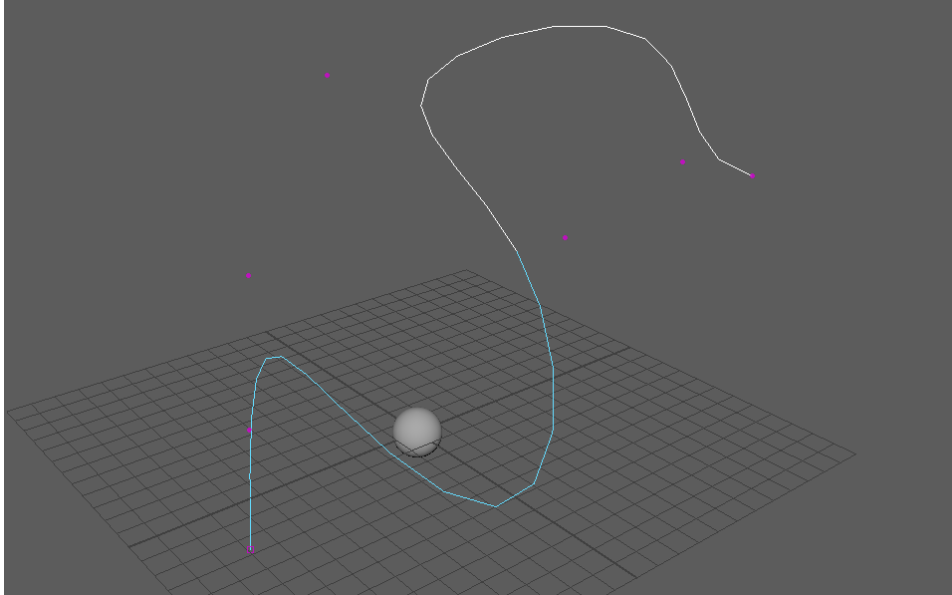
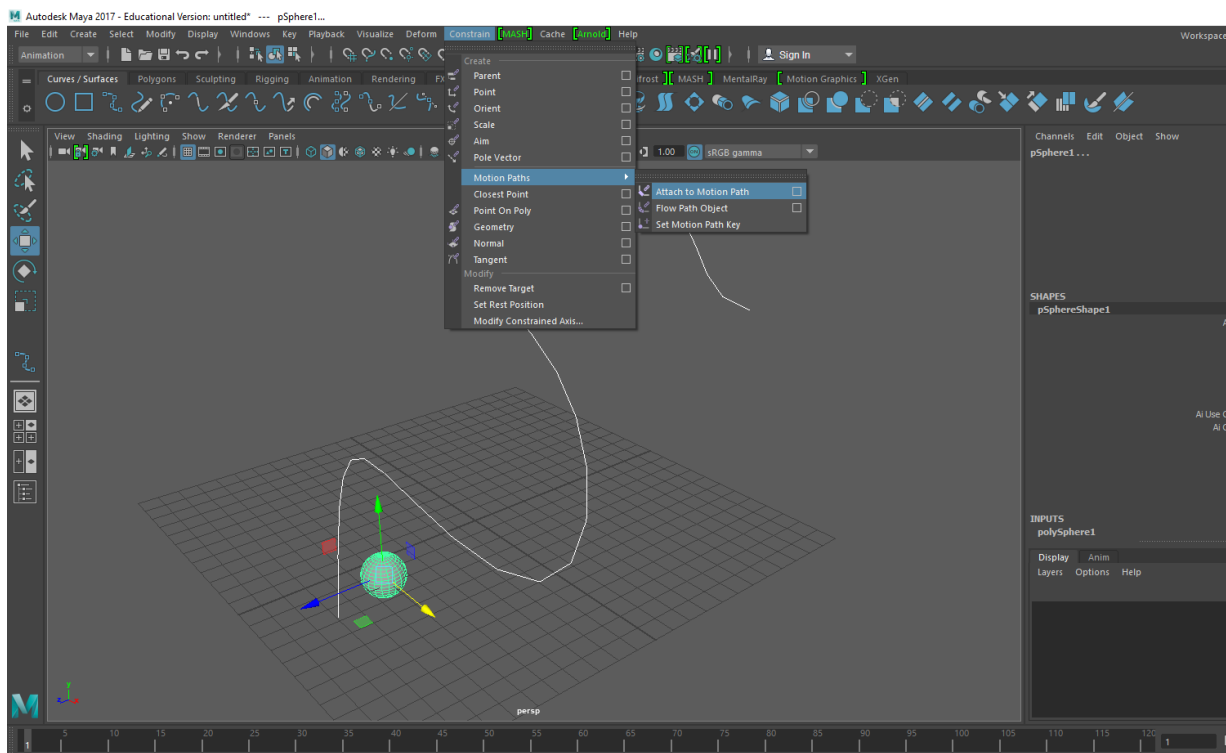


