

Clothing MorphKit for Victoria 4

Version 3.0

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A Complete and Professional System for adding Victoria 4 Morphs to clothing using Poser's Magnets and re-designed Python Scripts.

This Kit covers the methods for using the sets in Poser 5-7, Poser Pro and DAZ Studio.

It is possible to use the deformers (Poser Magnets) with earlier versions of Poser as long as you know how to load magnets, spawn morphs manually in each body part and Create a Full Body Morph after dialing each spawned morph to 1.000, followed by setting all of those morphs back to 0.000. Be warned that this is a long, manual process.

Foreward

Firstly, thank you for purchasing the Clothing Morph Kit for Victoria 4. I hope that you have as much fun using this kit as I have creating it.

The purpose of this Kit is to replicate the ++Morphs (from DAZ) into clothing produced for Victoria 4, through the use of Poser's Magnets.

This Kit is more effective "out of the box" with clothing that uses standard body parts. In other words, clothing that contains unique parts not common to the Victoria 4 figure will require manual adjustment after a magnet set is loaded. There is a Tricks and Tips section at the end of this Guide to help you with this. Pose-Assisting parts, such as body handles should have no issues with this.

Though great care has been taken to make sure that the Magnet Sets work with a variety of garments, some clothing may require some manual adjustment. In this version of the Kit, we have also included 10 additional overall shaping morphs, which are called "Adjustments" that you can use to spawn bonus morphs into the clothing to give you or your customers more flexibility with the clothing.

It is recommended that you have some familiarity with Poser magnets. However, this guide will walk you through each step in using these deformers to replicate morph targets, so no need to fear if you feel uneasy with them.

This version 3.0 of the Morphkit features a brand new design and outlook on how magnets can be easily used to facilitate adding V4 morphs to clothing. The highlights in this version include specially designed "smart magnets" which pass the names of the morph and the body parts which should be receiving the morph to the python scripts. This makes the scripts a rather integral part of the Kit.

Users of the earlier versions of the Kits will see some similarities but there are differences. Seasoned or not, you are urged to follow the tutorial at least once in order to get the hang of how Version 3.0 differs. Regardless, I believe that you will find this to be the easiest system yet in our arsenal of morph utilities.

Thank you for your patronage!

Additional Tools for Poser

Everything you need is included in this Kit. The Magnet Sets are located in a Props folder named "ClothingMorphKit-V4".

You'll find 73 Magnet Sets (63 replicating V4 Morphs plus 10 Adjustment Morph Magnets) categorized in several groups:

"A" Magnets represent Full Body Morphs, "B" Magnets represent custom Adjustment Morphs, "C" Magnets represent Upper Torso Morphs, "D" Magnets represent Arm-Hand Morphs, "E" Magnets represent Breast Morphs, "F" Magnets represent Lower Torso Morphs, "G" Magnets represent Glute Morphs and lastly, "H" Magnets represent Leg-Foot Morphs.

The categories simply present a way to organize everything and you may want to only include Full Body Morphs along with Adjustment Morphs, for example, in your outfits.

The other tools in this kit include:

ClothBall

The ClothBall is a special figure included with this Kit to offset quirks that may arise from the design of the Magnet Sets and loading them into a scene that includes a figure and clothing.

The ClothBall should be used as the first loaded figure if you plan on working with the Magnet Sets with V4 also present in the scene, so that you can see the effects first-hand. Its purpose is to catch stray magnets from dropping onto V4 and causing her body parts to morph. This really has no effect on the morph creation process if it happens. It is simply a temporary anomaly.

Python Scripts

Since the scripts are such an integral part of the kit, it is recommended that you make use of them. They are not required to create morphs and spawn Full Body Morphs (P7 and Poser Pro only) but they make the process much easier.

They can all be found in your poserScripts\Netherworks\ClothingMorphKit3 Poser directory and also in the Scripts Menu in Poser 7/Poser Pro under "Netherworks" then "Clothing MorphKit 3" for instant access.

Poser 5 & 6 users: If you'd like to add these tools permanently to your Python menu but aren't sure how to do that, please see Appendix I at the end of this guide for instructions.

Poser 7 / Poser Pro users: There is no need at all to add these scripts permanently. If you prefer to work from the Python Palette, there is an entry in the Scripts Menu named "+ Send Menu to Python Palette". This changes your Palette temporarily. Once you press the "Back" button, the scripts menu is returned to normal.

