1. Welcome!

Welcome to StuffIt Deluxe®. All of us at Allume would like to thank you for buying this product. StuffIt Deluxe provides a suite of tools that help you compress, protect, send, backup, and organize all your important information. By combining multiple files and folders into a single compressed archive, StuffIt® saves space on your hard drive, and helps you to fit more on CD's, DVD's, and other removable media. StuffIt compression helps you to send information quickly over the Internet and across the network, and its powerful encryption features also ensure that your information is protected against unwanted access.

StuffIt Deluxe allows you to access all the files you download from the Internet, and expands the archives you receive from friends and coworkers whether sent from Macs or PCs. StuffIt also helps you to safely make backups of all your important documents. More than just a compression program, StuffIt Deluxe is a complete information management tool.
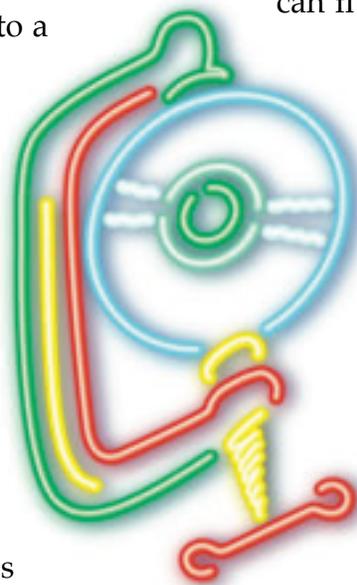
What's New in this Release

JPEG Compression

Only StuffIt allows you to compress your JPEG photos up to 30%! Using StuffIt's patent pending photo compression technology you can send more photos via email, and you can fit more photos on CDs, DVDs, and other removable media. Best of all, StuffIt's photo compression feature allows you to reduce the size of your photo files without any loss in picture quality.

Preview Thumbnails

StuffIt is designed to make it easy for you to access your archived files. Only StuffIt allows you to browse your archived images by thumbnail without first requiring you to decompress the image.

Spotlight Importer

StuffIt Deluxe now includes support for Tiger's new Spotlight search technology. The included Spotlight Importer allows Spotlight to index file names for items stored inside StuffIt, Zip, and Tar archives. When you use

Spotlight to search for items based on their names, you will see any archives that contain matching items returned in the results window.

Automator Support

StuffIt Deluxe now includes support for Tiger's new Automator scripting tool. StuffIt Deluxe now allows you to compress and expand StuffIt, Zip, and Tar archives in your automator workflows.

StuffIt SEA Maker™

StuffIt Deluxe now allows you more control over how you package your files for distribution. Create powerful new self-extracting archives that allow you to control where files are expanded on your recipient's computer. You can even add a splash screen and text dialog to your self-extracting archive.

Improved Performance

A number of improvements have been made to the StuffIt X archive format. The "Better" compression method will now obtain the same great compression ratios about 20% faster than previous incarnations.

Improved .Mac Support

Support for Apple's .Mac online service is now build into StuffIt Express™, the automation tool included with StuffIt Deluxe. StuffIt Express now allows you to create drop box application that send and retrieve files from your .Mac iDisk as part of a larger compression and file transfer task.

What's Included with StuffIt Deluxe

StuffIt Deluxe contains many different archive, compression, and data management tools. The following information provides an overview of the different tools that are available:

StuffIt Deluxe Application

Use StuffIt Deluxe to browse the contents of StuffIt, Zip, and Tar archives. You can use StuffIt Deluxe to extract individual items out of an archive, and you can also use Deluxe to change the contents of an existing archive.

DropStuff®

DropStuff is a drag and drop tool that can create StuffIt, Zip, and Tar archives. You can use DropStuff to compress directly to a CD or DVD, and you can also use DropStuff

to compress and send files directly to an FTP server. DropStuff Even allows you to archive directly to your .Mac iDisk. DropStuff also supports the creation of encrypted StuffIt and Zip archives.

StuffIt Expander®

StuffIt Expander allows you to open a wide range of archive, compressed, and encoded file formats. Over 22 formats are currently supported.

StuffIt Express

StuffIt Express is an automation tool. Express is used to create desktop drop boxes that can perform a wide range of file compression and transfer tasks. You can create drop box applications to automate tasks on your own computer, or you can create drop boxes that allow other Mac OS X users to quickly and easily send you files.

ArchiveSearch™

ArchiveSearch is used to search the contents of your StuffIt, Zip, and Tar archives. Use it to find files in archives in the same way you would use the Finder's search to find files on your hard drive.

Spotlight Importer

StuffIt Deluxe now integrates with the new Spotlight search technology included in Mac OS X 10.4 "Tiger". StuffIt's Spotlight Importer allows Spotlight to index the contents of StuffIt, Zip, and Tar archives.

StuffIt SEA Maker™

StuffIt SEA Maker is used to package files for distribution. The self-extracting archives you create can be expanded on Mac OS X 10.3 or 10.4 without the need for StuffIt Expander. Using SEA Maker you can specify where on your recipient's hard drive files should be expanded, and you can also choose to have the archive display a splash screen and text message before its contents are expanded.

Automator Support

StuffIt Deluxe now includes support for Tiger's new Automator search tool. StuffIt Deluxe now allows you to compress and expand StuffIt, Zip, and Tar archives in your automator workflows.

StuffIt Plug-ins

StuffIt Deluxe includes an Add-In for Microsoft Word that allows you to compress and email a document with a single click from within the Word application. The StuffIt Add-In allows you to save a Word document as a StuffIt archive, open a Word document directly from within an archive, and compress and send a Word document via email. Add-Ins for Adobe applications are also included; they support Adobe Photoshop, Adobe Photoshop Elements, and Adobe Illustrator.

2. Getting Started

The information included in this chapter is designed to get you up and running with StuffIt Deluxe®. It covers the basics of using StuffIt Expander® to open archives, DropStuff® to create archives, and MagicMenu® to automatically compress and send files to other people via email. It also provides basic information about using some of the other tools included with StuffIt Deluxe. More detailed information about all StuffIt Deluxe's many tools is provided later in this guide.

Using StuffIt Expander: The Basics

StuffIt Expander is used to expand the archived, compressed, or encoded files you receive over the network, from the Internet, or on a disk. When you download files from the Internet, you'll find that they are typically packaged in an archive. Anytime you see a file with ".sitx" or ".zip" at the end of the file name, you're dealing with an archive that contains other files. StuffIt Expander is the application you use to open these archives to get access to the files they contain. You can use StuffIt Expander to open just about any compressed or encoded file you encounter. Expander can open StuffIt, StuffIt X, Zip, and Tar archives; BinHex, MacBinary, MIME, and UU encoded files; and many, many more. A full list of all the file types StuffIt Expander can open is available later in this guide.

The easiest way to use StuffIt Expander is to "Drag and Drop" the file you want to open on top of the StuffIt Expander icon that was created in the Dock when you installed the product. When you drag and drop the file on top of Expander's icon, the application will launch, and expand the item inside the archive. By default, the item in the archive will be created in the same folder as the archive itself. For example, if you download a file from the Internet to your desktop, and then drag and drop that file on top of StuffIt Expander, the item inside the archive will also be placed on the desktop. If the archive you are expanding contains multiple items, they will be placed in a new folder that will be created in the same location as the archive you are expanding.

Using DropStuff: The Basics
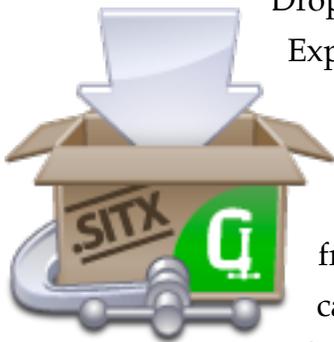
DropStuff is the counter-part to StuffIt Expander. Just as you use StuffIt Expander to open compressed and encoded files, so you use DropStuff to create archives from your files and folders. You can use DropStuff to create archives in StuffIt (.sitx), Zip (.zip), and Tar (.tar) formats.

Typically, you'll want to use DropStuff to compress your files whenever you're posting them on the Internet, or whenever you're making backup copies of your files. When you're sending files over the Internet, compressing files to make them smaller means that it will take you less time to upload the file, and it will also take the person receiving the file less time to download and open it.

The easiest way to use DropStuff is to drag and drop the files you want to compress on to the DropStuff icon that was created in the Dock during installation. The files and folders you dragged onto the icon will be compressed into a new StuffIt archive. The archive will be created in the same location as the files and folders you dropped onto DropStuff. For example, if you drag a folder called "Pictures" from your documents folder onto DropStuff, you will find a new file call "Pictures.sitx" in your documents folder. The original files and from which you created the archive will not be moved or deleted. Instead, the files are copied into the archive leaving the originals intact.

Using DropStuff: Encryption

When you are sending sensitive files to other people, you can use encryption to protect them with a password. This means that 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. To tell DropStuff to protect your archives with encryption, simply launch the application and check the "Encrypt Archives" check box in the DropStuff Window. Do note, however, that encryption is only available when you are creating StuffIt and Zip archives.

When you create an encrypted archive, be sure to make a careful note of the password that you used. Allume Systems is not able to recover the contents of an encrypted

archive if the password has been lost. There is no "Back Door".

Magic Menu and StuffIt Contextual Menu: The Basics
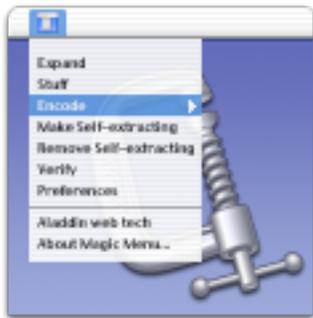
MagicMenu provides you with a way to access the power of StuffIt Deluxe without having to launch any of the StuffIt applications. It creates a special icon in the Finder's menu bar. To use Magic Menu to perform a task, select the items you want to process and click the menu bar icon to create a list of StuffIt related tasks that can be performed. The list of commands that are displayed in the Magic Menu are also available from StuffIt's contextual menu. To access the contextual menu, hold down the Control (Ctrl) key while clicking a file. After you install StuffIt Deluxe, you should see a new "StuffIt" Menu appear in the contextual menu.

Stuff & Mail

MagicMenu allows you to access one of the most useful features of StuffIt Deluxe, Stuff and Mail. Stuff & Mail allows you to compress a file or folder into a StuffIt archive, and then automatically attach that folder to a new email message. To use Stuff & Mail, select the file or folder you want to send, and then choose "Mail" from the Magic Menu. From the resulting submenu, you can then choose the archive format you want to use. You can use Stuff & Mail from the StuffIt contextual menu by Control (Ctrl) clicking the file, and choosing "Mail" from the StuffIt menu.

By default, Stuff & Mail will use the Mail client that is currently set as the default on your system. For a new Macintosh, this will be the "Mail" application that comes with Mac OS X. You can, however, change the mail client that Stuff and Mail uses with the Menu Preferences application. Stuff and Mail supports Apple Mail, America Online, Claris Emailer, Entourage, Eudora, Outlook, Outlook Express, Power- Mail, and QuickMail Pro.

After choosing Stuff & Mail, all you need to do is type the recipient's email address in the new message window, and click send.

Using the StuffIt Deluxe application: The Basics

The StuffIt Deluxe application is the tool that allows you to browse and extract, and even change, the contents of an archive. The StuffIt Deluxe application works with StuffIt X (.sitx), StuffIt (.sit), and Zip (.zip) archives. When StuffIt Deluxe is installed, you can open your archives in the Deluxe application simply by double clicking them.

The StuffIt Deluxe application also allows you to browse the contents of Tape Archives (.tar), including Tape Archives that have been compressed using Unix Compress, Bzip, or Gzip compression. While you can browse the contents of such files and extract individual items without expanding the whole archive, the contents cannot be changed.

When an archive is open in the Deluxe application, its contents are presented to you in much the same way as the Finder presents information about the contents of a folder.

In addition to the standard information you would expect to see about a file in a Finder list view, such as its name, size, date of modification, and label, StuffIt Deluxe also shows you the compressed size of the file and the percentage saving gained through compression. You can change the sort order of the list by clicking a column heading, clicking the same column headings again reverses the sort order. You can choose what column heading are displayed by opening the preferences dialog, and clicking the Views icon.

You can add and remove files from an archive using the StuffIt Deluxe application in exactly the same way as you would add and remove files from a folder in the Finder. Drag files into the archive window to add them to your archive, and drag files from the archive window to the Finder to extract them. You can also delete, rename, move, and copy files in an archive exactly as you can in the Finder.

StuffIt Deluxe allows you to save a copy of the current archive using the "Save a Copy As..." command in the

File menu. Clicking the "Options" button in the Save As dialog allows you change the compression level, encrypt the archive with a password, and add Error Correction (when saving the archive in StuffIt X archive).

Using the Deluxe Application: "Get Info"

You can get information about any of the files in an archive by selecting the file, and clicking the "Get Info" button on the StuffIt Deluxe toolbar.

In addition to information about the name, size, and dates of creation and modification, the StuffIt Deluxe Get Info window includes a number of tabs that allow you view advanced information about the contents of the archive:

- **Comments**: Just as you can assign comments to the archive as a whole, StuffIt Deluxe also allows you to assign comments to individual files in the archive using the Comments field in the Get Info window.
- **Source**: The source tab is only used when you open a StuffIt X archive. The source tab allows StuffIt to record where on your hard drive a particular file originated. StuffIt Expander can then use this information to "restore" the contents of your archive back to their original location on the hard drive. Typically, a source is only recorded for each top level item in an archive. The location for lower level items is calculated based on their relationship to the top level folder in which it is located.
- **Attributes**: The attributes tab allows you to view, among other things, the type and creator codes for items stored in the archive. Type and Creator codes are used by the Mac OS to link documents to their creating applications. Only change the Type and Creator codes for a file if you're SURE you know what you're doing!
- **Preview**: The Preview tab is a special area only used when you open a StuffIt X archive and select a compressed JPEG. This dialog allows you to view a preview of the compressed image without having to expand it from the archive.

Using ArchiveAssistant: The Basics

ArchiveAssistant is designed to provide a simple, easy to use, personal backup solution. You can use ArchiveAssistant to schedule automatic file backups, and you can save the backup archives you create to CDs, DVDs, external drives, FTP servers, and even your .Mac iDisk.

Getting Started

When you click the "New Task" button on the ArchiveAssistant tool bar, the "New Task" assistant is opened. This wizard style interface will walk you step by step through the process of selecting what to backup, where to create the backup archive, and when the backup task should be run. The first dialog, however, simply asks you to pick a name for the backup task you are about to create.

Once you've picked a name, click the "Continue" button to move to the next step. You can also use the "Cancel" button to exit the assistant, or the "Help" button to access information specific to the page you are on at any step in this process.

What to Archive

ArchiveAssistant 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.

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

ArchiveAssistant now 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 ArchiveAssistant window. You can use the

"+" button to browse for items to add to the list, or use the "-" button to remove optional items from the list.

Criteria

By default, ArchiveAssistant will add all the files and folders in the folders you have selected 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 certain specific files from the selected folder. The "Custom Criteria" dialog provides a way to tell ArchiveAssistant exactly what files should be included or excluded from the backup archive.
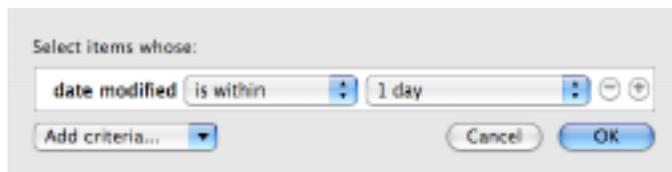
The criteria dialog works in the same way as the Finder's "Find…" function. By adding search criteria in this dialog, you can tell ArchiveAssistant to search the folder you have selected to find matching items to backup. The most common use for this dialog is to tell ArchiveAssistant to find files that have changed in the last week, and then add only those files to your weekly backup archive.

Where to archive

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

Schedule

You can choose to have ArchiveAssistant automatically run your backup task at a specific time, and you can choose the days of the week on which the task will be executed. Remember, that 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! ArchiveAssistant 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, ArchiveAssistant will notify you the next time you start your computer.

Restoring Files

The archives you create with ArchiveAssistant are standard StuffIt X archives. To retrieve files form a StuffIt X archive, you can use StuffIt Expander, StuffIt Deluxe, or any of the tools described in this chapter. StuffIt Expander, however, supports a special mode specifically designed to take files backed up by ArchiveAssistant 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. 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.

Using StuffIt SEA Maker™:
The Basics

StuffIt SEA Maker is designed to provide you with a document distribution system for use on Mac OS X 10.3 and 10.4. The archives you create can be expanded without StuffIt Expander, and they can also be used to display splash screen graphics and text based Read Me files to your recipients as files are being expanded.

Adding Files

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

By default, your recipient will be prompted to specify the location to which they want the files in the archive extracted when they run the SEA, but you can also specify an expand location while you are making the archive. Click the arrow in the "Destination" column to create a pop-up menu. You can either choose one of the default

options on the list (such as Documents), or you can use the "Other..." option to specify a custom location. If the folder you specify is not present on your recipients computer, they will be prompted to choose a new destination.
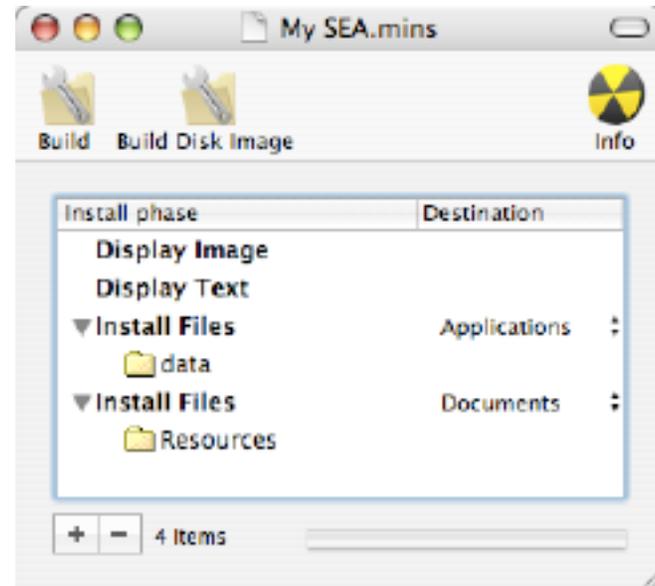
Displaying a Splash Screen

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 that if the image format is supported by QuickTime, 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. Note: The file must be formatted as a plain text document. Files in RTF format are not currently supported.

