Hairstyles Packs. User guide

For more convenience and to avoid confusion, I will duplicate the links to the assets of the marketplace:

Hairstyles Pack: Female

Hairstyles Pack: Female v02

Also pay attention to the link (Recently, I noticed that following an external link from a marketplace asset breaks the link to the youtube playlist itself. Here's a direct link to a playlist with video tutorials:

Link to playlist with video tutoroals: https://www.youtube.com/watch?v=wpyeCOA-7UI&list=PLzWMybzBn_gW50z9BFt8nrZPLT3HLLksK

The Source Files clarification.

The source files inside the asset are Xgen Interactive Groom converted from Xgen Description.
Xgen Description and Xgen Description Groom are different entities. Internal asset files designed to ajust the scalp for your custom characters. If you have experience, you can edit something in hairstyles, but I do not recommend doing this.
Due to the very complex structure, large number of files and sensitivity, I see no reason to add Xgen Description. Also it must have a different price which higher than the current one.

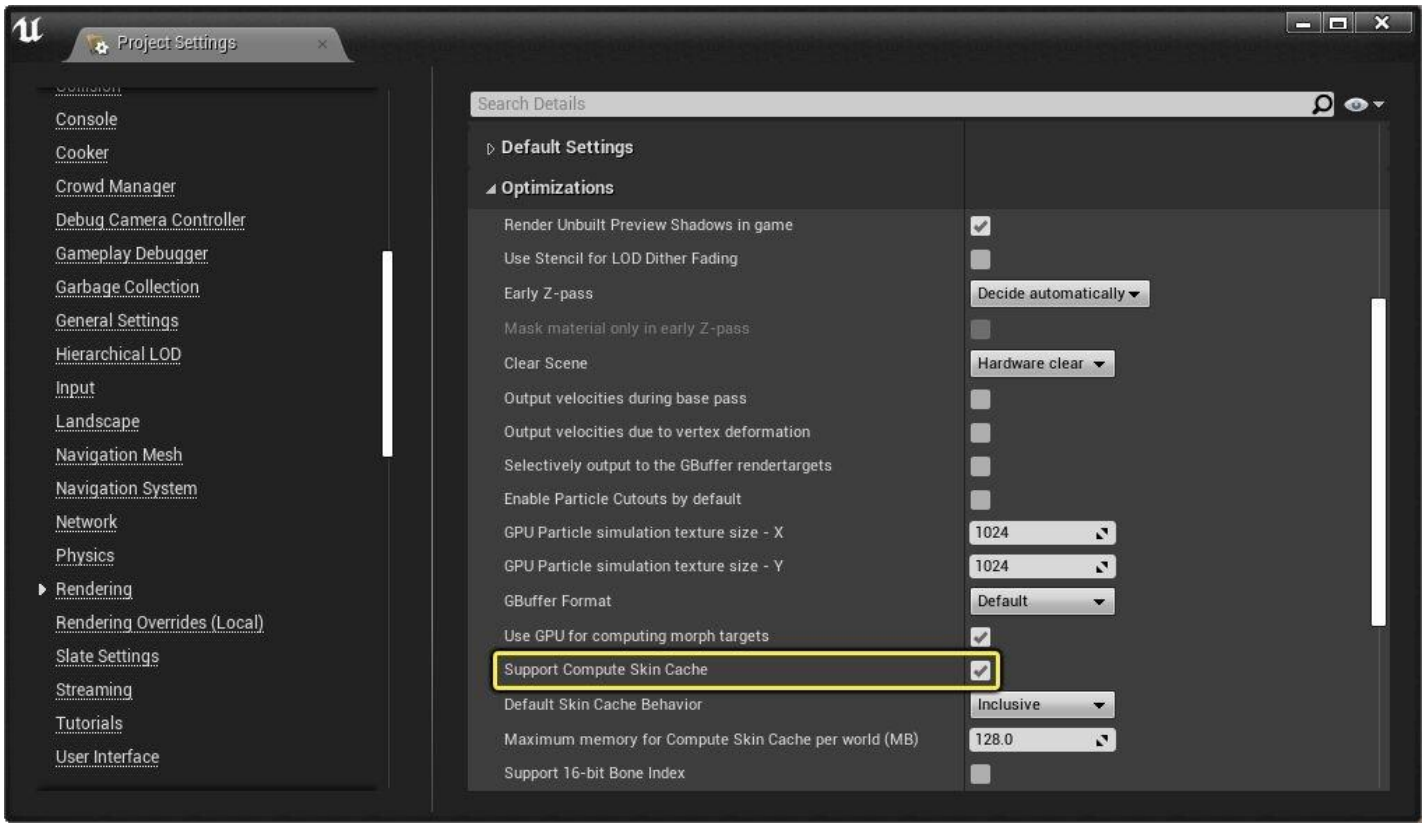
Take a look at the links below and you will understand the crazy workflow for organizing files:

https://knowledge.autodesk.com/support/maya/learn-explore/caas/CloudHelp/cloudhelp/2016/ENU/Maya/files/GUID-D1B28D5E-A776-49B0-BA50-C99F2CA8E5AF-htm.html

https://knowledge.autodesk.com/support/maya/learn-explore/caas/CloudHelp/cloudhelp/2019/ENU/Maya-CharEffEnvBuild/files/GUID-E4714F1D-C4F6-49FD-9B89-FDE72CF9296F-htm.html

How to attach Groom asset to the Skeletal mesh

*** Important introduction:**
By default in asset the simulation of physics groom's is turned off. You must manually enable **(Enable Simulation)** checkbox.
To merge this asset into your project, make sure all required plugins is enabled.
Below is the link to the Unreal Documentation:
https://docs.unrealengine.com/en-US/WorkingWithContent/Hair/QuickStart/index.html



