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VR Scene WORX™ T U T O R I A L



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VR SceneWorx for Windows™ Tutorial Guide

Welcome to the VR SceneWorx™ Tutorial Guide. This guide presents several examples of how to use VR SceneWorx to compose QuickTime VR multi-node scenes. These lessons will expose you to the basics of scene composition as well as introduce you to some of the more advanced capabilities of VR SceneWorx.

Accompanying this tutorial are several media files which are referred to in the accompanying examples. If you do not have these files, you may download them from the VR Toolbox web site at <http://www.vrtoolbox.com>.

Lesson 1 – Building a Simple Scene

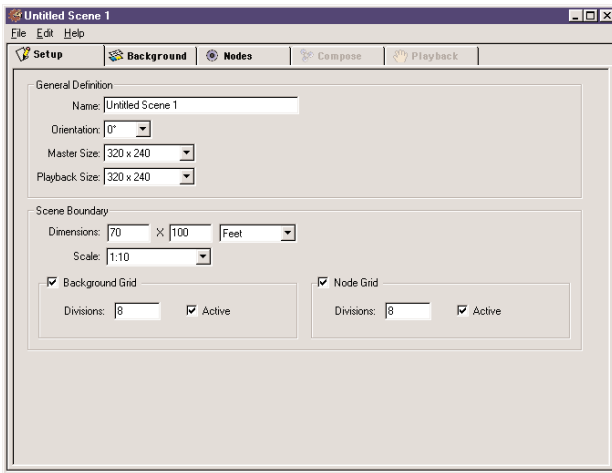
In this lesson you will learn how to:

- 1) Setup a scene,
- 2) Specify a background image template,
- 3) Place two nodes in the scene,
- 4) Link the two nodes together,
- 5) Compose the QuickTime VR multi-node scene.

These steps cover the basic process for creating any multi-node QuickTime VR scene. It is recommended that even if you have experience building QuickTime VR scenes, you step through this lesson to become familiar with VR SceneWorx basics.

Step 1 – Setup a Scene

Launch VR SceneWorx by selecting the “VRSceneWorx” from the “VR Toolbox” program group in the Start Menu. When the application launches, a document window will appear that looks like the following:



At the top of the document window are five folder tabs labeled “Setup”, “Background”, “Nodes”, “Compose” and “Playback.” Each one of these tabs displays a different *panel*. Initially, the *Setup Panel* is active.

It is in the Setup Panel that you specify information about your scene. For this lesson we will only perform two changes, relying on the defaults for all other settings:

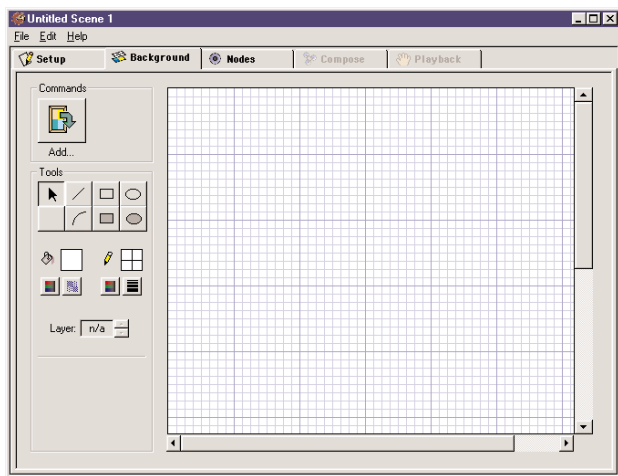
- 1) Change the name of the scene to “Roman Coliseum.”
- 2) Disable the *Node Grid* by un-checking the “Node Grid” check box.

Step 2 – Specify a Background Image Template

A background image template is simply a graphics drawing that can be used as a guide for placing nodes in the scene. For instance, if you were composing a scene of a house, you may want to use a floor plan of the house as a guide for where to place the nodes.

VR SceneWorx provides the ability to design your own background templates using the built in drawing tools; or you can import a more complex image created in another program (or scanned using a flatbed scanner).

To create a background template, click on the “Background” folder tab which activates the *Background Panel*. It appears like this:



If you wish, you may use the drawing tools to create a simple template. For this lesson, however, we have provided a template as a image file. To add it to your background, do the following:

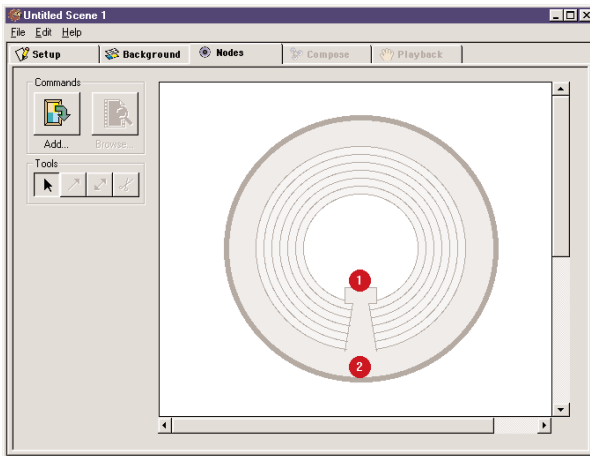
- 1) Click the “Add...” button in the “Commands” button group.
- 2) Use the standard file selection dialog to locate the file named “Background Map.mov” located in the “Media” folder of this tutorial.

After the “Background Map.mov” file has been selected, an image will appear in the Background Panel. You may center this image by clicking and dragging it to the desired position. You may also need to enlarge the window to see the entire image. The easiest way to do this is by clicking the *Maximize Box* in the upper right corner of the document window’s title bar.

You have successfully placed an image to be used as a background template. It is important to note that the background template is merely a guide for placing nodes. It will not appear in the final QuickTime VR scene.

