

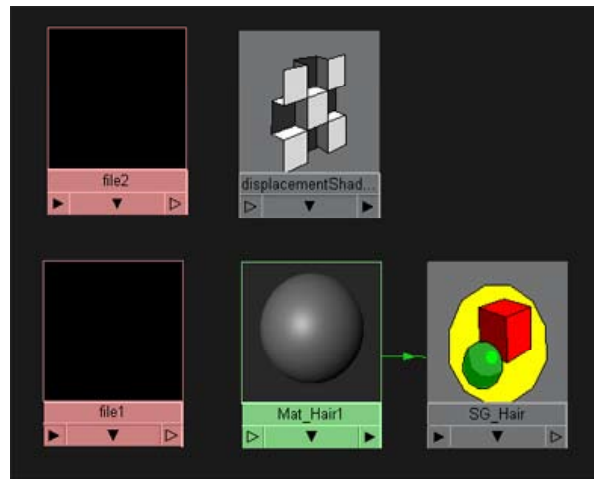


This tutorial shows you how to set up Displacement maps using Maya and RenderMan for Maya.

Requirements:

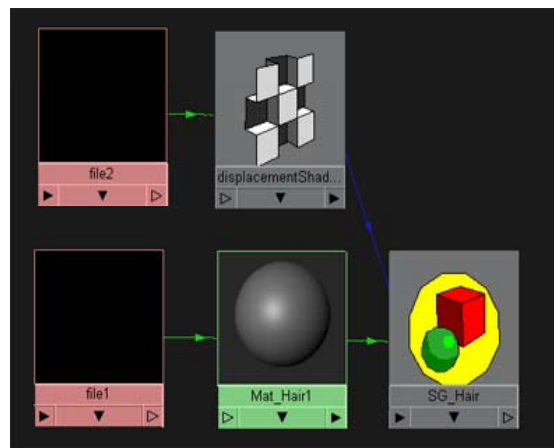
Autodesk Maya
RenderMan for Maya plug-in.

1. First create a displacement map. In the Hypershade drag out two file nodes, a shader and a displacement node.



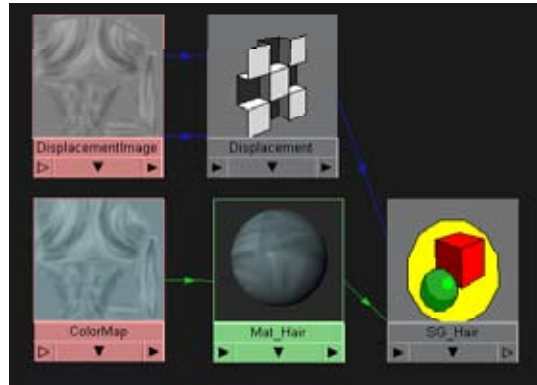
2. Drag the displacement node on top of the shader node (SG_Hair) and drop it. The displacement will automatically hook up. Next hook the file1 node onto the color map of the material node and the file2 node into the displacement node. Just drag and drop should work fine.

3. Your shader should now look like this:

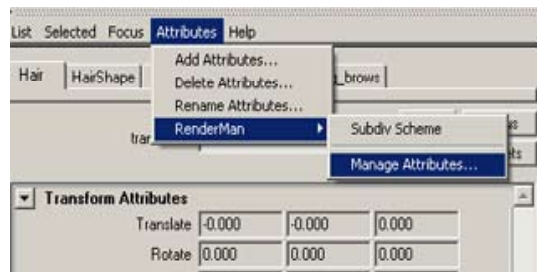




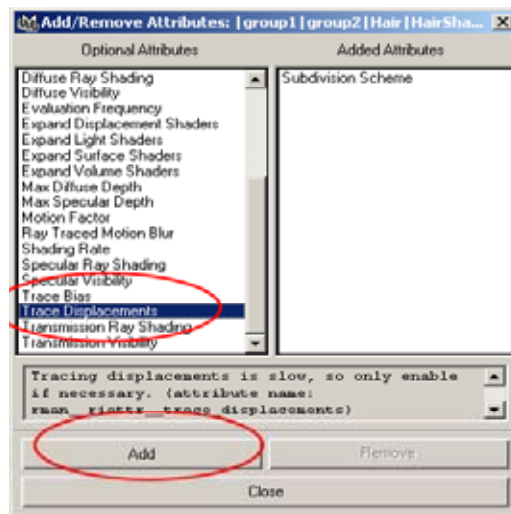
4. Load some images into your file nodes and name them accordingly. This is how I set mine up.



5. Apply the shader to your geometry, then select the geometry and open the Attributes editor. In the attribute editor select Attributes>RenderMan>Manage Attributes.

