



SpeedyFinder7

For Macintosh System 7.0, 7.0.1 and 7.1 Finder™ ONLY.
Version 1.5.4, October 8, 1992 by Victor TAN

About SpeedyFinder7

Firstly, if this package is redistributed then all documentation must be included and no part of it may be modified without the permission of the author (me).

One of the main principles of this Control Panel is that the actual “Finder” file in your System Folder is not modified in any way. This means that should you decide that a change is not wanted you can remove this Control Panel. The other feature in favour of this Control Panel is that it’s configurable and some features can be turned on/off at will. Try doing that to an open Finder™! Also, if you make changes to the Finder™ the changes are not saved in compressed form. This means your “Finder” file actually grows in size!

New users please take the time to read this document. Previous users who have received this as an update it would be wise to read the version history at the end of the document and then browse the relevant additions.

Remember that when you install new versions, always restart before opening the Control Panel. Internal data structures change between versions and I haven’t as yet implemented a preferences file feature—that’s coming.

Note that as of v1.5.3 a recommended shareware fee of Aus\$20.00 or convenient equivalent (US\$) is asked for. For more details refer to the Important Information section. Upon registration, I will send you (electronically preferably) a registered version which includes the SpeedyFinder7 backgrounder. This currently handles background copying and emptying of the trash. The background copier not only allows you to use the Finder™ whilst copying is being performed, it is faster than the Finder™’s copy and is comparable to CopyDoubler™ except that you can still things in the Finder™ whereas with CopyDoubler™ all you get is a modal dialog box and you can twiddle your thumbs all you like! Please include an electronic mailing address.

Speed Options

- speeds up the Macintosh System 7.0, 7.0.1 or 7.1 Finder™ when copying files—by using an optimal (or manual) amount of Process Manager (MultiFinder) memory, as well as large data transfers—which you can optionally apply to floppy disk, network or external file system transfers. You will find that copying will seem more sensible. However, when large data transfers are in progress for devices that are inherently slow (floppy disks and networks), the Finder™ will not respond to clicking on the “Stop” button and all background processing will stop.
- eliminates those (subjectively) annoying zoom rectangles—they’re nice but slow on low-end Macintosh models.
- eliminates the (subjectively) annoying delay before a file’s name can be changed.
- speeds up emptying the trash exactly as CopyDoubler™ does and at exactly the same speeds - if not faster! However, there is no visual feedback so that emptying the trash with a lot of files can cause your Macintosh to stop all processing. This is where the backgrounder comes to the rescue to give you visual feedback, empty the trash just as fast and still let you continue using the Finder™.
- when dragging files to the Trash, either holding down the “option” key before dragging or not holding down the “option” key (depending on preferences) will delete the files when placed into the Trash by the Finder™. Holding down the “control” key will delete locked files also. Note that you can also hold down the “control” key instead of the “option” key to accomplish the same thing. This is to be consistent with the Finder™’s option-Empty Trash as deleting locked files. This process is theoretically irreversible. Applications like Norton Utilities may be able to recover the files though.

Cool Options

- displays colour floppy disk icons instead of the boring old black and white icon. While this actually slows down the Finder™ (in theory), it looks nice!
- displays whether the floppy disk required re-verifying when formatted by showing the disk with a “band-aid”.

- displays the type (or format) of the floppy disk (SS=single sided, DD=double density, HD=high density and PC=MS-DOS). High density disks also have the little “HD” and hole.
- displays whether the floppy disk is locked either by a little black dot over the hardware lock hole or by a strap over the disk icon.
- finds originals of aliases directly, or for the ‘Get Info’ window (resolving aliases to aliases until the absolute original is found). Holding down the “option” key when selecting the Menu Bar will cause the “Get Info...” and “Find...” selections to become “Get Original Info...” and “Find Original”. Holding down the “option” key when selecting “Cmd-I” or “Cmd-F” will do the same. If the “option” key is not held down then the original Finder™ action will be executed. The “Automatic alias resolving” checkbox allows you to obviate the need to hold down the “option” key for “Get Info” but NOT for “Find”.
- displays whether SpeedyFinder is installed graphically by altering the Finder™’s application icon to be representative of SpeedyFinder’s presence.
- allows you to stop the alert that appears before unmounting a non-floppy volume.
- allows you to change the tolerance of the Finder™ before it displays numbers in the info part of a window as Meg and not k. This feature was suggested by a few users but Klaus P. Fechner of the Dept. of Radiology at University of Michigan Medical Center, Ann Arbor, MI 48109-0030, USA kindly gave me the location to change within Finder™ 7.0. I searched for the location (similar) in Finder™ 7.1.

