

Realistic Base Skeleton

Textures

Sizes

The texture sizes are 4096 px

Texture Sets

Following naming convention is used for the textures of all assets:

T_NameOfObject_	Base Color/Albedo
T_NameOfObject_MRAO	Red Channel → M: Metal Green Channel → R: Roughness Blue Channel → AO: Ambient Occlusion
T_NameOfObject_N	Normal

Meshes

Click [Here](#) for an image of the full list of meshes.

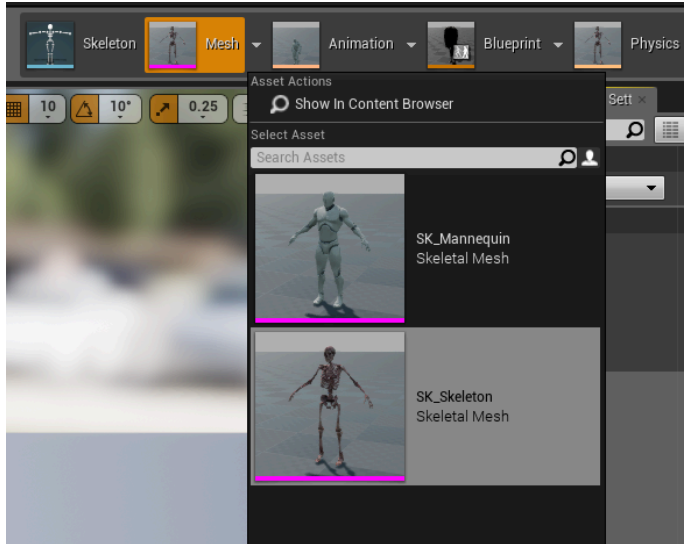
A [detailed list](#) of the vertex count of the meshes.

Collision

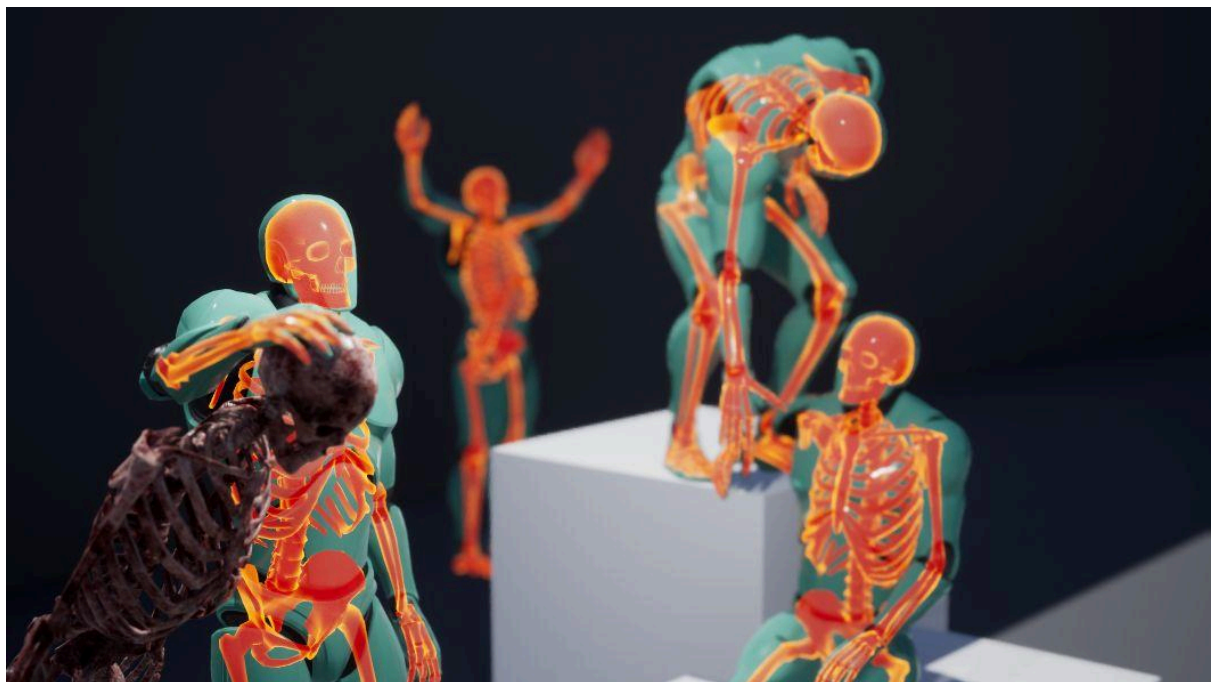
All assets have either a custom collision, an auto generated convex collision or simple box collisions.

Update

We have added an updated SK_Skeleton. With this version, retargeting is **not** necessary anymore! The new version fits exactly inside of the default UE4 Mannequin, using the exact same proportions and rig.



This screenshot shows that SK_Skeleton and SK_Mannequin are using the same skeleton.



The picture shows animations from the Generic NPC Anim Pack without the need of retargeting, these animations are not included in the set!
We have added a new shader to make the Skeleton visible inside of a character to create a x-ray effect.

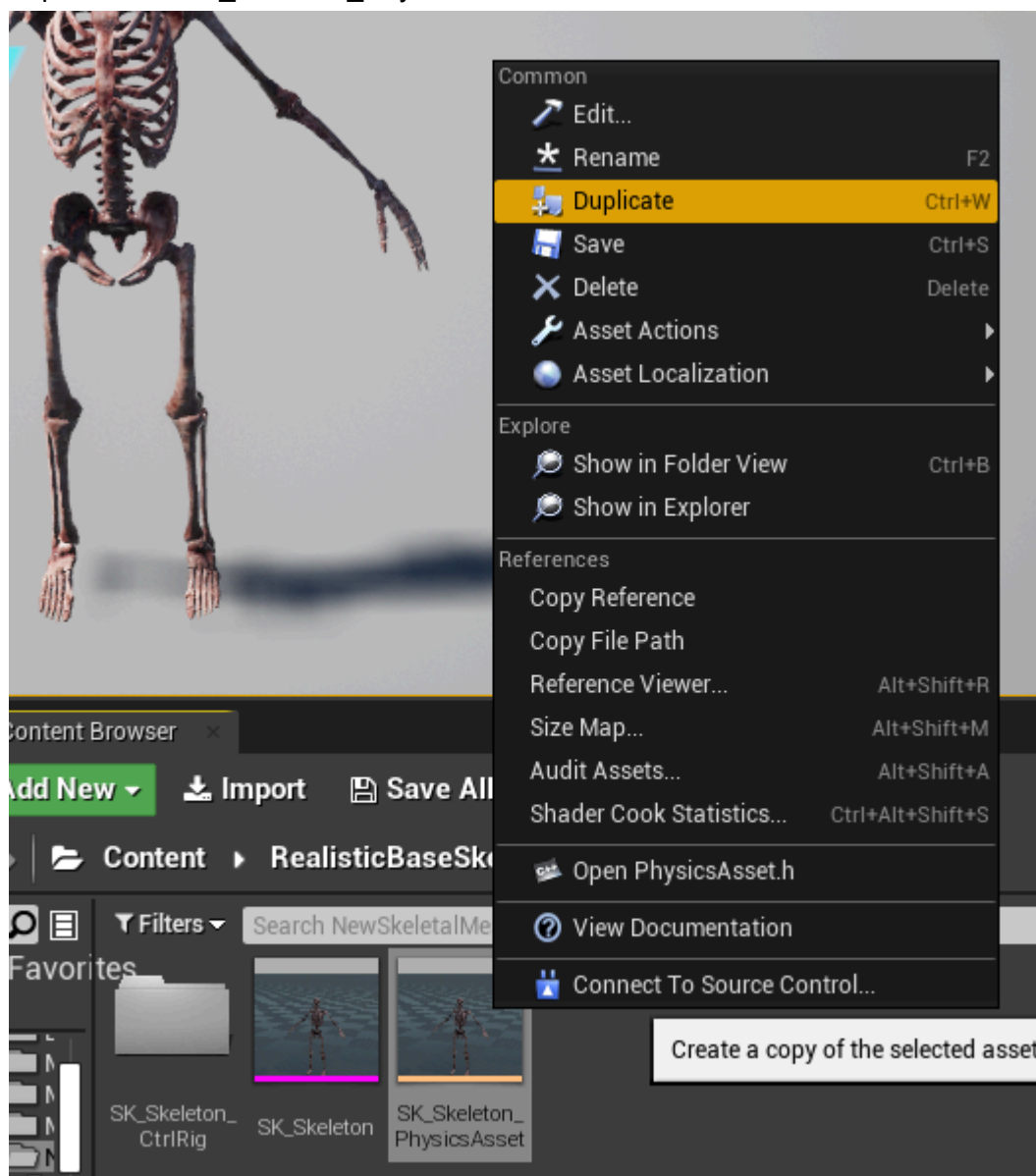
Pose Skeletal Mesh and convert to Static Mesh

