minutes and learn about a special procedure named **"force lens"** which will help you obtain better stitching results in most cases.

The process of **"forcing lens"** is carried out only once and the resulting values calculated for your particular lens/camera combination can be used in future stitching projects for the image sets shot by that same system. This will dramatically increase the stitching speed and accuracy for your future work.
Select a suitable option in the optics selection window and load your images.

SETTINGS AREA (Forcing Lens Option)

The options provided under the settings button will allow you to get better quality, more accurate and faster stitching results.

VERY IMPORTANT:

- Don't resize the images or if you do, avoid too much downsizing.

- Rotate image so it is upright.

- Click on Settings button and make sure that "force lens" value is DISABLED.

- Click on "Continue".

- For Fisheye lenses make sure the auto-crop area is selected correctly. If not, use right-click & up/down dragging with mouse to resize and the left click & drag to re-position the crop area. So that the entire image is in view.

- Select Full Panorama.

- Select Manual Stitching.

- Now you need to set a couple of common points on the 2 images shown on the left and right screens. You must first start in the left image and then move to the right image each time you set a pair of corresponding points. You do this by placing one point at a time in the left screen and then its corresponding point in the right screen. Try to spread them over different parts of the image covering the upper and lower areas of the images. We recommend you set 6 points.

- To remove a point or a couple of points just right-click on it or hit the delete key on your keyboard.

- Repeat the process through the different pairs of images until this step is completed.

- Now make sure the stitching result is "acceptable". If you find it bad, please click on "back" and make sure that the control points are set accurately. One bad control point can ruin the whole process. If the result is "acceptable" copy the value shown in the toolbar that says "lens". This is the value you need to use in the "Force lens" field. It should be between 180-186.

- Click on back until you get to the main screen with the images loaded and the settings button.

- Click on Settings button and introduce the value there. CHECK the box to activate the option.

- Now you are ready to select Auto Stitching for all the Stitching projects that you'll do for images taken with this lens. PLEASE NOTICE that if you change the lens or you zoom in or out when taking the images, the value will need to be recalculated.

- Please remember that you can fine-tune the stitching process by "manually aligning" the images in the last stage of the process.

OPTICS SELECTION

3DVista Stitcher VR Development Lab Edition allows you to process images obtained with almost any available lens in the market. Every lens has its own advantages and disadvantages and the technique of stitching/unwrapping varies from one to the other.

Please select the type of lens that you use for shooting your images.

Multi-shot single-row: Usually will give you with the best image quality provided that your source images are of high quality to start with, but requires the largest number of source images to create the panorama and also the field of view will be limited to maximum the vertical field of view of the lens used on the camera and likely to be a low compared to the other methods. This type results in cylindrical panoramas and allows for creation of partial panoramas as well as full 360° panoramas.

***(VRDL 2008 Setup) Circular fisheyes:** Quality is usually fairly good and the method gives you spherical panoramas (360° x 180° full sphere). Only 2 back-and-front images are needed, but we strongly recommend taking 3 shots at 120 degrees intervals.

Semi-circular cropped fisheyes: Basically the same as full circular fisheye lenses but since the sides are cropped you may need several more images to get a full spherical panorama.

Full-frame diagonal fisheye and ultra wide-angle: Better quality than circular fisheye lenses in general but less vertical field of view, also usually more source images needed to obtain a 360° panorama.

Single-shot doughnuts (donuts): This method allows you to obtain a 360° panorama with only one single image. On the other hand, having only one image as your source for the final panorama makes the quality of the panorama to be limited to a portion of the maximum resolution that your camera can provide. The quality of the images also varies from different optics in this category as well as the total vertical field of view covered by them. Right for use on Internet, but poor for printing in large sizes.

Cubic panorama faces: Usually the best in terms of quality. Especially useful for rendered projects. It is also possible to obtain the faces with special rotating/scanning cameras. The downside is the high price of these cameras.

RESIZING SCREEN

Downsizing of the source images will result in a faster stitching process, but the size of the output panorama will be consequently smaller. This is good if you only plan to check if a set of images are good or if you are planning to use your panoramas for publishing on the Internet. For high quality printing purposes, you should select "not resize" so you will get the maximum quality possible with the source images intact.

This is the main stitching window. At this level you can load, remove, rotate and arrange the images that you will use to obtain the panorama. You can also adjust brightness, contrast, gamma and colors of the individual images to match them better and create a more seamless panorama. Please notice that you can re-arrange the order of the images by dragging and dropping them over the others.

However, the most important feature you will find in this screen is the "Settings" area.
The auto mode usually gives fairly good stitch results, however to drastically improve your stitching accuracy and processing speed, you need to take advantage of the "force lens" option. Please click on the settings button and click on help again to learn more about this.

ADD:
Allows you to add new image(s) to the set.

REMOVE:
Removes selected image or images from the set.

INVERT:
Inverts the order of the images alphabetically.

SORT:
Sorts the order of the images alphabetically.

FLIP HORIZONTAL:
Flips the images in the horizontal axis. Like a mirror effect.

ROTATE:
Rotates the images anti-clockwise in 90-degree intervals.

ADJUST COLORS:
In this window you can adjust brightness, contrast, gamma and saturation of an image or multiple images prior to the stitching process.

SETTINGS:
Here you can select/deselect options which will help getting better quality, more accurate and faster stitching results.

PANORAMA TYPE

There are 2 types of panoramas that can be created: Partial and Full-360. The process of stitching, especially the manual adjustments, will also vary depending on what type is selected. In full-360, matching the first and last images is needed and therefore the manual adjustments like rotating of the images are more limited.

Partial: The result is not a full horizontal 360-degree panorama, and therefore when playing in the viewer it won't be continuous revolution, but will bounce when reaching each ends of the image.

Full-360: The result is a complete horizontal 360-degree panorama and it will play in a continuous loop and a set direction when shown in the viewer.

TYPE OF STITCHING PROCESS:

There are 2 ways to stitch a set of images: Automatically and Manually. Both ways allow an additional manual fine tuning instance in the process.

We advise you to read this info to learn about the "force lens" option that we recommend using in conjunction with any of the 2 types of stitching. The stitching process will then be faster and yield better results.

Automatic: The program will try to automatically find the optimal parameters (lens, pitch, yaw and roll values) to achieve a good stitching. Moreover, the result can later be edited manually by the user.

Manual: It allows the user to insert pairs of control points between consecutive images to help the program find better possible values and therefore get the best stitching result. This option is much recommended for difficult images and for finding your right lens value that you can later use in "force lens" feature. After the stitching is done, manual fine tuning can also be done by the user.

MANUAL STITCHING:

This window allows you to insert pairs of control points between consecutive images. It will give the program the necessary parameters to achieve the best possible stitching result with the selected set of images.

The images have been "pre-deformed" so the "image data" on the overlapping areas match, making this process easier.

The process is very easy, just click on a detail in the left image that is easily recognizable in the right image. You can use the zoom window on the top to help you to locate the control points more accurately with high precision.

It is very important to distribute and spread the points all over as much as possible, both in the vertical and horizontal parts of the overlapping area.

Once the first point is placed, click on the same point in the right image to place the equivalent control point. Repeat the process with 5 or 6 pairs of points (3 minimum).

If you placed the control points wrongly, you can right click on it to remove it. You can also use “delete” key on your keyboard.

When a few pairs of points have been placed, click on “next” to go to the following images. Repeat the process on all image-pairs on the set.

If needed, you can change the color of the control points so that they “highlight” better in different sets of images.

The scroll bar in the middle displaces both images at the same time and the ones to the left and right displace each image respectively.

FINAL PANORAMA:

This is the window where the final panorama is shown. You can zoom in the panorama to view the image details and see if the result is good or needs fine tuning. You can also preview the panorama in an immersive viewer window to check how it will look when presenting in a tour.

The red lines surrounding the panorama are the **CROP** marks showing the limits around the panorama that is about to be saved. You can adjust this by dragging any line and moving up, down, left or right. By default the program calculates the “optimal” valid area of the panorama, excluding areas without photographic value, but you can edit it to your liking.

You can save the panorama by clicking on **“Save”**, start the whole stitching process again by clicking on **“Cancel”** or go back to the previous window (manual control points insertion for manual stitching) by clicking on **“Back”**..

There is some useful information displayed in the center-bottom black rectangle:

HFOV (Horizontal Field of View): Degrees in horizontal axis. Full panoramas: 360

VFOV (Vertical Field of View): Degrees in vertical axis.

Lens Value: The value in mm or degrees calculated in this process for your lens. If the stitching is satisfactory, copy this value and use it in the “force lens” field in the settings area in the loading images window.

Preview Button:
This will offer you a preview of the current panorama in an immersive viewer. It is possible to resize and zoom in and out by using “A and Z” keys.

Edit Button:
If the stitching result presents imperfections or is not very accurate in some areas it may need “fine-tuning”. By clicking on this button you will enter in the manual adjustment area. You can then improve the stitching by panning and rotating the images, changing the lens value, color, brightness and contrast parameters, etc.

Caps Button: Allows you to introduce special graphics in the upper and lower part of the panorama (usually used to show your logo and corporation info) so the tripod and ceiling areas are hidden. It is very popular in fisheye panoramas, but it’s now possible to use it in any other types of panoramas, virtually making full spherical panoramas from any source. The cap size and cap rotation can be adjusted and the areas outside of the edge of the caps can be set to transparent if the cap edges have distinct border.

Zoom In, Zoom Out and Fit Buttons: Allows the user to magnify or reduce the image of the panorama result. This affects the view size on the screen, not the final output image dimension or size.

MANUAL ADJUSTMENT AREA

3DVista Stitcher VR Development Lab Edition enables the user to have manual control over almost every aspect of the stitching process. From the lens value (that affects the FOV and deformation of the images), to the position of the images (pixel sensitivity), roll and pitch.

Due to its advanced merge technology, even if the images are not correctly overlapped or if the deformation is not very accurate, the result will look fine. You won't need to align the images perfectly to get a good result.

Select each image either by clicking directly on it or on the thumbnail (recommended). Then you can drag and drop it in the position which you think matches better with the other images.

* Notice that in the images with high FOV like fisheye and ultra wide-angle, the deformation of the image is very sensitive to different pitch values, so when panning up and down, the image will look distorted. This is necessary to match the rest of the images and these deformations are corrected when projected in the viewer.

To pan or change pitch value of an image just drag and release it with the mouse. You can also do this using arrow keys for more accuracy, and also using **"SHIFT + arrow keys"** to move in 10 pixels intervals

To rotate an image you can use **"CTRL + arrow keys"** or place and click the mouse pointer on a corner of the image (orange marker) and move the mouse to the left or right.

The overlapping area of the images is shown by default with a certain transparency degree. **THIS DOESN´T REPRESENT THE WAY THE FINAL STITCHED IMAGE WILL LOOK.** It is just as a help in the alignment process. To see how the panorama will look, you need to click on **"Show Merge"** button.

Finally, remember that first and last images (especially in full-360 panoramas) may be locked, not allowing movements or rotations to preserve the continuity of the panorama and the seam on the edges.

Zoom In and Zoom Out Buttons: Allow the user to magnify or reduce the viewing size of the images. This does not affect the output size of the panorama.

Lens Value Field: Sometimes in auto mode, the lens value maybe calculated incorrectly and as a result the images are not properly deformed and therefore the stitching result is not good (there is no way to match the images). To remedy this situation, you can modify the lens value which will directly affect the deformation of each image, allowing you to match them better. We recommend modifying this value slightly, in 4 or 5 degrees intervals at most.

* Notice that when changing lens value, the position of the images will remain intact, so manual alignment will be necessary. If you find a good value for your lens, then we recommend you to use it in the "force lens" field in the settings area, so it will be used in the next stitching projects for that particular lens. This will save time and make the stitcher work more accurately.

Lock Button: By default each image is "chained" or "locked" to its adjacent images. This means that when you move one of them, the rest of them will retain their relative positions so you don't need to reposition all of them. This may cause a lack of "freedom" in movements, especially panning. However, sometimes it is necessary to "unlock "an image to correct a severe rotation or pitch error, especially in the images taken handheld. You can release an image by clicking on "unlock" button. Then just align it as you desire and remember to "lock" it again when finished.

Show/Hide Merge Button: The Merge process is what makes "the miracle". When processing a set of images manually, you just need to align them relatively well in the horizontal axis, but they need to be quite accurately aligned in the vertical axis. The Merge process will then correct the defects of matching and output a good result. By default the program works with Merge Hidden, since the images can be aligned faster and smoother (the merge process requires a certain amount of processor power). When Merge is hidden the images show transparency in the overlapping areas, displaying the so called "ghosts". This doesn't represent the real look of final panorama. To see how the panorama will actually look, click on "SHOW merge" button.

Undo Align Button: Resets the values modified by the user and shows the panorama as it was automatically processed by the program.

Adjust Colors Button: This is the stage where you can best correct the differences in colors, brightness, gamma and contrast between the images. Just slide the scrollbar for each value until you equalize the values on the adjacent images.

SAVING PANORAMA SCREEN

Here you will be able to save your final stitched panorama as a single image file.
There are 4 formats to save to:

JPG: Compressed and small file size. Good if you plan to send it via email or post on the Internet.

BMP: No compression and large file size. The best in terms of quality. It takes much more disk-space when storing but preserves all the details of the image.

PSD: It saves each image that composes the panorama in a its separate layer, so it is possible to edit them one by one in Photoshop and other image editing programs supporting PSD format.

Cube faces: Use it to output the panorama to 6 faces of a cube. Very useful for editing the bottom and top parts in the panorama in an image editor like Photoshop. You can then import the edited faces back to Stitcher and recompose one single panorama file, now with edited top and bottom

The quality of the panorama output can be modified by sliding the **"Quality bar"**, and the size in **"Kbs"** will be shown at the bottom of the **"Compress image"** window.

Advanced settings: Giving you one more chance, it is possible to modify color, brightness, contrast, saturation and gamma values in here, but now affecting the whole panorama as a single image. It is also possible to add some sharpening to make the panorama look a bit crispier.

By clicking on the **"preview"** button you will get an immersive projection of the panorama with the settings applied.

CROP WINDOW

A correct crop area selection is one of the most important factors in achieving good final results. The program automatically selects the optimal area to crop, but sometimes for certain lenses or for images taken in very low light conditions, manual adjustment may be necessary.

You can move the crop circle by clicking and holding the left mouse button and repositioning the crop circle. You can also use arrow keys on the keyboard to fine-tune.

To resize the crop circle just click and hold right mouse button and move the mouse up to make it larger and down make it smaller.

If the processed result is not accurate, one of the main reasons maybe an incorrect crop area selection. Just modify a little the size or location (only a little since the process is very sensitive to crop selection modifications) and try again.

Since it is possible to export any panorama to 6 cube faces for easy editing of bottom and upper part in programs like Photoshop, it is also necessary to be able to convert these 6 faces in one single panorama again.

This mode is equally useful in importing cube face images created with CAD and 3D modelling programs.

The main window shows the different faces of the cube that have been previously imported. If the order is not correct or any image is wrong you can re-import it by double-clicking on the image or clicking on the **"change"** button.

You can modify the brightness, contrast, saturation and gamma values of any picture by moving the corresponding slide-bar.

CAPS Window

3Dvista Stitcher VR Development Lab Edition allows the user to insert the so called "caps" in the upper and lower part of the panorama. The caps are graphics that were originally aimed to hide the tripod in full-spherical panoramas, but that now are also used as advertising elements or for enlarging the vertical field of view in a panorama converting it to full spherical projection.

Inserting caps is a pretty easy process. Just load the image(s) you want to insert in the upper and/or lower cap menus. You will see a preview of the graphic in the right window.

You can change the size of the cap (the degrees it will take) with the "size slide bar". See the changes in real time in the panorama preview at the bottom window.

The rotation slide bar allows you to rotate the cap inside the panorama, so you can align a specific part of the cap with a specific part of the panorama. Again, you can see the changes in real time in the preview window.

The transparency option allows you to exclude a certain color from the graphic, so you can create circular caps. In order to achieve this, make sure that you have a design which consists of a separate distinct color in the corners surrounding the cap circle color and which is not represented in the cap elements inside the circular part of the cap itself. (We recommend using plain non-common colors as background)

Finally, the bottom preview window will show you the changes in real time on the panorama image and the preview button will show the panorama projected in an immersive and interactive viewer.

NOTE: Once you have all your panorama's stitched and saved then you can go to the Show program to assemble the Virtual Reality Tour. Make sure you have placed all the images in the same location so that you can retrieve and access them easily.

Skin

NEW SOFTWARE 2008

3D Vista Skin
VR Development Lab Edition
(PC Version Only)

3DVista Skin Editor Introduction

Create Custom Skins for your panoramic virtual tours and slideshows.
A unique feature of 3DVista software is the Viewer Skin or Interface. A Viewer Skin consists of the background, button images and other features that you see around the viewer. The Skin allows the user who is viewing a presentation to interact with and control the media that is played inside the skin.

3DVista Skin Editor can be used to create your own custom skins or to reconstruct existing skins using pre-made images. You determine the size, layout, text properties, viewer and map sizes, whether to use a media list or drop-down list, the color schemes and which skin components to include.

Overview

The individual parts that make up a Skin are referred to as "Skin Components".
Skin Components can be divided into two categories:

1. Images - background(s), viewer region backgrounds and control buttons.
2. Other - viewer regions, map region, text panels and labels, media list, drop-down list (combo box), thumbnail list and company logo.

You can set the following properties when creating a Skin:
The background and text properties for the Text Descriptions, Hotspots, Map, Map Pop-up menu and Buttons Hints. Determine the web page to be use as the Help Page and set the Help Page's pop-up window size.

Most skin components are optional; you decide which components you want to include in your skin design. However, you should consider which control buttons your published presentation will need in order to function in the desired way.

Avoid adding media features to your 'projects' if they have not been allowed for in the Skin. For example, if you did not add the component "Company Logo" to your Skin Design then don't add a "Company Logo" to your project. Doing so can sometimes result in errors when attempting to publish and/or view/preview your final presentation.

Mandatory components (for SHOW) are as follows:

1. The viewer areas (Regions) for the panoramas, slideshows and videos. Even if you don't want to use all of these viewer types with your new skin, you must still define them.

2. A background component. This can be just a simple colored rectangle or a pre-made image.

Preparing your skin image files (components)

When you prepare your own images for a skin, there are a few points you need to be aware of.

1. Java applets do not recognize transparency in any images, so your buttons will always appear as a rectangular area over the background. Often, you won't want a button to be rectangular, for example, you may want a rounded button or just plain text. In this case, when saving your buttons as a jpg or gif, you will need to do so over the background image 'in situ'. This ensures that the outer edges of your button includes the appropriate part of the background image. If you do not do this, your buttons will appear with white colored outer edges and will not blend in with the skin background - they need to be saved with the appropriate 'bit' of the skin background image!

2. The background can be set as a plain color in the Skin Editor program thereby eliminating the need to create a separate background image using other graphics software. However, you may wish to create your own custom background in order to introduce texture and other graphics that will form part of the background image. You can add more than one background image if required!

3. Remember to save (export) your buttons and background images individually, in .JPG or .GIF format. The buttons do not need to be part of the background image. If they are, this will only add to the skin's file size and download time!

4. File sizes: If download time is important to your website visitors, remember that the larger and more detailed your images are, the longer they will take to download. It's good practice to optimize your graphics to reduce files sizes, you should do this before adding the images to your skin project.

5. Button "States": Each button has four button states - Normal, Roll-Over, Pressed, and Ghost.
You can use just one (the same) image for all four button states if the button effect is not important to you. All four images must be exactly the same size.

Normal is the "selectable" state. This is the button state that will normally, but not always, appear in the skin when first loaded. It's the "off" position but indicates a feature that can be selected or switched on.
Roll-Over is the button state that appears on "mouse-over".
Pressed is the button state that appears when the button is switched "on".
Ghost is the state for "Inactive" buttons. This will appear when a feature cannot be select. For example, the "Mute" ghost state will appear if the playing media does not include and audio file.