Document Linking

- note that document linking features are controlled from the “Cool Options” dialog but document links are added with the “Document Linking” dialog. Also, SpeedyFinder7 is not very intelligent about the type documents can be linked to applications. For instance, it’s no good opening a Claris Resolve document with TeachText as TeachText simply can’t open them.
- document linking which launches documents whose creating application is unknown under a known local application. The Finder™ has two pre-defined links for “TEXT” and “PICT” files. You may add your own (eg. MacWrite files are opened by MacWrite II). If you choose a type that is pre-defined in the Finder™ then you will be alerted to this fact—and if you then choose an application to link that document type to, it will replace the pre-defined link in the Finder™. Note that you cannot remove links within the Finder™ by using SpeedyFinder7. You must use a resource editor to do that. Remember that SpeedyFinder7 does not save the links that you add directly to the Finder™ but rather modifies itself and alters the Finder™’s list when required. SpeedyFinder7 will remember separately the folders in which the last selected document and applications are. It will place you there directly.
- SpeedyFinder7 also makes applications for which you specify links to, be “drag and droppable”. This takes advantage of the Finder™ 7.0 feature without having to manually add known file types to an application and then re-building the desktop. Of course, it’s no substitute for developers creating BNDL resources correctly in the first place. This feature can be turned on or off, but as the Finder™ only collects information for this once and stores it internally, changes take effect on quitting the Finder™ or restarting.
- SpeedyFinder7 is also capable of “on the fly” document linking. When the Finder™ comes across a document that it cannot launch, it normally puts up an alert saying that the document can’t be launched. On the fly linking puts up the standard file dialog and asks the user for an application with which to launch the file. Choosing “Cancel” will not launch any application, nor will it display the normal Finder™ alert. SpeedyFinder7 also remembers the folder in which the last application was launched (on the fly) and places you directly there. If the Control Panel is open in another application or the Finder™, the newly selected position will not be saved. It is simply not possible to do this without a great hack! SpeedyFinder7 also has an option to automatically remember links created “on the fly”. This, of course, assumes that the Control Panel is not open in another application or the Finder™.
- Power users might like to know that you can enter the 4-letter document and application creator types if you know them. This also allows you to add the type “*****” which allows you to drag any file of any type to the application. Remember the above warning that the application to which you make a link may not be able to open the specified type of document.

Menu Options

- adds a “Quit” selection to the Finder™’s File menu—optionally attaching a command key shortcut “Cmd-Q”. This can be useful if you need to rebuild your desktop. You can quit the Finder™ and hold down option-

command without having to do a full restart (as long as the Finder™ is the only open application—otherwise you’ll have to quit all the other applications too).

- places several command key shortcuts: “Make Alias”–“Cmd-M”, “Clean Up”–“Cmd-U”, “Empty Trash”–“Cmd-T” and “Restart”–“Cmd-R”.
- optionally removes the “Balloon Help” menu from the menu bar. This will give users of 9" screens a bit more menu bar real estate (but not that much really). Anyway, some people don’t like this menu there. This option can be changed back without restarting, but **no** guarantees are made when you do this. While the method it uses is sound and shouldn’t cause any problems, it’s not a documented method as you’re not supposed to be able to do this. Also, if you hold down “command” before selecting a menu the “Balloon Help” menu will be placed back in the menu bar for the duration of you selecting the menu. It will disappear when you release the mouse.
- optionally allows “hot keys” to show balloons.

