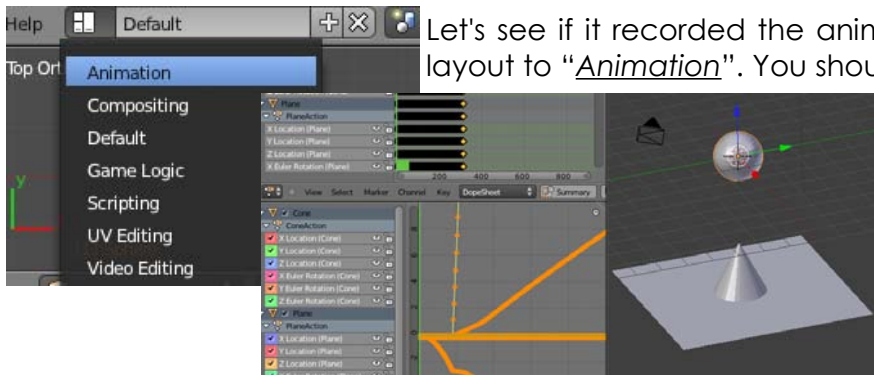
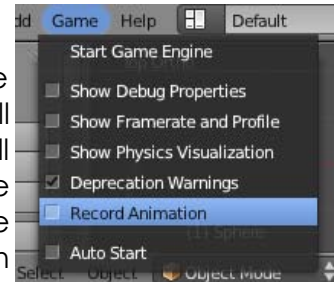


Chapter 21- Game Engine Basics

Using Game Physics in Animation

So far, you have a ball dropping on a cone and rolling off the plane. It works when you press “P” to enable the game engine, but what if you want to use this reaction in a movie? If you press “Alt-A” to play an animation, nothing happens. That is because the reaction has not been written into an animation curve... yet.

Writing the game physics to an animation curve is a simple process. In order to write to a curve, go to the “Game” pull down menu and select the “Record Animation” option. This will enable the game record feature. Now, press “P” to run the game engine. Let the physics run through, then “Esc” the game engine. Go back to the “Game” menu and turn “Record Animation” off. You should also change the Engine back to “Blender Render”.



Let's see if it recorded the animation. Switch your screen layout to “Animation”. You should see animation curves in the Curve Editor window. Press “Alt-A” to confirm the animation. You can now work with your scene exactly as you would for any other animation work including materials and textures.

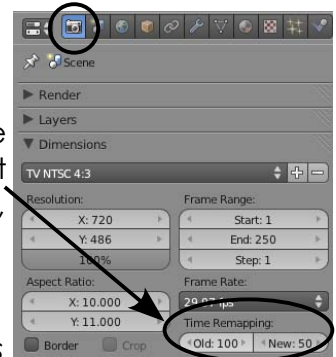
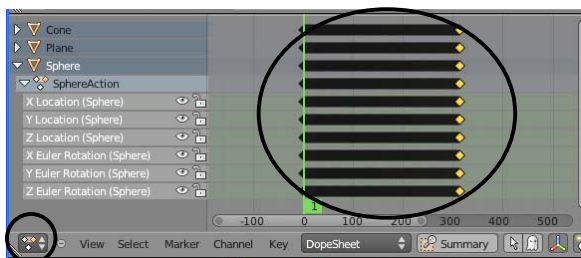


RoboDude Says: Remember to TURN OFF the “Record Animation” feature after you have recorded your motion. If you leave it on and accidentally press “P” again, it will try to over write your saved animation curves!

The only problem you may encounter when saving a movie file will involve the speed of the animation. The physics may be run slow in the final movie. This can be corrected in several ways.

Method #1: Remap the timing in the Render panel.

Find the “Old” and “New” mapping settings. If you need the movie to run twice as fast, set “New” map to 50 (50%) and adjust your end frame to half. If you need it to run slower, like ½ speed, try a new map of 200 and double your end frame.



Method #2: Scale Keys in the Dope Sheet.

Another method is to select All keys in the Dope Sheet window and Scale them in the “X” axis (“S” to scale and “X”- drag the mouse).