



SECURITY UTILITIES FOR APRICOTS WITH WINCHESTER DISKS

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Introduction

There are two advantages in storing computer software on an internal Winchester rather than on a floppy disk. It's faster because your programs are loaded into the computer's memory more quickly. And there's much more storage capacity — a 10 Megabyte Winchester can store as much information as 14 double-sided microfloppy disks.

Of course, with so much valuable software stored on one device, it's important to make regular security copies of your files.

You can make security copies of single files from your Winchester on to floppy disks with the *FILES* icon in *ACTIVITY*. This is described in your *STARTER PACK*. However, a directory or group of files on your Winchester will often be larger than a single floppy disk. To secure these you'll need the two Winchester security utilities - *Backup* and *Restore*. *Backup*, for example, can make a security copy of your entire Winchester onto a series of microfloppy disks.

Backup stores files in a special form. If you *Backup* a report you cannot directly wordprocess the security copy of your text. This is where *Restore* comes in; it restores the files you save with *Backup*, so that they can be processed in the normal way.

Use *Backup* to make a security copy of all, or selected parts of your Winchester disk. You can copy files from the current directory, any named directory, or any directory and its subdirectories. In fact, by adding *switches* to your commands, you can control the files you *Backup* and *Restore* even further. For example, to save time, add the */M* switch to the command. Then you only *Backup* modified files - files which have been edited or created since your last *Backup*.

The first thing to do is to make a security copy on a microfloppy disk of *Backup*, *Restore* and the MS-DOS operating system.

How to secure Backup, Restore and MS-DOS

Select the *DISK* icon of *ACTIVITY* and then the *FORMAT* disk icon to format a microfloppy disk.

Select the *DISK* icon of *ACTIVITY* and then the *COPY DOS* icon to make a security copy of the MS-DOS operating system.

Select the *FILES* icon of *ACTIVITY* to make a security copy of *Backup* and *Restore* - the files are named *BACKUP.EXE* and *RESTORE.EXE*.

Backup

Here is the format of *Backup*:

BACKUP filespec floppy drive [/switch] ...

It's the *filespec* which tells the computer which files to *Backup* from your Winchester. The *floppy drive* name — drive **B:** — tells it where to store those files.

You can add one or more *switches* to the basic command to modify its effect.

Filespec

A *filespec* consists of a *pathname* followed by an optional *filename*.

A *pathname* is a *drive name*, followed by sequence of *directory* names each separated from one another by a backslash (\).

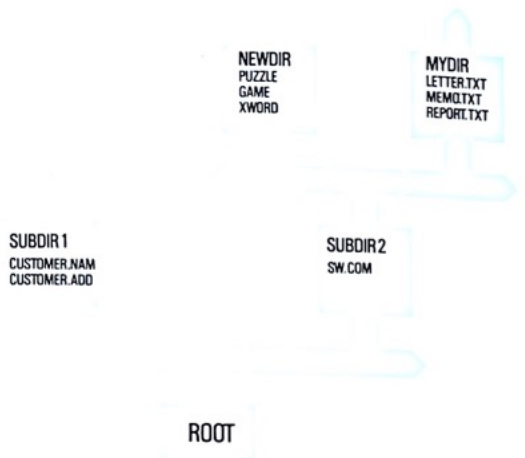
The syntax of a *filespec* is:

drive:\directory\directory...\[filename]

If a *pathname* begins with a backslash, *Backup* searches for files beginning at the *root directory*; otherwise it begins at your *current directory*.

The *filename* is optional. Without a filename your file specification points to all the files in a directory. If you want to *Backup* a single file you must to add a filename. To select a group of files within a directory you can include a *wildcard* in your filename.

BACKUP drive: pathname filename drive:



For example, to Backup all the files on your Winchester:

BACKUP A:\ B:

To Backup all the files in MYDIR, and its subdirectories, the command is:

BACKUP A:\SUBDIR2\MYDIR\ B:

Remember to press the **RETURN** key after typing the command.

Notice, if you don't include a *filename* in your *filespec* there must be a backslash (\) after the last directory name. You must also put a space between the filespec and the floppy drive name.

After you enter a command, Backup prompts you to load a formatted disk in to the floppy drive so that the security copy can be made. Format your disks with the *DISK* icon in *ACTIVITY*. When it fills up a disk, Backup prompts you to insert a new one. Label each disk and make a note of what it contains; you should also record the disk numbers in sequence.

Backup displays the names of the files which it copies. To print a record of these Backup files first switch on and connect your printer. Then, hold down the **CONTROL** key and, at the same time, press P before you type in the **BACKUP** command. Everything which is printed on your screen will be copied by the printer. When you finish press **CONTROL** and P again to disconnect the printer from your screen output.

*The * wild card*

You can make more flexible filenames with a *wild card*. The asterisk (*) indicates that any number of characters (or no characters) can occupy that position in a filename. So entering:

BACKUP A:*.TXT B:

would make a security copy all the files on your Winchester with a **.TXT** extension on their filenames.

Switches

You can add a *switch*, or combination of *switches*, to modify the way the *Backup* and *Restore* commands work. You must put a space between each switch that you add to a command.

If you add the switch **/R** Backup only saves the files in the specified directory. The *default* of *Backup* - when you don't add the **/R** switch to the command - saves not only the files in the specified directory, but also the files in any of its subdirectories.

