Placing your vehicle in JO/DFX
Written by DR.EVIL~TAG
Credits: Loa, Members of Mod Depot

FILE Located at http://www.txpgone3d.com/tutorial/buggy/Dbuggy9.zip

This tutorial will be based on a vehicle being already made and your just wanting to get it into the game and drive it. So in 3ds Max were going to confirm that you have all the attachments points and other pertinent boxes needed to make the vehicle animated and drivable in the game.

Tools Used:

1: 3DS Max 7
2: Super OED
3: Pff extractor
4: Items.def decrypter/encrypter.

The model for this tutorial was made by GamesterArt for the use in Unreal UT 2004.

Step 1:

Open the vehicle your trying to get into the game and ensure you have the following mount points for the wheels. For this vehicle it only has 4 wheels so were going to attach them to the body of the car using the following naming convention. Being that the body of the car it self it labelled as 01 Car .

Front left tire = 02 Flt , _02 Centre , ~01
Front right tire = 03 Frt , _03 Centre , ~01a
Rear left tire = 04 Rlt , _04 Centre , ~01b
Rear right tire = 05 Rrt, _05 Centre , ~01c

OK what this all mean now huh.

The 1st set of numbers you see (02 Flt, 03Frt, 04Rlt & 05Rrt) are the labels placed on the tires themselfs.

The 2nd set of numbers you see (_02 Centre, _03 Centre, _04 Centre & _05 Centre) are the centre points on the tires, picture them as the axles of a car so we will make little cube boxes and place then on the inside centre of the tire.

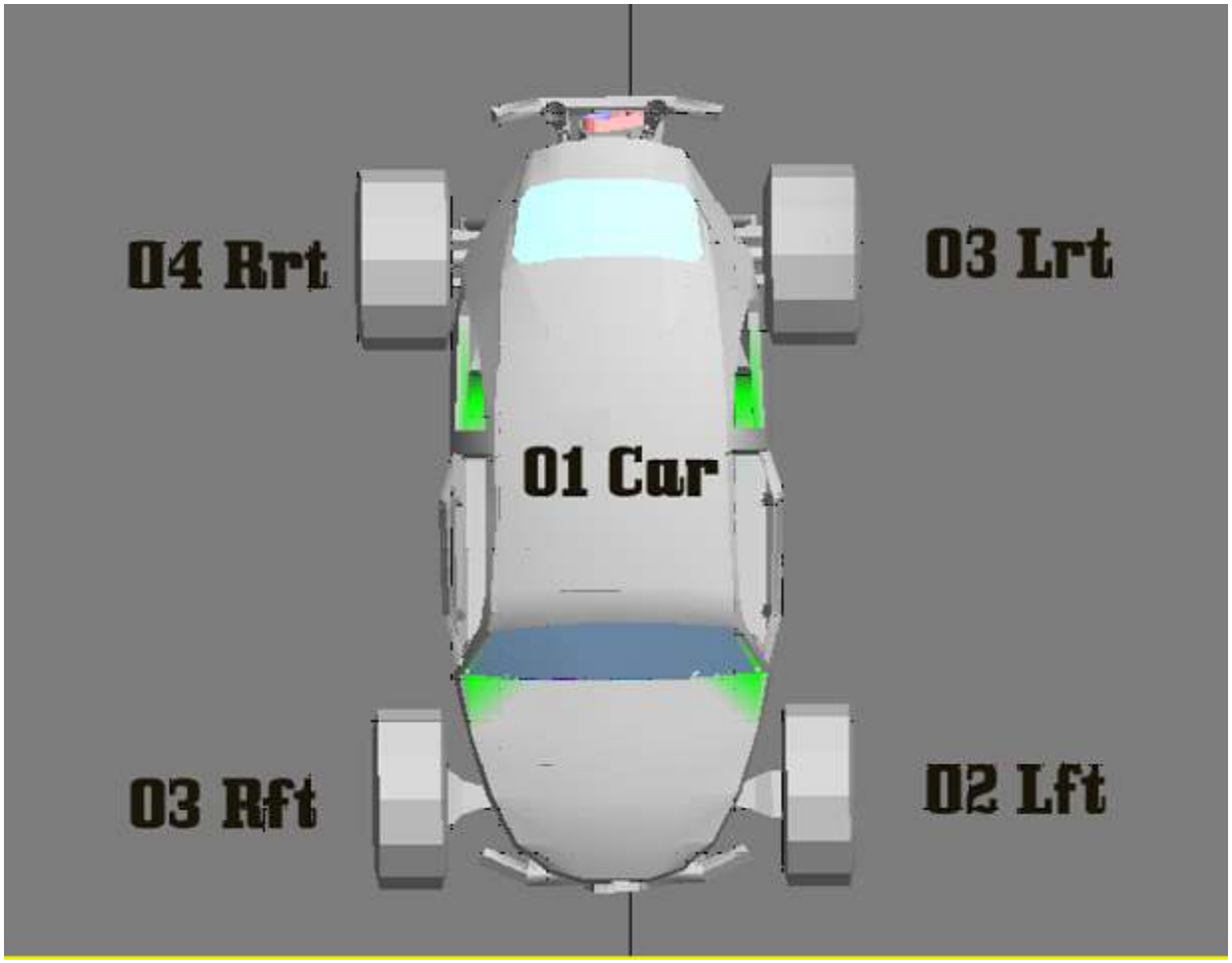
The 3rd set of numbers you see (~01, ~01a, ~01b & ~01c) are the attatchment points for the axles to connect to the actual body of the car which we labelled 01 Car.

