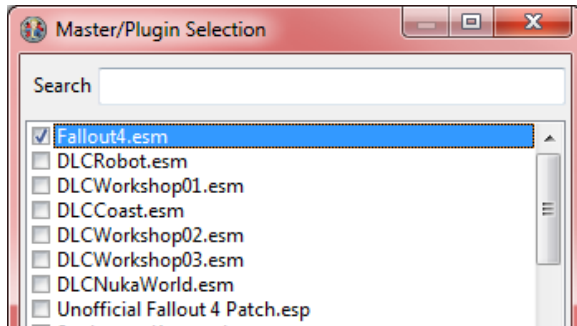


HOW TO CONVERT ARMOR FOR NPC'S

I will be converting Kellogg's boots for Dogmeat.

1. First, I find the exact name using the [Fallout Wiki](#).

2. Start Fo4Edit and select where your model is coming from, in my case it is Fallout4.esm.



3. Find the outfit in Fo4Edit, using the name from the wiki.

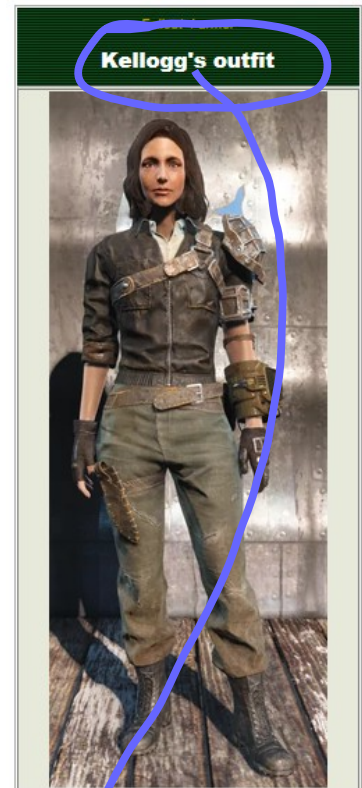
0017E91C	ClothesDog_BandanaMonkey	Jingles Bandana
001153DB	ArmorKellogg	Kellogg's Outfit
00167A74	ClothesKids01Hat	Kid's Baseball Cap
001561D8	ClothesKids03	Kid's Dress
0015DBA6	ClothesKids04	Kid's Pajamas

4. Find the 'Models' section and control+left click the 'Armor Addon'.

INRD - Instance Naming	
Models	
Model	
INDX - Addon Index	0
MODL - Armor Addon	AAArmorKellogg [ARMA:001153DA]
Model	
INDX - Addon Index	0
MODL - Armor Addon	AAKelloggGloves [ARMA:001C75EC]
DATA -	

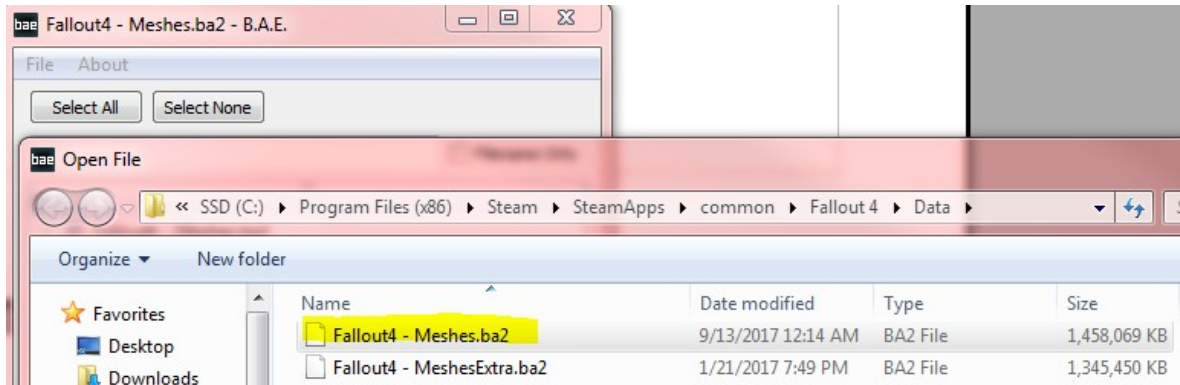
5. Find the 'Male world model' (or Female) section. This is the 3rd person model file that you will edit.

