About Object

A plugin for Cinema 4D.

1. Introduction

If you want to obtain information such as the number of polygons in an object, there are two ways to do this in Cinema.

First, you can right-click on an object and choose Object Info... from the context menu. This will give you the polygon and point count in the object, and if it is a parametric object, the counts if the object was made editable. There are some problems with this, however:

- the message box which appears is modal, so you have to close it and then repeat the above steps if you want the same information for another object
- it always includes any child objects of the selected object, and there's no way to turn this off
- the information it returns is often incorrect

The second way is to use the viewport HUD. You can use this to display the polygon counts, etc. but it too has problems:

- to show the polygon count you have to be in Polygon mode and the point count is not shown: to do that, you need to switch to Point mode, but then the polygon count is not shown
- it doesn't work at all with parametric objects

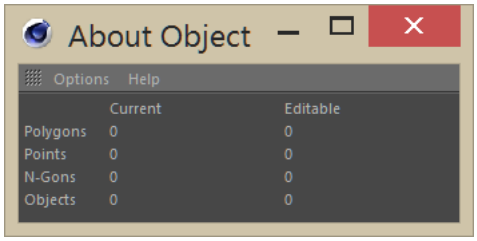
This little plugin is designed to overcome these issues.

2. Installation

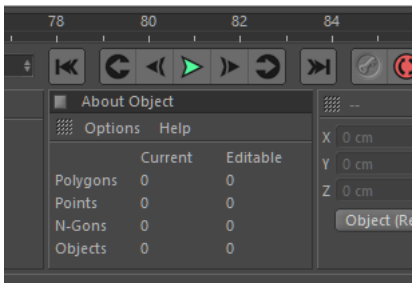
Simply unzip the downloaded archive into the Cinema 4D plugins folder. There is no serial number or registration data to enter and the plugin does not require internet access.

3. Usage

Click 'About Object' to open the plugin window. This is very small and the interface looks like this:



This window can be left open and can be docked in Cinema's layout like so, where it is docked next to the Coordinates Manager:



The plugin returns four pieces of information, in two columns. The left-hand column - labelled 'Current' - is the number of polygons etc. in the object as currently is. If the object is parametric, such as a primitive Cube, the polygon, point and n-gon counts will all be zero, since parametric objects don't have any actual polygons.

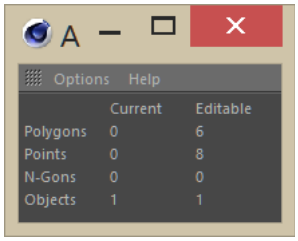
The right-hand column - 'Editable' - shows the counts you would see if the object was made editable. In the case of a Cube, these would be 6 polygons, 8 points, and no n-gons.

When you click on another object or update the object in some way (e.g. increasing the number of segments in a Cube primitive) the counts are automatically updated.

4. Some examples

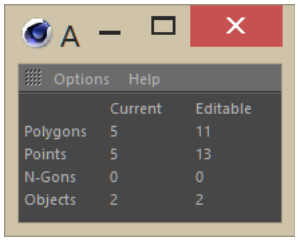
These are some examples to show what you can expect.

4.1. Primitive Cube



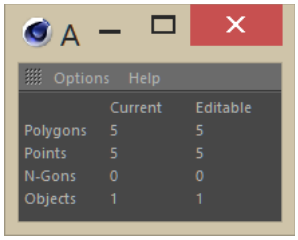
As explained above, the polygon, point, and n-gon counts are all zero as this is a parametric object. If made editable, the counts obtained are shown in the 'Editable' column. Note that object count in both cases is 1; there is one Cube primitive, and if made editable, there is one polygon object.

