OOTP24 Uniform Maker

The files in this .zip are for use with OOTP 23 (and higher) and – with the exception of the cap – are not backwards compatible with previous versions of OOTP. The uniforms generated by the Uniform Maker are compatible with OOTP23, but the font file will only work with OOTP24 (and higher, I presume).

What are all of these odd-looking jersey files for?

OOTP23 introduces a new player model and more advanced 3D lighting and rendering techniques, and three of the files in this .zip are intended for use with the new engine:

1) jerseys_<team name>_<home/away/etc>.png

You'll notice that the jersey in this file does not have a texture applied to it, even though it was appearing in the application. This is what is known as a "diffuse map" file. This is normal.

- 2) jerseys <team name> <home/away/etc> h.png
- 3) jerseys_<team name>_<home/away/etc>_n.png

The file ending in "_h.png" is what is known as a "height map" file. It is basically just a grayscale version of the finished jersey where lighter colors indicate "higher" elements and dark colors are "lower". A height map of a mountain, for example, would be lighter towards the peak. The height map, however, isn't used directly in-game. I'll explain that in more detail below.

The "height map" file is included to assist you in creating what is known as a "normal map" file. This is the file used by OOTP to determine the shading on the jersey. An automatically generated normal map is included in the zip file, but the algorithm used to create it does not produce the best results. The height map is also included should you wish to generate a better normal map than the app does.

Do I really need the normal map?

While it is entirely possible to skip the normal map and import *just* the diffuse map into OOTP, it will not provide the dynamic shading. See the two images below for an example of a jersey *without* a normal map (left) and one *with* a normal map:



How do I create a normal map that looks better than the included one?

To generate a higher quality normal map, you will need to rely on a third-party program. The one currently recommended by OOTP Developments is Materialize with the normal map style set to "Maya style."

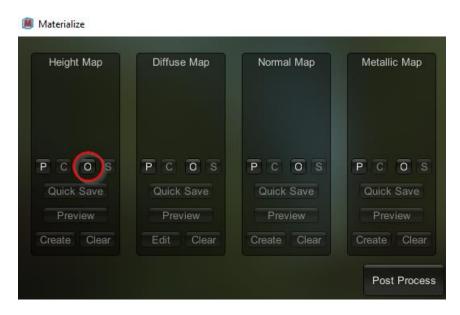
Choosing the Maya style is important since normal maps can be of different formats which all might appear correct but will look wrong in-game. Buttons, for example, may look as if they are popping "in" instead of popping "out" or it will look as if the light is coming from the wrong direction.

After starting it, first set the file format to PNG and click on "Settings" to choose the Maya style:





Then click on the "O" on the height map element on the top left of the app screen to open your height map:



Then click on the "Create" button of the normal map section and setup the settings as shown (these should be the default settings out of the gate):



Then click on "Set as normal map".



Now you can click on the "S" button on the normal map element. The normal map should be saved in the same folder as the diffuse map.



So if your height map is "jerseys_Unknown_Team_Home_h.png", the normal map has to be named "jerseys_Unknown_Team_Home_n.png" and you should end up with the following jersey files:



What is the "textured" file? Can I just use that instead?

The "jerseys_<team name>_<home/away/etc>_textured.png" file in the folder already has the texture "baked in," similar to how the jersey templates worked in previous versions of OOTP. Like jerseys created for earlier versions of OOTP it can be used although it may not provide optimal results and I cannot guarantee that it will work in future versions of OOTP. It is provided as a convenience only.

Why isn't there a height map or normal map for the pants?

OOTP uses a common normal map for all the pants, so you do not need to generate a height map or a normal map, the game handles that automatically.

I don't use Windows, is there a version of Materialize for my operating system?

Unfortunately, Materialize is Windows only, although there are a number of free programs for Mac and Linux that can generate normal maps, as well as an online tool at https://cpetry.github.io/NormalMap-online/. Materialize is the only tool that I know will generate normal maps that work properly with

OOTP, although to be honest you probably won't notice much of a difference. At least, not yet. As OOTP's 3D capabilities expand in the future, it may well become noticeable.

What about the fonts? What do I do with them?

OOTP24 has added the ability to have team-specific dynamic names & numbers on the backs of the jerseys. They are included as .webp files, which are slightly smaller files that OOTP looks for when finding the fonts – .png files work just fine, but .webp is what OOTP defaults to so that's what the app creates.

At this time, the font files have to be placed in the "data\jersey_fonts" folder to be recognized by the game. As long as the files match the standard "<team name>_<home/away/etc>.webp" (i.e. "miami_marlins_home.webp") naming scheme OOTP should pick them up automatically. Note that they should *not* have a prefix like the jerseys, caps, and pants do, and *cannot be in any other folder*, even though the game currently lets you choose a file from other folders.

So that's great and all, but what's with the .uni file? You never explained what that does!

I'm glad you asked! The .uni file is actually just a .json file which can be loaded back into the Uniform Maker. It's not perfect, but I'm working on that.