# Basic Clothing Modeling - An Introduction

If you're one of the many people who have decided to venture into the realm of a modeling app to make clothing for your Poser characters, you've certainly come to the right place! Now, I'm certainly not an expert, but I started out feeling lost, found a few simple tutorials, and just kept teaching myself from there. I'm not the world's greatest modeler, but I do hope that I can save you some of the initial frustration of "how do I even start this?" with this series of tutorials.

This series of tutorials is designed more to show you some general tips and tricks that (I hope) are not program specific, but rather something that people can apply in their modeling program of choice to give a base they can build from as they find the techniques that fit them best. My way is most certainly not the only way, and it is my hope that you'll even find a way to do it better!

Any modeling tutorial for your chosen program can be of great help if you're just starting out. Something simple that shows you how to use the tools in your application is great! Start out with the small and simple and work your way up. Take an existing model of something you'd like to be able to make into your modeler and take it apart to see how it was put together. Don't get bogged down thinking you can only learn from clothing tutorials - any trick you pick up from modeling something else will always be there for you to apply to anything you create.

The best thing I can impart to you right now is - take it slow! Trying to do too much too soon can quite often leave a person feeling frustrated and confused. Set a goal for what you want to be able to do, and work towards it. Certainly jump right in and find your passion, but don't let it leave you feeling overwhelmed. Practice - practice - practice, and soon you'll be on your way.

And don't be afraid of showing your mesh to other people and getting advice. Most people in the 'Poserverse' are happy to help someone if they've hit a snag or need to know how to fix something if it's not working. They'll often have some tips and tricks up their sleeves to share that you can take, apply, and adjust to fit your style of modeling as well as your current project.

Well, I'm sure you're all tired of me blathering on, so we'll move onto the first part of the process - what to do when the inspiration bug has decided to bite you.


** Please note - Daz has recently released their figure rigging toolset for Studio. I cannot yet afford to add it to my content creation tool collection, so these tutorials are written mainly from the Poser side of things. The basic ideas for conforming things should translate over ok, and hopefully in the future I can make an addition to this tutorial series to include things working with the D|S tools.

I don't want anyone to think I'm leaving it out on purpose, just that I can do what I need with the software I've already purchased, and as of this writing, have other things that need funding more. (like a kitchen remodel...try it, you'll love it...)

# Getting Started - Planning the project

Ok, so we're sitting at our computer, we've loaded up a figure...and now we're scrolling through our content libraries looking for the perfect outfit. Except..wait for it...we can't find exactly what we want, or we just plain don't have it.

We could spend hours looking through the various market places and freebie offerings, it might possibly be there - or we can just decide to make it ourselves. (which, if you've opened up this tutorial, you're already at said point and just want me to shut up and get on with it)

So, now what?

Well, sketch out your idea. It doesn't have to look pretty or have all the details, just enough to generate a rough plan. Don't feel like drawing? Don't like to draw? Search online for some images of a similar outfit, enough to give you an idea of what will need to be made. Look in magazines and books for pictures or drawings of what you want to make. Take a trip to a local store that sells clothing patterns and see if you can't find it that way.

Clothing patterns can be of help showing you how a garment goes together - and you don't have to be a tailor/seamstress either. There are some modelers out there that do actually cut pieces of mesh out just like a pattern and then join and adjust in their modeler to create Poser clothing. Again, we're back to the "find what works best for you" line again. I don't use patterns in that way, get enough of that at the sewing machine, but they can be a great source of understanding what goes into the clothing we wear. Cut out the pieces, tape them together and see how the various pieces work with each other. This can also come in handy when planning out your UV mapping.

And you don't have to restrict yourself to people sized clothing patterns either - Barbie doll (any doll really...just generally get more bang for your buck with Barbie) patterns often come with multiple outfits, and generally are more simplified (less pieces for a similar people sized pattern) - which would lend itself well to translating into our 3D world. Not to mention, if you were so inclined, you could get yourself some scrap fabric, a needle and thread (they're small enough to make by hand - no machine needed) and make yourself a mockup to have sitting there on your desk to refer to as you model.

