Beginner's Guide to Modding

- **Introduction to Textures**

- **Installing Your First Mod**

- **Converting a Video Loop for Home Screen**

Introduction to Textures

Prerequisites

Compressonator	**Download Here**

Texture Asset Type Table [DRAFT]

TYPE	FORMAT	QUALITY
Clothing	BC1	1.0
Crowd Signs	BC3	1.0

Texture Data Table

TYPE	FORMAT	QUALITY
_color	BC1	1.0
_nrm	BC7	0.05 (Dev)	0.5 (Production)
_roughness	ATI1N	0.05 (Dev)	1 (Production)
_metal	ATI1N	0.05 (Dev)	1 (Production)
_normal	ATI2N	0.05 (Dev)	1 (Production)

Introduction

We have been acquainted over the years with saving textures through **Photoshop** or **Paint.NET** into the **DDS** format. This is still the case in **WWE 2K22**, however the compression settings and process is entirely different to before. If you do not follow this walkthrough, your textures may work, but will appear with artifacts or crash the game itself.

_color:
This is a very common texture that you will find inside the games archives. This is now your diffuse/albedo map, which contains all the colour information for your mesh.

_nrm:
Also common, this file controls the prominent characteristics of whatever mesh the textures point too. The breakdown is as follows.

- Red/Green channels control the actual normal map information, however the green channel is now flipped from previous games.

- Blue channel is your roughness. Roughness controls how rough or smooth a Material's surface is. Rough materials scatter reflected light in more directions than smooth materials, which controls how blurry or sharp a reflection is (or how broad or tight a specular highlight is).

- Alpha (if it exists) channel is your metallic, this controls how 'metal-like' your surface will be. Nonmetals have metallic values of 0 and metals have metallic values of 1

_roughness:
This is the same logic as above, except in certain cases (belts for example) have it separated from the normal map. These separated files have different compression settings than the combined nrm.

_metallic:
This is the same logic as above, except in certain cases (belts for example) have it separated from the normal map. These separated files have different compression settings than the combined nrm.

_normal:
This is the same logic as above, These separated files have different compression settings than the combined nrm.

Step #1 |

We are now working with Compressonator, this tool will handle the compression and output of our DDS files with a single click **once** setup. When you open Compressonator, you will be presented with the image below. Follow the next steps.

- File, New Project.

- Enter a name for your project and select the location of your mod work directory.

- Perform a save to make sure your project has successfully been stored.
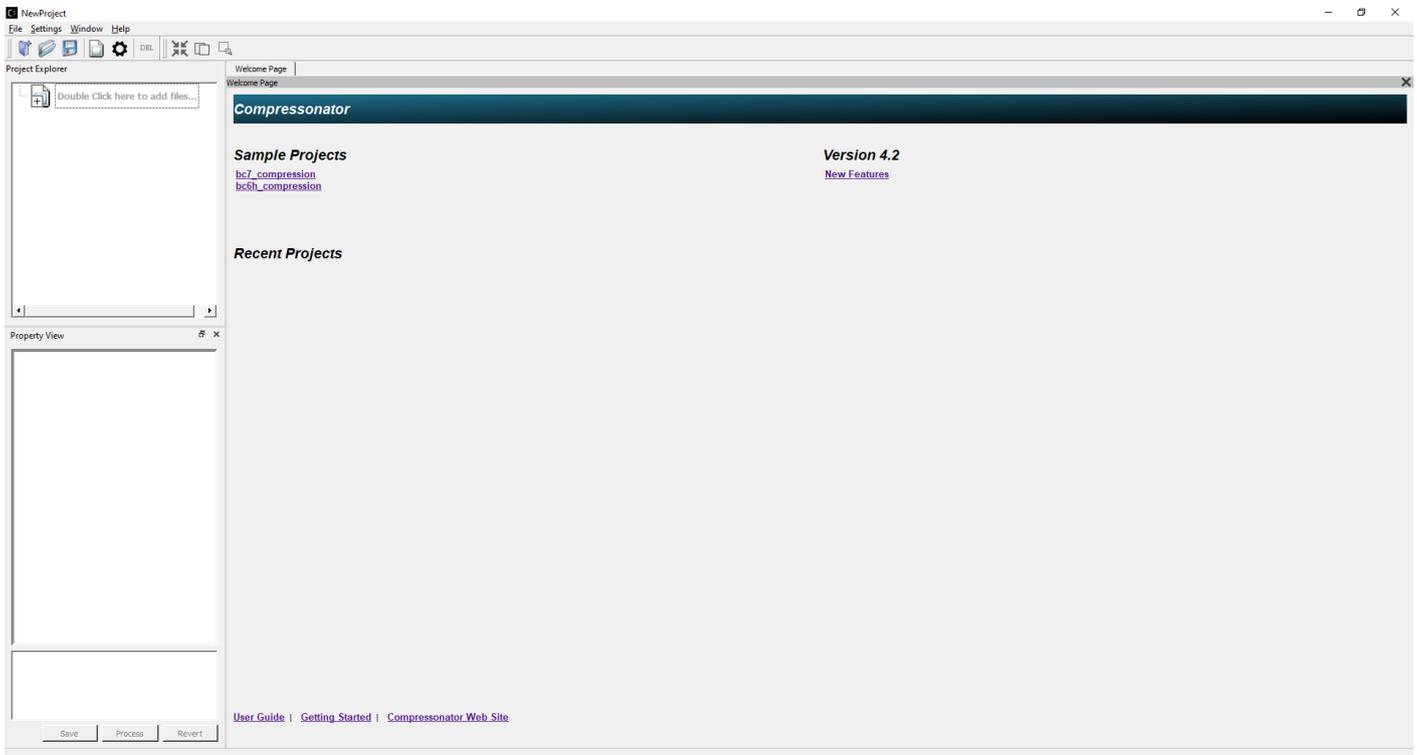
Step #2 |

We are now going to add textures to our project, when this step has been done you will only need to select the textures you wish to process and click Process.

- Double click *Double click here to add files* and select your _color.**tif**

- You will see your texture on the left side. Expand it inside the list and double click *Add destination settings*. The software will now look something similar to this:
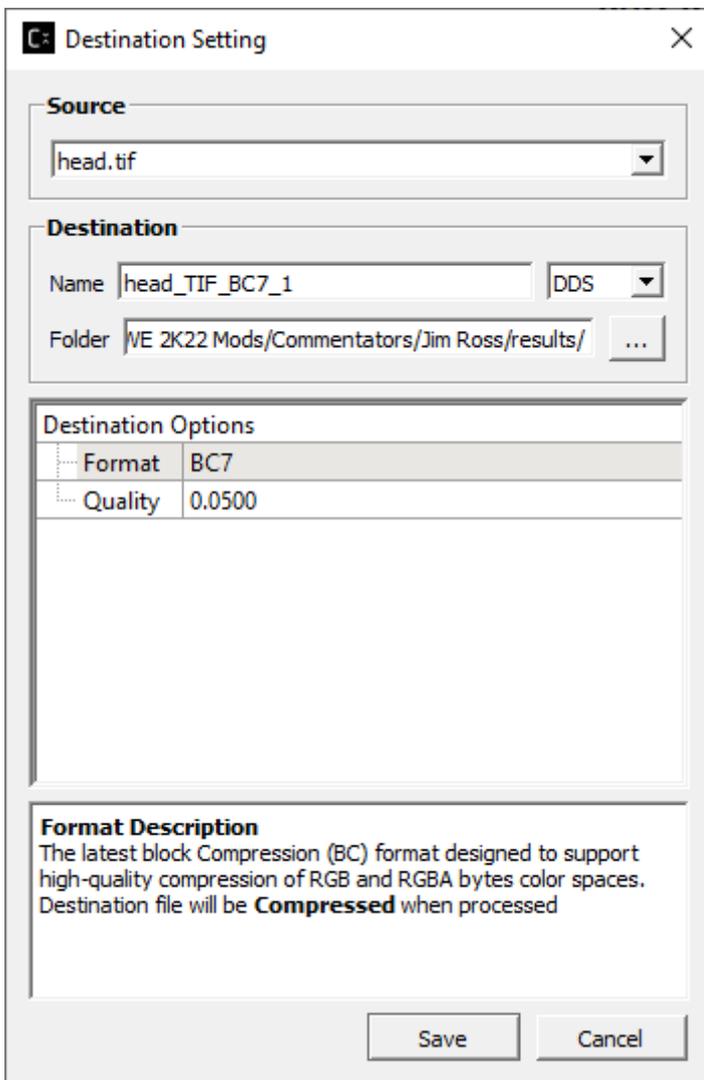
- Refer to the data table at the beginning of this tutorial for which Format you may need. For this tutorial we will need

    - Format: **DXT1**
    - Quality: **1** (production)

- Configure the folder path to where you wish the textures to be saved too once processed.