Step 3 – Place Two Nodes in the Scene

To place nodes in the scene, you must advance to the *Nodes Panel* by clicking the “Nodes” folder tab. The Nodes Panel appears like this:



Notice the background template in the Nodes Panel. It may not be moved or modified in any way. Nodes will be placed on top of this image. The red markers labeled “1” and “2” indicate where the two nodes for this lesson must be placed.

To place the first node, perform the following steps:

- 1) Click the “Add...” button in the “Commands” button group.
- 2) Use the standard file selection dialog to select the file named “Floor.mov” located in the “Media” folder of this tutorial.
- 3) The new node is added to the scene and is represented by the following icon:



- 4) Position this icon by clicking and dragging it until it is sitting on top of the red marker labeled “1” in the background template.

To place the second node, perform the following steps:

- 1) Click the “Add...” button in the “Commands” button group.
- 2) Use the standard file selection dialog to select the file named “Entrance.mov” located in the “Media” folder of this tutorial.
- 3) The new node is added to the scene and is represented by the following icon:



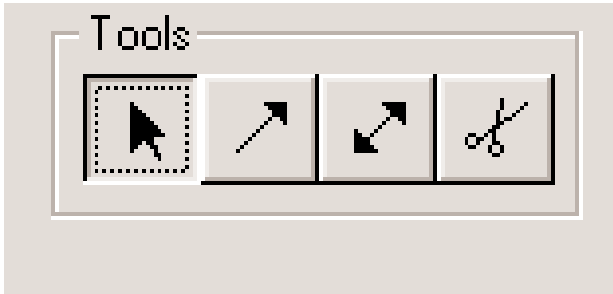
- 4) Position this icon by clicking and dragging it until it is sitting on top of the red marker labeled “2” in the background template.

You have now successfully placed the two nodes into this scene.

Step 4 – Link the Two Nodes Together

With our two nodes correctly placed, the next step is to link them together. The process of linking will create *Hot Spots* that, when clicked on by the user, will switch from one node to another. This presents the effect of “walking” through a scene.

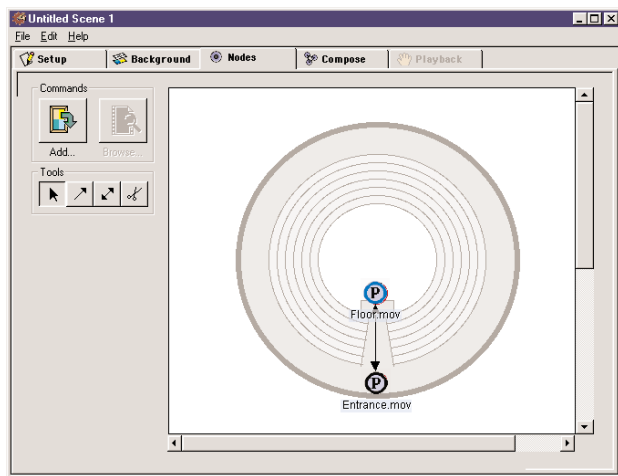
Creating links is accomplished by using one of the link tools available in the *Tools Palette*. This palette appears like this:



For this lesson we will create a bidirectional link between the two nodes. To do this, perform the following steps:

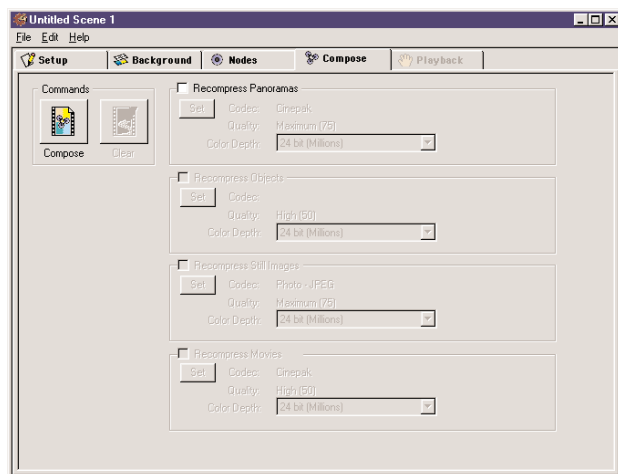
- 1) Click on the *Bidirectional Link* tool in the “Tools” button group.
- 2) Use the mouse to click on the node named “Floor.mov”
- 3) Hold the mouse button down and drag the mouse to the node named “Entrance.mov” As you are dragging, you will see a line being drawn from “Floor.mov” to the current mouse position.
- 4) With the “Entrance.mov” node highlighted, release the mouse button. A line with an arrow at each end is drawn between these nodes.

You have just linked the two nodes together. The hot spots associated with this link have been automatically created. The Nodes Panel should appear like this:



Step 5 – Compose the QuickTime VR Multi-node Scene

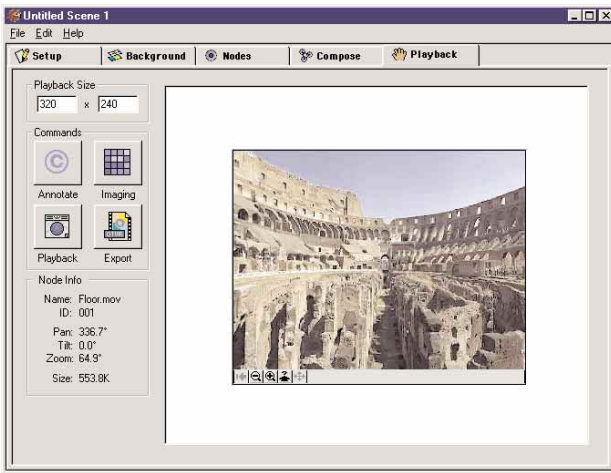
With the nodes placed and the links defined, you may proceed to the *Compose Panel* by clicking on the “Compose” tab. It appears like this:



For this lesson, we will stick to the default settings and not perform any customization here. We will immediately proceed to compose the QuickTime VR scene by performing the following step:

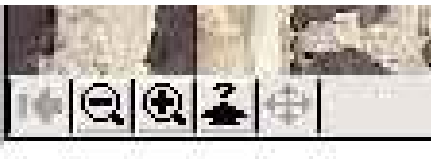
- 1) Click the “Compose” button in the “Commands” button group.