The best way to pose the Mesh would probably be, using a rig in a DCC like Blender, Max or Maya. For posing it directly in the Unreal Editor there are several possible ways.

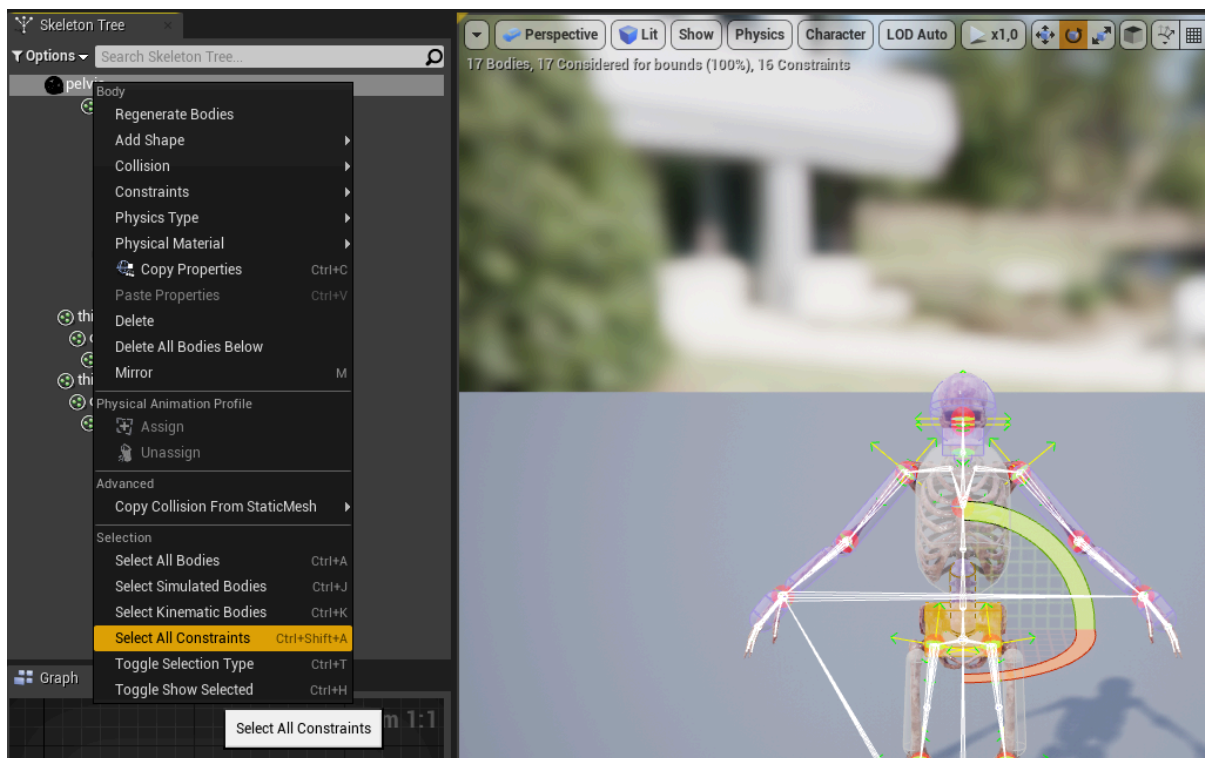
- A. Create a Physics Asset and simulate the Skeleton in your level.
- B. Posing the Skeletal Mesh inside the Skeletal Mesh Editor by rotating each bone separately (skip to point 9 for this workflow)
- C. Use the new Control Rig Plugin (Version 4.25), however you would have to create your own custom rig

We will describe step by step how you can use A and B together, to create a new Static Mesh Asset for your Project:

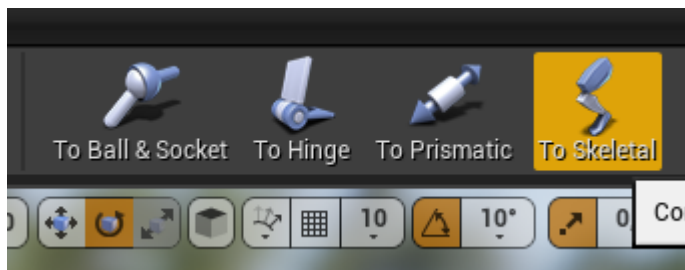
1. Duplicate the SK_Skeleton_PhysicsAsset.



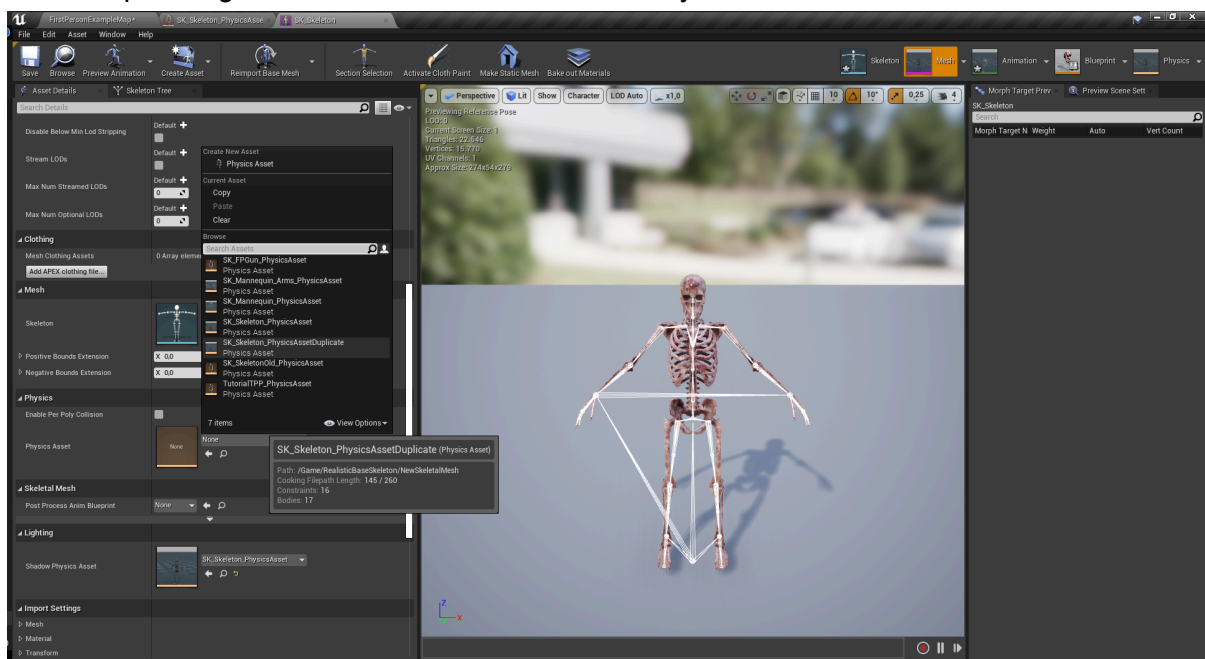
2. Inside the duplicated Physics Asset, right click the pelvis bone and click “Select All Constraints”.



