Legacy UVs for Genesis 8: Victoria 4
Instructions for use

1. Load and select *Genesis 8 Female*.

2. Click on the 'Legacy UVs !Prepare Genesis 8 Female' icon (found in *People: Genesis 8 Female: Anatomy: Legacy UVs*).

   This will load and fit the geografts, create the Legacy Surface Selection Sets so that legacy Material files will recognise the surface names, and apply a neutral surface material to *Genesis 8*.

   *Genesis 8* and the geografts will also be selected in the Scene panel in readiness for the application of the legacy textures. If you have fitted the Genitalia geograft to *Genesis 8*, that will be also be prepared and selected. If you wish to add the genitalia at a later stage you must rerun the '!Prepare Genesis 8 Female' script. You can also rerun the Prepare script at any time to ensure that the geografts are selected and to reset the surfaces. (The script will check for existing geografts and will not keep loading new ones.)

3. Apply the Legacy Material files in the normal way by navigating to the required folders and clicking the icons.

   The Material files must be in .duf format to work correctly with *Genesis 8*. You can either prepare these yourself by loading the MATs onto *Victoria 4* and then saving them within DAZ Studio as Material Presets, or you can utilise a program such as DraagonStorm's "V4 Skins Batch Converter" which will convert them automatically.

4. Click on the 'Apply Victoria 4 UVs' icon. This will ensure the UV sets for all the selected surfaces are 'Victoria 4'. The Apply script will also make adjustments to the Eye surfaces (see below). You will now have *Genesis 8 Female* fitted with Victoria 4 textures.

For convenience I have included an optional toolbar which you can load from the 'Components' sub-folder. This will make the icons in the main folder available as toolbar buttons which can be easily accessed without having to navigate back and forth between folders.
The other icons in the Components folder are the .duf file for the geografts and eye adjustments, the material file for the 'neutral' start surfaces, and the script which adds the legacy surface names to Genesis 8 and the genitalia. It should not usually be necessary to use any of these directly as they are all run when the '!Prepare Genesis 8 Female' and 'Apply UVs' icons are clicked.

**Genesis 8 Eye Surfaces**

The eye geometry for Genesis 8 is configured differently from Genesis 3. The Cornea is now connected to the EyeMoisture surface instead of the Sclera, and the Sclera is connected to the Iris and Pupil. Because there is now a ridge between the Sclera and Iris, legacy materials for the Sclera which have specular or reflective settings may produce a ring-like effect around the Iris, and so it is necessary to make adjustments to the materials.

The Legacy UVs geografts load with a conforming attachment, which is not itself a geograft, comprising of 'Cornea Legacy' and 'Sclera Legacy' surfaces. The attachment fits between the EyeMoisture and Iris. The purpose of this attachment is to replicate the Sclera/Cornea legacy geometry and thus provide a surface for the Cornea materials which would otherwise have no place to go. It also largely helps to circumvent the problems for legacy materials created by the ridge in the new geometry.

Because the Sclera Legacy surface now replicates the role of previous generations of Sclera surfaces, it is necessary for the Iris beneath it to be enlarged. So when the 'Apply UVs' script is run a hidden Iris Size morph (Legacy_UVs_Irices_Size) is applied to Genesis 8 Female. This morph can also be applied or removed using the presets in the Components folder.

When Iray materials are used, the Cutout Opacity property of the Cornea/Sclera legacy attachment will be set to zero, and the Legacy_UVs_Irices_Size morph will also be set to zero, effectively making the attachment invisible. When legacy, non-Iray materials are used, the original Sclera surface on Genesis 8 will be set to zero opacity.

Material alterations (both 3Delight and Iray) for some specular and displacement surfaces will nevertheless be automatically made when the 'Apply UVs' script is run. The 'Apply UVs' script will also conform the Genesis 8 Cornea surface to the EyeMoisture surface, by copying and pasting the EyeMoisture material to the
Cornea, after, if necessary, applying a new Shader. **It is therefore advisable to always run the 'Apply UVs' script after a new texture has been applied, even if the UVs do not appear to have changed.**

A Cornea Size morph for the legacy attachment (Actor > Morphs) enables subtle adjustments to be made to the viewable area of the iris appropriate for each individual texture. The 'Apply UVs' script for Victoria 4 sets this value to 100%.

A hidden morph (Sclera_Pos) moves the Cornea/Sclera legacy surface outward and inward. This is in place to counter instances where the EyeMoisture surface may intersect with the legacy surface due to the application of HD Expression or other facial morphs, for example. But the default setting should be adequate for most situations.

**Sclera Attachment**

I have included a standalone version of the legacy eye attachment so that the option is available to use legacy Eye MATs with Genesis 8 textures. The usual procedure would be:

a) Load the **Sclera Attachment** from the Components folder;
b) Apply the 'Legacy UVs Eyes Adjustment' Shape Preset to increase the size of the Irises on Genesis 8;
c) Run the 'Legacy UVs Surfaces’ script;
d) Select Genesis 8 and the Sclera Attachment in the Surfaces tab and apply the Legacy Eye MAT;
e) Set the Sclera Opacity on Genesis 8 to zero;
f) Copy the EyeMoisture surface on Genesis 8 to the Cornea surface on Genesis 8, ensuring first that the Shaders are the same.
g) Manually change the UV Sets for the Eye surfaces to “Victoria 4”.

This procedure comes with some caveats. One of these is that Eye MATs are variable in the surfaces that they include. Some may only set the Irises, others may even set Lacrimals or Reflections. If there is no set of properties for the Sclera, it may be necessary to copy the surface from the Genesis 8 sclera. I have also found that if the EyeSocket surface uses the AoA_Subsurface Shader then the Negative and Positive Bump values should be set at zero.

The Sclera Attachment can also be used for **Genesis 3** Eye MATs.
**LIE presets**

Loading a Victoria 4 LIE preset may result in multiple layers if the original preset was designed to span more than one surface on Victoria 4. For example, a LIE preset (like a tattoo) covering the neck, torso and hip surfaces on Victoria 4 will be loaded three times onto the torso surface for *Genesis 8* because the torso now covers the surfaces originally covered by the neck, torso and hips. The additional layers can be removed in the LIE editor.

**'Partial' Textures**

Some original Victoria 4 textures may be "partial" textures. For example, where there is a tattoo on the hand the actual texture may only include the texture for the 'hand' surface, the rest of it will be blank. This worked on Victoria 4 because there was a separate surface for the hand. *Genesis 8* only has 'Arms', so if you apply the hand tattoo the rest of the arm will be untextured. In these instances one can easily create a "whole" texture in a Paint or Graphics program by simply cutting the partial texture and overlaying it on an existing complete texture. Then you navigate to the new texture in the Surfaces tab and save it as a new Material .duf preset.

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