EMBEDDING FLUX TEXT
IN WEB PAGES WITH VIEWPOINT

Objective:

To create a clickable, interactive 3D object that can be embedded into a web page.
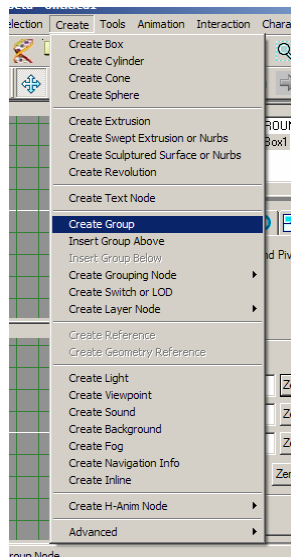
Actions:

Open Flux Studio

1. Use Top View
2. Click **Create > Create Text Node** and click in window to place in scene.
3. Zero it for all 3 axes.

NOTE: Zeroing first isn't absolutely necessary but in the long run it does help to keep track of where things start and helps to keep things aligned. It's a good habit to get into.

4. Click **Create > Create Group**

5. The cursor will change to a 3-headed arrow when you move it over one of the view windows.
6. Using the Top View, click inside the window to place a Group Node and zero it for all 3 axes.
7. Click on the Text node in the Tree Window to select it.
8. Drag the Text node into the Group.
9. In the Text node Properties window click on the "Text" tab.
10. In the large window enter your text.
11. Next choose a Font "Family" for your text from the drop-down menu.
12. Choose "Middle" for both "Hor." And "Vert. Justify".

13. Click in the check box for "Solid".
14. Your Text node properties should look ike the following example.
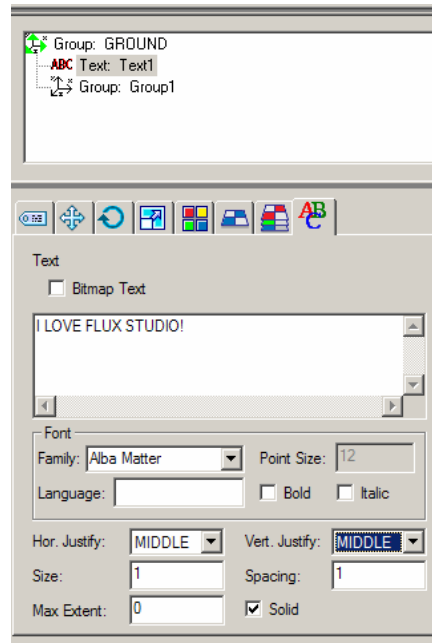
15. Switch to Front View.
16. With the Text Node still selected move it on its Y axis so that the bottom of the text sits on the X axis.

NOTE: If you lock the X and Z axes or use the Y slider you will be able to move it up without moving it sideways or forward.
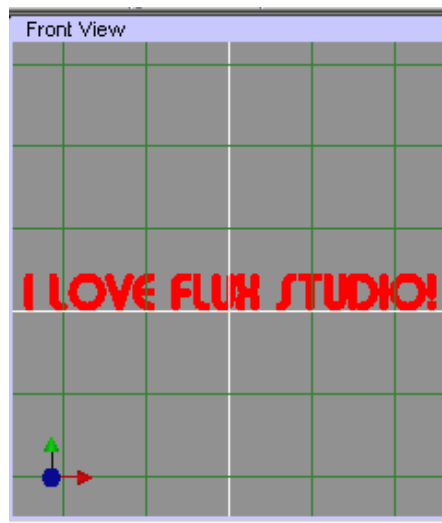
17. Your Text should be showing in the Front View window.

NOTE: If you want to play with other fonts now is the time to do it. Just scroll thru the drop-down in the Text Node Properties window's Text tab until you find one you like. The text looks best with a fairly thick non-serif font.

18. With the Text node still selected go to the Material tab of the Properties window and select a color for your text. If you wish to use a texture instead of a color then go to the Texture tab and Browse for your texture file.
19. To make the text more interesting add a second Text node to act as a shadow.
20. In the Tree window click on the Text node and hold the CTRL key down as you drag down and away from the Text node.
21. Let go of the mouse and you will have a copied Text: Text2 node. It should also be in the same Group node as the first one but if it isn't then just click on it and drag it into the Group.
22. Switch to Top View.
23. With the new copied Text node still selected click in the Translation tab of its Properties window.
24. Lock the X and Y axes.
25. In the Top View window drag the new copied Text node slightly (above) to the back of the original one.
26. Click on the Dynamic Rotate Tool in the Toolbar.

