Yet Another Devkit

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Remember to allow script execution when opening the devkit. I would advise against allowing it unconditionally. Always verify that you have downloaded .blend files with scripts from a trusted source before running them.

This guide is currently for the testing version of the devkit found in the #wip channel of my server.

Before You Begin

Blender v4.2.1+ is required

It is highly recommended that you install Yet Another Addon for extra functionality.

The devkit comes with its own built in scripts and Blender UI Panel for interacting with the body models. The modules found in the Addon are supposed to handle most edge cases and are there so that you can freely work within the devkit without having to worry too much about the technical details. However, there are a few expectations to your workflow while using the devkit:

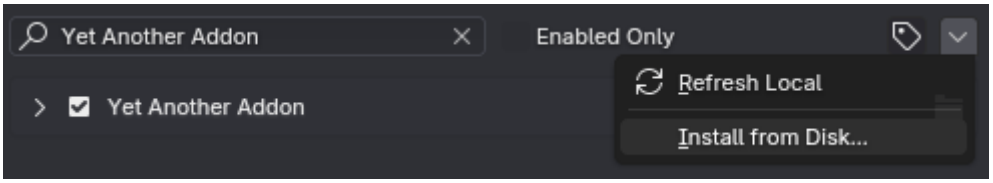
- You are supposed to work within the specific collections that are already setup in the scene.
    - If you are working on a top, you should have your files in the *Chest* collection.
    - Do not rename or change the collections that already exist in the devkit.
    - You are free to add **new** collections anywhere.
- Use the exporter found in my Addon, not Blender's default ones.
- Use the skeleton provided with the devkit. See *Import* for how to quickly fix any imported files.
- Do not delete any of the controller meshes. They are used as controllers and reference objects for a lot of devkit functionality. You are free to **rename** or **hide** them. These are the controller meshes you should not delete:
    - **Torso 0.1**
    - **Waist 0.0**
    - **Hands 0.0**
    - **Feet 0.0**

- Most will probably be surprised to see the UI, not including the custom panels, is different from the standard Blender one. This is due to Blender loading layouts that are saved in the .blend file. To stop this feature do the following:
    - In the top left taskbar go to **Edit > Preferences**.
    - In Blender Preferences select **Save & Load** and under **Blend Files** untick **Load UI**.

Addon

To make updating the various features easier as well as enabling any features outside of the devkit, it has a sister addon affectionately named *Yet Another Addon* that is semi-mandatory/highly recommended.

Install it by going to **Edit > Preferences** and under **Add-ons** install it by selecting the archive through Blender's install menu:



You should've gotten a download of the addon from wherever you downloaded the devkit.

Collections

Here is a quick summary of everything contained in the devkit and the collections.

Skeleton

This contains the skeleton to be used with your mods. It comes with several animations controlled via the devkit's menus or blender's animation playback

Chest

This contains the torso meshes. Use the table below when setting attributes and importing into TexTools. The nipple piercings are in their own collection and will toggle depending on the chest size that is active. The controller mesh is the Torso part.

Part	Chest
0.0	Neck
0.1	Torso
0.2	Elbows
0.3	Wrists

The piercings use the following material:
/mt_c0201b0001_piercings.mtrl

Legs

This contains the leg meshes. Use the table below when setting attributes and importing into TexTools. Pubes are in their own collection and include the regular pubes and Better Pube Framework.

Part	Legs
0.0	Waist
0.1	Knees
0.2	Shins

Hands

This contains the hand mesh as well as separate collections for Clawsies and Nails. The regular Nails are supposed to be exported all together and used alongside metadata attributes to toggle the practical nails.

The nails and claws use the following material:
/mt_c0201b0001_yafinger.mtrl
/mt_c0201b0001_clawsies.mtrl

A mesh devkit for the nails can be found in the Resources collection.

Feet

This contains the feet mesh as well as collections for the Clawsies and Nails.

