

DressWizard™

By *Apparition*

DressWizard is a revolutionary clothing Kit designed by Apparition for G3 female characters and usable with Reallusion iClone versions 3.x, 4.x and upwards! Long skirts, coats, capes, bell type sleeves and pants, leotards, boots and shoes as well as hair wigs complement this outstanding kit.

DressWizard is based on 6 different complex mesh characters using multilayer mesh architecture, spring cloth flow, high linear texture mapping, adjustable skirt proportions, correctable skirt position, size and rotation, all which can be key framed to adjust for different motion and special effect conditions.

16 fantastically and elegantly finished and ready to be used characters are included in this kit for immediate enjoyment and inclusion in User's video projects!

6 Templates with different components and style offer iClone users and texture developers the possibility to create outstanding original vintage and Victorian styled ladies wear, but also can be used to produce conventional clothing as well as futuristic designs, all in one single super flexible clothing kit.

These are the basic template characters:



From left to right: DWN3, 2, 1, 4, 5 and 6 made transparent to show inner layers

Each character has a different set and number of layers, 2, 3, 4 and 5 have coats in varied styles, and all have capes, shoes and 1 2 or 3 leotard layers for unique combinations.

The same characters shown with opacity applied.



Clothing is designed by using the different layers in a creative and distinctive way, which ends up producing clothing with an extreme sense of dimension and depth. Most of the work is done by trimming and working on the opacity image maps, creating cuts to reveal the inner layers in different areas. This way, by simply changing the cloth texture images, or adjusting the color characteristics of each layer, many varieties of the same style can be achieved.

Below is the same DWN1 character template, showing the different layers it contains. Simply hiding an outer layer by turning down the Opacity slider, will produce a different style instantly. If you have applied distinctive textures to each layer, when you hide an outer layer then the character “changes clothing” even dynamically, allowing for special effects, limited only by imagination!

EstudioA Producciones –Guatemala

The template textures which come applied to each character contains design lines which show the high degree of linearity in the mapping system. This makes it extremely easy to transfer cloth photos to the characters using a painting program like Photoshop. This technique is clearly explained in the included tutorial in this papers.



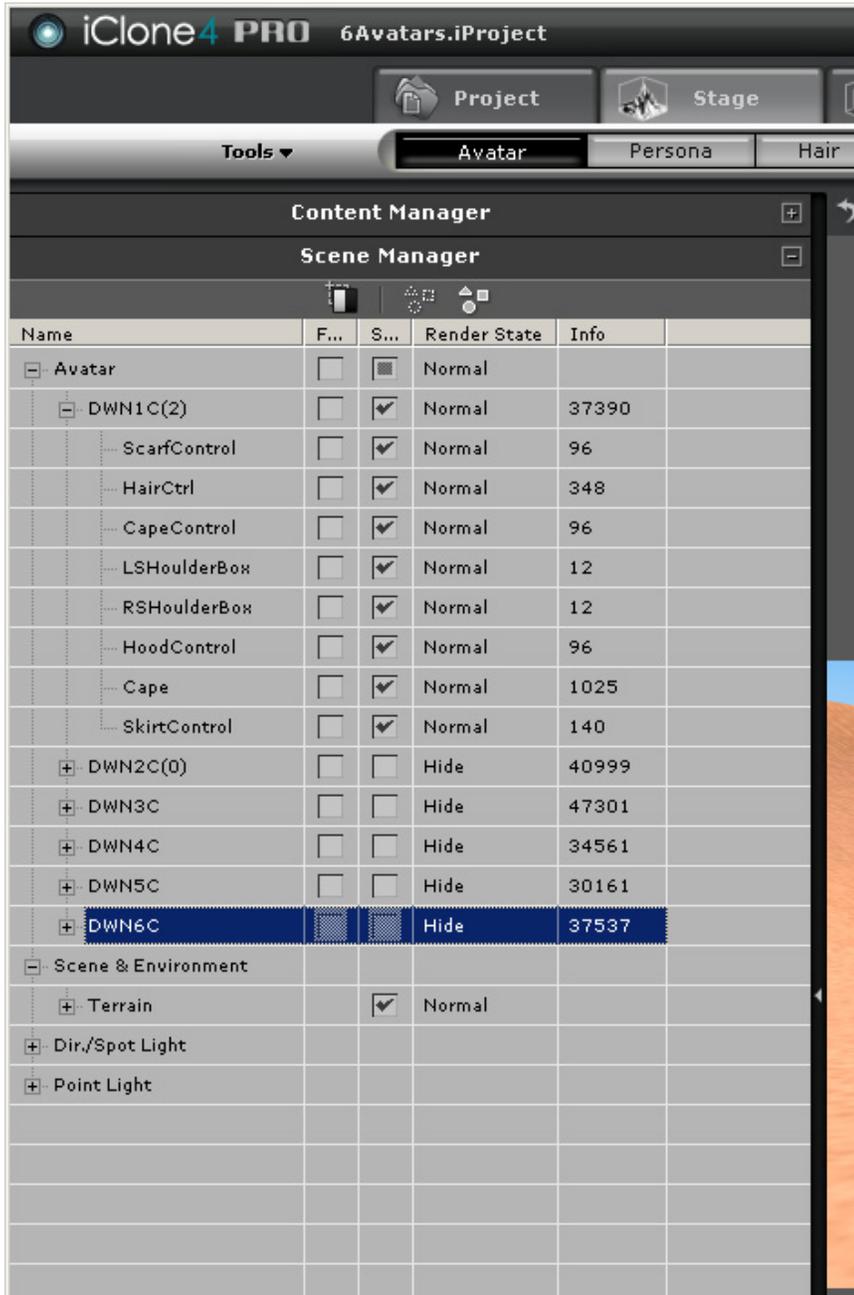
You can see above, how the different layers in DWN1 are hiding under the outer ones. The pink leotard is the innermost one. Above it is the blue middle leotard while the green one is outside. The sleeve extenders are on top of all as well as the shoulder extenders. There is of course a cape available in all characters.

