

MIND THIS BEFORE YOU BEGIN

- If you are looking for a 5 min thing to get your car in your nuvi: **this guide is not for you.**
- If you have never digitally edited an image: **maybe this guide is not for you.**
- If you think that a 3D model editor tool is for movie artists only: **maybe this guide is not for you.**
- Although this is not a click-by-click guide it has all the steps needed to create a vehicle like the ones you can see at the site, so you'll have to learn a little about some of the tools to follow all the steps.
- I haven't tried other tools than the ones used in this guide or something other than a Window PC, but that doesn't mean that you can't get the same result with other tools and/or other type of computer.

IF YOU ARE STILL HERE LET'S START GETTING THE TOOLS

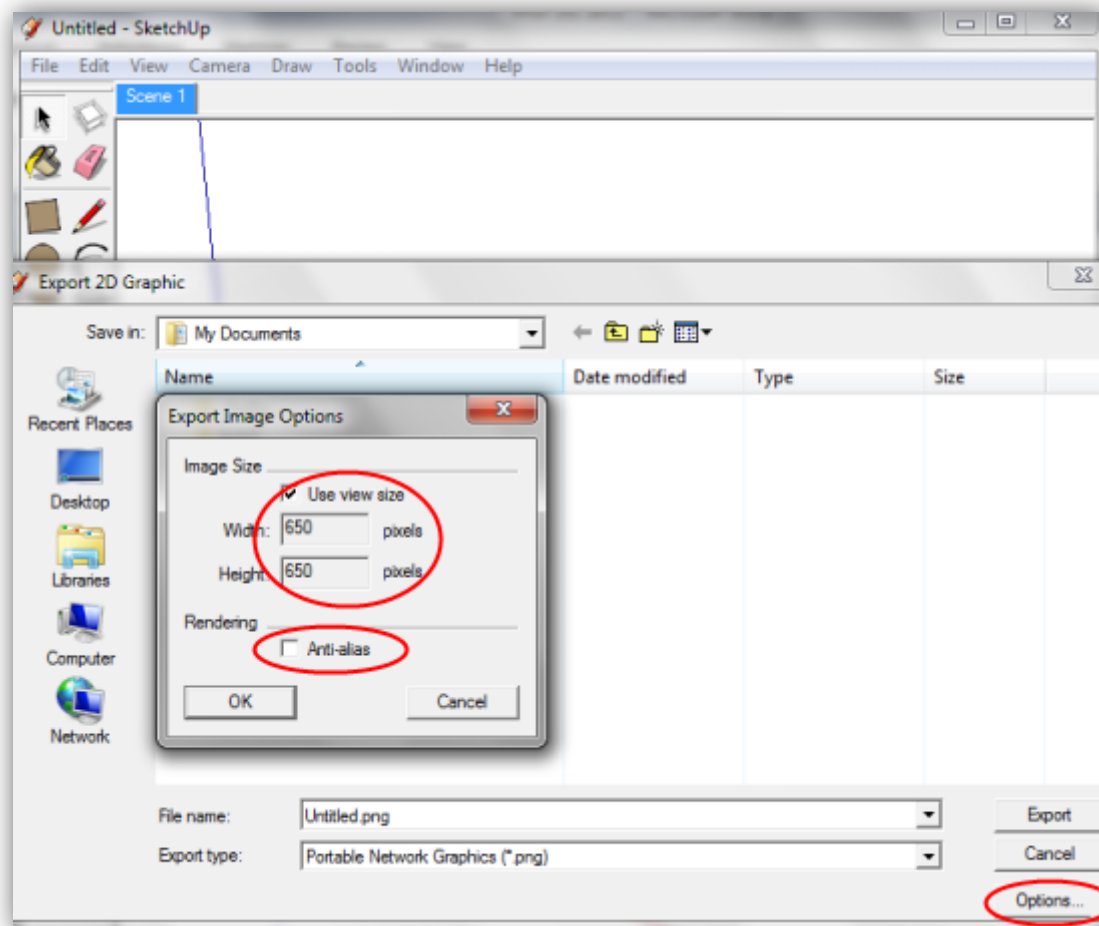
- **Google Sketchup** (sketchup.google.com): a 3D modeling tool easy to use and free. If you have a minute watch the first tutorial videos to get around the tool.
- **ImageMagick** (www.imagemagick.org): one of the most flexible image editing tools you can find, free also. You won't have to learn anything from this tool since we only use it to perform some image operations from a script.
- **Paint.Net** (www.getpaint.net): another image editing tool, this time easy to use and again free. You'll have to get your hands on this one, but I think with the instructions provided you'll be fine.
- **VfGn scripts**: in the VfGnScripts.zip file you have the following scripts:
 - Export 2D 360x10 to PNG.rb: automated images exports for Google Sketchup.
 - Export 3D 360x10 to PNG.rb: same.
 - To2D3D.bat: automated image composing using ImageMagick.

