From maya to Sandbox

Version_1.2_e **September 15, 2004**

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1. Introduction

This tutorial is a guide that shows how to get objects from *maya* into *Sandbox*.
Some points like the installation aren't described in detail. For more information take a look at the "CryExporter document" which comes with the SDK.

This tutorial is not completed yet, it needs a real error correction because it is not my native language. The objects don't have a collision yet but I'm trying to figure this out and will add a solution as soon as i find one. As well i will write a German version. So check for new versions from time to time.

http://fs.cravils-design.com/download.html

for questions visit:
irc://irc.quakenet.eu.org/fls

I hope this guide will help you to get your own objects into *Sandbox*.

2. Plug-in installation

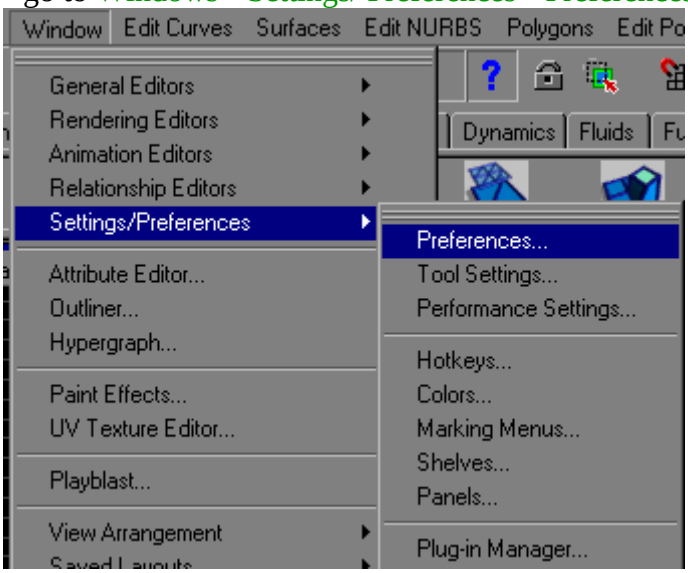
• Copy MayaCryExport.mll to Maya\bin\plug-ins
• Copy scripts and prefs to MyDocuments\maya\#\scripts
MyDocuments\maya\#\prefs
with its whole directory structure.

• Execute *maya* and start the exporter with: Window->Setting/Preferences->Plug-in Manager

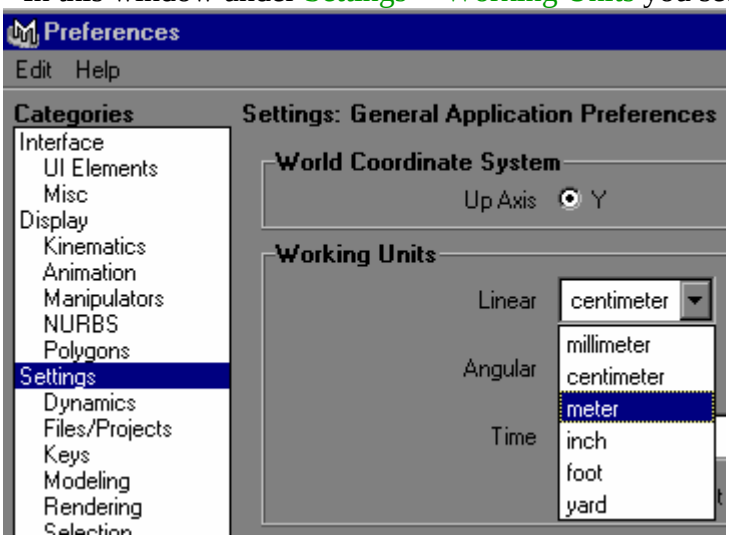
or just load it over the shelves

3. Scale

• set the Working Units
• go to Windows->Settings/ Preferences->Preferences.



• In this window under Settings-> Working Units you set "Linear" to "Meters".



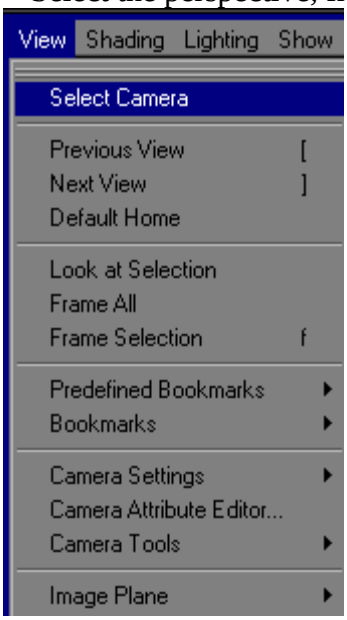
• If you create a cube now, it has the size 1m/1m/1m (X/Y/Z). This will be translated into a 1m^3 cube in the *Sandbox*-engine.
• If you set "Linear" to "centimeters" and you create a cube, it will be 1cm/1cm/1cm. This will translate it into a 1cm^3 cube in the *Sandbox*-engine.
In order to have it 1 meter, you have to scale it up.
• It depends on your initial settings in Maya.
• The *CryTeam* set everything to centimeters in Max and work with that for the whole game (in Max changing the Unit Setup will rescale the objects to the new units. there is less confusion).

Special thx to evilmil for those informations ;)

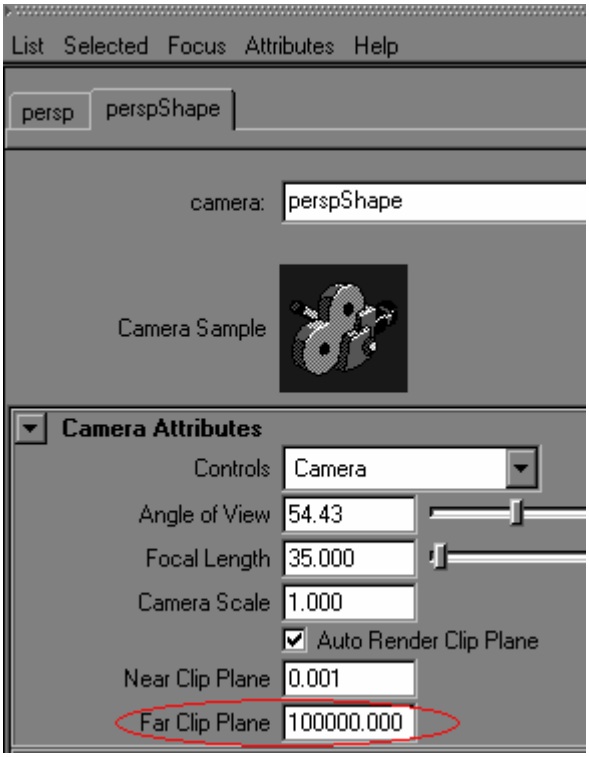
4. Far Clip Plane

• If you have the problem that your objects disappear if you zoom out, you should change the settings of your far Clip Plane.