Please notice the fact, sleeves, cape, hair extensions, skirts, pant flares and dresses are all dynamically fitted so you will get a very natural cloth behavior in your animations. You can watch this also in the supplied video tutorials.

DYNAMIC CONTROL

Not all characters in iClone can accept all kind of motions. Invariably, except for very tight layers of clothing, some polygons might come out, “breaking” the clothing surface. This problem can occur only in the exterior dresses and skirts, as the character does exaggerated leg motions. But DressWizard includes a new novel approach, providing controller objects, which will allow the animator to correct the skirt or dress motion DURING THE ANIMATION, also allowing him to simulate twists bounces, skirt flying up and other motion effects for a more natural finished clip

Bellow you can see the controllers which always appear in the Project manager window, for each character. Let’s explain what they do:



Scarf Control:

Adjusts and animates the Hair Scarf accessory when it is applied to the hair.

HairCtrl:

Adjusts and animates the hair extensions and curls when they are applied.

CapeControl:

It works to adjust the cape that is attached to each character. You can use it to change the cape angle and position during animation, to simulate wind deflection. Remember also, ALL this adjustments complement the built in SPRING flexion effects of the accessory or skirt.

LShoulderBox and RShoulderBox::

Work to adjust the cape start at the shoulders. You can bring it up or down and also adjust their separation to make the cape fit the way you want to the avatar shoulders.

HoodControl:

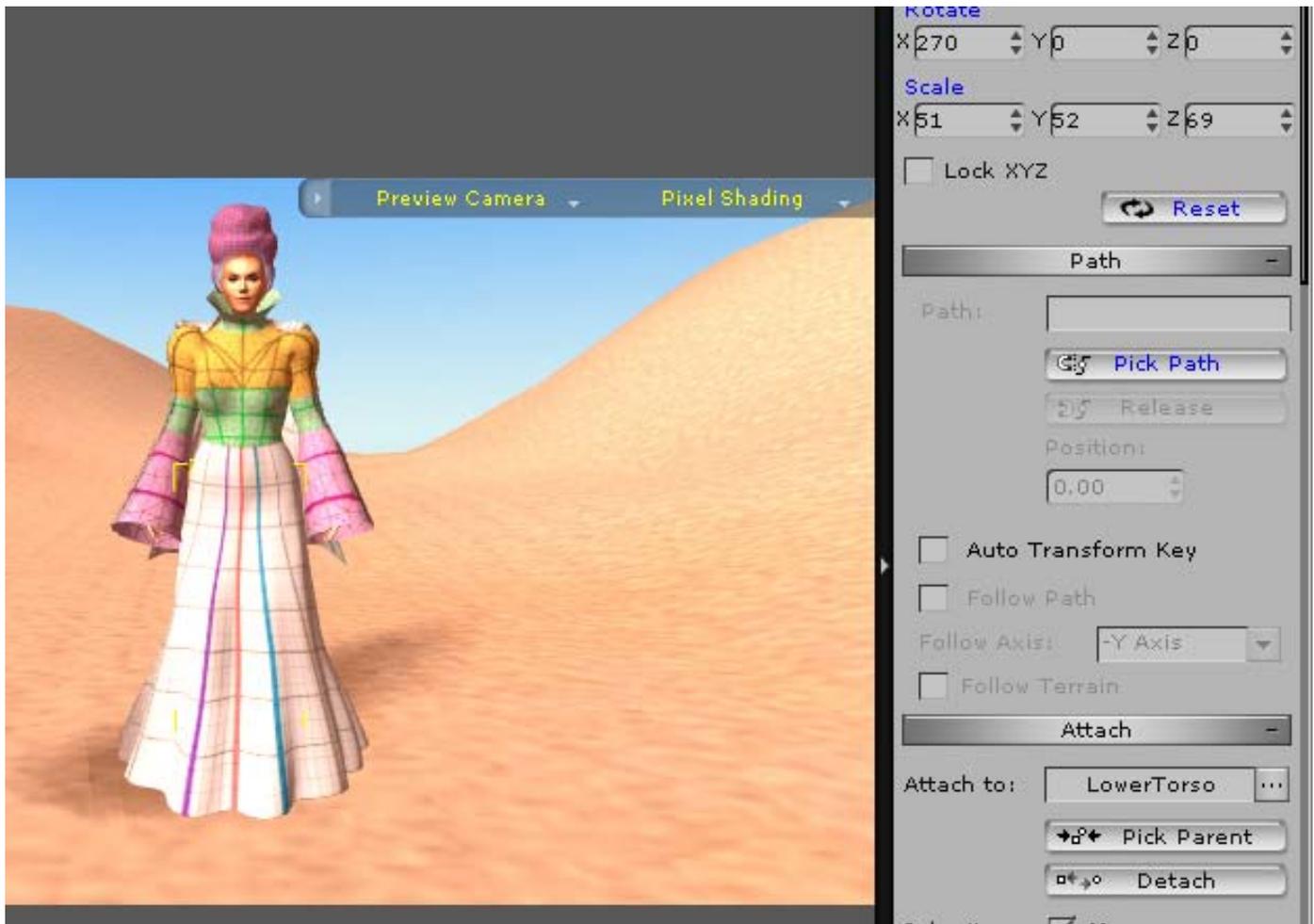
It is for adjusting the HoodHair which is an optional replacement for the normal avatar hair, to create mysterious hoods, scarves and other items. HoodHair is actually NOT an accessory but a Hair item and it is

applied as such. Of course this controller can also be adjusted in time as you will need!

