Hair Conversion System II
Universal Guide

OS Required: Mac or PC
Software Required: Poser 6+ or DAZ Studio

The Hair Conversion System II is a complete and professional system for converting Prop (.hr2) and Figure (.cr2) Hair from one figure to another. These products provide the tools and scripts necessary to make this a swift and easy process. It does not handle converting dynamic hair.

This package builds on the original System and goes beyond that to give you several brand new tools and features:

- The system is no longer limited by non-standard body parts! This means that you can now convert hair with ribbons, segmented braids, bows and other features. There are new tools included to allow these conversions to be done easily. However, you will have to "parent" Figure Hair done in this way.
- Brand new scripts (Poser only, DS doesn't really need them) have been included and older scripts modified with robust new features and flexibility. Scripts allow you to: Create New Morphs Easily in Figure and Prop hair, Apply Existing Magnets to Hair or Any Other Type of Head Props in the Scene, Unlock Hair Parts and Turn on Bending, Apply Texture Shaded Mode to Hair, and more!
- One Magnet Set for Each Type of Conversion – no more worrying about whether a set applies to propped or OBJ hair. This also eliminates having to use a "Hair Ball" to catch stray magnets.
- More conversions are included – Each package handles converting from Popular Male and Female Figures.
- The individual magnets in each set are descriptively identified, using terms like Top, Front and Back Magnet, so that you can more easily visualize any adjustments.

Forward

The Deformer sets aren't going to give you 100% conversions "out of the box" all of the time. Hair has to fit to the scalp closely versus clothing, which can be looser. Furthermore, hair transparency maps may make the hair appear further away from the skin than normal and may require manual adjustments.

Netherworks Studios has made a few changes to how the Hair Conversion System guide is handled. You only have to follow the tutorials once, after which you should be able to handle converting most hair products. There is now only one unified guide and it will be a simple matter to keep it up-to-date with tricks, tips and techniques.

Furthermore, the DAZ Studio and Poser guides are combined. Within each tutorial, text with no background color is universal text, good for both. Text with a grey background is for Poser only. Text with a light blue background is DAZ Studio only.

For purposes of Illustration, the Victoria 4 figure is going to be used throughout this guide. The actual figure presented is irrelevant as the techniques remain the same.

This System uses different methods for converting Prop and Figure Hair. Both can be done quite easily if you are willing to "Parent" Figure Hair to the target Figure. Advanced Techniques are included for those who would like to try doing "true" conversions that involve some hand-editing and moving of morph targets.

Basic Tools

For Basic conversions of hair, this System is all-inclusive. The magnets and scripts are provided for you and everything can be done inside of Poser or DAZ Studio.

Python Scripts (Poser Only)

There are also several Python Scripts included to help with the conversion process. An overview of these tools follows. These are the actual names used in the Python Palette Menu and may differ slightly in the scripts folder. Scripts can easily be sent to the Python Palette via a special Props file. Poser 7 and PRO users can also access them from the Scripts drop-down menu.

- **START Hair Conversion System II** – For Poser 7 and PoserPRO users and found in the "Scripts" drop-down menu, sends all the scripts to the Python Menu under "Window", "Python Scripts".
- **RESET Python Menu** – For Poser 7 and PoserPRO users and found in the "Scripts" drop-down menu, resets the basic Python Menu under "Window", "Python Scripts".
- **Create Hair Morph** – The standard morph creating script used in the tutorials. It spawns morphs from the magnets, allows you to name the Fitting Morph and so on.
- **Apply Magnets to Selected** – Allows you to apply the deformer sets to any headwear item in the scene, including Figure Hair, imported props and smart props. A figure MUST be in the scene, even temporarily, for this script to function properly
- **Re-Parent Hair** – Allows you to temporarily "fix" prop hair that uses dial adjustments (trans and scaling) to fit the core figure so that it is ready for conversion via magnets.
- **Unlock Parts & Bends** – Fixes an annoyance with some hair models, especially Figure Hair, where the artist has locked body parts or turned off bending. This will allow the magnet sets to affect those models.
- **Texture Shaded Mode** – Another annoyance fix, this script will turn Prop or Figure Hair in Wireframe or Outlined Mode into Texture Shaded Mode.
- **Remove Magnets** – Removes all magnets from the scene. Useful for cleanup in rare cases or changing your mind. It does not affect embedded deformers.
- **Zero Rot/Scale/Trans + IK** – Can be used on Prop or Figure Hair (or even the core figure), this script sets the rotation, scaling and trans of figure to zero (100% in the case of scaling). If it is a figure with IK present, it turns that off also.
- **Zero Morphs and ERC** – Can be used on Props or Figures, this script resets all morph targets and ERC dials.
- **Thumber** – A bonus script that allows you to easily create Thumbnails for you conversions. Uses tkinter interface and may not work on Mac.
- **Open PDF Guide** – This script gives you easy access to the Hair Conversion System II Guide in pdf format. Requires Adobe Acrobat Reader to view.

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.

Advanced Tools

The Advanced Tools are only required for those of you who completely shudder at the notion of parenting Figure Hair rather than conforming it (this is called "Fit To" in DAZ Studio).

Text Editor

For Windows users I recommend something much more robust than Windows' Notepad, such as: **Notetab Light** (http://www.notetab.com/ntl.php) or **Edit Pad Light** (http://www.editpadpro.com/editpadlite.html). Both of these programs are able to handle very large files as cr2s can often be.

Morph Manager

For moving morph targets from the old to new hair (Figure Hair only), we have two choices: one for PC users, one for Mac users.

PC users will need to download Morph Manager by Paul Mason. English Bob has it available for download on his utilities page here: http://www.morphography.uk.vu/dlutility.html
We also have Morph Manager as a free download in the Freebie area of our store.

