

The dumb person's guide to making reskin mods in Sm4sh 3DS

by Letheposting

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(/ many other names on the Internet...)

<https://deadendshrine.online/mods/>

Stuff you need

- **A dumped copy of the game** (obviously) along with the latest update (1.1.7) downloaded and installed
 - You can mod DLC characters without owning the corresponding DLC since the files come in the updates, but you won't be able to test them
 - It's not enough to simply dump the romfs using GodMode9 or similar, because the game has all the assets in one large-ass file named "dt" (and a smaller one named "ls")
 - You have to use [this collection of scripts](#) to dump the data from the base game and updates and then properly extract it
 - This further requires **Python 2.7**
- A computer with **Windows 10**
 - A VM with a pirated or otherwise unactivated copy will work
- **Ohana3DS Rebirth**
 - Install **DirectX** first or you will get very vague errors when attempting to run it
- An image editing software like **GIMP**
 - Don't use MS Paint because it will destroy transparencies
- Java
- [SmashT3X](#)

Working directory setup

Let's start with CSPs (Character Selection Portraits) first.

Open a new File Explorer window. Go to the folder you copied the dumped game to.

Note: if you do "move" instead of "copy" when getting the files from your 3DS's (micro)SD card, you risk corrupting the card and losing all your data. Trust me; this happened to me twice.

If you want to edit a character that was in the base game (including unlockables):

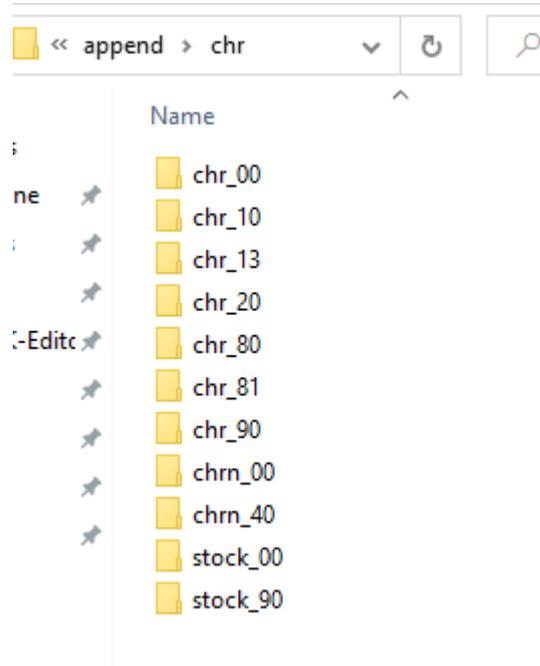
- go to "base game\data\ui\replace\chr"

If you want to edit a DLC character:

- go to "update\Output\ui\replace\append\chr"

Open another File Explorer window. Put this one and the other one side-by-side. This new one will hold your working directory. Make a folder named "WORKING" anywhere. Your desktop, maybe? (If it's not too full...)

Working directory setup



In the first window you opened, you will see a bunch of scary-looking folders like this. You only need the following to mod:

- chr_00
- chr_13
- chr_20
- stock_00
- stock_90

Let's use Lucas slot 8 as an example of what each looks like:



stock_90



stock_00



chr_20

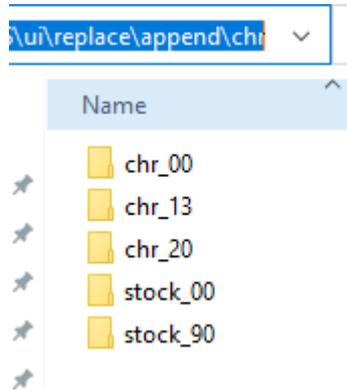


chr_13



chr_00

Working directory setup



In your working directory window, make the following folder structure:

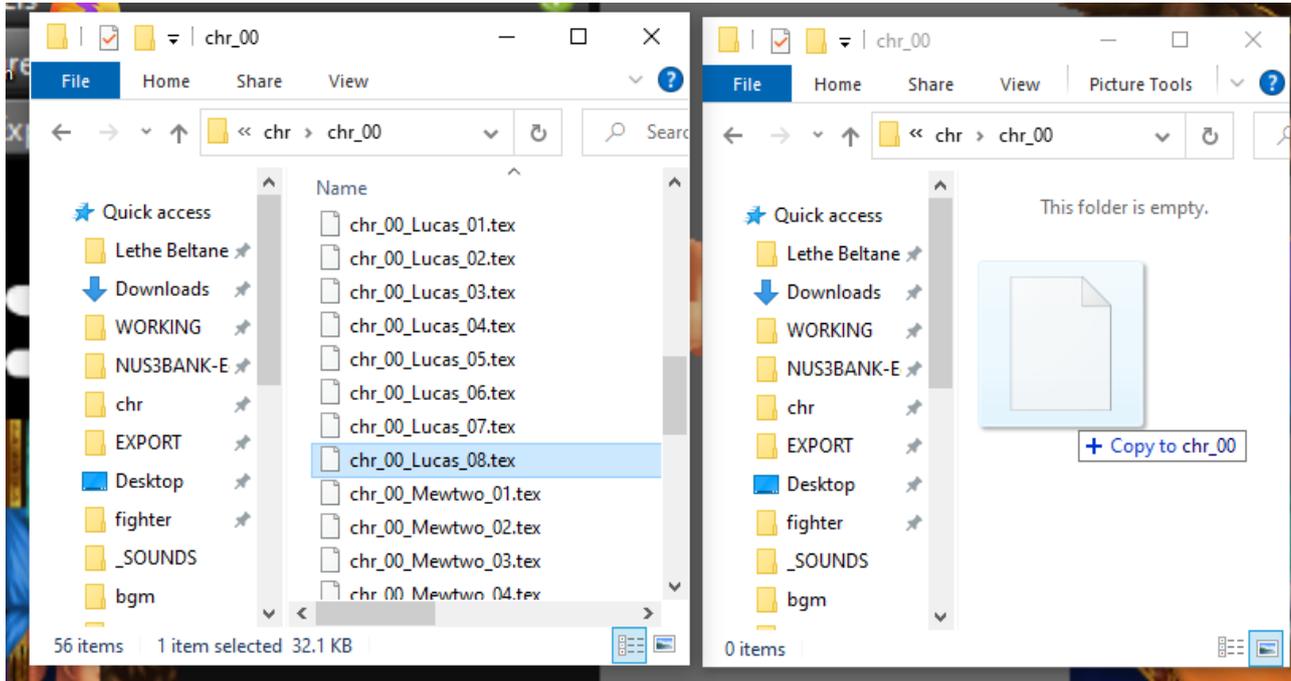
- Base game characters: `ui > replace > chr`
- DLC characters: `ui > replace > append > chr`

Inside the new “chr” folder, make the following folders next to each other:

- `chr_00`
- `chr_13`
- `chr_20`
- `stock_00`
- `stock_90`

It should look like the picture on the left.

Working directory setup



Copy (**NOT MOVE**) each of the five CSP files from the dump folder into their respective working directory folders.

File counting starts from 1 for CSPs, so the chr_00 for Lucas slot 8 would be "chr_00_Lucas_08.tex".

Do not rename the files.

Working directory setup

In the working directory folder, go back up in the folder hierarchy until you can see the “ui” folder.

In the dump folder, if you want to edit a base game character:

- go to “base game\data\model\fighter\[name of fighter]”

If you want to edit a DLC character:

- go to “update\Output\model\fighter\[name of fighter]”

In the working directory folder, make a new folder called “model”. Inside that, make a new folder named “fighter”. Inside that, make a new folder with the same (internally-used) name as the fighter. Since I am using Lucas as an example, the folder will be named “lucas”.

Working directory setup

For most characters, the only texture you will need to edit is in the “body” folder. Some characters, like Corrin, have multiple parts that need to be edited and compiled separately. This tutorial will only cover the former for simplicity.

