

## Apple File Exchange Intro

### Quick Summary

Apple File Exchange is a free utility program, included with your system software, that allows the Mac user to move the **contents** from a DOS or Apple II (ProDos) disk to the Mac desktop (or to other folder locations within the Mac.) It is used with Apple's SuperDrive floppy drive. That's the floppy drive that can read high-density 1.4 Meg floppy disks as well as 800K disks (SE30 and later models of the Mac.) The Apple File Exchange interface (the "look" of the application's windows and menus) has a large window containing two window panels for the "from" and "to" locations. It's somewhat slow due to the number of steps needed to translate files from DOS to Mac but it's free and it does the job.

There are commercial applications to mount a DOS floppy itself on the desktop giving it an icon which allows direct access to the files. If you work with DOS-to-Mac regularly consider these programs for the speed gains. (Apple's *PC Exchange*, Dayna's *DOS Mounter* and Insignia's *Access PC*.)

In this document I'll explain how to use Apple File Exchange to format a DOS disk, read a DOS disk and transfer its files for use on the Mac in a compatible application. I'll give a quick tour for surviving on a DOS machine and I'll use Pascal and WordPerfect files as examples of translating from Mac to DOS.

### Tips on working with two ,or more, applications in System 7

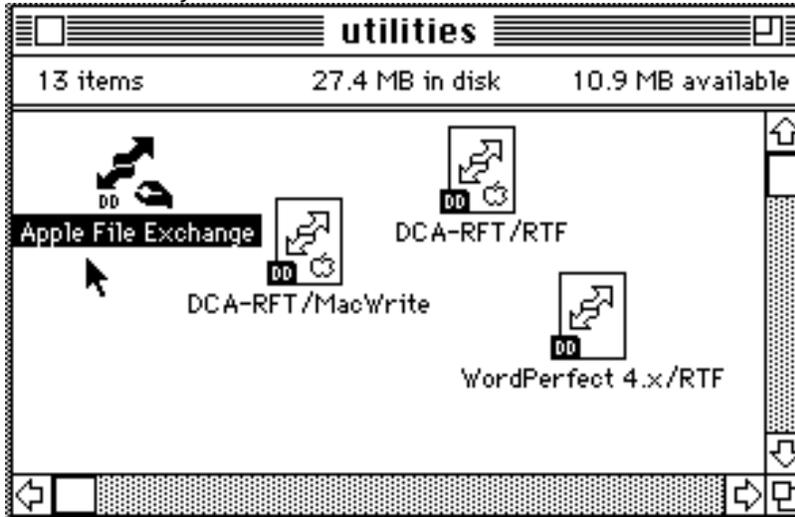
The Mac desktop, also called the **Finder**, is shown as active by a little Mac icon in the top right of the menu bar in System 7. As you read this document the icon showing in this **application menu** will be your word processing application. Pointing to this application icon with the mouse as you press and hold the button will cause a menu of open applications to drop down . There should be at least two—this application and the **Finder** or **At Ease**, a Finder substitute sold with the **Performa** line of Apple computers. There may also be other applications open. If you see an application you know you are not using drag the mouse cursor down until it is highlighted and release the button. This puts you in that application with no documents open. Choose **Quit** from the **File** menu. This will quit the application and return you to this document and application. This will help avoid the "Not enough memory" messages. (Note: there may be a screen saver, like **DarkSide**, running in the background. Leave this one running.)

I mention this because System 7 allows you to have several applications open at the same time allowing you to switch between/among them. You may want to have this document available as you work with **Apple File Exchange**. You can choose **Hide <<name of application>>**, if working from the **Finder**. It will show **At Ease** if you launched the application from At Ease. You'll need to open At Ease. You can then find and open Apple File Exchange and both will be running. You can use this application menu to switch back and forth.

## Using Apple File Exchange

### Finding the application

I have Apple File Exchange in a “utilities” folder. Yours may be located elsewhere, including the System Folder or its own folder. It can be found in System 7 by choosing **Find...** in the **File** menu from the Mac desktop and typing in the word **exchange** before clicking the **Find** button. You can also access the **Find...** dialog box by pressing the key sequence Command-F. (The Command key has an open apple icon and a quadrille or “cloverleaf” symbol. It’s next to the spacebar.) If something other than the application comes up—this document, for example—choose **Find Again** from the **File** menu or press Command-G. Continue pressing Command-G, or choosing **Find Again** in the **File** menu, until the application appears or a beep sounds indicating no more items. If it isn’t found it needs to be installed on your hard drive.