I don't have the best answers in the world for moving morphs for Mac users but here are some ideas:

If you are not on OSX, you can try Poser Maconstructor by Martin C in the downloads area of soft-rabbit. URL: http://www.soft-rabbit.com/

If you are on OSX, you are probably going to have to try to use a Macintosh Emulator for Maconstructor or a Windows Emulator for Morph Manager.

A couple of Macintosh Emulators:

Basilisk II: http://basilisk.cebix.net/
Sheepshaver: http://gwenole.beauchesne.info/en/projects/sheepshaver

A Windows Emulator:

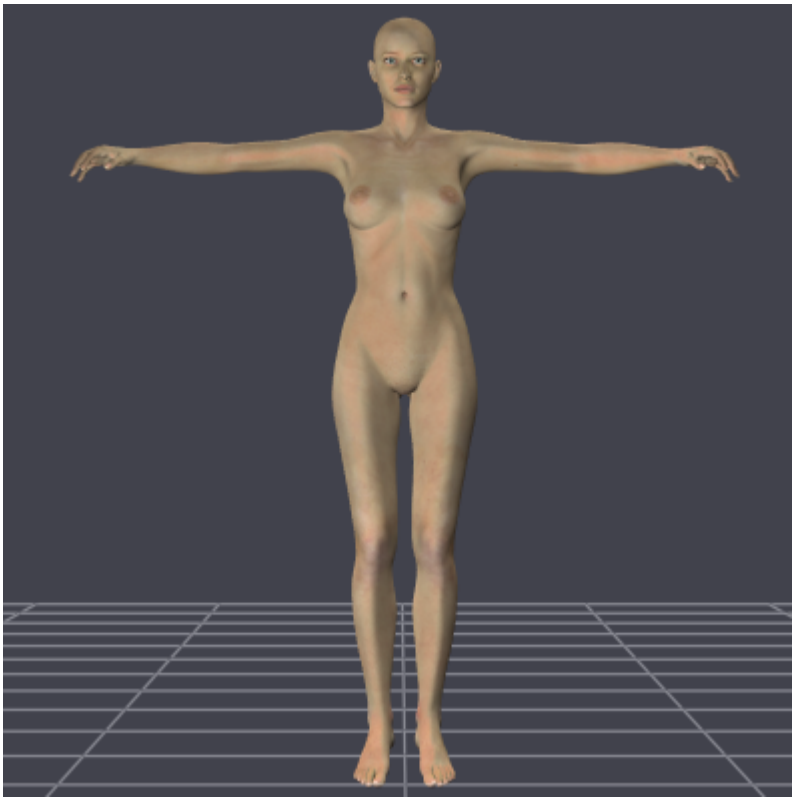
Q: http://www.kju-app.org/

Converting Prop Hair (hr2)

First let's try our hand at converting some Prop Hair. For this tutorial, we are going to use the Full & Feathered Haircut for Victoria/Michael available in the Platinum Club at DAZ. It is a Victoria 1 & 2 Prop Hair. (link: http://www.daz3d.com/i/3d-models/-/full-feathered-haircut?item=727&_m=d).

However, you can use any prop hair that is represented in the Hair Conversion product that you purchased.

1. Setting Up



Poser:

In Poser 7 and Poser PRO, you can easily access all the scripts from the Scripts Dropdown menu, under the "Netherworks - Hair Conversion II" folder.

In Poser 6, Simply head to the "HCS-II-Victoria 4" Props folder and use the "+Load Python Menu" prop.

Start with a fresh scene and load the figure that will receive the conversion. I find it best to work with "zeroed" joints and IK turned off. This means that all the various body parts have zero in their rotations (which usually appear as Bend, Twist, Side-Side, etc) and that the IK for the arms and legs are turned off.

Fortunately, you don't have to do all of this manually. A python script is provided to zero all joints and turn off IK in one click. It is called "Zero Rot/Scale/Trans + IK".

Now we are ready to load the hair.

DAZ Studio:

Start with a fresh scene and load the figure that will receive the conversion. I find it best to work with a

figure with "zeroed" joints. This means that all the various body parts have zero in their rotations (which usually appear as Bend, Twist, Side-Side, etc).

Select the figure in the Scene Pane and go to the Parameters Pane. Open the pane's drop-down menu (little button with arrow on in the top right corner of the pane) and choose Zero->Zero figure.

Now we are ready to load the hair.

2. Load Your Prop Hair

First, select the figure. Go to your Hair library and load the hair to be converted into the scene. It should appear somewhere above, below or even inside the figure's head.

Poser Users:

Often the hair will enter the scene in Wireframe or some type of mode with lines in it. Pre-Poser 6, Poser didn't preview transparencies very well and this was done by artists to compensate for that. We can easily set the hair to Texture Shaded mode by using an included python script, "Texture Shaded Mode".

3. Fixing Moved and Morphed Hair

A common problem with converting older (and sometimes newer) hair is that the Artist may have tweaked the product using the trans, scale and rotation dials. This doesn't work very well with Magnets or D-Formers because they look at the hair in its original position without adjustments.

What you want to do is check the Parameters Palette (or Tab) and look at the dials under "Transform". If the rotation and trans dials are anything other than 0.000 and the scale dials are anything other than 100%, we need to fix that before conversion.

Also take a glance at the Morphs Dials if there are any in your hair. If the are dialed to various strengths, we need to zero those out – you can redial them later if you wish.

Follow the steps below to fix the hair. If all the dials are okay you can just move onto step #4.

