

MIND THIS BEFORE YOU BEGIN

- If you have never made a nüvi vehicle: **this guide is not for you. Go to VfGn101 Guide.**
- This is not a click-by-click guide and doesn't have all the steps needed to create an animated vehicle like the ones you can see at the site, but what's missing you already know having done a nüvi vehicle as described in VfGn101 Guide.
- 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 RECAP 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.

(VfGn201 Additions)

- \Animated\ExportAnimationRoll3Frames.rb: more automated images exports.
 - \Animated\ExportAnimationRoll4Frames.rb: same.
 - \Animated\ExportAnimationRoll6Frames.rb: same.
 - \Animated\ExportAnimationRoll9Frames.rb: same.
 - \Animated\To2Dd3Dd.bat: automated image composing using ImageMagick.
- **Ezran's offline java converter**: ezran new java converter that supports animated vehicles.
 - \Converter\90x90x4_info.txt: 3242x340 vehicle format information for the converter.
 - \Converter\Png2Srf.class: Png to Srf java converter.
 - \Converter\Srf2Png.class: Srf to Png java converter.
 - \Converter\srf_format_details.txt: srf formats information for the converter.
(you can find this converter sources thru page 16 of the same thread that started custom nüvi vehicles at http://www.gpspassion.com/forumsen/topic.asp?topic_id=78125, thanks again **ezran**!)
- **Java Runtime Environment**: 90% chances that it's already installed in your computer, if not you can download it here: <http://www.java.com/en/download/index.jsp>.

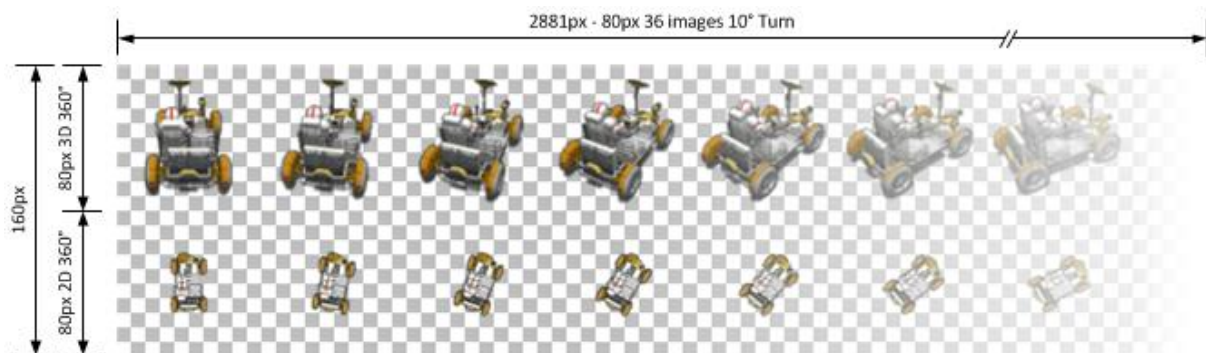
Default setup options of every tool will do it, just watch out when asked for changing some file type default program and chose what you want.

Once you have completed Google Sketchup setup copy all **Export***.rb** scripts to C:\Program Files\Google\Google SketchUp 8\Plugins\ folder (or the non-default path you had chosen).

