laddin Systems bills Stufflt Deluxe 4.0 as "Industry Standard Compression For Macintosh Computers," and this is an accurate description of the newest version of their compression package. Most Macintosh files on the internet or on online services are compressed with Stufflt. In addition, Stufflt can expand files from many other compression programs, making it a very useful piece of software to own.

Stufflt is useful for many things. It can speed up transfers of files over modems and networks, by reducing the amount of data that needs to be sent. It can reduce the number of floppy disks or removable cartridges needed to hold files, and allows large files to be spread across multiple disks. It is also useful for squeezing more data onto hard disks. Compression programs make files smaller by finding more efficient ways of representing the data they contain. There are many ways of doing this, and I don't have space to go into detail here, but the result of compression is that the file is usually reduced to about 50% of its original size. Large text files usually compress a bit more than this, while JPEG graphics files and QuickTime movies (which already employ their own sort of compression) don't compress as much. Compressing files can take anywhere from seconds to minutes to hours, depending on how large the file is, what speed computer it is being compressed on, and several other factors. A file compressed with Stufflt, or any other compression program in its class, must be expanded before it can be used, and once expanded, it becomes an exact duplicate of the original file.

Stufflt Deluxe is a package that performs very few tasks, but does them extremely well. It also goes to great lengths to give the user many different ways of accomplishing the same thing. Stufflt Deluxe is really two compression programs in one: Stufflt Deluxe and Stufflt SpaceSaver. Stufflt Deluxe is a full featured compression program made for archiving files. It is the main component of the package, and when people refer to a file that is stuffed, or if you see a file whose name ends in '.sit', the file in question is compressed with Stufflt Deluxe. Stufflt SpaceSaver, the other component of the Stufflt Deluxe package, is an automatic compression program which uses a different compression routine than does Stufflt Deluxe, and is made for increasing the capacity of your hard disk transparently. Aladdin uses the terms 'archived' and 'stuffed' to refer to files compressed with Stufflt

Deluxe, and the word 'compressed' to refer to SpaceSaver compressed files. I will do the same for this review.

# Changes In StuffIt Deluxe

There are quite a few improvements in the Stufflt Deluxe package since the last version. Version 4.0 is significantly faster on PowerMacs than previous versions were. Aladdin claims that it can be up to 25% faster, and while I haven't done any formal testing, the new version does seem quicker. Stufflt is also more integrated with the operating system than it used to be. In fact, the new True Finder Integration control panel makes it possible to perform almost all Stufflt tasks without ever opening the main application. Double-clicking on an archive file in the Finder brings up a browser window showing all the files and folders in that archive, as well as statistics about how much space is being saved. Files and folders can be stuffed by dragging

them

into the archive window, and expanded by dragging them out of the browser window. You can also manipulate files and folders in the archive just as easily as if they were inside a normal folder. You can even open certain types of files such as text documents and PICT

graphics by double-clicking them while they are still in the archive. This opens the appropriate Stufflt Viewer, letting you view, and sometimes edit files while they are still in the archive.

### Stuffing

There are quite a few different ways to stuff files. Aladdin has created many of those possible ways, because different people find different methods more intuitive. To stuff a file or folder, you can:

- Select it in the Finder and choose 'Stuff' from the menu that StuffIt adds to the Finder.
- Drag and drop the file or folder onto the DropStuff application.
- Add the suffix '.sit' or '.sea' to the name of the file or folder. Adding '.sit' creates an archive, while adding '.sea' creates a self-extracting archive that you can give to people who don't have Stufflt.
- Open the Stufflt Deluxe application, create a new archive, and add the file or folder to that archive.
- Drag and drop the file or folder into an open Stufflt Browser window in the Finder.

# Expanding

There are also many different ways to expand files. To expand an archive, you can:

 Select it in the Finder and choose 'Expand' from the menu that Stufflt adds to the Finder.

- Drag and drop the file or folder onto the StuffItExpander application.
- Remove the suffix '.sit' or '.sea' from the name of the archive.
- Open the archive in the StuffIt Deluxe application and expand individual files.
- Drag and drop files or folders out of the Stufflt Browser window.