Male world model	
MOD2 - Model Filename	Armor\Kellogg\MOutfit.nif
MO2S - Material Swap	



6. Start B.A.E. and select 'File'>'Open File...'

- The armor I'm editing is in the base Fallout 4 game, so I will select 'Fallout4 - Meshes.ba2'.
- If you are unsure, you can select multiple as we will search for our mesh next.



7. Search for your file using the 'Male world model' name that we found using FO4edit in Step 5

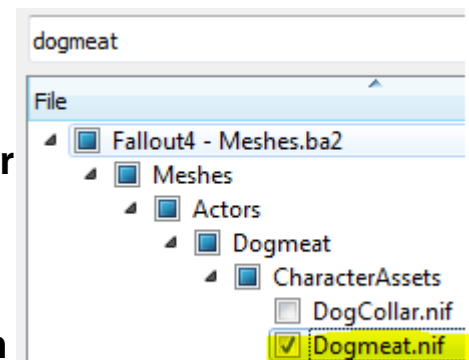
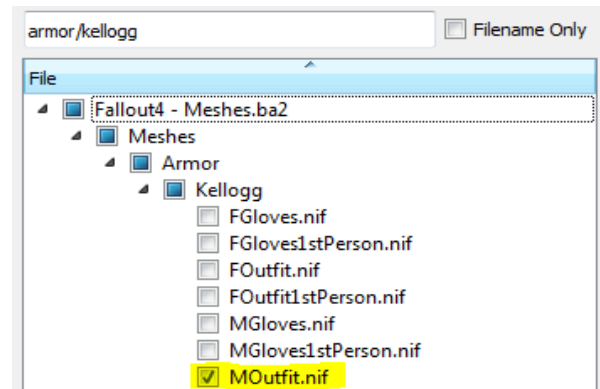
- You must use forward slashes.

8. Click 'Extract' and select a folder for your edit.

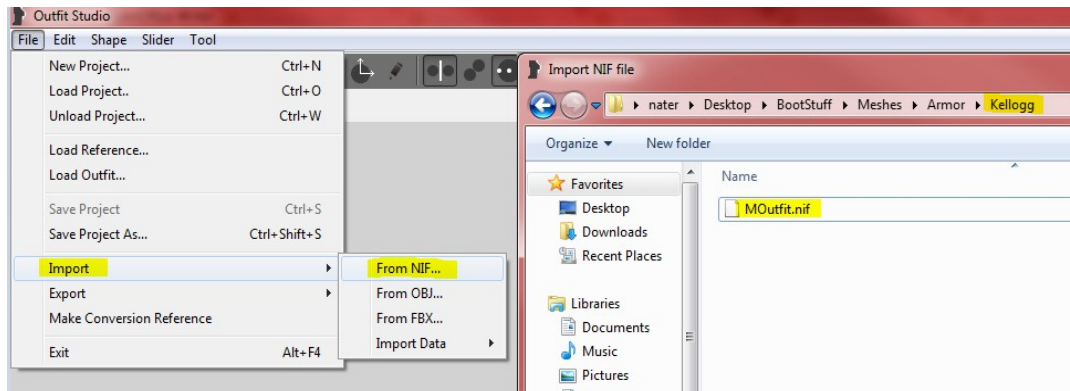
- Do not use your default Fallout 4 folder.

