

13 Utilities

It's always been a little difficult to define *utility*. A small program? One that doesn't make its own documents? One that serves as a supplement to another, full-fledged application? None of these definitions actually works because a utility can be quite large and intricate, create documents, and work as a stand-alone program.

But it's safe to say that a utility is a program that you wouldn't need unless you were also using your Mac for other things. You don't need a spelling checker unless you do word processing; you don't need a disk repair utility unless you're using that disk to store applications and documents; and you wouldn't need a utility that fancies up your desktop if you had no reason to be on the desktop!

We can't, of course, cover *every* Mac utility in this chapter—there are just too many. Utilities are mentioned in many chapters throughout this book; font utilities, for instance, are covered in Chapter 14. But we've tried to cover a good sampling of general-interest utilities in this chapter.

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Power Tools

You may not think of yourself as a power user, but that definition is open to interpretation. Anyone who goes beyond using one or two applications and adds a few extra extensions might qualify for the title—and might find that some of the power tools discussed here come in handy.

Macros

A *macro* is a series of commands or actions that's invoked with a single key combination or a menu selection. On a simple level, you can use a *macro editor* to assign a keyboard equivalent to a menu command that doesn't have one, or combine two menu commands into a single one—putting Save and Quit onto $\text{⌘} \text{⌘} \text{⌘} \text{⌘}$ (Option)Q, for instance.

But that doesn't even scratch the surface of a macro program's power. As I wrote this chapter, for instance, I put the figures and their captions in the Word document as footnotes. When I was finished, I used a macro that went to each footnote reference mark, cut out the related picture, put it into a Photoshop document, and saved it as a PICT file, asking me to name the document; next, it came back to Word, cut the caption out of the footnote, and put it into the body of the chapter, formatting it the way the layout people needed it—applying the right style, typing “CAPTION:” in front of it, and marking it with the figure number.

I hope that description intrigues you, not frightens you away. Because although you can wind up doing some complicated programming—such as a list of commands for an intricate macro, the majority of macros—even those that play back a long series of actions—can be simply recorded by telling the macro editor to watch you while you do something.

QuicKeys (EC). I've used CE Software's **QuicKeys** (\$120) macro-creating control panel for years to create keyboard equivalents for menu commands. It's performed flawlessly, and I've gotten so I can barely work without it (as I realized when I upgraded my system software and didn't have a compatible version of QuicKeys for a few days).

I found earlier versions of QuicKeys a bit complex and hard to use, but the current version is pretty intuitive. It may not be the most powerful macro program, but I don't use ten percent of QuicKeys' power as it is, and neither will most Mac users.

QuicKeys 3 has a whole slew of extensions, which let you, say, dial your telephone through your modem or select a printer from the Chooser. It also supports Apple events and AppleScript (described in Chapter 3).



Tempo (EC). The most powerful macro utility you can get is **Tempo II Plus** (\$180, Affinity Microsystems). One of the most important benefits it has over QuicKeys is that it's smart—it can assess the contents of a field in a database, the codes that precede paragraphs, or part of a file's name in order to decide what action it should perform next.

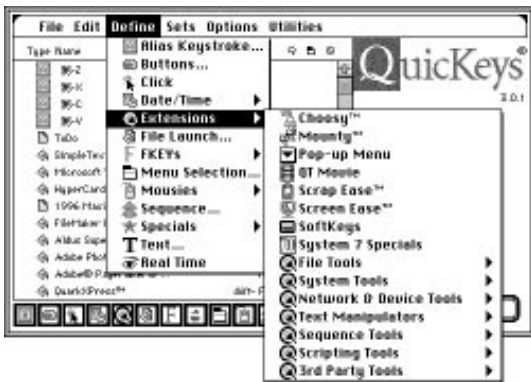
Suppose you want to sharpen the images in a group of Photoshop files. You'll need to open each one, apply the filter, gaze off into space as the filter is applied, save the document, and open the next one. Because Tempo can choose files by name, you can have Tempo process each file sequentially, while you either find something better to do or just gaze off into space the *entire* time.

Tempo has an incredible array of *Externals*. You can use them in macros to check how much free space you have on a disk, assign and use variables, find out how long a particular string is, repeat a macro a given number of times, and much more. You can automate practically any Mac function with Tempo.

If all you want to do is assign keyboard shortcuts to a few menu commands and programs, you'll find all you need in **TempoEZ** (\$80, Affinity Microsystems), the scaled-down version of Tempo II Plus, discussed above. TempoEZ also lets you play more complicated macros created with Tempo II Plus.

QuicKeys versus Tempo (SZA). I've always preferred Tempo, but for the sake of this chapter, I gave it up and worked exclusively with QuicKeys for three months. I used it for everything from simple keyboard equivalents for menu commands that didn't

have them to more complicated tasks such as the Word/Photoshop figure-processing procedure described earlier.



Despite the confusing plethora of options and menu icons in the QuicKeys dialog, you can save lots of time by using macros you create with it.

And how do I feel about QuicKeys after putting it through its paces? I feel that it's still awkward and ungainly—too many windows, too many menus, too many labels (a macro can be a sequence, a mousie, an extension, and so on), too many steps in what should be a simple recording. (The 3.5 version, due out about the same time as this book, will address all these issues. CE promises a totally reworked interface, as well

as some new capabilities, such as the ability to create application-specific toolbars and a batch-processing mode which will let you execute a macro on a collection of files.)

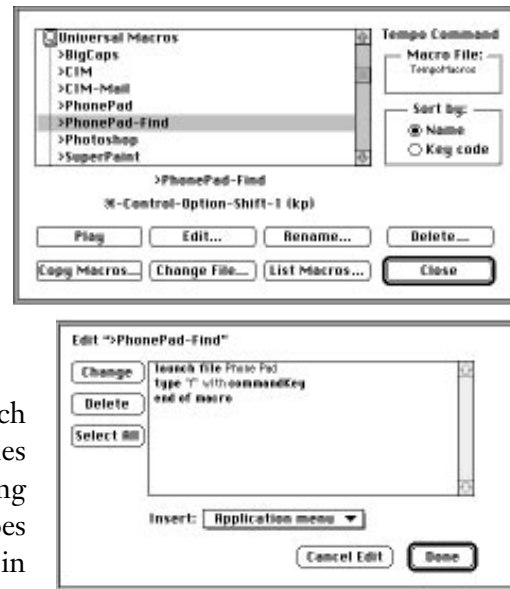
The current version has too many glitches: Sometimes a macro works flawlessly ten times and then chokes on the eleventh, leaving the QuicKeys icon blinking at the top of the Apple menu until you restart the computer. View what you've recorded for a QuicKeys macro, and you'll find a dozen surprises: multiple listings of *pause .5 seconds* and *wait watchcursor* which, if you delete, rarely prevent the macro from working.

At the same time, on its simpler levels, it's a cinch to use and is a boon to every Mac user. It handles some things that Tempo balks at—such as working with pop-up menus inside dialog boxes—and does most of its chores smoothly. But its dominance in the marketplace is due to better marketing, not inherent superiority or simplicity.

I'm glad to get back to Tempo, though my love for it isn't blind. It occasionally slips up in the order of commands—record a switch to a desk accessory followed by a Find command, play it back in, say, Word, and the Find command may be executed (in Word) before the desk accessory opens. But Tempo's overall power, its capability to branch to a specific series of commands based on the specifics at the time of the macro playback (for instance, depending on what's on the Clipboard), its ability to present a dialog box and act on user input, the ease with which you can request that an existing macro be repeated a specific number of times, and its less obtrusive interface makes it, for me, far superior to QuicKeys.

Compression

Compression is making a file smaller so you can squeeze more information into a smaller space on a disk. Only a few short years ago, when hard drives were relatively small and expensive, compressing even active files (the ones you were still working on) was important. Although that's less of an imperative now, compressing archival files (ones that you want to save just in case you ever need them again) is still an issue. And, of course, if you want to e-mail a file, smaller ones transmit more quickly, so file compression is always a major concern for telecommunication.



Two of Tempo's dialog boxes.

Top: The Tempo Command dialog where you can edit and rename, or even trigger, existing macros.

Bottom: The editing window, where you can alter, delete, or add steps to an existing macro.

File-level compression (SZA/KC). A *file-level* compression package lets you select individual files, folders, or groups of files and folders to compress. A compression utility might let you do any or all of the following:

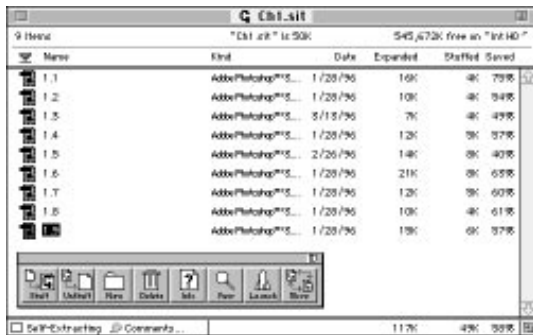
- Choose between compressing your files quickly but not as compactly, or compressing more tightly but taking more time to do so.
- Select groups of files for compression according to their labels, file types, prefixes or suffixes in their names, or according to a list of what should be included or excluded.
- Segment a large file into pieces to fit on floppy disks.
- Add a password to restrict access to a compressed file.
- Use a special menu in the Finder to compress files directly on the desktop.
- Translate files compressed in a variety of compression formats.
- Create a *self-extracting archive* which can be expanded without the compression software.

Some compression utilities offer “on-the-fly” compression: As you save a document, it’s automatically compressed, and if you open it, it’s automatically expanded without your having to do anything (except keep the compression extension running in the background). Some even work constantly in the background on any or all files on your drive to keep free space at a maximum; these utilities usually let you define which files can be compressed (documents not modified in the last two months, for instance) and how long your computer should be idle before the *idle time compression* kicks in.

