



## ResEdit for Fun and Productivity

## By Francine Schwieder

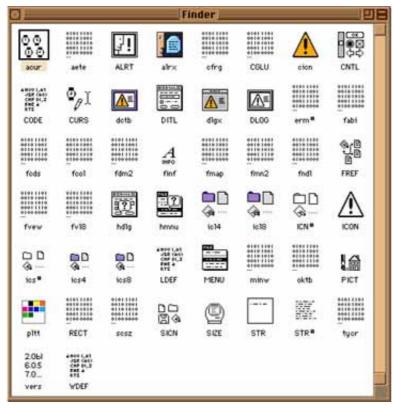
Before setting out on a ResEdit adventure there are some safety precautions that must be followed. Really. Although you cannot break your Mac using the keyboard and mouse--as long as you don't unplug either while the computer is running--you can wreck any program you use ResEdit on, and, since this includes the operating system itself, you can do some serious damage which could result in the loss of important data and the necessity of calling a guru to help you get up and running again. But if you follow basic safety precautions, then using ResEdit can make your system behave the way you want it to and thus increase the usability of your Mac. You can get ResEdit almost anywhere fine downloads are offered on the Internet, including Apple's own site. But first those truly necessary precautions:

- 1. Back everything up all the time. This should be done whether you ever use ResEdit or not. You should have at least 3 copies of anything you don't want to lose or couldn't replace easily. One copy will be on your hard drive, the other two should be on two different sorts of media, if that is at all possible. For instance you could have a copy of a text file on a floppy and on a zip drive, or on tape and a CD. Bear in mind that these days floppies are almost useless. The iMac and new G3s don't even have floppy drives, and hardly any new programs will fit on a floppy, not to mention most graphics files. So invest in some sort of removable media drive that you can hook to your machine and back those files up! The more room on the drive you select the better. My system folder at the moment is 173MBs which means it doesn't fit on a zip cartridge, so I keep current copies of it on two zips and once a month back up everything in the system and anything new to a CD. A good CD burner costs around \$500 (or less if you do some shopping around and don't want a rewritable drive) and regular CD-R media is \$2 or less per disk.
- 2. Know how to start your computer by some means other than the internal drive! The easiest method is to use your original OS CD. Restart your computer with the CD in the CD drive and hold down the "c" key while the computer restarts. It will reboot from the CD. Then you can fix whatever you did wrong. You can also make an emergency restart floppy disk using Norton Utilities. To force your machine to restart simply hold down the command and control keys and hit the Power On/Off button. Try restarting your computer using an alternate method before you monkey with anything to make sure you know how to do it and that the method you have selected actually works.
- 3. Always use ResEdit on a copy of the file you want to alter, and always keep a copy of the original somewhere handy in case your change turns out to have some unforseen bad effect. You can make a copy easily by selecting the file, then option-click-drag to wherever you want the file you are working on to reside. Or select the file, hit command-d and drag the resultant "myfile copy" to wherever you want. Remember: make a copy, work on the copy, save the original.
- 4. Take notes on what you've done. You'll be glad you did at some future date when you either want to reverse things or do them a little differently, or if you do a clean install and want to recreate something you had done before. Or, of course, if what you did doesn't work you'll want to know what to avoid doing next time and try something different.

Here are some things to never, ever do while using ResEdit:

- 1. Never work on a file that is running.
- 2. If ResEdit crashes while you are working on a file never attempt to use that file. Trash it and start over. It has almost certainly been corrupted.
- 3. Never use ResEdit on the only copy you have of a file. If it crashes while you are working (and ResEdit is prone to crashes) you are in serious trouble. Remember that each change you make with ResEdit is made on the spot. If you decide you don't want that change ResEdit then goes back and restores the original state. So if you are interrupted before you have a chance to tell ResEdit to save or not to save, your changes are all already in place in the file. And the interruption, whether a crash or power outage, has probably corrupted the file anyway.

