

enough is enough - how to make a dmg the way you expect it

June 2008, Guy Hoffman

here is the step-by-step instruction to making a dmg to distribute your software that will open in icon mode, with a background image, and symbolic links (aliases) to drop your file in.

for people who don't want to "read more" or trust os x magic.

just a step-by-step. follow me.

1. Open Disk Utility
2. Press on 'New Image'. Use the following options:
 1. Pick a Volume Name - we will from now call it `NAME`
 2. Volume Size - should be enough to contain your files. Note that you can pick a custom size, not just the preset ones. Don't worry if it's bigger than you think you need. There's a some overhead. The final file will be smaller.
 3. Leave everything else as is. Make sure the Image Format is "read/write disk image".
3. Save as `NAME.dmg`
4. If it's not already open, open the new dmg file. This creates a Disk Volume mount, and an icon on the Desktop
5. Using the terminal, create a directory called `.background` inside the Volume. Your new Volume can be found under `/Volumes/NAME/` - the directory can be any name, the dot just makes sure it's not visible in the Finder
6. Put your background image in that directory
7. Double-click on the Disk Volume icon on the Desktop, to open it as most users will
8. Arrange the folder as you like it - remove the menu bar, change it to icon mode, make aliases to your install folders and drag them into the window, and using Cmd-J open the Display Preferences to choose the background image. Make sure you select the one that's inside the Volume's background folder.
9. Eject (Unmount) the Volume
10. Mount the volume again (by double-clicking on the dmg file)
11. Now make a new directory somewhere, let's call it `staging`
12. Put all the same files you put in the Volume into `staging`, including the `.background` directory with the image.
13. In the terminal, copy the `.DS_Store` file from the Volume to `staging`
14. You can now eject/unmount the Volume
15. In the terminal, go to the directory containing `staging` and run the following two commands (credit goes to [jwz](#))
 1. `hdiutil makehybrid -hfs -hfs-volume-name NAME -hfs-openfolder staging staging -o tmp.dmg`
 2. `hdiutil convert -format UDZO tmp.dmg -o NAME.dmg`
 3. Remember, `NAME` is your App/Volume/Dist name, all the rest is verbatim
16. You can now remove `tmp.dmg`

Voilà! You now have a properly sized, compressed, read-only dmg file that will open as you want it with a background image and links to folders.

For comments, suggestions, and bug-reports, please write `guy@media.mit.edu`