A progress dialog appears showing you the progress of the scene composition. When it is complete, you may proceed to the *Playback Panel* by clicking on the “Playback” folder tab. It appears like this:



The final QuickTime VR Scene is displayed at the center of the window. You may interact with the movie by clicking and dragging on it or using one of the controller buttons.

A particularly useful controller button is the “Show Hot Spots” button:



By double-clicking this button, all hot spots in the node will be highlighted in blue and remain highlighted as you pan, tilt and zoom. This allows you to quickly find the hot spots that were created when the

two nodes were linked together. Clicking on a hot spot will take you to the next node.

You have now successfully generated your first QuickTime VR multi-node scene using VR SceneWorx. It is recommended you step through the following tutorial lessons to learn how to further enhance the scene.

Lesson 2 – Fine-tuning the Simple Scene

In this lesson you will learn how to:

- 1) Set the initial node of the scene,
- 2) Adjust the size & position of hot spots,
- 3) Specify entry angles for links,
- 4) Add a URL hot spot.

In the preceding example you learned how to create a simple QuickTime VR multi node scene. Although the process generated a multi node QuickTime VR scene quickly and easily, you may have noticed that the final result was not what would be considered optimal. The scene, as generated, has the following shortcomings:

- The first node viewed is the “Floor.mov” node. It would make more sense to the user if the first node were at the “Entrance.mov”
- The placement of the hot spots do not correspond to what the user would expect. For instance, the hot spot leading from “Floor.mov” to “Entrance.mov” is a bit to the left of the path leading to the entrance. Likewise, the hot spot linking “Entrance.mov” to “Floor.mov” is floating up in the air, above the actual floor.
- When the user clicks the hot spot link from “Floor.mov” to “Entrance.mov” they would expect to be looking at the entrance after the new node appears. However, the initial view after “walking” the link is out over the coliseum floor - exactly 180° from what the user expects.

In addition to the above shortcomings, there is also a text URL rendered into the base of the nodes in this scene. It would sure be nice to have a hot spot defined on top of this URL that would open the specified web page in the user’s web browser.

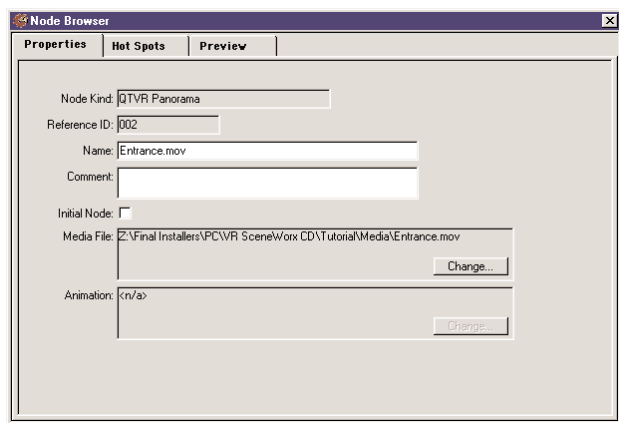
The following lesson addresses the above shortcomings and adds a URL hot spot to one of the nodes as desired.

Step 1 – Set the Initial Node of the Scene

The initial node of a scene is the first node that the user sees when they open the QuickTime VR movie.

In the Simple Scene composed in Lesson 1 of this tutorial, we want to change the initial node from “Floor.mov” to “Entrance.mov” To do this, perform the following steps:

- 1) Switch to the Nodes Panel by clicking on the “Nodes” folder tab.
- 2) Select “Entrance.mov” node by clicking its icon with the Arrow Selector tool.
- 3) Click the “Browse...” button in the “Commands” button group. The “Node Browser” dialog appears:



- 4) Check the “Initial Node” check box by clicking on it.
- 5) Close the “Node Browser” dialog.

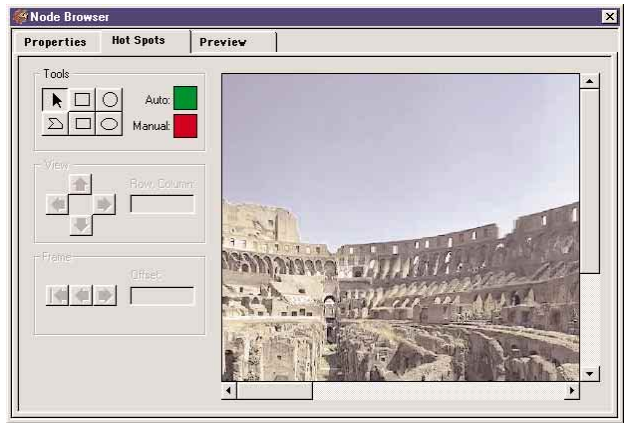
The “Entrance.mov” node has now been designated as the initial node of the scene. Notice how its icon has a blue ring around it instead of the standard black ring. This blue ring indicates that “Entrance.mov” is the scene’s initial node.

Step 2 – Adjust the Size & Position of Hot Spots

As noted at the beginning of this lesson, the size and placement of the automatically generated hot spots does not exactly correspond to what the user would expect. However, the size and placement of each hot spot is easily adjusted.

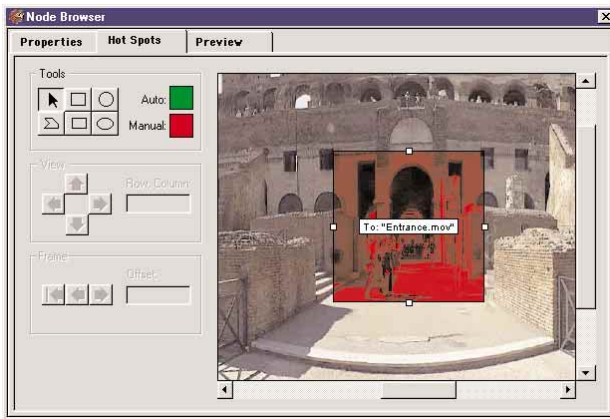
To correct the size and placement of the hot spot in the “Floor.mov” node, perform the following steps.