27. Using the Dynamic Rotate Tool slightly tilt the Top View window back until it becomes a Top-Front View window and you can see both Text nodes like in the example below.

28. Select the back (Text2) Text node if it isn't still selected.
29. In its Properties window click on the "Material:" tab.
30. Click on the black color chip and then the **Edit Materials** button to open the Material Editor window.
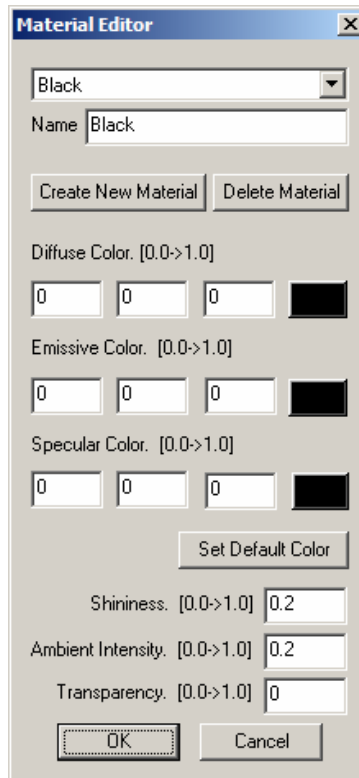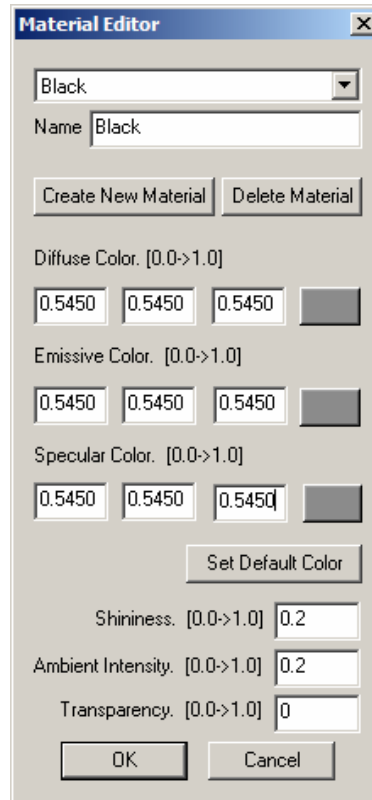

31. Click on the color chip for "Diffuse Color" to open the Color window.
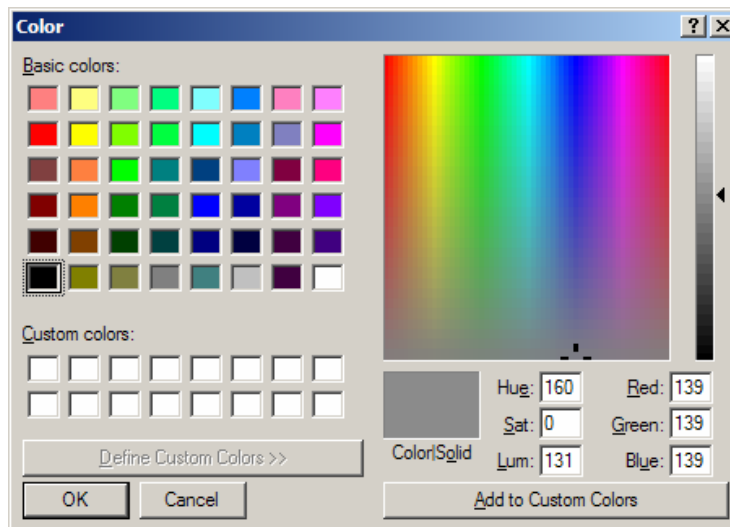
32. Move the triangle slider up until a medium gray color is showing in the "Color\Solid" chip.
33. Click **OK** to close the Color window.
34. Back in the Material Editor copy the color numer from one of the boxes in the Diffuse Color area (the numbers will all be the same because it is gray).

35. Paste the numbers in each of the other 6 boxes (3 for Emissive Color and 3 for Specular Color) until all 3 color chips are the same color gray.