Stuffit Deluxe (SZA/KC/EC). Even if **Stuffit Deluxe 3.5** (\$130, Aladdin Systems) weren’t the most powerful compression program for the Mac, it would still be the sentimental favorite: first, for having been around so long, and second, because it started out as a shareware program written by high school student Raymond Lau (who’s been out of college for a while now). In fact, the utility’s very name is used in the Mac world to refer to compressed files—*stuffed* files. Its age is something of an advantage: The majority of the files you find on-line have been compressed—and, more importantly,

Lossless versus Lossy Compression (KC)

Whether file- or disk-level, the compression programs described in this chapter use *lossless compression*—the files retain all of their information after compression. You can compress and then extract a file as many times as you need to, and you will always have exactly the same file. *Lossy compression*, on the other hand, is employed by utilities that perform JPEG compression and other such methods used in compacting video files, for example, where some information is lost during compression.



StuffIt Deluxe's main window and control palette. You can see the sizes of the original files, and their compressed sizes in the window; the statistics for the entire archive are at the bottom of the window.

can be decompressed—with StuffIt. Any time you see a file with a *.sit* suffix (like *QReport.sit*), it's a file that's been stuffed with StuffIt.

StuffIt compresses your files—either manually through the main program or automatically with the included module when your Mac is idle—in *archives*, separate documents that may contain any number of your original files. You can segment large archives into two or more pieces to fit on floppy disks. The ingenious View option lets you

peek at text and images inside your compressed files. You can protect your archives from inquiring minds with encryption and a password (see “Levels of Security” later in this chapter). And, StuffIt provides the capability of expanding many other compression formats, ones used by other compression programs. One quick tip: In the main StuffIt dialog box, the Open button is the default when a folder is selected in the left panel. If you don't want to open the folder, but instead want to add it to the panel on the right, hold down (⌘) to make Add the default button so you can activate it with (Return) or (Enter) instead of reaching for the mouse.



StuffIt's Magic Menu, which is added to the menu bar in the Finder, and its drag-and-drop compression options let you compress files right from the desktop.

StuffIt's completeness comes at a price, and it occupies 2MB on your hard disk. A shareware version, **StuffIt Lite** (\$25), limits you to stuffing and unstuffing but that may be all you need. The automatic compression module, **SpaceSaver**, can also be purchased separately for \$80.

Compact Pro (EC). My personal favorite in the file-compression field is **Compact Pro**, a shareware program by Bill Goodman. It doesn't work automatically, nor does it have a Finder menu, but it can compress and expand, add passwords, and split large files with the best of them. Compact Pro is fast and reliable and worth every penny of the \$25 it costs.

More Disk Space (KC). Other than the flexibility it gives you when compressing files, **More Disk Space** (\$100, Alysis) doesn't distinguish itself much from the other programs mentioned here except for its operation along a network. Network administrators will be happy to know that MDS can be installed onto other Macs on the network from a central location; it can also be set up on a server to automatically compress files that are added to it.



HOT TIP

Self-Extracting Archives

(Darcy DiNucci/EC)

Older versions of compression software often can't read files that have been compressed with newer versions. If you're not sure whether the recipient will be able to open the file, make it a *self-extracting archive*, which can decompress itself.

A self-extracting archive is actually an application, and it uses memory like any other application. If you get an "insufficient memory" message when you double-click on a self-extracting archive, give it more memory (with the Get Info command).

If you are compressing a very small document (say, under 25K), it usually doesn't make sense to make it self-extracting: Compression programs add from 18K to 25K of instructions to the file so it knows how to decompress itself. Instead, use a compression program that the recipient has, or send the file uncompressed.

Driver-level compression (KC). Driver-level compression utilities are supposedly easier to use than file-level packages because they compress your entire disk and carry out expansion and recompression without any user intervention. All files remain compressed and are decompressed only when the Mac reads them from the disk.



WARNING

Use caution when using driver-level compression utilities. They replace your Mac's hard disk driver, which controls how the Mac and all its applications handle files. Before installing any driver-level utility you should make sure your hard disk is completely backed up. *[Let me reword that in much stronger language. Don't use driver-level compression software. It's not worth the risk. File recovery from a damaged disk that's been compressed is nearly impossible. Why spend \$150 on questionable software when for \$200 you can get an 800MB hard drive?—SZA]*

If I were to use a driver-level compression program, it would be **Stacker** (\$100, Stac Electronics). It's the least intrusive disk-level utility, since it merely attaches itself to your existing disk driver instead of replacing it. It also lets you use other programs such as Disk First Aid and Norton Utilities.

I can't recommend Alysis' **eDisk** (\$150), which is much more intrusive than Stacker, since it replaces the hard disk's driver—and erases your hard disk in the process, so you have to reinstall your system software and applications after the disk is compressed.

Security

(KM)

Unfortunately, we live in a world where sometimes we must be concerned about safeguarding computer data so it doesn't fall into the wrong hands.

Levels of Security (SZA/KM). There are several different ways to secure your data, each of which may be available separately or as part of a larger software package.

Data encryption is at the extreme end of the security spectrum: Encryption programs secure your data by scrambling and unscrambling it when you provide the proper password. Basic encryption programs are generally secure; only someone who is very knowledgeable and determined could get to your data after it's been encrypted.

For medium-level security, try a utility that can lock a folder. The contents of a locked folder cannot be accessed without a password, but the items in the folder are not encrypted. This is a good method for keeping people from casually browsing through your data.

Exaggerate the locked folder idea, and you get a locked hard disk. You can lock a disk so that only someone with the password can access its data; more secure programs also encrypt the drive's data.

Unless you absolutely need high-level security, avoid encryption programs like the plague. If you forget a password, there is *no* way to get at your files—even the company that made the program won't be able to help you. If you store encrypted files and a year or two later want to get at them, you may be using newer encryption software



Is Big Brother Watching?

(KM)

There are several data encryption methods, but DES (*Data Encryption Standard*) is generally considered the most secure. It was established by the National Bureau of Standards and is supposedly impossible to break unless you possess the *encryption key*. But not everyone thinks DES is all it's cracked up to be.

Many believe that the code was written so that NSA agents could break it. Bell scientist Michael Wiener introduced a paper at Crypt93 (a conference for cryptographers) describing a microprocessor chip that will enable the NSA to break any DES-encrypted message in two minutes.

There is, however, a solution called Pretty Good Privacy (PGP), a *public key cryptography* application, although many—including the government—are unhappy about the existence of this program because its encryption seems to be unbreakable. Despite the opposition, **ViaCrypt PGP for Macintosh** is available from ViaCrypt for \$135.

by then—which won't open the old files, even with the password. And, to top it all off, encrypted files usually can't be recovered from a hard disk when disaster strikes.

FileGuard and TrashGuard (KM). ASD Software provides two security packages. **FileGuard** (\$250) is a comprehensive security package that provides disk-, folder-, and file-level security. It will automatically encrypt your data as it is saved to the hard disk; you can also use it to prevent files from being copied off your hard drive. For Macs that are used by several people, you can set up a security system that allows access using an AppleShare-like privilege setup.

TrashGuard (\$80) is a simple utility that completely erases a file when it's placed in the trash. The space the file occupied is overwritten, making it unrecoverable.

The Kent Marsh collection (KM). Kent Marsh makes a line of security products that can be used to encrypt files, lock up your hard drive, lock folders, or prevent casual access to your Macintosh. While each is a stand-alone product providing a certain level of security, they are also made to work with each other to provide a complete security system. One of the unique features of the Kent Marsh system is the use of an Administrator's disk, which allows access to your data even if you forget your password.

NightWatch II (\$160) locks your hard drive without encrypting files. Access to the hard disk can be gained with a password or with a key disk. NightWatch II also includes a security screensaver that prevents someone from accessing open files on your Mac when you leave it unattended.

FolderBolt Pro (\$130) is used to manage access to folders. You can determine the level of access someone has to your folders by making them read-only, write-only, or completely locked. FolderBolt also lets you lock the trash so only someone with the password can delete files.

CryptoMatic (\$100) is a complete encryption package that lets you use a variety of standards to encrypt files or folders. If you have to send a file to someone else, you can create a self-deciphering file that the recipient can open without the CryptoMatic extension, as long as he or she has the proper password. CryptoMatic also allows you to erase files so that they are unrecoverable, even with data recovery software.

QuickLock (\$30) is a screensaver that prevents others from using your Mac without the proper password.

A.M.E. (KM). **Access Managed Environment**, or **A.M.E.** (\$160, Casady & Greene), is a multilevel security package providing varying levels of access to different users. It offers disk-, folder-, or file-level security, and can even be set up to reject floppy disks so that nothing can be copied from your disk. A.M.E. includes a secure delete feature so that trashed files cannot be recovered.

A.M.E. is very comprehensive, providing tools for almost every security need. It can even be used to prevent desktop modification and setup—ideal for multiuser access where each user has his or her own secure folder. A.M.E. can also be used in an AppleShare environment to restrict access to AppleShare volumes or other AppleTalk devices.

Critical warning! Do not use any hard disk utility programs or update the hard disk drivers on a drive protected by A.M.E.. Doing so will destroy the data on your hard drive or cause your hard disk to crash.



Other Must-Haves

Your arsenal of Mac utilities wouldn't be complete without at least some of the programs described in this section.

Managing extensions (SZA). An *extension manager* helps solve startup conflicts by letting you determine which extensions and control panels should load, and in what order. (Extension conflicts—which can involve both extensions and control panels—are covered in Chapter 7.) Full-featured managers handle more than just extensions and control panels; some offer control over fonts and items in the Startup Items and Apple Menu Items folders.

An extension manager utility basically does its work by moving things in and out of the Extensions and Control Panels folders. If you use an extension manager, you'll find folders inside your System Folder named something like *Control Panels (disabled)* and *Extensions (disabled)* that are used to hold the items you've turned off.

