

CUSTOM PLAYER FLAGS

April's Breeze Unfurled: A Barely Comprehensible Guide to Creating Custom Player Flags in MOO3

by the Grand Potato
(James Owen Lowe)

This guide is mostly for PC users running Windows. The rest of you might be interested, too, but I'm not sure how much will be applicable to the Mac version.

The Tools

There are a few tools you'll need to get started. First, you need a good compression utility that can read, save, and modify zip files. I use WinRAR (which is shareware and can be downloaded from www.download.com), but anything that can do the job will work. Second you need an image editing program capable of reading and writing 32-bit PNG's (millions of colors plus an alpha channel). For commercial programs, Macromedia Fireworks is the best I've been able to use. Photoshop might do the job, but I haven't figured out how to do 32-bit PNG's (if anyone knows, let me know). Fireworks MX is available for 30-day trial on www.macromedia.com.

There is also a list of programs that are capable of reading and writing the PNG format here: <http://www.libpng.org/pub/png/pngaped.html>

One of the great things about the data files of MoO3 is their accessibility and use of common file types. Spreadsheets are in text modifiable by importing them into Excel, and all of the two dimensional, non-video graphics in the game are in the PNG format. You'll have a hard time, however, finding the files if you poke around in the game directories.

The Files

There are these strange things galled MOB files hiding out in there, mocking you. Really, they make fun of you when you're not looking. One day, sore from all the tomfoolery I suffered at the hands of the angry MOB, I found out their secret: they are just zip files in disguise.

To find the existing player flags, you need to find a file called "Graphics.mob" in the following directory (if installed to the default):

```
C:\Program Files\Infogrames Interactive\Master of Orion  
3\GameDataSets\Classic_01\GameAssets\Common
```

A note: This guide was updated on February 24, 2003, to reflect some things Leiavoia and I discovered while working on the Official Flag Contest. It will be **much** easier to mod MoO3 now, especially flags. What we discovered is that if you re-create the directory structure within the mob files into the directory that the mob file is contained in. For example, if you want to replace the first player flag (pflag01_cr.png), which is contained in the mob file under /graphics/player flags/, you create a directory with the same name in the /GameAssets/Common/ directory and put the file there.

It acts as an override, since the game looks in the directory for a file before the mob file. To see what the proper file names and directories are, open the mob file using your selected compression utility.



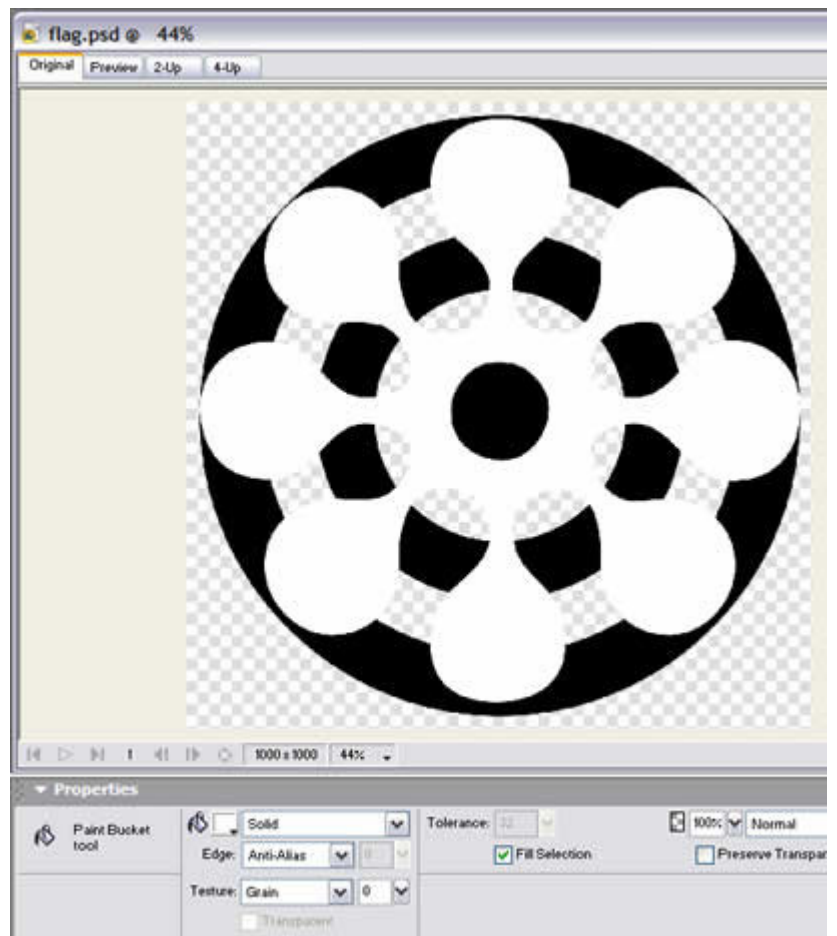
The Image

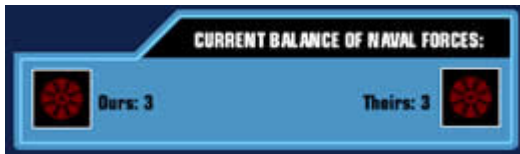
"How do I create the image?" you may ask... ah... I'll help you there, too.

MoO3's art director, Rantz Hosely, told me that the flag files needed to be black, white, and alpha channel only, like the flowery bull's eye to the right. I've found that to not be entirely true. Simple designs and shapes are best, but we can have a little more fun than that!

I usually create my images large, and then use the export or "save for the web" features of the program to save the output files in their proper size and type.

Before you start creating your image, remember that the game will be overlaying a color on top of your flag. All white areas will be the random color selected for your empire, and anything darker will be a proportionally darker version of the same color. It will look like you were looking at your flag through rose-colored glasses (if your empire's color is rose).





