

DropDMG 2.6 Manual

Michael Tsai
c-command.com

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1 Introduction

1.1 Disk Images

Disk images are a wonderful way of packing entire folders or disks into a single file, either for transport across the Internet or simply for backup. They are Apple's preferred format for distributing Mac OS X software. Unlike other formats, disk images preserve long filenames and Mac and Unix metadata. They are compatible with all versions of Mac OS X; to access an image's content, simply double-click the image file in the Mac OS X Finder. The contents of a disk image can be accessed in-place; unlike with archives, you can view and open the files on a disk image without spending the time—or disk space—to uncompress the entire image. Apple's Disk Utility can be used to create disk images, but DropDMG is more powerful and easier to use.

1.2 DropDMG

DropDMG is the easiest way to create Mac OS X disk images. Just drag and drop a folder or file, and DropDMG will create an image in `.dmg`, `.img`, or `.smi` format—or a Tar, Zip, or StuffIt archive. Or, you can drag an existing image or archive file onto DropDMG to easily convert it to any of the other supported formats. DropDMG supports encryption, segmented images, and custom icons, and it can create images with rich-text license agreements in multiple languages. There are many time-saving features such as temporary preferences when you hold down Option, remembering recent folders, configurations to keep track of popular combinations of settings, and the ability to create more than one image or archive at a time. All the options are available from [Automator](#)¹, AppleScript, and from the `dropdmg` command-line tool.

Here's a brief rundown of DropDMG's features:

- [Create and convert](#) images and archives (Tar, Zip, or StuffIt) simply by dragging and dropping or by using a [keyboard shortcut](#).
- Create `.dmg` images in many [formats](#), as well as `.img` and `.smi` (self-mounting) images that work on Mac OS 9 and `.cdr` master images that work on Windows. Compressed `.dmg` images are smaller than Disk Utility's but are fully compatible.
- [Segment](#) images, [encrypt](#) them, and [encode](#) them with BinHex, BZip2, GZip, or MacBinary.
- Include rich text [license agreements](#), in multiple languages.
- Easily add a [custom icon](#) for the mounted image.
- Make images that [auto-open](#) when you mount them. Or make [Internet-enabled](#) images that automatically expand when you download them.
- Hold down Option when creating an image to specify [temporary options](#) for that image without changing the preferences.

¹<http://www.apple.com/macosx/features/automator/>

- Save named [configurations](#); by switching between different configurations, you can instantly recall different combinations of options.
- All options are available from [Automator](#)², [AppleScript](#), and the command-line `dropdmg` tool.
- Authenticate as an administrator to copy protected files.
- Create more than one image at a time to take advantage of dual processors, or just so you don't have to babysit the program when creating multiple images.
- [Fix](#) downloaded disk images so that they open and mount properly.

2 Setting Up DropDMG

2.1 Requirements

DropDMG 2.6 has been developed and tested on Mac OS X 10.3 and 10.4. It requires Mac OS X 10.3 or later.

DropDMG 2.2 is compatible with Mac OS X 10.2 and is [still available](#)³.

If [StuffIt Expander](#)⁴ 9.0.1 or later is installed, DropDMG will be able to convert StuffIt archives to other formats.

If [StuffIt Deluxe](#)⁵ 7.0 or later (9.0.1 recommended) is installed, DropDMG will be able to convert disk images and other kinds of archives to StuffIt X format. In addition, StuffIt Deluxe allows DropDMG to convert more than one StuffIt archive at a time and to convert StuffIt archives without opening the StuffIt Expander application. Recent versions of StuffIt Deluxe automatically install the command-line `stuff` and `unstuff` tools that DropDMG requires; with older versions, you will need to install these tools separately.

2.2 Installation

Double-click the `DropDMG-2.6.dmg` file to mount the DropDMG disk image. Then drag the DropDMG application to your **Applications** folder.

To install the `dropdmg` command-line tool, choose **Install “dropdmg” Tool** from the **DropDMG** menu. DropDMG will ask for an administrator password, as it needs to copy the `dropdmg` file to the protected `/usr/bin` folder.

The [DropDMG service](#) will become available the next time you log in.

²<http://www.apple.com/macosx/features/automator/>

³<http://c-command.com/downloads/DropDMG-2.2.dmg>

⁴<http://www.stuffit.com/mac/expander/index.html>

⁵<http://www.stuffit.com/mac/deluxe/index.html>

2.3 Updating From DropDMG 1.x–2.x

DropDMG 2.6 is a free update for registered users of previous versions of DropDMG. Simply replace your old copy of the DropDMG application with the new version. To take advantage of new features in the `dropdmg` command-line tool, choose **Install “dropdmg” Tool** from the **DropDMG** menu.

2.4 Always Run With Root Access

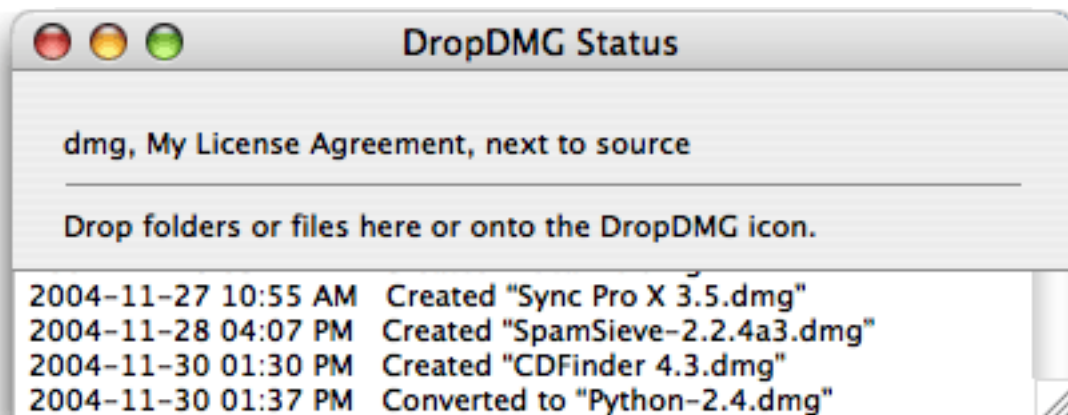
Normally, if DropDMG does not have the privileges that it needs in order to create an image or archive, it will prompt you to authenticate by entering an administrator password. This authentication lasts for a few minutes, or until you quit DropDMG (whichever happens first).

If you choose **Always Run With Root Access** from the **DropDMG** menu, DropDMG will retain administrator access—even between launches—until you choose this command again (to uncheck it). This saves you from the trouble of having to keep entering your password, and it makes it easier to run DropDMG unattended (for example, as part of an automated, scheduled backup). However, this is a *potential security risk*. Anyone with access to your copy of DropDMG will be able to access and modify any file on your Mac.

3 Basic Operations

3.1 The Status Window

The top portion of the **DropDMG Status** window displays the current options that will be used for creating images. The options may be changed using the **Preferences** window. You can also Control-click on the striped portion of the window to quickly change common preferences using a contextual menu.