Building your SEA

You can create a Self-Extracting Archive from SEA Maker by using the "Build" button in the toolbar. 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 cre-

ated with SEA Maker contain a StuffIt X archive, 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.

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

Using ArchiveSearch: The Basics

ArchiveSearch is designed to provide the "look and feel" of Apple's "Find" dialog in the Finder. You can search for files located in an archive using ArchiveSearch in exactly the same way that you would search for files located on your hard drive using "Find".

When you first launch ArchiveSearch, the user interface provides you with options that allow you to look for files located in StuffIt, Zip, TAR, and StuffIt X archives by specifying the name of the file you are looking for. To
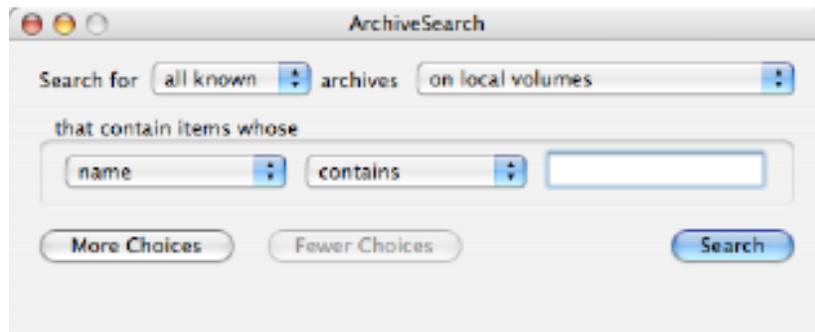
start a search, simply enter the name of the file you want to find.

To add additional search criteria, click the More Choices button. Use the Toggle menu to select the criteria you want to use. You may search using all eight available criteria at once, or you can search using any combination you choose.

The additional choices are as follows:

- Name
- Size
- Compressed Size
- Kind
- Label
- Date Created
- Date Modified
- File Type

Mac OS X 10.4 Integration

StuffIt Deluxe includes two features that are designed specifically for Mac OS X 10.4 "Tiger". Obviously, you'll need to have Tiger installed in order to use them.

Spotlight

Spotlight is a new search technology included for the first time in Mac OS X 10.4. 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 StuffIt, Zip, and Tar 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.

Automator

Automator is a new feature of Mac OS X 10.4 that allows you to create scripts using a viusal point and click interface. StufIt Deluxe includes actions that allow you to create and expand StuffIt, Zip, and Tar archives from within your Automator workflows.

When you launch the Automator application, you will see a new "StuffIt" item listed in the Automator Library. To use StuffIt successfully as part of an Automator workflow it is recommended that you follow the following rough outline:

1. Use the "Finder" or "Spotlight" Library items to create a collection of files to be compressed. You can either use the "Finder" item to select a folder, or the "Spotlight" item to create a search command that returns a list of items to be archived. Once you have a step that results in files or folders, you can then move to step two.
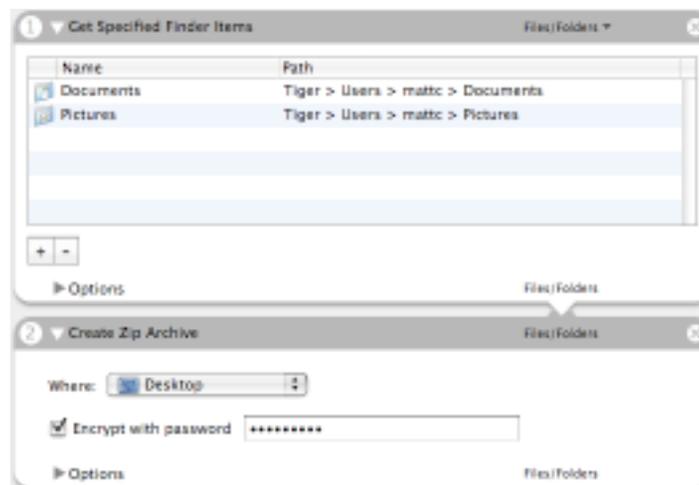
2. The StuffIt Library item offers the choice to create an archive in either StuffIt, Zip, or Tar format. Once you have chosen the format you wish to use, you can then set addition options such as choosing a destination for you files, or creating your archive with encryption. You can also specify that the user be prompted to set these options when the task is run.

When your Automator workflow is run, the list of items created by step one in the process is handed to the StuffIt step, that then adds those items to an archive.

You can also use StuffIt as part of a workflow to Expand archived, compressed, or encoded files. As before, you will need to have create a step that results in a compressed file in order to use Expander as part of a work folder. This first step, for example, might be a Safari step that downloads a file from the Internet.

3. StuffIt Expander®

StuffIt Expander is the most comprehensive tool for dealing with any compressed, segmented, and encoded files you encounter.

If you imagine the internet as an Information Super-Highway, 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.

• **Archive**: An archive is a single file that contains other files and folders. The contents of an archive can be compressed, but some archive formats simply store multiple items without a compression component. StuffIt and Zip archive examples of archive file types that use compression, Tape archives (.tar) are an example of an archive file type that does not use compression. On occasion, you will encounter an archive that has been segmented into several pieces. Typically, segmentation is used to split a large archive over several disks.

• **Encoding**: Typically, in the context that applies to StuffIt Expander, encoding refers to a process by which a binary file is translated into a text 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 Newgroups. Most often, an encoded file contains only one item, but occasionally multiple files will be concatenated together into a single encoded file.

• **Compression**: Compression is the process of reducing a file's size through various pattern matching and token replacement schemes. Some compression formats, such as Gzip) do not archive, but only handle individual files.

StuffIt Expander is a utility designed to open any of these compressed, archived, or encoded "packages" that you receive.

Supported Formats

Format Name	Typical Extension
StuffIt X	.sitx, .part01,sitx,
StuffIt	.sit, .sea, sit.01
Zip	.zip, .exe
RAR	.rar
TAR	.tar, .tgz, tbz2, .tZ
Compact Pro	.cpt
Cabinet Files	.CAB
LHA	.lha, .lzh
Arj	.arj
Arc	.arc
Gzip	.gzip
Bzip2	.bz2
Unix Compress	.Z
Private File	.pf
AppleSingle	.as
BinHex	.hqx
UUencode	.uu
Base64	.mme, .b64
yEncode	.yenc
BtoA	.btoa

Using StuffIt Expander

StuffIt Expander is easy to use! To expand a file with StuffIt Expander, simply launch StuffIt Expander and drag and drop the file you want to expand into Expander's window.

You can also use StuffIt Expander by dragging and dropping onto the application icon. By default, an icon for StuffIt Expander is placed in the Dock by the StuffIt Deluxe installer. If Expander is closed, the program will launch, expand your files and quit. You can expand more than one file by dragging multiple items onto StuffIt Expander at the same time.

Using the packaging system analogy, when Expander finishes "opening the package", the contents will be lo-

cated in the same directory as the original files (this set-ting can be changed in the preferences).

Expanding Segmented Files

StuffIt Expander can join several types of segmented files. To join the segments into a single file, drag the first seg-ment of the set onto StuffIt Expander. If the segments are located on different disks, you will have to insert each disk in turn to complete the expansion process. When Expander is finished joining the segments, the resulting file will be located in the same directory as the original segments. If you are expanding segments from removable disks, you will be prompted to provide a new expansion location.

Expanding Encrypted Archives

On occasion you may receive archives that have been en-crypted with a pass-phrase. StuffIt Expander will prompt you to provide the pass-phrase before the files are ex-panded. If you do not have the correct pass-phrase you will not be able to access the files stored in an encrypted archive.

One Time Options

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. When you click "OK" to dismiss the Preferences dialog, your file would be ex-panded to this new location for this one time. Future ex-pansion operations will use the regular preference set-tings.

Working with Stuffit Expander 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.

Expansion Preferences

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

- **Automatically expand archives in:** This setting is used to setup a special folder that StuffIt Expander will periodically scan for items to be expanded. Any compressed, archived, or encoded files placed in the specified folder will be expanded automatically. This functionality is similar to that of the "Watch Folders" feature of previous Expander releases.
- **Continue to expand (if possible):** This preference, when enabled, causes StuffIt Expander to scan the file that results from expanding an archive, compressed, or encoded file to see if it can be further expanded. For example, when this preference is enabled, and StuffIt

Expander encounters a BinHex encoded StuffIt archive, it will start to expand the archive as soon as it has decoded the BinHex layer. Note: Archives, compressed, and encoded files contained within folders in the archive must be separately expanded.

- **Set execute permissions by default:** This preference determines whether StuffIt Expander should set the execute file permission on items expanded from archives that do not 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. StuffIt X archives (.sitx) are designed to preserve UNIX permissions and ignore this setting.
- **Mount Disk Images:** When this preference is enabled, StuffIt Expander will attempt to mount disk image files (resulting in the appearance of a "virtual disk"). Apple's Disk Utility is used to mount the images.
- **Delete after expanding:** When enabled, the files you expand will be deleted once the files they contain are successfully extracted. **Use this preference with great 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:** StuffIt Expander allows you to automatically scan files that are extracted from archives and encoded files for viruses with your virus protection software. StuffIt Expander supports Virex, Norton Anti-Virus, and Virus Barrier. If you would like to try using a different Virus program, choose "Other..." from the pop-up menu.

- **Error Reporting**: 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 written to disk in a log file.

Destination Preferences

The Destination preferences determine where StuffIt 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:

- **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, StuffIt Expander 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 StuffIt Expander saves 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 folder with the same name already exists. When merging is not specified, StuffIt will create a new copy of the folder with a ".1" at the end of its name. If the merging feature is turned on, StuffIt will expand files to the copy of the folder that already exists on the hard drive rather than creating a new one. If, when the Merging feature in enabled, StuffIt tries to expand a file from an archive, and finds that a file with the same name already exists in the selected

destination, you will be prompted to select which of the two files you would like to preserve.

• **By Merging into a Location Specified by the Archive**: This applies the same "merging" location described for the "Merge into the specified location" option. Instead of prompting you for the location to which items should be expanded, however, this option will attempt to obtain a location from the "Source" information stored by the archive. Typically, this option will only be useful when you are expanding StuffIt X archives created by 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

The File Mappings dialog allows you to determine, individually, which archive and encoded file formats will be opened with StuffIt Expander. For StuffIt Deluxe users, this preference also allows you to determine whether a StuffIt X, StuffIt, Zip, or Tar archive will open with StuffIt Expander or StuffIt Deluxe when you double click it in the Finder.

4. DropStuff®

DropStuff is the counterpart to StuffIt Expander. Just as you use StuffIt Expander to open compressed and encoded files, so you use DropStuff to create archives from your files and folders. DropStuff creates StuffIt X (.sitx), Zip (.zip), and TAR (.tar) archives.

Use DropStuff to compress the files you post on the internet, send as email attachments, or burn to CD, DVD, or save to other removable media to create backups. Whether you're storing backups of files on disks, or sending files over the Internet, using compression makes them smaller so that they will take less storage space, less time to upload, and less time to download.

While DropStuff can create, Zip and TAR archives, we highly recommend using the StuffIt X format. StuffIt X archives provide superior compression, and can compress your JPEG photos and images. StuffIt X includes important features that help you to protect your data; StuffIt X archives can be made with strong encryption, and can also be made with built in "error-correction" technology in many cases will allow StuffIt Expander to automatically repair damaged archives when it attempts to expand them.

Anyone can open StuffIt X archives using our StuffIt Expander software. Just point them to http://www.stuffit.com to download the StuffIt Expander software they'll need. It's available for Macintosh (both Classic Mac OS and OS X), Windows and Linux/ UNIX. Best of all, it's free.

Using DropStuff

DropStuff is easy to use! To compress DropStuff, drag and drop files and/or folders into the DropStuff window. You can also drag and drop onto the DropStuff icon that the StuffIt Deluxe installer creates in the Dock. If DropStuff is closed, the program will launch, compress your files and quit. You can also compress files with DropStuff by dragging files into the DropStuff Drag Window, as in the figure below.
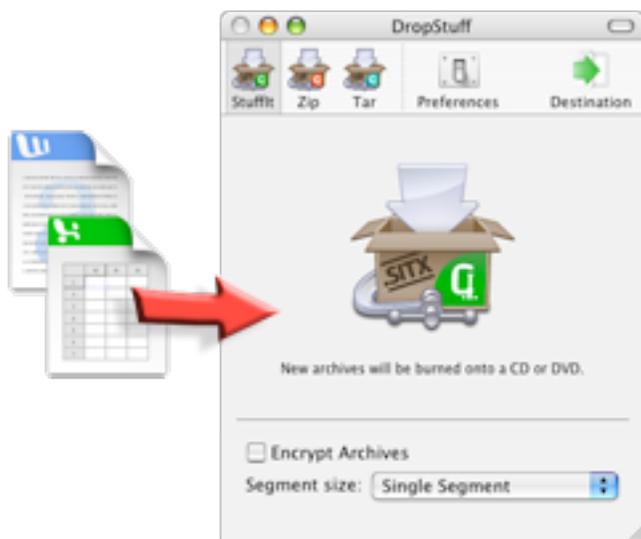
When you drag and drop multiple items onto DropStuff, those items are combined into a single archive file. By default, that archive is created in the same folder as the files and folders you dragged to DropStuff (this setting can be changed in the preferences).

Supported Archive Formats

By default DropStuff creates archives in StuffIt X format. The StuffIt X archive format offers the best available compression, and also provides access to unique features such as strong encryption, error correction, and the ability to compress JPEG images. DropStuff also allows you to create Zip and TAR archives. Zip archives are most common on Windows® based computers. StuffIt X archives provide better compression than Zip, and you may also find that certain Macintosh specific file attributes are not correctly preserved when Zip compression is used. The TAR format is most commonly used on Linux or UNIX based computers. The TAR format has no inherent compression, it only groups files together into an archive format. Gzip is a common post-compression format for TAR files.

Encryption

When you use DropStuff to combine files into an archive, you can choose to protect the resulting archive with en-

cryption. When encryption is turned on, the software will prompt you to supply a pass-phrase during the compression process. This pass-phrase is used as a "key" to scramble the contents of the archive, only people with the correct pass-phrase, or key, will then be able to extract the files you add to an encrypted archive.

While both StuffIt X and Zip provide encryption, the encryption provided by the StuffIt X format is the better choice. StuffIt X uses strong encryption (512bit RC4 encryption , by default) and, unlike zip, the encryption used by StuffIt X requires the user to enter a password to browse the contents of an archive in the StuffIt Deluxe application.

Any encryption method you use to protect your files is only as strong as your pass-phrase. When you see encryption methods rated by strength (40bit, 128bit, 512bit, etc) the number used indicates how many "bits" your pass-phrase can contain. Stronger encryption methods simply allow you to use longer pass-phrases. For the most secure pass-phrases, avoid using common names, or words that can be found in a standard dictionary. The most common way to defeat, or "hack", a secure archive is to use common dictionary words to guess the pass-

phrase. When you enter your pass-phrase the "Password Quality" bar will indicate how secure your pass-phrase will be.

Segmentation

When you create archives in StuffIt X format, you have the ability to create those archives in pieces small enough to fit on removable media including CD-R(W) and DVD-R(W). You can tell StuffIt how big the segments should be either by choosing a pre-set disk type from the Segmenting pop-up menu, or by choosing "Other" and entering a specific size. Once the segments are created you can copy them to each removable disk. Be sure to keep track of all of the segments. If any segment is missing, the archive can not be rejoined or expanded.

The Stuff Menu Command

While DropStuff is designed to be used as a drag and drop application, you can compress files using the Stuff command in the DropStuff "File" menu. When you choose Stuff from the File menu, a file selection dialog will be used to allow you to select files to compress. If you select multiple files and/or folders in the selection dialog, they will be combined into a single archive file. If

the selected archive format is Zip, then the menu command will be "Zip", if the selected archive format is TAR, the menu command will be "Archive".

DropStuff Filters

In addition to using the Stuff menu command to create a regular archive, you can also use the "Stuff with Filters" 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 Filters" 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 "Find..." dialog that allows you to specify which files in the folder you wish to add to the archive.

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. In the example pictured, DropStuff will create an archive from the selected folder using only files with the word "Stuff" in the title, that have an extension of ".rtf", and that were modified in the last 2 weeks.
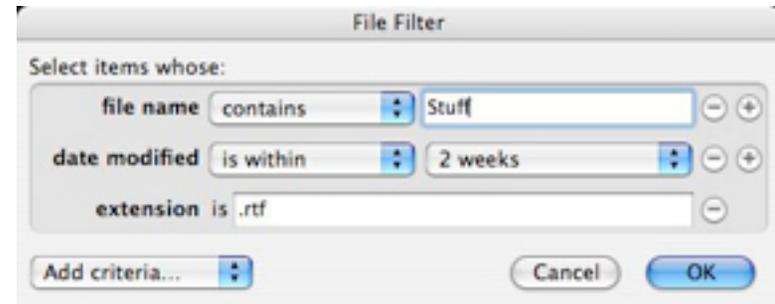
You can choose to apply Filters on the fly by holding down the Command and Option keys when you drag folders to DropStuff

Changing Archive Formats

The DropStuff application window now allows you to change commonly used compression settings without having to open the preferences window. Click the format you want to create in the DropStuff toolbar to change the setting. When you change format, additional options related to that format appear at the bottom off the DropStuff window.

