



StufferIt 2010 for Macintosh

User Guide

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Chapter 1: Welcome and Thanks for Choosing Stuftit!

The Stuftit compression utilities enable you to work with a wide variety of compressed and encoded file formats. While the compression tools built into Mac OS X have limited expansion and creation abilities (eg: they do not support encryption and only handle a selection of archive formats), we provide tools for opening over 30 different file types (see "[Appendix A: Supported Formats](#)" on page 79). Our Stuftit and Stuftit Deluxe suites create several popular archive formats including our own cutting-edge Stuftit X format. We provide all manner of options including encryption, segmenting and encoding. Our Deluxe suite offers many ways work with archives, easily finding them anywhere on your machine; easily searching for files inside archives; peeking inside archives without opening them first; modifying their contents, and much more!

Stuftit comes in three flavors:

- A free, stand-alone Stuftit Expander
- The shareware Stuftit Suite which includes Expander and adds the companion tool DropStuff for creating archives
- The Stuftit Deluxe suite which includes the components from the Stuftit Suite as well as other tools for that help make working with compressed files easy.

This User Guide is organized by components included in the Stuftit Expander, the Stuftit Suite, and the Stuftit Deluxe suite. Generally, documentation for each component is divided into two parts: a "Getting Started" section that cover the basics of using the component and an "Advanced" section that provide more detailed information as well as troubleshooting information.

About Us

We know compression. Stuftit was originally created for the Macintosh in 1987, and was published in 1989 by a little company near Santa Cruz, California called Aladdin Systems. Since then company names have changed and team members have come and gone, but we're still here in Watsonville, a stone's throw from our old offices, still coming up with ways to make your files smaller and provide the most comprehensive suite of file compression tools available.

What's New in Stuftit 2010

Stuftit Deluxe 2010 is a leap forward in workflow management.

- **Stuftit® SmartSend:** Resolves issues with bounced email due to oversized attachments. Your larger archives can be uploaded to a File Host site automatically, and your recipient can be mailed a link to retrieve the file. Currently,

FTP, MobileMe, and the new StuffIt® Connect service are supported file host destinations.

- **StuffIt® Connect:** A new service that allows you to easily and securely share files with others. You can track invitations and downloads via any web browser. You can expire invitations and create new ones right from your smart phone or iPhone. A one-year subscription is included with the purchase of StuffIt Deluxe. Visit <http://www.stuffitconnect.com> for more information.
- **StuffIt Plugins for iPhoto and Aperture:** Allows you to compress your important photos and burn the archive to CD/DVD or upload it to FTP or your MobileMe iDisk.

The StuffIt Engine

- **Enhanced Image Recompessors:** Our updated image recompressors are faster and make smaller files.
- **WAV Recompessor:** In addition to JPEG, MP3 and our other recompressors, we've added a special recompressor optimized for WAV files.

System Requirements

- Mac OS X 10.4 Tiger required for basic functionality.
- The Quick Look plugin, and MacFUSE plugin require Mac OS X 10.5 Leopard or later.
- The StuffIt Export plugin for iPhoto requires iPhoto 8.0 or later.
- The StuffIt Export plugin for Aperture requires Aperture 2.0 or later.
- The MacFUSE plugin requires that Google's MacFUSE be installed (separate download).
- Growl notification support requires Growl to be installed (separate download).

Note: In Mac OS 10.6 (Snow Leopard), Apple has removed support for third party contextual menu plugins. As a result, the StuffIt Contextual Menu is not available. The MagicMenu, which has identical features, is still available in the menu bar for 10.6 users.

Chapter 2: Overview

What is Stuflit for?

If you imagine the Internet as a series of tubes, you can think of compressed, encoded and encrypted files as different packaging systems used to deliver files from one place to another. Generally, the purpose of these different packaging systems is to group related files together, and to make them smaller so they can be stored and transmitted more easily.

Compressing, Archiving, Encoding, Segmenting, Encryption...What's it all mean?

- **Compression:** Compression is the process of reducing a file's size through various pattern matching and token replacement schemes. Many compression formats, like gzip and bzip2, only handle individual files, not files and folders.
- **Archiving:** An archive is a package that can contain multiple files and folders. The contents of an archive can be compressed, but some archive formats simply store multiple

items without a compression component. Stuflit and Zip archive examples of archive file types that use compression, UNIX Tape Archives (.tar) are an example of an archive file type that does not use compression.

- **Segmenting:** On occasion, you may encounter an archive that has been divided into several pieces. Typically, segmentation is used to split a large archive over several disks or to post a large file in several smaller, easier to download parts.
- **Encoding:** In the context that applies to Stuflit, encoding refers to a process by which a binary (8-bit) file is translated into a text (7-bit) file. BinHex and UUencode are examples of encoding methods that convert binary into text. This encoding method is most often used when files are sent by email, or posted on to USENET Newsgroups. Most often, an encoded file contains only one item, but occasionally multiple files will be concatenated (joined) together into a single encoded file.
- **Encryption:** To keep prying eyes from looking at private information, files can be secured with passwords – their contents scrambled and inaccessible without the correct key.

Often these different schemes are used in combination: most archive formats are compressed and many support encryption. Some packaging operations are performed one after the other creating compound files that are like nested dolls – packages within packages.

The tools provided by Stuffit, at a minimum, allow you to open these different formats. The **Stuffit Suite** adds the ability to create archives and the **Stuffit Deluxe** suite offers many more ways to work with these files, share files with others, and optimize your workflow.

Features	Expander	Standard (unregistered)	Standard (Registered)	Deluxe
Expand over 30 formats	•	•	•	•
AppleScript support	•	•	•	•
Create Custom Compression Profiles		•	•	•
Create Encrypted Archives			•	•
Create Segmented Archives			•	•
Compress and Burn to CD/DVD			•	•
Compress and Upload to FTP			•	•
Compress and Upload to MobileMe iDisk			•	•
Search for Items Stored in Archives				•
Command Center for Working with Compressed Files				•
Preview Images Stored in Archives				•
Preview Archive Contents without Expanding				•
Scheduled Archiving				•

Features	Expander	Standard (unregistered)	Standard (Registered)	Deluxe
Finder Integration with MagicMenu, Stuffit Contextual Menu, Spotlight, Quick Look, and MacFUSE plugins				•
Create Mini Installers				•
Automator Actions				•
Command Line Tools				•
Smart Attachment Handling				•
1-year Subscription to Stuffit® Connect				•
Create disk images				•
Archive photos directly from iPhoto and Aperture				•

More about the Stuffit Products for Macintosh

Stuffit Expander

Expander opens many files and does it for free!

Basic Expander Features/Benefits

- Easy to use.
- Unobtrusive – it launches, expands, then quits
- Expansion support for over 30 formats (see [“Appendix A: Supported Formats”](#) on page 79).
- Free! Anyone can download Stuffit Expander for Mac or Windows from our website and many third party Internet sites - Absolutely Free!

Advanced Expander Features

- Watch Folder – Auto expand files when they are added to a folder
- Auto Scan for viruses – check files for viruses after expansion automatically
- Merging - If the target folder exists, merge the contents keeping older files or replacing with newer ones.

Advanced Expander Features for the Stuffit Deluxe User

- Assign file types to be opened with Archive Manager in browse-mode
- Merging with Archive Specified Destination to restore files to their original locations

Other Expander Features

- Growl notification support
 - Update notification
 - AppleScript support
-

The Stuffit Suite

The Stuffit Suite includes Stuffit Expander for opening files and adds the companion program DropStuff for creating compressed, encrypted and encoded archives.

Basic DropStuff Features:

- Easy to use Drag and Drop interface.
- Unobtrusive – it launches, compresses, then quits
- Compress files into StuffIt X, Zip, and Tar archives
- Create encrypted (Password protected) archives
- Customizable Profiles and Droplets

Advanced DropStuff Features:

- Create archives for non-Mac users
- Compress and Encode archives for uploading
- Create Segmented StuffIt X archives
- Compress and burn CD/DVD
- Compress and upload to FTP
- Compress and upload to Apple MobileMe iDisk

Advanced DropStuff Features for the StuffIt Deluxe User

- Index Archives

Other DropStuff Features

- Growl notification support
 - Version Checking
-

The StuffIt Deluxe Suite

StuffIt Deluxe includes StuffIt Expander and DropStuff and adds the following:

- Finder integration with the StuffIt Quick Look plugin
- The StuffIt plugin for MacFUSE
- Even easier expansion and archive creation, including legacy format support via the MagicMenu and the StuffIt Contextual Menu
- Smart attachment handling

- Export plugins for iPhoto and Aperture
- Archive browsing and manipulation
- Archive searching and scheduled archiving via Archive Manager
- Mini-Installer creation with SEA Maker
- Workflow scripting with Actions for Apple's Automator and the Stuffit Command Line Tools.

Links to QuickStart Guides

Click the links below to jump section for the component.

- Getting Started with StuffIt Expander (see "[Chapter 3: StuffIt Expander](#)" on page 9)
- Getting Started with DropStuff (see "[Chapter 4: DropStuff](#)" on page 20)
- The StuffIt Quick Look plugin (see "[Chapter 5: The StuffIt Quick Look Plugin](#)" on page 29)
- Getting Started with MagicMenu and the StuffIt Contextual Menu (see "[Chapter 6: MagicMenu and StuffIt Contextual Menu](#)" on page 31)
- Using StuffIt SmartSend (see "[Using StuffIt® SmartSend](#)" on page 43)
- Using StuffIt Connect (see "[Using StuffIt Connect](#)" on page 46)
- The StuffIt plugin for MacFUSE (see "[Chapter 7: The StuffIt Plugin for MacFUSE](#)" on page 50)
- Getting Started with Archive Manager (see "[Chapter 9: StuffIt Plugins for iPhoto and Aperture](#)" on page 54)
- iPhoto and Aperture Plugins (see "[Export Plugins for iPhoto and Aperture](#)" on page 54)
- Getting Started with SEA Maker (see "[Chapter 11: SEA Maker](#)" on page 68)
- Getting Started with the StuffIt Actions for Automator (see "[Chapter 12: StuffIt Actions for Automator](#)" on page 73)
- Getting Started with the StuffIt Command Line Tools (see "[Chapter 13: StuffIt Command Line Tools](#)" on page 76)

Chapter 3: Stuflit Expander



Fig 3.1: Stuflit Expander

Installation

Note: The installer will look for older versions of Stuflit in your Applications folder. If you have older versions of Stuflit or multiple copies of Stuflit Expander stored in other locations you should manually remove the other copies.

Whether you've downloaded the stand-alone Stuflit Expander, the Stuflit Suite or the Stuflit Deluxe Suite, double-click the installer and follow the prompts. The installer will put a Stuflit folder into your Applications folder that includes Stuflit Expander., and will optionally add Stuflit Expander to your Dock.

Expanding Files

Stuflit provides several different options for expanding files. Each of these options are explained in the following sections.

Expanding Files by Double-click

Many of the files that are supported by Stuflit Expander are automatically associated with the program when it is installed. These files will be identified by the "ball in cube" icon. Open the file in the Finder by double-clicking it. If Expander is closed, the program will launch, expand your files and then quit.



A StuffIt Archive.sitx



A Zip Archive.zip

Fig 3.2: "Ball in cube" icons

Expanding Files by Drag and Drop to Application Icon/Dock Icon

Some files that Expander can open may not be associated with it. You can try to open them by dragging them to StuffIt Expander's application or Dock icon.

*Fig 3.3: StuffIt Expander's Dock icon.*

If Expander is closed, the program will launch, expand your files and quit.

Tip: You can expand more than one file at a time by dragging multiple items onto StuffIt Expander.

Expanding Files by Drag and Drop to the Drag Window

When you launch StuffIt Expander, a Drag Window will appear. You can drag files and drop them onto the StuffIt Expander Drag Window to expand them.



Fig 3.4: “StuffIt Expander Application window

Finding the Expanded Files

When Expander finishes, the expanded content will be located in the same directory as the original files (this setting can be changed in the preferences).

If you no longer need the original file you can discard it.

If there is a “package within a package” that Expander recognizes, it will continue to expand the resulting files (this setting can be changed in the preferences).

Expanding Segmented Files

StuffIt Expander supports several types of segmented files (see “Appendix A: Supported Formats ” on page 79). To expand a segmented file, drag only the first segment of the set onto StuffIt Expander.

Note: You must have all of the segments in the same location (ie: a folder).

When Expander is finished joining the segments, the resulting file will be located in the same directory as the original segments (this setting can be changed in the preferences).

If the segmented archive you want to expand is stored on multiple CDs or DVDs, you can expand the segments one by one. First insert the disk that contains segment 1, and then drag and drop that segment onto StuffIt Expander. After Expander has finished expanding the first segment, you will be prompted to insert the disks that contain the remaining segments in the set.

Expanding Encrypted Archives

StuffIt Expander will prompt you to provide the passphrase before encrypted files can be expanded. If you do not have the correct passphrase you will not be able to access the files stored in the encrypted archive.

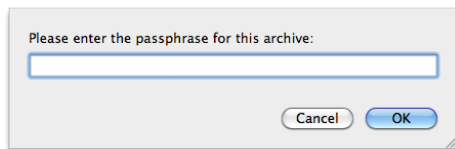


Fig 3.5: Enter your Encryption passphrase to expand the file.

That's it. You're ready to use Expander! Continue reading if you want to learn more, or come back later and explore Expander's Advanced Features.

Upgrading from StuffIt Expander to StuffIt Deluxe

To get files out of archives, StuffIt Expander can only expand the entire contents. StuffIt Deluxe allows you to:

- Browse the contents of archives and selectively extract items.
- Create archives in popular formats such as Zip, Tar and the cutting-edge StuffIt X.
- Schedule compressed backups
- Search for files stored in archives

Chapter 3: StuffIt Expander

- Preview images stored in archives
- Automate your workflow with several scripting options.
- Share your files easily with StuffIt SmartSend and StuffIt Connect
- Archive your photos directly from iPhoto and Aperture

Find out more here:

<http://my.smithmicro.com/mac/stuffit/index.html>

StuffIt Expander - Advanced Features

Below are some useful options many of which you can set in the Preferences.

One Time Preferences

If you hold down the **Option** key while dragging files to StuffIt Expander, you will be presented with a special "One Time" Preferences dialog.

This allows you to change preference settings that apply only to the current operation, such as the Destination directory. When you click **OK** to dismiss the Preferences dialog, your file would be expanded

to this new location for this one time. Future expansion operations will use the regular preference settings.

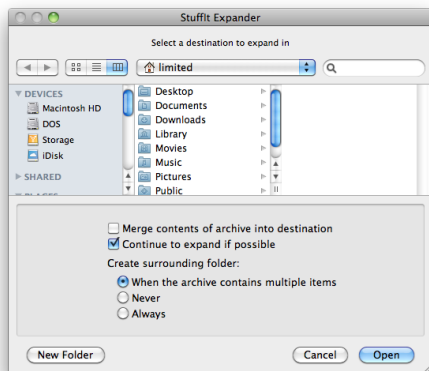


Fig 3.6: One-Time Preferences window.

The options found in this window are:

- **Merge contents of archive into destination:** See **By Merging into a Specified Location**, in “[Destination Preferences](#)” on page 16
- **Continue to expand if possible:** This option is discussed in “[Expansion Preferences](#)” on page 14
- **Create surrounding folder:** The options presented in this section are discussed in “[Destination Preferences](#)” on page 16

Advanced Expander Features for the Stuffit Deluxe User

Assign File Types to be Opened with Archive Manager

Expanding vs Browsing: When files are opened by Expander, they will be completely expanded. Some archives may contain many files and can be browsed with the Archive Manager tool, if present (see “[Chapter 9: Stuffit Plugins for iPhoto and Aperture](#)” on page 54). Browsing allows you to selectively extract individual files from an archive. You may also modify the contents of some archives when browsing them. You can decide whether Stuffit Expander or Archive Manager is launched when these files are double-clicked in the Finder by adjusting Expander’s File Mapping preferences. For further information, see “[File Mappings](#)” on page 17.