9. Search for, and extract 'Dogmeat.nif' (or your NPC).

10. Open BodySlide and select 'Outfit Studio' in the bottom right.

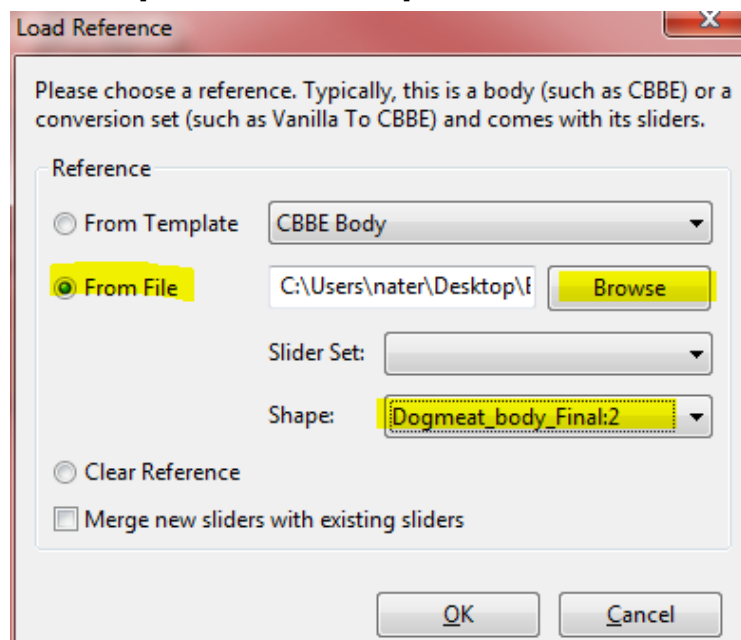


11. Select 'File'>'Import'>'From Nif...' and import the mesh you extracted using B.A.E.



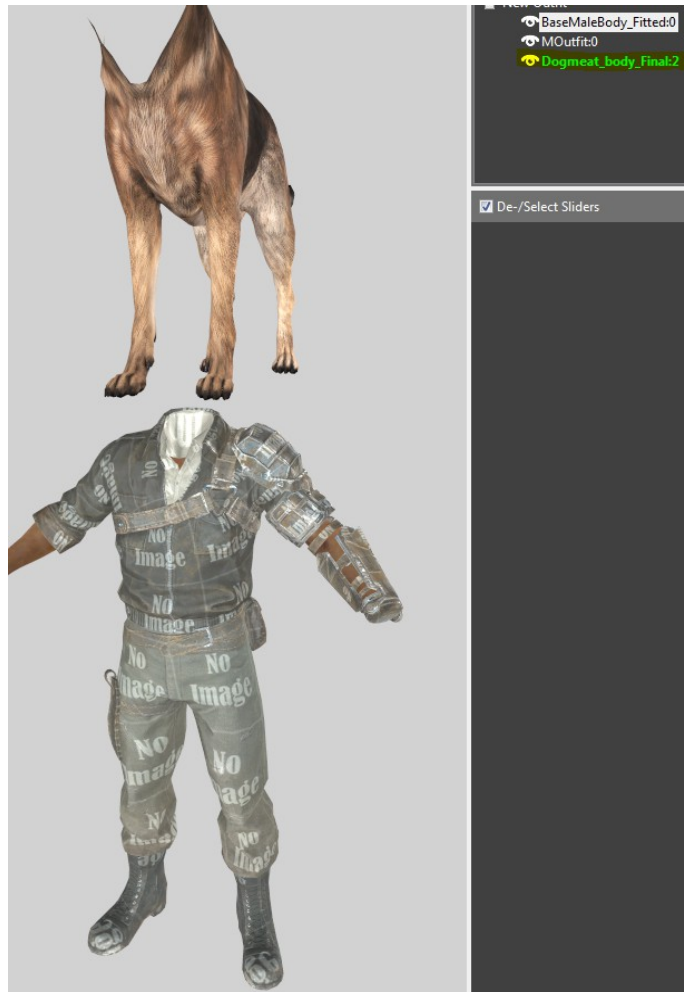
12. Select 'File'>'Load Reference...'

13. Select the radio button 'From File', select 'Browse' and select the 'Dogmeat.nif' you extracted in step 9. Set the Shape to 'Dogmeat_body_Final:2'.



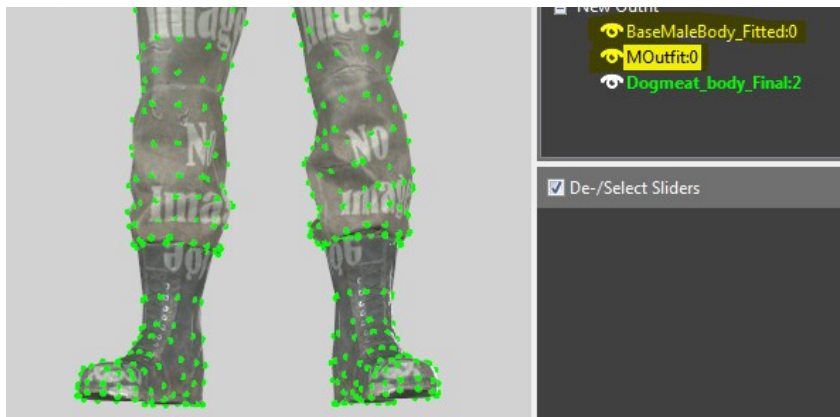
14. You should now have a screen similar to this picture.