Intro (First Step):

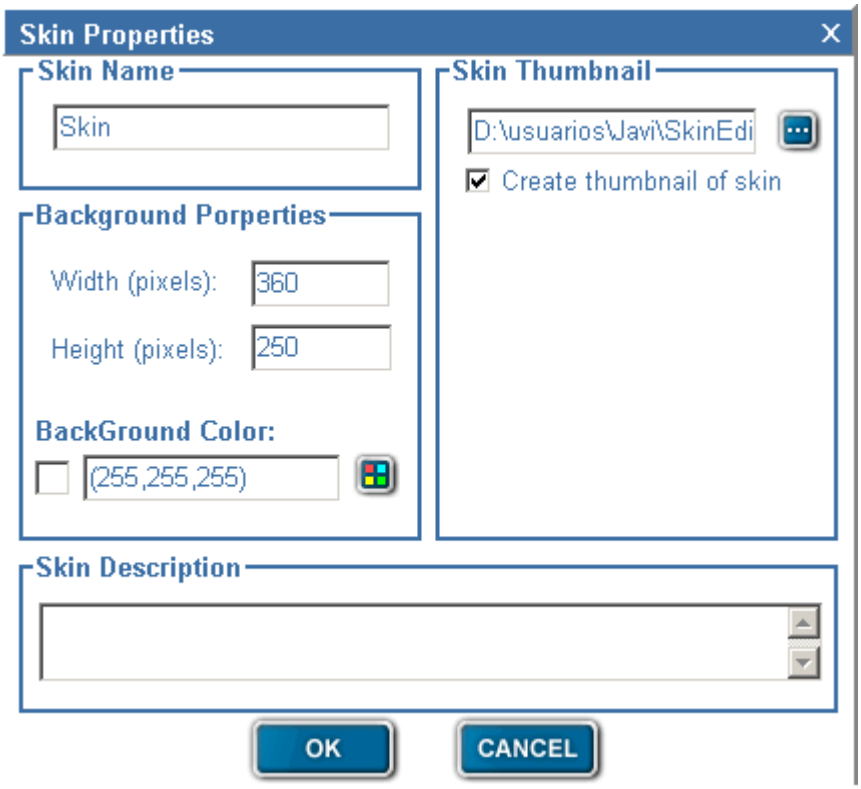
1. Open the Skin Editor
2. From the menu bar, select "File" then "New Skin Project".
3. Select Skin Type (**Show**, or Studio or PhotoWeb) Select **Show** for your project.

The appropriate set of Skin Component buttons will now be loaded into the Skin Editor interface and appear just above the Skin Window Layout. At the same time, the Skin Properties window will open.

Skin Properties:

Skin Name:

Give your skin a name. This is the name that will help you to identify the skin in the 'available skins' list, during the publication process, inside 3DVista programs (Studio, Show, etc.).



Background Properties:

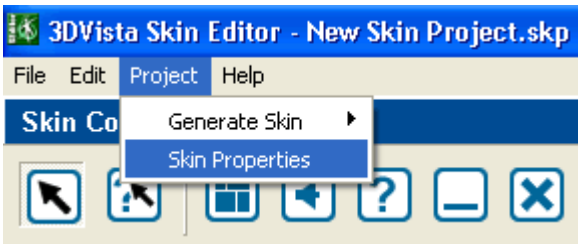
- **Width and Height:** Enter the overall size values for the skin. If you intent to add a background image, the image's size must be no greater than the size values you enter here. If you intent to use a single image as the background, you may want to set the skin Width and Height to the same size as your background image!

- **Background Color:** Click on the button to select a color for the background. This might be the same color as your web page for a Java applet (web version) presentation or the color of your viewer skin, if no using a background image.

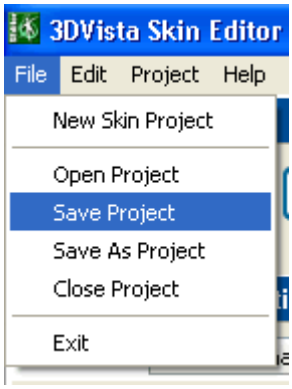
- **Create Thumbnail of Skin:** If you want the Skin Editor to automatically generate a thumbnail image of your finished skin check this box. You will see the skin's thumbnail image during the publication process - inside 3DVista programs, Studio, **Show**, etc.

- **Skin Description:** Use this area to enter a description of the skin, along with any notes or special instructions you may wish to add. The description you enter here will appear in the available skins list during the publication process inside 3DVista programs (Studio, **Show**, etc.). It will help to remind you of the color and features and components included in the skin.

You can return to and modify the above skin properties at anytime, simply select "Project" --> "Skin Properties" from the file menu bar.



Remember to frequently save your skin Project. Saving the Project does not Generate the Skin! You can return to a Project to make changes to it before and after generating a skin. If required, you can open the project later, give the project and skin a new name, then Generate a new skin!



Background Image(s)
When you set the "Skin Properties" you set the background color, you may only want a plain colored background. However, you may also choose to add your own background images to the Skin.
To do this:

1. Select the  button then click inside the skin background (in the Skin Window Layout), this will open a window allowing you to browse your folders for the background image you wish to add.
Your image can be in any of the following formats: jpg, jpeg, gif, bmp.

2. The Background can be made up of several different images if required. To add more background images simply repeating the above steps. See "Working with Skin Components" to learn how to move, position and resize skin components.

Button Images.
When loading your button images you have two options:

1. Load "multi-status" button
Select this option if you are using a single image file (a previously created multi-status button) containing all four button states.

2. Create "multi-status" button
Select this option if all four of your button states are individual image files (normal, roll over, pressed, ghost). The Skin Editor with then create a multi-status (single image) button for you.


A multi-status button

To add more Skin Components select the appropriate skin component button, click inside the skin layout window then, for buttons, select the image file(s) that you want to use to represent the component.

Working with Skin Components

A skin component needs to the active (selected) component before you can work with its properties. To make a component active, either click on the component in the skin layout window or select it from the Component Properties "Positionable" drop-down menu list.

You will notice that the active component has 8 handles or nodes (small black squares) around its perimeter. When positioning and aligning small components you may want to switch these handles off for better viewing. To switch handles on/off, select "Hide/Show Selection" in the "Edit" menu towards the top-left of the interface window. You can also change the color of the handles by selecting "Selection Color" in the "Edit" menu then select a new color.

To delete a skin component, either select it in the skin window layout or select its name from the skin properties drop-down list, then hit the delete key on your keyboard.

If the skin background image or other larger components are hiding smaller components, simply right-mouse-click over the image, then select "Send To Back".

Moving and Resizing Components

When you add a skin component, it will usually need to be positioned within the background area. Additionally, Skin components other than images may need resizing. There are a number of ways you can do this.

Moving Skin Components (Image and non-image Components):

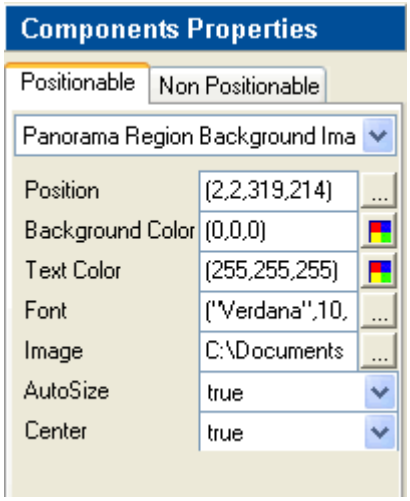
1. Click and drag inside the components image to the desired position.
2. Use the arrow keys on your keyboard for more precise positioning.
3. In the Component Properties window, select the "Positionable" tag then click the ellipsis (...) button to the right of the "Position" text, this will open a small dialogue box. Enter 'X' (horizontal distance across) and 'Y' (vertical distance down) values in pixels. This is useful when aligning same-size buttons and different media viewer regions.

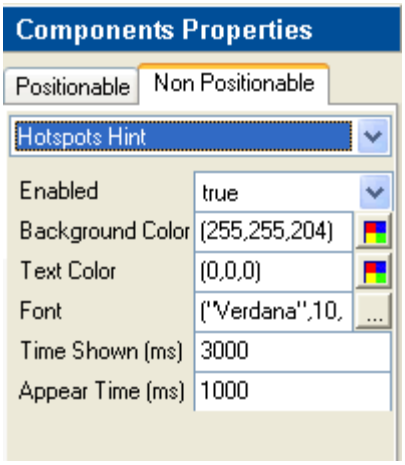
Resizing non-image components (Image Components cannot be resized):

1. Click on and drag the handles to resize the component.
2. In the Component Properties window, select the "Positionable" tag then click the ellipsis (...) button to the right of the "Position" text, this will open a small dialogue box. Enter the desired Width and Height values. This is useful when you want to match the size of different media viewer regions.

Component Properties

Component properties such as colors, hints and text can all be changed.
Components are either "Positionable" or "Non Positionable":





Positionable
Depending on the type of Component you are working with, the following properties can be set for each skin component. To change these properties simply select the component you wish to work with from the drop-down list. Only the Components that you've added will appear in the drop-down list.

Common Properties:
Properties that are common to most, but not all, skin components:

- **States Image:** You can change the image for any of the components by clicking on the ellipsis (...) button, then select a new image file.

- **Position:** Depending on the component, you can change the position and size of the component by clicking the ellipsis (...) button, then enter the values in pixels.

- **Hint Text:** Enter the text that you want to appear in the button's mouse-over Hint, a Button description, for example.

- **State:** Select a state from the drop-down list to view the different button states (effects) in the layout window.

- **Background Color:** Select a background color to apply to your 'non image' skin Component - Popup Menu, Labels etc.

- **Text Color:** Select a text color for the Hint or Pop-up Menu text.

- **Font:** Select a font face and font size.

- **Alignment:** Set the Text Alignment - Left/Center/Right. (Applies to Status and Sliding Show Position Labels).

Thumbnail list:
If you want to use your viewer skin for slideshows you can add a thumbnail list, this is optional.
The Thumbnail List is the area where the thumbnails for your slideshow will appear.

- **Orientation:** You can set the Thumbnail List's Orientation to Vertical or Horizontal.

- **Selected Border Color:** This is the color to apply to the border of the active slide's thumbnail image. The border can be set to flicker when the slide is being downloaded.

Media List Properties:
The Media List is where the names of all the media files in a SHOW presentation will be listed - Panoramas, Slideshows and Videos. The names can be selected (click on) by the user and the media will play in the viewer. The Media List can be used instead of, or with, the 'Combo Box'.

- **Unselected Background Color:** Select a background color for the media list.

- **Unselected Text Color**: Select a text color to apply to the names of the media in the list.

- **Selected Background Color**: Select a color to apply to the Media List's text background for the 'mouse-over' and 'active link' effect.

- **Selected Text Color:** Select a color to apply to the Media List's text (media name) for the 'mouse-over' and 'active link' effect.

- **Video Image:** (Optional) If you wish to add or change the image used in the media list to represent video media types; click on the ellipsis (...) button then select your new image file. To delete an image, select the file name shown to the left of the ellipsis button then press delete on your keyboard.

- **Panorama Image**: (Optional) If you wish to add or change the image used in the media list to represent panorama media types; click on the ellipsis (...) button then select your new image file. To delete an image, select the file name shown to the left of the ellipsis button then press delete on your keyboard.

- **Sliding Show Image:** (Optional) If you wish to add or change the image used in the media list to represent Slideshow media types; click on the ellipsis (...) button then select your new image file. To delete an image, select the file name shown to the left of the ellipsis button then press delete on your keyboard.

- **Media List Horizontal/Vertical Scroll Bars:** When including a Media List, you may also wish to add scroll bars. The Scroll bars consist of two images - a Background and a Bar. The Bar is the image that can be dragged to scroll the media list, the Background is the track the Bar slides over. Select files to use as the Media List's Horizontal or Vertical Scroll Bar "Background" and "Bar" images.

Non Positionable

In the Component Properties window, click on the 'Non Positionable' tab. Now you can select a non positionable feature from the drop-down list and set or modify its properties values.

Common Properties:

Properties that are common to most, but not all, of the features listed below:

- **Enable:** Set value to 'true' if you want to apply the feature to your viewer skin, 'false' if you don't. For example, if you don't want button hints to appear in a published presentation, select 'false' for the Hints.

- **Background color:** Select a background color to apply to the Text, Labels, Hint or Popup Menu.

- **Text Color:** Select a text color to apply to the Text, Labels, Hint or Popup Menu.

- **Font:** Select a font face and font size to apply to the Text, Labels, Hint or Popup Menu

- **Time Shown (ms):** Enter the value in milliseconds. This is the length of time the Hint text will remain visible on mouse-over.

- **Appear Time (ms):** Enter the value in milliseconds. This is the time value from initial mouse-over before the hint appears.

Help:

Configure the Help page URL and Popup size.

- **Help URL:** If you wish to include a Help button, the Help URL is the page that will open when the button is clicked. You must create a separate help page (an HTML web page) for this purpose. The default location for the help page will be the same location as you skin images, in other words, the URL enter here is relative to the Skin's image folder. Example - Create a help page with a file name of 'help.htm' and place a copy of this into the same folder as your viewer skin images (after generating the skin).
  You can enter a full URL, if you prefer, to call the Help page from a web server.
  Example: http://www.mydomain.com/folder/help.htm

- **Help Size:** Enter a value in pixel for the size of the Help popup window.

Hint (Skin Button Hints):

Set the properties for the Skin Button mouse-over Hints.

Hotspot Hints:

Set the properties for the Hotspot mouse-over Hints.

Map Hints:

Set the properties for the mouse-over Hints that appear over the hotspots in the map/floorplan viewer region.

Map Popup Menu:

The Map Popup Menu appears when a hotspot area within a map or floorplan link is click. This is useful where you have added multiple links to a mapped hotspot area. The user then selects a link from this popup menu. In addition to other common properties, you can also set the:

- **Transparency.** This value sets the transparency of the popup menu.
  Enter a value between 0-100% where 100% equals no transparency.

- **Selected Color and Selected Text Color.** Set the color for the menu background and text for the 'mouse-over' effect to apply to the links in your popup menu.

Generating the Skin

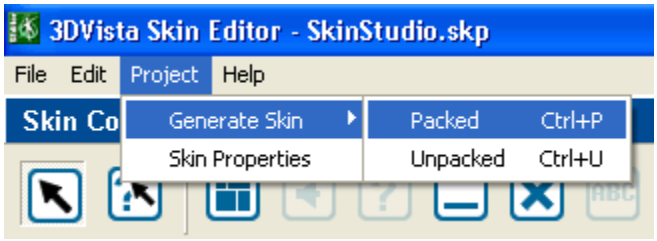
When you've finished your viewer skin, you need to "Generate" it in order to create the necessary files for use with your 3DVista Show program.

You can generate a "Packed" or "Unpacked" skin.

An Unpacked skin will generate all the necessary skin images and the .ski file as individual elements or files. A Packed skin will generate a single 'packed' file containing all the necessary files.

The advantage of using Packed skins is that they download much faster than unpacked skins.

To generate your viewer skin:
From the file menu, select "Project" > "Generate Skin" then select "Packed" or "Unpacked"
Select the location (folder) where you want to save the skin, and give your skin a file name.
Click "save".
You have now generated the files for your new 3DVista Skin.



Adding your New Viewer Skin to 3DVista Programs.

Intro

After Generating a skin, you need to add (copy) the skin files to your 3DVista program (Studio, **SHOW**, etc.) so that you can select the skin during the Publication process.

You must copy the ".ski" file and a folder containing all your skin's images to the 3DVista Program's folder that contains the existing skins files and folders.
The exact folder path (location) will depend on which 3DVista program you have installed on your computer and the program's location on your hard disk.
Look for the "3dvista" program in your "Program Files" folder then locate the skins folder for that program - this will be the location to copy your new skin's files to.

Example:
For 3DVista SHOW the default path will be something like this:

For Java applet (web) skins:
C:\Program Files\3dvista\3DVista Show Standard x.x RC x\skins\skins.applet

Or, for exe skins:
C:\Program Files\3dvista\3DVista Show Standard x.x RC x\skins\skins.exe

'Classic' Skin Layout

Shown below is the layout of the 3DVista SHOW Classic Skin. It serves as a guide to various skin features and components.

SHOW Skin Button - Definitions.

1. Select.
Use this button to select and work with a skin Component inside the Skin Window Layout area. Once selected, you can work with the Components Properties. You can also click and drag, either inside a component to move it or on its handles to resize it components. To switch the handles on/off, select Hide/Show Selection from the Edit menu.

2. "What's This?" - Help!
Use this button for Skin Editor button definitions help. When selected, click the Skin Editor button icon(s) that you want information about and a small pop-up help window will open. To exit the help mode, click the Select button.

3. Background Image.
Select an Image file to use as the background for the skin. You can include more than one background image if required.

4. Play Button.
Select an image file to use as the Play button. The Play button is used to start a SHOW presentation.

5. Stop Button.
Select an image file to use as the Stop button. The Stop button is used to stop a SHOW presentation.

6. Pause Button.
Select an image file to use as the Pause button. The Pause button is used to pause a SHOW presentation.

7.  **Backward Button.**
Select an image file to use as the Backward button. The Backward button is used to move back to, and play, the previous media in the SHOW Media List.

8.  **Forward Button.**
Select an image file to use as the Forward button. The Forward button is used to move to, and play, the next media in the SHOW Media List.

9.  **Loop "Current Media" Button.**
Select an image file to use as the Loop Current Media button. When on, the Loop Current Media button causes the current media to loop, playing over and over until another media item is selected.

10.  **Continuous Play Button.**
Select an image file to use as the Continuous Play button. When on, the viewer will automatically load and play the next media file when the current media has ended.
Does not apply to panoramas.

11.  **Mute Button.**
Select an image file to use as the Mute button. The Mute button is used to switch Audio on/off.

12.  **Help Button.**
Select an image file to use as the Help button. The Help button is used to open the help.htm page.

13.  **Minimize Button.**
Select an image file to use as the Minimize button. The Minimize button is used when creating an "Executable" skin and is not required when creating a "Java" skin. It allows the executable version's window to be minimized.

14.  **Close Button.**
Select an image file to use as the Close button. The Close button is used when creating an "Executable" skin and is not required when creating a "Java" skin. It allows the executable version's window to be closed.

15.  **Text Panel.**
Adds the Text Panel area to the skin. The Text Panel is where a SHOW presentation's panoramas, slideshow and video text will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the text panel or use the Components Properties to apply changes.

16.  **Status Label.**
Adds the Status Label area to the skin. The Status Label shows the media's status - % loading... and media file name.
Select this button then click inside the skins background area. Click and drag to move or resize the status label area or use the Components Properties to apply changes.

17.  **Media List.**
Adds the Media List area to the skin. The Media List is where the names of all the media files included in a SHOW presentation will be listed (Panoramas, Slideshows and Videos names).
The Media List can be used instead of, or with, the Media Combo Box.
Select this button then click inside the skins background area. Click and drag to move or resize the media list area or use the Components Properties to apply changes.

18.  **Media List Horizontal Scroll Bar.**
Select files to use as the Media List's Horizontal Scroll Bar "Background" and "Bar" images. Select this button then click inside the skins background area. Click and drag to move or resize the Horizontal Scroll Bar's image area or use the Components Properties to apply changes.

19.  **Media List Vertical Scroll Bar**.
Select files to use as the Media List's Vertical Scroll Bar "Background" and "Bar" images. Select this button then click inside the skins background area. Click and drag to move or resize the Vertical Scroll Bar's image area or use the Components Properties to apply changes.

20.  **Media Combo Box.**
Adds a Drop-Down Media List to the skin. The Media Combo Box is the drop-down menu that lists the names of all the media files included in a SHOW presentation.
The Media Combo Box can be used instead of, or in addition to the Media List.
Select this button then click inside the skins background area. Click and drag to move or resize the Combo Box or use the Components Properties to apply changes.

21.  **Map.**
Adds the Map viewer area to the skin. This is where maps, plans, etc will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the Map area or use the Components Properties to apply changes.

22. 

Map Region Label.
Adds the Map Region Label area to the skin. The Map Region Label is where the name of a selected mapped hotspot area will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the text panel or use the Components Properties to apply changes.

23.  **Up Panorama Button.**
Select an image file to use as the Panorama's Up Button. The Up Button allows the user to look in the vertical-up direction of a panorama.

24.  **Down Panorama Button.**
Select an image file to use as the Panorama's Down Button. The Down Button allows the user to look in the vertical-down direction of a panorama.

