TransMac™ for Windows
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TransMac is a Windows utility for accessing Macintosh HFS formatted media. This includes high density diskettes, CD-ROMS, Syquests, Opticals, Harddrives and most other SCSI drives. It is designed to be fast and easy to use. Click on a topic below to find more information.

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Using TransMac

System Requirements

ı 386 or higher PC
ı Windows 3.1 or higher

Optionally

ı 3.5 inch HD diskette drive (for accessing Mac diskettes)
ı CD-ROM Drive (for accessing Mac CD's)
ı SCSI card (for accessing Mac SCSI drives)

Program Operation

TransMac can be in one of two modes. PC mode is entered when the PC listbox is clicked. In PC mode all buttons operate on PC files or directories. Mac mode is entered when the Mac listbox is clicked. In Mac mode all buttons operate on Mac files or folders.

Getting Around: Double clicking a directory entry in a listbox will move into the directory. Double clicking the path below a listbox will move out of the current directory.

Copying: Select the files you want to copy from the Mac or PC listbox and press the "Copy From PC" or "Copy From Mac" button. A window will pop up allowing you to select a file translation and other information to be used for the current copy operation. A box is displayed showing the progress of the copy.

Formatting: First select the drive you want to format in the Mac listbox. Select "Format Disk" from the "Utilities" menu. A box is displayed showing the progress of the format.

Deleting: Files and Folders/Directories can be deleted. Select them from the listbox and press the "Delete From PC" or "Delete From Mac" button. Folders/Directories must be empty if they are to be deleted.

Creating Folders/Directories: To create a Folder/Directory. Press the "New PC Directory" or "New Mac Folder" button and enter a name for it.

Mac and PC Files

File Systems

A file system is a way of organizing large numbers of files on some sort of recording medium (most commonly a disk drive). The idea is to store the files on the disk so that they can be accessed randomly and with minimal time delay. Needless to say, Macintosh's and DOS PC's do this in different ways.

Early versions of the Macintosh used what was called the Macintosh File System or MFS.   MFS was most common on early low density 400K/800K diskettes. Although simple to implement, MFS was inefficient on larger volumes and was soon abandoned in favor of the Hierarchical File System or HFS for short. HFS has a tree like structure which helps manage large numbers of files using folders. Each folder can contain both files and other folders which appear graphically on the Mac as icons. This tree like structure can make a very large number of files easy to handle.

DOS is an operating system which has it's own file system. It came with the original IBM PC and has evolved somewhat since then. DOS is also the underlying file system that Windows 3.x uses. From the users point of view the DOS file structure appears very similar to HFS. It also has a tree like structure, but folders are referred to as directories. There are several differences in the way Mac's and DOS PC's deal with files. In Dos, a file appears as a sequence of bytes which can store any type of information. On the Mac there are two separate parts to a file called forks. The resource fork contains resources used by an application (menus, fonts, etc.). The data fork can contain any type of data which used by the application.

File Names

Another difference between Mac and PC files are how they are named. DOS files (and directories) can have an eight character base name and optional three character extension after a period. This adds up to a maximum of twelve characters which are stored as upper case only. Mac files (and folders) can have a maximum of thirty one characters. The characters can be upper or lower case even though internally case is not differentiated. This means that most DOS file names can be used on the Mac without change, but the reverse is not true. Mac file names which will not work as PC names must be abbreviated. There are some punctuation characters which can't be used in filenames. See your system documentation for more information.

Path separators also differ between the two machines. The PC uses a backslash (as in \WINDOWS\SYSTEM) while the Mac uses a colon (as in :Macintosh HD:Shuttle). Users of Macintosh and Windows do not need

use paths to get around, but DOS users are very familiar with the backslash.

File Types

It is useful to be able to determine what sort of data is in a file. If an application can determine a file's type, it can filter out unsupported types or decide how to read the file.

On the PC this information usually exists in the file name extension. For example in the name FILE.TXT, the TXT indicates that this is a text file.

