Welcome to Acid Fluxx Bass' Guide To Modding Star Trek Legacy!

The general intentions of this is to introduce new modders and to explain as simply as easily as possible the ways of modding!
I had been interesting in modding a while before actually starting. I found the availability of modding tutorials very limited and the information given can be very vague. With this tutorial, I intend to make it easy of new modders come into modding.
I had started modding in March with the TNG Relic Refit of the NX Class. As my first released mod, it was a simple retexture, however, upon starting to mod, my releases attracted attention and almost instantly i was drafted into New Gen. Since I have decided to go it alone and contribute as 'acidfluxxbass'. I have, since, learnt new techniques such as odf-editing, retexturing and more recently modelling.

This second version of the Guide to modding shall cover refitting and retexturing!

Retexturing is a popular way to create a wide range of ships spanning from section 31 ships, to assimilated vessels! You can also throw in the novelty ship from time-to-time as I have my Mcdonalds cargo ship!

Before you even start retexturing. You need to do a couple of things.
~ Firstly, you need Adobe Photoshop. That's the program the tutorials based around.
~ Secondly, you need the DDS plugin. Found at:
http://developer.nvidia.com/object/photoshop_dds_plugins.html
~Thirdly, go to the Star trek legacy directory and obtain the files for your ship.
For the tutorial I am going to use an Ambassador class. I shall, as result, select:
- All the DDS files for the ambassador. (F_Ambassador_* and all the glow spec and bump files, the HI_F_Ambassador file which is the logo and the F_Ambassador_logo files)
- The ODF File for the ship (F_Ambassador)
- The M3D File (F_Ambassador)
~Lastly, you need a hex editor. I use Wind32 which allows you to alter the digits with in an m3d!
I got mine from: http://www.chmaas.handshake.de/delphi/freeware/xvi32/xvi32.htm

NOTE: Always backup what you are doing. Say you've done something wrong - you'll want something to refer back-to in order to restart.

As it stands. You have all the files for the Ambassador (or your preferred ship). To create a separate ship in the game with separate textures, you need to rename your textures.
You need to change the name of all your DDS files.

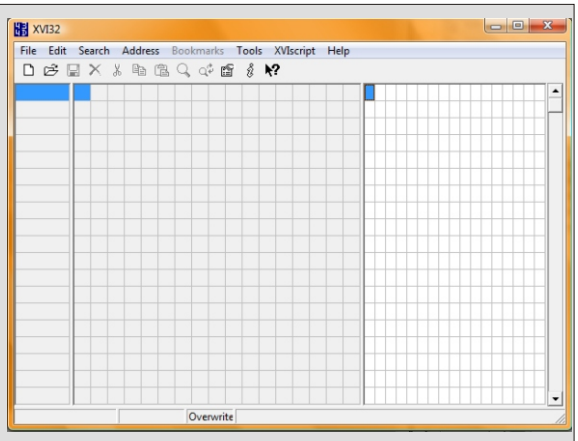
Take note at this part. Your new texture names MUST be the same amount as digits as the old ones. For example: F_Ambassador_A_spec => F_Ambassardo1_A_spec
All files are to be done this way. This is because the M3d file needs to be changed using the hex editor. The file names also need to be the same length as you cant add digits to a name in the hex editor.

The M3D and the ODF need to the same so they should turn to F_Ambassado1.odf and F_Ambassado1.m3d.