Default setup options of every tool will do it, just watch out when asked for changing some file type default program and chose what you want.

Once you have completed Google Sketchup setup copy **Export 2D 360x10 to PNG.rb** and **Export 3D 360x10 to PNG.rb** scripts to `C:\Program Files\Google\Google SketchUp 8\Plugins\` folder (or the non-default path you had chosen).

PREPARE GOOGLE SKETCHUP

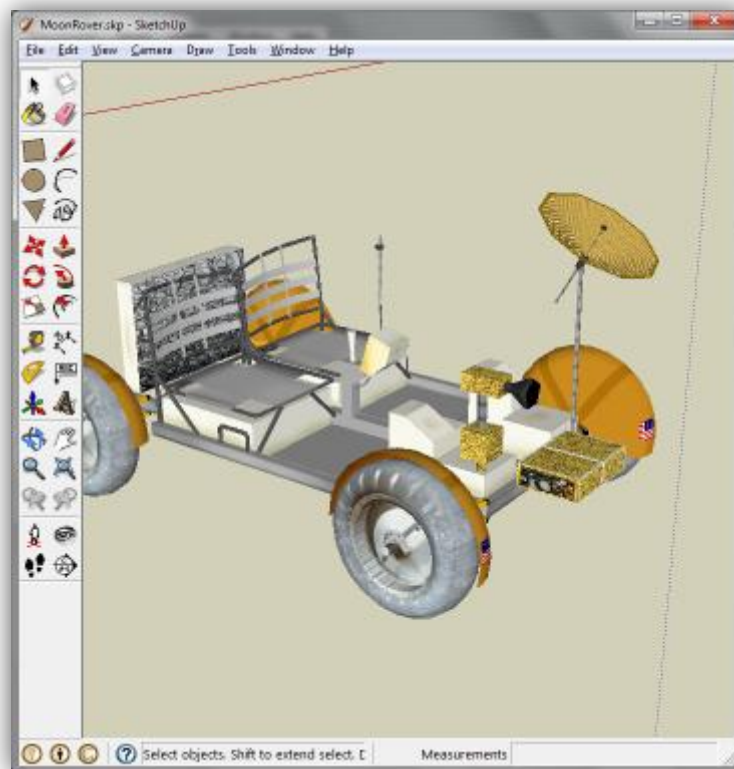
Open Google Sketchup for the first time and after choosing some template click **View->Animation->Add Scene** and then **File->Export->2D Graphic**:



As the figure shows you need to size the Google Sketchup window to select **Use view size** and get a square size around 600px with **Anti-alias** unselected (you may need to do this a couple of times until you get it right). Once you got it save Untitled.png image (useless) just to set these preferences from now on.

