MAX Artist Guide
Character Creator Template and Supplemental Artist Guide

The template can be used for exporting custom characters and animations for use in the GameGuru MAX Character Creator.

Templates as of November 2023
Major change to template now allows direct export of both animations and skinned character parts to the FBX format, which are now fully compatible with the GameGuru MAX Character Creator.
Templates supplied are for 3ds Max, Blender and Maya.

Overview:
The Blender template is organized into collections. In the Outliner, the first layer is the BASE MALE ARMATURE. This layer contains all of the bones that make up the skeleton, and are the bones to which the character meshes are skinned to.
The next layer is the BASE MALE MESHES. These contain the four main meshes that make up a character in the Character Creator (head/body/legs/feet).

Export process:
Wether you are exporting a new body part destined for the Character Creator, or a new animation, the export process is the same.

Make sue you are in <u>Object Mode</u>, then select the character mesh and all the bones of the armature and export to FBX using the settings in the image on the right.

If exporting an animation, the FBX file can be loaded directly into the Character Creator into a new animation slot and saved with the character.

If exporting a character body part. the FBX file can be loaded into the GameGuru MAX model importer and saved to DBO format, which will then be able to be usable as a new body part for the Character Creator.

HELP GUIDE

GameGuru MAX
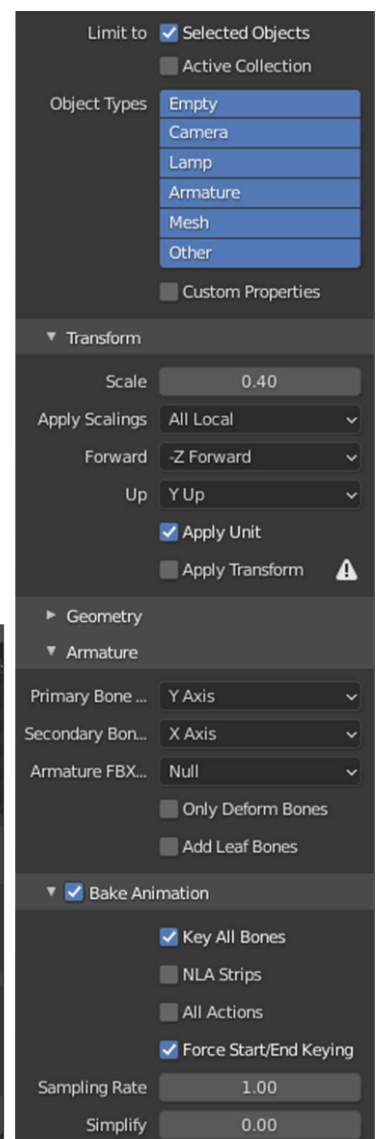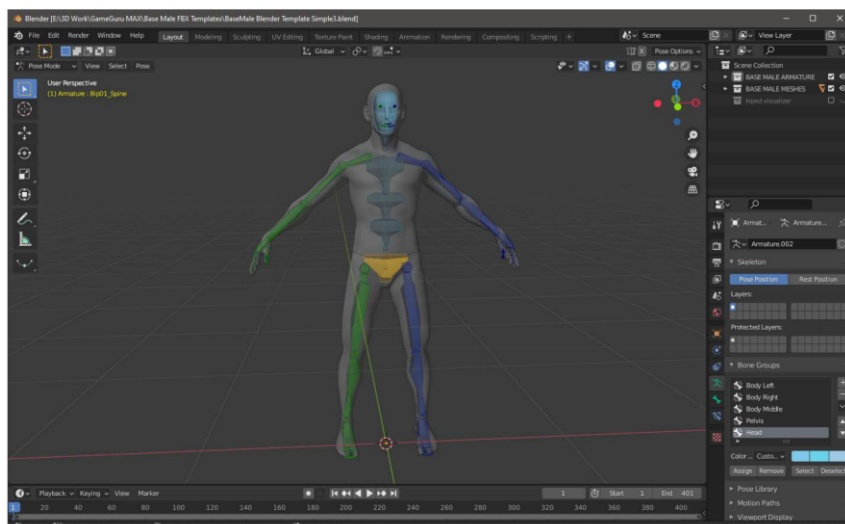
Notes on the 3ds Max Template.