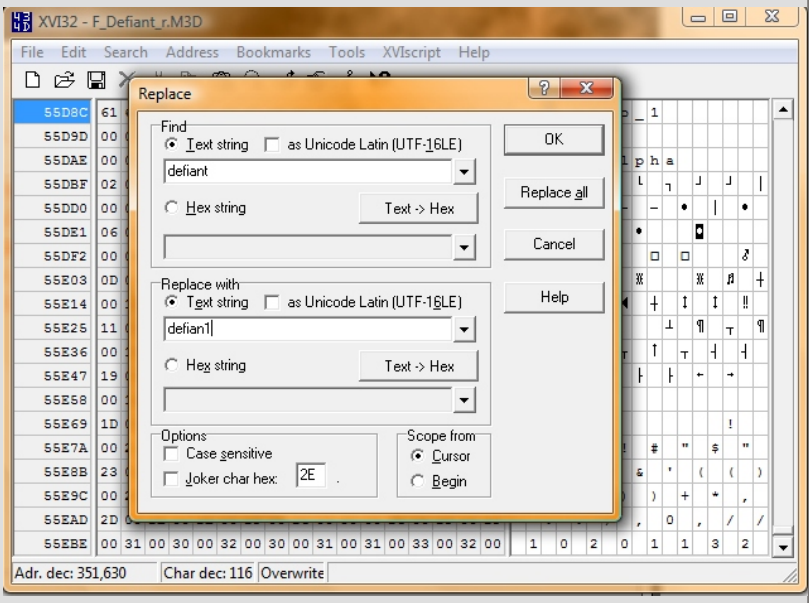
The HI_F_Ambassador becomes HI_F_Ambassado1

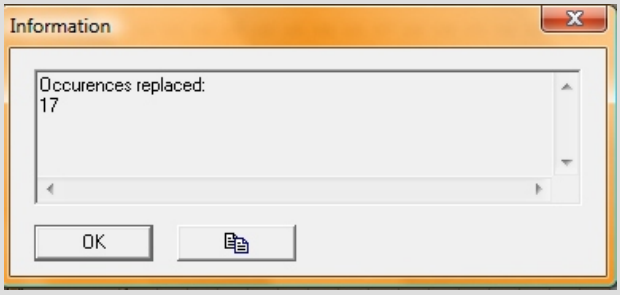
Hex Editing

A tricky section so make sure you pay attention.
Open XVI32 (one of the required programs from page 1).



Go to File, Open and open your M3D. You see two sides of the program that look similar. We are interested on the right side.
Go to Find and replace [Ctrl+R]. Now, provided you used the Ambassador example earlier, you should type in the 'find' section 'Ambassador' or your original ship name. Then in the replace section you type in 'Ambassado1' or the name you used for your ship. Then select replace all and so it isn't case sensitive.
Once you press 'ok', the files will be replaced. A Message saying how ever Many occurrences changed.



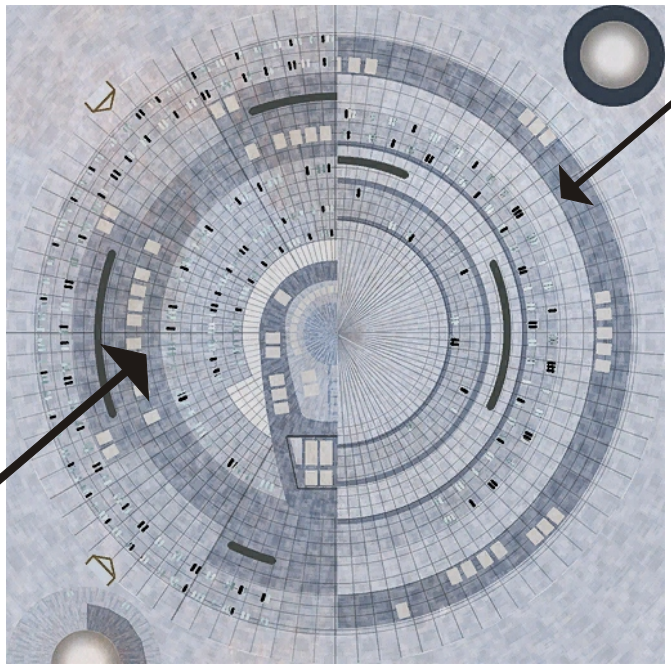


This is all that's required. What you have just done is change the the coding in the M3d to link with your new textures we are about to do. Before we do get to the fun part we still need to change the ODF. In the last tutorial I brought you up to speed on odf editing. All that needs changing is the tooltip and ship name. Change unit name to have 'Refit' or whatever. Add _refit to the tooltip.

We are now ready to get texturing! Continued on the following page.

Possibly one of the best bits of Legacy. Retexturing your ship. However, for someone new to it theres a couple of things people need to remember. DDS files are normally reflected. In F_**_A, you get half of he top side of the saucer and the bottom half. They are both reflected to form complete hulls. F_**_B is normally refers to the engineering hull. F_**_C normally refers to the nacelles or warp drives.