How to do path animation

To create a path animation, firstly an object to move is needed, and a curve (created through a NURBS Curve tool), which will be the path that the object will move along.



Next, the object, in this case a sphere, needs to be attached to the curve via a motion path in order to create the path animation, this is done through first selecting both the sphere and the curve, and then using “attach to motion path”, in the motion paths section of the constrain tab:

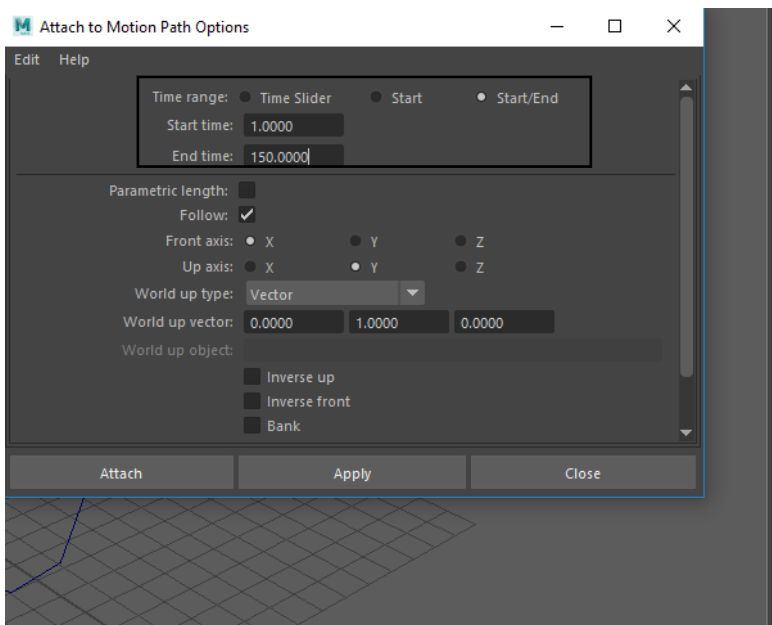


There are 3 ways that the time range of the animation can be set, the most common being time slider, which is where the length of the animation is based off of the length of the time slider bar at the bottom of the window:

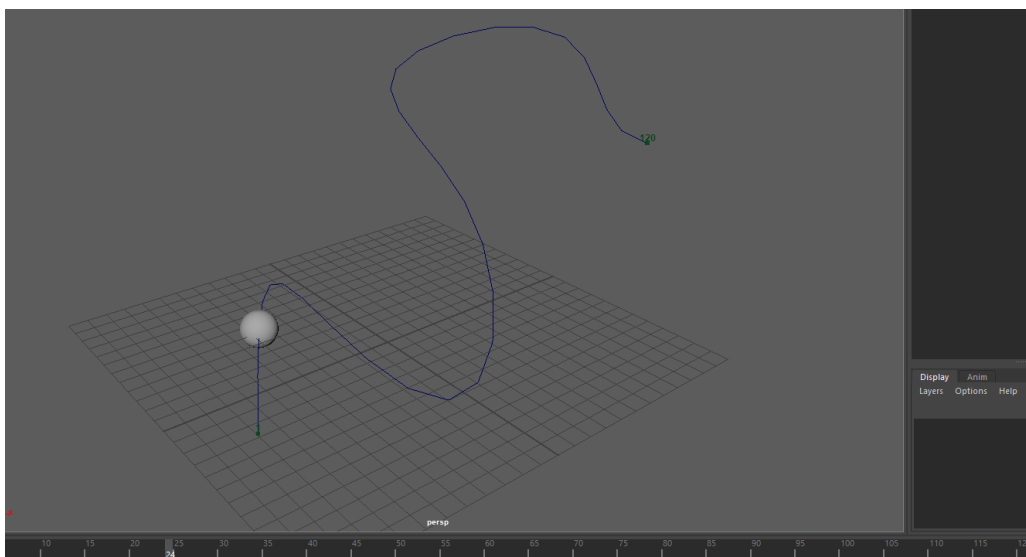


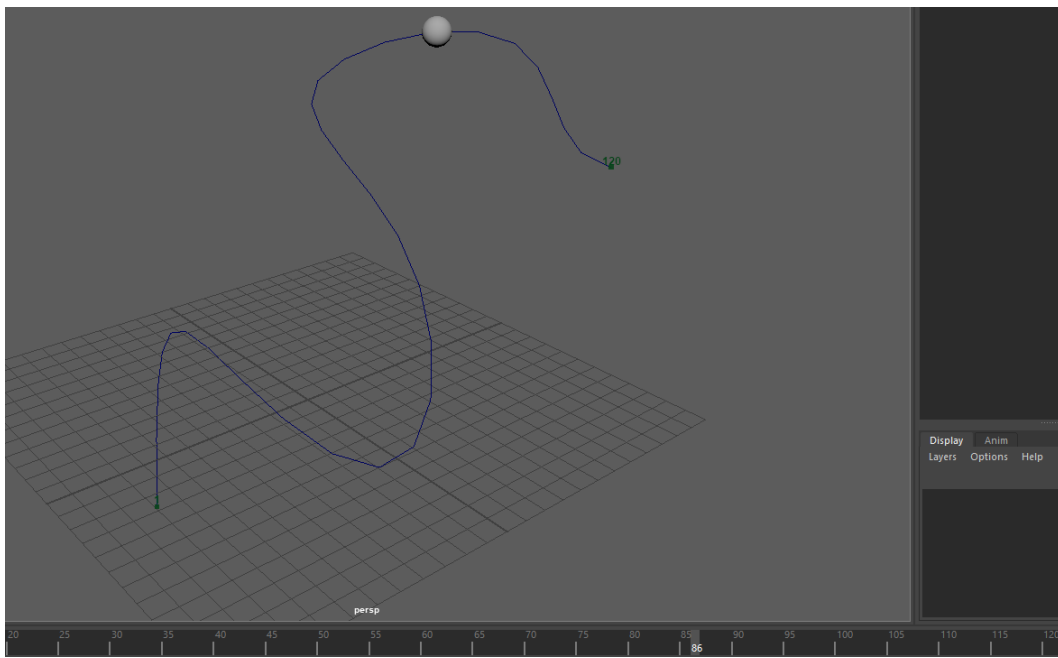
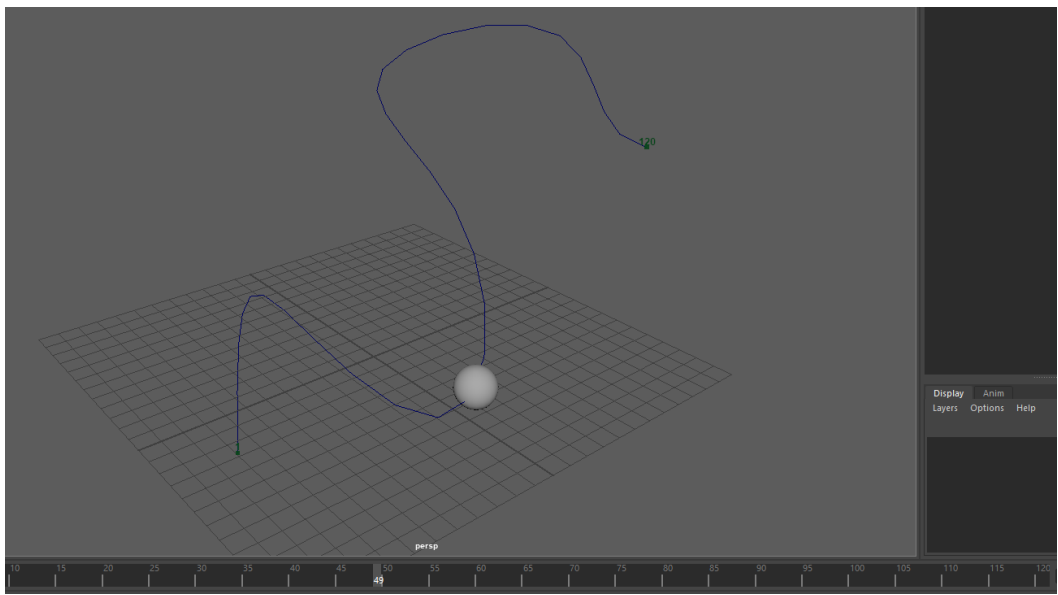
So in this case, the animation would last 120 frames.