• Select the perspective, front, side or top view and go to View->Select Camera



• change the Camera Attributes to 100’000 in perspective view and in the others to 1’000’000’000



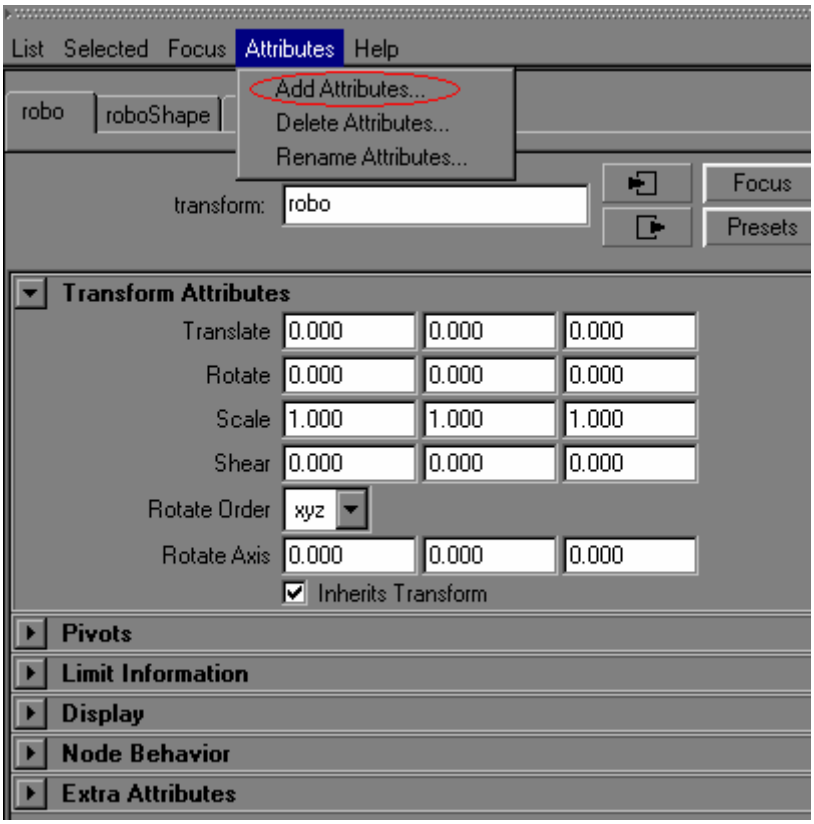
• you can create a shelve for the farClipPlane with those attributes

```
setAttr "perspShape.farClipPlane" 100000;
setAttr "frontShape.farClipPlane" 1000000000;
setAttr "topShape.farClipPlane" 1000000000;
setAttr "sideShape.farClipPlane" 1000000000;
```

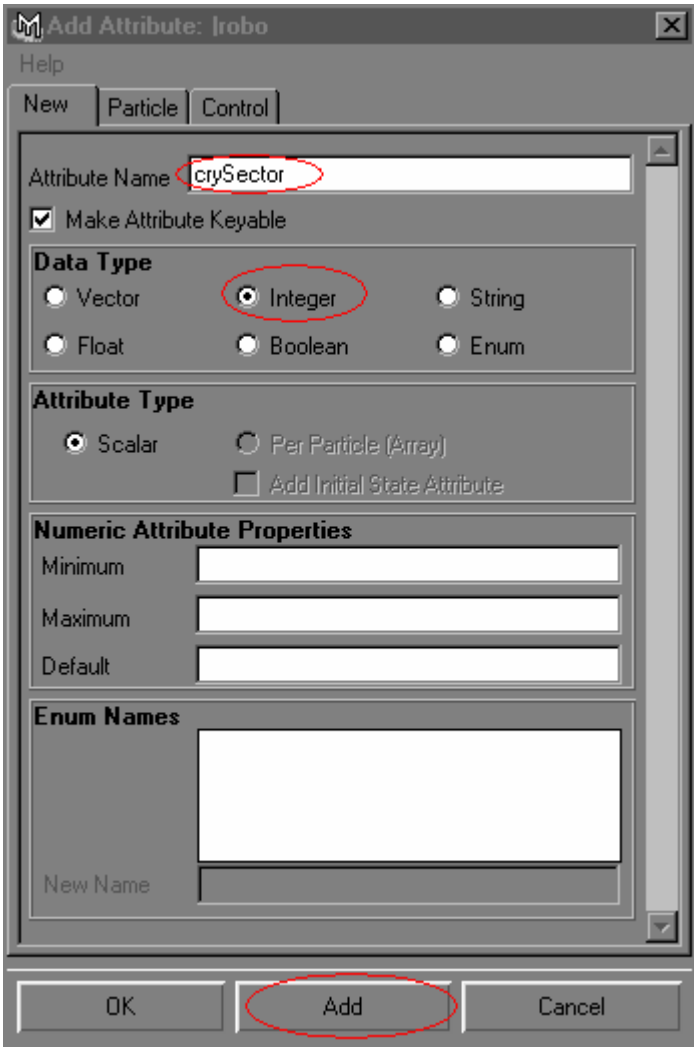
If you have any questions how to create shelves I will add some more information in the next version.

5. crySector

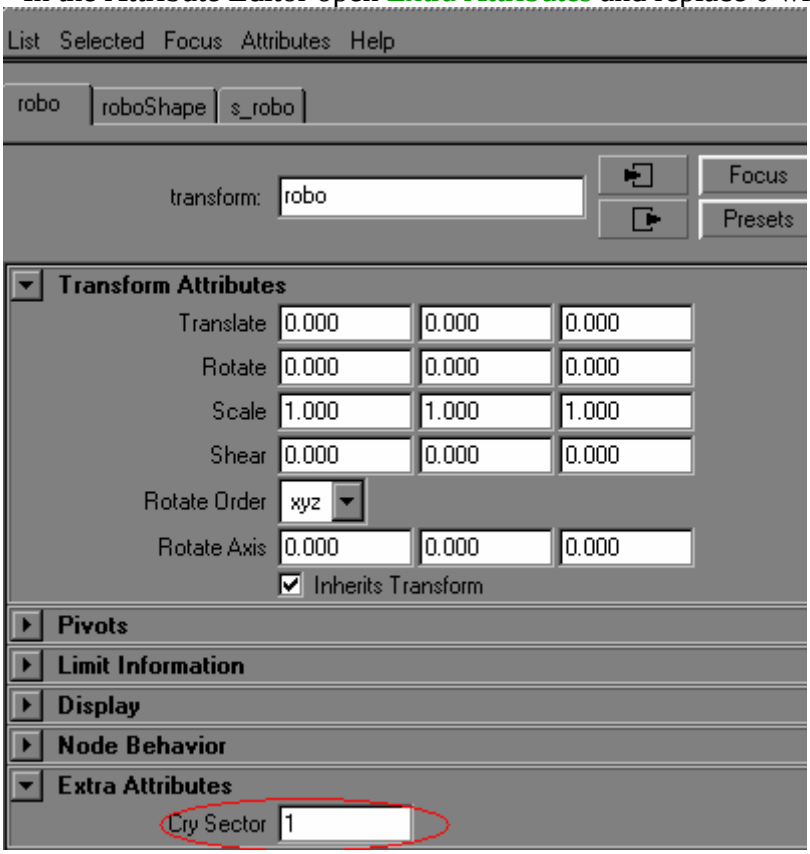
• Create a polygon object
• Open the Attribute Editor (Ctrl+A)
• Select your object
• Choose Attributes->Add Attributes...