- **Encryption**: When DropStuff is configured to create either StuffIt X or Zip archives you can check the "Encrypt Archives" box in the application window to protect the archive you create with a pass-phrase.

- **Segment Size**: When DropStuff is configured to create StuffIt X archives you can choose to create the archive in multiple parts. This option is useful when you need to split a large archive into smaller parts so it can be saved to a CD, DVD, or other removable media. You can also use segmentation to split a large file into smaller parts to work around the file size limits that are often encountered when you send files via email.
- **Compression Method**: When DropStuff is configured to create Tape archives (.tar), you can choose to further compress those archives with either Bzip2, Gzip, or UNIX compression. This option is useful because the Tape archive format does not include compression.

One Time Preferences

One of the most useful features of DropStuff is the ability to access a "One Time" preferences dialog. This dialog allows you to access the most common archive settings quickly and conveniently, and make changes that apply only to the current compression task. This can be particularly useful if you are using DropStuff by dragging and dropping items to the icon in the Dock and don't remember what the current preferences happen to be.
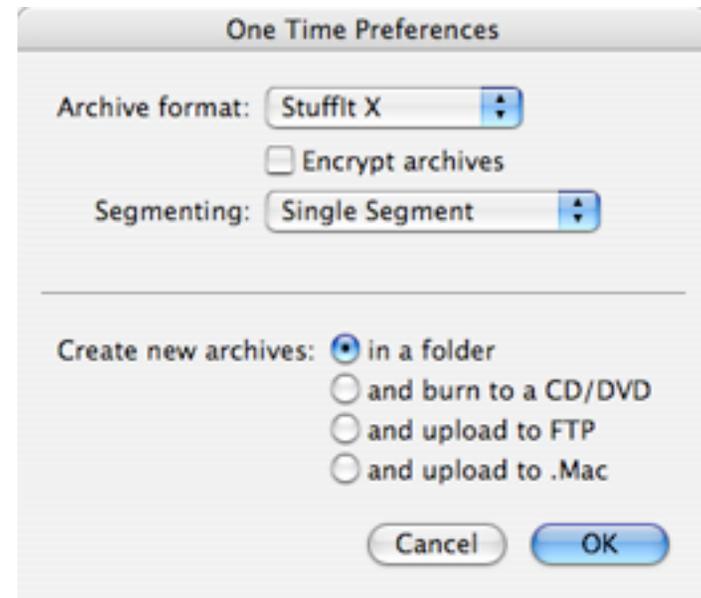
To use one time preferences, hold down the Option key as you drag and drop items on top of the DropStuff icon.

The Destination Tray

DropStuff allows you to change the destination to which a newly created archive will be saved from the destination tray. To open the destination tray, click the "Destination" button in the DropStuff toolbar. DropStuff allows you to save our archives to four main types of destination:

- **Folder**: The folder option allows you save your archive to any location in the Finder, including folders on your internal hard drives, external drives, and mounted network volumes.
- **CD/DVD**: The CD/DVD option allows you to burn archives to CD or DVD using the CD burning software built into Mac OS X.
- **FTP**: The FTP option allows you to upload the archive you create to an FTP server.
- **.Mac**: The .Mac option allows you to upload the archives you create to your .Mac iDisk.

Detailed information about how to configure each of these destination options is included in the preferences section of this chapter.

DropStuff Preferences

DropStuff Preferences can be used to change a number of aspects of DropStuff's behavior when creating archives. In particular, you can fine tune the compression settings for the StuffIt X format, enabling features such as error correction, or changing the compression level.

StuffIt

The settings on the StuffIt page apply to the creation of StuffIt X archives.

- **Compression Level**: This control allows you to set the compression level used when DropStuff is creating StuffIt X archives. You can choose either "Better Compression" or "Faster Compression"; as the names suggest the Faster compression method makes archives more quickly, and the Better compression method creates smaller archives. **Archives created with the "Better" compression level are backwards compatible to version 9.02 of StuffIt Expander, while archives created with the "Faster" compression level are backwards compatible with version 7.03 of StuffIt Expander.** An additional choice, "Custom" is also available. When Custom is selected you can use the StuffIt Expert Com-

pression Settings dialog to determine how DropStuff will compress your files. The Chapter on the StuffIt X archive format offers a comprehensive explanation of the settings contained in this dialog.

- **Segment Size**: This option is used to break the StuffIt X archive you create into smaller pieces to fit them on CD's, DVD's, or other removable media.

- **Encrypt Archives with a Pass-phrase**: When this option is checked, the archives you create will be encrypted with a pass-phrase. You will be prompted to provide a pass-phrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your pass-phrase.

- **Compress JPEG Images**: The StuffIt X archive format offers you the ability to compress JPEG files without further reducing the quality of the image. **When you choose "Faster" JPEGs will compress up-to 15%, when you choose "Smaller" JPEGs will compress up-to 30%. Archives created with the JPEG compression feature are backwards compatible with version 9.02 of StuffIt Expander for Mac, or version 9.0 of StuffIt Expander for Windows.**

- **Include Thumbnail**: StuffIt's JPEG compression method is also able to create thumbnails of your ar-

chived images that can be viewed from within the StuffIt Deluxe application. Use this option to turn the thumbnail feature on and off.

Zip

The settings on the Zip page apply to the creation of Zip archives.

- **Compression Level**: This control allows you to set the compression level used when DropStuff is creating Zip archives. You can choose either "Better Compression" or "Faster 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 Zip Expert Compression Settings dialog to determine how DropStuff will compress your files. Zip's custom compression dialog allows you to choose the exact Zip compression level, as well as choosing the "Enhanced Deflate" compression method.

- **Encrypt Archives with a Pass-phrase**: When this option is checked, the archives you create will be encrypted with a pass-phrase. You will be prompted to provide a

pass-phrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your pass-phrase. Important! Allume cannot recover files from encrypted archives if you have lost your pass-phrase. Also note that pass-phrases 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 need 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 an archive format designed for the Macintosh, such as StuffIt X. 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 compatible with Apple's Zip implementation used in the Finder in Mac OS X 10.3 and later. Apple Double encoding will be used to separate Macintosh information from the file's data, and store it in a folder at the root of the archive. The Apple Double encoded

information will automatically be recombined with the file's data fork when the archive is expanded on a Mac.

TAR

The options on the TAR page apply to the creation of Tape archives.

- **Compression Method**: When you use DropStuff to create TAR archives you can specify that TAR archives be compressed after they have been created. You can choose to compress TAR archives using Gzip (.gz), Bzip2 (.bz2), and UNIX compression (.z).
- **Compression Level**: This control allows you to set the compression level used when DropStuff is compressing TAR archives. You can choose either "Better Compression" or "Faster Compression". An additional choice, "Custom", is also available. When "Custom" is selected you can use the TAR Expert Compression Settings dialog to determine how DropStuff will compress your files.
- **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 non-Macintosh user you do not have to preserve this information, as it cannot be used on a non-Macintosh 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 an archive format designed for the Macintosh, such as StuffIt X. If you do need to send Mac files to Mac users in Tar format, choosing this option will cause files that have Mac specific information in them to be MacBinary encoded as they are added to a TAR archive.

Destination

The destination page of DropStuff's preferences dialog contains settings that allow you to specify how each of DropStuff's available destinations work. Use the pop-up menu in the destination dialog to select the destination you want to use. Once you have selected a destination, addition options can be configured.

- **Folder**: By default DropStuff is configured to save new archives to the same location in the Finder in which the archived items were located. If you stuff items on the Desktop, for example, the new archive will be created on the Desktop. You can also configure DropStuff to ask

for a destination for each new archive, or you can configure a specific location to which will archives will always be saved.

- **CD/DVD**: When this option is selected, DropStuff will burn new archives to CD or DVD using the Finder's built in burning software. The archives first need to be created on the disk before they can be burned, and the preferences dialog allows you to specify a temporary location to be used. This temporary archive is deleted from your hard drive once it has been successfully burned.

- **FTP**: DropStuff allows you to upload new archives to an FTP server. In order to use this feature, you must provide DropStuff with details about the FTP server you want to use. Specify the server, path, username and password in this dialog. The archive must first be created on your hard drive before it can be uploaded, and the FTP preferences allow you to specify the temporary location to be used. This temporary archive is deleted from your hard drive once the disk has been successfully uploaded.

- .**Mac**: DropStuff allows you to upload new archives to a .Mac iDisk. Specify the user name and password of the .Mac account you wish to use, and specify the location

on the iDisk to which the archive should be saved. The archive must first be created on your hard drive before it can be uploaded, and the .Mac preferences allow you to specify the temporary location to be used. This temporary archive is deleted from your hard drive once it has been successfully uploaded.

Encoding

The options in the Encoding page allow you to instruct DropStuff to encode your archive after it has been created. You can choose to have DropStuff encode your archive using Binhex or UUencode. Use the "Simplify extension after encoding" option to remove the archive extension from the encoded file's name. Using this option a file that would otherwise be created as "file.sit.hqx" will be named "file.hqx" instead.

Options

The preferences on the "Options" page apply to all archive formats.

- **Don't Stuff files that are already compressed**: File types that are known to already include compression (such as GIF images, or QuickTime movies) will not be compressed when they are added to an archive. Selecting this option will save time where these types of files are involved. You may wish to deselect this option if you want DropStuff to attempt to further compress these files. In most cases these files will not significantly decrease in size enough to warrant the time spent to compress them.

- **Ignore Finder Desktop Files**: When this option is set, DropStuff will not add Finder files (such as Desktop Database files or .DS_Store) to an archive.

- **Create Individual Archives:** When this option is set, dragging multiple items to DropStuff will result in each item being compressed in its own individual archive.

- **Delete Originals**: We didn't want to include this feature, but you, dear user, insisted. So here it is. When this option is set, DropStuff will delete the source file when creating an archive. We're really not sure why anyone would want to do this, but there you go.

5. StuffIt Deluxe®

This chapter is designed to provide detailed information about the StuffIt Deluxe application. It is the reference you should turn to if you have a question about the function of a particular button, menu item, or preference.

The StuffIt Deluxe application is the tool that allows you to browse and manipulate the contents of an archive. The StuffIt Deluxe application is able to browse and manipulate the contents of StuffIt (.sit), StuffIt X (.sitx), and Zip (.zip) archives. When StuffIt Deluxe is installed, you can open your archives in the Deluxe application simply by double clicking them.

The StuffIt Deluxe application also allows you to browse the contents of Tape Archives (.tar), including Tape Archives that have been compressed using Unix Compress, Bzip, or Gzip compression. While you can browse the contents of such files and extract individual items without expanding the whole archive, the contents cannot be changed.

Using StuffIt Deluxe

By default, after you have installed the StuffIt Deluxe package, when you double click an archive in the Finder it will open up in the StuffIt Deluxe application. When an archive is open in the Deluxe application, its contents are presented to you in much the same way as the Finder presents information about the contents of a folder when it is in list view.
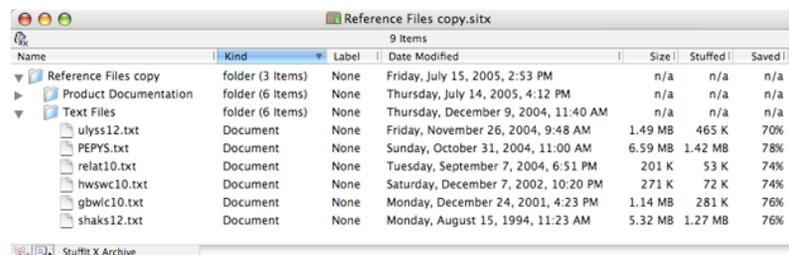
In addition to the standard information you would expect to see about a file in a Finder view, such as its name, size, and date of modification, StuffIt Deluxe also shows you the compressed size of the file and the percentage saving gained through compression. You can change the sort order of the list by clicking a column heading, clicking the

same column headings again reverses the sort order. You can choose what column heading are displayed by opening the preferences dialog, and clicking the Views icon. You an also click and drag to change the order in which columns are displayed.

Get Info

If you want to view more information about an item in the archive, select it and click the "Get Info" button from the StuffIt Deluxe toolbar.

In addition to information about the name, size, and dates of creation and modification, the StuffIt Deluxe Get Info window includes a number of tabs that allow you view advanced information about the contents of the archive:
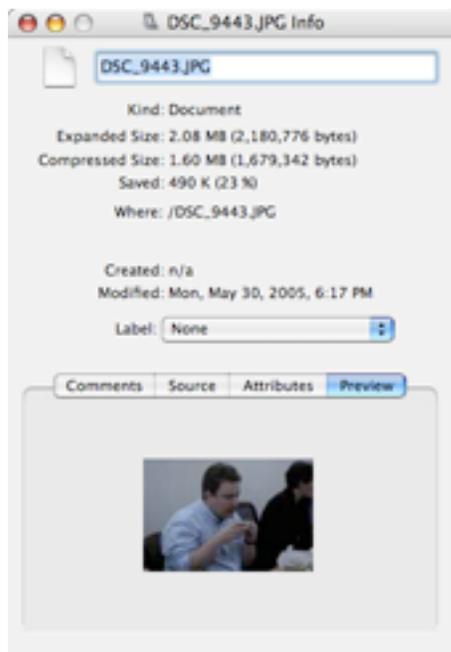
- **Comments**: Just as you can assign comments to the archive as a whole, StuffIt Deluxe also allows you to assign comments to individual files in the archive using the Comments field in the Get Info window.
- **Source**: The Source tab is only used when you open a StuffIt X archive. The source tab displays where on your hard drive a particular file originated. StuffIt Expander can then use this information to "restore" the contents of your archive back to their original location on the hard drive. Typically, a source is only recorded for each top level item in an archive. The location for lower level items is calculated based on that items relationship to its top level folder.
- **Attributes**: The Attributes tab allows you to view, among other things, the type and creator codes for items stored in the archive. Type and Creator codes are used by the Mac OS to link documents to their creating applications. Only change the Type and Creator codes for a file if you're SURE you know what you're doing!
- **Preview**: The Preview tab is a special area only used when you open a StuffIt X archive and select a compressed JPEG. This dialog allows you to view a preview of the compressed image without having to expand it from the archive.

Creating a New Archive

In addition to creating archives using DropStuff, you can also create archives using the StuffIt Deluxe application. When you create an archive in the StuffIt Deluxe application, you first create a new empty archive, and then add content. To create a new empty archive in the StuffIt Deluxe application:

1. Launch StuffIt Deluxe

2. Click the "New" button on the StuffIt Deluxe toolbar

3. In the dialog that appears, choose a name and location for your new archive. You can also use the "Archive Type" toggle menu to select the format your new archive will use. You can create StuffIt (.sit), Zip (.zip), or StuffIt X (.sitx) archives using the StuffIt Deluxe application.

Once you have named and saved your new archive, a new empty archive window will appear.

Adding Files to an Existing Archive

The easiest way to add files to an archive open in StuffIt Deluxe is to drag and drop them from a Finder window to the archive window. You can add multiple items at once by making a multiple selection in the Finder and dragging the files into the archive window. When you drop the files into the archive, you will see a progress bar while the items are being compressed.

You can also add files to an archive using the "Stuff" command. The Stuff command can be accessed from the StuffIt Deluxe Toolbar, from the Archive menu, and from the context menu that appears when you Control (ctrl) click items in the archive window. When you use the Stuff command, you will be prompted to select the files to add to the archive in a standard file selection dialog.

If you have indicated that items should be encrypted with a password, you will be prompted to enter the password before the items are compressed into the archive.

In addition to adding files to a StuffIt archive, you can also rename, copy, and move items that are stored in an archive. To rename an item, select a file, and then click its name to activate the edit name text field. Click in the text field to activate the cursor. To move a file, select the item you want to move, and drag and drop it to its new location in the archive. To copy a file in an archive, drag and

drop while holding down the Option key. Again, this works just like copying files in the Finder.

Occasionally, the StuffIt X archives you open will be marked as "read-only". This means that their contents cannot be changed. StuffIt X archives created with "redundancy" - the StuffIt X error correction method - are an example of StuffIt X archives that are read only, as are archived created by ArchiveAssistant.

Extract Files From an Archive

The easiest way to extract a file from an archive open in StuffIt Deluxe is to simply drag and drop the file from the archive window to a Finder window. After you've dropped the file to the desired location, a progress bar will be displayed while StuffIt extracts the file from the archive. You can extract multiple items using drag and drop by making multiple selections in the archive window. You can click and drag within the archive window to select multiple items that are next to each other in the list. To select multiple items that are not next to each other in the list, hold down the shift key while you are selecting files. When you have the items you want to expand selected, drag and drop them to a Finder window.

You can also extract files from an archive by using the "UnStuff" command. You can access the "UnStuff" command from the StuffIt Deluxe Toolbar, from the Archive menu, and from the Contextual menu what appears when you Control (Ctrl) click items in the archive window. When you extract using the UnStuff command, you will be prompted to select a location to which files should be expanded.

Files extracted from an archive are copies of the compressed file in the archive. The compressed file remains in the archive unless you choose to delete it.

If any of the items you are extracting have been encrypted with a password, you will be prompted to enter the password before the items can be extracted.

In addition to extracting files from an archive, you can also choose to delete files from the archive. To delete, select the file you want to delete and click the "Delete" button on the StuffIt Deluxe Toolbar.

"Save As..."

StuffIt Deluxe allows you to save a copy of the current archive using the "Save a Copy As..." command in the

File menu. Clicking the "Options" button in the Save As dialog allows you change the compression level, encrypt the archive with a password, make the archive self-extracting, and add Error Correction (when saving the archive in StuffIt X archive).