SkirtControl: Easy to guess, it does all the skirt adjustments and corrections in real time, and helps to set the skirt in awkward positions.

WARNING: YOU MUST NEVER DELETE ANY OF THESE CONTROLLER ACCESSORIES.

Here is an example on how the skirt can be changed by using this controller:



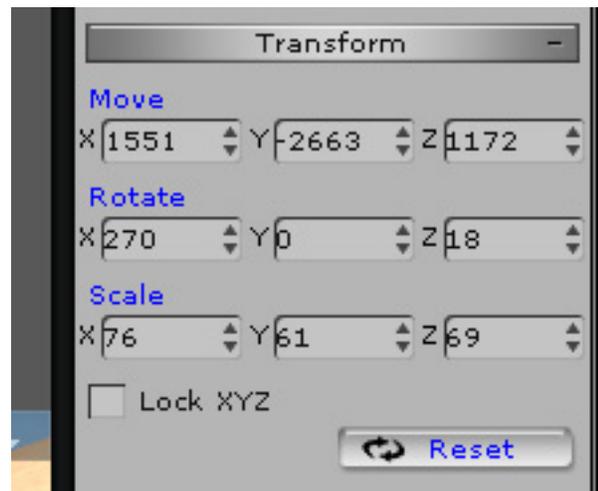
The SkirtController has been adjusted in X and Y scales to make the skirt narrower. This is a good starting point in an animation, while the character is not walking or dancing.

You must remember all adjustments to ANY of the controllers actually create KEY FRAMES, so if you want to do a permanent adjustment for the whole clip time you must do it at frame ZERO. If you do otherwise, the skirt will animate collapsing to the tight shape it shows in the picture.

At a point the character moves a leg to a side to do a big step: It will break as in next picture:



You can see here, the leg motion has been too much and the skirt is broken showing the inner mesh parts. But, thanks to SkirtController we can do some X and Y scaling to make the skirt open and we can also do a Z rotation to make it cover the leg again! Like in the next image below:



Rotating the Z and adjusting the scales and the skirt is OK now! Of course you do this at the right time, when the leg reaches it's outermost position, there you set the SkirtController key!

The same technique applies to adjust and play with other controllers affecting the cape, the Hair Hood and the Hair curls as well!

Let's try now some special "wind" effect such as a skirt blowing up:



This effect is done by simply placing a key in time, adjusting the SkirtControl like this:



Remember you must place a Key before the skirt starts blowing up, then after the skirt goes up you place another key, ahead in time, to bring it back to

normal! Wow!

The same can be done with the cape. Let see first the cape as it comes:



Now we adjust the CapeControl this way:



Notice we must use the Y scale to adjust the CapeControl length and the X angle rotation to make it fly:



IMPORTANT NOTICE:

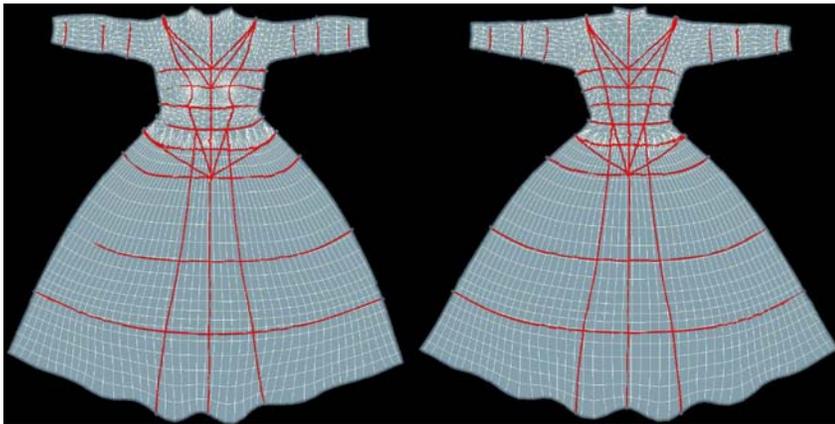
Never do alterations or deletions to a DressWizard template. After you just load a template, the first thing to do is to save it as it is with the name for a new customized character you will produce, by changing proportions, applying textures and working with opacity maps.

Next section will illustrate how to create textures for DressWizard, using any version of Adobe Photoshop software, from Photoshop 7 up.

CREATING TEXTURES

Template design in DressWizard is a definite NEW way to apply textures to avatars. It is based on a flat, planar mapping technique, which has been relaxed by using sophisticated mapping software. The results are extremely linear textures which will ideally transfer the clothing designs to the correct and exact places in the avatar mesh.

Below, an example of a template image and how it maps on a character:



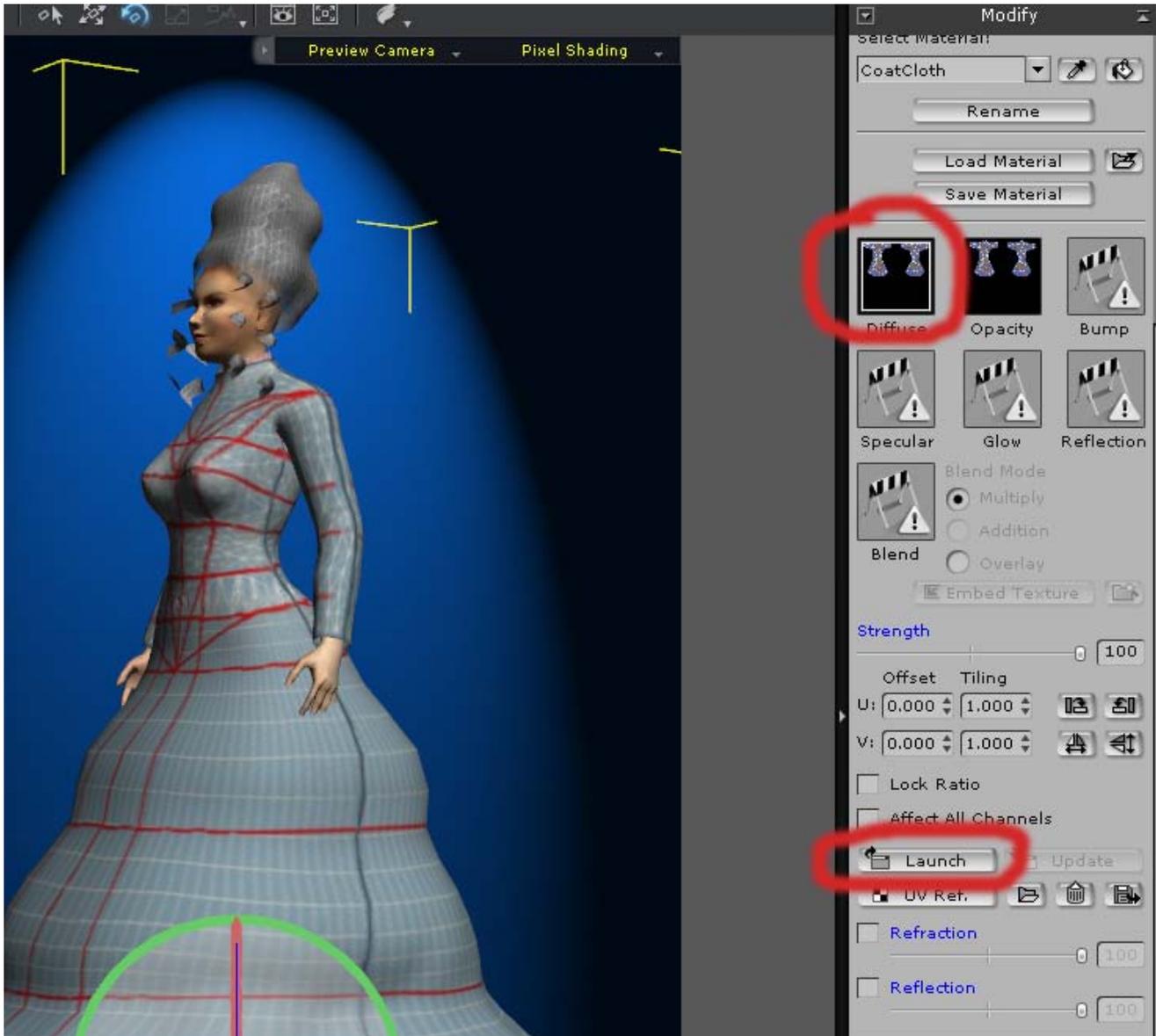
These are the front and back template design images. You use these images to create on top, your custom clothing design.

The red colored lines match the front a back parts PERFECTLY, allowing precise texture layout without mismatch at the front-rear joint parts.



LAUNCHING A TEXTURE TEMPLATE INTO PHOTOSHOP

Before creating textures you must have assigned an image editor to be called when hitting the LAUNCH button at the **material modify panel**, according to the instructions in the iClone user's manual.



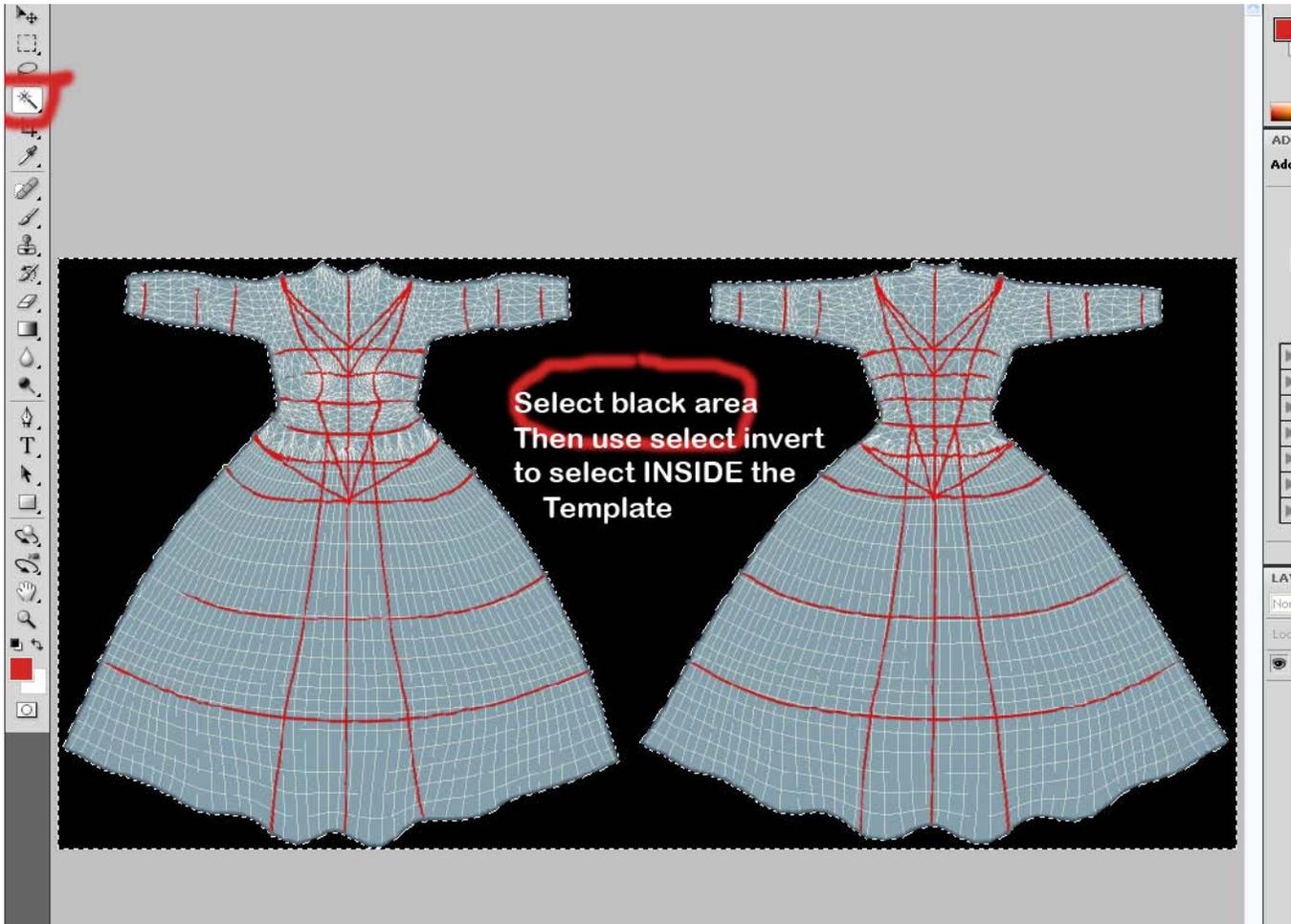
Having selected the Texture Map icon (upper circle) you hit the LAUNCH button (lower circle) which will launch the paint program. (For this tutorial you must have Photoshop installed and linked as the default iClone image editor.