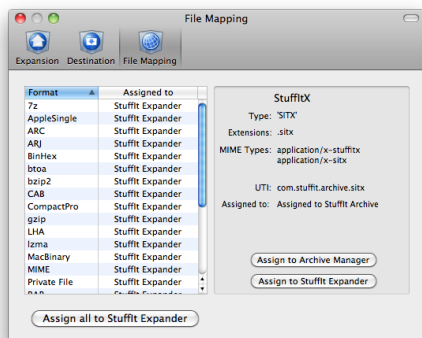


Figure 3.7: Setting File Mapping

Merging with Archive Specified Destination

Archives created with the Stuffit Scheduler feature of Archive Manager contain source path information that indicates where on the computer the files were when they were archived. Expanding with the special Merge option that uses this path information will restore the files back to their original location.

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Changing Expander's Preferences

You can change the behavior of Stuffit Expander using the Stuffit Expander preferences dialog. To open Stuffit Expander preferences, choose Preferences from the **Stuffit Expander** menu or click the **Preferences** button on Expander's toolbar.

Expansion Preferences

The Expanding Preferences are used to determine how Stuffit Expander goes about the task of expanding an archive or encoded file.

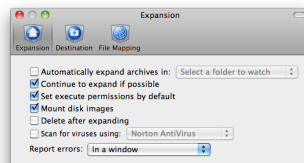


Fig 3.8: Expansion Preferences

- **Automatically expand archives in...** This setting is used to specify a folder that Expander will periodically scan

for new items to be expanded. Any compressed, archived, or encoded files placed in the specified folder will be expanded automatically.

- **Continue to expand if possible:** This preference, when enabled, causes Stuffit Expander to scan the expanded output to see if it can be further expanded. For example, expanding a BinHex encoded Stuffit archive (foo.sit.hqx), Expander will start to expand the archive "foo.sit" as soon as it has removed the BinHex (.hqx) encoding.

Note: Expandable content contained within sub-folders in the archive must be separately expanded.

- **Set execute permissions by default:** This preference determines whether Expander should set the execute file permission attribute on items expanded from archives that do not typically store UNIX file permissions, such as Zip (.zip) and the older Stuffit (.sit). If you un-check this box, OS X applications expanded from such archives may not run correctly.

Note: Stuffit X archives (.sitx) are designed to preserve UNIX permissions and ignore this setting.

- **Mount disk images:** When this option is enabled, Expander will attempt to mount disk image files (resulting in

the appearance of a "virtual disk"). Apple's DiskImageMounter is used to mount the images.

- **Delete after expanding:** When enabled, the files you expand will be deleted once the contents have been extracted.

Note: Use this preference with caution! If the archive or compressed file is damaged, or any error occurs during expansion, the file may still be deleted and would then have to be replaced before you can try expanding it again.

- **Scan for viruses using:** Expander allows you to automatically scan files that are extracted from archives and encoded files for viruses with your virus protection software. Expander supports some versions of McAfee VirusScan, Norton/Symantec Anti-Virus, and Intego Virus Barrier with pre-defined selections. If you would like to try using a different anti-virus program, choose **Other...** from the pop-up menu.
- **Report errors:** This preference determines how Stuffit Expander will handle errors that occur while files are being expanded. You can choose to ignore error message that occur, to have them displayed in window, or to have them written to disk in a log file.

Note: If Growl is installed, the In a Window option is suppressed in favor of the Growl notifications.

Destination Preferences

The Destination preferences determine where Expander will save files that have been extracted from archives, compressed files, or encoded files. You can choose the location where files are extracted. The following options are available:

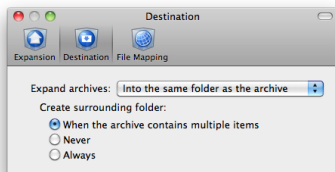


Fig 3.9: Destination Preferences

- **Into the Same Folder as the Archive:** When this option is selected, files will be saved to the same location as the archive, compressed file, or encoded file from which they were expanded. This is the default setting.
- **By Asking for a Destination:** When this option is selected, Expander will prompt you to specify a location to which files should be expanded.
- **Into a Specific Location:** Use this option to specify a location to be used every time Expander expands a file.
- **By Merging into a Specified Location:** As with the **Into a specified location** option, this preference requires you to choose a location on the hard drive to which the contents of the archive will be expanded. “Merge” refers to the behavior Expander will use when it attempts to expand a folder from the archive to the specified location, only to find a file or folder with the same name already exists. When merging is not selected, StuffIt will create a new copy of the folder with a “.1” at the end of its name. If Merging is enabled, StuffIt will expand files into the target location combining the contents of folders. If there is a name collision (a file with the same name is encountered), you will be prompted to select which of the two files you would like to preserve.
- **By Merging into the Location Specified by the Archive:** This applies the same “merging” process as above, but instead of prompting you for the location to which items should be expanded; this option will attempt to obtain a location from the “Source” information stored by the archive. Typically, this Merge option will only be useful when you are expanding StuffIt X archives created by Archive Manager’s Scheduler, or the older Archive Assistant.

In addition to telling StuffIt Expander where to place items that are expanded, you can specify whether or not StuffIt Expander should

place expanded files into a new folder. The preferences set in this dialog are not applied if either of the **Merge Folders** features are enabled.

- **When the archive contains multiple items:** This is the default option. When this option is selected, StuffIt Expander will create a surrounding folder whenever the archive contains multiple items at the root (first) level. The name of the archive will be used for the newly created folder.
- **Never:** StuffIt Expander will never create a surrounding folder.
- **Always:** StuffIt Expander will always create a surrounding folder.

File Mappings

If you purchased the StuffIt Deluxe suite, this preference allows you to choose whether StuffIt X, StuffIt 5, StuffIt, Zip, TAR or RAR archives will be expanded with StuffIt Expander or opened in browse-mode in StuffIt Archive Manager when double-clicked in the Finder. Compressed Tar archives can also be browsed in StuffIt Archive Manager by assigning bzip2, gzip, UNIX compress and lzma accordingly.

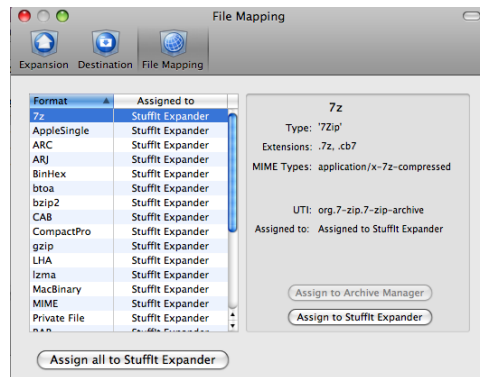


Figure 3.10: File Mapping Preferences

Other Expander Features

Growl Notification support

If you have the notification system Growl installed on your machine, Expander will use it to display alerts and other messages.

You can find out more about Growl here: <http://growl.info>

Update notification

Stuffit Expander uses Sparkle for version checking and self-updating. If there is a new version of Expander available, you will receive an alert. You can choose one of the following options:

- **Install Update:** Downloads the new version, quits Expander, and installs the new version in its place
- **Remind Me Later:** Dismisses the dialog, but it reappears the next time you launch Expander
- **Skip This Version:** Dismisses the dialog and prevents it from reappearing until the next revision is available.

AppleScript support

You can automate Expander using AppleScript commands.

Expander Troubleshooting

- **Double-clicking files in the Finder** - You may find some stubborn files that do not open Expander when double-clicked even when the format is “assigned” to Expander in the File Mapping preferences. You can force the assignment by selecting the file in the Finder and then selecting **Get Info** from the **File** menu. In the **Open With** section, choose

Stuffit Expander as the preferred application. Once selected, click the **Change All...** button.

Conversely, if you would prefer to use a different program when you double-click a particular file format, select the file in the Finder and then select **Get Info** from the **File** menu. In the **Open With** section, choose your preferred application from the list or select **Other...** at the bottom of the menu. Once selected, click the **Change All...** button.

- **Expansion Errors:** Sometimes files fail to expand. Either Stuffit Expander launches, then immediately quits as if nothing happened, or there is an error similar to one of the following: “Error -39 Unexpected End of File...”, “This is not a complete file...”, “This file is not in the right format...”

Some possible problems and solutions:

- **Disk Problems:** Make sure your system is healthy. Disk errors and incorrect permissions can cause problems reading and writing files. As part of your regular periodic system maintenance, you should check your disk for errors and incorrect permissions.
- **Damaged Files:** If downloaded from the Internet, it is possible that the file was damaged when posted, or damaged when downloaded. It is also possible that the download did not complete successfully. If you can, check the size of the original posted file in

bytes (sometimes referred to as the “byte count”) and compare that to the file you downloaded. If they do not match, then your downloaded file is probably incomplete or damaged. Try downloading the file again, perhaps choosing a different time of day or, if available, a different download site (or “mirror site”). Problems on the Internet tend to be intermittent and specific to certain regions of the Net itself. Before re-downloading you may want to try emptying your Web browser’s cache to make sure you are getting a new copy of the file.

- **Incorrect Format:** If Stuffit Expander gives a message that says the file is not in the right format, this may indicate the file is damaged and it is worth trying the suggestions above. However, it may also mean the file was compressed, encrypted, or encoded in an unusual format that Stuffit Expander does not recognize. Look at the extension (the last few letters of the filename) and compare that to the list of formats supported by Expander. If the extension is not in the list, see if you can find out what the format is. If you think it’s a packaging format that Stuffit Expander should support, then let us know at <http://www.smithmicro.com/support/>. New formats and variations are being created all the time.
- **The file is already expanded:** The file may already be expanded but your machine may not have an application program that can open or edit the file. You may need to have information from the party that

provided the file to know how to use it. If you do not have the appropriate application you will need to obtain it by searching the web or a local software store.

You can try double-clicking the expanded file. If that doesn’t help, you can try opening it by dragging and dropping onto the icons of applications that you do have installed. If you believe it is a picture, you could try dragging it onto your Web browser’s icon or a picture viewer. If it’s a word processing document, you could try your word processor’s icon.

Chapter 4: DropStuff

Getting Started

DropStuff is the companion to StuffIt Expander and works using the same Drag and Drop method. It allows you to create Tar, Zip and Stuffit X archives – including Zip and Stuffit X archives protected with encryption. Also, DropStuff can compress files and automatically burn them to CD/DVD or upload them to either an FTP server or your MobileMe iDisk.



Fig 4.1: DropStuff Icon

Installation

Note: The installer will look for older versions of Stuffit in your Applications folder. If you have older versions of Stuffit or multiple copies of DropStuff stored in other locations you should manually remove the other copies.

Whether you've downloaded the StuffIt Suite or the StuffIt Deluxe Suite, double-click the installer and follow the prompts. The installer will put a Stuffit folder in your Applications folder that includes DropStuff and optionally add DropStuff to your Dock.

Creating Archives

Creating Archives by Drag and Drop to Application Icon/Dock Icon

Select files and folders in the Finder and drag them to DropStuff's application or Dock icon and DropStuff will launch, create an archive of the files and quit. By default, DropStuff will create Stuffit X archives.

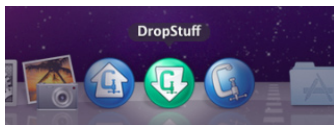


Fig 4.2: DropStuff Icon on Dock

Tip: DropStuff also features a “One Time Preferences” dialog that allows you to set the most common compression options on-the-fly so that they only apply to the current task. These settings temporarily override DropStuff’s default settings.

One-Time Preferences

To use “One Time Preferences”, hold down the “Option” key while dragging files onto the DropStuff application or Dock icon.

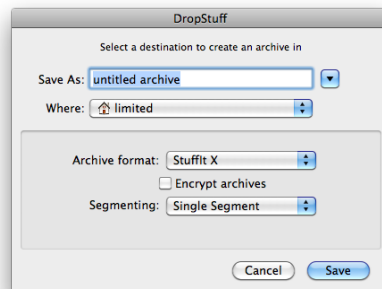


Fig 4.3: One-time Preferences

The options are as follows:

- **Save As:** Enter a name for your archive.
- **Where:** Select the folder in which to save the archive.
- **Archive Format:** Choose one of the supported formats from the drop-down menu.
- **Encrypt Archives:** Check this box to secure your archive. You will be prompted to enter a passphrase.

- **Segmenting:** If you would like to split your archive into smaller pieces for posting online, or copying to specific sized media, choose a preset segment size from the pop-up menu, or select **Other** and enter in a custom segment size..

Creating Archives by Drag and Drop to the Drag Window

When you launch DropStuff, a Drag Window will appear with five DropTargets. You can drag files onto the main (large) DropTarget to create the default Stuffit X archives.



Fig 4.4: DropStuff Application Window

Tip: The smaller DropTargets are configured to create Zip and Tar archives and Stuffit X archives with different attributes. Each DropTarget creates a different type of archive.

You've got a basic understanding of DropStuff and can now create archives. Read "[Appendix C: Creating Archives](#)" on page 85 for information about choosing the right format and other options. Continue reading the rest of this section when you are ready to find out how to customize DropStuff for your own needs with the

new Profiles feature and to learn about DropStuff's other Advanced Features.

A Note About the Premium Features of the StuffIt Suite

Unregistered, DropStuff will run with all features enabled for a 30 day trial period. After the trial period these features will become disabled:

- CD/DVD Burning
- FTP/MobileMe iDisk uploading
- Segmenting
- Encryption

Purchasing a License

You can purchase a Software License for the StuffIt Suite from our online store here:

<http://my.smithmicro.com/store/index.html>

When you enter the serial number you receive, the Premium features will be restored.

Upgrading from the StuffIt Suite to the StuffIt Deluxe Suite

The StuffIt Suite includes only DropStuff, once you've created an archive, you can't modify it. The StuffIt Deluxe suite allows you to browse the contents of archives and selectively extract items. You can add, delete, and rename items in existing archives. With Deluxe you can easily share files, schedule compressed backups, search for files stored in archives, preview images stored in archives, backup your photos right from iPhoto and Aperture, and automate your workflow with several scripting options. Find out more here:

<http://my.smithmicro.com/mac/stuffit/index.html>

DropStuff - Advanced Features

DropStuff is completely customizable!

When you launch DropStuff, its main window appears showing one large DropTarget and four smaller DropTargets. You can set up profiles by choosing **Profiles** from the DropStuff **Window** menu.

In DropStuff's Profiles Setup window you can create unique Compression and Destination settings, save them to a "Profile" and assign them to any of the DropTargets in the main window. The larger DropTarget is DropStuff's default and determines how the program will function when you drag files to its Dock or Application

icon. Dragging files and folders to that DropTarget will create an archive using the settings from Profile you specified. You can also save a Profile as a Droplet in the Finder.

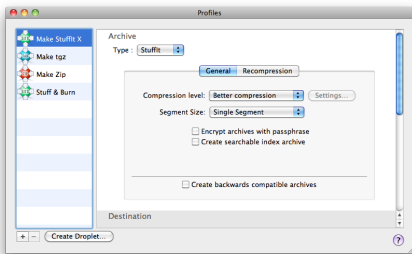


Fig 4.5: Profiles window

Tip: While DropStuff's main window is limited to five Profiles, you can make as many unique Droplets as you wish. Also, you can use Droplets even if DropStuff is not already running.

Note: Droplets are not continuously connected to the Profile that created them. If you change the Profile settings and want those settings applied to a Droplet you will need to save a new Droplet from that Profile.

Because Droplets are independent, they are unaffected by changes

or deletion of the Profiles from whence they came

Setting Up DropStuff Profiles

In DropStuff's Profiles Setup window you can create new Profiles and define these attributes:

- **Archive Type:** Choose between Stuffit X, Zip and Tar formats. Then choose options for the particular format like encryption.
- **Destination Settings:** Choose between local folder, burning to CD/DVD, FTP servers, or MobileMe iDisk
- **Encoding Settings:** Automatically post-encode the archive for emailing or posting to the Internet
- **Other Options:** Various general settings.

Example 1: Create Encrypted Stuffit X archives and burn to CD/DVD

1. Select **Profiles** from DropStuff's Window menu, or double-click on any of the DropTargets in DropStuff's DragWindow, to open the **Profiles Setup** window
2. Click the "+" to create a new Profile. It will appear

alphabetized in the profiles list. The default English title is **New Profile**.

3. Double-click the name and change it to something more informative like **Encrypt and Burn**.
4. Select **Stuffit** from the **Archive Type** pop-up menu. Note that the icon changes when you change archive format.
5. Enable the **Encrypt archives with passphrase** option in the General settings section.
6. Leave **Create searchable index archive** enabled. This feature allows StuffIt Deluxe users to locate files in archives stored offline.
7. Scroll down the options list to **Destination** and choose **CD/DVD** from the pop-up menu.
8. Optionally click the **Select ...** button to specify a directory to temporarily store the compressed files before it is burned to disk.
9. There are two options for using this Profile:
 - Save it to the Desktop (or anywhere on your disk) as a Droplet by clicking the **Create Droplet** button. To use a Droplet, just drag files and/or folders to the Droplet in the Finder.