When changes take effect

In general, changes take effect immediately, although some require redrawing to be seen. The changes that take effect at restart are:

- stop zoom rectangles
- no rename delay
- use more “MultiFinder” memory (this can be disabled without restart by setting the “Use:” option to 100k (standard).
- SpeedyFinder’s replacement for the Finder™ application icon
- alias resolving (don’t hold down the “option” key)

These changes take effect either on quitting the Finder™ and re-launching it, or on restart:

- drag and drop document linking (immediate but reliably on re-launch)
- SpeedyFinder7 application icon
- tolerance before Megs are displayed instead of k (immediate but reliably on re-launch)
- add Quit menu
- Cmd-Q keyboard shortcut
- Cmd-M keyboard shortcut
- Cmd-U keyboard shortcut
- Cmd-T keyboard shortcut
- Cmd-R keyboard shortcut

Although some of these changes can take effect immediately, it would require just a little more coding which I will do if the demand is there. Otherwise, it stays as is!

Warning

Do **not** use the force quit feature of System 7.0, 7.0.1 or 7.1 to quit the Finder™. That is reserved for emergency use *only*. If you have a debugger installed then don’t even consider using it at all—learn how to use your debugger. If you receive advice to use force quit to quit the Finder™, **don’t** do it. Use SpeedyFinder7 instead. To use SpeedyFinder7 ensure that the “Add Quit Selection” option is checked. If you must use the force quit feature then it is recommended (by some unseen force) that you restart immediately.

Important Information

SpeedyFinder7 is released as is. No responsibility will be taken for any damage, destruction or loss of data caused by its use (this is very unlikely as it does not do any file changing—all alterations are done on the fly). SpeedyFinder7 is now released as shareware. Versions prior to version 1.5.3 are valued at whatever you think it’s worth. Versions 1.5.3 or later have a recommended fee of Aus\$20.00 or convenient equivalent (US\$). If you think that it’s worth more then please send me that amount. If you think it’s worth less then please send that amount to:

Victor TAN
42 Waratah Avenue

RANDWICK NSW 2031
AUSTRALIA

If you don't think it's worth anything, how about a postcard instead? Don't think it's worth even that much—how about some E-mail? I'm curious to see how far this little hack goes! Besides, if you send me something, it will give me the encouragement to write more useful Finder™ hacks! I will not hold it against you for not making a donation.

I welcome feedback (bug reports) and suggestions for enhancements. Send them to the afore mentioned address or the following E-mail addresses (which may possibly change):

Sydney/Australia:	AAPDA BBS on (02) 975-4238 or (02) 975-4332 (preferably) with TeleFinder™ MacInTouch BBS on (02) 743-2113 with TeleFinder™
International:	Change the above prefixes to (612) instead of (02)
AppleLink:	AUST0116 (“zero”116)
InterNet:	AUST0116@applelink.apple.com
InterNet:	jasonh@extro.ucc.su.OZ.AU

When reporting a bug, please state your SpeedyFinder7 version number, Macintosh Model, System software version, memory manager mode, active system extensions, what the problem is (take a photo if that helps), when the problem occurs and if the problem can be consistently reproduced (and in what circumstances). If you don't understand any of the above, please find someone who can tell me those details.

Attention bug reporters: if there's a bug you've reported that hasn't been fixed in a new release, hassle me to let me know it still exists. I'll keep looking into bugs, I just need reminding—I'm a scatter brain.

Also, bugs reports have come from many people. I acknowledge them but apologise for not being able to individually name who reported what. There simply isn't enough room!

The SpeedyFinder7 Control Panel was written with THINK Pascal 4.0.1 and MPW Assembler (about 75% to 25% of each respectively) on a Macintosh LC running System 7.0 with Tune-Up Z-1.1.1 and 32-Bit Addressing mode. The Control Panel has also been tested on the same Macintosh running System 7.1. I haven't tested this Control Panel with heap scrambling and purging but I have examined the code and it should survive. Because the Macintosh LC has 32-Bit Colour QuickDraw™ in ROM and has a 68020, some problems that will occur on 68000 Macintoshes without Colour QuickDraw™ in ROM are probably as yet undiscovered. Send those bug reports and I will fix them!