- Configure the name of your texture to match the required suffix. In this case _color

Destination Setting ☒

Source
head.tif ▼

Destination
Name | head_color | | DDS ▼
Folder | /550_Byron_Saxton_2017/BaseModel/Textures | ...

Destination Options		▲
Format	DXT1	
Quality	1.00	
Channel Weighting		
Adaptive	☐	
X RED	0.3086	
Y GREEN	0.6094	
Z BLUE	0.0820	
DXT1 Alpha		
Threshold	0	▼

Adaptive

[Save] [Cancel]
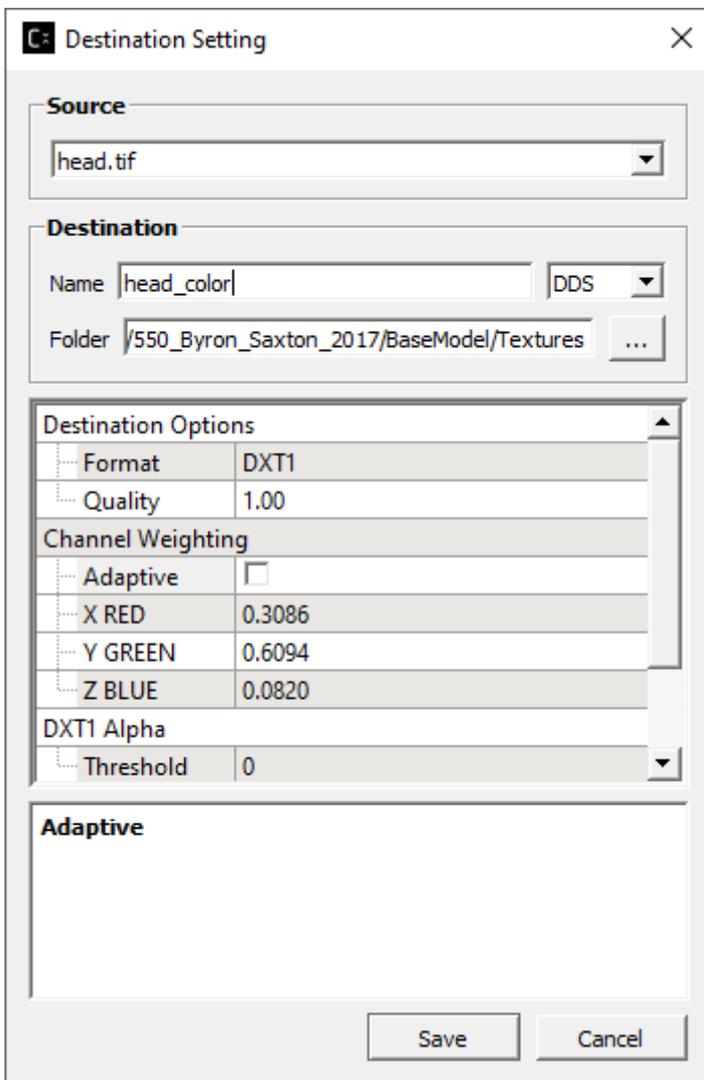
- Now we must generate mipmaps for this texture (recommend for finalized production, but for the sake of this tutorial we will do it now.

- Select your texture, making sure it is highlighted and click the generate mipmap button found on the toolbar.
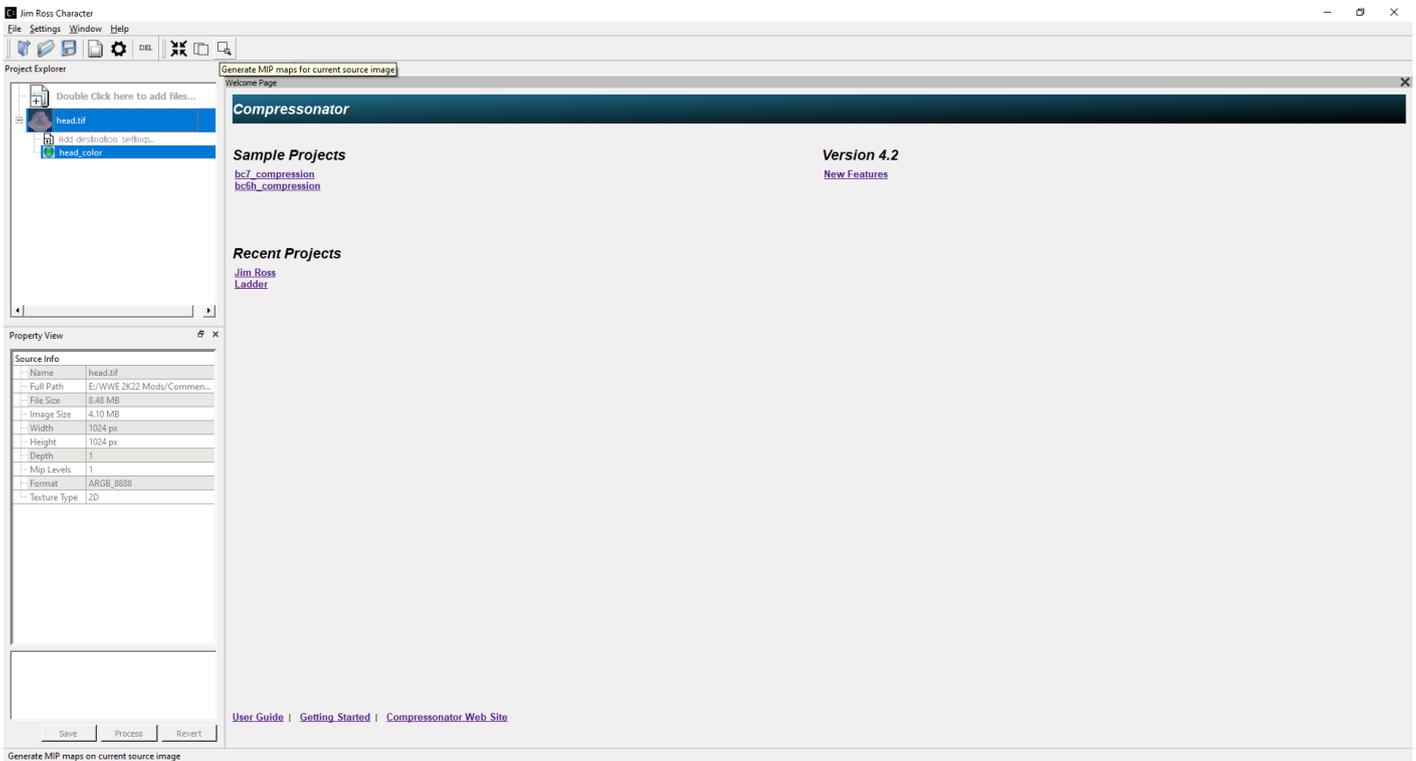
- A popup will appear, select OK with the default settings and the tool will the generate mipmaps for that particular texture.
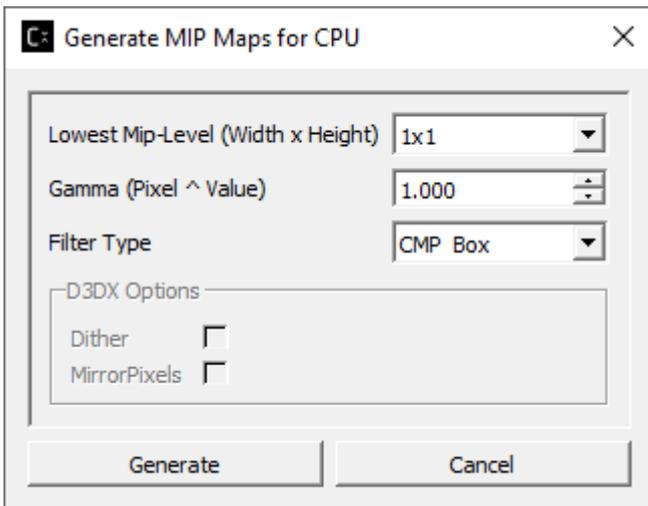
- Repeat this entire texture process for the rest of your texture(s), following the data sheet provided at the beginning of this page. For us, we will be doing the nrm texture.