Tip: Drag your Droplets to your Dock for convenient access.

- Assign the Profile to one of the five DropTarget areas in DropStuff's Drag Window by dragging the Profile name to the DropTarget. To use it, drag files and/or folders to the DropTarget on DropStuff's main window.

Note: the center DropTarget is the default Profile that DropStuff will use in minimized mode, and when files are dropped on the application or Dock icon.

Example 2: Create Zip Archives for Windows Users and Upload to FTP Site.

1. Select **Profiles** from DropStuff's Window menu to open the Profiles Setup window
2. Click the "+" to create a new Profile
3. It will appear alphabetized in the profiles list. The default English title is "New Profile."
4. Double-click the name and change it to something more informative like **Zip and FTP**

5. Select **Zip** from the Archive Type pop-up menu
6. Disable the **Preserve Macintosh Content** option. Disabling this feature prevents Windows users from receiving unneeded Mac-specific content.
7. Scroll down the options list to **Destination** and choose **FTP** from the pop-up menu.
8. Enter the FTP server information.
9. Optionally click the **Select ...** button to specify a directory to temporarily store the compressed files before it is uploaded to the FTP server.
10. As in Example 1 above, create a Droplet, and/or assign the Profile to a target on DropStuff's main window.
11. Create more Profiles to meet your needs. The possibilities are enormous!

DropStuff Advanced Features

Stuff with Filter

You can use the **Stuff with Filter** menu command to create an archive, from a source folder, that only contains those items that match the custom search criteria you specify.

When you choose **Stuff with Filter** from the **File** menu, you will first be asked to choose the source folder from which you wish to create an archive. After you have selected the folder, you will next be presented with a **Filter** dialog that allows you to specify the criteria for the files you wish to add to the archive.

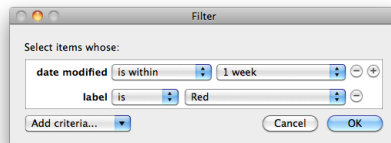


Fig 4.6: Filter dialog.

While the entire folder hierarchy will be recreated within the archive, only files that match the search criteria you specify in this dialog will be added to the archive.

Advanced Features for the StuffIt Deluxe user

StuffIt Index Archives

DropStuff will create small StuffIt Index proxy files in your home folder whenever you make StuffIt X archives. With the tools available in StuffIt Deluxe, these Index Archives can be searched, and opened just like the StuffIt X archive they are paired with, even if the StuffIt X archive is stored offline on CD/DVD, or posted to the Internet. You can read more in “[StuffIt Index Archives](#)” on page 52.

Other DropStuff Features

Growl Notification Support

If you have the notification system Growl installed on your machine, DropStuff will use it to display alerts and other messages.

You can find out more about Growl at <http://growl.info>.

Version Checking

DropStuff will contact the Smith Micro server on launch to see if there is a newer version available. If you would like to disable this, uncheck the **Allow Version Check** option from the **DropStuff** menu.

AppleScript Support

You can automate DropStuff using AppleScript commands.

If you have the StuffIt Suite, you can stop reading now. The rest of this manual explains how to use the powerful tools included in the StuffIt Deluxe suite. Or read on and see what you are missing...

The StuffIt Deluxe Suite



StuffIt Expander



DropStuff



StuffIt Archive Manager



StuffIt SEA Maker



StuffIt Setup Assistant



MagicMenu

In addition to StuffIt Expander (see “[Chapter 3: StuffIt Expander](#)” on page 9) and DropStuff (see “[Chapter 4: DropStuff](#)” on page 20), StuffIt Deluxe includes many more tools for working with archives. This section describes the additional components.

Chapter 5: The StuffIt Quick Look Plugin



Fig 5.1 StuffIt Quick Look plugin.

Introduced in Mac OS 10.5, Quick Look lets you “Look before you launch”. You can peek into many types of files without launching any program. With the StuffIt Quick Look plugin, you can “Look before you expand”.

More info on Quick Look can be found at:

<http://www.apple.com/macosx/what-is-macosx/quick-look.html>

Quick Look is built right into the Finder. To peek inside an archive with Quick Look, select the archive in the Finder, then hit the **Space Bar**, or **Cmd + Y**. A window will appear displaying the contents of the archive hierarchically.



Fig 5.2. Archive contents.

You can optionally toggle whether invisible files are displayed or not, by checking or unchecking the **Show hidden files** option.

If you'd like to open the archive, just double-click anywhere in the window.

Tip: Quick Look just tells the system to open the currently selected file. If StuffIt Expander is associated with this type of file, then it will launch and expand the entire archive. If instead Archive Manager “owns” this file type, then

it will launch and open the archive in browse-mode so you can do more with the archive contents. You can change this behavior by adjusting the File Mappings as explained in “[File Mappings](#)” on page 17.

The Coolest Thing

Quick Look is integrated into other Apple applications like Mail and Time Machine. This means that if someone sends you a compressed email attachment, you can preview the contents of the archive right in Mail without having to save it first, and then open it. Likewise, if you are using Time Machine to do regular incremental backups and have archives on your machine, you can preview the contents of archives right in the Time Machine browser.

Tip: In either case, if you double-click anywhere in the Quick Look window, it will tell the system to open the file. You can set the behavior as described above.

Chapter 6: MagicMenu and Stuffit Contextual Menu

After installation MagicMenu is added to your login items and is launched automatically. When you log in to your account, a new icon will appear in your Finder menubar. This is the MagicMenu. It provides quick access to many of Stuffit's features without having to launch any applications.

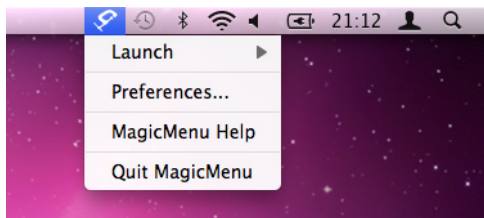


Fig 6.1: MagicMenu icon.

Tip: If you opted to not add MagicMenu to your login items, you can add it at any time by selecting "Add MagicMenu to Login Items" from the menu.

Getting Started

Expanding with Magic Menu

To expand a compressed file, select it in the Finder, then click on the **MagicMenu** and choose **Unstuff** or **Expand**.

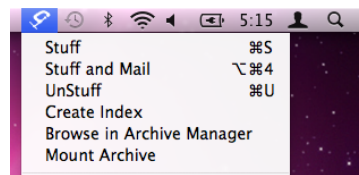


Fig 6.2: Expanding with MagicMenu.

The Stuffit Contextual Menu

StuffitCM is an alternative to MagicMenu. Except for keyboard shortcuts, all the commands available in MagicMenu are also available in the Stuffit Contextual Menu. Rather than appearing in the Finder menubar, the Contextual Menu appears when you hold down the Control (Ctrl) key or right-click while selecting a file in the Finder.

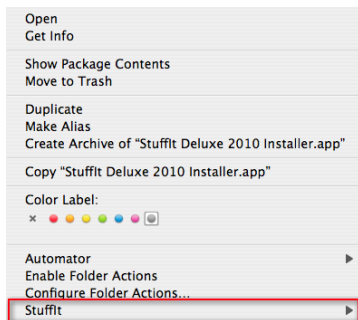


Fig 6.3: The StuffIt Contextual Menu.

- Mac OS 10.4 (Tiger) users will find the “Stuffit” option at the top-level of the Finder’s contextual menu.
- Mac OS 10.5 (Leopard) users will find non-Apple contextual menus under “More”.
- In Mac OS 10.6 (Snow Leopard), Apple has removed support for third party contextual menu plugins. As a result, the Stuffit Contextual Menu is not available.

Note: The items that appear in the MagicMenu are contextual based on what is selected in the Finder. If you select a Disk Image for example,

the command “Mount” will appear in the menu. If you select an archive, “Expand” or “Unstuff” will appear in the menu.

Creating Archives with MagicMenu

Compressing files with MagicMenu is as simple as selecting them in the Finder and then clicking on the MagicMenu and selecting the desired archive format. You can create Stuffit X, Zip and Tar formats with a variety of options including encryption and encoding.

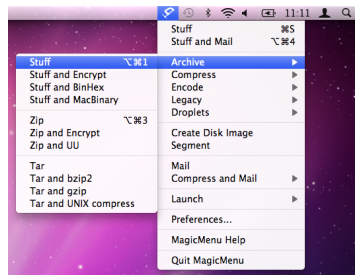


Fig 6.4: Archive Options.

Older formats can be created using MagicMenu’s “Legacy” commands.

Mail Operations

MagicMenu's Mail sub-menu allows you to create an archive and send it via E-mail in a single step. Just select the item(s) you want to send, go to the MagicMenu and choose (for example) "Stuff & Mail". The **Compress and Mail** sub-menu lists a variety of archiving and compression options so you can compress and mail an archive created in most of the formats that are supported by Stuffit.

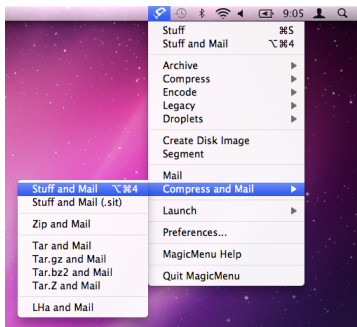


Fig 6.5: Compress and Mail options.

Tip: You can also choose the sub-menu item "Mail" which allows you to send the selected item(s) without archiving.

Browsing Archives via MagicMenu

Using MagicMenu, you can 'hand off' archives to other Stuffit tools for browsing.

To send the archive to Archive Manager select an archive in the Finder, and choose **Browse in Archive Manager** from the MagicMenu.

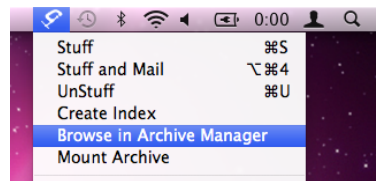


Fig 6.6: The Browse in Archive Manager command.

If you have MacFUSE installed (see below), you can use the Stuffit plugin for MacFUSE. Just select the archive in the Finder, then select **Mount Archive** from the MagicMenu. MacFUSE will mount it on the Desktop like a disk.

Launching Stuffit Applications via the MagicMenu

You can quickly launch any of the Stuffit applications without having to navigate to the Applications and then Stuffit folders. Just select **Launch** and then the desired Stuffit application from the sub-menu.

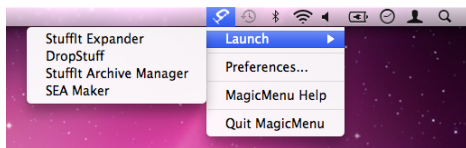


Fig 6.7: Launch options.

You've got a basic understanding of MagicMenu and the Stuffit Contextual Menu. Continue reading the rest of this section if you would like to learn about Advanced Features.

Advanced Features

Growl

If you have the notification system Growl installed on your Mac, Magic Menu/Stuffit Contextual Menu will use it to display alerts and other messages.

Keyboard Shortcuts

When Magic Menu is loaded, you can access Stuffit functions in the Finder using keyboard shortcuts:

Shortcut	Function
Command+U	Executes the Unstuff/Expand command on the selected item(s)
Command+S	Stuffs files and folders that have been selected in the Finder
Command+Option+1	Creates Stuffit X archives (equivalent to Command+S)
Command+Option+2	Creates older Stuffit 5 archives
Command+Option+3	Creates Zip archives
Command+Option+4	Stuff and Mail

Tip: You can disable the keyboard shortcuts in the

MagicMenu Preferences under the Menu Options tab.

Menu Items - The Complete List

The MagicMenu and Stuffit Contextual Menu provide quick access to the following functions (As indicated, some of the commands are conditional and only appear in the menu when you select specific types of files.):

- **Stuff:** By default, the Stuff command will create a Stuffit X archive that contains the items that are currently selected in the Finder. This option appears whenever files and folders are selected in the Finder.
- **Stuff and Mail:** Quick access to the Stuff and Mail command. The selected files and folders will be compressed into a Stuffit X archive and attached to an outbound message in your preferred email client. This option appears whenever files and folders are selected in the Finder.
- **Unstuff/Expand:** menu item causes the selected item to be expanded. This option appears when you select an already archived, compressed, or encoded file.
- **Remove Compression:** This option allows you to convert a compressed Tape Archive (or "tarball") into an uncompressed TAR file and appears when you select a file compressed with Gzip, Bzip/Bzip2, or UNIX Compress.

- **Remove (encoding type) Encoding:** This menu item causes the selected item to be decoded. This option appears when you select an BinHex, MacBinary, or UUencoded file
- **Create Index:** This option creates a StuffIt Index archive - a tiny catalog of a full StuffIt X archive stored locally which allows Spotlight to find files in the original archive, even if it's stored offline on CD/DVD, or another computer. This option only appears when you select a StuffIt X archive.
- **Browse in Archive Manager:** This menu item causes the archive to be opened in the StuffIt Archive Manager application. This option appears when you select a browsable archive type such as StuffIt X, Zip, RAR, Tar and Compressed TAR.
- **Mount Archive:** For Leopard and Snow Leopard users, if MacFUSE is installed and the selected file supports browsing, this command mounts the archive in the Finder as a volume. This option only appears when MacFUSE is installed and you select a browsable archive type such as StuffIt X, Zip, RAR, Tar and Compressed TAR.
- **Archive:** The Archive submenu provides you with several options to create archives. You can create StuffIt X, Zip, and TAR archives using the Archive commands. Archives preserve hierarchical folder structure. If you use the TAR options, you can also choose to further compress or encode these archives so that you end up with, for example, a Gzip compressed TAR

archive. This option appears whenever files and folders are selected in the Finder.

- **Compress:** The Compress submenu allows you to compress single files selected in the Finder using Gzip, Bzip2, and Unix Compress compression. Compression operations can only be performed on individual files, not folders or selections of multiple files. This option appears whenever files and folders are selected in the Finder, but if multiple files, folders, or OS X application bundles are selected, you will be prompted to archive before applying single-file compression.
- **Encode:** The Encode sub-menu allows you to encode single files selected in the Finder using MacBinary, BinHex, AppleSingle, and UUEncode formats. Encoding operations can only be performed on individual files, not on folders. A folder must be archived into a single file before it can be encoded.
- **Join:** The Encode submenu allows you to encode single files selected in the Finder using MacBinary, BinHex, AppleSingle, and UUEncode formats. This option appears whenever files and folders are selected in the Finder, but if multiple files, folders, or OS X application bundles are selected, you will be prompted to archive before applying single-file encoding.
- **Legacy:** The Legacy submenu allows you to compress files into older and less common formats. This option appears whenever files and folders are selected in the Finder.

- **Stuff (.sit):** This option creates archives in the older StuffIt 5 format.
- **Make Self-Extracting:** The Make Self-Extracting menu allows you to compress files into a StuffIt 5 (.sit) archive and make that archive self-extracting for either Classic Macintosh OS (.sea) or Windows (.exe).
- **LHa:** This option creates LHa archives.

Note: Archive Sizes: We always recommend using StuffIt X (.sitx) compression for better compression, better protection, and the capacity for very large archive sizes into the terabyte range. If you are creating legacy formats like the previous StuffIt format (.sit) please be aware that if the total size of the files you want to compress is at or near 2 GB and above, the resulting archive may not be usable and the data inside may be unrecoverable. You may attempt making larger archives in these older formats, but always test them to make sure they expand correctly and all the files are usable. As always, it is important to keep a backup copy of your files.

- **Droplets:** Any custom Droplets that you've created with DropStuff are accessible. You can quickly hand off selected files and folders to a Droplet by selecting it from the Droplets submenu.

- **Mount:** Use the Mount menu option to mount disk images (DMG, ISO, IMG, SMI, etc) in the Finder. This option appears whenever a supported disk image is selected in the Finder.
- **Create Disk Image:** Use the Create Disk Image menu option to copy the selected items onto an Apple Disk Image (DMG). This option appears whenever files and folders are selected in the Finder.
- **Segment:** The Segment menu option is used to divide large files into smaller pieces. The selected file will be added to a StuffIt X archive using no compression, and split into segments as specified in the StuffIt Menu Preferences dialog. This option appears whenever a single file is selected in the Finder.
- **Join:** This option will join the segments back into a single archive. You must have all the segments located in the same folder for this option to work successfully. If you have other types of segmented files such as StuffIt X, use the "UnStuff" option from the StuffIt Menu. StuffIt should automatically join the segments and expand the resulting file. This option appears only when you select the first segment from a set of legacy Stuffit segments (ie: "foo.sit.1").