START USING GOOGLE SKETCHUP

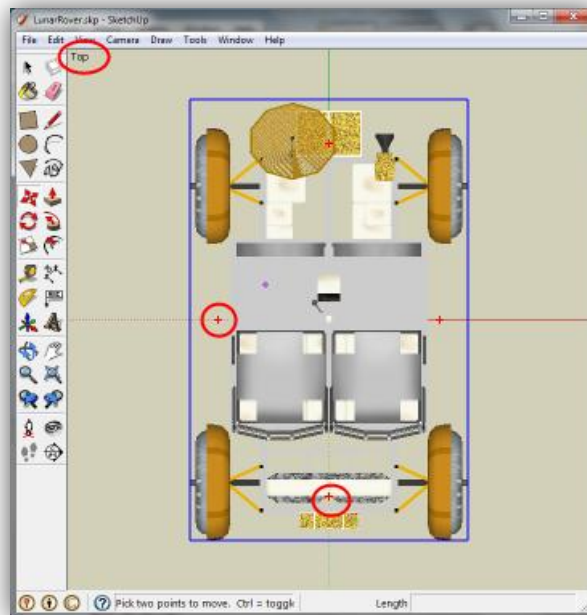
If you got here then is time to look for a 3D model to set your first vehicle going. For that go to sketchup.google.com/3dwarehouse where you'll find an excellent collection of 3D models free to download.



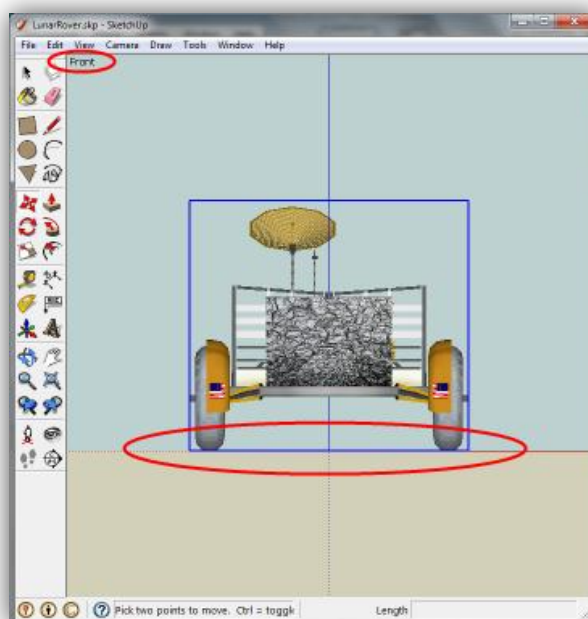
The Lunar Rover as downloaded from the 3D Warehouse.

PLACING YOUR MODEL

Then you have to select **Camera->Parallel Projection** and **Camera->Standard Views->Top** and center the model (may be you have to do a **Select All->Make Group** before doing this) with the Front of the vehicle up and the Rear down.

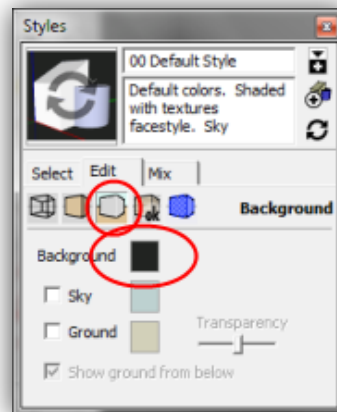


Then select **Camera->Standard Views->Front** and move the vehicle to be on the ground since it's (almost) a car.

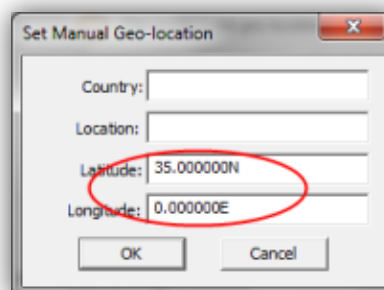


SETTING BAKGROUND AND LIGHTNING

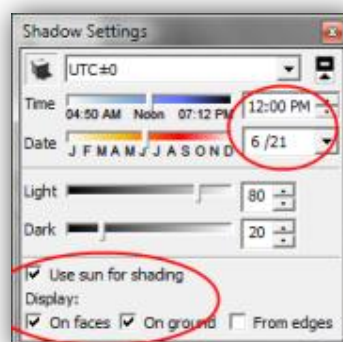
With the model on place click **View->Edge Styles** and check that **Edges** is **unselected**. Then click **Window->Styles->Edit** and on **Background Settings** set the **Background** almost black but not completely. Also **unselect Sky** and **Ground**.