• Type Attribute Name: crySector
• Select Data Type: Integer
• Press the Add Button

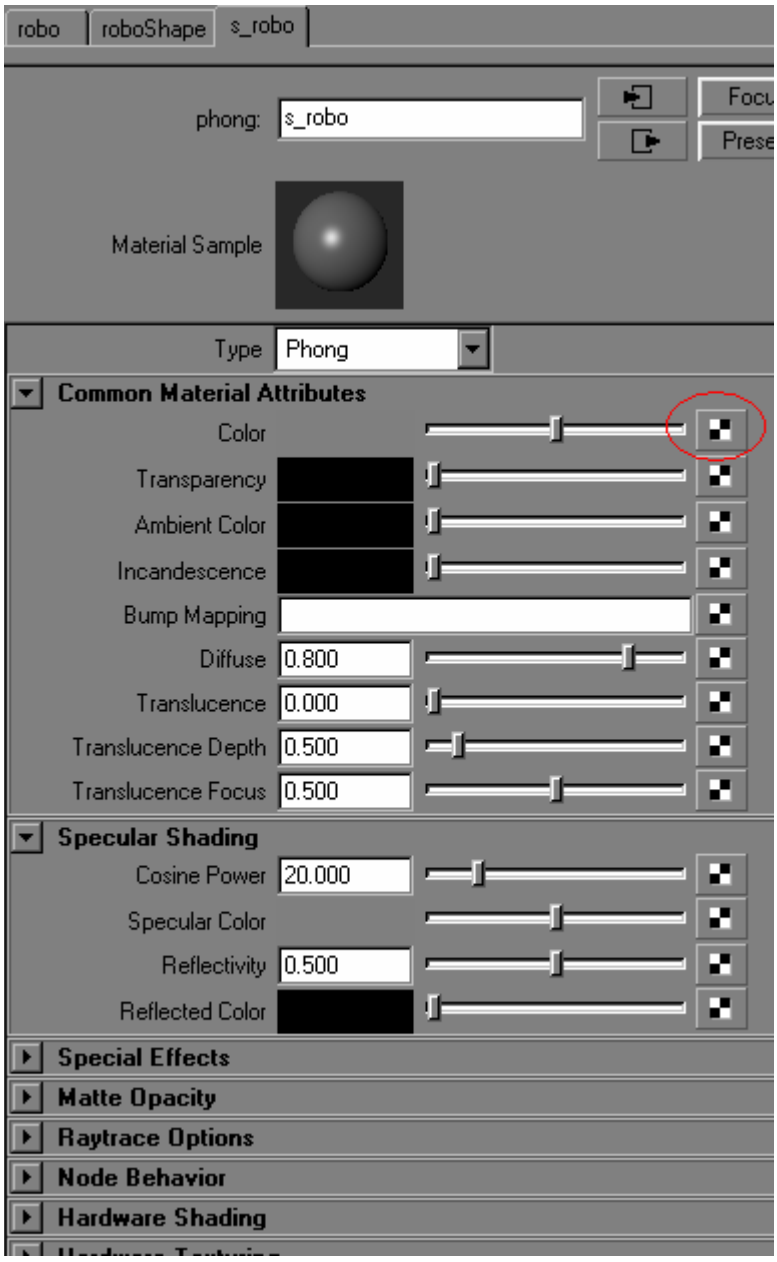


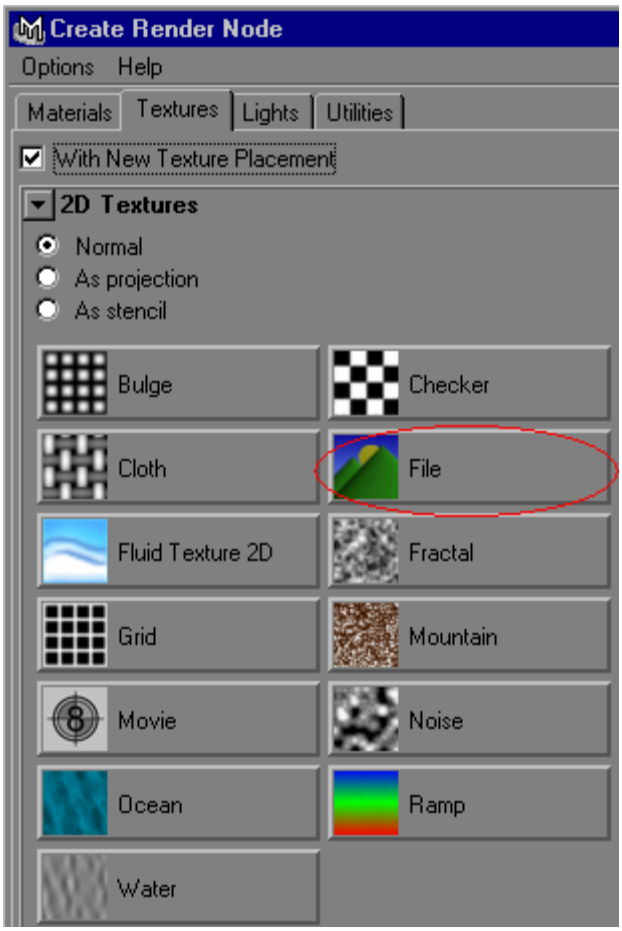
• In the Attribute Editor open Extra Attributes and replace 0 with 1