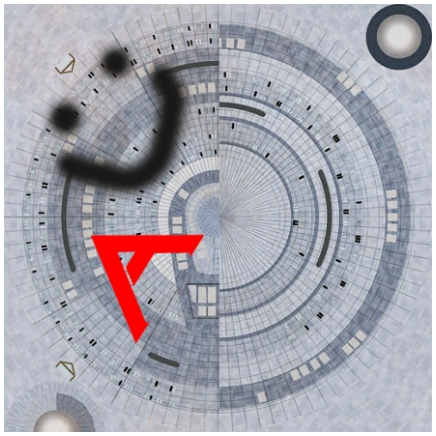
Bottom side of the hull



Top side of the hull

This is the F_Ambassador_A file.

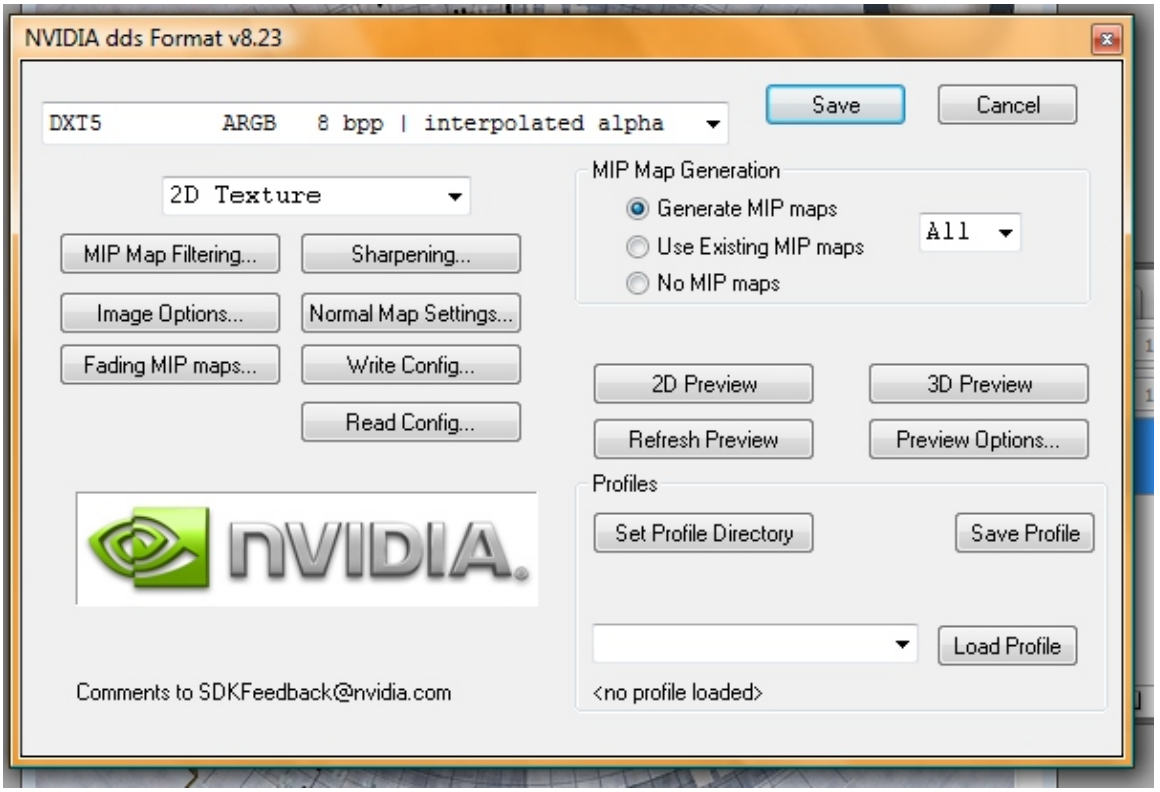
When I draw over the hull...



You can see how it looks ingame.

Obviously you wont be doing smiley faces but it shows how its mirrored across the hull. Have a play and get to understand it.