25.  **Left Panorama Button.**
Select an image file to use as the Panorama's Left Button. The Left Button allows the user to look in the horizontal-left direction of a panorama.

26.  **Right Panorama Button.**
Select an image file to use as the Panorama's Right Button. The Right Button allows the user to look in the horizontal-right direction of a panorama.

27.  **Stop Panorama Button.**
Select an image file to use as the Panorama's Stop Button. When pressed, the Stop button stops the movement of the panorama.

28.  **Hotspot Panorama Button.**
Select an image file to use as the Panorama's Hotspots on/off Button.

29.  **Zoom Out Button.**
Select an image file to use as the Zoom Out Button. When pressed, immersive panoramas will zoom out.

30.  **Zoom In Button.**
Select an image file to use as the Zoom In Button. When pressed, immersive panoramas will zoom in. If slides in a slideshow are larger than the slideshow's viewer the zoom in button will open the full-size slide in a pop-up browser window.

31.  **Panorama Region. (Mandatory Component)**
Adds the Panoramas viewing area to the skin. This is the area where any panoramas will be visible within the skin.
Select this button then click inside the skins background area. Click and drag to move or resize the Panorama Region or use the Components Properties to apply changes.

32.  **Panorama Region Background Image.**
Select a file to use as the background image to appear in the panorama viewer region when a panorama is stopped.

33.  **Thumbnail List.**
Adds the Thumbnail list to the skin. This is the area where the thumbnail images for slideshows will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the Thumbnail List area or use the Components Properties to apply changes.

34.  **Backward Image List Button.**
Select an image file to use as the Backward Button for the Thumbnail list.

35.  **Forward Image List Button.**
Select an image file to use as the Forward Button for the Thumbnail list.

36.  **Slideshow Status Position.**
Adds the Slideshow Status Position area to the skin.
The Slideshow Status Position indicates the status of the slide, that is, the position of the slide (slide number) being displayed. It also indicates the total number of slides in a slideshow. For example "2 of 6".
Select this button then click inside the skins background area. Click and drag to move or resize the slideshow status position area or use the Components Properties to apply changes.

37.  **Slideshow Text Panel.**
Adds the Slideshow Text Panel area to the skin. The Slideshow Text Panel is where the text that accompanies each individual slide will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the text panel or use the Components Properties to apply changes.

38.  **Slideshow Region. (Mandatory Component)**
Adds the Slideshow viewing area to the skin. This is the area where any slideshows will be visible within the skin.
Select this button then click inside the skins background area. Click and drag to move or resize the Slideshow Region or use the Components Properties to apply changes.

39.  **Slideshow Region Background Image.**
Select a file to use as the background image to appear in the slideshow viewer region when the slideshow is stopped.

40. **Video Region. (Mandatory Compone**nt)
Adds the Video viewing area to the skin. This is the area where any videos will be visible within the skin.
Select this button then click inside the skins background area. Click and drag to move or resize the Video Region or use the Components Properties to apply changes.

41. **Video Region Background Image.**
Select a file to use as the background image to appear in the video viewer region when the Video is stopped.

42. **Viewer Default Background Image.**
Select a file to use as the default background image to appear in the viewers before any media is loaded in any viewer, or if the presentation is stopped. This image will be used as the default background for viewers that do not have their own background image defined.

43. **Company Mail Button.**
Select an image file to use as the Email Button. When pressed, this allows an email to be sent by the user to the email address entered during SHOW's publishing process.

44. **Company Text Panel.**
Adds the Company Text Panel area to the skin. The Company Text Panel is where the Company Info text, entered during SHOW's publishing process, will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the company text panel or use the Components Properties to apply changes.

45. **Company Logo Image.**
Adds the Company Logo area to the skin. The Company Logo area is where the Company Logo image, entered during SHOW's publishing process, will appear.
Select this button then click inside the skins background area. Click and drag to move or resize the company logo's area or use the Components Properties to apply changes.

FloorPlan

3DVista FloorPlan Maker

version 1

Tutorial

Creating 2D and 3D Floorplans

Table of Contents

Introduction

Tutorial Overview

Using FloorPlan Maker you can quickly create 2D and 3D rendered floorplan images. No CAD or other drawing skills are need. By following this tutorial you will learn how to quickly create a 2D and 3D floorplan for your website and for printing or to use as interactive floorplans with your 3DVista virtual tour projects.

In **Part One**, you'll learn about the different viewing modes and the basic drawing techniques including how to use FloorPlan Maker's tools and export both 2D, with dimensions, and 3D floorplans.

You are probably eager to get started drawing your first floorplan. For this reason, rather than start by explaining all of FloorPlan Maker's tools and settings, part one of the tutorial gives step by step instructions showing you how to quickly create your first basic 2D and 3D floorplan within minutes.

In **Part Two,** you will learn how to add furniture and stairs. FloorPlan Maker includes an extensive library of furniture objects. The library is being added to all the time and it's even possible to add your own 3D objects.

In **Part Three**, you will learn how to extend and modify your floorplan using some of FloorPlan Makers other drawing tools; how to add different types of garden walls, buildings and decorative objects and how to illuminate your 3D Floorplan for a realist professional rendered finish.

About Auto Updates

Like all 3DVista products, FloorPlan Maker updates automatically. To ensure your copy remains up to date you need to be connected to the Internet each time you start FloorPlan Maker. FloorPlan Maker will then automatically check the latest version and, if a newer version is available, will ask if you'd like to download and install the updates. Make sure your firewall is set to allow FloorPlan Maker access to the Internet if you want to allow auto updates.

Part One: Creating a Basic 3D Floorplan

By following this part of the tutorial you will learn the basic drawing techniques required when using FloorPlan Maker – how to sketch and decorate a floorplan and how to manipulate the 3D view in preparation of exporting the image. The floorplan you'll create is a very simple floorplan – a box with a single room, a door and window.

Main Toolbar

The main toolbar, shown below, appears at top-right of FloorPlan Maker's user interface:

New is used to start a new project.

Open is used to open a previously saved FloorPlan Maker project.

Save is used to save the project you are working on.

Export is used to export the 2D or 3D floorplan picture – discussed later in this tutorial.

Drawing and Viewing Modes

There are three other buttons in the main toolbar; these are used to switch between the 3 different work **Modes**, which are:

- **Sketch**
- **Decoration**
- **3D View**

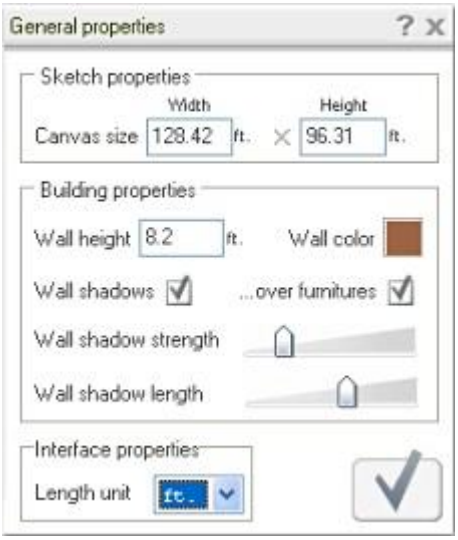
Sketch mode is used to draw the walls using measurement units of either imperial; Feet (ft.) or Inches (in.), or metric; Metres (m.) or Centimetres (cm.) depending on your chosen preference (See General Properties, below).

Decoration mode is used to Add furniture, doors, windows and stairs, and also to set floor and wall colors and textures. The perimeter and ground color can also be set.

In **3D View** Mode you can zoom, pan and rotate your 3D floorplan at any time. You can also adjust Camera Angle, Ambient Light levels, Shadows and Sun Position. Wall Height - High, Medium or Small - can also be selected.

General Properties

Immediately below the 3D View mode button and to the left of the Help button is a small 'Preferences' (cogwheel) button. Click the button to open the **General Properties** (**Preferences**) window, shown below.



Most of the properties are self-explanatory and won't need changing most of the time.

The most important one for now is **Units** (**Length Unit**). Select your preferred unit of measurement - either imperial Feet (ft.) or Inches (in.), or metric Metres (m.) or Centimetres (cm.).

We'll being using feet (ft.) throughout this tutorial but your can use whichever unit you prefer. For simplicity, where sizes are quoted and if you select Metres, just replace 1ft with 1m, for example. You'll obviously end up with a much larger floorplan, but that won't matter for the sake of this tutorial.

Sketch Mode: Drawing Walls

Having set the units, you're ready to start drawing. Click the **Sketch** mode button to make sure that you are in Sketch mode.You'll notice that there's a floating **Tools** box – the tools available vary depending on which mode you are working in. You can click and drag the tool box's header to move it or you can minimize it the same way as you would minimize any other Windows window.

To aid drawing of straight, parallel and square lines, and 'whole number' unit lengths (i.e. 1, 2, 3, etc.) make sure **Snap to Grid** is **ON**. The green circle shown in the **Snap to Grid** icon (first column, last icon in tool box) will be over the horizontal and vertical lines, as shown left, when snap is '**on**'.

To draw lines (walls) in fraction (not whole) unit lengths (i.e. 1.5ft) switch Snap **off**.

Use the '**Eye**' button (right column, sixth button) to switch the **Grid** on/off.

Use the '**5m**' button to **show/hide wall dimensions**. For this tutorial switch this button to **ON**. The button will appear green when switched to '**on**'.

Now, with units set to 'ft', Grid 'on' and Snap to Grid 'on' your are ready to draw.

Click the **Create Polywall** button (right column, third button down) – this is the tool you'll probably be using most often when drawing walls.

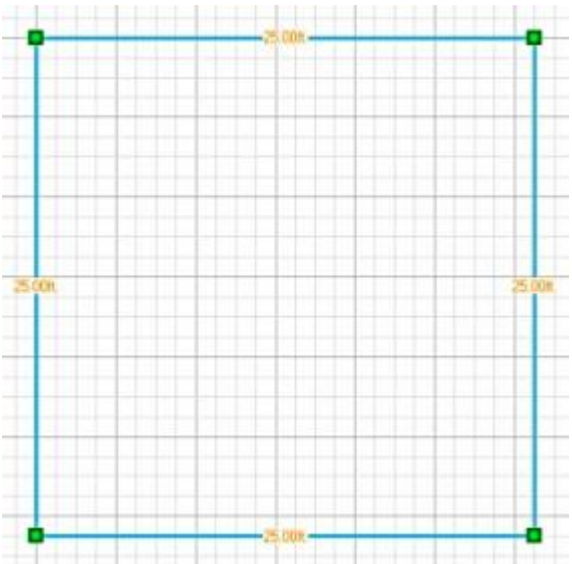
Import Background Image (bottom right button, **Tools** menu) allows you to select an image that can be traced over. For example, you might have an existing floorplan picture that you want to convert to a 3D Floorplan, simply import it and draw over it in 2D **Sketch** mode. The imported background is not visible in exported floorplans, it is only used for reference in **Sketch** mode.

Click in the Grid area to place your first corner point (start of the wall).

Notice that as you move your pointer over the grid the line and dimension change dynamically. Move the pointer in the direction you want the wall to be and then click to place the next point (corner) of your wall.

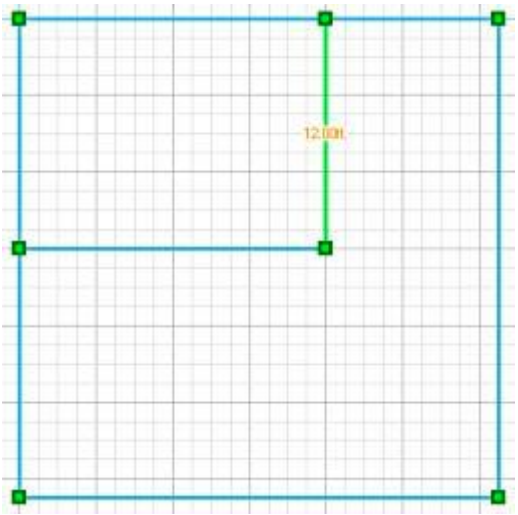
If you make a mistake and need to remove a line, click the '**X**' button (**Tools** box - right column, second button down) and then click on the line you want to delete.

Start by **drawing a 25ft x 25ft square** as shown below.



After placing the final point (corner) closing the square, right mouse-click to finish the polywall.

Add the two walls shown below to create a new room inside the square. Working from the top left corner, left mouse-click 12ft to the right along the top line to place the start point. Move down 12ft and click to place the second point. And finally, move left and click on the left line to create the internal room as shown In the sketch below. Each square in the grid = 1ft.

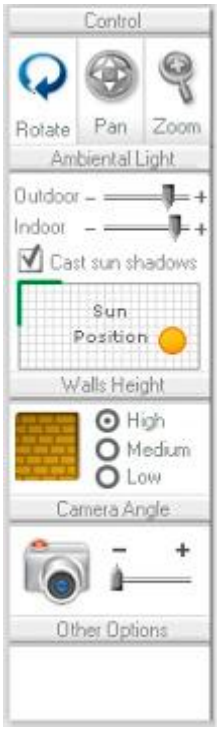


Save your Project.

Note: When drawing larger floorplans use the **Zoom out** and **Zoom in** buttons in the floating **Tools** box as required.

3D View Mode: Introduction

The next logical sequence when drawing a floorplan is to switch to **Decoration** mode in order to add doors, windows and furniture. However, for the purpose of this tutorial, an introduction to the **3D View** mode is more appropriate. Click on the **3D View** button in the top menu to switch to 3D view.



The 3D View mode is used to orient your floorplan and to adjust camera position and ambient light levels before exporting the 3D Floorplan. The tools allow you to **Zoom**, **Pan** and **Rotate** your 3D floorplan at any time during the drawing process. You can adjust **Camera Angle**, **Ambient Light** levels, **Sun Position** and Shadows. **Wall Height** - High, Medium or Small - can be also be selected.

You are encouraged to try these tools in order appreciate the effect they have on your rendered 3D floorplan.

Whilst manipulating the view, you may find it faster if you uncheck the **Auto Render** checkbox (bottom left of interface), this is especially true when working with large and complex 3D floorplans.

After making changes to your floorplan – adding furniture, illumination, ambient light levels or changing the viewing angle – you should click on the **Render** button; rendering will produce a much more realistic 3D model.

Important: While the rendering process is running you cannot export the image, you must wait until rending is complete.

Note: Both the **3D View** and the 2D **Decoration** view images can be exported. Wall dimensions can be shown (switched on) in the 2D **Decoration** mode.

Rotate

To rotate your floorplan either:

- Click and drag using your **Left Mouse Button**
- Select the **Rotate** tool then click and drag in the center of the view.

Pan

To pan your floorplan either:

- Click and drag using your **Right Mouse Button.**
- Select the **Pan** tool, click and drag horizontally or vertically as required.

Zoom

To zoom in/out either:

- Click and drag **Left and Right Mouse Buttons**
- Select the **Zoom** tool, click and drag your floorplan. Drag upwards to zoom in, downwards to zoom out.

We'll return to the 3D View later in the tutorial. For now, having familiarised yourself with 3D View, it's time to switch to the **Decoration** mode in order to learn how to add doors, windows and furniture and change floor and surface textures.

Decoration Mode: Introduction

Click the **Decoration** button in the top menu. A new set of tools will appear in the floating **Tools** box, as shown below, along with a new floating **Room Properties** panel. Both of these can be dragged to move them away from your floorplan picture if necessary.

Most of the new tools are self-explanatory and some tools you will recognise from drawing in Sketch mode. Hover your mouse pointer over the tool icons to see what each tool is.

Decoration Mode: Surface Textures

We'll start by taking a look at the **Room Properties** panel, below.

Again, many of the tools are self-explanatory and you are encouraged to try them and experiment a little in order to understand their purpose and effect. It's important to realise that the purpose of these tools will change slightly depending on the item (object) you have selected – the 'active' item. If the Room Properties panel is not visible, simply double-click inside the floorplan to open it.

Example: the initial **Floor Texture** – the 'external' floor (ground) texture - is shown as green. Click inside the floorplan, to make it the 'active' item - notice that the floorplan perimeter is now highlighted in orange and that the **Room Properties 'Textures'** (floor, wall and perimeter textures) have changed. If you now click outside of your floorplan the outside area will again become the 'active' item.

To continue with the exercise, click inside the **smaller room** of your floorplan; notice how the room is highlighted in light orange color indicating that it's the 'active' room. You can now use the **Room Properties** tools to change the floor and wall (internal) colors and textures.

The default floor texture is a light color wood parquet. Do the following to change this to black and white floor tiles; the **Room Properties** floor **textures** panel will update to look like the one shown below.

To change the floor texture, click **Floor - Texture**'s thumbnail; this will open the **Textures Library**

Select the texture material type from the top row of thumbnail pictures. Click on the arrows to scroll back and forth through the list of available textures.

Select the **Tiled** texture.

Now scroll through the bottom thumbnail list and select the **TileDark** as the finish.

Click the '**X**', top right of the **Textures Library** panel, to confirm and close panel.

The **Room Properties** will update to show the selected texture as a thumbnail, as shown right.

The **Texture offset** arrows buttons can be used to 'move' (position) the texture within the floorplan.

To change the scale of the texture, to make the tiles appear larger or small for example, use the **Texture Zoom** tools.

If you want to add a color overlay to the texture, click on the **Floor Color** box (default color is white) to open the color palette window.

Changing the **Wall** and **Perimeter** textures is just as easy, simply click on the relevant thumbnail to open the **Textures Library**.

You can switch to **3D View** at anytime to check the progress of your work, just be sure to click inside the room you are working on – to make it the 'active' room – when you switch back to **Decoration** mode.

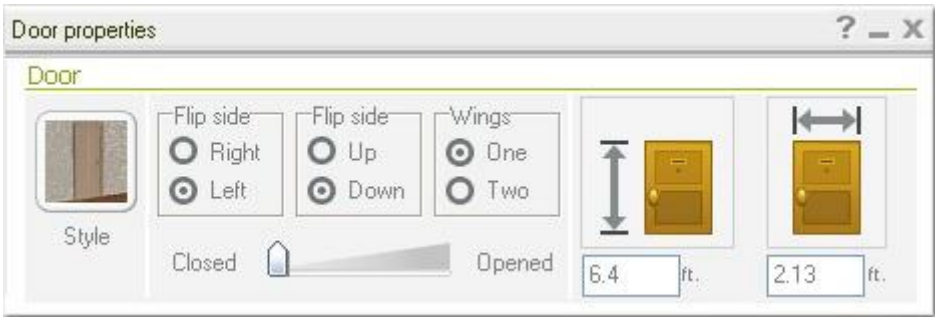
Still working in Decoration mode, it's time to add a door and window…

Decoration Mode: Doors and Windows

In the floating **Tools** box, select the '**Add Door**' icon. Ignore the **Door Properties** for a moment.

Notice that the door symbol attached to the pointer auto-rotates and has **red handles**. Hover the door over one of the internal walls and the handles' color changes to **green**; green handles indicate that the door can be anchored in that position. Click once to place the door in a wall. The handles' color now changes to **orange** indicating it is the '**active**' object. Inactive object handles are **black**.
Having anchored the door, click the **Select** (Arrow) in the **Tools** floating toolbox to exit 'add doors'.

Click on the door in your floorplan to make it the **active** object – its properties will now appear in the **Door Properties** panel, as shown below.



You can change the **Door Style** in much the same way as you changed surface textures discussed earlier; simply click on the Door 'Style' **Thumbnail** to open the door **Textures Library**; After selecting a door type, **Close** ('**X**') the textures library to return to the door properties panel.

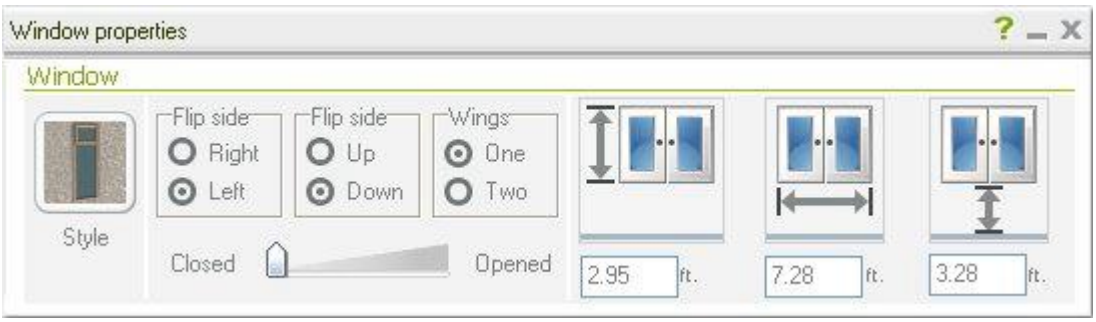
Using the **Door Properties** settings panel, you can **Flip** the door to open inwards or outwards and apply left or right side hinged opening. You can also enter values for the **Height** and **Width** of the door by replacing the default values shown in the door properties' panel.

