

# DropDMG 2.8 Manual

Michael Tsai  
c-command.com

April 4, 2007



# Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>Introduction</b>                              | <b>4</b>  |
| 1.1      | Disk Images . . . . .                            | 4         |
| 1.2      | DropDMG . . . . .                                | 4         |
| <b>2</b> | <b>Setting Up DropDMG</b>                        | <b>5</b>  |
| 2.1      | Requirements . . . . .                           | 5         |
| 2.2      | Installation . . . . .                           | 6         |
| 2.3      | Updating From DropDMG 1.x–2.x . . . . .          | 6         |
| <b>3</b> | <b>Features</b>                                  | <b>6</b>  |
| 3.1      | The Status Window . . . . .                      | 6         |
| 3.2      | Creating and Converting . . . . .                | 7         |
| 3.2.1    | Drag and Drop . . . . .                          | 8         |
| 3.2.2    | Service . . . . .                                | 8         |
| 3.2.3    | Automator Workflows . . . . .                    | 8         |
| 3.2.4    | AppleScript . . . . .                            | 8         |
| 3.2.5    | Command-Line . . . . .                           | 12        |
| 3.2.6    | Contextual Menu . . . . .                        | 12        |
| 3.2.7    | File Menu . . . . .                              | 12        |
| 3.3      | Overriding the Preferences . . . . .             | 12        |
| 3.4      | Mounting Images . . . . .                        | 13        |
| 3.5      | Configurations . . . . .                         | 13        |
| 3.6      | Burning Discs . . . . .                          | 14        |
| 3.7      | License Agreements . . . . .                     | 15        |
| <b>4</b> | <b>Examples</b>                                  | <b>16</b> |
| 4.1      | Backing Up Your Files to CD/DVD . . . . .        | 16        |
| 4.2      | Burning Backups of CDs/DVDs . . . . .            | 17        |
| 4.3      | Making Images With Background Pictures . . . . . | 18        |
| 4.4      | Protecting Your Files With Encryption . . . . .  | 18        |
| 4.5      | Restoring Files and Disks . . . . .              | 19        |
| 4.6      | Transferring Files Securely . . . . .            | 20        |
| <b>5</b> | <b>Menus</b>                                     | <b>21</b> |
| 5.1      | The DropDMG Menu . . . . .                       | 21        |
| 5.1.1    | About DropDMG . . . . .                          | 21        |
| 5.1.2    | Software Update . . . . .                        | 21        |
| 5.1.3    | Purchase . . . . .                               | 22        |
| 5.1.4    | Always Run With Root Access . . . . .            | 22        |
| 5.1.5    | Quit When Done . . . . .                         | 23        |
| 5.1.6    | Install “dropdmg” Tool . . . . .                 | 23        |
| 5.2      | The File Menu . . . . .                          | 23        |
| 5.2.1    | Fix Image. . . . .                               | 23        |
| 5.2.2    | Get Image Info. . . . .                          | 23        |

|          |   |           |
|----------|---|-----------|
| 5.2.3    | Mount Image (with Owners)...  | 23        |
| 5.2.4    | Mount Image At...   | 24        |
| 5.2.5    | Verify Image Checksum...  | 24        |
| 5.2.6    | Convert Graphic to “.VolumeIcon.icns”...                                      | 24        |
| <b>6</b> | <b>Preferences</b>  | <b>25</b> |
| 6.1      | Format . . . . .  | 26        |
| 6.2      | Encrypt using passphrase . . . . .  | 27        |
| 6.3      | Limit segments to at most ___ MB . . . . .                                    | 28        |
| 6.4      | Encoding . . . . .  | 28        |
| 6.5      | License Agreement . . . . .   | 29        |
| 6.6      | Use custom icon for mounted image . . . . .                                   | 29        |
| 6.7      | Auto-open image window after mounting . . . . .                               | 30        |
| 6.8      | Internet-enabled (auto-copy instead of mounting) . . . . .                    | 31        |
| 6.9      | Save . . . . .  | 31        |
| 6.10     | Prompt for names . . . . .  | 31        |
| 6.11     | Append Current Date . . . . .   | 32        |
| 6.12     | Sanitize for Servers . . . . .  | 32        |
| 6.13     | Delete original after Creating or Converting . . . . .                        | 32        |
| <b>7</b> | <b>Frequently Asked Questions</b>   | <b>32</b> |
| 7.1      | Why doesn't my serial number work? . . . . .                                  | 32        |
| 7.2      | Why does DropDMG try to connect to dreamhost.com when it starts up? . . . . . | 32        |
| <b>8</b> | <b>Legal Stuff</b>  | <b>32</b> |
| <b>9</b> | <b>Version History</b>  | <b>33</b> |

# 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 *and* 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. Once you've created the image or archive, you can easily burn it to CD/DVD. 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](#)<sup>1</sup>, AppleScript, and from the `dropdmg` command-line tool.

What can you do with DropDMG? Here are a few possibilities:

- Make [backups](#). (You know you should.) Before backing up files to another hard disk or to removable media, you can use DropDMG to bundle them into a disk image. The disk image compresses the files to save space, lets you check their integrity with a [checksum](#)<sup>2</sup>, and can (optionally) [encrypt](#) the files to protect your off-site backup from prying eyes.
- [Burn](#) files, folders, and images to disc with a simple drag and drop. If your folder is too large to fit on one CD or DVD, DropDMG can [segment](#) it into an image that spans multiple discs. If you have multiple optical drives, you can burn the segments simultaneously.
- Prepare Mac OS X software for distribution. Apple recommends that developers use disk images to distribute their software. DropDMG makes it easy to create disk images that [auto-open](#), have [license agreements](#), [custom icons](#), and that are [Internet-enabled](#) (so the image unpacks automatically when downloaded with Safari).