Then click **Window->ModelInfo->GeoLocation->SetManualLocation** and type **35N** and **0E**.



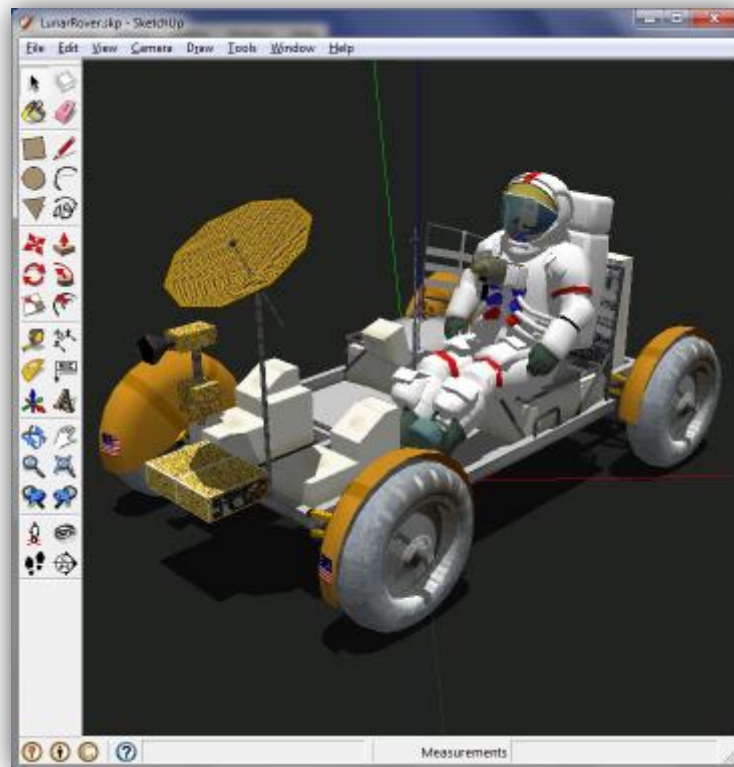
Then **Window->Shadows** and set the values and options displayed here:



Light and **Dark** values are up to you. Once you have finished check that **View->Shadows** is **selected**.

A SIDE NOTE

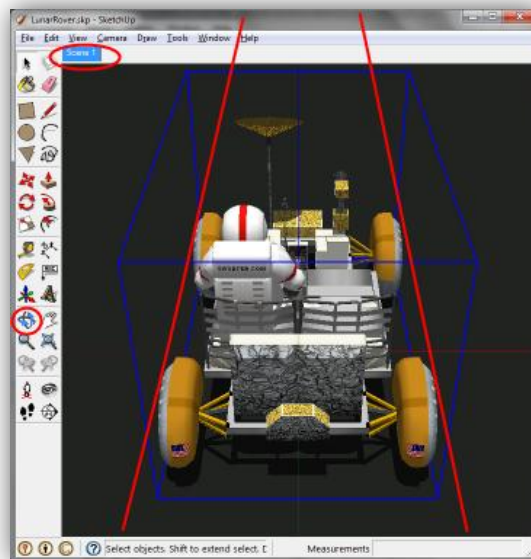
Before going further is worth mentioning that you can modify the 3D model to fit your needs, from changing colors (**Window->Materials**) to edit the 3D model itself (ouch!) or as you can see here, get another 3D model and combining them together... Look ma! I have the driver now!