So you should have for example Tire >Box >Box > Car Body <Box <Box <Tire. So now take a

look at the few screen shots below and you will then understand all the above to a certain point I hope.

Screen shot number one:

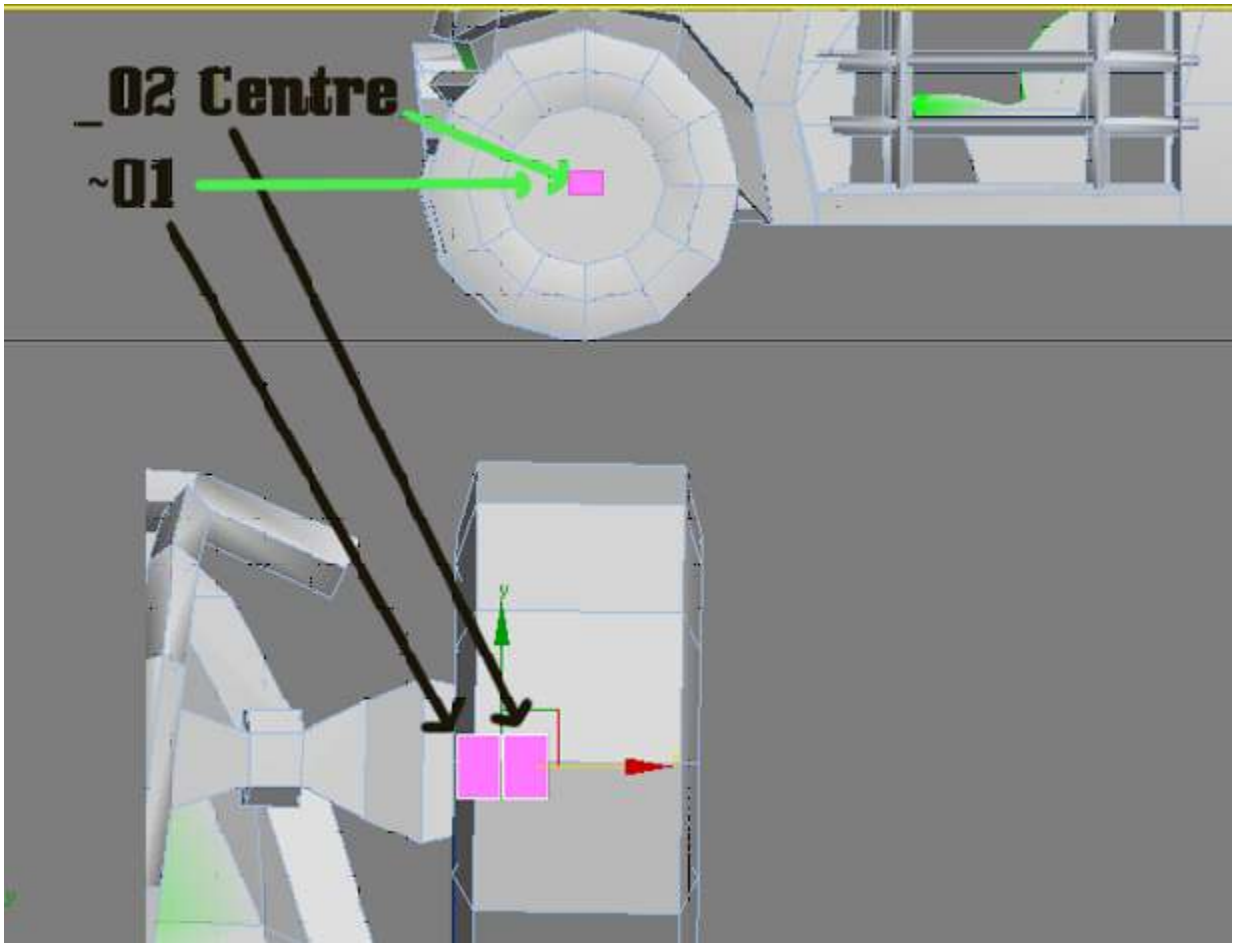
Labelling the tires correctly. TOP view.



