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# Chapter 1

## ????

### 1.1 Preliminary

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ABackup 5.22

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### 1.2 Diffusion

Since v5.22, ABackup is now a freeware program. Without written authorization, any commercial usage or selling is absolutely forbidden. You can copy and spread this program under the following conditions:

1. All the files must be provided
2. No file can be modified, in any way
3. You can't ask for more than 5 USD for this

In spite of several tests, no warranty is made that there are no errors in ABackup. YOU USE THIS PROGRAM AT YOUR OWN RISK. In no event I shall be liable for any damage, direct or indirect, resulting of the use of ABackup.

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## 1.3 Introduction

ABackup is a program which allows you to backup data from your hard disk. It can be used on any Amiga model, providing you have Kickstart V37 or higher, and at least 1 Mb of memory.

ABackup has all the features you might expect from such a program:

- Both full and selective backup and restore operations (you can select the files by name, by date, by protection bits, but also one by one)
- Backup to floppy disks, to partitions (for example a SyQuest cartridge) or to an archive file. Optional data compression, data encryption, verification, and archive bit setting.
- Restore to any directory, with or without restoring the original directory tree, and handling of already existing files. Optional date and empty directories restore.
- Backup of non-AmigaDOS partitions (PC, Mac, UNIX, ...)
- Optional report file for all operations
- Full Intuition interface, AmigaGuide documentation.

However, ABackup is not just one more backup program. This program also provides unusual features, like:

- Support for removable disks (SyQuest, Zip, Jaz, etc...), which are handled like floppy disks.
- Transparent support of High Density floppy disks. Cyclic utilisation of several disks drives. Supports mixing of Double Density and High Density floppy disks. Transparent support of the "diskspare.device".
- Asynchronous writes for maximal backup speed
- Data compression can be performed by the "xpk.library" or an external program. Automatic exclusion of files already compressed.
- Allows full operation automatization : you can, for example, start a backup just with a double-click over an icon.
- Lots of controls, in order to avoid data loss due to handling errors.
- Supports of the "MultiUserFileSystem" : access rights and owner are automatically backed up. When restoring files to a partition which is managed by this filesystem, theses informations will be automatically restored.

## 1.4 Legal information

The "xpk.library" library is (C) by U. Dominik Mueller, Bryan Ford,

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Christian Schneider, and the others XPK authors.

The "diskspare.device" device is (C) by Klaus Deppisch.

The "MultiUserFileSystem" filesystem is (C) by Geert Uytterhoeven.

All other products, brands and softwares quoted, are trade marks of their respective owners.

## 1.5 Authors

ABackup has been written by :

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Version 5.00 of ABackup was written with Reza Elghazi.

## 1.6 Four ways to make it work

Depending on the Arguments specified when starting the program, ABackup may be used in four different modes :

### 1. Interactif avec interface Intuition

This is the default mode : the program shows a standard Intuition GUI, and you direct the operations with the mouse and/or the keyboard.

### 2. Automatique avec interface Intuition

This mode is useful when you often do the same operation : you can create an Project icon, with all the suitable parameters, and start this operation just by a double-click on the icon.

### 3. Interactif avec interface Shell

This mode allows to use ABackup as a file archiver, as if it was a program like "LhA" or "Tar".

### 4. Automatique avec interface Shell

This mode is very useful, for example, to make night-time backups to a disk partition or a streamer.

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## 1.7 Interactive with Intuition interface

Once ABackup has been loaded and setup, the Fenêtre principale is opened on the screen specified in the Preferences.

## 1.8 Automatic with Intuition interface

This mode is selected by a double-click on a "Project" icon, of which the "Default Tool" is ABackup, and whose "Tool Types" have at least the "MODE" and "FROM" specifications (see Arguments ).

Once ABackup has been loaded and setup, the program automatically loads the directory tree (or the archive catalog) and does the file selection. Then, the Fenêtre moniteur appears, and the specified operation begins.

## 1.9 Interactive with Shell interface

This mode is selected when you start ABackup from a Shell command line, specifying at least the operation to perform (BACKUP, RESTORE or VERIFY arguments) and the operation source (FROM argument). The program will not open any Intuition window (except for the requests) but will rather print messages into the Shell window.

