3ds Max to Multigen Creator to TRK

This tutorial is a basic walk-through of one method of taking an object i.e. a track from 3ds Max and converting it into a form that can be loaded into Viper Racing as a track.

Programs required:

-The VR trackmaking-tools pack (specifically: Mkworld.exe, Mktable.exe, Mkres.exe - for VR)

-3ds Max (any version)

-Polytrans-for-Max plugin ("DCC pack")
(Polytrans must be installed for its plugin to work in 3ds Max)

-Multigen Creator v. 3.0 or higher
(it's "Openflight API", should come included and must be installed, as well)

Steps:

1. Exporting from 3ds Max
2. Processing with Multigen Creator and exporting
3. Processing with Mkworld
4. Processing with Mkres into a track file

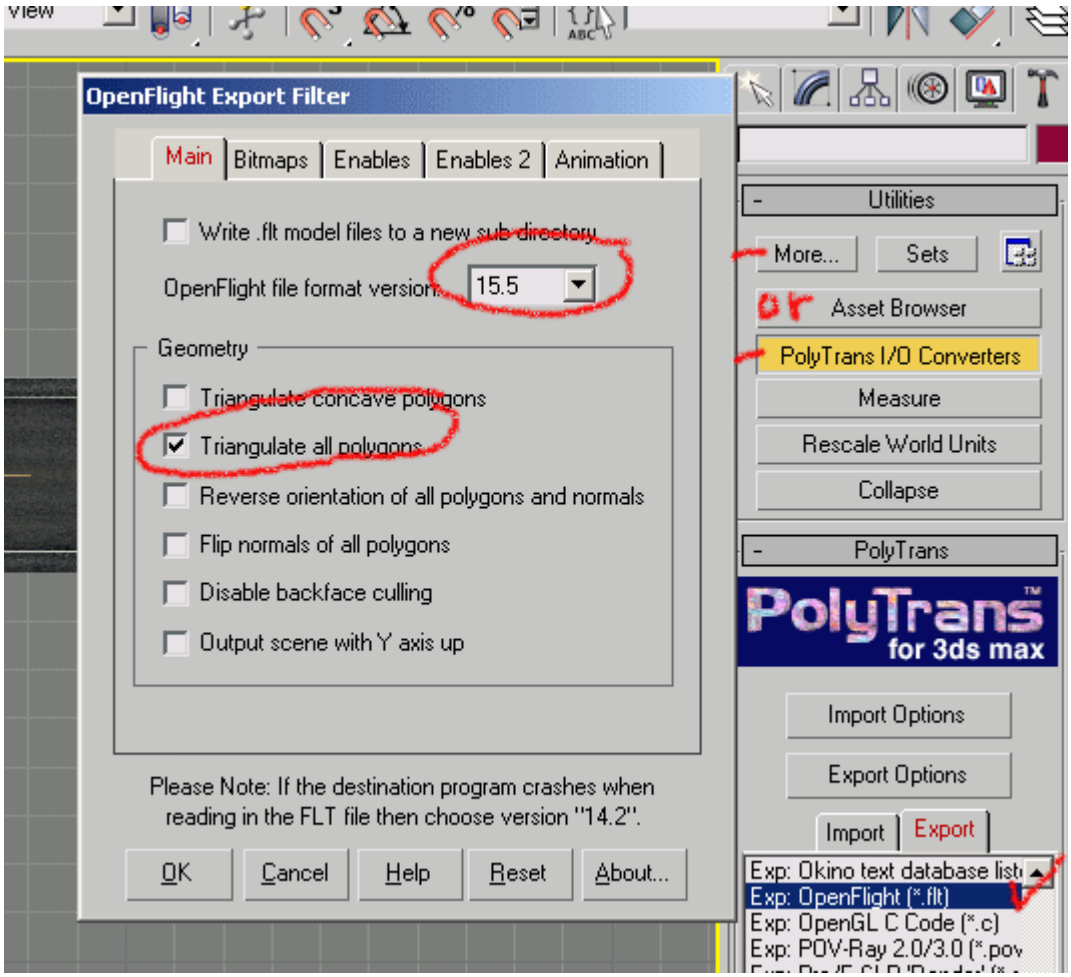
Side note:

Because creating a path spline is a separate process, and not going to be covered here, I suggest creating a large, flat, horizontal "plane" as your object. We'll be using a path spline from another track and it will be impossible to predict where your car will be placed in the game, so making a simple "plane" with a large surface area will increase the chance that you'll be set somewhere on it, instead of floating through the air somewhere in never-never land. But even if that does happen, you'll know that it worked if you're able to load it from the game.