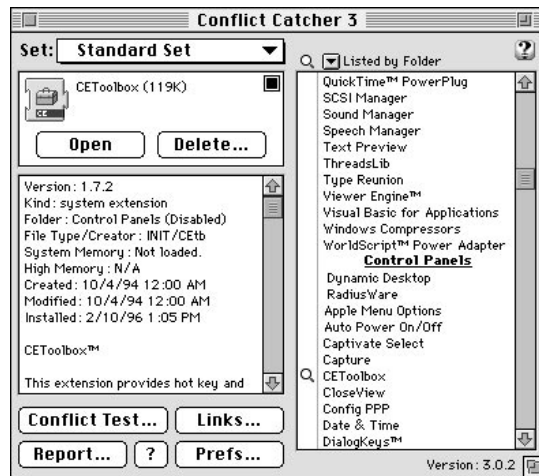
The straightforwardly named **Extensions Manager** was, for a long time, a no-frills freeware control panel. It has a few frills now, and it's freeware of a different sort: it's included in System 7.5. You can create various “sets”—groups of extensions—and choose a set for a restart. It lets you run or disable extensions, control panels, fonts, and even items in the Startup Items folder, but it doesn't let you change the order in which they load. Now Utilities, described later in this chapter, includes **Now Startup Manager** which offers a few more features than the Extensions Manager.

Catching conflicts (SZA). **Conflict Catcher 3** (\$100, Casady & Greene) retains its predecessor's claim to being the best extensions manager around. The program goes beyond simple management both in function and interface. You can define sets of extensions to use under certain circumstances, handle fonts and Apple Menu items, and get information about the function of each item in every list. (For common items, Conflict Catcher uses a description from its own database of information; for

others, the embedded Balloon Help information is displayed.) Conflict Catcher puts its own menu up in the menu bar so you can easily open the control panel or select a set of extensions to use at the next startup.



One of Conflict Catcher's neatest features is the Linking option, which lets you define groups of extensions which should always run together (like Apple's handful of CD-ROM extensions) or never run together (such as two screensavers). With links defined, turning one item on or off affects the others in the link automatically. And, of course, there's Conflict Catcher's original claim to fame: It helps you track down the troublemaker(s) in an extension conflict by shuffling items around and asking you to restart the Mac, as many times as necessary, until the culprit is isolated.



Conflict Catcher manages your Mac's extensions and also provides little extras such as information about the items listed in its window.

Speed bump (SZA). Accelerate your Mac without touching the hardware—just install Connectix's **Speed Doubler** (\$100). While the name is a slight exaggeration—you won't *double* the speed of your machine—you will see a significant increase in its performance.



Speed Doubler's main module is for Power Macs; it boosts the speed of non-native code (instructions written for the 68K-based Macs instead of for the PowerPC chip) considerably. Because the Finder is still not entirely native for PowerPC Macs, Speed Doubler helps even users who are using native applications. The speed increase you get depends on your Mac, and your software, but you can generally assume you'll be bumped up a little past the capabilities of the model that's one step beyond yours; so, a Power Mac 6100 with Speed Doubler can perform a little better than a Power Mac 7100.

Speed Doubler also includes a module for 68K Macs that increases their performance, although not as impressively as on the Power Mac side.

Other necessities (SZA). In addition to many of the utilities described throughout this chapter, there are others that are necessities of Mac life, so I want to mention them here even though they're dealt with in detail in other chapters.

- *Virus protection*: Whether you use a commercial package or one of the many shareware products around, protecting your files from nasty infections is necessary if you

have high exposure—all of this is covered in Chapter 7. (I have to admit that I don't understand why people *buy* virus protection when the terrific Disinfectant is free.)

- *Backup software:* Sometime, when you least expect it, you're going to lose some files, or even access to your entire drive—and you're going to wish you had an extra copy of important documents put aside. Backup software makes making those copies a cinch. There's more about this in Chapters 5 and 7.
- *Memory manipulation:* RAM Doubler from Connectix is a staple of Mac use; [see Chapter 4](#) for more information about it.
- *Disk repair and recovery tools:* The Disk First Aid program that comes with the system software is a good first step for preventing problems or fixing them afterward. But Norton Utilities, from Symantec (which first rose to fame in the PC world), keeps millions of Mac hard disks safe and fixes small problems before they become big ones. Actually, though, I've always preferred MacTools, which Symantec bought and, to everyone's surprise, kept in its product line instead of killing it. Serious Mac users, and especially consultants, keep both of these programs in their troubleshooting arsenal. Check Chapter 7 for more information on these.
- *Font utilities:* [See Chapter 14](#) for details, but it boils down to this: If you use lots of fonts, you need Suitcase or MasterJuggler to handle them. I've always preferred Suitcase, and so do most of my friends—whom I haven't unduly influenced in this area, so far as I know.

Resource Editing

One of the nicest things about Macintosh software, and something that sets it apart from most PC software, is that the code that makes the program run is separate from the interface that's presented to the user—the dialog boxes, alerts, menus, icons, pictures, sounds, and so on, collectively known as *resources*. That means you don't have to be a programmer to futz around with the interface; all you need is a *resource editor*:

The two editors (EC). There are two good resource editors available for the Mac: Apple's **ResEdit** and Mathemaesthetics' excellent **Resorcerer**. Although both programs can do the job, Resorcerer offers many time-saving options that programmers will love. Resorcerer can find and replace text in resources, decompile the text in resources for spell checking or printing, and it has a great icon editor, just for starters. Resorcerer is also more stable, more flexible, and generally more powerful. Unfortunately, the difference in price—ResEdit is freeware, while Resorcerer costs \$256—makes ResEdit the only choice for most home editors.



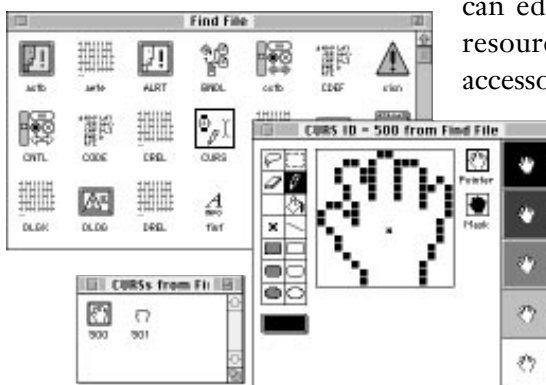
Used incorrectly, ResEdit or Resorcerer can make your program (or your system) inoperable. Make sure you *always* work on a copy, and in the case of system resources, make sure you have a disk you can boot up your Mac with, in case you damage the installed system.

ResEdit's uses (EC). You can change (or just copy) resources from practically any application, desk accessory, extension, control panel, or other nondocument file. A few programs, most notably those from Microsoft, cannot be looked at or tinkered with. (Spoilsports!)

What does all this mean? It means you can personalize your programs and the System and Finder by changing the wording of menu commands, adding keyboard shortcuts, and editing text and icons in dialogs and alerts. You can also transfer pictures and sounds from one program to another.

ResEdit basics (SZA). Despite the sometimes dire consequences of making a mistake with ResEdit and ruining a program, it's easy to use—easy enough that you can just play around with it and figure out how to change some resources.

When you use ResEdit's Open command and select an application or desk accessory, you get a window that displays the resources used in that program. Double-click on a resource icon, and you'll get a list of resources of that type (such as all the cursors, or all the icons). Double-click on an item in the list, and you'll be looking at the actual resource, with its (sometimes) editable contents. (As a general rule, the resources represented by pictorial icons rather than the block of ones and zeros are the ones you



can edit easily.) The figure at left shows the main resource window for System 7.5's Find File desk accessory, the window that displays its CURS items (cursor resources), and the editing window for one of the cursors.

ResEdit has no Save command. Instead, when you close the main window of a file that you've worked on, you're asked if you want to save the changes.

Working in ResEdit means working in a series of windows. To edit a cursor in the Find File desk accessory, for instance, you open Find File and double-click on the CURS resource icon. You'll get a window that shows all the cursor resources (there are two available in Find File); double-clicking on one opens that cursor in an editing window where you can alter it.

Three steps to happy ResEditing (SZA/EC). If you follow these three steps (along with general Mac hygiene, such as regular saves and backups) you should be able to modify your resources without fear.

1. **Always, but *always*, work on a copy.** That has already been said, but it bears repeating: Never work on the original or sole copy of a program or the system. Instead, make a copy of the program and alter *that*. It's easy to damage a file so that it will never run again, and unless you have a clean copy, you'll have lost it forever.
2. **Be careful what you touch.** There are many different kinds of resources; some are more difficult to alter than others, and some are downright dangerous to mess around with. Generally speaking, you should limit yourself to these resources:
 - *DITL*: dialog box contents, with corresponding DLOG or ALRT resource that stores the window size and title
 - *MENU* and *CMNU*: menu resources
 - *STR#*: string resources attached to menus and dialogs
 - *PICT*: pictures used in the program
 - *CURS*: cursors in programs and the system
 - *ICON*, *ics4*, *ic18* (and other resources beginning with IC): icon families
 - *snd*: sound resources can't be altered easily but you can copy and paste them from one place to another
3. **Don't create, just modify.** Don't erase anything and don't create anything: only modify what's already there. Generally, you should stick to cosmetic changes—modifying a button's text, size, color, and shape is fine, but changing it from a button to a checkbox will probably cause the program to hang.

Other Desktop Tools

Not every utility is a power tool—but that doesn't mean that it's not extremely useful. There's a wide range of utilities that do everything from find files to change your desktop background.

Utility Collections

Because so many utilities are tiny, they have a hard time making it as commercial software. It finally occurred to someone to put a bunch of the tiny ones together and sell the collection. So, there are several utility collections available, although their contents are often of uneven quality and totally unrelated to one another.

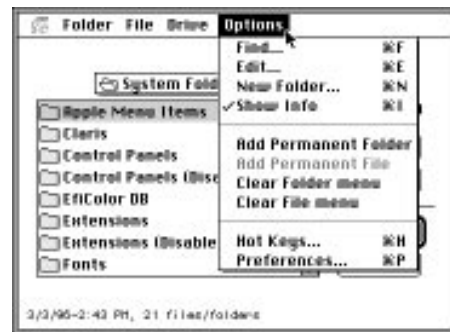
The Now collection (SZA). Now Utilities is the premier utility collection for the Mac. Is it perfect? No. Is it great? No, not really. But it's good and there's no competition. Thousands of users can't work without it.