Placing and labelling the centre points and attachement points of the tires to the care.

Left Front side:

Ok this will be the same lay out for the rest of the tires. Using the labelling I mentioned up above. As you can see in the top part of the image you can only see the one box but there really is two of them one is right behind the other. If you take a look in the bottom part of the image you can see both and how there labelled. You can play with the placement of the boxes once you test it in the game. Try and keep them centre or your tire will have a bad speed woble in it.



Step 2:

Here now we will add a mount point to the car for the purpose of driving the car. This point you can choose a few different options of how you want to mount. Meaning that there is mount names for cars, tanks, bikes, choppers and etc etc for ours we'll be using a mount point designated for a dune buggy. Here is a list of possible mount points for vehicles taken from with in the Mod Depot forums.

This is a list of the Sit\Control point animations:
anim_sit "LBirdSP.bad"
anim_sit_2 "BugSit.bad"
anim_sit_3 "Z3Sit.bad"
anim_sit_4 "LBirdSCP.bad"
anim_sit_5 "LBirdSit.bad"
anim_sit_6 "BugSitP.bad"
anim_sit_7 "Z3SitR.bad"
anim_sit_8 "Z3SitF.bad"

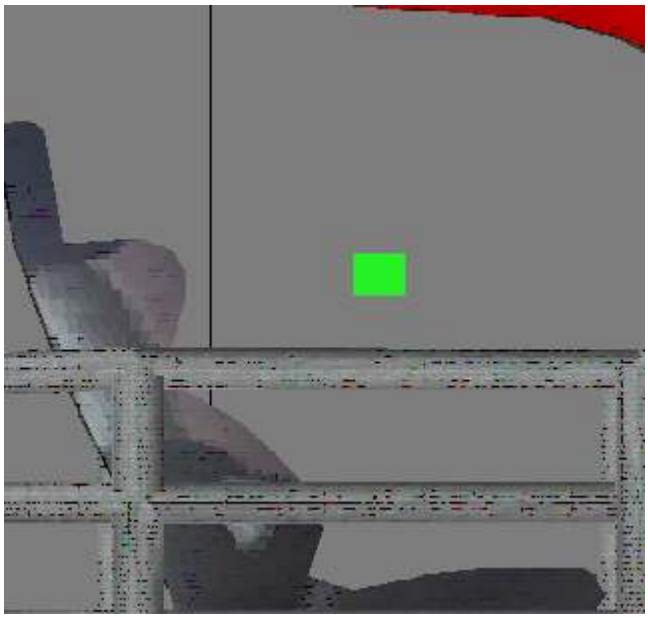
anim_sit_9 "Z3SitL.bad"
anim_sit_10 "TruDSi.bad"
anim_sit_11 "LCacDr.bad"
anim_sit_12 "HomSitPa.bad"
anim_sit_13 "HomSDri.bad"
anim_sit_14 "datvDr.bad"
anim_sit_15 "SIT_015.bad"
anim_sit_16 "SIT_016.bad"
anim_sit_17 "SIT_017.bad"
anim_sit_18 "SIT_018.bad"
anim_sit_19 "SIT_019.bad"
anim_sit_20 "SIT_020.bad"
anim_sit_21 "SIT_021.bad"
anim_sit_22 "lcacdr_1.bad"
anim_sit_23 "CycDr23.bad"
anim_sit_24 "CycDr24_A.bad"
anim_sit_24_stop "CycDr24X_A.bad"
anim_sit_24_back "CycDr24BF_A.bad"
anim_sit_24_left "CycDr24L_A.bad"
anim_sit_24_right "CycDr24R_A.bad"
anim_sit_25 "Tnk_Drv.bad"
anim_sit_26 "Idl_stnd.bad"