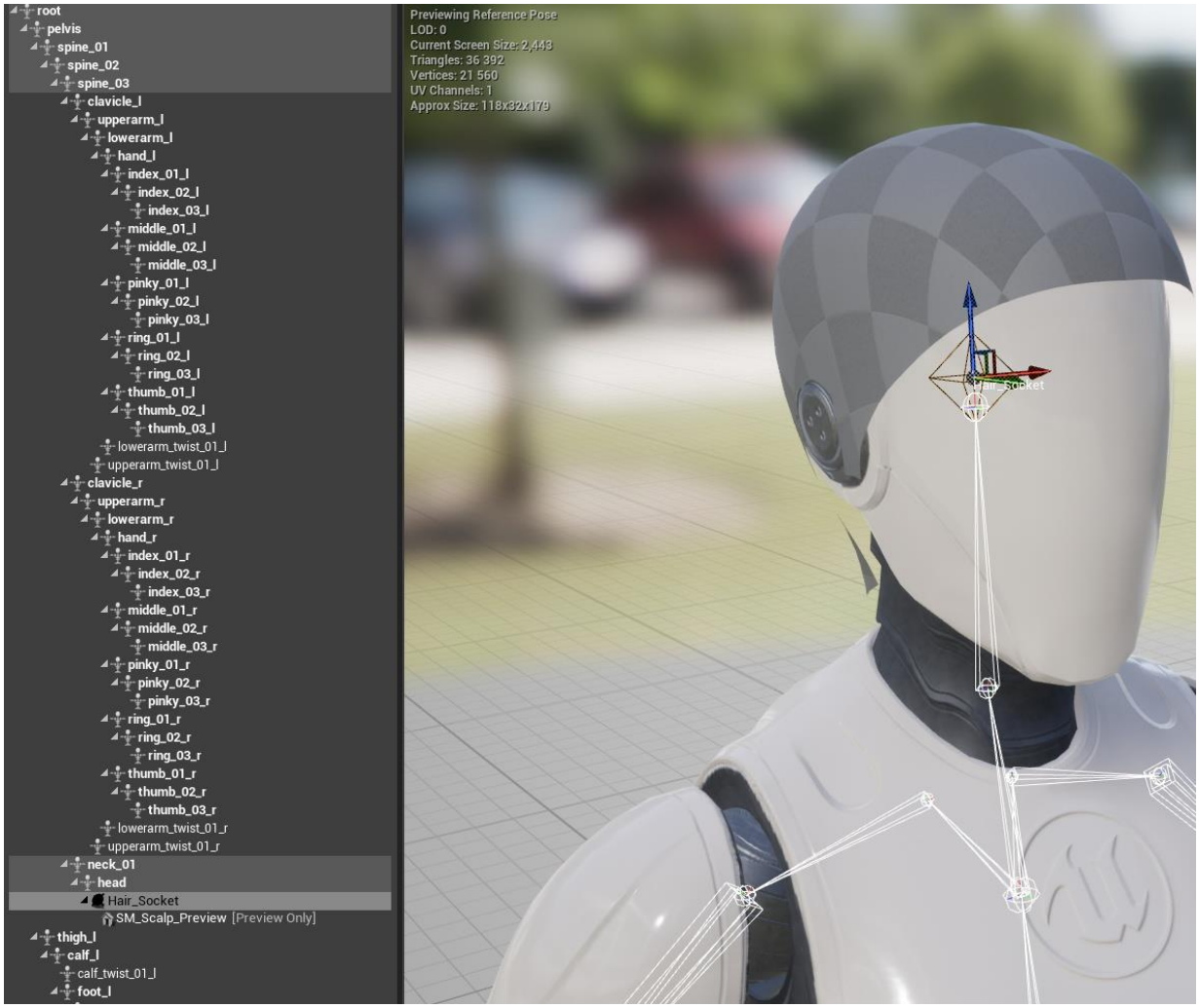
Let's start

There are two ways to attach a groom to a character. Attaching to surface of the skeletal mesh and attaching to the skeleton socket. Attaching to the skeletal mesh is described in the link above.