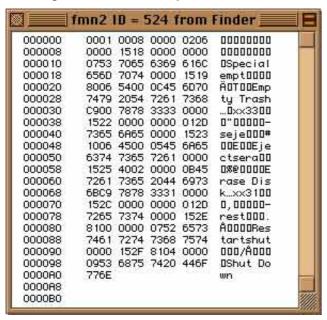
OK, everyone ready? Let's modify the Finder. First, create a folder on your drive, call it MyFinders. Open your system folder and option-click and drag the Finder icon onto this folder. You will now have a copy of the Finder to work on inside the MyFinders folder. Launch ResEdit and click on the Jack-in-the-Box to make him go away and get the Open dialog box. Move to the MyFinders folder and select Finder. Open it. Make sure you are opening your copy and not the original! You will have a window open in ResEdit that has a bunch of icons with 4 letter names under them.



The first illustration happens to be a screen capture of the window for the Finder in OS8.1, which is slightly different from earlier and later versions. The little icons represent the different resources present in the Finder. These resources are the things we are going to modify. The first thing I do after installing a new system is to add command-T to the Special Menu so I can empty the Trash from the keyboard rather than using the mouse. I will use that modification as an example for adding different keyboard commands to your Finder menus.

Click on the resource "fmn2" in OS8 or OS8.5, in OS7.5.5 and OS7.6 it is called "fmnu." A new window opens on top of the Finder resources window. This window has a list of all the individual resources in fmn2. There are three columns, the first being the ID number, then the size of the resource, and finally the name (which is blank for the Finder fmn2s). If you are operating on OS8 you will want to select the resource with ID 524 to get to the Special Menu. In OS8.5 it is ID 525, and in 7.5.5 and 7.6 it is ID 1255. When you open it you get an intimidating window full of weird characters. Don't panic! Editing this hex code is easy,

although it can cause eye strain.



The first column in the illustration can be ignored. The next four columns are hex code. Scary isn't it? The last column contains a translation of the hex code into something faintly resembling the English language. If you peer at it for a time you will begin to recognize words. The first word is "Special" and the next fully formed words are "Empty Trash." In the accompanying illustration you will notice that the third space in front of "Empty Trash" is the letter T. This is my modified Finder. When you look at your Finder resource in ResEdit you will see that the third space in front of "Empty Trash" is occupied by a place holder thingy. Running in any OS before 8.5 the place holder is kind of "0" shaped, but if you are working in OS8.5 the place holder will be like this ^ (which caused me some consternation the first time I used ResEdit with OS8.5). Click the mouse cursor between the second and third place holder, then carefully drag your mouse over the third character to select it. You will notice that a pair of zeroes in the hex code gets simultaneously selected with a little box drawn around them. If your selection is bigger than this try again. You want only the third character in front of "Empty Trash" to be selected and a 00 pair boxed. Now hold down the shift key and type a T. The place holder thingy has been replaced by your capital T (which looks better in the menu than a lower-case one, or so the GUI designers think), and the hex code has changed from "00" to "54." That's it. You've edited the hex code for the Special Menu. Save your changes and quit.

Create a folder called OriginalFinder, open your System Folder and drag the Finder to this folder. Open the MyFinders folder and drag your modified Finder (or option drag to leave you with something to go on playing with later) into the System Folder. Restart. When you go to the Special menu you will see a new command-T keyboard shortcut listed for Empty Trash. Put something in the Trash and hit command-T and you get the Empty Trash dialog box. Hit return and the Trash is emptied without moving your hands off the keyboard.

You can customize your menu command key shortcuts to your heart's content using this method. Just make sure you don't pick a letter that is already in use! For instance, if you want to make command-R a keyboard shortcut to restart your computer, you must first open the fmn2 resource for the File menu and change the R in front of Show Original to some other unused letter (I changed it to G). You can then go back to the Special menu resource and add the R in front of Restart. Pretty neat! Of course this particular modification can lead to some mishaps if you happen to use Command-R for something else. I use it habitually to reload web pages. If you think you're in the program, but are actually in the Finder and hit Command-R you will watch with some consternation as your computer restarts.