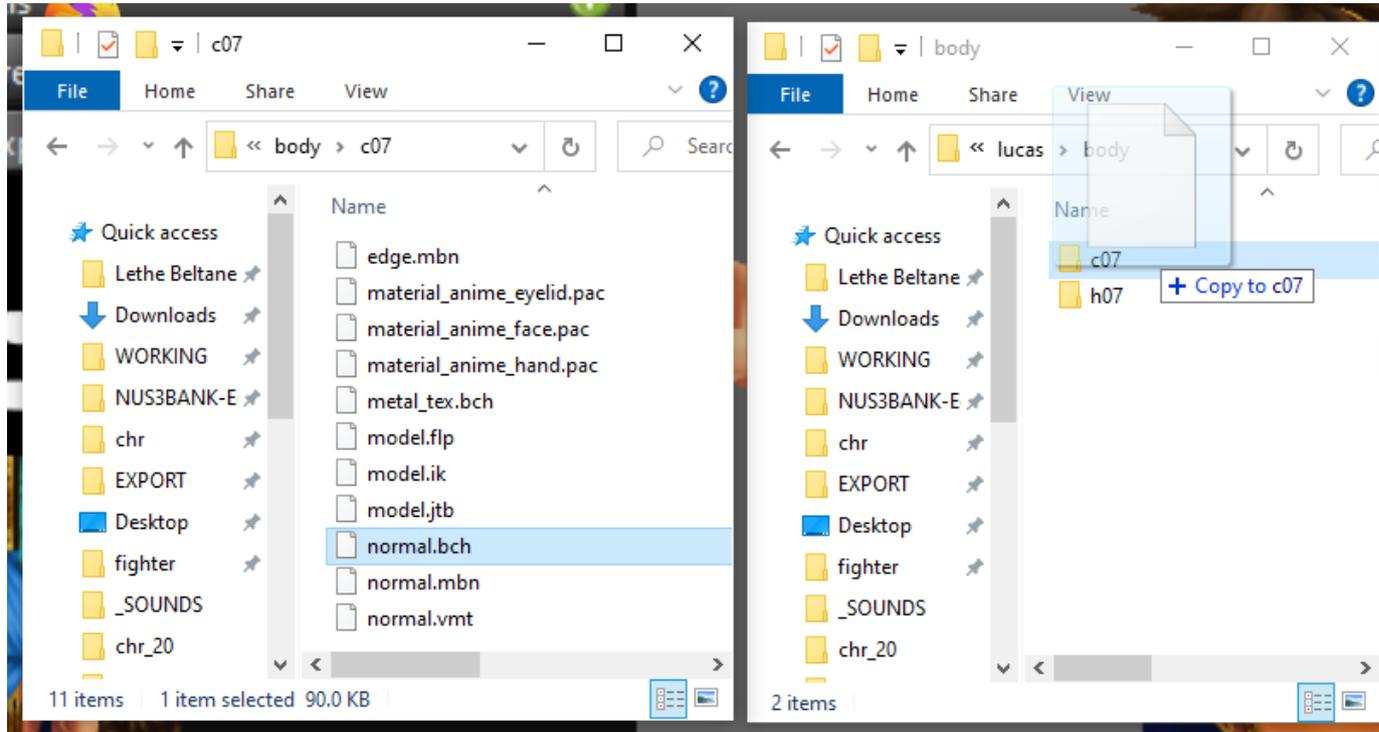
There are two folders in the dump folder that concern us: cXX and hXX. “c” folders contain low-poly models, which are used in-fight. “h” folders contain high-poly models, which are used on the pause screen. For almost all characters, you can edit the hXX textures and then just resize them to make the cXX textures.

In your working directory folder, make a “body” folder. Inside that, make two folders next to each other: “cXX” and “hXX”, where XX is the number of the slot you are working on. **Model numbering starts from 0**, so slot 8 is 07, slot 1 is 00, slot 4 is 03... etc.