The bottom portion of the status window displays a log of the images that DropDMG has created, converted, and fixed. Choose **Clear Log** from the **File** menu to erase the contents of the log.

3.2 Creating and Converting

DropDMG tries to determine what you want it to do based on the files or folders that you give it. For example, suppose that you've set the preferences to create `.dmg` disk images. If you give DropDMG a folder, it will create an image of the folder. If you give it a `.zip`, `.tar.gz`, or StuffIt archive, it will convert the archive into a `.dmg` disk image. If you give it an image in another format, DropDMG will convert it to `.dmg` format, using the options specified in the preferences. Conversion can also be used to add or remove license agreements or encryption, or to segment or join an existing image. If you give DropDMG a file that's not an archive or image, DropDMG will create a new image containing just that file.

When asked to create an image from a volume, DropDMG creates a special "device image" that is an exact copy of the volume, not just its constituent files. If the volume was bootable, the image may be burned to CD or DVD and the resulting disc will also be bootable.

When given multiple files or folders, DropDMG creates a separate image or archive for each. To group multiple items into a single image or archive, move them into a new folder, and then drop it on DropDMG.

So how do you "give" DropDMG a file or folder to work with? There are several ways:

3.2.1 Drag and Drop

Drag and drop one or more files or folders onto the DropDMG icon, either in the Finder or in the Dock; or onto the top portion of the status window.

Hold down the Option key to choose a different configuration or options than the ones currently selected.

3.2.2 Service

Select a file or folder in the Finder or [Path Finder](#)⁶ and choose **DropDMG** or **DropDMG (Ask For Options)** from the **Services** menu (inside the application menu). The ordinary **DropDMG** command has a keyboard shortcut of Command-Shift-D. You can customize the keyboard shortcuts in the Keyboard pane in System Preferences or using [Service Manager](#)⁷.

⁶<http://www.cocoatech.com/pf.php>

⁷<http://www.blacktree.com/apps/servicemanager/index.html>

3.2.3 Automator Workflows

You can use the [Automator](#)⁸ application in Mac OS X 10.4 to create workflows incorporating DropDMG actions. Frequently used workflows can be accessed from a system-wide menu or saved as droplets.

3.2.4 AppleScript

You can use AppleScript to automate DropDMG. For example:

```
-- create a new image
tell application "DropDMG"
    create image from path "~/Desktop/folder" format NDIF compressed
end tell

-- convert an image
tell application "DropDMG"
    set myImage to "~/Desktop/image.img"
    create image from path myImage format zlib compressed
end tell
```

See [AppleScripting DropDMG](#) for more information about the available AppleScript options.

3.2.5 Command-Line

In Terminal:

```
dropdmg -f ndif ~/Desktop/folder
```

Run `dropdmg` with no arguments to see a list of the available options.

3.2.6 Menu

Choose **New from Folder/File...** or **Convert Image/Archive** from the **File** menu. Unlike the methods above, when you use one of these menu commands, DropDMG does not try to determine whether you want to *convert* the source file/folder or *create* a new image/archive. It knows what to do based on which command you chose.

⁸<http://www.apple.com/macosx/features/automator/>

3.3 Fixing Disk Images

Sometimes a downloaded disk image won't open because the Web server told the Web browser that the disk image was a text file. DropDMG can fix such images by setting their type and creator codes so that the Finder will open them. There are two ways to fix disk images:

- Drag and drop one or more disk images onto the DropDMG icon or onto the **DropDMG Status** window while holding down the Control key.
- Choose **Fix Image...** from the **File** menu.

3.4 Getting Information About Disk Images

Choose **Get Image Info...** from the **File** menu to get information about a disk image, such as its format and compression.

3.5 Mounting Images

You can mount an image on the desktop by double-clicking its icon. This works on any Mac OS X machine, whether or not DropDMG is installed.

You may, however, want to mount an image at some other location in your local filesystem. This can be done using the **Mount Image At...** command in DropDMG's **File** menu. It will prompt you for an image file and a folder, and then it will mount the image inside the folder.

Why would you want to do this? Perhaps you want to reduce desktop clutter. Or maybe you know that another application will be looking for its files in a particular place. Maybe [FileVault](http://www.apple.com/macosx/features/filevault/)⁹ is overkill for you, but you still want to protect some of your files (using an encrypted disk image) and make them available inside your **Documents** folder.

3.6 Verifying Disk Images

Choose **Verify Image Checksum...** from the **File** menu to verify that an image file is in working order (not damaged).

3.7 Making Images With Background Pictures

When making an image from a folder, DropDMG copies to the image the background pictures and view options of all the contained folders. It does not copy this information for the top-level folder

⁹<http://www.apple.com/macosx/features/filevault/>

because Apple does not provide a way to do this. If the top-level background picture and view settings on the image are important to you, you can set them as follows:

1. Drag the folder onto DropDMG and create a read-write image.
2. Mount the image in the Finder.
3. Set the background picture on the mounted image. Make sure the picture file you select is saved somewhere on the disk image. Set the view options and arrange the icons the way you want them.
4. Sometimes the Finder doesn't save changes to the view options. It may help to create and delete an empty folder on the image.
5. Unmount the image in the Finder using the **Eject** command in the **File** menu.
6. Drag the `.dmg` file onto DropDMG and convert it to read-only or a compressed format.

Some people like to save the background picture file in an invisible folder named `.background`, so that it is not visible on the mounted image. This folder will not be visible in the **Save** window of your graphics program. You can, however, type Command-Shift-G. This will let you enter the path of the `.background` folder so that you can save the picture in it.

4 License Agreements

Disk images can include license agreements, which are displayed to the user whenever the image is mounted. DropDMG lets you define multiple license agreements ahead of time. Each agreement may be localized into multiple languages. You can choose which agreement (if any) to include with an image. When you make an image, DropDMG will add that agreement, and all its localizations, to the image file.

To manage your license agreements, choose **Show Agreements** from the **License Agreements** menu. This opens the **License Agreements** window, which displays the agreements and localizations you have defined. The license agreements are automatically saved in DropDMG's preferences file.