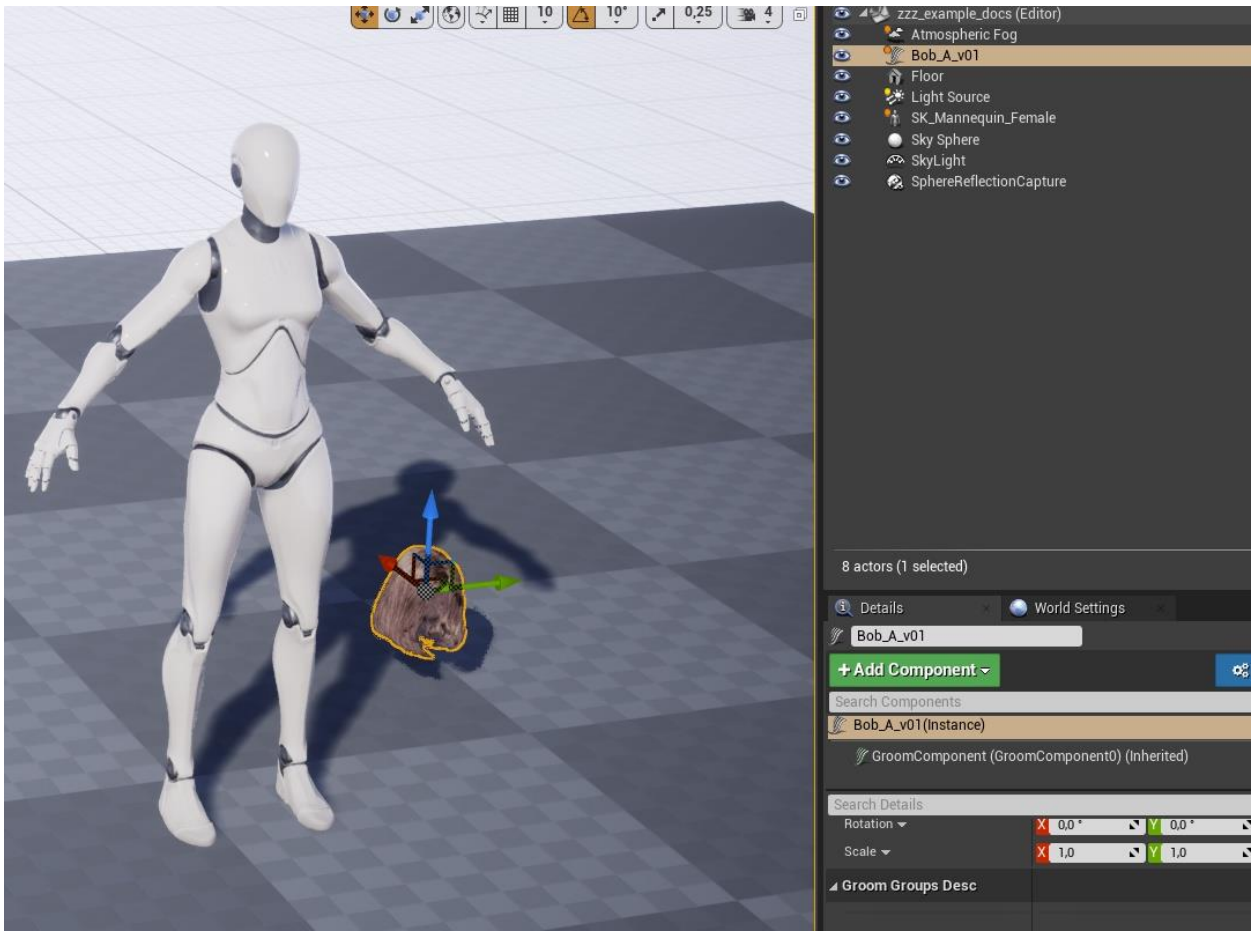
Below is a description of the binding to the socket.

Select skeleton of your character and open it in the editor. Add the socket to the head bone. You can add a scalp static mesh to the socket for convenience preview. The Static Mesh scalp is located here Content \ Hairstyles_Pack_Female \ Mesh \ Static_Meshes \ SM_Scalp_A
(The scalp mesh can also be found in the **Source Files**. **Content\...SourceFiles\Scalp_A_01_low.zip**) In fact, this scalp

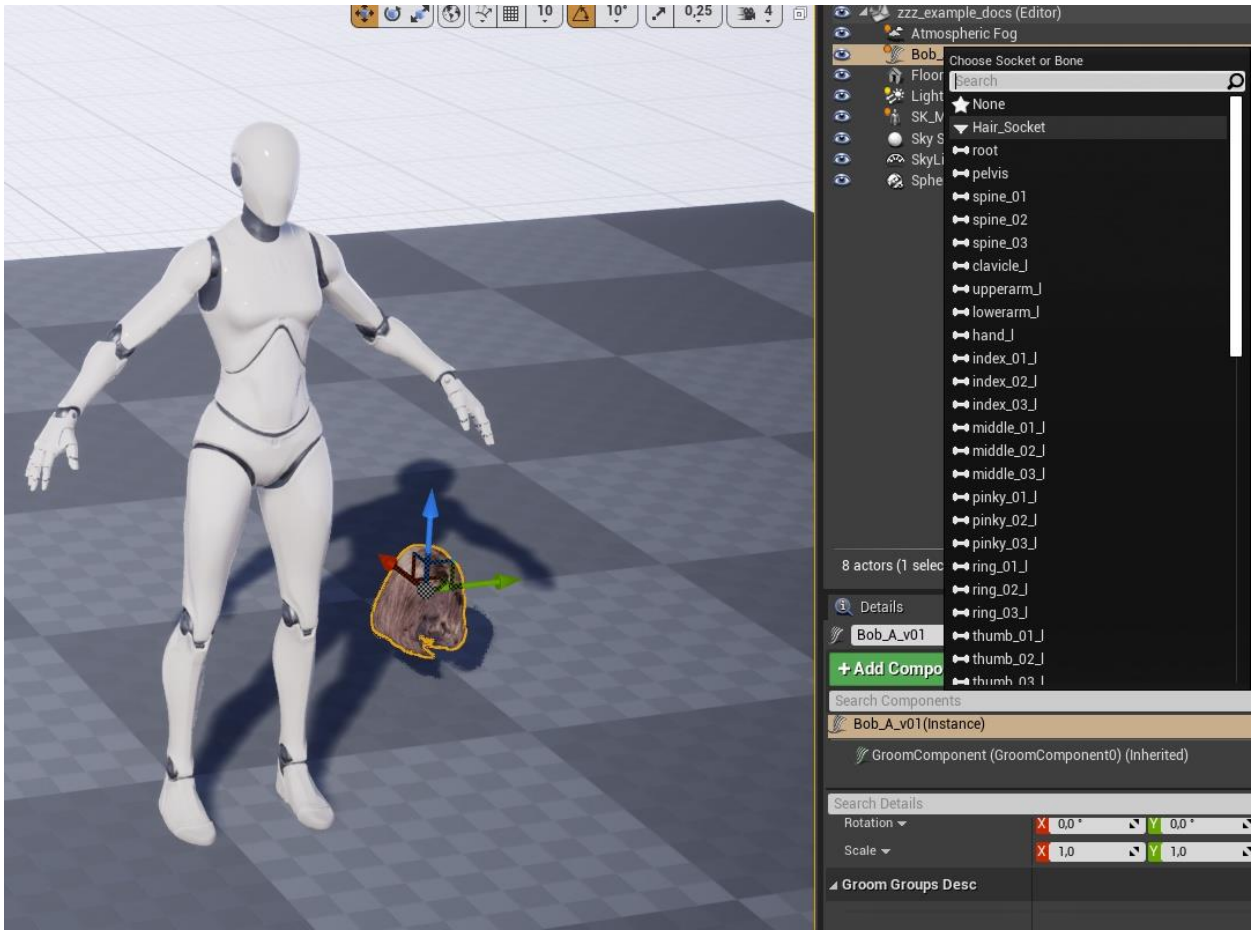
does not matter inside the asset, since you only need to adjust the Groom asset. Adjust the position of the socket so that the Scalp or Groom asset follows the shape of the head. Save the skeleton.