- We do not recommend that you set the quality to 1 for nrm. For time saving it is best to use 0.05 for quality testing, and then 0.5 for production (finished).
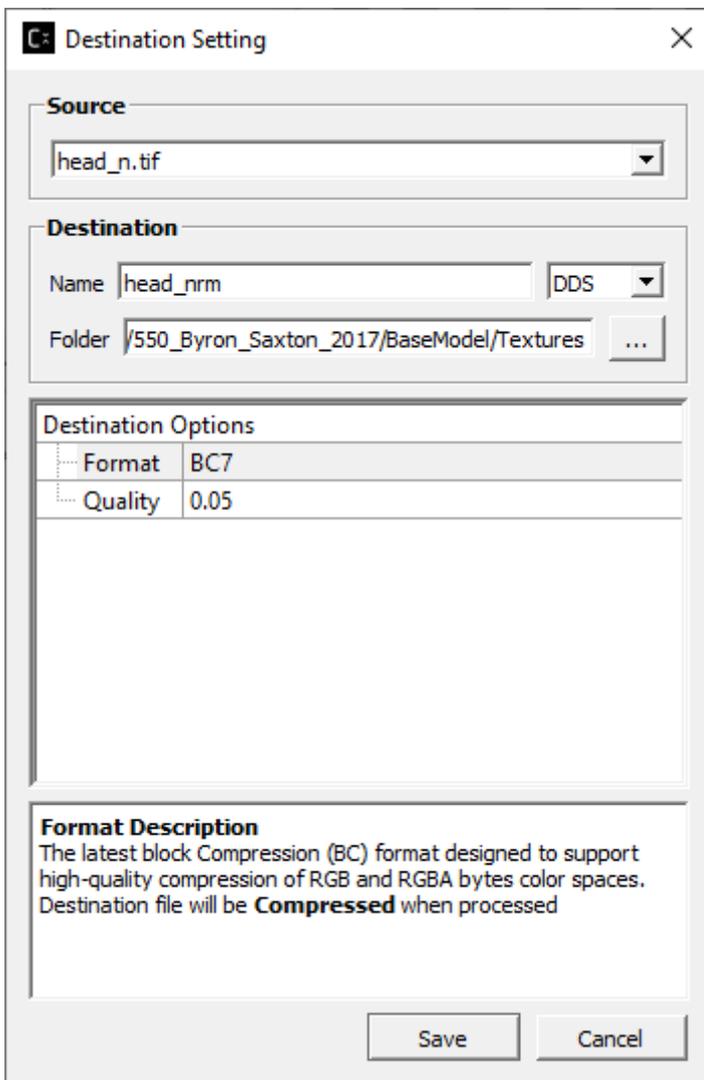
Step #3 |

This is the fun bit, once you have setup your textures correctly. Highlight the textures that you wish to process, and click **Process Selected Images** in the toolbar.
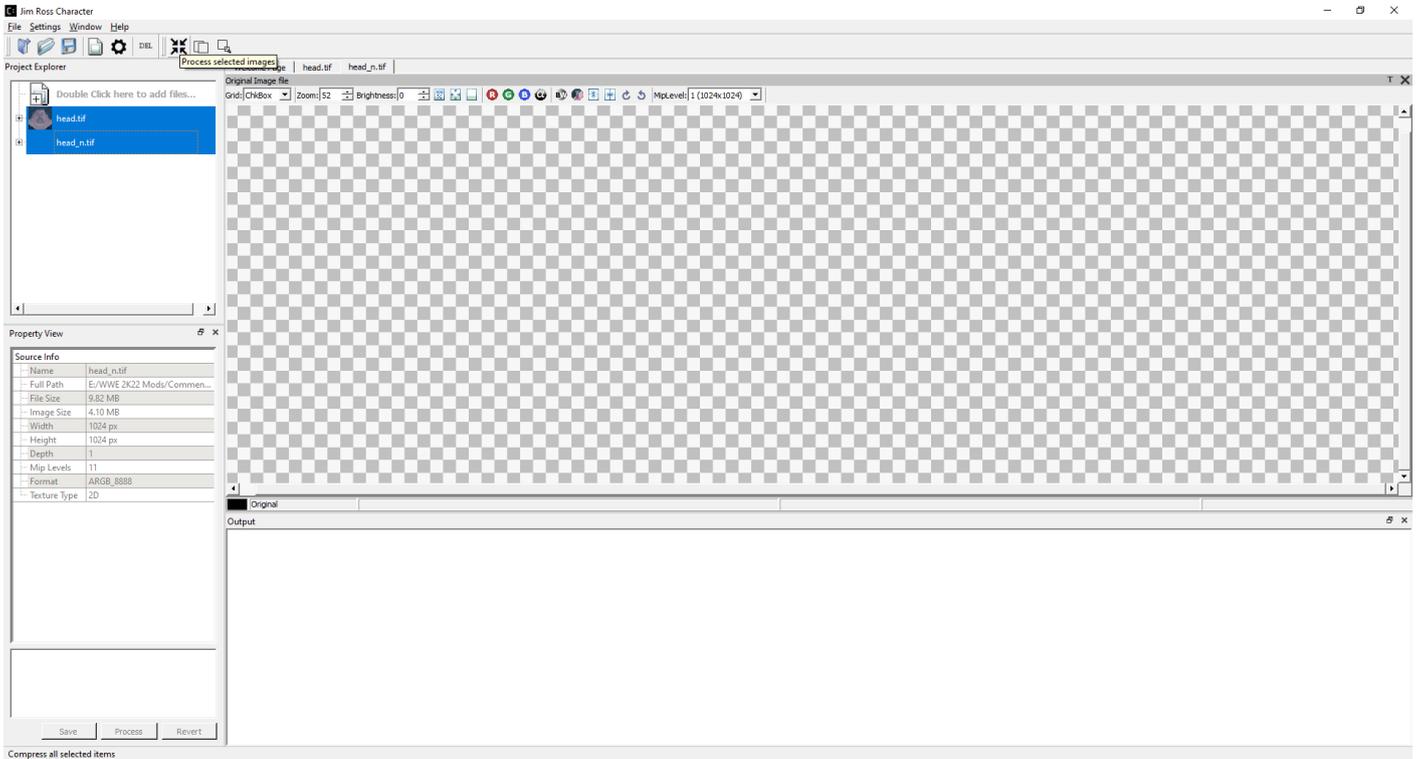
This will save out your images in high quality compression with very minimal if at all destruction of your texture. Using the correct settings will get you the same result that 2K use for their texture pipeline.

Always remember to save your project when adding new textures and once you configure their output.