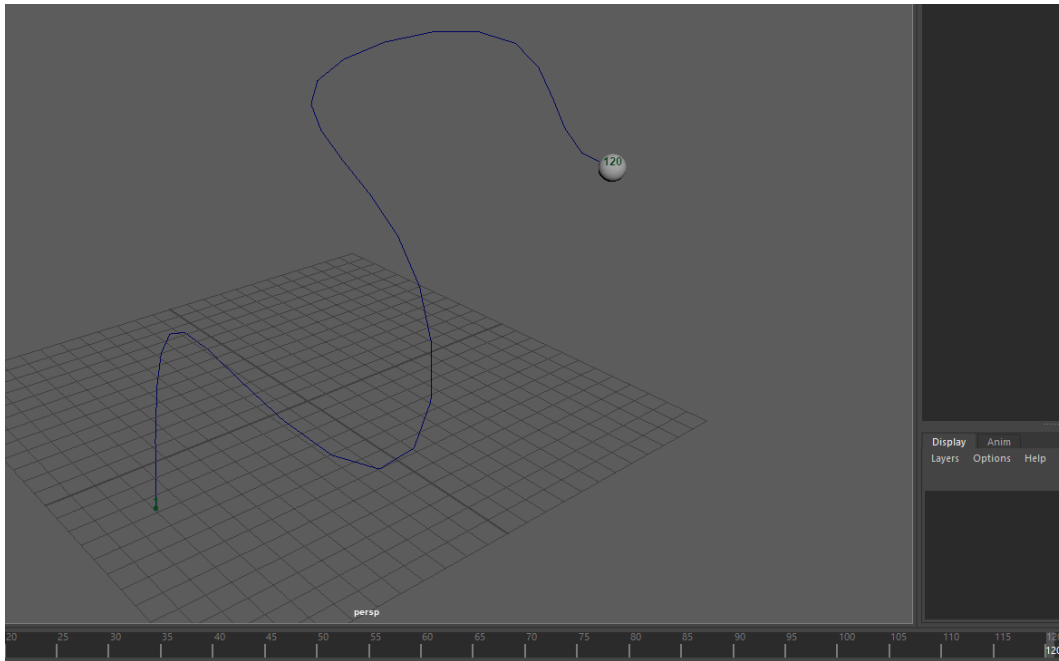
Another viable option is start/end, where you yourself choose the specific frames that the path animation will start and end at, regardless of the time slider.



I will be using the time slider option in this case, so the path animation will last 120 frames after clicking "attach", and the animation plays out like so when clicking the play button at the bottom right of Maya (next to the time slider):