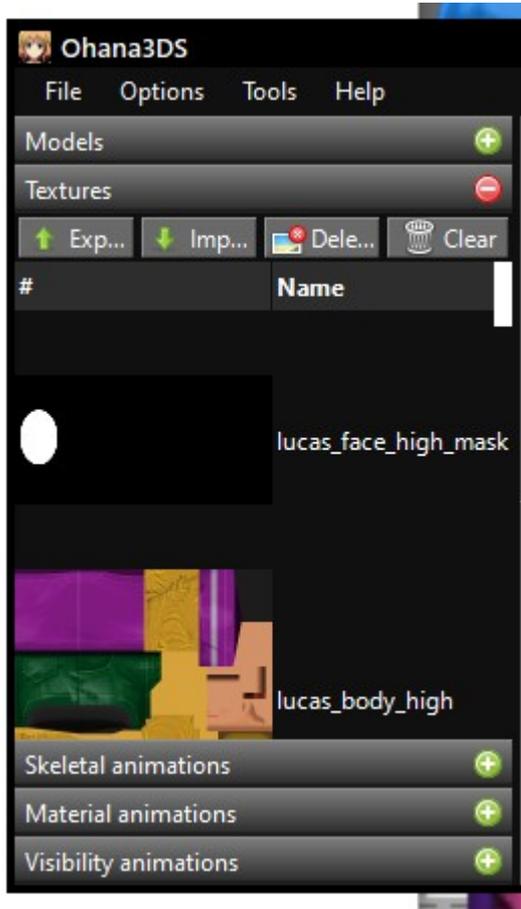
Almost all characters only have 8 slots. Little Mac is an exception with 16 slots. Adding new slots for other characters is beyond the scope of this tutorial.

Working directory setup

Copy (**NOT MOVE**) the file “normal.bch” from “cXX” in the dump folder to the corresponding “cXX” in the working directory folder. Do the same for “hXX”.



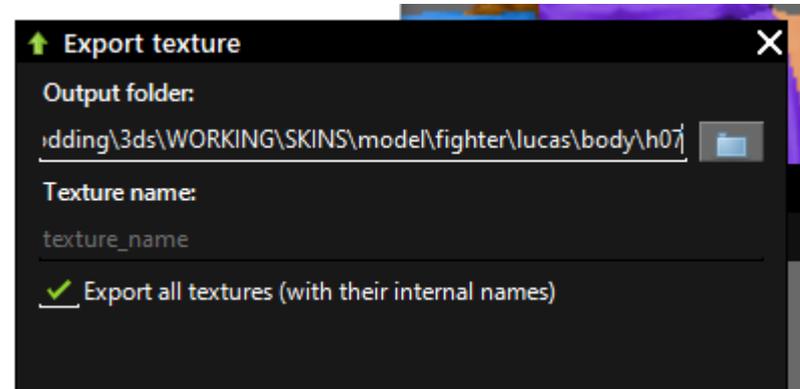
Extracting files



At this point, you can close the dump folder window. Don't maximize the working directory folder, though: we still need to run some other programs to extract actual PNGs we can edit.

Open Ohana3DS Rebirth. Drag "normal.bch" into the window. Nothing will appear in the preview window, but this is expected. Click "Export". Make sure "Export all textures (with their internal names)" is checked, then export the textures to the same folder "normal.bch" is in.

Repeat these steps with the cXX files as well.



Extracting files

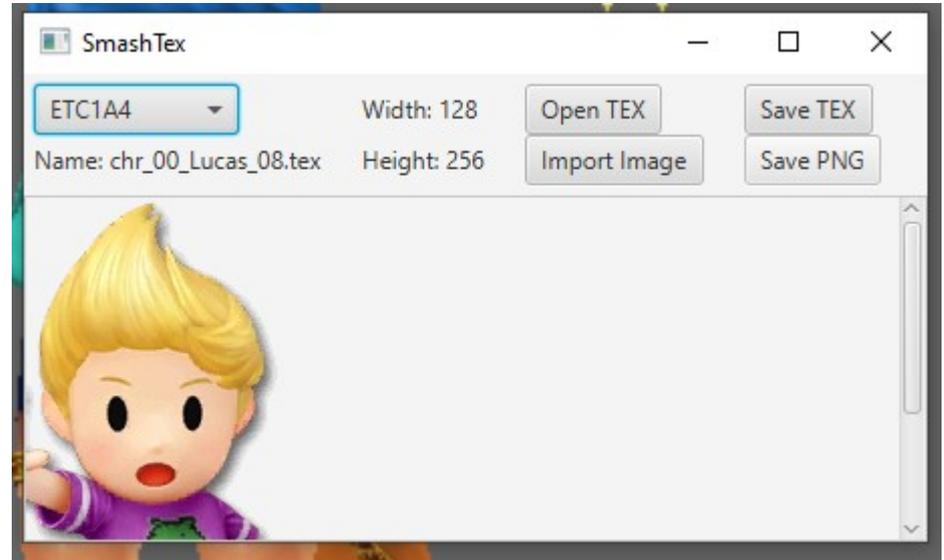
Close Ohana3DS. We won't need it again until we are ready to recompile the textures.

