# Tutorial: Editing Tarkov Meshes

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(original by Tyrian)

## 1 Explanation

What we are going to do, is edit base gamefile meshes of the crowbar, to turn it into a really cool cube. Quick Notes

1. This tutorial can also be applied for other meshes/models/bundles, it is not limited to the crowbar.
2. Trial and error! You won't get it perfect every time. Also, edit the mesh directly as edits to the object will not reflect in the export. E.G If you want to scale it down, go into edit mode and change the scale in there. Same goes for rotation.

Requirements

- Unity LTS Release (Make sure to match the version with BSG, otherwise there will be unforseen consequences)
- Blender/Modeling software capable of exporting/importing .dae | .obj | .fbx (I use Blender 2.79): https://download.blender.org/release/Blender2.79/
- AssetBundleExtractor: UABE | UABEA | UAAE (You only need one, just make sure the software can support current bundle version)
- AssetStudioGUI
- Text editor NP++ | VSCodium

How to start?

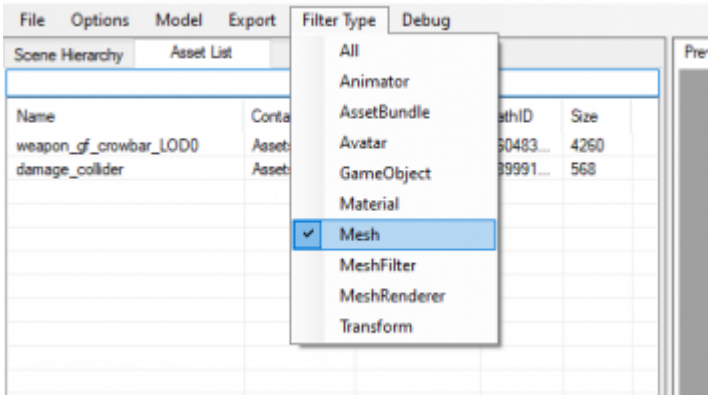
## 2 First step: Finding the weapon bundle

For this, go in your gamedir GameDir\EscapeFromTarkov_Data\StreamingAssets\Windows\assets\content\weapons\crowbar\ and copy the file client_assets.bundle to a backup folder inside the same folder.

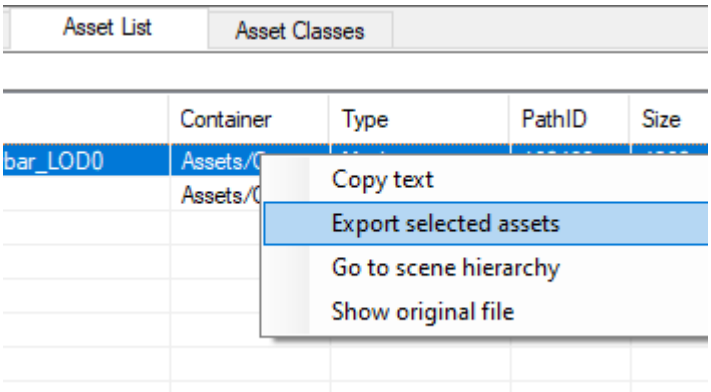
## 3 Step two : Extracting the desired texture file.

Here we will use AssetStudio GUI (if you haven't installed it, then install it somewhere accessible). Grab the client bundle and drop it inside AssetStudio, it will take a moment for the app to load the content.

Once done loading, go to asset list tab and click on Filter Type, set it to mesh. This will help ease looking for the mesh you need.




Now select the lod0 mesh, right click and choose export selected asset, save it where it's accessible. (The asset you've exported will be in FBX format)




# 4 Step three: Edit the mesh file to the new mesh.

Import the model you've recently exported, make sure whatever model you're going to import have the same position as the one from the bundle, this is so that the mesh isn't positioned incorrectly later in-game. Also, do not forget to apply all transform for your mesh.
0a6cc3eabd6f7760 5c057d1a02072fd0-Preview.webp

Change the material name of the model to m0mat.
0d871459d6e1d684e48582c2692406ca-Full.webp

Once you're done you can export it as .obj, .fbx or .dae (for FBX export, make sure the scaling is set to FBX all)
321b7b2cd20751af656d8219e7c1989c-Full.webp

# 5 [1]

Load up unity and create a new project.
d6d7781646fba46fcd07321875dd21ff-Full.webp

Name it whatever you want.
927645e3d3043d8bfe17432289a8d3be-Full.webp

Import new asset. (The .dae you exported.)
b4f013a38837f5d2c83782e0f967fec1-Full.webp

dc3dbd9537c9aeb6ed77324d6f3500cf9-Full.webp

Drag and drop the new model asset into the main window.
91d0a3423228cc965b02ea9aa1f8b27ca-Full.webp

998622d155dc2339eee03f0c6c7e5fe8-Preview.webp

Set the transforms and rotations to 0.
9d240bed4d8d06d0d6c1a269e338b839-Full.webp

Don't forget to set mesh compression to low


Now go to build settings.
5b2ce1e16d6f9d4f1f72c8a9d6cc2525-Full.webp

Click 'Add open scenes'. If it asks for a save file name, call it whatever you want.
19a3165522426d1eeb48bed15a146ea8-Full.webp

And then click 'Build', save it to your project folder and let it run.