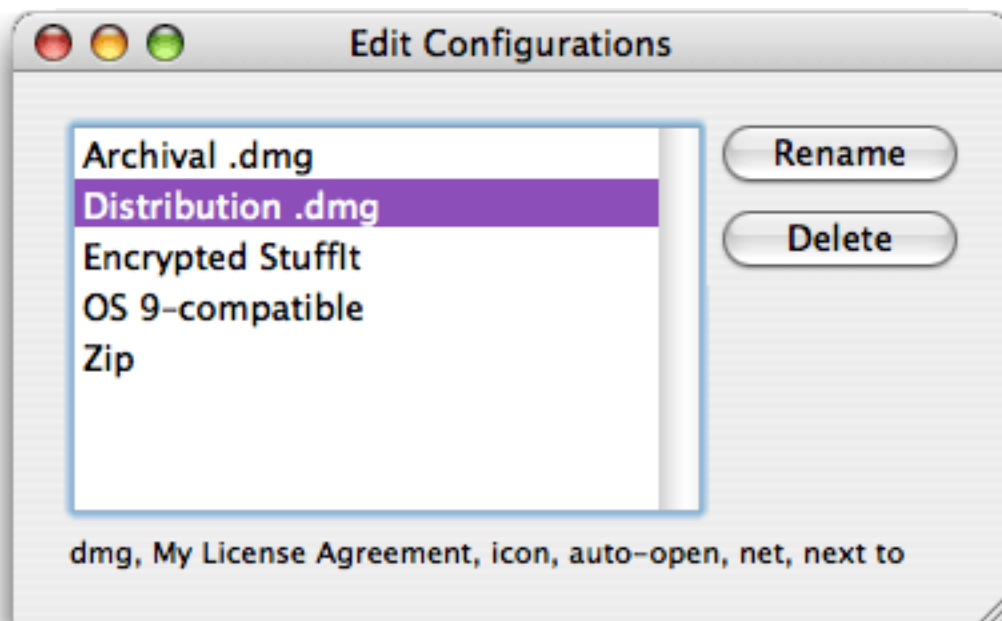
To make a new license agreement, choose **Add Agreement...** from the **License Agreements** menu. The created agreement will be empty. You can rename it by double-clicking the agreement's name. In order to type the text of the agreement, use **Add Language...** from the **License Agreements** menu. This creates an entry in the **License Agreements** window for a new localized variant. Note that only the English variant will be displayed on Mac OS 9.

To edit the text of an agreement, double-click on one of its languages in the **License Agreements** window. This opens an editing window where you can type. You can view and edit multiple localizations at once, if you want. The **Edit** menu contains commands for checking spelling and text-to-speech.

License agreements can use multiple fonts, sizes, and styles of text. Beware, however, of using fonts that are not built into Mac OS X, for the license agreement will look different if the user does not have the fonts installed. Secondly, note that “synthetic” font traits will not be preserved. A synthetic trait is a style for which you do not have a font. For instance, Mac OS X ships with normal and bold variants of Lucida. Both of these work fine in license agreements. DropDMG will also let you create a license agreement using italic Lucida, where the operating system synthesizes Lucida Italic from regular Lucida, but the italic style will not be displayed when the image is mounted.

5 Configurations

At the top of DropDMG’s **Preferences** window is the configurations pop-up menu. The **Save Configuration As...** command lets you save the current state of the **Preferences** window as a named configuration. Choosing a configuration from the pop-up menu applies that configuration’s settings to the **Preferences** window. Thus, you can have a configuration for each kind of image or archive that you create and easily switch between the configurations depending on the task at hand. The **Edit Configurations...** command opens a window that lets you view all of the saved configurations. You can also use this window to rename configurations or delete them.



The top of DropDMG’s status window shows the current configuration (if any), and you can Control-click in the status window to switch to another configuration without having to open the **Preferences** window.

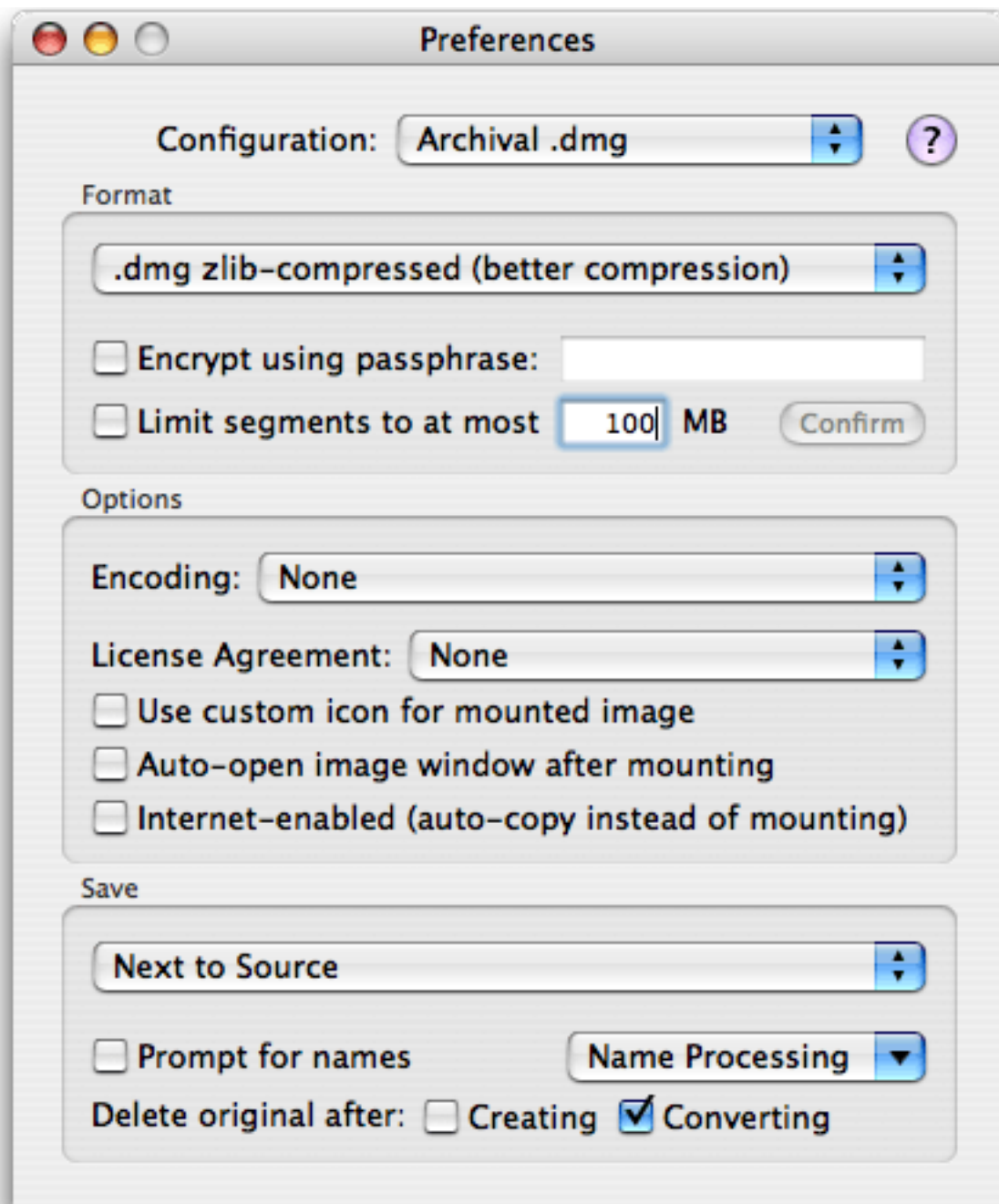
6 Overriding the Preferences

Normally, when DropDMG is creating or converting an image, it uses the preferences shown in the **Preferences** window. (See [Preferences](#) for explanations of the preferences.) Sometimes you may wish to use slightly different preferences for a particular image. For instance, perhaps you usually create `.dmg` images, but you sometimes need to make `.img` images for a friend who uses Mac OS 9. You could open the **Preferences** window, change the image format to `.img`, make the image, and change the format back to `.dmg`. Or, you could save yourself some time by overriding the preferences.