To **Delete** a door, click on it to make it the **Active** object and then select the delete (**X**) button in the floating **Tools** box.

Windows can be added in a similar way as doors; select the '**Add Window**' icon in the **Tools** box. Click on an external wall to place the start point (beginning) of the window. If you clicked in the wrong place, right-mouse-click to cancel the start point and to 'free' the pointer.

Move your mouse pointer along the wall to the approximate end point of the window and click to place it. If at this point you want to place more windows, right-mouse-click to 'free' the pointer from the end of the window and then repeat the above steps.

When done, click on the **Select** (arrow) button in the **Tools** menu. Now click on the window you just added to make it the **Active** object – the **Window Properties** panel (shown below) will appear (double-click on the window in your floorplan if the properties panel does not appear).



As you can see, **Window Properties** are very similar to door properties, click the **Style** thumbnail to open the windows **Textures Library**. Also, notice that as well entering height and width values, you can enter the height from ground level to the bottom edge of the window.

Switch to **3D View** if you want to confirm your style changes and to see the effect in 3D. Switch back to **Decoration** mode when done.

To **Move** a door or window, make sure it is the **Active** object and then click and drag one of the orange colored handles and drop the door/window into the new position.

To **Delete** a door or window, make sure it is the **Active** object and then click the Delete (**X**) button in the floating **Tools** box.

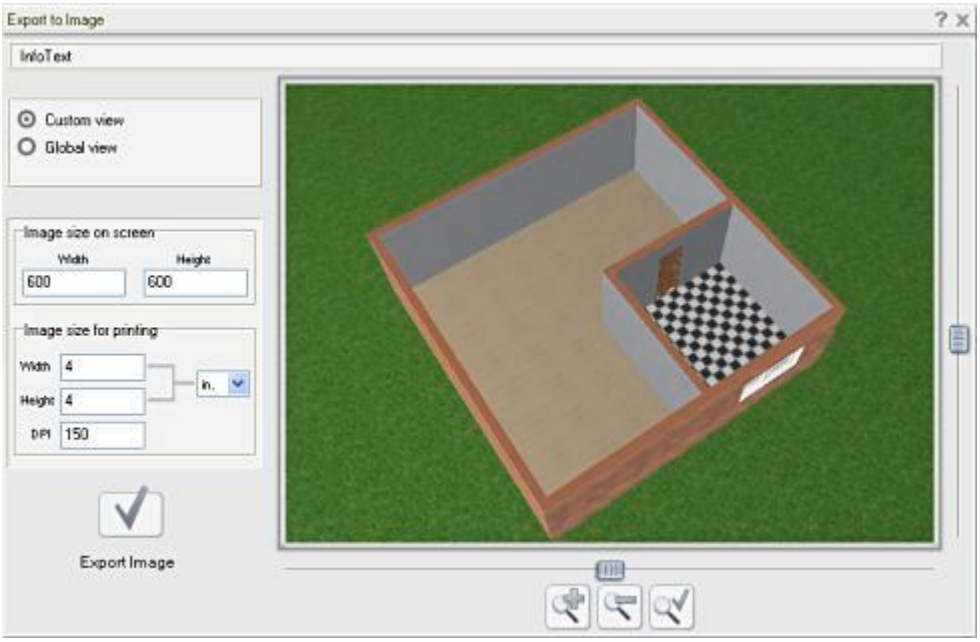
Exporting the Floorplan Picture

Using Floorplan Maker you can export both the 2D (with or without wall dimensions) and 3D floorplans as JPEG (jpg) or Windows Bitmap (bmp) images depending on which **Mode** you are viewing when you select the **Export** option.

To **Export** a **3D Floorplan**, switch to **3D View** mode.

Using the **Controls** tools, compose the 3D view by adjust the elevation, camera angle and lighting as required in readiness for exporting the image.

Select **Export** from the top menu; the **Export to Image** settings window will open (shown below).



Your exported image will be the exact image you see here apart from the size, that is. Use the **zoom-in**/ **zoom-out** tools and the horizontal and vertical **slider controls** to achieve the desired image.

Note: If you are not happy with the elevation or orientation of the view, **close** the **Export to Image** window ('**X**') to return to **3D View** mode. Adjust the rotation and camera angle as required and then select **Export** again.

Having centered your floorplan in the **Export to Image** window, you should set the **Image Size**. Enter a value – number of pixels - for the screen width by typing inside the **Width textbox**, click inside the **Height textbox** and all the other size values will automatically update accordingly. If required, you can enter a new value for the image's DPI for printing.

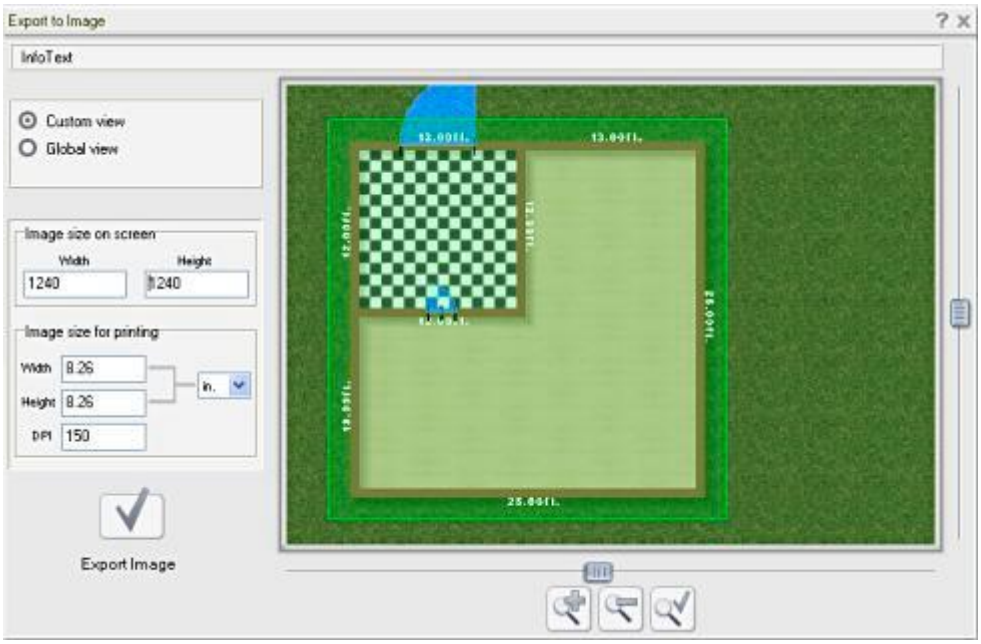
Click the **Export Image** button. In the **Save FloorPlan Maker Render** widow, enter a name for your floorplan image and select the image type to save as – i.e. Windows Bitmap or JPEG Image.

To **Export** a **2D Floorplan**, switch to **2D View** mode.

The sequence and tools for exporting a 2D Floorplan are very similar to those used when exporting a 3D floorplan. The main difference is in image cropping.

First, decide if you want wall dimensions to be visible. Used the **Show Wall Lengths** button – '**5m**' button at the bottom of the floating **Tools** menu - to toggle wall dimensions on and off.

Select **Export** from the top menu; the **Export to Image** settings window will open (shown below).



Unless you want to export the entire image, select **Custom View**. Notice that FloorPlan Maker has placed a light green box around the floorplan; this is the **crop box** – everything outside of the box will be removed from your exported image.

If preferred, you can draw your own crop box around an area of the floorplan that you want to keep. Simply click and drag inside the picture area to draw a new crop box; this can be useful if you only want to export part of your floorplan – a room, for example.

Use the zoom and slider controls, set the image size and export the image as explained earlier for 'Exporting a 3D Floorplan'.

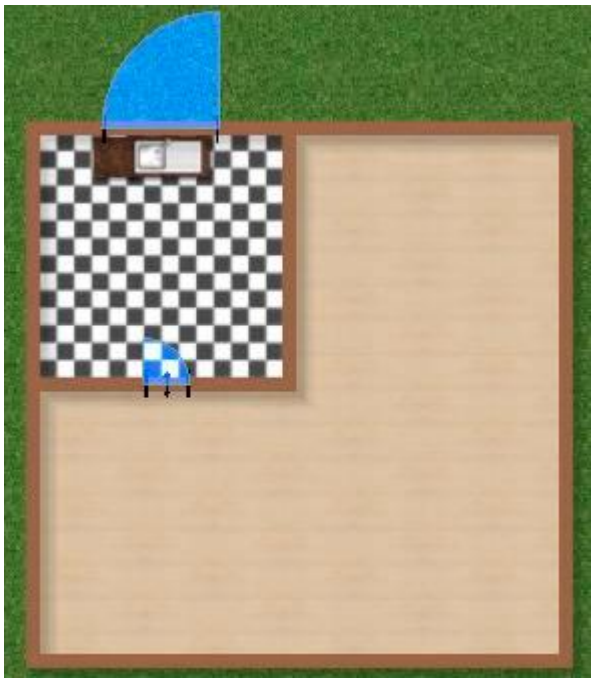
Part Two: Adding Furniture & Stairs

It this part of the tutorial you will learn how to:

- Add and Position Furniture
- Add Different Styles (Flights) of Stairs

Adding Furniture

Open the Floorplan you created in Part One of this tutorial and switch to **Decoration** mode. Select the **Add Furniture** (chair) button – the **Furniture Library** panel will open. Follow the steps given below to add a kitchen sink unit and a washing machine to the small room, as shown (below, right).



From the **Furniture Library**, first select the **Kitchen** thumbnail in the top row, then select **Sinks** in the second row, and finally, select a sink from the last row. Since the above picture shows the sink positioned under a window, you would not select a sink with a wall unit (cupboard over)!

Switch on the **Snap to Wall** and **Snap to Furniture** (floating **Tools** box). If you were positioning and island or other free-standing piece of furniture, you should switch these snap modes to 'off'.

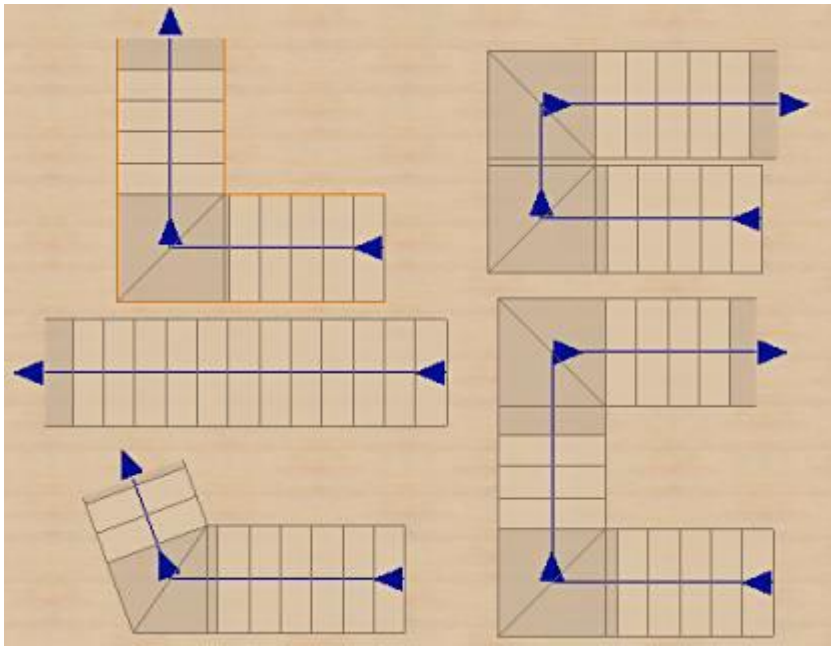
Move your mouse pointer over the floorplan close where you want to place the sink then click to place it.

Click and drag to **Move** the sink. For fine control, click on the sink (to make it the active object) and use the arrow keys on your keyboard. To **Delete** it, click on it and press the delete key on your keyboard.

There may be occasions where you need to rotate an object. To do this, select it, click the **Rotate** button in the floating **Tools** box, then click and drag anywhere inside your floorplan. Click the **Select** button in the **Tools** box, when done.

Adding Stairs

Shown below are just 5 examples of stair layouts that can be added to your floorplans. As you can see, stair can be a single **straight flight** or of **multiple flights**.



Select the **Add Stair** button in the floating **Tools** box; the **Stairs Properties** panel will open.

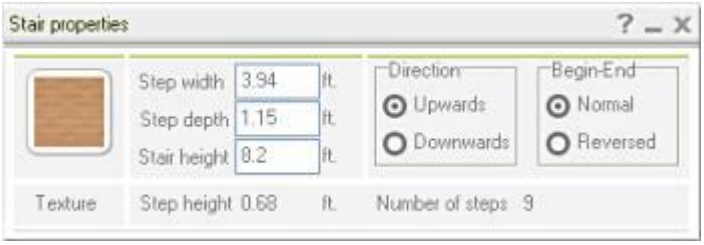
Use the **Texture** in exactly the same way as detailed earlier in this tutorial. All of the **Stair Properties** can be changed later so, for now, try the following in order to practice drawing and positioning flights of stairs.

A Straight Flights of Stairs

Click in the approximate position that you want the first step to be – that's the beginning of the flight – this point will be the front center of the first step.

Note: The stairs can easily be moved into the correct position after you've drawn then.

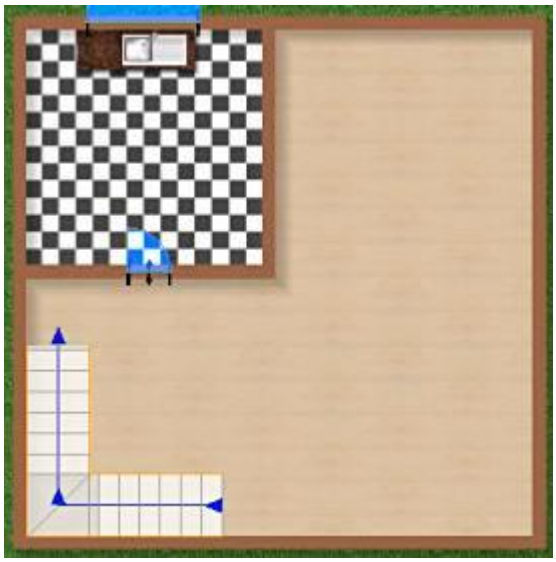
Now move your mouse into the general direction that you want the flight of stairs to run. Click to indicate the end of the stair flight. Finally, right-click to finish drawing the stairs.



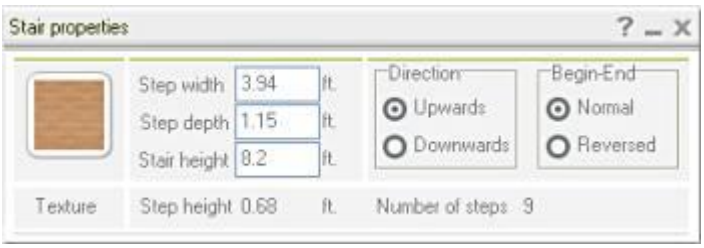
Multiple Flights of Stairs

Begin as detailed above for the straight flight to draw the first flight of steps. Do not right-click after placing the end of the first flight, but instead, move the mouse in the new direction that you want the continuation flight to go – click to indicate the end of that flight. You can do this as many times as you like, just right-click to indicate the end of run the stair run.

Try drawing the 'L' shaped stairway shown in the example below. Remember, begin by drawing the stairs in the approximate position and then, after right-clicking to end, click on the stairs to make them the 'active' object and drag to **Move** then into the required position.



With the stairs now in place, you can adjust the **Stair Properties** if required. You can have more than one staircase in a floorplan, each with different property values. Click on the stairs at anytime to open the **Stair Property** panel.



Step Width: This is the width of the staircase.
Step Depth: The area that you stand on – from front edge of one step to the front of the next step.
Stair Height: The total height, i.e. distance between floor levels.

Notice that the **Step Height** and **Number of Steps** automatically change (update) to suit the values you entered above.

Part Three: Advanced Floorplan Drawing

In this part of the tutorial you will learn how to:

- Move a Point or Wall (Line)
- Bisect Walls
- Divide Walls
- Extrude Walls
- Garden Walls, Furniture and Lights
- Illuminations (Scene lighting)
- Wall Properties

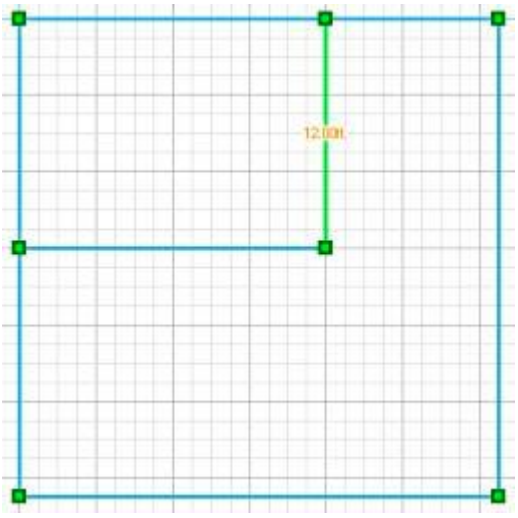
Extending the Existing Floorplan Project

In **Part 1** you learned how to create walls and rooms using the **Polywall** tool. In this final part of the tutorial you will learn how to use the remaining tools to extent and modify the floorplan that you created in parts 1 and 2.

To begin, **Open** your Floorplan project file in **Sketch** mode.

Moving a Point or Wall 

Let's say we now want to make the kitchen area a little larger. One way to do this is to use the **Move Point or Line** tool. Do the following to make the kitchen larger using the sketch shown as a guide.



Select the **Move Point or Line** tool.

Click on one of the **handles** (green squares) at the end of the wall – the line shown in green in the picture left.

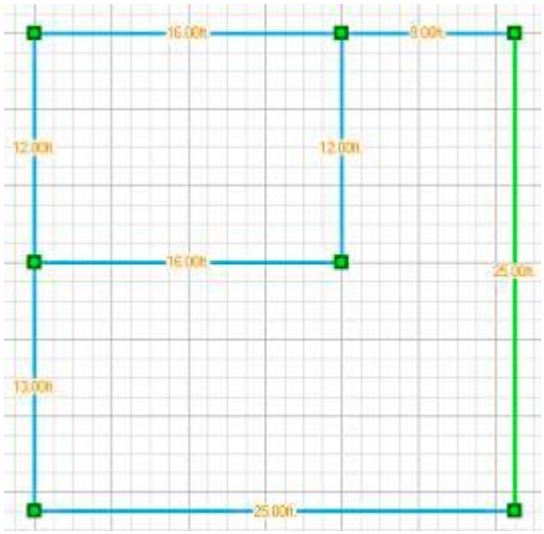
Move your mouse to the point you want to move the line to and click to place the new end point.

Repeat the above for the other end of the wall to extent the kitchen area as shown in the sketch, so the kitchen is now 16ft wide.

Extruding Walls 

Let's now say we want to make the building larger. This is very easy to do by using the **Extrude** tool. The first picture below shows the sketch as it is before extruding. The second picture shows the sketch after extruding the wall to the right of the floorplan.