Once ABackup has been loaded and setup, the program automatically loads the directory tree (or the archive catalog) and does the file selection. Then, the specified operation begins and messages, like those usually displayed on the Fenêtre moniteur , appear on the Shell window.

## 1.10 Automatic with Shell interface

This mode is selected like the Interactif avec interface Shell mode, but with the additionnal QUIET argument. In this case, ABackup doesn't make any request nor any display (except error messages), so it is suggested to ask for a full operation report.

Once ABackup has been loaded and setup, the program automatically loads the directory tree (or the archive catalog) and does the file selection. Then, the specified operation begins.

## 1.11 Arguments

The list of possible ABackup arguments is shown below. For each argument, the first line shows the Shell syntax, while the second one shows the Tool Types syntax.

FROM/K source  
FROM=source

---

Specifies the name of the source directory or volume (backup), or the source archive (restore/verify). In order to backup several volumes at the same time, specify the volume names separated by a comma (e.g. "SYS:,Work:").

TO/K destination

TO=destination

Specifies the name of the destination archive (backup), or the directory to restore to (restore).

B=BACKUP/S

MODE=BACKUP

Begins a backup operation, in automatic mode.

R=RESTORE/S

MODE=RESTORE

Begins a restore operation, in automatic mode.

V=VERIFY/S

MODE=VERIFY

Begins a verify operation, in automatic mode.

SE=SELECT/K ALL|ARC|file

SELECT=ALL|ARC|file

Specifies the name of the selection file to use (see Enregistrement des sélections). By default, in "Automatic with Shell interface" mode, all the files are selected.

The "ALL" keyword is an easy way to select all the files. The "ARC" keyword is an easy way to select all the files with the archive bit cleared.

RP=REPORT/K file

REPORT=file

Specifies the name of the report file.

IM=IMAGE/S

IMAGE

This toggle activates the "image" backup, which allows to backup non-AmigaDOS disk partitions.

PRF=PREFS/K file

PREFS=file

Specifies the name of the Preferences file to use.

CAT=CATALOG/K file

CATALOG=file

Specifies the name of the archive catalog file (restore/verify). Useful only if the "Use catalog file" option has been activated.

SFX=ECSUFFIX/K .suffix

ECSUFFIX=.suffix

Specifies the suffix added by the external compression program. For example, if you want to use the LZX program, you must specify the ".lzx" value for this argument.

QUIET/S

This toggle activates the Automatique avec interface Shell mode.

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**HELPPATH=directory**

Specifies the name of the online help directory. Default value is "HELP:language", where language is the preferred language, as specified in the system Preferences.

**PREFSPATH=directory**

Specifies the name of the Preferences program directory. Default value is "SYS:Prefs".

## 1.12 Main window

The main window allows selection of the operation to perform:

**Backup files and dirs**

To backup a directory, or one (or more) logical volume, by archiving all the files in this directory or this volume(s).

Once you will have selected the source directory or volume, ABackup will load the list of the corresponding files, and display the Fenêtre de sélection, to let you select the files to backup. An option in the backup Preferences allow to disable loading of files or directories which comment begins with the "SKIPME" keyword : this feature avoids wasting lots of time loading the contents of a large directory you never backup.

**Backup partitions**

To backup one or more physical volumes, by archiving every cylinder of this volume(s).

ABackup will display the Fenêtre de sélection, to let you select the partitions to backup.

CAUTION ! Restoring such partitions will be possible only if their characteristics have not changed : for exemple, the size and location of the partition must be the same as those backed up. Take note that ABackup can't format the target drive : if you need to restore a partition to a new disk drive, you must first low-level format it.

**Restore**

To restore data previously backed up.

ABackup will display the Fenêtre de sélection de l'archive, to let you select the archive to restore.

**Verify**

To verify an archive. This means at least integrity checking, but you can also ask to compare backed up data with original data. In this last case, ABackup will perform integrity checking even if a comparison is not possible (original file not found, etc...)

