

COMPACT PRO™

A File Compression Utility for the Macintosh®

User's Guide

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1 Introduction

Compact Pro™ is a Macintosh application which lets you reduce the size of many of the files on your computer by “compressing” the data in the files. Making files smaller can free up valuable space on your hard disk. It can also reduce the number of floppy disks needed to save back-up copies of important files. If you transfer files between computers using modems, you can save time and money by first compressing the files first since compressed files usually take significantly less time to transmit.

Compact Pro also supports “archives”. An archive is a collection of files and folders which are combined into a single unit. By grouping related items into an archive, you can simplify the storage of large amounts of data. This helps organize your backup data storage in much the same way that using folders helps organize your desktop.

Features

- Advanced compression algorithm typically reduces file size by 50%.
- Files and folders may be stored together in “archives” which further reduce storage space and simplify file management.
- Encryption capability provides the ability to scramble sensitive data files so that a password is required to access them (North American version only).
- Automatic segmentation of archives makes it simple to build archives which are larger than a single disk.
- Optionally builds “self-extracting” archives.
- Supports file compression as a background job under MultiFinder™.

Requirements/Limitations

To use Compact Pro, you must have a Macintosh 512KE or higher model (Plus, SE, SE/30, II, IICx, etc.), and you must be running System file 4.2 or higher. Compact Pro requires 501K bytes of free memory to operate.

Compact Pro can store up to 1500 files and folders in an archive. Segmented archives are limited to 255 segment files.

How Does Data Compression Work?

Compact Pro “compresses” the data in a file by analyzing the data and then encoding it in a more efficient manner. The encoded data takes up much less space, but still contains all of the “information” in the original file. For example, if a document contained the character “A” repeated 20 times, most word processing programs would store this as 20 individual characters. By encoding the repeated characters as 20(A), only 5 characters are required. The resulting data is much smaller, but all of the original meaning is retained. By using a complementary data decoding process, the original data file can be produced from the compressed file data at a later date.

Acknowledgments

Many people have contributed to the development of Compact Pro in a variety of ways. The author would like to express special gratitude to the following individuals for their assistance: Scott Anderson, Mike Arst, John Atwood, Bart Barton, Steven Bobker, Kirk Crawford, Daniel Dechant, Thierry Delettre, Richard Fowell, Mearle Gates, Herb Goodman, Mary Anne Janke, Bill Kubeck, Eric Larson, Garner Miller, Doug Moore, John Norstad, Mike O’Connor, John Rummel, Robert Seaver, Joe Sewell, Kevin Shoemaker, David Smigelskis, David Sternlight, Ray Terry, Joe Thornton, Michel Touchot and John Wipfli.

2 Getting Started

Installing Compact Pro

Compact Pro is distributed as a single file called “Compact Pro Package” which is a self-extracting archive. When this file is opened from the Finder™, it creates a folder containing the Compact Pro application and supporting documentation.

The following files are included in the Compact Pro package:

Compact Pro—The Compact Pro application program

Compact Pro User’s Guide—User’s manual (this document)

Release Notes—Notes regarding the latest release

Registration Form—Registration form in TeachText™ format

Disk Order Form—Disk order form in TeachText format

To install Compact Pro, place a copy of the “Compact Pro” file in any folder on your startup disk (the one which has your System folder). If your startup disk does not have enough free space to hold the Compact Pro application, you may store it on ANY mounted disk, but some operations will not be as smooth.

Registering Your Copy

Compact Pro is distributed as Shareware. It is NOT free. You are permitted to use the product on a trial basis for up to 30 days. If you wish to continue using the product beyond that period, you are required to pay a registration fee of \$25. For details on registering, see the chapter on “Distribution/Registration”.

3 Using Compact Pro

About Archives

Compact Pro creates documents called archives. One archive can hold the data for many files and folders on your Macintosh. You may add files to an archive, eliminate files from an archive, or copy files from an archive to other folders on your Macintosh.

Archives provide a simple method of grouping related files to reduce clutter from the Macintosh desktop and your backup disks. They contain their own type of folders which are similar to the ones on the Macintosh's desktop (you can move whole groups of files/folders from your desktop to an archive, or vice versa, in one operation).

Unlike the files/folders on the desktop, the names of files in an archive are not required to be unique; you may have two files with the same name, in the same folder. This allows you to save multiple versions of a changing document without having to change the name every time it's saved.

Most archives consist of a single document which is represented by a file cabinet icon on the Macintosh desktop. You can move and copy an archive just like any other document. At times, you may want to make an archive which is too large to fit on a single disk. Compact Pro provides a simple means for making archives which span several disks. For more information on this type of archive, see the section titled "Working With Segmented Archives" later in this chapter.

Generally, you will use the Compact Pro application to save files in archives and read files from archives; however, Compact Pro also lets you build "self-extracting" archives. A self-extracting archive has a tiny version of Compact Pro built in so that the archive can decompress its own contents. This feature is described in the section titled "Working With Self-Extracting Archives".

Viewing An Archive

When you open an archive, Compact Pro displays a catalog of the files and folders which are contained in the archive. The catalog is viewed as a series of folders, and the first folder displayed is the “top folder” of the archive. As you move from folder to folder, the catalog window shows information for the current folder. An example of a catalog window is given below. The name of the current folder is displayed in a box in the upper left corner of the window (the box is absent in the top folder).

Financial Records Archive					
Stock Folder					
Name	Type/Crea	Expanded	Compacted	Saved	Modified
Acme History Plot	PICT/SPNT	22419	9012	60%	Oct 26, 1990
Company Profiles	-----	188646	57305	70%	-----
ROI Analysis	XLS /XCEL	19651	7337	63%	Nov 17, 1989
Quotes Stack	STAK/WILD	86786	28602	67%	Jul 14, 1989
Net Present Value	XLS /XCEL	20223	8316	59%	Nov 17, 1989
Terminal 3.03	APPL/QD99	46578	25588	45%	Dec 13, 1989
Prime Report	WDBN/MSWD	6656	*	*	Jan 10, 1991
ROI Analysis	XLS /XCEL	27697	*	*	Jul 09, 1990
18 files in folder:		418656	*	*	

In addition to the name of each file and folder, the catalog window displays each file's type and creator code in the **Type/Crea** column. These are four-character names which applications attach to their files to indicate which application created a file and what type of information is in the file. For example, the third file (“ROI Analysis”) in the catalog window above was created by Microsoft® Excel as indicated by the XCEL creator code. The XLS_ type code indicates it is an Excel spreadsheet. While many of the creator codes are similar to the names of their applications, some (like the WILD code used by HyperCard® for the “Quotes Stack”) are not. Notice that folders do not have a type or creator code.