The StuffIt Deluxe Toolbar

Most of the features of the StuffIt Deluxe application, such as adding or removing files from an archive, can be done by dragging and dropping in exactly the same was as you would in the Finder. StuffIt Deluxe, however, also provides a toolbar that allows the user to access the various functions associated with manipulating the contents of an archive.

The following functions are accessible from the StuffIt Toolbar:
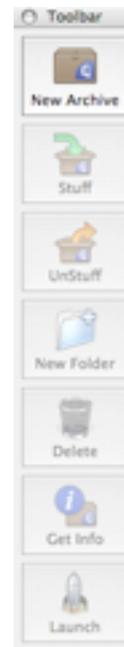
•**New Archive**: The New Archive button will cause the StuffIt Deluxe application to create a new empty archive. You can have up-to nine archives open at the same time in the StuffIt Deluxe application.

•**Stuff**: The Stuff button provides an alternative to drag and drop when it comes to adding files to an existing archive. When the Stuff button is clicked, a dialog prompts you to select the files that should be added to the current archive.

•**UnStuff**: The UnStuff button provides an alternative to drag and drop when it comes to extracting files from an archive. The UnStuff button becomes active when an archive is open and items are selected. When clicked, a dialog prompts the user to choose a location to which the selected items should be expanded.

• **New Folder**: The New Folder button allows the user to create a New folder in the current archive.

• **Delete**: The Delete button is active when an archive is open and items are selected. The selected items are deleted from the archive when the button is clicked. The

items are immediately deleted, rather than being moved to the Mac OS trash can.

- **Get Info**: The Get Info button is active when an archive is open and items are selected. When used, an Info dialog is opened for the selected item. This dialog functions in much the same way as the Get Info dialog in the Finder. The dialog displays information about the size, and modification date of the file, and also allows the user to view and edit its Type and Creator code.
- **Launch**: The launch button allows you to UnStuff and launch or open a file in a single step. This button is active when an archive is open and items are selected.

StuffIt Deluxe Menus

StuffIt Deluxe also provides access to its many functions via the menu bar.

File Menu

The following functions are available from the File menu in the StuffIt Deluxe application.

- **New**: The command will cause the StuffIt Deluxe application to create a new empty archive. You can have up-to nine archives open at the same time in the StuffIt Deluxe application.
- **Save a Copy As**: StuffIt Deluxe allows you to save a copy of the current archive using the "Save a Copy As…" command in the File menu. Clicking the "Options" button in the Save As dialog allows you change the compression level, encrypt the archive with a password, make the archive self-extracting, and add Error Correction (when saving the archive in StuffIt X format).
- **Verify**: The verify command allows you to test the integrity of StuffIt, StuffIt X, and Zip archives. If errors are encountered in the archive, StuffIt Deluxe will prompt you to before attempting to recover them.

View Menu

The items available in the View menu allow you to change the sort order of the list in the foremost archive window.

Archive Menu

The functions available in the Archive menu can be used to add and extract files from an open archive, as well as to access advanced archiving features such as comments or return receipt.

- **Add**: The Add command provides an alternative to drag and drop when it comes to adding files to an existing archive. When the Add menu item is clicked, a dialog prompts you to select the files that should be added to the current archive.
- **Add with Filter**: When you choose "Add with Filters" from the Archive 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 "Find..." dialog that allows you to specify search criteria to determine which files to add to the archive. 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.

- **Expand**: The Expand command provides an alternative to drag and drop when it comes to extracting files from an archive. The Expand menu item becomes active when an archive is open and items are selected. When clicked, a dialog prompts the user to select a location to which the selected items should be expanded.
- **New Folder**: The New Folder menu item allows the user to create a New folder in the current archive.
- **Delete**: The Delete menu item is active when an archive is open and items are selected. The selected items are deleted from the archive when the menu item is clicked. The items are immediately deleted, rather than being moved to the Mac OS trash can.
- **Get Info**: The Get Info menu item is active when an archive is open and items are selected. When used, an Info dialog is opened for the selected item. This dialog functions in much the same way as the Get Info dialog in the Finder. The dialog displays information about the size, and modification date of the file, and also allows the user to view and edit its Type and Creator code.

- **Launch**: The launch button allows you to UnStuff and launch or open a file in a single step. This menu item is active when an archive is open and items are selected.
- **Edit Comment...**: Opens the Edit Comment dialog that allows you to edit or add an archive comment.
- **Return Receipt...**: Allows you to add, edit or remove a Return Receipt request to a StuffIt 5 (.sit) archive.

Translate Menu

The Translate menu allows you to create archives in all the formats that are supported by StuffIt Deluxe, but that cannot be directly browsed and manipulated. These formats include LHa, Tar, Bzip, Gzip, Unix Compress, Apple Single, BinHex, MacBinary, and UUEncode.

Scripts Menu

The Scripts menu allows users to access the AppleScript features in StuffIt Deluxe.

- **Open Script Editor**: Launches Apple's Script Editor application.
- **Open Script Dictionary**: Displays the AppleScript dictionary for StuffIt Deluxe.

- **Open Scripts Folder**: Opens the folder used to store StuffIt Deluxe scripts.

Archive Comments

The StuffIt Deluxe application allows you to add comments to your archives. Up to 2048 characters are permitted.

To add a comment to an archive open in the StuffIt Deluxe application:

1. Choose "Comment->Add Comment" from the Archive menu.
2. In the text entry field provided, add your comment.

To edit a comment:

1. Choose "Comment->Edit" from the Archive menu.
2. Edit the text in the comment field.

StuffIt Deluxe Preferences

This section is designed to provide information about the StuffIt Deluxe preferences dialog. It covers the effect of all the available settings. The StuffIt Deluxe preferences dialog is divided in pages, each page is represented by an icon in a toolbar that runs across the top of the application. To switch pages, simply click the icon that corresponds to the page you want to view.

General Page

The General Page contains settings that effect the general operation of the StuffIt Deluxe application.

- **Allow Version Checking**: The preferences governs whether the StuffIt Deluxe application will check for updates when it is launched.
- **Convert Old Archives on Open**: When this box is checked, older StuffIt archives will be converted to StuffIt format. This setting applies to any StuffIt archive created by a version of StuffIt Deluxe prior to 5.0. StuffIt 5 (.sit) archives will not be converted to StuffIt X.
- **Number of Recent Items**: This toggle menu allows you to specify the number of archives that will be displayed in the Recent Items menu item in the StuffIt Deluxe application.
- **Default Archive Name**: This preference allows you to specify the default name that will be given to a new archive created by StuffIt Deluxe. The file extension for the currently selected file format will be appended to the name you select.
- **Default Archive Type**: This toggle menu allows you to determine the archive format that StuffIt will use when you select the New Archive command. The StuffIt Deluxe application supports StuffIt, StuffIt X, and Zip archives.

Compression Page

The Settings in the Compression page are used to control how files are compressed into archives.

- **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" and "Better"; as the names suggest the "Faster" compression method makes archives more quickly, and the "Better" compression method creates smaller archives. An addi-

tion choice, "Custom" is also available. When "Custom" is selected you can use the Advanced Compression Preferences dialog to determine how StuffIt Deluxe will compress your files. **The StuffIt X archives created using the "Better" setting will be backwards compatible with version 9.02 of StuffIt Expander. The StuffIt X archives created with the "Faster" setting will be backwards compatible to version 7.03 of StuffIt Expander.**

- **Don't Compress Files that are Already Compressed**: When checked, this preference means that StuffIt will not attempt to compress files that contain already compressed data when adding them to an archive. Examples of files that contain already compressed data include .gif images, MP3 music files, as well as other archive file types.

- **Encrypt archives with a password**: When this preference is set, StuffIt Deluxe will encrypt items added to an archive with a password.

- **Ignore Finder Desktop Files**: When this preference is selected, StuffIt Deluxe will not add Finder files (such as the Desktop Database or DS_Store files) to an archive.

- **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 need 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 an archive format designed for the Macintosh, such as StuffIt X. 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 compatible with Apple's Zip implementation used in the Finder in Mac OS X 10.3 and later.

Expansion Page

The preferences on this page determine how StuffIt Deluxe will behave when you extract files from an archive.

The Expansion Destination preference determines where files will be placed when they are expanded from an archive:

- **Same As Original**: Items will be extracted to the folder in which the open archive is located.

- **Ask**: You will be prompted to select a destination for the files being expanded.
- **Use Specified**: Use the Select button to specify a folder on your hard drive to use every time you expand files from an archive.

The following, additional, Expansion options are available:

- **Scan for Viruses Using**: Using this preference, you can specify that files extracted from an archive are scanned for viruses using your Virus protection software. Use the toggle menu to select your Virus program, Norton AntiVirus, Virex, and Virus Barrier are supported.
- **Set Execute Permissions by Default**: This preference determines whether StuffIt Expander should set the execute file permission on items expanded from archives that do not store UNIX file permissions, such as Zip (.zip) and the older StuffIt (.sit). If you un-check this box, Mac OS X applications expanded from such archives may not run correctly. StuffIt X archives (.sitx) are designed to store UNIX permissions and ignore this setting.

Views Page

The Views page allows you determine what columns will be displayed in the archive window.

- **Kind**: Displays the Kind Column in the StuffIt Deluxe application.
- **Label**: Displays the Label Column in the StuffIt Deluxe application.
- **Date**: Displays the Date Column in the StuffIt Deluxe application.
- **Expanded Size**: Displays the Expanded Size Column in the StuffIt Deluxe application.
- **Compressed Size**: Displays the Compressed Size Column in the StuffIt Deluxe application.
- **Percent Saved**: Displays the Percent Saved Column in the StuffIt Deluxe application.
- **Show Invisible Files and Folders**: Determines whether invisible files and folders located in your archives are displayed in the archive window.

Toolbars page

The Toolbars page allows you to configure how the StuffIt Deluxe toolbar will look and behave.

- **Toolbar Orientation**: This allows you to specify whether the toolbar is aligned vertically or horizontally.
- **Toolbar Icon Size**: Choose either large or small icons.
- **Anchor Toolbar to top of screen**: When checked, the StuffIt Deluxe toolbar becomes fixed to the top of the screen.
- **Show Names**: This setting determines whether or not the name of each button will be displayed in addition to the icon.

6. Finder Integration
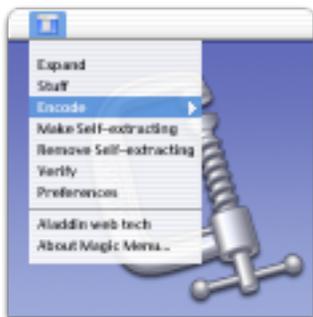
One of the key benefits of using StuffIt Deluxe® is that it provides you with easy-to-use ways to access all the power of StuffIt® directly from the Mac OS X Finder. Many of these integration features have been a part of StuffIt Deluxe for many years, some are brand new with this release and are designed to take advantage of Mac OS X 10.4 "Tiger".

MagicMenu® and StuffIt CM

The StuffIt "MagicMenu" provides you with a way to access the power of StuffIt Deluxe without having to launch any of the StuffIt applications. It creates a special icon in the Finder's menu bar. To use MagicMenu to perform a task, select the items you want to process and click the menu bar icon to create a list of StuffIt related tasks that can be performed. The same list of commands that are displayed in the MagicMenu are also available from StuffIt's contextual menu. To access the contextual menu, hold down the Control (Ctrl) key while clicking a file. After you install StuffIt Deluxe, you should see a new "StuffIt" Menu appear in the contextual menu.

The MagicMenu and StuffIt Contextual Menu both allow you access to the following functions:

- **Stuff**: By default, the Stuff command will create a StuffIt X archive that contains the items that are currently selected in the Finder.
- **Archive**: The archive menu provides you with the option to create archives from the items currently selected in the Finder, in a wide variety of formats. You can create StuffIt, Zip, TAR, and Lha archives using the Ar-

chive command. You can also choose to further compress or encode these archives so that you end up with, for example, a Gzip compressed TAR archive.

- **Compress**: The Compress menu allows you to compress single files selected in the Finder using Gzip, Bzip2, and Unix Compress compression.
- **Encode**: The Encode menu allows you to encode single files selected in the Finder using MacBinary, BinHex, AppleSingle, and UUEncode formats.
- **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). The StuffIt SEA Maker application is used to create SEAs for Mac OS X.
- **Segment**: Use the Segment menu option to divide large files into smaller pieces. The size of the segments that will be created can be set in the StuffIt Menu Preferences dialog.
- **Mail**: The Mail sub-menu allows you to create an archive and send it via email in a single step. Just select the item(s) you want to send, go to the MagicMenu and choose (for example) "Stuff & Mail". 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. You can also choose "Mail" which allows you to send the selected item(s) without archiving.

- **Dropboxes**: The Dropboxes menu option allows you to send the selected files and folders to a drop box created with the StuffIt Express companion product.
- **Preferences**: Opens the StuffIt Menu Preferences dialog.
- **MagicMenu Help**: Opens the MagicMenu help file.
- **Quit MagicMenu**: Quits MagicMenu, removing it from the menu bar. StuffIt Contextual Menu will continue to be available even after you Quit MagicMenu. MagicMenu is configured to launch with the Finder when your computer starts up. If you want to stop MagicMenu from launching, you must disable MagicMenu's startup item. (See below for details.)

Conditional Menu Items

Some of the items in the MagicMenu and StuffIt Contextual Menu are conditional, and only appear when you select specific types of item.

When you select an already archived, compressed, or encoded file, and go to the MagicMenu or the StuffIt Contextual Menu, the following menu item appears:

• **UnStuff**: This menu item causes the selected item to be expanded.

When you select the first segment from a set of Stuffit 5 segments, the following option appears:

• **Join**: Use this option to rejoin and expand an archive segmented into several pieces. You must have all the segments located in the same folder for this option to work successfully.

When you select a StuffIt 5 (.sit) archive the following menu item appears:

• **Attach Return Receipt**: This adds a Return Receipt request to the selected archive using the settings specified in the Menu Preferences dialog. Return Receipts cannot be added to StuffIt X (.sitx) archives

When you select a StuffIt 5 (.sit) archive that already contains a Return Receipt request, the following menu item is displayed:

• **Remove Return Receipt**: This menu items deletes the Return Receipt from the selected archive.

When you select a compressed Tape Archive (TAR file), such as a .tgz file, the following option appears:

• **Remove Compression**: This option allows you to convert a compressed Tape Archive into an uncompressed TAR file.

Browsing Archives with MagicMenu and StuffIt Contextual Menu

The MagicMenu and StuffIt Contextual Menu both allow you to browse the contents of an archive directly in the Finder. Browsing an archive allows you to view its contents, and extract files or folders without having to expand the entire archive.

To browse an archive select a StuffIt X, StuffIt, Zip or TAR archive you wish to see inside.

For StuffIt Contextual Menu, when you Control [CTRL] click an archive, beneath the StuffIt menu you will see a new menu item named for the archive you have selected. This new menu item will display a hierarchical menu that displays the contents of the archive. If you select an item from the folder structure the StuffIt Contextual Menu will

extract it from the archive. Items with a trailing '/' are folders. Selecting these will extract the entire folder.

For MagicMenu, when you select an archive, you will see a new menu item in the MagicMenu that is named for the archive you have selected. It will appear near the bottom of the MagicMenu just above the Preferences item. It works in exactly the same way as the StuffIt Contextual Menu described above.

MagicMenu Control Keys

When MagicMenu is loaded, you can also access StuffIt functions in the Finder using Command-key shortcuts. Use Command+S to stuff files and folders that have been selected in the Finder, and use Command+U to unstuff archives, compressed, and encoded files that have been selected in the Finder.

The Command+S combination will use the StuffIt format selected in the preferences (the default is StuffIt X). You can also use Command+Option+1 to create StuffIt X archives, Command+Option+2 to create StuffIt 5 archives (.sit), and Command+Option+3 to create Zip archives. You can turn off this feature in the MagicMenu preferences dialog.

Disable MagicMenu

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

1. From the Apple Menu, choose "System Preferences"
2. Click "Accounts" to open that control panel.
3. Click your users name in the Accounts control panel.
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 now no longer launch when your computer starts up.

StuffIt® Menu Preferences

The Menu Preferences dialog is used to set the behavior of both the StuffIt Contextual Menu (StuffIt CM) and MagicMenu. Archive Via Rename (described below) also respects the settings made in this dialog. To open the Menu Preferences dialog, choose Preferences from the MagicMenu.

Expansion Preferences

The Expansion Preferences are used to determine how MagicMenu and StuffIt CM go about the task of expanding an archive or encoded file.

- **Expand Archives and Compressed Files**: When this preference is enabled, MagicMenu and StuffIt CM will expand archives and compressed files.
- **Delete [archives and compressed files] after expanding**: This preference is available only when "Expand archives and compressed files" is enabled. When it is enabled, the archives and compressed files you expand will be deleted once the files they contain are successfully extracted. **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.
- **Expand Encoded Files**: Use this preference to determine whether or not MagicMenu and StuffIt CM should attempt to expand encoded files. Encoded files differ from compressed files as they are not smaller than the original. Encoding protects files from damage when transferred to non-native platforms.

- **Delete [encoded files] after expanding**: This preference determines whether or not encoded files should be deleted after they have been expanded. **Use this preferences with caution!** If the encoded 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.
- **Continue to expand (if possible)**: This preference, when enabled, causes MagicMenu and StuffIt CM to scan the file that results from expanding an archive, compressed, or encoded file to see if it can be further expanded. For example, when this preference is enabled, and MagicMenu and StuffIt CM encounters a BinHex encoded StuffIt archive, it will start to expand the archive as soon as it has decoded the BinHex layer. Archives, compressed, and encoded files contained within folders in the archive must be separately expanded.
- **Ignore Return Receipt requests**: Causes MagicMenu and StuffIt CM to ignore Return Receipt requests contained in StuffIt archives.
- **Scan for Viruses**: MagicMenu and StuffIt CM allow you to automatically scan files that are extracted from archives and encoded files for viruses with your virus

protection software. MagicMenu and StuffIt CM support Virex, Norton AntiVirus, and Virus Barrier. If you would like to try using a different anti-virus program, choose "Other..." from the pop-up menu.