- 1) In the Nodes Panel, select the “Floor.mov” node by clicking on it with the Arrow Selector tool.
- 2) Click on the “Browse...” button in the “Commands” button group.
- 3) The “Node Browser” dialog window appears. Click on the “Hot Spots” folder tab at the top of this window:



- 4) The Hot Spot Editor in the Node Browser allows you to adjust the size, shape and placement of existing hot spots as well as create new ones. With the Arrow Selector tool, click and drag the hot spot until it is sitting squarely above the coliseum entrance archway. You may need to resize the Node Browser window and/or scroll the panoramic image to effectively do this.

- 5) To resize the hot spot, click and drag on one of the four handles that appear at its corners. To change the shape of the selected hot spot, Option-Click the desired shaped tool in the “Tools” button group. The end result should look like this:

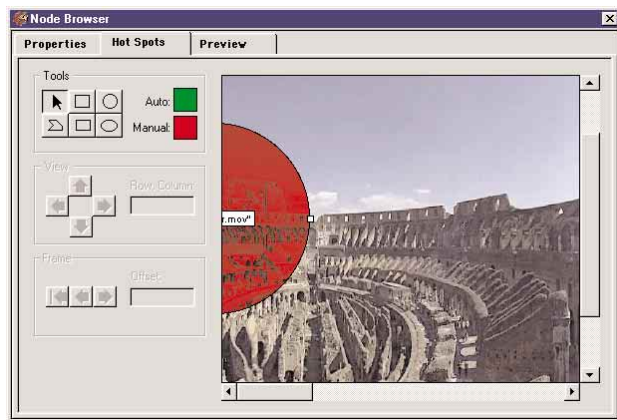


- 6) Close the Node Browser dialog.

To correct the size and placement of the hot spot in the “Entrance.mov” node, perform the following steps.

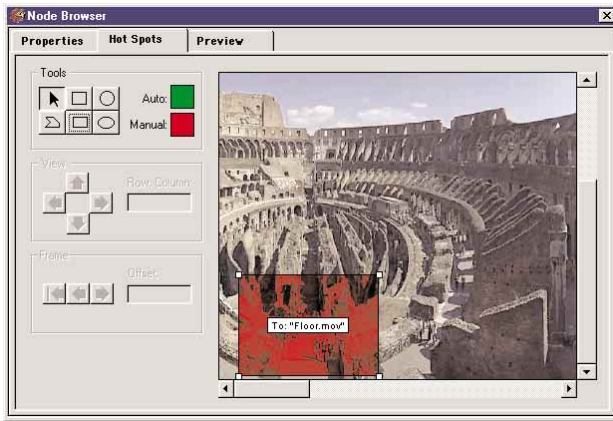
- 1) In the Nodes Panel, select the “Entrance.mov” node by clicking on it with the Arrow Selector tool.
- 2) Click on the “Browse...” button in the “Commands” button group.

- 3) The “Node Browser” dialog window appears. Click on the “Hot Spots” folder tab at the top of this window. The following appears:



- 4) The Hot Spot Editor in the Node Browser allows you to adjust the size, shape and placement of existing hot spots as well as create new ones. With the Arrow Selector tool, click and drag the hot spot until it is sitting squarely above the small balcony looking over the floor. You may need to resize the Node Browser window and/or scroll the panoramic image to effectively do this.

- 5) To resize the hot spot, click and drag on one of the four handles that appear at its corners. To change the shape of the selected hot spot, Option-Click the desired shaped tool in the “Tools” button group. The end result should look like this:



- 6) Close the Node Browser dialog.

You have just corrected the size and placement of all the hot spots in this scene.

Step 3 – Specify the Entry Angles for Links

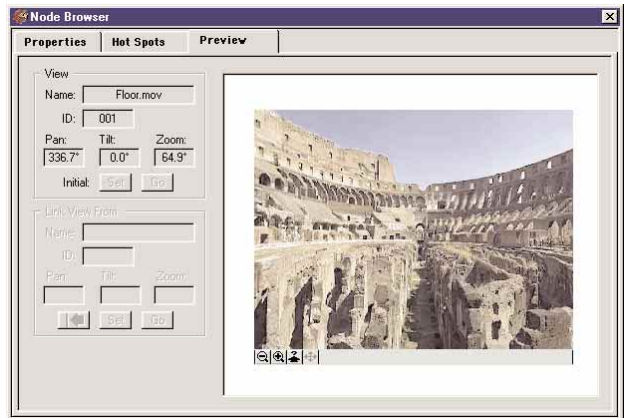
With all the hot spots correctly positioned and sized, you may think that our work is complete. However, this is not the case. If you were to compose the scene at this point you would notice that while “stepping” from the “Floor.mov” node to the “Entrance.mov” node by clicking on the hot spot, the “Entrance.mov” node’s initial view is looking out over the Coliseum floor. This is contrary to what the user would expect to see. This occurs because the *Entry Angle* for the hot spot link from “Floor.mov” to “Entrance.mov” is about 180° from what it needs to be.

To correct the entry angle problem, perform the following steps

- 1) In the Nodes Panel, select the “Floor.mov” node by clicking on it with the Arrow Selector tool.

- 2) Click the “Browse...” button in the “Commands” button group.