Now Utilities has two drawbacks, both of which you can live with or work around. First, it's pretty self-centered: Install all the components and you'll find that they've taken over your Mac. Press $\text{⌘} \text{⌘} \text{⌘}$ in the Finder, and Now Find comes up instead of Find File. Carelessly select a menu item while a key is being pressed, and you'll find that you've added a keyboard equivalent accidentally. You can avoid unwelcome surprises by activating a single component at a time and learning all its ins and outs. Now Utilities' second problem is that it always seems to "break" under a system update, causing problems and conflicts; it also, because it's in such widespread use, has problems with some popular applications. To Now Software's credit, they are always on top of things, supplying fixes and updates on-line for all their customers; if you use Now Utilities, plan to stay in touch on-line.

Here's a roundup of Now Utilities' components. As I write this, **Now Utilities 6** (\$90; \$30 upgrade for 5.x users) is only weeks away from release; these descriptions include the new 6.0 modules, although I haven't had a chance to try them out yet.

Now's premier components are:

- *Now Menus.* You get a hierarchical Apple menu in which you can customize the order of items and even add dividers (version 6 lets you go to ten levels of submenus instead of five). This capability alone is important, but Now Menus also lets you create other menus for instant access to all sorts of things—documents, applications, even file servers on a network. In addition, you can assign keyboard equivalents to any existing menu item.
- *Now SuperBoomerang.* This utility is something you can't live without once you've used it. It puts a menu bar inside every Open and Save dialog, providing lists of recently opened folders, files, and disks so you can get directly to them without moving up and down through intervening folders. The Options menu lets you assign permanent entries to the other menus, as well as edit what you see in the dialog's list—copy, move, rename, or delete items without moving to the Finder. Finally, it provides a Find feature which, although it's no better than the system's Find File, is right there in the dialog box.



SuperBoomerang adds a menu bar to every Open and Save dialog. The Option menu lets you add items to its first three menus, as well as search for files and even move, copy, rename, or delete them.

- *Now Startup Manager*. This extensions manager is miles ahead of the system's control panel, and only a few steps behind the stand-alone gem Conflict Catcher.

Now's smaller but still handy utilities include:

- *Now FolderMenus*. This lets you click on a folder on the desktop and get a pop-up menu that lists its contents, with submenus for subcontents; select an item to open it. But you can do more than just view the contents: You just drag a desktop item directly into one of the submenus to put it in an inner folder without ever having to open the outer one.
- *Now Scrapbook*. If you need a scrapbook at all, the one that comes with the system software won't be sufficient. Store almost anything—including sound and QuickTime movies—in this scrapbook, on pages you can name for easier retrieval. You can use a catalog view to see more than one page at a time, and print the scrapbook contents as thumbnails or full-size.
- *Now QuickFiler*. The Find function in QuickFiler is no better than Find File, though Now claims that it's faster. But QuickFiler also compresses files, even breaking them into pieces to fit on floppies. (Its usefulness is limited, because it can't handle standard compressed files that StuffIt makes.)

Version 5 of Now Utilities also includes: **Now Save**, for automatic document saving at set intervals; **Now Profile**, for compiling a profile of your system, including extensions, control panels, and even applications that are available; and **WYSIWYG Menus** (“whizzy-wig”—What You See Is What You Get) that change all Font menus so that the names are listed in the fonts themselves. All these items are still in version 6.

The new items in Now Utilities 6 include:

- *Now Tabs*. With an apparent nod towards Windows 95, Now Tabs puts a tab bar at the bottom of the screen; dragging an item onto the bar creates a button which later lets you open the item.
- *Now AutoType*. AutoType will let you define shorthand entries that are automatically expanded as you type (type *ss*, for instance, and it turns into *spreadsheet*); this is similar to Word 6's AutoText feature, or the Glossary feature in Casady & Greene's Spell Catcher (described in Chapter 8).
- *Now Shortcuts*. The Shortcuts in the title refers to saving time in the Finder, triggering such actions as duplicating, setting sharing options, and locking files with a single mouse click.

Super 7 Utilities (EC). **Super 7 Utilities** (\$100, Atticus) provides a small list of capabilities: tear-off menus so you can put your regular menus anywhere on the screen; a printer menu; an alias trasher; a sound manager; a file finder; and a comments manager that lets you type comments in a Save dialog that gets stored in the item's Get Info window. I love tear-off menus, and Super 7's work quite well, but the printer menu is good only in environments with multiple printers. I couldn't get the file finder to work at all, and most of the other components are not overwhelmingly useful. In all, the product isn't worth its price tag.

Aladdin Desktop Tools (SZA). Aladdin, purveyor of fine utilities like the superb StuffIt, has succumbed to the "let's make a package" syndrome: Take one terrific can't-live-without-it tool that's too small to be sold on its own and surround it with a bunch of okay-but-don't-really-need-it enhancements. The core of **Aladdin Desktop Tools** (\$90) is Desktop Shortcut, the one you can't live without. Shortcut puts a menu inside all Open and Save dialogs that lets you jump directly to any folder or file without traversing intervening folders. The menu keeps track of recently used files and folders and also lists any items you specifically add to it. You also get the convenience of a Find command, an erase option, and the ability to look *inside* a StuffIt archive of multiple items—and unstuff a file so you can open it.

As wonderful as Shortcut is, it's not worth \$90, and none of the other utilities in the package adds to its value. In fact, two of them—Desktop SpeedBoost (for faster Finder copying) and Desktop Makeover (for adding keyboard commands to Finder menus)—wouldn't even install on my Mac because they're incompatible with system 7.5.3. While the Desktop Viewer application could come in handy (it lets you view many types of documents without opening the parent application), Desktop Printer (drag and drop a document to a desktop printer icon to send it to the printer) and Desktop Secure Delete (make erased files unrecoverable) don't add up to a well-rounded package. Find this at a blow-out sale price, though, and you'll wonder how you ever survived without Shortcut.

Connectix Desktop Utilities (SZA/EC). This package provides keyboard shortcuts for menus and dialog boxes, a cursor locator (meant for PowerBooks with passive-matrix displays, so it's not much use on a desk Mac), control panel management, desktop beautifiers, file synchronization (described in the PowerBook utilities section later in this chapter), limited security, and a screen dimmer. **Connectix Desktop Utilities**, or **CDU**, (\$100, Connectix) is something of a jack-of-all-trades and master of none: It includes many utilities, but none is particularly spectacular. The screensaver only dims the screen (no fun pictures here), the security system can be overridden by booting from a floppy, and you can't customize the desktop beautifying schemes (except

for the background picture). The package was obviously spun off from the company's CPU package for PowerBooks (described a little later in this chapter) and isn't worth half the price they're asking.

Search Tools

There are two basic ways to search for something on the computer: Look for an item based on its name or other outer attribute like a label or modification date, or according to the text stored inside the file. The first is a system-level capability, while the second takes a special utility that looks through the text of a file for key words or phrases.

Finding files (SZA). The Mac's anemic Find command underwent a total revamp in System 7.5, essentially killing the "find file" utility market. Apple took the best shareware find utility—Bill Monk's Find Pro—and licensed it for the system software.

Several utility packages, such as Now Utilities and Norton Utilities, include Find utilities. And two utilities described later in this chapter, DiskTools and Disk Top, have powerful Find functions. But there's only one commercial package that's strictly a file finder: Olduvai's **MasterFinder** (\$150). While it's slick and fast, it's not *that* much better than the system's Find File utility, and its price certainly doesn't reflect the reality of the market.

Text retrieval (KC). The basic function of a text-retrieval package is to find a document stored anywhere on a disk or drive by searching the text that it contains. To do that job well, most text retrieval packages will let you:

- Search for part of a word, a word, or a string of words.
- Select a location—a disk or specific folder—to search.
- Use AND and OR to define multiple search criteria.
- Add special criteria for the search, such as the creation date of a file.
- Save your search criteria for use in later searches.
- Use your Mac for something else while it searches for your text in the background.
- Create and maintain an updated index of the files and folders on your disk, to expedite file searches.
- Read the contents of found files from within the search program.
- Search over a network.

Location, location (KC). **OnLocation 2.0.1** (\$130, On Technology) is the best search tool available on the Mac, because of its speed (it creates indexes for fast searches) and its ability to work in the background.

But OnLocation's search criteria are paltry at best. The program offers text searching with the Boolean operators AND and OR as well as a half-hearted wild card search—it can match the root of a word to find related files. I harp on the lack of search criteria so much because OnLocation has the potential of returning a daunting list of files—particularly since it can work over a network and search remote volumes.

FetchIt (KC). **FetchIt 3** (\$40, SilverWARE) is an extension that enhances the functions of the standard Save and Open dialog boxes by installing a pop-up menu containing several functions—most notably text retrieval.

FetchIt's Look 'Fer command lets you search for text strings in files in a given folder (and only in that folder) and is smart enough to automatically narrow the scope of the search to files the active program can read. A successful Look 'Fer will display a Context Window that shows you the part of the file where FetchIt found the match. The utility also lets you continue your search with Look 'Fer Next, which picks up where Look 'Fer left off, using the same criteria.

Additionally, FetchIt includes other utilities, such as Find, which looks for text in file and folder names. FetchIt also lets you change disks and rename, delete, copy, and move files and folders—all from within an application.

Alki Seek (KC). If it weren't for the fact that this program doesn't generate an index and doesn't search in the background, I'd tell you that **Alki Seek 2.1** (\$40, Alki Software) is the best search package available for individual users. I have a soft spot for this program because it has so many ways to narrow down a search—without bogging down the user in the process.

The strongest feature of Seek is its “banter box.” With so many options available for building a search string, this box is a necessity. It answers the question, “What was I looking for again?” by giving you a plain English description of what you had set up as your search criteria.

Alki Seek has a very elegant interface. The majority of the program's operations are handled in two main windows—one to set up a search and one to show the results. The search window has icons representing the different criteria you can select to define your search, and Alki Seek lets you search for files and folders by location, date, size, and application as well as by content.