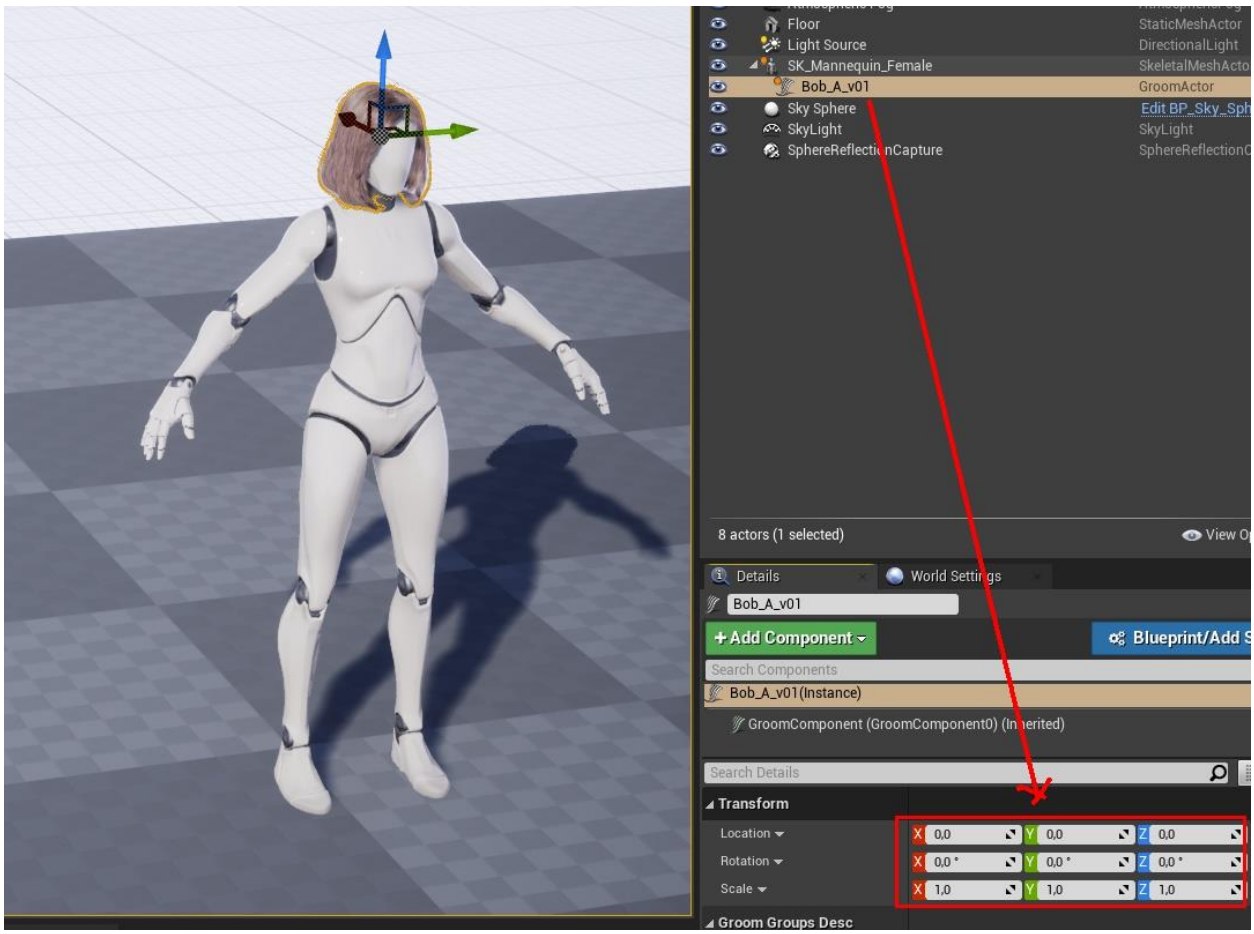
Drag the skeletal mesh to the level. Drag the groom as well.