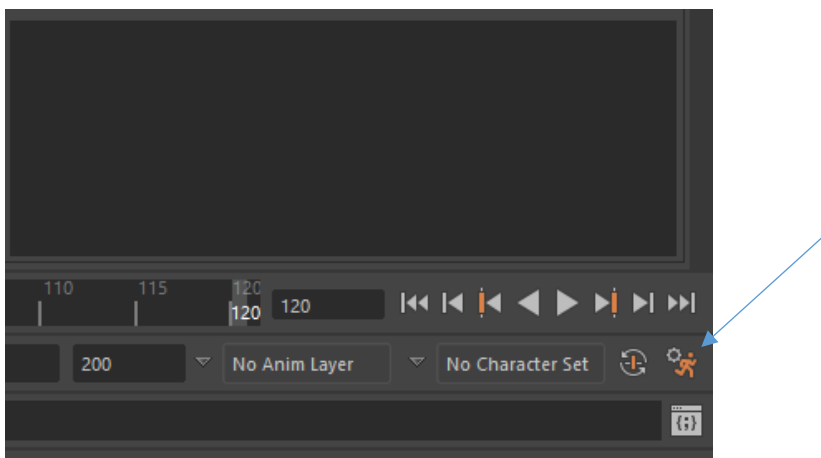




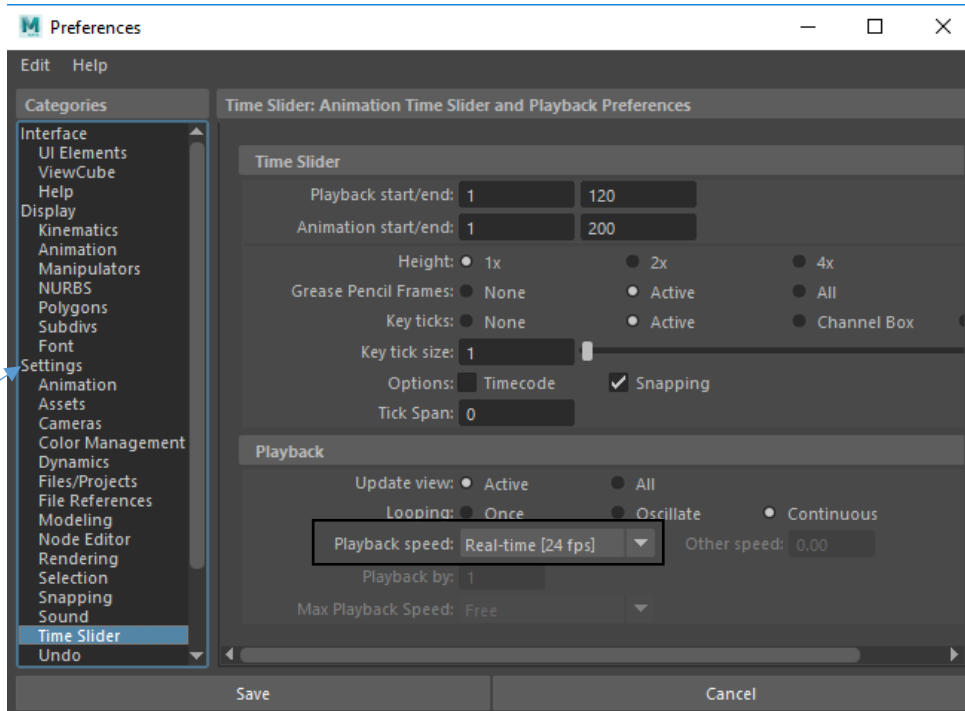


In this animation, a bar can be seen moving along the time slider, which represents what frame of the animation you are currently at.

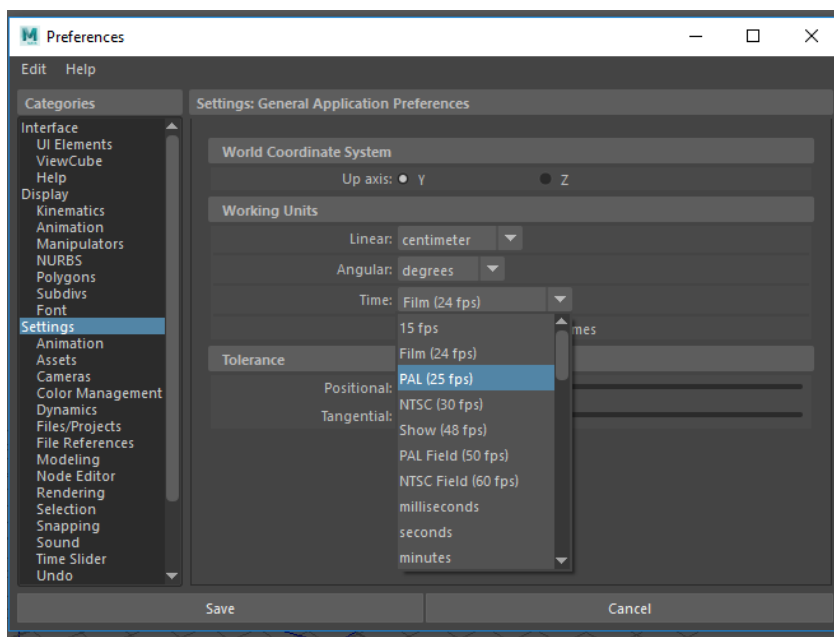
However, first make sure that your settings are set correctly, so that the animation doesn't play too fast, this is done by opening animation preferences:



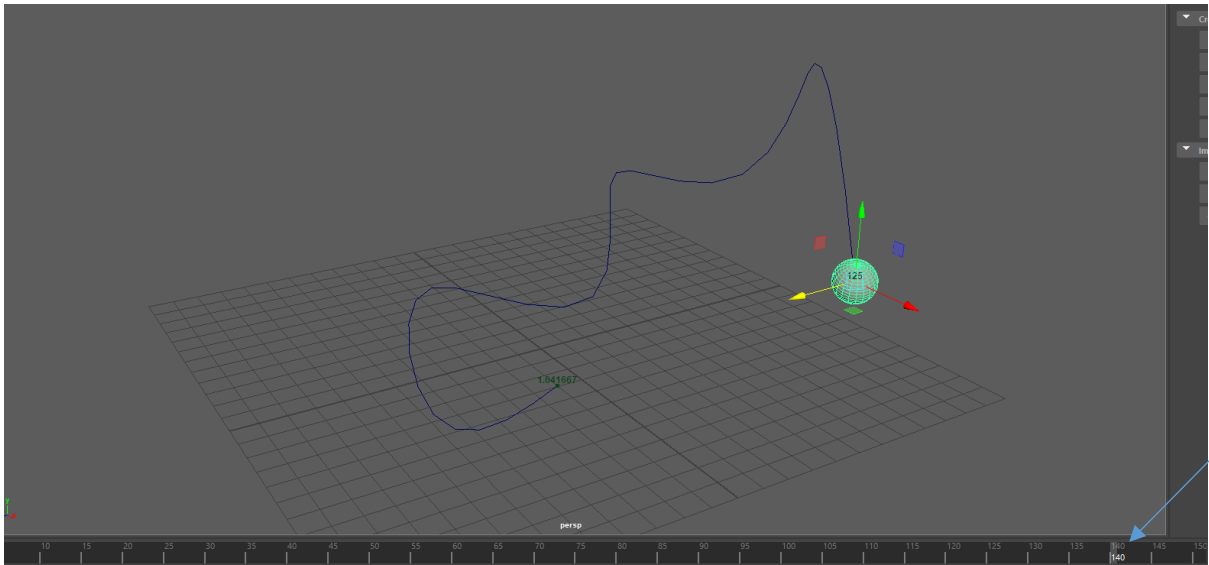
After opening this window you will be in the time slider tab, ensure that you are using real-time in the playback speed section, then switch to the settings speed at the left:



In this tab, set time to PAL (25 fps), then the animation will play at a good pace.

