



Adding Fur to Characters in Carrara Pro



Have you ever rendered a creature and thought, 'this would look so much better with real hair'? You can of course postwork hair in Photoshop, but if you have access to a 3D programme that can do it for you (like Carrara!), you can get even more realistic results with very little effort.

Carrara 7 Pro was used for this, but the technique also applies to **Carrara 6 Pro**. This doesn't apply to standard versions of Carrara, as the dynamic hair is only available in the Pro versions.

This tutorial assumes a basic knowledge of Carrara, i.e. manipulating objects within the workspace, moving and rotating cameras and adding textures. If you don't know how to do these things, you can use my Carrara starter tutorial [here](#).

Let's get stuck in!

1. Create a new scene, and add in the creature you want to make hairy. For this tutorial, I'm going to be adding hair to the [Garou](#) from the E-Frontier Legends series.



2. Do a couple of test renders using default settings to see how your model looks.

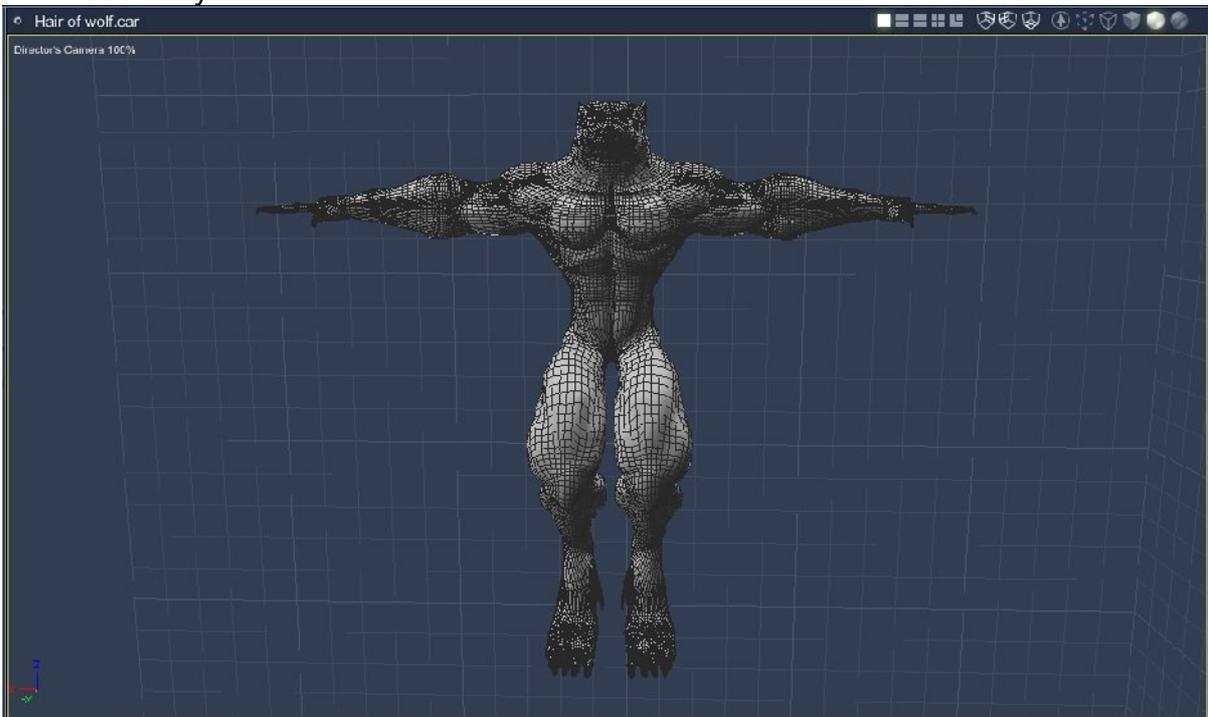


Not bad, but could definitely use some fur!