ANIMATED NUVI VEHICLE IMAGE FORMAT

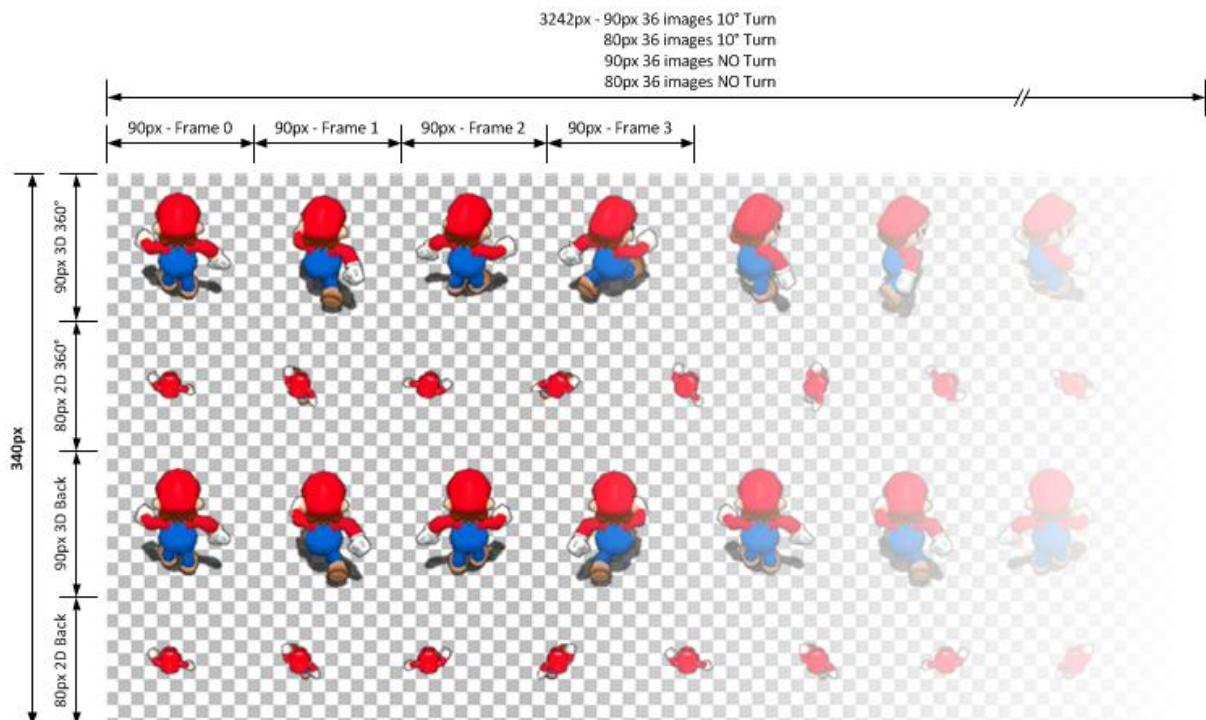
So now that you have everything in place let's start by knowing the difference of a regular nüvi vehicle image format and an animated one.

The nüvi vehicle image format you put together with **VfGn101** guide is a **2881x160** image that looks like this:



And that's why you need the new **ezran** converter, the online one at techmods.net/nuvi can only handle this non-animated formats. The new java converter can handle newer formats and there you have the animated ones.

So an animated format is a **3242x340** image that looks this:

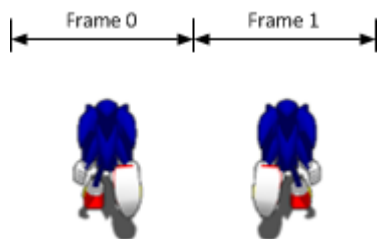


(there could be other formats but I didn't played much after getting to this one working)

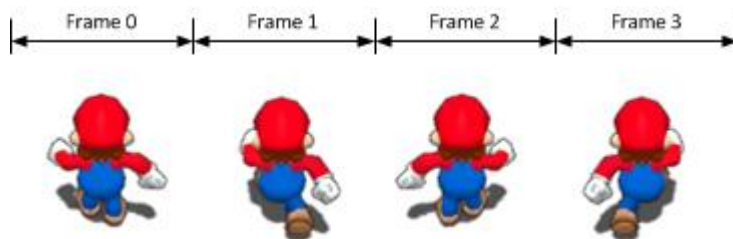
NOW THAT YOU KNOW THE WHAT LET'S SEE THE HOW...

So, what should be your steps to get to the animated nüvi image file? Let's start with the animation idea: you have to think of a vehicle that has some kind of simple motion that you can take to a nüvi vehicle: here are some examples:

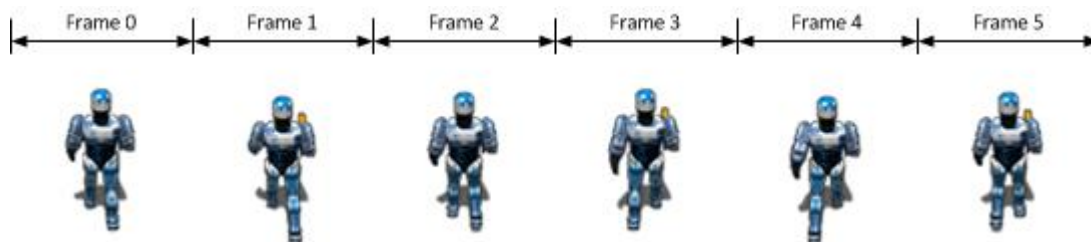
2 Frame **"running fast"** Sonic:



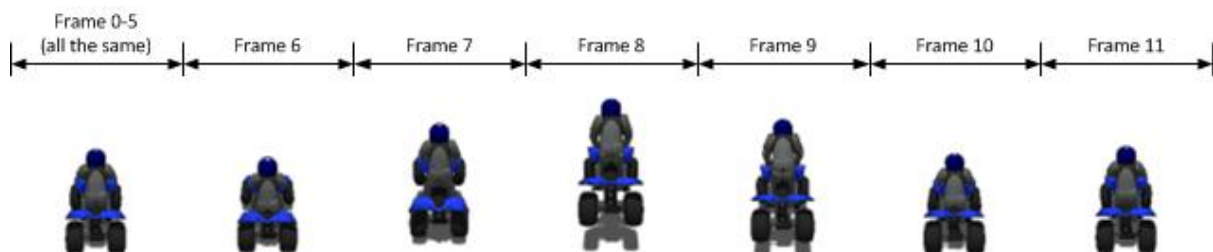
4 Frame **"walking fast"** Mario:



6 Frame **"walking"** Robocop:

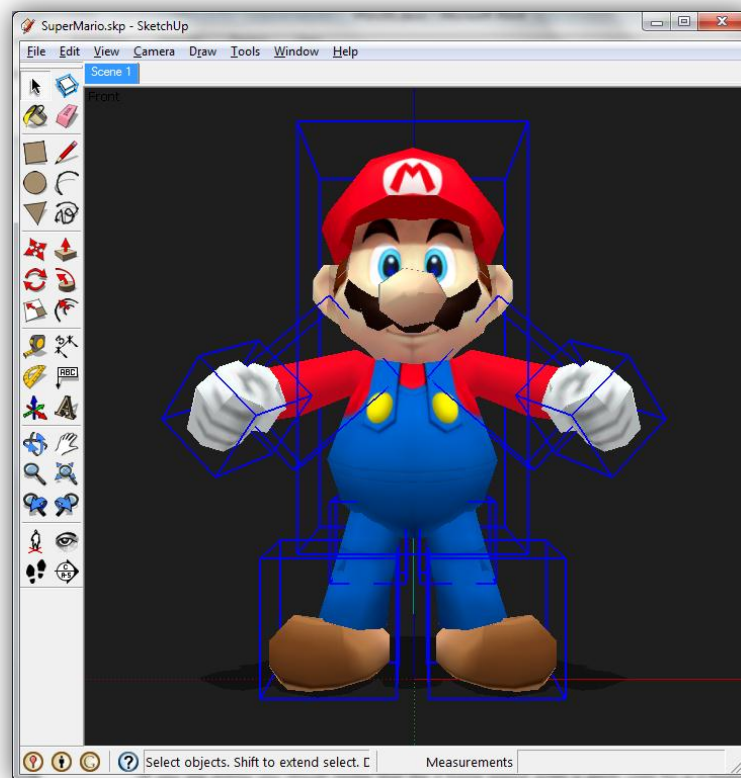


12 Frame **"jumping"** Yamaha Raptor

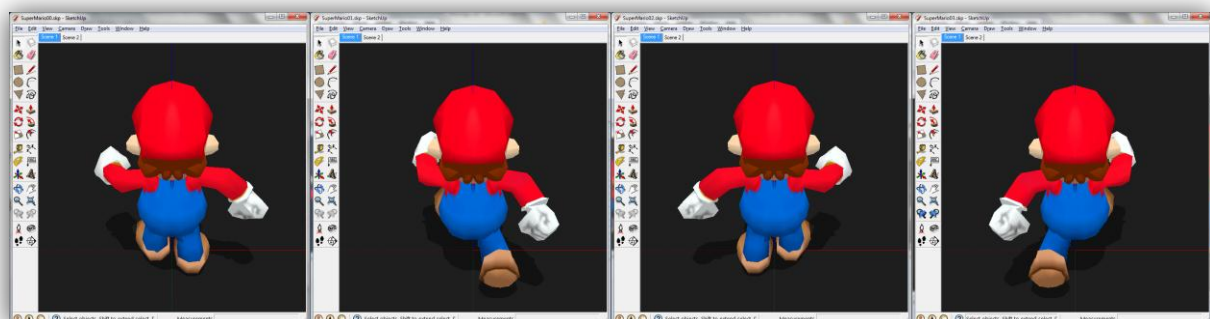


... and they repeat until complete the 36 images.

Once you have the idea, what you need to do is to get the proper Google Sketchup model with the moving parts, if any (in the rolling Blue Angel or the rotating Tardis the whole model moves), grouped in a way that you can move them. Some times the model is not build in this way but you can work with it in Sketchup grouping or chopping the parts to make it work. Something like this:



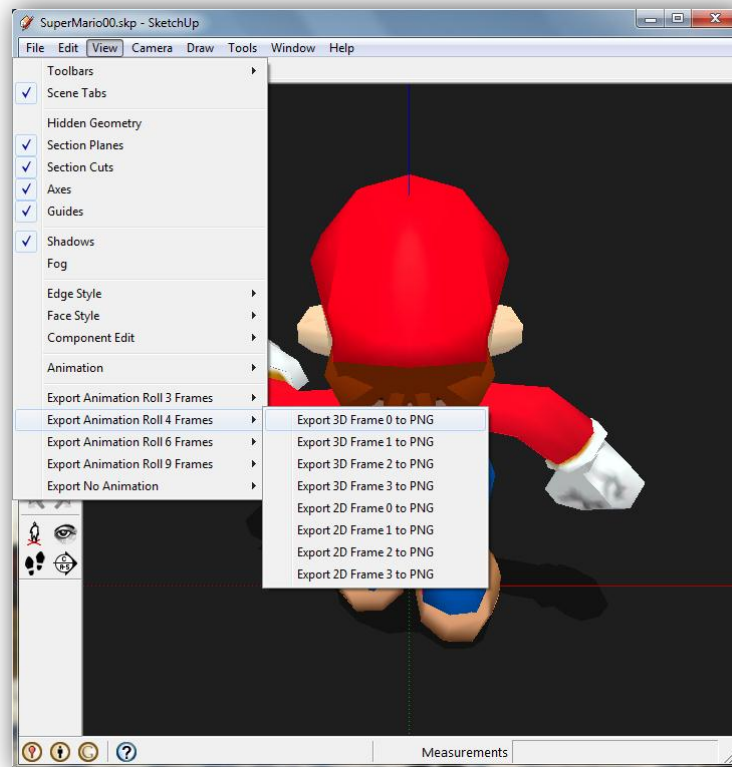
And now the tricky part: the animation itself! That means that you'll copy your model for each different frame in your animation moving the parts to make the motion that your looking for, something like this:



In this case, as in every symetric model, you should notice that **Frame 0** and **Frame 2**, and **Frame 1** and **Frame 3** are the same mirrored (in the model right-click FlipAlong->Red) so you have to create 2 Frames actually...

And once you are happy with it you are kind of done because the rest of the process you already know. The only difference is how you use the same things.

You'll export the images in the same way but with the new scripts that export each frame for the **3D views** and **2D views**:



(if you are asking you should realize that the 4 frame export script is easily used for a 2 frame animation and the 9 for the 18, etc.)

You'll use the **To2Dd3Dd.bat** that creates the 4 rows of the image instead of the 2 that you needed for a non-animated vehicle, you'll do the same work at **PaintNet** as always with the only difference of putting together the 4 images instead of 2.

And you'll convert your 3242x340.png with the new converter copying the files:

- **90x90x4_info.txt**: renaming 90x90x4 with your **<vehicle name>.png** (without the ".png"!).
- **Png2Srf.class**
- **srf_format_details.txt**

to your vehicle folder and executing the command: **java Png2Srf <vehicle name> <vehicle name>.srf**

And presto! You'll have your animated nüvi vehicle ready to copy to your nüvi!

Bye!