- 3) Click on the “Preview” folder tab at the top of this window. The “Floor.mov” node is created on-the-fly and displayed as a QuickTime VR movie as shown below:

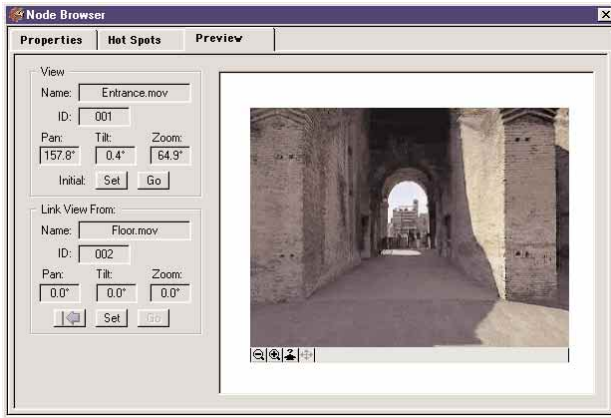


- 4) Pan the node by clicking on it and dragging to the left or right. Stop when the entrance (and hence the “Entrance.mov” hot spot link) comes into view.

- 5) Click on the hot spot link that takes you to the “Entrance.mov” node. The “Entrance.mov” node is generated on-the-fly and will appear in the Node Browser dialog after a brief delay.

- 6) Notice that the initial view of the “Entrance.mov” node looks out over the Coliseum floor as it does in the final composed

scene. Pan the node by clicking and dragging to the left or right until the entrance archway is centered in the field of view, as shown below:



7) Click the **Set** button at the bottom of the “Link View From” command group. This defines the current view angle as the Entry Angle for the hot spot link you just executed.

8) To test the Entry Angle, click the **↩** button at the bottom of the “Link View From” command group. This returns you to the “Floor.mov” node where you can test the hot spot link again. This time you will notice that the initial view when stepping from “Floor.mov” to “Entrance.mov” is looking out the entrance as the user would expect.

9) Close the Node Browser dialog.

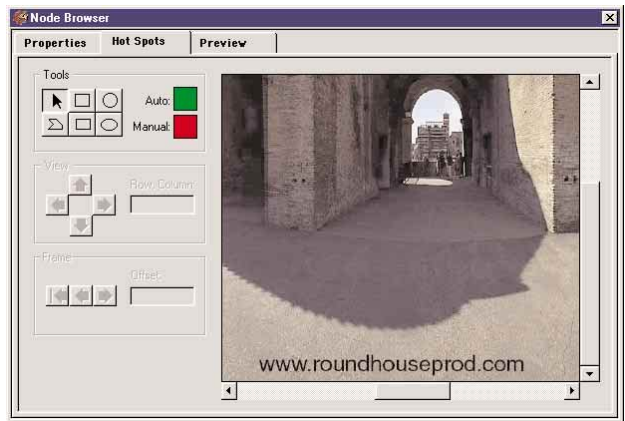
You have just adjusted the Entry Angle for a hot spot in the scene. You may perform this type of adjustment on as many hot spots as necessary. For this lesson, the only other hot spot need not be adjusted, as its Entry Angle is appropriate.

Step 4 – Add a URL Hot Spot

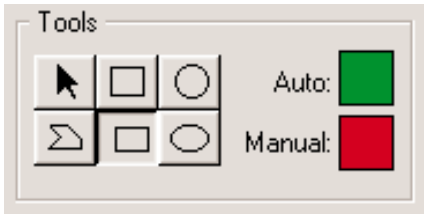
When adjusting the size and position of the auto-generated hot spots (Step 2), we mentioned that you could use the Hot Spot Editor in the Node Browser to create hot spots. In this step we'll take advantage of this capability to create a URL hot spot i.e. a hot spot that once triggered will open a specific web page in your web browser.

To add a URL hot spot to the scene, follow these steps:

- 1) In the Nodes Panel, select the “Entrance.mov” node by clicking on it with the Arrow Selector tool.
- 2) Click “Browse...” in the “Commands” button group.
- 3) Click on the “Hot Spots” folder tab at the top of the Node Browser dialog.
- 4) Scroll the panoramic image all the way down and midway to the right until the rendered text string: “www.roundhouseprod.com” is visible, as shown below.



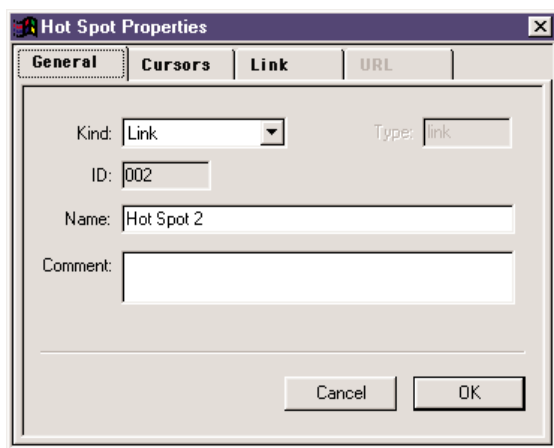
- 5) Select the Rectangle tool from the tool palette in the “Tools” button group:



- 6) Draw a rectangle around the text “www.roundhouseprod.com” by clicking at the upper right corner of the text and dragging down and to the right. Release the mouse and the hot spot is created, as shown below:



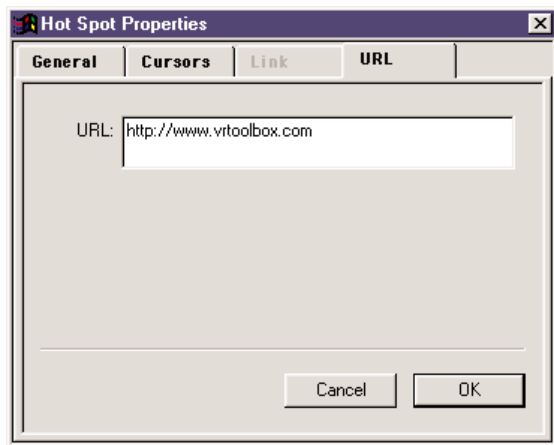
- 7) Double-click on the newly created hot spot to open the “Hot Spot Properties” editor:



- 8) Change the “Name” of the hot spot to “Roundhouse Web Site.”

- 9) Click on the “Kind” pop up and change it from “Link” to “URL.”