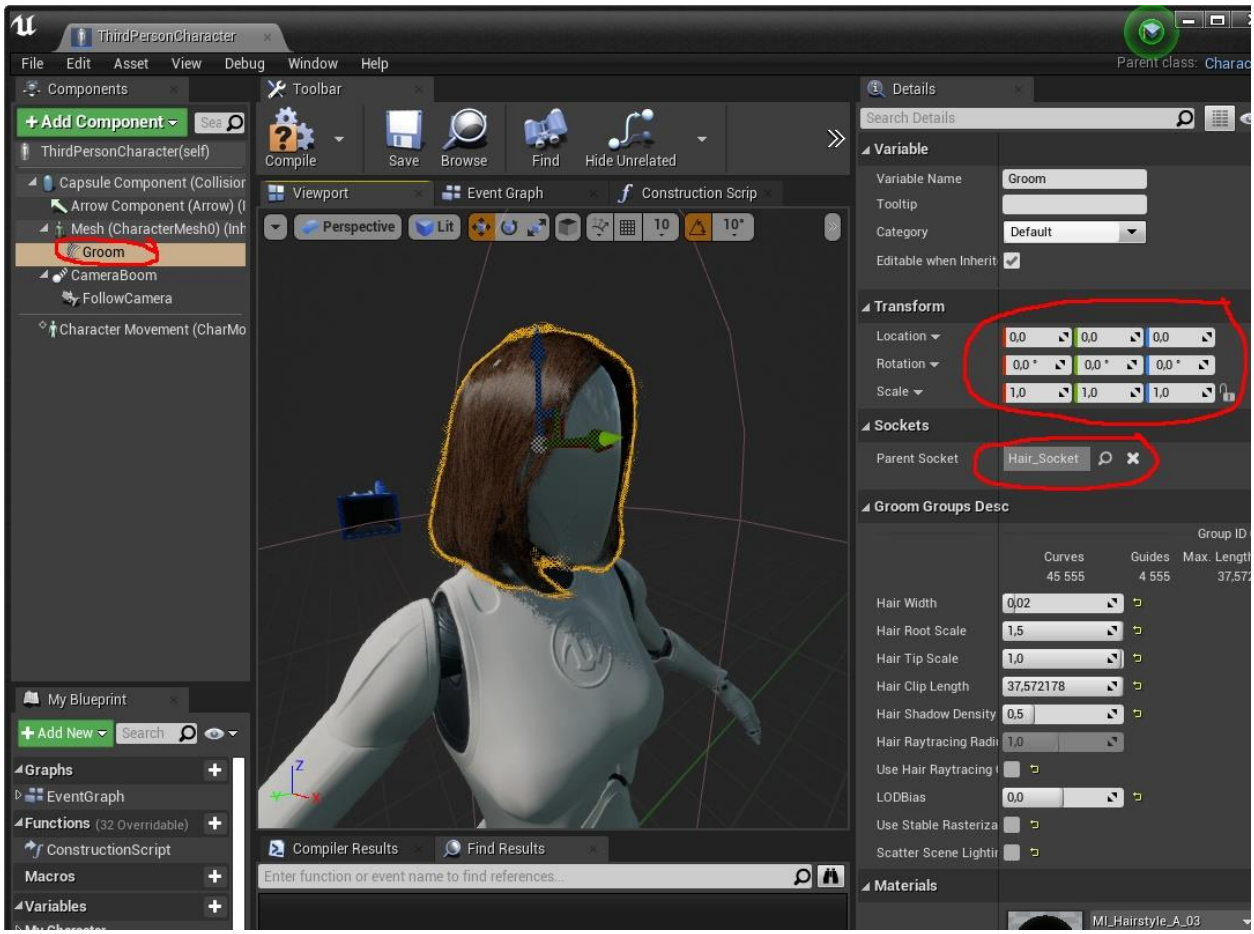
In the world outliner, drag the groom to the skeletal mesh above and select **Hair_Socket** from the pop-up menu.



Make sure the Groom asset transformation values have zero coordinates. Done.

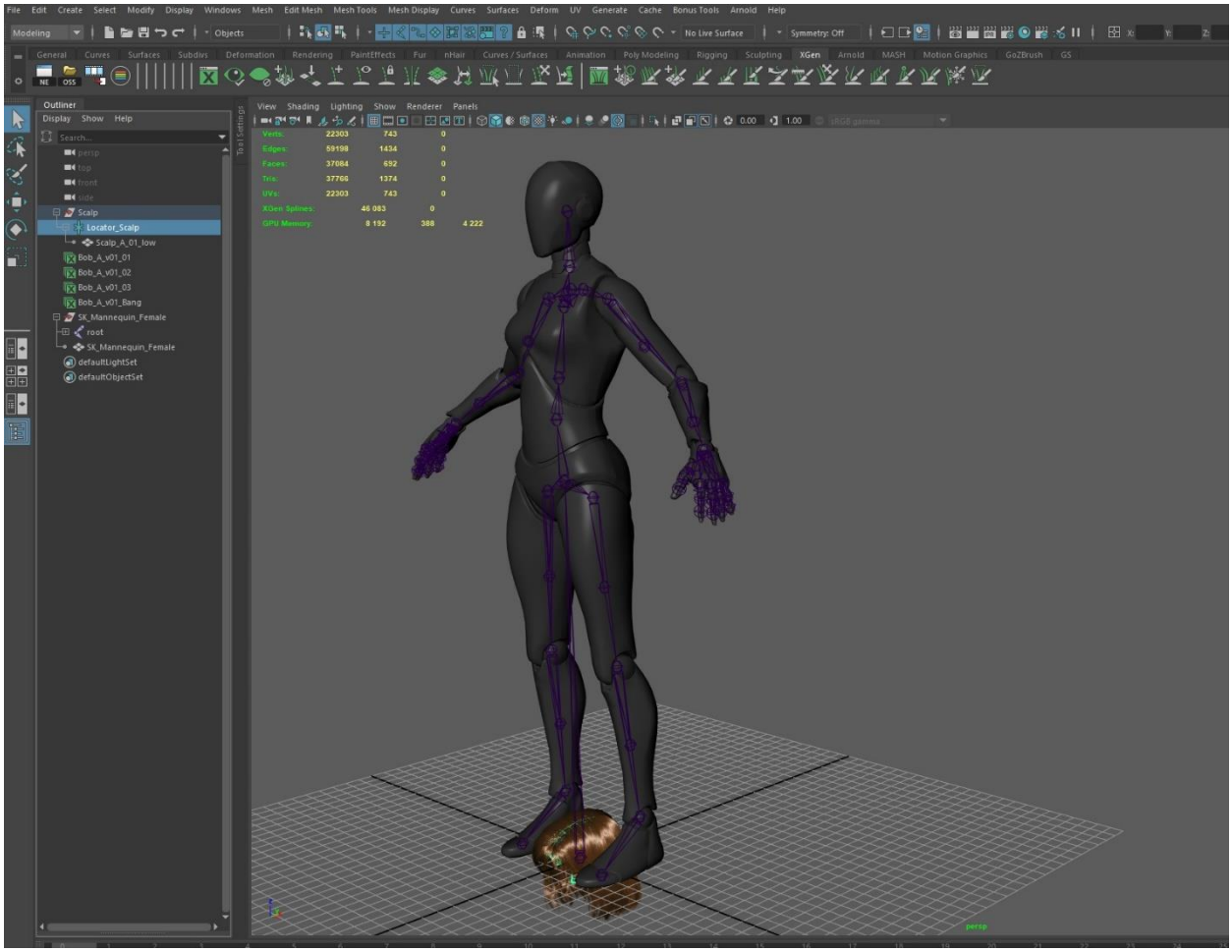


In the Character Blueprint, a slightly different way. The groom is added through the add component (Groom). Then it attached through the created socket.

