# Setting object texture tags and changing texture settings with Xpresso

In this Cinema 4d 11.5 tutorial (level = moderate), I will show how to change the texture tags of objects or changing the objects texture. I will also show you how to change the Transparency Brightness of a material, both using Xpresso.

Start with creating a cube and four different materials with distinguished colors and add the first material to the cube. Also create a Null and add a Xpresso tag to it.
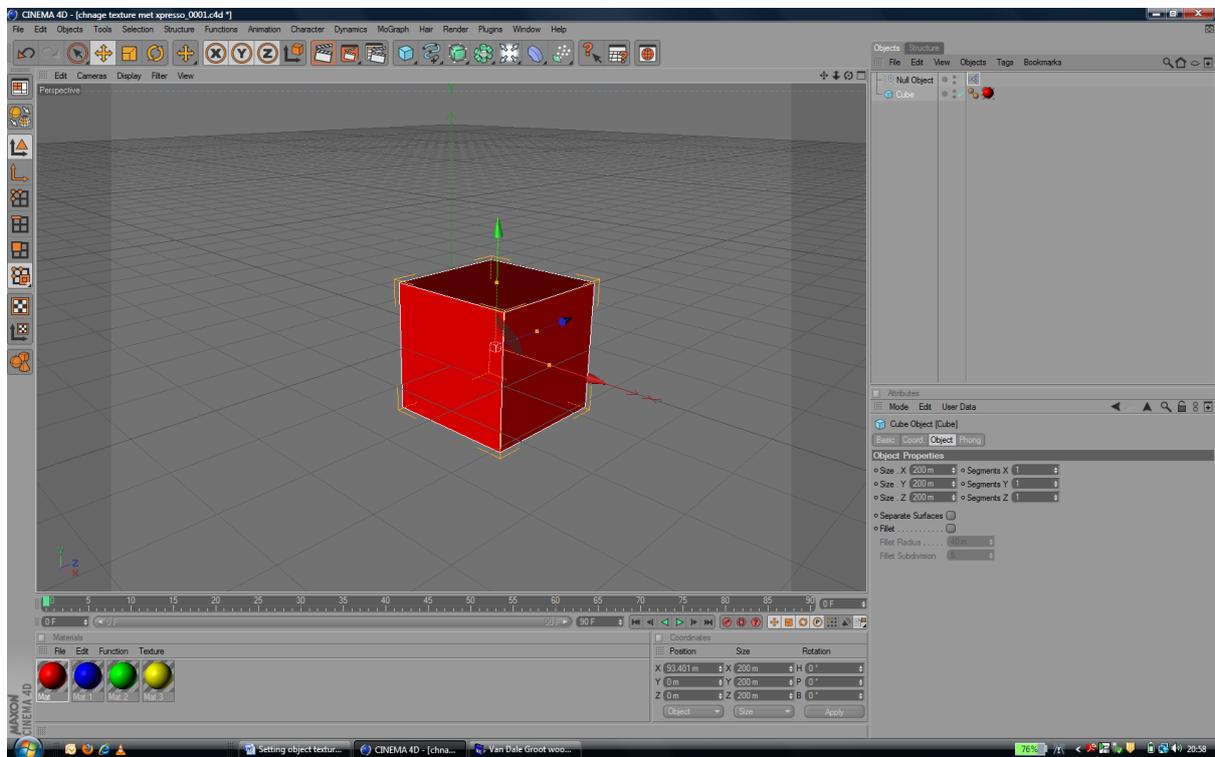
Double click the Xpresso tag to open the Xpresso window and drag & drop the texture tag of the cube onto it.
Then select the Xpresso Material node by right clicking and selecting New Node > Xpresso > Iterator > Material.

Select for the Texture Node Material as input port and for the Material node material as output port, connect them.
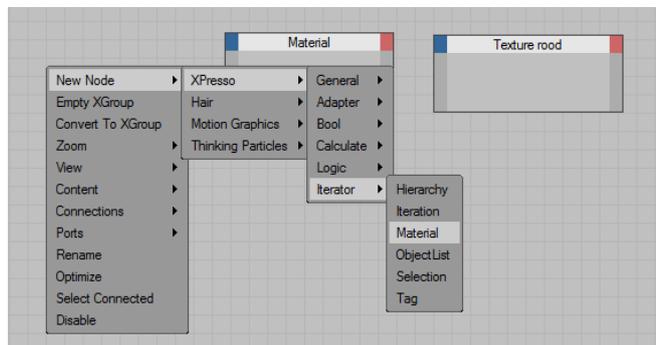
The Material node is an iteration node to access materials in the Material Manager.
The two inputs, besides the On port, we will use are:
• **First Material**
This port takes an integer value which defines where the search should begin. A value of **0** means the search will begin with the first material in the Material Manager onwards. A value of **1** means the search will skip the first material and begin with the second material instead, and so on.