To use override the preferences, hold down the Option key when you drag a folder or image onto DropDMG's icon or the **DropDMG Status** window. That is, click on the icon and begin dragging; then hold the Option key before you release the mouse button. After releasing the mouse button, continue holding down Option until DropDMG displays a preferences sheet with the name of your folder at the top. Any changes you make in this sheet will only affect that folder; they will not be saved. Click the **OK** button to use the preferences as shown, or the **Cancel** button to not create the image after all.

If you drop more than one item onto DropDMG, continue holding Option until a window and sheet have opened for each item. With more than one preferences sheet open, you can use the **Copy to Others** button to copy the settings on one sheet to the other sheets. In this way, you can quickly override the preferences to create many similar images. As a shortcut, you can hold down the Option key when clicking **OK** to dismiss *all* of the preferences sheets.

7 Preferences



7.1 Format

DropDMG supports the following image formats:

.dmg zlib-compressed

zlib creates the smallest disk images, but they only work on Mac OS X 10.1 and later. This is DropDMG's recommended format for general use.

.dmg ADC-compressed

ADC images are a bit larger and slower than zlib images, but they work on all versions of Mac OS X.

.dmg Read-only

Read-only images require Mac OS X and are larger than zlib- and ADC-compressed images. However, when post-compressed with BZip2 or GZip they may end up smaller than the other formats. Read-only images are also a good choice when the folder you are imaging contains internally compressed files such as MP3s or JPEGs; in this case, using a compressed image format takes significantly longer and does not save much more space.

.dmg Read-write

Read-write images can be mounted in the Finder and their contents modified. Read-write images do not support license agreements. DropDMG creates read-write images slightly larger than needed to hold all the files. This allows you to make minor modifications such as repositioning icons and creating aliases to other files on the image. Once the image is exactly the way you want it, you can use DropDMG to convert the read-write image into a compressed one. Another use for read-write images is as a secure workspace. If you turn on encryption, you can read and edit the files on the image as normal. However, when you unmount the image, no one will be able to access the contents of the image without the passphrase.

.img NDIF-compressed

NDIF images work with Disk Copy 6.x on Mac OS 7, 8, and 9, as well as on Mac OS X. They have resource forks and so must be encoded with a utility such as StuffIt, MacBinary, or BinHex before they are shared on the Internet. NDIF images do not support encryption and they are limited to 2 GB.

.img NDIF read-only

This is an uncompressed NDIF image whose contents cannot be modified.

.img NDIF read-write

This is an uncompressed NDIF image whose contents can be modified. Read-write images do not support license agreements.

.smi NDIF-compressed

Self-mounting NDIF images (.smi files) may be used on Mac OS 7, 8, and 9 systems that do not have Disk Copy installed. Additionally, self-mounting images are the only type that can display license agreements on Mac OS 9.

.sitx StuffIt X Archive

StuffIt X generally produces the smallest (most tightly compressed) files, but it slower than the other formats and StuffIt Expander is required to to expand the archives. Like .dmg disk images, this format preserves all Mac and Unix metadata.

.tar Tape Archive

Tar is a common Unix format. It is an uncompressed format, so for the smallest file sizes you should choose either the GZip or BZip2 encoding option to create a compressed `.tar.gz` or `.tar.bz2` file. DropDMG only supports Tar archives on Mac OS X 10.4 and later, because earlier versions of the OS cannot create (or expand) Tar archives that preserve Mac resource forks and other metadata. To expand a Tar archive, simply double-click it in the Mac OS X 10.4 Finder.

.zip Zip Archive

Support for the Zip archive format is built into Mac OS X 10.3 and later. It is also compatible with unzipping utilities on Windows. This format preserves resource forks and Mac metadata when expanded by the Finder. Do not expand the files using StuffIt Expander, because it does not preserve the Unix permissions and ownership. Zip archives do not support encryption or segments.

.cdr DVD/CD-R Master

Master images are uncompressed, so they are not good for archival. They are useful, however, for storing and transferring the contents of CD or DVD and can be read by both Mac and Windows disc-burning software.

7.2 Encrypt using passphrase

Encrypted images require a passphrase for access. They work on Mac OS X 10.1 and later. Encrypted images are much slower to access than unencrypted images. DropDMG uses Apple's implementation of the [AES-128 algorithm](#)¹⁰. Encrypted StuffIt archives use Allume's implementation of the AES-256 algorithm.

You can enter a passphrase in the text field to have DropDMG use that passphrase for all images and archives (until you change it). DropDMG stores the password securely in the system keychain.

A blank image passphrase will cause DropDMG to prompt you to enter a passphrase when the image is created. A blank StuffIt passphrase is the same as not having a passphrase.

To verify the passphrase, click the **Confirm** button and re-enter it. DropDMG will tell you whether the passphrase that you typed matches the one that was previously entered.

7.3 Limit segments to ___ MB

This option lets you set a maximum size for image files or StuffIt archives. If an image requires more space than the set limit, DropDMG will split it into two or more files.

To mount a segmented image or expand a segmented archive, open the first file of the segments. The segments will be joined automatically so long as they are all in the same folder.

¹⁰<http://csrc.nist.gov/encryption/aes/>

To split an existing image into smaller pieces, set the segment size and then drag the image file onto DropDMG's main window.

7.4 Encoding

NDIF and self mounting image files cannot be directly transmitted on the Internet because they have [resource forks](#)¹¹. BinHex and MacBinary encoding convert the image to a data fork-only file that can be safely uploaded to Web and FTP servers, even using software that's improperly configured or not Mac-savvy. MacBinary produces smaller files than BinHex, but some older software can only decode BinHex.

If you choose an encoding other than **None**, DropDMG will encode images so that you end up with a `.hqx` file, a `.bz2` file, a `.gz` file, or a `.bin` file. If you select **BZip2** or **GZip**, the image will be compressed a second time, *in addition* to the zlib/ADC/NDIF compression that is intrinsic to the image format. This will make the resulting file a bit smaller.

Some Web servers have trouble handling plain `.dmg` files, so that when people download them they open in the Web browser instead of mounting automatically. If you administer an Apache-based server, you can fix this by adding this line:

```
AddType application/x-apple-diskimage .dmg
```

or this line:

```
AddType application/octet-stream .dmg
```

to your `.htaccess` file. If you cannot do this on your server, you can use encoding to eliminate the problem, at the expense of an extra decompression step after downloading (usually using StuffIt Expander or OpenUp).

BZip2 is slower than GZip but compresses better. MacBinary offers no compression at all, so it is fast. BZip2 and GZip are disabled for NDIF images because they do not work with files that have resource forks.

If you use encoding in combination with segments, DropDMG will encode each segment of the image. Some segments may compress better than others, so it is normal for the segments to be of unequal size after encoding.