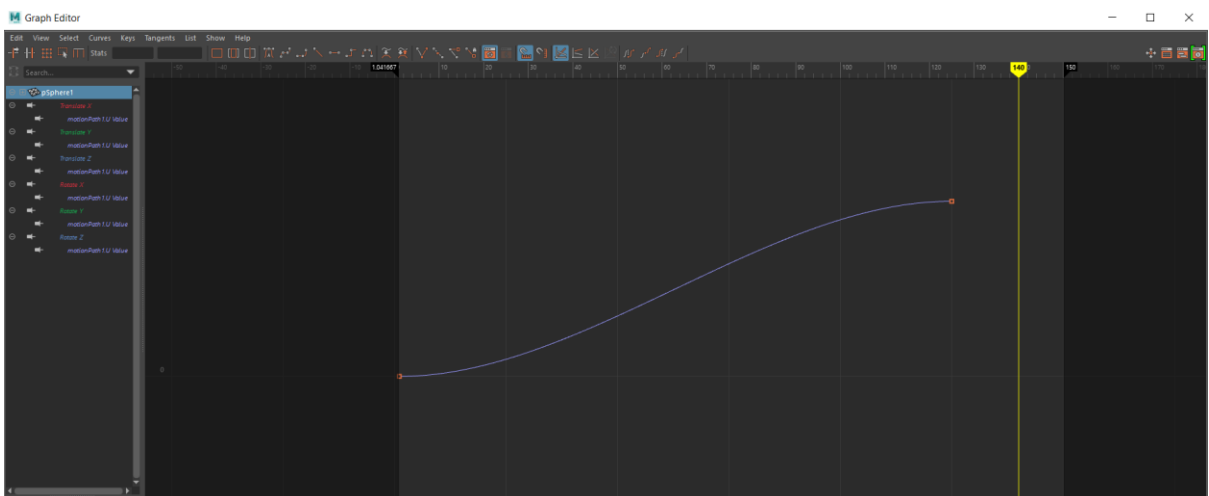
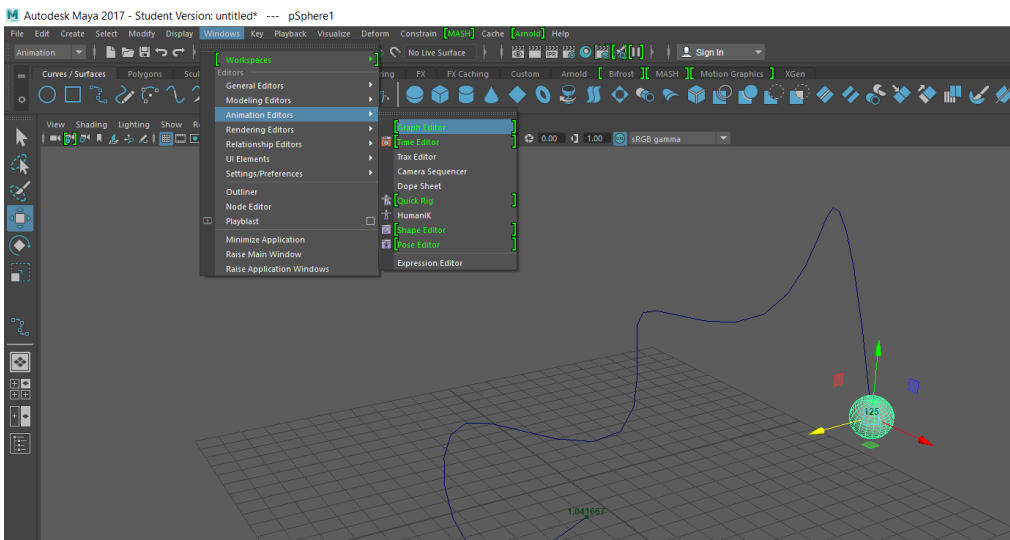


Changing the physical path that the animation plays on is simple, you simply have to change the control nodes of the path as you usually would to change a NURBS curve. However, to change the start and stop frames of the animation or where on the animation path the object will end its animation, you cannot use the tools that were used to create the path animation, nor will changing the timeslider have any effect, as it will still end at the same frame:



(changed to have 150 frames)

To change this, the graph editor is used. To access this, with the cube selected, click it from the animation editors section of the window's tab:



The graph editor displays a graph of the selected objects animation. The time slider is shown at the top of the graph, and the curve in the graph represents the animation itself, and is what needs to be changed.

First, the length of the curve represents how long the animation will last, making the animation quicker or slower also, while the height of the end of this curve represents how much of the animation is completed, although making this higher than completing the full animation will make the animation longer than the value of the length of the curve (e.g. a curve finishing at 60 frames may last 90 frames as of this).

To changed the length of the animation to what is desired, drag the end of the curve along to the desired length, and then adjust the height to the point where the object has just reached the end of the animation (this is shown as the object moves to the corresponding point of the animation as the curve in the graph editor is edited).