Next is all under Photoshop environment:

Once we enter into Photoshop we will see the template image has a black background, which allows for easy selection of the inactive area (the black part).

It is understood here you are familiar with Photoshop usage. If not, time to read the manuals and practice!

This is part of what we will see inside Photoshop: (NOTES and red circles added, to explain)

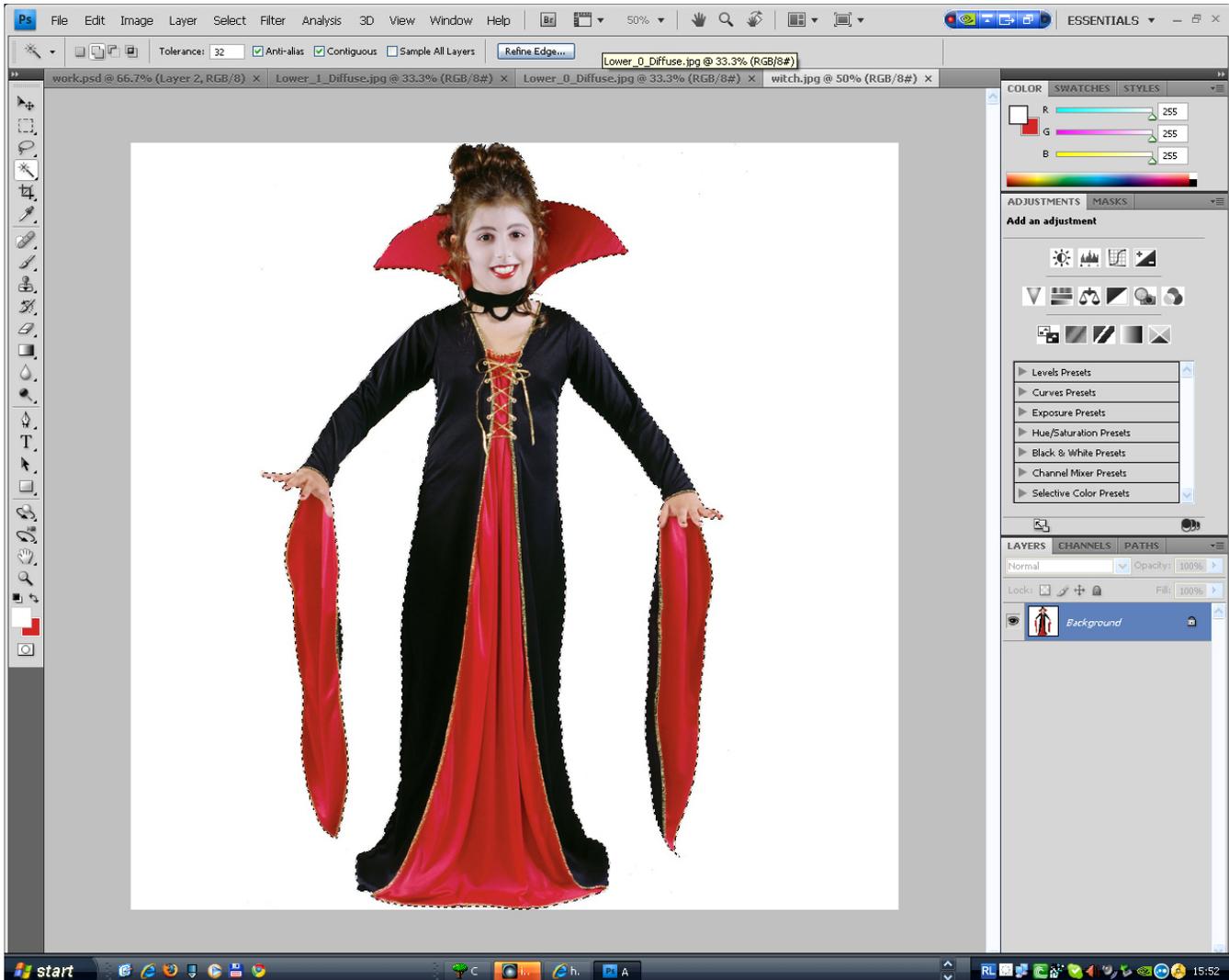


You then use the “Magic Wand selection tool”, with the threshold set at least to 64 and hit on the black template areas. Then, using the SELECT menu you hit INVERT, actually selecting the active template area, where we will work placing some real clothing!