ABackup will display the Fenêtre de sélection de l'archive, to let you select the archive to verify.

**Rebuild catalog**

This function is useful when an archive file is damaged, or if you lose the last floppy disk of a backup set : it allow to rebuild the archive catalog, which is required to restore data. Take note that this function is not supposed to recover any error that may occur, and is not intended for inexperienced users.

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If the damaged archive is an archive file, you must first check that the first header block is at a block boundary, that is at a address multiple of 512 (you may use the "TYPE archive HEX" command for this, the first and the third long word of the header blocks are set to "#0000"). If the damaged archive is on floppy disks, you must give the disks in increasing order of disk numbers. This function works even if some disks are missing.

ABackup will display the Fenêtre de sélection de l'archive , to let you select the archive for which the catalog is to rebuild.

#### Preferences

To call the external configuration program

See also Fenêtre d'application .

## 1.13 Selection window

This window shows the list of files or partitions, so that you can select which ones are to backup, restore, or verify. It is made of an upper part, containing selection gadgets, and a lower part, in which is displayed the list of the files or partitions. You can scroll this list, using the scroller at the right of the window. You can print the currently displayed list, using the "Print current list" item in the "Project" menu.

When selecting files to backup, you can add a new volume or directory to the current list, using either the "Add directory" item in the "Project" menu or the Fenêtre d'application .

In order to have an estimation of the number of disks and of the time required for the backup, you can use the "Estimate" item in the "Project" menu.

The "Files:" and "Size:" fields respectively show the number of selected files or partitions, and the total size of the selected objects. The "Directory:" field shows the name of the directory containing the currently displayed files.

To go down in the directory tree, just click on a directory name : the contents of this directory will be displayed (except if this directory is empty). The "Root" and "Parent" gadgets allow to go up in the directory tree, respectively to the root directory and to the parent directory of the current directory.

If you click on a file, empty directory, or partition's name, you will toggle the state of this entry : if it was selected, it will be unselected, and if it was not selected, it will be selected. To toggle all the contents of a non-empty directory, you just have to hold down the SHIFT key, while clicking on the directory's name.

You can move the mouse without releasing the left button, in order to "drag-select" or "drag-unselected" the other files, directories, or partitions.

If you double-click on a file's name, ABackup will try to call a viewing program, depending on the file's type. A requester will allow you to confirm the viewing request and, if necessary, to modify the name of the program to call.

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If you double-click on a partition's name, ABackup will display some information about this partition (unit number, number of blocks per track, etc...).

The selection gadgets are:

#### Filter

Tells if the other selection gadgets will add ("Include") or remove ("Exclude") files or partitions from the selection list.

#### Recursive

If activated, any selection action will be recursively applied to any files or directories, contained in the sub-directories of the current directory.

#### All

Include or exclude all the files or partitions.

#### Reverse

Toggle all the selection : any selected file or partition is unselected, and any unselected file or partition become selected.

#### By name

Include or exclude all the files or partitions matching a name ("ram:foo" for example) or a pattern ("#?.info" for example). ABackup recognize the same patterns as AmigaDOS (refer to your AmigaDOS manual for more information).

A requester will allow you to enter the name or the pattern. Two gadgets allow you to find files or partitions that match ("Match") or that don't match ("No Match") the given name or pattern.

#### By date

Include or exclude files depending on their last modification date and/or time.

A requester will allow you to enter the date (in "DD-MM-YY" or "DD-MMM-YY" format) and/or the time ("HH:MM:SS" format). If you only specify a date, the time will be assumed to be "00:00:00". If you only specify a time, the date will be assumed to be today's date. Two gadgets allow you to find files modified before ("Before") or after ("After") the specified date.

#### By bits

Include or exclude files depending on their protection bits.

A requester will allow you to specify, for each protection bit, if you want it to be set ("+" character in the corresponding gadget), cleared ("- " character in the corresponding gadget), or if you don't want to test it (empty gadget).

At the bottom of the window, three gadgets allow (from left to right):

- to start the operation (backup, restore or verify). ABackup will display the Fenêtre moniteur .
- to call the external configuration program
- to go back to the Fenêtre principale .