A 3ds Max version of the FBX character template is supplied. When exporting the 3ds Max version of the FBX character template., make sure you are only exporting the bones and character mesh in the layers labeled "FBX" in the Scene Explorer. It works exactly the same as the Blender template - the FBX animation files can be loaded directly into an animation slot in the CC and saved with the character. Or you can convert them to DBO and use it as a new body part in the CC.

When exporting from 3ds Max, only export the character and bones in the layers labeled "FBX". Export using the 2013 FBX version as that seems to be the most compatible. Although GameGuru Max was updated to support newer FBX versions, try to use the 2013 version because it works.

There is a hidden biped in the scene, you'll see it in your scene explorer. If you want to create your own animations, just animate this biped, and it will automatically transfer over to the FBX skeleton. Remember, don't export the actual biped. Only export the FBX skeleton and character mesh.

See image of FBX export settings.
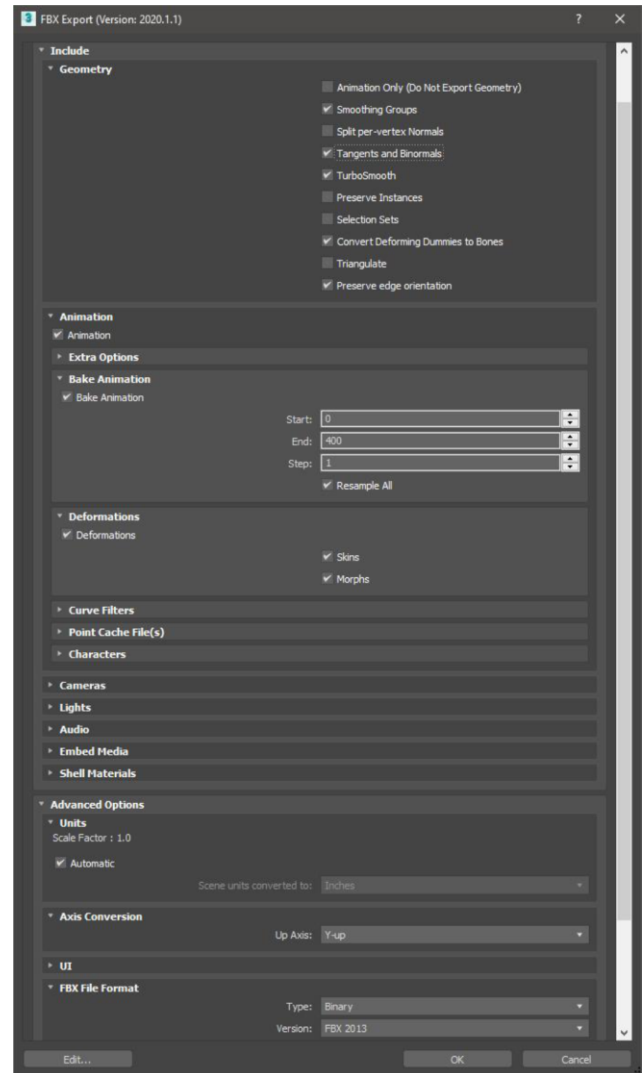

Notes on the Maya Template.