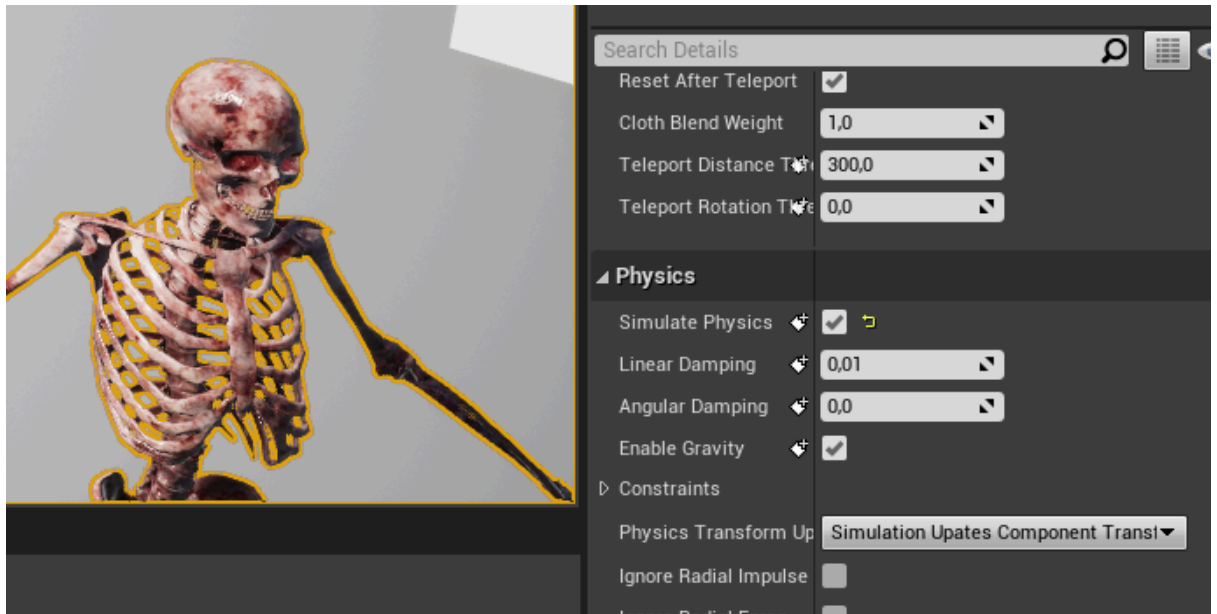
3. Press the “To Skeletal” Button on the top shelf. (This is to prevent the Skeleton to break apart while simulating)



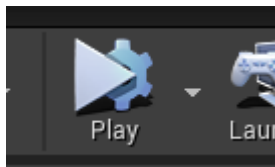
- 4.
5. On the top shelf go to “Mesh” and select the new Physics Asset.



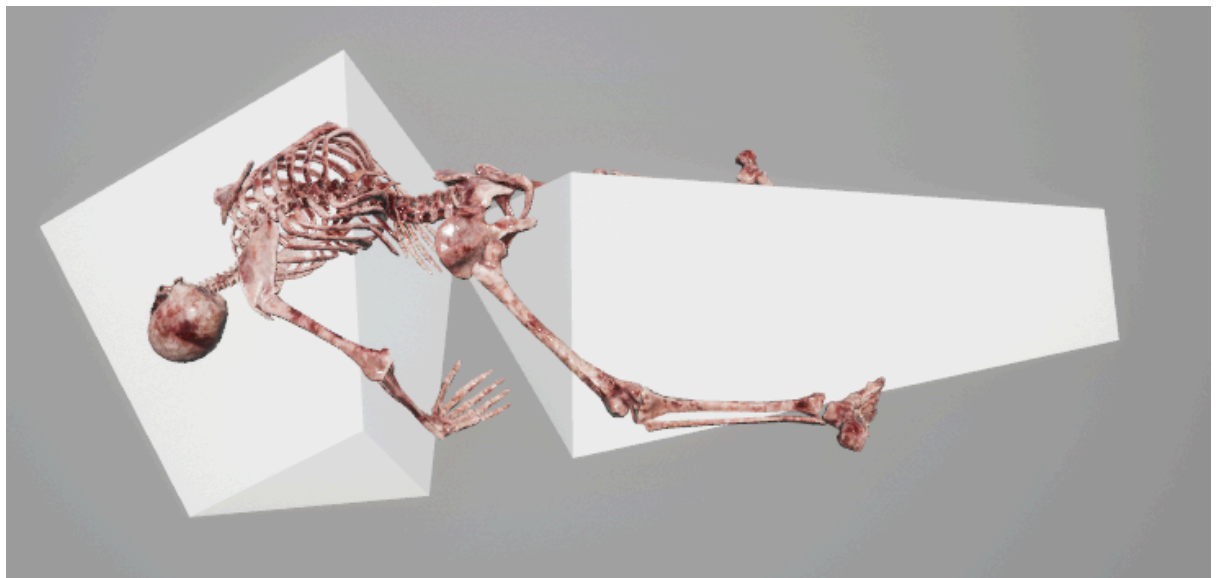
6. Drag the SK_Skeleton into your scene and toggle “Simulate Physics” on.