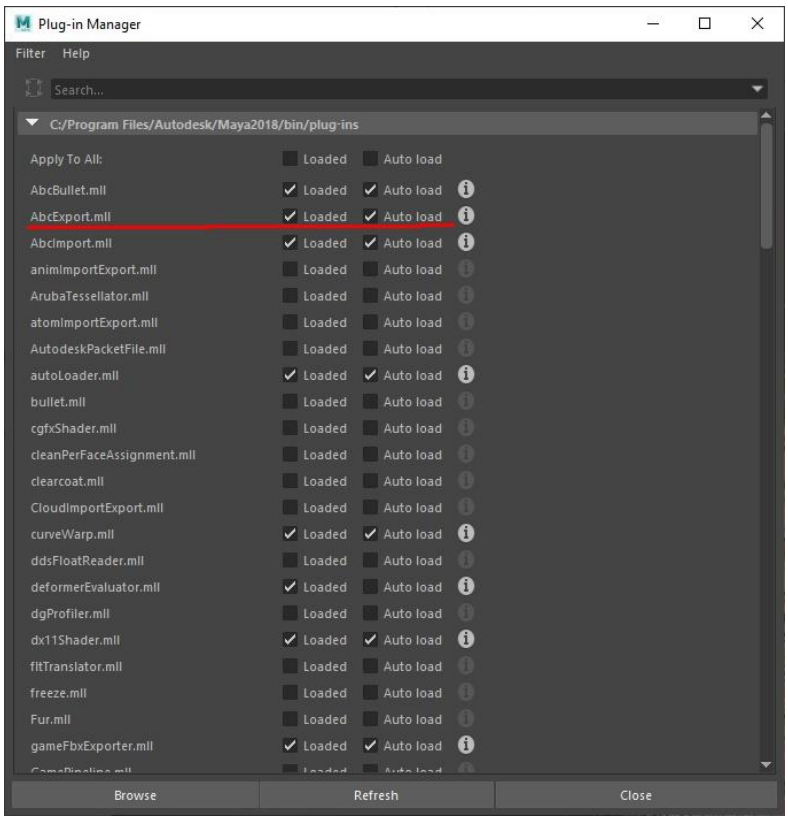


Using source files and adjusting for any skeletal mesh.

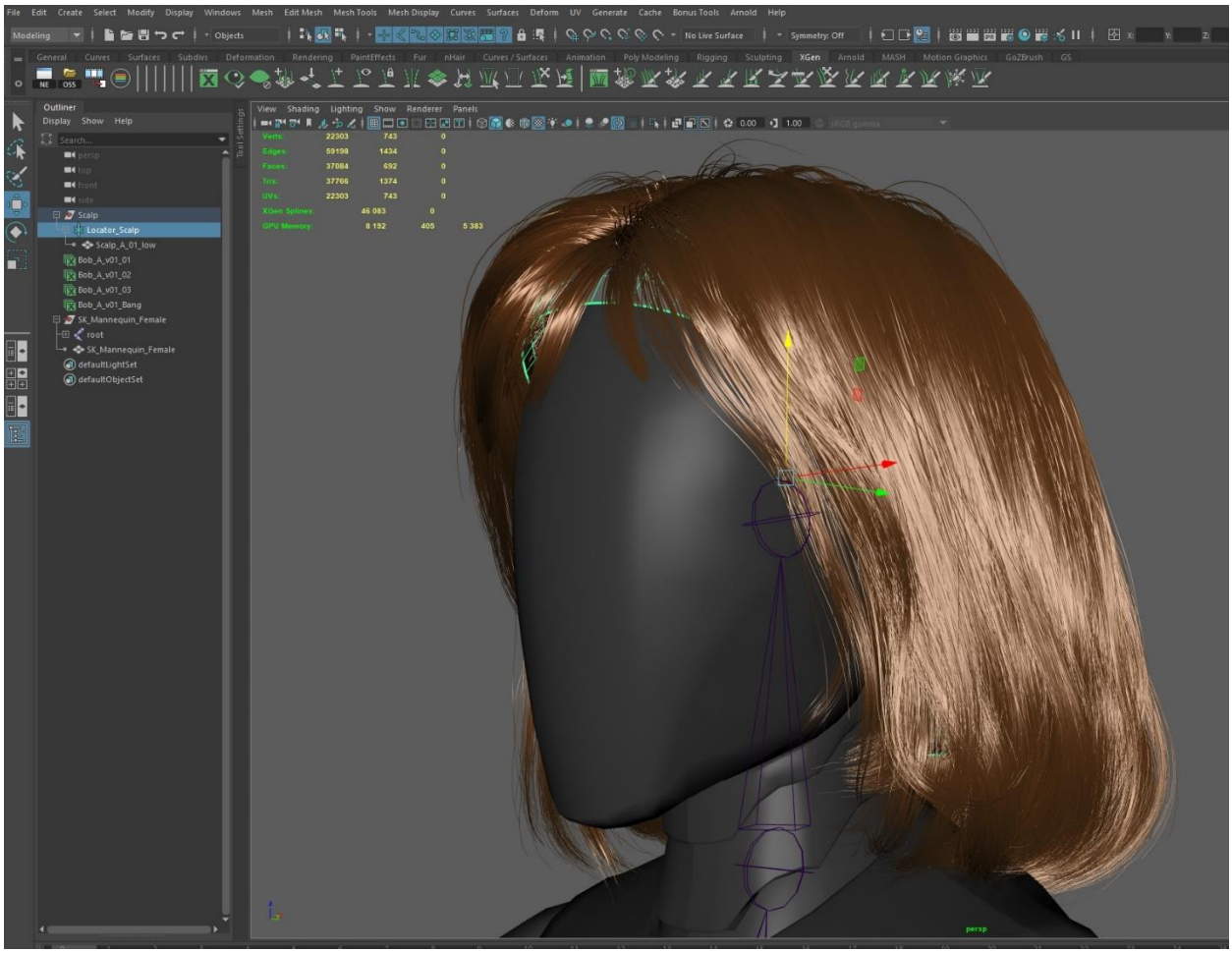
Start Maya 2018 or newer. Open the file with the groom. For example **Bob_A_01.mb**. Import your character into the scene.