7.5 License Agreement

If you choose a license agreement other than **None**, a license agreement will be displayed each time the image is mounted. Use the pop-up menu to select the license agreement you want included. This

¹¹<http://www.macdisk.com/macforken.php3>

option is disabled if you have not entered any license agreements. To add a license agreement, choose **Show Agreements** from the **License Agreements** menu. Then choose **Add Agreement...** to add an agreement and **Add Language...** to add at least one language.

7.6 Use custom icon for mounted image

Normally when a disk image is mounted, it shows up on the desktop with a plain white icon that looks like a hard drive. With this option checked, DropDMG will customize the icon based on the contents of the image. If the top level of the image contains an application, DropDMG will badge the application's icon onto the white drive icon. Or, if you create an image from a single file, DropDMG will badge that file's icon onto the drive.



To use a custom icon of your own design, save your icon at the top level of the folder from which the image will be created. The name of the icon file must be `.VolumeIcon.icns`, and the file must be in icns format. The easiest way to save an image in this format is to use the **Convert Graphic to “.VolumeIcon.icns”...** command in DropDMG's **File** menu. This lets you convert an image in another format (PNG, PDF, etc.) into icns format and use the proper filename.

7.7 Auto-open image window after mounting

With this option selected, DropDMG will make images that automatically open their root folder when mounted. That is, when you double-click the image in the Finder, its window will open. This is especially useful for images that you will be distributing to other users. Depending on how their Finders are configured, they may not see the image's icon appear on the desktop; therefore, making the image window auto-open provides a superior user experience.

7.8 Internet-enabled (auto-copy instead of mounting)

When an [Internet-enabled](#)¹² disk image is downloaded by Safari (and Safari's **Open “safe” files after downloading** preference is checked), it is automatically expanded into a folder and the

¹²<http://developer.apple.com/documentation/DeveloperTools/Conceptual/SoftwareDistribution/index.html>

image file is moved to the trash.

On Mac OS X 10.2.2 through 10.2.8, this happens whenever an Internet-enabled disk image is mounted (by any program).

On earlier versions of Mac OS X, Internet-enabled disk images are treated just like other disk images.

7.9 Save

You can choose to have images created in the same folder as the source folder (**Next to Source**), or specify a folder where images should be saved (by choosing **Other...** or dragging a folder onto the preferences window). If you specify a destination folder that's contained by the source folder, DropDMG will revert to its default behavior of saving the image next to the source folder. The **Ask Later** option causes DropDMG to ask you, for each operation, where to save the image or archive.

The bottom portion of the pop-up menu lists *recent* folders and *favorite* folders. Recent folders are the last 10 folders that you've chosen. Favorite folders are always shown in the menu, even if you have not used them recently. To make a recent folder into a favorite folder, find the folder's alias in `~/Library/Application Support/DropDMG/Recent Folders`. Select the alias and open the Finder's **Get Info** window. Then click the **Locked** checkbox.

7.10 Prompt for names

With this option selected, DropDMG will ask you to enter the name of the image file it will create and the name of the volume that will appear on the desktop when you mount the image. DropDMG will automatically add the proper filename extension (`.dmg`, `.img`, or `.smi`) to the image name. It may also truncate the names you enter if they would be too long for the Mac's volume and filename limits.

With this option deselected, DropDMG will assign the image and volume names based on the name of the folder being imaged.

7.11 Append Current Date

This option adds the current date (in the YYYY-MM-DD format) to the end of the name of the output disk image or archive.

7.12 Sanitize for Servers

This option processes the name of the output disk image or archive so that it does not contain any spaces, accented or foreign characters, or certain punctuation marks. This makes it possible to upload it to a Web or FTP server and then access it using a URL that contains no percent escape sequences.

7.13 Delete original after Creating or Converting

If you select one of these options, DropDMG will move the source folder, image, or archive to the trash after it has finished making the image.

8 AppleScripting DropDMG

[AppleScript](#)¹³ is a great way to automate your Mac. You can view DropDMG's AppleScript dictionary by dragging and dropping the DropDMG application onto Apple's Script Editor. The `create image` command lets you make images from folders, files, or other images. Whenever you use `create image`, you must always include the following parameter:

from path

This can be a POSIX path or an alias to a folder or file.

The remaining parameters are optional.

configuration name

Instead of specifying all the parameters in AppleScript, you can create a named [configuration](#) in DropDMG's preferences window, and then just specify the name of the configuration in the script, as a string. If you do this, all of the options below, except `always create`, `base name`, and `volume name` are ignored. This is because the other options are specified as part of the configuration. If you specify the empty string ("") as the configuration name, DropDMG uses whichever options are currently set in the **Preferences** window.

always create

Normally, DropDMG will automatically determine whether to *convert* the source item to another format or to *create* a new image/archive containing the item. If conversion is possible, it will convert; otherwise, it will create. This option lets you tell DropDMG to create a new image/archive, even if conversion is possible. It should be either `true` or `false`. If no value is specified, DropDMG will automatically decide whether to convert or create.

¹³<http://www.apple.com/applescript>

format

This corresponds to the [Format](#) preference. Accepted values are: `zlib compressed`, `ADC compressed`, `read only`, `read write`, `NDIF compressed`, `NDIF read only`, `NDIF read write`, `self mounting`, `StuffIt X`, `tar archive`, `zip archive`, and `master`. If no format is specified, DropDMG will choose `zlib compressed`.

encryption

This corresponds to the [Encrypt using passphrase](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will make the image unencrypted.

passphrase

If [encryption](#) is specified, you may also specify the passphrase with which to encrypt the image or archive.

segment size

This corresponds to the [Limit segments to ___ MB](#) preference. It should be a number, zero or greater, representing the number of megabytes per segment. If the value is zero or omitted, DropDMG will not segment the image.

encoding

This corresponds to the [Encoding](#) preference. Accepted values are: `none`, `binhex`, `bzip2`, `gzip`, and `macbinary`. If no encoding is specified, DropDMG will choose `none`.

license agreement name

This corresponds to the [License Agreement](#) preference. If the name is omitted or the empty string (`""`), DropDMG will not include a license agreement.

custom icon

This corresponds to the [Use custom icon for mounted image](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will not use a custom icon.

auto open

This corresponds to the [Auto-open image window after mounting](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will not make the image auto-open. This option is ignored when creating an image by converting.

internet enabled

This corresponds to the [Internet-enabled \(auto-copy instead of mounting\)](#) preference. It should be either `true` or `false`. If no value is specified, the image will not be Internet-enabled.

destination

This corresponds to the [Save](#) preference. This can be a POSIX path or an alias to a folder. If the destination is omitted, DropDMG will use the folder that contains the source folder or image. If the destination is the empty string (`""`), DropDMG will prompt you to choose a destination.

base name

This is the name of the image to create, without the `.dmg`, `.img`, or `.smi` extension. If the base name is omitted or the empty string (`""`), DropDMG will use the name of the source folder or image.

volume name

This is the name of the mounted image volume. If the volume name is omitted or the empty string (`""`), DropDMG will use the name of the source folder. This option is ignored when creating an image by converting.

append current date

This corresponds to the [Append Current Date](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will not append the date.

sanitize for servers

This corresponds to the [Sanitize for Servers](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will not modify the name.

delete original

This corresponds to the [Delete original after Creating or Converting](#) preference. It should be either `true` or `false`. If no value is specified, DropDMG will not delete the source folder or image.

just package contents

Some Mac OS X files, such as applications, are actually special folders called packages. The system presents packages to the user as a single file, but they're actually stored on disk as folders. Normally, when DropDMG makes an image from a folder it copies the contents of the folder into the image; that is, the mounted image behaves just like the original folder did.