- 10) Click on the “URL” folder tab at the top of the dialog window:



- 11) Change the “URL” to “http://www.roundhouseprod.com.”
- 12) Click “OK.”
- 13) Close the Node Browser.

You have just created a URL hot spot in the “Entrance.mov” node. You can repeat the above steps for the “Floor.mov” node if you wish.

Step 5 – Recompose Your Changes

Now that we have performed all of the desired adjustments and enhancements, it’s time to recompose the changes to see how the final scene looks. To do this perform the following steps:

- 1) Switch to the Compose Panel by clicking on the “Compose” folder tab.
- 2) Click on the “Compose” button in the “Commands” button group.
- 3) When the composition is complete, view the resulting scene by switching to the Playback Panel. Do this by clicking on the “Playback” folder tab.

You have just recomposed the Simple Scene. Play around with it and notice how nicely all the hot spot links behave. While in the “Entrance.mov” node, be sure to try out the URL hot spot. If you have a web browser properly installed, it will automatically launch and the Roundhouse Productions web site will appear.

Now that we have successfully composed a simple scene, it’s time to make the scene more complex as well as learn some shortcuts to facilitate the process.

Lesson 3 – Adding a Node to the Simple Scene

In this lesson you will learn how to:

- 1) Add a new node to the scene,
- 2) Fine-tune the new node in a single step.

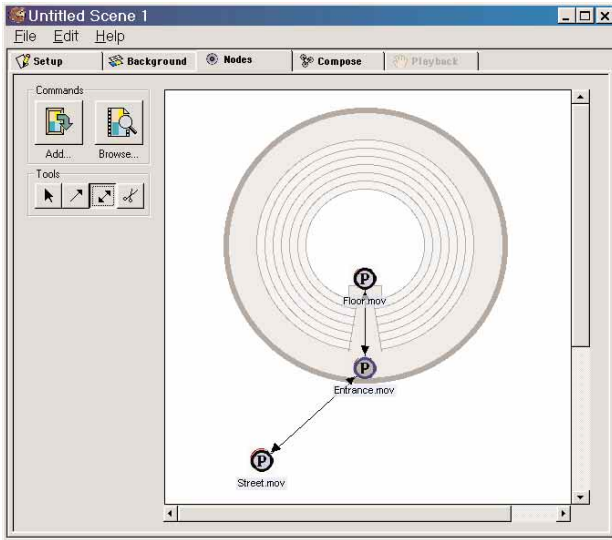
Now that we have the basic creation and fine-tuning process mastered, it's time to make the scene more complex by adding another node. The above process for creating and fine-tuning the scene is effective, but can be laborious, especially for large scenes. In this lesson, we will add a new node to the scene and show how the fine-tuning adjustments for the new node can be performed quickly and (almost) effortlessly.

Step 1 – Add a New Node to the Scene

This operation should be fairly straightforward by now:

- 1) Switch to the Nodes Panel by clicking on the “Nodes” folder tab.
- 2) Click on the “Add...” button in the “Commands” button group.
- 3) Use the standard file selection dialog to select the file named “Street.mov” located in the “Media” folder of this tutorial.
- 4) Scroll or enlarge the Nodes Panel to reveal the red marker labeled “3.”
- 5) Drag the “Street.mov” node on top of the “3” marker.

- 6) Use the Bidirectional Link tool to draw a link between the “Street.mov” node and the “Entrance.mov” node. The final result should appear as follows:



Step 2 – Fine Tune the New Node

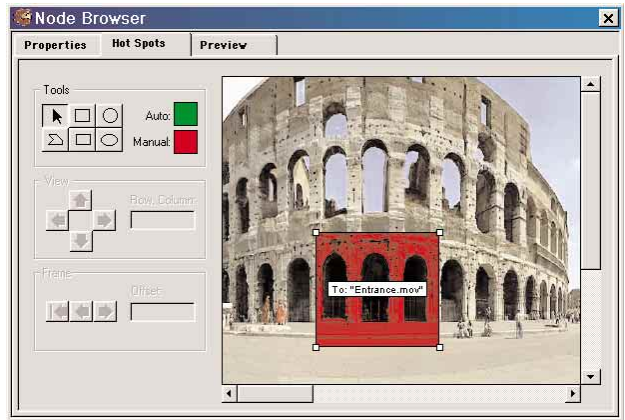
In the following steps we will perform the following:

- Specify the new node to be the Initial Node.
- Adjust the new node’s auto-generated hot spot size and location.
- Specify the correct Entry Angle when stepping into “Entrance.mov” and back.

All of the above are performed in the Node Browser so you should not close this dialog between steps.

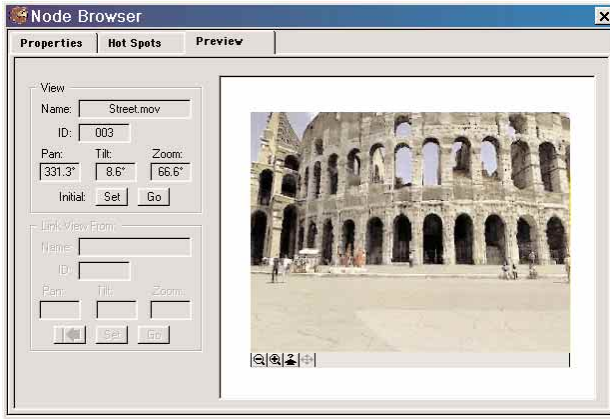
- 1) With the Arrow Selector tool, select the “Street.mov” node by clicking on it.
- 2) Click the “Browse...” button in the “Commands” button group.

- 3) If possible, position the Node Browser window so you can see as much of the underlying Nodes Panel as possible.
- 4) In the Properties Panel of the Node Browser, check the “Initial Node” check box.
- 5) Switch to the Hot Spots Panel by clicking on the “Hot Spots” folder tab.
- 6) Locate the auto-generated hot spot linking to “Entrance.mov”
Adjust its position and shape as desired:



- 7) Switch to the Preview Panel by clicking on the “Preview” folder tab.