Material Editor

Black

Name Black

Create New Material | Delete Material

Diffuse Color. [0.0->1.0]

0.5450 | 0.5450 | 0.5450

Emissive Color. [0.0->1.0]

0.5450 | 0.5450 | 0.5450

Specular Color. [0.0->1.0]

0.5450 | 0.5450 | 0.5450

Set Default Color

Shininess. [0.0->1.0] 0.2

Ambient Intensity. [0.0->1.0] 0.2

Transparency. [0.0->1.0] 0

OK | Cancel

36. Click **OK** to close the Material Editor.
37. Your text should look similar to this:

Top-Front View

NOTE: Hopefully you have been saving at frequent intervals but if you haven't now is a really good time to do so. ☺

38. Select the Group node holding the 2 Text nodes and click **Tools > Convert To Indexed Face Set** from the menu.
39. Click **OK** in the warning window.
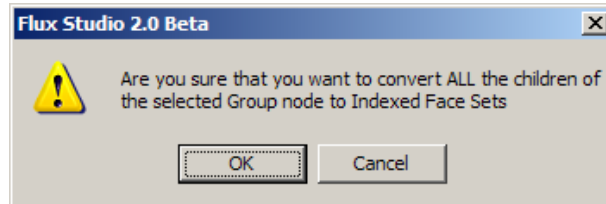
40. Then with the Group node still selected click on **File > Export Other Format** to open the Flux Studio Accutrans3D Translation Utility.
41. Your text should show in the left window. If it doesn't then you probably skipped the **Convert To Indexed Face Set** step. It has to be an IFS or the export won't work.
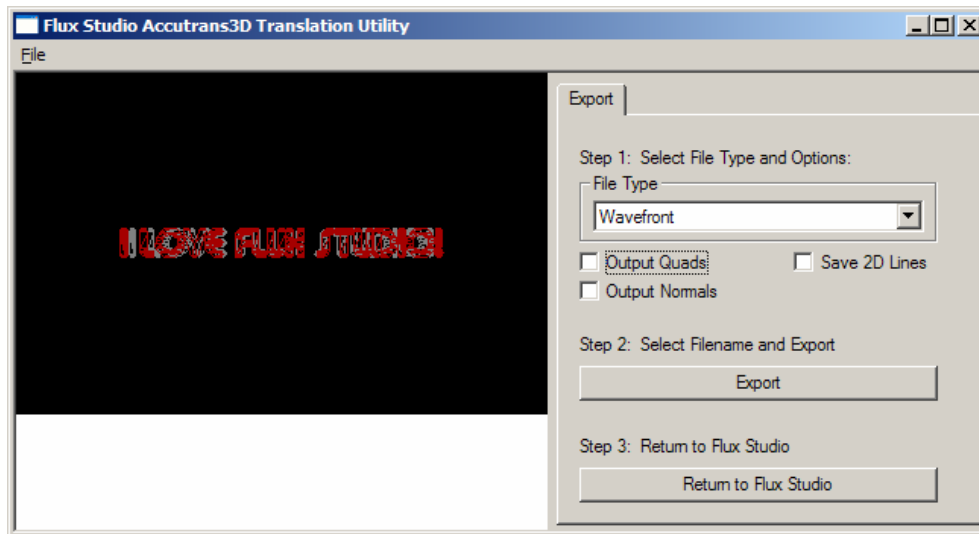
42. Select "Wavefront" from the "File Type" drop-down menu and click the **Export** button. This will export your text as an OBJ file.
43. Give it a name and select the location where you want to save it and then click Save to close the Save As window.
44. Click the **Return to Flux Studio** button to close the Translation Utility.
45. Close Flux Studio and save the Flux file.

Open Viewpoint Scene Builder

1. Go to **Viewpoint Developer Central** (http://developer.viewpoint.com/dc/tools.jsp?tab=TOOL&sub=TOOL) and download the free Viewpoint Scene Builder Bundle (9.78 MB) from the **rich media** menu under

Viewpoint Visualization tools on the left of the window. You only need Scene Builder but the other tools are cool also so you might as well take them all.