The **Expanded** column indicates the number of bytes a file will require if it is extracted from the archive to create a conventional file. The **Compacted** column indicates the number of bytes (including overhead) which the file consumes in the archive.

The bottom line of the catalog window gives a summary of the displayed information. The file count and size totals include all files which reside in all folders contained in the current folder. When the top folder is displayed, these totals provide a summary of the entire archive.

Special Indicators

The icon at the beginning of each line indicates whether the item is a folder, an application or some other type of file. Sometimes an icon will be shaded like the one for the “Prime Report” file in the example catalog window. This indicates that you have marked this file to be added to the archive, but the file’s data has not yet been compressed and stored in the archive.

Sometimes an item will be marked with a Σ like the one which appears next to the “Net Present Value” file. This marker indicates that the file is encrypted and a password will be required to access it.

A notepad icon in the upper left corner of the catalog window indicates that the archive has a note attached to it. You may view and modify the note by clicking on this icon.

Viewing Modes

The View menu lets you select the order in which the files are displayed in a folder. You may order the files **by name** (alphabetically), **by size** (from largest to smallest), **by modification date** (from newest to oldest), or **by the order** in which they were **saved** in the archive (earliest to most recent).

If you check **Hide Type** in the View menu, the **Type/Crea** field will not be displayed in the catalog window. This provides a simple way to view longer filenames on a Macintosh with a small screen.

Changing Folders

There are several ways to move between folders in the catalog window. You can move to a folder within the current folder by double-clicking on the desired folder’s name. As an alternative, you can select the folder by clicking on its name and pressing the **Return** or **Enter** key. If your Macintosh has arrow keys, you can use them to move the selection bar to the desired folder. Pressing the **Down-Arrow** key while holding down the **Command** key will move to the selected folder.

To move up to one of the folders which contain the current folder, click on the name of the current folder (the box in the upper left corner). A pop-up menu will appear to let you select the desired folder. You can also move to the next higher folder by pressing the **Up-Arrow** key while holding down the **Command** key.

Selecting Multiple Files

Sometimes you will want to select more than one file or folder in the catalog window. This is accomplished using the **Shift** and **Command** modifier keys in conjunction with the mouse. If you hold down the **Shift** key when selecting files, all entries between the last selection and the current mouse position will be selected. If you hold down the **Command** key when selecting files, any file clicked will be changed from its current state—selected files will be deselected and unselected files will be selected.

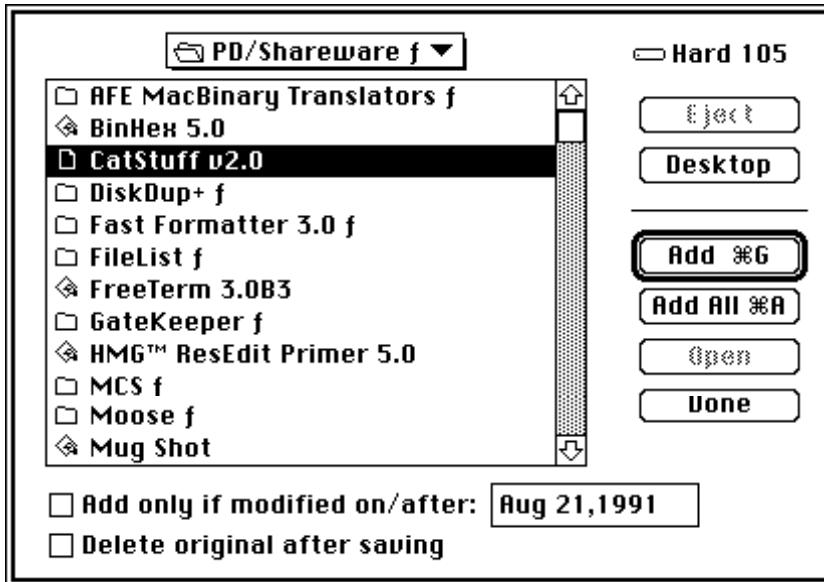
Creating And Opening Archives

Creating a new archive is simple. Select the **New** command from the File menu and an empty catalog window will appear. After you have added the files you want in the archive, use the **Save** or **Save As** commands to save your work. Until then, the catalog window will remain “Untitled”. Like most Macintosh applications, no file is actually created until you save your work.

Open an existing archive by selecting the **Open** command from the File menu. A dialog box will appear to let you choose the archive you wish to open.

Modifying An Archive

Once an archive has been opened, you can create folders in it and add new files. You can also change the names of existing files or remove them. In addition, Compact Pro provides the ability to attach a descriptive note to the archive for future reference.



Adding New Files To An Archive

To add new files to an archive, select the **Add** command from the Archive menu. This will display the Add dialog box (above) which lets you select a file or folder to add to the archive. If you select a folder, all the files and folders contained in that folder will be added to the archive. Since any file/folder you add is inserted in the current folder of the archive, it's important to move to the desired destination folder BEFORE you select the Add command.

[**Tip:** If you want to add most of the files in a folder, but not all of them, it may be quicker to add the entire folder and then use the **Clear** command to eliminate the ones you don't want.]

The Add dialog box provides several options when adding files. If you check the **Add only if modified on/after: date** checkbox, Compact Pro will only add a file from the group you've specified if the file was last modified on or after the date specified. This provides a simple means for performing incremental backups. You can specify the date of your last backup and only add the files that have changed since then. If you are updating an existing archive, Compact Pro automatically sets this date to the last date the archive was modified.

By checking the **Delete original after saving** checkbox before adding files, you can have Compact Pro automatically delete the files from your desktop after they've been saved in the archive. This is useful when you want to move files from your desktop into an archive without keeping the original copies.