- 8) Remember that this node is now going to be the initial node for the scene. Pan, tilt and zoom the node until the desired initial view is visible:

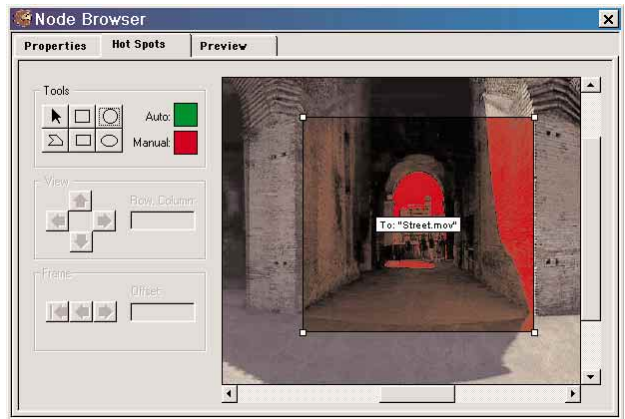


- 9) Click the **Set** button in the “Initial View” command group. This defines the current view as the initial view the user will see when the QuickTime VR scene is opened.
- 10) Execute the link to the “Entrance.mov” node by clicking on its hot spot. If you need help finding the hot spot, use the “Show Hot Spots” button on the movie controller:



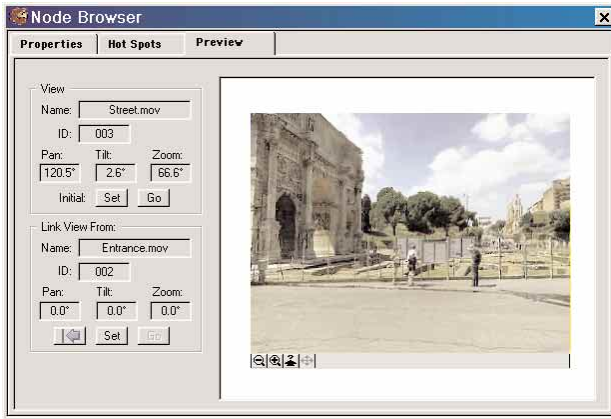
- 11) With the “Entrance.mov” node now being displayed, you would now set the pan, tilt and zoom angle to be the desired Entry Angle. In this example, the default entry angle is appropriate so we don’t need to change it.

- 12) Now we must adjust the hot spot linking back to the “Street.mov” node. To do this, switch back to the Hot Spots Panel by clicking the “Hot Spots” folder tab.
- 13) Note there are a total of three hot spots displayed; one links to the floor while the other is our custom URL hot spot from the previous lesson. Since these have already been adjusted, take care not to inadvertently modify them. Locate the “To: Street” hot spot and adjust its size, position and shape as desired.



- 14) Switch back to the Preview Panel by clicking on the “Preview” folder tab.
- 15) Locate the hot spot leading out to the street and execute it by clicking on it.

- 16) In this case you will want to adjust the Entry Angle by panning to a view that looks directly across the street:



- 17) Click the **Set** button in the “Link View From” command group to specify the Entry Angle.
- 18) Close the Node Browser dialog.

You have just completed all the fine-tuning necessary to accommodate your new node. The above procedure can be repeated for every node added to a scene. This is particularly useful when you have added many new nodes and links to a scene. The process of using the Node Browser to fine-tune multiple nodes by switching back and forth between Hot Spots and Preview is called “Sweeping” the scene.

If your monitor is large enough to view the Nodes Panel while the Node Browser was open, you would notice how the selected node in the Nodes Panel changes as you snake the scene. This is because there is a direct linkage between the Nodes Panel and the Node Browser, so a change in one automatically appears in the other. You can keep both windows open and switch back and forth between them. If you select another node in the Nodes Panel it will automatically appear in the Node Browser. If you create new

links, they will likewise automatically appear. This capability is extremely useful when building complex scenes; You can fine-tune and test the entire scene without actually composing it, thus saving a tremendous amount of time.

Step 3 – Recompose Your Changes

With a new node added and fine-tuned, it's time to recompose to see how the final scene looks. To do this perform the following steps:

- 1) Switch to the Compose Panel by clicking on the “Compose” folder tab.
- 2) Click on the “Compose” button in the “Commands” button group.
- 3) When the composition is complete, view the resulting scene by switching to the Playback Panel. Do this by clicking on the “Playback” folder tab.

With the Simple Scene getting more complex, it's now time to learn how to add a non-QuickTime VR media element to the scene.

Lesson 4 – Adding a Non-QuickTime VR Media Element

In this lesson you will learn how to:

- 1) Add a static picture to the scene,
- 2) Turn the static picture into an image map.

In addition to adding QuickTime VR panoramas and objects to a scene and linking them together, VR SceneWorx has the ability to add two types of non-QuickTime VR media elements: static pictures and linear movies. In this lesson we will scratch the surface of the implications of this capability by adding a static picture to our Simple Scene. We will then turn this picture into an image map to serve as a form of “Main Menu” for our QuickTime VR scene.