Dealing with DDS's in Photoshop can be confusing but there are just a couple of things to remember. When saving set the settings to be as in the Screenshot.
DXT5 ARGB 8 bpp | interpolated alpha.
Generate MIP Maps.
2D Texture.



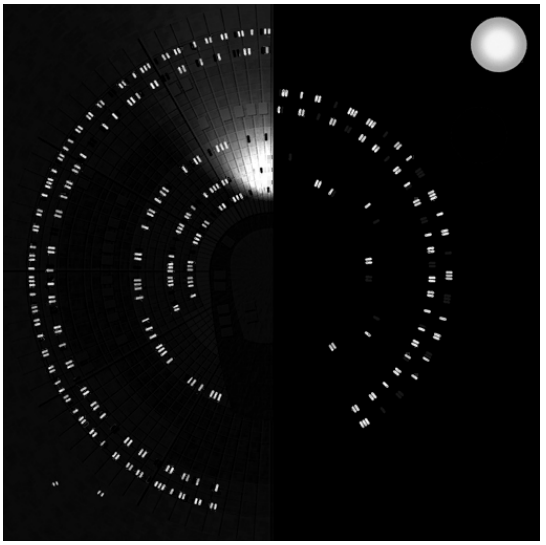
Settings otherwise cause me problems!

For Legacy, there are normally certain layers to a texture. The normal layer, spec, bump, glow and with some ships the diff.
Specs: The layer which adds shine to your ship! Can make the ship look awesome at the right angle
Bump: Adds shading to the layer despite not being in the model.
Glow: The glows from deflectors, bussards and so on
Diff: Pretty much the same as the normal layer..

When you have your main layer to your texture Do this to create specs, bumps and glow.
Spec: Desaturate and set contrast to +50.
Bump: Go to Filters > NVIDIA Tools > Normal Map Filter.
- i set height generation at 3x3
- add height to normal map
- Scale from 2-7
Glow: Freehand mask with a feather of around 20 and select the bussards etc. Then slect inverse and set brightness to minimum and contrast to maximum on legend so your left with a glow. To beef up the glow and spread it, alter gaussian blur.

Alpha channels can be tricky to grasp. On your textures, you will want windows to show in the dark. This is how to do it.

- When you create a new alpha channel, everything is black.
- Change the cannel to RGB, use a free-hand or polygonal mask and select what you want
- With your selection, change back to the alpha channel and set brightness to maximum.
- Use this technique with any lights, windows, warp bussards and so on.



Logo's are undoubtedly difficult to do. Your're literally working in the dark (no pun intended). Say for the Ambassador, I shall open the file F_Ambassador_logo_1 in Photoshop it.

To change it, take this course of action.

- Switch to the alpha channel and you will see some white writing.

To change the name of the ship but to keep roughly the same positions, use a square mask around the USS *** bit and make it black but keep the mask there. Now write inside it with your own ship name making sure it stays inside the mask.

Do the same for the NCC-*

To arch your text as you have seen on other ships, use the warped text tool.

That's a basic 101 on logo editing and alpha's.

Texturing Tips:
- Don't have resolution below 512x512. As result i can become pixilated and look poor.
- When making Borg Ships. Use parts of the stock textures and put them on you ship to make it look assimilated.
- Section 31 Ships are often black and use the color red for warp and in some cases windows.

Photoshop Tips
- If you don't have a steady hand, use the polygonal mask with minimum feather. You can select parts of the file with ease!
- Take advantage of the Contrast. If you set it to minimum, you can make your selected area grey! This allows you to start on this section again.
- Never forget alpha's they are important for realistic lighting.

When releasing a retextured refit, make sure everything's right. All the filenames etc. There should be the M3d, odf and basic dds files.

If you've edited logo's and names, remember to add it to the odf.

Make sure none of you files aren't renamed as they could overwrite something

Retexturing includes allot of trial and error and much patience.

Apart from that, that's retexturing! Hope I haven't forgotten anything.

Hope this proves helpful and I look forward to questions on modding and feedback to the tutorials!

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Volume 3 could be anything yet. I don't really have an order which I'm releasing these it :D
Until Next Time

Acid Fluxx Bass