Poser:

If the original hair has been rotated, scaled and/or trans to fit the model and "fixing" Morphs (such as FIT Victoria, Fix Neck, Adjust this or that) have not been set to anything other than 0.000, you can use the following method to "fix" it:

Select the Hair Prop and run the "Re-Parent Hair" script. What this does is Parent the hair again to the head and sets the hair to "inherit bends of the parent". This will effectively set all those naughty dials to 0.000 position. There is a side-effect that if you move the figure's head around, the hair may stretch and bend around a bit. This is eliminated once the hair is saved to the library and reloaded into the scene.

If the original has has been manipulated with any combination of rotation, trans or scaling AND some kind of fitting or fixing morphs are applied, it becomes more involved to fix it. You shouldn't have to use this method very often:

a. Temporarily Save the materials in the hair. You can do this by saving a Material Collection (Poser 6 or higher), using our PoserWriter Premium product, Shader Spider or saving the materials one at a time as single material files.
b. Export the hair as a Wavefront .obj file. Make sure everything in "Select Objects" is de-selected except the hair prop. In the "Export Options", uncheck everything except "Include Existing Groups in Polygon Groups", which should be selected. It is HIGHLY recommended that you name the exported file figureHair.obj, especially if you plan on using Morph Manager to put morphs back in it.
c. After export, delete the hair from the scene.
d. Import the hair you saved back into Poser with all the "Import Options" de-selected.
e. Apply the materials you saved.
f. At this point, if you can select the Properties of the hair and give it a different External name, such as MessyV4 (in our example).
f. Save the hair to your hair library with a temporary name.
g. Delete the current hair from the scene and load your temporary hair.
h. To restore morphs to the hair you can use Morph Manager or a program such as Cr2 Builder. Please see the appendix at the end of this guide.

DAZ Studio: (this is not the easiest fix as morphs are more time consuming to put back in the hair using DAZ Studio – you will also need the Morph Loader plugin to restore morphs)

a. Start a new scene and load only the prop hair from the Hair Library.
b. Temporarily Save the materials by Saving As... Material Preset (any name you'd like).
c. Save any morphs from the hair that you want. One at a time, dial each to 100% (or 1.000) and Export as a Wavefront .obj. Make sure "Do Not export Invisible Nodes" IS selected and "Weld Figures" IS NOT selected. Under the Advanced Tab, in the "Write Groups" box, make sure "Use Existing groups" is selected. Use unique names for each morph you export. These are temporary until you get the morphs back in.
d. Export the hair itself as a Wavefront .obj and in the Presets dropdown make sure Poser is selected. Make sure "Do Not export Invisible Nodes" IS selected and "Weld Figures" IS NOT selected. Under the Advanced Tab, in the "Write Groups" box, make sure "Use Existing groups" is selected.
e. It is HIGHLY recommended that you give the hair a unique name upon export, perhaps a combination of the original name of the hair plus the name of the figure the hair is to be converted to, such as MessyV4.obj. This should alleviate any conflicts in the DAZ Studio data folder.
f. Start a new scene again and load the figure you were converting the hair to.
g. Import the hair .obj you exported. Be sure to use the Poser scale in the import options.
h. Apply the temporary materials.
i. Import any morphs you saved using the Morph Loader plug in. Be sure to use the Poser Scale in the Presets.

4. Apply the Magnet Set

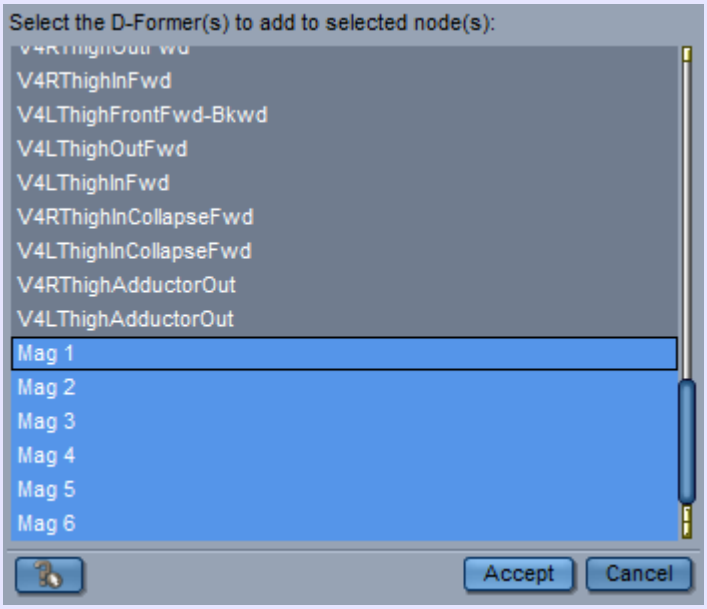
Next we want to apply the appropriate Magnet Set. Compared to older kits, there are some changes. There is only one magnet set for each Hair being converted from. For our example, we are converting from a Victoria 1 (or 2) hair to Victoria 4, therefore we are going to use the "V1 to Victoria 4" magnets. These can be found in your Props Library under "HCS-II-Victoria 4".

Make sure the Prop Hair is selected and load that set.