Step #4 |
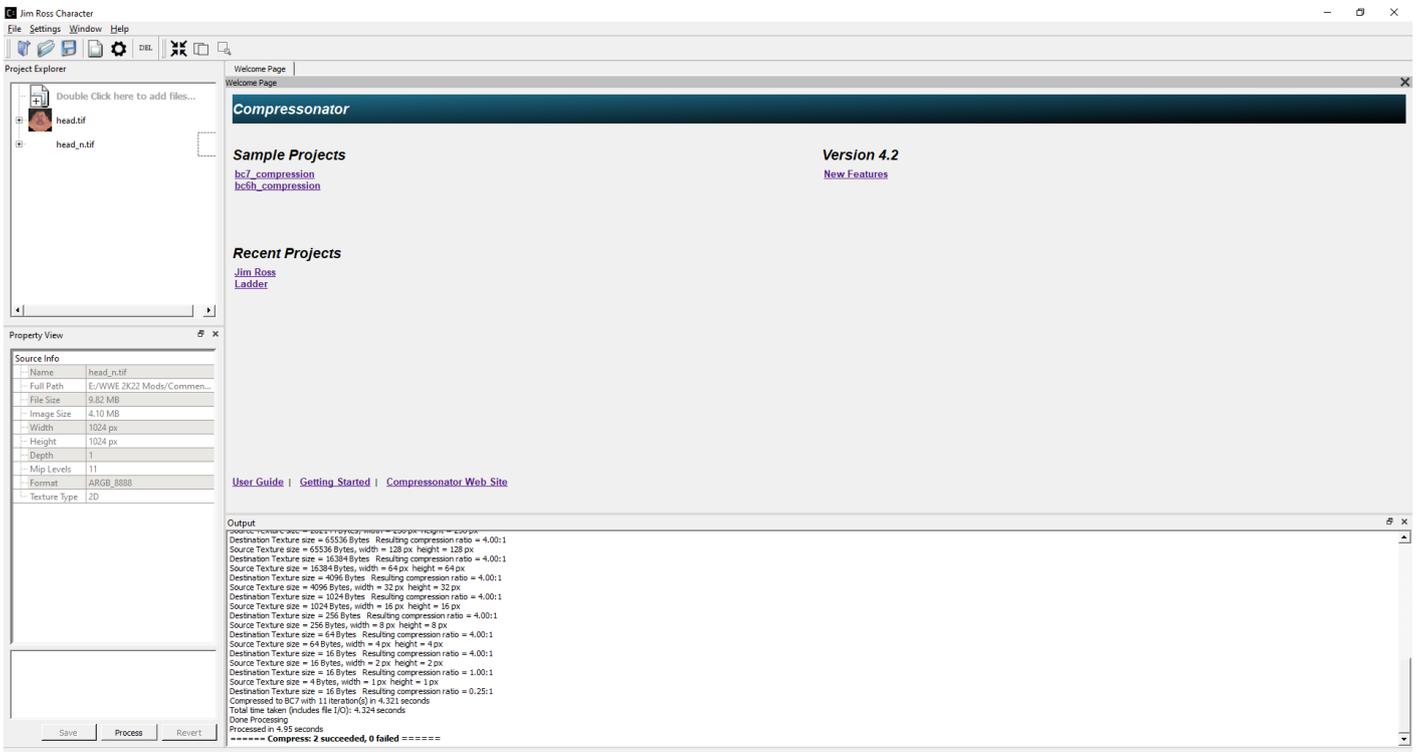
Once you have processed your images, they are game ready. If you followed this process and used the correct texture configuration, the result in game will be identical to the 2K formatting.
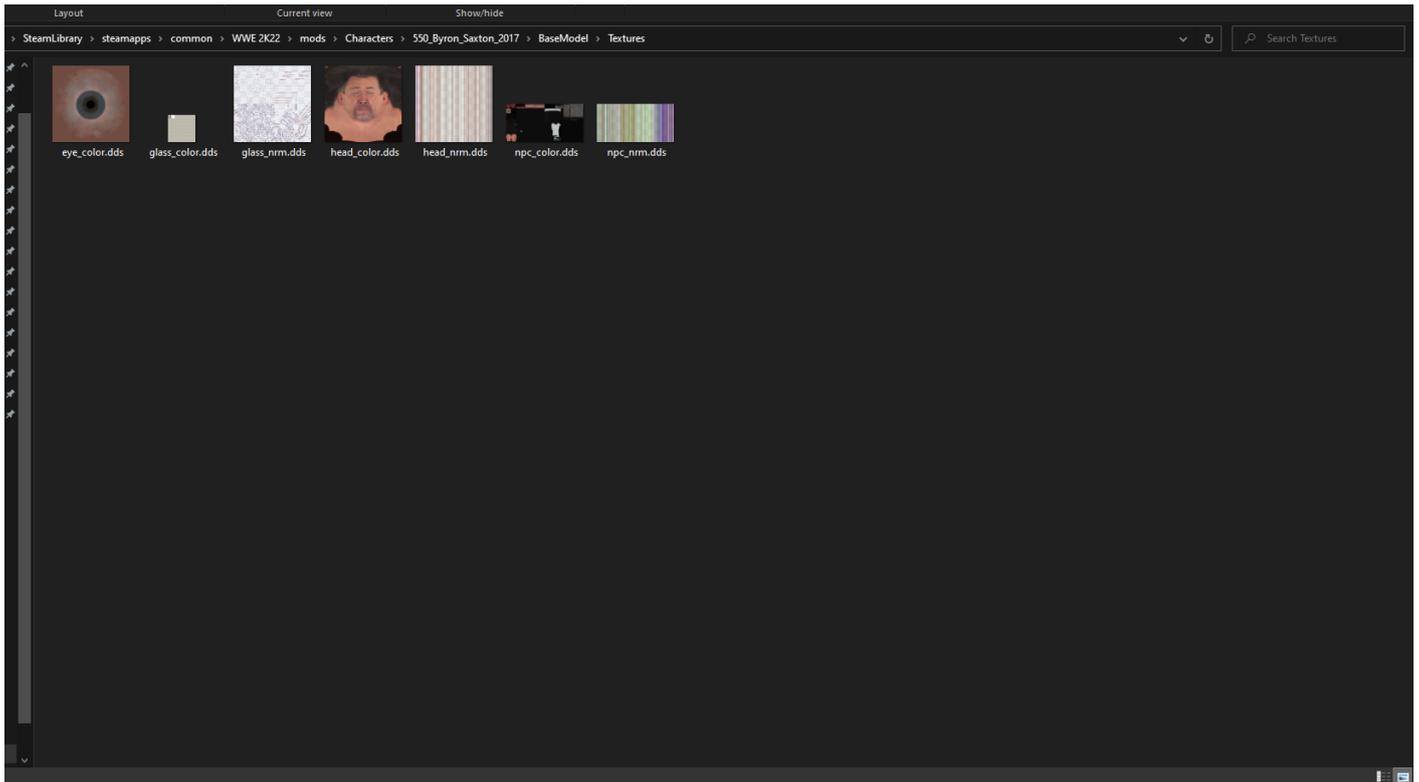
Installing Your First Mod

This is a very basic guide on installing your first mod. Following each step below, will teach you the fundamentals behind what tools you need and they operate.

Prerequisites

CakeTools	**Download Here**
Mod for installation	
CakeTools Fonts	**Download Here**

> This tutorial assumes that you have patched your WWE 2K22 exe to enable custom CAK files!

Step #1 |

For the purposes of this tutorial, we will be using **Dimma's WWE 2K22 Red/Blue mod**.

It is good practice once you have downloaded your mod, to extract it to a folder of its own somewhere on your computer.

Step #2 |

Inside your WWE 2K22 game directory, create a folder called **_mods**. This is now a dummy folder which will contain all your downloaded mods; CakeTools will use this to bake a new CAK archive.
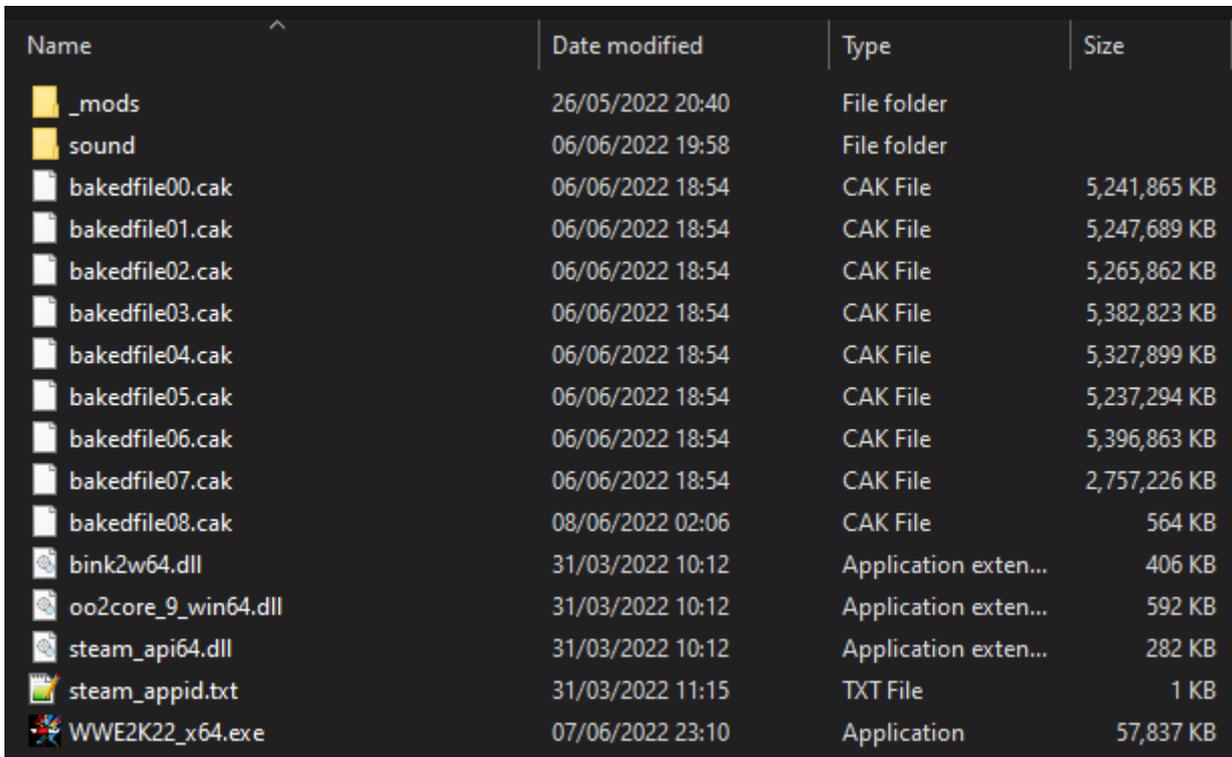
Name	Date modified	Type	Size
_mods	26/05/2022 20:40	File folder	
sound	06/06/2022 19:58	File folder	
bakedfile00.cak	06/06/2022 18:54	CAK File	5,241,865 KB
bakedfile01.cak	06/06/2022 18:54	CAK File	5,247,689 KB
bakedfile02.cak	06/06/2022 18:54	CAK File	5,265,862 KB
bakedfile03.cak	06/06/2022 18:54	CAK File	5,382,823 KB
bakedfile04.cak	06/06/2022 18:54	CAK File	5,327,899 KB
bakedfile05.cak	06/06/2022 18:54	CAK File	5,237,294 KB
bakedfile06.cak	06/06/2022 18:54	CAK File	5,396,863 KB
bakedfile07.cak	06/06/2022 18:54	CAK File	2,757,226 KB
bakedfile08.cak	08/06/2022 02:06	CAK File	564 KB
bink2w64.dll	31/03/2022 10:12	Application exten...	406 KB
oo2core_9_win64.dll	31/03/2022 10:12	Application exten...	592 KB
steam_api64.dll	31/03/2022 10:12	Application exten...	282 KB
steam_appid.txt	31/03/2022 11:15	TXT File	1 KB
WWE2K22_x64.exe	07/06/2022 23:10	Application	57,837 KB

