

Tutorial 7 - Building a Simple Scene

This tutorial explains how to:

- Setup a scene
- Specify a background image template
- Place two nodes in the scene
- Link the two nodes together
- Compose the QuickTime VR multi-node scene

Step 1 - Setup a Scene

Launch The VR Worx application. If the program is already running, choose **New** from the **File** menu. When the document selector dialog appears, click on the **Scene** radio button and choose **OK**. A blank scene project document window will appear.

It is in the **Setup Panel** that information is specified about the scene being created. For this lesson, only two settings will be modified, 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.

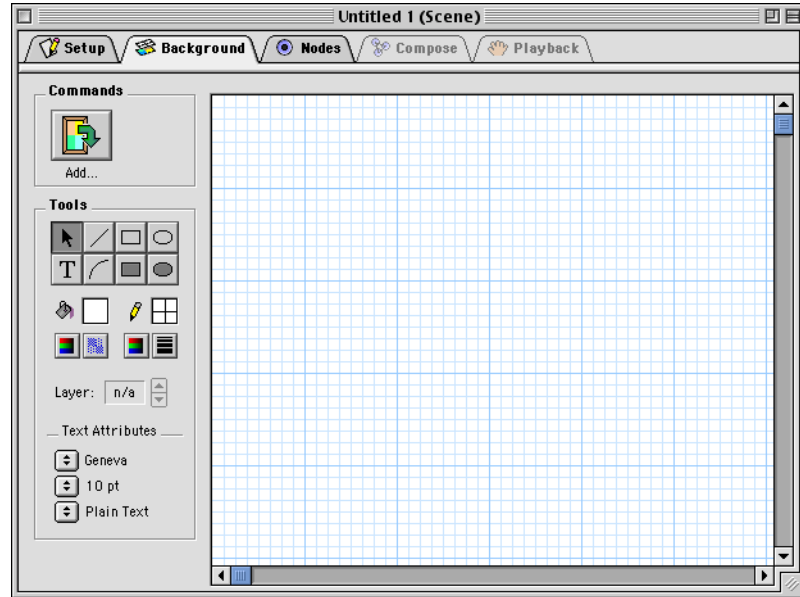
Step 2 - Specify a Background Image Template

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 a scene of a house were being composed, it may be desirable to use a floor plan of the house, as a guide for where to place the nodes.

The scene module provides the ability to design custom background templates, using the built in drawing tools. Alternatively, the operator 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.

Figure 14.7.1
The Background panel in a scene project document.



If so inclined, the drawing tools may be used to create a simple template. For this lesson, however, a simple template has been provided, as an image file. To add it to the background, perform 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.pct” located in “VR Worx CD:Tutorials:SI.Scene:Media” folder.
3. Click **Open**.

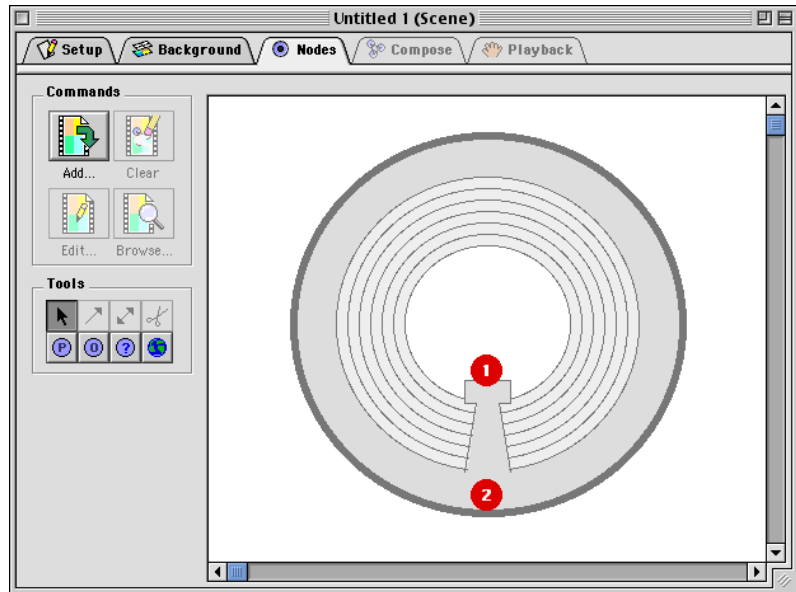
After “Background Map” file has been selected, an image will appear in the **Background Panel**. This image may be repositioned, by clicking and dragging it to the desired position. It may be necessary to enlarge the window to see the entire image.