Using Word for word searches (SZA). Word 6's Find File command can be used to find text inside non-Word documents, even if the document can't be opened by Word. So, if you use Word for word processing, you already have a general-purpose text retrieval tool.



HOT TIP

Just for PowerBooks

PowerBook users have some concerns that never bother desktop Mac users: making a battery last, figuring out how much battery charge is left, dealing with a “disappearing” cursor on a passive-matrix screen, and keeping track of where the most recently changed copy of a file resides. For software solutions to these concerns, read on.



POWERBOOK

CPU (SZA). **Connectix PowerBook Utilities** (\$100), known as CPU, has quite a following because it was the first collection of PowerBook utilities available. It's loaded with features—but they're not all useful, and they sure load up your menu bar with icons. Fortunately, you can pick and choose among the modules and keep clutter to a minimum.

CPU provides the basics: battery management with “sets” of conservation settings for different situations, an instant Sleep command, and a cursor finder. It also gives you keyboard control over menus and dialog boxes—a welcome feature for the trackball-impaired. The Easy Sync utility provides bare-bones file-synching capabilities ([see “That Synching Feeling”](#) later in this chapter).

But Connectix doesn't seem to care much about this little collection anymore: there have been no updates, it's seldom demonstrated at trade shows except by special request, and it's rarely advertised. So, there's some question in my mind as to how long this product will be supported.

PBTools (SZA/RC). A serious geekhead workplace lurks beneath **PBTools'** appealing simplicity of design (\$100, \$40 for owners of VST's PowerBook batteries, VST Systems). One control panel offers easy access to battery analysis, security, and power and sleep adjustment. A compact menu bar icon displays more information than seems possible in such a tiny space. At a glance you can check the battery-charge level, AC connection, hard disk spin, and AppleTalk and Caps Lock status. Deep Discharge Battery easily reconditions nickel cadmium batteries. It even has a *key remapper*—by pressing **Control**, you can use the **→←↑↓** keys as **Page Down**, **Page Up**, **Home**, and **End**. And it's all beautifully supported by extensive Help balloons.



GOOD FEATURE

Enter battery nerdhood with PBTools' PowerWatch station: Use adjustable graphs and diagnostic logs to track voltage thresholds, charge/discharge curves, and other

matters for up to four different batteries (it's not half as difficult as it sounds). If you have a PowerBook, you need PBTools.

That synching feeling (SZA). The PowerBooks introduced a unique problem to millions of computer users: When a file is used in two places (on the PowerBook and on a desktop machine), it's important that, as one copy is changed, the other is updated—and it's just as important to know if both files have been changed since the copy was made. Keeping the files updated in both places is called *synchronization* or *synching*.

File Assistant is a simple synching program that comes with your system software—it's in System 7.5 and also in the 3.0 update to System 7.1. It's better than nothing—but not much better. **CPU** and **CDU** from Connectix (described earlier in this chapter) include the EasySync module. EasySync watches as you drag things from one folder (or disk) to another and interrupts the normal “An older item with the same name already exists at this location. Do you want to replace with the one you're moving?” dialog with one that gives you the option to synchronize the two files so that they're the same.

Of all the stand-alone file-synching programs that came out soon after the PowerBooks were released, only **PowerMerge** (\$130, Leader Technologies) remains—and rightly so, in an atmosphere of “may the best program win.” You can use a variety of controls to define which files, folders, and disks should be synchronized, and when. You can include or exclude a specific file from a sync run, or any file that meets certain criteria. You can set the sync to run at a specific time, or in reaction to a certain event (like mounting a volume or logging on to a network). PowerMerge is so smooth and easy to set up that I use it all the time for backing up my desktop work as well as for file synching.

The Clipboard and Beyond

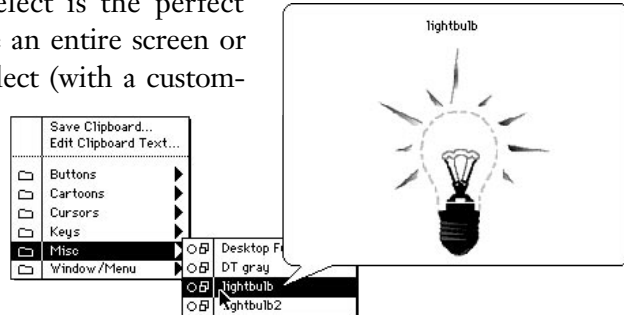
The elegant simplicity of the Clipboard and its Copy and Paste commands just can't be left alone by utility programmers—and it's a good thing, too, because there are actually some improvements available.

KopyKat (EC). Copy up to ten items and store them in temporary clipboards with **KopyKat** (SilverWARE, \$90). Paste the last item copied with **⌘****⌘****V** as usual, or hold down **⌘****⌘****Option** and click to have a pop-up menu appear with each of the items currently stored. The best thing about KopyKat is that you don't even notice you're using it—it is fast and works exactly like the regular system (with the **Option** key added). One problem: In Microsoft Word, KopyKat doesn't copy and paste formats correctly.

MultiClip Pro (SZA). With **MultiClip Pro** (\$150, Olduvai), you can use repeated Cut or Copy commands and have all the selections piled up in the Clipboard—the MultiClipboard—for later access. Copied material can be saved in collections, and you can interact with the Scrapbook seamlessly. Items in collections can be viewed as thumbnails or searched for by name. MultiClip really does provide quite a bit of functionality, but it does have two flaws: the price is way too high for what you get, and the manual has just about the worst writing I've ever seen.

Captivate (SZA). Mainstay's two staple utilities, Capture and ClickPaste, have always been terrific; now they've been tweaked a little further, renamed, and combined into a single package along with another little program. How could you go wrong? You can't. **Captivate** (\$90) includes Captivate Select (Capture), Captivate Store (ClickPaste), and Captivate View.

A *screen-capture* program lets you turn whatever's on the screen into an editable picture, either by putting it on the Clipboard for pasting or by saving it as a file for opening in a graphics program. Captivate Select is the perfect screen-capture utility. You can capture an entire screen or any portion of it just by activating Select (with a customizable keystroke) and then dragging across the area you want captured; it even works while menus are opened. You can set zillions (oh, all right, dozens) of options: a time delay for tricky captures, including the mouse pointer or not; capturing in color or black and white; sending the image to the Clipboard or a disk file; saving the image in any one of several file types (PICT, TIFF, GIF, and so on); and even automatically capturing the same section of the screen that you grabbed the last time out.



Captivate Select's pop-up menu lets you choose text or graphics that you've previously stored; whatever you select is automatically pasted in your document.

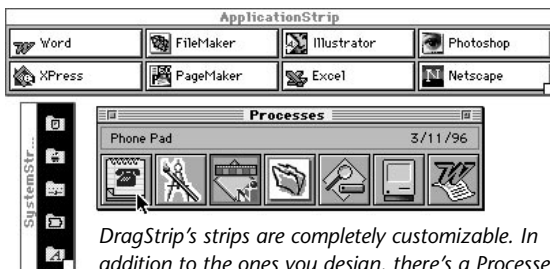
Captivate Store is perhaps best described as a hierarchical pop-up scrapbook. Its pop-up menu lists the folders and subfolders where you have items stored; pointing to a menu item pops out a sample of the item so you know what's there. Selecting the item copies it to the Clipboard and automatically pastes it down in your current application. Captivate Store can handle text, PICT, sound, or QuickTime files that you've put in its folders from within the Finder; you can also paste just about anything into Captivate Store and it will create a file for that item.

The final component in the trio is Captivate View. As its name implies, it lets you view any type of graphic file, but it also provides some manipulative capabilities. You can crop, frame, flip, or rotate the image, print it, or save it in any of these formats: PICT, TIFF, GIF, Startup Screen, MacPaint, Stand-alone, or SimpleText.

A Few More Tools

In the interest of sampling as wide a range of tools as possible, here's a brief list of totally unrelated utilities!

DragStrip (SZA). At first glance, **DragStrip** (\$60, Natural Intelligence) is a variation of the Launcher control panel and its clickable buttons for launching applications and opening documents. But, as with so many utilities, the more you're willing to put into it, the more you can get out of it. You can set up palettes of buttons that not only let you launch the item on the button, but also let you access subfolders (and, of course, their contents) connected to the button item. You can also treat the buttons as if they were icons in a Finder window, dragging a document onto an application's button to force it to open, for instance. In addition, you can make an application button "remember" the documents most recently used by the application so you can select them from



DragStrip's strips are completely customizable. In addition to the ones you design, there's a Processes strip provided which automatically tracks opened applications and lets you switch from one to another by clicking or with an assignable hot key.

a pop-up menu; or, you can manually add document names to a permanent list for the menu. DragStrip "strips" can be completely customized, including background color, the size of the icon buttons, and whether or not icon names should be included.

Although using DragStrip is both a convenience and a breeze, creating the strips is sometimes a drag. It starts off

well enough—you can create a strip button by simply dragging a desktop icon onto the strip. But a strip doesn't automatically resize itself to accommodate a new button, and you can't easily rearrange existing buttons: Although you can move a button to a blank spot, you can't drag a button between two existing ones and have them move apart. Luckily, the setup is the smallest part of using DragStrip. At a street price of under \$50, it's worth getting.

File-handling tools (SZA). It's beyond my apparently limited understanding why **DiskTools** (formerly from the MacPak collection from Fifth Generation Systems) and **Disk Top** (formerly from CE Software, more recently from PrairieSoft) didn't become commercial successes. Both let you do Finder operations—such as finding, copying, deleting, and getting info—without working on the desktop. More importantly, both let you view and manipulate some basic file attributes—like visibility/invisibility, file



DiskTools' main window (left) and the Info window it provides for an item (right), in which you can view and manipulate a file's attributes.

type, and creator—that you can't do in the Finder. (Did you ever notice that System 7.5's Find command lets you search by both file type and creator, yet there's nothing in the system software that lets you see either of these attributes?)



If you can find either of these programs, get it. At last sighting, Disk Top was still being distributed by PrairieSoft for a hefty \$100; although it hasn't been updated since January of 1994, it still works under the latest system software. DiskTools, my personal favorite, was released as shareware in 1995, so troll around your favorite on-line service for it as soon as possible.