Note: To have the desired effect, the checkboxes in the Add dialog box must be set BEFORE you add each file.

Creating New Folders

If you want to create folders in the archive which do not already exist on the desktop, you can create new, empty folders using the **New Folder** command in the Archive menu.

Changing The Names Of Existing Files

You can change the name of a file or folder which already exists in an archive by selecting the entry and using the **Change Name** command in the Archive menu. You cannot change the name of a file/folder which has not been stored into the archive yet. The icons for these entries are shaded in the catalog window.

Removing Old Files From An Archive

Existing files and folders may be removed from an archive by selecting them and using the **Clear** command in the Edit menu. The **Delete** key will also remove selected items.

Adding A Note

If you work with many archives, it may be convenient to attach notes to them to indicate what they contain or when they were generated. The **Note** command in the Archive menu provides a way of attaching a memo up to 254 characters long. Once a note is attached, a notepad icon will be displayed in the upper left corner of the catalog window. You may view and edit the note by clicking on this icon.

Saving Your Work

After you've added new files to an archive, deleted old files, or made other changes, you must "save" the archive to make the changes permanent.

If you are working with an existing archive, you will normally choose the **Save** command from the File menu to update the archive with the changes you've specified. If you would rather create a new archive, use the **Save As** command instead. This will copy any necessary files from the old archive to the new archive. Any changes specified will affect only the new archive.

If you are working with a new (untitled) archive, you may use either the **Save** or **Save As** commands in the File menu. Both commands bring up the Save As dialog box which lets you name the new archive.

In addition to letting you select the name for a new archive, the Save As dialog box also includes a **Self-Extracting** checkbox. Checking this checkbox includes a small self-extracting application in the new archive. For more information on this feature, see the section titled "Working With Self-Extracting Archives".

Background Operation Under MultiFinder

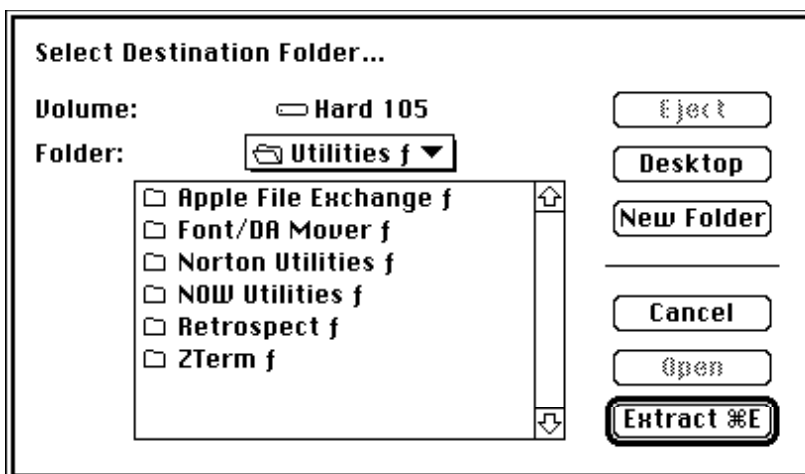
It is during the process of saving an archive that Compact Pro compresses the data in any newly added files. This can take a long time due to the large number of computations required. If you are using MultiFinder, you can switch to another application and Compact Pro will continue working in the background. The status window will disappear when the compacting is complete. If an error occurs, Compact Pro will flash its file cabinet icon on top of the apple icon in the menu bar.

Storing Small Files

As you use Compact Pro, you may notice that small files (shorter than 200 bytes) usually become LARGER when they are placed in an archive. This is due to the extra information which Compact Pro must keep to remember the file's name, size, etc. Surprisingly, even when Compact Pro shows an increase in a file's size, you will typically still save space by storing the file in an archive. This is due to the overhead of the Macintosh file system. Even the smallest file requires a minimum of 1024 bytes on a Macintosh disk. Since these files use much less than 1024 bytes in an archive, an overall savings may be realized. As an example, twenty 100-byte files would require 20,480 bytes (20 x 1024) if stored as conventional files. If each file required 150 bytes in an archive, the total space required by the archive would be 3,072 bytes—a savings of 85%.

Retrieving Files From An Archive

When you want to use a file which is stored in an archive, you must re-create the original file by "extracting" it from the archive. To extract a file, select a filename in the catalog window and use the **Extract** command in the Archive menu. The dialog box below is displayed to let you select the folder where the copy will be created.



You may select groups of files and folders in the catalog to be extracted in one operation. When you select a folder, Compact Pro will not only extract all of the files in the folder, it will also extract any folders contained in the selected folder. The hierarchy of folders in the archive will be re-created in the folder you specify. Compact Pro will create any new folders which are required to extract the requested folders.

[**Tip:** You may extract a single file by double-clicking on its name. Likewise, a group of files and folders may be extracted by selecting them and then double-clicking on one of the selected items.]

There are two options in the Extracting Preferences which affect the way Compact Pro extracts files. The first one specifies how Compact Pro should handle a request to extract a file which already exists in the destination folder. The second determines the “last modification date” which is assigned to an extracted file. For more information on these options, see the section on “Setting Preferences”.

Desktop Expanding

Compact Pro supports a shortcut called “Desktop Expanding” which lets you rapidly extract all the files in an archive. When working in the Finder, you can “expand” an archive by holding the **Option** key while double-clicking on the archive’s icon (you may have to hold the **Option** key until the Compact Pro status window appears). Compact Pro will extract all the files in the archive and place them in a new folder. The new folder has the same name as the archive with an ‘f’ appended (“.cpt” and “.sit” extensions are removed if present). As an alternative, an option in the Desktop Expanding Preferences lets you store all extracted files in the same folder as the original archive and skip creating the new folder.

After all files have been extracted from the archive, Compact Pro will ask if you wish to keep or delete the original archive. You may change the Desktop Expanding Preferences so that the archive is AUTOMATICALLY kept or deleted if you prefer.

You can expand several archives at once by selecting the desired archives in the Finder and then double-clicking one of them while holding the **Option** key. **Note:** If you are running MultiFinder and Compact Pro is already running, only one archive will be expanded.