Tip: If you are trying to join other types of segments, just select the first segment in the set and use the Expand/Unstuff command.

- **Mail:** This option will attach the selected item(s) to an outbound email in your preferred email client without archiving. This is handy if the item or items you are sending don't need to be compressed, or are already compressed. This option appears whenever files and folders are selected in the Finder.
- **Compress and Mail:** The Compress and Mail submenu appears whenever files and folders are selected in the Finder and allows you to create an archive and send it via E-mail in a single step. Just select the item(s) you want to send, go to the MagicMenu and choose (for example) "Stuff and Mail" from the Compress and Mail sub-menu. The files will be compressed into a StuffIt X archive and attached to an outbound message in your preferred email client. The Mail submenu lists a variety of archiving and compression options so you can compress and mail an archive created in most of the formats that are supported by StuffIt.

Note: You can use StuffIt SmartSend to transfer very large attachments that would normally cause your email to bounce due to attachment size restrictions. For more information about StuffIt SmartSend, see "Using StuffIt® SmartSend" on page 43.

- **Verify:** If the selected file is compressed, this command checks the file, and notifies if there are any problems.

- **Launch:** The Launch submenu is always available in MagicMenu, even when no files are selected and allows quick launching of StuffIt applications.
- **Preferences:** This command opens the StuffIt Menu Preferences dialog.
- **Add MagicMenu to Login Items:** If you didn't choose to add MagicMenu to your Login Items and want it to automatically open whenever you login to your machine, select this option from the bottom of the menu

Disabling Menu Items

You can disable nearly any of the menu items by unchecking them in the MagicMenu Preferences under the Menu Options tab.

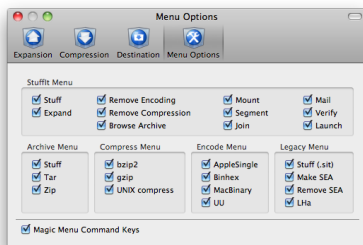


Fig 6.8: Menu Options.

Preventing MagicMenu from Auto-loading at Login

To prevent MagicMenu from loading when the system starts, follow these steps:

1. From the Apple Menu, choose **System Preferences**.
2. Click **Accounts** (in the System section) to open the Accounts control panel.
3. Click your user's name in the Accounts control panel. You may

need to authenticate to make changes.

4. Click the **Login Items** tab.
5. Select the **MagicMenu** item from the list that appears.
6. Click the **"-"** button to remove MagicMenu. MagicMenu will no longer launch when your computer starts up.

You will still be able to access Stuffit menu features via the Stuffit Contextual Menu, but will not be able to use the keyboard shortcuts.

Changing MagicMenu's Preferences

To open MagicMenu preferences, choose **Preferences...** from the MagicMenu.

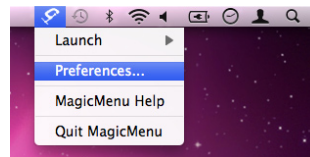


Fig 6.9: Preferences command.

Expansion Preferences

The Expanding Preferences are used to determine how MagicMenu goes about the task of expanding an archive or encoded file.

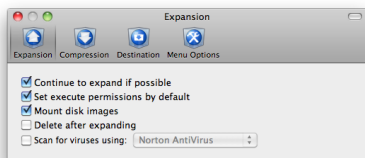


Fig 6.10: Expansion Preferences.

- **Continue to expand if possible:** This preference, when enabled, causes MagicMenu to scan the expanded output to see if it can be further expanded. For example, expanding a BinHex encoded Stuffit archive (foo.sit.hqx), MagicMenu will start to expand the archive “foo.sit” as soon as it has removed the BinHex (.hqx) encoding.

Note: Archives, compressed, and encoded files contained within sub-folders in the archive must be separately expanded.

- **Set execute permissions by default:** This preference determines whether MagicMenu should set the execute

file permission attribute on items expanded from archives that do not typically store UNIX file permissions, such as Zip (.zip) and the older Stuffit (.sit). If you un-check this box, OS X applications expanded from such archives may not run correctly.

Note: Stuffit X archives (.sitx) are designed to preserve UNIX permissions and ignore this setting.

- **Mount disk images:** When this option is enabled, MagicMenu will attempt to mount disk image files (resulting in the appearance of a “virtual disk”). Apple’s DiskImageMounter is used to mount the images.
- **Delete after expanding:** When enabled, the archive, compressed, or encoded files expanded by MagicMenu will be deleted once the contents have been extracted.

Note: Use this preference with caution! If the archive or compressed file is damaged, or any error occurs during expansion, the file may still be deleted and would then have to be replaced before you can try expanding it again.

- **Scan for viruses using:** MagicMenu allows you to automatically scan files that are extracted from archives and encoded files for viruses with your virus protection software. MagicMenu supports some versions of McAfee VirusScan, Norton/Symantec Anti-Virus, and Intego VirusBarrier with

pre-defined selections. If you would like to try using a different anti-virus program, choose **Other...** from the pop-up menu.

Compression Preferences

The Compression page contains settings that relate to how MagicMenu creates archives. The Compression page contains a multi-tabbed group box that contains settings that are specific to particular file formats, and also contains items that are applied to all file formats.

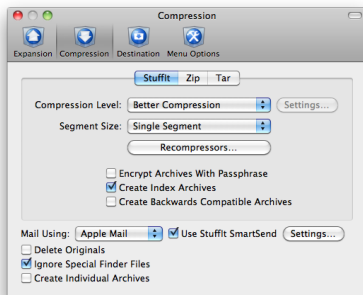


Fig 6.11: Compression Preferences.

Refer to “[Appendix D: Format Compression Options](#)” on page 88 for descriptions of the options offered for each format.

The following settings at the bottom of the Compression Preferences window apply to the creation of all archive formats:

- **Mail using:** This pop-up menu allows you to select the mail client that will be used when using the Stuff and Mail command. All the mail clients that support the MagicMenu mail commands are listed in this pop-up menu.
- **Use Stuffit SmartSend:** When this option is set, MagicMenu will invoke Stuffit SmartSend when your archive exceeds the size specified in SmartSend preferences. For more information about Stuffit SmartSend, see “[Using Stuffit® SmartSend](#)” on page 43.
- **Delete Originals:** When this option is set, MagicMenu deletes the original files after compressing.
- **Ignore Special Finder Files:** When this option is set, MagicMenu will not add Finder files (such as .DS_Store or older Desktop Database files) to an archive.
- **Create Individual Archives:** When this option is set, compressing multiple items with MagicMenu will result in each item being compressed in its own individual archive.

Destination Preferences

The Destination preferences determine where MagicMenu will save files that have been compressed as well as those that have been extracted from archives, compressed files, or encoded files.

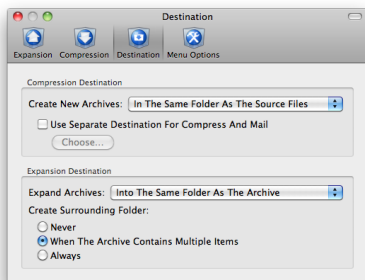


Fig 6.12: Compression Preferences.

Compression Destination

You can choose the location where new archives are created. The following options are available:

- **Into the Same Folder as the Source Files:** When this option is used, archives will be saved to the same location as the original selected files. This is the default setting.
- **By Asking for a Destination:** When this option is selected, MagicMenu will prompt you to specify a location to which files should be created.
- **Into a Specified Location:** Use this option to specify a location to be used every time MagicMenu creates a file.
- **Use Separate Destination for Compress and Mail:** This allows you to set a temporary location for archives that you share via email.

Expansion Destination

You can choose the location where files are extracted. The following options are available:

- **Into the Same Folder as the Archive:** When this option is selected, files will be saved to the same location as the archive, compressed file, or encoded file from which they were expanded. This is the default setting.
- **By Asking for a Destination:** When this option is selected, MagicMenu will prompt you to specify a location to which files should be expanded.

- **Into a Specified Location:** Use this option to specify a location to be used every time MagicMenu expands/unstuffs a file.

In addition to telling MagicMenu where to place items that are expanded, you can specify whether or not MagicMenu should place expanded files into a new folder.

- **When the archive contains multiple items:** This is the default option. When this option is selected, MagicMenu will create a surrounding folder whenever the archive contains multiple items at the root (first) level. The name of the archive will be used for the newly created folder.
- **Never:** MagicMenu will never create a surrounding folder.
- **Always:** MagicMenu will always create a surrounding folder.

Using Stuffit® SmartSend

It is not uncommon for an email server to set a size limit for files that you can send as attachments. All too often, you send a file and then learn later on that the message cannot be sent because the attachment exceeded the size limit. With Stuffit SmartSend, you can create an archive and email it to recipients without having to worry about the size of the file. When an archive exceeds the limit that you configure, Stuffit SmartSend will automatically send an email with a link that tells the recipient where they can download the

file. Your large attachment will be uploaded to the hosting service that you specify in your configuration. You can choose between FTP, MobileMe, and Stuffit Connect.

Configuring SmartSend

If you did not configure SmartSend when you installed Stuffit Deluxe, you can find the configuration settings in Stuffit Menu Preferences. From the MagicMenu, choose **Preferences...**, and then choose **Compression** settings.

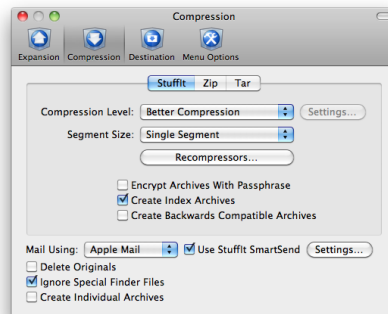


Fig 6.13: SmartSend Compression preferences.

In the lower portion of the dialog, check the Use Stuffit SmartSend option, then click the **Settings** button to configure the following settings:

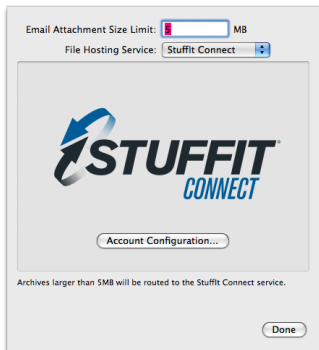


Fig 6.14: Choosing Stuffit Connect as a File Host.

- **Email Attachment Size Limit:** Enter the maximum size (in megabytes) for the files that you can or want to attach to email. The default setting is 5MB.
- **File Hosting Service:** SmartSend will upload your archive to the selected service if the Email Attachment Size Limit is exceeded. Choose from **Stuffit Connect**, **MobileMe iDisk**,

or **FTP**. Configuration options are described in the sections that follow.

- **Account Con:** Click this button to configure Stuffit Connect, described in the following section.

Configuring Stuffit Connect

Stuffit Deluxe 2010 includes a 1 year subscription to the Stuffit Connect File Hosting service. To use this service you will need to set up a new account. You can request your account in the SmartSend Setup Assistant, when you choose Stuffit Connect as your designated File Host site. If you opt to skip this setup, you can request your Stuffit Connect account later via the **MagicMenu->Compression** preferences.

You configure one or more Stuffit Connect accounts with the Stuffit Connect Setup Assistant, which is part of the SmartSend configuration discussed earlier. Click the **Setup Assistant** button to open the Stuffit Connect Setup Assistant. This assistant gives you three options:



Fig 6.15: *StuffIt Connect Setup Assistant.*

- **Request a New Account:** You will be prompted to enter your name, email address, and password for your StuffIt Connect account. After you complete the information, you send in a request for the account using the information that you entered.

You will then receive an email at the designated address. Follow the directions in the email to complete activation of your account. Log in to your account to complete the process.

- **Configure an Existing Account:** You will be prompted to enter an email address and password. Enter the email address

and password that you used when you configured your StuffIt Connect account.

- **View or Edit Account Information:** If you have changed your account configuration on the StuffIt Connect web site, you can use this command to update your local information. Use the Account drop-down menu to select the StuffIt Connect account you want to edit. Then enter your new password in the **Password** field. Check the **Set as the default account** checkbox to set the current account as default.

Configuring MobileMe iDisk

When you choose MobileMe iDisk, StuffIt SmartSend will use the account settings configured in the MobileMe System Preference. Click the **Open MobileMe Preferences** button to change your MobileMe settings.

Further information about MobileMe can be found at <http://www.apple.com/mobileme/>.

Configuring FTP

When you select **FTP** as your file hosting service, you will be prompted to enter your account information. Enter server, file path, and your username and password.

If you want to provide a custom URL for your download (such as a URL on your personal or business web site), check the **Custom Download URL** option, and select whether the URL will be on an **FTP** or **HTTP** server. Then enter the **Server** and **Path** information in the area provided. Click **Done** when you are finished.

How SmartSend Works

After you configure SmartSend as described in the previous sections, you are ready to use it. The steps are as follows:

1. Select the files that you want to add to an archive and send by mail. Then choose **Stuff and Mail** from the MagicMenu or StuffIt Contextual Menu.
2. StuffIt creates the archive.
3. StuffIt checks the size of your file:
 - If the archive exceeds the limit that you set in your configuration, StuffIt uploads the file to your host. While the file is uploading, the Archiving status bar displays a Waiting for Upload message. A second progress bar displays the status of your upload.

***NOTE:** You may be notified that StuffIt Helper wants to use the confidential information stored in your keychain. Click **Always Allow**, or **Allow**, to continue*

- If the size of the archive is below the limit that you set in your configuration, StuffIt opens your mail application and prompts you to complete your mail message.

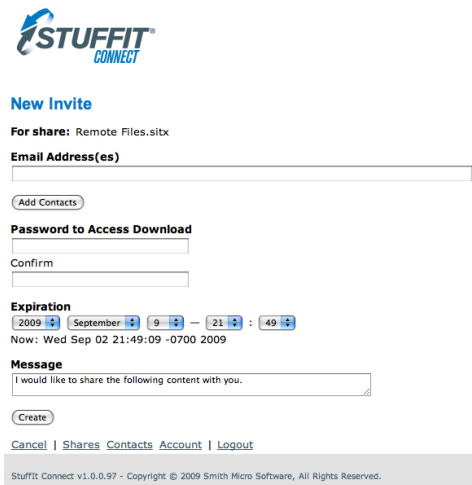
Using StuffIt Connect

StuffIt Connect is a service that is designed to share large files with friends, family, and co-workers. It is a safe and secure way to provide password-protected and time-limited access to files that are too large to email. It automatically works with StuffIt's SmartSend feature, but you can also upload files manually. The following sections describe some of the features found in StuffIt Connect. When describing the features of StuffIt Connect, the following terms are used:

- **Share:** The files you've uploaded, stored in a compressed package
- **Invite:** An email notification to specific recipients to download the package
- **Share landing page:** Where your recipients go to retrieve the package

Sending Files with SmartSend

If you are using StuffIt Connect for your SmartSend host, your browser opens to <http://www.stuffitconnect.com>, and asks you to send an invitation for your shared file. You are prompted to enter the following information:



STUFFIT
CONNECT

New Invite

For share: Remote Files.sitx

Email Address(es)

[Add Contacts](#)

Password to Access Download

Confirm

Expiration

2009 September 9 21:49

Now: Wed Sep 02 21:49:09 -0700 2009

Message

[Create](#)

[Cancel](#) | [Shares](#) | [Contacts](#) | [Account](#) | [Logout](#)

StuffIt Connect v1.0.0.97 - Copyright © 2009 Smith Micro Software, All Rights Reserved.

Fig 6.16: StuffIt Connect Invitation Screen.

- **Email address(es):** Enter one or more email addresses for the people with which you want to share the file. Separate multiple email addresses with commas. You can also use the **Add Contacts** button to select email addresses from your online StuffIt Connect addressbook. Control-click to select multiple contacts. Then click **Add** to add them to the Share's invite list.
- **Password to Access Download:** Enter a "Share landing page" password that the recipients will need to enter before downloading the file. You are asked to confirm the password in the field that immediately follows. The file cannot be downloaded without the proper password.
- **Expiration:** Enter the date and time on which the download link will expire.
- **Message:** Enter a message for the people to which you are sending the email, such as a description of the file or further instructions for use.
- **Create:** Click the Create button after all information is entered.