# 6 Step five: Opening your newly made bundle and exporting the raw mesh files.

Now we have to use the Unity Asset Bundle Extractor all over again, except this time it's to export the raw mesh files from the bundle you just created. It's pretty much the exact same steps. Navigate to your project folder and open up 'bestmodelever_Data' or w/e you called the project.
35c2faad0aea19cf3e92830ccddaf1a5-Full.webp

Do the same as you did before, open the sharedassets0.assets file.
7419fcb30a54fce8a19591a4ca9198cb-Full.webp

ccec29773565211ac356020797e49056f-Full.webp

And click 'Yes', name the unpacked file whatever you want, then click 'Info' again.
You should see the bundled mesh in here, mine is called 'cube' but it should be called whatever the name of the mesh was inside of blender before you exported it.
c854ac41101df63186d64a12dedf3e667-Full.webp

You can export either raw or dump. However, it's recommended to export as dump to rename the data
288b142449e4ae00dd858c53630f9f706-Full.webp

Then open up the text file.
a74f8d677e625ab33255707d832454f-Full.webp

You'll notice the string m_Name is the same as the mesh file in blender. You could set this up ahead of time by renaming it to weapon_gf_crowbar_LOD0 in blender, but you can do it here too. (It's useful for replacing LOD1's as well, without having to re-export a whole new model bundle with that name; etc.)
5679a4a5579b82404972a7b528a10ea8-Full.webp

## 7 [2][ref][/ref]

Open up another window of the unity extractor, go back to the crowbar unity asset bundle again and go through the same process until you're back at the info screen.
1f9c2068a36a3540da27732d4338073d-Full.webp

Click 'Import Dump' and then import the weapon_gf_crowbar_LOD0.txt file. (This makes sure it has the correct information/naming in the mesh data.)
129bafe8aff48f5a59148c061747f8b8-Full.webp

And then click 'ok' at the bottom and click 'yes' to save changes.
da997372da778ab106e07273290551ac-Full.webp

Then go to 'File' and 'Save'. Save the file as client_assets.bundle to your project folder.
a41d923a10b1845f55e17cbdb43676ea-Full.webp

0d668b492ecbd807016733eb7972a29a-Full.webp

Once it's saved, simply replace the client_assets.bundle in your crowbar bundles folder with the one in your project folder.
ce339baa4971 4b816bd2fb6e5733f385-Full.webp

## 8 Step seven Launch the game!

Now that every step of this tutorial is done, you can essentially start the game, and see the new mesh in game. (Though it'll be using the original textures, unless you replace those too.)
Follow the tutorial for texture replacement in the same fashion as you do normally. You can find a guide for that here - https://docs.offline-tarkov.co…als/edit_weapons_textures

But here is a simple tutorial anyway.
Open up the unity asset bundle for the textures in the texture folder, should be located where the crowbar mesh bundle is but in a folder called 'textures' instead.
4bd6d182233ba16bfa53e5df7cd7be46-Full.webp

Select the 'diff' file, and then click 'Plugins' and 'Edit'.
a646b719ebb1230792a85a57d8a08260-Full.webp

Click 'Load' and open up the .png or .tga of the texture for the mesh.
44ed26deed881cbc60f3443661ea351d-Full.webp

Leave settings as default.
09c24fbe3049babacfb595a425da83e7-Full.webp

And then go about saving it like you did the mesh, replacing the bundle in the texture folder.
da997372da778ab106e07273290551ac-Full.webp

a41d923a10b1845f55e17cbdb43676ea-Full.webp

And you're done!

## Foot Note

- Partial Update by Choccy Milk (As of: 25th August 2022)
- [3]Secondly, bundle can be loaded from the server if you wish to create a custom weapon (more on that later). If you want to test the bundle to see if it work be my guest and ovewrite it, just make sure to backup first.
- UABE 3.0, UABE Avalonia and UAAE have mostly the same operation
- Noteable difference for UABE 3.0 and Avalonia
- Avalonia can decompress bundle into memory or separate file, but mostly has the same element as UABE pre 3.0.
- UABE 3.0 has an entirely different UI from the previous version, 3.0 doesn't need to decompress *probably decompress to memory by default*, can modify value straight without exporting the file, can deal with multiple bundle editing, the name for certain object are different (Instead of meshname_lod0 it will be meshname.fbx), this can be confusing when trying to import new dump. Luckily, you can check their data by clicking on view info tab, *it's a bit tedious unfortunately*.)

- [4][5]Because of BSG transition to unity 2019 *(causing UABE to be essentially useless before finding the alternative*). Importing mesh into the new bundle causes the model to freak out. However, this issue can be solved by setting the mesh compression into low. Apparently the cause of this was because of bundle extractor not ripping the .resS data.
- Skinned Mesh Import will be an entirely different article (more on it later)
- Alternative method on building the bundle: Since building the bundle through regular method can cause a bit of cluttery on sharedassets. You can create single bundle with the necessary things using this guide, although the bundle will be compressed. But, using this alternative method is a life saver when it comes to gameobject transform

## References


1. Step four: Using unity to create the bundled mesh. **Check footnote*
2. Step six: Replacing the mesh with our newly aquired exported mesh files! *Check footnote
3. ALERT: Do not ovewrite the original bundle just like this step without backing up first.
4. Mesh Import Issue:
5.


Additional information

| | |
|---|---|
| Technical knowledge requirement | No programming skills required |