You can use the Desktop Expand feature from inside Compact Pro as well. To expand an archive, use the **Open** command in the File menu. Select the archive as you normally would to open it, but hold the **Option** key when you click the **Open** button in the Open dialog box. All of the archive's files will be extracted into a folder as described above.

Note: Holding the **Option** and **Command** keys while pressing the **O** key does NOT work as a keyboard equivalent to start a desktop expand.

Note: If you use the Desktop Expanding feature and you don't have a copy of the Compact Pro application on your startup volume, the system may try to "switch-launch" to the disk containing the Compact Pro application. This will produce an error message such as "The volume 'ABC' could not be made the startup volume ...". You can safely ignore this message—just continue to hold the **Option** key and click the **OK** button to proceed.

Background Operation Under MultiFinder

While extracting is not as slow as compacting, there are many calculations involved in rebuilding a compacted file. If you are extracting a large number of files, or a few large files, the process can be quite lengthy. If you are using MultiFinder, you can switch to another application and Compact Pro will continue extracting in the background. The Compact Pro status window will disappear when all files have been extracted. If an error occurs, Compact Pro will flash its file cabinet icon on top of the apple icon in the menu bar.

Validating Files In Archives

There may be times when you will want to verify that the data in an archive is still valid. This might happen if some of the files on an archive disk have been damaged. You might also want to verify that files have been stored properly when you have archived files that are especially valuable to you.

Before a file is compressed, Compact Pro generates a check code for the data in the file (a 32-bit Cyclic Redundancy Code is used). When the file is extracted, Compact Pro generates the check code for the resulting file. By comparing these codes, it can determine—with a fairly high degree of certainty—if the file has been reconstructed properly.

One way to verify the files in an archive, therefore, is to extract them. If no errors are reported, there is a high probability that the files have been recovered properly.

A more convenient way to verify the files in an archive is to use the **Validate** command in the Archive menu. This command works just like the **Extract** command and performs the same decompression process except that it does not store the results on disk. This lets you verify the files in an archive without modifying any of the files or folders on your Macintosh. If you check the **Validate archive after Save** option in the Compacting Preferences, Compact Pro will automatically validate all the files in an archive whenever changes to the archive are saved.

Encrypting Files

Note: Due to export regulations of the US government, encryption capabilities are only enabled for copies of Compact Pro which are registered to residents of the US and Canada. These functions are not available in unregistered copies.

Compact Pro provides a way for you to prevent unauthorized access to the files you store in an archive. Files can be “encrypted” with a password of your choice—this makes them unreadable by anyone else. When you want to restore an encrypted file, you must specify the same password which was used to encrypt it initially. No portion of an encrypted file can be extracted without the proper password.

To encrypt a file, you must check the Encrypt checkbox in the Add dialog box before you add the file to the archive. The entry for that file in the catalog window will be marked with a Σ to indicate that it is encrypted. [**Tip:** If you want to change the Encrypt flag for a file which has been added to an archive but not yet saved, you can use the **Get Info** command in the Archive menu to change its value. Once the file is saved, no further changes can be made.]

When you save the archive, Compact Pro will ask you to specify a password to be used for the encrypted files. This password must contain at least one character and no more than 99. Your files are most secure when you use longer passwords. Non-printing characters are permitted in the password, but you may find it difficult to remember your password if you use too many unusual characters.

The **Set Password** command in the Misc menu lets you specify a password before Compact Pro asks for it. However, the password is not actually used until the archive is saved, so all of the newly added files will be encrypted with the last password specified. Changing the password BEFORE you add each file will NOT assign different passwords to each file. If you want files to be encrypted with different passwords, you must save the archive after each file is added.

When you extract an encrypted file from the archive, Compact Pro will ask you to specify the password. This same password will be used for all files extracted in one operation; you will not be asked for a password for each encrypted file. If you are extracting files which have different passwords, you must use the **Set Password** command to change the password between extract operations.

Warning: The encryption algorithm used by Compact Pro is quite secure and does not contain any “back doors” which would allow access to an encrypted file without knowing the password. As a result, you must be careful to remember the passwords for your encrypted files since there is no known way to recover your files without them.

Working With Segmented Archives

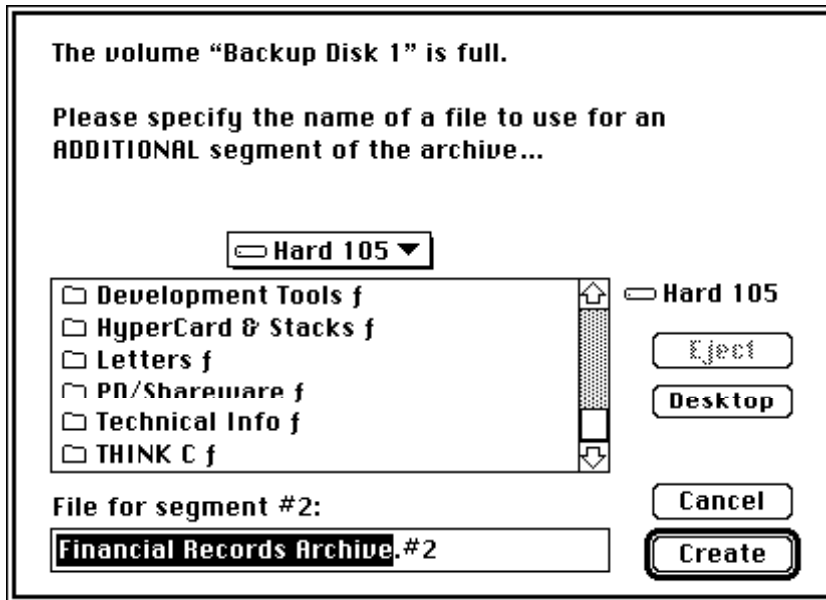
Compact Pro can build “segmented archives”. A segmented archive is a single archive which is divided into several pieces called “segments” (a segmented archive may have as many as 255 segments). Each segment is an ordinary Macintosh file and has the same icon as any other Compact Pro archive.