Step 1 – Add a Static Picture Node to the Scene

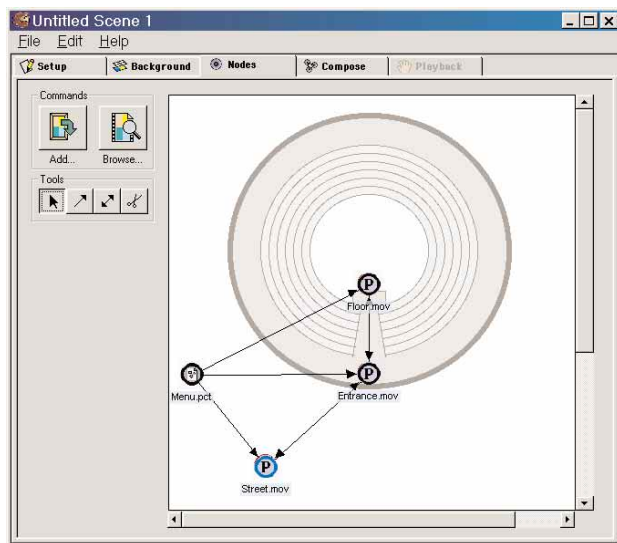
We begin by adding a static picture as a node in the scene. This is accomplished the same manner by which we added panoramas to the scene in the previous lessons:

- 1) Switch to the Nodes Panel by clicking on the “Nodes” folder tab.
- 2) Click on the “Add...” button in the “Commands” button group.
- 3) Use the standard file selection dialog to select the file named “Menu.pct” located in the “Media” folder of this tutorial. Since this is a different media element, it is represented by a slightly different icon. You may need to change the “Files of Type” field to “All Files (*.*)” to be able to see the file in the list of files:



- 4) Reposition the “Menu” node by clicking and dragging it with the Arrow Selector tool. Place it at the left edge of the scene at about the same height as the “Entrance.mov” node.
- 5) With the Unidirectional Link tool, create a link from the “Menu” node to the “Floor.mov” node by clicking first on “Menu” and dragging the mouse to the “Floor” node. Release the mouse when “Floor.mov” is highlighted.

- 6) Repeat the above step two times creating links from “Menu” to both “Entrance.mov” and “Street.mov” When complete the scene should appear as follows:



- 7) If the “Menu.mov” node isn’t positioned correctly, you may select it with the Arrow Selector tool and drag it to the proper position. The links will automatically update based on the new position.

You have now added a static picture media element as a node in the scene.

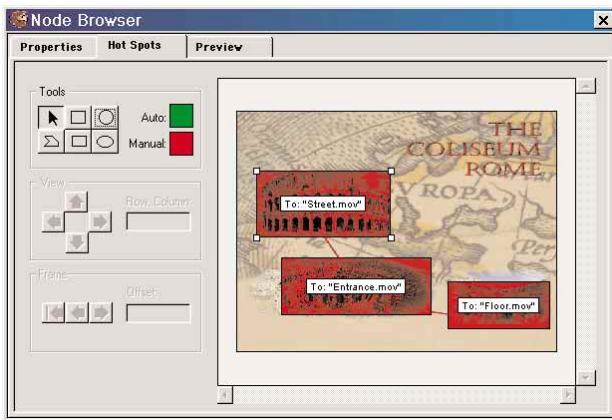
Step 2 – Turn the Static Picture Node Into an Image Map

Actually, the name of this step is deceiving - the static picture node is already an “image map” because hot spots have automatically been created linking it with the other nodes in the scene. What we seek to accomplish here is to “fine-tune” the hot spot placement so that the static picture node will serve as a menu for the user.

- 1) In the Nodes Panel, select the “Menu.mov” node by clicking

on it with the Arrow Selector tool.

- 2) Click the “Browse...” button in the “Commands” button group.
- 3) In the Node Browser, check the “Initial Node” check box. This will make the “Menu.mov” node the first one the user sees, thus functioning much more like a main menu to the scene.
- 4) Switch to the Hot Spots Editor by clicking the “Hot Spots” folder tab.
- 5) The hot spots that were automatically created will appear jumbled together. Click, drag and resize the hot spots so they appear as follows:



- 6) Close the Node Browser

You have now setup the “Menu.mov” node to behave as an image map and present a “main menu” to the user.

Step 3 – Recompose Your Changes

With a static picture node added and setup as an image map, it's time to recompose and see how the final scene looks. To do this perform the following steps:

- 1) Switch to the Compose Panel by clicking on the “Compose” folder tab.
- 2) Click on the “Compose” button in the “Commands” button group.
- 3) When the composition is complete, view the resulting scene by switching to the Playback Panel. Do this by clicking on the “Playback” folder tab.

The user is presented with an overview of the scene. Clicking any image will take them straight to that node. While in the node, they may navigate the scene as they normally would. They can use the “Back” icon button in the QuickTime VR movie controller to return to the previous node, eventually taking them back to the main menu.

With all this work completed, it is now a good time to save our efforts on disk. Proceed to the next lesson to learn how to do this.

Lesson 5 – Saving Your Work

In this lesson you will learn how to:

- 1) Export the scene as a stand-alone QuickTime movie,
- 2) Save the scene as a project document.

With all the work we've done it is now wise to save it to disk. This lesson shows you how to do this as well as save the results of your hard work as a stand-alone QuickTime movie for others to enjoy.

Step 1 – Export the Scene as a QuickTime VR Movie File

Until now, the scenes you've created can only be viewed inVR SceneWorx. You will now want to save it as a QuickTime movie file for others to experience. This is a very simple operation:

- 1) Switch to the Playback Panel by clicking the “Playback” folder tab.
- 2) Click the “Export” button in the “Commands” button group.
- 3) Use the standard file save dialog to locate the desired folder and to save the movie.
- 4) Type in a name for the movie.
- 5) Click the “Save” button.

That’s it, you’re done! The exported movie file may be played in any application that supports QuickTime playback. Double clicking its icon will cause it to open in the MoviePlayer application.

Step 2 – Saving the Scene as Project Document

After performing all this work to compose a QuickTime VR scene, it is very useful to be able to save all the scene layout and settings so that it can be altered and modified in the future. VR SceneWorx allows you to save all your work in what is called a ***Project Document***. To save a project document, perform the following steps.

- 1) From any panel, choose “Save” from the “File” menu.
- 2) If the project has never been saved, you will be presented with a standard file save dialog. Use this dialog to locate the desired folder where your work should be saved.
- 3) Type in a file name for you project document.
- 4) Click “Save.”

All of your scene’s settings, including the final composed QuickTime VR movie have been saved in a single project document for future use. To work on this file, simply choose “Open” from the file menu and locate the project document. You can also double-click the project document’s icon to automatically open it.