BACKUP A:\SUBDIR1\ B: /R

copies only the files in directory of SUBDIR1 on to the disk in drive B: From the diagram, you can see that there are two files - **CUSTOMER.NAM** and **CUSTOMER.ADD** - in SUBDIR1.

Backup with the **/M** switch only saves files that have been modified - updated or created - since your last Backup. You can avoid recopying files that never change with the **/M** switch.

BACKUP A:\SUBDIR2\MYDIR\ B: /M

copies all the files in MYDIR, and its subdirectories, which have been modified since your last Backup.

Normally, before it saves new files, Backup deletes all the files on the floppy disk in the B: drive (It warns you before it does this). With the **/A** switch Backup adds new files to any existing Backup files on the floppy disk.

You can use more than one switch at a time. Separate each switch with a space.

```
BACKUP A:\ B: /M /A
```

This command copies all the files which have been modified on your Winchester since your last Backup. It also adds these files to any existing Backup files on drive B:

Restore

You must *Restore* security copies of files made with *Backup* before you can process them again.

Here is the format of Restore:

```
RESTORE floppy drive filespec [/switch] ...
```

The floppy drive - drive **B:** - holds the Backup files. You can Restore all, or a selection of your Backup files, on to the Winchester. Again, as with Backup, it's the *filespec* and the *switches* you add to the command which control your selection of files.

Here are some examples of Restore which refer to the directory and filenames of the diagram.

```
RESTORE B: A:\
```

This Restores all your directories and files from the Backup security copies made previously with the command BACKUP A:\ B:

You can prevent empty directories being copied onto the Winchester with the /E switch:

```
RESTORE B: A:\ /E
```

Again, there must be a space between the *floppy drive* name, the *filespec* and the *switch*.

You do not have to Restore files to their original directories. For example, to Restore SUBDIR2 to a new subdirectory called SUBNEW you need to *override* the old pathname for SUBDIR2 with a new pathname, using the /O switch.

```
RESTORE B: A:\SUBDIR2\ /O\SUBDIR2\=\SUBNEW\
```

Because SUBNEW doesn't exist Restore creates the new directory. All the files in SUBDIR2, and its subdirectories, are then Restored to the new subdirectory - SUBNEW. All files and subdirectories of SUBDIR2 retain their old names.

If you are not sure what effect a particular Restore command has you can add the /N switch. This simply gives you the list of files which normally be restored to the Winchester. It does not actually carry the command out:

```
RESTORE B: A:\SUBDIR2\MYDIR\ /N
```

Backup Quick reference

Here is the format of Backup:

BACKUP filespec floppy drive [/switch] ...

filespec = drive\directory\directory...\[filename]

floppy drive = B:

/switch You can add one or more switches at the end of the command to modify Backup.

Default: this describes what happens when you don't use a particular switch.

/A Add files to the existing Backup files on a floppy disk.

Default: Backup deletes all existing files on the floppy disk before it stores any new ones.

/D Only Backup files which have been created, or edited, on or after the given date e.g.

BACKUP A:\ B: /D:18-01-85

This would Backup every file on the Winchester which had been edited, or created, on or after the 18 January 1985.

Default: Backup disregarding the date.

/F Display full file details e.g. file size, date and time etc.

Default: Display only the file names.

/M Backup only files which have been modified since the last Backup.

Default: Backup all the selected files.

/N No Backup displays a list of all the filenames which Backup would normally store on drive B: You can test the effect of commands with this switch without actually carrying them out.

Default: Backup all the selected files.

/R Backup only the files in the specified directory.

Default: Backup the files in the specified directory specified and in all its subdirectories.

/V Verify that the Backup files stored on the floppy disk match the original source files.

Default: No Verify.

Restore Quick reference

The format of Restore:

RESTORE floppy drive filespec [/switch] ...

floppy drive = B:

filespec = drive\directory\directory...\[filename]

/switch You can add one or more switches to modify the Restore command.

Default: this describes what happens when you don't use a particular switch.

/D:dd-mm-yy Only Restore files which have been created, or edited, on or after the given date e.g.

RESTORE B: A: /D:18-01-85

This would Restore only files saved with Backup on or after the 18 January 1985.

Default: Restore disregarding the date.

/E Do not Restore empty directories.

Default: Restore the specified directory and all its subdirectories, including empty directories.

/F Displays full details of the files Restored to the Winchester e.g. file size, date and time etc

Default: Display only the file names of Restored files.

/N No Restore of selected files. You can check the effect of a command without actually carry it out with this switch. It displays a list of all the filenames which the command would normally Restore on to the Winchester.

Default: Restore all the selected files.

/O If you Override the previous pathname of your Backup files you do not have to Restore them to their original directories on the Winchester. The full format of this switch is:

/O\old pathname\=\new pathname\

The *old pathname* must match all, or part, of the original pathname of your Backup files, starting from the root directory.

For example, with an original pathname

\SUBDIR2\MYDIR\DOCDIR\

the valid *old pathnames* which you can Override are

\SUBDIR2\

\SUBDIR2\MYDIR\

\SUBDIR2\MYDIR\DOCDIR\

Restore creates your *new pathname* if it does not already exist on the Winchester.

Default: Restore the selected files to their original directories on the Winchester.

/P Prompt when a Winchester file has been changed since the Backup file was made. You can choose to overwrite or leave the Winchester file.

Default: Restore all selected files.

/R Restore only the files in the specified directory.

Default: Restore the files in the directory specified and all its subdirectories.

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