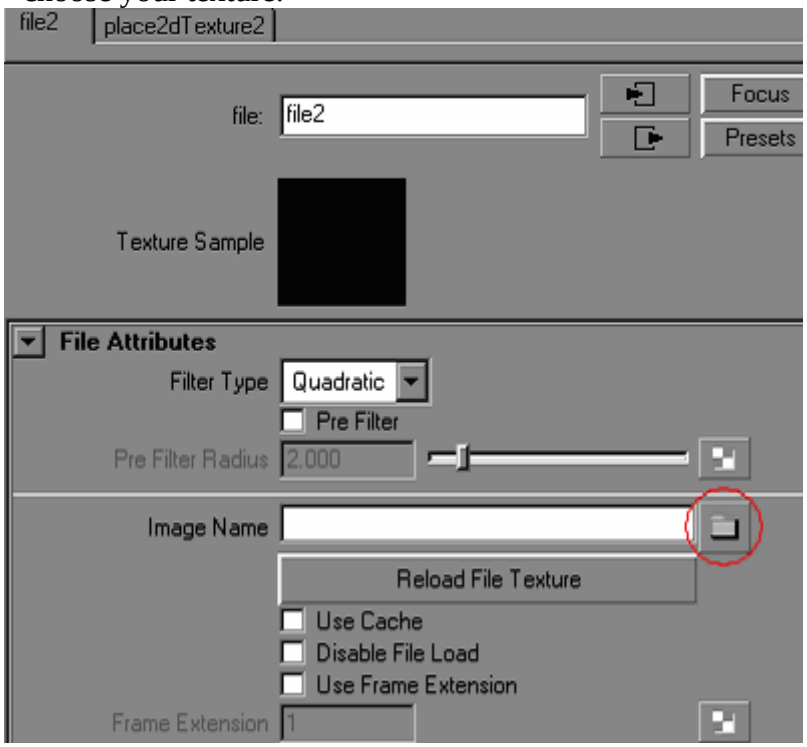
6. Shaders and texture

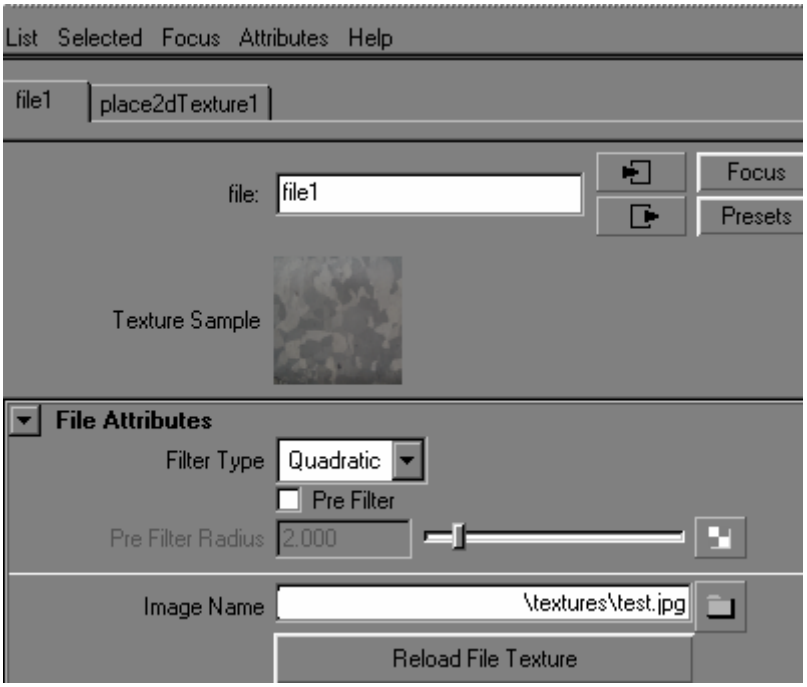
• choose a shader for your object
• select the object and open the Attribute Editor
• Give it a texture from a File



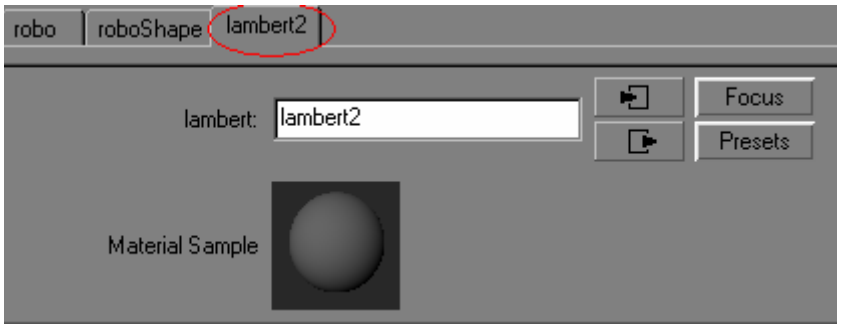


• choose your texture:

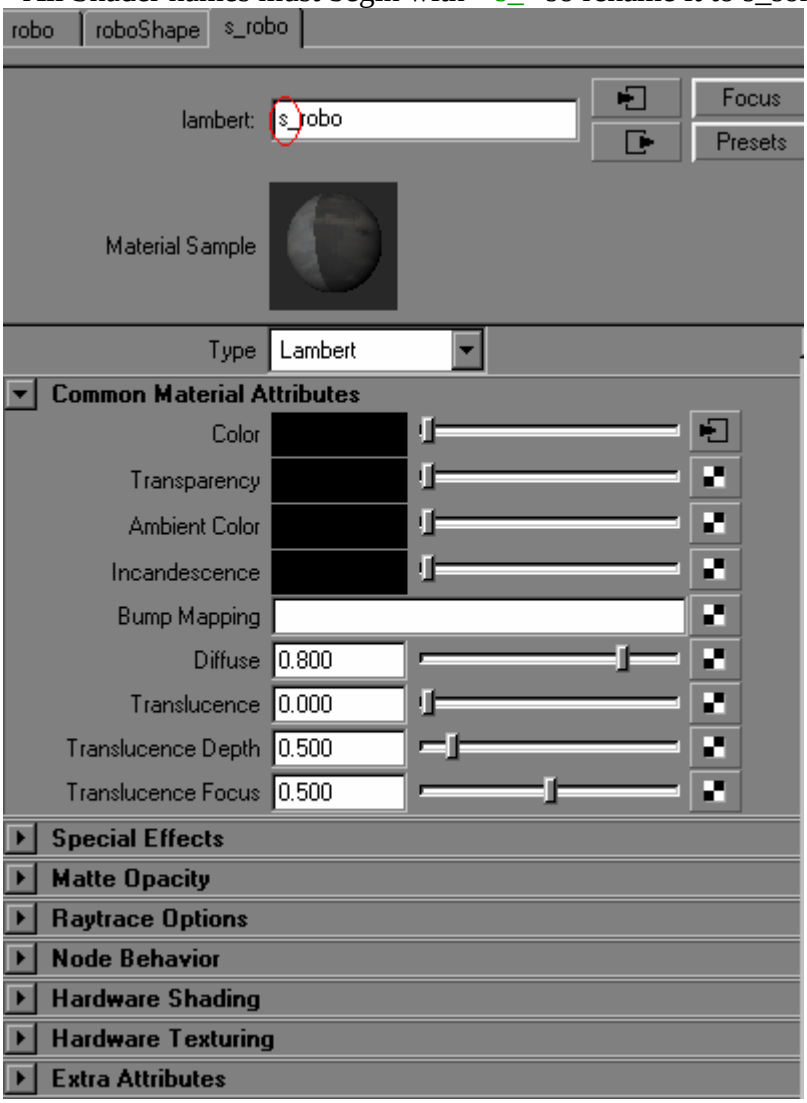




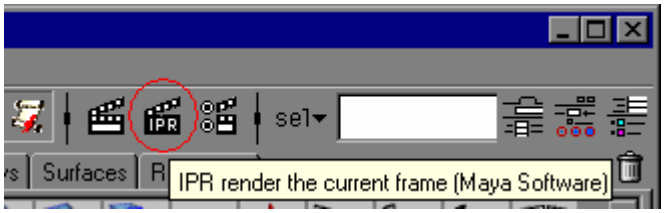
• Select the Shader Node



• All Shader names must begin with “s_“ so rename it to s_something



• To view your texture, select the perspective view and press key “6“ or make a IPR render.