The nails and claws use the following material:
/mt_c0201b0001_yatoe.mtrl
/mt_c0201b0001_clawsies.mtrl

A mesh devkit for the nails can be found in the Resources collection.

Mannequin

The mannequin should be the source of any weight transfers, shrinkwrap or surface deform that go across several body parts. Due to all the modifiers on it, you might notice a performance decrease in the devkit while this collection is active.

Resources

This collection contains several other collections that either make the devkit work properly, or resources you can use. The *Data Sources* collection is very resource intensive to have active. Unless you are actively using objects in this folder, you can leave it disabled. During Export, the devkit will temporarily enable the appropriate collections.

Controller: This is a main controller mesh that toggles UV Transfers, triangulation in the devkit and YAS weights. It is controlled via the devkit's custom UI.

Data Sources: This collection contains various files used to give the devkit models the correct UVs and weights. Because this collection is very resource intensive, you can leave it disabled. Exporting will temporarily enable it so everything exports correctly.

Connectors: These are not needed for general modding, but are used to replace the game's vanilla connectors. These are specific models not tied to any gear.

Gear: This contains various vanilla gear like long gloves and thighboots that you can use to verify that your gear properly fits the game's proportions. The thighboots contain shape keys for vanilla and YAB sizes.

Other: Pose skeleton can be used with plugins that allow you to load pose files from various posing tools.
Nail Kit can be used in Substance Painter to paint designs for all the available shapes.

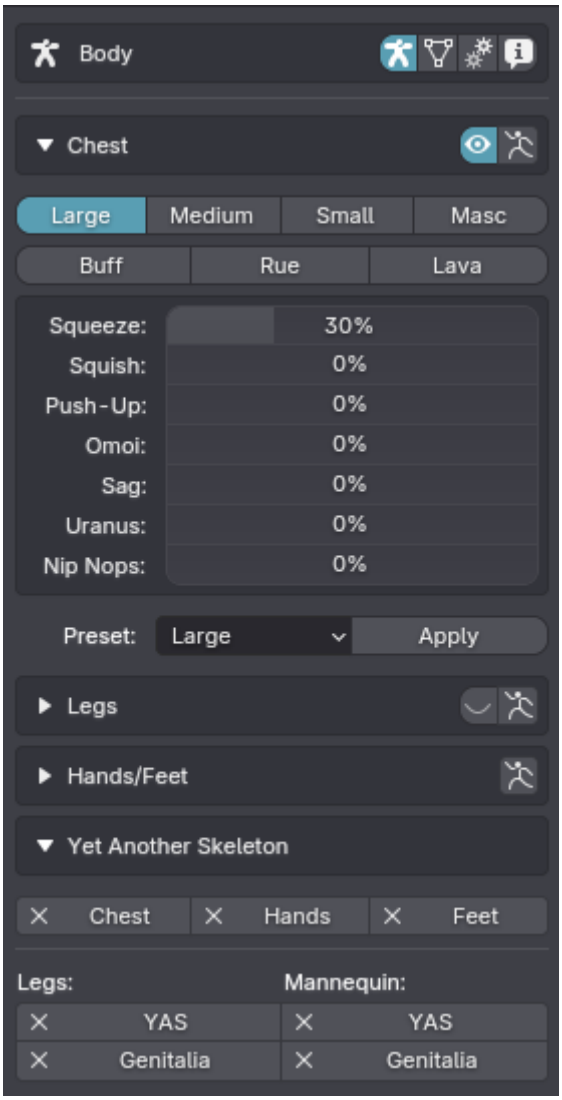
Yet Another Shape (WIP)

Yet Another Body's model framework comes with a lot of sizes and options. While not everyone is officially used or supported, the extra sizes are there for those who want to use them. Do keep in mind that some of them aren't meant to be used in YAB+ releases but meant for aid in porting from other bodies. Here is an overview over the shapes available in the devkit and their description:

Overview

Overview

The overview panel has several submenus you can select at the top right. Below is an explanation of each of them.



