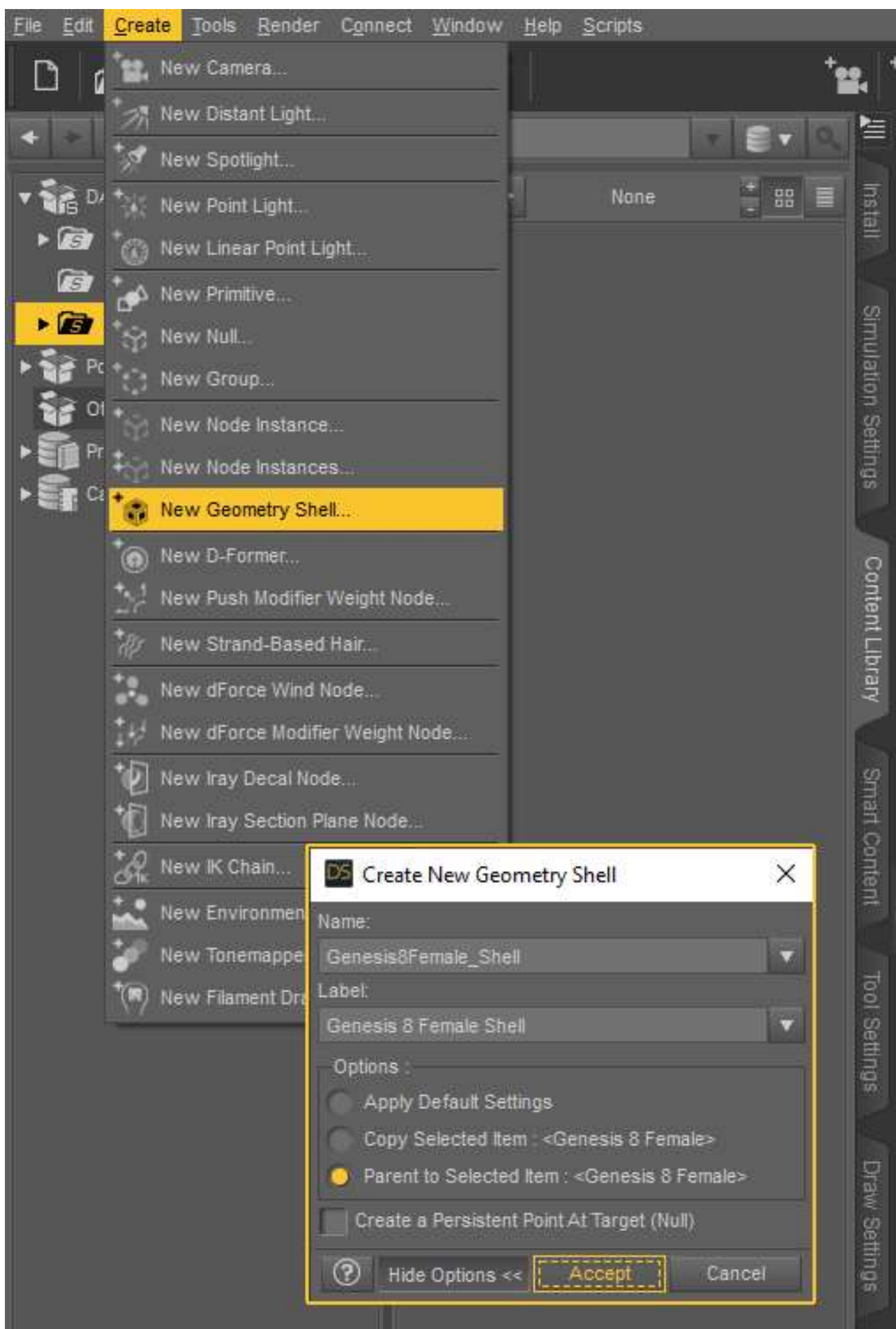# How to create a Geometry Shell

Compared to other things in the Studio app like geometry editing or weight painting, it's "easy" to create a Geometry Shell. It takes longer to read this guide (5 minutes) than to set up and tune a Geo Shell (2-3 minutes).

Step 1: Create the Geo Shell

• open a new and empty scene

• load your favourite model without clothes, hair, etc.

• from the main menu select "Create" ➜ "New Geometry Shell ..."

• leave all presets untouched and click "Accept".

That's it! You have created a Geometry Shell.