1. Exporting from 3ds Max

Once you have your object(track, "plane", etc.) made, check that units are in inches (Customize/Units Setup...) and then click on the Utilities tab (picture of a hammer) located at the top of the side menu on the right-hand side of the screen.

If you haven't yet assigned "Polytrans I/O Converters" plugin to one of the buttons under "Utilities", then click on the "More..." button and select them from the list - "Polytrans I/O Converters".



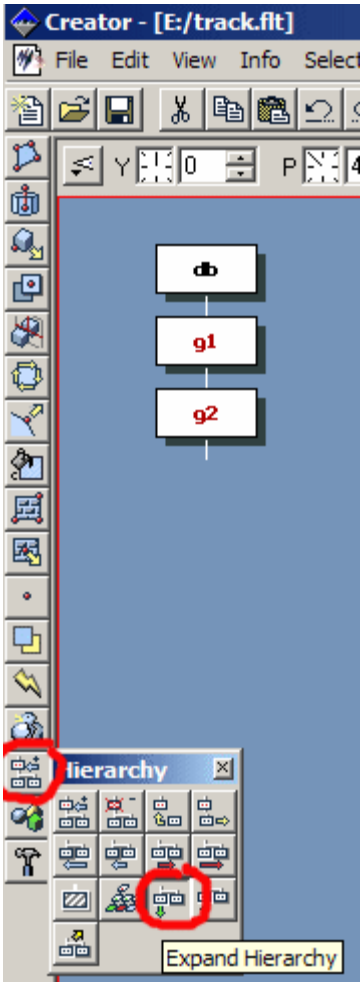
Once selected, you should see a list of formats to export to. There is an "Import" and "Export" tab, make sure the "Export" tab is selected. Then select "Exp: OpenFlight (*.flt)" from the list. A popup will ask you were to save the file. Save it to wherever you prefer, and note the location for later reference. Once you click "OK", another popup gives some options. 2 things here are required. Under the "main" tab of the popup, set "Openflight file format version:" to 15.5 (important!), and put a check in the "Triangulate all polygons" checkbox. Hit the "OK" button and you're done with that part! You can close out 3ds Max now.

2. Processing with Multigen Creator and exporting

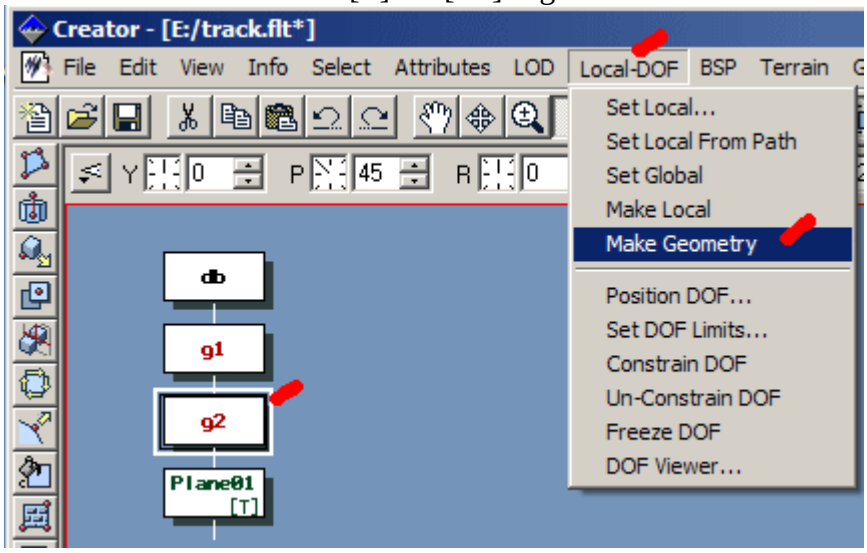
Fire up MC (Multigen Creator) and open the (name).flt file you just exported from 3ds Max. You should see something resembling what you exported from 3ds Max on the screen. Now press the "S" key *or* under the menu bar select View/Hierarchy. This will switch your view to the "hierarchy view" where you see some labeled boxes ("nodes") at different levels.