When we extracted Dimma's mod, inside we see an existing _mods folder. Copy and paste this to merge with your existing folder that is located in your WWE 2K22 game directory.

SteamLibrary > steamapps > common > WWE 2K22 > _mods >
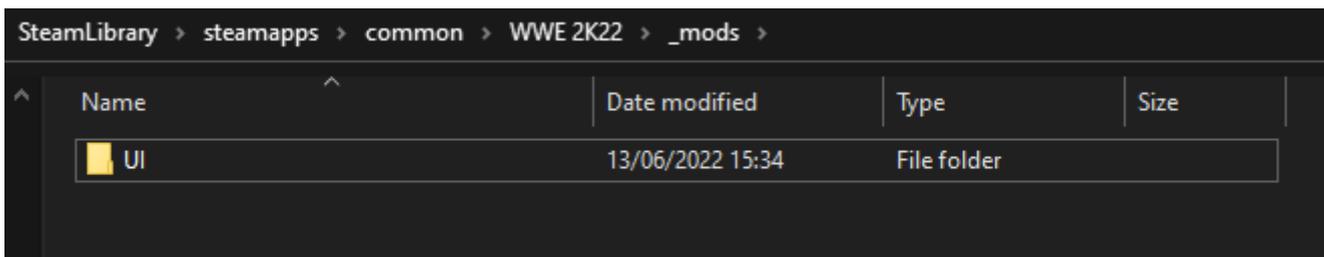
| Name	Date modified	Type	Size
UI	13/06/2022 15:34	File folder	

Step #3 |

Load CakeTools. Then choose '**File > Bake a Folder'**.
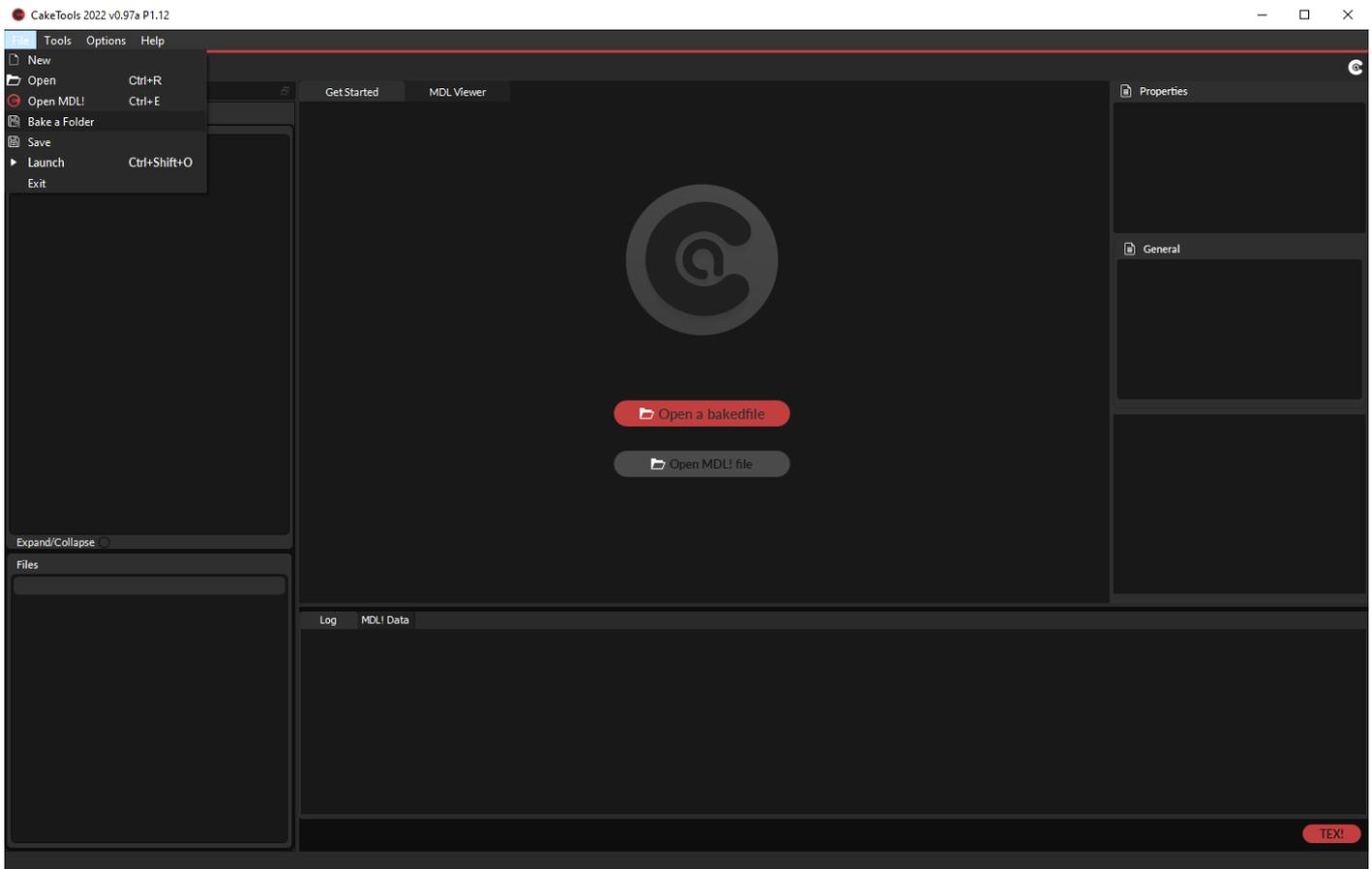
- Locate your _mods folder.