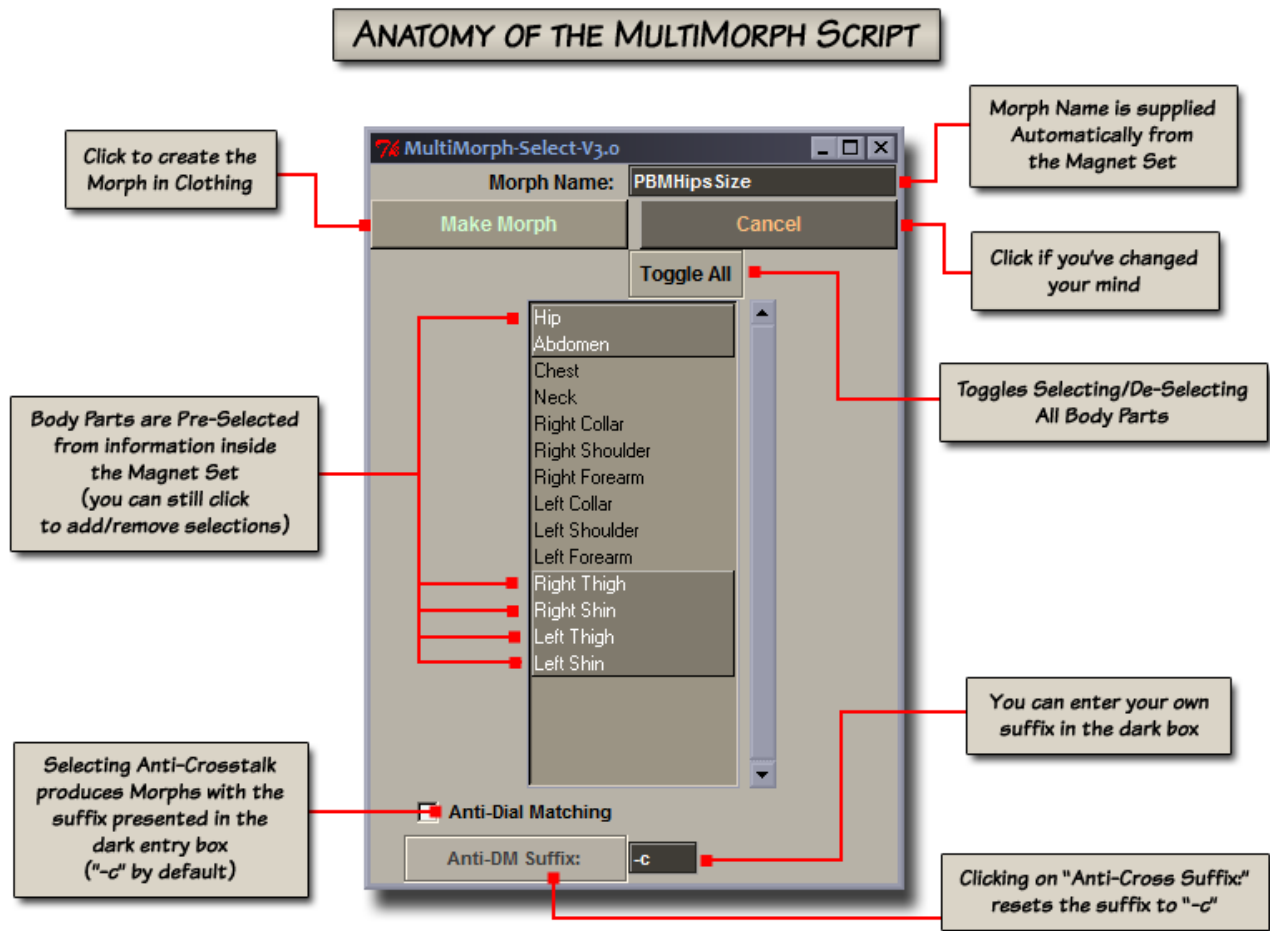
MultiMorph Select (MultiMorph_Select.py)

This is the primary morph-making tool in the Kit. It is much like the earlier MultiMorph Select script except that it is able to determine the Morph name and which body parts to pre-select from the V4 Magnets.

It also features an optional Anti-Dial Matching naming system which sidesteps crosstalk in early versions of Poser and dial matching in DAZ Studio.

The various areas are explained in more depth in the tutorials.

This script will run in Poser 5, 6 or 7 or Poser Pro for PC users. Mac OSX users should be able to use the script in Poser 7 and Poser Pro.



MultiMorph Auto (MultiMorph_Auto.py)

This script is a very quick version of the standard MultiMorph. There is no TK dialog, so it can be used with Mac or PC. It assumes that the clothing you are working with only contains standard bodyparts that can also be found on Victoria 4.

MultiMorph AutoXDM (MultiMorph_AutoXDM.py)

Identical to the script, above, except this one adds -c to the end of the morph names for Anti-Dial Matching.

Remove Magnets (Remove_Magnets.py)

This is a bonus script used to remove all the magnets attached to a figure. It is useful if you've changed your mind about what morphs to the clothing or in the event that a stray magnet has been left in the scene – this can happen, but rarely.