Body

An overview of the body and toggles for the various shapes. Each category contains the available options for the various body slots. The two buttons in the header control visibility of the respective collection and a switch to controlling the mannequin instead.

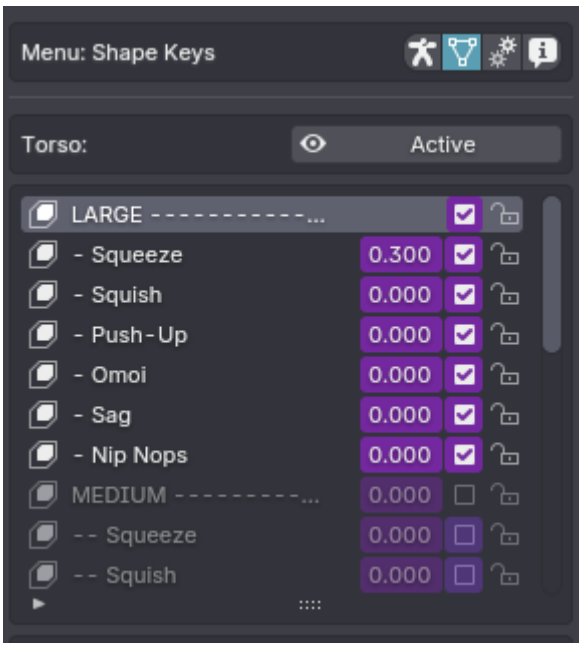
The *Chest* category contains several sliders to control the breast shape as well as presets for the current official shapes.

Hands/Feet share a category and will have less options for the mannequin. Visibility toggles are found within. *Feet* also contains heel sliders similar to the *Chest* category

The bottom category contains the toggles for the YAS/Yiggle bones.

Shape Keys

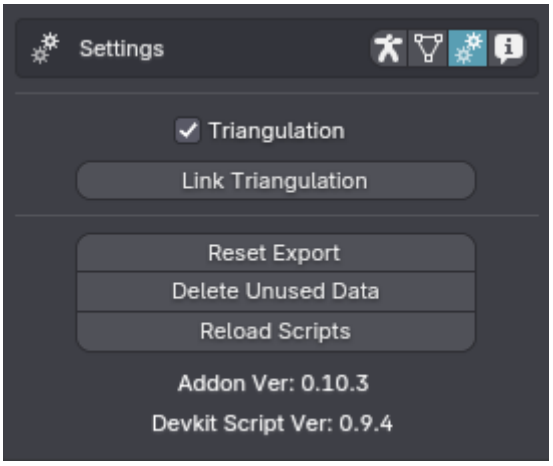
This second menu contains a more detailed overview of the shape keys on the body, this is where you'll see any custom shape keys you might add as well as some for other uses. The devkit is not designed arounding working in this menu, and most of the existing values are controlled by the previous one. It works nicely as a quick menu in edit mode to select which shape key to work on.



The view toggle defaults to active which will show you the shape keys of the currently selected object. You can change it to *Collection* which defaults to the controller mesh in your current collection.

Settings

This menu contains a toggle *Triangulation*. Triangulation is on by default, but while animations are playing it will be turned off for better framerates.



Triangulate modifiers can drastically reduce performance the more meshes with it are visible. Turn it off in this menu to increase performance, remember to enable it again before export. *Link Triangulation* will make it so that any modifier you add will also be linked to this global toggle.

Reset Export is used to reset the Export UI if it freezes after an error.

Delete Unused Data is a native blender operator that removes any unused files from the blend file.

Reload Scripts can be used to reload any addon you have loaded. This reloads **all** scripts, not just the ones relevant to the devkit. This should rarely be used as it could cause errors with loaded addons. Before trying this, try enabling/disabling addons in Blender's addon menu instead.