Last, the "Selection" menu allow to record a selection, in order to recall

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it later. See `Enregistrement des sélections` for more information.

## 1.14 Monitor window

This window allows you to follow the process of the current operation (backup, restore, etc...). It is made of an upper part, with eleven information fields, and a lower part in which messages are displayed.

The information fields are:

Saved/Restored/Verified/Read

Number of files or partitions processed (left), number of bytes processed (right). The gauge at the right of the window shows the percentage of files or partitions processed on the total number of selected objects.

Left

Number of files or partitions not yet processed (left), number of bytes not yet processed (right). The gauge at the right of the window shows the percentage of files or partitions not yet processed on the total number of selected objects.

Disk

Number of the current floppy disk (left). Duration of the operation (right).

Compression

Compression ratio.

Destination/Source

Archive name. The gauge at the right of the window shows the current position on the target (write) or source (read) volume.

At the bottom of the window, the "Pause" gadget allows you to pause the operation. Click a second time on this gadget to resume. The "Abort" gadget allows you to definitively abort the operation (you will be asked for confirmation). The name of the optional report file is displayed between these two gadgets.

Once the operation finished, ABackup will ask you if you want to go back to the `Fenêtre principale`. If you answer "no", the program will go back to the `Fenêtre de sélection`.

## 1.15 Loading window

This window appears while ABackup is scanning the contents of a directory or a volume, or loading the catalog of an archive. It allows your to follow the processing and, if necessary, to abort it by clicking on the "Abort" gadget : ABackup will return to the `Fenêtre principale`.

Once the loading finished, ABackup will display the `Fenêtre de sélection`, so you can select the files or partitions to process. If you have asked for

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a "Verify" operation, note that a Preferences option allows you to skip the selection and to always verify all the archive.

## 1.16 Information window

This window appears when ABackup is about to load the catalog of an archive. It displays some information saved during the backup :

Source

Name of the source directory(ies) or volume(s).

Files

Number of files in the archive.

Bytes

Number of data bytes in the archive.

Date

Backup date.

Time

Backup time.

Compression

Compression method used for the backup.

Comment

Optionnal comment specified during the backup.

To continue the operation, click on the "Continue" gadget : ABackup will display the Fenêtre de chargement . To cancel and go back to the Fenêtre principale , click on the "Abort" gadget.

## 1.17 Archive selection window

This window is like the one used by the Preferences program. It is made of:

- a cyclic gadget that lets you select the archive type (device, file, tape)
- two lists that let you select the units to use, if the archive type is set to "Device". The list on the left shows all the connected units, the one on the right shows the units to use. To transfer a unit from one list to another, just click on it's name in the list.
- a string gadget, and a request calling button, that lets you select the name of the archive file, if the archive type is set to "File".
- a gadget that allows you to ask to load the archive catalog from a file, instead of loading it from the archive itself.

To validate the request, click on the "Ok" gadget : ABackup will then display the Fenêtre d'information , if you have asked for a restore or a

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verify operation. If you asked for a catalog rebuilding, ABackup will display the Fenêtre moniteur , and will start to read the archive. Once the archive will have been read entirely, ABackup will create an archive catalogue file. To use this catalog, activate the "Use catalog file" option.

## 1.18 Selection recording

ABackup has the capability of recording a file selection so that you can recall it later. This can be useful if you frequently use the same selections (for example all the files with the archive bit cleared) but also when using one the automatic mode: you can specify the name of a selection file as an Arguments .

The recording process records the selection actions themselves, and not the name of the selected files (assuming you don't select files or directories by clicking on their names in the list). This way, you can apply this selection to any source directory. Also, if new files are created, they will be automatically taken in account.

In order to record a selection, choose the "Record" item in the "Selection" menu, on the Fenêtre de sélection . Once you will have specified the name of the selection file, ABackup will record all your selection actions. Once you have finished, select the "Save" or "Abort" item in the "Selection" menu, depending on whether you want to keep this selection or to cancel the recording.