The Maya template is organized almost identically to the 3ds Max template, only that the Biped has been swapped out for Maya HumanIK as requested. You can use the HIK controls to animate and manipulate the skeleton, but you'll need to skin your characters to the GGMAX_BONES. Also as shown in the pic below, when you export your characters, ONLY export the meshes and GGMAX bones, don't export the HIK controls. Use the same FBX export settings for Maya as shown for 3ds Max the FBX exporters are nearly identical.
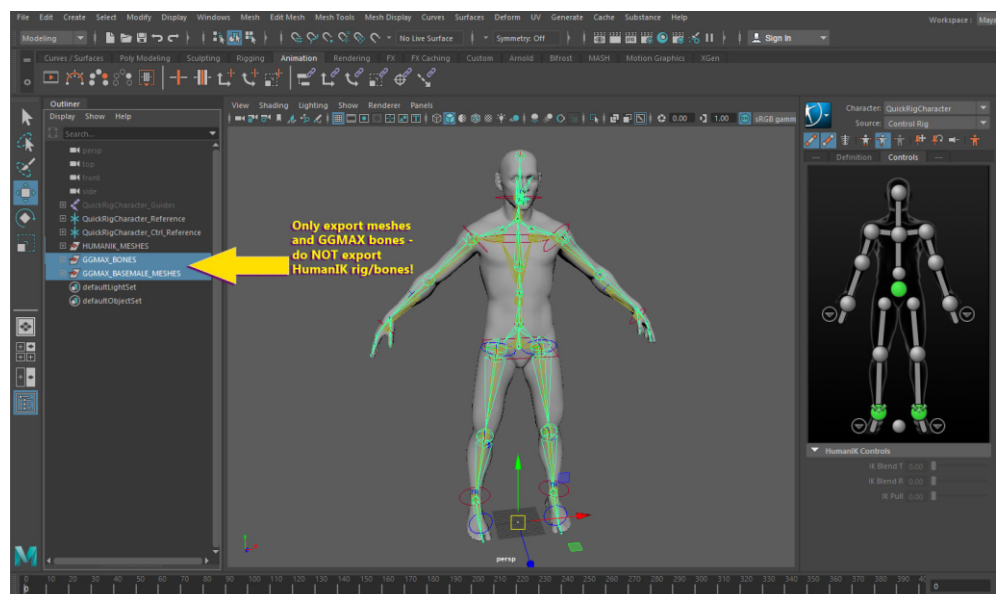
GameGuru Max Character Creator Supplemental Guide for Artists

This document supplements the materials in the "GameGuru MAX/Guides/Characters" folder explaining in more detail how to import your own character into the Character Creator.