• **Set execute permissions by default**: This preference determines whether MagicMenu and StuffIt CM should set the execute file permission on items expanded from archives that do not store UNIX file permissions. If you uncheck this box, OS X applications expanded from such archives may not run correctly.

Compression Preferences

The Compression page contains settings that relate to how MagicMenu and StuffIt CM create archives.

• **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" and "Better"; as the names suggest, the Faster Compression method makes archives more quickly, and the Better Compression method creates smaller archives. **When "Better" is selected, the StuffIt X archives you create will be backwards compatible to version 9.02 of Stuf-**

fIt Expander, when you choose "Faster" the StuffIt X archives you created will be backwards compatible to version 7.03 of StuffIt Expander. An additional choice, Custom is also available. When Custom is selected you can use the Expert Compression Settings dialog to determine how MagicMenu and StuffIt CM will compress your files.

• **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.

• **Don't compress files that are already compressed**: File types that are known to already include compression (such as GIF images, or QuickTime movies) will not be compressed when they are added to an archive. Selecting this option will save time where these types of files are involved. You may wish to deselect this option if you want MagicMenu and StuffIt CM to attempt to further compress these files. In most cases these files will not significantly decrease in size enough to warrant the time spent to compress them.

• **Encrypt archives with pass-phrase**: When this option is checked, the archives you create will be encrypted with

a pass-phrase. You will be prompted to provide a pass-phrase before the compression begins. When you create an archive with encryption, be sure to make a careful note of your pass-phrase. Allume Systems cannot recover files from encrypted archives if you have lost your pass-phrase. Pass-phrases are case sensitive.

• **Ignore Finder Desktop Files**: When this option is set, MagicMenu and StuffIt CM will not add Finder files (such as Desktop Database files or .DS_Store) to an archive.

• **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 and 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 a format designed for the Macintosh, such as StuffIt X or StuffIt 5. 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.

StuffIt Preferences

The preferences on this page allow you to specify whether the StuffIt X (.sitx) or StuffIt (.sit) file format is used when you use the "Stuff" command from StuffIt CM, or the StuffIt Finder keyboard shortcut in MagicMenu (Command + S).

Segments

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. You can set your own segment size by choosing "Other..." from the pop-up menu. In the dialog provided enter (in Kb) the size of the segment you want MagicMenu and StuffIt CM to create.

Disk Images

Disk Image preferences determines how MagicMenu and StuffIt CM will handle disk image files.

• **Mount Disk Images**: When this preference is enabled, MagicMenu and StuffIt CM will attempt to mount disk image files (resulting in the appearance of a "virtual disk"). Apple's utility is used to mount disk images.

Destination

The Destination preferences allow you to specify where MagicMenu and StuffIt CM should create files. Use this dialog to:

• Specify where newly created archives should be saved.
• Specify where newly created segments should be saved.
• Specify where Expanded files should be saved.

The available choices are the same in all three cases. The following options are:

• **Same as original**: When this option is selected files will be created in the same folder as the source file(s)
• **Ask**: When this option is selected, MagicMenu and StuffIt CM will prompt you to specify a location in which files should be created.
• **Use specified**: Use this option to specify a location to be used every time MagicMenu and StuffIt CM saves a file.

You can also specify whether or not MagicMenu and StuffIt CM should place expanded files into a new surrounding folder.

• **When the archive contains multiple items**: When this option is selected, MagicMenu and StuffIt CM will create a surrounding folder whenever the archive contains multiple items at the root level. The name of the archive will be used for the newly created folder.
• **Never**: MagicMenu and StuffIt CM will never create a surrounding folder.
• **Always**: MagicMenu and StuffIt CM will always create a surrounding folder.

Return Receipt

MagicMenu and StuffIt CM allow you to add Return Receipt requests to your StuffIt 5 (.sit) archives. A Return Receipt request is used to ask the person receiving your file to let you know that they were able to expand the contents successfully. A Return Receipt Request includes your name, email address, and a message to your recipient. Return Receipt requests cannot be added to StuffIt X (.sitx) archives.

The StuffIt Menu Preferences dialog allows you to pre-configure a Return Receipt request so that it can quickly be added to an archive. In the fields provided enter your Name, Email Address, and a message to be displayed to the user when they open the archive.

Menu Options

Allows each of the items in the MagicMenu and StuffIt CM to be turned on and off. You can also choose to turn off the StuffIt Finder keyboard shortcuts by unchecking the box for MagicMenu Command Keys.

Automator

Automator is a new feature of Mac OS X 10.4 that allows you to create scripts using a viusal point and click interface. StuffIt Deluxe includes actions that allow you to create and expand StuffIt, Zip, and Tar archives from within your Automator workflows.

When you launch the Automator application, you will see a new "StuffIt" item listed in the Automator Library. To use StuffIt successfully as part of an Automator workflow, most likely, it is recommended that you follow the following rough outline:

1. Use the "Finder" or "Spotlight" Library items to create a collection of files to be compressed. You can either use the "Finder" item to select a folder, or the "Spotlight" item to use a search command to build a list of items to be archived. Once you have a step that results in files or folders, you can then move to step two.
2. The StuffIt Library item offers the choice to create an archive in either StuffIt, Zip, or Tar format. Once you

have chosen the format you wish to use, you can then set addition options such as choosing a destination for you files, or creating your archive with encryption. You can also specify that the user be prompted to set these options when the task is run.

You can also use StuffIt as part of a workflow to Expand archived, compressed, or encoded files. As before, you will need to have create a step that results in a compressed file in order to use Expander as part of a work folder. This first step, for example, might be a Safari step that downloads a file from the Internet.

Configuring StuffIt Compression Actions

StuffIt provides you with access to compression actions that allow you to create StuffIt, Zip, and Tar archives. The StuffIt and Zip actions offer the following options:

- **Where**: Use this pop-up menu to specify where the archive will be saved. You can choose a default location from the list, or use the "Other" option to choose a custom destination. You can also save an archive in a temporary location, and then use an additional Finder action to move it to its final destination.
- **Encrypt with Password**: This option allows you to create an encrypted archive. You can enter the password you wish to use in the provided text field.

Clicking the "Options" reveal triangle will display a number of check boxes that correspond to the options that can be configured. Checking one of these boxes will cause that option to be configurable at the time the workflow that contains the StuffIt action is run.

The .Tar action offers the following options:

- **Where**: Use this pop-up menu to specify where the archive will be saved. You can choose a default location

from the list, or use the "Other" option to choose a custom destination. You can also save an archive in a temporary location, and then use an additional Finder action to move it to its final destination.

• **Compress**: This option allows you to compress the Tar archive created with either Bzip2, Gzip, or UNIX compression methods.

Configuring the Expand Action

The Expand Automator Action also you to set the following option:

• **Destination**: Use the pop-up menu to specify where items expanded from the archive should be placed. Choose one of the default items from the list, or choose "Other" to specify a custom location.

The items reveals by the "Options" item allow you to determine which, if any, of the available options are presented to the user when the workflow is run. In the case of the Expand action, you can choose to have the user prompted to provide a destination for the files expanded from the archive.

Spotlight

Spotlight is a new search technology included for the first time in Mac OS X 10.4. Spotlight builds, and constantly updates, an index of all the files located in multiple locations on your hard drive. When StuffIt Deluxe is installed, Spotlight is able to extend its Index capabilities to include the names of all the files located in StuffIt, Zip, and Tar 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 Spotlights search results.
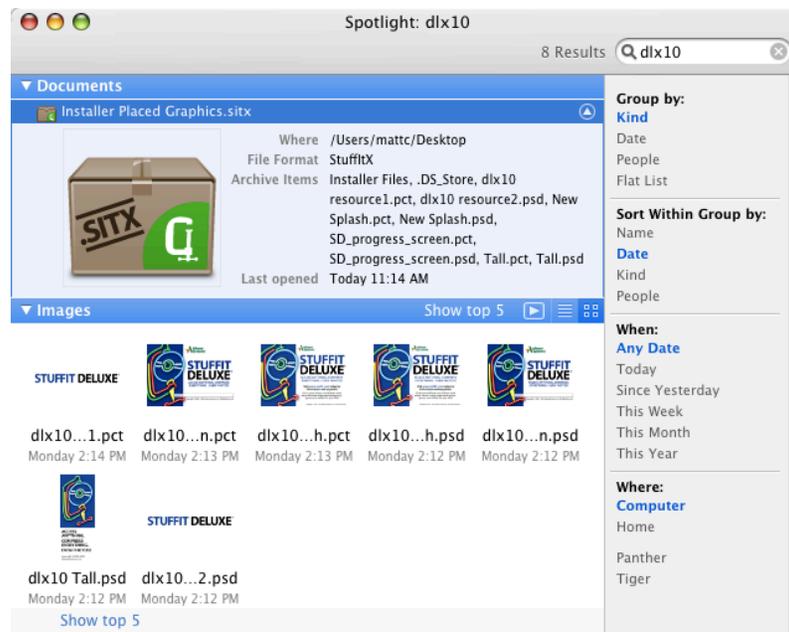
Archive Via Rename

Archive Via Rename is a unique feature of StuffIt Deluxe that allows you to compress files and folders into an archive simply by adding the file extension of the archive to the end of the file or folder name.

For example, let's say that there is a file called "Meeting Notes.txt" on my desktop. Using Archive Via Rename, I can compress that file into a StuffIt archive simply by adding ".sit" to the end of the file name. When the rename has been completed, the file will be compressed into a StuffIt archive called "Meeting Notes.txt.sit" and the original file will automatically be deleted.

You can also use Archive Via Rename to expand archives by removing the archive extension from the end of the file name.

For example, let's say that there is an archive called "Pictures.sit" on the desktop. This archive can be expand simply by removing the ".sit" extension from the end of the archive file name. Once the rename has been completed, StuffIt will expand the archive and place the expanded files in a folder on your desktop.

Important Note!: Unlike other components of StuffIt Deluxe, Archive Via Rename acts directly on the file or folder you are renaming. This means that when you change the name of a file, such as "Meeting Notes.txt", the file you rename is REPLACED by the archive that is created. In the same way, when you expand archives by renaming them, the archive you rename is REPLACED by the expanded data.

By default, when you install StuffIt Deluxe, Archive Via Rename is turned off. You can turn Archive Via Rename using the System Preferences dialog. To open the System Preferences dialog, choose "System Preferences" from the Apple Menu.

To turn on Archive Via Rename, click the "StuffIt AVR" Preferences Panel, and click the "Start" button. To stop Archive Via Rename, click the "Stop" button in this same dialog.

In order to function correctly, Archive Via Rename requires that you configure Mac OS X to always display the extension of your files. If Mac OS X is configured to hide extensions, Archive Via Rename will automatically switch Mac OS X so that extensions are displayed.

7. Archive Assistant

ArchiveAssistant is designed to provide a simple, easy to use, personal backup solution. You can use ArchiveAssistant to schedule automatic file backups, and you can save the backup archives you create to CDs, DVDs, external drives, FTP servers, and even your .Mac iDisk.

Creating a Backup Task

This section is designed to get you through the process of using Archive Assistant. This step by step tutorial will talk you through the process of creating and scheduling your first automated archiving task.

When you first launch the Archive Assistant application, you'll see an empty list. As you create and schedule backup tasks, they'll show up in this list. You'll be able to see when the task was last run, and when it is scheduled to run again. You can also edit the details of the tasks from this dialog, but more about that later. To get started creating your first backup task, click the "New Task" button on the Archive Assistant toolbar.

Getting Started

When you click the "New Task" button on the Archive Assistant tool bar, the "New Task" assistant is opened. This wizard style interface will walk you step by step through the process of selecting what to backup, where to create the backup archive, and when the backup task should be run. The first dialog, however, simply asks you to pick a name for the backup task you are about to create.

The Options button on this page allows you to access some advanced settings that determine how the backup job will be run:

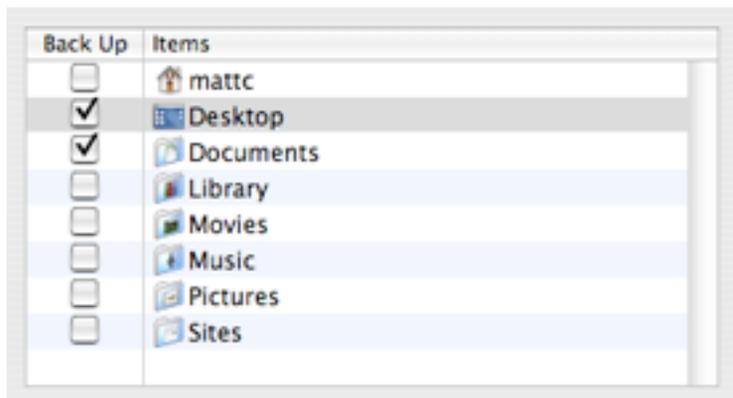- **Verify the Archive**: Check the "Verify the archive..." box to have Archive Assistant verify that the backup archive was created successfully. This option is on by default.
- **Perform this task with administrative privileges**: Check the "Perform this task with administrative privileges" box if you wish to backup files belonging to users other than yourself. This option may also be helpful for

eliminating some of the "File permissions errors" that you may see listed in the right pane of the "Logs" window for a particular task. This option is off by default.

Once you've picked a name, click the "Continue" button to move to the next step. You can also use the "Cancel" button to exit the assistant, or the "Help" button to access information specific to the page you are on at any step in this process.

What to Archive

Archive Assistant 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.

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

Archive Assistant now allows you to add any folder on any accessible network or local drive to the list of items that will be archived. You can add items to the backup list simply by dragging and dropping them from the Finder to the Archive Assistant 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.

Criteria

By default, Archive Assistant will add all the files and folders, in the folders you have selected, to a new StuffIt X archive. For most users, this is the most desirable option. In some cases, you may only want to include certain

files from the selected folder in the backup archive. The "Custom Criteria" dialog provides a way to tell Archive Assistant exactly what files should be included or excluded from the backup archive.
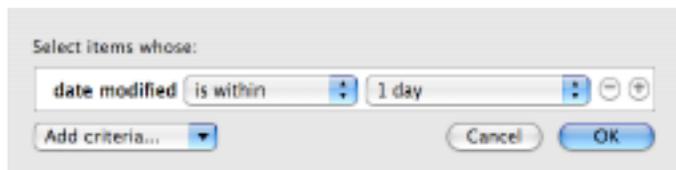
The criteria dialog works in the same way as the Finder's "Find..." function. By adding search criteria in this dialog, you can tell Archive Assistant to search the folder you have selected to find matching items to backup.

This feature is especially useful for backup tasks that are designed to run on a regular basis, for example once a week. You can use the "Date Modified" command in the "Custom Criteria" dialog to tell Archive Assistant to only add files that have changed in the last week to your latest backup archive. Using this approach, you will create smaller backup archives that contain only those files that have changed, rather than creating much larger archives that contain the same unchanged files week after week.

Where to archive

The pop-up menu at the top of the destination page lists the various options that you can select as a destination to which your backup archive will be saved. You can choose to backup to your current hard drive, you can choose to backup to recordable CD's and DVD's, you can choose to backup to an FTP server, you can choose to backup to your .Mac iDisk, and you can choose to backup to an external hard drive or server.

As the primary reason for creating backups is to make sure that you have copies of your important documents if something (such as a hard drive crash) happens to your computer, we strongly recommend that you choose to store your backup archives somewhere other than on the hard drive you are backing up.

- **Using CD's and DVD's**: If you backup to CD's and DVD's, you need to be aware that the size of your backup archive will likely exceed the size of a standard recordable CD. StuffIt has a great solution to this problem, and will automatically break your backup archive into pieces small enough to fit on your media. StuffIt will also automatically reassemble these pieces if you ever need to restore from your backup. Do remember,

however, if you are backing up to CD you will need to be near the computer to insert additional CD's (or DVD's) as and when they are needed.

- **Using External Hard Drives**: Perhaps the most convenient option is to backup to an external hard drive, such as a Firewire hard drive. If you choose this option, you can schedule your backup to occur late at night or over the weekend when you don't need to use your computer. You can tell StuffIt which drive your want to backup to simply by dragging and dropping your drive's icon into the indicated window.

- **Using FTP**: If you backup to an FTP server, you'll need to know the exact URL to the folder on the FTP server you want to backup to, and you'll also likely need to provide a username and password to log on. Ask the person who administers the FTP server if you need to get this information.

- **Backing up to your iDisk**: If you computer is configured to use your .Mac account, you can upload your backup archive directly to your iDisk. No additional configuration is necessary. Be aware, however, that the amount of storage space available on your iDisk is limited, typically to 100mb. You will find the backup ar-

chives you create in the "Documents" folder on your iDisk.

When you create a backup archive with Archive Assistant, you can choose to add a date and time stamp to the end of the archive name when it is created. This is useful if you anticipate storing several archives created from the same task in a single location. The date and time stamp uses the following format yyyymmdd-hhmmss; the year is listed first, then the month, then the day, then the hours, minutes and seconds.

If you do not use the date and time stamp, Archive Assistant will automatically overwrite older backup archives that have the same name, created from the same task that already exist in the specified destination. In this case, previous backups will be lost. If you are using a Custom Criteria filter this means that previously backed up items, not meeting the Custom Criteria you specified, will be lost.

Schedule

You can choose to have Archive Assistant automatically run your backup task on at a specific time every day, or you can choose the days of the week on which the backup

task will run. Remember, that 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 in step 4 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! Archive Assistant cannot run a scheduled backup task if your computer has been turned off.