Utilities folder showing Apple File Exchange and translators.

(Note: the DD on these files is for Disk Doubler, a compression utility to gain space on the hard drive. Auto Doubler uses it to compress and decompress automatically.)

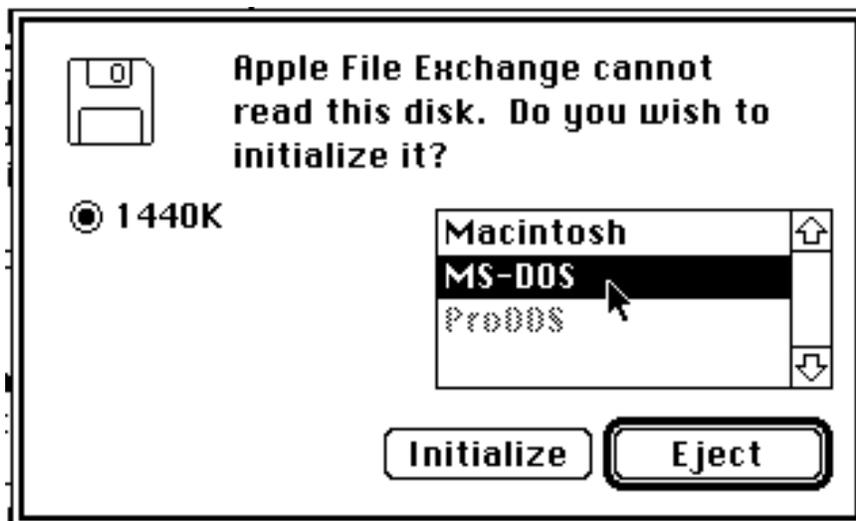
If you insert a DOS disk or a new, blank disk into the Mac the following Alert box will appear:



Non-Mac disk Alert box.

If you want to use this disk as a Mac disk choose **Initialize**. This will set up a Macintosh file directory. If you know it contains DOS files or want to use it on a DOS machine choose **Eject**. (Another option is that it is a Mac disk with problems. Eject it and use recovery utilities or see a friend with utilities to regain your data before copying the files to a newly formatted disk.)

If it is a DOS disk or you want to format it for use in a PC launch Apple File Exchange and **then** insert the disk. If it is blank (or is a Mac disk with problems—see above) you will be greeted with the following screen:



Blank disk Alert box.

Notice that you have the option of formatting it as a DOS disk. I have selected that choice above. I would then select the **Initialize** button to format it.

=====

### A Quick Intro to DOS

#### DOS Naming conventions

DOS allows 11 characters for the name of a disk (its *label*.) A space is a legal character in a label. The names of directories (comparable to folders on the Mac) and files can only have eight or fewer characters and **NO** spaces. Files can also have a period followed by a three character **extension**. Names are shown in all capital letters on a PC. Ex. PJC DISK (a disk label), MC3FILES (a directory), CIRCLES.PAS (a Pascal file.) I can add numerals after that last name to denote different versions of a current working file. Note that adding the numeral makes the name eight characters. You will need to get creative with your abbreviations. You can enter the name in lower case letters. DOS will change it.

#### A VERY Basic DOS Primer

Since DOS seems to be everywhere you'll probably have to deal with it at some point. This is especially true if you are studying programming with Pascal. (Although there is a more modest educational version of THINK Pascal from Symantec called Macintosh Pascal.) It is also true of electronic bulletin boards (BBSs) accessible with a modem that knowledge of DOS is helpful. A book recommended to me for survival in DOS is **DOS For Dummies** by Dan Gookin (IDG Books.) I highly recommend it as very readable.

If *Windows* is running follow the instruction windows, if any, and double-click on something you want to open. If a window shrinks to postage stamp size double-click to resize it. In Windows Turbo Pascal has an icon similar to the Mac. Close and Zoom boxes on the Mac are replaced by minus signs and arrows, respectively. There is no equivalent to the Apple or application menus and most things aren't as familiar or intuitive as the Mac.