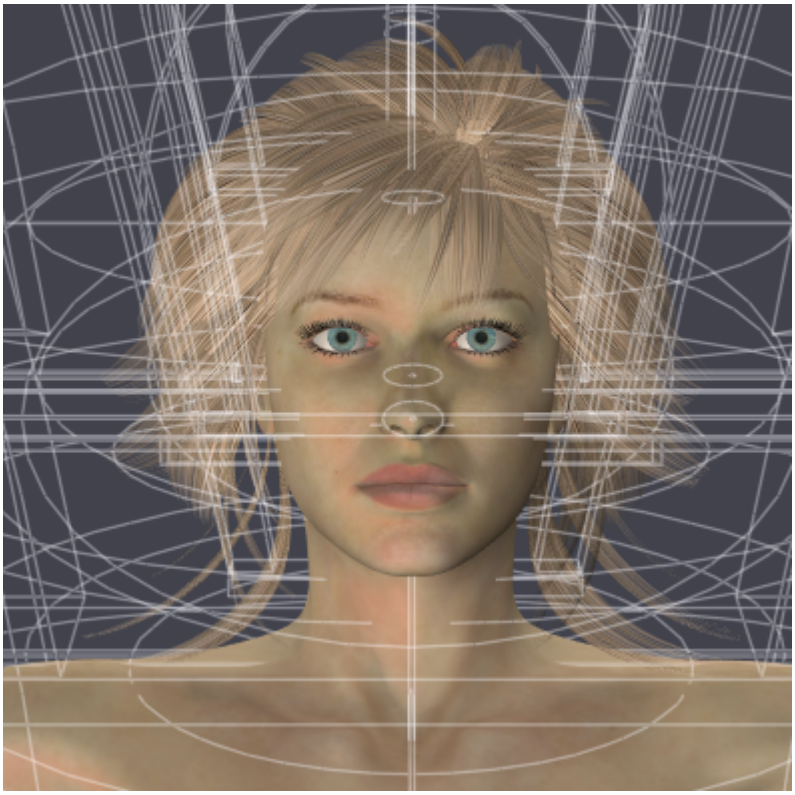
DAZ Studio:

Head over to the Scene Palette and click on the Hair you loaded. It is should be named "figureHair". Now, in your D-Form tab/palette click on "Add Node(s)...".

If you're using a figure with embedded deformers, you're going to see a bunch of stuff in there. However, we only want to select the ones that are named "Mag" followed by a number:



Hit "Accept" and the hair should pop into place.



Though we do have a lot going on with the Edge-Displayed Magnets, just looking the hair, we're getting a lot closer... (zones/mags do not show in DAZ Studio)

At this point, you may wish to examine the sides and back of the hair to make sure everything fits to your liking. The Magnet sets are easily identified as each is "described" by location. If it looks like you need to adjust the front of the hair a bit, for example, look for a magnet called "Mag Headfront" and use the trans or scaling dials to adjust that area a bit. In our example, we are going to pull the bottom of the hair up a bit using the Chest magnet.

5. Spawning a Morph

Poser:

What we need to do now is spawn a morph to save the magnet adjustments into the prop hair. Fortunately, a Python Script is included for this called "Create Hair Morph".

This is a one-click solution that does the following for Prop Hair:

- Spawns a morph named "FitHair", which you have the option of renaming if there is already a "FitHair" morph for some reason, which saves our adjustments into the hair.
- Sets the Dial of the morph to 1.0000 along with the Minimum and Maximum values to 1.0000
- Removes the Magnets

DAZ Studio:

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

Head over to the D-Form Tab/Palette. In the "Morph Spawning:" section click the "Spawn Morph..." button (it is not necessary to create a Root Control Parameter). In the little window that opens, type in a name for the morph and click the OK button. We suggest using "FitHair" followed by the name of your figure, but you can use any unique name that you'd like.

Having created the morph, we now want to remove all the D-Formers from the scene. Select all the deformers from the Scene Pane and right-click to select "Remove Items from Scene".

You'll now notice that the hair pops back into its unconverted position.

Select the hair and in the Parameters Panel/Tab look for the morph you created. Dial that to 100% (if it is showing as a percent, 1.0 otherwise). I also like to LOCK the morph target in place. Double-click the Morph name and click on the Lock button, changing it from "No" to "Yes".

6. Re-Save the Hair

Poser:

Now simply save the hair into your Hair library. You should create a new name for the hair, using the original name plus the figure it was converted for.

You can load this hair as normal, first selecting your Figure, of course.

DAZ Studio:

To save your work back into the library you will need to save it as a DAZ Studio Scene file. However, we have to remove the figure, leaving only the hair. Otherwise everything gets saved together.

In the Scene Tab/Palette again, select the hair. Right-click and select "Unparent Item".

Now select your figure and remove it from the scene, leaving only the hair behind. You can now save the hair by itself as a DAZ Scene in your DAZ Library.

To load the hair, you will have to merge the daz scene file into your scene (by dragging it into the scene from the content tab or right-clicking it and selecting "merge") and then Set the Parent to the Head. If your figure is already posed, you can select "Restore" in the drop-down of the hair's Parameter tab.

We are done with converting our prop hair!

Converting Figure Hair (easy method)

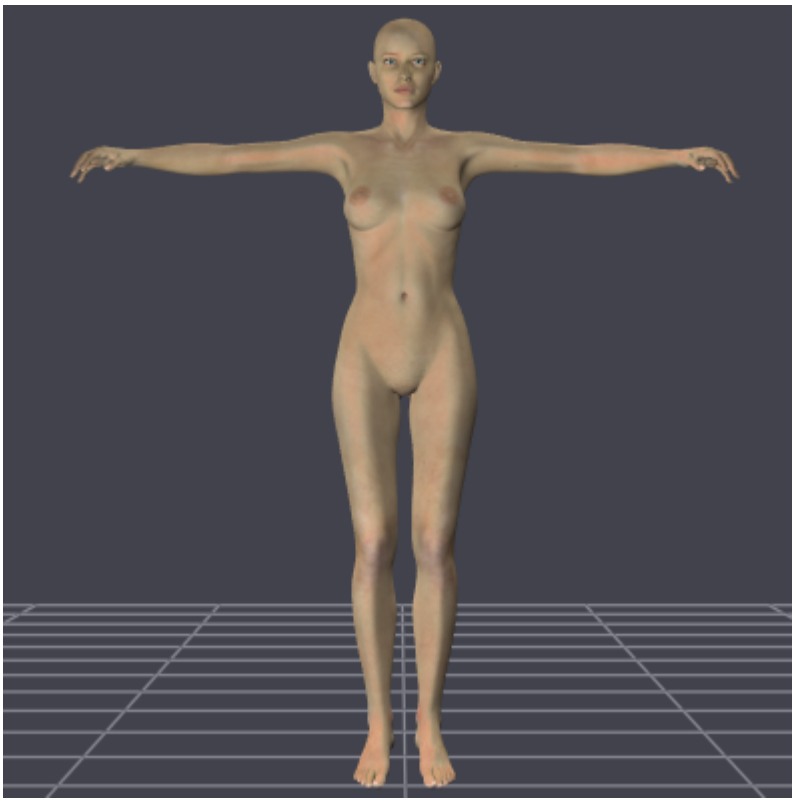
Converting Figure Hair can be a bit more involved and it's really going to depend on the hair being converted. If you are working with a short-styled conforming hair, one that has non-standard body parts, or you are indifferent on whether it conforms rather than being "parented", you can use the Easy Method.