3. Pose your model. It's much easier to do this before you add the hair! For the purposes of this tutorial, I've not posed the Garou, but would advise anyone to do this before going any further!
4. Click on the 'Model' name in the model hierarchy.
5. Click on the 'Hair' icon in the toolbar, and drag it either onto the model where it appears in the 3D view, or onto the 'Model' name in the hierarchy.
6. You're automatically taken to the 'Modelling' room, and are presented with some options:



7. If you're using a model you've purchased, it's highly likely to have been UV mapped, and to be using texture maps. I usually leave the defaults ticked here.
8. Click 'OK' and you'll be taken to the modelling room, with your model ready to be made furry!

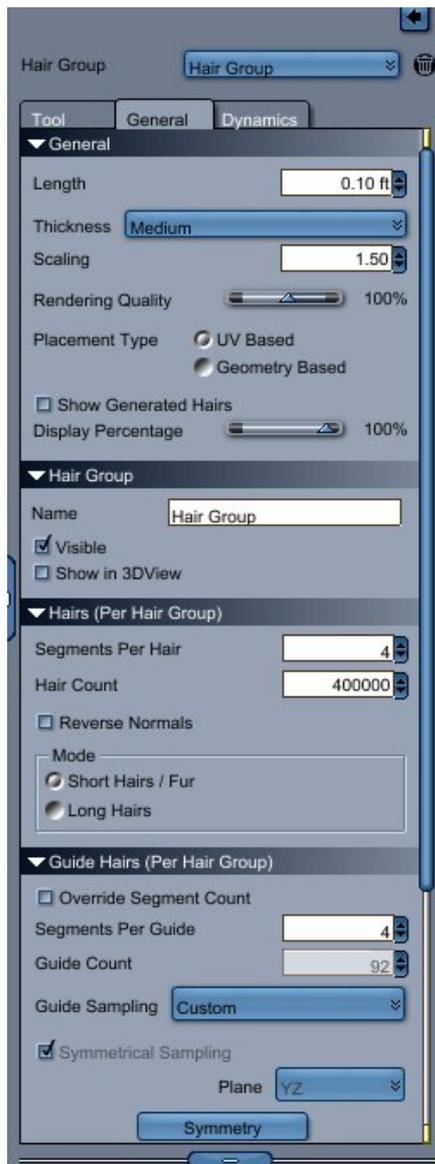


9. Zoom in so you can see the entire model.
10. If you wish, you can now separate out the hair groups, or you can just use one group for the entire model. If you want your creature to have longer or thicker hair on certain areas, or for parts of it to be sticking up in a particular direction, you can create separate hair groups. For example, you could divide the model into 'upper body', 'lower body, and 'head', but you can keep a single group for your entire figure if you want.
11. Click on the 'Hair group' button in the top right of your application window, and click 'New Hair Group'.



12. Name it, and click 'OK'.
13. Repeat for the other groups you want to create, if applicable.

14. Some useful settings to consider before you start (these are the settings I've used):



The length of the hair. More useful for head hair
Experiment with thickness settings to see what looks best.

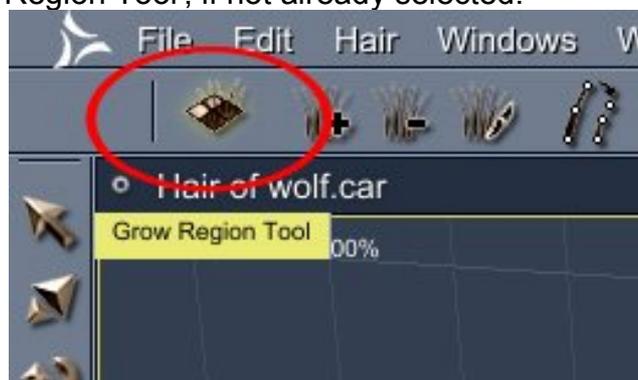
Turn this off while you're adding your grow regions
- turn on for a quick preview.