Since packages are folders, you can make images of them with DropDMG. However, if DropDMG proceeds as usual, when you mount an image that was created from a package, the Finder will think that the mounted image *is* a package. It will show the package icon instead of the disk image icon, but it won't let you double-click the mounted image to access the package (e.g. launch the application). You might think that you could drag the mounted image to your hard disk to launch the application from there, but the Finder will create an alias instead (unless you know to hold down Option).

Therefore, by default, DropDMG recognizes when you are imaging a package and gives you a disk image with the package inside it, instead of making an image *of* the package. To disable this feature, and thus have DropDMG treat all folders consistently, pass `true` for this parameter.

9 Frequently Asked Questions

9.1 Why doesn't my serial number work?

You need to enter the *serial number name* and *serial number* exactly as they appear on your order confirmation e-mail. If you no longer have this e-mail, you can look up the name and number by clicking the **Lost Your Serial Number?** button in DropDMG's **Purchase** window.

9.2 How can I burn disk images to CD/DVD?

Use Apple's Disk Utility program, which is in the **Utilities** folder in the **Applications** folder.

9.3 Why does DropDMG try to connect to dreamhost.com when it starts up?

It's checking to see whether there's a newer version of DropDMG available. You can disable this feature from the **Software Update** window that's accessible from the **DropDMG** menu.

10 Purchasing and Support

10.1 Contact Information

You can download the latest version of DropDMG from the [DropDMG Web site](http://c-command.com/dropdmg/)¹⁴. Questions about DropDMG may be sent to dropdmg@c-command.com¹⁵. I'm always looking to improve DropDMG, so please feel free to send any feature requests to that address.

To make sure that you have the latest version of DropDMG, you may wish to subscribe to the [DropDMG News mailing list](#)¹⁶. The traffic on this list is very low, only one message per new version of DropDMG.

10.2 Purchasing

DropDMG has a free trial period that lasts for 30 days or 20 launches, whichever is longer. To use DropDMG beyond the demo period, you must purchase it. This entitles you to free updates and support.

¹⁴<http://c-command.com/dropdmg/>

¹⁵<mailto:dropdmg@c-command.com>

¹⁶<http://c-command.com/dropdmg/support>

To purchase, choose **Purchase...** from the **DropDMG** menu. You can use the **Instant Purchase...** button to enter your billing information from within DropDMG or use the **Web Purchase...** button to enter it from your Web browser.

Soon after paying, you'll receive an e-mail with your serial number. If you used **Instant Purchase...**, you're done. If you used **Web Purchase...**, enter the name and serial number from the e-mail into the **Purchase** window and click **Personalize**. If you need to re-install DropDMG, you can simply re-enter your name and serial number and click **Personalize**; there's no need to purchase again.

If you purchased DropDMG but cannot find your serial number, click the **Lost Your Serial Number?** button. This will open a form where you can enter your e-mail address and look up your order information.

A license for DropDMG is good for one person *or* one computer. You can install it on one Mac, and everyone sharing that Mac can use it (on that Mac). Alternatively, you can install it on your desktop Mac and your PowerBook; you can then use it on either machine, provided that no one is using it on the other machine.

10.3 Legal Stuff

DropDMG and this manual are copyright © 2002–2005 by [Michael J. Tsai](#)¹⁷. All rights reserved.

Please distribute the unmodified **DropDMG-2.6.dmg** file on the Web, LANs, compilation CD-ROMs, etc. Please do not charge for it (beyond a reasonable cost for media), or distribute the contents of the image file in isolation. Do not distribute your serial number.

The software is provided “as is,” without warranty of any kind, express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose and noninfringement. In no event shall the authors or copyright holders be liable for any claim, damages or other liability, whether in an action of contract, tort or otherwise, arising from, out of or in connection with the software or the use or other dealings in the software.

DropDMG is a trademark of Michael Tsai. Mac is a registered trademark of Apple Computer. All other products mentioned are trademarks of their respective owners.

The following open-source components are used in DropDMG:

Regular expression support is provided by the [PCRE](#)¹⁸ library package, which is open source software, written by Philip Hazel, and copyright by the University of Cambridge, England.

¹⁷<mailto:mjt@c-command.com>

¹⁸<http://www.pcre.org>

11 Version History

2.6—April 29, 2005

- Works with Mac OS X 10.4 (Tiger).
- DropDMG now has an [Automator](#)¹⁹ action.
- Can now create Mac OS X 10.4 Tar archives (.tar, .tar.gz, .tar.bz2) that support Mac resource forks.
- Added [Append Current Date](#) and [Sanitize for Servers](#) name processing options.
- Can now create uncompressed read-only and read-write NDIF .img disk images.
- DropDMG is smarter about picking which file to use to create a custom icon.
- Added `configuration name` AppleScript parameter.
- Fixed bug where images sometimes weren't created large enough to hold all the files.
- Fixed bug where script errors were only reported in abbreviated form.
- Added **Edit Configurations** to the **DropDMG** menu.
- Added keyboard shortcuts for opening the **Edit Configurations** window and for saving the current configuration.
- Worked around the OS to prevent DropDMG from sometimes being dropped from the **Services** menu.
- Window order of the **Preferences** window is preserved when closing the **Configurations** window.
- Updated to eSellerate Engine 3.6.1.
- Improved serial number name entry.
- The Apple Help is now multiple linked pages, rather than a single page, so you can now use Help Viewer's search box.

2.5.3—February 7, 2005

- Fixed bug where some valid files weren't choosable in the open dialogs.
- Update Czech localization.
- Improved name and serial number entry.

2.5.2—January 24, 2005

- Fixed bug where the volume permissions would be incorrect when making an image directly from a file.
- Added French localization.
- Updated Czech localization.

2.5.1—January 11, 2005

- Fixed bug where the BinHex and MacBinary encoders didn't preserve non-ASCII file-name characters.

¹⁹<http://www.apple.com/macosx/features/automator/>

- Fixed bug where special handling of file packages was sometimes disabled.
- When there are many simultaneous operations, DropDMG will queue some of them. This improves performance and works around some `hdiutil` limitations.
- Added [Always Run With Root Access](#) option.
- When prompting for file and volume names, DropDMG is smarter about when to remove the file extension in its suggested name.
- Relaxed requirement that the source item's containing path doesn't contain a slash (colon).
- Now sets the owner and permissions of the disk image root to match the source folder.
- Added help button to the preferences window.
- Added Czech and Italian localizations.