There are several reasons you might want to build a segmented archive. Suppose you have compacted a group of files to send to a friend, but the archive is too large to fit on one floppy disk. By creating a segmented archive, you could break the original archive into several smaller “segment files” and place each one on a separate floppy disk.

Segmented archives may also be useful when transferring large archives using datacommunications services. Some services are prone to errors which may result in a transferred file being damaged. The probability of an error occurring is often proportional to the length of the file—the longer the file, the more likely an error will occur during the transfer. By sending several shorter files, you may be able to transfer an archive which you could never transfer in one piece.

Creating A Segmented Archive

There are two basic ways to create a segmented archive—automatically and manually.



Compact Pro automatically creates a segmented archive if you run out of room while updating or creating an archive with the **Save** or **Save As** commands. If the destination disk becomes full, Compact Pro ejects the disk and asks you to specify the name for an additional segment file. Typically, you just insert another floppy disk and specify a new filename. It is not necessary for the new disk to be empty. If it contains other files, Compact Pro will use whatever space is available. Note that if you insert an unformatted disk, Compact Pro will initialize it for you.

You can manually divide an existing archive into segments using the **Segment** command in the Misc menu. Manual segmenting gives you the option of creating segments of a pre-determined size rather than simply filling a disk. To manually segment an archive, open the archive with the **Open** command then select the **Segment** command in the Misc menu. A dialog is displayed which allows you to specify the size for the segments (one option is **As Large As Possible** which fills the disk in the same manner as automatic segmenting). Next, Compact Pro prompts you to name each segment as it creates the segment files.

Note: Compact Pro tries to limit each segment to the requested size, but the first and last segments of an archive may be larger if a small segment size is specified.

Naming Segment Files

Segment files may be moved from one disk or folder to another and may be named in any manner you wish. The names of the files are not important since Compact Pro saves information inside the files to determine their proper ordering. The locations are not important either since Compact Pro will ask YOU to find a segment file when it's needed. However, it is generally easier to work with segmented archives if you use Compact Pro's default naming convention.

When Compact Pro suggests a name for a segment, it always starts with a basic archive name, optionally appends “.cpt” or “.sea”, and then appends the segment number. For example, if the **Add .cpt/.sea extension to new archive names** preference is enabled and you segment an archive named “MyArchive”, Compact Pro will recommend the name “MyArchive.cpt.#1” for the first segment.

Accessing Files In A Segmented Archive

Aside from desktop expanding—which only works on single-segment archives—you may perform any operation on a segmented archive which is allowed on a non-segmented archive. The only difference is that you must open the FINAL segment of a segmented archive in order to access its contents. When you do something which requires the data from another segment in an archive, Compact Pro will display a dialog box prompting you to “load” the segment file. You should select the name of the requested segment file, and click the **Load** button (you may have to eject one disk and insert another to find the required segment file).

Updating Segmented Archives

When you add or remove files from a segmented archive, Compact Pro tries to pack the data as efficiently as possible in the final segment, but it will never go back and add or remove files in earlier segments. This restriction is necessary to ensure the integrity of the archive under some error conditions.

If you have removed files from earlier segments in a segmented archive, you can shrink the total size of the archive by creating a copy (Compact Pro will discard the removed files during the copying process). You can make a copy of an archive by opening it and then using the **Save As** command.

Working With Self-Extracting Archives

Compact Pro has the ability to build “self-extracting” archives. A self-extracting archive has a small application built in which can extract the files from the archive. When you open or double-click a self-extracting archive from the Finder, the embedded application (called AutoExtractor™) decompresses all the files in the archive just as if you selected all the files in the archive and performed an **Extract** command in Compact Pro. AutoExtractor will prompt you for a destination folder and then extract all files and folders in the archive. If the archive contains encrypted files, you will be asked to supply a password.

Self-extracting archives are useful when you want to give an archive to someone who does not have a copy of the Compact Pro application. Rather than sending a copy of the entire “Compact Pro Package”, you can send an archive with the extractor built in.

Self-extracting archives will work with any Macintosh model except the 128K and 512K (these models may be used if the HD20 INIT is installed to provide the Hierarchical File System). The extracting computer must be running System File 3.2 or higher, and it must have 307K bytes of free memory available.

Making A Self-Extracting Archive

To make a self-extracting archive, use the **Save As** command from the File menu. When the Save As dialog box appears, check the **Self-Extracting** checkbox. The new archive will include the AutoExtractor application which adds approximately 13K bytes to the size of the archive. The archive will also have a different icon to distinguish it from a normal archive.

Note that once an archive has been created, you cannot change it from normal to self-extracting or vice versa; however, you can always make a new copy using the **Save As** command. You may add or remove files from a self-extracting archive using the same commands you would use for a normal archive. The only difference is that you must use the **Open** command from the File menu to access the archive since double-clicking on a self-extracting archive will launch the built-in AutoExtractor application instead of Compact Pro.

If you use the **Note** command to add an archive note to a self-extracting archive, the note will be displayed each time the self-extracting archive is launched.

Working With StuffIt Archives

Compact Pro can open and extract files from archives created by StuffIt™ 1.5.1. Use the **Open** command from the File menu to open a StuffIt 1.5.1 archive. Once open, you may view the catalog and extract files using the same commands you would use with a Compact Pro archive. Note that Compact Pro cannot extract encrypted files from StuffIt 1.5.1 archives, and it cannot extract files from archives created by StuffIt Deluxe™.

Working With BinHex4 Files

BinHex4 is a file format used by some communications networks (Usenet, for example) to encode non-text Macintosh files so that they may be transmitted and stored as text files. It is not compatible with the BinHex5 format which is more widely known as “MacBinary”. Compact Pro can encode standard Macintosh files using the BinHex4 format, and it can decode files which are encoded using the BinHex4 format.

To convert a Macintosh file to BinHex4 format, use the **Convert TO BinHex4** command in the Misc menu. Compact Pro asks you to select the file to be converted and then asks you to supply a name for the file to be created (the source file is left unmodified). If the **Include LFs** checkbox is checked, Compact Pro adds Line Feed characters at the end of each line of text in the BinHex4 file (this is required by some systems); otherwise, it omits them to reduce the file size. The default creator code for BinHex4 files may be specified in the Miscellaneous Preferences.