Try the following:



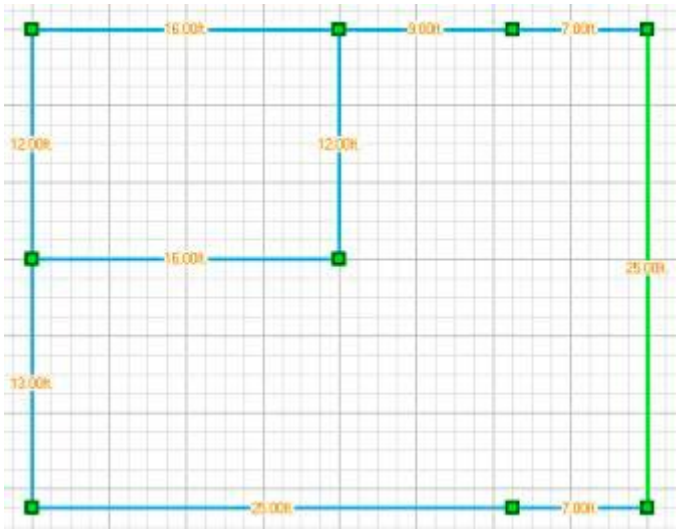
Select the **Extrude** tool.

Click on the line (shown in green, left).

Move you mouse to the right to the point you want to move the line (wall) to.

Click to place the wall in to the new position.

It is as simple as that!



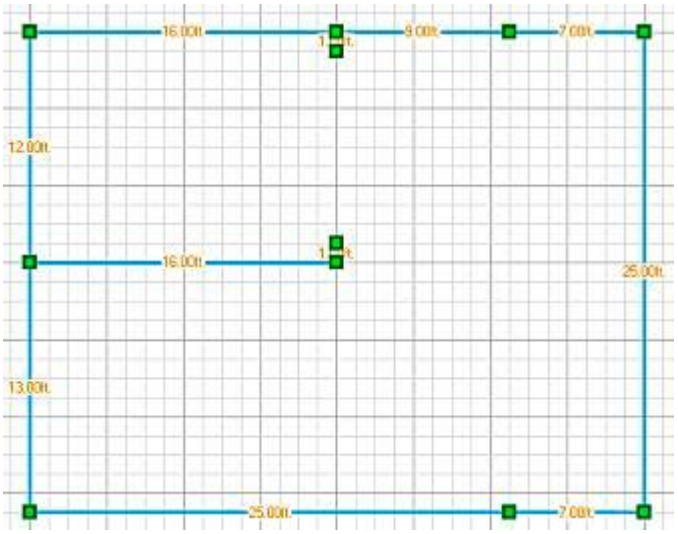
Notice that because the wall was extruded, the original wall end points are still there and a new section of wall has been added – 7.00ft. to each end in the example shown left.

This can be useful if you need to maintain the original wall end points (to create a pier for a archway, perhaps?) or if you want to remove sections of the wall to create a new opening.

Dividing a Wall 

You might want to divide a wall in order to remove a section of it. Let's say you want to make the kitchen open-plan, you want to remove part of the internal wall to leave piers both sides and maybe an archway over.

Follow the steps outlined below to remove part of the right-hand side kitchen wall so your floorplan looks similar to the sketch shown here.



Select the **Divide Wall** tool.

Hover your pointer over the wall that you want to divide, in the exact position you want to break the line. In the example above, that was 1ft or 1 square from the top/bottom horizontal walls.

Click to divide the line at that point.

Repeat the above so the line (wall) has been divided in the two positions shown above.

Now select the **Delete** ('**X**') tool and click on the line in between the two points you just created to delete the middle line. Your sketch should now look the same as the one shown above.

Switch to **3D View** to view to result of the changes you just made.

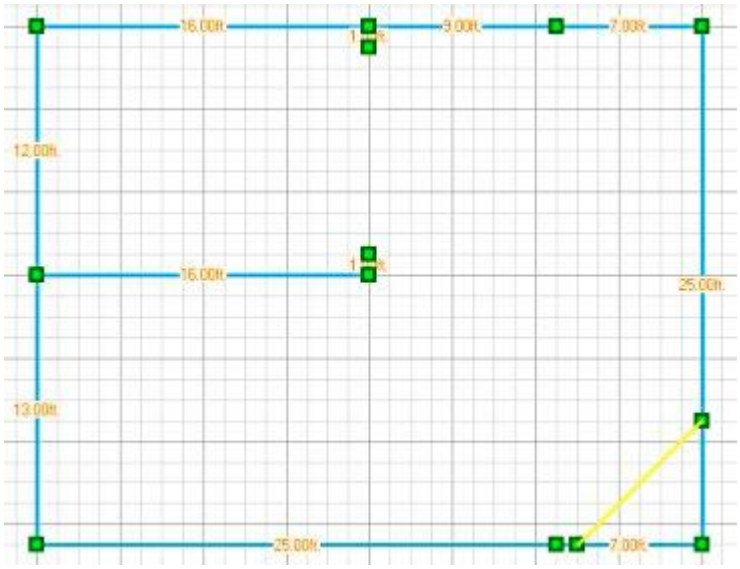
Bisecting Walls

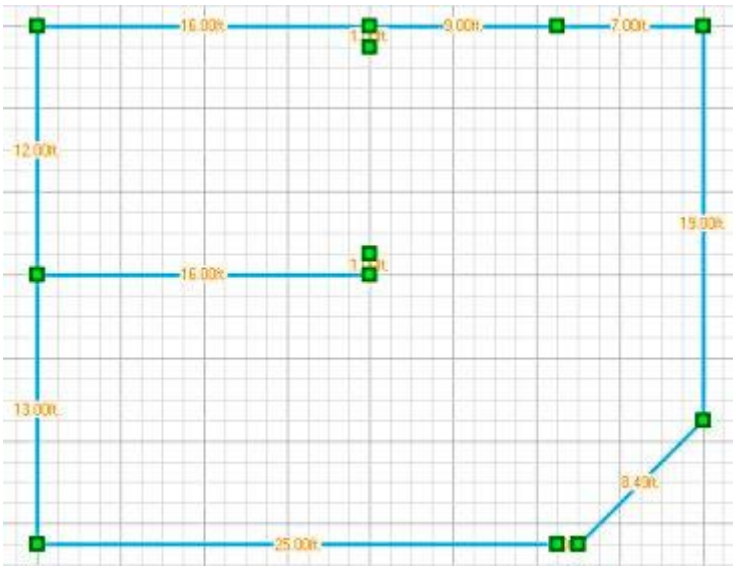
The **Bisect** tool is used to cut across two adjacent lines – the two points of intersection will then be joined with a single new line.

Suppose we wanted to replace the right-angle corner at the bottom right of our floorplan with an angled (45°) corner, perhaps to later add an entrance door into the wall, here's has to do it…

Select the **Bisect** tool.

Click on the horizontal and then the vertical lines to place two points - 7ft (7 squares) away from the bottom right corner in the example shown below. When you click to place the second point, a new line (between the two points) will be added and the corner will automatically be trimmed, as shown in the second picture below.





Garden Walls, Buildings, Furniture and Lights

As you can see from the floorplan below, you can decorate the garden by adding boundary walls, garden buildings (garage, summerhouse, etc.), swimming pools, cars, plants, ornaments and lighting.

Boundary walls and garden buildings can be of different **Heights** and different **Textures**, i.e. Timber, Brick, etc. The boundary walls and shed in the above floorplan were draw in **Sketch mode**. Next their texture and height were changed in **Decoration mode**.

Turn to the next page to see the **Sketch** and **Decoration** views of the above floorplan.

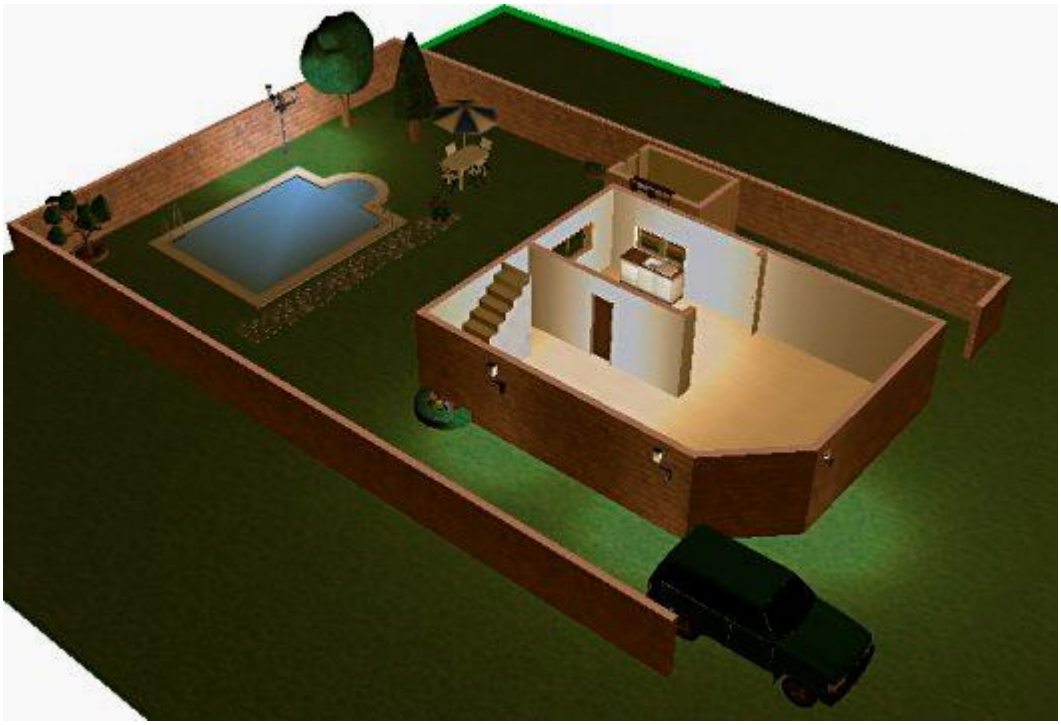
All other objects shown in the plan - car, swimming pool, furniture, plants, paving, and lighting - were added in **Decoration mode**.

To add these items, select **Add Furniture** button in the floating **Tools** box, this will open the **Furniture Library** – select **Garden & Out** to view the available library objects.

Garden and outdoor objects can be added to your floorplan as described on page 14 – Adding Furniture.

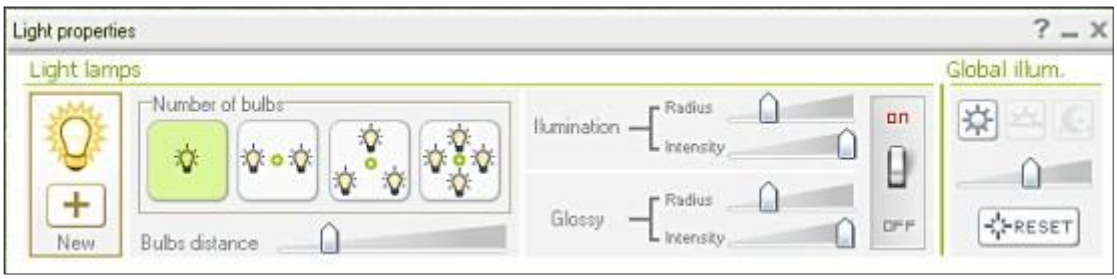
Illumination – Inside & Outdoor Lighting Effects

The illumination mode is used to add lighting effects to a floorplan. Indoor and outdoor scenes can be illuminated adding realism to your 3D Floorplan. The picture below shows what a evening/dusk scene might look like after reducing the outdoor ambient light and by illuminating rooms and garden lighting.



In **Decoration** mode click on the **Illumination Mode** (light bulb) button in the floating **Tools** menus, this will switch illumination mode **On**. Clicking the button a second time will switch the mode **Off** allowing you to again select other tools in the **Tools** menu.

The **Light Properties** panel will open, as shown below.



First, drag the **Global Illum** slider to the left to reduce the global illumination lighting. This will make it easier to see the size and intensity of any lights (lamps) you add to the scene. You can also switch to **3D View** and reduce the **Outdoor Ambient Light** level.

Start by adding a illumination light source to the Kitchen room. To add lighting you must first select **New** by clicking on the **+** button in the Light Properties panel. You can select a lamp with one, two,

three or four bulbs. Select the two-bulb button as the **Number of Bulbs** to be added. Now move your mouse over the floorplan and click to place the bulbs – see picture below as a guide.

If at this point you want to rotate the light fitting, select the **Rotate** button in the floating **Tools** menu, then click and drag over the light to rotate it. Click the **Select** tool (**Tools** menu) to **exit** the rotate tool.

In the **Light Properties** panel, use the **Bulbs Distance** slider to increase/decrease the distance between the light bulbs.

With bulbs now in position you can apply illumination settings to them using the **Lighting Properties** tools. Use the **Illumination** and **Glossy** slider bars to adjust the **Radius** (spread) and **Intensity** (brightness) of the light(s) to create the desired lighting tone (mood) – subtle (relaxed) to intense.

Switch to **3D View** and **Render** the floorplan to see the lighting effects. When switching back to **Decoration** mode, remember to select the **Illumination mode** button if you want to continue adding or adjusting illuminations.

To add illumination (lights) to other parts of your floorplan, simply select **New** (+) from the **Light Properties** panel, select the number of bulbs to use and then position the light and adjust illumination as detailed above.

Notice in the example floorplan on the following page, how illumination has been added to 'light' the outdoor lights that were added as garden furniture objects earlier.

When multiple lights are added to a floorplan, individually lights can be switched on and off as desired. In **Illumination mode**, select the light source in the floorplan and then click on the **On/Off switch** in the **Light Properties** panel.

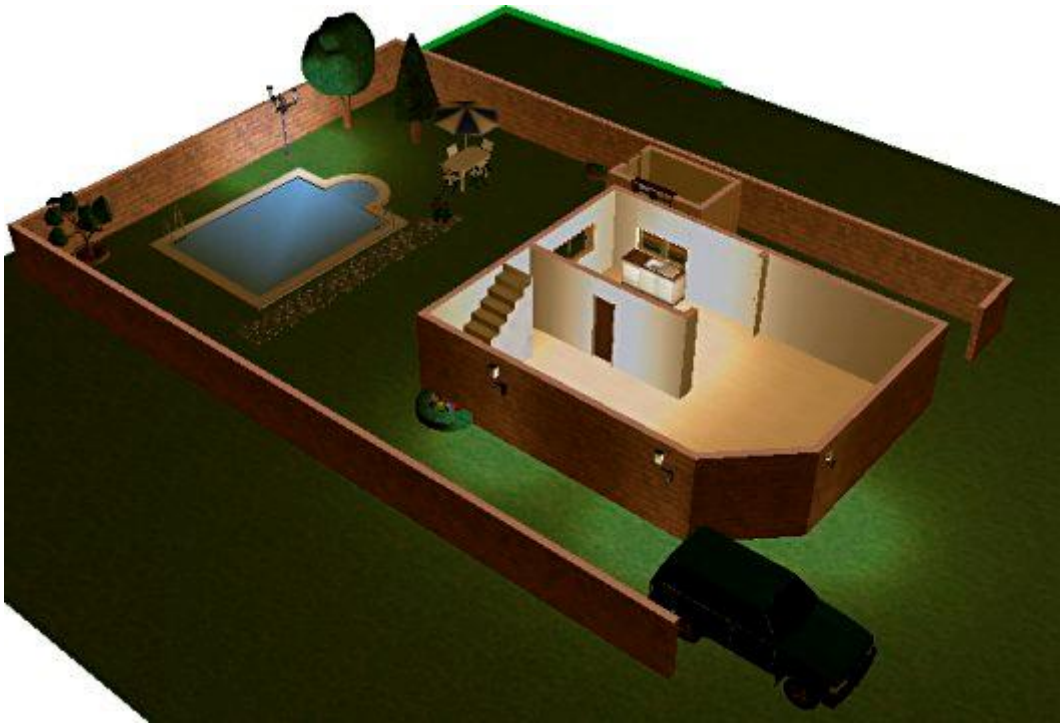
To **Delete** a light source, select it and then hit the delete key on your keyboard.

To exit illumination mode, click on the **Illumination mode** button in the floating **Tools** panel

Example of illumination (light bulbs) added to a floorplan in **Decoration** mode.

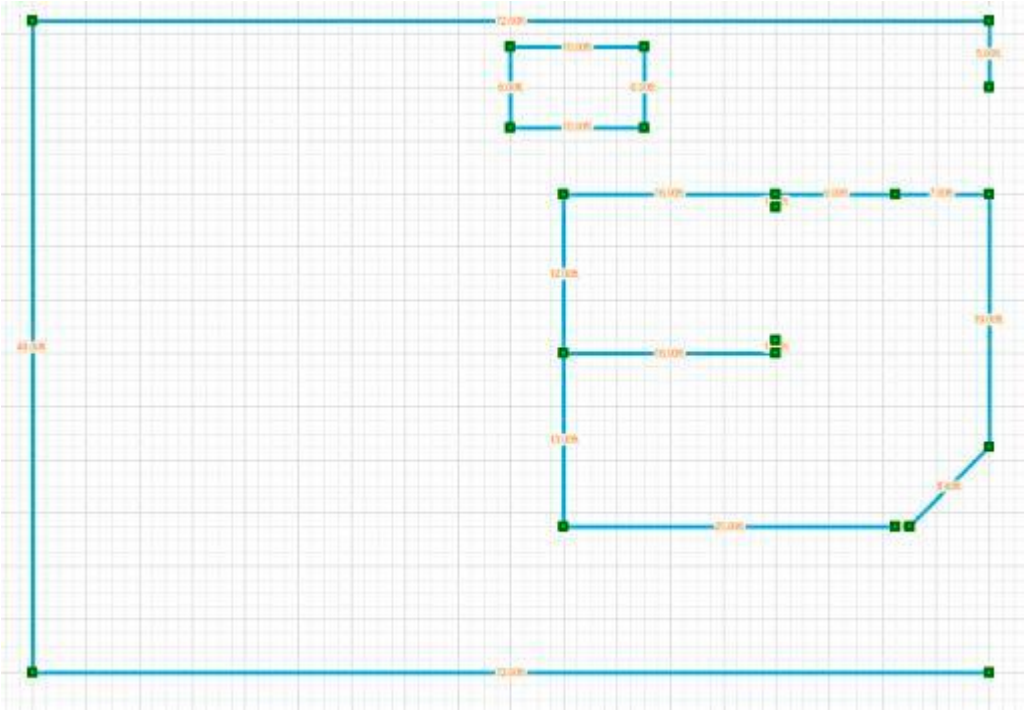
Below is the same floorplan as seen in **3D View** mode.

Outdoor Ambient Light levels were also reduced for better effect.



Working with Wall Properties

In **Sketch** mode, draw a garden wall. As an example, the picture below shows the Sketch mode view of the 3D floorplan shown on the previous page.



Switch to **Decoration mode**. Again as an example and for comparison, the picture below shows the **Decoration** mode view of the above Sketch and 3D floorplan shown on the previous page.

Click on the wall you just added – to make it the 'active' object - the **Wall Properties** panel will open.

To change the height of the wall – enter a new value in the **Wall Height** text box and hit the return (enter) key on your keyboard.

To change the wall **Texture** – click on the Wall **Texture** thumbnail, this will open the **Textures Library**.

Select **Outer** to view the available textures and finishes for external walls, select the texture you want to apply to the wall. **Close** (**X**) the panel when done.

Changing the **Height** and **Textures** for garden **buildings** is very similar. Select the building you want to modify – for example, the shed. The **Room Properties** panel will open.

To change the height of the wall – enter a new value in the **Wall Height** text box and hit the return (enter) key on your keyboard.

To change the **External** wall **Texture** – click on the **Perimeter** thumbnail, this will open the same **Textures Library** as for walls (above). Select **Outer** to view the available textures and finishes for external walls, select the texture you want to apply to the wall. **Close** (**X**) the panel when done.

Notice that because the shed is a building, not a free-standing wall, you can also change its **Floor** and internal **Wall Textures**.

Show

3DVista SHOW 2
Tutorial

Creating Multimedia Virtual Tours

Table of Contents

Introduction

By following this tutorial, you will learn how to quickly create multimedia virtual tours in different formats (Flash, Java Applets, Executables, ActiveX and QuickTime) for viewing over the Internet and offline on computer desktops.

In part 1, you will use the sample media files supplied to create a simple two-scene virtual tour in Adobe Flash format. It should take less than 15 minutes to complete and publish your first virtual tour.

In subsequent parts of the tutorial you will learn how to modify and extend the tour you created in part 1 by adding additional media types – Slides, Audio and Floorplans. You'll also learn how to extend users' interaction with your tour by adding hotspots that link the different media files.