Right now you're probably looking at the screen thinking I've lost my mind. Make doll clothing? What am I going to do with doll clothing laying around my house you say? Well...if you know any little girl that loves Barbie, think how thrilled she'd be to get some handmade doll clothing as a gift. Don't have kids, don't know anyone who does? Donate them to a local thrift store, or hey, sell them and make some Poser spending money. (I'm just full of bright ideas...can't you tell?)

Yes, the crazy lady will get back on track now.

So, the idea is there, you know what you want, and now you want to get going. But we can't just model it and hope it works - we need to model around our chosen figure for the best results. If you're just making it for yourself, and you've morphed the figure, you'll want to export out a copy of the morphed obj file. If you have the intent to share your creation, you'll want to decide if you're going to share the morph you've created/dialed up...or...model around the default base figure shape and leave it at that, or

include some of the figures morphs into the clothing as well if you're making conforming clothing. For dynamic clothing, you can either model around the base figure, or the morphed figure depending on what you need for your project.

To morph or not to morph - is a grand question. Not including morphs saves you some time, and for a freebie, people are generally fine with morphless clothing (and if they're not...well...I'd have to bleep out such comments on people that gripe about free content their peers have created). If you're wanting to venture on out to sell clothing, you can leave it morphless too...but in my opinion, it's a great deal better to include at least a few of the base figure morphs in the clothing (though, the more you stick in, the happier your customers might be..the return visit is the most important).

I personally don't mind having to adjust a freebie piece of clothing to fit my characters. I have however become wary of purchased content that doesn't include morphs, or only includes one or two (I mean, to not include at least all of the main breast morphs from a female figure...that's just..well...silly in this crazy lady's opinion). Yes, it is a lot of work to include morphs - I'm not going to lie to you on that point. And yes, there are magnet sets out there and clothing converters, but not everyone likes to or wants to use such. This is a decision you'll have to make, and I will be covering making morphs for clothing in later tutorials in this series.

But I'd better move on to the main course before your eyes glaze over and you start cursing at me. (and believe me - all that blathering up there is just the tip of the iceberg of what can end up going into a project..and we haven't even started modeling yet, let alone setting up UV maps and texturing)



Don't let the amount of information here scare you away...I don't like walking into things blindly, so I tend to write my tutorials in such a manner. Granted I probably spew forth too much stuff at times, but hey, you can always skip parts and come back to them later. There isn't a test at the end, so use these tutorials in a way that best fits your needs.

# Getting Started - Setting up the base to model around

You have a couple choices here depending on what you're wanting. You can go into the geometries folder and snag the base figure's obj file so you don't have to worry about morph or pose data when modeling (this is what I do), or you can export it out from Poser. If you're wanting to model around a morphed character, then you will need to export it out from Poser. (I don't use D|S...so hopefully the process is relatively similar)

Exporting a morphed figure from Poser - this process is also what you will use if wanting to include the morphs in your clothing later on after modeling around the unmorphed base figure.