This new version of the script will not remove V4's embedded deformers.

Zero Figure + IK (Zero_Figure_IK.py)

This script turns off the IK and sets the rotation and translation dials of all of the figure's body parts to 0.0000. This script will work on clothing also.

Zero Morphs (Zero_Morphs.py)

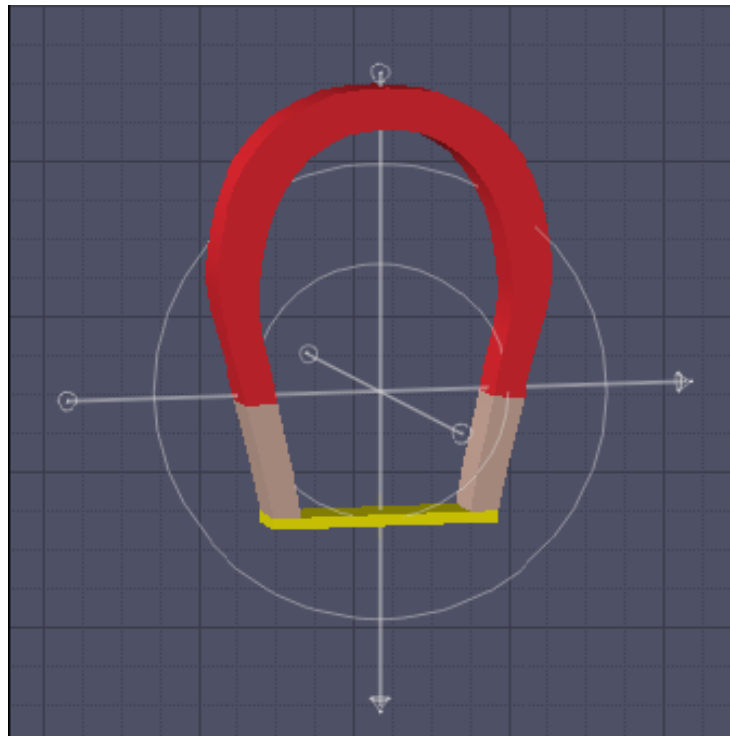
For Poser 5 and 6, this is a finishing script. After you've created the Full Body Morph, this will set all the morphs in the clothing to 0.0000.

Zero Morphs Selected (Zero_Morphs_Selected.py)

This is a bonus script that only zeroes morphs in the selected body part, not all of them. It is a general purpose utility.

Neo-Magnets

As a bonus to this package, I've included a visually enhanced magnet replacement called Neo-Magnets. This gives the standard Poser magnet zones a crosshair (for easily determining the center) as well as directional guides for the axis. It also includes a slightly higher resolution replacement for the Poser ball (new prop and geometry files), so you'll still have access to that primitive.



As the Neo-Magnets are completely optional and not required to use this kit, I have included them in a separate archive within the main zip file. Folder paths are retained, so you can unzip the contents to your Runtime folder if you'd like to use them.

One word of warning – if you replace the poser primitives, you cannot get them back! So you might do well to zip them up first.

Clothing Morph Tutorial – Poser

For this tutorial I am using an original mesh (unreleased at the time of this writing) to illustrate how to use the magnet sets.

You can use any clothing that you'd like to follow along. However, be sure that the clothing is standard in design (no additional body parts that V4 does not have).

1. Load the ClothBall

Start with a brand new Poser scene and load the ClothBall. This figure should be located in your character:ClothingMorphKit folder (Figures then ClothingMorphKit from inside Poser).



As described under the Tools section, the ClothBall is used to keep stray magnets from influencing things we don't want them to when the scene contains a figure and its clothing. If you're working with clothing that you know has all of the Victoria 4 body parts represented, you can skip loading the ClothBall. If you aren't sure, it doesn't hurt to use it.

2. Load the Figure

Load Victoria 4 into your scene. With the figure selected, use the "Zero Figure + IK" script (Zero_Figure_IK.py) to set all joints to a zeroed position and turn off arm and leg IK.

You should have a Victoria 4 that looks something like this:



3. Load the Clothing

Next we want to load the clothing that is to receive the Victoria 4 morphs.

First, **select the ClothBall** (so that it can do it's magnet-catching magic) and then load (by adding to the scene) the outfit.

When the clothing enters the scene **do not** conform it. Do make sure that it is "zeroed", the way we did when V4 was loaded, by again using the "Zero Figure + IK" script (important!)