---

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

<sup>2</sup><http://en.wikipedia.org/wiki/Checksum>

- Compress files before sharing them. With support for a variety of image and archive [formats](#) (and [encodings](#) for sending files over networks), DropDMG makes it easy to archive and compress files before sending them via e-mail, uploading them to a server, or saving them to removable media. In many cases, the images DropDMG creates are smaller than those created by Apple’s Disk Utility, while still being fully compatible. It’s also easy to convert between any of the formats DropDMG supports.
- Share files so that others can read them. Disk images provide maximum compatibility: earlier versions of Mac OS X don’t support Mac-savvy Zip and Tar archives, and Mac OS X 10.4 doesn’t have built-in support StuffIt archives. Only disk images preserve Mac metadata and long filenames and are compatible with all versions of Mac OS X. Of course, if your audience prefers archives, DropDMG makes it easy to create them, as well.
- Encrypt files that you want to keep private. Apple’s [FileVault](#)<sup>3</sup> encrypts your whole home folder, which is overkill for many users, needlessly slowing access to their files. DropDMG lets you create [encrypted](#) disk images that protect a select group of files or folders, while still letting you access and modify them (after entering your passphrase, of course).
- Create a device image that records the exact contents of a data CD or DVD. You can then [burn](#) backup copies of the disc, or double-click the image to access its contents as though the disc were still in your drive.
- Do it your way. There’s no need to hunt for the right menu command; just drag a file, folder, or disk onto DropDMG, and it will [do the right thing](#). Or you can invoke DropDMG using a [keyboard shortcut](#), [Automator](#)<sup>4</sup>, [AppleScript](#), or the command-line `dropdmg` tool—whichever is most convenient at the moment.
- Create more than one image or archive at a time to take advantage of dual processors, or simply to queue multiple operations.
- Specify as many—or as few—options as you want. DropDMG’s [Preferences](#) window gives you lots of controls, but you don’t always have to use them. Save named [configurations](#); by switching between different configurations, you can instantly recall different combinations of options. Or hold down the Option key to specify [temporary options](#) for the current operation, without changing the stored preferences.

## 2 Setting Up DropDMG

### 2.1 Requirements

Mac OS X 10.3 or later is required. DropDMG is a universal binary that runs natively on both PowerPC- and Intel-based Macs.

---

<sup>3</sup><http://www.apple.com/macosx/features/filevault/>

<sup>4</sup><http://www.apple.com/macosx/features/automator/>

If [StuffIt Expander](#)<sup>5</sup> 9.0.1 or later is installed, DropDMG will be able to convert StuffIt archives to other formats. It is recommended that you turn off the StuffIt Expander preference **Continue to expand (if possible)**.

If [StuffIt Deluxe](#)<sup>6</sup> 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-2.8.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.

## 2.3 Updating From DropDMG 1.x–2.x

DropDMG 2.8 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.

# 3 Features

## 3.1 The Status Window

The top of DropDMG’s status window shows the current [configuration](#) in a pop-up menu. If the current settings do not match any saved configuration, the menu says **(custom)**. Below the menu is a line of text showing the options that are associated with the current configuration. You can quickly change configurations—without opening the **Preferences** window—by selecting a new one from the menu.

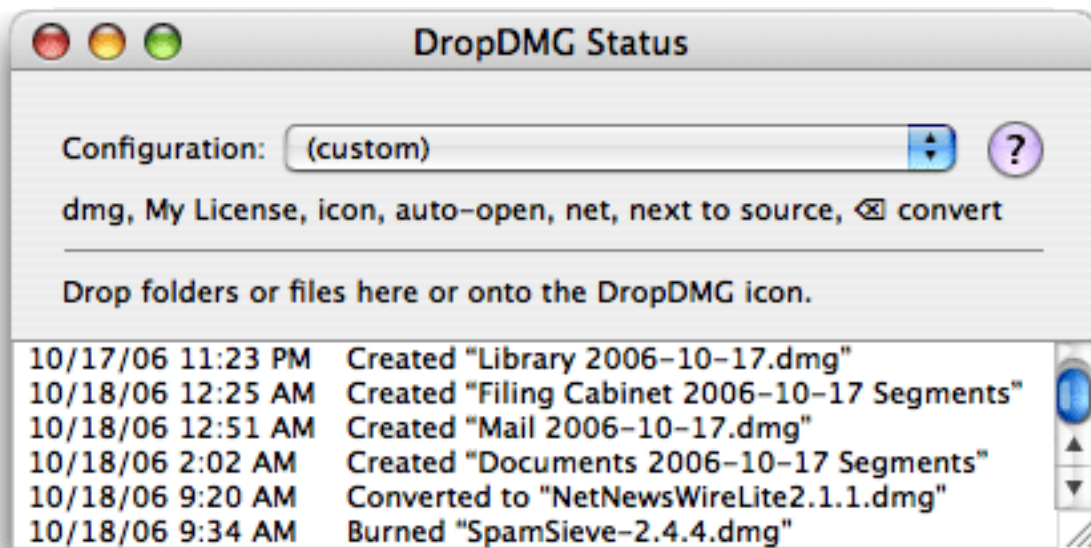
---

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

<sup>6</sup><http://www.stuffit.com/mac/deluxe/index.html>

Individual options may be changed by opening the [Preferences](#) window or by Control-clicking on the striped portion of the window.

You can drag files or folders onto the striped portion of the window to *create* disk images or archives using the options shown in the **Status** window. Drag and drop an image or archive to *convert* it to the format shown in the window. Hold down the Option key when dropping to set [temporary preferences](#) for that operation. Hold down the Shift key when dropping a folder or disk image to *burn* it. Hold down the Shift *and* Option keys to burn a disk image as a file instead of an image. Hold down the Control key when dropping an image to *fix* it. These same modifier keys also work when dragging and dropping onto the DropDMG application icon.



The bottom portion of the status window displays a log of the images and archives 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](#)<sup>7</sup> 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](#)<sup>8</sup> or [Service Scrubber](#)<sup>9</sup>.

### 3.2.3 Automator Workflows

You can use the [Automator](#)<sup>10</sup> application in Mac OS X 10.4 to create workflows incorporating DropDMG actions. Frequently used workflows can be accessed from a contextual menu in the Finder or saved as droplets. DropDMG includes a **Create Disk Image/Archive** action for making new images and archives, and also a **Expand Disk Image** action for converting a .dmg disk image back into a folder.

### 3.2.4 AppleScript

You can use [AppleScript](#)<sup>11</sup> to automate DropDMG. For example:

---

<sup>7</sup><http://www.cocoatech.com/pf.php>

<sup>8</sup><http://www.blacktree.com/apps/servicemanager/index.html>

<sup>9</sup><http://www.petermaurer.de/nasi.php?section=servicescrubber>

<sup>10</sup><http://www.apple.com/macosx/features/automator/>

<sup>11</sup><http://www.apple.com/applescript>



```

-- create a new image from a folder
tell application "DropDMG"
    -- allow 2 hours before AppleScript times out
    with timeout of 2 * 60 * 60 seconds
        set p to "~/Desktop/folder" -- POSIX path to source folder
        --Specify the options using AppleScript parameters.
        create image from path p format NDIF compressed encoding macbinary
    end timeout
end tell

-- convert an image to another format
tell application "DropDMG"
    -- allow 2 hours before AppleScript times out
    with timeout of 2 * 60 * 60 seconds
        set p to "~/Desktop/image.img" -- POSIX path to source image
        -- Rather than specifying all the options in AppleScript, you
        -- can save them as a DropDMG configuration and refer to them
        -- that way.
        create image from path p configuration name "My Configuration"
    end timeout
end tell

```

You can view DropDMG's AppleScript dictionary by dragging and dropping the DropDMG application onto Apple's Script Editor. A collection of [example DropDMG scripts](#)<sup>12</sup> is available. `create image` is the most commonly used command; it lets you make images and archives 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

---

<sup>12</sup><http://c-command.com/scripts/dropdmg/>

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.

### **format**

This corresponds to the [Format](#) preference. Accepted values are: `zlib compressed`, `bzip 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 at most \\_\\_\\_ 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.

### 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 Contextual Menu

You can use [Automator](#)<sup>13</sup> to create contextual menu item plug-ins for the Finder. Then, when you Control-click on a folder or file in the Finder, you will see a command in the menu to make a disk image or archive using DropDMG. To set this up, first create a new workflow in Automator. Then drag the DropDMG action into it, choose a configuration, and then choose **Save As Plug-In** from the **File** menu.

### 3.2.7 File 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.

## 3.3 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 [The 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

---

<sup>13</sup><http://www.apple.com/macosx/features/automator/>

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.

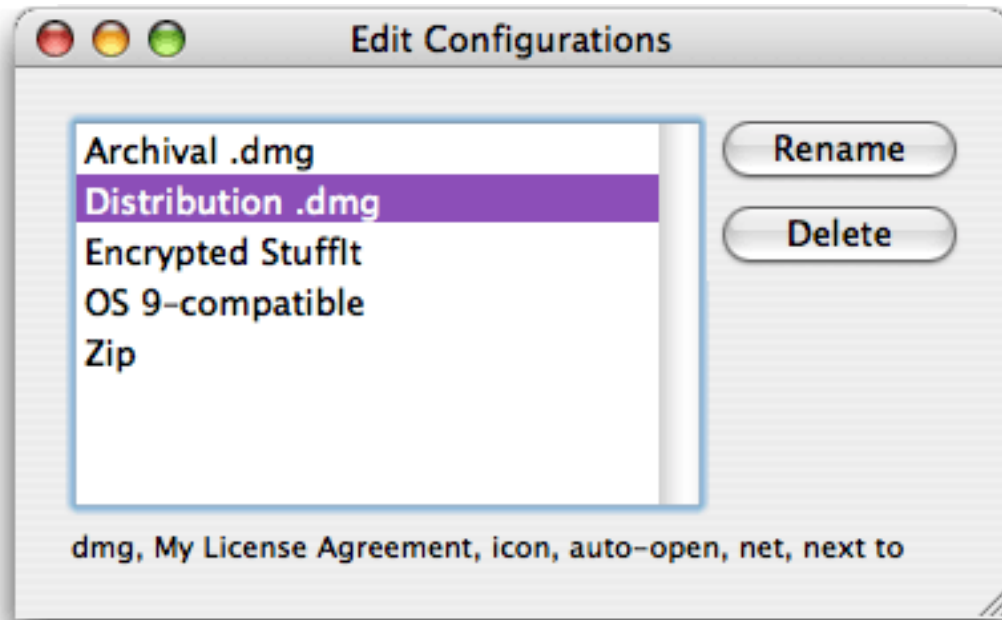
### 3.4 Mounting Images

Double-clicking an image mounts it on the desktop. This works on any Mac OS X machine, whether or not DropDMG is installed. You can also mount images using these commands in DropDMG's **File** menu:

- [Mount Image \(with Owners\)...](#)
- [Mount Image At...](#)

### 3.5 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.



### 3.6 Burning Discs

The **Burn Folder/File...** and **Burn Image...** commands let you burn files and folders to CD or DVD. This requires an internal or external drive that supports Mac OS X disc burning. You can continue to use DropDMG to create images or archives while a disc is burning, and if you have multiple optical drives you can even burn more than one disc at a time.

If you choose a folder, the **Burn Folder/File...** command makes the contents of the disc look like the contents of the folder. The name of the folder becomes the name of the disk. If you choose a file, it burns a disc whose content is that single file. The name of the disc is the file's name, without the extension.

The **Burn Image...** command makes the contents of the disc look like the contents of the disk image. The volume name of the mounted disk image becomes the name of the disc. If the disk image is a device image that contains multiple partitions, then the burned disc will have multiple partitions. The **Burn Image...** command requires Mac OS X 10.4 or later.

When burning a disk image file, you need to choose whether to use **Burn Folder/File...** or **Burn Image...**. Use **Burn Folder/File...** if:

- You want the burned disc to contain a single file, the disk image. If the disk image file was compressed or encrypted, so will be the burned file.
- The disk image is segmented, and you want to burn each segment to a different disc.

Use **Burn Image...** if:

- You want the burned disc to contain the contents of the disk image, not the disk image file itself. The contents of the burned disc will *not* be compressed or encrypted.
- The disk image is segmented, and you want to join the segments and burn them onto a single disc.

As a shortcut to choosing **Burn Folder/File...** or **Burn Image...** from the **File** menu, you can hold down the Shift key while dragging and dropping a folder or image file onto DropDMG's icon or the status window. DropDMG will burn images as images and non-images as folders/files. If you want to burn an image as a file, hold down the Shift *and* Option keys.

You can also initiate burns from Terminal:

```
dropdmg --burn-image ~/Desktop/Image.dmg
dropdmg --burn-file ~/Desktop/Folder
```

### 3.7 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.

Due to limitations of the `.dmg` format, images containing an extremely large number of files cannot have license agreements.

## 4 Examples

This section shows some examples of how to use DropDMG’s disk imaging and burning capabilities to complete a variety of tasks:

### 4.1 Backing Up Your Files to CD/DVD

By combining DropDMG’s [imaging](#) and [burning](#) features, you can easily backup your files to CD-R/RW or DVD-R/RW. DropDMG will store the files efficiently on the discs, and you can optionally protect them using encryption.

1. First, open DropDMG’s **Preferences** window and set the options that you want to use for the backup. Probably you want one of the compressed `.dmg` [formats](#). If you want the backup to be encrypted, enter a passphrase. Check **Limit segments to at most \_\_ MB** and enter the size of your backup discs, e.g. 680 MB for a typical CD or 4450 MB for a DVD. Uncheck (or set to **None**) all the items in the **Options** section of the window. In the **Save** section, choose a destination folder where the image should be saved and (if you want) choose **Append Current Date** from the **Name Processing** menu. You may want to save these settings as a [Configuration](#) so that it’s easy to recall them the next time you make a backup.
2. To backup a folder, drag it onto DropDMG’s status window. DropDMG will create one or more `.dmg` and `.dmgpart` files that contain the contents of the folder. You should not modify the contents of the folder while DropDMG is creating the image.
3. To burn a `.dmg` or `.dmgpart` file to disc, choose **Burn Folder/File...** from DropDMG’s **File** menu or Shift-Option-drag the file onto DropDMG’s status window.
4. After the burning is complete, you can delete the `.dmg` and `.dmgpart` files that you burned.

Although this simple backup method will not meet *everyone’s* needs, it does have a variety of advantages over ultra-simple backup methods (e.g. Burn Folders in the Finder) and more specialized backup software (e.g. Retrospect):



- Collecting the files onto a `.dmg` file is better than burning the files directly. The `.dmg` file can be compressed (to save space) and encrypted (so you can keep your off-site backup private). It contains a [checksum](#)<sup>14</sup> so that if the disc ever gets damaged, you'll know. Finally, you can easily backup large files that don't fit on a single CD or DVD because DropDMG will save them into disc-sized `.dmgpart` files.
- DropDMG can copy all the files in a folder onto the `.dmg`, preserving all ownership and permissions data.
- Backups created with DropDMG are stored in a standard Mac OS X format. The software needed to restore them is built into the operating system.
- DropDMG's seemingly inefficient two-step process (creating the image files and then burning them) can actually save you time. If you were using Retrospect to backup a large folder, it would prompt you for discs as it copied the files. Then, when it was done, it would prompt you for all the discs again to verify them. During this time, you would not be able to modify the files in the folder, because the backup could be corrupted if you modified files that were in the midst of being copied. Thus, the amount of time that your Mac is "out of commission" is determined by the time it takes to do the burning and swap all the discs.

With DropDMG, the first step of creating the `.dmg` files can run unattended, while you're at lunch or sleeping. When you get back to your Mac, you can burn the files to disc at your leisure. Since the folder has already been "snapshotted" to the disk image, you can access and modify the folder while burning the discs. Furthermore, if you have multiple optical drives you can save time by burning multiple discs at a time. Since each disc is verified individually, right after it's burned, you don't have to swap the discs twice.

After your files are backed up, you can [restore](#) them.

## 4.2 Burning Backups of CDs/DVDs

You can use DropDMG to create exact copies of CDs or DVDs, e.g. your Mac OS X install discs or a bootable emergency CD for disk repair software such as [DiskWarrior](#)<sup>15</sup> or [Drive Genius](#)<sup>16</sup>.

1. Set DropDMG to create a read-only `.dmg` image. A compressed format would also work, but this is faster.
2. Drag the CD or DVD icon onto DropDMG; it will create a device image of the disc and save it as a `.dmg` file.
3. Eject the disc.

---

<sup>14</sup><http://en.wikipedia.org/wiki/Checksum>

<sup>15</sup><http://www.alsoft.com/DiskWarrior/>

<sup>16</sup>[http://www.prosofteng.com/products/drive\\_genius\\_info.php](http://www.prosofteng.com/products/drive_genius_info.php)

4. Drag the `.dmg` file onto DropDMG while holding down the Shift key. This is equivalent to using **File** ▸ **Burn Image...**
5. DropDMG will ask you to insert a blank disc; after doing so, click the **Burn** button.

DVDs are faster to access than CDs. Thus, if you burn a DVD copy of an emergency boot CD, your Mac will boot approximately 25% faster from the backup than from the original CD. This can be a savings of a couple minutes.

### 4.3 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 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.

### 4.4 Protecting Your Files With Encryption

Apple's [FileVault](#)<sup>17</sup> encrypts your whole home folder, which is overkill for many users, needlessly slowing access to their files and increasing the risk of data corruption.

DropDMG lets you use the same encryption technology to protect a select group of files from prying eyes. Each group of files is stored on an encrypted disk image. Each disk image can hold as many

---

<sup>17</sup><http://www.apple.com/macosx/features/filevault/>

or as few files as you want and can have its own passphrase. The files will be secure if your hard drive is stolen or if you send the disk image across a network.

To create an encrypted disk image with your files:

1. Open DropDMG's preferences window and select one of the [.dmg formats](#). Choose "read-write" if you want to be able to modify the encrypted files, or choose one of the compressed formats to save disk space.
2. Check the box next to [Encrypt using passphrase](#) and enter a passphrase. Check the **Delete original after Creating** box if you want DropDMG to delete the original files when it's done, leaving only the encrypted version.
3. Drag the folder containing your files onto DropDMG's status window, or choose **New from Folder/File...** from the **File** menu and select the folder. DropDMG will then create an encrypted [.dmg](#) file with the contents of the folder.

To access the encrypted files:

1. Double-click the [.dmg](#) file. The Finder will ask for your passphrase, and then mount the image as a white volume icon on your desktop. Inside it will be your files, and you can access them as normal.
2. When you're done using the files, eject the volume. The files will now be inaccessible without the passphrase.

Here are some additional tips:

- You can encrypt files with just one step by saving DropDMG's preferences as a [Configuration](#). From DropDMG's **Preferences** window, choose **Save Configuration As...** from the **Configuration** pop-up menu and then enter a name for the configuration. When you want to encrypt a folder, make sure that the configuration is selected, and then drag the folder onto DropDMG. It will use the options and passphrase that you saved.
- Save time by using a Login Item to make some encrypted files available whenever you log into your Mac. Choose **System Preferences...** from the Apple menu. Click on **Accounts**, and then select your account. Then click **Login Items**. Drag your [.dmg](#) file into the list. Now, whenever you log into your Mac, it will ask for the passphrase and then mount the image.
- The encrypted files don't have to appear on your desktop. You can use the **Mount Image At...** command to make them available inside [another folder](#).

## 4.5 Restoring Files and Disks

Once you've [backed up](#) the contents of a hard disk or CD-ROM to an image, how can you restore the files?

- If you just need to access specific files, you can double-click the `.dmg` file to mount it, then locate the files using the Finder. If a large image is split into multiple `.dmg` and `.dmgpart` files, copy them all into a single folder before trying to mount the `.dmg`. If you have many `.dmg` files, you can use a utility such as [CDFinder](http://www.cdfinder.de)<sup>18</sup> to catalog them so that you can easily find which `.dmg` contains the files that you're looking for.
- To restore an entire CD or DVD, choose **Burn Image...** from the **File** menu and select the image file. This lets you create a copy of the original disc.
- To restore an entire drive, you can use the Disk Utility program in the **Utilities** folder of the **Applications** folder. (You can also access Disk Utility by booting from your Mac OS X installation CD/DVD; that way, you can restore your drive without first having to install Mac OS X.) First, choose **Scan Image for Restore...** from Disk Utility's **Images** menu and select the image file. Then click on the target drive in the list at the left side of the main Disk Utility window. Click on the **Restore** tab. Drag the image file onto the **Source** field, and then drag the target disk from the list to the **Destination** field. When you click the **Restore** button, Disk Utility will erase the target drive and replace its contents with an exact copy of the drive that the image was created from. If the original drive was bootable, the restored drive will be, too.

## 4.6 Transferring Files Securely

You can use DropDMG to transfer files from one Mac to another, while protecting them from unauthorized access.

1. Put the files in a folder.
2. Set DropDMG to create a compressed `.dmg` image that's encrypted with a passphrase.
3. Drag your folder onto DropDMG. This will create an encrypted `.dmg` file.
4. You can then send this file via e-mail, upload it to a Web or FTP server, or transfer it physically (via flash drive, hard disk, CD, etc.) without worrying about anyone accessing its contents.
5. An authorized person can access the files by double-clicking the `.dmg` file and entering the passphrase.

---

<sup>18</sup><http://www.cdfinder.de>

## 5 Menus

### 5.1 The DropDMG Menu

#### 5.1.1 About DropDMG

The **About DropDMG** window shows the credits, as well as download and support information.

You can always download the latest version of DropDMG from the [DropDMG Web site](#)<sup>19</sup>.

Questions about DropDMG may be sent to [dropdmg@c-command.com](mailto:dropdmg@c-command.com)<sup>20</sup>. 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 can use the [Software Update](#) feature or subscribe to the [DropDMG News mailing list](#)<sup>21</sup>. The traffic on this list is very low, only one message per new version of DropDMG.

The [DropDMG RSS feed](#)<sup>22</sup> contains update notices and other DropDMG news.

The [DropDMG forum](#)<sup>23</sup> is the place to talk with other DropDMG users, share tips and tricks, and ask questions.

#### 5.1.2 Software Update

Click the **Check Now** button, and DropDMG will tell you whether a newer version is available for download. By default, DropDMG will automatically check for new versions each time it is launched and once per day. You can disable this feature by unchecking the checkbox.

If a new version is available, DropDMG will tell you what's new in that version. Click **Download** to have DropDMG download the `.dmg` file for the new version to your Internet downloads folder. Click **Download & Install** to have it download the `.dmg` and then update the installed DropDMG application to the new version.

To check for a new version, DropDMG contacts a Web server at `dreamhost.com`. DropDMG transmits the following information to the server: the name of the product (DropDMG) and its version, the version of Mac OS X, whether DropDMG is registered, and the name of the current language. This information is used to guide future development. No personal information is transmitted.

---

<sup>19</sup><http://c-command.com/dropdmg/>

<sup>20</sup><mailto:dropdmg@c-command.com>

<sup>21</sup><http://c-command.com/dropdmg/support>

<sup>22</sup><http://c-command.com/blog/category/dropdmg/feed>

<sup>23</sup><http://c-command.com/forums/forumdisplay.php?f=3>

### 5.1.3 Purchase

This window lets you buy DropDMG. If you've already purchased DropDMG but it's running in demo mode, you can enter your name and serial number to personalize your copy of DropDMG and remove the demo limitations.

DropDMG has a free trial period that lasts for 30 days or 7 launches, whichever is longer. To use DropDMG beyond the demo period, you must purchase it. This entitles you to free updates and support.

To purchase, choose **Purchase...** from the **DropDMG** menu. You can use the **Purchase** button to enter the online store.

Soon after paying, you'll receive an e-mail with your serial number. 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 laptop; you can then use it on either machine, provided that no one is using it on the other machine.

### 5.1.4 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.

In order to take advantage of **Always Run With Root Access**, the DropDMG application should be located on your Mac's startup volume.

### 5.1.5 Quit When Done

If this option is selected, DropDMG will quit itself when there are no more imaging or burning operations in progress.

### 5.1.6 Install “dropdmg” Tool

This installs the `dropdmg` [command-line](#) tool in `/usr/bin/dropdmg` so that you can invoke DropDMG from Terminal.

## 5.2 The File Menu

### 5.2.1 Fix Image...

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 [The Status Window](#) window while holding down the Control key.
- Choose **Fix Image...** from the **File** menu.

### 5.2.2 Get Image Info...

This command lets you get information about a disk image, such as its format and compression.

### 5.2.3 Mount Image (with Owners)...

When you [mount](#) an image by double-clicking it, Mac OS X treats every file on the mounted image as though it were owned by you (the current user). When you mount an image using this command, the files are displayed with their actual owners, as stored on the disk image. Thus, if you use DropDMG to backup a collection of files whose ownership matters, you should also use DropDMG to mount the image when you restore from that backup.

#### 5.2.4 Mount Image At...

This command lets you [mount](#) an image at some other location in your local filesystem (rather than on the desktop, i.e. the `/Volumes` folder). 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 you want to protect some of your files (using an encrypted disk image) and make them available inside your `Documents` folder.

#### 5.2.5 Verify Image Checksum...

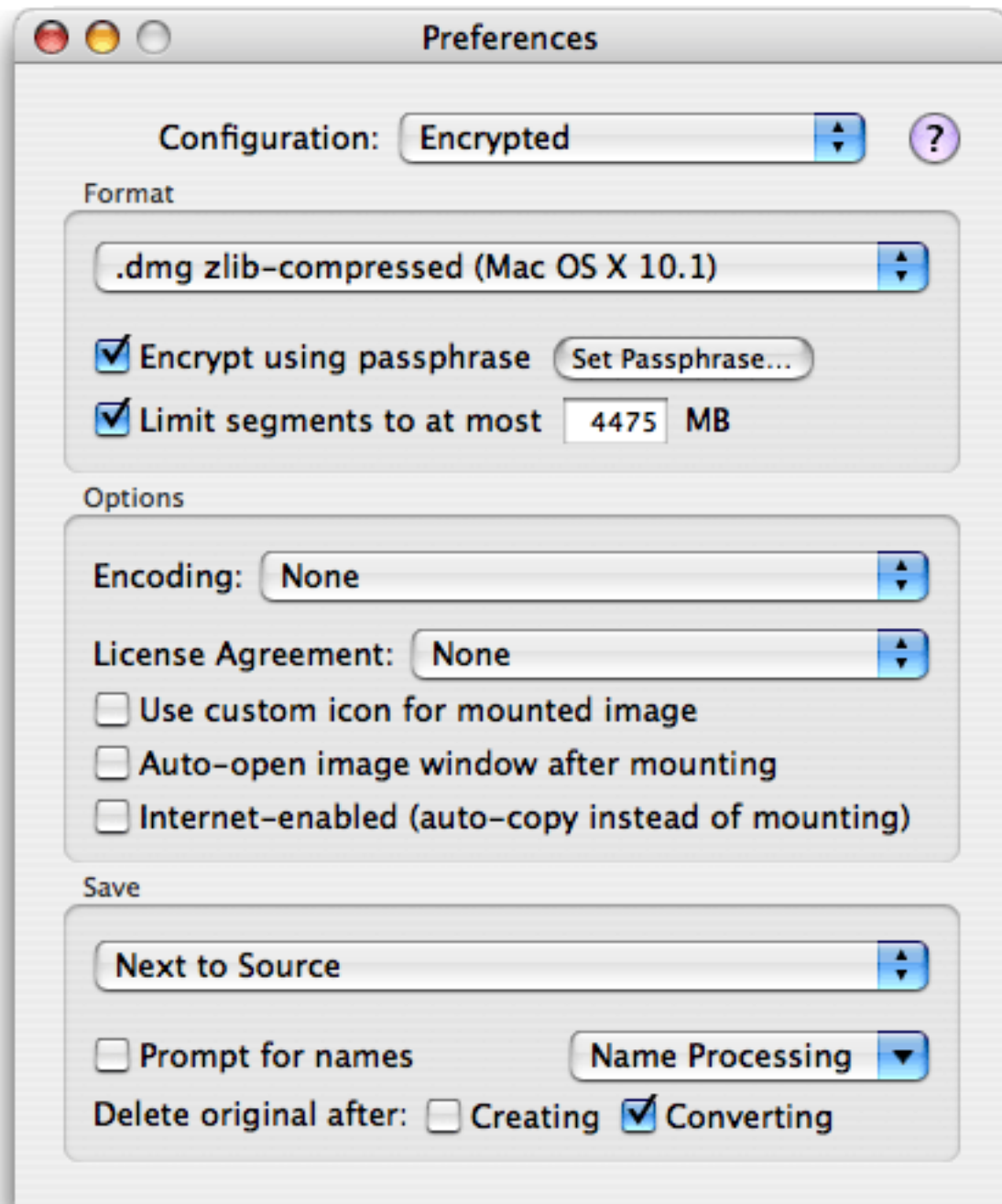
This command lets you verify that an image file is in working order (i.e. that it is not damaged).

#### 5.2.6 Convert Graphic to “.VolumeIcon.icns”...

This command lets you convert a graphic file in another format (PNG, PDF, etc.) into `icns` format for use as a custom icon. First, it asks you to choose the image file. Then it asks you to choose a folder in which to save the icon file. DropDMG then saves the icon there with filename `.VolumeIcon.icns`. This is the special filename that Mac OS X uses for volume icons. Because the name begins with a period, the file will be invisible. When you drag the folder onto DropDMG to create an image, DropDMG will see the icon file and set it as the icon (if you have [Use custom icon for mounted image](#) checked).



## 6 Preferences



## 6.1 Format

DropDMG supports the following image formats:

### **.dmg zlib-compressed**

zlib creates relatively compact disk images that are compatible with Mac OS X 10.1 and later. This is DropDMG's recommended format for general use.

### **.dmg bzip2-compressed**

bzip2-compressed images only work on Mac OS X 10.4 and later, but they can be significantly smaller than zlib-compressed images. They are *much* slower to create and access than zlib-compressed images.

### **.dmg ADC-compressed**

ADC-compressed images are a bit larger and slower than zlib-compressed 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 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. They do not support license agreements. DropDMG creates read-write images slightly larger than needed to hold all the files. This lets you 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 its contents 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 of logical size.

### **.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 is slower than the other formats and StuffIt Expander is required to expand the archives. StuffIt Expander is bundled with Mac OS X 10.3–10.3, but not with 10.4.

### **.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.

Note: Apple made some changes to the disk imaging engine in Mac OS X 10.4.7. As a result, .dmg images created with 10.4.7 and later are not compatible with Mac OS X 10.0 or 10.1.

## **6.2 Encrypt using passphrase**

Encrypted images require a passphrase for access; the image contents are secure from anyone who doesn't know the passphrase. 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 Advanced Encryption Standard (AES-128<sup>24</sup>) algorithm. Encrypted StuffIt archives use Allume's implementation of the AES-256 algorithm.

Click the **Set Passphrase...** button to choose the passphrase that you want to use. To make sure that you've typed what you meant to type, you must enter the same passphrase twice. DropDMG

---

<sup>24</sup><http://csrc.nist.gov/encryption/aes/>

will tell you whether the two typed passphrases are the same. After choosing a passphrase, you can return to the **Set Passphrase** dialog at any time to verify that the passphrase is what you think it is.

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.

### 6.3 Limit segments to at most \_\_\_ 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 **burn** segments to disc, you should use DropDMG's **Burn Folder/File...** command. Some common media types can accommodate segments of approximately these sizes:

- 700 MB CD: 702 MB segments
- 4.7 GB DVD: 4,475 MB segments
- 8.5 GB DVD DL: 8,150 MB segments

although capacities may vary slightly, as will the sizes of the segments produced by the disk imaging engine.

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.

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

To join multiple segments into a single image file, make sure that all the segments are in the same folder, set the desired image format in DropDMG's preferences and uncheck **Limit segments to at most \_\_\_ MB**, and then drag the image file onto DropDMG.

### 6.4 Encoding

NDIF and self mounting image files cannot be directly transmitted on the Internet because they have [resource forks](#)<sup>25</sup>. 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

---

<sup>25</sup><http://www.macdisk.com/macforken.php3>

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.

## 6.5 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 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.

## 6.6 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. This option is ignored when creating an image by converting.



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.

## 6.7 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.

If you burn an image that is set to auto-open, the CD/DVD window will auto-open when the disc is inserted.

In Mac OS X 10.4, the preferences set in Disk Utility override an individual image's auto-open setting. The default is for read-only images to auto-open and for read-write images not to auto-open.

This option is ignored when creating an image by converting.

## 6.8 Internet-enabled (auto-copy instead of mounting)

When an [Internet-enabled](#)<sup>26</sup> 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 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.

If the disk image has a background picture, it is not transferred to the expanded folder.

## 6.9 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.

## 6.10 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.

---

<sup>26</sup><http://developer.apple.com/documentation/DeveloperTools/Conceptual/SoftwareDistribution/index.html>

## 6.11 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.

## 6.12 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.

## 6.13 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.

# 7 Frequently Asked Questions

## 7.1 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. Launch DropDMG and choose **Purchase** from the **DropDMG** menu. Then click the **Lost Your Serial Number?** button.

## 7.2 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.

# 8 Legal Stuff

## Distribution



Please distribute the unmodified `DropDMG-2.8.dmg` file on the Web, LANs, compilation CD-ROMs, etc. You may not charge for it (beyond a reasonable cost for media) or distribute the contents of the disk image file in isolation. You may not distribute your serial number.

## Limited Warranty

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.

## License

A license for DropDMG is good for one person *or* one computer. You may install it on one Mac, and everyone sharing that Mac may use it (on that Mac). Alternatively, you may install it and use it on multiple Macs (e.g. your desktop Mac and your laptop); then you (and no one else) may use it on any of those Macs. For multiple users on multiple Macs, you should purchase multiple licenses.

## Copyright and Trademarks

DropDMG and this manual are copyright © 2002–2007 by [Michael J. Tsai](#)<sup>27</sup>. All rights reserved.

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.

## Components

The following open-source components are used in DropDMG:

Regular expression support is provided by the [PCRE](#)<sup>28</sup> library package, which is open source software, written by Philip Hazel, and copyright by the University of Cambridge, England.

Thanks to Allan Odgaard for some code snippets that are used in the Software Update installer.

## 9 Version History

### 2.8—April 4, 2007

- Improved compatibility with pre-release versions of Mac OS X 10.5.
- Passphrases are now set in a separate dialog rather than directly in the preferences window, and this has been combined with the old **Confirm Passphrase** feature. This

---

<sup>27</sup><mailto:mjt@c-command.com>

<sup>28</sup><http://www.pcre.org>

makes it easier to verify a passphrase when you enter it.

- DropDMG now accesses the keychain only when necessary, so it won't prompt you to unlock the keychain if you're creating an image that doesn't have a passphrase.
- The [Software Update](#) checker now works behind an HTTP proxy, and the auto-updater is compatible with FileVault.
- Reorganized the manual and added [Burning Backups of CDs/DVDs](#) and [Transferring Files Securely](#) sections.
- When creating an image of an application or installer package, DropDMG no longer includes file extension in the image name.
- Worked around -39 error from `hdiutil` when converting very large images with lots of files.
- Auto-open is now off by default, since it slows down image creation, and on Mac OS X 10.4 and later the OS will auto-mount images automatically, anyway.
- Fixed bug where **Burn Folder/File**... treated packages as folders rather than as files.
- Better recovery from -35 errors when doing image post-processing.
- Fixed bugs in enabling and disabling [Always Run With Root Access](#) menu command.
- Fixed bug where the **Services** menu commands could appear in French if you were using a British English system.
- Fixed bug remembering a recent folder that had a slash in its name.
- Fixed error when initiating a burn via AppleScript.
- Fixed small memory leak.
- Better names for temporary folders.
- Added keyboard shortcut for **Hide Others**.
- Added Spanish localization.

### 2.7.9—October 18, 2006

- Worked around OS bug that could cause crashes when editing license agreements.
- Fixed bug when converting multiple archives simultaneously using StuffIt Expander.
- Rewrote the [Software Update](#) feature. When a new version is available, it can now show you the release notes. DropDMG now downloads the new version itself, rather than relying on your browser. The **Download & Install** button will cause DropDMG to auto-update itself to the latest version.
- Added [recommended segment sizes](#) to the manual and tooltip.
- If no windows are open when you click on DropDMG's icon in the Dock, it will now open [The Status Window](#).
- The **Volume Name** field is ignored when creating a device image, so it's now disabled in that case.
- Aliases in the [Recent Folders](#) folder are now created with icons.
- Dates in the log now follow the user's preferred short format.

- Fixed bug where it was possible to change the destination folder without the active configuration changing to **(custom)**.
- Fixed bug where clicking the **Confirm** button could change the configuration to **(custom)**.
- Fixed regression where DropDMG didn't set the image name based on the localized name of the source file/folder.
- Fixed a small memory leak when making custom icons.
- Fixed bug converting multiple archives from the same folder.
- The segment size field is now disabled when unchecked.
- Fixed bug with display of remaining demo time.
- Fixed bug with Purchase window sheet.
- More code modernization and bullet-proofing.
- Made various localization, documentation, and error message improvements.

#### 2.7.8—July 13, 2006

- Fixed regression where double-clicking a license agreement sometimes wouldn't open its editor window.

#### 2.7.7—June 29, 2006

- The **Get Image Info...** and image conversion features now support **.iso** disk images.
- Various code modernization and bullet-proofing throughout.
- Added [Protecting Your Files With Encryption](#) section to the manual.
- Made a change to prevent a rare crash when closing the license agreement editor window.
- Fixed bug that could cause a crash when closing the application-modal progress window.
- Fixed bug where editing a license agreement's contents would change the active configuration to "(custom)."
- Fixed bug where you could create an image of the destination folder inside itself.
- Fixed bug where DropDMG could crash when running in Danish.
- Fixed various localization bugs.

#### 2.7.6—March 28, 2006

- DropDMG can now create images from files/folders/volumes whose names contain the **/** character (: at the Unix level).
- DropDMG can now burn images that are in **.cdr** format.
- Slightly faster at creating disk images.
- Improved the display of the demo time remaining.
- Various documentation improvements.
- Updated the localizations.

#### 2.7.5—January 25, 2006

- DropDMG is now a [universal binary](#)<sup>29</sup>.

---

<sup>29</sup><http://www.apple.com/universal/>

- You can now initiate burns using the `dropdmg` command-line tool.
- Rather than typing (or copying and pasting) your name and serial number to personalize DropDMG, you can now click the `x-dropdmg://` URL that’s sent to you when you [purchase](#)<sup>30</sup> DropDMG or get a [serial number reminder](#)<sup>31</sup>.
- Errors encountered while preparing to create an image are no longer reported twice.
- Mounting errors are now displayed properly.
- Improved display of keychain errors.
- Added Danish localization and updated the other localizations.
- Made various improvements to the manual.

#### 2.7.4—October 25, 2005

- Fixed bug where DropDMG would create a blank image when running on Mac OS X 10.3 and given a file or document package (i.e. not a folder or application).

#### 2.7.3—October 25, 2005

- You can now view and set the current configuration from DropDMG’s Dock menu.
- Added “Expand Disk Image” Automator action, which replaces a disk image with a folder containing the image’s contents. You can create an “Expand Image” contextual menu item in the Finder by creating a single-step Automator workflow with this action and saving it as a Finder plug-in.
- Problems with the destination folder are now reported using the “choose destination” sheet instead of in a separate alert.
- The software update feature now shows a sheet instead of an alert when there’s a new version, so it won’t interfere with scripted operations.
- Fixed regression where DropDMG would complain at launch if one of the configurations’ destination folders didn’t exist.
- Fixed bug where DropDMG would waste CPU time animating an off-screen progress bar after finishing an operation.
- Added **Technical Support & Feedback** item to **Help** menu.
- Updated eSellerate engine and PCRE.

#### 2.7.2—September 22, 2005

- You can now drag and drop anywhere on DropDMG’s status window, rather than just on the top part of it.
- Fixed bug where DropDMG was incompatible with StuffIt Expander 10.
- DropDMG now reports an error if you specify a destination folder that doesn’t exist, rather than silently picking a fallback folder.
- Better error messages when DropDMG doesn’t find a file in the expected place.

---

<sup>30</sup><http://c-command.com/store/>

<sup>31</sup><http://c-command.com/sn>

- The command-line tool now treats the empty string as an invalid destination folder instead of (as with AppleScript) treating it as a flag to indicate that the user should be prompted to specify a folder. This should reduce unexpected behavior when running DropDMG via a shell script that doesn't properly quote the command-line arguments.
- Errors during burning are now presented using a sheet, rather than just being logged.
- No longer shows an error message if you try to install the command-line tool and then cancel out of the authorization dialog.
- Updated the Italian localization.

### 2.7.1—August 22, 2005

- You can now erase rewritable discs before burning.
- Fixed regression where DropDMG could crash when converting an image to an archive.
- Fixed bug where DropDMG couldn't convert images with license agreements into archives or mount them.
- Worked around `hdiutil` bug for more reliable imaging of certain non-optical volumes.
- Fixed regression where the command-line tool didn't work on Mac OS X 10.3.

### 2.7—August 15, 2005

- Added commands for [burning](#) folders, files, and disk images. As a shortcut, you can initiate a burn by dragging and dropping onto the status window or the DropDMG icon while holding down the Shift key. Hold down Option *and* Shift when dropping a disk image if you want to burn the image as a file, rather than burning its contents.
- Added smooth determinate progress bars for the longer steps when creating disk images (requires Mac OS X 10.4).
- Progress windows now have a cancel button, an icon showing the kind of file that's being created, and an icon and title bar menu that show the source file or folder.
- Added [Quit When Done](#) option; if selected, DropDMG will quit when there are no longer any image, archive, or burn operations in progress.
- The status window now has a pop-up menu for displaying and changing the current configuration.
- Better creation of device images from multi-partition devices.
- Progress windows are now tiled (so they don't overlap), and DropDMG is better at remembering where you like to position them. Dragging a progress window sets the preferred location for new progress windows.
- The following **File** menu commands can now accept multiple selection, so that you can operate on more than one image at a time: **Fix Image...**, **Get Image Info...**, **Mount Image (with Owners)...**, **Verify Image Checksum...**
- Improved scriptability. You can now access DropDMG's windows, menus, and other interface elements from AppleScript. You can also access the current imaging and burning operations and cancel them. You can initiate burns from AppleScript.
- The Automator action is now a universal binary.

- The `dropdmg` command-line tool now properly communicates with the DropDMG application when running on Intel.
- Fixed bug where image creation could fail with an error when creating an image on an external volume, depending on the lengths of the source and destination paths.
- Fixed regression where file packages weren't wrapped when DropDMG was running with root access.
- Fixed bug where [Sanitize for Servers](#) didn't account for file names that were entirely non-ASCII characters.
- Fixed bug where DropDMG would sometimes fail to remove an extra folder layer when converting from Zip format.
- Fixed bug where the **Edit Configurations** window allowed multiple selection.
- Fixed bug that could cause a crash when creating a disk image if the OS reported an error at exactly the wrong moment.
- The **Purchase** window now makes it more clear when the serial number has been successfully entered. Merged the **Web Purchase...** and **Instant Purchase...** buttons.
- Adjusted the way the remaining demo time is displayed.
- Updated Czech, Dutch, French, and Italian localizations.

### 2.6.3—June 22, 2005

- Fixed regression where DropDMG would report an error when converting a `.dmg` image to read-write format.
- Fixed regression where the license agreement editor didn't work on Mac OS X 10.3.

### 2.6.2—June 20, 2005

- Fixed regression where DropDMG would halt with a permissions error when creating an image from a lone file and running on Mac OS X 10.3.

### 2.6.1—June 20, 2005

- DropDMG can now create `.dmg` disk images that are internally compressed using `bzip2`. These images can only be mounted on Mac OS X 10.4 and later, but they are often much smaller than `zlib`-compressed disk images.
- Made various optimizations for faster disk image creation.
- Added **Mount Image (with Owners)...** command. This lets you copy files off an image with their Unix ownership intact. (Normally, when you let the OS mount an image, it pretends that all the files are owned by you.)
- The **Add Agreement...** command is now enabled even when the **License Agreements** window isn't open. This should prevent people from being confused about how to create a new agreement.
- The [Append Current Date](#) option is now applied only when creating new images, not when converting.

- If you tell DropDMG to segment an image/archive, and it ends up being smaller than the segment size that you chose, DropDMG will no longer wrap the output files in a folder (since there's only one).
- The keyboard shortcut for **Open Configurations** is now Command-Option-,.
- Worked around some Tiger issues that could cause DropDMG to halt part way through creating an image.
- Worked around bug in Tiger where `.bz2` and `.gz` files would have `.dmg` type and creator codes, which could cause problems opening them.
- Worked around Tiger issue so that it's once again possible to remove a license agreement by converting (using **None** as the agreement).
- Better cleanup if there's an error creating the image.
- DropDMG no longer complains when there's no default keychain.
- `.mailbundle` folders are now treated as packages, even though technically they aren't.
- Filename uniquing is now smarter when there are two extensions. So, for example, you'll end up with `Foo-1.tar.bz2` instead of `Foo.tar-1.bz2`.
- Fixed bug where sometimes custom icons didn't work if you created multiple images simultaneously.
- Fixed bug where images created from volumes couldn't be Internet-enabled.
- Fixed bug where dragging a folder onto the **Preferences** window (to change the destination) didn't change the selected configuration to (**custom**).
- Fixed bug where StuffIt X and Tar were always enabled in the contextual menu.
- Fixed bug where Tar archive creation wasn't package-savvy.
- Fixed bug where Zip archives of single files contained an extra folder layer.
- Added `--version` switch to the `dropdmg` tool.
- The license agreement editor is faster at auto-saving any changes that you make.
- The demo reminder window updates the number of days remaining if you leave DropDMG running for days or weeks at a time.
- Fixed bug where DropDMG could get into a state where it was permanently waiting for other operations to complete.
- Fixed bug that could cause a crash when using the **Instant Purchase** feature.
- Updated French and Italian localizations. Added Dutch localization.

## 2.6—April 29, 2005

- Works with Mac OS X 10.4 (Tiger).
- DropDMG now has an **Automator**<sup>32</sup> action.
- Can now create Mac OS X 10.4 Tar archives (`.tar`, `.tar.gz`, `.tar.bz2`) that support Mac resource forks.

---

<sup>32</sup><http://www.apple.com/macosx/features/automator/>

- 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.
- 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 sub-folders of packages (instead of just vanilla folders).
- Minor UI tweaks.

## 1.0—January 21, 2002

- First public release.