- Click to go through to your _mods folder and select '**Select Folder'**.
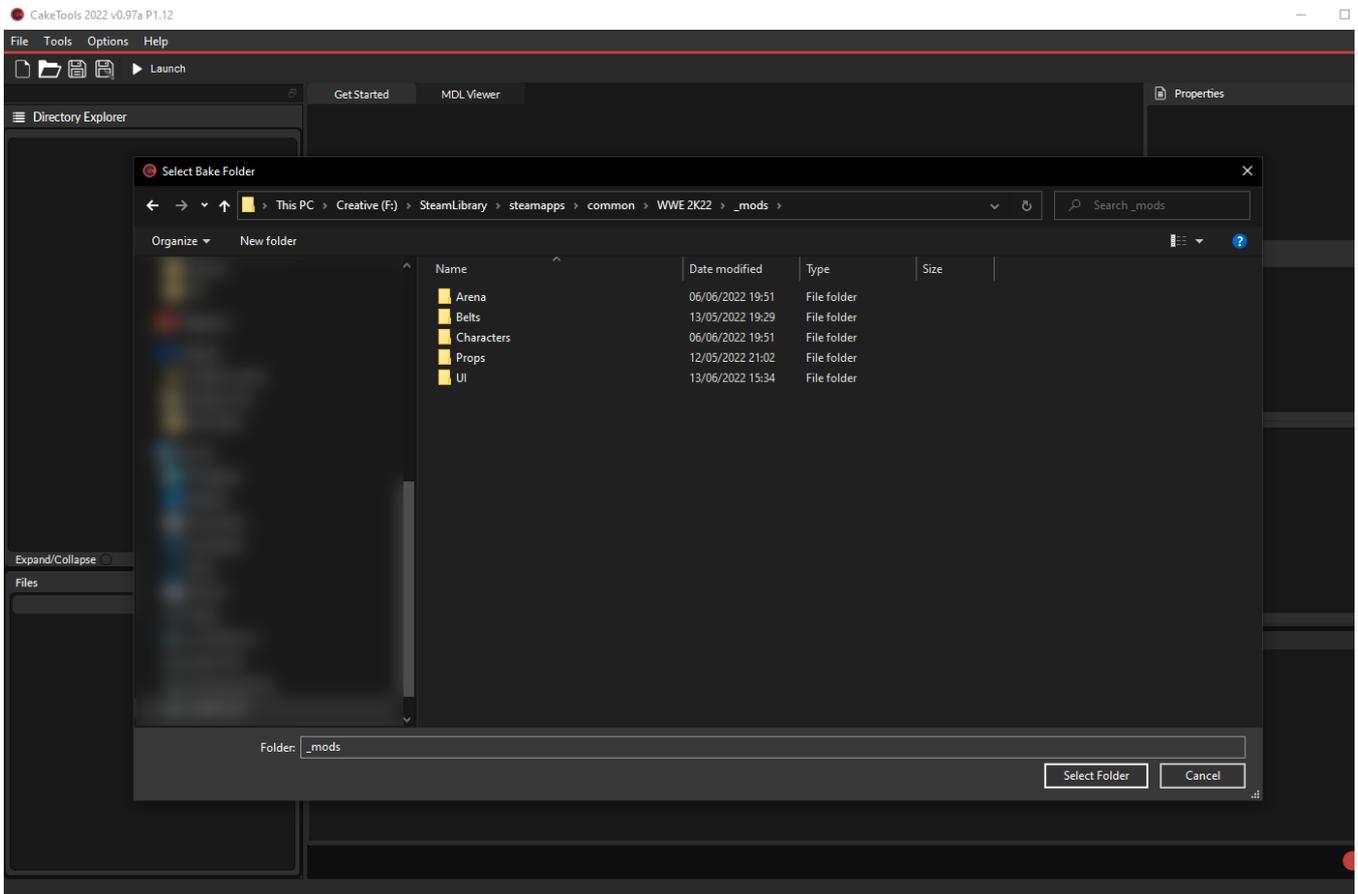
- You will be asked what index number you would like for your CAK. For unexperienced modders, the default 8 is what you're looking for.
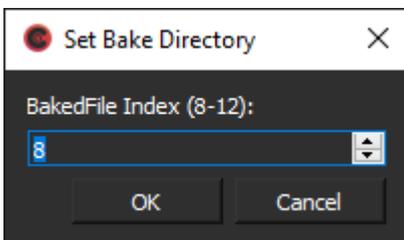
- Clicking OK will begin the process of baking your new CAK file. Once complete you will receive an alert notifying you of the successful bake.
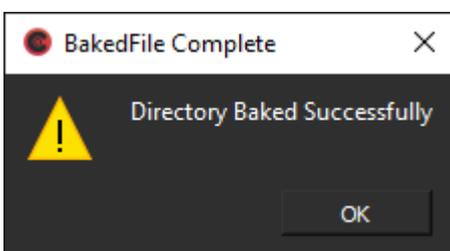

Inside your WWE 2K22 game directory, you will now see a bakedfile08.cak. This is your new CAK file that contains the mod you installed.

You **MUST** re-bake your CAK every time that you install a new mod.

Step #4 |

Well done! If you followed the steps correctly, your mod will now be visible the next time that you load the game.
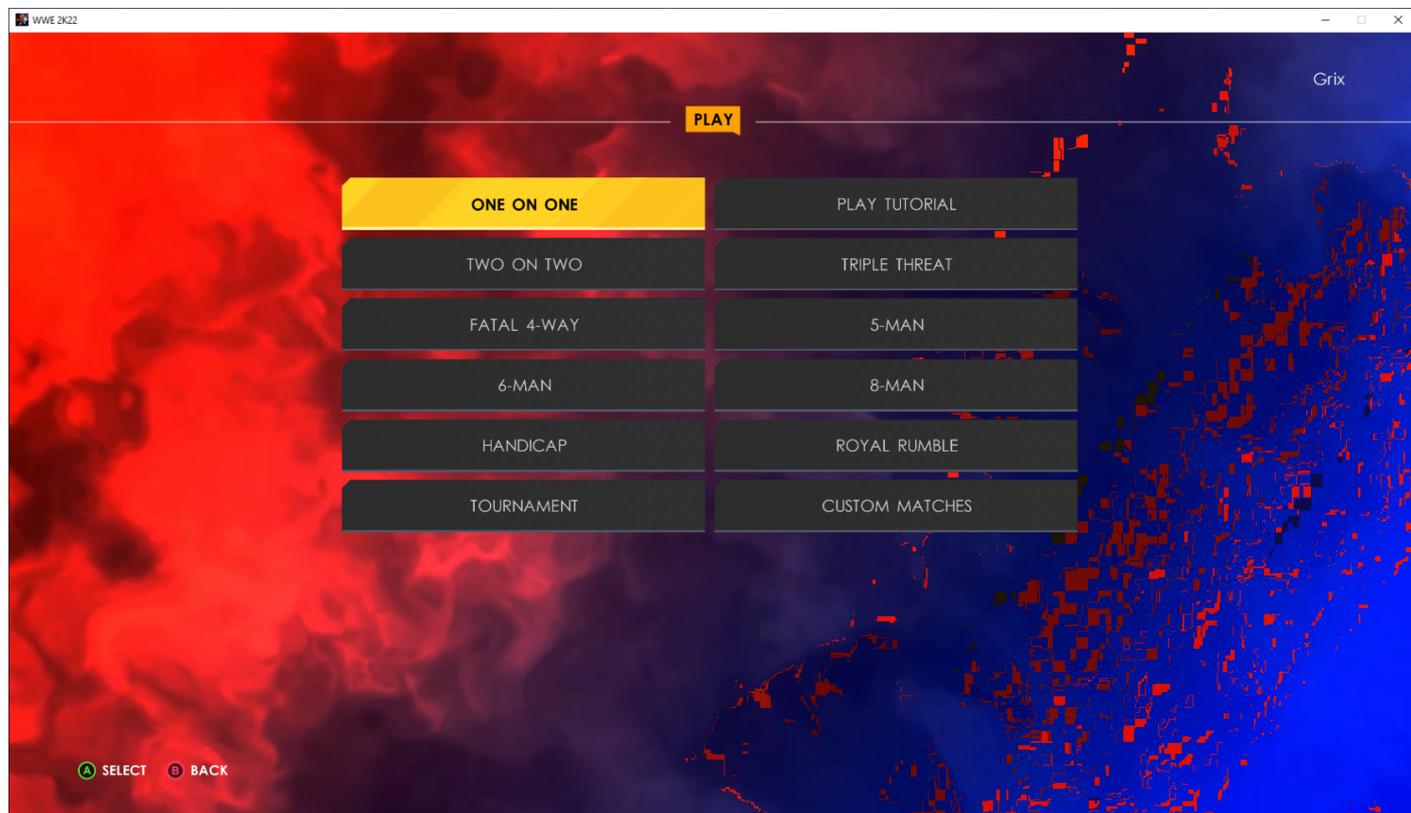
Converting a Video Loop for Home Screen

This is a guide to show you how to take a simple 10 - 20 second video loop and convert it to work with 2K22.

Prerequisites

CakeTools	**Download Here**
RAD Tools (Zip Password is RAD)	**Download Here**
Sample Video (MP4)	**Download Here**
7 Zip 64-Bit *OPTIONAL*	**Download Here**

Step #1 |

Make sure to install the RAD Video Tools before proceeding.