Working with Backup Tasks

When you exit the wizard you should now see the backup job you just created listed. There are various ways in which you can work with the backup task you have just created.

You can see when your backup task was last run by looking at the value in the "Last Run" column. You can see the date when the backup task is due to run next by looking in the "Next Scheduled Run" column.

You can choose to run a backup task at any time by selecting it from the list of tasks and clicking the "Run Task" button on the toolbar. Clicking the "Run Task" button will not alter the schedule that was previously assigned to the task.

You can edit the details of a previously created backup task by double-clicking a task in the list or by selecting a task from the list and clicking the "Edit Task" button on the toolbar. Rather than using an assistant interface, you can edit the details of your task in a tabbed dialog. This will allow you to jump directly to the page you want to edit, without having to click through the ones you want to leave alone. Each tab in the dialog corresponds to the page in the assistant we used to create the backup task.

You can remove a task from the list by selecting it and clicking the "Delete" button.

Restoring Files

Using StuffIt Expander

The archives you create with Archive Assistant are standard StuffIt X archive. To retrieve files form a StuffIt X archive, you can use StuffIt Expander, StuffIt Deluxe, or any of the tools described above. StuffIt Expander, however, supports a special mode specifically designed to take files backed up by Archive Assistant and place them back in the location on your hard drive from where 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.

Using StuffIt Deluxe

The StuffIt Deluxe application allows you to open an archive and browse its contents without expanding all the files it contains. Using StuffIt Deluxe is an ideal solution if you just want to access one or two files from your backup archive. For more information on StuffIt Deluxe, please see the StuffIt Deluxe Users Guide, located in the Documents folder in the StuffIt Deluxe install folder.

Using ArchiveSearch

The ArchiveSearch application allows you to search all archives located on any mounted volume (including CD's, DVD's, servers, and external drives) in exactly the same way as you would use the "Find…" command to search for files on your hard drive. ArchiveSearch allows you to search for files based on file name, modification date, and numerous other parameters.

Working with Segmented Archives

If you have created your backup archive across several CD's, you will first need to have all the segments accessi-

ble before you can browse, search, or expand the archive. Typically, this will mean you will have to copy the segments from CD to your hard drive.

Log Files

ArchiveAssistant records information about the tasks it runs in a log file. To view these logs, choose "Logs" from the "Window" menu.

You can choose to have ArchiveAssistant send you log files via email after a backup task has been executed. To setup emails, following these steps:

1. Open ArchiveAssistant's preferences dialog by choosing "Preferences" from the "ArchiveAssistant" menu.
2. Check the "Email activity logs to…" box
3. Specify the email address to which logs should be sent in the provided text field.

To avoid hard drive clutter, ArchiveAssistant only keeps the most recent log files. You can specify how many log files will be kept by using the control available in the preferences dialog.

Temporary Files

Typically, ArchiveAssistant must first make a temporary copy of a backup archive, or back archive segment, on your local hard drive before the archive is copied to its final destination. You can use the "Put Temporary Archives in…" control, found in the preferences dialog, to specify where these temp archives should be kept. ArchiveAssistant will automatically delete temporary items once it no longer has a need for them.

8. StuffIt SEA Maker™

StuffIt SEA Maker is designed to provide you with a document distribution system for use on Mac OS X 10.3 and 10.4. The archives you create can be expanded without StuffIt Expander, and they can also be used to display splash screen graphics and text based Read Me files.

Overview

StuffIt SEA Maker is an application that is used to create profiles, these profiles are then used to create self extracting archives. The "Archives" created by the StuffIt SEA Maker application are not, in fact, 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, the application code necessary to expand that archive, along with instructions created from your profile about exactly how the files in the archive should be expanded. The SEA package also contains any text files and graphics you have chosen to include. Eve-

rything needed to expand the archive is contained within the package.

In addition to creating self-extracting archives, StuffIt SEA Maker has a number of features that make it distinct from the other archives creation tools included with StuffIt Deluxe:

- **Specify the location to which items are expanded**: StuffIt SEA Maker allows you to specify the location on your recipient's hard drive to which the items in the archive will be extracted. You can also choose to have the user be prompted to specify the location. SEA Maker allows you to add multiple sets of files to your archive, and each set of files can have a unique destination.
- **Display a Splash Screen**: SEA Maker allows you to add a Splash screen to your archive. In fact, you can specify multiple image be displayed at different times during the extraction process.
- **Display a Text Message**: SEA Maker allows you to add a text dialog to your archive. As with the display of images, you can create an archive with multiple text dialogs that are displayed at different times during the extraction process.

Using StuffIt SEA Maker

StuffIt SEA Maker allows you to create profiles that describe a sequence of steps that the SEA Maker application will follow to create a self-extracting archive. The profile can be saved, for use at a later time, and you can also open and edit a profile at a later date. An SEA Maker profile can contain any number of steps. There are three types of step that can be used:

Listing Files and Folders to be Archived

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

By default, your recipient will be prompted to specify the location to which they want the files in the archive extracted when they run the SEA, but you can also specify an expand location while you are making the archive. Click the arrow in the "Destination" column to create a pop-up menu. You can either choose one of the default options on the list (such as Documents), or you can use the "Other..." option to specify a custom folder. If the folder you specify is not present on your recipients computer, they will be prompted to choose a new location.

Displaying an Image

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 that if the image format is supported by QuickTime, 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. Note: The file must be formatted as a plain text document. Files in RTF format are not currently supported.

The Preview Tray

StuffIt SEA Maker includes a "Preview" slide out tray that allows you to preview any text or image phases in your SEA profile.

Saving your profile

Once you have set up your compression profile, you can save it for later use. To Save a the current profile, choose "Save" from the "File" menu.

You can load a previously saved profile by choosing "Open" from the File menu.

Building your SEA

Archives created by the StuffIt SEA Maker application are created as Mac OS X applications. You can create an SEA from SEA Maker by using the "Build" button in the toolbar.

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

9. ArchiveSearch®

ArchiveSearch is designed to provide the "look and feel" of the Find File section of Apple's "Find" dialog in the Finder. You can search for files located in an archive using ArchiveSearch, in exactly the same way that you would search for files located on your hard drive using "Find". You can use ArchiveSearch directly from within the StuffIt Deluxe application. Choose "Find" from the Edit menu to launch ArchiveSearch. When ArchiveSearch has been launched via StuffIt Deluxe, you can choose to limit your search to only those archives that are currently open in the StuffIt Deluxe application.

Using ArchiveSearch

When you first launch ArchiveSearch, the user interface provides you with options that allow you to look for files located in StuffIt, Zip, and StuffIt X archives on any local hard drive using the name of the file you are looking for.
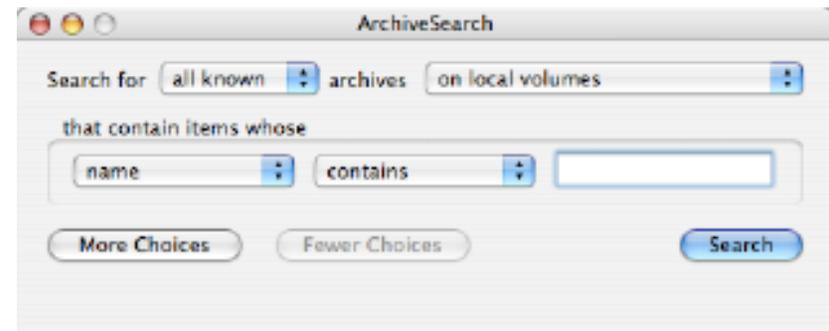
To start a search, simply enter the name of the file you want to find.

As with Searches conducted via the Finder, the "Name Contains" need only contain part of the name of the file you are looking for. For example, if the file is called "StuffIt Deluxe" typing "Stuff" into the Name Contains field will return StuffIt Deluxe as a matching result.

As with Finder's search you can specify that a search for files use additional criteria to find a match.
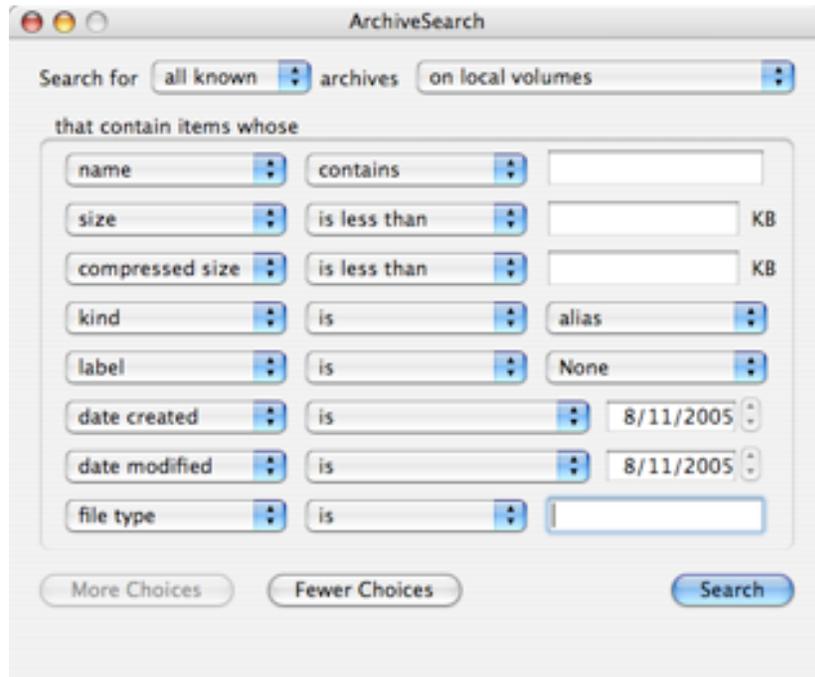
To add additional search criteria, click the More Choices button. Use the Toggle menu to select the criteria you want to use. You may search using all eight available criteria at once, or you can search using any combination you choose.

The additional choices are as follows:

- **Name**: Enter all or part of the name of the file you want to search for.
- **Size**: The Size criteria can be used to search for files that are less than, greater than, or the same size as a specified value. When you select the size criteria, the second toggle menu in the list is used to set how size will be defined, and the text entry field is used to specify (in Kb) the size that will be used. The size that ArchiveSearch looks for is the original size of the file before it was compressed into the archive.
- **Compressed Size**: The Compressed Size criteria is configured in exactly the same way as the size criteria, except that ArchiveSearch will look for the compressed size of the file rather than the original expanded size.
- **Kind**: Use the Kind field to specify the kind of file you are looking for. You can specify the kind as alias, application, audio file, clipping file, control panel, document, extension, folder, font, sound, stationary. You can also choose to find results based on whether files match the specified kind or not.
- **Label**: Use to find files based on whether they match (or don't match) the specified label.
- **Date Created**: Use the Date Created criteria to match files based on whether their date of creation is within

the range specified. Use the date field at to specify a target date, and use the toggle menu to specify whether matching files will be created, on, before, or after the date you have specified. The toggle menu also allows you to find files whose creation date is within, a specified number of days, weeks, or months, from the date specified.

• **Date Modified**: The Date Modified criteria works in exactly the same way as Date Created, except that Archive search will look for files based on the modification date.

• **File Type**: Use File Type to find matching files based on their file type. File types are used under classic versions of the Mac OS to distinguish between different types of documents created by the same application, or to specify that a file is a specific type such as an application, a control panel, or an extension.

As well as changing the terms of the search using file based criteria, you can also specify the type of archives you want to search in, and the location you want to search for archives.

Use the "Search For" toggle menu to specify the type of archives to search. You can choose to search just for StuffIt archives, just for Zip archives, or just for StuffIt X archives. The default is to search for files located in all known archive types.

The location toggle menu allows you to limit the location that will be searched. You can set the search location to be any of the following:

• **All Volumes**: ArchiveSearch will search for files located in any archive attached to any volume that is currently available. This includes hard drives, network drives, CD ROMS and other removable devices.

• **Local Unlocked Volumes**: Use this choice to prevent ArchiveSearch from looking in Network drives and CD ROMS.

• **Mounted Servers**: Use this option to limit the search to just mounted network volumes.

• **On the Desktop**: Use this option to look for only files in archives located on the desktop.

• **In the Finder selection**: This option limits the search to only folders or archives selected in the finder.

- **Open in StuffIt Deluxe**: Use this option to search only in archives that are currently open in the StuffIt Deluxe application.
- **In my Documents folder**: Use this option to search for files in archives located in your documents folder.
- **On a specific volume**: ArchiveSearch also allows you to limit the search to only archives located on a specific volume. A list of all available volumes will be listed at the end of the location list.

Saving Searches

Once you have specified search criteria you can save it to a file that can be used to set up a future search more quickly. To save you current search criteria, choose "Save Search Criteria..." from the File menu.

To load a previously saved search, choose "Open Search Criteria..." from the File menu, and select a saved search document when prompted to do so.

Working with Search Results

Once you have established your search criteria, click the "Search" button to begin searching for files. As ArchiveSearch is searching your hard drive, a progress dialog keeps you informed of its progress. The following fields are displayed;

- **Archives Found**: This field indicates how many archives ArchiveSearch has found in the specified search location.
- **Archives Searched**: This field indicates how many of the archives found have already been searched. This number, compared to the number of archives found, will provide a rough indication of how much longer the search will last.
- **Items Found**: Indicates the number of matching archives that have been found.

You can stop the search at any time by clicking the "Stop" button.

The Search Results Window

When ArchiveSearch finds a matching item, the results window is displayed. The results window displays a list of all matching items, when you select a matching item the lower pane of the results window shows you where the matching file can be found.

When you Control (ctrl) click on a matching file, ArchiveSearch provides a contextual menu that allows you to perform a variety of tasks.

- **Close window**: Closes the results window.
- **Open Item**: Extracts the selected item from the archive, and opens it. For applications, this will result in the application file launching, and for documents, the document will open in its parent application (if it is available).
- **Reveal Item**: Opens the archive that contains the selected file in the StuffIt Deluxe application.
- **Expand Item**: Expands the selected item from the archive. The item will be expanded to the same folder as the archive.
- **Expand to...**: Expands the selected item from the archive. You will be prompted to select a location to which the file should be expanded.

- **Expand to Desktop**: Expands the selected item from the archive to the desktop folder.
- **Expand to Document folder**: Expands the selected item from the archive to the documents folder.
- **Copy Item Name**: Copies the name of the selected item to the clipboard.

You can also open any item in the results list by double clicking it. If you double click an item located within an archive, that item will be expanded and saved in the folder where the archive is located.

ArchiveSearch Preferences

The ArchiveSearch preferences dialog allows you to specify the destination to which files expanded from an archive should be saved.

- **Same as original**: Files will be placed to the same folder as the archive from which they are expanded.
- **Ask**: ArchiveSearch will prompt you to specify a location to which files are saved.
- **Use Specified**: Allows you to specify a single location to be used whenever files are extracted from ArchiveSearch.

10. Other Drop Box Applications

In addition to DropStuff and StuffIt Expander, StuffIt Deluxe includes two additional drag and drop based applications, Secure Delete and DropConvert.

Secure Delete

Secure Delete™ is a Drag and Drop application that allows you to remove files from your computer in such a way that they cannot be recovered even with special disk recover software.

When you drag and drop files or folders onto Secure Delete they are **IMMEDIATELY** deleted from your hard drive. They are not moved to the trash, and you will not be able to undo the deletion. Use Secure Delete ONLY when you are absolutely sure the files you want to delete must be securely removed.

When you delete files using Secure Delete, the application writes over the

section of the hard drive where the files were located 3 times, so that they cannot be recovered.

DropConvert

DropConvert™ is a tool that allows you to batch convert older archives to the new StuffIt X format. To batch convert your archives, simply drag and drop them on top of the DropConvert icon, or onto the DropConvert application window.

The DropConvert preferences dialog allows you to specify whether older archives should be converted to StuffIt or StuffIt X archives. You can also specify what should happen to the archives that have been converted. You can choose to rename the older archives, move them to a back up location, or remove them from your computer. You can also use the Destination tab to specify where the newly converted archive should be created.

11. StuffIt Express™

StuffIt Express allows you to create customized drop box applications that can automate all of your file compression and transfer tasks. For example, you could easily create a drop box that zips a file, uploads it to a password-protected FTP server, and then distributes an email message notifying people that the file has been updated and posted. To make it all happen, all you do is drag and drop the file onto your Express-created drop box. StuffIt Express requires no knowledge of programming or scripting, and with its easy-to-use Wizards you can create custom drop box applications in minutes! You'll save time and avoid costly errors every time you transfer files.

The following section is designed to provide information about using StuffIt Express.

The StuffIt Express User Interface

The StuffIt Express User interface consists of the following elements:

- Steps Document Interface
- Steps Palette
- Wizard Palette

The Steps Document Interface

The Steps document can best be described as a sequential list of all the actions that an Express Box will perform. The buttons and menus that appear around the Steps document are designed to make it easy for you to add and remove steps from the list, build an Express Box application based on the list, and update an existing Express Box by making changes to a Steps document.

- **Add Step Button**: The Add Step button contains a list of all the steps supported by StuffIt Express. Choose a step from the list to add it to the steps document.
- **Drop Box Settings Button**: Opens the Drop Box settings dialog that allows you to change settings that govern how the Drop Box will run. Click here to learn more about Drop Box settings.

- **Create Drop Box Button**: This button is used to create an Express Box application based on the steps document that is currently open. If you have not saved the Steps document you will be prompted to do so before the Express Box itself is created.

- **Update Drop Box Button**: This button is used to update an existing Express Box application. To make changes to an Express Box, you must open its steps document, make the necessary changes, and then click the Update Drop Box Button to update the Express Box application. If you have not already saved your changes to the Steps document you will be prompted to do so.

- **Run Drop Box Button**: This button has the same effect as clicking the Create Drop Box button, except that after the Drop Box has been created it will automatically be run.