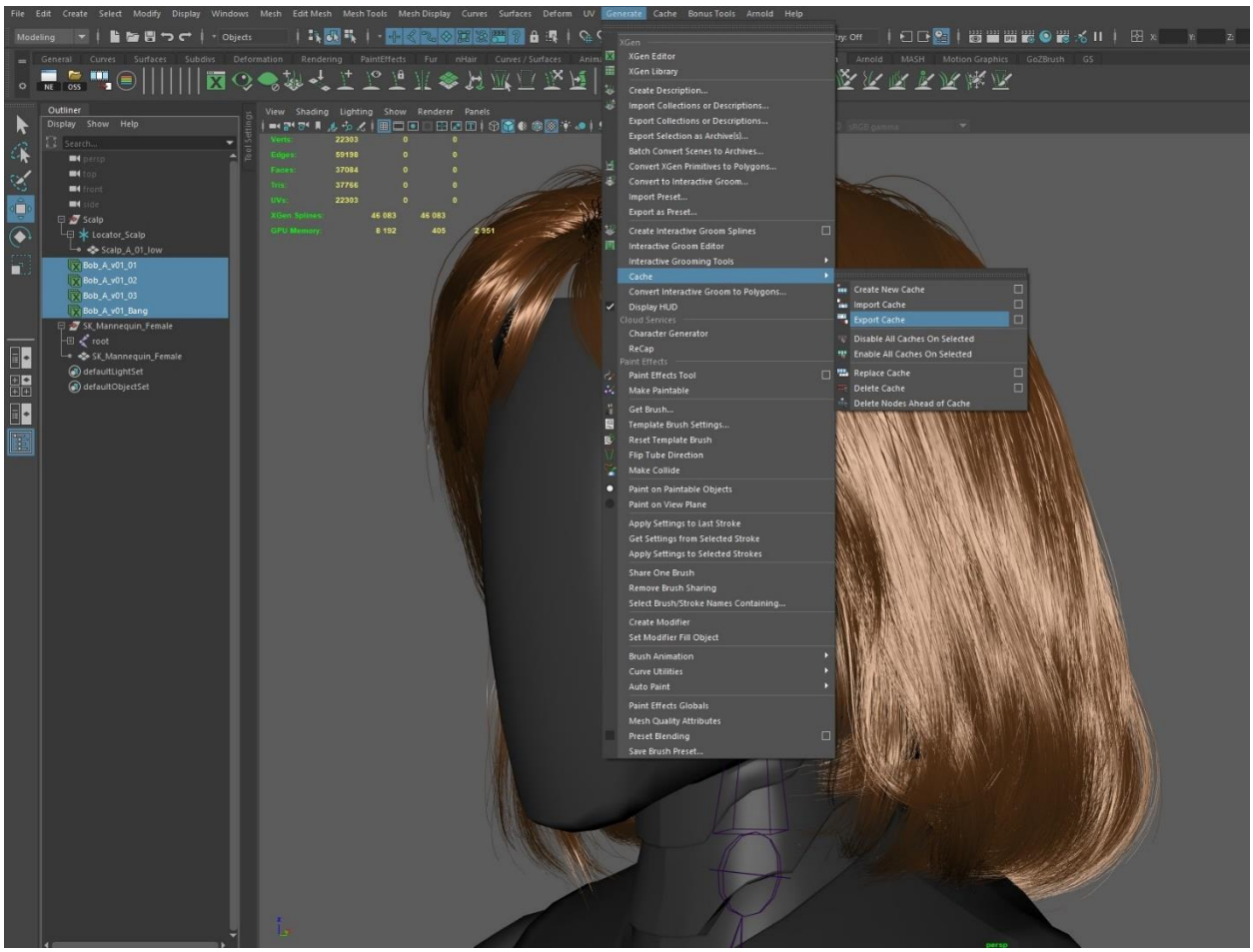
Make sure to enable the Alembic plugin in Maya Plugin Manager.