After you configure your StuffIt Connect invitation, an email will be sent to the recipients. The email contains a link to download the file. When the recipient clicks the link, they will open the download page in their browser. After entering the password they are able to download the file. A link to download the free version of StuffIt

Expander is also provided if they do not have it.

NOTE: The Share Landing Page password that you configured in the Stuffit Invitation is not sent with the email. For security purposes, you will need to send the Share Landing Page password separately.

If your archive package is also encrypted with a password, be sure to send the recipient the package password as well.

Uploading Packages to Stuffit Connect

Stuffit Connect also allows you to manually upload files from your computer and share them. You can use Stuffit Connect with the most popular browsers, including Safari, Internet Explorer, and Firefox.

1. Navigate to <http://www.stuffitconnect.com> to display the **Available Shares** screen.
2. Click the **New Share** link at the bottom of the page.
3. Click the **Choose File** button to select a file from your computer.
4. Enter a **Title**, **Description**, **File Name**, and package

password for the share.

5. Repeat steps 3 and 4 for additional files that you want to add to the share.
6. Click the **Create** button to create the share.

NOTE: If you are sending a single file that is already compressed (such as a Stuffit X or Zip archive), don't choose the "Encrypt package" option. Your upload will go faster, as the server will not have to compress or encrypt the file.

You will see a progress indicator as your files are uploaded to the Stuffit Connect service and compress into a package.

Maintaining Stuffit Connect Shares

The files that you upload to Stuffit Connect can be maintained as follows:

1. Open your browser to <http://www.stuffitconnect.com>.
2. Enter the email address and password that you configured when you set up Stuffit Connect.
3. A list of available shares appears on the page.
 - Click **Edit** to edit the title and description of the share.

When you are done, click **Update**.

- Click **Invite** to send additional invitations. The screen is the same invitation screen used to configure the invitation the first time.

Tip: Send a copy of the invite to yourself.

- Click **Delete** to delete the share from the Stuffit Connect Server. This command also deletes associated invitations.

Other Stuffit Connect Tasks

Additional links appear at the bottom of each page when you are logged in to your Stuffit Connect account on the Internet:

- **Shares:** Displays the Shares screen, where you upload and maintain your Stuffit Connect shares. These functions have been described in previous sections in this chapter.
- **New Contact:** Click this link to add a name and email address to your contact list.
- **Account:** Displays your Stuffit account information: User name, email address, maximum storage size, and storage and bandwidth used.
 - Click the **Settings** link to edit your display name. You can also choose to use Zip format instead of Stuffit X format

as your default.

- Click the **Account** link to edit your email address and password.

- **Logout:** Click this link to log out of Stuffit Connect.

Other MagicMenu Features

Growl Notification support

If you have the notification system Growl installed on your machine, MagicMenu will use it to display alerts and other messages.

You can find out more about Growl here: <http://growl.info/>

Chapter 7: The Stuffit Plugin for MacFUSE

MacFUSE is a kernel extension from Google for OS X that allows foreign file systems to be mounted in the Finder just like disks. A Stuffit plugin for MacFUSE is included with Stuffit Deluxe and will load if MacFUSE is available on your system.



Note: MacFUSE for Mac OS 10.4 is not supported.

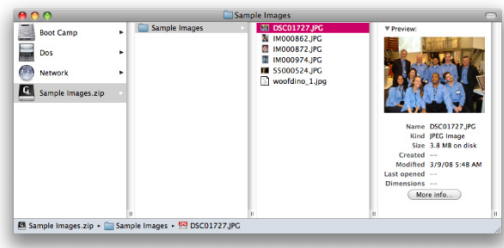
You can download MacFUSE from here:

<http://code.google.com/p/macfuse/>

To mount an archive with the MacFUSE plugin, just select it in the Finder, then select **Mount Archive** from the MagicMenu or the Stuffit Contextual Menu. MacFUSE will look at the archive's structure, and then mount it on the Desktop like a disk.

Note: for a list of browsable archive types, please

consult "Appendix A: Supported Formats " on page 79.



Once mounted, using that file system is just like using any other disk. You can navigate into folders and you can copy files out by dragging them to the Desktop.

When you are finished with the archive, you can eject it by dragging its disk icon to the trash.

Troubleshooting the MacFUSE Plugin

If archives don't appear to mount, it may be that you need to change your Finder preferences. In the **Finder->Preferences->General tab** make sure that the **Connected Servers** option is

enabled under the **Show these items on the Desktop** setting.

Note: There is a built-in one minute time-out to prevent operations that take a long time from hanging the Finder. If the timeout expires, MacFUSE will disconnect the file system. The archive will still be visible in the Finder as a mounted volume, but it won't be online. The only thing you can do at that point is eject the disk. This might occur if you are on a very slow machine, working with a very large archive, or working with an archive with very many items in it.

Chapter 8: StuffIt Spotlight Plugin



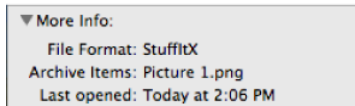
Spotlight is a search technology built into Mac OS 10.4 and later. Spotlight builds and constantly updates an index of all the files located on your hard drive. When StuffIt Deluxe is installed, Spotlight is able to extend its index capabilities to include the names of files located in any supported archives. When you use Spotlight to run a search, if a matching file is located in an archive, that archive is returned as part of Spotlight's search results.

Troubleshooting the StuffIt Spotlight Plugin

If archives don't appear in your search results when you expect they should, you can quickly see if a particular archive in question has been indexed by Spotlight.

Select the archive in the Finder and use the Get Info command.

In the **More Info** section of the Get Info window there should be information about the archive and its contents.



If you don't see this it may be that Spotlight has stopped indexing your drive. Check the following:

From the **Apple** menu, select **System Preferences**. In the **System Preferences...->Spotlight->Privacy** tab see if your hard disk is listed. If it is, remove it and Spotlight should immediately start indexing your drive (be patient, this may take some time).

Tip: You can reset Spotlight's database by adding your drives to the Privacy list, then removing them again.

StuffIt Index Archives

The StuffIt plugin for Spotlight allows searching for files that have been stored in an archive. Introduced in StuffIt 11 for Macintosh, StuffIt Index Archives make this feature even more useful by adding the ability to search archives even when they have

been moved to CDs, DVDs, or other “offline” locations. An Index Archive is a local proxy for an archive.

Created at the same time as a regular Stuffit X archive, an Index Archive contains a complete list of all the files stored in its “paired” Stuffit X file. Index Archives are fully searchable, and can be opened and browsed using the Archive Manager application. Because they contain catalog information, but no data, they are a fraction of the size of a regular Stuffit X archive, Index Archives can be stored on your computer while the full version of the archive is moved to a CD or DVD to save you space. Stuffit Suite users should consider upgrading to the Stuffit Deluxe suite to take full advantage of these features.

Using Index Archives

Index Archives can be created using Archive Manager, MagicMenu/ Stuffit Contextual Menu, and DropStuff. The creation of Index Archives can be turned on and off in DropStuff, Magic Menu and Archive Manager but is always enabled in Archive Manager’s Scheduler feature.

- To enable the creation of Index Archives in DropStuff, simply check the **Create Index Archive** box in the main DropStuff window.
- To create Index Archives with Archive Manager and MagicMenu/ Stuffit Contextual Menu, open the preferences

dialog and check the **Create Index Archives** option on the **Stuffit** tab of the **Compression** options page.

- You can also create Index Archives of existing Stuffit X archives. Just select the archive in the Finder, then use MagicMenu/ Stuffit Contextual Menu’s **Create Index** option.

Stuffit Index Archives are stored in a common location, you’ll find these files in the **Stuffit** folder, located in your home folder, on your Mac’s hard drive. Stuffit X Index Archives are differentiated by a yellow icon and a **.sidx** file extension.

You can view any Index Archives that have been created on your computer by launching the Archive Manager application, and clicking on the **Stuffit X Indexes** collection. If you double click any of the listed index files, they will be opened up in browse mode in an Archive Manager window. Remember that a Stuffit X Index Archive is not an archive, but is rather a proxy of an archive. When browsing an Index Archive you can view the files and folder hierarchy of the parent archive, but you cannot directly open any of the files that are listed.

The primary limitation of an Index Archive is that it won’t allow you to open or expand a file directly. Its purpose is to serve as a pointer that lets you know in which archive a particular file is stored. The original archive must be opened before you can expand any of the files it contains. If you try to extract files from an Index Archive you will be prompted for the original.

Chapter 9: StuffIt Plugins for iPhoto and Aperture

Export Plugins for iPhoto and Aperture

The StuffIt Export plugins are an optional install. You will find the installer in the **StuffIt > Extras** folder in Finder.

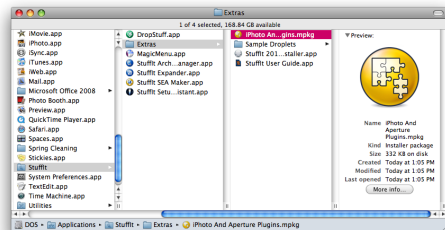


Fig 9.1. Installer for StuffIt Plugins for iPhoto and Aperture

Once installed, you can export images to Zip archives, or better

yet to StuffIt X archives, taking advantage of our patented image compression. You can also choose to back up the archives to CD/DVD, or upload them to FTP or your MobileMe iDisk, all in one step.

Using the iPhoto Export Plugin



Fig 9.2. iPhoto icon.

To use the StuffIt Export plugin in iPhoto:

1. Select individual pictures, Events, or Faces. from your iPhoto collection.
2. Choose **Export...** from the iPhoto **File** menu.

3. In the dialog that appears, choose **StuffIt Export**.

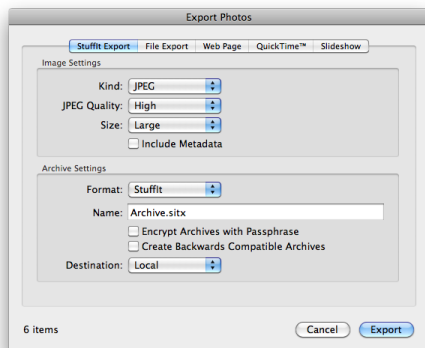


Fig 9.3. *StuffIt Export Options*

4. In the Archive Settings section, choose the following options:

- **Format:** Choose Stuffit, Zip, or Disk Image for your desired format.
- **Name:** Enter a name for the Stuffit or Zip archive. This option is unavailable when you choose Disk Image.

- **Encrypt Archives with Passphrase:** When this option is checked, the archives you create will be encrypted with a passphrase. You will be prompted to provide a passphrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your passphrase. Smith Micro Systems cannot recover files from encrypted archives if you have lost your passphrase. Passphrases are case sensitive.
- **Create Backwards Compatible Archives:** When this option is checked Stuffit X Archives will be created using only compression methods compatible with version 7.0 of Stuffit Expander for Macintosh
- **Destination:** Choose between local folder, burning to CD/DVD, FTP servers, or MobileMe iDisk.

5. Choose **Export** to complete the operation.

Using the Aperture Export Plugin



Fig 9.4. Aperture Icon

To use the StuffIt Export plugin in Aperture:

1. From Aperture, select a project, or images within a project.
2. Select **Export->StuffIt Export...** from the **File** menu.
3. From the StuffIt Export dialog, choose the following options:

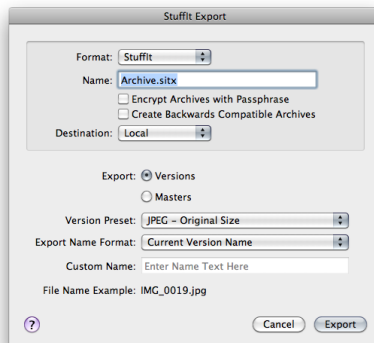


Fig 9.5. StuffIt Export Options

- **Format:** Choose StuffIt, Zip, or Disk Image for your desired format.
- **Name:** Enter a name for the StuffIt or Zip archive. This option is unavailable when you choose Disk Image.
- **Encrypt Archives with Passphrase:** When this option is checked, the archives you create will be encrypted with a passphrase. You will be prompted to provide a passphrase before the compression begins. When you

create an archive with encryption, be sure to make a careful note of your passphrase. Smith Micro Systems cannot recover files from encrypted archives if you have lost your passphrase. Passphrases are case sensitive.

- **Create Backwards Compatible Archives:** When this option is checked Stuffit X Archives will be created using only compression methods compatible with version 7.0 of Stuffit Expander for Macintosh
- **Destination:** Choose between local folder, burning to CD/DVD, FTP servers, or MobileMe iDisk.

4. Choose **Export** to complete the operation.

Chapter 10: StuffIt Archive Manager

Getting Started



Fig 10.1. Archive Manager icon.

StuffIt® Archive Manager™ is the command center for working with compressed and encoded files. Driven by Spotlight's automatic disk indexing, Archive Manager provides a central place to see all of the archives stored on your computer that is dynamically updated as the contents of your hard drive change.

Finding Archives

In Archive Manager's main window, there are a number of pre-defined "Collections". With a single click, you can quickly view all archives of a particular format. For example, click on "StuffIt X Archives" in the Collections list and you are quickly presented with a list of all the StuffIt X archives available both on your computer and on any mounted network drives.

Tip: You can filter the Results list by typing all or part of the name of a file into the Search field at the top of the Main window. Archive Manager will update its list to present only those archives that match the search terms you specify.

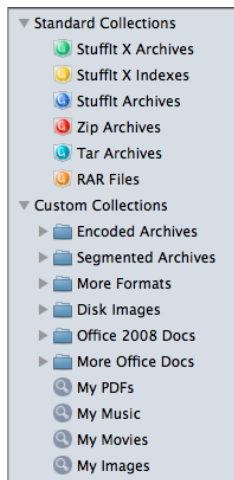


Fig 10.2. Standard and Custom Collections.

Below the preset Collections are Custom Collections that you can create and modify. We've provided some sample Custom Collections.

Click on a Collection and Archive Manager will list the search results in the Results List window on the right.

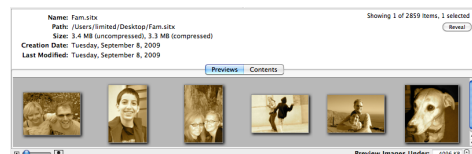


Fig 10.3. Preview drawer.

Click once on an archive in the Results List and Archive Manager will scan it for images and display preview thumbnails in the Preview drawer. If you click on the **Contents** tab, Archive Manager will show a hierarchical list of the archive's contents.

Tip: You can select a preview thumbnail, or an item in the Contents list and choose either "Reveal in Archive..." from the Action menu to open the archive and select that item, or "Extract..." to unstuff it from the archive.

Double-click on an archive in the Results List and Archive Manager will open it in a Browse window.

Note: If the item in the Results List is compressed, but doesn't support browsing, Archive Manager will prompt for a destination to expand the file. If the item isn't supported by Archive Manager at all, it will attempt to open it in the Finder.

Opening Archives in Archive Manager from the Finder

From the Finder, there are several ways to open archives in Archive Manager.

- You can drag archives to the Archive Manager application icon (which will be in your Dock after installation).
- You can select an archive in the Finder, and choose **Browse in Archive Manager** from the MagicMenu.

Tip: In StuffIt Expander's File Mapping Preferences you can set archives to automatically open with Archive Manager when double-clicked in the Finder.

Changing the Contents of an Archive

When an archive is open in StuffIt Archive Manager, its contents are presented to you in much the same way as the Finder presents folder content information.

You can add and remove files from an archive in the same manner you would add and remove files from a folder in the Finder. Drag files into the archive window to add them to your archive; drag files

from the archive window to the Finder to extract them. You can also delete, rename, move and copy files in an archive the same as you would in the Finder.

Note: Some archive formats are Read Only and do not support modification. These will be indicated with a Read Only badge in the Browse window.

Working with Custom Collections

In addition to the pre-defined collections that ship with Archive Manager, you can also create your own custom collections. These custom collections work in much the same way as "Smart Playlists" in iTunes.

To create a custom collection, start by defining a set of search criteria such as the archive type, size, or modification date. When Archive Manager displays your collection, it searches its database of all accessible archives and displays only those items that match the search criteria you specify.

Here's how to create a custom archive collection that contains StuffIt X archives modified within the last week:

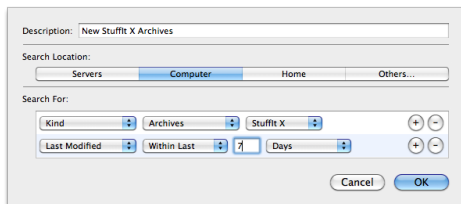


Fig 10.4. Creating a custom search.