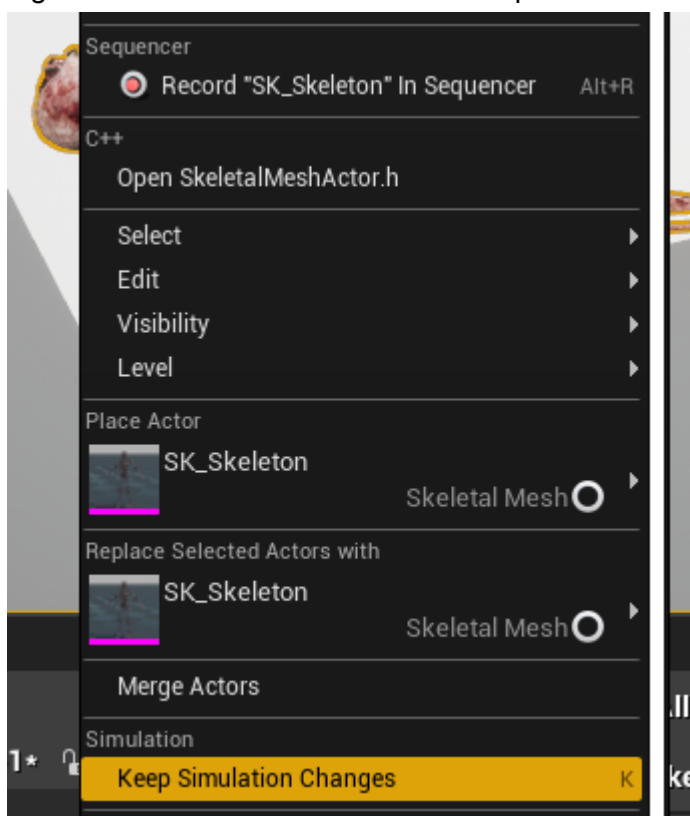
7. Position the Skeleton in the Level and hit the Simulate Button on the top.



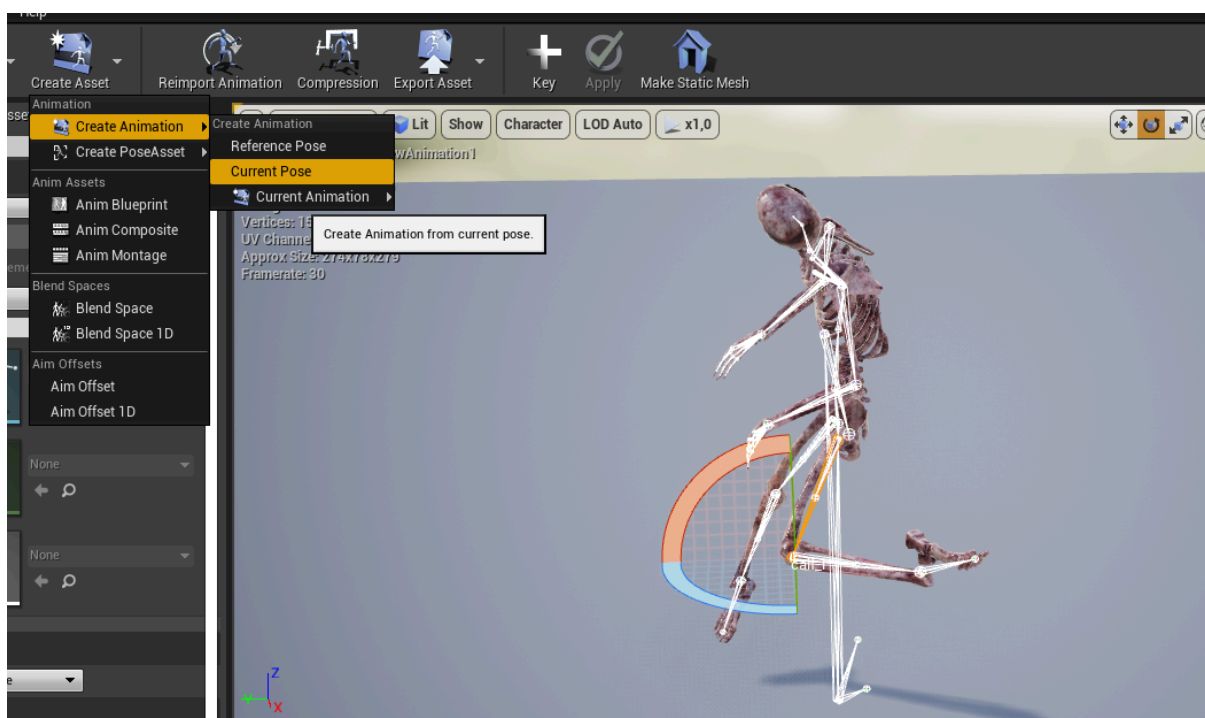
The Skeleton is now falling on the ground.



- Right click on the Skeleton and hit “Keep Simulation Changes” and save the pose.



- Open the saved animation file and change the pose as you desire, by rotating the bones. When you are happy with the results, hit “Create Asset”, “Create Animation” and then “Current Pose”.



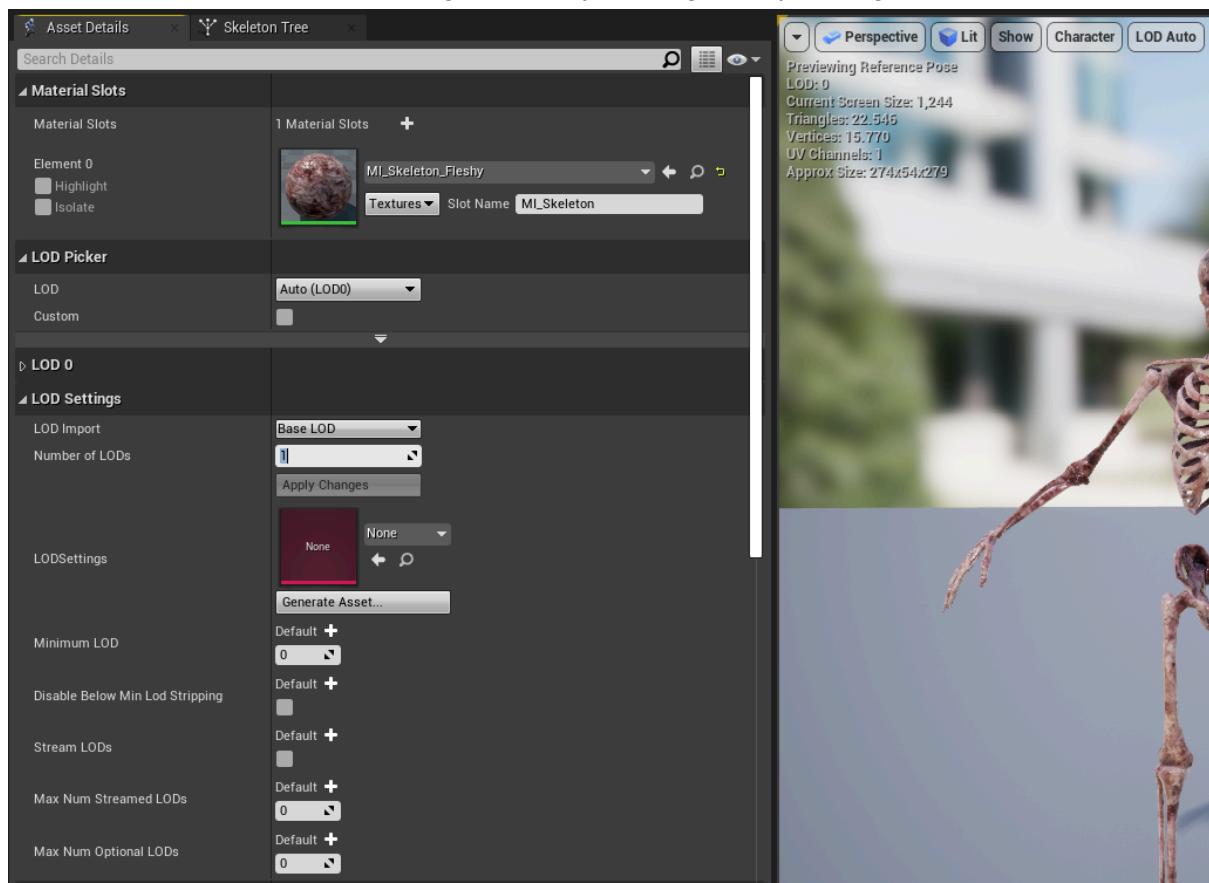
- Drag the new animation pose into your level and right click “Convert “SK_Skeleton” To Static Mesh” and save the new Static Mesh.