There is at least one benefit to doing this. Non-standard parts such as bows, braids and segments can be converted with no issues. However, you will have to "attach it" to the main figure when you load it into the scene by parenting it. This kind-of turns it into a smart-prop.

For this tutorial, we are going to use the Arizona Hair for Victoria 3 available in the Platinum Club at DAZ. (link: http://www.daz3d.com/i.x/shop/itemdetails/-/?item=1660).

However, you can use any figure hair that is represented in the Hair Conversion product that you purchased.

1. Setting Up



Poser:

In Poser 7 and Poser PRO, you can easily access all the scripts from the Scripts Dropdown menu, under the "Netherworks - Hair Conversion II" folder.

In Poser 6, Simply head to the "HCS-II-Victoria 4" Props folder and use the "+Load Python Menu" prop.

Start with a fresh scene and load the figure that will receive the conversion. I find it best to work with "zeroed" joints and IK turned off. This means that all the various body parts have zero in their rotations (which

usually appear as Bend, Twist, Side-Side, etc) and that the IK for the arms and legs are turned off.

Fortunately, you don't have to do all of this manually. A python script is provided to zero all joints and turn off IK in one click. It is called "Zero Rot/Scale/Trans + IK".

Now we are ready to load the hair.

DAZ Studio:

Start with a fresh scene and load the figure that will receive the conversion. I find it best to work with a figure with "zeroed" joints. This means that all the various body parts have zero in their rotations (which usually appear as Bend, Twist, Side-Side, etc).

Select the figure in the Scene Pane and go to the Parameters Pane. Open the pane's drop-down menu (little button with arrow on in the top right corner of the pane) and choose Zero->Zero figure.

Now we are ready to load the hair.

2. Load Your Figure Hair

Go to your Figure library and load the hair to be converted into the scene. It should appear somewhere above, below or even inside the parent figure's head.

Poser Users:

Occasionally the hair will enter the scene in Wireframe or some type of mode with lines in it. Pre-Poser 6, Poser didn't preview transparencies very well and this was done by artists to compensate for that. We can easily set the hair to Texture Shaded mode by using an included python script, "Texture Shaded Mode".

3. Zeroing Out the Hair

As we did with the parent figure, it's a good idea to "zero out" the hair and make sure that it hasn't been moved around in the scene.

Poser:

Select the Hair and zero all the joints by using the "Zero Rot/Scale/Trans + IK" script. Follow this by using the "Zero Morphs and ERC" script to make sure all the morphs are turned off as well.

DAZ Studio:

Select the hair in the Scene Pane and go to the Parameters Pane. Open the pane's drop-down menu (little button with arrow on in the top right corner of the pane) and choose Zero->Zero figure.

4. Apply the Magnet Set

Next we want to apply the appropriate Magnet Set. Compared to older kits, there are some changes. There is only one magnet set for each Hair being converted from. For our example, we are converting from a Victoria 1 (or 2) hair to Victoria 4, therefore we are going to use the "V3 to Victoria 4" magnets. These can be found in your Props Library under "HCS-II-Victoria 4".

Make sure the Figure Hair is selected and load that set.

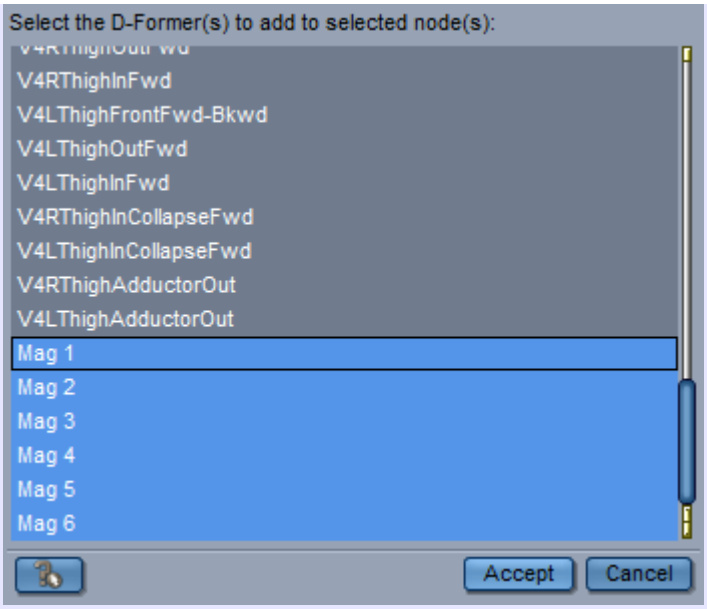
Poser:

But wait... the Magnets didn't do anything... Go back and select the Figure Hair (any part will do) and use the "Apply Magnets to Selected" script. This script will attach the magnet sets to any object or figure in the scene. You must have a figure present in the scene for this script to work properly.