Opening unopenable files (SZA). Everyone winds up with a corrupted document sooner or later—one that just can't be opened or, if it can be opened, can't be scrolled or manipulated in any way without crashing the application. A backup copy is not always the solution for this problem, either, because often you'll have backed up the already damaged file. **CanOpener** (\$65, Abbott Systems) lets you open almost any damaged file and copy out the text and pictures that you thought you'd lost.

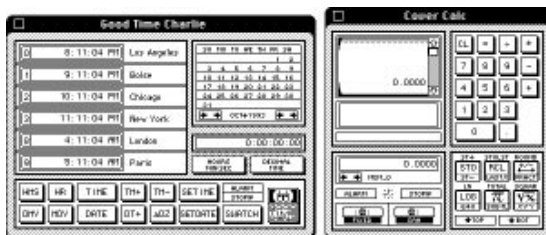
Calculators (SZA/Raines Cohen). Although Apple's Calculator, preinstalled on your Apple menu, works just fine for the basics, several developers offer souped-up alternatives. When shopping for one, evaluate carefully which one matches your style of data entry (conventional or reverse-Polish notation, for instance) and provides the features you need without taking over your screen.

Tuesday Software's **CalcuPad** (\$30) can save and print its calculations as documents. The application takes a unique approach: It thinks it's a Note Pad-type desk accessory, so you can enter comments (and variables) as well as numbers. The program includes 63 arithmetic, math, conversion, logical operation, and programming functions. You can customize the math symbols and use different languages, such as C programming, to operate the calculator.



Calc+ (\$80, Abbott Systems) is unattractive—although you can change the font and size of its number readout, it’s a plain gray box with ugly little buttons. On the other hand, it’s highly functional: In addition to providing standard calculator functions, it works as a graphics calculator, doing conversions between inches, centimeters, picas, and ciceros. The “paper tape” area is missing scroll bars but can be manipulated by “rolling” it with the mouse pointer. A significant flaw is that typing \square on the keyboard presses the percent key on the calculator (pressing \square on the keypad works fine, though).

If you really want a calculator that meets your specific needs, build it yourself. Dubl-Click Software’s versatile **Calculator Construction Set** (\$100) has been around for years, and its longevity may largely be attributed to its flexibility. You can create your own custom calculators using a toolbox similar to those found in painting



Two calculators that come with Calculator Construction Set; if you don’t like any of the sample calculators, you can build your own.

programs. CCS contains emulations of popular scientific and business calculators (such as those from Hewlett-Packard and Texas Instruments), but you can modify them with no programming, or create your own task-specific calculator. CCS calculators are stand-alone desk accessories, and Dubl-Click encourages you to give them away or post them on-line.

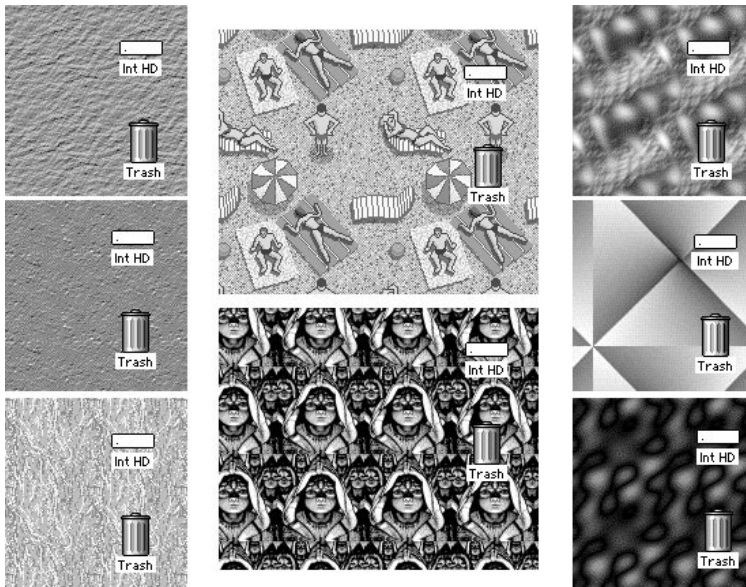
Desktop Diversions

Just as our real desks (the ones with legs and a wood top) are more inviting with a colorful sheet of blotter paper, a nicely framed photo of the spouse and kids, and a tasteful piece of artwork hanging nearby, our Mac desktops sometimes need personalization to offer just the right atmosphere for daily work.

Now Appearing on the Big Screen

From a black-and-white checked background that passed for gray on colorless monitors, the Mac’s desktop (the surface itself, as opposed to the work area) has evolved to accommodate color, patterns, textures, outright artwork, and even animations, both as backgrounds and for taking over the screen when you’re not working.

Wallpaper (SZA/RC). Until the advent of System 7.1, the desktop patterns that you could set through the General Controls control panel were limited to eight-color,

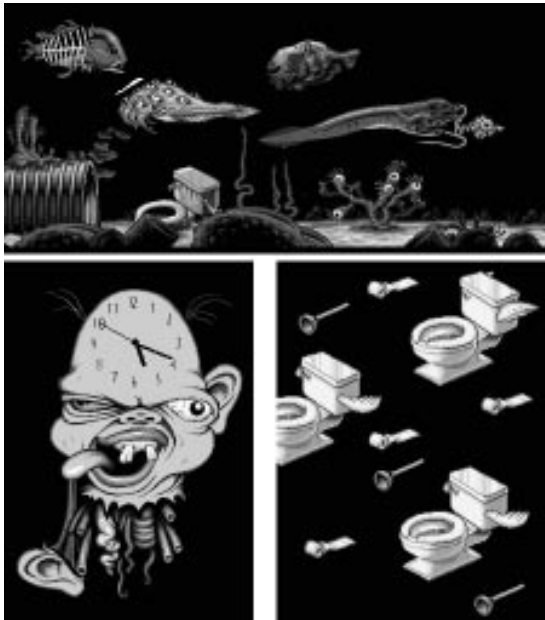


Desktop background patterns can be subtle (left), wild (middle), or weird (right).

8-by-8-pixel squares, repeated again and again across the screen. When **Wallpaper** (\$60, Thought I Could) came out, it provided a much-needed improvement: 128-pixel squares and as many colors as your monitor could handle—and a pattern editor that let you create your own large patterns. With the larger basic pattern and greater color depth, you can get impressive backgrounds that simulate the rich warm feeling of marble, wood, rice paper, a field of clover, or a pool of water.

Large patterns and full color depth are now a standard part of the system, and the Desktop Patterns control panel comes with a wide selection of special patterns, so Wallpaper, revolutionary at the time, is now needed only if you want to do the pattern editing. But it's a terrific little utility with lots of patterns—including Patterns from Hell, which fill your screen with a host of phantom arrow pointers, folders, or trash cans—and a screensaver, Wallpaper in the Dark, which can run a patchwork slide show of desktop patterns or After Dark modules.

About screensavers (SZA/EC). Most computer monitors (like most TVs) use *cathode ray tubes*. They're coated on the inside with phosphor that glows when a beam of electrons hits it, creating the image on the screen. Leaving the same image on the screen for a long period of time can exhaust the phosphor in certain areas, causing it to shine less brightly, or not at all. That's why *screensavers* came into being—to prevent this “burn-in” for monitors where the user walks away and leaves the same thing on the screen for hours at a time.



Selections from After Dark's *Totally Twisted* collection: the *Toxic Dump*, a *Shock Clock*, and the *Flying Toilets*.

That said, you should note that burn-in was a problem only on early monitors, and even then it took days of a non-changing screen to actually wreck the phosphor coating. But screensavers have taken on a life of their own, with various products producing beautiful or amusing moving screens or even game-style components—extremely odd for a program that's only supposed to run when you're not at your computer to see it! *[Some screensaver modules can actually be useful when you're away from your Mac. For example, there are screensavers that enable you to customize the screen with a message such as, "I was here, but now am gone—left my Mac to carry on. Back at 1:00."—JFJ]*

Although you can manually invoke a screensaver with a well-placed mouse click, most of them keep track of how long it's been since you did something on your Mac, and automatically activate themselves after a certain amount of idle time (which you specify); the screensaver provides an ever-changing landscape on the screen. Hitting any key or moving the mouse instantly puts your work windows back on the screen.

Before and after After Dark (SZA). The first Mac screensaver was *Pyro*, which put simple fireworks on the screen. But the standard is Berkeley System's **After Dark** (\$30 per package), which comes in so many flavors it's staggering. Whether you want the old standbys that include *Boris the Cat* and *Flying Toasters*, or something thematic like *Star Trek* (original and *The Next Generation*), *Marvel Comics*, *Looney Tunes*, *Disney* characters, the *Simpsons*, or the *Totally Twisted* collection, you can have it. And you'll find plenty of other modules on-line for downloading.



An animated screensaver from After Dark's *Disney* collection.

Each package provides not only ready-made screens, but also the ability to edit them and combine features from different scenes.

After Dark isn't the only screensaver around, but it's the standard by which all others are measured: Other screensavers can run After Dark modules, and make sure that their modules work with After Dark.

The shareware route (RC). **Desktop Textures** and **Before Dark** are two solid shareware screensaver applications that don't have pattern editors but do let you choose patterns from an easy-to-access list—an excellent feature none of the commercial programs offers.

And now for something completely different (SZA/RC). Just for giggles, call Bit Jugglers and tell their tech support, "I have a technical question about UnderWare." **UnderWare** (\$30) is a special kind of screensaver, something its slightly sick creators call the Dynamic Desktop. After a set period of time (usually just a few seconds), your desktop comes alive with a great variety of animated events. The configurable cartoon antics don't take over the screen, but instead interact with whatever's already there—ducking behind windows, jumping over folders, and sometimes smacking up against the inside edge of the screen. Robber is especially endearing: he breaks through your desktop and reappears later with your processor chip in his hands and the computer police hot on his trail. The fire-breathing dragon occasionally toasts a desktop icon (temporarily, of course!); Jindak the wizard is waiting to cast spells; and sometimes tiny ballerinas dance across the screen. And all this can happen *while* you're working in a window!