Additionally, you will learn how to add your company details - name, contact details and a logo or photo – customised loading screens and help pages, and detailed information pages about your tour's theme to automatically generate a printable brochure.

Requirements

To complete this tutorial you will need:

- 3DVista SHOW 2 installed on your PC.
  You can download a free evaluation version from our website. The virtual tours you produced when using the trial version will be watermarked '3DVista' and video is limited to 8 seconds. The trial version does not expire and is fully functional. When you upgrade to the full version the watermark and video limits are removed.

- The sample media files (included with SHOW 2 – see below for details).
  You can, of course, use your own media files if you prefer.

- No special skills or knowledge are required to complete the projects detailed in this tutorial. Only basic computer skills are required – word processing, for example, and the ability to use the Internet.

Before You Begin – get organised

After installing 3DVista SHOW 2, you should locate the sample media files and copy them to your 'project' folder.

Potentially, a project can include a lot of files, both before and after publishing a tour. For this reason, it makes sense to get organised from the very beginning. It is recommended that you create a new folder for each project, placing all related media files in that folder.

Create a new folder in **My Documents** and name it **SHOW Projects.** Then, inside this folder, create a (sub) folder named **Project 1**. 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.

The sample media files are included, and were installed, with SHOW. You will find the sample files in SHOW's program folder in a subfolder named **media files**. Copy the entire **media files** folder (with all its files and subfolders) and to your new **Project 1** folder.

Project 1 folder is from where you will select the media files during virtual tour authoring. It's also to where you'll export and publish your project. This will make it easier for you to find all the project-related files during and after tour creation.

Part 1: Create and Publish a Basic Virtual Tour

In this part of the tutorial you learn how to create a two-scene tour using SHOW's default values to quickly author and publish your first SHOW 2 virtual tour.

Select Media Types

When you launch SHOW 2 the Wizard opens automatically.
If you are using the evaluation version, the 'Welcome' screen will appear first, requesting your registration number. Simply click the cancel button to continue using the trial version.

For this part of the tutorial, check the **Panoramas** checkbox and then click the **Next** button to continue…

Select Skin

What is a Skin?
A virtual tour can include a number of different media types – panoramas, still images (Slide Show), floorplans and video, as well as audio – tours can also include information such as; company details, a help page, tour info page. All these different media types are presented inside a skin; the skin is the interface between the user and the tour viewer (program).

The buttons, for example, allow a user to interact with the different media within the tour. It is possible to publish a tour without using a skin. Doing so will restrict the users' ability of controlling the display to simple click-n-drag control, and keyboard control of zooming.

Notice that SHOW 2 has listed the **Recommended Skins**; The skins listed are based on the media types you selected earlier. Because you are adding panoramas only (no floorplans, slidesshows, etc.), you don't need a skin with display areas for the other media types. You can select **Show all available skins** if you prefer.

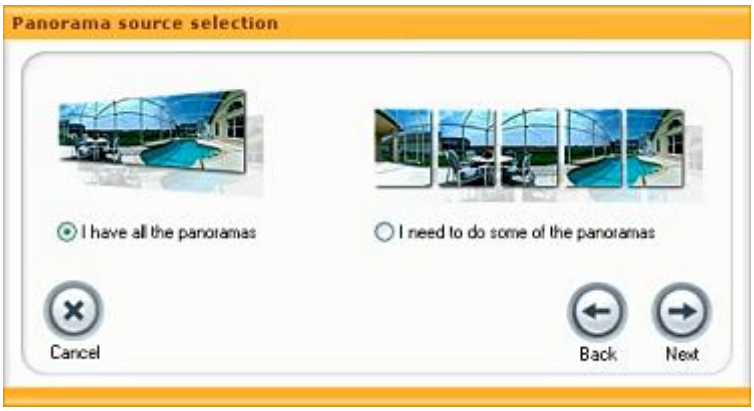
For now, select the **Avant Mini Blue**; A thumbnail preview of the skin will appear right of the list.

With exception of the **Executable** format, when you publish a tour it will be viewed inside a web page (html, php, asp, etc.). Click on the **Web page background color** square box (default box color is white but shown blue in the above screenshot) to select a color for the web page's background.

If you've installed **Skin Editor 3**, and you want to create a custom skin for your tour, click on the **Skin Editor 3** graphic; doing so will open the Skin Editor.

Hit the **Next** button to continue.

Select Panorama Source Files

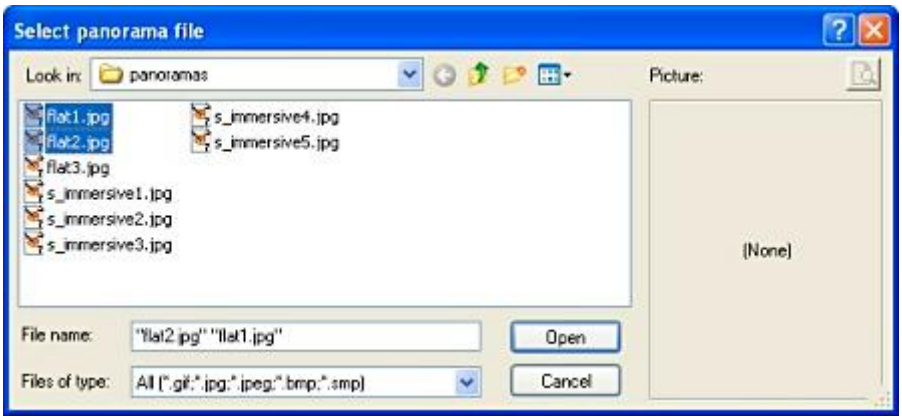


If you need to **Stitch** any new panoramas for your tour, and you've installed **3DVista Stitcher**, you can select the **I need to do some of the panoramas** radio button – to open Stitcher.

Since you are using ready-made panoramas, select the **I have all the panoramas** radio button.

Hit the **Next** button.

Now locate and select the sample panoramas (**`Project 1 > media files > panoramas`**) folder.



Select the **`flat2.jpg`** and then **`flat1.jpg`** panoramas (Ctrl+ left mouse button for multiple selection). Hit the **Open** button. The Wizard will now close and the **Panorama Editor** window opens.

The Panorama Editor.

This is where you add and modify text and other settings for each of your panoramas. You can also preview the panorama and adjust its display setting.

Click inside the **Name** text box (above right of the panorama) and replace the `flat1` name with your own text - name it **Panorama 1** for now. Changing the name of the panorama here does not change the original file name, just the display name.

In the panorama **Preview** area (lower middle), select the **Flat** radio button. You can choose Immersive, and indeed would, if the panorama was Spherical (Spherical panoramas are usually shot with special 'Fisheye' camera lens). Spherical panoramas can be viewed 360° horizontally and vertically. For this part of the tutorial, select **Flat** – the reason will become apparent in Part 2.

Click-and-drag on the image inside the preview window to move the panorama.

You can leave all the other setting as they are for now, so click the **Next** button.

The second panorama (`flat2`) now loads into the Editor interface. Change the **Name** to **Panorama 2**, select the **Flat** viewer type and hit the **Next** button.

SHOW pops up a message asking if you want to another Panorama. Click the **No** button.

The Media Editor

At this point, the **Media Editor** interface opens. For this part of the tutorial, you have added panoramas only, so clearly, no other media types are shown in the **Media List**.

At this point, you should **Save** your **Project**. Saving allows you to open the **Project** again later using 3DVista SHOW 2. You will do this in Part 2 **Modify the Virtual Tour**.

Click the **Save** button (top of interface). In the **Tour title** text box, type in **Project 1**. In the **Tour description** text area, type **My First SHOW Project** – you can, of course, type in your own tour name and description if you want. When done, hit the **OK** button. Notice that the Tour title now appears in the Show's main interface window.

You will revisit the **Media Editor** in Part 2 of this tutorial. But for now, you're ready to **Preview** and **Publish** your SHOW 2 Virtual Tour.

Preview and Publish

Before publishing your tour, it's a good idea to **Preview** it to check that it displays the way you intend, you can then close the preview window, return to SHOW 2 and make adjustment, if necessary.

Click the **Preview** icon and you are presented with of list of format options. The choice is yours to make. If you select the **Web (Flash)** option your tour will open in a new web Browser window and play using the Adobe Flash plug-in. You tour should look something like the image below - notice the web page's background color is the color you selected earlier. It my take a few moments for SHOW to prepare the preview and open your Browser, so be patient.

Close the Browser window to return to SHOW 2.

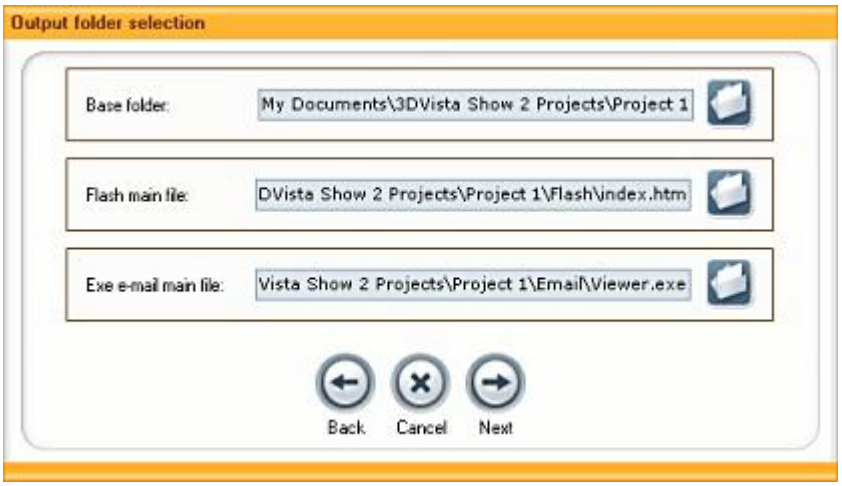
Click the **Publish** icon - the **Output format selection** window will open…

For now, select the **Web (Flash)** and **Executable for email** formats then hit the **Next** button.

In the **Publishing type selection** window, click on the **Automatic settings** to publish using default values.

SHOW 2 prompts you to select the **Output folder** – this is the folder where SHOW will save your publication. Because your tour will include a number of files and folders, it is bests to create an empty folder for the publication of each project.

Click on the top, right, folder icon (**Base folder:**). In the window that opens, locate your **`Project 1`** folder and select it as the **Output folder**. Notice that SHOW 2 has automatically entered the path for the Flash and Exe email main file; you can change the path to each publication type if you wish but, for now, leave them as they are. Hit the **Next** button to continue.



SHOW 2 prompts you, with a screen for each of the publishing formats you selected earlier, to begin publishing. Hit the **Next** button, each time you are prompted, to **Begin Publishing**. It will take a minute or two for SHOW to optimize and publish your tour, so be patient. The larger the virtual tour, the longer it will take to publish.

That's it! You have created and published your first SHOW 2 virtual tour. All that remains now is to view your tour. Since you created two versions (two different formats) – a '**Flash**' web page and an **email** (**executable**) – you will want to check both of these. First, **Save** your Project and **Close** SHOW 2.

Now open **My Computer** and navigate to your project folder (**`Project 1`**). Open the folder and you'll notice that SHOW has added two new folders (assuming you published to your **`Project 1`** folder).

- Open the **`Email`** folder and double-click (run) the **`Viewer.exe`** to view the emailable **Executable** version.
- Open the **`Flash`** folder and double-click the **`index.htm`** to view the Flash Version.

Now you are ready to move on to **Part 2** of the tutorial where you'll learn how to modify your tour by adding **Text** and **Caps**, changing the **Viewer display type** and add more panoramas to your tour.

Part 2: Modify and Improve the Virtual Tour

In this part of the tutorial you will learn how to:

- Open and Manage Previously Saved Projects
- Work with Panoramas
- Change Viewer Types and Set Zoom Controls
- Add Panorama Caps
- Add Accompanying Text
- Add Accompanying Audio.

Opening and Managing Previously Saved Projects

Open (run) SHOW 2. Click **Cancel** to close the **Wizard Media Selection** window.
Click the **Open** (folder icon) in the top menu, the **Tour Project** window will open (see above).

At this moment in time, you probably only have the one tour project saved (from part 1 of this tutorial). Each time you save a project it will be added to your project list.

Click on a tour to select it. Once selected you can **open** or **delete** a tour. Additionally, you can export a tour; you might want to export a tour to send it to a colleague or for backup purposes. You can **Import** any previously exported SHOW 2 project by clicking the **Import** icon. To **delete** a tour, simply select it then clicking the **Delete selected tour project** button.

Notice too, that you can change the **list sort order** by clicking on the **Title** or **Date** columns to switch between ascending and descending order – useful when you have many virtual tour projects.

Select your **Project 1** tour then hit the **OK** button; your project will open in SHOW's main interface.

Working with Panoramas

The project's Panoramas are shown in the **Media list** (left side of interface).

Replace **Panorama 2** (in the **Media** list) with the full 360° x 360° version of the same scene. What you will actual do is to delete the existing panorama then add a new one.

Click on **Panorama 2** in the **Media list** to select it. Now click the '**X'** button to delete it.

To add a new panorama, click the **Panorama** icon in the **Add Media** section (bottom left of interface). Now, following the same steps as described in Part 1 of this tutorial, add the panorama file named **`s_immersive2.jpg`** (in the tutorials sample media folder) and then change the panorama's **Name** (in the **Panorama Editor** window) to **Panorama 2**.

Select (click on) **Panorama 2** and then use the **up arrow button** (above right of the **Media list** window) to move **Panorama 2** to the top of the list, as shown in the screen shot below. This ensures that when your tour is viewed **Panorama 2** will appear first in the virtual tour. It will also appear in the first position in the tour's combo box (drop-down menu list).

Changing the Panorama's Start Point

Double-click on **Panorama 1** to open it in the **Panorama Editor**.

Notice the **Red Dot** in the center of the panorama. This indicates the **Start Point** of the panorama – the center of the viewed panorama when it first loads into the tour viewer. You can change the **Start Point** position by clicking anywhere inside the panorama, the Start Point moves to the point you click. Try moving the **Start Point** to the archway on the right instead of the middle archway.

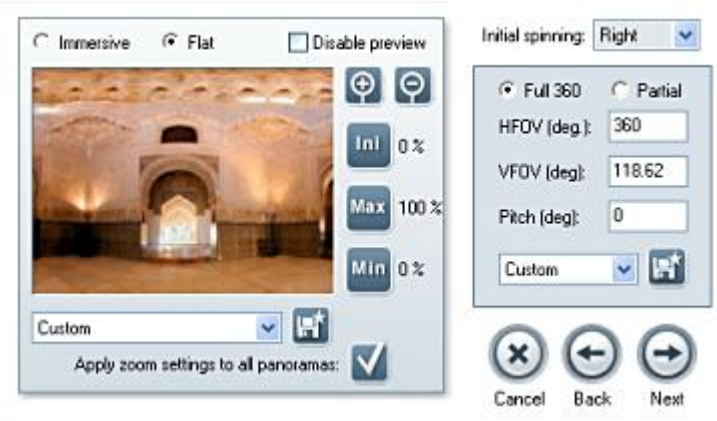
Setting Duration

You can set the **Duration** - the length of time a panorama should play before moving to the next panorama in the tour's sequence – for each panorama. The **Duration** can be set as either; the number of **Laps** (one full rotation = one lap), **Seconds** (time), **Adjust to Audio** (to match the length of time any accompanying audio plays for, i.e. the panorama will change when the audio ends.) or **Undefined** (none).

Checking the **Disable duration settings on user interaction** checkbox will stop the automatic sequencing (duration) set for the panorama if the user uses any of the skin control buttons (scrolling, zooming, etc.) or clicks and drags the panorama.

Changing Viewer Display Types & Setting Zoom Controls

The **viewer display type** can be changed by selecting either the **Immersive** or **Flat** viewer type radio button in the panorama preview area. In Part 1, you selected **Flat** as the viewer type.



Click and drag on the panorama inside the preview window to confirm this. Now select the **Immersive** radio button and click and drag the panorama to preview it using the **Immersive viewer**.

Zoom Settings

Briefly click on the **zoom-in** (**+**) button and then click the **Ini** button – this will set the **Initial zoom** (shown as a percentage). That's to say the amount of zoom applied to the panorama when it first loads into the tour viewer. You can set zoom controls to whatever values you want.

Note: Panoramas can often look sharper when loaded into the viewer if a small degree of **initial zoom** is applied to them. Try setting **Ini** to 5-10%.

Next, click and hold the **zoom-out** (**-**) button until the panorama is fully zoomed out, now click the **Ini** button once more. This sets the initial zoom back to zero.

You can adjust the **Maximum** (**Max**) and **Minimum** (**Min**) allowable zoom setting that you want to apply to the panorama in the same way.

Adding Panorama Caps

When shooting fully immersive 360° x 360° panoramas, there may be parts of a panorama at top and/or bottom dead centres that you wish to hide - a ceiling light fitting or the camera tripod, for example. Caps are added to the panorama to hide this unwanted detail. Additionally, caps are a useful way to add your copyright and or company details to the panoramas. SHOW 2 comes with several Caps that you can use. You can also create and use your own caps.

In this part of the tutorial you are going to use **Caps** to convert the flat panorama you added earlier, into a fully immersive 360° x 360° (spherical) panorama. This is not often done, but can be used as a way to convert a cylindrical (360° horizontally, less than 360° vertically) into a nice pseudo-spherical panorama.

With the **Panorama Editor** window still open, click the **Caps** button to open the **Caps Editor**. Click the **Folder icon** button to the right of the **Ceiling Cap** tools and choose the first Cap in the file list that appears. Now click the **Folder icon** button to the right of the **Tripod Caps** tools and select the same cap image. Your **Caps Editor** window should now look something like the screen shot below.

Notice that SHOW 2 has added the caps to the panorama below the caps tools. Notice also, that there is still black space at the top and bottom between the panorama and the caps. Click the **Preview** button and click and drag vertically inside the preview window to see the effect. **Close** the **Preview window** to return to the **Caps Editor**.

The 'thumbnail' panorama is dynamic. To eliminate the black space, drag the **Size** slider bars until all the black space has been covered in the 'thumbnail' panorama (drag the slider to the right to increase and left to decrease **Cap Size**). Now click **Preview** to check that you have successfully covered all the black space.

Notice that in the **Preview** the Ceiling cap's north (**N**) and Tripod Cap's north are pointing in different (opposite) directions! To rectify this, close the preview window and rotate the **Ceiling Cap** to bring it into alignment with the Tripod cap by dragging the **Position** (rotation) slider all the way across to the left.

Now **preview** the panorama again to check that the caps are both aligned correctly to north (N). Close the **Preview Window**. Sharp-eyed readers will notice that by aligning both of the North pointers, East and West are now incorrectly aligned. That's because you used the same NSEW cap for top and bottom. You would use different caps if this were a real-life project, of course.

Note! When you click the Caps Editor's **OK** button the Caps will become permanently embedded in the panorama image. For this reason, it is important to make sure you are entirely happy with the size and position of the Caps **before** you click **OK**.

Should you later decide to change a Cap's image, you can click the **Caps** button and select a new image to embed over the existing Cap.
To remove a Cap completely, you will need to delete the **Panorama** and then reselect to **add** it afresh – without the Caps.

Adding Text Descriptions to Panoramas

You might like to add description to accompany some or all of the panoramas in your virtual tour. To do so, double-click **Panorama 1** in the **Media list** to open the **Panorama Editor**.

Click the T button in the **Text** part of the interface, shown right. This will open the **Text selection** window, shown below.

Click inside the blue **Text** box area and type in your text.

Click the 'eye' button to view the text in the black **Preview** box.

Try changing between **Sliding** and **Fixed Text** to see the effect. Also, try modifying the **Properties** to see the effect in the Preview box to better understand the settings.

When done, click the **OK** button to close the **Text selection** window.

Repeat the above steps to add text to other panoramas in your virtual tour.

To **Delete** text, in **Panorama editor** window, uncheck the **Text checkbox**.

To **Edit** existing text descriptions, in **Panorama editor** window, click the T button to open the **Text selection** window and modify text and properties as required.

Adding Audio to Accompany Panoramas

Below the **Text** box is the **Audio** box. To add audio to accompany this panorama, check the **Audio** checkbox or the **Load Audio** folder icon; this will open the **Select Audio File** window.