As you can see there is a good list to choose from. Our naming convention for this part will be along the lines of this UPG01 sitex^^ , ^^ being the end number in one of the above sit points.

An example UPG01 sitex12 would be if you're a passenger. These sit points will be used again later on as control points as well.

So we could add a cube box over the seat in the dune buggy if it had two seats and title it UPG01 sitex2 . Now keep in mind some of those points in the list represent as passenger mount points , prime example would be to look at 12 and 13 where you see DR = driver and PA = passenger.

An Example picture.

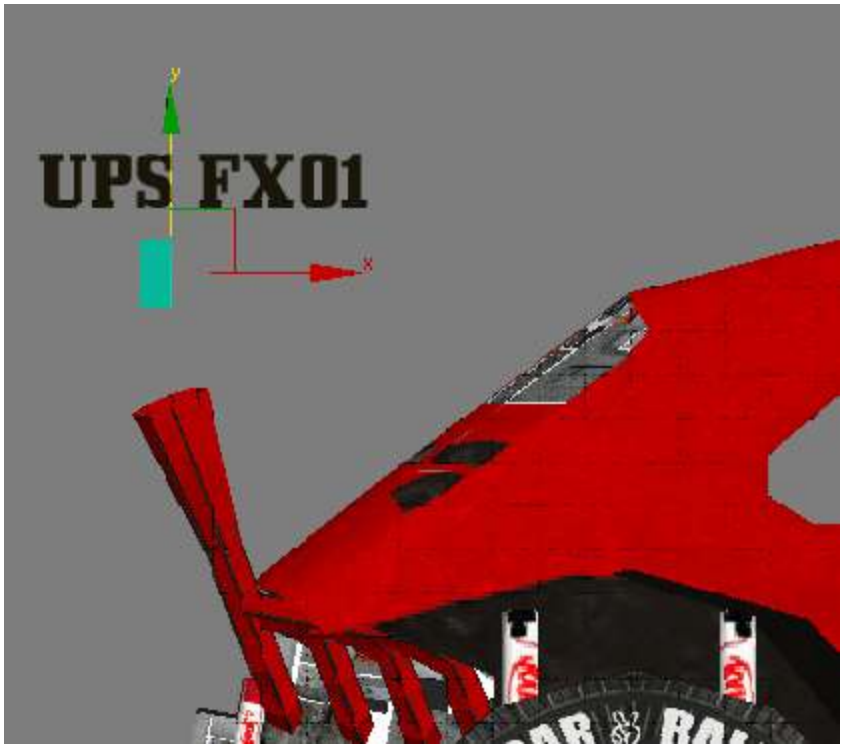


Step 3 :

Because this dune buggy only has the one seat though were just going to add a control point to it. We will put this control behind the steering wheel. We will title this control point UPG01 ctrlx2