You may tire of UnderWare rather quickly, and not everyone has room for the 5.5MB of space that the 26 desktop dynamos require, but UnderWare is a front-runner in the arena of desktop procrastination.

Changing Interface Elements

With only one or two inexpensive software packages, you can totally negate the millions of dollars that went into the design of the elegant Macintosh interface!

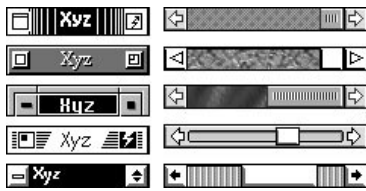
Icon editors (SZA/RC). When you use System 7's built-in ability to alter an icon (described in Chapter 3), all you do is paste a picture onto the existing icon. You may have noticed that a pasted icon doesn't always behave the way a "real" icon works: viewing it in grayscale instead of its original color, or applying a color from the Label menu, or seeing it in a small icon view instead of at regular size may result in the icon's not looking right. That's because every true icon is actually made up of a family of

eight icons that includes two color versions (16 and 256 colors), a black-and-white version, and a *mask* to alter the icon when it's selected or open; each of these icon designs comes in both regular and small icon sizes.

An icon editor allows you to custom-design *all* the members of an icon family. You can modify any existing icon or easily create new ones. Icon editors can also allow you to maintain icon libraries and simplify the process of replacing one icon with another. The cost of an icon editor may seem prohibitive considering the tiny piece of art you get out of it, but hand-crafted icons can look like little jewels on your desktop. *[I didn't write that last sentence. I can't imagine how people find the time to hand-craft icons. If I need some special icons, I'll take ones crafted by other hands.—SZA] [On the other hand, many Mac users are intensely individualistic and no amount of time is too great to make your Mac truly yours. Create icons in your own image, I say.—JF]*

- **Icon 7** (\$80, FOCUS Enhancements) is a system extension; all you have to do to open its editor is to open an icon's Get Info window and double-click on its picture in the window. Even though you're adding yet another system extension to your System Folder, this is a seamless approach to icon editing. Icon 7's text tool is particularly useful, because it's nice to be able to emblazon a folder with a big letter or a short word.
- **Icon Mania!** (\$70, Dubl-Click Software) blows away the competition by integrating icon selection, editing, and library storage into an easy-to-navigate, single-window display. The window's three columns display icon libraries, the icons on your computer, and a pasteboard for temporary storage while you're working. Icon Mania! lets you create thumbnail icons of any graphic file; you can even select just a part of the file to be the representative icon. One of the best features is the ability to customize the system's default icons: New folders and alert icons can be enhanced, and you can choose from 30 new Trash icon styles or make your own.
- Zonkers, described on the next page, includes an icon editor. And check out the shareware editors **IconBOSS** and **iContraption** for a cheaper introduction to creating icon art, although neither program is as slick and trouble-free as its commercial cousins.

Total makeovers (SZA/RC). Redesign the Mac interface: menu bar, windows, scroll bars, buttons—everything's fair game. Make your Mac look like a NeXT machine, a System 8-based system, something from a circus, or even a Windows computer (if you're feeling particularly perverse). Then customize or even animate your cursors (perhaps turn the wristwatch cursor into a spinning Earth).



Some of the many styles available from ClickChange for title and scroll bars.

If you're planning on totally redecorating your Mac, it's a good idea to reduce the chance of system conflicts by having a single program make all the changes. **ClickChange** (\$50, Dubl-Click Software) can do all these tricks, and more. It provides a menu-bar clock for pre-System 7.5 setups, substitutes icons for menu titles on your menu bar, puts color anywhere and everywhere, gives you a

selection of desktop patterns, changes the style of window controls (including double-headed scroll arrows), offers alternatives for the standard button styles ... the list goes on and on.

Zonkers (\$50, Nova Development) also provides window, menu, and cursor enhancements. And, it has more than 1,000 icons you can apply to system icons (such as floppy disks, hard disks, the Trash, and special system folders) or your own folders or documents. Assigning the icons is a cinch: Drag the one you want from the icon library to the Zonkers window that displays all the icons on your drive. To top it all off, there's a collection of desktop patterns, and a desktop pattern editor, along with a control panel that lets you choose several patterns that come up randomly on each startup.



A small sampling of the icons available in Zonkers.

Sounds galore (SZA). You already know that you can change the Mac's alert sound, or system beep, by selecting a new sound in the Sound control panel; you may even know how to put more sounds in there. But did you know that you can attach sounds to other events, such as emptying the trash, inserting a disk, and even clicking in a window's zoom box? Of course, you need a program to help you do that, and you need a lot of nifty sounds. **ClickTrax** (\$50, Dubl-Click) includes 4MB of sounds and a control panel to assign them to various events. And these aren't just special effects sounds such as crashing planes and tinkling glass—they're wonderful impersonations of characters as varied as Ronald Reagan and Elvis Presley.

For even more sound control, there's **Kaboom!** (\$30) and **More Kaboom!** (\$40) from Nova Development. Aside from the 150 sounds in one and 100 in the other, and a control panel to assign them to events, you get a sound editor, Kaboom! Factory, that lets you tweak sounds (add echoes, play them backwards, loop a section, add fade-ins and fade-outs) until you can't recognize them anymore.

The Shareware Interface

(SZA)

You don't have to buy a commercial package to twiddle with the looks of your Mac; there must be at least a zillion shareware and freeware programs that let you tweak the interface. The ones described in this section are just a small sampling. (Shareware programs come and go based on their popularity, how many people actually pay for them, and how busy the authors are. If you can't find these specific programs, look for others like them.)

Doing windows. The crux of the Mac interface is really the window, because that's where you do your work. So, there are plenty of programs that change the way windows look and behave.

You can drag a window by grabbing it anywhere along its title bar, but you can resize it only from the bottom right corner, and the top left—at the close box—is always anchored to the screen. With **Stretch2**, you can resize the window from any of its edges or corners simply by dragging the frame that gets added to every window.

- Mac windows seem to have conveniently placed scroll arrows but, in fact, if you want to scroll up and down, or back and forth, you have to move the mouse quite a bit to alternately use the top and bottom or left and right scroll arrows. Both **DoubleScroll** and **Scroll2** provide double scroll arrows at each end of both scroll bars—you won't believe how convenient this is!
- When you drag a window, it's just the outline that moves until you've let go of the mouse button. If you want the actual window to move as you drag, try **RealDrag**.
- **WindowWizard** keeps track of all your windows. You configure it to pop up in the menu bar, in window title bars or anywhere on the screen; its hierarchical menu lists every open application (including the Finder), and every window open in each one. Select a window from the menu, and it (and its application, of course) comes to the front.
- If you're using System 7.1 instead of System 7.5, the **WindowShade** control panel that lets you collapse a window down to just its title bar is still available as shareware; another shareware program, **Zoombar**, also shrinks windows down to their title bars.

Menu manipulation. You can change your menus as easily as you change the desktop pattern; make them drop down without clicking, add color, abbreviate their names, change the names to icons—the possibilities are seemingly endless.



POWERBOOK

- Slide up to the menu bar, point to a menu title, and have the menu drop down without a click; then, click on a menu command to activate it. **AutoMenus** provides this option, and it's especially handy on PowerBooks for the trackball- or trackpad-impaired.

- Use **Menuette** to change menu titles from the Chicago font that was specifically designed for easy readability to anything you'd like, or to change from text to icons for menu titles.
- Change any common menu title (File, Edit, Format, and so on) to an icon of your choice—even of your design—with the **MICN** utility.
- Change the standard system menu icons (Apple, Help, and Application) to animated ones with **Zipple**.
- Although you wouldn't guess it from its name, **Greg's Buttons** lets you add color to the menu bar and menus. Its main focus, however, is altering the standard style of radio buttons and checkboxes.

Power Tool Tips

Tips for Macro Editors

(SZA)

Keyboard launchers. Both macro editors (QuicKeys and Tempo II Plus) have specific, easy ways to assign a key to a program or file launch, so the only thing you have to think about is which keys to use. And the macros work not only to launch the program initially, but also to move you from one open program to another.

Use the function keys (F5), (F6), and so on) at the top of the keyboard as single-key launchers for the applications you use most. Avoid the first four keys because they work as single-stroke Undo, Cut, Copy, and Paste commands. You can even reserve the last three keys (off in a group by themselves) for special functions (mine are assigned to trigger a screen capture, hide all background applications, and move to the Finder) and still have eight keys left for launching applications.

I use those eight function keys to launch the applications I use the most; I've assigned eight other applications, which I use less often, to a combination of (Shift) and a function key. A combination of (Option) and a function key triggers something extra related to the application that usually launches from the key—a special template opens in Word, the telecommunication program logs on for my e-mail, or my database of Mac products opens in FileMaker.

Desk accessories and utilities are assigned to (Control)(Option)(Shift) (they're clustered together, so they're easy to press) and a number from the numeric keypad; so I can open the Chooser, or the Calculator, or my Phone Pad, from the keyboard.



HOT TIPS





Finder Menu Command-Key Equivalents

File Menu

New Folder	⌘⇧N*
Open	⌘⇧O*
Print	⌘⇧P*
Close Window	⌘⇧W*
Get Info	⌘⇧I*
Sharing	⌘⇧H
Duplicate	⌘⇧D*
Make Alias	⌘⇧M*
Put Away	⌘⇧Y*
Find	⌘⇧F*
Find Again	⌘⇧G*
Page Setup	⌘⇧J
Print Window	⌘⇧T

Edit Menu

Undo	⌘⇧Z*
Cut	⌘⇧X*
Copy	⌘⇧C*
Paste	⌘⇧V*
Clear	⌘⇧B
Select All	⌘⇧A*
Show Clipboard	⌘⇧K

View Menu

Small Icon	⌘⇧Shift S
Icon	⌘⇧Shift I
Name	⌘⇧Shift N
Size	⌘⇧Shift Z
Kind	⌘⇧Shift K
Date	⌘⇧Shift D
Label	⌘⇧Shift L
Comments	⌘⇧Shift C

Label Menu

None	⌘⇧0
Labels/Colors	⌘⇧1 through 7

Special Menu

Clean Up	⌘⇧U*
Empty Trash	⌘⇧Shift Option T
Eject Disk	⌘⇧E*
Erase Disk	⌘⇧Shift Option E
Restart	⌘⇧Shift Option R
Shut Down	⌘⇧Shift Option S
Sleep	⌘⇧L

Note: * = These command-key equivalents already exist.