4. Choose a Magnet Set

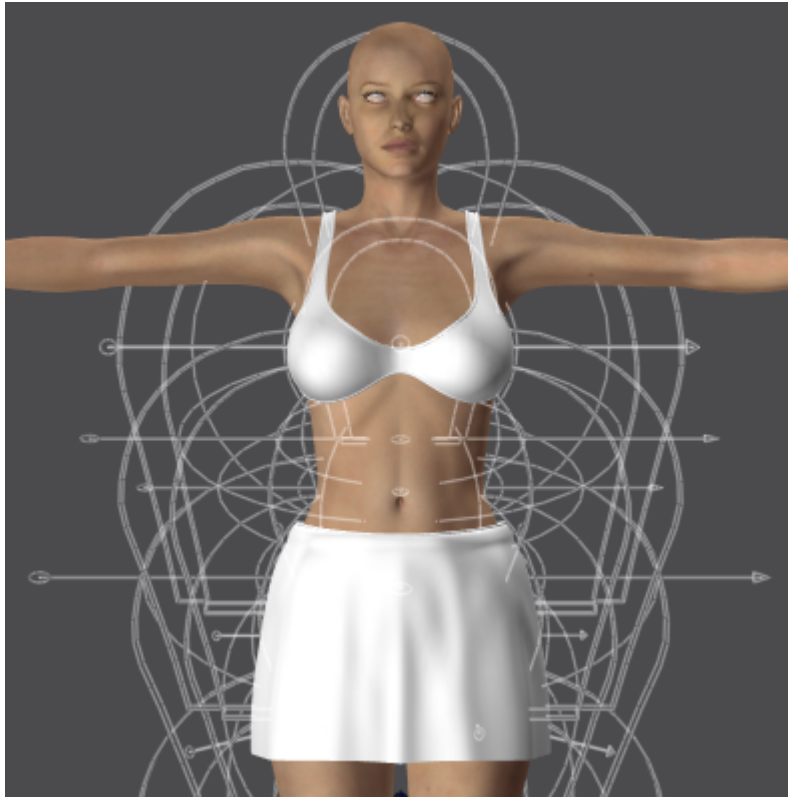
Head over to your Props library and choose the "ClothingMorphKit-V4" folder. You'll notice that all of the magnets are categorized with a starting letter (A through H). This roughly matches each category of body morphs in the Victoria 4 figure. The "B" category contains 10 completely optional magnet sets that you can use to create morphs that generally adjust certain areas.

On the thumbnail of each magnet set is the "internal name" that should be used in the resulting morph. Don't worry though, you do not need to study the names. The scripts will provide the names for you.

Back to our tutorial, we are going to load and use Voluptuous morph, which is "A-Voluptuous". With the clothing selected, load this magnet set.



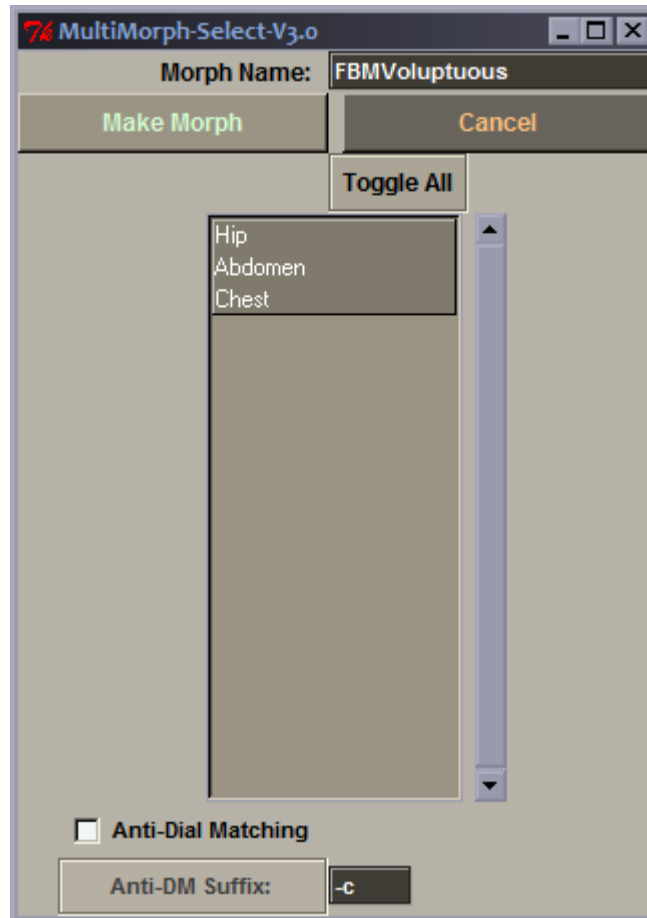
You should have something that looks like the following image. All of the magnets are creating using Edges Only so that you can see the deformation underneath.



5. Magnets to Morphs

Next we want to turn those magnets into morphs.

Make sure the Clothing is selected and load the MultiMorph_Select (MultiMorph_Select.py) script. As in our illustration in the Tools section, you should have the morph name automatically inserted and the suggested body parts pre-selected for you.