We realize this is a complicated workflow for simply posing the character. Epic is working on this right now. In the future there will be most likely a preset for the [Control Rig Plugin](#) and also they are working on a [Blender to Unreal tools](#) to easily create and import rigs.

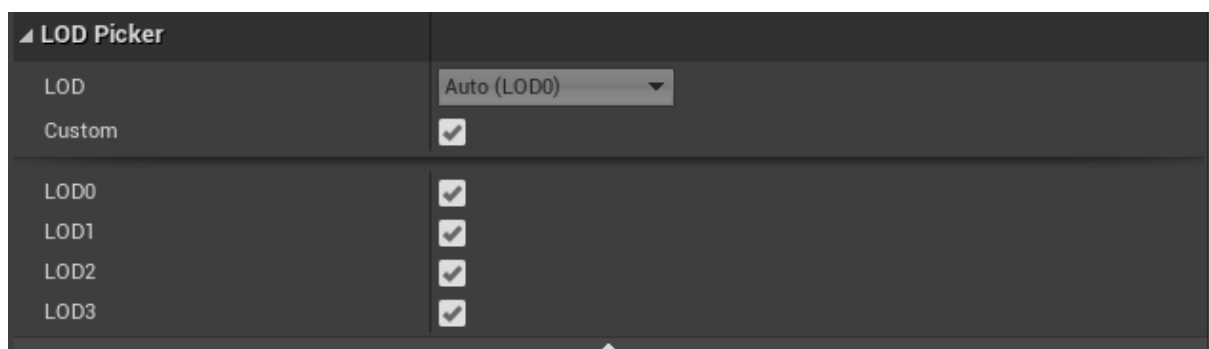
Generate LODs

LODs can be generated directly in the Unreal Editor (since version 4.22 and newer)
Here is a step by step tutorial, how to do it:

1. open the Realistic Base Skeleton set in an Unreal project of version 4.22 or higher
2. open the SK_Skeleton under the folder "NewSkeletalMesh"
3. on the left go to "Asset Details" and under "LOD Settings" type the numbers of LODs you want under "Number of LODs" -> generate by clicking "Apply Changes"



4. activate "Custom" under the "LOD Picker" menu



5. change the "Screen Size" (under LOD Info) and the "Percent of Triangles" (under Reduction Settings) of each LOD (1-x) as you desire

LOD 0 [generated]

LOD 1 [generated]

Sections

LOD Info

Screen Size Default + 0,3

LOD Hysteresis 0,0

Bones to Prioritize 0 Array elements +

Weight Of Prioritization 1,0

Source Import Filename

Skin Cache Usage Auto

Allow CPUAccess

Support Uniformly Distributed Samplin

Bake Pose None

Bake Pose Override None

Bones to Remove 0 Array elements +

Reduction Settings

Termination Criterion Triangles

Percent of Triangles 0,25

Remap Morph Targets

Max Bones Influence 4

Enforce Bone Boundaries

Volumetric Correction 1,0

Lock Mesh Edges

Lock Vertex Color Boundaries

Base LOD 0

Regenerate LOD Remove this LOD Reimport

Reimport (New File)

LOD 2 [generated]

LOD 3 [generated]