• **Maximum Materials**

This port defines the maximum number of materials that the node will output. A value of 0 means the node will output all the materials that match the search criteria.

So, now we want to change the first material to the second material on frame=5.
Change the second to the third material on frame=10 and change the third to the fourth material on frame=15.

To do so, add a Time node and change the output port to Frame.
Also add 3 Compare nodes and connect for each of them, one of the input ports to the Frame output of the Time node. Set the other input node in the attribute Manager to 5, 10 and 15.
Set the Function to ">=".
The Compares nodes will output a 1 if (frame >= input 2 port) and a 0 if (frame < input 2 port).
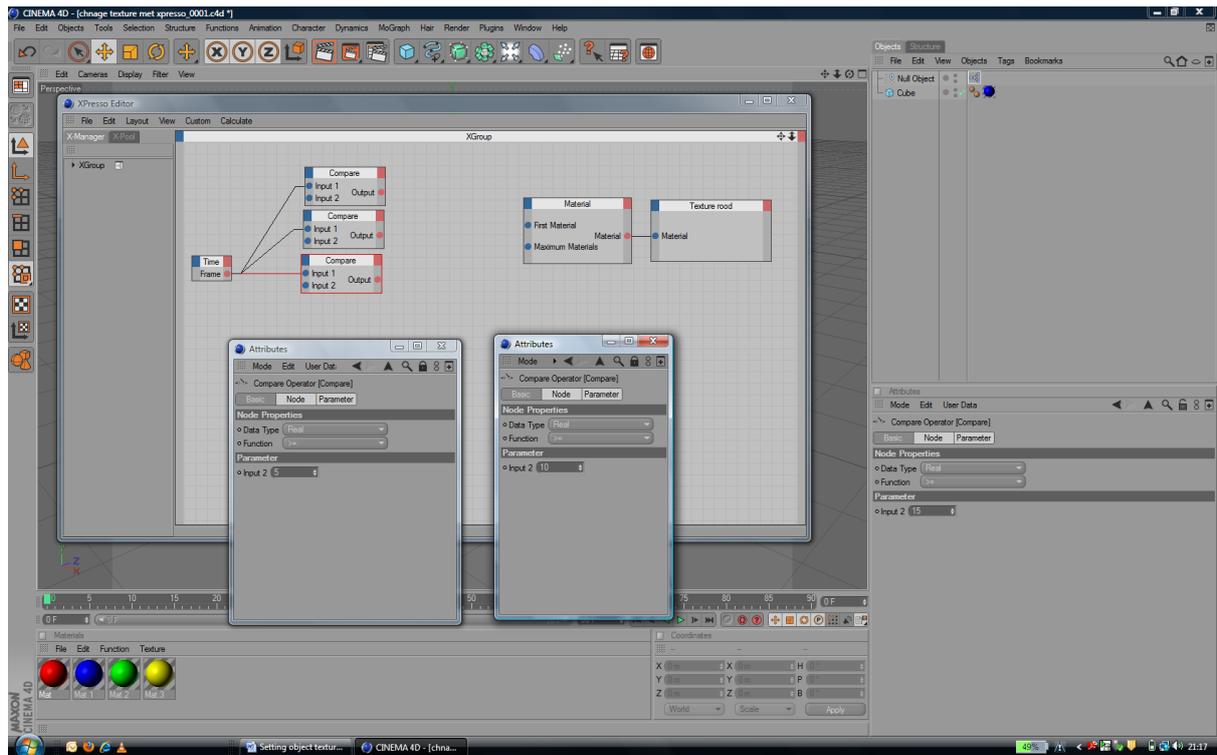
Now add a Math node (add mode) and add an extra input port.
Connect the three outputs of the Compare Nodes to the Math Node.

