TEKKEN 7

Stage Modding Text Guide
By Moruma

Hello, since speaking about stage modding is taboo, I'm going to flip the shit switch and spill the beans. This is what I've gathered experimenting on my own because nobody can truly offer any help except saying things like, "'It works just like item swapping', 'Just edit in hex and you will see', or 'If I could figure it out, then you can as well'. It's really not that difficult once you understand" ---> These example responses that I've listed... I can safely say are 100% complete BS. Lol

CAUTION: IT IS ALWAYS RECOMMENDED THAT YOU BACKUP YOUR GAME FILES BEFORE PROCEEDING WITH THIS TUTORIAL!!

General Information

Stage modding consists of the changing and editing of files that TEKKEN 7 loads. As basic stage modding is all that is possible at the moment, we can only do [b]SIMPLE[/b] things. However, with this information I am about to present to you, there should be literally be thousands possibilities.

Software Requirements

TEKKEN 7
HxD - Freeware Hex Editor (or other hex editing tool)
Folder Framework Tool by Koenji
T7 File Extraction Tutorial by MELOO

Types of Files

- Light is the source of light.
- Edit is a reference file for map.
- Effect are particles and more blueprints and settings.
- Demo contains extra data, sometimes stage transition data, and/or special events in ghost battle.
- Mob are background models and items in the background.
- Reload (DO NOT TOUCH) tells the game which part of the map is to be respawned once a particular action or condition has been met, breakable mesh and walls?
- Sound is an environmental sound data .
- Debug has no practical use at the moment without a debug menu.

- Switch is the transition file for Mishima Building.
- Lightstatic controls particular light depth and settings, not much to do with this file.
- Geom file is the geometry of the stage like floors and walls and what particles and meshes to appear upon ground interaction. It also the game how big the floor is and where the wall is.
- Color Grade is an adjustment of stage visuals such as color, contrast, and brightness.

Getting Started

Make sure you have extracted all of Tekken 7's game files and have downloaded Koenji's Framework Folder Tool!

First we should open three windows. One containing your "~mods" folder, one containing your "out" folder extracted with Quickbms, and the folder containing "u4pack". First, lets start out with something small. Open the Folder Framework Tool and type "2"
and press ENTER twice. Now open the "Frameworks" folder and there you will see a folder with the display name listing the time and date of when you created the folder. Now lets say we want to try modifying the light source of Mishima Dojo. Name the folder something to indicate the map of which you are editing such as "MishimaDojoMod" and add "_P" to the end. This allows the game to read the content of your mod before reading the content of the original game. Now it should be named, "MishimaDojoMod_P".

Now keep opening the subfolders until you have opened the "Map" folder. Once you have done so, lets switch to the window you've opened earlier named "out" within the "quickbms" folder. Now lets head to path. "out\Maps\". Inside you should find various files. Now lets say we want to change the original light to Arctic Snowfall's light. Look at the reference list further down this thread. The stage will be revealed as the stage number (ID) followed by the name. So "03" says that it is artic snowfall. Lets head back to the "Maps" folder within the "out" folder we opened earlier and pick a file that has the value, "03", and an extension of "_light" in its name since that is what we want to change in the Mishima dojo map. Now right-click "stg03_light" and select "Copy". Now head back to file we created with the framework tool named "MishimaDojoMod_P" and paste it into the "Maps" sub-folder again using CTRL+V or by right-clicking. Now we need to find the stage ID of Mishima dojo. The list says that it is, "00". So now we rename the file we pasted that displays, "stg03_light" to "stg00_light". We must rename it to that specific stage ID because Tekken 7 simply needs to think that a specific file is present, even if it is not. We have made our first mod!! Now we must pack and compress the file into a format the game can read.

Switch to the "u4pak" folder we opened from earlier. Drag the entire mod folder you named, "MishimaDojoMod_P" into the ROOT of the "u4pak" folder. Once the folder has moved to that location, drag and drop the same folder into the ".bat" file named "DROP_MOD_FOLDER_HERE". It will read, "[!] Any old MishimaDojoMod_P.pak files will be overwitten. Close the window to abort or press any key to continue...". Now press ENTER and let it do its thing. If it doesn't look like its extracting, you probably did not press it or you have run

out of disk space. Now press ENTER once more to close the window. Lastly, we open the folder that is inside the "u4pak" folder named "Pak". There you will find your stage mod. We must now head over to steam and enter our library. Right-click TEKKEN 7 and select, "Properties". Click on the "Local Files" tab and select, "Browse Local Files". Now open the "TekkenGame" folder, then the "Content" folder, and finally, the "Pak" folder. Drag and drop your recently extracted ".pak" file named, "MishimaDojoMod_P" and place it inside the "Pak" folder you opened from Steam.