Go back up in the folder hierarchy until you can see both the "model" and "ui" folders, then go as far as you can into "ui" until you come across the "chr_00" folders and the other four like it.

Open SmashT3X.

For each folder in this directory:

- 1) Enter it.
- 2) Drag the .tex file onto SmashT3X. A preview should appear. **DO NOT CHANGE ANY OPTIONS.**
- 3) Click "Save PNG".
- 4) Save the PNG to the same folder as the .tex file it came from.



Editing textures

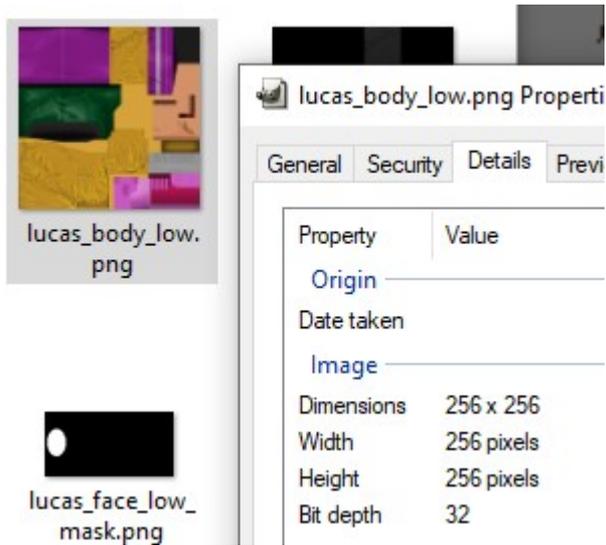
Open every PNG you saved in the last step, as well as whatever model textures you want to change, in GIMP or another image editor. I personally recommend GIMP because, after making an edit like changing hues, you can switch to a different file, select the same affected area (like hair), go to “Filters”, and then “Repeat” the same action. This helps avoid weird color differences between CSPs.

Don't edit files with the words “ref”, “mask”, or “spc” in the filename as this will almost certainly mess up rendering in-game.

Don't change any filenames. Always save with the same filename that the image had, unless scaling a high-poly texture to low-poly as in the next slide.

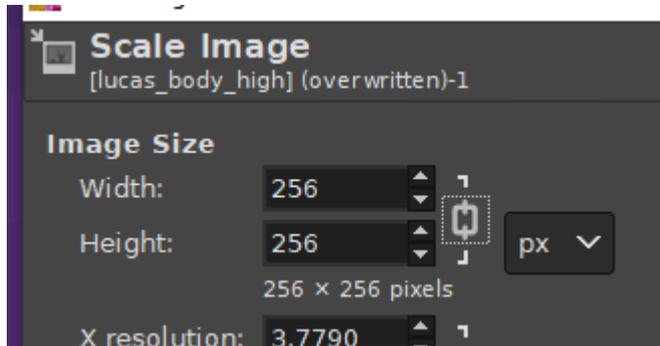
Saving textures for low-poly models

The rest of this page assumes you're using GIMP.



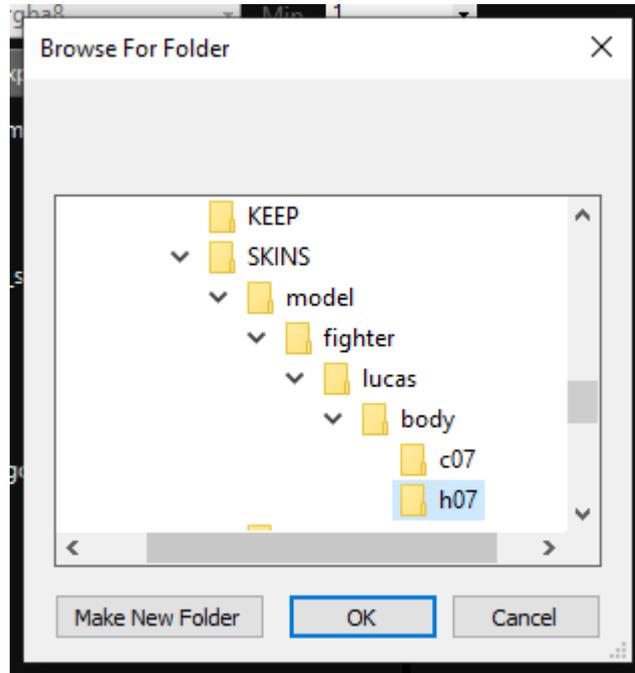
After you're done editing a texture, go to "File" and then click "Overwrite". Then go back to the working directory File Explorer window. Go into the cXX folder and find the same texture as the one you just edited. Right-click on it, then go to "Properties" and then "Details". Note the image dimensions.