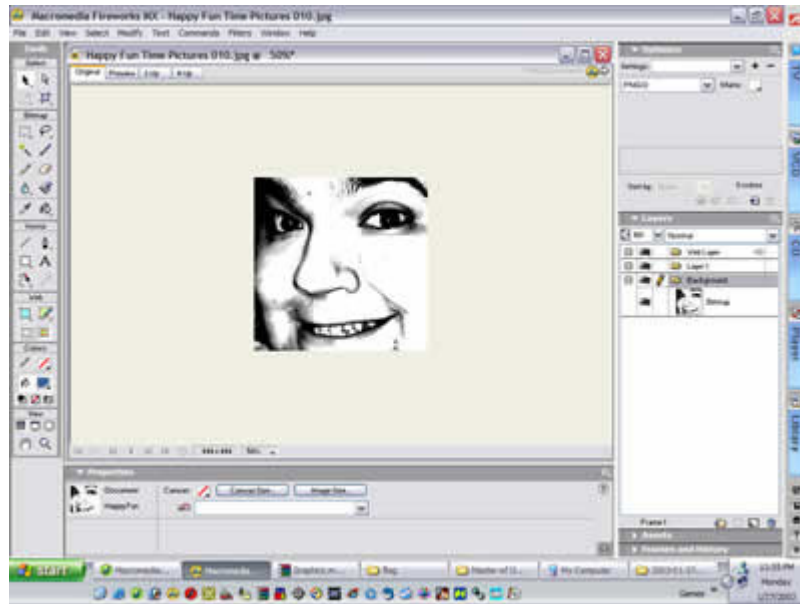
Images need to be saved as a 32-bit PNG, and the larger file (pflagXX_cr.png) has to be 32x32, and the smaller 20x20. These are used for different purposes in the game.

More Fun

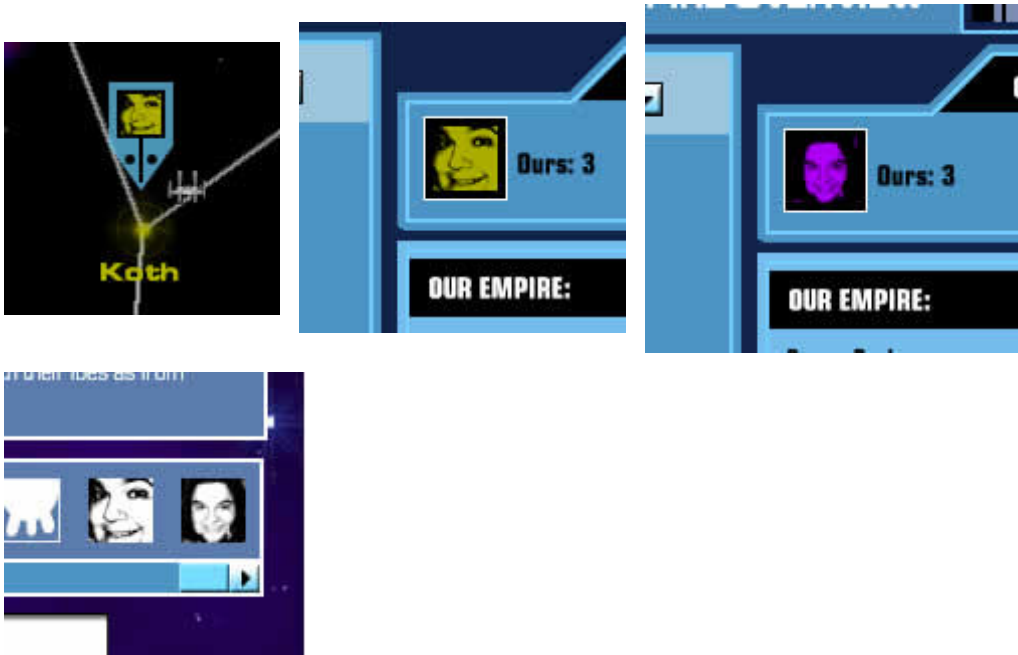
I've found that you don't have to stick with black or white, simple shapes. I've created a few for myself that out of a great source: my own face!



I snapped this one from my digital camera and opened it in Fireworks. I cropped it down to what I wanted to keep, and made sure that the area was square (so conversion to 32x32 and 20x20 wouldn't cause distortion). I then used a few tools to make the image grayscale and higher contrast in order to make the whites white and blacks black. Since the small images have very little image information, we want to make sure that what is important is visible in the final product. So I was left with this:



I then exported the files to the proper size, and added them to the override directory as described above. This is what it looks like in-game: (click on the cropped images to get the full context)



Remember, in multiplayer, no one will be able to see your flag unless they also have your flag at the same number in their override directory! Share them with your friends!

To summarize the rambling above:

- Create your images: One 32x32 32-bit PNG and One 20x20 32-bit PNG
- If you are going to replace an existing flag, name the two files pflagXX_cr.png (large) and pflagXX_g.png (small) where XX=the number of the file to replace. If you are making a new flag, the number will be the next in sequence.
- Create your directory in the MoO3 install directory:
\GameDataSets\Classic_01\GameAssets\Common\Graphics\Player Flags\
- Place the files in that directory

- Play!

A Final Note From The Editor

As you can see, flag hacking is a little trickier than just dropping in some files. Not *too much* trickier, but not entirely simple either. We as a community need to come up with some standards for distributing flags and if some brave soul would like to try it, we also need to come up with a way to make a self-installing flag pack that does not require zipping or unzipping files for the user. Just plug and play. If any technophiles figure out a good way to do this, let us know! Eventually, it would be nice if we could compile and distribute "standardized flag packs" so that everyone in multiplayer can use each other's flags.