Tip: If you want to use genitals, add them to the model before you create the Geometry Shell. I have tested this with the great "Golden Palace" and "Dicktator" from Meipe - no problems.

New Camera...

New Distant Light...

New Spotlight...

New Point Light...   None

New Linear Point Light...

New Primitive...

New Null...

New Group...

New Node Instance...

New Node Instances...

New Geometry Shell...

New D-Former...

New Push Modifier Weight Node...

New Strand-Based Hair...

New dForce Wind Node...

New dForce Modifier Weight Node...

New Iray Decal Node...

New Iray Section Plane Node...

New IK Chain...

New Environmen

New Tonemappe

New Filament Dr

DS Create New Geometry Shell   ✕

Name:

Genesis8Female_Shell   ▼

Label:

Genesis 8 Female Shell   ▼

Options :

◯ Apply Default Settings

◯ Copy Selected Item : <Genesis 8 Female>

🟡 Parent to Selected Item : <Genesis 8 Female>

☐ Create a Persistent Point At Target (Null)

⑦   Hide Options <<   ┆ Accept ┆   Cancel

Step 2: Fine tuning the Geo Shell

The newly created Geometry Shell looks like a really pale second skin, covering not only the body, but also the nails and eyes. Let's fix this!

With the Geo Shell (not the model) selected in the "Scene" pane switch to the "Parameters" pane and select **Shell**

You will see many names of body parts, each with an "on/off" button. Here you can specify whether the selected body part should be covered by the shell or not.

Go through the list of body parts and turn off the ones that should not be covered with the shell. For the eyes I usually switch off:

EyeMoisture
EyeSocket
Irises
Pupils
Sclera
lEye
rEye

The nails are easier - just switch off:

Fingernails
Toenails

Congratulations! You have created and fine-tuned your own Geo Shell within 2.26 minutes ;-)

Time to save your work:

Tip: I recommend saving the Geo Shell as a "Scene Subset". This way you can load the shell in any scene by double clicking on your saved work.

The shell has an other option located in the "Parameter" pane: General ➔ **Mesh Offset**

With the slider "Offset Distance (cm)" you can edit the distance between the Geometry Shell and the Skin of your model. Decrease the value and the skin of the model begins to "swallow" the shell. When you increase the value, the shell turns into something like the Hulk.
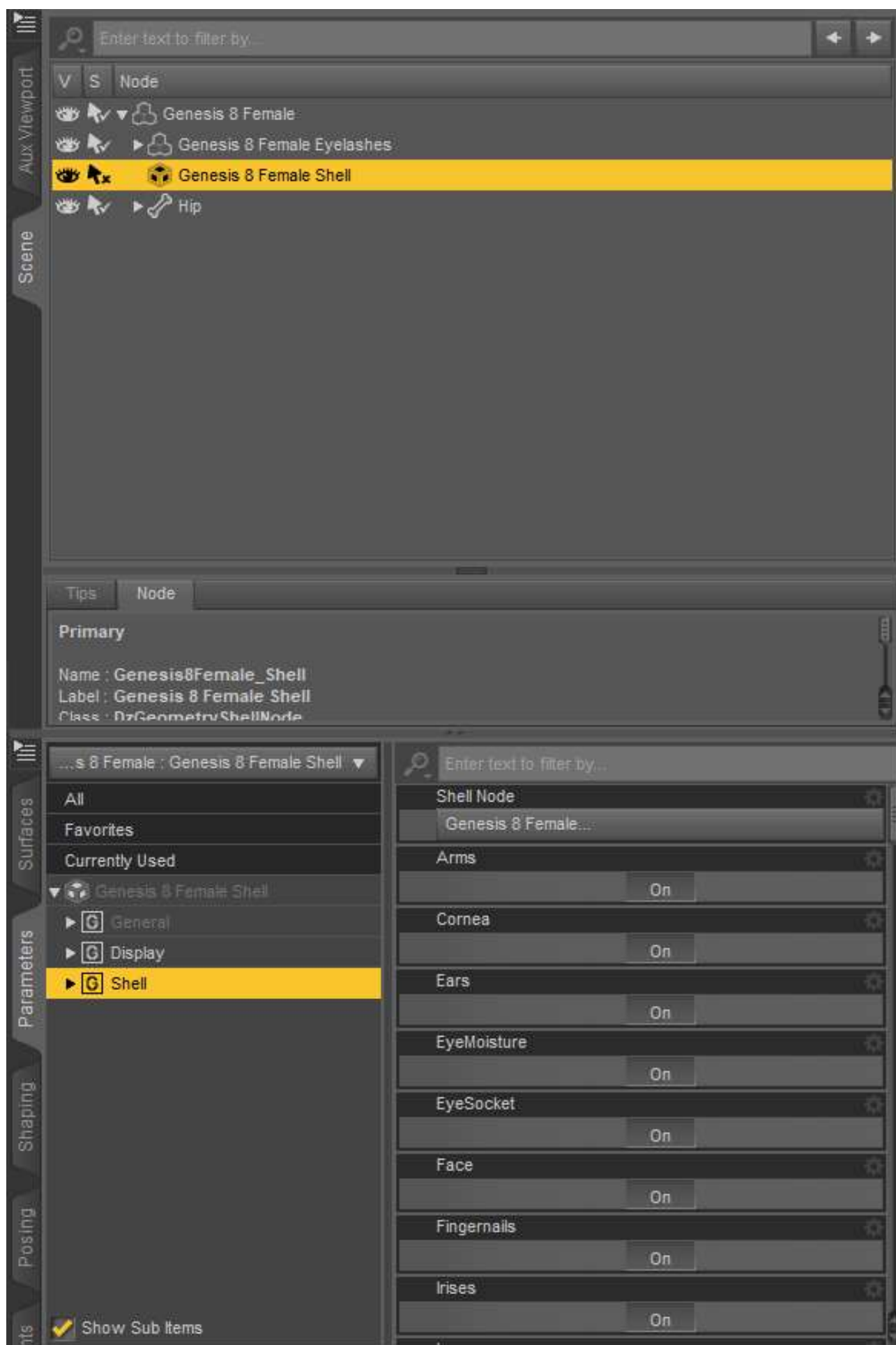
Step 3: Iray shader for the Geo Shell