As you open and explore the resources for Finder menus you will notice that there seem to be a double set. The simpler ones are for the Simple Menu option (if you don't use it you may have forgotten it exists). You'll want to edit the ones that already contain command key shortcuts. This will also help you remember where to place your changes. Third character in front of the menu item you're changing.

There are several other command key combinations that I've added to my OS. In the View menu for OS8.x you have a number of options for how the Finder displays its open windows. At the top are three choices: as Icons, as Buttons, or as List. In OS 8.5 you can set a global default preference for your windows by going to the Edit menu, Preferences, and then selecting the Views tab. There is a drop-down menu in the resultant window where you then set the display preferences for Icons, Buttons, and List view. Your settings here apply to all windows for which you have not specified custom settings. What if you have a window open that is set to Icon view, but at this moment you want it to display as a List so you can have the items arranged in alphabetical order? Or arranged by date modified? You could use your mouse to go up to the View menu, select List, do what you want, then use the mouse to go back to the menu and restore your settings. Or you could click in the window while holding down the control key, go to View in the resultant contextual menu and select it with your mouse. If you change window views very often this mousing around gets to be a pain. Instead use ResEdit to add the following command key shortcuts: K for Icons (the letter I is already in use for Get Info, and C for Copy, so I thought K would work best), B for Buttons and the letter L for List. Now when you want to change views you can do so from the keyboard. A friend of mine with much computer experience, but a horror of ResEdit, was using my computer one day and conceded that this was a truly useful change.

To make these changes in OS8.x, you open the copy of your Finder with ResEdit. Now select the resource fmn2 and open ID number 524 (in OS8.5, see Illustration). In OS 8.1 the ID number is 523. In any case you will know if you have the correct menu resource open because the words you can read at the right side will say "View" and "as Icons" and so on. Remember: to assign your new command key letters you carefully select the place holder that is the third one in front of the menu item you are changing. Hold down the shift key and type the letter you want to use as the command key shortcut. You can use the Illustration as a guide as it already contains my improvements. Save your changes.

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000018	7369 0000 0000 C00A si"""¿"	
000020	4800 0861 7320 4963 K**as Ic	9
000028	6F6E 7300 7661 7362 ons"vasb	6
000030	0000 0000 C00A 4200 """"¿"B"	
000038	0A61 7320 4275 7474 "as Butt	
000040	6F6E 7300 7661 736C ons"vasl	
000048	0000 0000 C00A 4C00 """&"L"	
000050	0761 7320 4C69 7374 as List	8
000058	7878 3336 0000 0000 xx36****	
000060	0000 0000 0120 6368 -ch	8
000068	3277 0000 0000 C00A 2w 2	3 1
000070	0000 0961 7320 5769 ""as Hi	
000078	6E64 6F77 6368 3264 ndowch2d	
0000080	0000 0000 C00A 0000 ****&**	
0000088	1061 7320 506F 702D "as Pop- 7570 2057 696E 646F up Hindo	
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0000008	1800 0741 7272 616E "**Arran	8
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000008	0000 4006 0000 1652 "e""R	8
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There are other resources one can change as well, though the changes I always make are more a matter of taste than something practical. For instance STR# ID 4000, item number 1 in the OS8.5 Finder displays the rather boring message, "The application O^2O has unexpectedly guit, ^1." Well one doesn't ever expect the application to guit, so why not change this rather moronic message? In your open ResEdit window highlight the words "has unexpectedly quit" and substitute something that makes more sense. When I have an application quit the dialog box displays the message, "The application O^2O has wigged out, ^1." And my STR# 4000, number 11, now reads "The application O^2O has wigged out, ^1. You should save your work in other open applications and restart the computer." You may find this equally moronic, or impossibly sophomoric, but you can make the message read whatever you want. In OS8.5 the default name given a new folder is located in STR# 4500 item number 3. Personally I think "untitled folder" is both uninspired and takes up too much space. When I make a new folder it begins life as "nameless." As you explore the STR# resource you may find a number of things you want to change. Just don't change any of the weird looking things, such as "^2" because this is a direction to the Finder to plug-in some specific information. If your change doesn't seem to do anything you may have to search other STR# resources and also the STR resource for other occurrences of the phrase you want modified. One of the things I also like to do is change "About this Computer" at the top of the Apple menu to "Francine's Computer." But I'm not quite sure which change actually works. "About this Computer" appears not only in the STR# resource but other places as well, including fmnu2 ID 521. I just poke around until I've changed everything I can find to "Francine's Computer" and get the result I want. Since you are working on a copy of the Finder feel free to open everything and see what's inside. Just don't use that copy if you change something you don't understand or you get a crash!