To recall a selection, select the "Load" item in the "Selection" menu. A file requester will be displayed, allowing you to specify the selection file you want use. Then the file will be loaded, and ABackup will execute the selection actions it contains.

Selections are recorded as text files, in a directory specified in the Preferences. Here is the description of the selection language used by ABackup, which will allow you to create or modify a selection file as you like, by means of your usual text editor.

```
CD :  
    Go back to the root directory  
  
CD /  
    Go back to the parent directory  
  
CD "dir"  
    Go down into the given sub-directory  
  
INVERT  
    Reverse the selection  
  
RECURS {YES|NO}  
    Set the recursivity flag  
  
INCLUDE ALL  
EXCLUDE ALL  
    Include/exclude all the files
```

---

```

INCLUDE "name"
EXCLUDE "name"
    Include/exclude the given file or directory

INCLUDE NAME "name or pattern" {MATCH|NOMATCH}
EXCLUDE NAME "name or pattern" {MATCH|NOMATCH}
    Include/exclude using the given name or pattern

INCLUDE DATE "date and/or time" {UPTO|SINCE}
EXCLUDE DATE "date and/or time" {UPTO|SINCE}
    Include/exclude using the given date and/or time

INCLUDE BITS mask value
EXCLUDE BITS mask value
    Include/exclude using protection bits
    (files for which "bits AND mask = value")

```

Here is an example of selection file:

```

RECURS YES
; back to the root !
CD :
; clears any previous selection
EXCLUDE ALL
; include all files with archive bit cleared
INCLUDE BITS "0x10 0x00"
; exclude all ".o" files
EXCLUDE NAME "#?.o" MATCH

```

Note that empty lines and lines starting by a ";" character are ignored. Also note that ABackup automatically stores the state of the recursivity indicator at the beginning of your selection record: if you take a look at the created files, you'll see that they all begin with a "RECURS" command.

If you want to be sure to clear a previous selection, it is recommended to start all your selections by clicking on the "Root" gadget and then excluding all the files of the selection.

## 1.19 Compatibility with the previous versions

ABackup has been entirely re-written for this version. Archives created by the previous versions of the program are supported as follow:

```

v1.00-v2.01  you must rebuild the archive catalog

v2.10-v2.43  directly supported

v3.00-v3.12  NOT SUPPORTED

v4.00-v4.09  directly supported

```

Archives crypted by a previous version are NOT supported, whatever version you used for the backup.

## 1.20 Application window

When you run ABackup on the Workbench screen, the program's window is automatically set as an "Application Window". If you run ABackup on a public or custom screen, an "Application Icon" is automatically opened on the Workbench screen.

This allows you to drop the following icons:

Preferences file icon

Accepted on the Fenêtre principale and the Fenêtre de sélection . The file will immediatly be loaded, and the new parameters taken in account.

Archive file or volume

Accepted only on the Fenêtre principale . The corresponding archive will immediatly be scanned for a restore operation.

Directory(ies) or AmigaDOS volume(s) icon(s)

Accepted on the Fenêtre principale , or the Fenêtre de sélection if the current operation is a backup. The list of the files contained in the corresponding directory(ies) or volume(s) will immediatly be loaded and added to the list of the files to backup.

Selection file icon

Accepted only on the Fenêtre de sélection . The file will immediatly be loaded, and the selection executed as if you had selected the file with the "Open" item of the "Selection" menu.

A double-click on the Application Icon will bring to the front the screen used by ABackup.

## 1.21 Removable disks support

ABackup supports removable/amovable disks, like SyQuest, Zip and Jaz systems. This means that it is possible to write on several disks, just like floppy disks, if the data to backup doesn't fit on a single one.

In order to use this function, you just have to select the corresponding partition as the destination partition, in the Backup preferences (for exemple, set the destination to SH0:, in order to use the first partition of your SyQuest drive). The name to select must correspond to the "physical" name of the partition, that is, the partition name you specified in HDToolsBox (not the name of the disk icon on the Workbench).

Of course, ABackup will only write to the specified partition. If your removable disk has three partitions named SH0:, SH1: and SH2:, and you ask to use SH1: as the destination partition, the two other partitions will be left unchanged. For security reasons, however, it is recommended to dedicate the full disk for your backup.