Next, you use the LAYER Photoshop menu to create a new plain layer. We will work on this new layer as to keep the template design complete. The new layer will totally cover the template. You can, if you want to, adjust the new layer properties to make it’s opacity a little bit less than 100% so you can see the template under.

EstudioA Producciones –Guatemala

The cloth picture we will use is now loaded into Photoshop, and the white area selected and inverted so we have the actual clothing image selected.

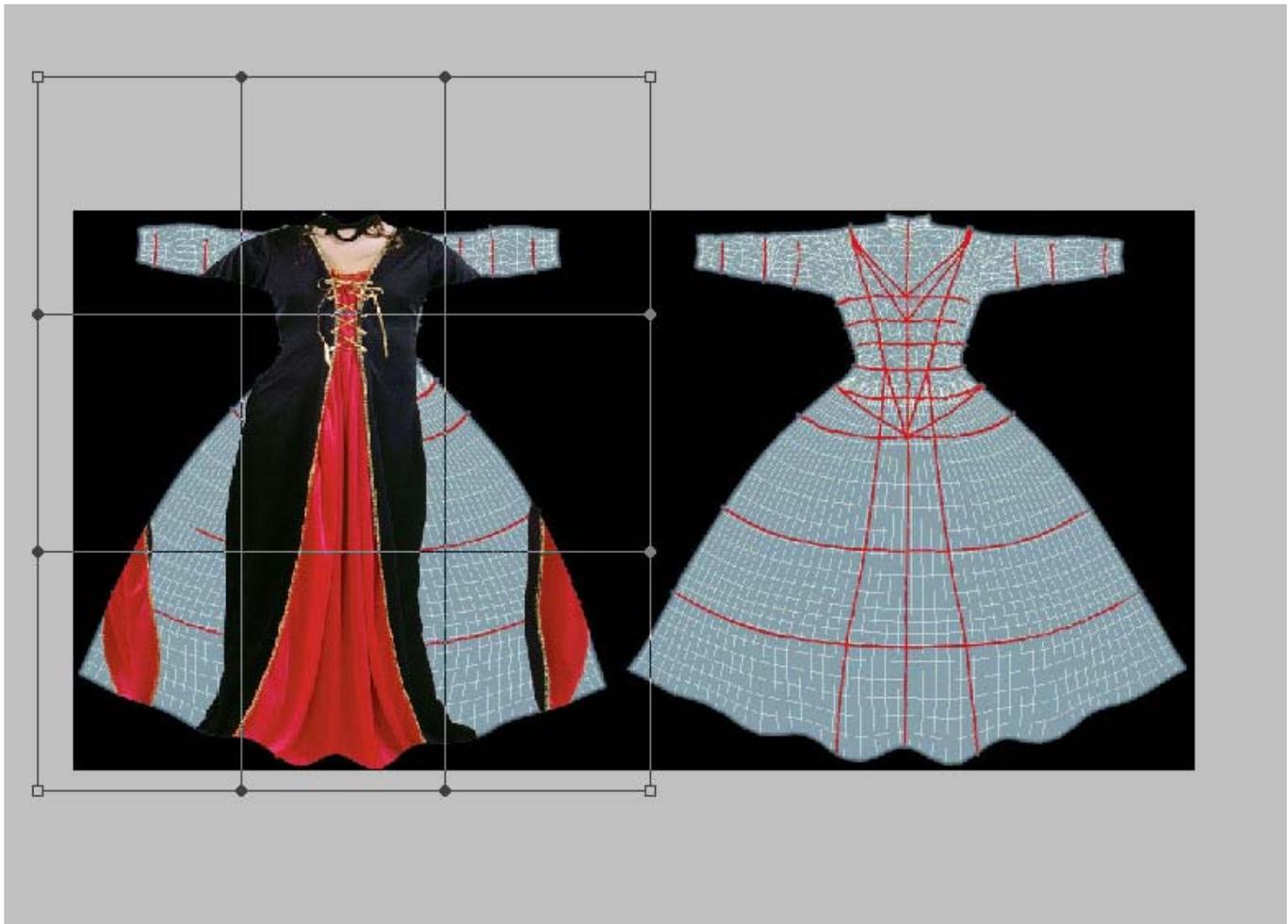
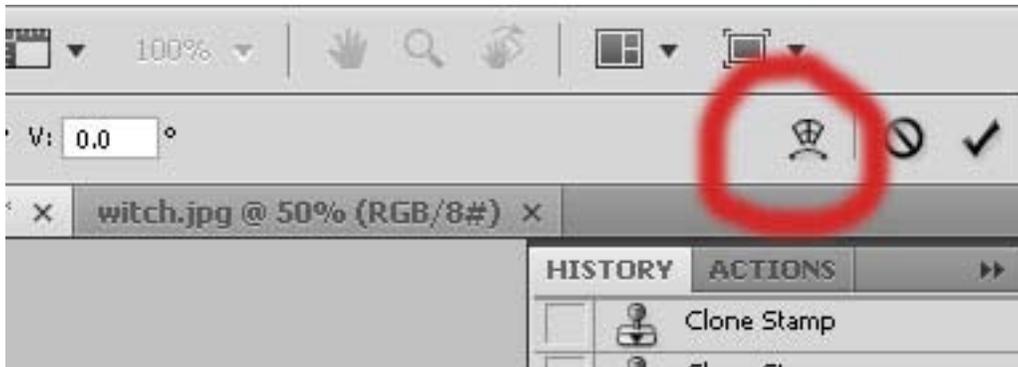


Now we use Edit-Copy to place the cloth image in the clip board.