- Load your desired figure
- Make sure you're at a default or zeroed out pose (generic T pose or similar)
- Apply morphs
- Go to File --> Export --> Wavefront OBJ
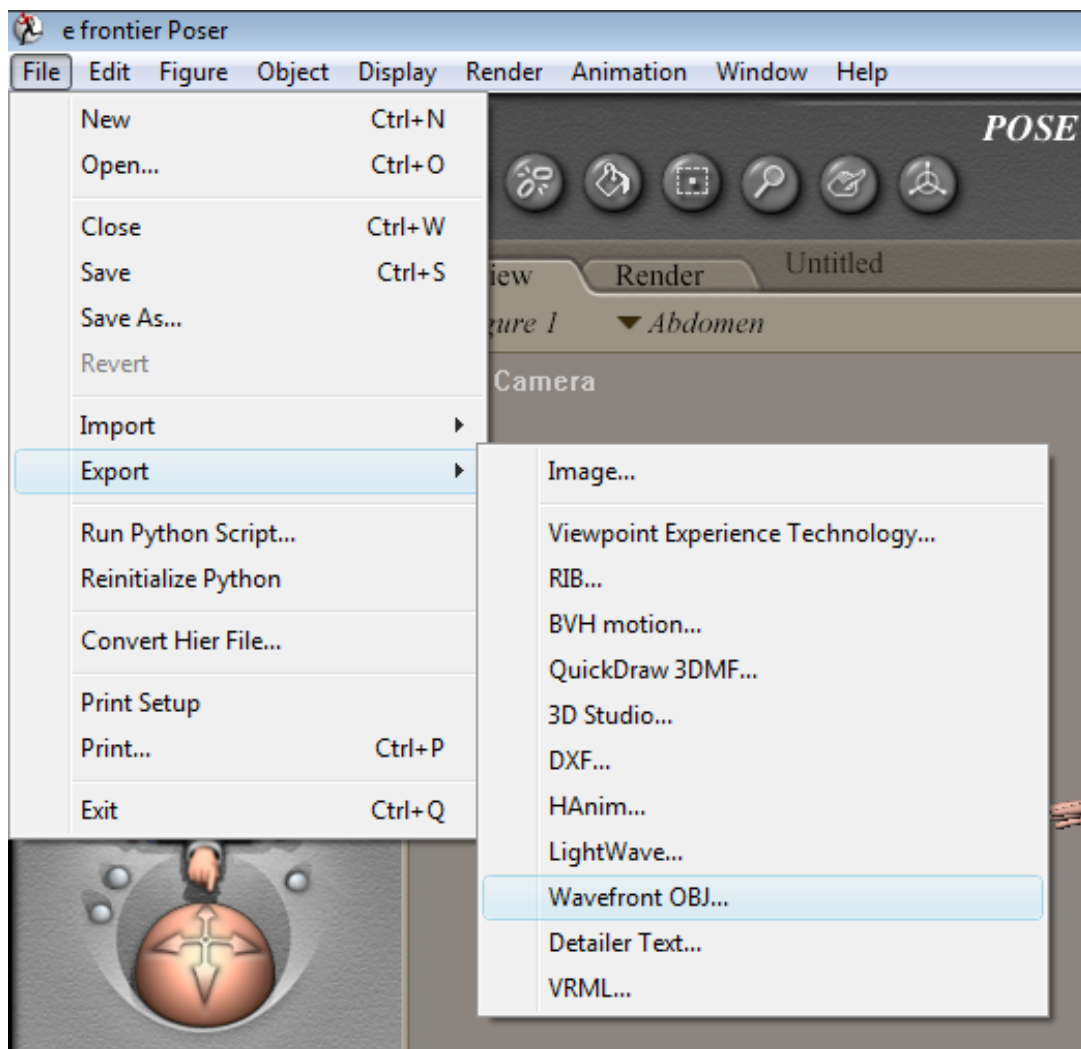
The next dialog box that pops up is the **Export Range** selector. This would be if you were exporting an animation. But since we only need the figure in default position with our morphs, we only need to worry about a single frame, so just leave it as it is set by default and click **OK**.
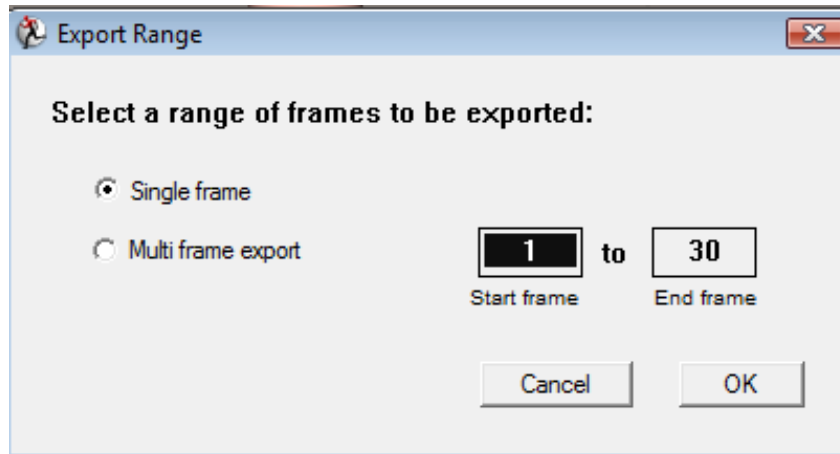