- **The Steps List**: The Steps Document dialog contains a list of all the steps that are currently specified. You can edit the details of any of the steps by double clicking it. You can also reorder steps within a steps document; click and hold down the mouse button on the step you want to move until the insertion line appears, and then drag the step to its new position in the list.

- **The Details Panel**: Below the steps list is the Details panel. This Panel is used to display information about the step that is currently selected in the steps list.

The Steps Palette

The Steps Palette is divided into three tabs, one for File steps, one for Internet steps, and one for Action steps. Each tab contains buttons that are used to add a particular step to the Steps document. For example, the Internet tab contains an FTP Upload button which is used to add an FTP upload task to the steps document. For more information on the steps that are available on each palette, please lookup the section below that specifically refers to it.

- File Steps
- Internet Steps

The Wizards Palette

The Wizards Palette contains links that describe some of the most common actions you might want to automate with StuffIt Express. Creating a drop box via the Wizard interface allows you to use a slimmed down version of the user interface, and is designed for less experienced users.

Creating a StuffIt Express Drop Box

Drop Boxes are created by adding tasks, or "Steps", to a Steps document in the StuffIt Express application. A Steps document is a sequential list of all the actions that a drop box will perform. With-in the Steps document, you can create steps, change the order of steps, and delete steps. Each step contains all of the information needed to accomplish that part of the task. For example, when you create a step that will send a file by email, you need to enter the email address of the person to whom the email will be sent, and the subject and message you want to send along with the file.

To add a step to an open Steps document, you can either click the corresponding button on the Steps Palette, or choose the step you want to add from the New Step menu. To reorder steps, click and drag the step to its new position with in the document. The "Details" pane provides you with a summary of all the information that corresponds to the selected step, you can edit these details

by double clicking the step from within the Steps document.
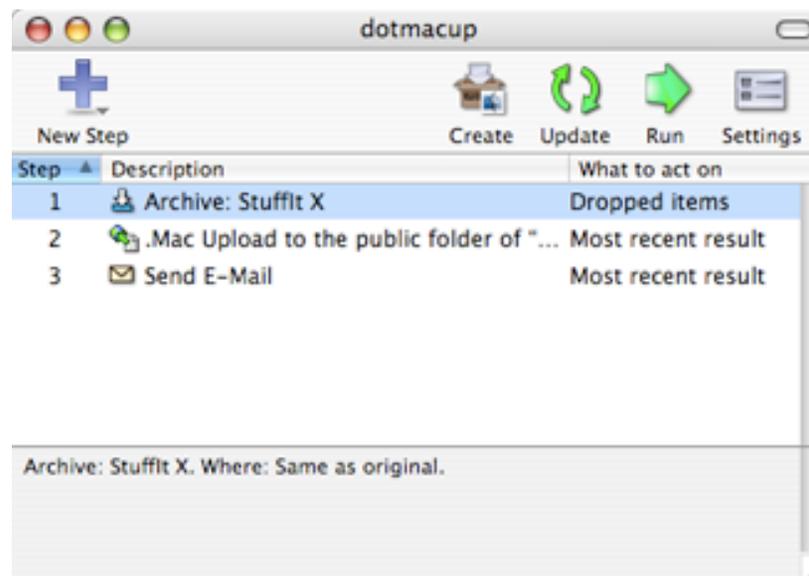
When all the Steps required to automate a particular task have been specified, save the Steps document, and click the Create Drop Box button in the toolbar. This will create a drop box application that performs all the tasks you have specified. Once a Drop Box has been configured, it can be modified through the Steps document. To edit an Express Box, open its Steps document, make the necessary changes, and then click the Update Drop Box button in the toolbar.

What to Act on, and Where to Act

There are a number of options that are common to most of the steps available in StuffIt Express. These options allow you to specify the item a step action is performed on and where any output is created.

What to Act On:

Almost every step you add with StuffIt Express requires you to specify the items (usually files and folders) that the step should perform its actions on. For example, the "Archive" step requires you to specify what files and/or folders should be compressed, and the "FTP Upload" step requires you to specify what items should be uploaded to the FTP server. Typically, when you are specifying what items a step should act on, the following choices are available:

- **Dropped Items**: "Dropped items" means the step will start when items are dropped onto the drop box.
- **Most Recent Result**: "Most recent result" uses the results of the last step that produced a file.
- **Ask for Items**: "Ask for items" displays a dialog box prompting for the files to be acted upon. Once items have been selected, the step starts.

- **Result of Prior Step**; "Result of prior step" uses the results from a previous StuffIt Express step. Note that this option is only available when a previous step could result in files to act upon.

Where to act

Many of the steps you add to your Steps document require you to specify a destination; they ask you, in other words, where they should act. For example, the "Expand" step asks you to specify where items from the archive should be expanded, and the "Copy Items" step asks you where on your hard drive items should be copied to. Typically, the following options are available:

- **Same as Original**: "Same as original" means the same location as the original item dropped on the drop box.
- **Drop Box's Folder**: "Drop Box's Folder" means the folder where the drop box is located.
- **Ask**: "Ask" displays a dialog box that prompts for a destination.
- **Result of New Folder Step**: "Result of New Folder step" is only enabled if a previous step creates a new folder.
- **Special Folder**: "Special Folder" allows you to specify an OS-related folder such as Desktop or Documents.

• **Specific Folder**: Choose "Specific Folder" to specify that folder. Click the Choose Folder button and navigate to the folder you want to use. If the specified folder is not available, the person using the drop box is prompted to specify a new location.

File Steps

The Steps available in the File palette primarily concern steps that involve compression and decompression actions. The File palette also includes actions that allow you to move, copy, rename, and open items. The following steps are available:

Archive

Select "Archive" to add a step that archives files. "Archive" allows you compress multiple files and folders together into a single compressed archive file. You can specify what information is archived, where the resulting archive is created, a name, and the type of archive such as StuffIt or Zip. See the "What to act on" section for details.

You can also choose to encrypt an archive to protect sensitive data, or delete the archive after it is successfully created.

You can enter an Archive Name or leave this box blank to use a default name. Choose an archive type. StuffIt X is the default. StuffIt files can be expanded on Macintosh, and Windows using StuffIt Expander. Download the latest version of StuffIt Expander at http://www.stuffit.com. Additionally, you can choose a self-extracting file for Macintosh or Windows.

Select "Encrypt archive with password" to protect sensitive data in an archive. Write the password somewhere where you can find it later if needed. You can also provide StuffIt with a default password to use when the archive is created.

Select "Archive originals instead of aliases" to ensure that the original items are archived rather than their aliases. Select Segment, and choose a size, to create an archive in multiple pices of the size you specify.

Encode

Select Encode to add a step that encodes files. Typically you'll encode files when sending them to a different type of computer or operating system. You can specify what format to use and whether files inside folders should be encoded. See "What to act on" and "Where to act" for details.

Choose an encoding type from the list. Next, if desired, select "Encode files inside folders" to encode files contained within folders. Choose "Use file name" if you are encoding only one file.

Expand

Select Expand to add a step that expands archives, placing the contents in the location you specify. You can specify what is expanded, where the resulting files are placed, whether files in folders are expanded, and which files get deleted after expansion. See "What to act on" and "Where to act" for details.

Choose one or more of these options as desired. Select "Expand files inside folders" to expand the contents of folders contained in the archive. Choose one of the "Passing expanded items..." options to specify what re-

sult is passed to subsequent steps. This setting does not affect how the archive is expanded, merely what information is passed to the next step in the drop box. You can choose to pass both the folder structure and files to the next step, or pass only the resulting files without their folders.

New Folder

Select New Folder to add a step that creates a new folder. You can specify where the new folder is created and the folder name. You can also specify to delete the folder when the drop box completes all of the tasks. See "Where to act" for details.

Copy Items

Select Copy Items to add a step that copies items. For example, you may create an Express Box that copies items to another location as a back up. You can specify which items to copy. See "What to act on" and "Where to act" for details.

Select "Replace items with same names" to automatically replace items with the same names.

Move Items

Select Move Items to add a step that moves items. You can specify what is moved, where the resulting files are placed, whether files in folders are replaced, and whether moved items are deleted once all of the drop box tasks are complete. See "What to act on" and "Where to Act" for details.

Select "Replace items with same names" to automatically overwrite existing files with the same names without prompting.

Open/Launch

Select Open/Launch Items to add a step that opens or launches files. For example, you can create a drop box that sends a group of images, then launches an application to edit them. Or you can send a spreadsheet and then open the application, assuming it is present on the system running the drop box. To specify what items to open or launch, select an option from the list. See "What to act on" for details.

Make Alias

Select Make Alias to add a step that creates an alias. For example, you can create a drop box that opens an archive,

expands a file, and puts an alias to that file on the desktop. You can specify for what to create an alias, where the alias is placed and whether the alias should be deleted when all of the drop box tasks are completed. See "What to act on" and "Where to act" for details.

Rename

Select Rename Items to add a step that renames files. You can specify what items to rename. See "What to act on" for details.

Enter a new name only if you are renaming one item. Select "Keep existing name's extension" to keep the current file's extension.

Verify Archive

Choose "Verify" to add a step that checks a StuffIt or Zip archive for corruption.

Delete Items

Choose "Delete Items" to add a step that deletes files and folders.

Internet Steps

The steps available on the Internet palette allow you to upload and download items via FTP, and also allow you to send files via email. The following steps are available:

FTP Upload

FTP stands for file transport protocol and is a protocol used to send files to or retrieve files from another computer on the internet. Select FTP Upload to add a step that uploads files via FTP. You can specify what to upload and the destination. You can also specify a user name and password. Be sure to specify whether existing items should be replaced. See "What to act on" for details on specifying what to upload.

To add an FTP Upload step the following options must be configured:

- **FTP URL**: Enter the URL of the FTP site. To place a file into a directory, the URL must end with "/" otherwise, the address is assumed to specify a file or folder that should be replaced. For example, if you specify www.allume.com/uploads/ the file would be placed into the uploads folder. However, if you entered www.allume.com/uploads (and notice there is not a "/" at the end) as the URL, the "uploads" folder would be replaced with the file you send. If you do not have rights to upload to a location, you will receive an error message when you run the drop box. If you are trying to replace existing items on a server, and file or folder names (on your local disk and on the server) have special characters in them such as the less than character (<), space, forward slash, colon, percent, and any high-ASCII characters (greater than 255), you need to encode those characters. To encode a character, use %xxx where x is hex value of the character.

- **User Name and Password**: Provide the user name and password if needed. If you are logging onto an anonymous FTP site, you may need to enter anonymous as your name and your e-mail address as your password.

- **Replace**: Select "Replace existing items at this URL" to automatically overwrite existing files with the same name. If you are uploading to a site with a firewall, you may need to select "FTP Passive Mode" setting depending on how the firewall is configured. Try sending with each of the options selected. Contact the administrator of the ftp site if you are unsure.

FTP Download

Select FTP Download to add a step that downloads files via ftp. You can specify where to download files such as a downloads folder, or see "Where to act" for descriptions of the other options.

To add an FTP Download step, the following options must be configured:

- **FTP URL**: Enter the URL of the ftp site. See "FTP Upload" above for details on specifying the path and file name.
- **User Name and Password**: Provide the user name and password if needed.
- **Replace Existing**: Select "Replace existing file or folder" if you want to automatically overwrite existing files with the same name. If you are downloading from a site with a firewall, you may need to select a "FTP Passive Mode" setting depending on how the firewall is configured. Try sending with each of the options selected. Contact the administrator of the ftp site if you are unsure.

.Mac Upload

The .Mac Upload step allows you to add a step to your drop box that uploads files to a .Mac iDisk volume. The .Mac upload step allows you to specify what to upload, the folder on the iDisk to which items should be uploaded, and the .Mac account information for the iDisk you wish to use.

In order to add a .Mac Upload step, the following options must be configured:

- **Upload to**: Use "Public Folder of the Specified User" if you want to create a drop box that allows other people to send you files. Use "iDisk of the current User" if you are creating a drop box designed to upload files to the iDisk of the person running it.
- **User**: This field is only active if you choose "Public Folder of the Specified User". This is the field where you specify the .Mac user name of the iDisk owner to whom you would like to send files.
- **Password**: Use this field to supply the password for the specified users iDisk (if one is required.)
- **Path**: Use this field to specify the folder on the iDisk to which files should be uploaded. This option is only

used if the "iDisk of the current User" option has been selected.

.Mac Download

The .Mac Download step allows you to add a step that downloads files from a .Mac iDisk.

In order to add a .Mac Download step, the following options must be configured:

- **Download From**: Use "Public Folder of the Specified User" to create a drop box that downloads from the iDisk that does not belong to the person running it. This option would be the one you would use if you were creating a drop box that allowed other people to download files located in your iDisk Public folder. Use "iDisk of the current User" to create a drop box that downloads from a specified location on the iDisk belonging to the person running it.
- **User**: This field is only active if you choose "Public Folder of the Specified User". This is the field where you specify the .Mac user name of the iDisk owner from whom you would like to download files.

- **Password**: Use this field to supply the password for the specified users iDisk (if one is required.)
- **Path**: Use this field to specify the folder on the iDisk to which files should be uploaded. This option is only used if the "iDisk of the current User" option has been selected.

HTTP Download

Select HTTP Download to add a step that downloads files via http. You can specify the download destination such as a downloads folder. See "Where to act" for descriptions of the other options.

The HTTP Download step allows you to configure the following options;

- **HTTP URL**: Enter the URL of the http site. You can specify "http://" or "https://" but be sure that the name specifies a file, and not a folder. There should not be a "/" at the end of the line. See "FTP Upload" above for details on specifying the path and file name.
- **User Name and Password**: Provide the user name and password if needed. Select "Replace any existing file" if

you want to automatically overwrite existing files with the same name.

Open URL

Select Open URL to add a step that opens a specific URL in your web browser. Enter the address of the URL to open. See "FTP Upload" above for details on specifying the path and any special characters.

Send Email

Select Send email to add a step that creates and sends an email message. You can specify one or more recipients, a subject, message text, and specify whether to send immediately. StuffIt Express uses AppleScript to send email using one of the following email clients: Mail.app (Mac OS X email client), Eudora, and Entourage. When the drop box runs, it will obtain the information it needs from your e-mail client to send the message. Your computer must be set up to use e-mail to use this feature.

The Send Email step requires you to configure the following options:

- **What to email**: See "What to act on" for details. You can also choose "Nothing" to create a message without an attachment.
- **Recipients**: Click "Add", then enter the name and address of each recipient. In the "Type" box, specify To, CC, or BCC. "To" sends a message to a recipient, CC or "carbon copy" sends a copy of the message listing the other recipients, and BCC stands for "blind carbon copy", and means to copy the person without the other recipients seeing that person's name on the list. To remove anyone on the list, select that name, then click Remove. As you start typing an e-mail address, StuffIt Express tries to match the text being typed to addresses that have previously been entered in this dialog box. A floating window displays with most frequently-used matching address highlighted; you can select that address by double-clicking the address, or by pressing Enter. Select additional addresses the same way. As you continue to type, StuffIt Express removes any addresses that no longer match. When no addresses in the book match the address you have entered, the address book window is removed.
- **Subject**: Specify the subject line of the email in this field. StuffIt Express can automatically add the name of

any files attached to the email as the message is generated. To have Express automatically add the name of the attachment in the subject line type "^a" at the point in the subject line where you would like the file name to appear. For example, entering a the subject of "The file ^a has been attached to this message" will cause the "^a" to be replaced by the actual name of the attachment when the message is generated by the drop box.

- **Message**: Type any message text you would like to be sent with the email in this field. In the message, type "^R" to display a list of most recent result items or "^D" to display a list of all dropped items in the message. You can also type "^" followed by a number to list the items resulting from a specific step number in the steps document.

- **"Can Edit Subject and Message" box**: If you check this box, the person running the drop box will be able to edit the subject and message of the email before it is sent.

- **"Can Edit Recipients" box**: When this box is checked, the person running the drop box will be able to add or remove recipients before the email is sent.

- **Substitute full path names**: Choose "Substitute full path names" to use the path to the original file.

- **Include sender as recipient**: Choose "Include sender as recipient" if you would like a copy of the message sent to the person using the drop box.

- **Sending options**: Use this check box to specify how the message is handled by the email client after it is generated by the drop box. You can tell the email client to send the message immediately, or you can choose to have the message saved as a draft or placed in the outbox.

Stop Drop Box

Select Stop StuffIt Express to add a step that stops a drop box. For example, if you provide a dialog box that asks if the user wants to continue, and they choose No, use this step to quit the drop box. If they choose Yes, you can skip one step (the Stop step) and continue running the drop box.

Changing Drop Box Settings

Choose Edit > StuffIt Express Settings or click the StuffIt Express Settings toolbar button to display the drop box settings dialog. The settings in this dialog determine how the drop box application created from the current steps document will behave. The settings on this dialog are specific to each drop box you create, and are not globally applied.

- **Author and Description**: The Author text is filled in with the name entered when StuffIt Express was installed. You can change this if needed. You can also add an optional description. You may want to include the name of the drop box, how to contact you, a version number, a description of what it does, or other information indicative of its contents. The author and description displays in the About box of the drop box you create.
- **StuffIt Express email Signatures**: By default, a special StuffIt Express signature is added to any e-mail message that is sent from a StuffIt Express Drop Box. Uncheck this box to stop this signature from being used.
- **Include drop box in the StuffIt Contextual Menu**: You can make your StuffIt Express drop boxes available in the StuffIt Contextual menu, under the drop boxes Submenu. When you create a drop box with this option set, an alias that points to it will be created in the Library/Application Support/StuffIt CM drop boxes folder in your User folder. When you Control [CTRL] click a file in the Finder, and choose a drop box from the drop boxes menu, the drop box will treat the selected file as if it had been dragged and dropped onto the drop box icon. To remove a drop box from the StuffIt Contextual menu, simple open the Library/Application Support/StuffIt CM drop boxes folder in your User folder and delete the alias of the drop box you wish to remove.
- **Run Options**: You can configure whether the drop box operates manually or automatically. When one of the automatic options is chosen, the drop box runs without user interaction once a file is dragged onto it. Manual: The Steps window is visible, and the person using the drop box must click "Start". Automatic: The Steps window is only shown if an error occurs.