2. Follow the directions to install Scene Builder and then open it.
3. First switch the Auto-Scale option to **OFF**.
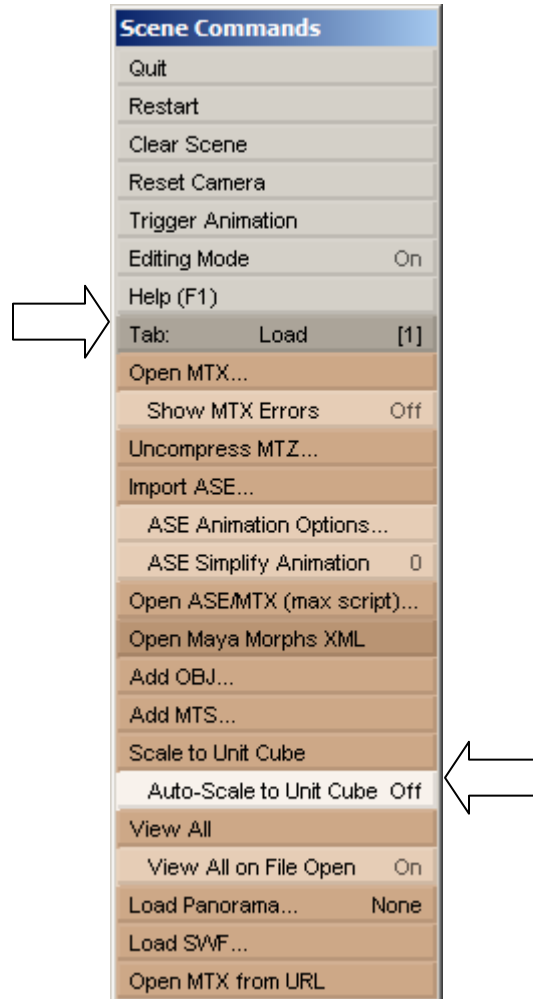
4. In the default "Scene Commands" window select **Tab: Load > Add OBJ** or drag and drop the *.obj file you exported from **Flux Studio** into the editor window.
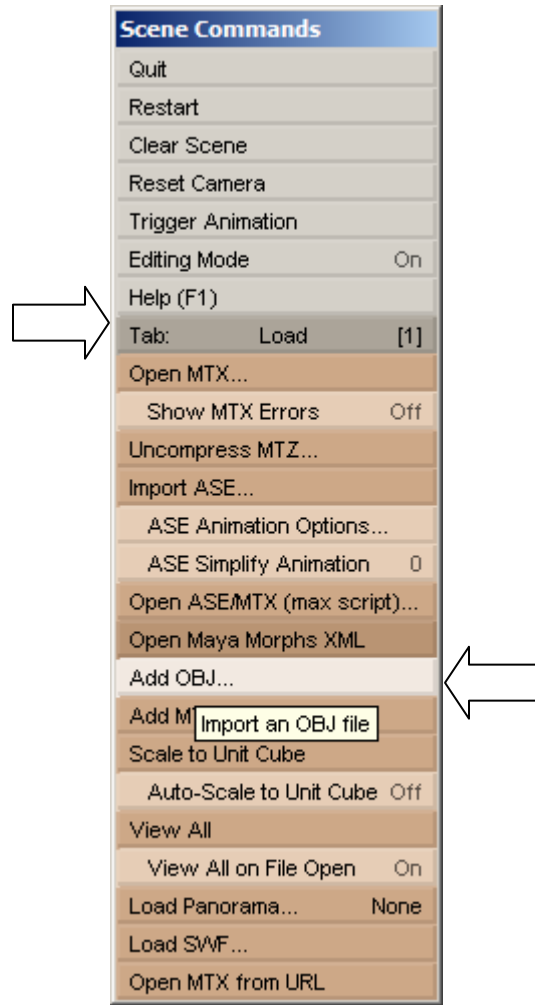
5. Your Text object will appear in the Viewpoint scene editor window.
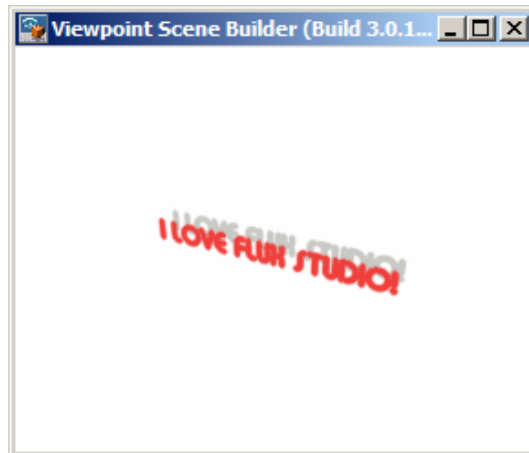
6. Right-click the object.
7. In the default "Scene Commands" window click **Tab: Load** to change menus
8. Choose **Tab: Publish**.
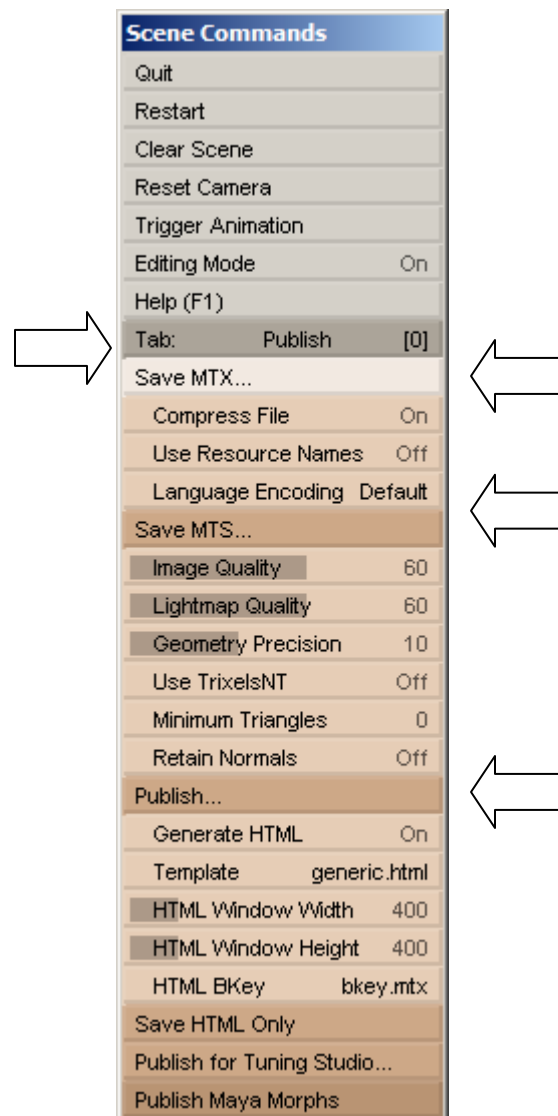9. Make sure that **Generate HTML** is set to **ON**.
10. Make sure that **Compress File** is set to **OFF**.
11. Click **Save MTX …** to save a file with an MTX extension.
12. Change the setting in **Compress File** to **OFF**.
13. Click **Save MTX …** again to save it as an MTZ file this time.
14. Click **Save MTS …** to save it as an MTS file this time.
15. Lastly click **Publish …** to save an HTML file with your VMP embed info in it.