The next step brings up the **Hierarchy Selection** dialog. This is where we select our figure (or specific parts thereof) for export. When it first opens, everything should show as being selected - each box should have an **X** in it. Click in the top box labeled **UNIVERSE** to deselect everything. Then click on the box for just the figure with whatever name it shows up with. This will select each individual part of your figure.

If you're only wanting a specific set of body parts, then only click on their specific box in the hierarchy to select them. I personally just export out everything except eyes and internal head bits as I keep a clean base figure to work with and get rid of the parts I don't need for a specific project in my modeling app. Figure out what best suits your needs. Once that's done, click **OK**.

And since the image of the hierarchy selection box was a bit too large for the end of this page...well...enjoy this silly little filler image.
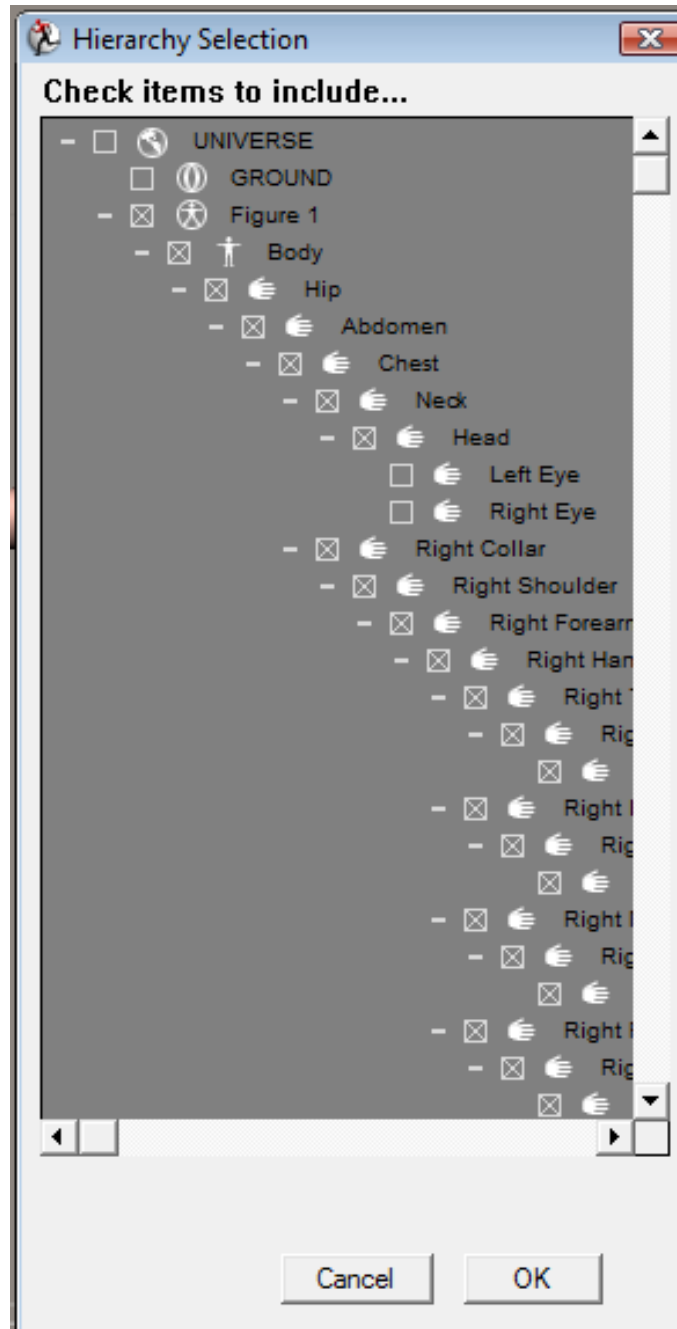
Next comes the save file dialog (I trust you don't need a screen shot of that one). Name it something you'll remember for future use, and save it to a place you'll remember easily as well. I have a folder called Figure Bases, with sub-folders therein for each specific figure I work with. Keeps everything in one location for me and I know exactly where to go to import a figure to model around for whatever project fires me up on any given day.