1. Launch the Archive Manager application.
2. Click the **Action** menu button at the top of the application window and choose **Add custom search...** to create a new custom search.
3. In the drop down sheet that results, define the search criteria you want to use to create your collection.
 - In the **Description** field, enter text that will help to remind you of what this collection is designed to do. For this example, type **New Stuffit X Archives**.
 - The **Search Location** section allows you to specify where Stuffit Archive Manager will look for matching files. Choose **Computer** to search on all hard drives accessible to your computer. This will include your hard

drive, any external hard drives you have attached and any mounted network drives.

- In the **Search For** section, specify the type of item you are looking for. In this example, click the **Name** pop-up menu and choose **Kind**. In the pop-up menu that appears to the right of the **Name** field, choose **Archives** and, in the next pop-up menu, choose **Stuffit X**.
4. To add an additional search parameter, click the "+" button.
 5. Click the **Name** pop-up menu and choose **Last Modified** to create criteria that will display archives that have been recently modified. Type **"7"** in the text entry field to display only items that have been modified within the last seven days.
 6. Click **OK** to close the dialog. You should notice that the Archive Manager dialog now has a new listing for the collection you just created. Once you exit the dialog, Archive Manager will immediately start building the list of archives that match your search terms.

Note: Stuffit Archive Manager utilizes Apple's Spotlight Search technology. Accordingly, any items that exist in locations you have excluded from Spotlight searches will not be displayed Collection search Results.

Create Archives from Custom Collections

Archive Manager's Custom Collections can contain files of any type including applications, music and pictures. Using Stuffit Archive Manager, you can create a collection that includes all the files you need to work on a particular project. For example, if you were the technical writer for Stuffit Deluxe, you could create a collection that contains only files located in the **Documents** folder that contain **Stuffit** in the name.

When you click on your Custom Collection, the results are presented in the Results List on the right. If you select some or all of the items, you can choose **New Archive from Selection** from the action menu to create a new archive of these items.

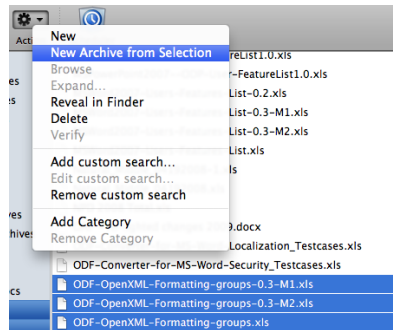


Fig 10.5. Select items in a custom collection and create a new archive.

Troubleshooting Archive Manager

If archives don't appear in your Collections search results when you expect they should, follow the Spotlight troubleshooting steps above.

Scheduled Archiving with Stuffit Scheduler

Stuffit Archive Manager includes a scheduling feature that is designed to provide a simple, easy to use, personal backup solution. You can use Stuffit to schedule automatic file backups, and you can save the backup archives you create to CDs, DVDs, external drives, FTP servers and even your MobileMe iDisk.

Getting Started

To get started with a backup task, launch the Archive Manager application and then click the **Scheduler** toolbar button. When you click the **New Task** button on the Scheduler tool bar, the **Scheduled Task Assistant** is opened. This wizard-style interface will walk you step-by-step through the process of naming the backup task, selecting the source data to backup, selecting the destination for the backup archive and setting when the backup task should be run.

Once you've picked a name, click the **Continue** button to move to the next step.

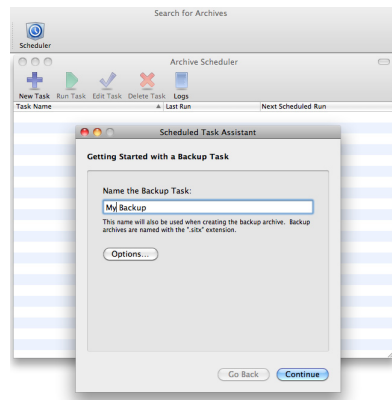


Fig 10.6. Scheduled Task Assistant.

Choosing the Source Files

Stuffit's Scheduler is designed to be easy to use. When picking files to backup, the default option will simply backup all the files in your **Documents** folder.

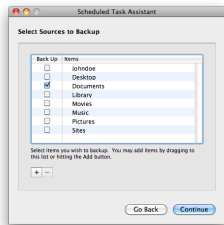


Fig 10.7. Documents folder is selected by default.

In Mac OS X, most data that you have created while using your computer will usually be stored somewhere in your Home directory. The default interface presented in this dialog is designed to make it easy for you to add the various folders in your Home directory to the backup set. You can choose to add the entire Home directory to your backup set by checking the top item in the list. This will backup all the files in your Home directory including not only your documents but also any files on your desktop. This option also backups your personal preferences and settings for the various applications you use.

Stuffit allows you to add any folder, on any accessible network or local drive, to the list of items that will be backed up. You can add items to the backup list simply by dragging and dropping them from the Finder to the Scheduler window. You can also use the “+”

button to browse for items to add to the list, or use the “-” button to remove optional items from the list. Then click **Continue** to customize your selection criteria.

Setting Criteria

By default, Stuffit will add all files and subfolders in the directories (or folders) you have designated to a new Stuffit X archive. For most users, this is the most desirable option. In some cases however, you may only want to archive specific files from the selected folder. The **Customize Criteria** dialog provides a way to tell Stuffit exactly which files should be included or excluded from the backup archive.

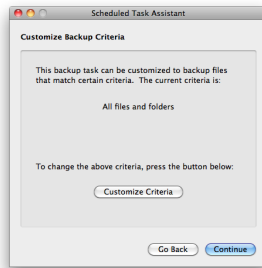


Fig 10.8. Customize Backup Criteria screen.

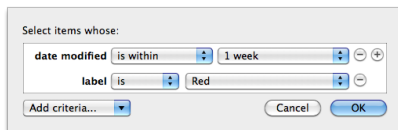


Fig 10.9. Add custom criteria.

The criteria dialog works in the same way as the Finder's **Find...** function. By adding search criteria in this dialog, you can tell Stuffit to search your selected directory to find matching items to be archived. The most common use for this dialog is to tell Stuffit to find files that have changed in the last week and then add only those files to your weekly backup archive. Click **OK** after you select your criteria, and then click **Continue** to set the destination (next).

Setting the Destination

The pop-up menu at the top of the destination page lists the various destination options to which your backup archive can be saved. You can choose to backup to your hard drive (although this isn't recommended), recordable CDs and DVDs, an FTP server, an external hard drive (such as an external Firewire or USB device) or upload to your .Mac iDisk.

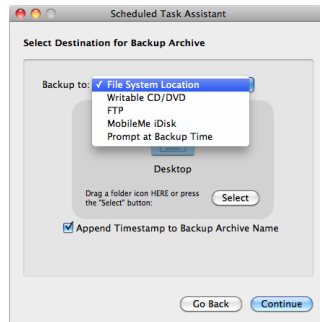


Fig 10.10. Choosing the destination.

Scheduling the Task

After selecting the destination, you can choose to have Stuffit automatically run your backup task at a specific time and the days of the week on which the task will be executed. Remember, if you choose to have the backup task run at a time when you will not be present at your computer (such as late at night, or over the weekend), you will need to make sure that the destination you specified will be available at that time and that it has enough free space in which to save your archive. Using an external hard drive or a remote server as a backup destination is the best way to do this.

Even if you are able to choose a backup destination that will enable you to schedule a backup in the middle of the night, make sure that you remember to leave your computer running! StuffIt cannot run a scheduled backup task if your computer has been turned off. If a scheduled backup task cannot be run because your Mac was turned off, StuffIt will notify you the next time you start your computer.

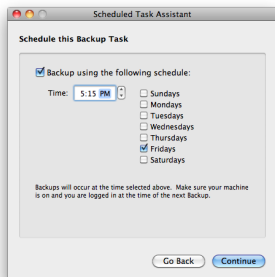


Fig 10.11. Scheduling Time and Day.

Restoring Files

The archives you create with StuffIt's Scheduler are standard StuffIt X archives (.sitx). To retrieve files from a StuffIt X archive, you can use StuffIt Expander, StuffIt Deluxe or any of the tools described

in this chapter. However, StuffIt Expander supports a special mode specifically designed to take files backed up by StuffIt's Scheduler and place them back in the location on your hard drive from which they originated.

To access this feature of StuffIt Expander, use these steps:

1. Launch StuffIt Expander.
2. Choose **Preferences...** from the StuffIt Expander menu.
3. Click the **Destination** button in the **Preferences** dialog.
4. Click the **Expand Archives...** pop-up menu and choose the **By merging into the location specified by the Archive** option.

When you expand an archive with this setting enabled, StuffIt Expander will use the information specified in the **Source** tab of the StuffIt Deluxe **Get Info** dialog (see above) to pick the location to which files will be expanded. The contents of the folders in your archive will be merged into the matching folders on your hard drive.

5. If StuffIt Expander needs to replace a file on your hard drive with one being expanded from the archive, you will be prompted to confirm which copy of the file you want to keep.

You can also browse your backup archives using the StuffIt Archive Manager application. This allows you to selectively expand just one

or two files from a backup archive without having to restore the complete backup.

Other Features

Version Checking

Archive Manager will contact the Smith Micro server on launch to see if there is a newer version available. If you would like to disable this, uncheck the **Allow Version Check** option from the Stuffit Archive Manager menu.

Archive Manager Troubleshooting

There is a known issue for Mac OS 10.5 Leopard users using Scheduled tasks with MobileMe iDisk as a destination. Manual tasks with the iDisk destination work without problems.

Chapter 11: SEA Maker

Getting Started



Fig 11.1. SEA Maker icon.

What's an SEA?

SEA is an abbreviation for Self-Extracting Archive. SEAs are a family of archives that include application code allowing them to be expanded without the use of an external application. They are useful when you aren't sure if the person you're sending files to has the necessary expansion tool, such as the free StuffIt Expander, to open an archive.

StuffIt SEA Maker™ creates SEAs based on the StuffIt X format that run on Macs running Mac OS 10.4 or later. These SEAs can install files to specified target areas on a user's hard drive, or can prompt the user to select a destination. SEAs can also display graphics and text files. You can create mini-installers that can display a Splash Screen or logo, and text-based Read Me files in addition to installing files.

Using SEA Maker

When you launch SEA Maker a new, empty Install document is created. To make your installer, you need to add steps or "phases" to the install process.

Adding Files

The easiest way to add files to an SEA is to drag the Payload items into the SEA Maker window from the Finder. After you have dropped the files, you will see a new **Install Files** phase listed in the SEA Maker window.

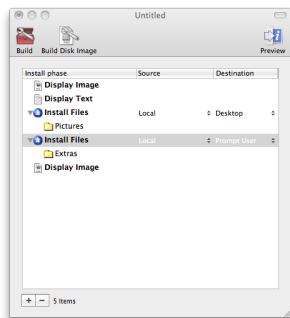


Fig 11.2. Adding phases.

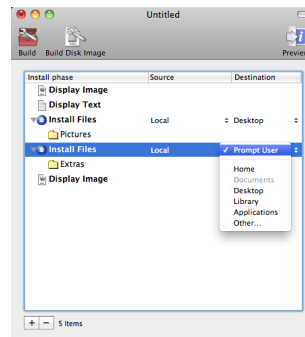


Fig 11.3. Choosing destination type.

Setting the Target Destination

When a user runs your SEA, they will be prompted (by default) to specify the location to which they want the files extracted. However, you can specify a specific target location. Click the arrow in the **Destination** column and choose one of the default options on the list (such as **Documents**) or use the **Other...** option to specify a custom location. If the folder you specify is not present on your recipient's computer, they will be prompted to choose a new destination.

Tip: If you want to specify multiple destinations for your Payload files, each group the files with the same destination to its own phase.

Specifying a Remote Payload

SEA Maker installers can now optionally retrieve their payload from your FTP server or MobileMe iDisk. This allows the installer your distribute to be even smaller.

To specify an FTP server:

1. Click on the **Source** column and choose FTP.
2. In the sheet that appears, fill in:

Fig 11.4. FTP Options.

- **Server:** The Server's address
- **Path:** The path to the directory where you would like to store the payload
- **File Name:** The name you would like to give the payload file
- **Username and Password:** Add your credentials for your FTP account.
- **Download Options:** When the recipient run's the installer you can specify how the payload will be

retrieved. If your FTP server is also a Web server, you can select the **HTTP** option and fill in the address (and path) to the payload file. If your FTP server is not also a Web server then you can configure the **FTP** option. The **Anonymous** option will not attempt to send a username and password to your FTP server to retrieve the payload. If your server doesn't allow anonymous access, leave this option unchecked and the user will be prompted for a username and password when the retrieve payload phase is running.

Displaying a Splash Screen

To add a splash screen to your SEA, follow these steps:

1. Click the "+" button in the SEA Maker window to create a new phase.
2. Choose **Display Image** from the menu that appears.
3. Use the navigation dialog that is created to browse for the image you want to display. SEA Maker supports a wide range of image formats. The rule of thumb is, if QuickTime supports the image format, it can be used with SEA Maker.

Displaying a Text Dialog

To add a text dialog to your SEA, follow these steps:

1. Click the “+” button in the SEA Maker window to create a new phase.
2. Choose **Display Text** from the menu that appears.
3. Use the navigation dialog that is created to browse for the text file you want to use.

Building your SEA

You can create a Self-Extracting Archive from SEA Maker by using the **Build** button in the tool bar. The “Archives” created by the Stuffit SEA Maker application are not, however, really archives at all in the strict sense of the word. Rather, the archives created by SEA Maker are Mac OS X application “packages”. The SEA packages created with SEA Maker contain a Stuffit X archive and the application code necessary to expand that archive, along with instructions created from your profile about exactly how the archive should be expanded. The SEA package also contains any text files and graphics you have chosen to include.

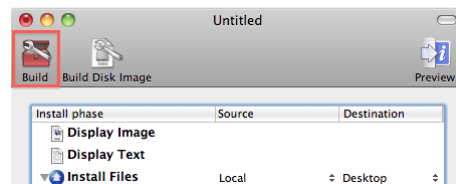


Fig 11.5. Build screen.

Creating a Disk Image

If you plan to post your SEA on the Internet, we recommend that you save it onto a Disk Image (DMG).

You can do this automatically by choosing the Build Disk Image button in the SEA Maker toolbar. When you choose this option, your SEA will be saved onto a DMG file that can be mounted as a disk in the Finder.

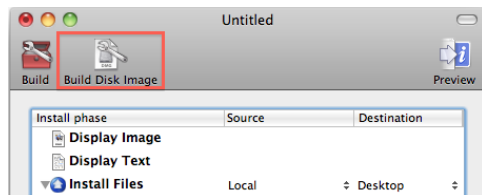


Fig 11.6. Build Disk Image.

Running Installers

When a Mac user receives your SEA, they double-click it to start the install process. Display Text phases, Display Graphic phases and Install File phases will occur in the order specified when you created the installer. If the archive uses a remote payload, the user may be prompted to enter a username and password to retrieve the file. If the Install Files phase(s) are set to prompt for an install location, the user will be presented a save dialog.

Note: Stuffit SEA Maker's SEAs are designed for OS X only and require Mac OS 10.4 or later.

Chapter 12: StuffIt Actions for Automator

Getting Started



What is Automator?

Automator is a tool included in the Mac OS that lets you create scripts visually by connecting modules or building blocks. You can find it in the Applications folder. There are tutorials for working with

Automator here:

<http://support.apple.com/kb/HT2488>

Apple provides Actions for many Applications and features included in the OS. You can download more Actions from here:

<http://www.apple.com/downloads/macosx/automator/>

StuffIt Deluxe includes Actions for Expanding files, Creating StuffIt X, Creating Zip and Creating Tar archives.

Creating Workflows

To create a workflow using the StuffIt Actions, you must precede the StuffIt Action with a file list.

In Automator, with the **Files and Folders** group selected on the left, you can pick from **Get Selected Finder Items**, **Get Specified Finder Items**, and **Ask for Finder Items**. Whichever you choose, if you choose **Files and Folders** from the pop-up menu, you won't be as restricted. Likewise if you check **Allow Multiple Selection**. You will be able to select more than one item at a time.