This way the First Material input node will get a value from:
0: frame < 5
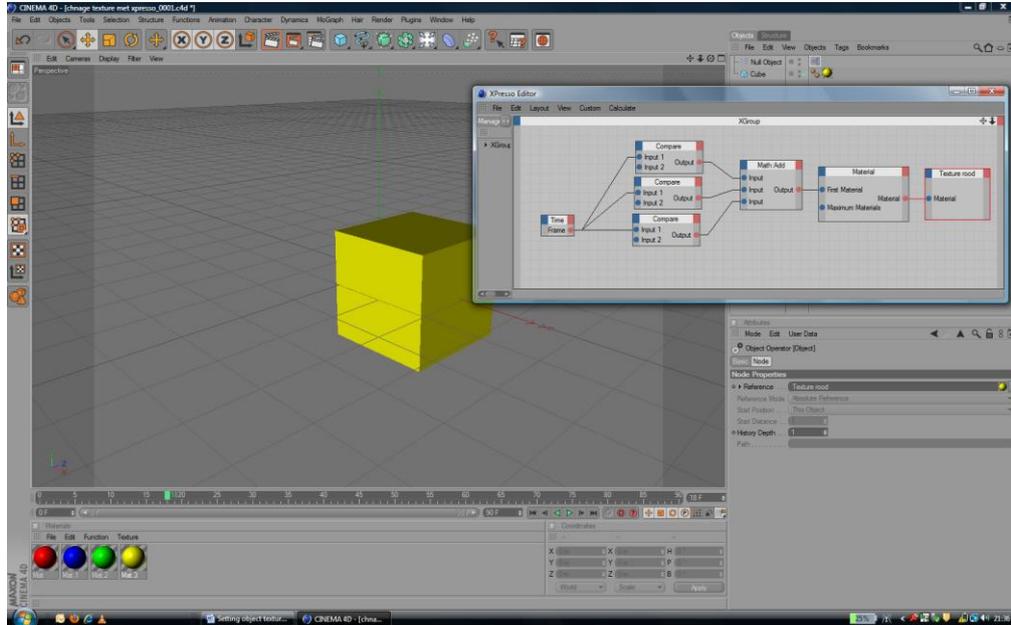1: frame 5 – 9
2: frame 10 - 14
3: frame > 15.
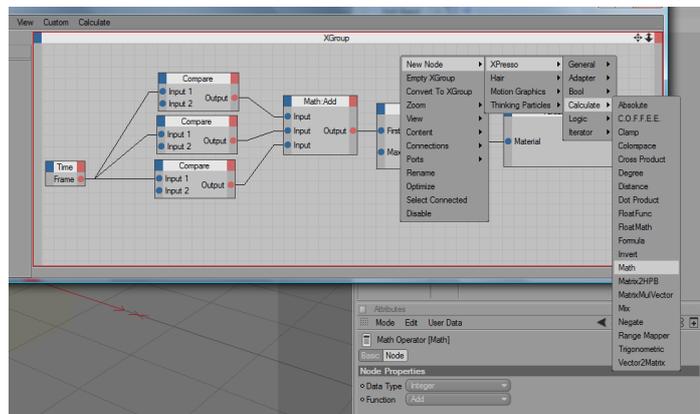
When we set Maximum input to 1 (output only one material), the Material node will output to the Texture node:
Frame 5: second material in the Material Manager
Frame 10: third material in the Material Manager
Frame 15: fourth material in the Material Manager

Now click Play Forward and you will see that the color (the texture) of the cube will change.

Changing texture settings with Xpresso
To show you how to change material attributes, I will take the example of changing the Transparency Brightness settings.