You can change the selections by clicking them, which toggles the selection on or off. White text is selected.

The Anti-Dial Matching feature is optional. If you are producing morphs and also like to use DAZ Studio, this option alters the morph naming slightly to prevent Morph Matching from occurring. The morphs created from these sets approximate DAZ' morphs. They will work to match positive morph dialing to a setting of 1.0000. However, folks tend to dial morphs in both forwards and backwards and in that case the morphs may become less accurate.

Mentioned earlier, the Category "B" Adjustment Magnet Sets are supplied to help with reverse dialing also as they can be used to add general adjustment morphs. So if you intend to include the Adjustment morphs, you might not need to worry about Anti-Dial Matching.

If you do decide to use the Anti-Dial Matching, the suffix "-c" is added to your morphs by default. You can enter whatever extension you'd like in the dark box and the script will save it between sessions.

Back to the tutorial, we aren't going to worry about Anti-Dial Matching right now and just create the Voluptuous morph in the Clothing. Click the **Make Morph** button.

In **Poser 5 and 6**, the following things will happen:

- Spawn a morph named PBMVoluptuous on each selected body part
- Delete all of the magnets attached to the clothing
- Set those new morphs to 1.0000
- Close the TK dialog box

Additionally, in **Poser 7 and Poser Pro** the script will:

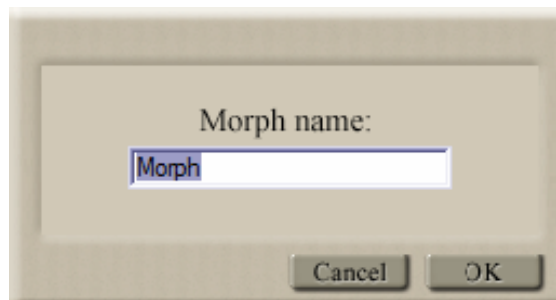
- Create the Full Body Morph Automatically
- Set the Sensitivity and Friendly Dial Name for the Body dial
- Set all the individual morphs back to 0.0000

The **first time** you run the MultiMorph Select script, you will get a dialog telling you that a morph was created, it's name and to go onto the next step (if on Poser 5 or 6). This will not show upon successive runs of the script.

Due to the differences in Python between Poser versions, Poser 5 and 6 users will need to perform steps a, b and c below. Poser 7 / Poser Pro users can skip right to step 6.

5a. Create a Full Body Morph (Poser 5 & 6 only)

With the new morphs set to 1.000 go to the Poser menu and select "Figure" then "Create Full Body Morph". You'll get a dialog box similar to this (the actual look is Poser version dependent):



For the naming, we're going to use the name on the Magnet Set Thumbnail. In this case it's **PBMVoluptuous** (if you were using Anti-Dial Matching the name would be PBMVoluptuous-c if you used the default suffix).

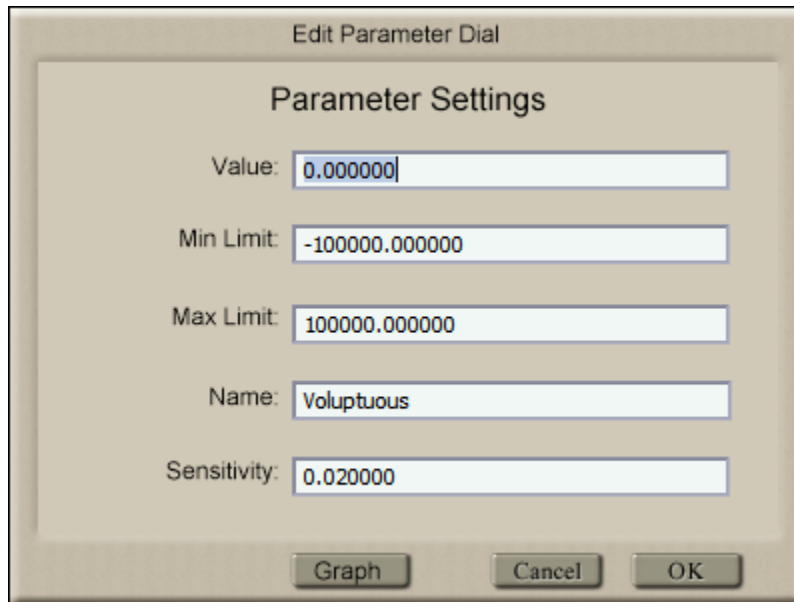
5b. Set Morphs Back to Zero (Poser 5 & 6 only)

Now we want to set all those new 1.0000 morphs back to zero. With the Clothing selected, use the Zero Morphs script (Zero_Morphs.py).