If you start in DOS (nearly blank screen and typed commands) you will see the C-prompt (C> or C:\>) . This is the "root directory" similar to your Mac's main hard drive window. To change drives (i.e. read your disk in the floppy drive A) type the drive letter and a colon after the current drive prompt (**C>a:**). You're drive may also be designated the "b:" drive if there is a 5-1/4" floppy drive as the A drive on the machine. The hard drive is usually divided between "c:" and "d:" (Changing back to the hard drive from the A drive is **A:\>c:** ) You can tell if you are in a subdirectory if the C-prompt (or A-prompt) is followed by "back-slashes" and names (see next paragraph.)

You can list the files in a directory with the command "dir" This gives size, date and other characteristics of the files. Listing file name and extensions only is done with the command "dir/w" The "/w" is a "switch" to show the names in wide format. A directory name will have brackets around it. Ex: [MC3FILES] Typing **cd mc3files** at the prompt followed by a <Return> will put you in

that directory (**A:\MC3FILES**>). Typing a file name and <Return> might launch the appropriate application and open the file if it is in that directory. It does in WordPerfect ( Ex: C:\WP\WP51>CVRLTR.WP) and Turbo Pascal.

The extensions added to file names usually tell their function or creator.

Ex:     LETTER.WP (WordPerfect file)  
          LETTER.BK (WordPerfect backs up automatically. This is that file.)  
          CIRCLES2.PAS (Turbo Pascal file)  
          EMPINFO.TXT (ASCII text file)  
          XXXX.COM (System command file)  
          WP.EXE (program execution file. This one will start WordPerfect.)  
          CONFIG.SYS (system configuration file.)  
          AUTOEXEC.BAT (a series of command files run as a batch on startup.)

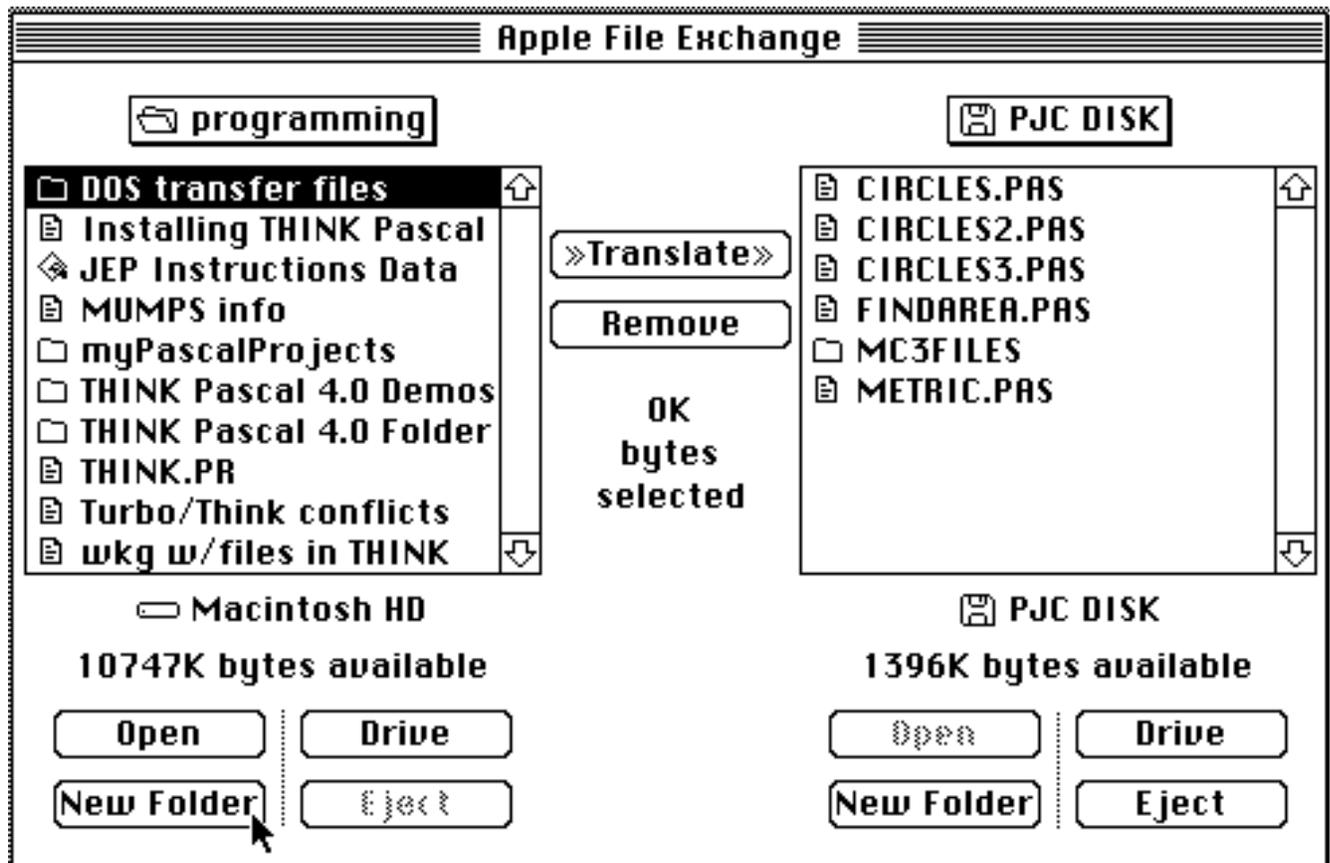
If you are lost deep in subdirectories you can jump to the top by typing **cd\** (back-slash) to get to the root directory (top level.) Now, aren't you glad you have a Mac?