LOD Settings

Perspective Lit Show

Previewing Reference Pose

LOD: 0

Current Screen Size: 0,578

Triangles: 22.546

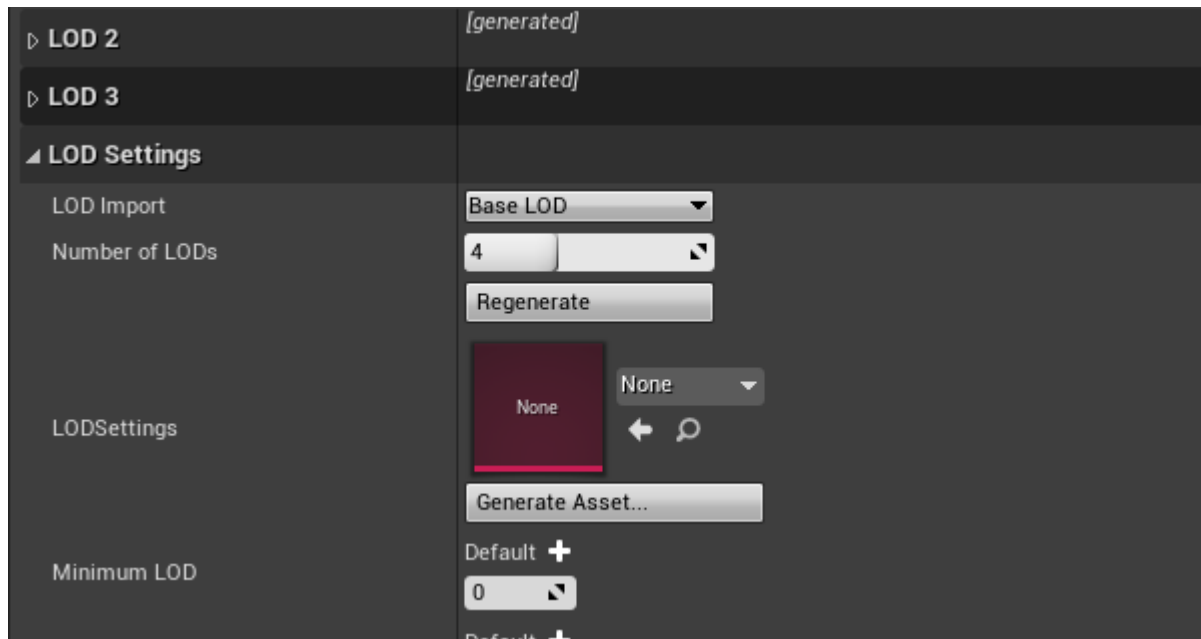
Vertices: 15.770

UV Channels: 1

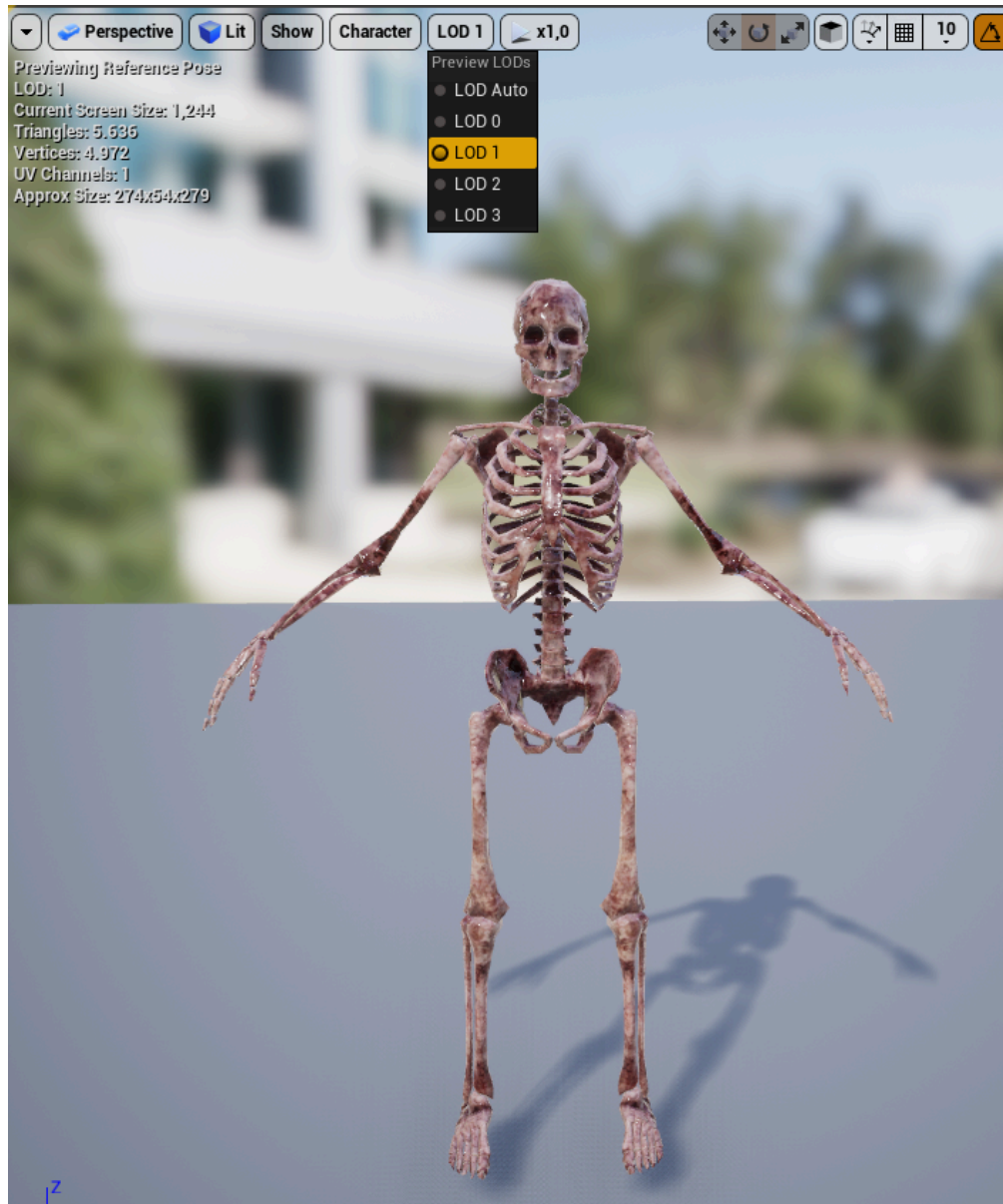
Approx. Size: 274x54x279

In the top left corner of the preview 3D screen are infos about the Current Screen Size and the Triangle count of each LOD (the Current Screen Size of the object changes by zooming in and out)

6. hit "Regenerate" ind LOD Settings



7. in the 3D Screen you can check your LODs under the "LOD Auto" Button in the top row



Example: "Percent of Triangles" = 0.25 (5636 Triangles)

Previewing Reference Pose
LOD: 1
Current Screen Size: 1,501
Triangles: 5,636
Vertices: 4,972
UV Channels: 1
Approx Size: 274x54x279



Example: "Percent of Triangles" = 0,125 (2818 Triangles)

Previewing Reference Pose
LOD: 2
Current Screen Size: 1,438
Triangles: 2.818
Vertices: 2.914
UV Channels: 1
Approx Size: 274x54x279



Example: "Percent of Triangles" = 0,09 (2029 Triangles)

Previewing Reference Pose
LOD: 3
Current Screen Size: 1,438
Triangles: 2.029
Vertices: 2.268
UV Channels: 1
Approx Size: 274x54x279



Use with Unreal Engine 5 Mannequin

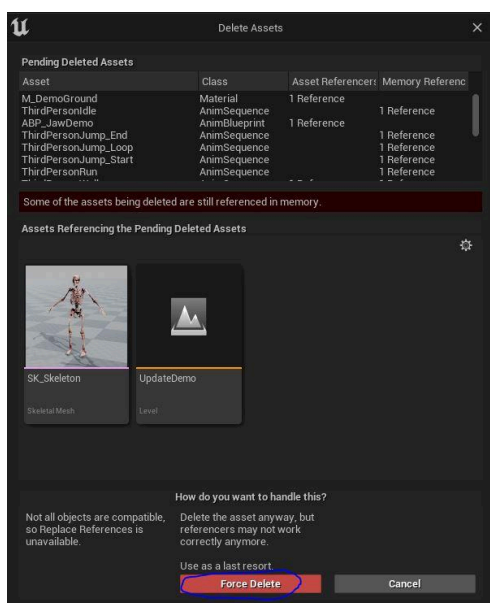
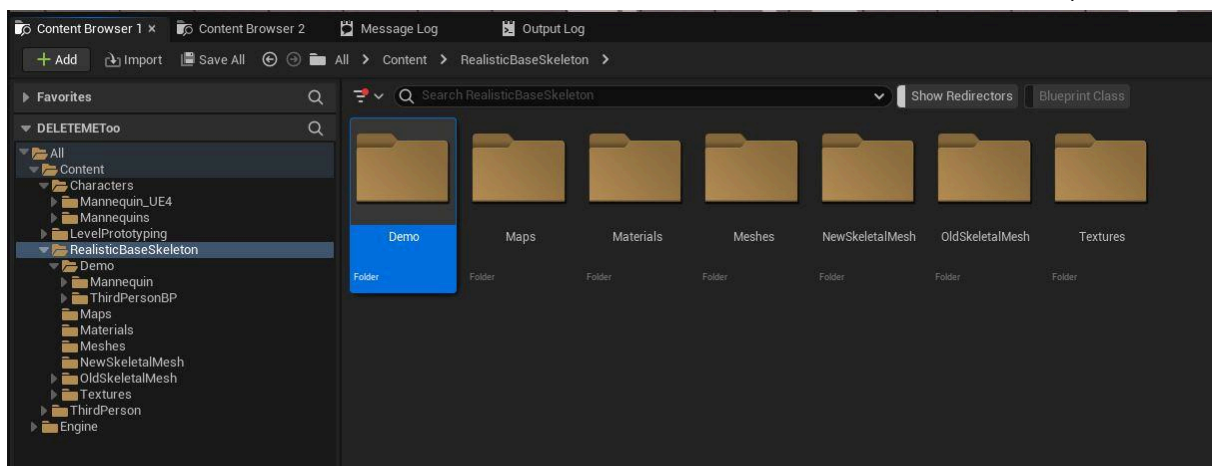
This Skeleton is rigged to the UE4 mannequin, which has a slightly different bind pose and some different bone positions.

However UE5 comes with some retargeting assets which makes it quite easy to use the “old” UE4 skeleton with the UE5 Manny or Quinn Animations.