DAZ Studio:

Head over to the Scene Palette and click on the Hair you loaded. It is should be named "figureHair". Now, in your D-Form tab/palette click on "Add Node(s)...".

If you're using a figure with embedded deformers, you're going to see a bunch of stuff in there. However, we only want to select the ones that are named "Mag" followed by a number:



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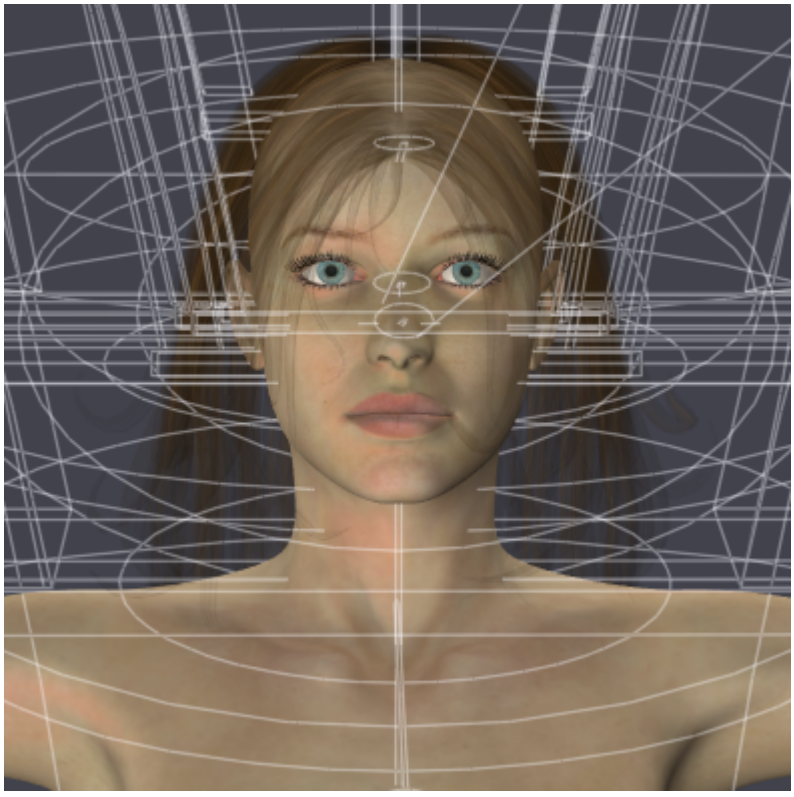

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At this point, you may wish to examine the sides and back of the hair to make sure everything fits to your liking. The Magnet sets are easily identified as each is "described" by location. If it looks like you need to adjust the front of the hair a bit, for example, look for a magnet called "Mag Headfront" and use the trans or scaling dials to adjust that area a bit. In our example, we are going to pull the bottom of the hair up a bit using the Chest magnet.

5. Spawning a Morph

Poser:

What we need to do now is spawn a morph to save the magnet adjustments into the Figure Hair. Fortunately, a Python Script is included for this called "Create Hair Morph".

This is a one-click solution that does the following for Figure Hair if you are using Poser 7 or Poser PRO:

- Spawns a morphs in all body parts named "FitHair", which you have the option of renaming if there is already a "FitHair" morph for some reason, which saves our adjustments into the hair.
- Sets the Dial of those morphs to 1.0000 along with the Minimum and Maximum values to 1.0000
- Removes the Magnets
- Creates a Full Body Morph and sets the sensitivity to 0.0200
- Sets all the individual morphs in the Body Parts back to 0.0000

If you are using Poser 6, the script stops after Removing the Magnets. There is no method in that version of Poser python for creating a full body morph. Go to the Poser menu and choose "Create Full Body Morph" and enter in either "FitHair" or the name you chose in the script's dialog box.

Afterwards, use the "Zero Morphs and ERC" script to zero out all the morphs. Go back and dial the hair's Full Body Morph to 1.0000 and you should be set.

DAZ Studio:

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

Head over to the D-Form Tab/Palette. In the "Morph Spawning:" section click the "Spawn Morph..." button (it is not necessary to create a Root Control Parameter). In the little window that opens, type in a name for the morph and click the OK button. We suggest using "FitHair" followed by the name of your figure, but you can use any unique name that you'd like.

Having created the morph, we now want to remove all the D-Formers from the scene. Select all the deformers from the Scene Pane and right-click to select "Remove Items from Scene".

You'll now notice that the hair pops back into its unconverted position.

Select the hair and in the Parameters Panel/Tab look for the morph you created. Dial that to 100% (if it is showing as a percent, 1.0 otherwise). I also like to LOCK the morph target in place. Double-click the Morph name and click on the Lock button, changing it from "No" to "Yes".

6. Re-Save the Hair

Poser:

Now simply save the hair into your Figures library. You should create a new name for the hair, using the original name plus the figure it was converted for.

You should now be able to load this hair as normal. However, when you bring it into the scene you will need to "parent" it to the figure underneath. Select the hair and under the "Figure" menu, choose "Set Figure Parent" and select the base figure's head.

DAZ Studio:

To save your work back into the library you will need to save it as a DAZ Studio Scene file. However, we have to remove the figure, leaving only the hair. Otherwise everything gets saved together.

In the Scene Tab/Palette again, select the hair. Right-click and select "Unparent Item".

Now select your figure and remove it from the scene, leaving only the hair behind. You can now save the hair by itself as a DAZ Scene in your DAZ Library.