Known Extension conflicts (that cannot be fixed)

- Removal of the “Balloon Help Menu” is accomplished by another extension called “NoBalloonMenu”. Its method of removal of the balloon help menu from the menu bar is not the correct the way of doing. It looks for the second last menu and moves its “left” position to 32700. This works fine under standard System 7.0. If you're using different keyboard layouts then you'll lose your “Keyboard Menu”—what's worse is that it actually crashed under System 7.1. If you use both SpeedyFinder7 and NoBalloonMenu then you'll lose the Finder™'s “Special” menu. Have fun trying to restart! :-)

Known Features—*Not* bugs

- when the icon of a floppy disk in the Finder™'s Info window is selected and either copied or cut, the type of the disk is not included and neither is the colour icon. This is due to the way my Control Panel works. It's not fixable without a great deal of effort on my part. If you must copy the icons then open the Control Panel with ResEdit and copy from the “icl8”, “icl4”, “ICN#” and “ICON” resources whatever you want. You will also discover how this Control Panel does its magic!
- when you use the “Find Original” feature, sometimes the Finder™ selections may be altered or not appear as they seem. This is due to the way the Finder™ handles its icons. I do not know the entire Finder™ icon object structure—nor do I want to. I have attempted to make it more cosmetically acceptable but sometimes it just plain gets it wrong. There is no lack of functionality or danger. It is just cosmetically dirty.
- Floppy icon types and embellishments are still not displayed on non-Colour QuickDraw Macintosh models.

Possible future direction

Features are always being suggested or thought of by me. Add your suggestions today! If you've added a suggestion that doesn't appear in a new release then hassle me again.

- Substitution for “duplicate” in the Finder™.
- improved “Get Info” dialog for the Finder™ which includes “type” and “creator” fields for modification.
- *Do not ask me to implement background formatting of floppy disks. It is simply not possible for me to do this. It would require patching the floppy disk driver. That's theoretically impossible because it is in the Macintosh ROM but not practically impossible.*

Impending future direction

These features are lined up for inclusion at some point in time when I get enough time to do them.

- separate preferences file.
- as a joke (for the environmentally conscious) “Empty Trash” will become “Recycle Rubbish” and the Trash icon will become the recycle symbol (probably only understood by Australians).
- allowing volumes that are not shared to be unmounted in the Finder™ without first turning off file sharing (I have a solution—needs implementing).
- user definable command key shortcuts for any Finder™ menu.

Bulletin Board Services/Shareware CD-ROMs

This package may be distributed on BBSes or CD-ROMs as is. It must include this document and either Control Panel or document may not be modified in any way. It may **NOT** be included on shareware floppy disks sold by BBSes (or their clubs) for a profit. Place it on your BBS for downloading, but **NOT** on a floppy disk sold for a profit. *Do I need to repeat that again?* I understand that CD-ROM distributors have to recover the cost of producing the CD-ROM, so that's okay. The aim of this extension is to help the Macintosh user community.

Power Users—technico advice

The Finder™ 7.0 determines the maximum number of files it can copy into the given area of Process Manager memory. If you drag a folder with many files (or containing folders with many files in total) then the Finder™ may spend a fair amount of time calculating before actually starting the copy. This is the reason why the “Use:” option is provided. It allows power users to set the maximum amount of memory that the Finder™ will use. If that amount is not available it will use the maximum possible memory available. Depending on the amount of files you select to copy with one drag and the amount of memory available to the Finder™ will determine whether there will be significant delays while the Finder™ calculates. The “Optimal guess” option tries to take into account the above, but sometimes gets it wrong. If you want to override, it's best to override to a low amount of memory. Override at your own risk!

Users who have customised their SpeedyFinder7 disk icons, please don't distribute those versions. Also include this document *unmodified* if you choose to redistribute it. Thank you.

