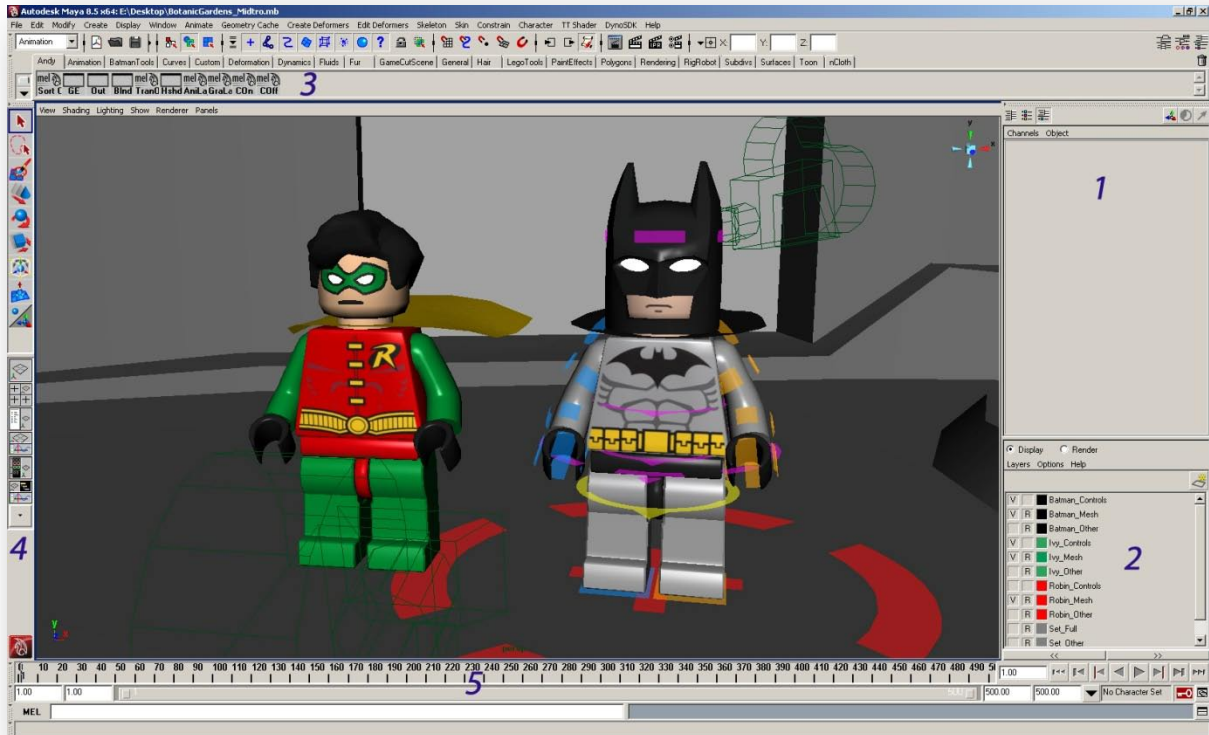


Maya Crash Course

This very brief tutorial is intended to familiarise the user with the basic layout of animation tools in Maya. It assumes that the reader will consult help files to find out more about each tool.

The Main Screen



1. Channel Editor
2. Layer Editor
3. Shelf
4. Toolbox
5. Timeline

Okay, so Maya looks pretty daunting, especially if you go hunting through all the menus, but from an animation point of view it's not that hard to use once you know where things are.

Menus

The drop-down box at the top left of the screen lets you choose which set of menus to display. Setting it to 'animation' will let you see everything needed for this tutorial.

Navigation

You can navigate your way round the viewport by using the following controls:

To Rotate – hold the Alt key and drag with the left mouse button.

To Zoom – use the mouse scroll wheel or hold Alt and drag with the right mouse button.

To Pan – hold Alt and drag with the middle mouse button.

To focus the camera on an object, hold Ctrl+Alt and drag a selection box around the object.

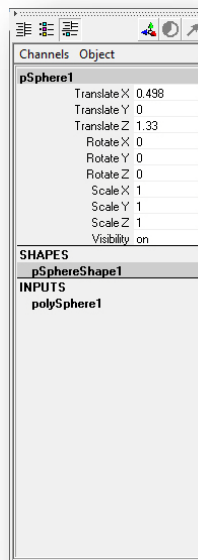
To Move an object – press ‘W’ or select the ‘move object’ tool in the toolbox. Click the object and then drag the manipulator to move it.

To Rotate an object – press ‘E’ or select the ‘rotate object’ tool.

To Scale an object – press ‘R’ or select the ‘scale object’ tool.

Channel Box

The channel box is a simple way of showing every keyable attribute on an object. You can set a key on an attribute by clicking on the attribute name to highlight it and holding the right mouse button down to bring up a context menu and selecting ‘key selected’. You can change the value of any attribute here by just typing a new value.

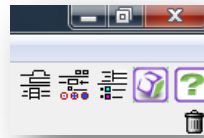


Attribute Editor

Open the attribute editor by going to Window > Attribute Editor or by pressing Ctrl+A. Here you can see all the attributes for an object, whether keyable or not.