Before using them to backup your data, the disks must have been low-level formatted and partitionned. When using several disks, every backup disk \*MUST\* have a partition with the name specified as the destination partition. I mean that if you selected SH0: as the destination partition,



there must be a partition named SH0: on each disk you plan to use for your backup. However, this partition can have different size and location on each disk.

## 1.22 Thanks

Several persons have helped, directly or not, to achieve this project :

AmigaDream  
AmigaNews  
Andrew D. Appleby (also known as "-AD-" or "morse" :-)  
Daniel J. Andrea II  
Gaël Marziou  
Jean-Pierre Rivière  
Jérôme Chesnot (R.A.M.)  
Michel Castel  
Michel Schinz  
Philippe Brand (RAMSES SysOp)  
Stéphane Anquetil

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Alessandro Basso  
Francesco Mancuso  
Horst Schumann  
Kersten Emmrich  
Martin Steigerwald  
Stefan Salewski

and Etienne Schneider for the icons.

And also all the people who reported bugs or suggested enhancements, and those who send the shareware fee.

Denis would like to send personal greetings to Jean-Philippe Rapp (without whom ABackup may have never existed) and to Michel Schinz.

Reza would like to send personal greetings to Michael Berg and Jan van den Baard.

While finishing this program, we have a thought for Pierre Carrette, one of the author of BrowserII, who left us in May 1995.

## 1.23 Program history

v5.00, 15-Aug-95, 107332 bytes

v5.01, 30-Sep-95, 108388 bytes

- Catalog rebuilding was unusable for archives on floppy disks (terminated without creating the new catalogue)
- A few errors corrected in old archive format support (one of these errors made failed backup which where made just after).

- Using several units (DF0: and DF1: for example) now works (in v5.00, ABackup couldn't open the second unit, because it's name was overwritten)
- Added the "\_\_stackext" directive for all recursive functions, in order to avoid crashes by lack of stack space
- Added the ECSUFFIX argument, which let you specify the suffix added by the external compression program (so you may now use LZX)
- Do not change now the comment, the icon and the protection bits of archive files, when you do a restore or a verify operation
- The message suggesting to verify the backup, when a bad cylinder has been detected, only appears now at the end of the backup
- When using a custom screen, the window opened by ABackup was too large, so the screen's menu bar disappeared at the first WindowToFront() call
- No more problems when you quit the program, and visitors windows are left on ABackup custom screen (the screen is left opened)
- When you ask to rebuild the catalog, ABackup now first display the archive selection window (as for restore or verify), and do not ask any comment for the catalog.
- The "Preferences" gadget, on the Monitor window, is wider (the german text did not fit in)
- Do not verify now the name of the SCSI driver, in the Preferences program (this was a problem because, if the SCSI port number was not correct, the previous driver name was taken back)

v5.02, 28-Oct-95, 108180 bytes

- Didn't react to the "Abort" gadget while sorting directory trees (during the loading of the files to backup)
- When "No" was answered to the request asking if the current disk could be overwritten, the first bloc of the disk was destroyed anyway
- Removed two enforcer hits at program startup (occurred only when no catalog file was installed)
- Now sets the archive bit only on successfully backed up files (no more on any selected file)
- Couldn't find the on-line help with a Kickstart version lower than V40 (used the "language" variable, which is not defined before this version)
- The disk gauge now goes up to 100% in read more (restore/verify, it used to stop at 98%, although 100% was read)
- Speeded up the filename sorting function (should be about two times faster on directories containing several hundred of files)

v5.10, 23-Dec-95, 111996 bytes

- Enhanced MUFs support : you can't restore or verify files for which you don't have read access
  - Catalog rebuilding totally rewritten. For archives created by v5.10 or higher, the generated catalog will be good up to 64 sub-directory levels, and 256 sub-directories per level. Things will also be better (but not perfect) for previous archive formats.
  - About two times faster when reading archives (restore/verify operations)
  - Filename sorting algorithm changed (now takes less than two seconds to sort a 3000 files directory, instead of more than one hour)
  - Selected/processed/left sizes have now a decimal (i.e. 2.6 Mb instead of 2 Mb)
  - Input/output buffer for streamer access can be allocated in FAST memory now.
  - A few bugs fixed in old archive format support
  - Automatic splitting of large files will now be correct even if the temporary directory is not on RAM:
-