Scene Commands	
Quit	
Restart	
Clear Scene	
Reset Camera	
Trigger Animation	
Editing Mode	On
Help (F1)	
Tab: Publish	[0]
Save MTX...	
Compress File	On
Use Resource Names	Off
Language Encoding	Default
Save MTS...	
Image Quality	60
Lightmap Quality	60
Geometry Precision	10
Use TrixelsNT	Off
Minimum Triangles	0
Retain Normals	Off
Publish...	
Generate HTML	On
Template	generic.html
HTML Window Width	400
HTML Window Height	400
HTML BKey	bkey.mtx
Save HTML Only	
Publish for Tuning Studio...	
Publish Maya Morphs	

16. You should now have 4 files with the same name but with different extensions – MTX, MTZ, MTS, and HTML.
17. Close Viewpoint Scene Builder.

Necessary File Placement:

1. Open the folder where you have saved all of your files (the Flux Studio, the OBJ and all the Viewpoint files.
2. You will find a resource folder with the same name as your files in a subdirectory.
3. That folder will have the following files in it:

    ★   MTS3Interface.js
    ★   Not,gif
    ★   Vp_exper_tr-90x30.gif

4. The only important one is the JS file – the others are a Viewpoint logo and a blank placeholder image.
5. Open the HTML file and your text should be showing. Use your mouse to rotate it around.
6. Where ever you decide to use your embedded image the resource folder has to go along with it or the image won't show on the page.
7. The default embedding does not allow the image to "float" on the page but once you have it working take a look at the code and compare it with the code in my other tutorial "Embedding VMP Content in Your Web Page" to see how to place the image into a layer that will float over the text.

Summary:

1. Use Flux Studio to create your object.
2. Download and install Viewpoint Scene Builder.
3. Use it to convert the Flux OBJ file to a set of Viewpoint files.
4. Use the code in the Published HTML file to embed the image into your own web page.

Words to Know:

★   **Zeroing –** to set an object's XYZ axes to zero in the scene.

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