Go back into GIMP, where the high-poly texture should still be open. Click on "Image" and then "Scale Image". Input the dimensions of the low-poly image we just checked. (You may have to click the link icon to the right of the dimension input boxes to disable keeping the original image dimension ratios.)



Afterwards, go to "File" > "Export As" and overwrite the corresponding low-poly texture image.

Compiling textures



Now we are ready to put the texture files back into “normal.bch”.

Open Ohana3DS. Go to “Tools” > “BCH texture replacer”. Open the “normal.bch” from the hXX folder in the working directory window. Then click “Replace all”. Navigate to the folder that holds all the textures we just edited, select it, and then click “OK”.

Nothing will visibly change in Ohana3DS. This is expected. Go to “File” and then click “Save”. The file has been saved. At this point you can delete all the PNG textures, leaving just “normal.bch” in the hXX folder.

Repeat these steps for the cXX folder.

Compiling CSPs

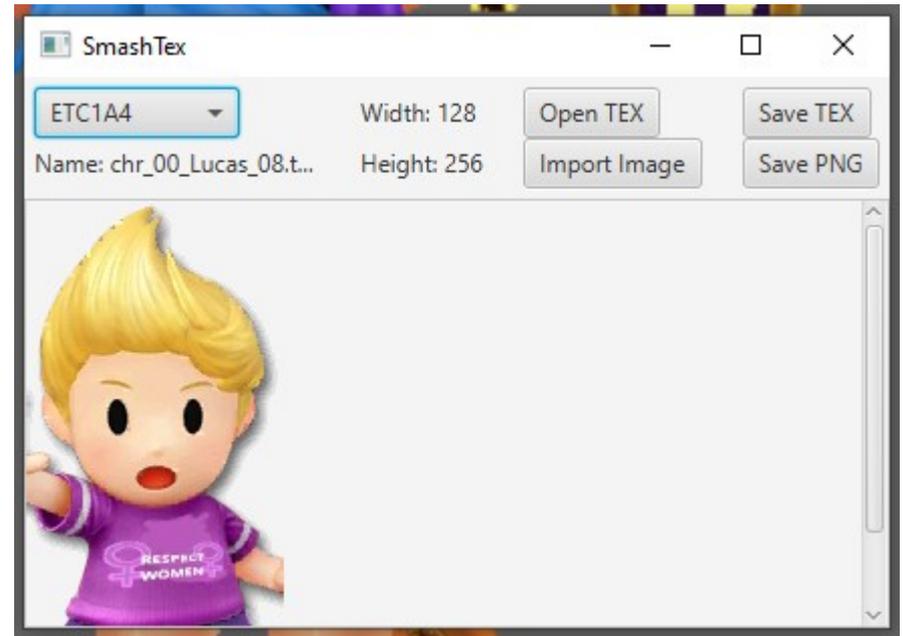
Close Ohana3DS. We won't need it again.

Go back up in the folder hierarchy until you can see both the "model" and "ui" folders, then go as far as you can into "ui" until you come across the "chr_00" folders and the other four like it.

Open SmashT3X.

For each folder in this directory:

- 1) Enter it.
- 2) Drag the .tex file onto SmashT3X. A preview should appear. **DO NOT CHANGE ANY OPTIONS.**
- 3) Drag the edited PNG onto the same window. It should now show the edited CSP.
- 4) Click "Save TEX".
- 5) Overwrite the .tex file.
- 6) Delete the old PNG file.



Conclusion

Congratulations! At this point, you are technically done. You can throw the “model” and “ui” folders into a ZIP file and distribute it as you please. You should consider adding a README.txt, though, so people downloading your mod can easily tell what it’s supposed to be.