We will use a sample video loop which is copyright free and no credit needed. You would want to make your own with your favorite video editing/productions software (Sony Vegas, Fimora, After Effects, etc).
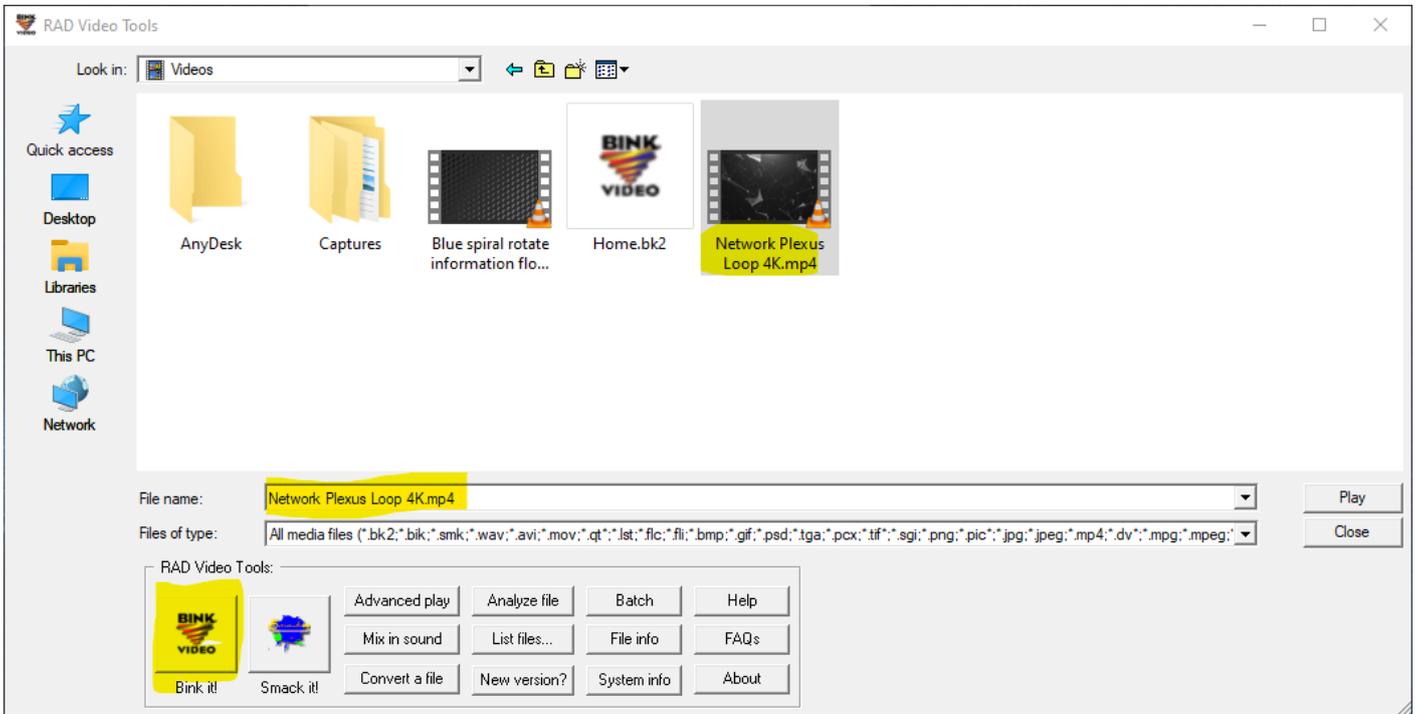
Change the name of the output file to *HomeScreenLoop-V4-1080.bk2* and click **[Bink]**!
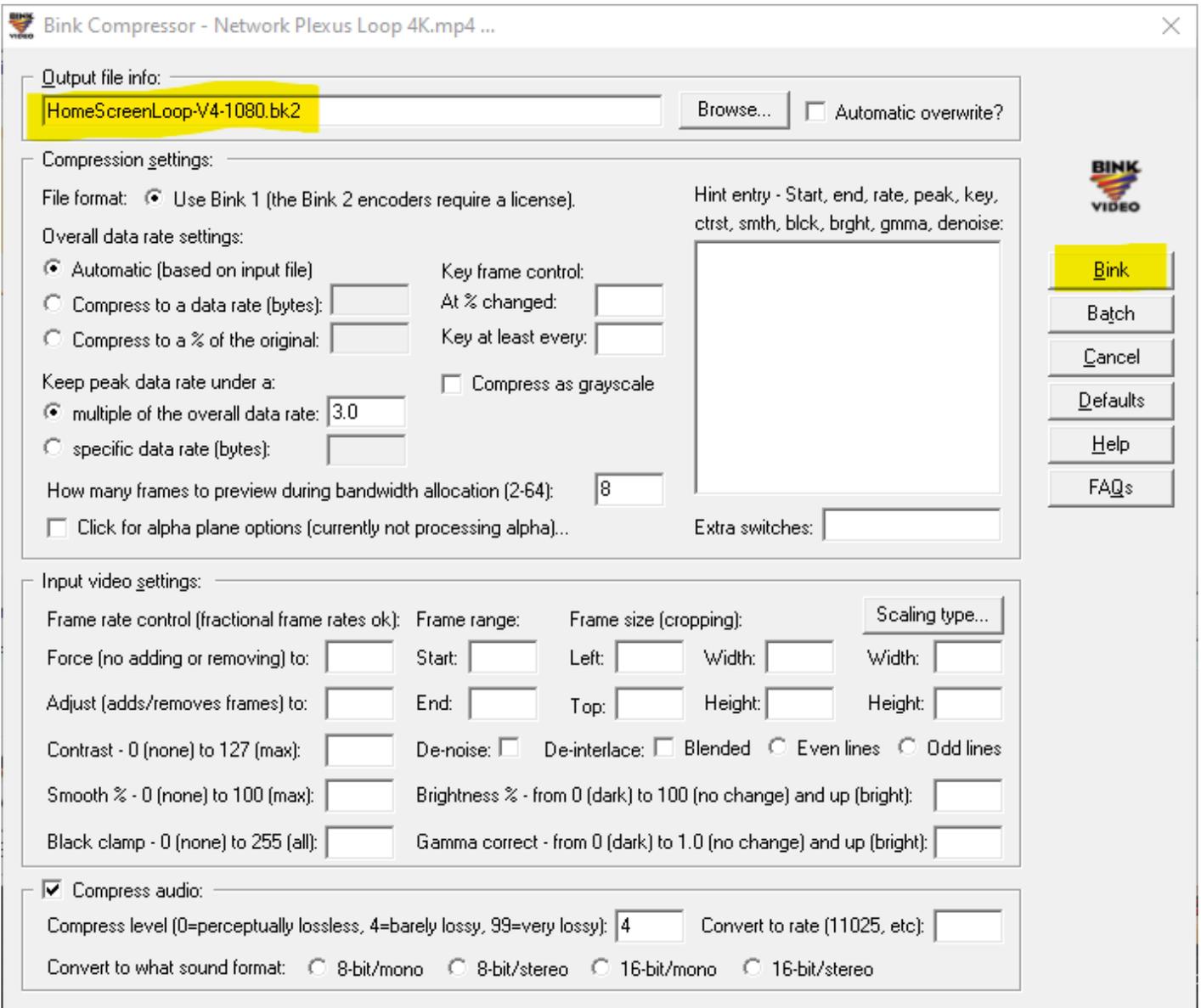
You will see a compression results box, when it is finished, you can close RAD Video Tools.
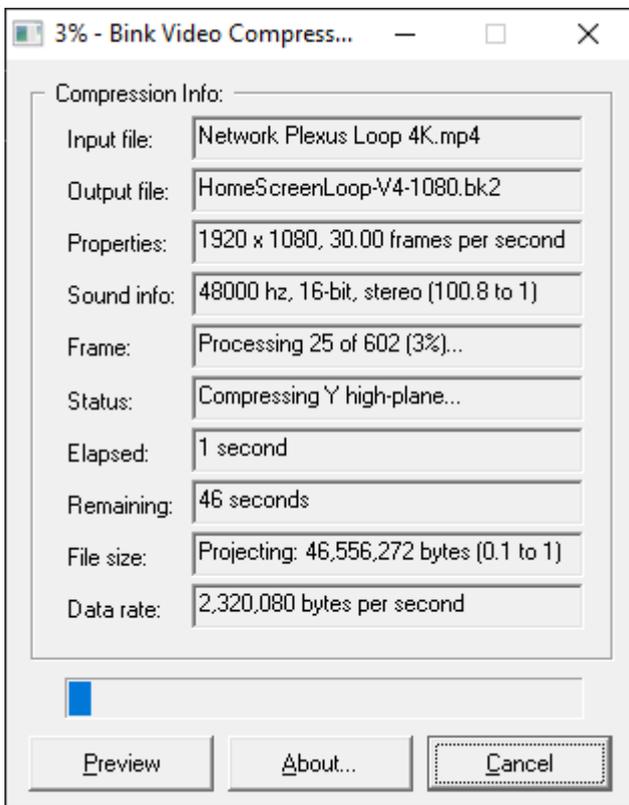
Now you can move this video into the _**mods\UI\Assets\2K22_video**folder in your 2K22, create the folders inside _mods if they are not already created.