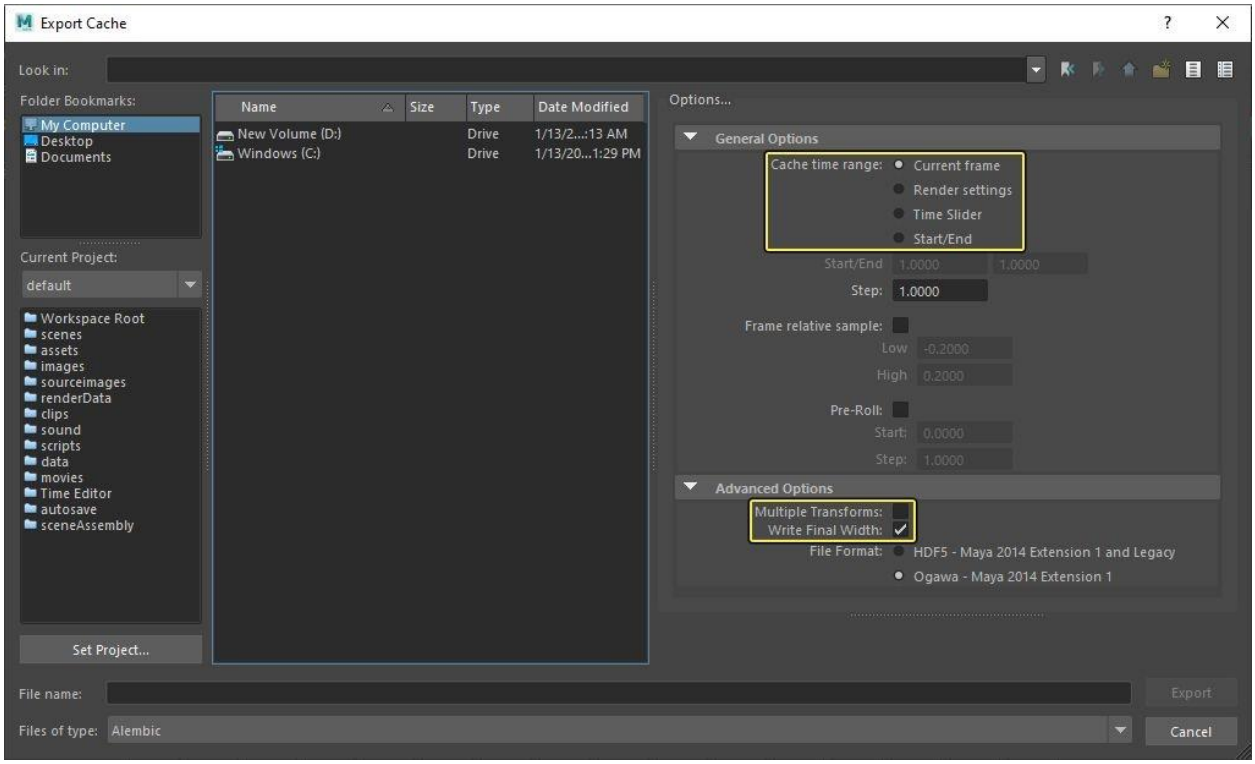
Select **Locator_Scalp** and bring it up to the level of your character's head. If desired, you can deform the scalp at the component level vertex, faces, edges for more precise adjustment.



Once you are satisfied with the hairstyle, select the Xgen nodes  and export them in the Alembic Cache ***abc** extension to any place with any name.

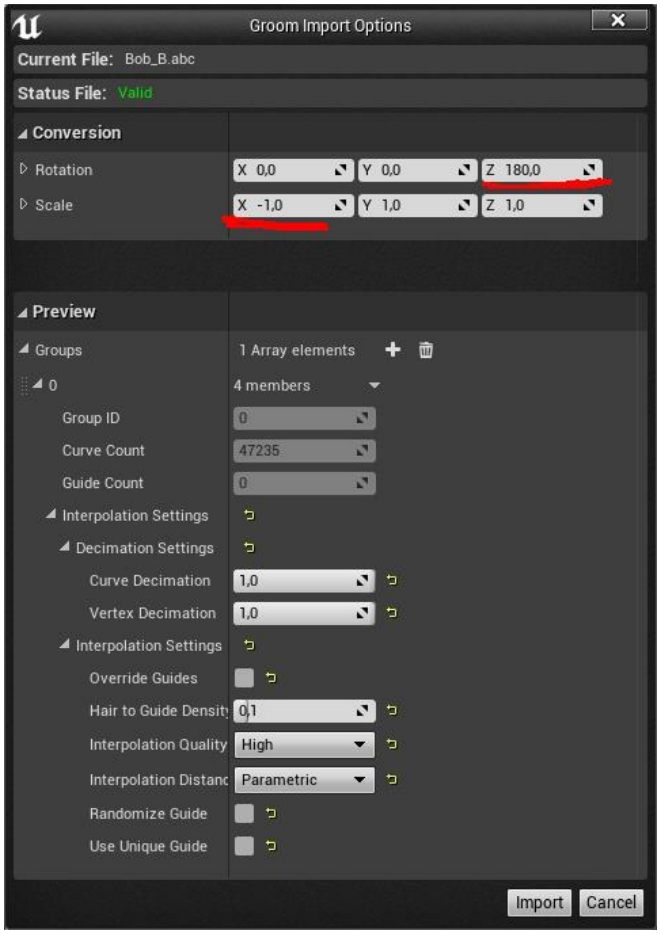


Set options in the export window as in the picture below



Import to Unreal4

Drag your Alembic Groom asset to the content browser wherever you want. The groom import options will open. Paying attention to the values of transformation conversion. **Rotation Z (180) Scale X (-1)**



Done.

This groom can now be attached via a bridging asset.

More details at this link:

https://docs.unrealengine.com/en-US/WorkingWithContent/Hair/QuickStart/index.html

Groom's modules

Check out modular hairstyles like Ponytails, separated Bangs. Such a hairstyle can consist of at least two modules such as a hat base, tail and bangs. The hat base must not have a physical simulation, otherwise the hair will fall through.

You need to export modules from Maya as separate **Alembic** files and combine them already in the engine.

The properties of the groom. Tips and tricks.

1. Play with the properties of bending, stiffness and stretching.

2. Pay attention to the radius of collision in the properties of the groom. A higher radius allows for better collision with a physical asset.

3. Cuvre and Vertex decimation will increase performance.

4. In the properties of the Strands, you can change the thickness and length of the hair. It's also helpful to play with the depth of the shadows.