5c. Adjust Body Dial Name (Poser 5 & 6 only)

At this point you might want to give the PBMVoluptuous Body Morph a friendlier name and adjust the dial settings a bit.

Select the Body of the Dress. Go to the PBMVoluptuous Body Dial and double-click it. In this dialog, you want to change the name from PBMVoluptuous to just Voluptuous in the Name entry box. So that you're not dialing the morph forever to get to 1.0000, change the Sensitivity to 0.02.



6. Final Result

You're finished. You can repeat making morphs as necessary.



Clothing Morph Tutorial – DAZ Studio

For this tutorial I am using an original outfit (unreleased at the time of this writing) to illustrate how to use the magnet sets.

You can use any clothing that you'd like to follow along. However, be sure that the clothing is standard in design (no additional body parts that V4 does not have).

The basics of this tutorial were written by DavidGB. His words are used with permission.

1. Load the Figure and Clothing

Load Victoria 4 and the Clothing into your Studio scene. You may fit the clothing to the figure, or not, as you wish.

2. Figure and Clothing Set Up

Select V4 in the Scene Pane and go to the Parameters Pane. Open the pane's dropdown menu (little button with arrow on in the top right corner of the pane) and choose Zero->Zero figure. Apply the morph to V4 that you wish to add to the clothing.

Make sure that the Clothing is Zeroed in the same way as we did with the figure: Select the Clothing and in the Parameters Pane's dropdown menu, choose Zero-> Zero figure.



3. Applying the Magnet Set

Back to the Scene Pane, select the Clothing. In the Content Pane to the Poser Runtime where you installed the magnet set. It should be in Props, then the "ClothingMorphKit-V4" folder. You'll notice that all of the magnets are categorized with a starting letter (A through H). This roughly matches each category of body

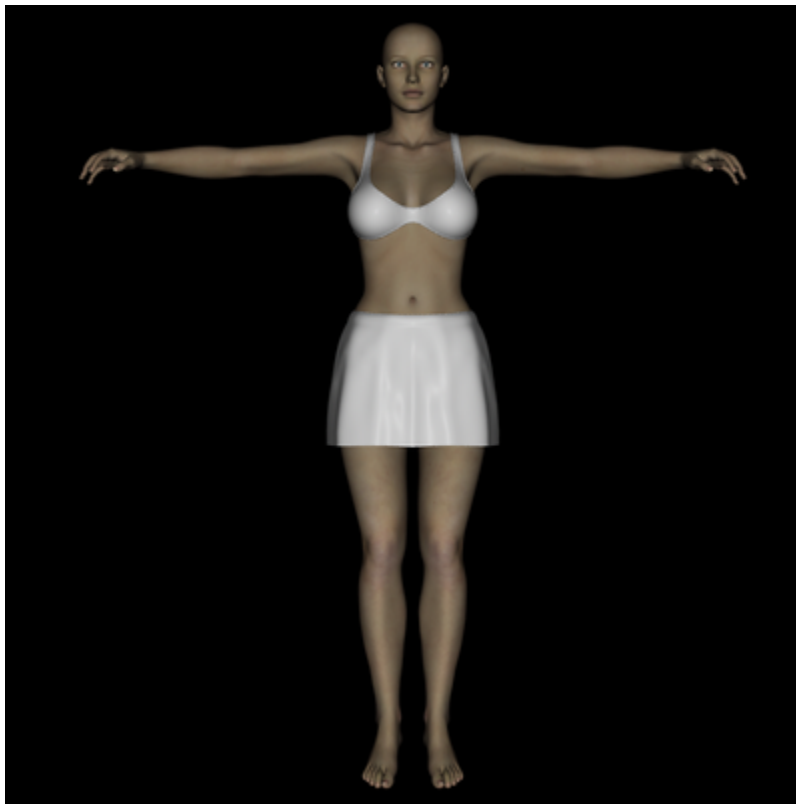
morphs in the Victoria 4 figure. The "B" category contains 10 completely optional magnet sets that you can use to create morphs that generally adjust certain areas.

On the thumbnail of each magnet set is the "internal name" that can be used in the resulting morph.

Back to our tutorial, we are going to load and use Voluptuous morph, which is "A-Voluptuous". With the Clothing selected, load this magnet set.



You should have something that looks like the following image.



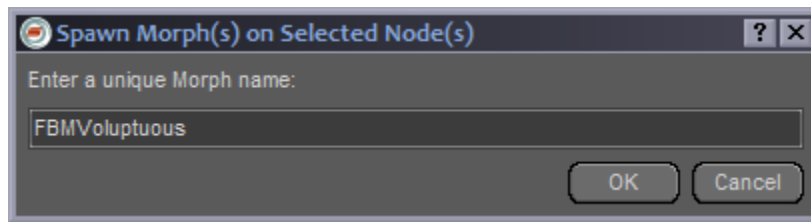
You might notice that on occasion some magnets may "fall through" and attach to the V4 figure. However, this is simply an anomaly and they should not affect the V4 figure.