Add a Transparency channel to the material you want to change.
Double click the texture tag after the cube, the material will open in the Material manager and drag and drop the small preview window to a new Xpresso window.
Now select the input port you want to change. I selected Transparency > Transparency Brightness.
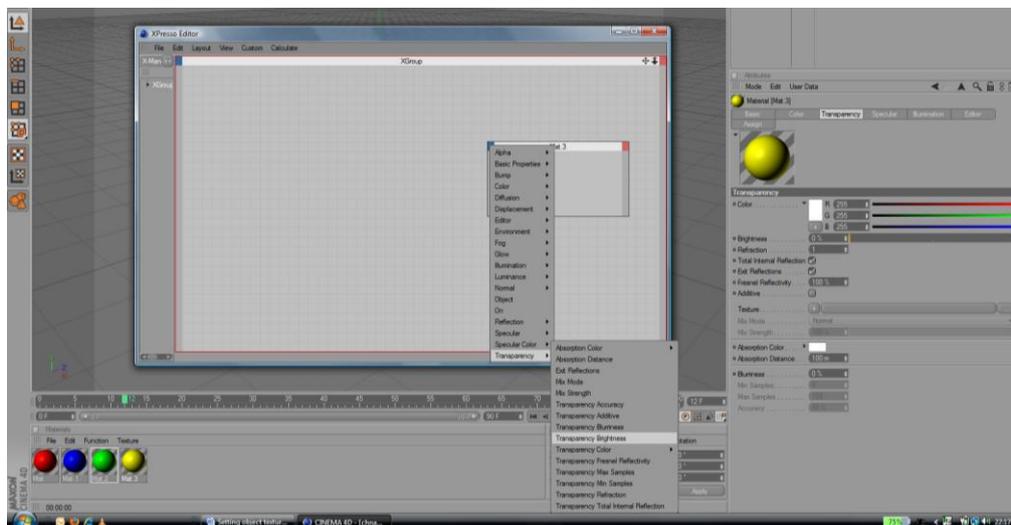
As an example I want to change the Transparency according to the frame but starting after frame 15. To start after frame 15, add a Time Node and a Comparison node, connect them and set the input port of the Comparison node to 15 and the function to '>='. Connect the output port to the On input port of the material node. This way we only change the Transparency when the input port in On, so when the comparison is true, frame >= 15.
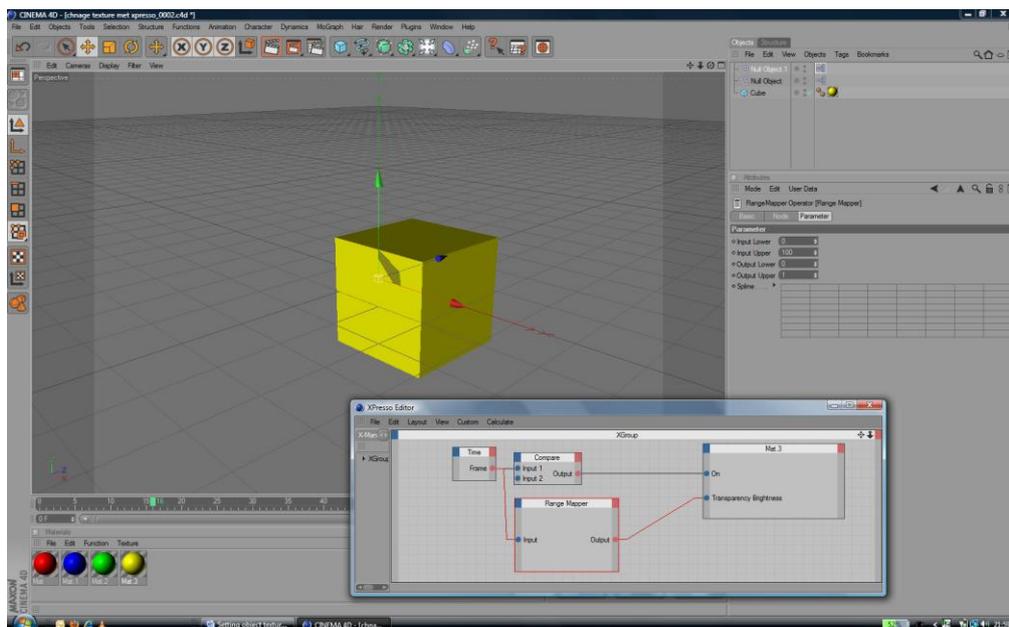
Because Transparency Brightness is a percentage we have to convert frames to percentage.
We do this with the Range Mapper node.
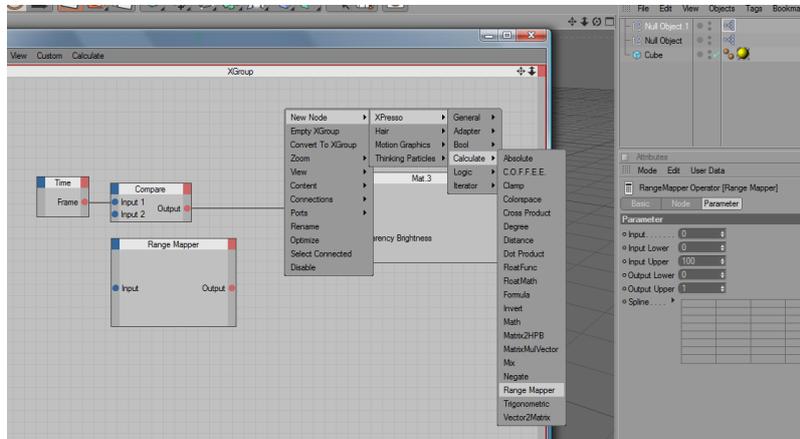
Now connect the Frame output port to the Range Mapper input port en the Range Mapper Output port to the Transparency Brightness input port.

Select the Range Mapper in the Xpresso window and in the Attribute Manager change Input Upper to 0. 0 – 100 is now converted to 0 – 1.
Click Play Forward and you will see the material change and after frame=15 the transparency of the cube.

Enjoy.