Browse to the audio folder inside the samples folder and select the **CORP01.WAV** audio file, click the open button to load the file.

Click the **Play** button to hear the audio. Check the **Loop** checkbox if you want the audio to play continuously (repeatedly) when the panorama is played inside the tour viewer.

To **Delete** an audio, in **Panorama editor** window, uncheck the **Audio checkbox**.

To **Replace** an existing audio, in **Panorama editor** window, click the **Load Audio** folder icon and select the new file.

Adding Background Audio

If preferred, instead of setting audio files for each panorama (and/or Slide Show or video), you can select a single audio file to play throughout the entire virtual tour.

In SHOW's main interface, in the **Advanced Options**, select the **Background audio** icon.

This will open the **Audio Settings** window. Select and set the audio in exactly the same way as described for the panorama audio above. There are some sample audio files you can try included in the sample media files folder.

This concludes Part 2 of the tutorial. **Save** your project (name it **Project 2**) and **close** SHOW 2.

Part 3: Adding Panoramas and Hotspots

It this part of the tutorial you will learn how to:

- Add More Panoramas
- Add Hotspots to Link Between Panoramas and other Media Types

You can add **multiple Hotspots** to a panorama and apply different **Actions** to each Hotspot.

Adding More Panoramas

Open Project 2, which you saved at the end of Part 2 of this tutorial. Now **Save** the project renaming it **Project 3**.

Delete Panorama 1 (this was the flat panorama you added Caps to earlier) – it is no longer required. You should now have only one panorama in the **Media** list (named **Panorama 2**).

Click the **Panorama** button below the **Add Media** heading (bottom left of the main interface). Select **"I have all the panoramas"** radio button. Select: **`s_immersive3.jpg`**, **`s_immersive4.jpg`** and **`s_immersive5.jpg`** from the panoramas in the samples' media folder.

The individual panoramas will load in the **Panorama Editor** one at a time. As they do so, make the following changes and then click the **OK** button.

- **Name** each panorama.
  In the screen shots (right), I have named them **Panorama 3**, **4** and **5** respectively.
- Select **Immersive** as the viewer type.
- **Add text** if you want text descriptions to appear in the published virtual tour. (See Part 2: *Adding Text Descriptions to Panoramas).*

When done, click the **OK** button to return to the **Main interface**. All the new Panoramas now appear in the **Media list**.

Adding Hotspots to Panoramas

To add hotpots to a panorama, click the **Hotspots** button in the **Advanced Options** menu to open the **Hotspot Editor**.

Notice that the **Editor's Media list** includes two new items – **Play Audio** and **Open a URL**.

You are going to add a hotspot to **Panorama 2** to link it to **Panorama 3** (assuming you used the same names for your panoramas as mentioned above). So now, when the hotspot is clicked, Panorama 3 will replace Panorama 2 in your published virtual tour.

If the Panorama that appears in the Editor is not Panorama 2 (or the one you want to add Hotspots to) use the **Panorama** drop-down menu (upper right) and select it. Now click and drag **Panorama 3** in the Editor's **Media list** and drop it onto the main panorama image (**Panorama 2**) in the position where you want the Hotspot to appear.

As soon as you drop the hotspot onto the panorama the **Panorama Hotspots Action Settings** window will open showing the panorama to which you are linking the hotspot to (**Panorama 3**).

You can change the **Start Point** for the panorama as detailed in *Part 2: Changing the panorama's Start Point*. The Start Point you create here only applies to the Hotspot link; your original or default Start Point remains unchanged.

You can decide if, when a hotspot is clicked on, you want the tour viewer to **Zoom in** to the present panorama before the next panorama loads. To apply Zoom, check the **Zoom in before change to this panorama** box. Drag the slider bar to set the amount of zoom-in to be applied before the next panorama loads.

You can also choose the **Initial Spinning** (horizontal or vertical scrolling) for the Panorama and whether the hotspot should be visible or not when the panorama loads into the viewer.

When done, click the **OK** button to return to the **Hotspot Editor**.

SHOW has now added the Hotspot **Action** to the **Hotspot Properties** box.

In order for a **Hotspot's Action** to appear in the **Hotspots properties** box, you must first select the Hotspot by clicking it in the main panorama.

If at any time you want to modify a Hotspot's settings, you must first select the Hotspot then double-click the **Action** (the name or thumbnail picture) in the **Action list** to open the **Panorama Hotspot Action Settings** window.

Hotspot Properties

Click on the Hotspot and then select a **Symbol** for the Hotspot from the drop-down list in the **Hotspot Properties** box. You can select from the comprehensive library of symbols supplied with SHOW 2 or you can create your own using your favorite drawing program.

If creating your own symbol, you should save it (export it) in GIF (.gif) format. Animated GIFs are allowed. Move or copy your symbol to SHOW's hotspots symbols library:
`C:\Program Files\3DVista\3DVista Show 2.0\symbols\hotspots`

You can **Name** your Hotspot by typing in the **'Hotspot properties' Name** text box. The name will appear as a **tooltip** when the mouse pointer is hovered over the hotspot. The **hotspot name** can be used to inform the user of the scene or action that will occur when they click on the hotspot.

To Move a **Hotspot**, simply click and drag it to a new position.

When done, click the **OK** button to close the **Hotspot Editor** and return to the **Main interface**.

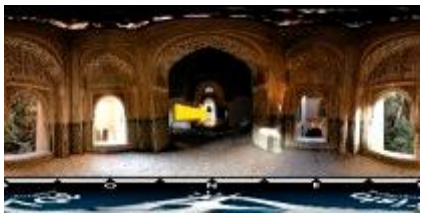
Save your project then **Preview** your virtual tour to test the hotspot.

Adding more Hotspots

Now add more Hotspots by linking **Panorama 4** to **Panorama 5** then link them back again by adding a hotspot to **Panorama 5** linking back to **Panorama 4**

- Click the **Hotspots** button (in the main interface) to open the **Hotspot Editor**
- Select **Panorama 4** from the Panorama drop-down list (upper-right of interface)
- **Click and Drag** Panorama **5** onto Panorama **4**
- Set the **Hotspot Properties**

- Select **Panorama 5** from the Panorama drop-down list
- **Click and Drag** Panorama **4** onto Panorama **5**
- Set the **Hotspot Properties**



The above screen shots show hotspot positions for **Panorama 4** and **Panorama 5** respectively.

Click **OK** to close the Editor, **Save** your project as **Project 3** and then **Preview** your tour to test the Hotspots you just added.

More about Hotspots

A hotspot does not have to link to a panorama; it can link to an audio (a short narration relating to that part of the scene, for example), a Slide Show, video clip or to a web page.

Hotspots to Open Slide Shows and Video Clips

To add a Hotspot linked to a Slide Show or video clip, first create your Slide Show or add your video clip to your SHOW project. Once added, it can be linked to a hotspot in the same way as you linked hotspots to panoramas, that is, you **drag** the **Slide Show** or **Video** from the **Hotspot Editor's Media list** and drop it onto the panorama.

Hotspots to Play Audio Files

To add an **Audio** Hotspot, drag **Play Audio** from the **Editor's Media list**, drop it onto your panorama and then select the **Audio** file to link to using the **Audio Hotspot Action Settings** window that opens.

Hotspots to Open Web Pages

To add a Hotspot that opens a Web Page, **drag Open a URL** from the **Editor's Media list**, drop it onto your panorama and then configure the **URL Hotspot Action Settings**.

To configure the **URL Hotspot Action Settings**:

- Enter your description for the web page in the **Name** text box.
- Add the full **URL** address (including the http:// part) for the web page.
- Enter a **Name** for the popup **Window** – this can be whatever you like.
- The Window will open as a Popup window; you can define the **Size** of the popup window by entering the **Width** and **Height** in pixels.
- You can choose whether or not to show the browser's **Toolbar, Menu, Scroll bars,** etc. and if the user can **Resize** the Window by checking (allow) or unchecking the appropriate checkboxes.

Part 4: Creating a Slide Show

It this part of the tutorial you will learn how to:

- Change the Viewer Skin
- Create a Slide Show
- Set Slide Show and Slide Properties

Using SHOW 2 you can add multiple **Slide Shows** to your virtual tour, each with any number of slides (still photos, drawings, cartoons, etc.). Each slide can have a '**zoomed**' full-size image that will open in a popup window when a users clicks the Zoom (+) button on the skin. Each slide can have a link to a web page that opens when a User clicks on the slide.

For this part of the tutorial you could start a new project and select the **Panoramas** and **Slide Shows** checkboxes in the **Wizard Media Selection** window, and then select a new skin. However, for now, **Open Project 3** (see part 2) which you saved at the end of Part 3 of this tutorial. Now **save** the project renaming it **Project 4**.

Changing the Viewer Skin

The skin you selected (in part 1) is only suitable for showing panoramas (with or without text) and Slide Shows without the **thumbnail list** - the thumbnail list shows clickable thumbnail images of the slides in the Slide Show. You could use the same Skin. However, it would be nice if Users could see thumbnail images of the slides in the Slide Show. Additionally, in part 5 of this tutorial you will learn how to add floorplans and you will need to select a suitable skin that shows floorplans as well.

To change the viewer Skin for this project:

- Click the **Change Skin** icon button (bottom right of interface) – the **Skin Selection** window opens.
- Select the **Show all available skins** radio button.
- Select any skin that has a **Floorplan** (Map region) and **Slide Show Thumbnail** list.
- Select the **Web page background color**.
- Click the **OK** button to apply the new skin.

Create the Slide Show

Click **Slide Show** in **Add media**, in the window that opens select all the files in the sample media folder: **`media files\slides\set 1`**. Click **Open**.

The **Slide Show Editor** will open, as shown below.

Above right of the thumbnail images is the Slide Show **Name** textbox. Enter a name for your **Slide Show**; the **Name** will appear in the drop-down list and/or media list in your **published** tour.

The order your slides will appear in your published tour will be the same order as shown in the **Editor's thumbnail list,** as read from left to right. Click on and drag and drop the slides to change the order.

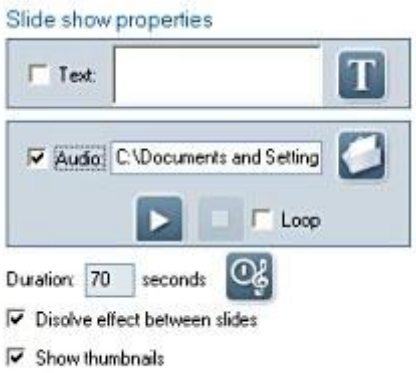
Use the buttons to the left of the slide thumbnail images to:

- **Add** more Slides (**+**)
- **Delete** selected Slides (**-**)
- **Delete all** the Slide

Slide Show and Slide Properties

Slide Show Properties

Above you set the **Name** for the Slide Show. You can also add **Text Description** and **Audio** to accompany your **Slide Show**, using the **Slide Show Properties.** Adding Text Description and Audio is covered in Part 2 - *Adding Text Descriptions to Panoramas* and *Adding Audio to Panoramas*.



The **Duration** (in seconds) is the duration of the entire Slide Show. If you have six slides in your Slide Show and you set duration to 60 seconds, then each slide would appear for 10 seconds unless you apply individual slide duration's (see *Selected Slide Properties*, below).

If you add **Audio** to accompany the entire Slide Show, the **Duration** of the Slide Show can be set to match the length of time the audio will play for by selecting an audio and then clicking the  button.

Check the **Dissolve Effect between Slides** checkbox to apply the dissolve transition effect.

If the Skin you selected for the tour includes a **slide thumbnails** list, check the **Show Thumbnails** checkbox. If the skin does not include a slide thumbnails list or you don't want to show the slide thumbnails, uncheck the box.

Selected Slide Properties

To set individual **Slide Properties**, first select the slide you want to work with in the thumbnail list.

You can add different **Text** and a different **Audio** for **each slide** in your show.

You can set the **Duration** for **each slide**. Notice that when you change a slide's Duration the **Slide Show Duration** updates automatically to reflect the change.

Below the Duration setting is the **Link** box. Each slide can be linked to open a web page. If you include a link, the web page will open in a popup window when a User clicks on the slide.

To add a Link to a slide, check the **Link checkbox**. The **Open a URL** window will open.

To configure the Link's **URL**:

- Enter the full **URL** to the Web page including the **http://** part
- Enter an arbitrary **Name** for the popup **Window**
- The Window will open as a Popup. You can define the **Size** of the popup window by entering the **Width** and **Height** in pixels.
- You can choose whether or not the Browser window will show the **Toolbar, Menu, Scroll bars,** etc. and if the User will be allowed to **Resize** the Window – check the box for **Yes** (allowed), uncheck for **No**.
- Click the **OK** button to apply the Link settings and return to the Slide Show Editor

If you need to modify the Link, click the button to the right of the URL to open the Link settings' window.

Show Zoomed Image on "Zoom in" Button Click

Where your original picture is larger than the Slide shown in your tour and you want to allow the User the to view the larger 'full-size' (higher resolution) picture, check the "Show zoomed image on 'Zoom in' button click" checkbox. Now, when your Slide Show is playing and a User clicks on the Skin's '**+**' (zoom-in) button the 'full-size' picture will open in a new Browser window.

To the right of the **Selected Slide Properties** is a **Preview** of the selected slide. To see a full-size preview, click the **Zoom** button.

When you've finished adding slides and configuring the Slide and Slide Show Properties, click the **OK** button to return to SHOW's **main interface**.

Your Slide Show now appears in the main **Media list**. You can change the position (playing order) of the Slide Show in exactly the same way as you re-ordered the panoramas earlier in this tutorial.

Modifying a Slide Show

Double-click the Slide Show in the **Media list** to open the **Slide Show Editor**.

Part 5: Floorplans and Maps

It this part of the tutorial you will learn how to:

- Add Floorplans (Maps) and Hotspots
- Add Radar effect
- Add Multi-Action Hotspots

Using SHOW 2 you can add multiple Floorplans and Maps to your virtual tours. For this part of the tutorial I will use the term **Floorplan** to refer to the image(s) used. The image can be Maps, Floorplans, Photographs or any other supported image/graphic files.

Each Floorplan can have any number of hotspots added to it. Hotspots can be linked to any other media files within your tour – panoramas, Slide Shows and videos. Additionally, Hotspots can be used to send email (open the users email client) or linked to a website (URL).

For this part of the tutorial you could start a new project and select the **Panoramas**, **Slide Show** and **Floorplans** checkboxes in the **Wizard Media Selection** window and then select a new skin. However, for now, **Open Project 4** which you saved at the end of Part 4 of this tutorial. **Save** the project renaming it **Project 5**.

Note about Floorplans and the Viewer Skin!
If when you add a Floorplan to a project its image in the **Maps Editor** appears as a thumbnail image, it's because the skin you have selected does not display Floorplans (it has no **Map region**). Change the Skin to one that will display floorplans to rectify this.

Adding Floorplans (Maps) and Hotspots

You are going to add two floorplan images. For clarity of this tutorial, you'll add them one at a time.

Click the **Floorplan** button in the **Add Media** part of the main interface.

Select the following floorplan image (included in the sample media **`maps`** folder): **`plan1.jpg`**.
The **Map Editor** interface, shown below, will now open.

You can change the **Name** of the floorplan by typing in a new name in the **Name:** text box (upper right). The name entered here will appear in your published tour allowing users to select the floorplan from the drop-down combo box, where one is included in the skin.

Click **OK** to exit the **Map Editor**. Now repeat the steps above, only this time select the **`plan2.jpg`** image. Click **OK** to exit the **Map Editor**.

In SHOW's **Main interface**, the two Floorplans now appear in the **Maps list**. You can re-order the Floorplan images by clicking and dragging them inside the Maps list – exactly the same as you did earlier in this tutorial with media (Panoramas and Slide Show) in the Media list.

Double-click on the first Floorplan (Plan 1) in the **Maps list** to open it in the **Map Editor**.

Click and Drag **Panorama 3** and drop it on the front 'tower' in the floorplan (as shown below). A widow will open asking if you want to add a **Radar** to the Hotspot, click **NO** to close the window without adding a Radar – **Radar** is covered later in this tutorial.

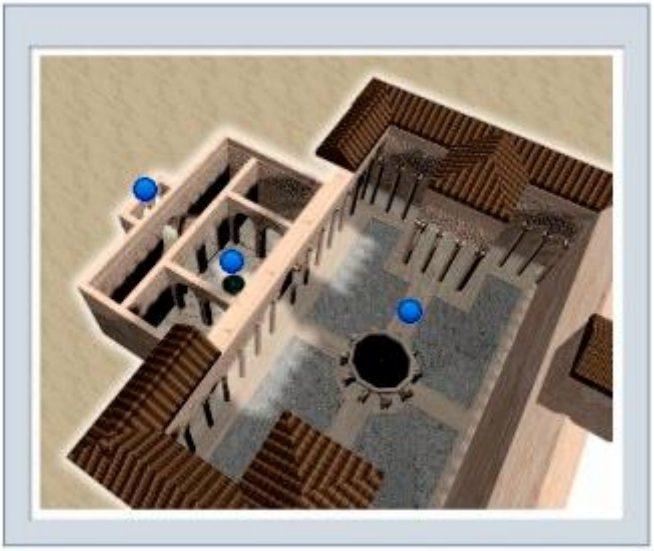
Now drop **Panorama 2** onto the floorplan towards the top left of the image (as shown above).

Adding Hotspots to Floorplans is very similar to adding Hotspots to panoramas - See *Adding Hotspots to Panoramas* in Part 3 – using the **Map Editor**, you simply drag media from the **Media list** and drop it onto the **Floorplan**. You can select a hotspot **Symbol** and enter a **Name** for the Hotspot.
Remember you must select (click on) the Hotspot to work on its **Properties**. Once selected, its action will appear in the **Actions** list.

Click **OK** to close the **Map Editor** and return to the Main interface.

Double-click on the second Floorplan (Plan 2) in the **Maps list** to open it in the **Map Editor**.

Now **Add** three **Hotspots** to link to the following media items: **Panorama 4**, **Panorama 5** and the **Slide Show** (Slide Show 1), placing the Hotspots, left to right respectively, in the positions shown (blue dots) in the screenshot below.
Again, click **NO** when asked if you want to add **Radar** to the panoramas.



Click **OK** to close the **Map Editor** and return to the **Main interface**.

Map Zoom Settings.

Double-click **Plan 1** to open it in the **Map Editor**, notice the **Zoom settings** button at the bottom.

The effect of applying zoom to floorplans (Maps) is similar to applying zoom settings to panoramas (see Part 2: *Changing Viewer Display Types & Setting Zoom Controls* for details).

Click the **Zoom** (**+**) button to open the **Map Zoom Settings** window.

Note that the floorplan image in the settings' window is dynamic, which is to say that when you zoom in, the image will zoom in. When zoomed-in, drag inside the floorplan to change the point (the red cross) where you want the map image to center to in your published tour.