How to use the UE4 Realistic Base Skeleton with the UE5 Third Person Template

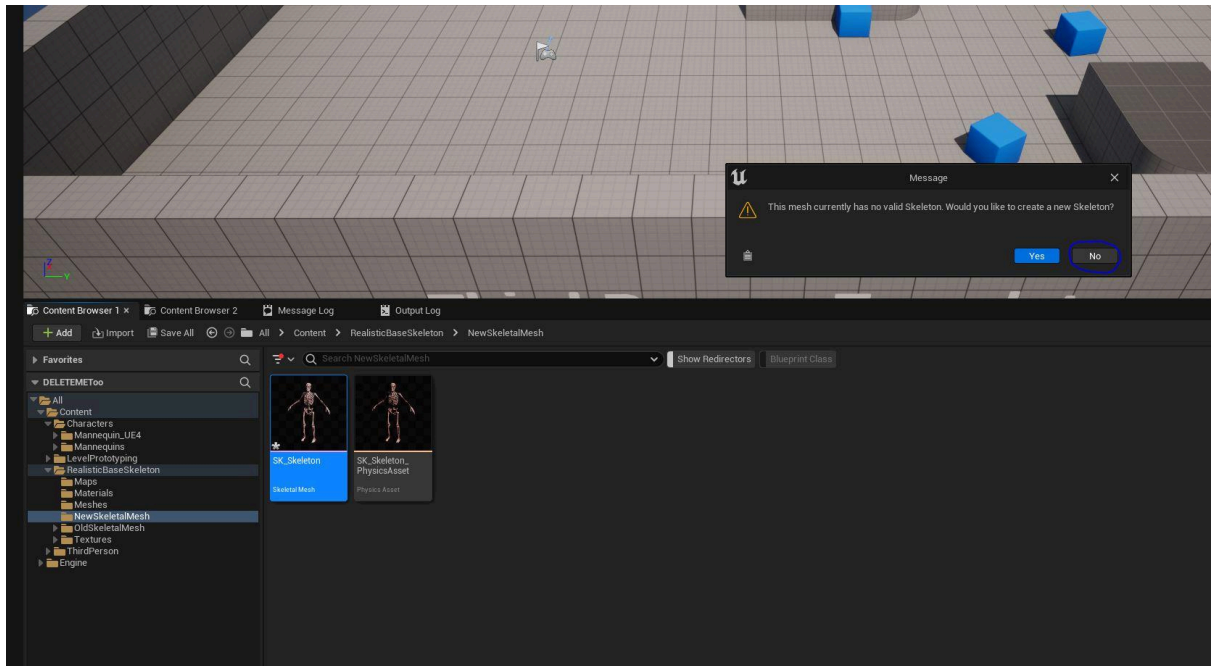
1. Create a Fresh Third Person Template Project (inside are the conversion assets)
2. Import the “Realistic Base Skeleton” pack
3. Locate the Demo folder (**Content/RealisticBaseSkeleton/Demo**)
if you don't need our demo maps and the old third person blueprint, you can delete the folder completely (if you don't want to delete the whole folder we want to exchange

/Content/RealisticBaseSkeleton/Demo/Mannequin/Character/Mesh/UE4_Mannequin_Skeleton')

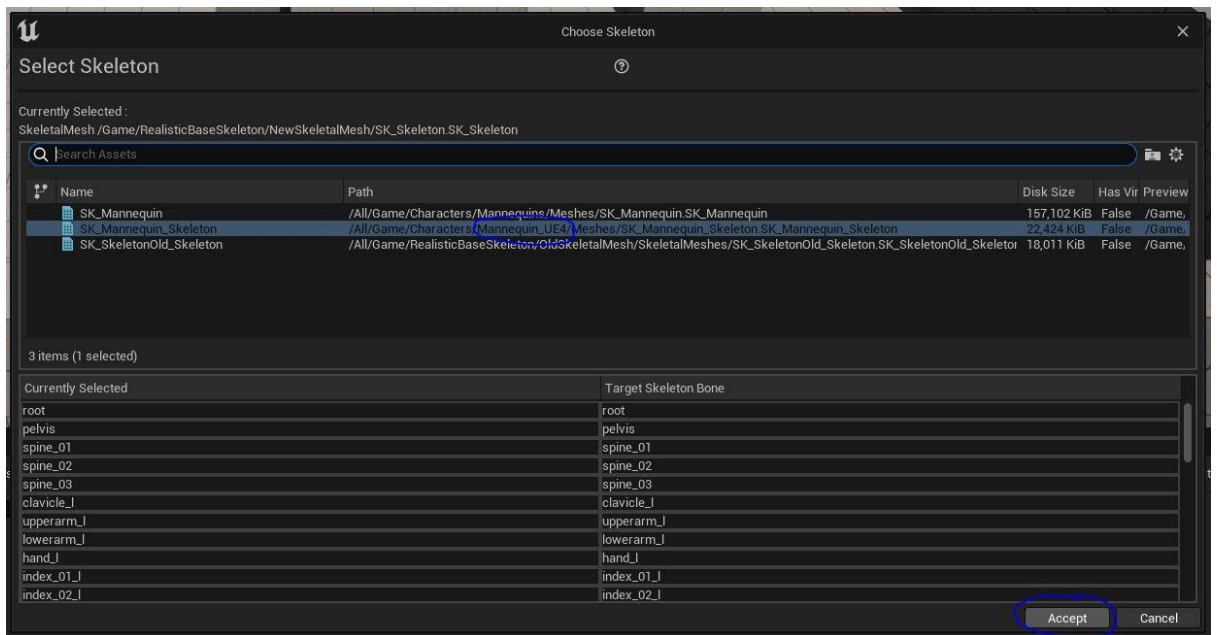


4. When you try to delete the folder unreal will prompt you about Referencing Assets: press **“Force Delete”**
5. Now locate the SK_Skeleton
(**/Content/RealisticBaseSkeleton/NewSkeletalMesh/SK_Skeleton**) and double click it and

press “ **No** ”