2.5—December 7, 2004

- Can now create archives in Panther's Zip format; can convert Zip archives to images and vice-versa.
- DropDMG can now create StuffIt X archives, convert StuffIt archives to disk images, and vice-versa.
- Can now convert `.tar`, `.tgz`, `.tar.gz`, and `.tar.bz2` archives to disk images (as well as to `.zip` and `.sitx`).
- Added support for `.cdr` (DVD/CD-R master) images.
- DropDMG can create a [custom icon](#) for the mounted image.
- You can now save named [Configurations](#) of DropDMG's preferences. By switching between different configurations, you can instantly recall different combinations of options.
- When you ask DropDMG to create an image from a volume, it automatically creates a *device image*, an exact copy of the volume, which is bootable (if original volume is).
- DropDMG now has a system service, which lets you easily create images/archives from items selected in the Finder, without DropDMG being open or in the Dock.
- Added **Mount Image At...** command, which lets you mount images at arbitrary locations in the filesystem, rather than on the desktop.
- Add **Ask Later** option, which makes DropDMG prompt you for a destination folder each time it needs to save an image or archive.
- Added **Confirm** button to let you verify a passphrase after typing it.
- DropDMG can now process multiple commands from AppleScript or the command line at the same time.
- Uses much less memory when computing folder sizes.
- Launches faster.
- The license agreement editor now supports find and replace.
- The log and image info windows now support the **Find** command.
- Lots of minor interface tweaks (window zooming, folder abbreviations, checkbox and button enabling etc, keyboard shortcuts, new window manipulation menu commands.).

- When creating encrypted images, the passphrase is now sent to `hdiutil` securely using a pipe instead of on the command line.
- A **Cancel** button is now available when you're prompted to enter image and volume names.
- When creating a segmented image or archive, the segments are now placed in a newly created folder.
- Normalizes serial number case when personalizing, to make it less error-prone.
- You can hold down the Option key when clicking **OK** to dismiss multiple temporary preferences sheets at once.
- If the chosen destination folder is read-only, DropDMG now prompts for a new destination folder rather than aborting with an error.
- When you try to delete a license agreement, DropDMG now shows an alert sheet to make sure that's what you really meant.
- The `returning immediately` AppleScript parameter is no longer needed and has been removed. If you want the AppleScript command to return before the operation is complete, use a standard AppleScript with `timeout` block.
- The `create image` AppleScript command now returns the path of the created image/archive. The command-line tool prints the path to standard output.
- The **When Imaging a Package** option has been removed from the preferences, but is still available via AppleScript and the command line.
- When creating an image, DropDMG now preserves ownerships and permissions, rather than just permissions. (This will not be evident unless you uncheck **Ignore ownership on this volume** after mounting the image.)
- Fixed bug where you'd have to authenticate more often than necessary.
- Fixed bug where relative paths did not work with the `dropdmg` tool's `--destination` switch.
- Fixed bug where top-level symlinks were resolved instead of being copied as links.
- Fixed bug where it was possible to rename a license agreement, giving it the same name as another agreement.
- Fixed bug where DropDMG would sometimes return a "permission denied" error when calculating the space necessary to image a folder. Now, it will instead prompt for an administrator password.
- Fixed bug where sometimes you'd be prompted for a password after already entering one in the preferences sheet.

2.2—October 16, 2003

- Added `dropdmg` tool for creating images from the command-line.
- You can now create an image from a file by dropping it on DropDMG; you no longer have to "wrap" the file in a folder.
- You can now specify the passphrase for an encrypted image via AppleScript.
- Can save a passphrase in the system Keychain, so that you can encrypt multiple images using the same passphrase, without having to keep typing it.

- Lets you authenticate as an administrator to copy protected files to an image.
- Images can now be encoded with BinHex.
- You can now drag a file or folder onto the preferences to set the destination.
- License agreements can use non-roman characters.
- Added **Get Image Info...** command.
- Added **Verify Image Checksum...** command.
- Added crash reporter.
- Added software update version checker.
- Faster MacBinary encoding.
- Uses less memory when dealing with lots of files.
- The destination pop-up menu now includes icons.
- Rather than nagging when unregistered, DropDMG now has a 30-day/20-launch trial period.
- Fixed bug that caused an error when creating more than one self-mounting image simultaneously.
- Fixed bug where DropDMG never prompted for volume and image names when you used a temporary preferences sheet.
- DropDMG now requires Mac OS X 10.2 or later.

2.1.1—July 21, 2003

- Fixed bug where converting a `.dmg` file created by Disk Copy to `.img` or `.smi` caused the `.dmg` file to remain in use so that it couldn't be deleted, or its volume ejected.
- Adding license agreements to images now works on Panther.
- Fixed open/save dialog prompts to be more in line with the Aqua Human Interface Guidelines.

2.1—April 24, 2003

- Remembers recent and favorite destination folders.
- Can create [Internet-enabled](#) disk images.
- Simplified the drag modifiers, the preferences window, and the scripting interface.
- Can move the source folder to the trash after creating an image.
- Can choose the destination folder when converting.
- You can now specify preferences overrides using one sheet per image, rather than a single modal dialog.
- You can now set the volume name and image name from the scripting interface.
- Added a `returning immediately` scripting parameter. This lets you control whether the script waits for DropDMG to finish creating the image.
- You can now use tildes in paths when scripting DropDMG.
- Suggests localized image names, when possible, and omits hidden extensions, so that you don't end up with, e.g., a `.app.dmg` file.

- The license agreement editor is much more responsive.
- You can set the encoding from the **DropDMG Status** window's contextual menu.
- Can now encode `.dmg` images with MacBinary.
- Updated the MacBinary encoder for compatibility with Apple's JDK 1.4.1. (In the latest JDK, Apple removed support for JDirect, which the old MacBinary encoder relied upon.)
- Fixed bug where DropDMG couldn't image a folder with more than 100 or so top-level items.
- Worked around problem where some `.dmg` images created with Disk Copy could not be converted to `.img` or `.smi`.
- Fixed license agreement assertion failure bug.
- DropDMG will no longer let you quit while an image operation is in progress.
- The agreement editor window zooms to the width of the text field that Disk Copy will use to display the agreement when the image is mounted.
- When you drag something over the **DropDMG Status** window, its instructional text changes to tell you the meanings of the modifier keys.
- The **DropDMG Status** window is closable (if you register).
- License agreements remember their window positions across renames.
- The **License Agreements** window is printable.
- The **DropDMG Status** window zooms to a reasonable width instead of the whole screen.
- The **DropDMG Status** window summary shows more of the current preferences.
- The progress bar is finer-grained.
- The key equivalent for **Delete Selection** is Command-Delete instead of Command-D.
- Better error messages.
- DropDMG is better about picking fresh names for its temporary files.
- The **Registration** window is smarter about ignoring whitespace and control characters that can be introduced when pasting in a serial number.