The next dialog box is probably the most important, and can be the single most confusing part, to the whole export from Poser process. But fear not, I'm here to help make this your friend.

You may not ever want to invite it over for milk and cookies, but hopefully after this, it will make sense and not be this confusing, frustrating monster.

First, we'll take a look at the default state at which it presents itself.
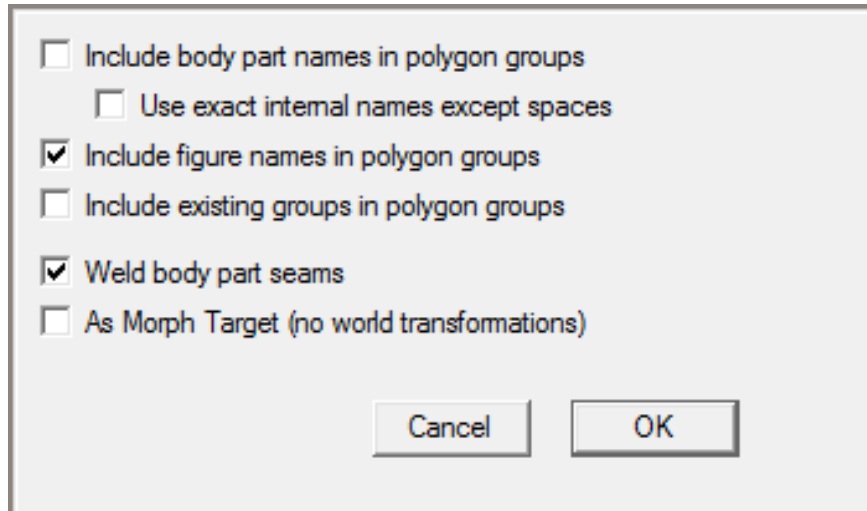


What is all this stuff? The first four options deal with how Poser meshes are broken down into their respective groupings - from the toenails to the eyelashes. The last two give you your main export options. You can chose to have Poser weld all those groups together - and yes, this can come in handy at times having just one solid mesh to model around - however, it can also cause us a headache later on if we're making conforming clothing.

If everything is welded together, it can make it a tad difficult to cut up our clothing mesh to match the base figure as best as possible (because the less time spent with the Poser grouping tool, the better in my opinion..kudos to you if you get along with and/or like it). Most modeling apps should give you an option to use different layers and/or to group things together. In Max, I place the base figure on a separate "layer" within the scene, and I can also select all of the body parts and group them. They're still separate, and I can ungroup later, but they're treated as one item as far as selecting things while working. This is where you will need to decide what is going to work best for you and your work flow.

The bottom option, **As Morph Target,** is if you need the plain base figure with **no morphs and no pose data.** This is only used if you are going to take the figure and make your own custom morphs. **If you check this box, the morphed figure you are wanting to export will not be there!**

So, for modeling purposes, you really only need to concern yourself with the top options (and welding body parts if you so desire). These options keep the mesh grouped as it currently is in Poser, as well as keeping the names of each group associated with them. This comes in handy for making conforming clothing so you can select just the body part needed, cut your clothing mesh to match as closely as possible, and name it the same.