Outfit Studio

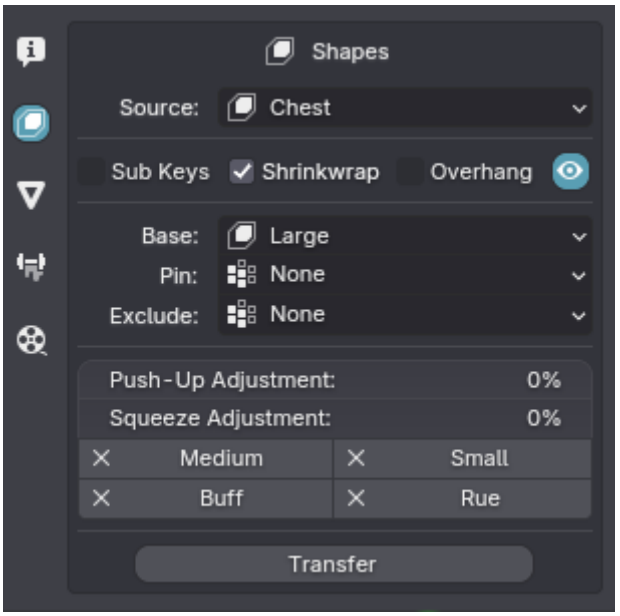
Outfit Studio

This panel is only available if you have installed Yet Another Addon.

You can choose from several categories, combine and remove them freely by holding *Ctrl/Shift* while selecting.

Shapes

This menu will let you transfer and link shape keys between objects. The *Source* dropdown has three options:



Selected

Transfers and links shape keys from the selected object to the active one. Does not transfer deforms.

Chest

Only available while working in the devkit.

Transfers, links and deforms active mesh based on the three chest size categories. You select the base size of the mesh you're working on and then select the sizes you want to target for the deforms. It works by applying a *Surface Deform* modifier alongside *Smooth Corrective* and optionally a *Shrinkwrap* modifier. It also assumes you've already fitted the mesh to one of the available base sizes.

Sub Keys: Transfers all minor chest size shape keys. Does not include deforms.

Shrinkwrap: Enables a shrinkwrap modifier to adjust the final deform. Not always necessary, but recommended.

Overhang: This tries to compensate for meshes that hang off of the breasts to give a better deform. Recommended to pin areas under the breasts you don't want affected from this.

Base: This is the current base size of the mesh you are deforming. Will also change the size of the deform mesh when previewing adjustment values.

Pin: This vertex group will be pinned and ignored by the deform and shrinkwrap. It's recommended to pin the area under the breasts for better results, as well as other areas that don't need the deform. Buff and Rue deforms will ignore the pin, this is intentional.

Exclude: This vertex group will be ignored by the shrinkwrap. Only available when shrinkwrap is enabled. Use this to mark areas that clip into the body mesh or solidified parts to avoid having the shrinkwrap break the mesh.

The adjustment sliders should match your body mesh sliders. Click the eye icon to show/hide the mesh used for mesh deformation to see how the adjustments line up. Keep in mind that 30% squeeze on *Large* equals to 0% on the squeeze adjustment. *Small* will not be affected by the adjustment sliders. You can use the *Base* dropdown to change the default size of the deform mesh.

The size options are the deforms that will be applied. Shape keys will always be transferred irrelevant of if you are transferring the size itself.

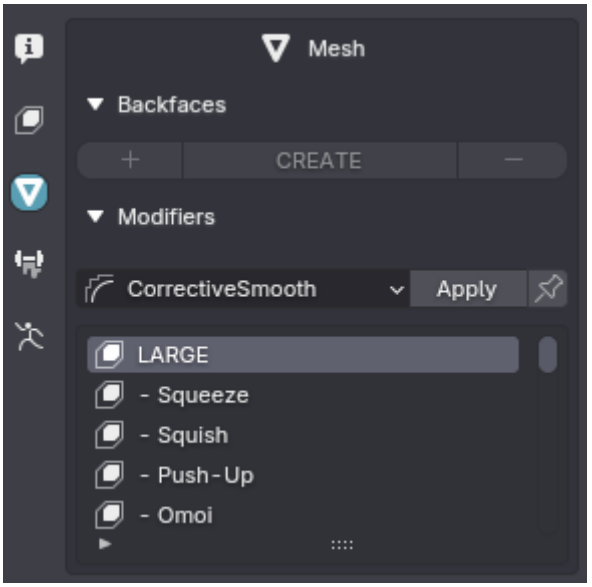
Because the difference between chest shapes is quite big, don't expect the result to be perfect. It's meant as an aid to remove most of the tedium before you finalise the size.