To convert a BinHex4 format file back to a normal Macintosh file, use the **Convert FROM BinHex4** command in the Misc menu. Compact Pro asks you to select the BinHex4 file to be converted and then asks you to supply a name for the file to be created (the source file is left unmodified).

Printing The Catalog

Use the **Print** command in the File menu to print the catalog of an archive on a printer. The document produced is similar to the display in the catalog window except that ALL of the files in the archive are displayed rather than just the ones in the current folder.

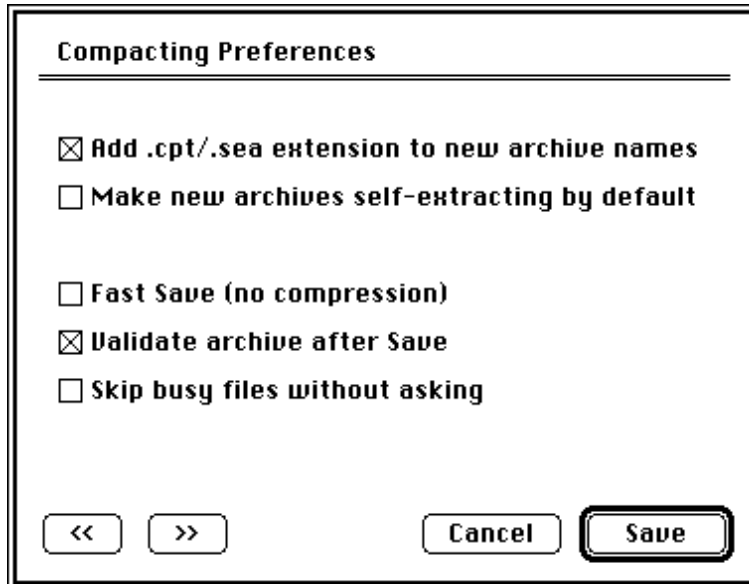
The File menu also contains a standard **Page Setup** command which lets you set the page size and other options before you print.

Generating A Report File

Use the **Report** command in the File menu to generate a text file which has a list of all the files and folders in an archive. Each line contains a file/folder name, type code, creator code, expanded file size, compacted file size, percentage reduction and last modification date. The fields are separated with tab characters. A checkbox in the Report dialog lets you omit the header and total lines which are normally included in the file. The default creator code for report files may be specified in the Miscellaneous Preferences.

Setting Preferences

The **Preferences** command in the Misc menu displays four dialog boxes which let you tailor Compact Pro's operation to your work style.



Add .cpt/.sea extension to new archive names

If this box is checked, Compact Pro adds either “.cpt” (standard archives) or “.sea” (self-extracting archives) to the initial filenames suggested for archives during Save operations.

Make new archives self-extracting by default

If this box is checked, new archives are self-extracting by default.

Fast Save (no compression)

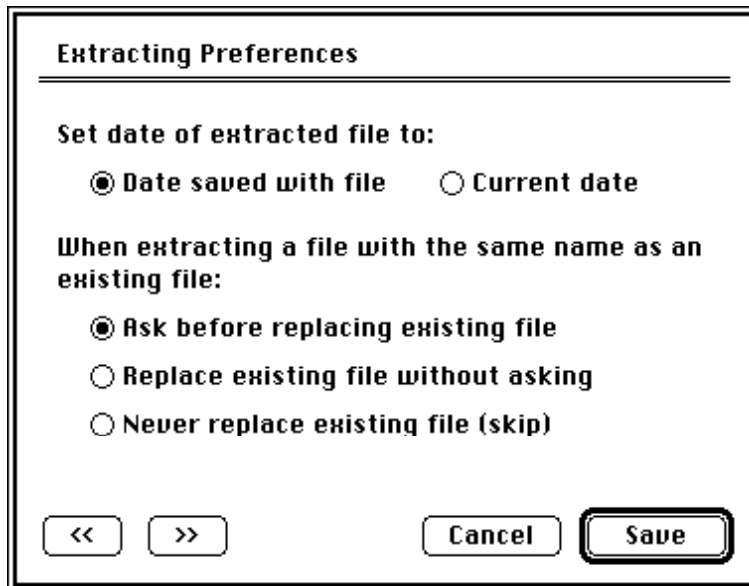
Selecting this option speeds up Save operations by not attempting to compress the data in files. File data is copied to the archive with a simple compression algorithm which typically produces no reduction in size.

Validate archive after Save

If this box is checked, Compact Pro validates all files in an archive after every Save operation.

Skip busy files without asking

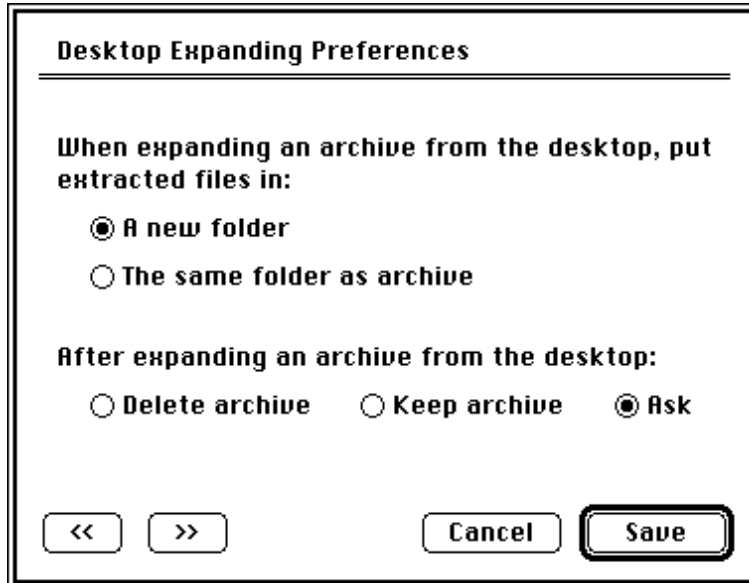
If this option is not enabled, Compact Pro will stop and display a message whenever a newly added file is found to be busy during compacting. If this option is enabled, it will automatically skip any busy files.