Step #2 |

Load CakeTools. Then choose '**File > Bake a Folder'**.
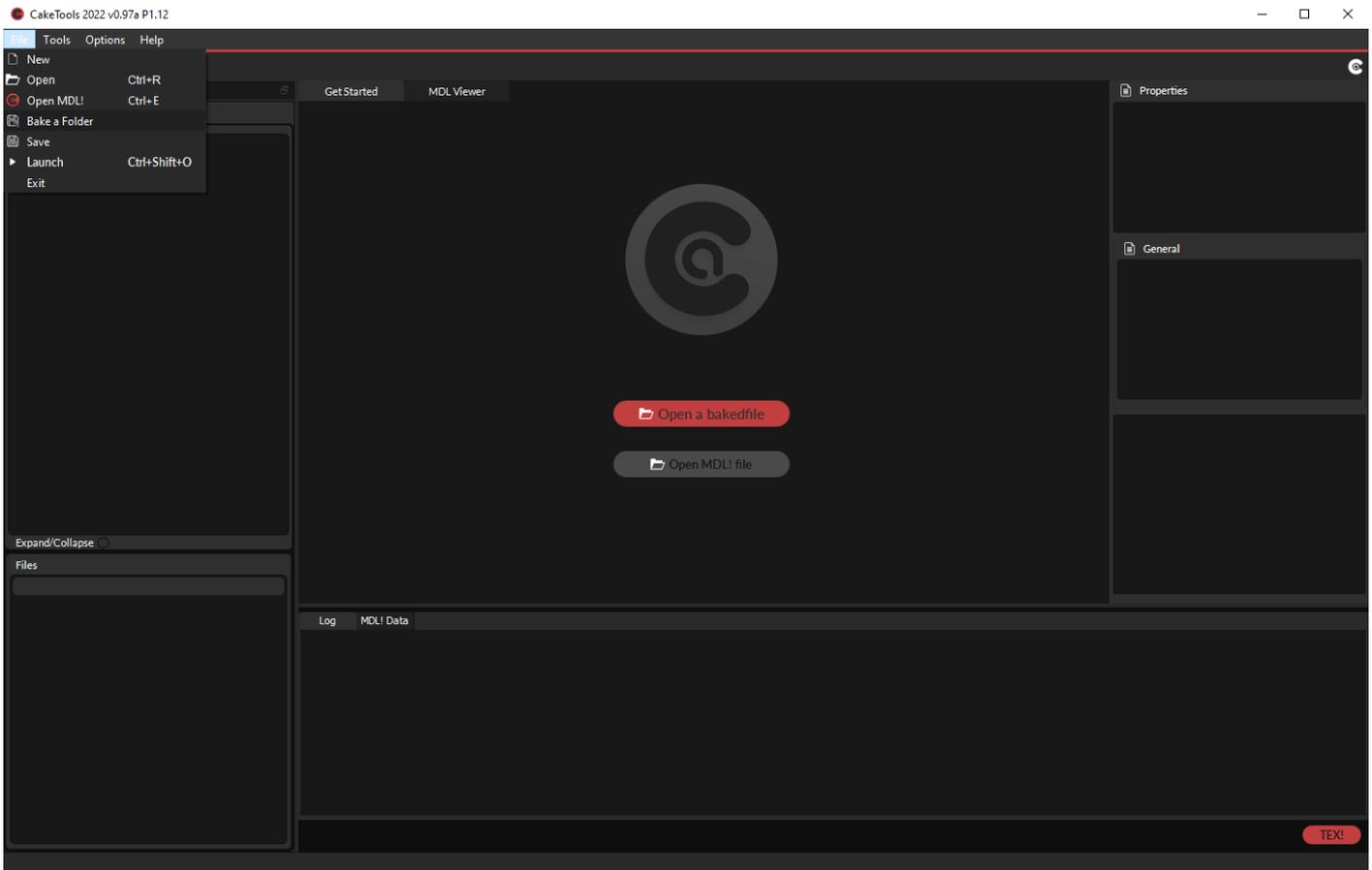
- Locate your _mods folder.

- Click to go through to your _mods folder and select '**Select Folder'**.
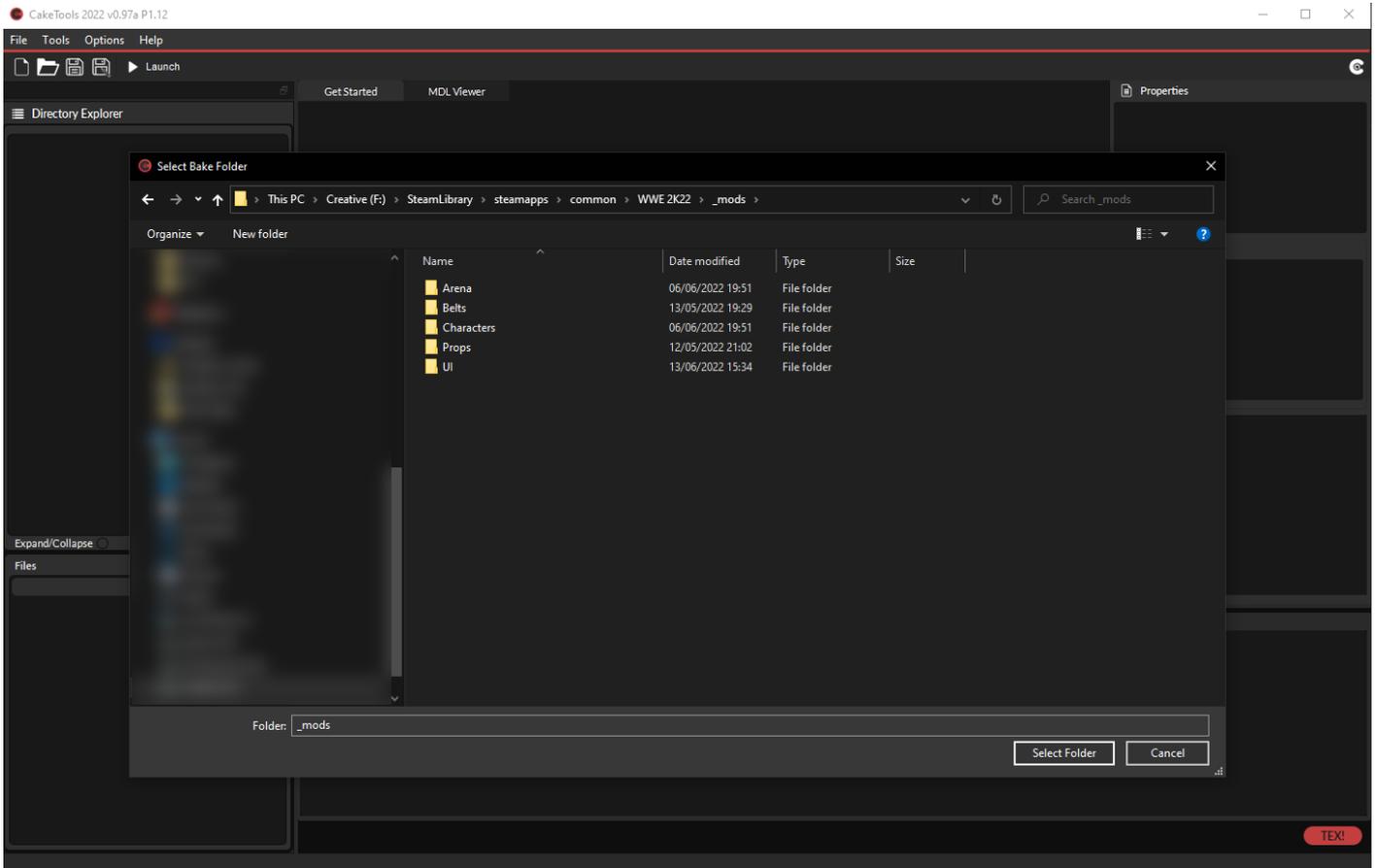
You will be asked what index number you would like for your CAK. For new inexperienced modders,
the default BakedFile Index 8 is what you're looking for.

- Clicking OK will begin the process of baking your new CAK file. Once complete you will receive
  an alert notifying you of the successful bake.

Inside your WWE 2K22 game directory, you will now see a bakedfile08.cak. This is your new CAK file that contains the mod you installed.

Step #3 |