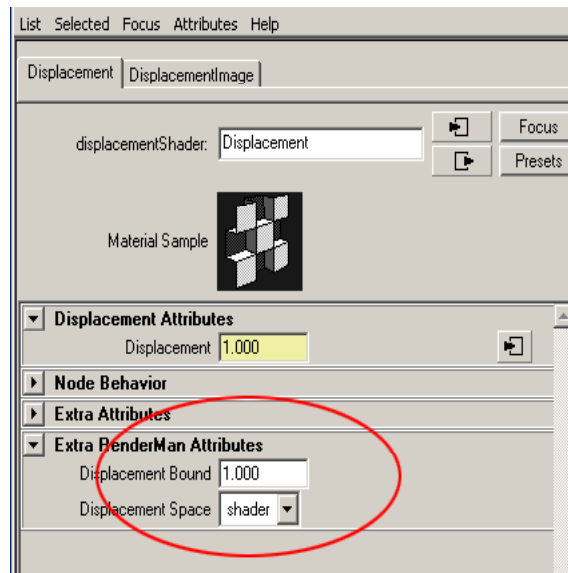


6. In the window that opens select Trace Displacements and click Add, then close the window.

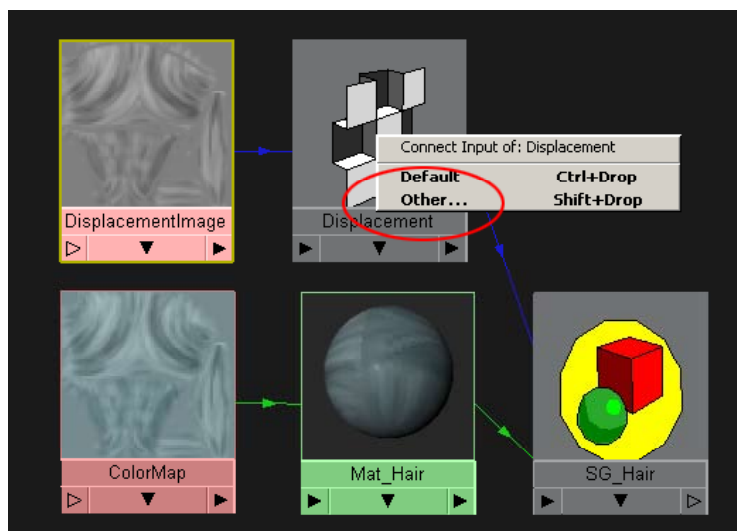




7. Select the Displacement Node on your shader.
8. Open the Attribute editor and click Attributes>RenderMan> Add Displacement Attrs
9. This adds a node below under Extra RenderMan Attributes.

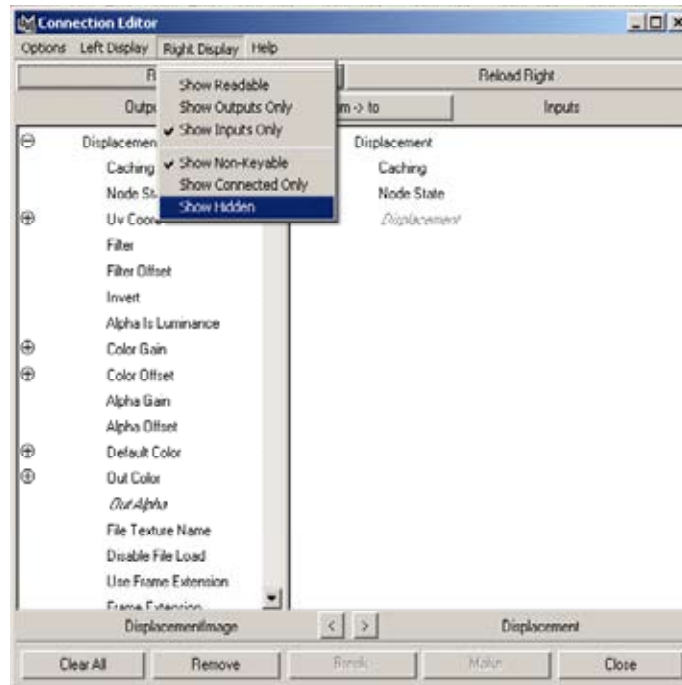


10. In the Hypershade select the displacement file texture and middle mouse drag it onto the displacement node and let go. A sub menu will popup with options. Choose Other...

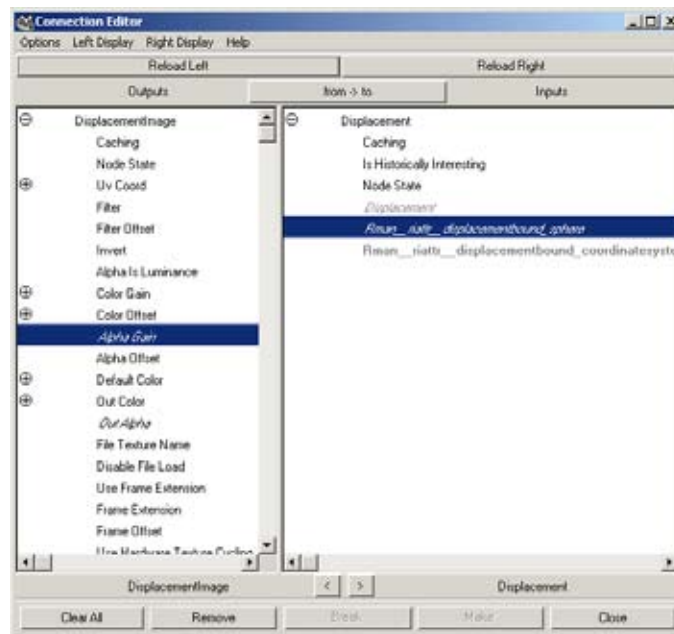




11. This will open the Connection Editor. Click on Right Display>Show Hidden to show all the hidden attributes.



12. Connect the Alpha Gain to the Rman_riattr_displacementbound_sphere.





13. By connecting the attributes, the displacement bound will automatically be set as you change your Alpha Gain. You can always disconnect this later if you run into any special problems that need the displacement bound to be higher or lower.

14. In the Hypergraph click on the displacement file texture node then open the Attribute Editor. Toggle open the Color Balance tab and adjust the Alpha Gain. The lower the number, the smaller the displacement amount. Also, you MUST set the Alpha Offset to minus half of the Alpha Gain if your image is default 50% gray. If your image is default Black then the Alpha Offset stays at 0.