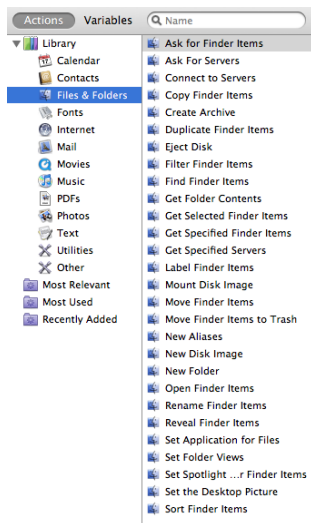


Fig 12.2. Files and Folders options.

Tip: Use the “Get Selected Finder Items” action if you want to create a DropBox that you can drag files onto to activate.

Then select one of the StuffIt Actions next. They can be found in

the **Other** group at the bottom of the list. The options are pretty self-explanatory. If you click the **Options** button, you can check the **Show this action when the workflow runs** if you would like to interact with the Workflow to name the archive you are creating or set a directory for expanding into. If you want to run the script unattended, then leave this option disabled.

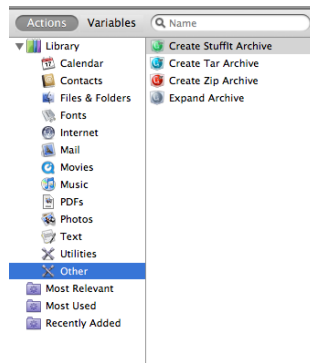


Fig 12.3. StuffIt options are found in the Other library.

Save your script as a Workflow. To try it out, just click Automator’s **Run** button. You can also save the Workflow as an application, then drag files on it to activate it.

Tip: You can even save it as a Plugin for iCal and have the script triggered by iCal events.

Sharing Workflows

You can share Automator Workflows and Dropboxes with others provided they have the required Automator Actions installed on their machine.

Troubleshooting

If the StuffIt Actions don't appear when you first run Automator, try launching the Archive Manager application first, then running the Automator application.

If you are running Snow Leopard and get an error when adding one of the StuffIt Actions that the Action could not be loaded because it is not Universal, follow these steps:

1. Quit Automator
2. Locate Automator in the Applications folder
3. Select it and choose "Get Info" from the Finder's File menu
4. In the General section of the Get Info window select the "Open in 32-bit mode" option
5. Relaunch Automator

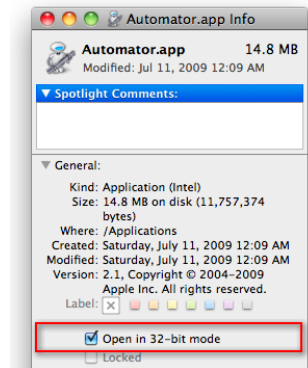


Fig 12.4: Open in 32-bit mode option.

Chapter 13: Stuffit Command Line Tools



- `unstuff`

To see a help screen, just type:

```
--help
```

after the command and hit enter (typing the command by itself with no arguments will also show the help screen).

You can see what version of the tool and the Stuffit Engine is installed by typing

```
stuff -v
```

...at the command prompt.

Getting Started

Stuffit can be automated using shell scripts, or run remotely via telnet or SSH sessions.

The Stuffit Command Line Tools are installed in **`/usr/local/bin/`**.

This path is appended to your `.profile` and `.login` files.

The two programs are (appropriately named):

- `stuff`

Chapter 14: Contact Us

Technical Support

You may contact us for technical support (available to all registered users). You can receive information immediately by visiting our Technical Support web site:

<http://my.smithmicro.com/support/index.html>

The online site provides a constantly updated Knowledge Base consisting of FAQ's (Frequently Asked Questions). Chances are good that someone has reported the same issue and we've posted information about it.

If you haven't found the answer after reviewing the pertinent FAQ's, you can submit a form to our Support staff which they will respond to by email. Support requests are answered in the order they are received and response time varies depending on the number of pending requests. We therefore recommend checking the FAQ's.

When submitting a Support request, you will need to know the following information:

- The exact version of StuffIt Deluxe you are using.
- The exact version of the Operating System you are using.

- If you have a Serial Number, you will have the opportunity to enter it when submitting a Support Request.

How To Contact Smith Micro

Web: <http://my.smithmicro.com/contact/index.html>

Fax: 831-761-6206

Phone: 831-768-3615

Mail: Smith Micro Software, Inc.
185 Westridge Drive,
Watsonville, CA 95076

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Appendices

Appendix A: Supported Formats

Archives

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Stuflit X archives	.sitx	•	•	•	•
Stuflit 5 and older Stuflit archives	.sit	•	•	•	•
Stuflit 5 and older Mac Self-Extracting archives	.sea	•	•	•	•
Zip archives (including encrypted and Zip64 archives)	.zip	•	•	•	•
Windows Self-Extracting archives	.exe	•	•	•	•
RAR archives (including encrypted archives)	.rar	•	•		
TAR archives	.tar	•	•	•	•

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Tarballs (Compressed TAR archives):					
Gzip Compressed Tar	.tar.gz, .tgz, .taz	•	•		•
Bzip Compressed Tar	.tar.bz, .tbz	•	•		
Bzip2 Compressed Tar	.tarbz2, .tbz2	•	•		•
UNIX Compressed Tar	.tar.Z, .tz	•	•		•
LZMA Compressed Tar	.tar.lzma, .tlzma	•	•		
7-Zip archives	.7z	•			
Compact Pro archives (including self-extracting archives)	.cpt	•	•		
Windows CAB Files	.cab	•			
LHA archives	.lha, .lzh	•	•		
ARJ archives	.arj	•			
ARC archives	.arc	•			

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Comic Book Archives					
CBZ	.cbz	•	•	•	
CBR	.cbr	•	•		
CBT	.cbt	•	•	•	
CB7	.cb7	•			

Segments

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Stuffit X segments	.part01.sitx, .part02.sitx, etc.	•	•		•
Stuffit 5 and older segments	.sit.1, .sit.2, etc.	•	•		•
Zip segments	.z01, .z02, etc.	•			
Split Archives (used by some Zip, Rar and 7-Zip implementations)	.001, .002, etc.	•			

Compressed Files

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Stuffit SpaceSaver compressed files	n/a	•	n/a		
gzip compressed files	.gzip, .gz	•	n/a		•
bzip compressed files	.bzip, .bz	•	n/a		
bzip2 compressed files	.bzip2, .bz2	•	n/a		•
UNIX compressed files	.z, .Z	•	n/a		•
LZMA compressed files	.lzma	•	n/a		

Encoded Files

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
AppleSingle encoded files	n/a	•	n/a		•
Binhex encoded files	.hqx	•	n/a		•
MacBinary encoded files	.bin	•	n/a		•
UUencode encoded files	.uu, .uue	•	n/a		•
Base64/MIME encoded files	.b64, .mme, .mime	•	n/a		

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
yEncode encoded files	.yenc, .ync	•	n/a		
BtoAText encoded files	.b2a, .btoa	•	n/a		

Other

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
PrivateFile encrypted files	.pf	•	n/a		

Encoded Archives

Supported Formats	Typical Filename Extension	Expand	Browse	Modify	Create
Binhex encoded Stuftit X archives	.sitx.hqx	•	•		•
Binhex encoded Stuftit archives	.sit.hqx	•	•		•
Binhex encoded Self-Extracting archives	.sea.hqx	•	•		•
MacBinary encoded Stuftit X archives	.sitx.bin	•	•		•
MacBinary Encoded Stuftit archives	.sit.bin	•	•		•
MacBinary encoded Self-Extracting archives	.sea.bin	•	•		•
UUencode encoded Zip archives	.zip.uu, .zip.uue	•	•		•

Appendix B: All About Compression

What is compression?

According to http://en.wikipedia.org/wiki/Data_compression:

Compression is the process of encoding information using fewer bits (or other information-bearing units) than a more obvious representation would use, through use of specific encoding schemes.

This is done by looking for redundancy in the bits that represent a file and replacing these with tokens that use fewer bits. Compression is reversed by replacing the tokens with the original values.

Lossy vs. Lossless compression

Some compression methods (typically multimedia formats such as JPEG and MP3) discard information (loss) to achieve smaller file sizes. This type of compression can't be reversed and the resulting file will never match the original. There is a trade-off in the

relationship of file size to quality degradation. Lossy compression is not used in applications where complete restoration of the original file is necessary (such as your financial records!). Stuffit uses lossless compression methods.

Tip: Due to the fact that lossy compressed files have limited redundancy they don't further compress well when using formats like Zip. Stuffit X has proprietary technology to losslessly recompress many of these lossy compressed formats significantly.

Why compress?

Compression makes files smaller so they take up less storage space and can be transferred faster from machine to machine. Combined with archiving, it becomes a useful way to organize files and projects.

Compressing vs. Archiving

Compression is typically applied to a single file. Archiving allows a hierarchy of files and folders to be grouped together for compression. Most archive formats include compression as part of the archiving process. The UNIX Tape Archive (tar) format does not and it typically post-compressed with gzip (gz), bzip2 (bz2), or UNIX compress (Z).

Encryption

Similar to compression, encryption is the process of obfuscating a file using various schemes such as RC4, DES, Blowfish and AES for security purposes.

Encoding

Encoding is the process of converting files to allow them to be transferred intact from one platform via another platform. For example, pre-OS X Macintosh files typically have two parts: a resource fork and a data fork. Since no other platform use this dual-fork format, older Macintosh files need to be encoded to preserve the resource forks before being transferred to a non-Mac. Typically this is done with MacBinary (.bin) encoding.

Files that are represented with an 8-bit character set (ie: binary files) often need to be converted to a 7-bit character set (ie: text files) to be attached to emails or posted to UseNet news groups. Typically this is done with BinHex (.hqx) for older Mac files and UUencoding (.uu or .uue) for non-Mac specific files.

Note: *Encoding does not compress a file. Often it actually makes a given file larger.*

For cross-platform compatibility, Stuftit 5 and Stuftit X use a single file format (ie: no critical data is stored in the resource fork) and as a result can be used instead of MacBinary encoding. If the resource

fork of a Stuftit 5 or Stuftit X archive is stripped off, the data contained in the archive will still be completely intact. There is no need to MacBinary encode a Stuftit 5 or Stuftit X archive.

Stuftit X also includes text encoding options within its own format to allow for text encoding at the time of compression without post-processing.

Stuftit vs. Stuftit 5 vs. Stuftit X

The original Stuftit format designed by Ray Lau in 1987 was an implementation of LZW compression for the Macintosh. It supported the Mac's dual-fork format and supported a browsable hierarchy. Users could expand individual items from the archive as well as modify existing archives.

The original Stuftit format went through several small revisions before a major redesign.

Stuftit 5 was introduced in Nov. 1998 with Stuftit Deluxe 5 for Macintosh. It was designed to offer better compression, and to be cross-platform friendly. It became available to Windows users with the release of DropStuftit for Windows 5.0 in Aug. 1999.

Stuftit X was introduced in Sep. 2002 with Stuftit Deluxe 7.0 for Macintosh. It was designed to be extendable, support more compression methods, support long file names, support UNIX and Windows file attributes. While most formats will use a single compression algorithm (for example: Zip and gzip use "Deflate",

bzip2 uses “BWT”). Compression with Stfflit X can use a wide variety of compression methods to get the most optimal compression for any particular set of data. Additionally, Stfflit X has been extended with optimized compression methods for particular types of data such as JPEGs, and 24-bit images.

Appendix C: Creating Archives

When creating an archive, what is most important? If you are trying to fit files onto a CD, or a USB Flash drive, then Size may be the most important factor to you. If you are just grouping a bunch of related files together, Speed may be more important than size. If you are posting files to an Internet site for public distribution, then portability may be the most important factor.

Choosing the Right Format

The Stuflit and Stuflit Deluxe suites let you create archives in three formats: Zip, Tar and our own cutting-edge Stuflit X format.

Stuflit Deluxe also offers some older legacy formats which are described at the end of this section.

- **Tar** is a format that is common on UNIX and Linux systems. Since OS X is based on UNIX, there is some support built into the OS for expanding these files. Tar archives are not compressed by default and need some post-compression applied (such as Gzip, Bzip2, or UNIX Compress). If you are sending files to a UNIX or Linux user, Tar is a reasonable choice. The compression offered by Gzip, and BZip2 are adequate for most purposes.

- **Zip** is a ubiquitous format. Most computer platforms including OS X have some form of Zip expansion available. The compression offered by the Zip format is similar to that of the Gzip format and is satisfactory for most purposes, but read the notes about Options below.
- **Stuflit X** was introduced in Sep. 2002. Free expansion tools are available for both Macintosh and Windows. Stuflit X was designed to be extendable, support more compression methods, support long file names, support UNIX and Windows file attributes. While most existing compression formats will use one type of compression algorithm (for example: Zip and gzip use "Deflate", bzip2 uses "BWT"). Compression with Stuflit X can use any of four algorithms alone or in combination to get the most optimal compression for any particular set of data.

Additionally, Stuflit X has been extended with optimized compression methods for particular types of data such as JPEGs, and 24-bit images.

Stuflit 2009 introduced a technique called "Duplicate Folding". When creating a Stuflit X archive, if duplicate items are being compressed, only one copy is stored in the archive, with pointers to the duplicates. When expanded, the duplicate content is retrieved normally. For data sets where duplicate items exist, this can reduce the archive size and compression time. When size is a factor, Stuflit X is the right choice.

Choosing the Right Options

Most of these options are set in the Compression preferences for each Stuffit application.

Encryption

When you are sending sensitive files to other people, you can use encryption to protect your files with a password. This means if someone other than your intended recipient receives the archive that the files are stored in, they will not be able to open it and gain access to your documents. Encryption is only available when you are creating Stuffit and Zip archives.

Stuffit X Encryption vs Zip Encryption

Stuffit X offers four different encryption methods, but defaults to the stronger 512-bit RC4 encryption. Also, the encryption in Stuffit X encrypts the entire archive. A password is required to view or expand the contents of the archive.

Zip uses 256-bit AES encryption but encrypts only the items inside the archive. It is possible to browse the contents of a Zip with the password only being required to expand items from the archive.

Support for expanding encrypted Zip archives is limited. While the Stuffit utilities can expand encrypted Zips, many tools including the Zip utilities built into Windows and OS X cannot.

Note: Regardless of which format you choose, when you create an encrypted archive, be sure to make a careful note of the password that you used. Smith Micro is not able to recover the contents of an encrypted archive if the password has been lost. There is no “Back Door”.

Preserve Macintosh Content

Before OS X, Macintosh had a dual-fork format. Even though it was hidden from the user, most files had two parts, a Resource Fork and a Data Fork. Most other computer platforms use a single Data Fork. In some cases, like Classic Mac applications, the Resource Fork was critical. In other cases, like JPEG images, the important data was stored in the Data Fork and the Resource Fork was not important. In OS X, Resource Forks are less important, but sometimes still needed. Formats such as Zip and Tar do not natively store this information. Enabling the “Preserve Macintosh Content” option allows any Resource Forks to be encoded when added to an archive. If a Mac user expands these archives, the Resource Forks will be intact. Non-Mac users will see an extra folder of all the Resource Fork data and can discard it. Stuffit X was designed with Resource Forks in mind and has no need for this option.

Backwards Compatible Archives

Stuffit X is a cutting-edge archive format. We periodically add new features to the format to provide better compression. Sometimes these new features use compression methods that were not designed into older versions of Stuffit and are therefore incompatible. You can easily make Stuffit X archives that are completely backwards compatible all the way back to Stuffit 7 for Mac. Just check the “Create Backwards Compatible Archives” option in the Compression Preferences.

- **Windows SEA** - These are Self-Extracting Archives (applications) based on the Stuffit 5 format, but include application code specifically for Windows.
- **LHa** - This format was popular for compressing MOD digital audio files and other files on Amiga and old MS-DOS systems. According to Wikipedia it remains popular in Japan: [http://en.wikipedia.org/wiki/LHA_\(file_format\)](http://en.wikipedia.org/wiki/LHA_(file_format))

Legacy Formats

- **Stuffit (.sit)** – Also known as Stuffit 5, this archive format was designed prior to OS X. It was designed to be cross-platform compatible, but still be Macintosh file-friendly. This format is best used when creating archives for very old Macintoshes running Classic Mac OS prior to System 9. The format has limitations relating to long file names and UNIX file permissions.
- **Mac OS Classic SEA** – These are Self-Extracting Archives (applications) based on the Stuffit 5 format. These have all the same limitations of the Stuffit 5 format above. Additionally, because of the nature of the Classic Mac file format it is best to encode these with MacBinary or BinHex before transferring via the internet.