After you've made the changes you want you can then drag the original Finder out of the System folder, put it somewhere safe, and put your modified Finder into the System folder and restart. Your customized Finder is now running the show.

There are things you can do with the System also, and I always make one alteration when I install a System upgrade: I substitute my own startup screen. So make a folder, let's call it MySystem, and make a copy of your System (it is inside the System Folder, of course) and place your copy in the MySystem folder. Launch ResEdit and open this copy. My, isn't that impressive! Did you ever see so many resources in one place before? If you like you can open the "snd" resources, and then get ResEdit to play the mysterious ones (the window shade sound is ID -120234 in System 8.5) by selecting the sound you would like to hear, and then either hitting command-T or picking "Play Sound" from the snd menu.

To change the start screen you want to open the PICT resource. Select it and open by double clicking. Scroll down to resource -16506, in OS 8.5, and double click again, and then copy this pict to the scrapbook. When you do you will see that the scrapbook gives the dimensions (422 by 323) of the image in pixels. Now open your painting program and create something you want, that is that size. Remember to leave a border around the image where the "Welcome to Mac" text appears. Copy your masterpiece, go back to ResEdit, and double click the picture -16506 if you closed it. Paste your piece into this window, close it and save. To get the text to match, go to resources -20235 and -20241. Note what they say. Copy one to the scrapbook, make a new graphic that size, fill with a color that matches the border of your splash screen, and add some text. Personally I make both say "Let us begin" in Gothic type. But you can do whatever appeals to you. When you've finished, copy, open the resource, and paste your replacement. Obviously you can alter any or all of the other picts that you find here as well. Just be sure your replacement is the same size.

As long as we are making some custom pictures, how about the Finder? Again, make a copy of the Finder, open with ResEdit, and double click the PICT resource. You'll see two picture resources, ID 4000 and 4001. These are the pictures that appear when you select "About this Computer" or, in my case, "Francine's Computer" from the Apple menu when the Finder is active. If you've been real thorough editing the STR and STR# resources in the Finder, the window that opens when you select this will also be titled "My Very Own Computer" (or whatever you chose to call it). Now you can also make the pictures your own custom productions as well. Follow the exact same procedure as above.

When you have finished all your wonderful changes, move the System and Finder files out of the System Folder, stash them somewhere safe--but don't put both of them together in the same folder somewhere on your startup drive! Your Mac will get very confused and think you have two System Folders or something, and then you may have to see if your alternate way of starting up really works. Replace the originals with your new, improved models in the System Folder (and if your copies said "copy" at the end of the name, be sure to remember to delete that). Now restart and watch your own opening graphic and comments appear. Once up and running select the "About the Computer" from the Apple menu and admire your graphic work here as well. Ain't this fun?

Oh, and if you noticed the screen capture shots above looked a little strange, that's because I'm also unable to resist **Kaleidoscope**, which is reputed to also be a risky program to use. Personally, I love it. Not only does my Mac act the way I want, but it looks the way I want, too. But that is a whole 'nother column. Meanwhile, if you've decided to give ResEditing a go, you might want to visit the **ResExcellence Site**. It is full of good advice and fun hacks.