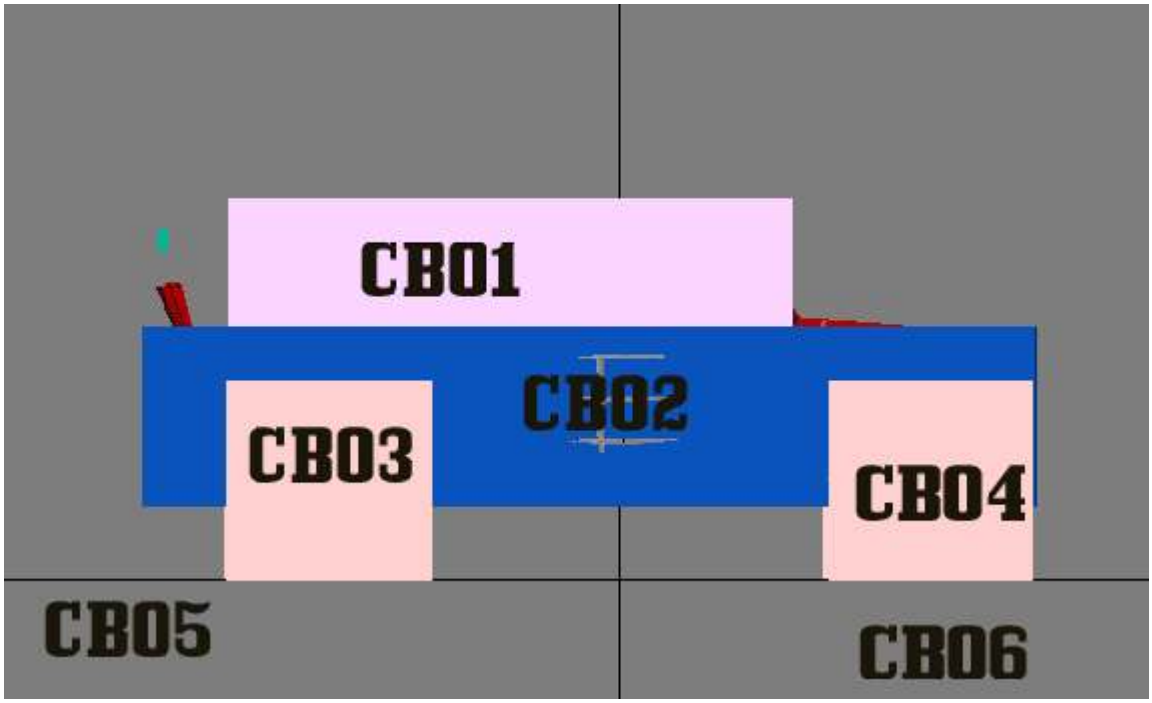
This will now allow the player to attach to the buggy and drive it.

Step 4: We will add some effects to the exhaust , To do this we will make another little box and call it UPS FX01.



Step 5:

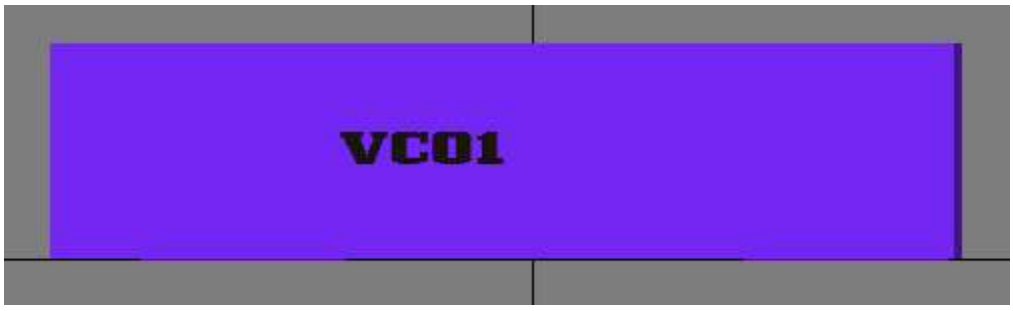
Well this just gave us the basic points to get in and control the car. We will now set up a couple of collision boxes.
I used 6 collision boxes on this buggy. Two on the body of it and one on each tire.



