# Create conforming clothing from a 3D mesh

Author:	elisabethc	Printable Version	Tools Needed
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## Step 1 - Create a clothing prop

Create a clothing prop in a 3D modelling application (I am using "cinema 4D" MAXON).

## Step 2 - Export the clothing prop

Export the clothing prop as an "\*.obj" file to any geometries folder in a poser Runtime folder.

Note: poser does not support spline- or nurbs - objects. Therefor the prop has to be a polygon object!

## Step 3 - Import this "\*.obj"

Import this ".obj" into poser with the default settings (I only change the figure's scaling to 50% in this  $\underline{case}$  – you will have to try that out).

R	Prop Import Options	×
81	Prop import options	
	Centered	
	Place on floor	
	Percent of standard figure size: 50	
	🗖 Offset (X, Y, Z):	
	Weld identical vertices	
	Make polygon normals consistent	
	Flip normals	
	Flip U Texture Coordinates	
	Flip V Texture Coordinates	
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	Cancel OK	

## Step 4 - Grouping the prop

Load the figure that will wear the clothing into poser (in my case it is SP 3 from DAZ). Position and scale the clothing prop that it will fit the figure properly - if necessary.

Change the display mode to "hidden line" and open the grouping tool. As you move the mouse over the figure and the dress you will see the figure's body parts appear. That makes the grouping rather easy.



Back in the grouping tool I notice that the prop already has one group which is named "polygon object". I delete it and create these new groups: hip, skirt, chest, abdomen, ICollar, rCollar, IShldr and rShldr. After that I selct one group and add the relevant polygons. The groups of your clothing prop do not have to match those of the figure exactly. But it is very important that all polygons are grouped and that no polygon belongs to more than one group (exception: the skirt group polygons are the same as that of the hip). You can check that by activating the "show multigrouped faces" or "show non-grouped faces" in the grouping tool window. It is also important that the spelling of the groups match exactly those of the figure ("ICollar" is correct, "Icollar" or "LCollar" is wrong)!

This is the hip (and the skirt) group of the dress:



## Step 5 - Arranging the hierarchie

Now you may change the display mode to your favorite one and choose the translation tool from the editing tools. Select the clothing prop and open the Hirarchy Editor (Window > Hirarchy Editor).

HierarchyWindow	المالا
Show in hierarchy	
Show Figures	Show Props
Show Cameras	Show Deformers
Show Parameters	Show Lights
Show All Parameters	
- 🐵 🚷 UNIVERSE	<u> </u>
I GROUND	
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– 🐵 🛞 Figure 1	
- 🚥 🕇 Body	
- 🖘 🄄 Hip	
- 👁 🖨 Abder	men
- 🐵 🎃 Ch	heat
- 10 6	Neck
- 🗇 (	🗇 Head
1	🗇 Left Eye
•	🕞 Right Eye
- 🗇 🖨	Right Collar
- 🖘 🕯	🗧 Right Shoulder
	Diable Commune
Apply Std Rot. Order	Creste IK Chain
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Double click your clothing prop and it will appear white, click "create new figure and name it. Double click your clothing prop again and it will appear white, click "Apply Std. Hirarchy". Double click your clothing prop a third time and it will appear white, click "Apply Std. Rotation". After these steps the groups of your prop are in the right parent-child relationship (and this is very important) and also the rotation and bend parameters are set.

Close the Hirarchie Editor Window. If you want to (I recommend it) save your "\*.obj" file by exporting.

#### Step 6 - Preparing the donor figure for the setup room

To make your clothing prop conforming it will need bones. These bones you can "borrow" by a "donor" figure. The donor can be the humanoid figure (like SP3, V3, Jessi etc.) or you choose a similar clothing figure for this purpose (I recommend that). Here I load the "Morphing Fantasy Dress" for SP3 (DAZ) into the scene. Some clothing figures have the IK turned on – you will have to turn it off and zero the figure. Then memorize the figure (Edit > Memorize > Figure) and save it to the figure library. Delete everything except the clothing prop out of the scene, select the prop and proceed to the setup room. Say "yes" to the appearing window.

## Step 7 - In the Setup Room

In the setup room load the donor dress you prepared before from the figure library.



Voila - that's it. Go back to the pose room. If there are no mistakes in the prop's grouping no warning message will appear and your prop has turned to a figure!

## Step 8 - Test

Load you figure (here: SP3 from DAZ), pose it and conform the new dress (Figure > Conform to ...).

After a little scaling, bending and twisting it fits humanoid figure.







## Step 9 - Final Work

Now the dress contains a lot of parameterv dials from the donor dress, but they do not work. You can delete them easily by using the freeware tool "Morph Manager 4" (http://www.morphography.uk.vu/dl.php?file=MorphMan40.zip).

Hope you have fun with this tutorial and that it is helpful!