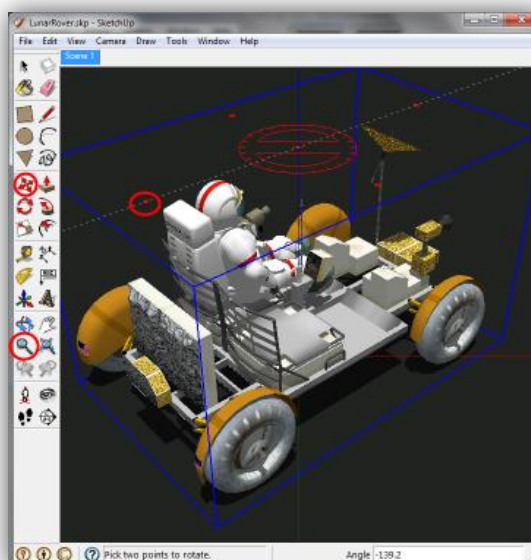
And I know that nüvi vehicles are so tiny that you may think “why bother?” well, the better it looks big the better looks the tiny little version, trust me on this one. Don’t get carried away but enhance it a little if it’s just a few minutes.

SETTING THE 3D AND 2D NÜVI VIEWS

Going back to the model click **Camera->Standard Views->Front** and then **Camera->Perspective** and then use the **Orbit** tool to move your view somewhat above the model to get the 3D perspective view used on the nüvi 3D view. The red lines try to show the perspective. Once you got it click **View->Animation->Add Scene**.

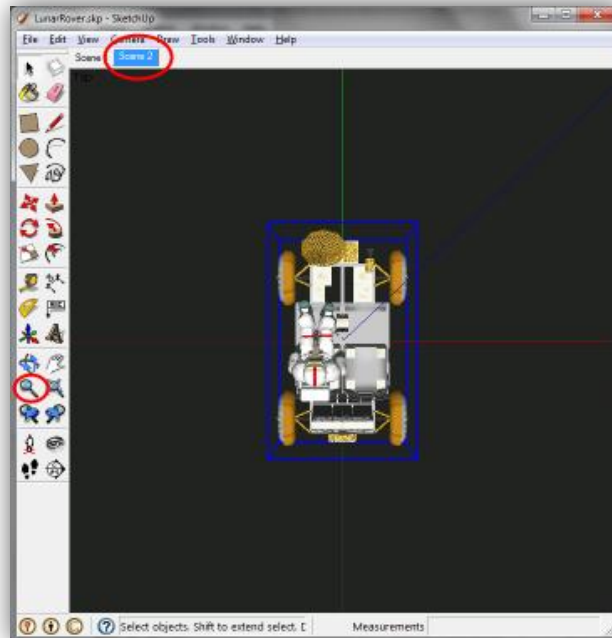


To finish with the 3D view using the **Move** tool click in one of the above little red crosses and make the model spin 360° to check that at no point some part of the model ends up out of frame.

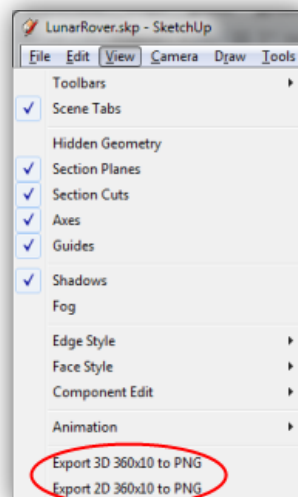


Use the **Zoom** tool if you have to adjust the view and click on **Scene1** tab and then **Update**.

Then click **Camera->Stand Views->Top** and using the **Zoom** tool make the size of the vehicle a little more than 1/3 of the view size. Click **Window->Shadows** and unselect **On ground**. Click **View->Animation->Add Scene**.



Congratulations! The 3D model part is over! Just one more thing before closing Google Sketchup: check that .skp file is in a folder of its own and then click **Scene1** and click **View->Animation-> Export 3D 360x10 to PNG** and then click **Scene2** and click **View->Animation-> Export 2D 360x10 to PNG**.