Once you have done so you have successfully created and are ready to use your mod!! Start Tekken 7 and head on over to your stage for a breath of fresh air from crappy Tekken 7!! You might ask, "I have all these weird lights floating mid air.. wtf?". Not every map has a light in the same place, otherwise shadows wouldn't matter at all. Unfortunately, the only way to get rid of them is through hex. Sorry casuals...

Now What?

You must be feeling very bored after doing all of this light switching. Now it is time to turn it up a notch. We are going to now stack light sources on top of each other. Yes, I said stack. Any file within the stage can be swapped interchangeably and stacked. You can add up to [b]FOUR[/b] light sources or particle effect files and/or geometry files!! Remember, the game just simply needs to think that the file is there even if it isn't. For instance, we replace the ".edit" file that is within Mishima dojo.

So as like earlier, you are going to grab yet another light source from the main game's files and and paste it into the mod folder of where your first modded light source is. We are now going to rename that light file to "stg00_edit". Now repack your mod once again and load it up in Tekken 7. Now behold and say, "WOAH!! IS THIS EVEN REALL?!?!? OH MER GERDDDD!! LIKE DERP!!" at the marvelous creation before your sight. I mentioned earlier this can be done with other files other than light sources. Now it is time to experiment. See below for swapping rules and limits.

How Can I Make My Mod Look More Official?

If you see something that somebody has done, recreate it and do it better. Or create something you haven't seen before. Wondering what Forbidden Realm geometry would look like on top of Jungle Outpost? Give it a shot. Add some custom music using the Tekken 7 Jukebox Tool located in the forum. It will give it a nice touch. If you cannot get the volume right in the game, simply use Audacity and make a duplicate track and adjust the volume slider on that duplicated track and hear how it sounds through trial and error.

Swapping Rules

Light - This light file can be swapped with any other kind of stage file. Keep in mind that replacing this file means that you are REMOVING the light from the map. So unless you are replacing it
with another light file, obviously leaving it blank will result in very dark lighting which will look very poor. The only light left will be individual light files hidden in geometry.

Edit - This can be swapped with any other kind of stage file. Mostly has very to little purpose on a map. Of course there are exceptions as stated above

Geometry - This file should NOT be swapped with any other kind of stage file. When replacing the original geometry with another stage's geometry, the size, stage interactions, and shape MUST match to avoid desyncs.
For example: Dragon's Nests has a size of 24 x 24 and the shape of an octagon. Therefore a stage that is compatible to directly replace the geometry of Dragon's Nest must be a stage such as Arena, which has the same basic geometry.
What if I stack other geometry on top of each other? Yes, that is also an option. However, you cannot add the geometry of a stage that is smaller that contains walls. If you do, you must DISABLE all wall components in hex. Otherwise, stick to a wallless map and just throw the geometry on top. If you do not, when playing online you will be desynced. How can your opponent be playing on an original 24x24 wall stage while you are on a 24.2 x 24.2 wall stage? Lol Come on.
So now that you've stacked geometry, how can you get rid
of specific objects in the geometry. You're saying something like "My guy, why is this big azz pipe is blocking my nice buddha statue?". Unfortunately, the only way to disable any of these is once again through hex.

Sound - This should not be swapped with anything unless you hate hearing stage and character movement SFX.

Demo - This can be swapped with any other kind of stage file. Has some purpose that isn't as noticeable as other files.

Mob - This can be swapped with any other kind of stage file. Sometimes impacts background objects such as a crowd or items and other mesh materials.

Reload - Never, that's it. Never... Unless you want break the walls and geometry on every stage, sure why not?

Color Grade - Located in path of bms: "out\PostProcess\ColorGrading" and, "out\TekkenGame\Content\PostProcess\ColorGrading". Swap the files in the same way as you would a stage mod. The only difference is that you will be adding an extra folder to your "Content" folder of your mod and renaming the stage ID of that said color grade file.

NOTE: Every file branches off of each other. Removing or altering a file may change something in another file within the map! The game can reference a specific file up to four times in multiple files.

Color Legend

Red - Map will break if not handled correctly!! Any file listed under red that is i[b]DAMAGED[/b] may cause a desync or crash upon loading the game or map.
Yellow - Can partially break stage but swappable and usable.
Green - Will not harm the stage in anyway and is completely swappable and usable.