Legs

Only available while working in the devkit.

This works similarly to the *Chest* option, but as deforming legs is a lot simpler it only contains the sizes you want to target

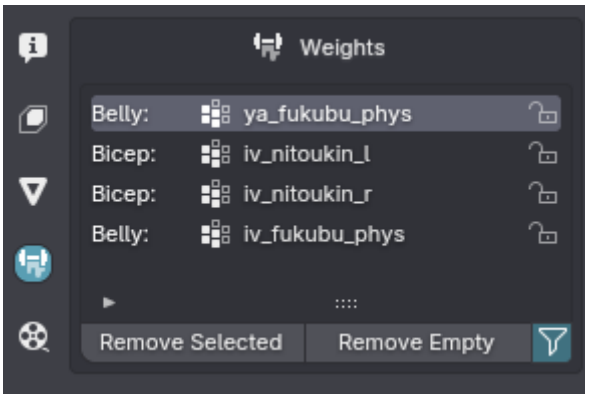
Mesh



Backfaces lets you tag faces in edit mode by adding them to a vertex group. This vertex group will be read by the exporter and automatically generate backfaces for you if you enable the option. If you don't intend to generate them on export you can click *CREATE* to create the backfaces immediately. The faces that have been added to the group will also be assigned their own material in blender without backface culling to simulate how it would look ingame. If the mesh already has two materials this extra will not be added.

Modifiers give you an overview of the shape keys on the active object. You can select a shape key and a *Deform* modifier from the dropdown to immediately apply this modifier to the selected shape key. If you want to keep the modifier after applying, enable the pin. The deform modifier list is based on the modifiers already on the mesh. Keep in mind that the *Mirror* modifier does not work with this function. This makes it a lot easier to work with certain modifiers on a mesh with shape keys. *Data Transfer* modifiers also have special handling in this menu. By default Blender only considers the active shape key when applying them, which is an issue when your mesh has a mix of several shape keys. This menu makes sure the transfer is always applied to the current mix of shape keys.

Weights



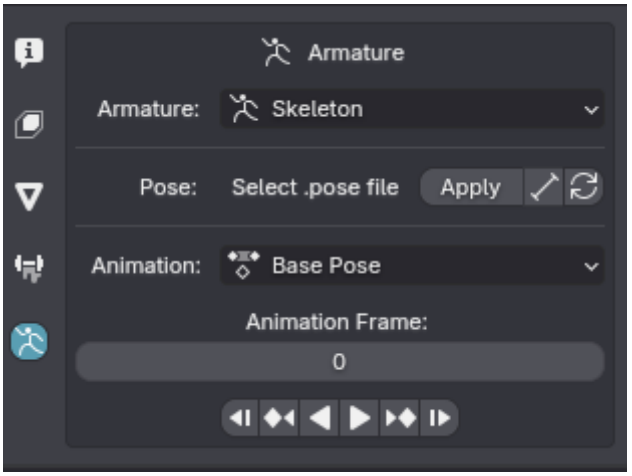
This is a specialised weight menu that will show you an overview of the vertex groups on your active mesh as well as a translation of any XIV related bones. You can filter it to show either all groups, or just ones related to *Yet Another Skeleton*.

Remove Selected will remove the active vertex group and add its weights to the parent bone. It automatically finds the parent

bone based on a skeleton linked to your object either via parenting or an *Armature* modifier. This is meant as a quick aid when you want to remove something like an IVCS/YAS physics bone from loose fitting gear or skirts/dresses where it wouldn't make sense to have them.

Remove Empty will check all the vertex groups on your active mesh and remove any empty ones. It will ignore any locked groups.