4.2. Primitive Cube with editable pyramid as its child object



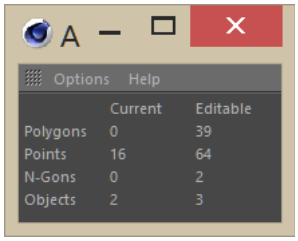
Here we see that currently there are 5 polygons (from the pyramid primitive that was made editable and which is the child of the cube) and if the cube is made editable there would be 11 polygons, 5 from the pyramid and 6 from the cube. The object count is the same in both cases.

What if you only wanted to know the counts for the editable pyramid? In this case, just select the pyramid in the object manager and then you see this:



Here, the counts are the same in both columns since the pyramid is already editable. If you want to show the values for the cube only, and not its child objects as well, you need to pull down the 'Options' menu and uncheck 'Include Child Objects'. Now you will only see the counts for the selected object alone and not its child objects as well (if any).

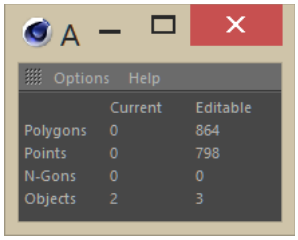
4.3. Editable Star spline in an Extrude object



What you see here is interesting. The Extrude object is selected and shows a count of 16 points. These are from the editable star spline which is a child of the Extrude object. The spline has no polygons, so the count is zero.

If the Extrude object was made editable, it would then have a total of 39 polygons, 64 points, and 2 n-gons. (This is in Cinema R19, rather oddly the counts differ in earlier versions of Cinema!) But look at the number of objects. in the 'Current' column there are two - the Extrude object and the spline. However, in the 'Editable' column there are three: these are the body of the Extrude object plus one object for each cap.

4.4. Primitive Sphere in a Mograph cloner



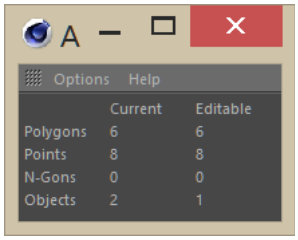
This should now be straightforward. There are initially two objects - the cloner and the sphere - which, if made editable, would have the counts shown. The only count to note is the object count, which is shown as 3 when made editable. If

you do this manually, you see that making the cloner editable gives you four objects, not three - a null object plus three editable spheres. Why then does the plugin show three?

This is a small problem with Cinema in that when a parametric object is made editable the results are not consistent. Some result in a single polygon object, some into a polygon object with other polygon child objects, and some as a null with one or more polygon objects as child objects.

To bring some consistency to this, the object count in the 'Editable' column will normally only include polygon or point objects and not objects such as null objects or deformers. If you want such objects to be included in the count, go to the 'Options' menu and check the option 'Include Non-Poly/Point Objects'.

4.5. Editable Cube with Bend deformer



There is something to note here. The cube is editable, and the correct number of polygons and points is shown in the window. But in the 'Editable' column, there is only shown as being one object.

If you press 'C' to make the already editable cube editable, nothing happens, and the cube remains the same, with the bend deformer child object. Why then is only one object shown? This happens because what the plugin does internally is to perform a Current State to Object operation on the cube; you can do this on the editable cube and it will remove the bend deformer. This is why only one object is shown.

5. Menu reference

5.1. Options menu

5.1.1. Include Child Objects

If checked, the counts will include all child objects of the selected object. If unchecked, only the selected object is included in the counts.

5.1.2. Include Non-Poly/Point Objects

If checked, the object counts will include any non-polygon or non-point objects in the object count. The polygon and point counts are not affected (since by definition such objects don't have points or polygons).

5.1.3. Pause

if you are doing a lot of point modelling on an object, every time you move a point the counts are updated. This is normally very fast but if you find that it seems to be slowing down your modelling, check this option. The counts will all be greyed-out and will not be updated. Uncheck the option to begin updating the counts again.

5.2. Help menu

5.2.1. About...

Click this option to show the version of the plugin.

5.2.2. Show Help File (.PDF)...

Click this option to open this help file (which must be in the same place as the plugin itself).