4. Magnets to Morphs

In the Scene Pane, select the clothing and in the Scene dropdown menu select "Expand All".

Again in the Scene Pane, click in the highest body part node (usually the hip) in the clothing item. Then Shift-Click on the lowest body part node so that all nodes are highlighted and selected.

Head over to the D-Form Pane. In the "Morph Spawning:" section, make sure "Create Root Control Parameter" is ticked, then click the "Spawn Morph..." button. In the little window that opens, type in a name for the morph and click the OK button. For our example here, you may want to enter FBMVoluptuous:



About Naming

If you want the morph to operate automatically in the clothes (when you change the morph setting in the figure the clothes are fitted also) you **must** give the morph a name that is **exactly** the same as the name illustrated on the thumbnail of magnet set - including an FBM or PBM on the front.

If you don't want the morph to operate automatically, then give the morph any name you like (such as the name of the magnet set **without** the FBM or PBM prefix) that is **not** exactly the same.

It must be noted that the morph produced in the clothes is not guaranteed to fit through the full range of the morph setting, particularly if the morph is applied in the clothes-wearing figure in a negative value.

If you create the morph so that it does **not** auto-match the setting, you can manually dial it in the root (BODY) of the clothes to a slightly different value that may solve poke-through issues. If you create the morph so that it does auto-match, then this will not be possible using the root (BODY) dial as this is disabled for an auto-matching morph. However, you **can**, using Shift-Select, select all the nodes of the clothing at the same time, and then in the Parameters Pane, adjust the morph in all the body part nodes away from the auto-matching value to solve any poke-through with just the one morph dial.

Be warned that if you do do Dial Matching with exact names in this step, you will get a **doubling effect** from the morphs "kicking in" along with the magnets still being present. Do not be alarmed, this will be remedied once we remove the deformers.

5. Finishing Up

Having created the morph, we now want to remove all the D-Formers from the scene. From the Scene Pane dropdown menu, deselect "Show Figures", "Show Cameras" and "Show Lights". Now simply select everything in the Scene Paletta (or use "Control-A" on your keyboard). Right-Click anywhere over the selected D-Formers and click on "Remove Items from Scene".

Be sure to go back to your Scene Pane dropdown and reselect "Show Figures", "Show Cameras" and "Show Lights".

Alternatively, if you have done a completely virgin install of DAZ Studio (not an upgrade), you can use the Scene Menu item, Delete All D-Formers to remove the D-Form objects from the scene. However, I had trouble getting this menu to appear at the time of this writing.

To save your work back into the library, after you've added all the morphs that you want in the outfit, first remove Victoria 4 from the scene and then save the outfit (by itself) as a DAZ scene file in your DAZ libraries.

Appendix I: Setting Up the Python Menu

This section is mainly for Poser 5 and 6 users. Poser 7 / Poser Pro users can use the "+ Send Menu to Python Palette" Scripts Menu entry to send the menu temporarily to the Python Palette.

There are two ways to set up the Python Scripts to work from the Python Menu Box with Poser:

Click and Add

The first one is for a temporary change in the current Poser session. Simply Click on an empty button and browse to the script (.py extension) that you'd like to assign to that button. It will remain in place until you close Poser, use a sub-menu within the Python Menu or reinitialize Python from the File menu.

The second option is a bit more involved but gives you permanent access to the script...

Adding a Sub-Menu

If you'd like a brand new sub-menu from the Python Menu, you can set up Poser's Script Palette Menu to show the Clothing MorphKit Tools by using MorphKit3Buttons.py, found in poserScripts/Netherworks/ClothingMorphKit3.

Make a backup of mainButtons.py in your Runtime:Python:poserScripts folder (just a safety precaution). Open this file with a text editor (notepad or similar) and you should have something similar to this (the different versions of Poser may have slightly different text):

```
import poser
poser.DefineScriptButton(1, ":",Runtime:Python:PoserScripts>CreateProps:propButtons.py", "Prop Samples")
poser.DefineScriptButton(2, ":",Runtime:Python:PoserScripts:GeomMods:geomModButtons.py", "Geom Mods")
poser.DefineScriptButton(3, ":",Runtime:Python:PoserScripts:Utility:utilityButtons.py", "Utility Funcs")
poser.DefineScriptButton(4, ":",Runtime:Python:PoserScripts:SampleCallbacks:callbackButtons.py", "Sample
Callbacks")
poser.DefineScriptButton(5, ":",Runtime:Python:PoserScripts:RenderControl:renderButtons.py", "Render / IO")
poser.DefineScriptButton(6, ":",Runtime:Python:PoserScripts:MaterialMods:materialModButtons.py", "Material
Mods")
poser.DefineScriptButton(7, "", "...")
poser.DefineScriptButton(8, "", "...")
poser.DefineScriptButton(9, "", "...")
poser.DefineScriptButton(10, ":",Runtime:Python:PoserScripts:clearButtons.py", "Clear Buttons")
```

Where you see poser.DefineScriptButton, followed by a parenthesis and a number, those are the positions on the Python Menu box.