Next we will go back to the template image with the New Layer selected and will use Edit-Paste into.

Next we drag the image right as to appear inside the front template (left).

Now we activate “Free Transform” from the EDIT menu and select the WARP tool:



Using the transform warp tool we work with it to stretch the image pasted into the selection, as to better fit it as possible inside the template area. Small areas, which remain uncovered, can be painted with the Photoshop CLONE tool.

We then do the same with the opposite (back) part of the template, being careful to deselect the left part already done. Use Photoshop tools to change the back of the dress accordingly. As said before, teaching Photoshop is above this manual's scope. You must learn Photoshop on your own!

We end up having this:



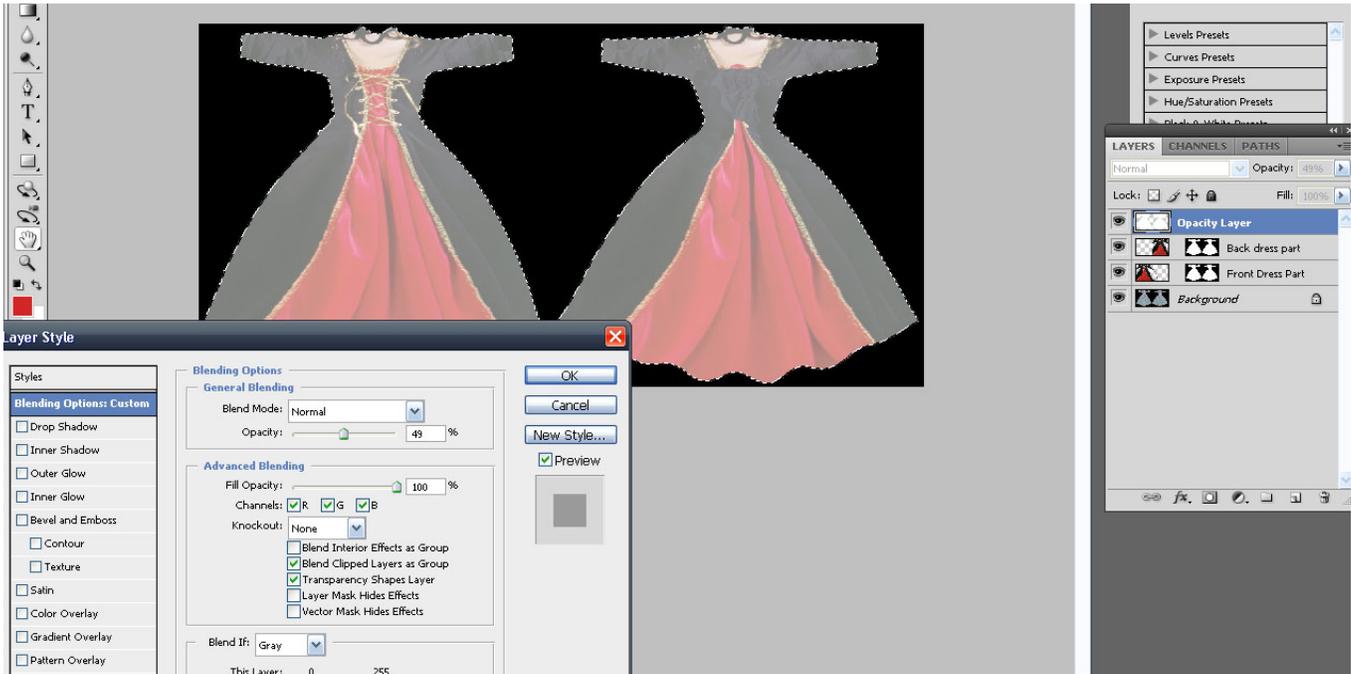
The front and rear parts are now properly “painted” with the actual photo image!

We need now to make the opacity map to expose, at the neck area, those body parts which will show in the finished dress. To do so, we create a new layer on top of all, and reload the original selection which limits the work areas. With the selection active, we fill the complete template area using EDIT FILL with a full WHITE.

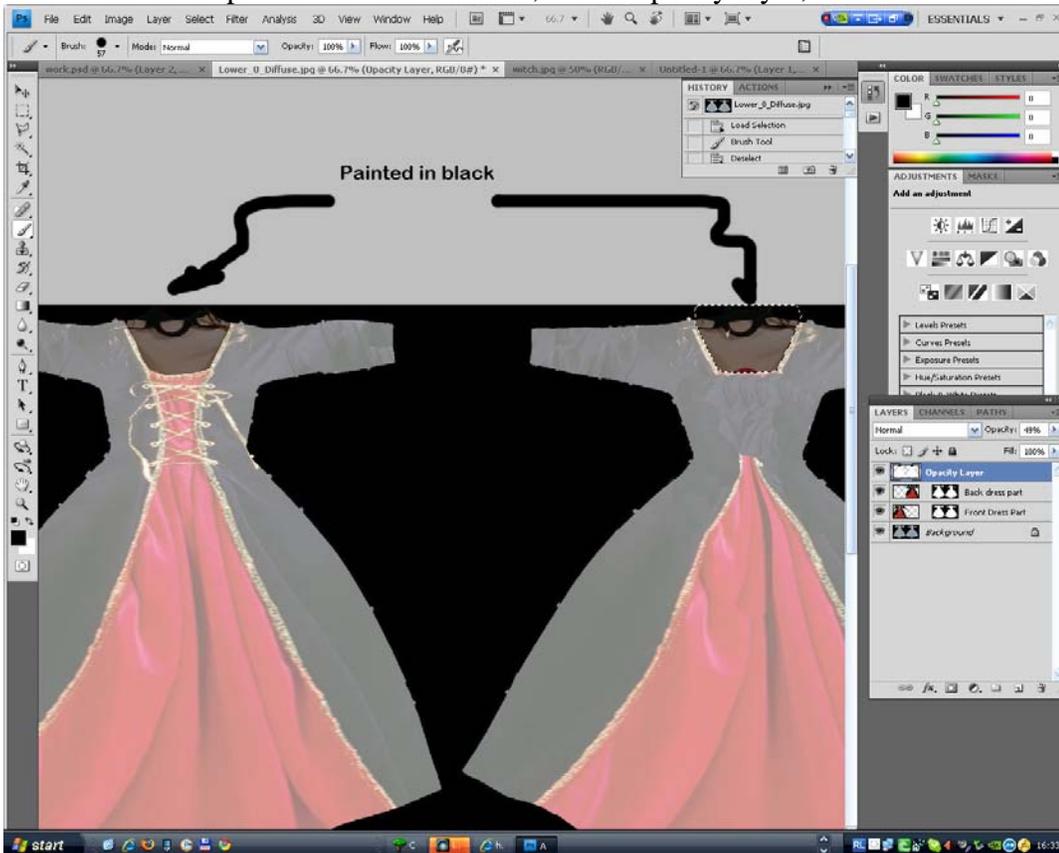
You must remember, when saving Photoshop images in JPG format, the total view, “what you see is what you get”.