Armature



This menu has the ability to apply a pose and/or scaling to your armature or work as a simplified animation playback menu.

You can select a pose file on your computer to instantly apply it to the selected armature. The button next to the *Apply* button enables scaling application instead. The rightmost button will reset either pose/animation or scaling depending on which toggle is enabled.

The addon has specific handling for animations in the devkit that should increase the performance considerably.
You can use this menu to play, seek through, and change animations. Also works outside of the devkit if your blend has animations, but the performance optimisations will not take effect.

Note: If you have an animation selected Blender might revert any pose you load if you make any changes to any objects. Set *Animation* to *None* if you want to avoid this. This is because Animations are also considered poses and will take precedence.

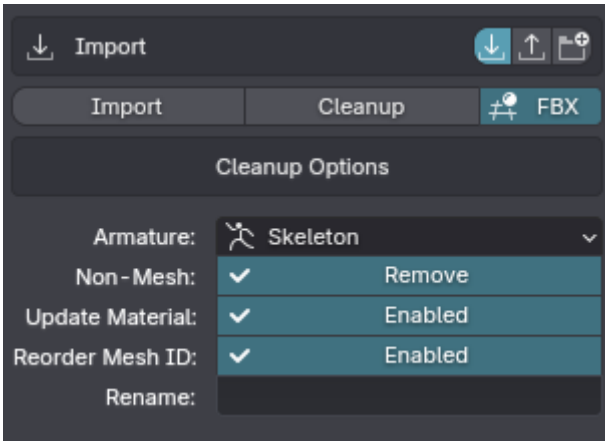
File Manager

File Manager

This panel is only available if you have installed Yet Another Addon.

Import

This is a simple menu for importing FBX or GLTF files. After importing your files you can use the cleanup button and its options to quickly update and rename the imported files. The files you imported should automatically be selected for cleanup. This is what the options do:



Armature: This parents the meshes to the selected armature.

Non-Mesh: This removes the unused lattices from TT imports and removes the *n_root.*

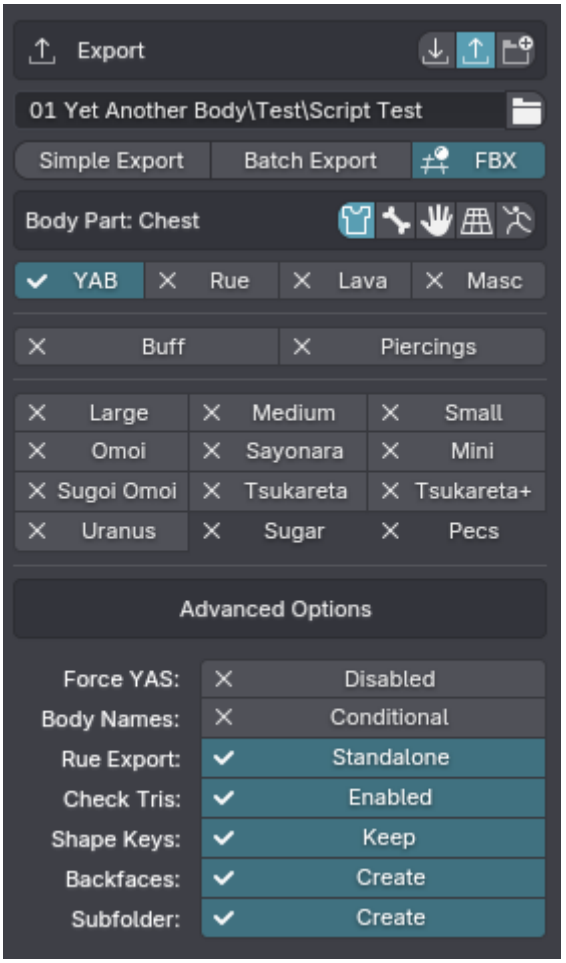
Update Material: Fixes rendering method of the material and removes backface culling.