CB01 = Top of the car
CB02 = Middle Body of car
CB03 = Rrear Tire
CB04 = Rfront Tire
CB05 = Lrear Tire
CB06 = Lfront Tire

Step 6:

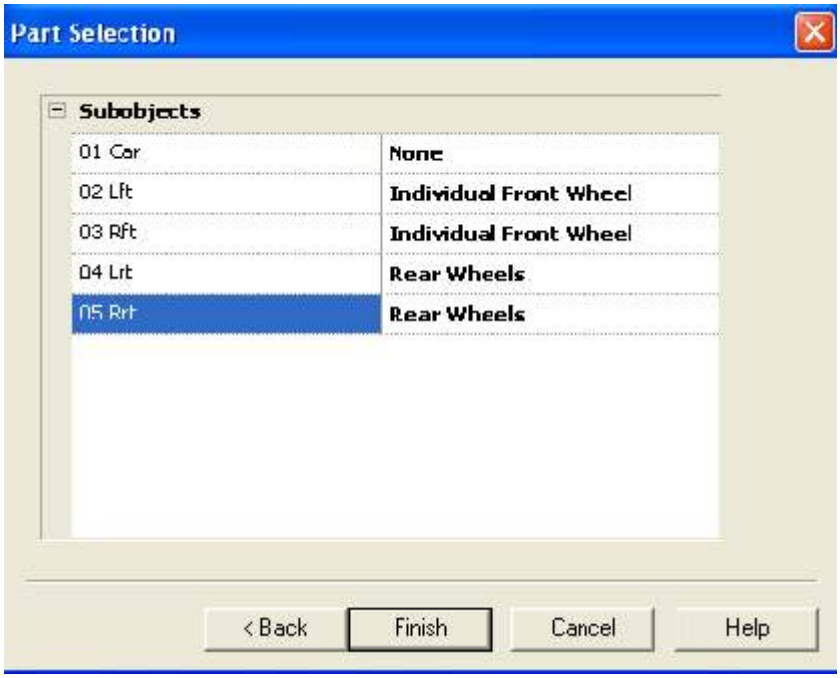
We have to add a vehicle collision box now as well. We will call this box VC01 this will prevent the vehicle from going inside buildings and what not. Place the box over the entire car.



That is pretty much it for the basic car. Now you can go further and set up a full suspension on the car so the tires move up and down with the bumps simulating shock movement etc etc.

Now save the car as a ASE and import it into the Super OED.

Once in the Super OED were going to set up the tires the fast way.
Click on EDIT
Go to PART ANIMATION
Check the box called Enable Part Animation.
Now click on the USE WIZARD
Click NEXT when it pops up
Select Generic Ground Vehicle
Fill it out according to the picture.



Front tires = Front Wheel
Rear tires = Rear Wheel

Export the car now as a 3di file.

Next we will add it to the items.def file using the format below. There is no husk or added on weapons so we do not have to add those lines in the code.

```
begin "Docs Drivable Buggy"
  id 109859
  type vehicle
  graphic Dbuggy9

  attrib: AIData noscar neutral PlayerControl  forceasset DynamicShadow
  shadow  shadow1.tga   3.5  5.4  0.0  0.0
  hp 3000
  armor 10 10
  damage_reduc_pp 0.15  0.30
  criticalhp 750
  criticaldrain 25
  score 50
  radarsig 500
  ai_function cveh
  render_function cveh
  move_function cveh
    turn_rate 65
          turn_rate2 41
    acceleration 15
    deceleration 70
    slip_speed 0
    player_speed 94
    slip_slope    50
    max_slope   60
    spring                  1
    spring_comp 35
    shock                   1
    mass                    3
    minai                   1
    physics     1
    flip            30
   torque          9
          particlefx    Effect_whiteExhaust FX00
          particlefxw2 Effect_DirtWake FX01 FX_DirtWake_SN
          particlefxs Effect_DirtWakeS FX01 FX_DirtWakeS_SN

  default_aip d_buggy
  unit_type 1
  particledeath Effect_Fuelxp3
  particleh2odeath Effect_H2OVeExp
  particlefinale Effect_VehDrtPuftrk
  particleother Effect_SmkNStemNP
  sound_profile SP_DuneBuggy
end
```