Mac files sometimes use extensions, but they also have a four character type field in their file system record. This field may have the letters TEXT to indicate a text file. This field is not directly viewable by the user, but applications can use it to determine the file's type. Mac files have another four character field called the creator. This field contains an indicator of which application created the file. With this information the Macintosh operating system can launch an application by clicking on a data file's icon instead of clicking on the application's icon.

Translations

Only certain types of files are useable on both Mac and PC. Some files are the same on both machines and some may require alterations. Others are of no use at all (such as executable files).

Platform independent graphics formats (like TIFF, GIF, or JPG) are basically the same on both the Mac and the PC. These files can be transferred using "Data Fork" translation. Most file transfers will use this translation.

Straight ASCII text files can be exchanged using text translation. Text translation changes the file slightly by converting the line ending characters to what is appropriate for each machine. Mac's use a carriage return and the PC uses a carriage return followed by a line feed. This translation is not appropriate for non-text files or text files with non-ASCII formatting codes.

Since you can't run Mac applications on the PC and vice versa, executable files are not translatable. Many major applications have a version for each platform which may or may not use the same data file format.

MacBinary and BinHex translations are Macintosh specific formats. These files retain the information required to recreate a Mac file from a stream of data. (Remember from above that Mac files have two forks which have no direct representation on a PC.)   They are mostly used for sending Mac files over telecommunication lines. They also allow a complete Mac file to exist on a PC or UNIX machine. HQX is often used on Internet sites. MacBinary is more common on BBS sites.
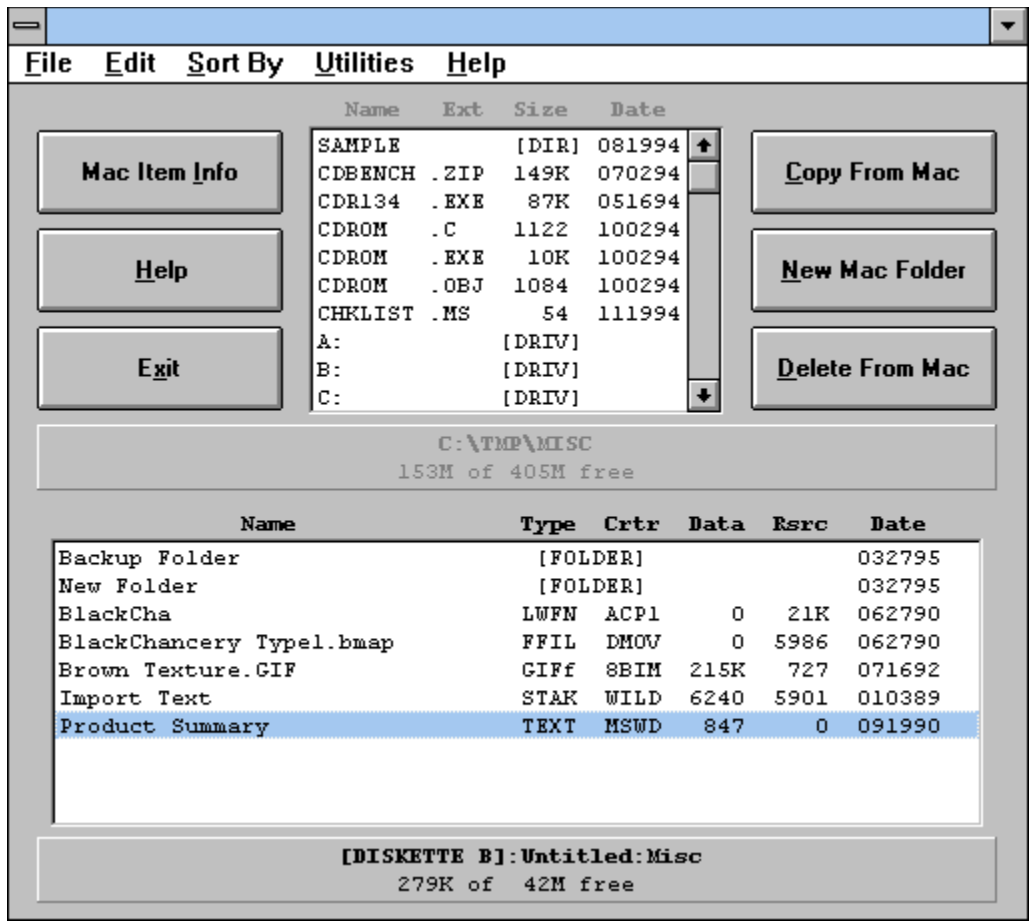
These disks are not software compatible with the PC. For this reason TransMac can not read low density Mac diskettes.