**Set date of extracted file to:**

These buttons determine the “last modification date” assigned when a file is extracted. If **Date saved with file** is selected, Compact Pro uses the date stored in the archive (the last date when the file in the archive was actually modified). If **Current date** is selected, Compact Pro uses the current date (the date when the file was extracted).

When extracting a file with the same name as an existing file:

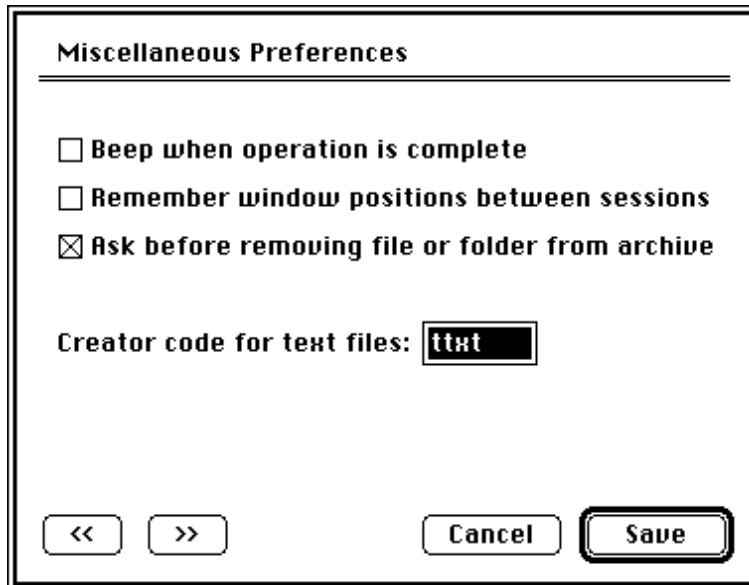
These buttons specify the action Compact Pro should take when a file being extracted already exists in the destination folder you’ve specified. If **Ask before replacing existing file** is selected, Compact Pro displays a dialog to let you decide whether to replace the existing file or keep it. If **Replace existing file without asking** is selected, Compact Pro always deletes the existing file and replaces it with the new file extracted from the archive. If **Never replace existing file (skip)** is selected, Compact Pro skips any files which already exist.

**When expanding an archive from the desktop, put extracted files in:**

These buttons determine where extracted files are stored when an archive is expanded on the desktop. If **A new folder** is selected, Compact Pro creates a new folder and stores the files there. The new folder has the same name as the archive with an 'f' appended (".cpt" and ".sit" extensions are removed if present). If **The same folder as archive** is selected, Compact Pro stores the files in the folder which holds the archive.

After expanding an archive from the desktop:

These buttons determine what Compact Pro does with an archive after it has been successfully expanded on the desktop. If **Delete archive** is selected, Compact Pro removes the archive. If **Keep archive** is selected, it leaves the archive in place. If **Ask** is selected, Compact Pro displays a dialog to let you decide what to do.

**Beep when operation is complete**

If this option is selected, Compact Pro beeps when a Save, Save As, Extract, or Validate operation finishes.

Remember window positions between sessions

If this box is checked, Compact Pro saves the positions of the catalog and status windows when you quit. When you start again, the windows will be restored to their most recent positions. If you always want the windows to start in the same positions, you should uncheck this checkbox. [**Tip:** You may want to check this box for the first several times you run Compact Pro until you get the windows positioned where you like them. After that, uncheck the box to retain those window positions permanently.]

Ask before removing file or folder from archive

Checking this box makes a confirming dialog appear every time you try to delete a file or folder.

Creator code for text files

These four characters define the creator code assigned to the report and BinHex4 text files created by Compact Pro. The standard value is "ttxx" which is the creator code for the TeachText application.

4 Technical Support

You may send questions, problem reports, suggestions for improvements and general comments about Compact Pro to:

Cyclos
PO Box 31417
San Francisco, CA 94131-0417
USA

You may also contact the author by electronic mail:

CompuServe: 71101,204
Internet: 71101.204@compuserve.com
GEnie: B.GOODMAN5

Answers To Some Common Questions

Q: Why does the compacted size column on the total line show a number larger than 0 for an archive or folder which contains no files?

A: The compacted size column indicates the total space required in the archive including the internal overhead Compact Pro requires to keep track of filenames, etc.

Q: Copying one multi-segment archive (on floppies) to another requires a lot of disk swapping on a single floppy system. Is there an easier way to do this?

A: If you have a hard disk with enough space to hold the entire archive, it is much quicker to make the copy in two steps. First, open the original multi-segment archive with Compact Pro and use the **Save As** command to make a copy on the hard disk. This will be a single segment archive. Next, open the archive on the hard disk and use the **Save As** command again to make the new multi-segment archive.

Q: Why does Compact Pro keep asking me to insert disks after I have cancelled a Save operation?

A: When you are creating a multi-segment archive and you cancel the operation or an unrecoverable error occurs, Compact Pro asks you to re-insert all the other disks so that it can remove the files which no longer contain valid information.

Q: It seems like the **Delete original after saving** option in the Add dialog box only works some of the time. What's wrong?

A: For a file to be deleted, the **Delete original after saving** checkbox must be checked BEFORE you add the file.

Q: When I have GateKeeper™ (the virus protection program) enabled, it occasionally complains that Compact Pro is trying to violate "File(Other)" privileges against a file I'm extracting. Does this mean I have a virus?

A: Probably not. When Compact Pro extracts a file, it must perform some operations which look similar to the operations performed by some viruses. GateKeeper is warning you that these operations look suspicious. You can eliminate these warnings by adding Compact Pro to GateKeeper's list of known applications and checking the "File(Other)" checkbox.

Q: I installed CptExpand™ and Compact Pro on the same disk. Now the icons for CptExpand and Compact Pro seem to get mixed up. Sometimes Compact Pro launches when I double-click on an archive to open it, and sometimes CptExpand starts. What's wrong?