At the top is 'db', below that is 'g1', and below that is 'g2'. Boxes with red names are at the "group level". Under those is a box or boxes with names in green letters, which correspond to the name(s) you gave your object(s) in 3ds Max.

note: You may not see these boxes unless you "Expand Hierarchy" by either clicking the center mouse button once, or selecting "expand hierarchy" from the panel of buttons on the left-hand edge of the window:



The boxes with green names (below the ones with red names) are at the "object level" and the names will have a '[T]' or '[TS]' tag next to them.



We need to get rid of those tags by selecting the group-level box directly above the object level box(es) (with the mouse), and then selecting "Local DOF/Make Geometry" from the menu bar. A popup will ask "Are you sure you want to convert the selected items to pure geometry?..." Click "OK", and now the '[T]', etc. tags will have disappeared.

Now time to export! Select "Export" from the "File" menu and browse to your preferred folder. Before you click "Save", be sure to select "OpenFlight version 15.4(*.flt)" from the "Save as type" drop-down list. Only v. 15.4 will work, as 15.5 is not an option in Multigen Creator 3.0. I always save the file as "track"(.flt) because I believe Mkworld requires the name to be track.flt.

Done with that part!

3. Processing with Mkworld

Before using Mkworld.exe, you must have a proper "working folder". In your working folder, you must have: Mkworld.exe, Mktable.exe and a subfolder labeled "Out". If you do not have an “Out” subfolder, Mkworld will fail.

Now take the "track.flt" file that you exported from Multigen Creator and place it into the folder where Mkworld and Mktable reside.

You may use a Dos Box("Command Prompt") to run Mkworld.exe, but an easier method is to make and run a batch file. To do this, I create a blank text file, open it and type in the command: Mkworld track.flt
Now save and close, and rename the extension from .txt to .bat . Now if you double-click

the file it will automatically send the command to Mkworld without your having to use a dos box.

After Mkworld has finished processing, check the "Out" folder. There should now be 6 files there:
track.bpp
track.bsp
track.grf
track.obt
track.sol
track.txt

If not, there is a problem with your track.flt file and Mkworld will balk about it. You can see what it says by running Mkworld again, using the Dos Box and watching for the errors it reports. This may shed a clue on what may be the problem.

Done with that.

4. Processing with Mkres into a track file

At this point you should also have a folder where the track will be built. I put my "track" folder in the same directory where Mkworld is, but it can be placed anywhere.

We need to borrow some files from another track, so Rescrack another track and grab the following 13 files and put them into your track folder:
aidef.ccs
dundas.ccs -(the name can be whatever track you took it from)
Trackmap.stp
default.ili
rdefault.ili
sky1.tex
sky2.tex
sky3.tex
sky4.tex
camera.tab
track.ild
track.obt
reslist.txt -(you may copy this or just create your own)

Now go back to the "Out" folder and copy ONLY the following 4 files from the "Out" folder to your "track" folder:
track.bpp
track.bsp
track.grf
track.sol

(We want to keep the track.obt file from the track you just Rescracked, so **don't** take the one from the "Out" folder.)

One more thing before you run Mkres.exe - edit the list inside reslist.txt. Reslist.txt must list *all* files that are to be packed into the track file. Each item must be on separate line and there can be no spaces after or before an item - or anywhere in the list.

Example:

aidef.ccs
dundas.ccs
track.bsp
track.grf
track.obt
track.sol
track.bpp
Trackmap.stp
default.ili
rdefault.ili
sky1.tex
sky2.tex
sky3.tex
sky4.tex
track.ild
camera.tab

If you gave your object a texture, you'll need to convert the texture format into .tex file format and include it both in the "track" folder and in the reslist.txt list for it to show up in the game. Instructions and tools for making .tex files are located on Fpwolf's website.

Now it's time to run Mkres.exe. If you like, you can create another batch file for this as we did for Mkworld. The command is: Mkres (trackname).trk @reslist.txt

Mkres will create a track file. Rename the extension to .tra and place the file into the Viper Racing/Data folder so that Fpwolf's track-loader program "TrackMan" can successfully swap it with an original track. After loading the track using TrackMan, run the game, select the corresponding track (the name will show up but the picture will still be the same as the original track) and you should now be able to load your track. If your object surface is large enough or is under the same place where the path lies, your car will be set onto the surface and you can drive around on it. If not, you can try loading one of the plane-car add-ons and fly around to look for your track!

That’s all for this tutorial. The next step will be to make a path and checkpoints so that the car starts where you want it to… Charles >>> cnummelin@yahoo.com