Troubleshooting

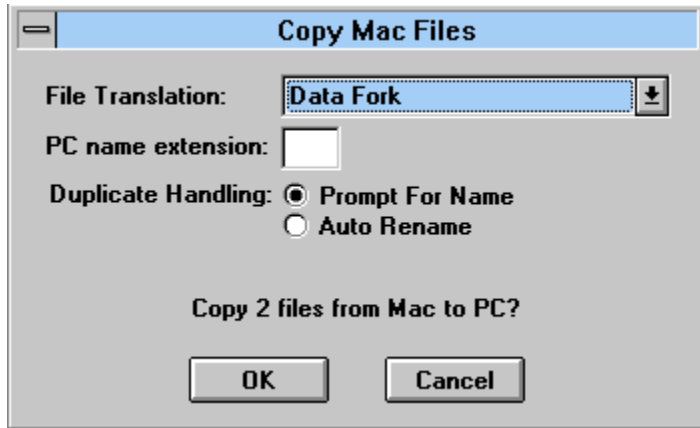| Problem	Possible Cause
▯ Message "Not enough real mode memory" appears when trying to run TransMac.	▯ TransMac requires at least 4096 bytes of free real mode memory below 1 Meg. Try closing other applications.
▯ Drive does not appear in Mac listbox	▯ Drive not connected properly. ▯ PC SCSI card not supported.
▯ Dialog box displays "No Mac HFS volumes found"	▯ Trying to read a low density 400k/800k diskette. ▯ Trying to read a non Mac HFS format disk (DOS, UNIX, Unformatted, etc.).
▯ Error message appears when writing to a disk.	▯ Disk is write protected. ▯ Disk has a bad sector.
▯ Mac application does not recognize file.	▯ File has wrong Type/Creator. ▯ File type is not transportable.

Main Window Hypergraphic Reference
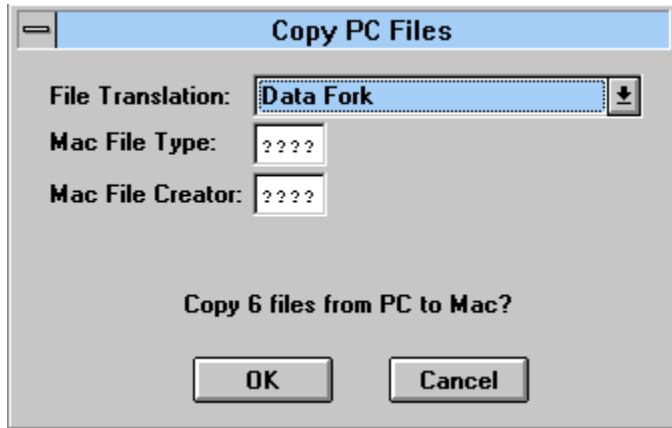
Click on a part of the dialog below to see it's function.