- Dogmeat should be green in the Meshes tab on the right if he is correctly loaded as a reference.



15. Tap 'Q' to enable vertex mode, and find the mesh you need to edit by selecting them in the meshes tab.

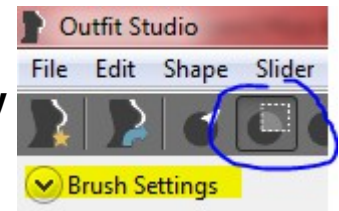
- Delete any other unneeded meshes (make sure not to remove the Dogmeat reference) by left clicking them and hitting delete on your keyboard.



[If you would like more information on the brushes and tools in BodySlide, click here.](#)

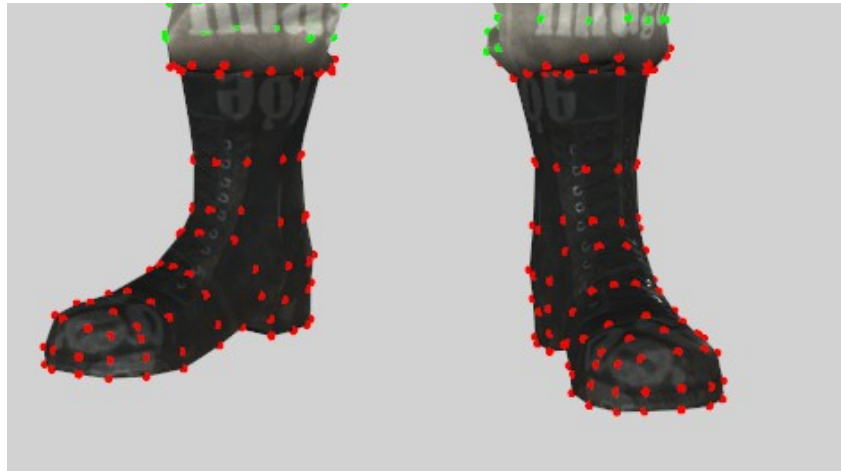
16. Click the 'Mask vertices' tool.

- Notice the 'Brush Settings' drop down directly under the button. The only setting you will need to change now is the 'Size'.

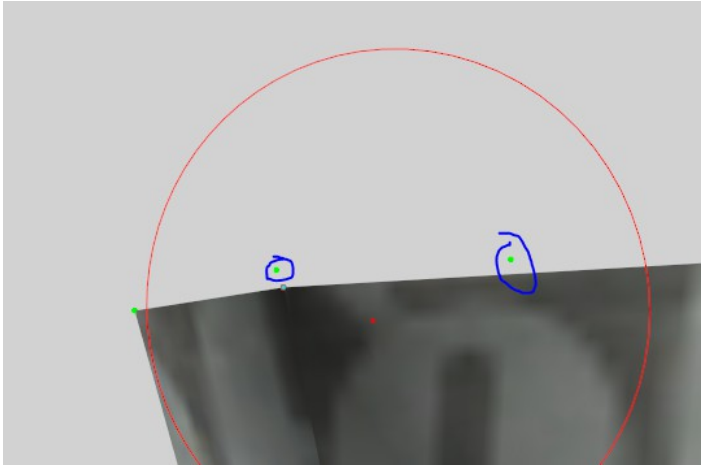


17. Hold left click and paint the areas you would like to keep.

- You can use alt+left click to unpaint areas.
- It is easiest to get the general area first, then fine tune after.
- You will notice this automatically mirrors across the X axis. If you need, you can disable this by pressing 'x' or clicking the button on the toolbar.