The image has now been placed, 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, the *Nodes Panel* must be activated, by clicking the **Nodes** folder tab. The Nodes Panel appears like this.

Figure 14.7.2
The Nodes panel,
with a background
template added.



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 dots 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 this icon.
4. Position this icon, by clicking and dragging it, until it is sitting on top the red dot 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 this icon.
4. Position this icon, by clicking and dragging it, until it is sitting on top the red dot labeled “2” in the background template.



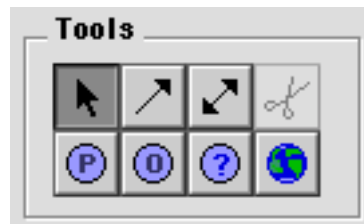
The two nodes have now been placed into this scene.

Step 4 - Link the Two Nodes Together

With the 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 viewer, 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.

Figure 14.7.3
The Nodes panel's
Tools palette.

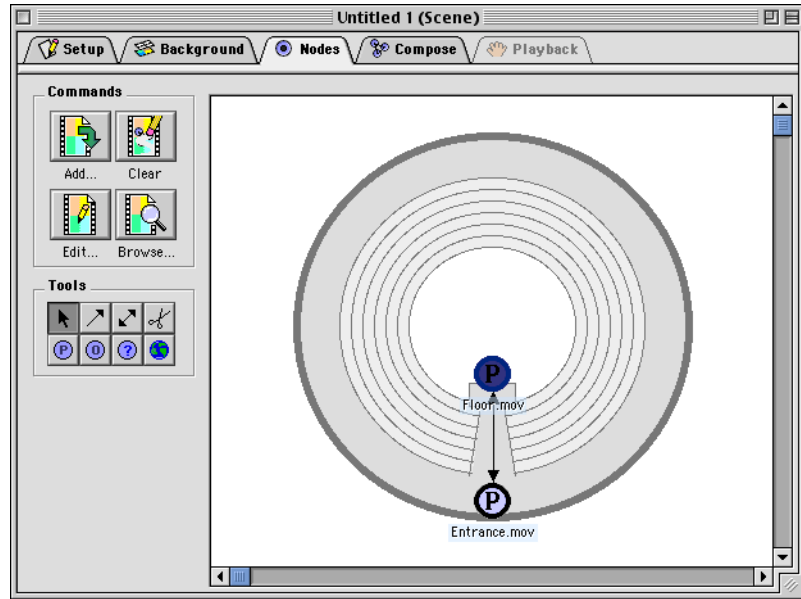


For this lesson a bidirectional link between the two nodes will be created. To do this, perform the following steps:

1. Click on the *Bidirectional Link* tool in the **Tools** button group.
2. Use the mouse to click on the node named “Floor.”
3. Hold the mouse button down, and drag the cursor to the node named “Entrance.” As the drag is occurring, a line is being drawn from “Floor” to the current cursor position.
4. With the “Entrance” node highlighted, release the mouse button. A line with arrows at each end is drawn between these nodes.

The two nodes are now linked together. The hot spots associated with this link have been automatically created. The Nodes Panel should appear like this.

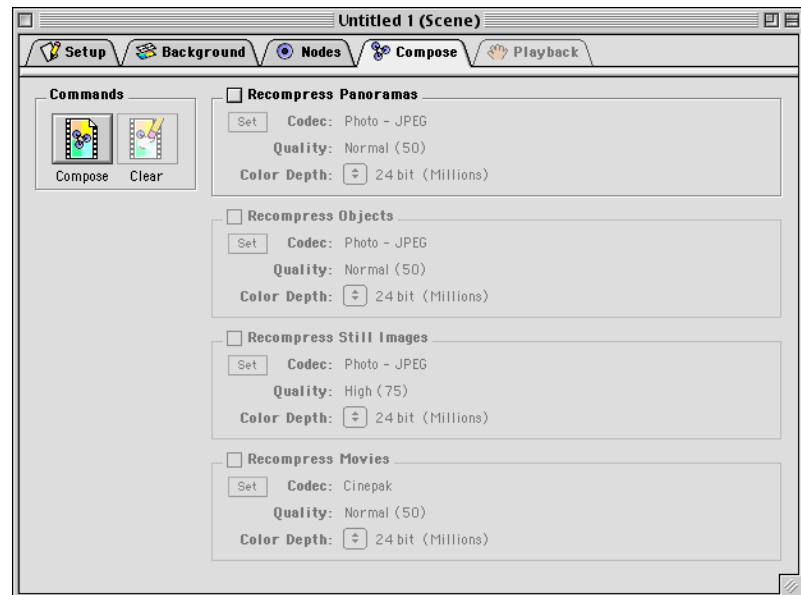
Figure 14.7.4
Adding two nodes,
with a
bi-directional link.



Step 5 - Compose the QuickTime VR Multi-node Scene

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

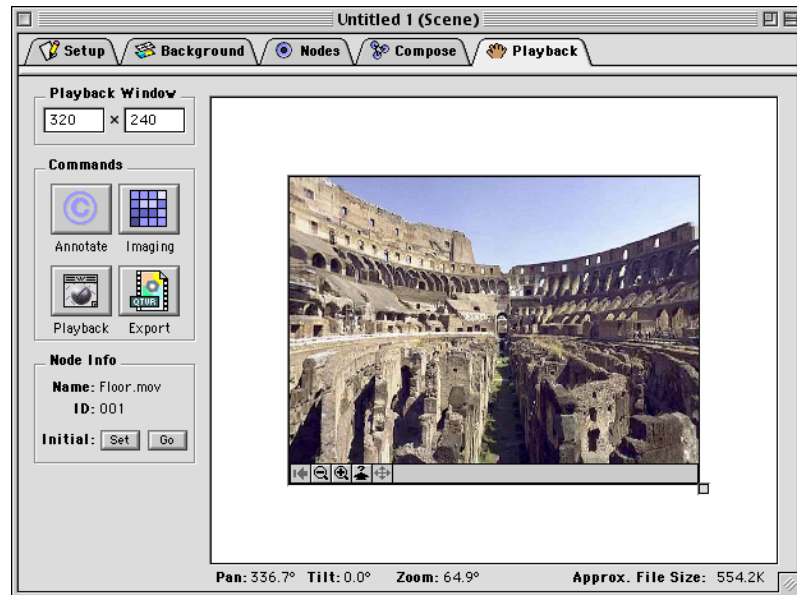
Figure 14.7.5
The Compress
panel.



For this lesson, the default settings for composition will be used. Thus, immediately induce the composition process, by clicking the **Compose** button in the **Commands** button group.

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

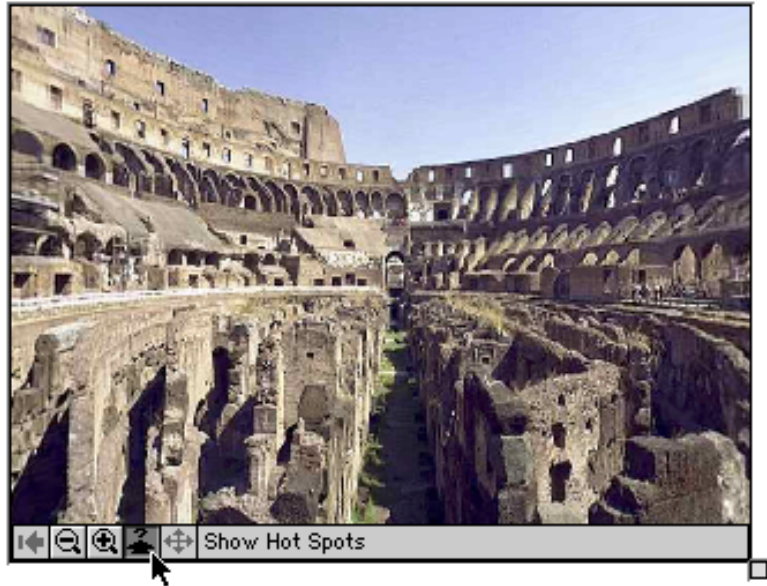
Figure 14.7.6
The Playback panel.



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

A particularly useful controller button is the **Show Hot Spots** button.

Figure 14.7.7
The movie
interaction box.
Note the movie
controller and the
Show Hot Spots
icon button.



By double-clicking this button, all hot spots in the node will be highlighted in blue and will remain highlighted, as the movie is panned, tilted and zoomed. This allows the hot spots that were created when the two nodes were linked together, to be quickly identified. Clicking on a hot spot will trigger a transition to the next node.

The QuickTime VR multi-node scene has now been successfully generated. It is recommended to proceed to the following tutorial lessons, to learn how to improve the scene.