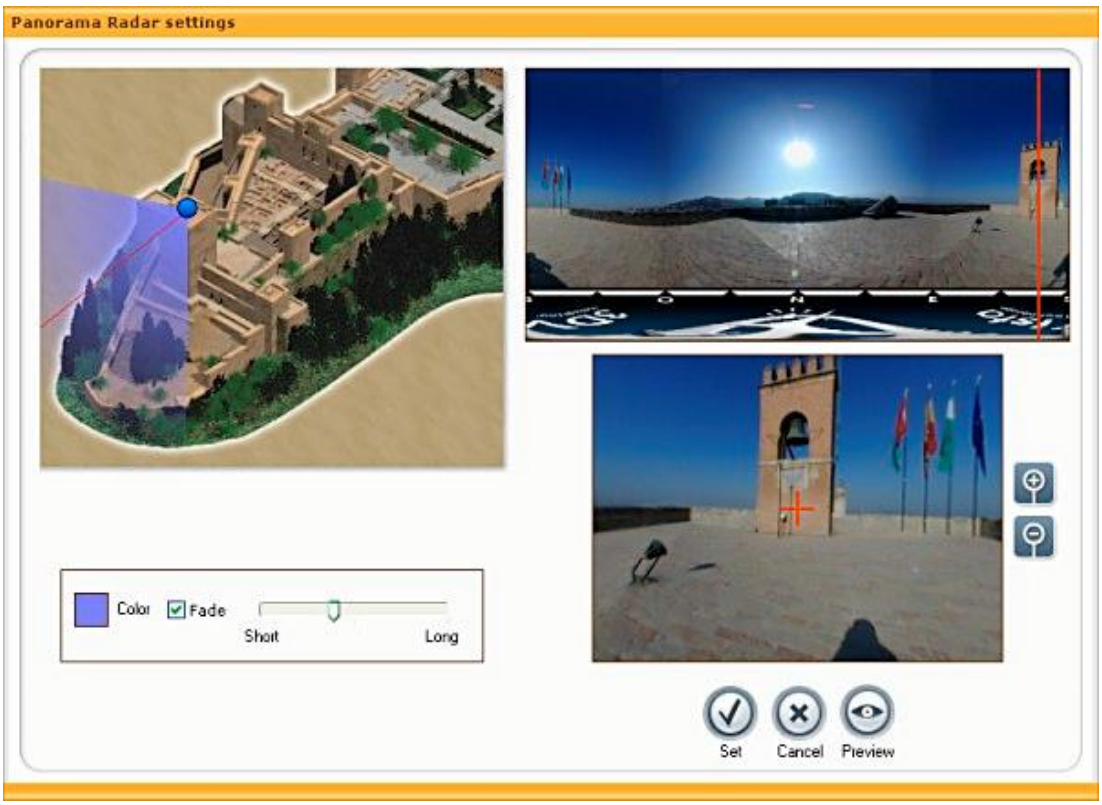
You can apply **Ini** (initial), **Min** (minimum) and **Max** (maximum) **Zoom settings** to each floorplan image if desired. If you want to apply the same Zoom settings to other Floorplans, you can create (save) a **Profile** (set the zoom settings for the floorplan first) and then just select the profile again later, from the **Profile** drop-down list, to apply them.

Note: use a viewer Skin that includes Map zoom-in and zoom-out buttons if you want to allow users to zoom in and out of the floorplans in your published tour.

Adding Radar to Floorplans

The floorplan **Radar** can help Users to understand in which direction they are looking when viewing a panorama – they can more easily relate (compare) the view of the Floorplan and Panorama.

To apply **Radar** to **Floorplan 1** for the hotspot linked to **Panorama 3**, open Floorplan 1 in the **Map Editor** (double-click the floorplan in the main interface) and select the hotspot that you placed on the 'tower'. The **Show Radar on this Hotspot** checkbox will appear at the bottom of the **Editor's** window. Check the checkbox to open the **Panorama Radar Settings** window will open.



Now you need to relate (set) the same point (object and position) in the floorplan and panorama. The **red lines** indicate the point. You can either click-and-drag the red line to change its position or click anywhere inside the floorplan and top panorama and the line will jump to that point.

In the example above, align the red line with the bell tower in the floorplan and then, in the top panorama, align with the center of the tower. The bottom panorama dynamically changes as you move the top panorama line. You can zoom-in on the panorama to more accurately check the line's position.

Click the **Preview** button to check the results of the changes you've made. In the Preview window, click and drag the panorama and make sure that when the bell tower is central, the Radar is pointing in the correct direction. Notice as you zoom-in on the panorama how the spread of the radar narrows.

Experiment with the **Radar Color** and **Fade** settings to see the effects and set as desired.

Click the **Set** button to apply the changes and exit the settings' window.

Adding Multi-Action Hotspots to Floorplans and Maps

You can add more then one Action to a floorplan Hotspot, to create **Multi-Action Hotspots**. For example, a hotspot could be linked to one or several panoramas and Slide Shows and to URL and email links. You might choose to add a multi-action hotspot where you have included a panorama and a Slide Show of the same scene.

When a User clicks on a multi-action Hotspot a small **Menu List** appears below the hotspot allowing the User to select a link (see screenshot, right).

How to Add Multi-Action Hotspots

For the purpose of demonstration, you will learn how to add a multi-action hotspot similar to the one shown above by adding **Slide Show 1** to the existing **Panorama 2** hotspot.

Double-click **Plan 1** to open it in the **Map Editor**. Earlier you added a hotspot to the top left of the floorplan that linked to **Panorama 2**. In the Editor's Media List, drag Slide Show 1 and drop it onto the **existing hotspot**. That's it!

Notice that **Slide Show 1** has been added to the Hotspot Properties' **Actions list**.

To **delete** an Action, select it in the list and click the '**X**' button or the delete key on your keyboard.

You can also add multi-action hotspot links to **Send an Email** or to **Open a URL** - See *Adding Hotspots to Panoramas* in Part 3 for details of settings. If you need to edit an email or URL link, double-click on it in the **Action** list to open its **Action Settings** window.

Click the **OK** button when done to return to the main interface. Don't forget to **Save** your **Project**.

Part 6: Advanced Options

The **Hotspots** and **Background Audio** are detailed elsewhere in this tutorial. In this part, you will learn about **Company & Author Info**, **Tour Help** and **Tour Info** – their purpose and how to customise and use them. Clicking a button will open the appropriate **Editor** window.

Company and Author Info

In addition to **Company & Author Info**, this Editor allows you to customise the **Loading Screen**.

Loading Screen Settings

When a published virtual tour is viewed in a Web Browser, before media files are downloaded and viewable, the appropriate plug-in is called for, and loaded (Flash, Java or DirectX), then the viewer and skin are downloaded. How long this takes depends on a number of different things including: network traffic, speed of the Web Server, the User's connecting speed, the size of the plug-in and the size of the viewer and skin files. The **Loading Screen** will appear after the plug-in is loaded and while the **Viewer** and **Skin** are being downloaded.

Use the **Loading Screen Settings**, as shown below, to add your own **Logo**, **Slogan** (Tag Line) and **Website** address. You can also select the Loading Screen's **Background color** and **Layout**: use the Layout drop-down to select where you want the **Progress Icon** to be positioned – above or below your logo and slogan.

The **Progress Icon** is an animated (gif) graphic that indicates to the Users that files are downloading. You can select one of the pre-made progress icons supplied with SHOW or create your own using your favourite graphics software. If using your own graphic, copy the file to the **\symbols\progress** folder, which can be found inside 3DVista SHOW's program folder.

Click the **Preview** button to view your customise Loading Screen.

If you plan to use these same settings with other projects, you can save a **Profile** of the settings and then select it from the Profile drop-down list the next time.

Company & Author Info

This is where you can enter your **Logo** or **Photo** and other information that will appear within the tour's **Skin**. You can also enter a contact **E-mail** address. You must select a Skin which includes space for the Company Info logo and text, and an email button if you add an email address, when including these in your project otherwise they will not appear.

Use the **Text** to enter things like your name, address and telephone number or, if you prefer, a tagline or sales message.

Add a contact E-mail address to link to the Skin's **E-mail Button**.

Add a **Link** back to your website (or any other website) that will open in a browser window when a User clicks on the **Logo/Photo** you added above.

Save a **Profile** if you want to apply the same settings to other projects later.

To **Preview** your **Company & Author Info** settings, first click the **OK** button to close the Editor then click the **Preview** button in **SHOW's main interface** window.

Tour Help

The **Tour Help** opens in a Browser window when a User clicks the **Skin's Help** button (**?**).

The Help page is a web page (html). You can either select a local web page to 'pack' with your tour – a default page is supplied with SHOW - or a remote page located on your web server.

Local HTML file

When you select a **Local HTML File** you can also choose whether or not to **include files and folders**. If, for example, your help page calls other files – images, css, etc. – you will need to check the checkbox to include these files and folders for your help page to display properly.

CAUTION! Create a separate folder for each of your Help web pages. If you where to include your help page in your local website's root directory, for example, and then selected **include files and folders** your entire website would be included with your virtual tour files!!

Internet HTML file

If your prefer, you can server your Help page from an Internet server. If you choose this option remember that Users will need to be connected to the Internet to see the Help page – Users may not be connected when viewing 'exe' (downloadable) tours, for example.

HTML Page

Click the folder button and select a **Local Help** page or enter the URL to an **Internet Help** page.

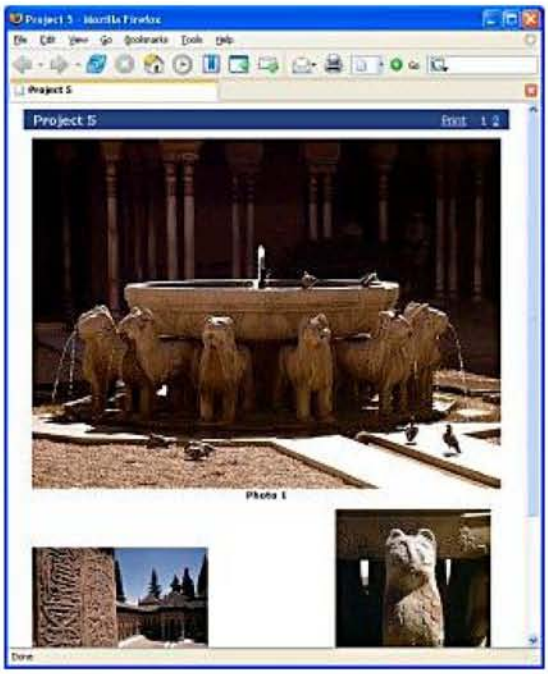
If you want your help page to open in a **Popup window**, check the **Show as Popup** checkbox and enter **Width** and **Height** (pixels) of the Popup window. Note that some Users may have their Browser set to block popups.

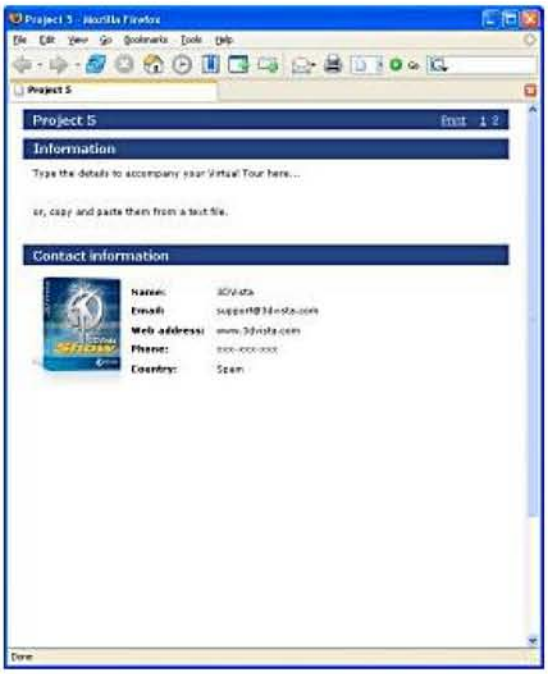
Tour Info

If the Skin includes an **Info** (**i**) button, clicking it will open the **Tour Info** page(s) in a Browser window. **Tour Info** is a quick and easy way to create an '**online brochure**' for your project.

You can add up to five **Pictures** - usually photos - each with a short text description (see screen shots above and below). Your **Contact Info** and **Tour Info** will all be included in the Tour Info pages.

Before closing the **Tour Info Editor**, you can preview the 'brochure' by clicking the **Preview** button.





Click the **OK** button to close the **Tour Info Editor**.

Don't forget to **Save** and **Preview** your project before **publishing** your virtual tour.

FAQ’s

Frequently Asked Questions

1. What is the difference between the 'Flat' and 'Immersive' viewers?
Immersive viewer corrects the optical distortion when the images are stitched together. This is especially useful when the photos are taken with a wide-angle lens. The immersive viewer also allows you to zoom in and out of the panorama. The Flat viewer generally gives a sharper image when compared to the Immersive viewer. Most of the time it comes down to personal taste … please look at the demos in samples to see the difference for yourself.

2. What is an Exe tour?
The Exe tour or emailable tour is a 'self-executable program' (also known as an 'exe-tour'). This means that the virtual tour is self contained within a single file which you can save and then attach to an email as you would with any other kind of email attachment. This is a great way to get users to see your tours directly via their email. It can contain all your panoramas as well as slide shows, videos clips, interactive floor plans and audio tracks.

3. Will my virtual tours work on other browsers such as Netscape or Firefox or Opera?
Yes, as long as the necessary plug-ins are installed on a particular browser, the tours of that format can be run: Flash, QTVR, Java, ActiveX, your tours in any of these formats can be run on all browsers and platforms provided that the browser is enabled with Flash, QuickTime, Java or ActiveX. When it comes to ActiveX, the Mac users are not able to view them since this a PC format only.

4. Can I zoom in and out?
Yes, but only in the 'immersive' viewers. You can zoom in and out by using the respective buttons (magnifying glass icons) when available on skins. In the skinless viewers, do this by pressing the 'A' key on your keyboard to zoom in and the 'Z' key to zoom out.

5. Can I create a full 360°x180° virtual tour, which allows me to look up and down as well as left and right?
Yes. You can do this in several ways:
A) Create a spherical panorama from within the 3DVista Studio using 2 or 3 circular fisheye images for stitching.
B) Make a cubic panorama by assembling 6 faces of a 'cube' created in CAD programs or with special photo techniques.
C) Import a ready-stitched 360°x180° panorama that has already been created in another stitching program.

6. What is a partial and a full panorama?
A partial panorama is one that does not rotate a full 360° horizontally. The partial will simply 'bounce back' once it reaches the either end of the horizontal view. A full panorama however refers to a complete 360 degree horizontal revolution in a view. Please look at the demos in samples to see the difference for yourself.

7. What is the optimum file size for a panorama in a virtual tour?
Generally you should aim to keep each panorama around 100 KB if your audience will be using dial-up 56k modems. If you are targeting users with broadband Internet access, you can create panoramas that have a file size of as large as 250 KB without worrying about lengthy download times.

8. Can I create my own interface for the virtual tours?
Yes. The interface, meaning the frame, buttons and other elements surrounding the viewer that the user sees and clicks on to control the tours, can be changed to your own specifications and designs using 3DVista SkinEditor VR Development Lab Edition program. You can also select any of the many 'Skins' that are included in the Publisher/Show programs.

9. Can I show my own 'info' screen in the Skins?
Yes. All you need to do is to create your own designs in any html editor program such as DreamWeaver or GoLive. For instance, you can use your own graphic and text elements showing any information in any language you want, and then save them as an HTML file. Next, in the publishing stage, after choosing the

skin, you can assign that html file to be the page that shows up when the user selects the 'i' (info) button on the Skin. Your design with your elements will show in its own window.

10. Which parameters in the virtual tours can be modified?
The following settings in the tours can be changed with user specified settings:
- Applet dimensions
- Rotation direction
- Rotation speed
- Rotation time out
- Viewer type (Flat or Immersive)
- Applet's HTML page background color.
- Info page content

Please refer to API guide to learn more about what and how other parameters can be changed.

11. Can I show the 3DVista virtual tours via a CD-ROM presentation?
Yes. To do this, just select the CD-format option in the publishing stage. Moreover, you can select the Email-format option in the publishing window and save the whole tour as a single file to your CD.

12. Can I import panoramas that I have already created in other stitching programs to be presented in 3DVista virtual tours?
Absolutely. No matter which program was used to create your panoramic images (spherical or cylindrical, full 360 or partial), you can import them into 3DVista Publisher or Show and include them in your virtual tours. There is no restrictions on this as long as the panoramas are in JPG or BMP format.

13. My tours don't show up on Windows 2003 servers. How can I resolve this?
The IIS (Internet Information Services) include a Web Server that allows your customers to view your web page contents.
The Windows 2003 Web Server only allows (by default) download of files with known extensions (referred to as MIME TYPES). These extensions don't include the ones required by 3DVista web viewers (.cfg, .skz, .rba, etc).

Here is an explanation of how to add the 3DVista MIME types to your Windows 2003 Web Server:

1.- Go to Start / Control Panel / Administrative Tools / Internet Information Services (IIS) Manager.
2.- In the tree view to the left of the IIS Manager Window go to "Websites". Right-button click and select "Properties"
3.- Select the "Http Headers" tab and click on "MIME types" button.
4.- To add a new MIME type click on new in the window that you get.
5.- In the extension field enter the ones that you need to add (with dot included). In the MIME type field enter a description for the extension as described below:

You have to add the following new extensions:

Extension	MIME Type
.cfg	3DVista CFG
.skz	3DVista SKZ
.rba	3DVista RBA
.ski	3DVista SKI
.rbv	3DVista RBV
.bra	3DVista BRA
.mp3	MP3

14. I uploaded the virtual tour to my server but am presented with the message in the applet 'Error loading 3DVista viewer'. What can I do to resolve this?
This might only occur due to several things. First, make sure that all the elements of the virtual tour were successfully uploaded and are in the same directory. The four elements are:
I) an .HTML file
II) a .jar file (for JAVA format)
III) a .cfg file
IV) a folder that contains the Panorama images
V) a folder that contains the skin file
VI) a folder that contains the help files

If all of these elements are uploaded and are in the same folder but you still get an error message, there may be a security issue on your server which can prevent the tours to show. If this is the case, we recommend that you contact your web-hosting company directly in order to resolve the issue.

15. Registration keys: What are they? How can I retrieve them?
When you install a 3DVista software, you will need a registration key to successfully activate your software and remove the watermarks (www.WeCanTakeYouThere.com) Once purchased, you will receive an email containing instructions on how to obtain the registration key. You will have your user name and password sent you in order to log in to your account. Simply follow the instructions when you are in and you can always access the keys should you need them for re-installing your software on same computer.

16. What is a SKIN? and how can I change their designs?
Skin is the term used for the graphic interface that contains the virtual tour elements. It is usually made up of a graphic frame, different button icons such as zoom -in, zoom-out, info/help, audio, hotspot, and a drop down menu. Skins can have many different designs and come in a large library of forms and colors. You can change the Skins of your tours in two ways:

A) by selecting a different Skin from the Skin library. There are currently near to 100 different skins to choose from.
B) by designing and creating your own skins with 3DVista SkinEditor VR Development Lab Edition, a powerful skin design and editing program with a broad range of creation tools and design options.

17. In which formats can I publish my 3DVista virtual tours? Differences? PROs & CONs?
Choosing 3DVista Publisher, you can opt to export your tours in a myriad of formats such as:

Java:
Pro: faster downloads, cross-platform compatibility, controllable via JavaScript
Con: Relatively average quality, in some case needs a rather big plug-in to download

EXE and CD-rom:
Pro: High quality, small and compact files (a single file for email EXE), runs off line
Con: only works on PC

ActiveX:
Pro: Best quality, smallest plug-in size
Con: It only works on Internet Explorer and on PC

Flash:
Pro: High quality audio and video, cross-platform compatibility, plug-in already installed on 97% of computers
Con: Immersive viewers have not as good quality as Java, ActiveX or QTVR yet.

QTVR:
Pro: High quality, cross-platform compatible
Cons: Huge plug-in to download. Only for panos.

Misc.

Installation Instructions

PC Vista Software

Package Contents:

1 VRDL Vista CD-ROM (PC Only)
1 Binder with VRDL Vista Manual

Instructions:

1.) Place CD in your PC
2.) Create a folder on your desktop called VRDL Programs (or where you place the programs) and copy both the Show25VRDL and the Stitcher30VRDL applications and place inside.
3.) Now go to that folder and double-click or open both the Show25VRDL and/or the Sticher30VRDL programs
4.) After you run both programs it will place the following icons on your desktop
Stitcher
Skin
Show
5.) If you do not see all these icons run the other program and the other icons should appear.
6.) Now start either Show, Skin or Stitcher and a screen saying:
Welcome to 3DVista Stitcher VR Development Lab will appear.

There is a section at the bottom labeled

User Number
XXXXXXXX

Registration Key (please enter)

Now you need to write down this 9 digit User Number which is unique to each computer you install the software on. You will receive 1 Registration Key per licensed copy that you purchased.

Please email this 9 digital number to:
sales@wecantakeyouthere.com
or
sjochim@aol.com

7.) A Registration Key will be sent back to you within 24-36 hours and your software is then ready to use.

If you have any problems feel free to call:
Digital Tech Frontier, LLC. Tech Support: 1.888.587.7529

DIGITAL
TECH FRONTIER LLC

888-587-7529

4416 E. Tanglewood Dr.
Phoenix, Arizona 85048

Tech Support Hours 10:00 am - 5:00 pm M-F
AOL Instant Messenger / iChat AV Support: VRDLDev
www.WeCanTakeYouThere.com