=====

## Working in the Apple File Exchange Windows

### Moving Files

Now that you have a formatted and named DOS disk created in AFE, or have inserted a DOS disk after launching the program, it will appear in AFE's main window which is shown on the right below:



Main AFE window with source drive and destination drive windows.

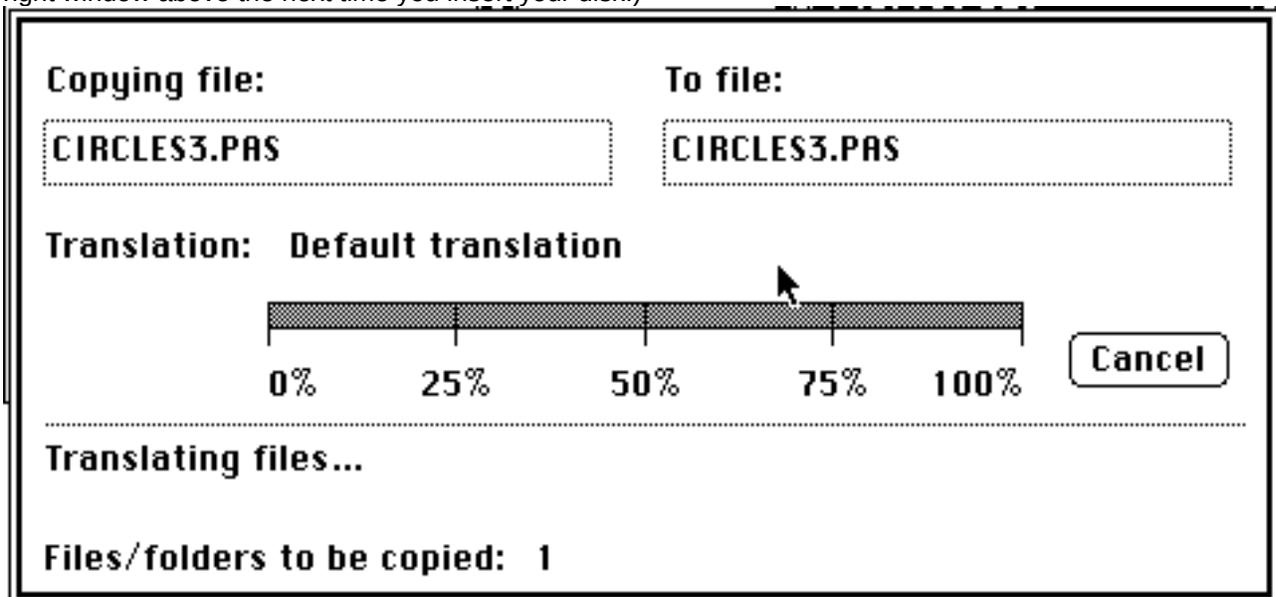
To move up a level in the windows above you would point to the window label (Ex: *programming* above the left panel) with the mouse as you press and hold the button. This will cause a menu of higher level folders to drop down. Drag to the folder you want and release the mouse button to move to that level. You can try something similar now by choosing **Save As...** under the **File** menu and holding the mouse button down on the label above the window panel. Choose the **Cancel** button to dismiss the window. (See the next to last illustration in this document for the *Save As...* window.)