Switch the display mode of your viewport to "NVIDIA Iray".

With the Geo Shell selected in the "Scene" pane and also in the "Surfaces" pane you can literally transfer any shader preset you have to the shell.

In the "Surfaces" pane switch to the "Presets" tab ➜ Shaders ➜ **Iray**. Starting from "Architectural", you can try any of the presets provided.

A good starting point to make the Geo Shell look "wet" is the preset:
"Presets" tab ➜ Shaders ➜ Iray ➜ Liquids ➜ **Water - Thin**.

Once transfered, the Shell (Model) starts looking really wet. To edit the "wetness", switch to the "Surfaces" pane ➜ **Editor** tab.

Try the following sliders (individually or mixed) and see what happens to the shell:

Glossy Layered Weight
Refraction Index
Abbe
Cutout Opacity

There are many more possibilities. Just experiment and see what happens. It's really fun and exciting to explore the Iray shader options for Geometry Shells.

Good luck and have fun!

No Selection ▼   🔍 Enter text to filter by...   1 - 3

Asphalt

Car Paint

Ceramic

Concrete

Crystal

Emissives

Fabric

Glass

Granite

Hair

Leather

Liquids

Marble

Metal

Noise

Pattern

✔ Filter By Context

Sort by Name : A to Z ▼

Shader   Shader   Shader

Water - Dispersive   Water - Thin   Water

Tips   Info   Tags

Presets   **Editor**   Shader Baker

Shader : Iray Uber

All

Favorites

Currently Used

▼ 🎲 Genesis 8 Female Shell

▶ 🔷 Arms

▶ 🔷 Cornea

▶ 🔷 Ears

▶ 🔷 EyeMoisture

▶ 🔷 EyeSocket

▶ 🔷 Face

▶ 🔷 Fingernails

▶ 🔷 Irises

▶ 🔷 Legs

▶ 🔷 Lips

▶ 🔷 Mouth

▶ 🔷 Pupils

✔ Show Sub Items

🔍 Enter text to filter by...

(16): Glossy Layered Weight   💍♡⚙

▼ ──────────────────── ◐▶ 1.00

(16): Share Glossy Inputs

On

(16): Glossy Color

▼   1.00   1.00   1.00

(16): Glossy Color Effect

Scatter Only ▼

(16): Glossy Reflectivity

▼ ── ◐ ──── +   0.50

(16): Glossy Roughness

▼ ─◐ ──────── +   0.00

(16): Backscattering Weight

▼ ─◐ ──────── +   0.00

(16): Refraction Index

─ ─◐ ──────── +   1.33

Tips