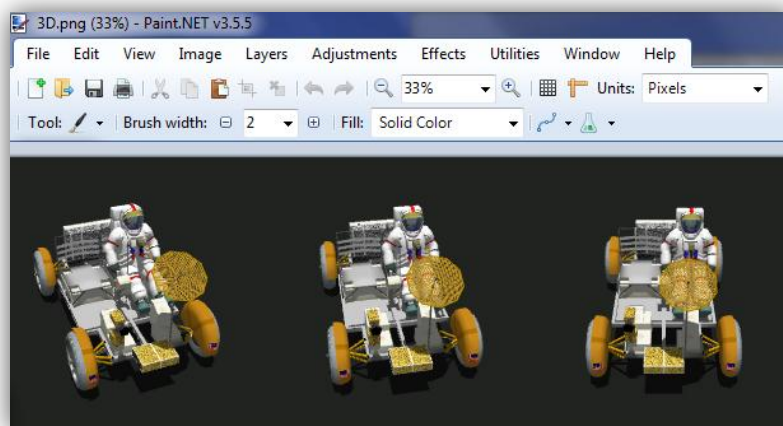
Once finished you'll find 72 images with the 360° rotation of the 3D and the 2D view of your vehicle .skp's model folder.

PAINT.NET TIME

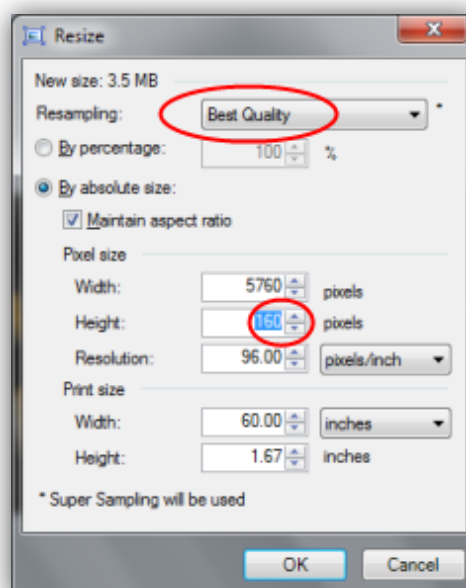
Before starting with **Paint.Net** copy **To2D3D.bat** file to the .skp's model folder and using a **Command Prompt** window type **To2D3D.bat**.

Note: the following steps may seem to have some arbitrary options but they are there to get a good result in the .srf nüvi vehicle file. If you find a better set of steps please let me know...

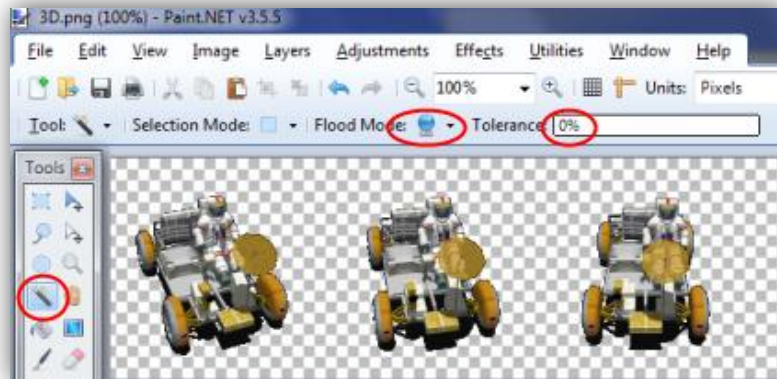
Open **Paint.Net** and then open <model's folder>\3D\3D.png file.



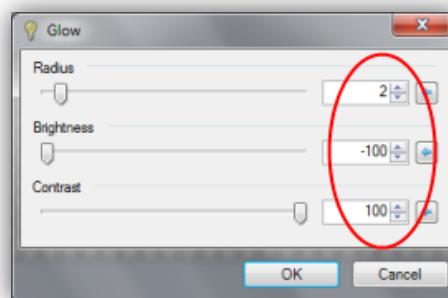
Select **Image->Resize** select **Best Quality** and a **Height** of **160px**.