In the window above *PJC DISK* is my DOS formatted floppy disk with Pascal files and a subdirectory *MC3FILES* (shown as a folder). *Programming* is a folder on my hard drive *Macintosh HD*. I have created a new folder called *DOS transfer files* for incoming and outgoing files (see **New Folder** button.)



In DOS if you haven't saved files to a particular directory you need to copy them from the current directory to the desired directory using the proper command and path i.e **copy <name of file>** (in current dir.)(to)**new directory**(new name-optional)>> (Ex: **A:\>copy circles.pas \mc3files**) Note: that is a space after the command **copy** as well as after filename (before the backslash.) Then you can delete them from the previous directory. Similar rules apply in AFE but the files need to be moved twice. I moved the above Pascal files to the transfer folder on my hard drive by selecting that folder as shown above and clicking on the **Open** button below the window. I then moved the files from floppy window after highlighting them by shift-selecting (select one, press Shift and select others) and using the **Translate** button. I then deleted the files showing at the same level as the MC3FILES directory on the floppy using the **Remove** button and answering Yes to the Alert window that followed. Don't select the directory to translate or delete (Ex: MC3FILES.)

I then selected and opened the MC3FILES folder and moved the files residing in the hard drive transfer folder to that window with **Translate**. (These actions would leave only MC3FILES in the right window above the next time you insert your disk.)



*AFE translation progress window.*

### **Opening And Working With Translated DOS files**

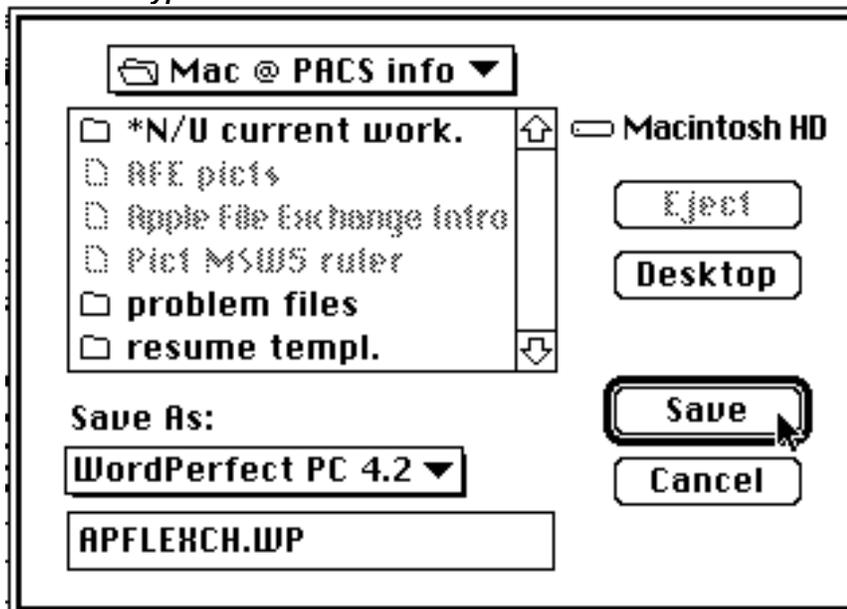
I can use the translated DOS files by opening a compatible application, THINK Pascal, and opening a file from the *DOS transfer files* folder. In THINK Pascal the steps would be: 1)Launch THINK Pascal which shows a standard Open dialog box, 2) Choose the check box **Instant Project**,

name the new project and press the **Create** button, 3)choose **Add File...** from the **Project** menu selecting the transferred file and 4)select the project files window (ends in .1) and highlight the name of the template window (ends in .p and has "enter your declarations here," etc.) and select **Remove** in the **Project** menu. The project is now ready to Check Syntax, Compile, Run, etc.