IMPORTANT: Reload, Geom, Switch (stg08 only), Stg08a_Demo

Moderately IMPORTANT: Demo, Sound, Effect, Mob

Least Important: Edit, Light, Lightstatic

In addition to color grading. However, color grading can get overwritten by certain stage lights don't remember which ones

References

- Stage ID, Sizes, and Shapes:
SAMPLE = Twilight (ColorGrading)
00. Dojo: (Main) - 24 x 20, Rounded Square.
00Sty. Mishima Dojo [Akuma vs Heihachi]: (Main) - 24 x 20, Rounded Square.
01. Forgotten Realm: (3F, 2F, 1F) - 24 x 18 x 25, Rounded Square.. (B1) Last Floor - 25 x 20, Rounded Square..
02. Jungle Outpost: (2F) - 13 x 23, Octagon. (1F) - 11.5 x 26, Octagon. (Wall Break) - 26 x 26, Octagon.
03. Arctic Snowfall: NO WALLS
04. Twilight Conflict: (2F) - 19 x 22, Square. (1F) - 16.5x22, Rectangle.
05. Dragon's Nest: (Main) - 24 x 24, Octagon.
06. Souq: (Main) - 17.5 x 26.5, Octagon.
07. Devil's Pit: (2F) - 24 x 24, Octagon. (1F) - NO WALLS
08. Mishima Building: (Main) - 24 x 24
08a. Mishima Building Rooftop: (Main) - 24 x 24, Octagon
09. Abandoned Temple: (Main) - 27 x 27, Octagon
10. Duomo Di Sirio: (2F) - 20 x 23, Octagon. (1F), 22.5 x 26, Rounded Square.
11. Arena - (Main): 24x24, Octagon
12. Helipad: (Main): 16 x 24, Hexagon. (Wall Break) - 16 x 31, Octagon.
12a. Helipad Night: 16 x 24, Hexagon. (Wall Break) - 16 x 31, Octagon.
12Sty. Modified Helipad: (Main) - 16 x 24, Hexagon. (Wall Break) - 16 x 31, Octagon.
13. Undamaged Mishima Dojo [Heihachi vs Kazumi]: (Main) - 24 x 20, Rounded Square.
13Sty. Crumbling Mishima Dojo [Kazuya vs Jack-5]: (Main) - 24 x 20, Rounded Square.
14. Brimstone and Fire: (Main) - 24.2 x 24.2, Octagonal.
15. Precipice of Fate: (Main) - 24.2 x 24.2, Octagonal.

16. Violet Systems: (Main) - 22.5 x 26, Rounded Square.
16sty. Violet Systems [Story]: (Main) - 22.5 x 26, Rounded Square.
17. NONE
18. Violet Industries Hallway: N/A
19. Kinder Gym: (Main) 24 x 24, Rounded Square.
20. Infinite Azure: NO WALLS
21. Geometric Plane: (Main) 24 x 24, Rounded Square.
22. Warm-Up Stage: NO WALLS
23. Howard Estate: (2F) 15 x 22, Rounded Square. (Wall Break 1) - 24 x 22, Rounded Square. (Wall Break 2) - 33 x 22, Rounded Square. (Wall Break 3) 42 x 22, Rounded Square. (1F) - 18 x 23.5, Rounded Square.
90. Bowling Alley: N/A
Chr_Cust. Customization: N/A
Chr_view. Portrait (Blur): N/A
WallStage. Lighting File

Paths

- Maps Files: Located in path of bms: "out\Maps" containing some map files and Howard Estate. For all other stages, located in: "out\TekkenGame\Content\Maps"
- Color Grades: Located in path of bms: "out\PostProcess\ColorGrading" containing Mishima dojo and Howard Estate. For all other stages, located in: "out\TekkenGame\Content\PostProcess\ColorGrading"

- Stage Specific Alteration List Names:
03. Arctic Snowfall: Effect: Snow Gust
05. Dragon's Nest: Effect: Fog Gust
06. Souq: Effect: Sand Dust
07. Devil's Pit: Effect - Lava Particles
12. Mishima Building: Demo: Floor geometry
14. Brimstone and Fire: Effect: Lava Particles
23. Howard Estate: Edit - Howard Estate entrance doors. Effect: Sakura blossoms

- Stage Specific Information:
[N/A]

Hex Editing

Hex editing gives you great flexibility on stage specific modifications. It allows you to change the depth and activation of most stage characteristics such as specific lights, geometry, particle effects, transitions, and sounds.
[N/A]

My Stage Mods Completed Using This Method:

1. Dragon's Garden
2. Mishima Building - Storm

Afterword: I expect to see thousands of mods since you all had been desperately asking. Now you have it, enjoy. I will be updating this ASAP to fill in missing gaps. And NO THIS IS NOT POSSIBLE ON A MAC OR LINUX.

Special Thanks
Koenji - Framework Tool
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MELOO - For Basic Modding Tutorial