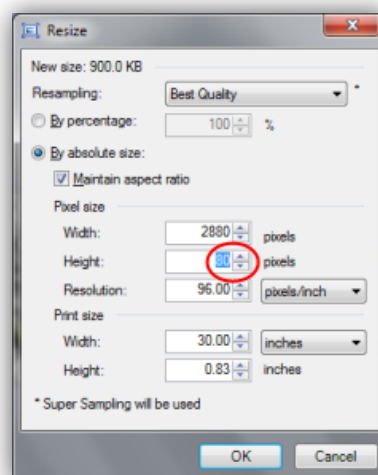
Select the **Magic Wand** tool change the **Flood Mode** to **Global** the **Tolerance** to **0%** and click somewhere on the dark gray background and delete the resulting selection.



Now the trick that makes borders look good: click **Effects->Photo->Glow** with **Radius 2 Brightness - 100%** and **Contrast 100%** (if it's a white top vehicle you may have to dim Contrast to ~75%)

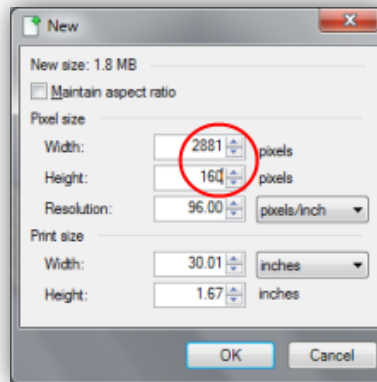


Resize again this time to a **Height of 80** and done!

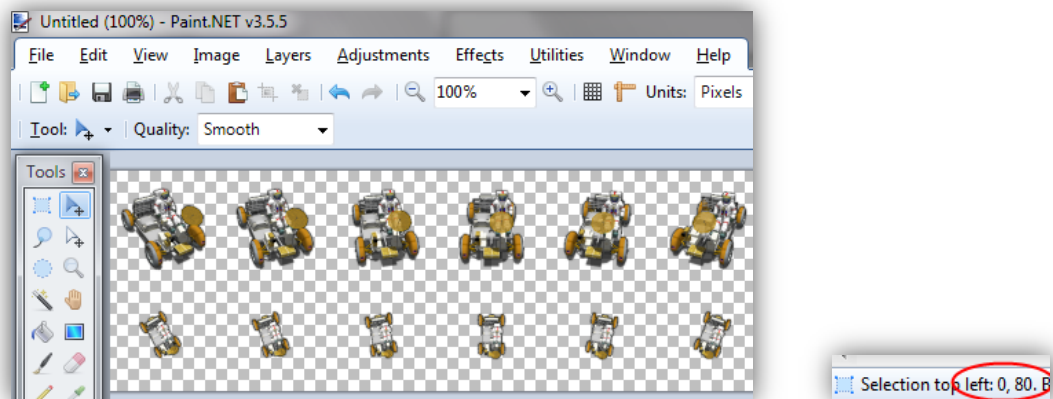


Lets move on now to the 2D view at <model's folder>\2D\2D.png... well, to make the story short: repeat the same steps that you had for the 3D one...

Once you have finished with the 2D click **File->New** and create an image of **2881** by **160** pixels.



And copy the **3D** part up and the **2D** part exactly below (use bottom coordinates to move down the 2D view once copied).



Note: if you noticed that this model has a semi-transparent shadow, well, I'll leave that cookie for you, a couple of layers a couple of copy and paints do the job...

Click **File->Save** select **PNG** and **Auto-detect** option and now you are really almost done!

CONVERT FROM .PNG TO .SRF

Now you only have to convert the **.png** you just created to **.srf** nüvi vehicle format file. For that you'll go to **techmods.net/nuvi** and click on **Choose File** on the **png2srf** section and then click **Convert it!** (you may find useful the srf2png option to see .pngs as the one you created from vehicles that you like and compare your work)

*Let me pay tribute to the guy that started this by creating this converter, you can read the whole story at http://www.gpspassion.com/forumsen/topic.asp?topic_id=78125, thanks **ezran!***

By the way, you're done! Copy the .srf to your nüvi and see it for yourself!

That's all for now, I'll appreciate any feedback you may have for the VfGn101 guide and are very much welcomed to send the .srf's you create with your nick to post them in the site, may be with your help we can get to 1000 vehicles and I'll write the VfGn201 guide to make a running Transformer...

Bye!