### Going From Mac to DOS

As a matter of course, before I close a project or quit the program, I generally choose **Remove Objects** (the object code created by the compiler. In DOS it's the separate (filename).EXE file.) This command is located in the **Project** menu . This results in smaller files (source code only) on my hard disk. After quitting I return to my programming folder where I have the items listed By Name (set in **View** menu in **Finder**.) If I hold the Option key and drag the source code file (ends in .p) to the *DOS transfer files* folder it will add a copy of that file to the folder without the word "copy" after the name which is what you get from **Duplicate** in the **File** menu. After checking for the 8-character DOS name limitation I can open AFE and insert my DOS disk and open the MC3FILES folder and translate it. I can then quit AFE and head to class.

### What About Other File Types?



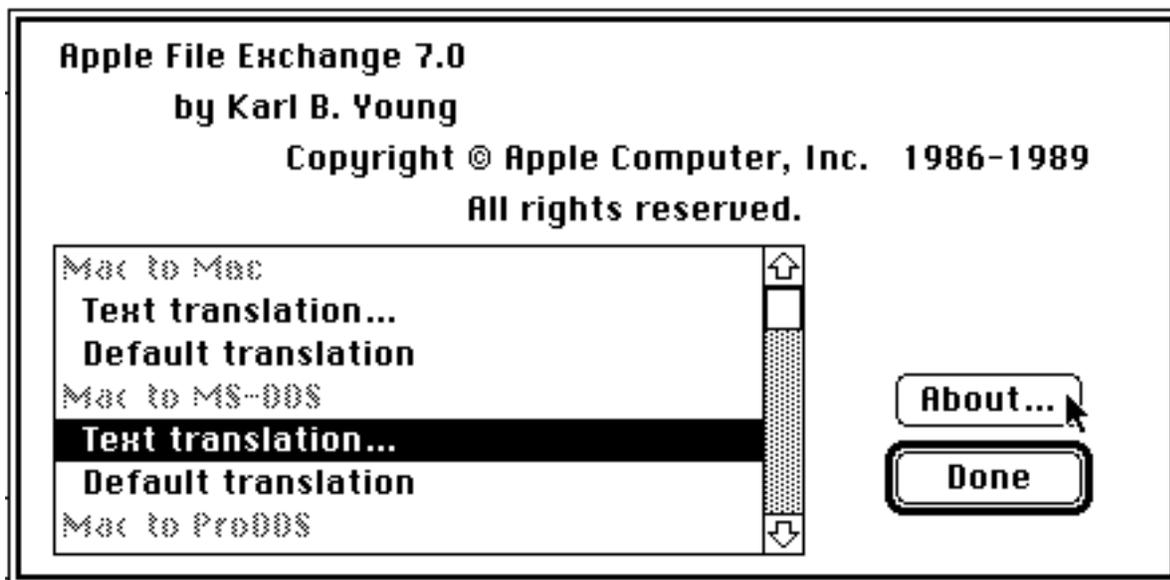
Using Save As to change a word processing file to a DOS compatible format.

If you are moving a word processing file, for example, you need to use **Save As...** in the **File** menu in that application and select a compatible PC format in the drop down menu under the listing window. As an example I have saved this file in **WordPerfect PC 4.2** format. I abbreviated the name to DOS convention and I'm ready to move it with Apple File Exchange.

The same is true of a Microsoft Excel Mac file. You can save it in WK1 format which Lotus 1-2-3 can open.

### Conclusion

I hope you have found this information useful. There are other features of Apple File Exchange that you can read about by choosing **About Apple File Exchange** in the Apple menu (top left of your screen.) You can then highlight a list topic you want to explore and select the **About** button on the right to learn more. I have used the default translations each time I have used it. These retain format settings. The other option is usually a plain text translation.



*About Apple File Exchange window.*

Created in ClarisWorks from System 7 screenshots (Command-Shift-3) cut and pasted with selection rectangle from TeachText 7.0 which opens "Picture 1" screenshot.

Paul Corr 3/15/93  
[AOL: PaulC98; Internet: corr@hal.hahnemann.edu]