The more segments, the more bendy it can be!
More hairs = better skin coverage + more processing time!

Definitely a good idea to tick this if your character is going to have symmetrical hair. Means you only have to apply the grow regions on one side.

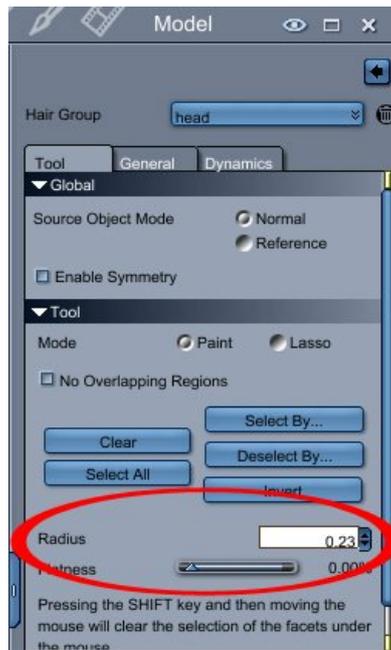
15. Select the region where you want to add the hair.

16. Click the 'Grow Region Tool', if not already selected.



17. Click the Symmetrical Sampling box in the General tab if you want the same hair layout on the left and right of the figure.
18. Zoom in on the first area you want to make hairy (I've started with the head), then click and drag to select the polygons where you want the fur to appear.

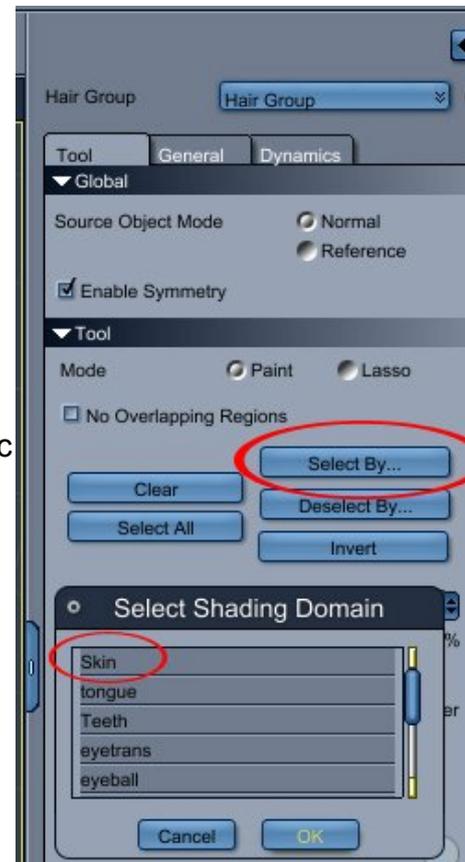
Tip: For more detail in smaller areas, you can change the size of the Grow Region Tool either by changing the radius in the tool settings, or on the fly by holding down CTRL, and clicking and dragging the mouse.



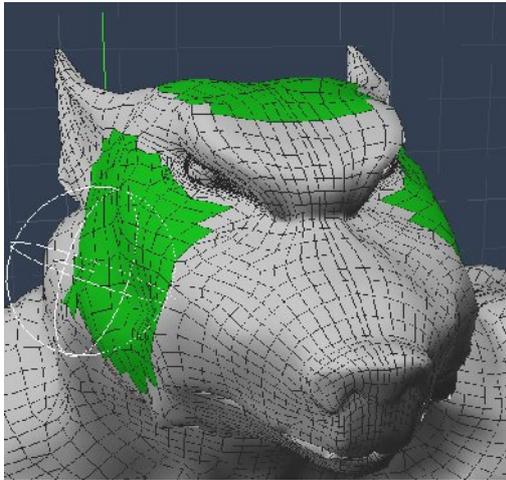
19. Alternatively, you can select by shading area. If your model has a 'skin' texture map, or a set of maps called 'torso', 'skinhead', 'skinleg' etc, you can choose to assign hairs to these automatically.

Click on the Grow Region Tool, and then on the Select by' button in the tool tab. You can then choose which areas you want to grow hairs on.

You can also **deselect** by Shading domain: for example, you can deselect by 'eyeball', 'tongue' etc so as not to grow hairs in unwanted places!



20. I've quickly selected a couple of areas on the head and rendered on default so you can see what it looks like.



Model room view



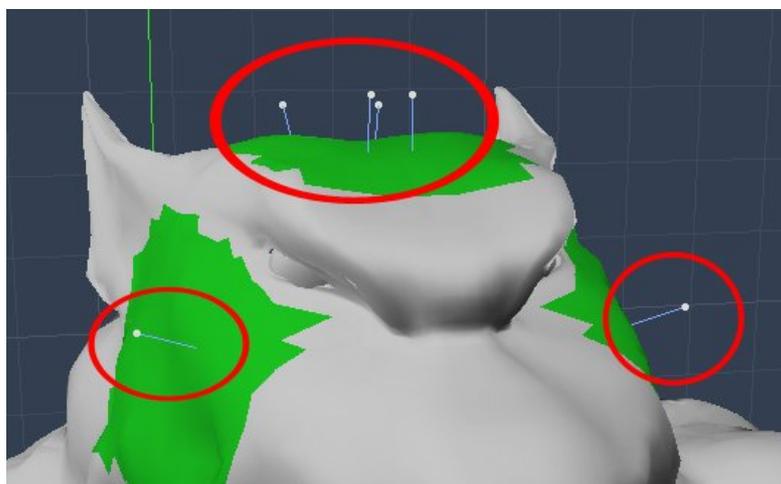
Render

We have hair, but it needs a bit of work!

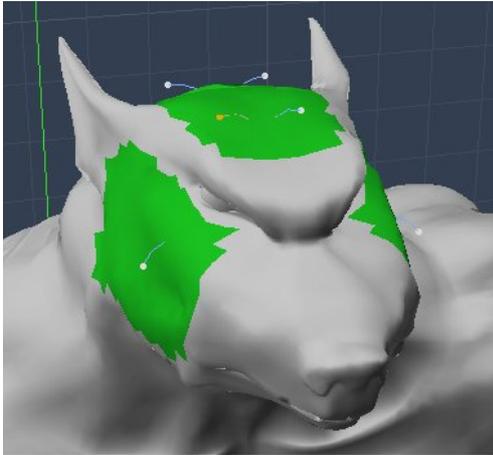
21. Add some guide hairs by selecting the icon in the toolbar, then clicking on the region where you want to add a guide. The guide hairs can be pulled around to help control the direction of the hair.



22. Once you've clicked, small blue lines with white dots will appear.



23. Click the selection tool  and click and drag on the white dots to move the guide hairs around. Try dragging them downwards to start with.



Guide hairs pointing down



Hairs also pointing down!

24. If you select some polygons that you don't want hairy, you can deselect them again by holding down 'Shift' and clicking and dragging over the unwanted polygons.
25. You can now go ahead and add more hairs to your hair group – but be aware that you may need to raise the 'hair count (per group)' when you do this, otherwise the hairs will appear thinner (because they're spread over a larger area!).
26. Remember to add and use the guide hairs to pull the hair around to where you want it.



27. Now to change that hair colour! With the white texture underneath, this critter definitely needs some silvery hair. Go to the Shader tab, and edit the hair shader.

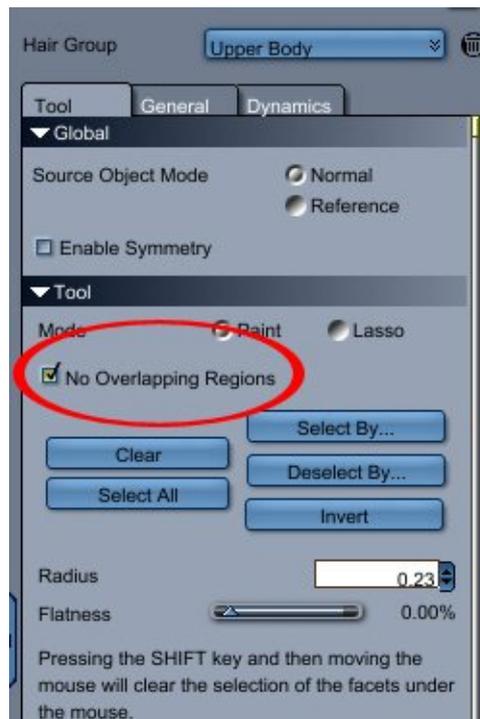
Change the 'Tip' colour to white or very light grey, and re-render to see the difference.



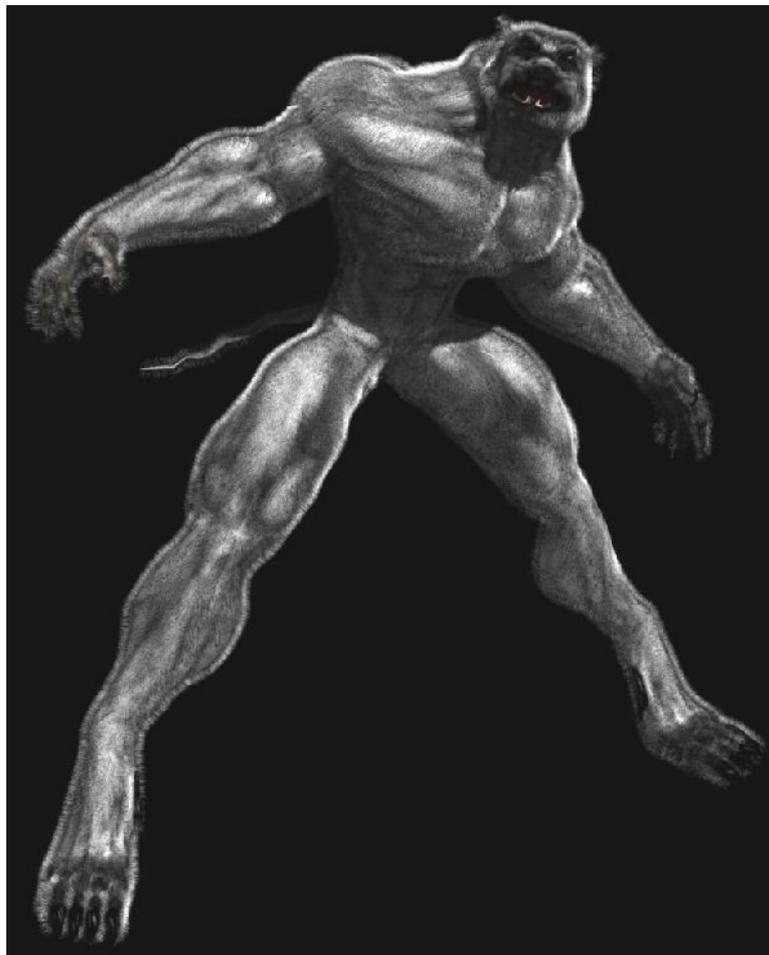
28. Play around with the hair, adding and removing polygons from your hair group(s), until you're happy with the result.

29. Now go and add hair to the other areas of your creature's body using the same techniques.

30. If you're using more than one hair region, it's worth ticking the 'No overlapping regions' box in the tool settings to make sure each polygon only belongs to one hair group!



31. Get rendering!



One quick, hairy werewolf!

32. Play around with your settings and experiment until you get the look you want. :)



Rendered in Carrara, postwork in Photoshop



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If you've any questions about this tutorial, or want to leave feedback, please email me on the link below.

Deedee
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