So, to create the finished diffuse texture image and the Opacity texture image we proceed as follows.

To create the opacity image we adjust the new (opacity) layer transparency, so we can see the dress parts under it. Just like this:



Now it is time to paint with a black brush, on the opacity layer, the neck areas we need to be transparent.



Finally we adjust the upper layer transparency, to make it totally opaque, so we can use the image for the Opacity map in iClone.

We end up saving the complete PSD for future corrections and first save the JPG with the opacity map, then we hide the layer, so we see the composite cloth texture and save it too as another JPEG image, which we will load both back to iClone.

After applying the images, and creating some texture for the Inner Leotard (upper), we have this:



Absolutely gorgeous and easy!

Remember DressWizard comes with 16 finished beautiful outfits, which can be altered in many ways before you commit to making your own very exclusive garments for your G3 Victorian Characters!

MULTI LAYERED CLOTHING

A very valuable characteristic of the Apparition's DressWizard system is in its multiple clothing layers, which allow creating ENDLESS female fashions by combining the different layers, and carefully trimming the opacity maps for each layer.

Cloth designers must take this into account, because the novel multilayered design is a totally NEW concept, and must be carefully reviewed and understood before committing to create clothing textures for it. Each Template Avatar has different number of mesh layers, where the most complex one has 3 different leotards plus a full sized dress mesh, a coat, shoulder pads and sleeves.

The samples provided illustrate quite well how to use the different layers by making the opacity maps, reveal layers under, and partially cover body parts.

By using this, it is possible to create highly detailed clothing, but at the same time the User has the facility of replacing texture maps for the diffuse component of the clothing, without altering the way the complete design looks.

In other words, a single garment set can be changed in color, cloth or fabric texture, and even embroidery or appliqués, while the opacity maps keep giving the proper cut and trim for the particular clothing.

In next picture you can see how the same garment set looks different by applying a variety of simple fabric Bitmaps, but keeping the Opacity and Bump maps always the same.



EstudioA Producciones –Guatemala

In effect, the versatility is almost endless. Next image shows some of 100's combinations, each and all done in a “snap”, by simply switching Uppers and Lower. All created with high precision templates allowing exact placement of opacity cuts, decorations, painting on top or applying photographs of real clothing as textures.



DRESS WIZARD PACK CONTAINS:

Template Characters: 6 Templates, which include several layers of clothing mesh, from a simple triple mesh one to a complex 7 layer mesh design. Each template comes with a different set of Hair piece templates as well, as three types of shoe templates.

All 6 characters are already set with the proper spring adjustments for natural cloth behavior, but the adjustment sliders for each controller allows for perfect flow trimming.

DressWizard Samples: 16 totally finished, ultra elegant samples, including texture hair, hoods, and capes. Customized shoes and dynamic pant flairs are part of this excellent collection. From Victorian styles, up to ultra modern fashions, all derived from the super flexible template sets. These characters are READY to be part of your new, fiction or historic videos! Also, replacement Controller Accessories are included, just in case you accidentally delete one, **ALTHOUGH YOU SHOULD NEVER DELETE THE CONTROLLERS**

Upper Clothing combos: 14 Upper sets, allowing mixing then with all the Lower Combos supplied! Just by combining different Upper Sets with any Lower Set selection will result in hundreds of different dress styles!

Lower Clothing Combos: 12 Lower sets, which combined with the Upper's variety, will render hundreds of fantastic new styles for you fantasy movies!

Accessories: 14 Hair accessories and collars are included, plus replacement Control Accessories.

Hair: 9 Hair creation Templates plus 10 different textured and styled hair sets.

Shoes: Ten shoe samples and templates, for those cases where you create skirtless fashions, miniskirts or other styles where you need shoes. A tall boots template allows creating a large variety of shoe items by simply crafting the opacity template map.

Materials: 18 Material sets plus the complete set of Avatar templates for replacement.

Support: This PDF manual and several tutorial videos published at <http://forum.reallusion.com>. Any questions, help or advice is available by direct contact with Appariton at: meaparicio@inadep.com

I wish all happy DressWizard buyers, will enjoy using this pack as much as I have enjoyed creating it for all creative iClone Users!

Mike Aparicio
iClone CCD developer for Reallusion.

March 2010.