Reorder Mesh ID: This places the usual X.Y number at the end of object names from TexTools to the front of the names.

Rename: Rename the prefix of the files to whatever you want. Leave empty to ignore.

Export

This menu lets you choose what body part you are exporting as well as the sizes you want. The devkit's exporter has a lot of checks and verifications to make sure the body meshes are exported as intended. As long as you work within the appropriate collection, everything should be handled for you. Batch Export will automatically toggle the collections for you, but you can hide specific objects yourself that you want the exporter to ignore. *Simple Export* will export what is currently visible for you. Both will respect the settings you choose in *Advanced Options*, except *Body Names, Rue Export* and *Subfolder* which are exclusive to batch exporting.



Both export options have an export preset made for what TT expects of FBX and Penumbra of GLTF. Exporting is only available while in *Object Mode.*

Simple Export

Will export your currently visible scene to your selected export folder. Enter the file name of your export in the pop-up when you click export. When not working in my devkit you'll have a more simplified export menu.

Batch Export

Only available while working in the devkit.

This will export specific collections based on what body part you have selected. Selecting *Chest* will export anything visible in the *Chest* collection. It will then export all valid combinations of the options you have selected. It will do so by applying the various shape keys on the controller meshes in each collection. If you want your gear to match these sizes you need to link them to the controller mesh via shape keys and drivers. The *Shapes* menu can do this for you.

A UI showing the progress will replace the export buttons. You can't use Blender while this process is ongoing as Blender's export operators freeze the UI. If the progress UI is stuck after an export finishes or fails, please go to the *Settings* menu in the *Overview* and click *Reset Export*.

Advanced Options

Force YAS: This will force enable YAS on the controller model you are exporting and prefix the exported files with *Yiggle*. Use this if you want to separate your Yiggle models by name. If you already enabled YAS manually it simply works as a name toggle.

Body Names: This setting will either prepend body names based on if you're exporting more than one body, or always append them. The conditional setting will not prepend YAB due to how I pack my own mods.

Rue Export: Because Rue can be added as a variant to other bodies and is its own standalone one, you can toggle this off to not export base Rue models if you're only looking to export Lava/Masc standalone with the belly.

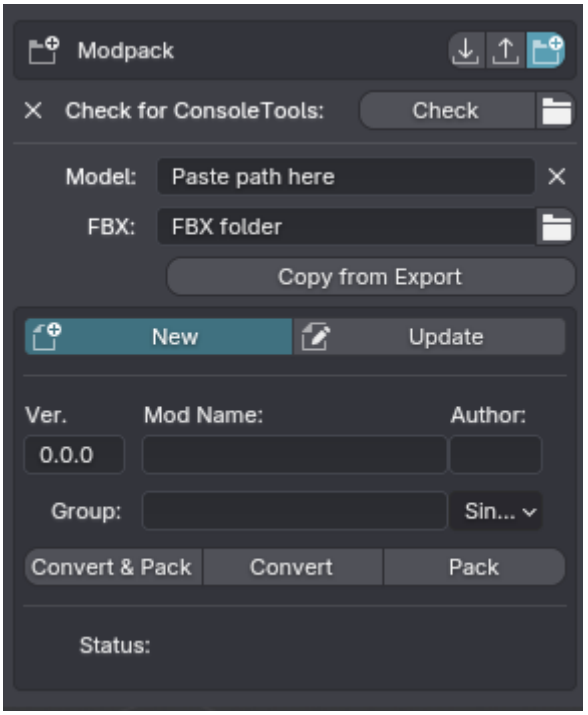
Check Tris: This checks if the meshes you're trying to export are triangulated and prevents export if not. The error message will show a list of objects that are not triangulated.

Shape Keys: If you have any shape keys compatible with XIV's attribute system this will keep them when exporting. These are shape keys that start with *shp* and are responsible for making gear fit boots/gloves and similar. Export will take a bit longer if these are detected.

Backfaces: This will automatically create backfaces from meshes that you have tagged with the *Outfit Studio* operator.