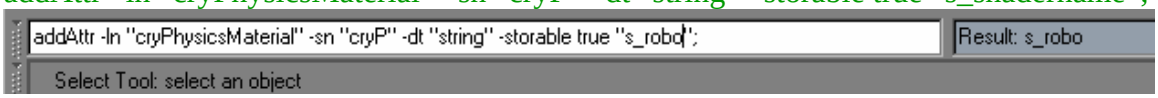


7. Materials and Physics

I had to add the shader attributes to the command line otherwise they end up as „Transfer Node Attributes“.

• select your shader and type in the command line:
addAttr –ln “cryTemplate“ –sn “CryT“ –dt “string“ –storable true “s_shadername“;

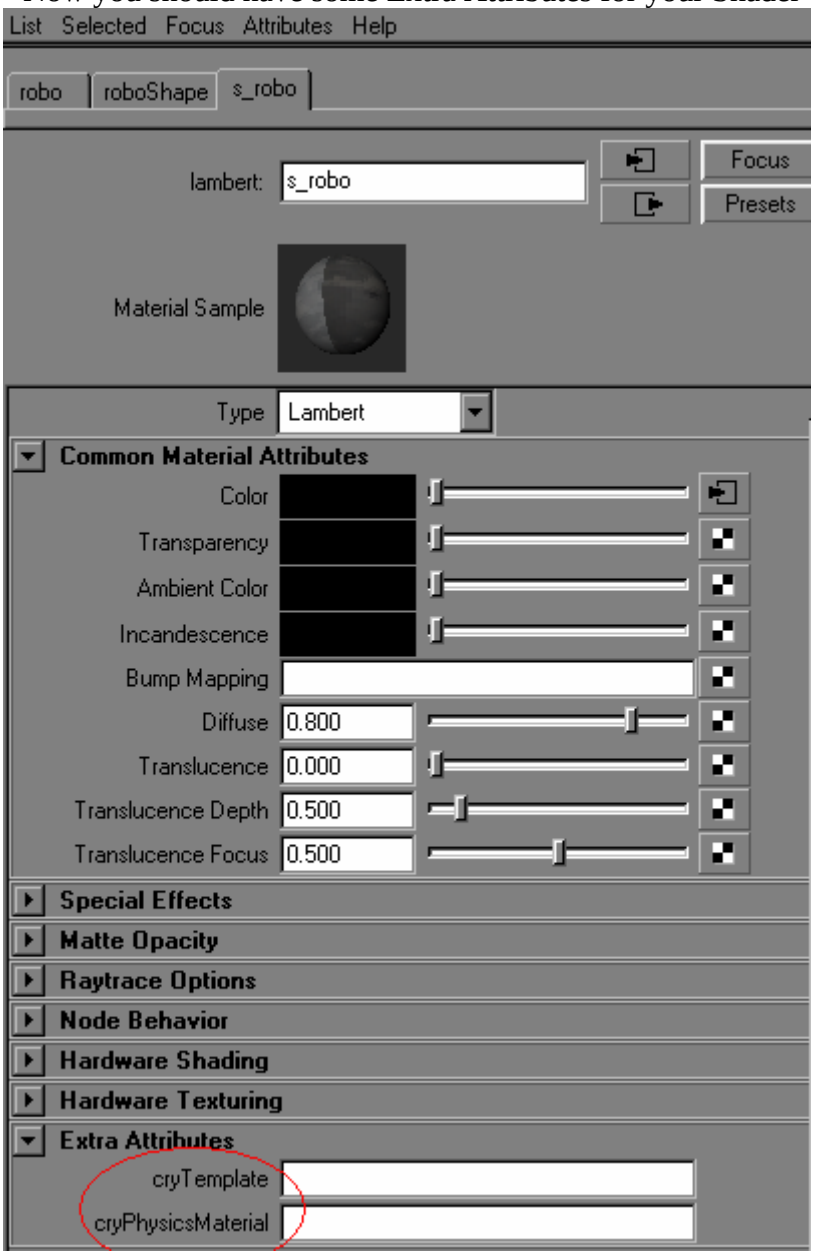
addAttr –ln “cryPhysicsMaterial“ –sn “cryP“ –dt “string“ –storable true “s_shadername“;



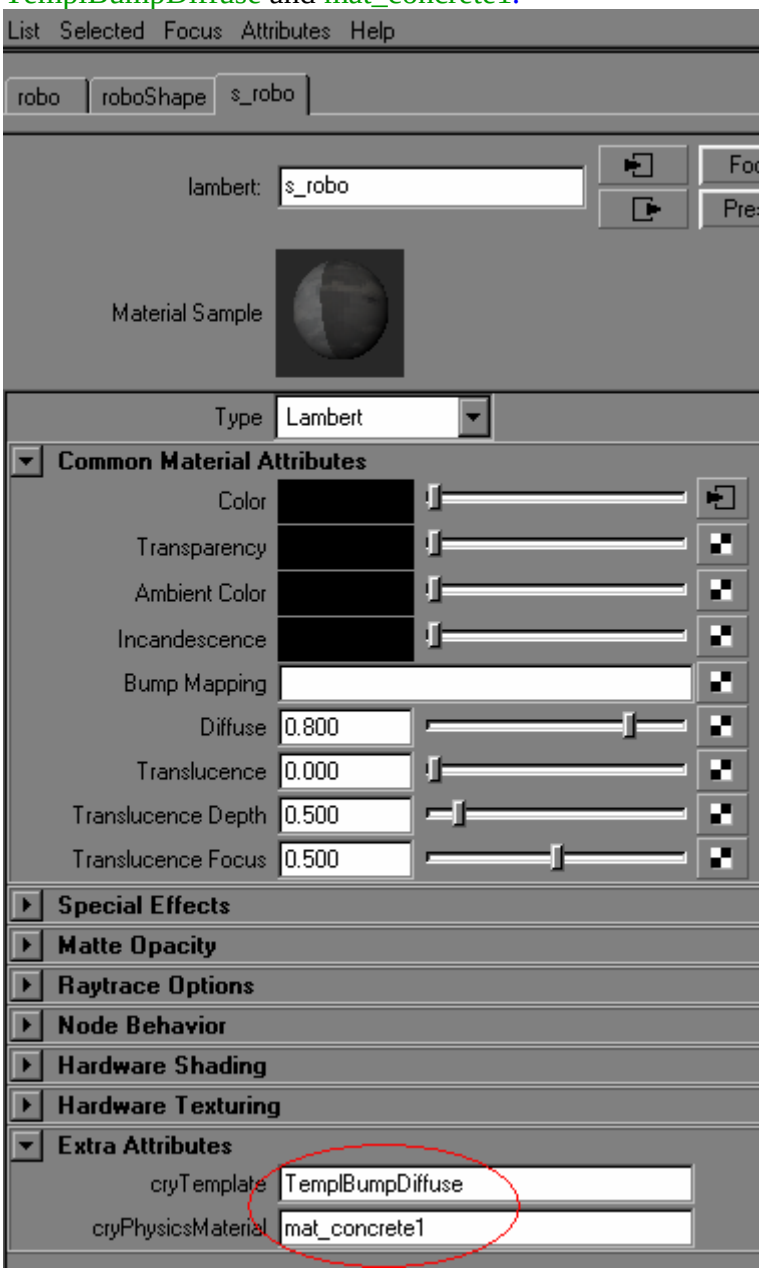
I saved the commands as shelves so I didn’t have to enter the whole thing every time. If you make this be sure you gave the “Shader“ the same name you entered in the shelve command.