To load the hair, you will have to merge the daz scene file into your scene (by dragging it into the scene from the content tab or right-clicking it and selecting "merge") and then Set the Parent to the Head. If your figure is already posed, you can select "Restore" in the drop-down of the hair's Parameter tab.

We are done with easily converting our Figure Hair!

Converting Figure Hair (involved method)

Completely converting Figure Hair so that it is conforming is a bit involved and is really going to depend on the way the hair is designed on whether or not it can be converted.

If you are working with a short-styled conforming hair, one that has non-standard body parts, or you are indifferent on whether it conforms rather than being "parented", you can use the Easy Method presented earlier.

As long as there are standard body parts in the hair (head, neck, etc) and no new body parts (like ties, bows, etc) then most hair should convert properly in this way.

1. Setting Up and Import

For our example, we are going to convert the Windswept figure hair available at DAZ (http://www.daz3d.com/i/3d-models/-/windswept-hair?item=1822&spmeta=ab&_m=d).

Poser:

Start with a new scene and load the base figure that the hair is to be converted to.

We need to find out where the Hair's obj is located. It's easy enough to simply load the hair into our text editor and look near the top. The location will be after "figureResFile" entry and ours is at :Runtime:Geometries:Dark Whisper:WSHair.obj. However, yours may be under the DAZHair Geometry folder.

Import the hair .obj that you discovered while looking in the text editor. Be sure all "Import Options" are de-selected.

DAZ Studio:

As of DAZ Studio version 2, the Import Option does not load groups properly. So simply load the hair figure from your library.

2. Apply the Magnet Set

Next we want to apply the appropriate Magnet Set for our hair object:

It can be found in your "HCS-II-Victoria 4" Props library. Make sure the hair obj is selected and load that set.

Poser:

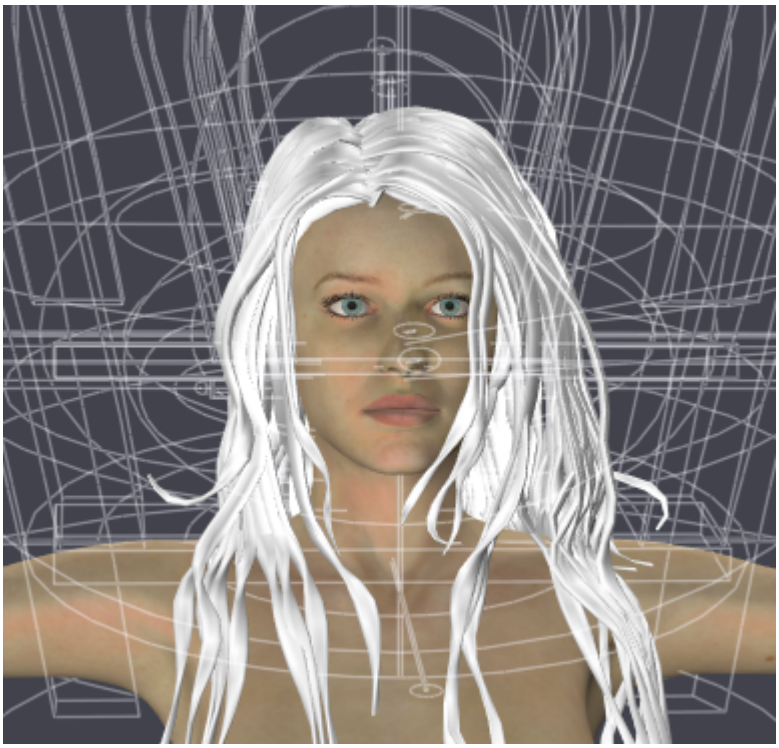
But wait... the Magnets didn't do anything... Go back and select the imported object and use the "Apply Magnets to Selected" script. This script will attach the magnet sets to any object or figure in the scene. A figure must be in the scene for this script to work properly.

DAZ Studio:

Initially, the deformers will enter the scene not connected to anything and we are going to fix this.

Select your loaded Hair object in the Scene Palette/Tab and head over to the D-Form Panel/Tab. There, select "Add Nodes..." and make sure that each Mag (or Magnet) is highlighted. Click "Accept"

You should see something like the following image (zones/mags do not show in DAZ Studio):



3. Export the Hair

Poser:

Now we will export the hair (From the top menu it's "File", "Export" then "Wavefront OBJ"). You do not need to worry about the attached magnets. They will not be saved with the hair, but the adjustments will!

In the first dialog box, "Export Range", leave it on Single frame. In the following box, "Select objects" be sure that only the imported object is checked. Under "Export Options", we only want the last option checked, "Include existing groups in polygon groups".

DAZ Studio:

First, go to the Scene Pane and make sure all the Magnets and their respective parts are invisible (click on the "eyes" to turn them off).

Now, Export as Wavefront .obj and in the Presets drop-down make sure Poser is selected. Make sure "Do Not export Invisible Nodes" IS selected and "Weld Figures" IS NOT selected. Under the Advanced Tab, in the "Write Groups" box, make sure "Use Existing groups" is selected.

For the filename, you should use a friendly name, such as using the original hair name, along with the figure it is to be converted to. We are using "WSHairV4.obj" in our example.

For the directory to save to, we have provided some blank directories for your to save your figure hair conversions, located under :Runtime:Geometries:Netherworks:. You should see one or more folders like "Michael 3 Hair", " Victoria 4 Hair", etc. The hair cr2s that we provided for these conversions reference those folders.