International users (who wish to customise SpeedyFinder7)

SpeedyFinder7 should now work with localised Macintosh Systems. In fact, it is possible to totally localise the Control Panel as well as its additions to the Finder™. However, you are not permitted to modify this Control Panel without my permission. Should you wish to make a localised version, contact me and we'll see what we can do. Do not translate this Control Panel without my permission.

In conclusion:

I pride myself on attention to detail. No problem is too small to bring up. If you think this Control Panel doesn't conform in any way to expected Macintosh User Interface guidelines then let me know. I'll see what I can do.

Well, if you have any suggestions for further enhancements let me know by mail or E-mail.

Have a nice day,

Victor. (08-Oct-92).

Known (and suspected) bugs to be fixed in impending releases

- I have a list kept internally. I will update this when I get a chance.

Version History for those interested in such insane concepts (date completed)

- 1.0** (26-Jul-92) Initial release. Didn't last long as I thought of improvements. Actually added "Quit" from Finder™ as an afterthought.
- 1.1** (30-Jul-92) Investigated further optimisation of SpeedyFinder7 and Process Manager heap usage. Decided that perhaps it was time to include a "face" to this extension. Converted it to a Control Panel.
- 1.2** (1-Aug-92) Was hassled by Ben Kremer who suggested that "Wouldn't it be nice if the Finder™ displayed what type of floppy disk was in the drive? Hey, Vic. Why don't you write that?" Well, Ben, here it is!
- 1.3** (3-Aug-92) Hadn't fully tested the Control Panel. It turns out one of my assembly language routines was causing the microprocessor to read a long (and subsequent but not executed word) from an odd address. Whilst this works fine on 68020 or higher microprocessors (at a speed cost), it causes an address error on a 68000. This is documented in the "MacsBug Reference and Debugging Guide" which I loaned from Saul Bryan (thanks Saul). Also thanks to Anne Mok who tried this Control Panel on her Macintosh SE only to discover that it dropped into MacsBug—I bet you that surprised her! She kindly allowed me to find the error on her SE and I subsequently squashed it. I apologise to all those 68000 users for this error on my part.
- 1.3.1** (4-Aug-92) "Use" method wasn't being saved correctly. This has now been fixed.
- 1.3.2** (4-Aug-92) Discovered (again on Anne's SE) that adding "Quit" to the File menu didn't work. Silly me! I introduced a bug by saving a register on the stack. Oops! This has been fixed with the extra options now of adding "Cmd-M" for "Make Alias" and "Cmd-Q" for the added "Quit". Also discovered (because a Macintosh SE doesn't have Colour QuickDraw™ that "show floppy types" didn't work. I have attempted a patch that should work in theory but hasn't been tested on non-Colour QuickDraw™ Macintoshes. Attention all 68000 users out there, report those bugs, please!
- 1.3.3** (12-Aug-92) Fixed a small interface problem. The Control Panel was incorrectly (and indiscriminately) disabling check boxes. This was actually correct initially but I modified and optimised the code. That introduced an error. Well, it's now been fixed. Thanks to both Lucas Mueller and Ben Kremer for spotting this error.
- 1.4** (15-Aug-92) Added "Alias Resolving" as a suggestion by Ben Kremer. It was a difficult patch to do and there are some residual cosmetic errors. Full functionality although—that's what's important.
- 1.4.1** (18-Aug-92) A *non-released* version. Discovered a problem by using SpeedyFinder7 on Macintoshes not operating in 32-bit addressing mode—it seemed the only reliable way of reproducing a sometimes random error. Investigated the possible causes but never actually pinned down a specific problem that could be called the reason for the bomb. Recoded the `_MenuSelect` routine without a tail patch and it now seems to work—yes, it did bomb on my Macintosh in 24-bit addressing mode (I always code in 32-bit addressing).
- 1.4.2** (19-Aug-92) Also *non-released*. This version added colour disk icons and the strap locked disk icon. Thanks to Ben Kremer for the strap locked disk icon. It also included the "Empty trash on option-drag" and associated features.
- 1.5** (20-Aug-92) I knew that SpeedyFinder7 would not install in System 7 Release 7.1. I did that on purpose as I knew it was 99% certain to break. Well, I was right. I spent the good half of two evenings making it System 7 Release 7.1 compatible. I think I got it right with backward System 7.0 and 7.0.1 compatibility. Apple may change the workings of the Finder™ 7.1 before final release. As it stands, it has only been tested with Release beta version 7. If you are using it with System 7 Release 7.1—you *have been warned!*
- 1.5.1** (27-Aug-92) This release involves improvements to the "optimal guess" routine when copying files in the Finder™. It hopefully removes an obvious delay which occurred for a reason I never worked out. Also implemented was the large data transfers, a bug fix and document linking. This bug