Appendix D: Format Compression Options

StuffIt X Options

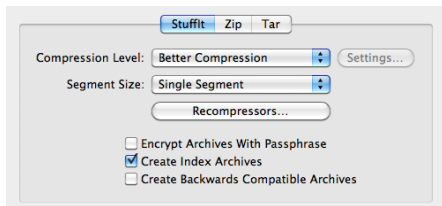


Fig D.1: StuffIt General Settings

- **Compression Level:** As well as changing the format in which the archive will be created, you can also change the compression level that will be used when items are added to the archive. Options are:
 - **Better Compression:** Creates smaller archives

- **Faster Compression:** Makes archives more quickly
- **No Compression:** Groups files together into an archive without compression

An additional choice, Custom is also available. When Custom is selected you can use the StuffIt X Expert Compression Settings dialog (see "[StuffIt X Expert Compression Settings](#)" on page 91) to configure how StuffIt will compress your files.

- **Segment Size:** The Segment Size pop-up menu can be used to select one of several common pre-defined segment size choices. These pre-set options are designed to cover a range of popular backup media such as Zip disks, and CD ROMs.
- **Encrypt Archives with Passphrase:** When this option is checked, the archives you create will be encrypted with a passphrase. You will be prompted to provide a passphrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your passphrase. Smith Micro Systems cannot recover files from encrypted archives if you have lost your passphrase. Passphrases are case sensitive.
- **Create Searchable Index Archive:** Creates a proxy "Index" archive at the same time a StuffIt X archive is created (see "[StuffIt Index Archives](#)" on page 52).
- **Create Backwards Compatible Archives:** When this option is checked StuffIt X Archives will be created using only

compression methods compatible with version 7.0 of Stuffit Expander for Macintosh. Refer to [“Appendix E: Getting and Distributing the Free Expander”](#) on page 98 for a list of recommended Expander versions.

- **Recompression:** Stuffit includes a patented method for making files even smaller called Recompression. Like our JPEG compression, introduced in 2005, Recompression make files smaller by ‘disassembling’ the structure of the data type and compressing it more efficiently using the Stuffit X format’s own compressors. When the item is expanded from the Stuffit X archive, the structure for that particular data type is recreated and the original content restored.

A good example to illustrate this concept is PDF recompression. Internally, a PDF may have embedded text, images, and other multimedia content. With PDF recompression, when adding a PDF file to a Stuffit X archive, the PDF is treated as a container. It is opened and its content is extracted and recompressed into the Stuffit X archive taking advantage of Stuffit’s superior compression methods. Upon expansion, a PDF archive is created and the elements from the original PDF are added to it.

This recompression concept also applies to other formats like JPEG, PNG, and MP3 that contain compressed information as part of the structure.

- **Bit-perfect vs Pixel-perfect:** Stuffit’s recompressors will always result in output that is a “pixel-perfect” perfect copy of the original source file. There will never be any quality reduction comparing the output to the source material. In some cases you may find that while the output file is “pixel-perfect”, it may not be “bit-perfect”, meaning that the output file may be slightly larger or smaller than your source file. The content itself is identical, and any ancillary data is never lost – just the bit encoding may sometimes differ.

In the example above, the recreated PDF archive and the original PDF archive will have identical contents, but the order of the contents within the internal structure of the expanded PDF may differ from the original. For most uses, the recreated PDF can be considered identical, but if check-summed, the two files may or may not match. This is commonly referred to as “pixel-perfect”. In many cases, the content AND the structure will both be identical. This is commonly referred to as “bit-perfect”.

Some formats such as JPEG have little variance in the compression used, allowing for a bit-perfect reproduction every time. For other formats, bit-perfectness depends on the data from the original file.

Stuffit includes custom recompressors for these file formats:

Bit-perfect

- JPEG (.jpg, .jpeg)

Note: The JPEG compressor has an additional option: Include Thumbnails. When this option is enabled, a small thumbnail of the image is stored in the archive for quick previewing.

- Bitmap (.bmp)
- MP3 (.mp3)
- WAV (.wav)

Pixel-perfect

- JPEG lossless (.jls)
- JPEG 2000 (.j2k)

Note - recompression is only applied when a j2k file is lossless encoded

- GIF (.gif)
- TIFF (.tif, .tiff)

Note - Some are recompressed bit-perfectly, depending on how they were originally saved.

- PSD (.psd)

Note - Some are recompressed bit-perfectly, depending on how they were originally saved.

- PNG (.png)
- PICT (.pict, .pct)
- Pxm (.pbm, .pgm, .ppm)

Note - Some are recompressed bit-perfectly, depending on how they were originally saved.

- Zip (.zip, .cbz, .docx, .xlsx, .pptx, .odt, .odg, .ods, .odb)
- PDF (.pdf)

Check each type for which you wish to enable recompression.

Stuffit X Compression Options in Archive Manager

The Stuffit X compression settings found in Stuffit Archive Manager are slightly different than those described in "[Stuffit X Options](#)" on page 88.

You can change the compression level that will be used when items are added to an archive. You can choose **Fastest**, **Optimal** or

Smallest. There is a trade-off between making archives as small as possible and making archives quickly.

- As the names suggest the **Fastest** compression method makes archives more quickly, usually at the expense of compression size.
- The **Smallest** compression method uses our best General compression method and enables all Recompessors to make archives as small as possible. As this option is working much harder to find and compress data, it will take longer.
- The default, **Optimal** setting balances compression speed with archive size, giving generally superior compression as fast as possible.

Note: Fastest and Optimal use only Bit-perfect Recompessors. Smallest uses all Recompessors. You can read more about Recompessors in “Stuflit X Expert Compression Settings”, later in this chapter.

Use the **Expert** checkbox to toggle between Basic and Expert Compression Settings.

Stuflit X Expert Compression Settings

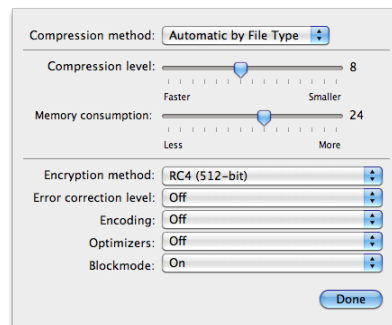


Fig D.2: Stuflit Custom Settings

Compression Method

Compression method allows you to select different compressors for use when adding files to a Stuflit X archive with compression.

- No Compression:** Files will be added to the archive without being compressed.

- **Fastest Compression and Expansion (LZ):** Lempel-Ziv or LZ is a common compression method that provides compression optimized for speed of both compression and decompression. It works by replacing a series of bytes with a reference to a previous occurrence of the same series of bytes. LZ is used when the compression level is set to "Faster".
- **Best Size/Speed Trade Off (BWT):** Burrows-Wheeler Transform or BWT provides the best trade-off between compression/decompression speed and archive file size and works well on a variety of different file types. This compression method does a reversible sort on the data, which places like data closer together making it more compressible.

Note: There is a newer implementation of BWT in Stuffit 10 and later. This method is faster and makes smaller archives, but is not backwards compatible. Archives created with this compression method must be opened with Stuffit Expander 9.02 or later on the Macintosh, or Stuffit Expander 9.0 or later on Windows. You can easily make archives that are backwards compatible by selecting that option in the Stuffit X preferences. The older implementation of BWT will be substituted.

- **Best Text Compression (PPM):** Prediction by Partial Matching or PPM provides compression that is primarily optimized for text. This compression method works by "predicting" what the next byte will be based on previous

data. For example, if it is predicting the byte following "t" and "h", it will give high probabilities to "e", and "a".

Levels and Extents

Levels and Extents are variables used to optimize performance (ie: compression speed vs. expansion speed vs. compressed size) for a particular set of data.

- **Levels:** Levels generally set "how hard" each method tries to compress. In LZ, levels 1-9 generally correspond to gzip's compression levels. The higher the number the harder it tries to find a match (more compression, but slower). Levels above 9 use a different, more exhaustive search for previous matches, which gets extra compression, but at the expense of speed. In the "prediction" algorithm, PPM, the level corresponds to how many previous bytes to use when making the prediction.
- **Extents:** Extents has a direct relationship to how much memory is used. In LZ, the extent sets how far back to look for a match. In PPM, extent sets how much memory to use for storing the prediction information.

Encryption Method

Stuffit X archives can be created with encryption. There are 4 compression methods supported:

- **RC4** - Supports up to 512bit key lengths.
- **DES** - Supports up to 64bit key lengths
- **BlowFish** - Supports up to 448bit key lengths
- **AES** - Supports up to 256bit key lengths

Error Correction

Stuflit X archives can be created with Error Correction. Adding error correction code to an archive will increase its size, but its availability allows the Stuflit Engine to reconstruct data damaged as the result of bad media or transfer errors during the decode phase. You can vary the amount of error correction code applied to an archive during the encode phase. The more error correction you add, the larger the archive will become. But more error correction also adds the ability to repair larger disasters. It is, of course, possible to have large enough damage that even error correction will not be able to save the entire contents of the archive. The range of values supported are as follows:

- 1/128 of a block (1% Overhead)
- 1/64 of a block (3% Overhead)
- 1/32 of a block (6% Overhead)
- 1/16 of a block (14% Overhead)

- 1/8 of a block (33% Overhead)

Text Encoding

Stuflit X archives can be converted to ASCII text format. Three text encoding methods are available, Base 64 (-L 1), Base 85 (-L 2) and Base 222 (-L 3). The levels of available text encoding determine how much of the full ASCII character set will be used to encode the data. The more characters used, the less size overhead will be imposed as a result of translating the binary data of the archive into text characters. When sending archives via E-mail, it is best to use Base-64. This uses the fewest characters, but as a result is the most compatible. Base 222 is a good choice if files are being posted to a news group.

Optimizers

Optimizers are special compression methods designed to handle specific file types. Stuflit includes optimizers designed to compress executables (.exe), disk images created with Error Code Modeler (ECM) and text files (.txt).

Block Mode

The Blockmode setting determines whether Stuffit will group like files together in order to compress them more efficiently. This allows the compressor to benefit from a longer history, and to benefit from redundancy that may occur across multiple files.

Depending on the data set, Block Mode can provide a marked improvement in compression ratios, and is generally at least as fast as compressing files individually.

Duplicate Detection (aka “Duplicate Folding”)

Duplicate Folding stores only a single copy of duplicate items within archives to improve expansion and compression time, eliminating redundancy and increasing space on the hard drive. Upon expansion, duplicate items are restored.

Zip Options

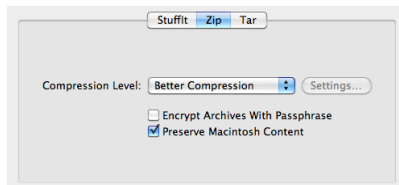


Fig D.3: Zip Format Settings

- **Compression level:** As well as changing the format in which the archive will be created, you can also change the compression level that will be used when items are added to the archive. The choices are Faster Compression and Better Compression; as the names suggest, the Faster Compression method makes archives more quickly, and the Better Compression method creates smaller archives. An additional choice, Custom is also available. When Custom is selected you can use the Expert Compression Settings dialog to determine how Stuffit will compress your files.
- **Encrypt archives with passphrase:** When this option is checked, the archives you create will be encrypted with a passphrase. You will be prompted to provide a passphrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your

passphrase. Smith Micro Systems cannot recover files from encrypted archives if you have lost your passphrase. Passphrases are case sensitive.

- **Preserve Macintosh Content:** This option determines whether or not Macintosh specific file attributes (such as a resource fork and Finder information) is preserved when adding files to Zip archives. Typically, if you are sending files to a Windows user you do not have to preserve this information, as it will not be used on a Windows-based computer. If you are sending files to a Macintosh user, we would recommend that you preserve Macintosh file information by sending your files in the Stuffit X format which is designed to support Macintosh files properly. If you do need to send Macintosh files to other Macintosh users in Zip format, however, checking this option will preserve Macintosh file information in a way that is now compatible with the Zip implementation used in the Finder in Mac OS X 10.3 and later.

Zip Expert Compression Settings

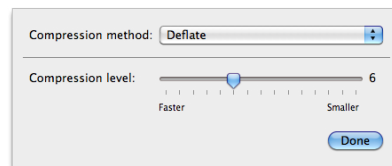


Fig D.4: Zip Custom Settings

- **Compression Method:** When creating Zip (.zip) archives you can choose between the following compression methods: "Deflate" and "Deflate 64". Deflate is the default that all Zip-compatible applications use. Not all third-party Zip tools support Deflate 64. If you are going to share Zip files with others, you should use the Deflate option. You can also choose to use "No compression" when creating Zip archives.
- **Compression Level:** You can set the compression level for Zip compression between 1 and 9. At level 1, compression will be very fast, but the archives will be larger. At level 9, the compression will be slower, but the archives will be smaller. Changing the compression level has no effect on the compatibility of the archive with other Zip-capable programs.

Tar Options

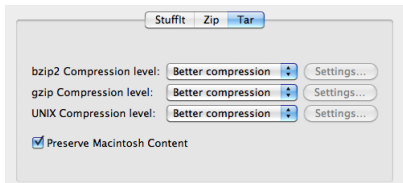


Fig D.5: Tar Format Settings

- **Compression Method:** Tar archives, by default, contain no compression. You can choose to post-compress a Tar archive using either Gzip, Bzip2, or UNIX Compression.
- **Compression Level:** When you have selected a compression method to use in conjunction with Tar archives, you can then select a compression level to be used.
- **Preserve Macintosh Content:** This option determines whether or not Macintosh specific file attributes (such as a resource fork and Finder information) is preserved when adding files to Tar archives. Typically, if you are sending files to a Windows user you do not have to preserve this information, as it will not be used on a Windows-based computer. If you are sending files to a Macintosh user, we would recommend that you preserve Macintosh file information by sending your files

in the Stuffit X format which is designed to support Macintosh files properly.

Tar Expert Compression Settings

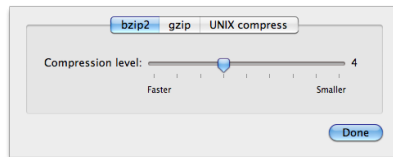


Fig D.6: Tar Format Settings

Tar Compression Method

When creating bzip2 (.tbz), gzip (.tgz), or UNIX Compressed (.tar.Z) Tar archives, the “Custom” settings lets you set the compression level. Levels generally set “how hard” each method tries to compress. You can also choose to use “No compression” when creating Tar archives.

- **bzip2:** You can set the compression level for bzip2 compression between 1 and 9. At level 1 compression will be very fast, but the archives will be larger. At level 9 compression will be very slow, but the archives will be very small.

- **gzip:** You can set the compression level for gzip compression between 1 and 9. At level 1, compression will be very fast, but the archives will be larger. At level 9, compression will be slower, but the archives will be smaller.
- **UNIX Compress:** You can set the compression level for UNIX Compress compression between 1 and 5. At level 1 compression will be very fast, but the archives will be larger. At level 5 compression will be very slow, but the archives will be very small.

Appendix E: Getting and Distributing the Free Expander

StuffIt Expander is a versatile tool that handles expansion of a wide variety of compression formats. With it, Macintosh and Windows users can easily expand StuffIt X archives.

Note: For the most backwards-compatible archive check the “Create Backwards Compatible Archives” compression option in the StuffIt application preferences you are using (ie: DropStuff, MagicMenu/StuffIt Contextual Menu, Archive Manager).

The most current version of StuffIt Expander can be downloaded from:

<http://www.stuffit.com/expander>

OS Version	Recommended Expander Version
Mac OS 8.6 - 9.2.2 (Classic Mac OS)	StuffIt Expander 7.0.3
Mac OS 10.0 (Cheetah), 10.1 (Puma), 10.2 (Jaguar)	StuffIt Expander 8.0.2
Mac OS 10.3 (Panther)	StuffIt Expander 10.0.2

Mac OS 10.4 (Tiger) or later	StuffIt Expander 2010
Windows 98SE	StuffIt for Windows 9.0
Windows 2000 or later	StuffIt Expander for Windows 2010

While we encourage you to freely distribute StuffIt Expander to friends, and coworkers, you may not include StuffIt Expander as part of any commercial product or service. For information on licensing StuffIt Expander for

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Appendix G: End User License Agreement

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