The ones like:

```
poser.DefineScriptButton(7, "", "...")
```

are blank areas that we can add a new submenu to. Pick one of those and change the

```
"" , "..."
```

to

```
":Runtime:Python:PoserScripts:Netherworks:ClothingMorphKit3:MorphKit3Buttons.py", "Clothing Morph Kit 3"
```

That's it. Now when you open the Python Menu Box, you should see a new selection, Clothing Morph Kit 3.

Appendix II: Tips and Tricks

Non-Standard Body Parts

Inevitably, you are going to come across clothing that have areas that the Magnets Sets aren't affecting. This is usually due to additional body parts built into the clothing to add rigid or draping pieces.

Guide parts, such as body handles or pose pointers, are unaffected and should not cause you to have to adjust the sets.

To remedy affecting Non-Standard Body Parts you have to extend the influence of the Magnet Set to cover those extra body parts.

In Poser

First thing you need to do is examine your clothing and determine where those extra parts are. After loading the desired Magnet Set (Step 4), select a standard body part next to the extra parts and it should reveal which magnets are likely to affect it by looking at the circular Zones of the magnets. You might do well to use Poser's Hierarchy Editor and make a list (perhaps on a scratch pad) of the Magnets that need to be modified. Poser 5 users will have to use the Hierarchy Editor as the magnets don't show up properly in the scene.

For each Zone that appears to be influencing the extra parts, select that Magnet. In the Poser Menu, select "Object" then "Properties" and click on "Add Element to Deform". When the Hierarchy dialog box comes up, select the extra body part that the zone came into contact with. You may have to do this more than once for the same magnet if multiple extra parts are affected.

Depending on the number of additional body parts, this can be a lot of work, so make sure it's something that you definitely want to have the morphs.

When you get to the portion of the tutorial where you use the MultiMorph script to make the morphs, you **must** use the MultiMorph_Select script, not either of the "quickie" ones. Make sure at that step (Step 5) to click to select and include the extra body parts.

DAZ Studio

This is actually much easier to do in DAZ Studio.

Select the extra body part. If there are more than one, use CTRL-Select to select all of the parts that V4 doesn't have at the same time.

Go to the D-Form Pane, click on the "Add Node(s)..." button. In the D-Former selection window, scroll down past all the names that begin "V4" (these are V4's joint smoothing magnets, which you do **not** want to add). On the first name that doesn't begin with V4, press **and hold** the mouse button while dragging downwards until you have highlighted all of the remaining names in the list.

Now click the "Accept" button. You should now see the D-Formers affect any extra parts of the clothes that come within range of their influence.

Magnet Adjustments

Though this should be an uncommon occurrence, there may be times where you'll have to adjust the magnets to better fit the morphs to some garments.

There are a few things you can do to adjust them. First, try to increase the Magnet Zone's (of D-Former Field in DS) influence overall using the Scale dial. Try going up by 2's.

If this doesn't work well, try increasing the influence of the magnet (or D-Former in DS) by slightly increasing the values that have already been set. So if the xScale is set to 102%, try 104% and so on.

You can also try moving the Magnet Base more towards the center of the offending area.

Naughty Magnets -or- I've Changed My Mind

You may load a Magnet Set and then change your mind. The "Remove Magnets" (Remove_Magnets.py) Python script will delete all the magnets connected to a figure with one click.

Occasionally, a Magnet may remain in the scene after using the Python scripts to delete them.

This is a rare occurrence that can happen when a lot of magnets are present (as with the full body morph sets). The "Remove Magnets" script is good for cleaning up after this too.

The All-Hip Dress (Poser)

Often clothing designers will choose to make the entire skirt or lower part of a dress a solid "hip" body part instead of putting Thighs, Shins and Feet into it.

The Full Body and Legs Magnet Sets are created so that this is anticipated. However, in the case of some of the leg morphs, you will need to use the standard MultiMorph Select script and also make sure that you select "hip" in addition to any other body parts present.

Auto Scripts Non-Verbose (Poser)

The Auto Scripts (MultiMorph Auto and MultiMorph AutoXDM) are designed to tell you each time when morphs have been successfully created. If you tire of seeing this dialog at the end, open each in a text editor and change:

```
flag3 = 1
```

```
to
```

```
flag3 = 0
```