was to do with the colour floppy disk icons in 24-bit/32-bit colour mode. I don't have a machine capable of displaying direct RGB pixels and as such I could never test this feature fully. Thanks to Toru Nishioka who reported this bug to me. I subsequently fixed it. The document format was changed from Microsoft Word to Claris MacWrite II because of file size.

- 1.5.2 (30-Aug-92)** Bug fixes: William Uther pointed out to me that folders did not appear when selecting an application to link a document to. A major oversight on my part, he was correct. It's now been fixed. Toru Nishioka pointed out that Macintosh PC Exchange floppy disk icons were not being displayed correctly with my colour disk icons as well as a cosmetic bug in the document linking options dialog. This has now been fixed. Document linking has also been taken one step further with "on the fly" linking which is implemented in this version (Peter Li's idea). The start-up animation has been removed—a waste of space! Removal of the "Balloon Help Menu" was added (Toru Nishioka's idea).
- 1.5.3 (13-Sep-92)** Firstly, thanks for all the e-mail guys! Long awaited release version with many bug fixes. Recommended shareware fee of Aus\$20.00! Bug fixes: changes were taking effect even if "Cancel" was being used. This has now been fixed. Floppy disk icons were fixed (cosmetic). Floppy disks have a crack through them (bad) if the Finder™ needed to re-verify that disk. Alert boxes were appearing at the top-left hand corner of the screen. This has now been fixed. Aliases were not being resolved completely. Aliases are now resolved to their absolute original. "Address Errors" were occurring on 68000 Macintoshes. This should fix conflicts with File Sharing and the TrashMan Engine on these Macintoshes as well as closing the "Document Linking" dialog box. Command key shortcuts were not installing on non-localised Macintosh Systems. This has now been fixed with the improvement of being able to totally localise the Control Panel and its Finder™ additions. Document linking now saves "on the fly" links as well as allowing those applications to take advantage of Finder™ 7.0's drag and drop feature. Michael Lowe also kindly reformatted the document into a somewhat better format than mine. I have decided to use this and so the document format has changed back to Microsoft Word (hiss).
- 1.5.4 (08-Oct-92)** Bug fixes: the conflict with Helium 2.1.1 (and the problem with the Standard File Dialog popupmenu) has now been fixed. As both Control Panels compete to remove the Balloon Help Menu, turning my balloon menu on with Helium's balloon menu off will do nothing. If you turn Helium's balloon menu off and then my balloon menu off, your Balloon Menu will return to the application's menu bar without having to re-launch that application (something Helium doesn't do)! Zoom rectangles are now removed from the final release System 7.1 and consequently will no longer work with the β7 release 7.1. Fixed a bug that caused the "SpeedyFinder7 application icon" to get scrambled. It also caused launching applications to consistently crash the Mac. Improvements: "hot keys" allowing instant access to balloon help (somewhat like Helium). Control Panel interface layout change/improvement. The "floppy icons" and associated checkboxes now give you visual feedback on what the icons will look like. Power users can now enter 4-letter types instead of having to locate a file of that type. You can set the tolerance before the Finder™ displays sizes in Meg rather than k. "Ctrl-Command-F" will locate the application that created the document. The "...alias" suffix is now customisable. The alert that appears before a non-floppy volume unmount can be suppressed. Thought that I would at least offer some competition to CopyDoubler™ so I included the "speed empty trash" feature.