Subfolder: This creates a subfolder in your export directory for the body part you are exporting, i.e. "Chest", "Legs", "Hands". Useful when packing models.

Modpack



This menu gives you a quick way to convert and pack multiple models into their own options. There are two main functions of this menu, converting FBX and packaging MDL files into a modpack. There is currently no support for GLTF. FBX conversions are handled via ConsoleTools, a function of TexTools.

Except when converting to MDL, if the *Status* ever gets stuck this is an indicator that the modpacker failed. Report what part it got stuck on if you run into errors.

Any modpack created will be output in the main FBX folder, a rolling backup of the previous five modpacks will also be saved.

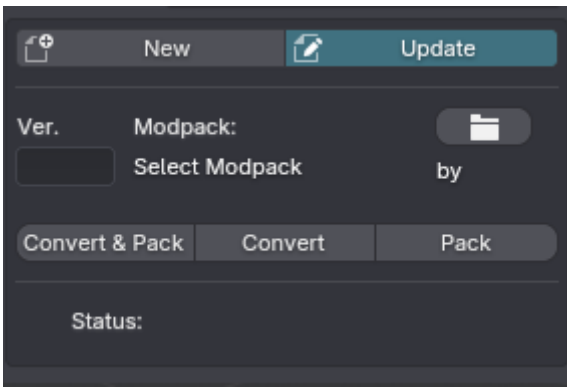
Note: This converter does not work with TT's transaction system. It will require you to run TT on a separate copy of your game install in **UNSAFE** mode. This is because ConsoleTools checks the currently loaded attributes and materials of your game files when converting an FBX to MDL.

Quick Guide

1. Click *Check* to search for a valid install of TexTools and ConsoleTools.
    a. If the check fails, please use the file browser to find your TT install and select *ConsoleTools.exe*.
2. Input the game path to the MDL you are replacing.
    a. You can find this path by going to a model in TT and copying the path below the model viewport.
3. Select the location of your FBX files. The menu integrates directly with the export folder and any subfolder generated by *Batch Export*.
4. Choose if you want to *Create* a new mod or *Update* an existing one.
5. You can either convert, pack or do both at the same time. The name of each option will be based on the file's name.

Updating

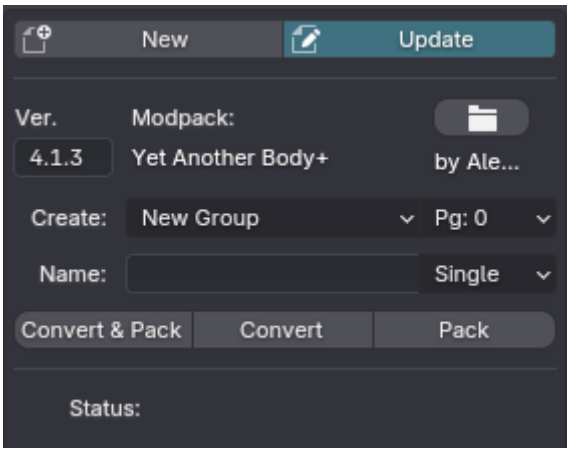
Creating a new mod is relatively simple and just creates a mod with a single group with the info you have provided. Updating has a lot more features explained here:



When updating a mod you can either create a new group and name it whatever you want, or update an existing group.

Creating a new group lets you decide which page you want it to be on if the mod has several pages. You can select existing groups to see what their page currently is.

Updating an existing group either lets you keep its name or rename it. Beware that if you have a deduplicated modpack and two of your options share models, like Emperor's and Smallclothes. You will need to update both individually.



Bonus

Bonus!

This is a lifesaving blender script that lets you retain shape keys when applying modifiers:
https://github.com/JasonWeiseUnreal/Blender-ApplyModifierForObjectWithShapeKeys

This addon has a ton of great workflow additions and tools:
https://machin3.gumroad.com/l/MACHIN3tools

Lock vertices in place.
https://bookyakuno.gumroad.com/l/hide_only_vertex