• To save them to the Shelve, you can catch the commands with your middle mouse Button and drop them in your custom shelve bar.

• Now you should have some Extra Attributes for your Shader



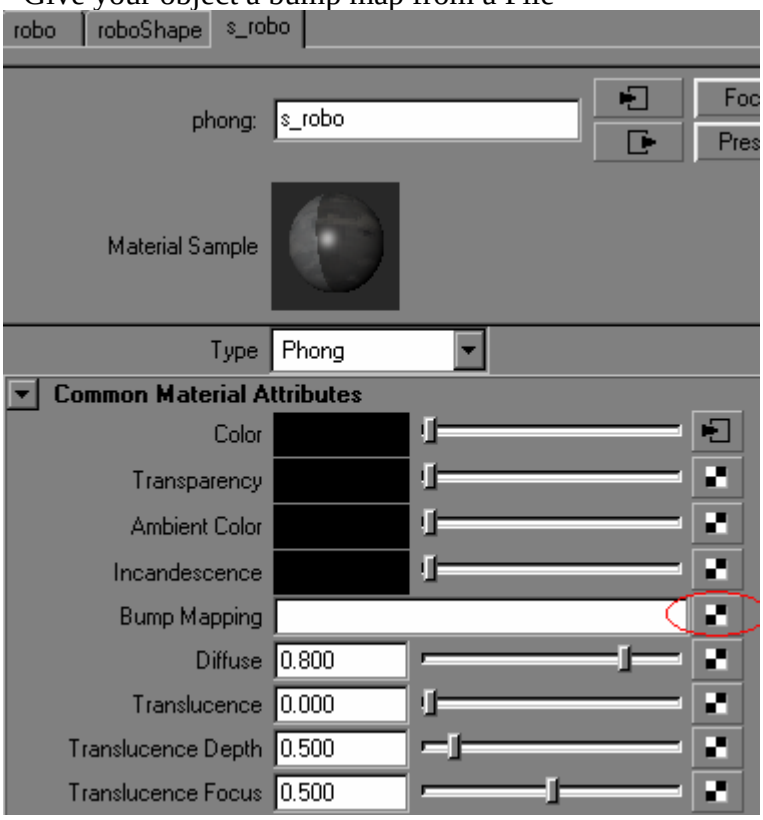
• For my first try I took the options from the CryExporter document:
TemplBumpDiffuse and mat_concrete1.

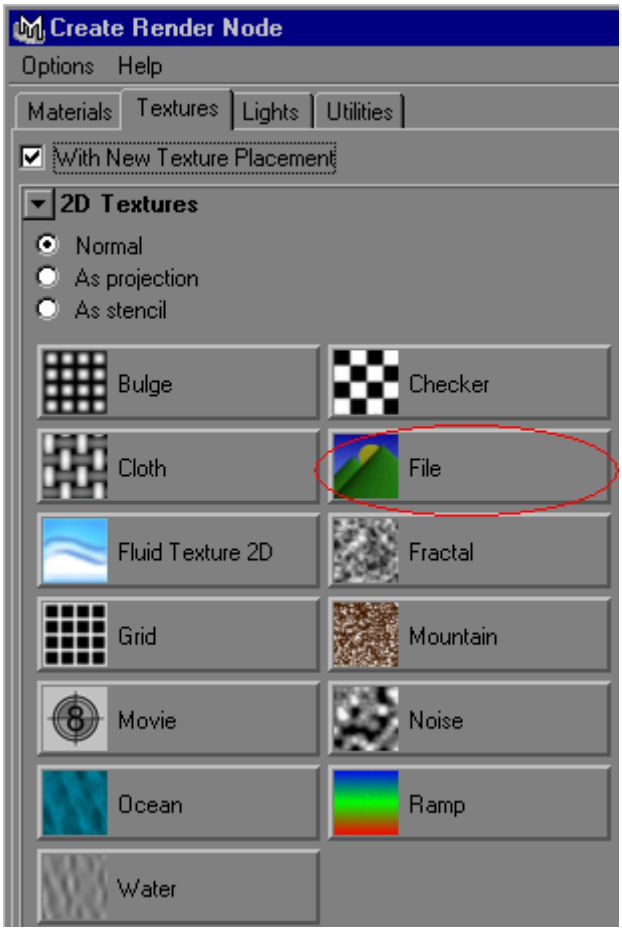


• You can also make shelves for those:
setAttr -type "string" s_ shadername.cryTemplate "TempleBumpDiffuse";
setAttr -type "string" s_ shadername.cryPhysicsMaterial "mat_concrete1";