Finder menu commands. Use a macro editor to add a keyboard equivalent to any Finder command that doesn't have one. There aren't enough alphabetic characters to go around in logical combinations, but you don't have to stick to using just the ⌘⇧ key with a letter. The above table lists suggested keyboard combinations that cover every command available. Combinations with asterisks are the ones that already exist.

Making a better Make Alias command. The Finder's Make Alias command already has a keyboard equivalent, but you can improve upon the command itself, which creates the alias using the original icon's name with *alias* appended to it. To create an alias without that pesky suffix, record a macro that includes these steps (making sure you first select an icon that can be aliased):

1. Choose Make Alias from the File menu.
2. Press ⌘⇧ to move the insertion point to the end of the alias's name (it's automatically selected when it's created).
3. Press **Delete** five times to erase the word *alias*.

That's all. By not erasing the space that comes before the word *alias*, the alias has a name that's different from the original's, so they can co-exist in the same folder—which is where the alias is created.



HOT TIPS

Keyboard button presses. Record macros that let you “click” buttons in dialog boxes so you don't always have to reach for the mouse; these are especially convenient when it's a simple dialog that just presents a few buttons and no other controls. Make sure you save them as universal macros so that they'll work no matter what application you're in. Here's a list of suggestions which will help you avoid the problem of assigning something like **⌘C** for Configure when that combination is often built-in for the Cancel button; in fact, even **⌘C** isn't a good idea for Configure because of the potential confusion. And, don't forget—**Return** and **Enter** work for the highlighted button in a dialog, and **⌘.** and **Esc** trigger the Cancel button.

⌘Y	Yes	⌘T	Options
⌘N	No	⌘K	Configure
⌘S	Save	⌘R	Revert
⌘D	Don't Save	⌘H	Help

ResEdit Tips and Projects

Jumping around (EC). Because **⌘O** is used to open files, ResEdit lets you use **Return** and **Enter** to open practically everything else. Try it while you have a resource item selected in a list, or while you have a button selected in a dialog box, just to name a few spots. You can use **⌘W** to close, and the **↑↓** keys to move up and down the lists. You can also type in a resource item number (or a name if it has one) to jump to that resource item.

Aligning (EC). If you're really picky about aligning things, which most people who bother with ResEdit usually are, you'll find that entering values in the Top, Bottom, Left, and Right boxes is the fastest way to align items. The numbers entered refer to the number of pixels from the given edge. The **↑↓←→** keys also work nicely for moving one pixel at a time.

Hidden objects (EC). Sometimes you'll find that various objects are piled up one on top of another in a window that holds DITL resources. To see all the objects in a dialog box, hold down the **Option** key. Each item's ID number will be revealed. To select an object that's below another, use the Select Item Number command in the DITL menu, enter the appropriate number, and press **Enter**.



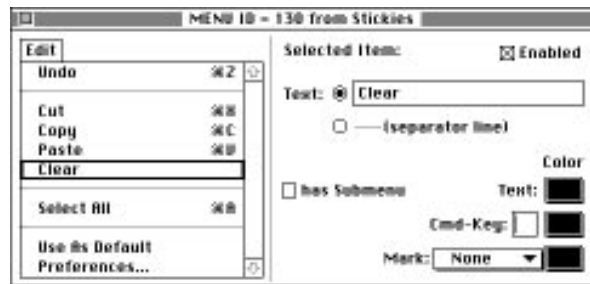
HOT TIPS

Use Get Info (EC). If you have an “orphaned” document on your Mac—one with a generic icon—and you want to know what program it was created with, open ResEdit and use the Get Info command in the File menu. It will tell you the Type and Creator of the document, which will often clue you in to which kind of program you’ll be able to use to open the document. *[Of course, if you get DiskTools, described earlier, you won’t have to do this.—SZA]*

Use the Get Resource Info command (EC). Many programmers don’t bother to name their resources. When you open a resource type, you may just see the number and size. You can give a resource item a name (or a better name) to help you find it later. Simply press $\text{⌘} \text{⌘} \text{⌘}$ and type in a name. When you close the Info box, the name appears in the list. You can change an item’s name without problem, but don’t touch anything else in the window; the ID number and type should not be modified. (On rare occasions, and almost never with DITL, DLOG, MENU, or STR# resources, a resource item name is used as text in the program itself. Changing the resource item’s name will change the text in the software.)

Adding a keyboard equivalent (SZA). It’s easy to add keyboard equivalents to menu commands so long as the application stores its menus as standard resources. The following example adds the standard $\text{⌘} \text{⌘} \text{⌘}$ to the Clear command in the Stickies desk accessory’s Edit menu.

1. Open Stickies in ResEdit and double-click on the MENU resource icon.
2. Double-click on the picture of the Edit menu to open the editing window.
3. Click on the Clear command in the menu at the left of the window. Type a *B* in the box labeled Cmd-Key. You’ll see the keyboard equivalent immediately added to the picture of the menu. (The menu you’re editing also appears in RedEdit’s menu bar so you can pull it down and see what it looks like.)



Type the letter *B* in the Cmd-Key box in the lower right to add the keyboard equivalent to the Stickies Edit menu.

4. Close all windows and click Yes when you’re asked if you want the changes saved.

Grabbing a sound (SZA). You can move sounds from one application to another, or from an application into the Sound control panel so you can use it for your system beep. The following example gets the xylophone sound used in the Jigsaw Puzzle desk accessory and puts it into the Sound control panel.

1. Open the Jigsaw Puzzle in ResEdit, and double-click on the snd resource.
2. Select the “CongratsSnd” line from the list of sounds in the window that opens.
3. Use Copy from the Edit menu.
4. Open the Sound control panel and select Alert Sounds from the pop-up menu.
5. Choose Paste from the Edit menu, and name the sound in the dialog that appears.

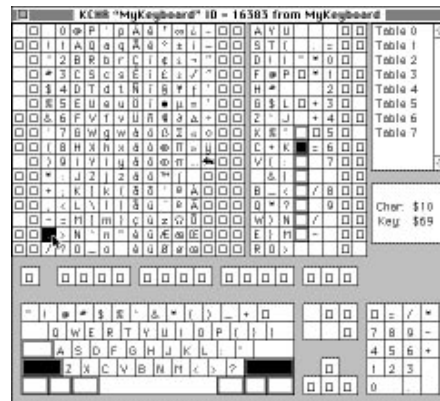


That’s all—don’t forget to close the Jigsaw Puzzle file in ResEdit.

Creating a keyboard layout (SZA). It seems pretty simple: You press the \boxed{N} key, and an n appears on your screen; press $\boxed{\text{Shift}}\boxed{N}$ and you get an N . But sometimes it’s annoying: Hold down $\boxed{\text{Shift}}$ when you want to type “N.Y.” and you’ll wind up with “N>Y>” instead. And working on a PowerBook presents a problem for numeric entry: Wouldn’t it be nice if you could, say, hold down $\boxed{\text{Option}}$ and use a cluster of alphabetic keys as numbers instead of having to use the ones spread out along the top row of the keyboard?

It’s actually very simple to create a keyboard layout that maps the keys on your keyboard to any character you want. Here’s how to get rid of the $N>Y>$ problem:

1. Create a keyboard layout to work on: Double-click on your System file, and option-drag the *U.S.-System 6* keyboard layout to the desktop (this makes a copy of it). Rename the icon to something like *MyKeyboard*. If you can’t rename it because it’s locked, use the Duplicate command from the File menu, and rename the duplicate.
2. Launch ResEdit and open the new keyboard file; a window opens with four icons in it; double-click on the one named KCHR.
3. In the window that opens, double-click on the single line of information. This opens the layout window.
4. The only items you need to work with in the layout window are the 16-by-16 grid of characters and the sample keyboard. Hold down $\boxed{\text{Shift}}$ on your real keyboard, and drag the $\boxed{.}$ character from the grid to the $\boxed{>}$ key on the sample keyboard. With $\boxed{\text{Shift}}$ still down, next drag the $\boxed{.}$ character to the $\boxed{<}$ key.



Dragging a character from the grid at the upper left onto the keyboard in the lower left changes how keys are mapped from your keyboard to the system.



HOT TIPS

5. To make sure you can still type \langle and \rangle , you have to put them somewhere accessible: Hold down \langle Option \rangle and \langle Shift \rangle and drag the greater-than and less-than symbols from the grid to their usual positions on the keyboard.
6. Close all the windows you've opened; you'll be asked if you want to save changes when you close the last one. Click Yes, and quit ResEdit.
7. Drag the keyboard layout into your System Folder.

To use the new layout, open the Keyboard control panel and select it from there—that's it!

The keyboard layout menu (SZA). If you work with multiple keyboard layouts for foreign languages or other, simpler purposes, you don't have to use the Keyboard control panel to switch among them. Although it's disabled by default, there's actually a system menu that lists keyboard layouts.

For this trick, you'll be altering the System file itself, so start by duplicating it inside the System Folder, and open the duplicate in ResEdit.

1. Double-click on the itlc resource icon.
2. Double-click on the single line of information in the window that opens.
3. In the new window, look for radio buttons labeled Always Show. The zero button will be selected; click on the 1 instead.
4. Close the windows, saving your changes when prompted.

Next, you have to swap your System files: Drag the original out onto the desktop, and rename the altered duplicate to *System*. Restart, and you'll find a keyboard menu on the menu bar between the Help and Application menus. If everything's working fine, you can trash the original system file at this point.