4. Preparing the Cr2

The next thing we want to do is build a new cr2 for your converted hair. A specially designed "plug-in" cr2 has been prepared for you for this purpose. It can be found in one of the "HCS-II" figure folders, with the figure name, followed by Setup. For our example, it's V4Hair-Setup.cr2

Open the Setup cr2 file (such as V4Hair-Setup.cr2) in your text editor. We need to change two lines to point to your new .obj file (in the example, WSHairV4.obj). We are only looking to change the .obj reference at the end of those lines (Yourhair.obj).

In each instance change:

figureResFile :Runtime:Geometries:Netherworks:Victoria 4 Hair:Yourhair.obj

To:

figureResFile :Runtime:Geometries:Netherworks:Victoria 4 Hair:WSHairV4.obj

Save this new cr2 with a new name that reflects the hair you are working on, such as WindsweptV4.cr2 You can save it in it's original folder or any Figures library folder you'd like to.

5. Checking It All Out

You should now be able to start a scene as normal and load your main figure and use the hair you converted, keeping in mind that you conform (or "Fit To" in DS) the hair to your figure, rather than parenting it.

However, it is missing textures and may be missing morphs. The sections that follow will give you several ways to restore those features.

Restoring Textures to Figure Hair

This is for the "involved method" and is very easy to do. If you want your converted hair to be textured when entering the poser scene, you can load the converted hair and apply any pose MATs that the original hair creator has provided for you and just save the hair back into the poser library.

Poser:

If the original creator has not provided additional MAT or material files to allow you to switch textures, you can do this (Poser 6 or 7):

a. Start with a new Scene
b. Load the original hair figure
c. Go to the Material Room
d. Temporarily save the textures to the material room as a "Material Collection"
e. Go back to the Pose Room and start a new Scene.
f. Load your converted figure hair
g. Go back to the Material Room and Apply that Material Collection you had previously saved.
h. Go back to the Pose Room and save your hair back into the poser library.

There are many other ways to restore hair textures. Shader Spider will save out or copy textures. Our MatWriter Premium script will do the same.

DAZ Studio:

a. Start with a new Scene
b. Load the original hair figure
c. Save it as a Material Preset
d. Start a new Scene
e. Load your converted figure hair
f. Apply that Preset that you saved
g. Save as a DAZ Studio scene with nothing but the hair present.

Restoring Morphs to Figure Hair

Most hair out there has a nice array of morph targets and we want to restore these to our converted hair, if you used the "involved method".

Poser:

The procedure is different for pc and mac users.

PC Users

a. Load Mason's Morph Manager.
b. In the Left Pane open up your newly converted Hair (it's very easy to just drag-and-drop to this pane using Windows Explorer).
c. In the Right Pane open up the original Hair (again, drag-and-drop is hassle-free).
d. Wherever you see a PLUS sign in the right pane are likely morph targets to move over.
e. Expand the PLUS and where you see MORPH TARGETS, right-click and choose "Copy All Morph Targets"
f. On the Left Pane Side click the "Save File" button and overwrite your existing file.
g. Done

Mac Users

a. Launch Maconstructor.
b. Click on the the Open button at the bottom.
c. Select the original hair (hr2 or cr2).
d. Click Open again and select the reciever, your newly converted hair file.
e. Make sure the source drop down shows the original and the Target shows the recent conversion.
f. From the Select menu-button, choose "ALL".
g. Click the "Copy" button.
h. Status should show that the morphs were copied.
i. Click the Save All Files Button.
j. Done.

DAZ Studio:

The above method only works on native Poser files (cr2, hr2). It will not work on daz studio files. You will need the Morph Loader Plug-In to import morph targets.

a. Load the original hair.
b. One at a time, dial each to 100% (or 1.000) and Export as a Wavefront .obj. Make sure "Do Not export Invisible Nodes" IS selected and "Weld Figures" IS NOT selected. Under the Advanced Tab, in the "Write Groups" box, make sure "Use Existing groups" is selected. Use unique names for each morph you export. These are temporary until you get the morphs back in.
c. Remove the original hair from the scene and load the converted hair.
d. Use the Morph Loader Plugin to load each morph into the converted hair.

Creative Uses of this Package

Below are a few tips and tricks when using the Hair Conversion System. There's always more than meets the eye...

Conversions in Reverse

Can you use this package to go in reverse? For example: You purchased the V4 conversion system and want to go from Victoria 4 to Aiko 3. Yes, it is possible by dialing the deformers backwards. It isn't always spot-on accurate but it's a good idea for covering figures we haven't gotten to just yet.

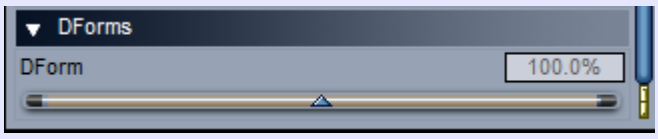
Poser:

After the point in the tutorial where you load the Magnet set, Select the hair and dial each "Mag" shown from 1.000 to -1.000 (yes my dials look a bit different).

You can then proceed as normal with the rest of the tutorial.

DAZ Studio:

Once you have attached the D-Forms to the hair, select the hair. In Parameters Tab, go down near the bottom and look for:



You want to change that 100% to -100%.

You can then proceed as normal with the rest of the tutorial.

This is much easier for prop hair. But you can do the reversal on figure hair too. You just need a blank cr2

to plug it into for the involved method.

Converting Head Props

You can also use this kit to convert head props from another figure.

Poser:
Follow the same procedure outlined in Converting Prop Hair. Once the Magnet Set is loaded, select the prop and use the "Apply Magnets to Selected" script.

Daz Studio:
Use the same method for Converting Prop Hair :)

Converting Conforming HeadWear

You can use the same system that you used to convert Figure Hair to fit conforming HeadWear (hats, etc) to your figure. The "easy method" works for any kinds of bodyparts. The "involved method" works for standard body parts.