2.0—October 23, 2002

- Converts dropped images to the format specified in the preferences when you hold down Control-Shift.
- Hold down Option when dropping a folder or image to specify settings to be used for that item (temporarily overriding the preferences).
- Makes self-mounting NDIF images (SMIs). This is the only kind of image that supports license agreements on both 9 and X.
- Creates smaller zlib-compressed images when running on 10.2 and later. (The images are still compatible with 10.1's Disk Copy.)
- You can now choose to post-compress with BZip2 instead of GZip. BZip2 is slower than GZip but creates smaller files.

- Improved the layout of the preferences window.
- Faster at copying files to the image when running on 10.2 and later.
- Worked around 10.2 bug that caused errors when a file or folder name contained a slash (as shown in the Finder).
- Worked around OS X bug that prevented copying files larger than about 1 GB.
- New application icon.
- Compiled with GCC 3.
- No longer calls thread-unsafe parts of Carbon from child threads.
- Prevents the user from making a read-write image with a license agreement, rather than stopping midway through with an error message saying that this wasn't possible.
- The status window no longer looks as though it will accept the drop when you try to drop a `.dmg` file that doesn't need metadata fixing.
- Changed **File** menu text and keyboard shortcuts to more closely match 10.2's Disk Copy.
- The about box and registration window now use the design first seen in SpamSieve.
- The log no longer uses the large system font under 10.2.
- Better error message if you try to image the startup volume.
- Fixed bug where images with license agreements contained duplicate `styl` resources.

1.7.3—August 17, 2002

- Fixed bug that could make DropDMG crash when you clicked the **Include license agreement** checkbox.
- The spelling commands now have the standard keyboard equivalents.
- The **Preferences...** keyboard equivalent has been changed to **Command-.**

1.7.2—August 15, 2002

- Removed spurious error message when changing the attributes of text in a license agreement.

1.7.1—August 12, 2002

- The user interface no longer gets out of sync when you modify license agreements.
- Changes to the segment size take effect immediately; you no longer have to type Tab or Return to commit them.
- The status window updates faster.

1.7—August 12, 2002

- Added support for license agreements. License agreements support rich text and may be localized.
- The image destination path is now stored abbreviated with a tilde, if possible. This should help people who have multiple boot partitions.
- The log is printable.
- Finer-grained progress bar and status text.

- If adding the requisite filename extensions would make the requested image name longer than the limit, DropDMG will now quietly truncate the name rather than stopping with an error.
- NDIF images are now created with filenames of 31 characters or less, so that there won't be any name mangling when they're viewed in Mac OS 9.
- DropDMG now truncates `.dmg` volume names to 62 characters and `.img` volume names to 27.
- Fixed bug where DropDMG could deadlock after certain kinds of errors.
- Fixed bug where DropDMG sometimes didn't detect filename collisions until after it started making the image.
- Fixed bug where DropDMG would overwrite pre-existing `.dmgpart` files if the first segment was not present and the newly created image happened to have the same name.
- Renamed some **File** menu commands.

1.6—July 15, 2002

- Option to make images auto-open. When you mount an image, its window opens in the Finder. Previously, there might have been no visual indication that the image had mounted, depending on how the user's Finder preferences were set.
- The status window has a contextual menu for quickly changing common preferences.
- You can optionally set the names of the image file and volume, instead of having them based on the name of the folder.
- Documentation is now included in Apple Help (HTML) format as well as PDF.
- Contains a menu command for clearing the log.
- No longer fails when copying files for which the user only has read privileges. Previously, DropDMG would copy the file and permissions and then report a permissions error when it tried to set the catalog information of the copy, which wasn't writable.
- The radio buttons for selecting where the image will be saved are no longer linked to the image destination text field. That is, tabbing of the text field no longer affects the radio button's selection, making the preferences more friendly for keyboard navigators.

1.5—May 2, 2002

- Multi-threading—DropDMG can create more than one image at a time, and the interface remains responsive.
- Can divide large images into multiple segments of fixed size.
- Creates uncompressed read-only images, which often compress better with GZip than internally-compressed image files do.
- Creates read-write images.
- Encodes Mac OS 9 `.img` images with MacBinary so that they can be transferred on the Internet.
- The status window displays a log that shows all the completed operations and errors.
- The status window now shows all the format options that are in effect.

- Faster copying of Mac metadata.
- Worked around Apple bug that sometimes caused errors when creating large images. `hdiutil` crashed when expanding sparse images.
- Fixed bug where DropDMG mistakenly resolved symlinks when copying Mac metadata. This had caused some metadata not to be copied, and also caused image creation to fail if the user didn't have write access to the original file.
- Fixed regression where DropDMG sometimes didn't complain when the destination folder was inside the source folder.
- Tries several times to eject images, rather than giving up immediately.
- More detailed reporting of file copy errors.
- More accurate reporting of what state the image creation process is in when errors occur.
- Mailing list for version announcements has a Web interface.

1.3.1—March 11, 2002

- You can now create images by dragging and dropping folders into the status window.
- The status window's indication of the progress is more accurate.
- Fixed regression in which images couldn't be created on non-boot volumes.
- Fixed regression in which images couldn't be created in `~/Desktop` if the destination folder had never been manually set.

1.3—February 25, 2002

- You can now choose whether images are saved next to the source folder, or in a user-defined folder.
- Volume images are now created in `~/Desktop` by default (instead of `/Volumes`).
- Resolved problem in which DropDMG tried to replace invisible system files on the image, if the source folder contained items with the same names.
- The `format` parameter is now optional when creating images with AppleScript.
- Notifies the system after fixing an image's type and creator.
- Fixed bug in which DropDMG would report the wrong file as the cause of a copy error.
- The keyboard loop in the Preferences window should work again.
- The status window no longer flickers when the program first opens.
- The distribution is smaller, since the manual uses fewer images.

1.2.1—February 11, 2002

- Uses Carbon to preserve Finder info (e.g. the locked, stationery, and custom icon bits) when copying files.

1.2—February 3, 2002

- All options are now available from the scripting interface.
- No longer requires Mac OS X's optional "BSD Subsystem" installation.
- Optionally post-compresses DMGs with GZip.

- Fixes type and creator codes of DMGs.
- Preferences window is easier to use; now, enablement is only tied to the Image Format radio buttons.
- Capitalizations now follow the Aqua Human Interface Guidelines.

1.1—January 28, 2002

- Supports ADC and NDIF compression for compatibility with Mac OS 10.0.x and Mac OS 9, respectively.
- Supports encrypted compressed images in the zlib and ADC formats.
- Optionally detects packages so that you end up with a mounted image *containing* the package instead of a mounted image that the Finder thinks *is* a package.
- Copies locked files to images (instead of stopping with an access error).
- Images' logical sizes are smaller; this should slightly reduce their physical sizes and reduce mount times.
- Accepts drops of all file types (including packages); if DropDMG doesn't know how to handle a dropped file it will just ignore it.
- The **Make Image From Folder...** menu command lets you choose packages and subfolders of packages (instead of just vanilla folders).
- Minor UI tweaks.

1.0—January 21, 2002

- First public release.