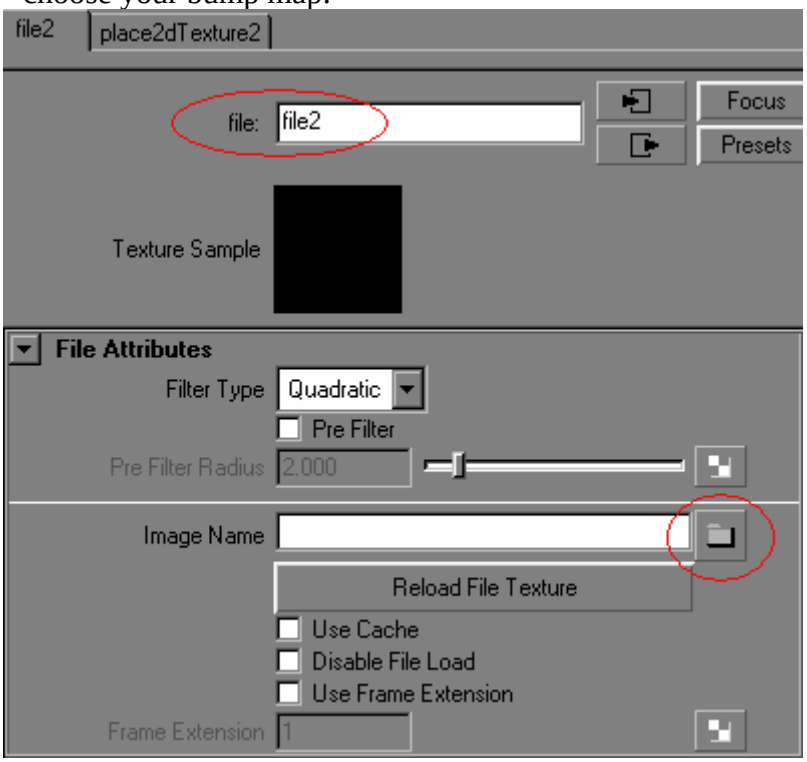
8. Bump Mapping

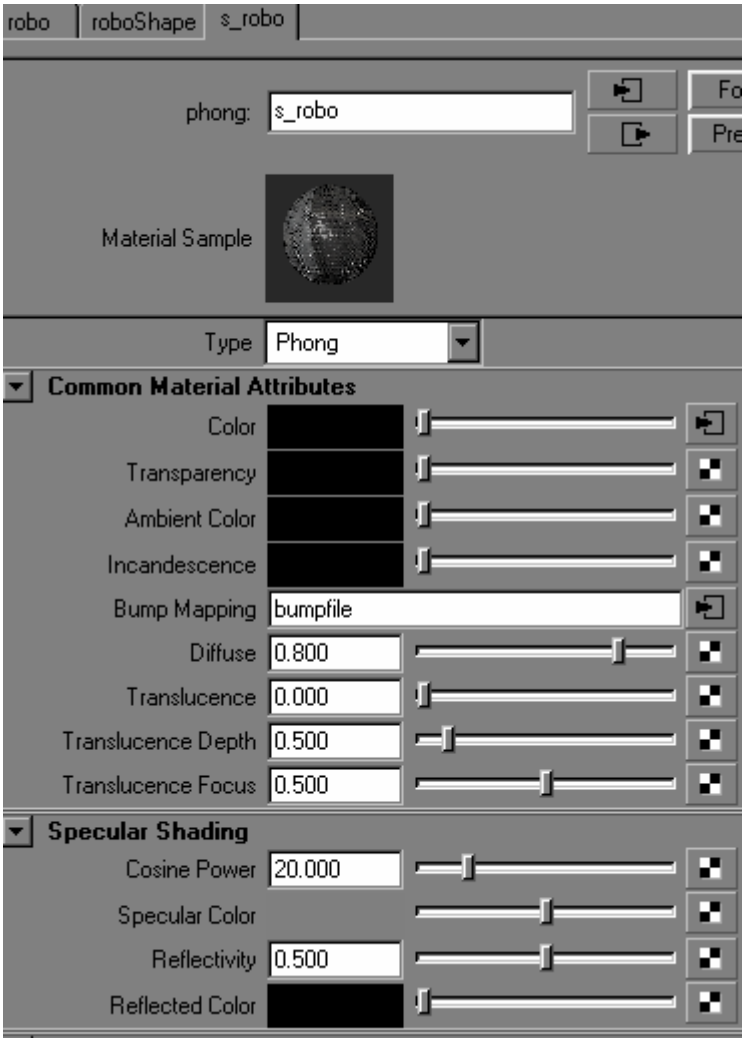
• Give your object a bump map from a File



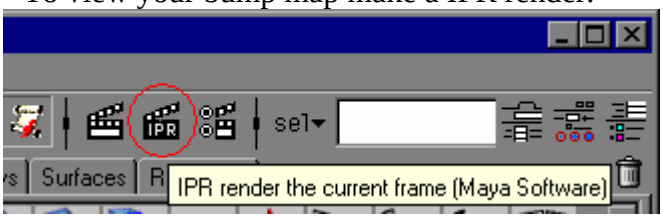

Create Render Node
Options
Help
Materials
Textures
Lights
Utilities
With New Texture Placement
2D Textures
Normal
As projection
As stencil
Bulge
Checker
Cloth
File
Fluid Texture 2D
Fractal
Grid
Mountain
Movie
Noise
Ocean
Ramp
Water

• You don’t have to rename the bump map, it will work as it is.
• choose your bump map:





• To view your bump map make a IPR render.