Name	Ext	Size	Date
SAMPLE		[DIR]	081994
CDBENCH	.ZIP	149K	070294
CDR134	.EXE	87K	051694
CDROM	.C	1122	100294
CDROM	.EXE	10K	100294
CDROM	.OBJ	1084	100294
CHKLIST	.MS	54	111994
A:		[DRIV]	
B:		[DRIV]	
C:		[DRIV]	

Mac Item Info

Help

Exit

Copy From Mac

New Mac Folder

Delete From Mac

C:\TMP\MISC
153M of 405M free

Name	Type	Crtr	Data	Rsrc	Date
Backup Folder	[FOLDER]				032795
New Folder	[FOLDER]				032795
BlackCha	LWFN	ACP1	0	21K	062790
BlackChancery Type1.bmap	FFIL	DMOV	0	5986	062790
Brown Texture.GIF	GIFf	8BIM	215K	727	071692
Import Text	STAK	WILD	6240	5901	010389
Product Summary	TEXT	MSWD	847	0	091990

[DISKETTE B]:Untitled:Misc
279K of 42M free

Mac Copy Dialog Box Hypergraphic Reference

Click on a part of the dialog below to see it's function.

Copy Mac Files

File Translation: Data Fork

PC name extension:

Duplicate Handling: ● Prompt For Name
○ Auto Rename

Copy 2 files from Mac to PC?

OK   Cancel

PC Copy Dialog Box Hypergraphic Reference

Click on a part of the dialog below to see it's function.

Copy PC Files

File Translation: Data Fork

Mac File Type: ????

Mac File Creator: ????

Copy 6 files from PC to Mac?

OK   Cancel

Initiate copy of highlited items from Mac to PC or PC to Mac depending on which listbox is selected.

Create a PC directory or Mac folder depending on which listbox is selected.

Delete highlited files and empty folders from the Mac or PC depending on which listbox is selected.

Display detailed information on a selected file or folder/directory.

Quit TransMac.

List files and sub-directories in the current PC directory.

Clicking in this box selects PC functions.
Double clicking on a file displays more information on the file.
Double clicking on a directory lists the directory.
Double clicking on the path below this box lists the parent directory.

List files and folders in the current Mac directory.

Clicking in this box selects Mac functions.
Double clicking on a file displays more information on the file.
Double clicking on a folder lists the folder.
Double clicking on the path below this box lists the parent folder.

The current PC path and volume size are displayed here.
Double clicking in this area displays the parent directory in the PC listbox.

The current Mac path and volume size are displayed here.
Double clicking in this area displays the parent folder in the Mac listbox.

This menu duplicates the button functions.

Select or deselect all files in the current listbox.

Get help and information about TransMac.

Format diskettes for use on a Mac.

Select header field which listbox is sorted by.

PC directory listbox header.

Name:File/Directory/Drive name.
Ext: PC file extension (specifies type of file).
Size: Size of file.
Date: Date file was last modified.

Mac directory listbox header.

Name: File/Folder/Volume/Drive name.
Type: Type attribute of file.
Crtr: Creator attribute of file.
Data: Size of file's data fork.
Rsrc: Size of file's resource fork.
Date: Date file was last modified.

Translation for Mac to PC copy.

Automatic: Copy data fork and assign DOS extension from Mac file type. (Used most of the time)
Data Fork: Copy data fork only. (Used most of the time)
Resource Fork: Copy resource fork only. (Rarely needed)
Text: Convert between the Mac's CR and PC's CRLF. (Use for straight ASCII files)
MacBinary: Standard format for telecommunicating Mac files.
BinHex (HQX): Another standard format for telecommunicating Mac files.

Specify PC filename extension for copied files. If this field is blank, the extension in the Mac filename (if one exists) is used.

Prompt for a new name or to skip file when the filename already exists.

Automatically rename duplicate filenames by changing the last character in the base name.

Confirmation message indicating the number of files selected for copy. Press OK to continue or Cancel to abort.

Translation for PC to Mac copy.

Automatic: Copy data fork and assign Mac file type/creator from DOS extension. (Used most of the time)
Data Fork: Copy data fork only. (Used most of the time)
Resource Fork: Copy resource fork only. (Rarely needed)
Text: Convert between the Mac's CR and PC's CRLF. (Use for straight ASCII files)
MacBinary: Standard format for telecommunicating Mac files.
BinHex (HQX): Another standard format for telecommunicating Mac files.

Mac file type attribute for copied files.

Mac file creator attribute for copied files.

Confirmation message indicating the number of files selected for copy. Press OK to continue or Cancel to abort.