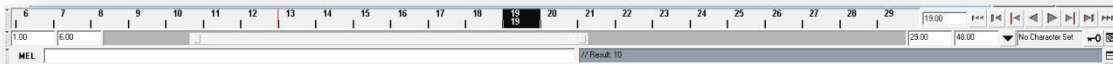


To switch between showing the attribute editor and channel box/layer editor, you can use the buttons at the top-right of the screen.



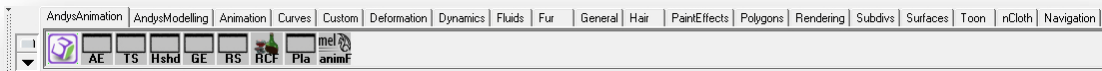
Time Slider

Keys will be represented on the time slider by a thin line on a particular frame. You can do simple actions on keys by right clicking the timeline (eg copy and paste frames). You can change the range of frames the timeline shows by dragging either end of the bar beneath the time slider (called the range slider). Dragging with the left mouse button on the time slider will scrub through the animation. Sound can be imported into the scene by dragging a sound file onto the time slider.



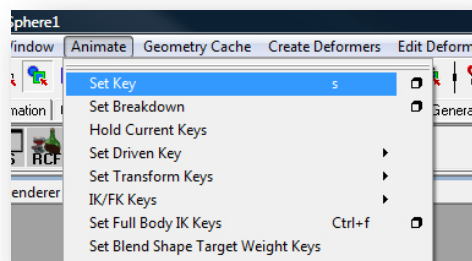
The Shelf

You can make buttons to go on the shelf to perform commonly used tasks. These can be simply a menu option you use a lot, or a complicated script. To add a menu item, hold Ctrl+Alt+Shift, go into the desired menu and click the desired item.



Settings

Most menu items have changeable settings. To change them, click the little box next to the name of the item.



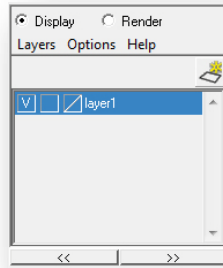
Playblast

To make a preview of your animation without rendering, go to Window > Playblast.

Layer Editor

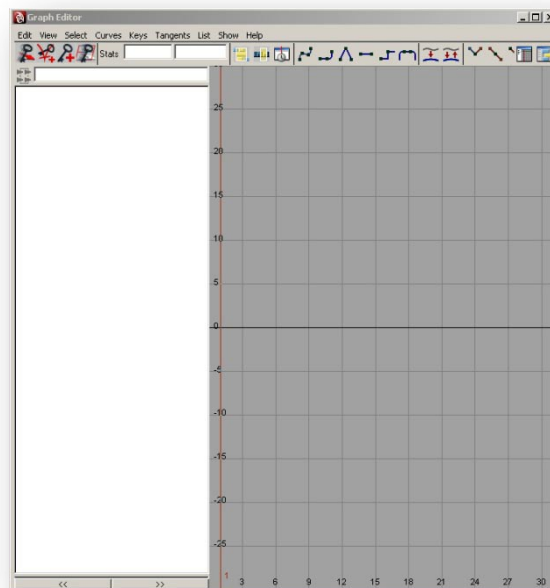
Here you can organise your scene into layers to make it easy to cope with. For example, you could have your character's geometry on one layer and it's controls on another. This would allow you to make the geometry layer a reference (click twice in the second box to put an 'R' in it), stopping it from being selected. You could also hide the control layer when you want preview your animation

with no unnecessary things on-screen. To add an object to a layer, select the object, right-click the layer and press 'add selected objects'.



Graph Editor

Here you can edit your animation curves. When you select an object, any attributes that are animated will be shown in the graph editor window (Window > Animation Editors > Graph Editor). To show just the curve for a particular attribute, select the attribute in the left-hand portion of the window. To frame the curves in the graph editor, press 'F'.



Constraints

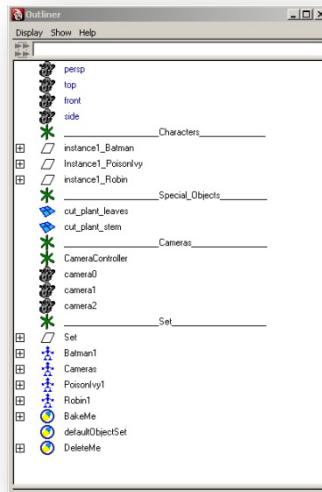
One object can be constrained to another in a number of ways, but in each case the process is to select the two objects, making sure to select the object to constrain last and go to the constrain menu.

Character Sets

A key can be set on objects using the 's' key. When using multiple characters in a scene, it can be very useful to define a character set. This allows you to show on the time slider and graph editor all the keys being set for just one character. To do this, select all your character's controls and go to Character > Create Character Set. The drop down box in the bottom-right of the screen can then be used to select which character set to use. When a character set is selected, pressing 's' will set a key on every attribute in that set and nothing else in the scene.

Outliner

The outliner (Window > Outliner) is similar to a file manager in that it shows the hierarchical structure of the scene. Use it to organise your scene and keep track of objects.



Maya's sheer scale means that you will find new things in it every day, so don't expect to become an expert overnight. However to get a good working knowledge of the animation side of things, I suggest you make a simple scene and just play around, using this document as a guide to where things are. I advise you to look up each of these things in the Maya help files, where you will find much more detailed information on what they can do.