A: CptExpand and Compact Pro cannot co-exist on the same disk. You may install one or the other but not both. If you have installed both on the same system or you are removing one and installing the other, you can clear up any launch problems by deleting all copies of the application you no longer want. To ensure that the proper icons are displayed, use one of the following procedures:

1) The simplest solution is to rebuild the Finder's desktop file. It's not a bad idea to rebuild the Finder's desktop file every once in a while since this speeds up some Finder operations; however, rebuilding the desktop file will permanently erase any notes you've attached to files in the Finder's "Get Info" boxes. **Warning: DON'T REBUILD THE DESKTOP FILE IF YOU WANT TO KEEP THESE FINDER NOTES.** To rebuild the desktop file on a hard disk, restart your Macintosh and

hold down the **Option** and **Command** keys while it starts up. When a dialog appears asking if you want to rebuild the desktop, click **OK**. You can rebuild the desktop on a floppy disk by pressing the **Option** and **Command** keys while you insert the disk.

2) If you don't want to lose the Finder notes you've attached, use this procedure instead: First, copy the desired application to a blank floppy disk. Rebuild the desktop on this floppy disk by unmounting it (drag the disk icon to the trash) and then re-inserting it while holding down the **Option** and **Command** keys. Next, copy the application back to the desired destination disk. Finally, restart your Macintosh.

5 Distribution/Registration

What Is Shareware?

“Shareware” is a method of software distribution which gives users a chance to try software before buying it. If you try a Shareware program and continue using it, you are expected to register. Details vary for individual programs—some request registration while others require it; some specify a maximum trial period. With registration, you get anything from the simple right to continue using the software, to an updated program with printed manual.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights with a few specific exceptions as stated below. Like commercial authors, Shareware authors are accomplished programmers, and the programs are of comparable quality (in both cases, there are good programs and bad ones). The main difference is in the method of distribution. The Shareware author specifically grants the right to copy and distribute the software, either to all and sundry or to a specific group. For example, some authors require written permission before a commercial disk vendor may copy their software.

Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook—whether it's commercial or Shareware. The Shareware system makes fitting your needs easier because you can try before you buy. Furthermore, since the Shareware author's overhead is low, prices are generally low as well. Shareware has the ultimate money-back guarantee—if you don't use the product, you don't pay for it.

Distribution

Compact Pro is a Shareware program and is provided at no charge to the user for evaluation. You are encouraged to copy and distribute Compact Pro for non-commercial use with the following restrictions:

- You may copy and distribute the self-extracting “Compact Pro Package” file but not the individual application and document files. This ensures that users receive a complete package with all documentation files.
- You may not modify the “Compact Pro Package” file in any way.
- You may not charge any fee for the use, copying, or distribution of the product.

Commercial Distribution Of Compact Pro

Clubs and user groups may charge a nominal fee (not to exceed \$10) for expenses while distributing Compact Pro. All other organizations must obtain written permission to distribute copies of Compact Pro if any fee is charged for the use, copying, or distribution of the product.

Commercial Distribution Of Archives Created By Compact Pro

Standard and self-extracting archives created by Compact Pro may be used for commercial distribution with no additional license fee. Note that self-extracting archives contain an embedded application named AutoExtractor™ which is copyrighted. Any modification of AutoExtractor’s code or associated resources (including icons) is strictly prohibited.

Registration

If you find Compact Pro useful and continue to use it beyond the 30 day free trial period, you are required to register your copy.

Single-Machine Licensing

A \$25 registration fee will license one copy of Compact Pro for use on any one computer at any one time. For example, one copy may be used by any number of people and may be freely moved from one computer to another as long as there is no possibility of it being used simultaneously on more than one machine.

To register your copy of Compact Pro, print the “Registration Form” file and fill it out. If you do not have a means of printing the form, write your name, address and “Compact Pro 1.32” on a blank sheet of paper. Mail the registration form with payment of the \$25 license fee to:

Cyclos
PO Box 31417
San Francisco, CA 94131-0417
USA

Note: California residents must add applicable sales tax.

Quick Tip: If you are registering a single copy of Compact Pro and paying with a check which is imprinted with your name and address, it is not necessary to use the registration form. You may register by writing “Compact Pro 1.32” on the check and mailing it to the address above.

When you register, you will receive a registration code which can be used to personalize your copy of Compact Pro. Once your registration code has been entered, the registration reminder screen will no longer be displayed. Your name will appear in the “About Compact Pro” dialog box and on the printed reports.

Site Licensing

Site licenses are available to permit the use of Compact Pro within companies or government agencies. A site license allows internal use and copying for a specified number of computers.

The fee for a site license is \$20 for each computer covered. The minimum license fee is \$200 which includes licensing for the first 10 computers. Additional discounts may be negotiated if a large number of machines is licensed. California companies must add applicable sales tax.

To request a site license, send a letter specifying your organization's name and address—as they should appear on the site license contract—and indicate the number of computers you wish to have covered by the license. You will receive two copies of the site license which must be signed and returned with payment of the site license fee. An authorized copy of the site license will be mailed to you along with a registration code to be used on all the machines you have licensed.

Program Updates

Registered users of Compact Pro are entitled to use future versions of Compact Pro without paying any additional licensing fee. In general, users will not be notified directly of new releases, so it is a good idea to check electronic bulletin boards, users groups or magazines for announcements of new versions.

Typically, new releases are available on most of the national information services (America On Line, AppleLink, CompuServe, GENie and Internet archive sites). If you have a modem, this is usually the simplest and least expensive way to obtain updates.

If you do not have a modem, check with your local Macintosh users group. Many users groups distribute disks containing the latest version of Compact Pro (and other Shareware programs) for a small fee.

If you prefer to have a disk mailed to you directly, you may use the disk order form provided in the Compact Pro Package to order an update disk.

Warranty

Compact Pro is supplied as is. Cyclos hereby disclaims all warranties relating to this software, whether express or implied, including without limitation any implied warranties of merchantability or fitness for a particular purpose. Cyclos will not be liable for any special, incidental, consequential, indirect or similar damages due to loss of data or any other reason, even if Cyclos, or an agent of Cyclos has been advised of the possibility of such damages. In no event shall Cyclos' liability for any damages ever exceed the price paid for the license to use the software, regardless of the form of the claim. The person using the software bears all risk as to the quality and performance of the software.