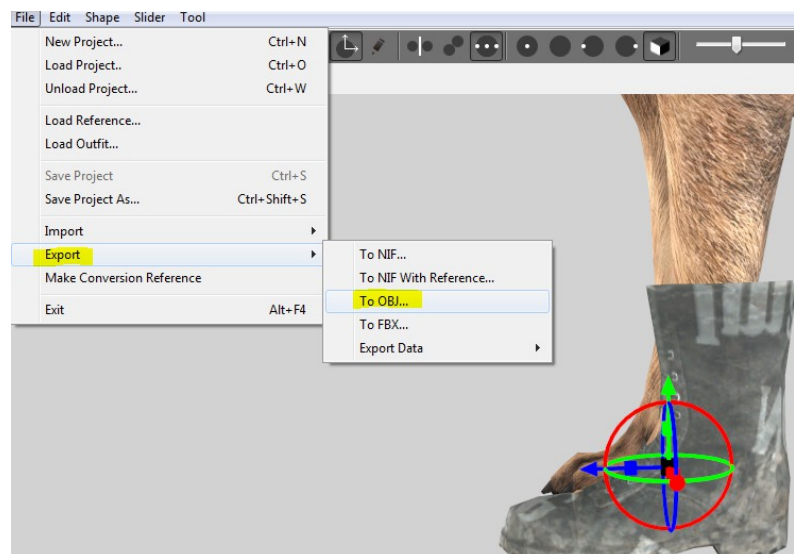
18. Select 'Shape'>'Delete Vertices...' and confirm.

- You can use ctrl+i to invert what you have painted.
- Repeat this process a few times until you are left with only what you would like.
- You may notice you have floating vertices (green dots) that you can not select. To get rid of these, paint the entire section of your mesh (you should still see the green dots) and then use 'Shape'>'Delete Vertices...'.

19. You should now have just your item left and there should be no floating vertices.

20. Tap 'F' to enable the free transform tool (don't forget you can tap 'Q' to disable seeing the vertices) and move the object in place.

- I do all mesh editing in BodySlide, but you can export this as an .OBJ and then import it again, however you will lose the material and texture information. This can be fixed in NifSkope, though.

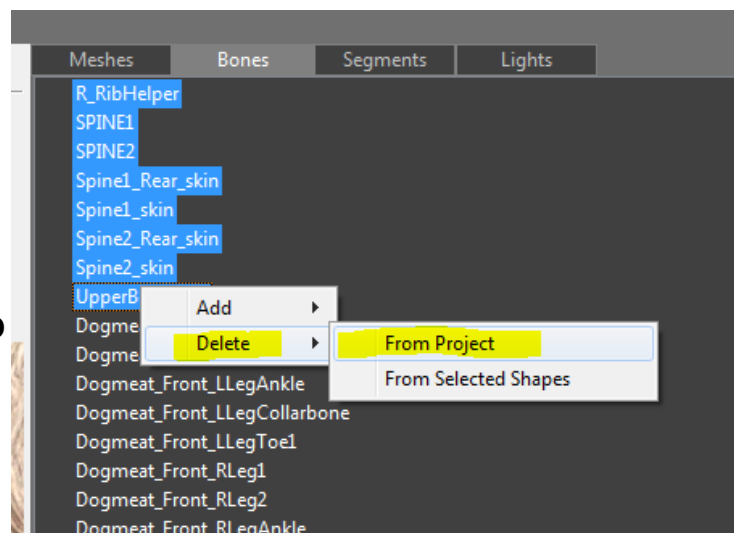


21. There are multiple ways to size the boot, I scale it down using the boxes in the the free transform tool, then I fix the clipping using the 'inflate', 'deflate', and 'move' brushes.

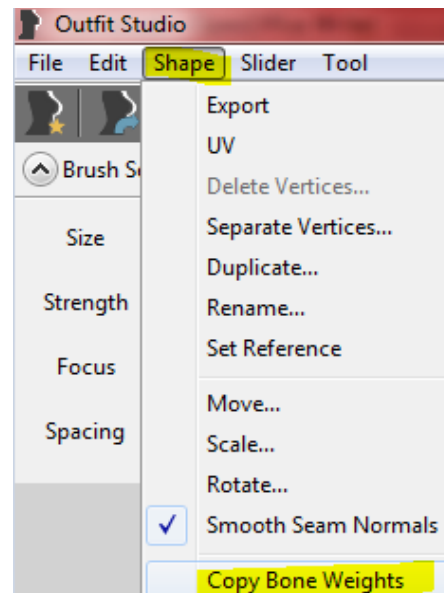


22. Select the 'Bones' tab and select all the bones that do not start with 'Dogmeat'. Right click them and select 'Delete'>'From Project'.

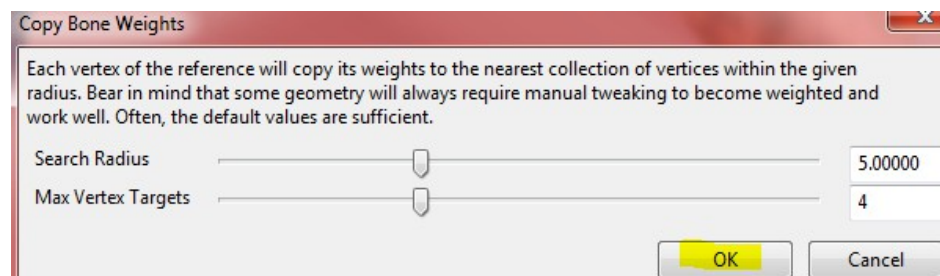
- You can use shift+click to select more than one bone at a time.



23. Select 'Shape'>'Copy Bone Weights'.

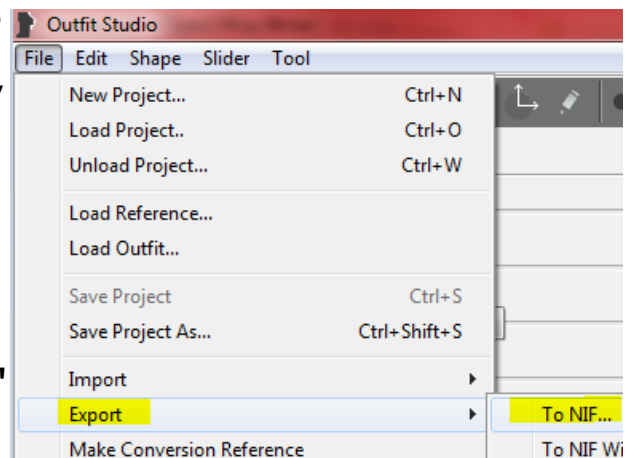


24. Use the default settings.



25. Select 'Export'>'To NIF...' and save your file. If you do not get an error, skip the next two steps to 28.

26. If you see the 'Unweighted Vertices' error, you will need to press 'ctrl+a', or 'Tool'>'Clear Mask' to clear the mask that has been created. Repeat step 23, but gradually increase both sliders. Attempt to export again.

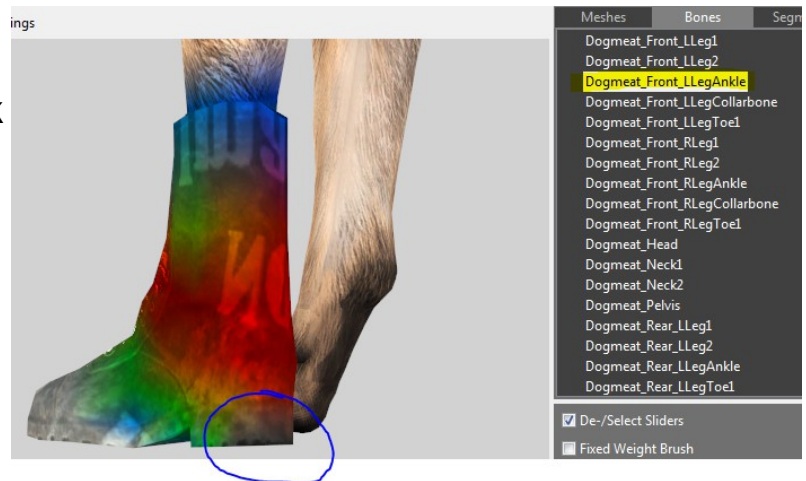


- If it still doesn't work, increase them again.

27. If you have increased the sliders to the maximum value and you are still getting the error, you will need to manually paint the weight. The first picture shows the mask that was created, showing where my unweighted area is. Left clicking the bones will show you the current weights. Select the one that is closest to the area you need, and then left click and paint your missing area to be similar to the other areas.



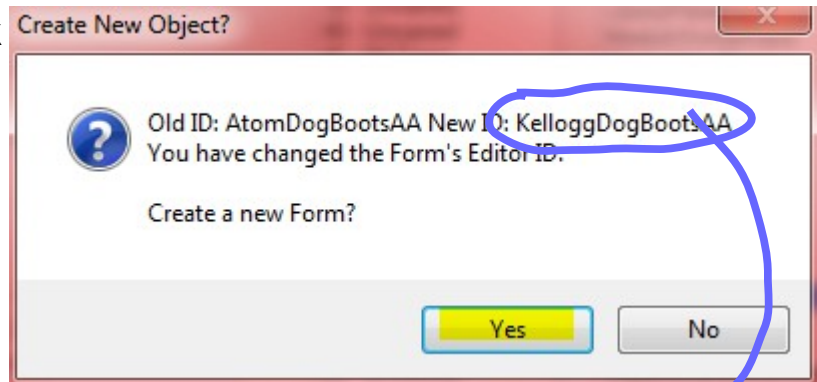
- If you can not paint the area, your mask is not cleared, alternatively you can press ctrl+i to invert the mask.



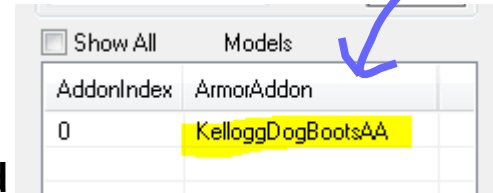
28. Copy your file from wherever you exported it to 'Fallout 4\Data\Meshes\yourFolder'.

29. Start the creation kit, and create a new plugin. Search for and double click 'ClothesDog_DogHeadMuzzle' (or whatever is closest to your item). Change the ID and the name. Change the 'Biped Object' from '46 - Headband' to 44 and 45 for the legs (or whatever is closest to your item).

31. Click 'Ok' and it will ask if you would like to create a new object, make sure you select 'Yes'.

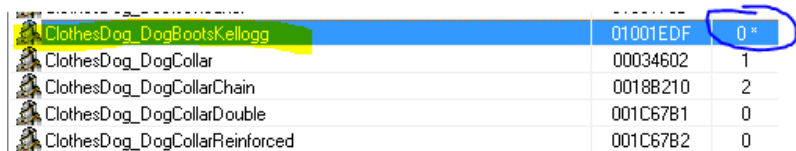


32. Make sure you update the ArmorAddon as it will not automatically update. Click 'Ok' for the main armor object, and you will be greeted with another 'Create new Object' message. Again, make sure you press 'Yes'.



AddonIndex	ArmorAddon
0	KelloggDogBootsAA

33. You should now see your new armor, double click it and verify all the settings are correct. You will need to know the name to find it in game.



ClothesDog_DogBootsKellogg	01001EDF	0
ClothesDog_DogCollar	00034602	1
ClothesDog_DogCollarChain	0018B210	2
ClothesDog_DogCollarDouble	001C67B1	0
ClothesDog_DogCollarReinforced	001C67B2	0

34. If you did everything correctly, the boot should animate and flex with Dogmeat as he moves his foot.

35. The last thing I do is import this boot into Blender and mirror it so

it will fit correctly on his other foot. This causes the material/texture information to disappear, but I'm not covering that in this tutorial.

```
help "kellogg dog"  
-----CONSOLE COMMANDS-----  
----SCRIPT FUNCTIONS-----  
----VIEWER STRINGS NOT AVAILABLE-----  
----GLOBAL VARIABLES-----  
----OTHER FORMS-----  
ARMO: (F7001EDF) 'Kellogg Dog Boots'  
usage: help <matchstring> <filter> <form type>  
filters: 0-all 1-functions, 2-settings  
form type is 4 characters and is ignored  
--- player.additem f7001edf
```