These procedures may sound difficult to remember, but after using Stufflt for a short period of time, they become second nature. Aladdin does a good job of explaining them in its detailed and complete documentation and tutorial. Actually, you only really have to know one way of stuffing and expanding files to use the program effectively.

### StuffItExpander

The StuffltExpander drag and drop application can be used for expanding and decoding just about any file from the internet, and is probably the most useful part of the entire package. You can tell it which types of files you want expanded, and even tell it to 'watch' a folder. For instance, if you select your Netscape download folder as the 'watch folder,' whenever you download a file with Netscape, it will automatically be decoded and expanded.

#### **Advanced Features**

In addition, Stufflt Deluxe has some advanced features such as the ability to encrypt archives, and the ability to break archives up into segments. Segmenting is useful if you want to distribute a large archive over a set of floppy disks or other removable media, and with the new DropSegment application, segmenting is now as simply as drag and drop. For people who like to write macros, Stufflt Deluxe can also integrate well with QuicKeys, AppleScript, and UserLand Frontier. The manual contains a complete reference detailing how you can control Stufflt Deluxe with AppleScript. In addition, because the main compression engine is an extension, it is possible for other programs to utilize its capabilities. For instance, ShrinkWrap, a disk image utility, can automatically stuff its files if you have Stufflt installed, and my disk cataloging programs can locate files within Stufflt archives.

### SpaceSaver

	SpaceSaver is a separate component of the StuffIt Deluxe package that
and	uses a different compression method than the rest of the package,
	performs an entirely different task. It is dedicated to increasing the amount of data that can be stored on your hard disk transparently. It
	can compress files automatically during idle time, or on demand via similar techniques as StuffltDeluxe. However, with SpaceSaver,
every	file is compressed individually. You can have SpaceSaver compress,
or	not compress files based on their label, their modification dates, and

also by keywords in their names such as 'small' and 'big'. Whenever you open a SpaceSaver compressed application or file, it is automatically expanded.

The problem is that SpaceSaver runs rather slowly on the Macs I've tested it on. I fact, it doesn't seem to be much faster than Stufflt Deluxe. It is nowhere near as transparent a product as Symantec's

AutoDoubler, its closest rival. This could be because AutoDoubler expands only the portions of files that are needed, and does so into RAM, rather than onto the disk. Also, SpaceSaver doesn't save as much disk space as StuffItDeluxe does. On typical files on my hard disk, it averaged only about 30% savings. StuffIt SpaceSaver can be useful if you need to increase the capacity of your hard disk in a pinch, but be aware that using it incurs a huge performance penalty. You may be better off using StuffIt Deluxe because it saves more space, and is more easily controlled. If you are serious about a transparent compression program, you should look into AutoDoubler, a part of Symantec's Norton DiskDoubler Pro package, or Stac Technologies' Stacker.

#### The Shareware Alternative

If you decide that you don't need all the features of the full Stufflt Deluxe package, Aladdin has shareware programs that perform many of the same tasks. Stufflt Lite is similar to the main Stufflt Deluxe application, although it isn't quite as fully featured. In addition, DropSuff and StuffltExpander are available as shareware, and can compress and expand just as well as Stufflt Deluxe, except that they don't give you the True Finder Integration control panel, which lets you stuff files by renaming them, and includes the Stufflt Browser and Finder menu.

## **Nothing Is Perfect**

The Stufflt Deluxe package comes close to being ideal. However, there are several improvements that could be made. At the moment, it cannot expand files compressed with Symantec's AutoDoubler or DiskDoubler. I suspect that this omission may have been due to licensing agreements, but nonetheless, it would be a welcome addition. Stuffing and expansion should take place in the background all of the time. At present, this only happens when the Stufflt Deluxe application, or one of the drag and drop applications is used. Also, it should be possible to queue tasks. For instance, it would be nice to be able to drag a file into a Browser window, regain control of the Finder, select an archive, choose expand from the menu, and have these tasks be executed one after another. As it stands now, you must wait for the operation to complete before regaining control of the Finder, though you can switch to another application while the process is completing.

#### **Final Words**

Stufflt Deluxe is a full featured compression solution. It offers excellent speed and savings, and the new version contains several important enhancements. It is integrated well with the Finder, and is very intuitive to use. If you are looking for a well refined compression program,

r a utility to decode files from the internet, look no further than Stufflt Deluxe.

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