

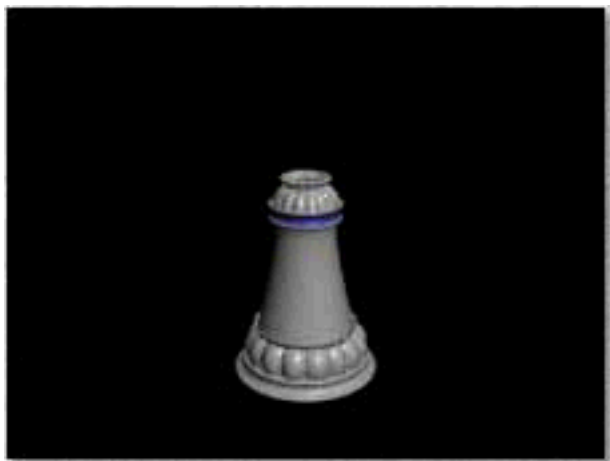
Tutorial 3: Making QTVR Objects-

Topics Covered:

QTVR Object Animation Assistant

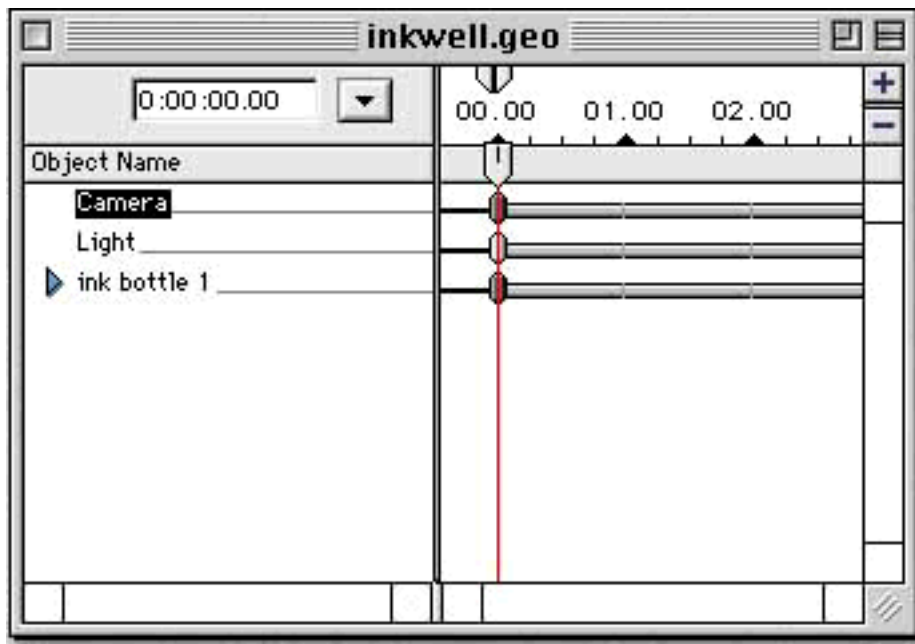
Camera

Apple's MakeQTVRObject Application- [Available Here](#)

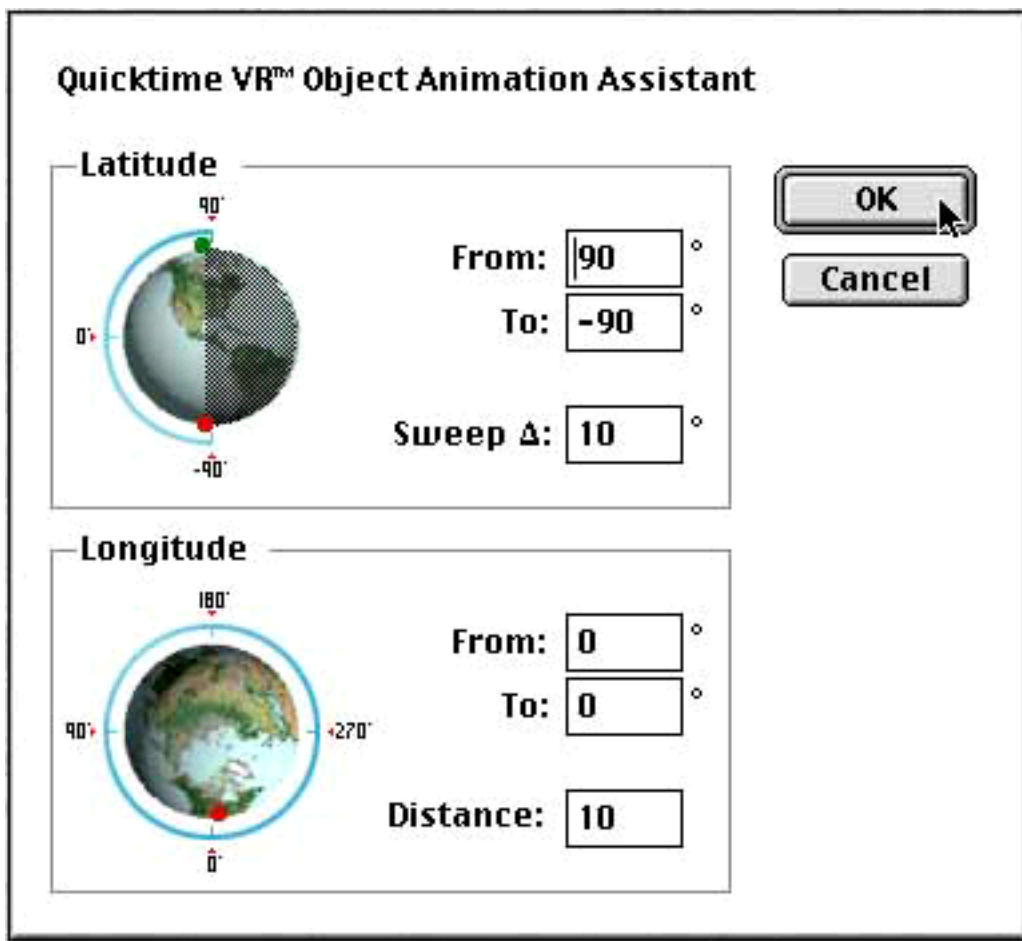


Description: In this tutorial, we will take an existing geometry and create a QTVR object movie out of it. We will use Apple's MakeQTVRObject application and a PICT compiler. I use PICTStoMOVIE. You will also need Apple's QTVR MoviePlayer, which ships with most new PowerMacs and is available for download from their website. If you get MacAddict, it's on the CD this month. Let's go...

1. Pick an Infini-D object or create one. The object can be made from many parts as long as all the parts are grouped. For the purpose of this tutorial, I am going to use an inkwell I made for my job. When you open the scene file, make sure that the object is in the center of the world (0.000 at x,y, and z in the top row of the INFO floater).
2. Select the CAMERA and delete it and its target (in Infini-D4.0). Place a new CAMERA in the world. It doesn't really matter where it is, as long as it is pointing in the general direction of the object. You may have to open the Camera view by selecting it from the WINDOWS menu.
3. Open the SEQUENCER by choosing it from the WINDOWS menu. Select the CAMERA. Then select the CAMERA'S eventmark. Hold down the shift key to select the Object's eventmark as well.



4. Apply the MAKE QUICKTIME VR OBJECT animation assistant by selecting it from the ANIMATION ASSISTANT from the ANIMATION menu. The default settings are what we want to use.



5. Preview your movie in Infini-D by clicking the PREVIEW button on the SEQUENCER in Infini-D3.x or use the ANIMATION floater in Infini-D4.0. Make sure that the entire object can be seen in the Camera window. If not, change the scale of your object until the entire object is visible.

Now, we have to render the animation.

6. Keep the Camera window small; 240x180 pixels is fine for this tutorial.

7. Choose RENDER from the FILE menu. A dialog will appear. This dialog will differ depending on which version of Infini-D you are using.

We want to render this animation with transparency and reflections OFF.

We will render the CAMERA view with the Anti-Aliasing set at low and the patch detail set at low.

Make sure SHADOWS are ON.

In Infini-D4.0, make sure that the time for the animation to end matches the actual end time in you sequencer. It should end at 19 seconds if you use the default settings for the QTVR Object Animation Assistant.

IMPORTANT! If you are using Infini-D3.x, you should render using BEST shading. If you are using Infini-D4.0, the BEST (PHONG) shading has a bug which makes it significantly slower than Ray-Tracing. In Infini-D4.0, if you have a decently fast machine, choose to Ray-Trace, and leave the transparency and reflections OFF. At these settings, the ray-trace engine is fairly fast.

Make sure to render to PICTS! If something happens and the lights flicker or you have to get back to work, you can pick up where you left off fairly easily by checking the last frame number rendered. By the way, putting these PICTS into their own folder would be a good idea.

8. Sit back, pop some popcorn, and watch some commercials while the animation renders.

It's done rendering! Now what?...

9. First, change the name of the first frame rendered. It should be something like "object". We want it to be "object.00000". The rest of your frames will have numbers already.

10. Open PICTStoMovie if you have it, or whatever you use to compile picts into quicktime movies.

11. Find the folder with the PICTS. A list should appear. Double-Click the first frame. A little dialog box will appear. The starting frame should be 00000. The ending frame should be 00284. The last field should have a "1" in it. Hit OK.

12. Now you will get the standard compression screen. Depending on what's available to you for compression, you'll want to pick the best quality and the smallest file size. I have found that the GRAPHICS compression at 100% quality is a good middle ground. It is not as good as ANIMATION, or No compression, and it is not as lossy as Cinepak, which will give the smallest file size.

Select the GRAPHICS compression. Set the QUALITY to 100%. Set the frame rate to 15fps (or at whatever you rendered the movie). Set the keyframe to EVERY frame, or 1. This last is especially important or the quality of the QTVR object will be awful (many artifacts in the movie). Hit OK.

13. After movie is rendered, open the MakeQTVRObject application from Apple. 14. Open the animation by choosing OPEN from the FILE menu. 15. From the EDIT menu, choose ADD OBJECT DATA. A dialog box will appear. The number of rows should be 18, if you used the default settings for the animation assistant in Infini-D. The number of columns is the same as the Frames per second, or fps, used in the animation. You'll want to change the VPan values to (+)90 to -90 degrees. The HPan values are 0 to 360 degrees by default, so we will leave those alone.

Field	Value
Version #	1
# Of Rows	18
# Of Columns	15
Loop Size	1
Loop Ticks	0
Start HPan	0.0
End HPan	360.0
Start VPan	90
End VPan	-90.0
Field Of View	360

Buttons: Load From Object Movie..., Cancel, OK

16. Hit the Return key and the QTVR Object is done.

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