Why do we need to worry about this? Because of how rigging is handled in Poser, we take the bones from the figure and apply them to the clothing so they act the same, pose the same, and

work with the base figure. If everything is named the same following Poser's internal name system, you just take your clothing into the setup room, apply the base skeleton, and it will automatically associate the correct clothing group to the correct bone. (We'll go into this more later on)

Below are the settings I always use when exporting from Poser. You can experiment to find out what is going to work best for you and your chosen modeling app. Once you've decided on your export options, click **OK** and you're good to go.
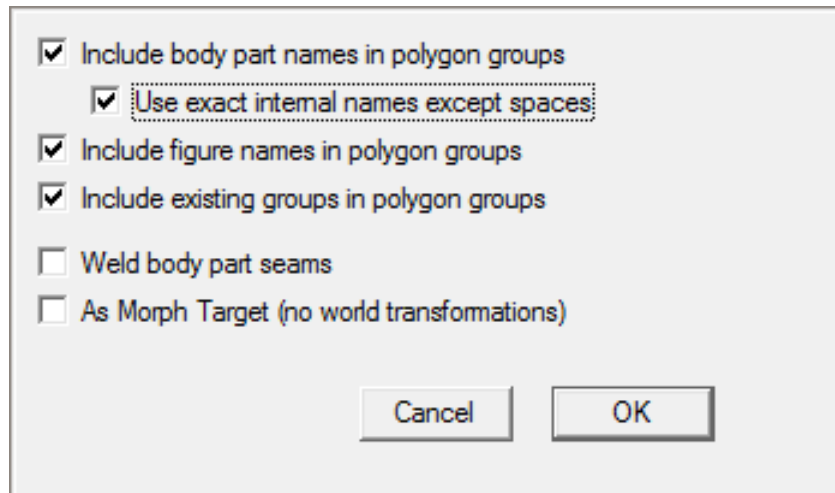


Guess what?!?! We're now one step closer to modeling our own clothing!

No, really. The planning, the setup - those can sometimes be the hardest parts. But now that you know what you want to model, and your base figure is almost ready to go, it's all downhill from here.

What do I mean "the base figure is almost ready to go"? Well, there's this little thing called Poser scale vs. everything else scale...and it's something you have to factor in before you can start modeling.

# Getting Started - Dealing with Poser Scale

Hey, you've made it this far, don't tune out on me just yet. Before we take our base figure into our modeling app, we need to deal with scale issues.

For some reason, Poser scale is much much much smaller than every other single program out there. You can choose to model at Poser scale, however I have found that it is easier to model around something a tad larger. Would get funny things going on occasionally in Max when I first started and was doing things at Poser scale.

Couple options here, you can do some test runs with your modeling app if it has a scale option on import/export or within the program afterwards, or you can use an outside scaling app to take care of the task for you. If you're using your modeler for this, you'll need to figure out the amount of scaling up that will work, and if it's the same ratio to reduce or if it's different before you export to then import into Poser. Myself, I could never get the scale utility in Max to work right, though I know others do use it for their Poser work. Occasionally, there is some part of any program that decides it just doesn't like me.

So instead, I use Maz's OBJscaler utility to enlarge the scale on items exported from Poser, and then reduce them again before I import them. What's nice about this little utility is it takes all the guess work out for you, and as long as you enlarge and reduce by the same amount, you don't have any problems going back and forth to Poser scale.

I enlarge by a factor of 100, and then reduce again by the same. Has worked fine for all my projects the last few years I've been doing this...and I'm also happy to say it still works just great on Vista Ultimate (64bit version OS).



You just input the file you want to enlarge/reduce, decide which direction you need to go, set your scale factor, give the output file a slightly different name (I add a B to the end for enlarged files, and a sm to the end for reductions) - click the convert button and Poof! you're good to go.

You can download OBJscaler for free if it's something you decide to utilize, and as I've said, been using it for years as part of my workflow with no problems at all. It is windows only though, but if anyone knows of a good option for Mac users, would be happy to edit it into the tutorial here.

http://www.sandylodge.demon.co.uk/

Click on the utilities link in the left menu, and OBJscaler is the first thing you'll see. (and yes, I know it's called Objaction scaler, but that's really a mouthful)

So, we've made it through the initial phase - bet you thought it'd be a bit less huh? But guess what, now that you know the pre-modeling stuff, any future project will go that much quicker. And with a collection of base figure obj files stashed, you won't have to mess with the export from Poser part each time. Just import the one you want into your modeling app and start making clothes.

Give yourself a pat on the back - you're ready to start modeling!



(and yes, I'm addicted to the clip art smilies....)

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