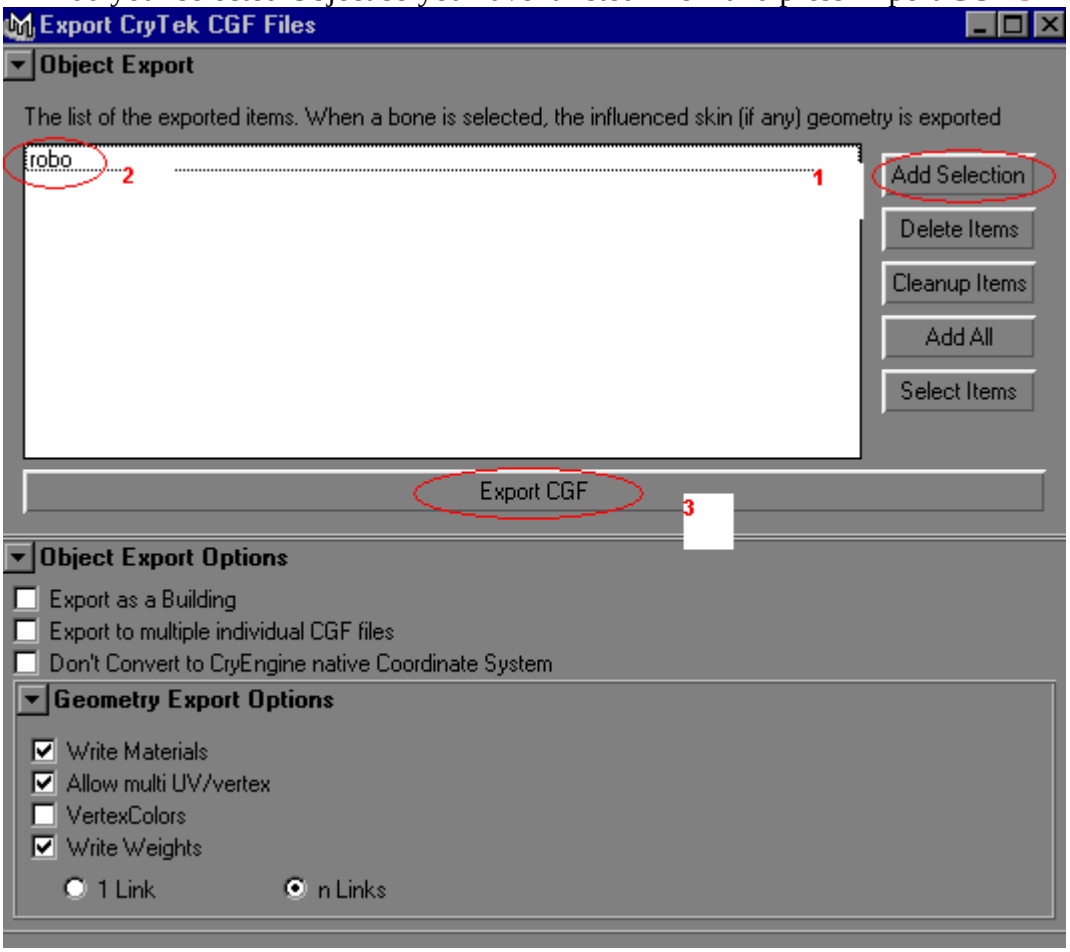


9. Export

• Make sure your Object has the correct scale

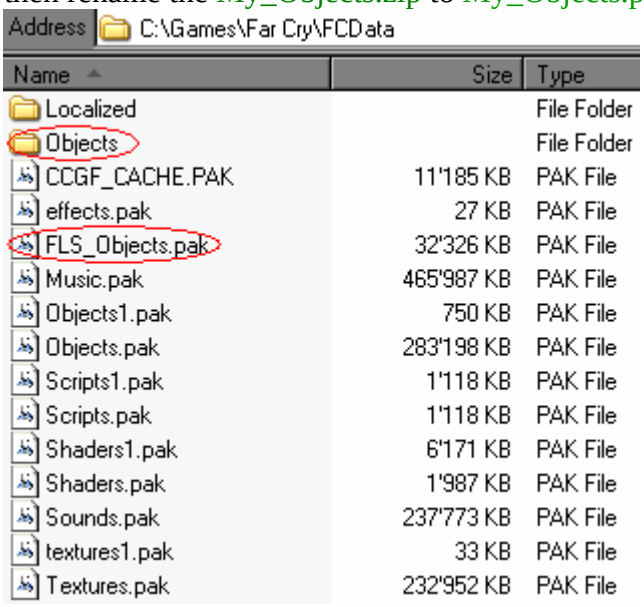
• Now the Object is ready for export, press the Geometry Export UI

• **1** Add your selected Object so you have it listed like **2** and press Export CGF **3**

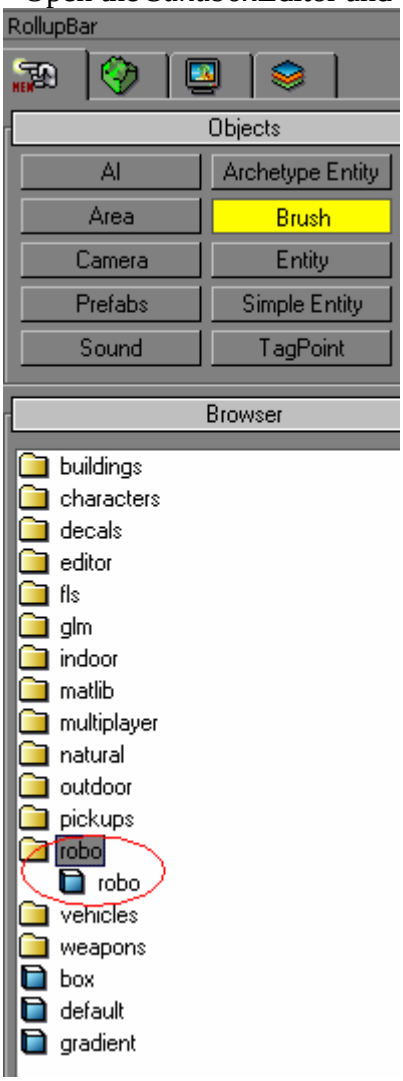


10. *Sandbox*

• Create a new Folder named “Objects“ in your “FCData“ Folder and copy the created *.cgf and your Texture in this Folder.
• Create a new zip-Archive named “My_Objects“ and copy the Objects Folder into it, then rename the My_Objects.zip to My_Objects.pak



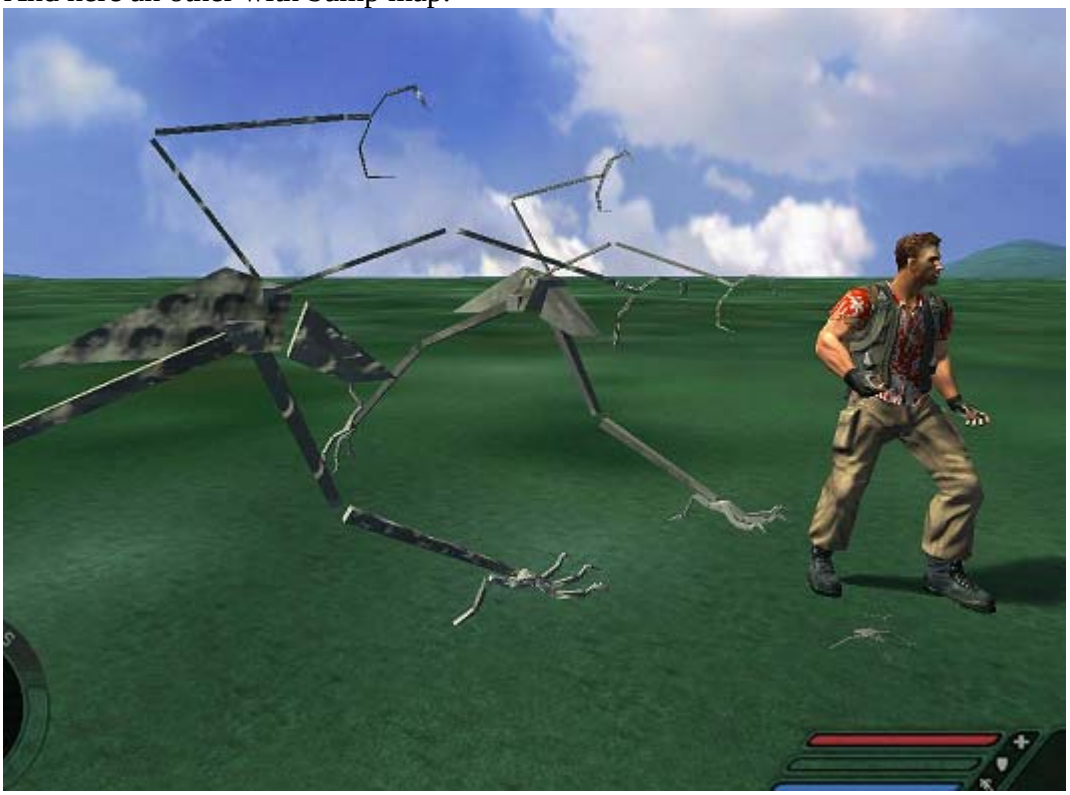
• Open the *Sandbox*Editor and check the “Brushes/ Simple Entityes“ for your new Object



• If your object is very small check out chapter ”4. Far Clip Plane”.

Here we go... rescaled and pivot placed
run jack run^^

And here an other with bump map.



written by SpiderdaN