1. Using either the 3ds Max or Blender template, model your character using the meshes in the templates as a guide for scale and position. Here the body is highlighted as an example:
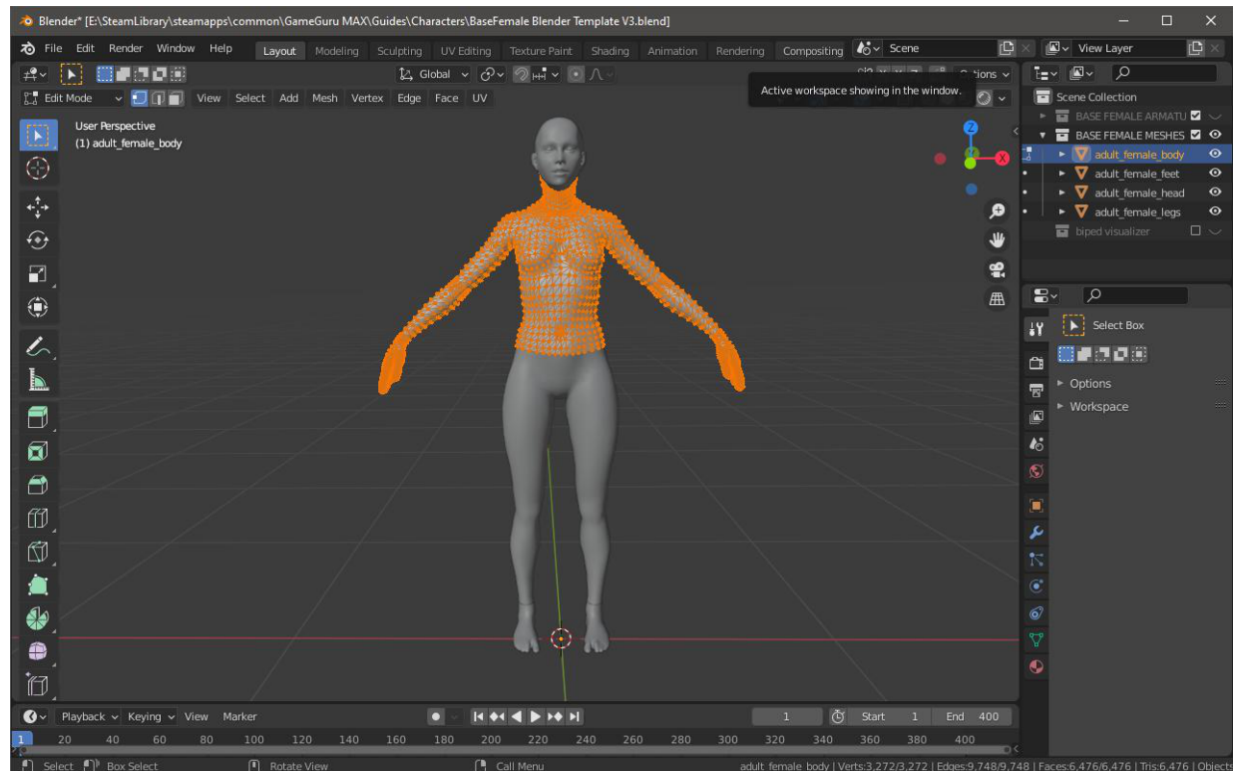
2. Next you will need to "skin" your model to the skeleton/armature.
In 3ds Max, this is done using a Skin Modifier:
https://help.autodesk.com/view/3DSMAX/2022/ENU/?guid=GUID-9596F6EF-3569-44F2-8D6C-6EB58C30BEDD

In Blender, this is done using an Armature Modifier:
https://docs.blender.org/manual/en/latest/modeling/modifiers/deform/armature.html

3. Export you character to FBX using the settings shown earlier in this guide.
4. Import your FBX into GGMAX to generate a DBO file for your body part.
5. Name your DBO file and textures according to the naming convention shown in the CC parts folder, SteamLibrary\steamapps\common\GameGuru MAX\Files\charactercreatorplus\parts
6. Place your DBO file, textures, and thumbnail image in the above mentioned folder.
For example, the files needed for a new female body part would look like this:
adult female body 75.dbo
adult female body 75_color.dds (BC1 or BC3 dds format)
adult female body 75_normal.dds (BC1 dds format)
adult female body 75_surface.dds (BC3 dds format)
adult female body 75_mask (BC1 dds format)
adult female body 75.png (thumbnail image 128x128 pixels)

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Continued

The surface texture for characters uses the following format:
R channel – ambient occlusion
G channel – roughness
B channel – metalness
Alpha – reflectivity

The "mask" texture is used to swap skin colors when a different head is selected in the CC. Use white where areas of the skin will show on the character, and black where skin does not show, for example clothes. This mask is placed in the red channel of the mask texture.

7. Next, open up the "annotates.txt" file in the CC parts folder, and add your new body part to the list.
For the example shown above, it would be: adult female body 75 = My New Body Part

8. Enjoy your new character part!

Facial Animations
All facial animation is done using 13 mouth shapes, or phenomes. If you want to use your own phenomes, you just need to export 13 frames of animation with the mouth in the following poses. Using the templates, export these 13 frames as "Mouthshapes.dbo" and place them in:
For male characters:
SteamLibrary\steamapps\common\GameGuruMAX\Files\charactercreatorplus\animations\soldiermale-common
For female characters:
SteamLibrary\steamapps\common\GameGuruMAX\Files\charactercreatorplus\animations\soldierfemale-common
Here is a visual reference

Mouth Shape Phenomes with frame numbers