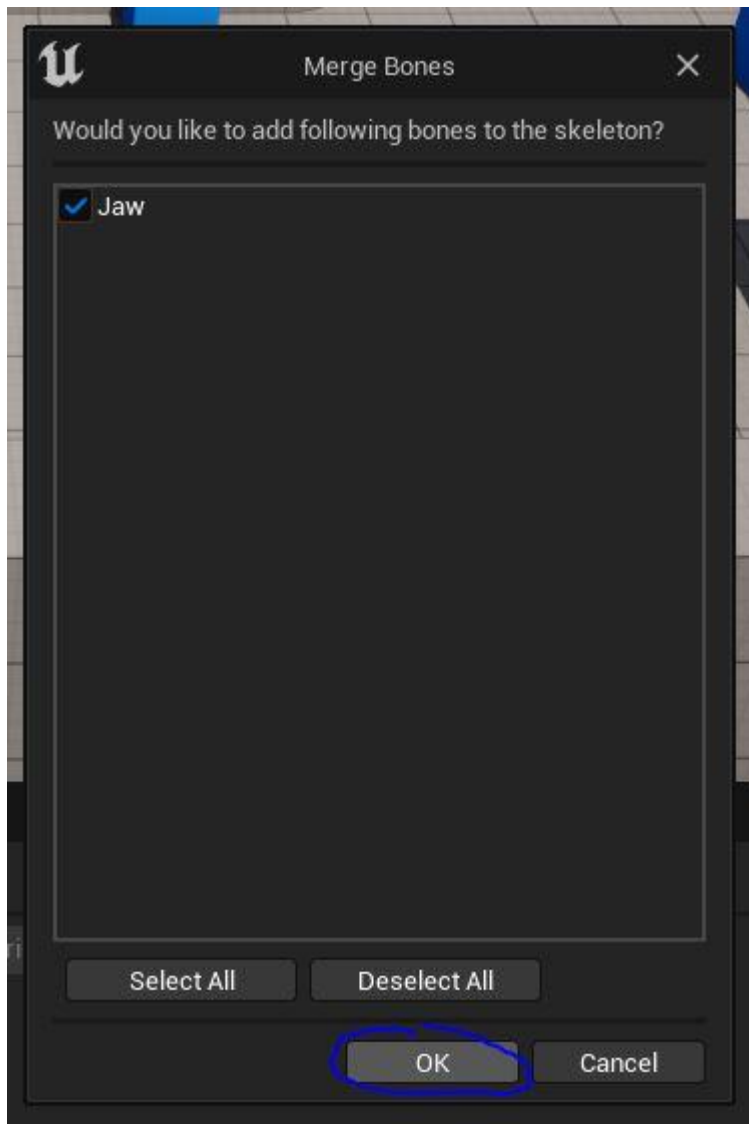


6. Unreal will prompt you with a window to select an existing skeleton

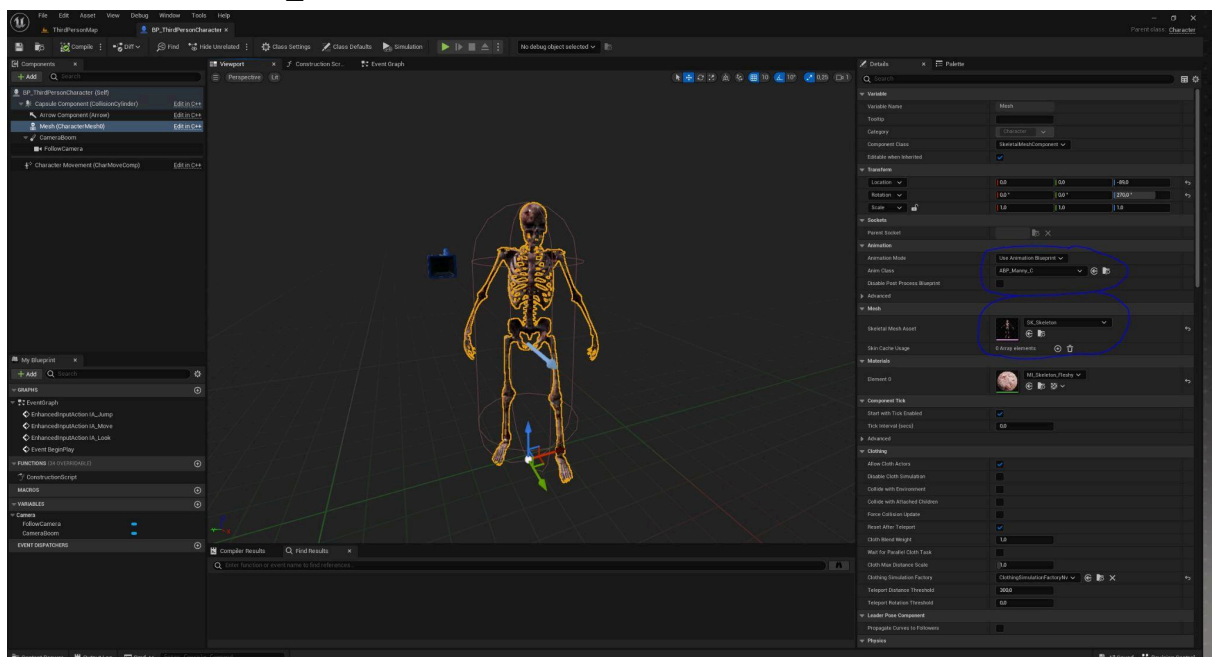


7. Now select the one from the Third Person Template
(/All/Game/Characters/Mannequin_UE4/Meshes/SK_Mannequin_Skeleton) and press
“ **Accept** ”

8. Now hit “OK” to add the Jaw bone to the SK_Mannequin_Skeleton Asset



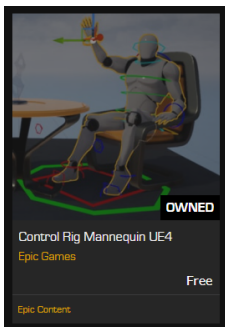
9. Now you should be able to just use the skeleton with the same Animations/Animation_BP from UE5



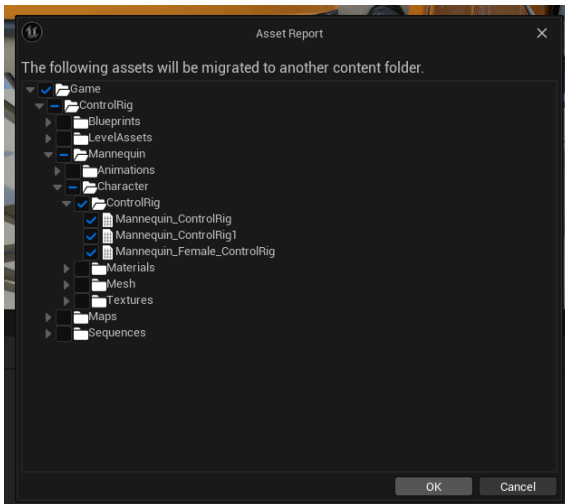
Use With Control Rig

Download the Original Ue4 Control Rig from Epic

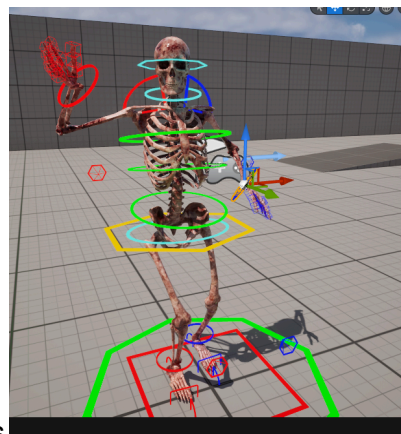
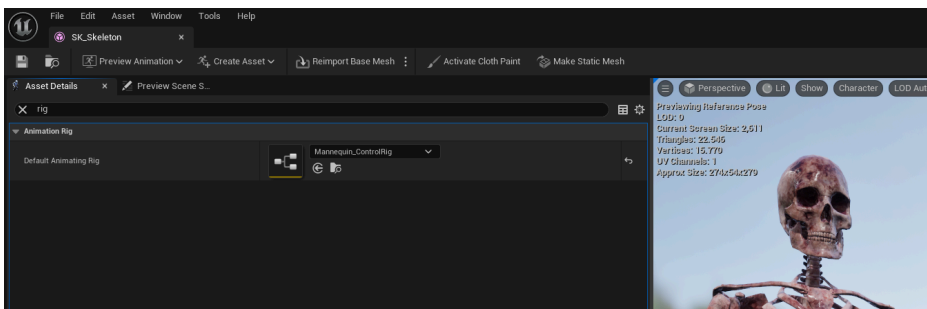
<https://www.unrealengine.com/marketplace/en-US/product/control-rig-mannequin/>



1. Open it Directly in Ue5 (as of now it works with 5.3.2)
2. migrate just the Control rigs to your project



3. in **Your Project** Open the “SK_Skeleton” asset
4. Assign “Mannequin_ControlRig” to the Default Animation Rig



it should now work like the default ue5 rig does

Need help?

If you find bugs or need help please contact us under thepocketemail@gmail.com
Your feedback is welcome!