- Windows where too high on a Custom screen, so the screen's menu bar could disappear in some cases.
- Added missing "\_\_stackext" directive on two recursive functions

v5.11, 03-Feb-96, 112152 bytes

- No longer crashes when it have to switch to another disk drive to write the archive catalog
- The "Print current list" item used to send the output to the "Ram:Toto" file, instead of the printer

v5.12, 01-May-96, 112172 bytes

- If the last disk was not much used, the disk header was not written at the right location (overwrote the archive catalog instead of being written on the first cylinder)
- Did not check the length of the root name before copying it in the header blocks, so it overwrote other data area if longer than 32 characters.
- The "ARC" keyword after the "SELECT" argument had to be specified in uppercase in order to be recognized.
- Display problem when restoring/verifying a partition : the displayed size of the last cylinder was in fact the total size of the partition
- When you confirm the overwriting of an existing archive file, the DELETE and WRITE protection bits are set before opening the file
- On the selection window, links are flagged by the "Link" word instead of the file size (like "Drawer" for the directories)

v5.13, 09-Jul-96, 112436 bytes

- Fixed a few bugs when a unencrypted backup was made over a crypted archive
- The verified/to verify count was not always correct
- Now restores date and comment of not empty directories

v5.14, 18-Jan-97, 114780 bytes

- Compiled with SAS/C 6.57
- In the selection window, selection by name, by date and by bits was made from the root directory, instead of the current directory
- Fixed a (not frequent) bug when reading data spread on two consecutive disks
- Fixed several bugs in the "Automatic with Intuition interface" mode (didn't load the file list when called with a directory icon, didn't load the catalog when called with an archive file icon, etc...)
- In the "Automatic with Intuition interface", the SELECT argument is now required in order to directly start the operation (if omitted, ABackup will stop on the selection window)
- Added the "ALL" keyword on the SELECT argument
- Can now verify partitions if comparison is disabled even if the source partitions are not mounted

v5.20, 06-Feb-98, 120608 bytes

- Allow to use several removable disks (SyQuest, Zip, Jaz, etc...) for a backup.
- Added the "Ignore SKIPME" option in the backup Preferences.
- Bug fixed : when recording a selection, generated a "CD :" instead of a "CD /", and vice-versa.
- Bug fixed : the CATALOG argument was not recognized as a "Tool Types".
- Bug fixed : the REPORT and CATALOG arguments were taken in account only when using ABackup in one of the two "from Shell" modes.
- Bug fixed : if the default text font was too wide, didn't always switch

back to the "Topaz 8" font.

v5.21, 15-Mar-98, 120628 bytes

- Compiled with SAS/C 6.58
- If the archive catalog duplication fails, allow to retry to another file

v5.22, 21-Aug-99, 120188 bytes

- Now reminds about the report file selected by the file requester, and uses it for the next request
- Bug fixed: the CATALOG argument was not always handled in the right way
- Bug fixed: the REPORT argument was not always handled in the right way
- Is now distributed as a freeware program, no more 68060 special version

## 1.24 Frequently Asked Questions

Q:I've tried to use LZX, with external compression, but it doesn't work. All the files are "Stored", and lots of ".lzx" files are left in the temporary directory.

A:If the external compression program adds a suffix to filenames (LZX adds ".lzx"), you must use the ECSUFFIX argument to tell ABackup which suffix is added.

Q:At the end of a backup, I had a requester "CAUTION ! Some cylinders on the target drive were defectives !". I thought ABackup could handle this kind of problem, so I would not have to restart the backup again.

R:This kind of error is handled by ABackup, which simply marks the bad cylinders as "unusable", and try to write on the next cylinder. This message is only here to suggest you to perform a verify operation, to make sure the backup is correct (some write errors might have not been detected).