12. StuffIt Plugins

StuffIt Deluxe includes Plugins for Adobe Photoshop®, Photoshop Elements®, Illustrator®, as well as Microsoft® Word®. The StuffIt Plug-Ins allows you to compress your word documents directly into StuffIt archives, allows you to stuff and email directly from within the Word application, and allows you to open files directly from within StuffIt archives.

The StuffIt Plug-In for Photoshop requires at least version 7.0 of Photoshop, the Plug-In for Illustrator requires version at least version 10 of Illustrator, and the Word Plug-In requires at least Word X.

Microsoft Office Add-ins

To install the StuffIt Plug-In for Microsoft Word follow these steps;

1. Open the "Office Plug-Ins" folder inside your StuffIt Deluxe install folder.

2. Drag the file "StuffIt Word X Plug-In" to the "Office\Startup\Word" folder in your Microsoft Office X folder.

The next time you launch Word, the new StuffIt commands should be available in your File menu.

When the StuffIt Plug-In is loaded, four new options will be available in the Word File menu:

• **Save as StuffIt Archive**: This command will compress the currently open Word document into a StuffIt archive. If the document contains unsaved changes, you will first be prompted to save those changes.
• **Stuff and Mail**: The currently open Word document is compressed into a StuffIt archive. That archive is then attached to a new mail message created using your default email program.
• **Open Archived Document**: This command allows you to open a document from a StuffIt archive directly into the Word application. This command assumes that the archive you are opening contains only a single Word document. If the archive contains multiple documents, the first Word document that is encountered will be loaded.

• **StuffIt Preferences**: Opens the StuffIt Menu preferences application, from which you can change settings for the Word Plug-In.

Adobe Plugins

To install the StuffIt Plug-In for Adobe Photoshop and Photoshop Elements, follow these steps:

1. Open the "StuffIt Third Party Plug-Ins" folder inside your StuffIt Deluxe install folder.
2. Drag the file "StuffIt Photoshop Plug-in" to the "Plug-Ins/Adobe Photoshop Only/Automate" folder in your Adobe PhotoShop folder.

The next time you launch Photoshop, new StuffIt commands should be available in the "Automate" menu in the File menu.

When the StuffIt Plug-In is loaded, four new options will be available in the Automate menu:

• **Save as StuffIt Archive**: This command will compress the currently open Photoshop document into a StuffIt archive. If the document contains unsaved changes, you must first save changes before choosing this option.

• **Stuff and Mail**: The currently open document is compressed into a StuffIt archive. That archive is then attached to a new mail message created using your default email program.

• **Open Archived Document**: This command allows you to open a document from a StuffIt archive directly into the Photoshop application. This command assumes that the archive you are opening contains only a single Photoshop document.

• **StuffIt Preferences**: Opens the StuffIt Menu preferences application, from which you can change settings for the Photoshop Plug-in.

To install the StuffIt Plug-In for Adobe Illustrator, follow these steps:

1. Open the "StuffIt Third Party Plug-Ins" folder inside your StuffIt Deluxe install folder.
2. Drag the file "StuffIt AI Plug-in" to the "Plug-Ins" folder in your Illustrator folder.

The next time you launch Illustrator, new StuffIt commands should be available in the File menu.

When the StuffIt Plug-In is loaded, four new options will be available in the Automate menu:

- **Save as StuffIt Archive**: This command will compress the currently open document into a StuffIt archive. If the document contains unsaved changes, you must first save changes before choosing this option.
- **Stuff and Mail**: The currently open document is compressed into a StuffIt archive. That archive is then attached to a new mail message created using your default email program.
- **Open Archived Document**: This command allows you to open a document from a StuffIt archive directly into the Illustrator application. This command assumes that the archive you are opening contains only a single Illustrator document.
- **StuffIt Preferences**: Opens the StuffIt Menu preferences application, from which you can change settings for the Illustrator Plug-in.

The StuffIt Plug-Ins share a common settings file with Magic Menu and the StuffIt Contextual Menu. Settings made in the Menu Preferences application will also effect the Word, Photoshop, and Illustrator plugins.

13. The StuffIt X File Format

The StuffIt X file format represents the latest in compression technology. It provides the best available compression technology, in addition to which it also includes a number of important features that help to keep your information safe and secure.

Key StuffIt X Technologies

The StuffIt X file format includes a number of unique features that places it head and shoulders above Zip and other compression and archive technologies.

- **Better Compression**: The StuffIt X file format includes all the latest advances in the science of file compression. Where as Zip only includes a single compression method, StuffIt X includes not only a range of compression algorithms, but also includes technology that can automatically pick the most appropriate method for the type of data being compressed. StuffIt X also supports block mode compression, meaning that the files you compress are automatically sorted into like groups and compressed together for maximum efficiency.

- **JPEG Compression**: The most recent advance in StuffIt compression technology is new, patent pending, technology that allows StuffIt to further compress JPEG images as they are added to an archive, without further reducing image quality. StuffIt can reduce the size of JPEG files by between 20 and 30 percent.

- **Error Recovery**: The StuffIt X file format includes built in technology that allows corrupted archives to be automatically repaired; not only is StuffIt able to recover information from damaged archives, it is actually able to repair the damage so that no data is lost. StuffIt's Error Recovery feature represents a huge step.

- **Strong Encryption**: The StuffIt X file format was designed from the ground up to include strong encryption. StuffIt X supports RC4, AES, DES, and Blowfish encryption methods, and supports keys up to 512bits in length. While some Zip products have recently added strong encryption, its important for customers to understand that these implementations do not represent an industry standard; Zip archives that have been created with strong encryption using WinZip or PKZip Cannot be opened by standard Zip implementation, such as the

ones included with Windows XP and Mac OS X, despite the fact that the files continue to carry the standard ".zip" file extension.

- **Built for Tomorrows Data Compression Needs**: The StuffIt X file format includes a number of forward looking features that anticipate the changing requirements that users have for their archive software. The StuffIt X file format was designed from the ground up to support archives larger that 4Gb in size, and they also support more than 65,565 files in a single archive. While some Zip solutions also offer solutions for these limitations in the standard Zip format, it is important for customers to understand that by using such solutions they are making archives that do not conform to the established Zip standard. For example, if you use WinZip to create a Zip archive that is large that 4Gbs in size, that archive cannot be opened in the Zip implementations that ship as part of Windows XP and Mac OS X. The issues of trust that arise from archives that use the ".zip" extension, yet do not conform to the established standard for the Zip format, must be troubling for any user looking to archive information in what they believed to be an open and compatible standard.

Who Needs Compression Anyway?

In a word where most computers ship with hard drives that range in capacity from 50Gb all the way up to 500Gb (and more), it is natural to question the value of compression software. In the long ago past of the early '90s computers, typically, shipped with hard drives in the 10s of Megabyte size range and were unable (in most cases) to use drives that were larger that 512Mb. In this environment compression played a vital role in allowing users to make the most efficient possible use of a very limited resource.

One answer to the question of compression's value in the present day is to examine exactly why hard drives increased in capacity so rapidly. While it is true that improving disk drive technology provides part of the answer, it is also true that this technology has been matched by consumer demand. A single Microsoft Office document today can quickly grow to the point where it could no longer be contained on the hard drive of any computer shipping before 1995. Hard drives have increased in size by many orders of magnitude since StuffIt first appeared on the scene, but it is also the case that file sizes have grown at a rate that matches or even exceeds that of drive

capacity. As computers have grown more powerful, we are constantly finding new and more challenging uses for them. The value proposition of compression today remains much the same as it has always been, it allows you to make the most efficient possible use of a limited resource. In the business world this can be translated directly into cost savings; compression reduces the amount of disk capacity necessary to store your files, and it also decreases the bandwidth necessary to transfer files via email, over the Internet, and across the network.

The Internet (or more generally the network) is perhaps, the key area in which the value of compression software can be irrefutably proved. In its most simple possible expression, the value of compression can be summed up by the statement that the smaller the file, the more quickly it can be transfered. In a business environment where high bandwidth has a high cost, compression is an essential tool that IT administrators can use to reduce the amount of information that is transfered across their networks.

In the consumer world, compression also helps to solve some basic, everyday, Internet problems. Almost everybody who has ever sent an email has probably had a message returned as "undeliverable" because the files they tried to send along with the message were too large. Even in a time where many email services offer vast Inbox capacities, the size of file that can be attached to a single email message is strictly limited. Google's Gmail email service provides a good example of this dynamic; while Gmail offers a 2Gb Inbox capacity, no single email message (including attachments) can exceed 10Mb in size. Compression software provides a solution in two ways. First of all, compressing documents before you attach them, allows you to fit more files in 10Mb email message before the file size limit is reached. In some cases, even with compression, you will find that some files are simply too large to send in a single email message, and StuffIt, again, can provide a solution. StuffIt allows you to break big files into smaller pieces through a process known as segmentation. Instead of sending a single 20Mb file, and having it rejected, StuffIt will instead create two 10Mb files each of which can safely be attached to its own email message. By sending the file in two parts, spread across two email messages, you can work around the limitation.

By placing files in an archive before sending them over the Internet, users can not only make files smaller, but they can also help to make them more secure. One of the

key features of the StuffIt X file format is strong encryption; by encrypting files with a password before they are transfered, users can protect themselves against unknowingly revealing information to an unauthorized third party. StuffIt uses standard RC4 encryption, and supports passwords up to 512bits strong. StuffIt X archives even feature self-repairing technology, so that if they become corrupted you can still retrieve all the files they contain. Archives, such as the StuffIt X archives created by StuffIt, not only provide a way to make files smaller, they can also be seen as essential protective packaging that helps to keep them safe and secure. Just as you would never send a vase through the mail without making sure it was correctly packaged, so you shouldn't send your files without taking similar precautions.

So, who needs compression? Almost everyone who owns a computer, or uses the internet, can benefit by using a compression product such as StuffIt. Compression will help you to save time and money as well as disk space, and can even help you to keep personal information safe and secure even when it is being transfered on the Internet.

A Brief History of StuffIt

The original StuffIt format designed by Ray Lau 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.

StuffIt 5 was introduced in Nov. 1998 with StuffIt Deluxe 5 for Macintosh. It was designed to offer better compression, and to be cross-platform friendly. It was incorporated into DropStuff for Windows 5.0 in Aug. 1999.

StuffIt X was introduced in Sep. 2002 with StuffIt 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.
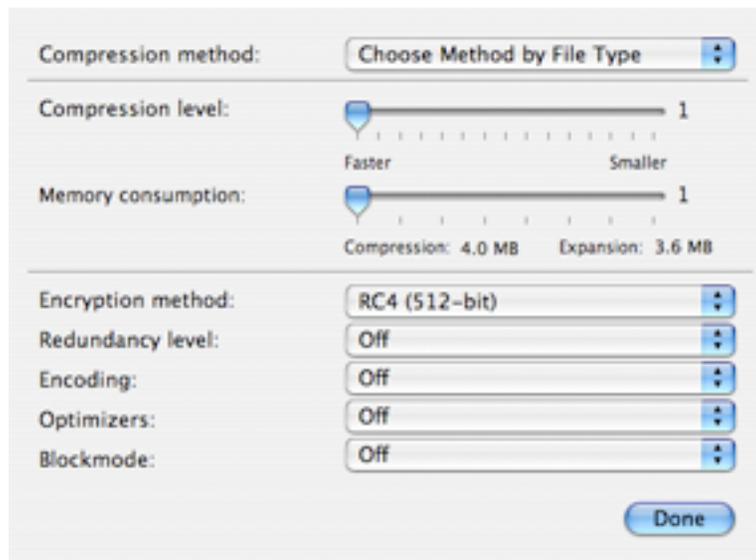
In Jan. 2005, StuffIt X was extended to include compression of JPEG images. Typically JPEG files do not have much redundancy as they are pre-compressed with a lossy compression method. In older versions of StuffIt, they were usually not compressed by default. StuffIt X's JPEG compression allows for further, lossless compression, resulting in files up to 30% smaller. JPEG compres-

sion was included in StuffIt 9.0 for Windows. Expansion of JPEG compressed files was introduced in StuffIt 9.0.2 for Macintosh. StuffIt 10 for Mac will include full compression and decompression of JPEG files.

StuffIt X Technical Details

The following section include more technical details that will help you to configure the StuffIt X format and get the most from its advanced features.

When you first start to configure the StuffIt X format, for example in DropStuff's preferences dialog, you'll see that there are some basic settings that can be configured. You can set the compression level to either "Faster" or "Bet-

ter", and you can turn JPEG compression on and off. You'll notice, however, that an additional choice called

"Custom" is also available. When you choose "Custom" and click the "Settings button that then appears, you'll come face to face with all the various compression settings that StuffIt X makes available.

StuffIt X Compression Methods

The first setting listed in this dialog is called "Compression Method". In this dialog, you tell the StuffIt X format what type of compression should be used when the archive is created.

- **No Compression (Method 0)**: Files will be added to the archive without being compressed.
- **Fastest Compression (Method 1)**: Method 1 provides compression that is optimized for speed of compression and decompression. It works by replacing a series of bytes with a reference to a previous occurrence of the same series of bytes. Method 1 is used when the compression level is set to "Faster" in Menu Preferences, DropStuff, or StuffIt Deluxe.
- **Best Binary Compression (Method 2)**:Method 2 is optimized for the compression of binary files (such as applications) and also for fast decompression. Method 2 works in the same way as Method 1, except that it has a more exact way of representing the offsets and lengths, which makes it compress a little more, but at the cost of slower compression and decompression. Typically Method 2 will provide you with the best results when you're compressing applications.
- **Best Size/Speed Trade Off (Method 8)**: Method 8 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 which makes it more compressible. 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.
- **Best Text Compression (Method 4)**: Method 4 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".
- **Choose by File Type (Method 5, aka "Mix")**: This compression method uses a combination of the "Best Text Compression" method and the "Best Size Speed Trade Off" method to achieve better results. If the file being

compressed is a mostly text file, it uses Method 4, otherwise it uses Method 8. As Method 8 can be used in the creation of archives, StuffIt Expander 9.02 on the Macintosh, and Expander 9.02 on Windows will be required to open these files.

- **Choose by Analysis (Method 6- AKA "Blend")**: This method breaks the file being compressed into small blocks of data and compresses each block with Methods 2, 4, and 8. Whichever method produces the smallest result is used for that chunk of data. This makes compression very slow but it generally produces the smallest possible files. As Method 8 can be used in the creation of archives, StuffIt Expander 9.02 on the Macintosh, and Expander 9.02 on Windows will be required to open these files.

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 the matching algorithms (Method 1 & 2 [Fastest Compression & Best Binary Compression]), 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, the level corresponds to how many previous bytes to use when making the prediction. Note: Not all the compression methods used by StuffIt X support setting compression levels. You cannot specify compression levels for methods 8 or 6 [Best Size/Speed Trade Off or Choose Method by Analysis].

Extents: Extents has a direct relationship to how much memory is used. In Methods 1 & 2 [Fastest Compression & Best Binary Compression], the extent sets how far back to look for a match. In Method 4 [Best Text Compression], extent sets how much memory to use for storing the prediction information.

Encryption Method

StuffIt X allows use to select one of the following encryption methods to use when encrypting:

- **RC4 (512 bit)**: Rivest Cipher 4. The most widely used stream cipher.
- **DES (64 bit)**: Data Encryption Standard,an older commonly used encryption method, uses a smaller key size and is less secure.
- **Blowfish (448 bit)**: a public domain encryption algorithm.
- **AES (256 bit)**: Advanced Encryption Standard. Deemed by the US Government to be secure enough for nonclassified information up to the level of "Top Secret".

Error Correction (was "Redundancy") level

This setting adjusts the amount of error-correcting code added to the data stored in an archive. Error correction improves the recoverability of data should the archive become damaged because of bad media, or data transfer errors.

Encoding

StuffIt X encoding works pretty much like UUencode or BinHex. Basically, encodings in some limit the values stored in each byte to a subset of the 256 possibilities. Most of the reasons for doing this are historical, going back to teletype, and to the use of a parity bit in an 8 bit word. The 127 'low ascii' values (all bytes with a 0 for the left most bit).

In BinHex, there are only 64 chars used, say hex 00 to 3F - all the bytes with 00 as the two leftmost bits. It takes 3 bytes (24 bits) of input data, and divides it into 4 6-bit sequences, and writes each one out as a separate byte, so 3 bytes become 4 encoded bytes.

Other encodings are variations on this theme. SITx encoding offers 3 different levels, named by the number of characters eliminated from the 256 possible. The fewer characters eliminated, the less the data will grow from the encoding, but the greater possibility that in some obscure context, an 'illegal' or control character will be used.

Blockmode

Blockmode applies the chosen compression algorithm to the contents of multiple files to produce a single com-

pressed stream. This allows the compressor to benefit from a longer history, and to benefit from redundancy that may occur across multiple files. With block mode off, each fork of each file is compressed in a separate and independent operation, just as in Zip and SIT5 archives.

StuffIt X sorts files by type/suffix and size, before compressing them into a block. Placing files which are likely to be similar near each other in the uncompressed input stream increases the likelihood of benefiting from repeated patterns.

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

Optimizers

Generally speaking, optimizers are algorithms that operate on files before compression to improve compression. StuffIt X includes optimizers that operate on the following file types to improve their compression ratios: