THE ALTERNATIVE MAC MANUAL

FROM

MACFORMAT

Everything you wish the official manual had told you, from the basics of using your Mac to expert tips

The Alternative Mac Manual

Rod Lawton

MACFORMAT, Britain's best-selling Macintosh magazine, is published every four weeks, and brings you the latest Mac-related news, practical how-tos, and authoritative reviews of interesting and affordable new products. MACFORMAT is available every issue with a cover-mounted CD-ROM or high-density floppy disk.

MACFORMAT will help you get more out of your Macintosh, whatever you use it for.

For information on subscriptions to MACFORMAT, phone our Customer Service Hotline on 01225 822511 or fax 01458 274378.

Contents

Introduction

This book is aimed at a whole range of Mac users. It starts with the very basics – how to use a mouse, and finding your way around the Desktop – all the information that absolute beginners need to know. It also has information for more experienced Mac users – how to use the Apple menu, getting the most out of aliases, efficient ways of handling files and folders and the low-down on control panels and the System itself. Even 'Mac pros' may learn things they didn't know before – for example, the mysteries of the Apple Extras folder with System 7.5, what AppleScript does and whether to install QuickDraw GX…

What we had to assume

We couldn't produce a guide for every single version of the System running on every single model of Mac. Much of the advice and information in this book applies throughout the Mac range, and although it concentrates on System 7.5, a lot of this information is general. And who knows, if you don't already have System 7.5, you may be persuaded to upgrade!

What we had to leave out

This isn't a book for serious, heavyweight Mac professionals (although even they might learn a trick or two). It's for ordinary home or office users who want to understand and use their machine that much better. For that reason we steered clear of networking – it's a complicated subject that's only going to be relevant to a small number of people. We also had to leave out advice on hardware and software, just because there wasn't space to include it.

What we've crammed in

For all the things we had to leave out, we like to think we've stuffed a lot more in! In 100 pages it's tough to explain the Macintosh from the ground up, catering for both complete beginners and experienced Mac owners – but we think we've made a pretty good effort!

We hope you like it.

1: Macintosh basics

This chapter is for people who have never used a Macintosh before. It starts with what you see when you first switch on your machine, and by the end you should be able to find your way around. If you've used a Mac before, you don't need this chapter.

If you've never used a computer at all, your Macintosh will give you the simplest, most painless introduction to computing possible. If you've used another machine, your Mac will make you wonder why all manufacturers don't make computers this easy to get to grips with.

What's an Operating System?

To start with the very basics, your Macintosh has both a 'body' and a 'brain'. The body is the hardware on your desk – the main box, the monitor, the keyboard and the mouse. None of this is any use, though, without the Mac's 'brain'. This is the software that works with the hardware to display documents on the screen, moves the pointer when you move the mouse, stores your programs and files so that you can find them again and a hundred more 'invisible' tasks that you wouldn't usually be aware of. This 'brain' is, to use the proper computing jargon, the 'Operating System' – it controls how your Macintosh 'thinks'.

All computers have their own operating system, and this is what differentiates one machine from another. Macintoshes have their own operating system, PCs have theirs (the new Windows 95 is very much like the Mac's operating system) and other computers like the Commodore Amiga and Atari ST have different operating systems too. These days, though, the PC and the Macintosh are the two main computer types to choose from.

Why don't all computer have the same operating system? The reasons are historical and commercial. At different times, different computer manufacturers have looked at the opposition and decided they could build something better – something that's easier to use, nicer-looking or more efficient. That's all very well, because it ensures that computers 'evolve' in a spirit of competition. However, there are two drawbacks:

1. Macintoshes are different to use to PCs (and other types of

computer). You have to learn how to use each machine differently – they display information differently, and they are controlled differently.

2. Programs designed to run on a Macintosh won't work on a PC, and vice versa.

Called simply the System, the Mac's operating system is actually a complex and powerful piece of software that contains many features you can modify to suit the way you work – from how things look on the screen, to where your files are stored and how easy it is to load up the programs you use most often. There have been many versions of the System, and the latest – System 7.5 – is the most powerful and flexible to date.

The part of the System you actually see is the Macintosh's 'Finder'. The Finder is a program that helps you find and organise your files and programs, and it's always running. The Finder is what you see when you first start up your Macintosh, and you can always switch back to the Finder while you're working with another program. The Finder is basically your Mac's control centre, and this is what it looks like (the details may vary from one Macintosh to another, but the main components are the same):

Not much to see, is there? This is the 'Desktop', and it's very much like the surface of your own desk might be.

Using your mouse

But before you start experimenting with the Desktop, there are some techniques you need to learn. Most of the things you do on your Macintosh are controlled with the mouse. As you move the mouse around on a flat surface, you'll see a small pointer moving about on the screen: ▶

You make things happen by moving this pointer to the right place and then using the button on top of the mouse. Now, there are three ways of using this button:

1. **Single-clicking.** Where you are asked to 'click' on something, move the mouse pointer to the right place and press once on the button.

2. **Double-clicking.** The same as single-clicking, except that you have to press the button twice in rapid succession. (This can be hard for beginners initially, but it comes with practice.)

3. **Dragging.** Here you have to position the mouse pointer, then press the mouse button – and keep it pressed while you move the mouse pointer. This technique is used when you use 'menus' on the 'menu bar' (see below) and when moving icons from one place to another (e.g. dragging an unwanted file to the Wastebasket).

The menu bar

File Edit View Label Special

Along the top of the Desktop is the 'menu bar'. Menus are lists of commands you can give that become visible when you move the mouse pointer over them and hold the mouse button down.

To select one of the commands (the proper term is 'options') you just move the mouse pointer until that option is highlighted underneath it, and let go.

Special
Clean Up Desktop
Empty Wastebasket...

Eject Disk   ⌘E
Erase Disk...

Restart
Shut Down

For example, the Erase Disk... option (above) deletes all the information stored on a floppy disk inserted in the disk drive (obviously, it only works if there's one inserted). Some of the options on the Desktop menus won't make sense right now, but that doesn't matter for the time being.

Most programs you run on your Macintosh have a menu bar (although some, such as multimedia products and games don't – or don't always display it), and it's always displayed right at the top of the screen. All menus work in the same way, too – you position the mouse pointer, click on the menu name and, still holding the mouse button down, move the mouse pointer down to the option you want, so that it turns black (it's 'highlighted') and then let go.

You'll notice that there are half a dozen named menus in the Desktop's menu bar, together with an array of symbols. You can click on these symbols to do a variety of things. You will probably see just three on your Desktop:

The 'Apple menu' (far left). This is a special menu which you can set up yourself to offer short-cuts to your most-used files or programs, amongst other things. It also offers quick access to the settings that control the way your Mac works and lets you access the small programs, like the Calculator and the Puzzle, that come with your Macintosh.

The 'Help' menu (towards the far right). Most programs come with 'on-line help' so that you can call up screens containing advice, definitions and instructions while you're working.

The Applications menu (far right). Your Macintosh can work on many things at once. We mentioned earlier that the Finder is always running, and you can go back to it at any time by selecting it from this menu. When you're working with a program, this icon changes to one that represents the program, but it still works the same way – any time you want to get back to the Finder (your Desktop) or another program, simply choose it from the list that appears when you click on this icon.

The menu bar in the main illustration on page 11 contains a couple of additional icons. Don't worry about these. Some programs create menu bar icons like these so that you can access the programs quickly at any time – another valuable short-cut for more experienced Mac users.

A closer look at menu options

If you browse around the Desktop menus, you'll notice that not all of the menu options look the same.

For a start, not all of the menu options you see are in black text – some are grey. When an option is grey (or 'greyed out', to use the proper term), you can't select it. This is because not all menu options are necessarily appropriate or possible at any one time. For example, if you try to empty the wastebasket (described on page 18) when there is nothing it, you'll see that option is greyed out. In this same menu you'll see that the Eject Disk option is greyed out – that's because there isn't a disk currently inserted.

On the File menu you'll notice that (as well as options that are greyed out), many of the options are accompanied by symbols. For example, the New Folder option has a small symbol followed by a capital 'N'. This symbol is the one you find on your keyboard's 'command' key (which often has an apple on it too). The command key offers short-cuts to many options you find on menus, and in this case, holding down the command key and pressing the 'N' key will

have the same effect as choosing the New Folder option using the mouse. Many of the options on the File menu have these 'keyboard shortcuts', and they can save more experienced Macintosh users a lot of time. Because they're always visible when you use the menus, you quickly get to learn them without having to try – soon you'll find you stop using the menus for many tasks and rely on these shortcuts.

Still on the File menu, you'll see that a couple of the options are followed by three dots (...). These are continuation marks, and they are a kind of visual shorthand to let you know that these options lead to dialogs. We'll be looking at dialogs shortly, but basically they are devices that ask you for any extra information the Macintosh needs before it can carry out the command you've selected.
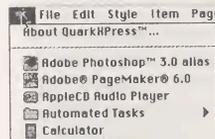
Lastly, take a look at the Apple menu. If you have System 7.5 installed on your machine, you'll see some options with right-facing arrowheads. This means that if you choose these options, a smaller 'sub-menu' will pop up alongside, giving you a further range of options to choose from. To select one, just move the mouse pointer over to this sub-list, without releasing the button.

Shutting down

This is the first menu option you need to memorise! Take a look at the illustration of the Special menu on the previous page, and the last option – Shut Down. When you want to switch your Macintosh off, ALWAYS choose this menu option first so that it can close down its disk drives properly and check for any unsaved data.

Talk to me!

Many of the options you select from menus will need you to supply further information. For example, if you want to open a word

processing document that you've been working on previously, your Mac is going to need to know what it's called and where to find it.

Your Mac gets this additional information in the form of a 'dialog' (the American spelling is obligatory, I'm afraid). A dialog is like a form, where you have to fill in the right information in the right places. Here's the dialog that the ClarisWorks program displays when you try to open a file.
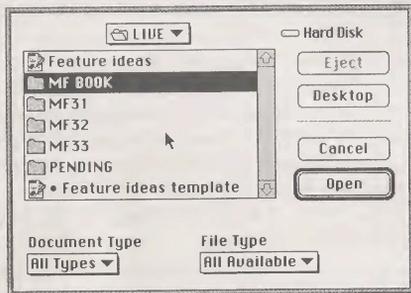
It may look complicated, but it breaks down into pretty easy-to-understand segments. The main part of this dialog is a mini-window which lets you choose which file to open. (It also displays folders which you can double-click on to see if the file you want is within them.) You'll see this mini-window often when you're handling files, and there are other items in this dialog you'll see repeatedly too:

At the bottom of the dialog are two options – Document Type and File Type – which are peculiar to ClarisWorks, and you don't need to know about right now. However, the downward-pointing arrows after All Types and All Available indicated that there are choices to make.

When you see a box like this, with a downward-pointing arrow, it indicates a 'pop-up' menu. If you click on this box and hold the mouse button down, a menu appears which contains a preset range of choices for you to make a selection from. Pop-up menus can help you decide where to save a file, choose the type of file you want to create and more.

Meanwhile, on the right hand side of the dialog you'll see a column of 'buttons'. (Buttons are objects you click on once to make something happen.) The top one (Eject) is greyed out, meaning that we don't have a disk inserted. The next (Desktop) is a shortcut back to the top level of your filing system, which is useful if you get lost. The third button (Cancel) stops the whole operation and the dialog disappears. There's a Cancel button on just about every dialog you'll meet, you'll be pleased to here. Finally, there's the OK button. You click on this when you're satisfied you've chosen all the other options correctly.

You'll notice that the OK button has a heavier border. This is a useful short-cut in dialogs. Pressing the Return key is the same as clicking on whichever button in a dialog has the heavy border (there will only ever be one). Quite often you'll open dialogs that you don't need to make any changes to, and pressing the Return key is quicker than moving the mouse pointer and clicking.

Nearly all dialogs will have at least an OK (or Open, or Save) or a Cancel button and many dialogs will have additional buttons.

There are three other types of object you'll meet in dialogs which aren't illustrated in our ClarisWorks example (above):

This box is called a 'field'. Fields are used where you, the user, need to enter a name for a new file, for example. Dialogs often fill in these fields with standard text which you can change. When the text, as in this case, is highlighted, you can start typing straight away and what you type will replace the highlighted text.

This is a 'checkbox', shown in 'unchecked' and 'checked' state. It's like ticking a box on a form to say if you want something or not. To check or uncheck a checkbox, simply click on it.

These are 'radio buttons'. You find them in groups of two or more, and they let you choose one out of a related set of options. They are used where one response has to be

chosen out of several possibles – rather like multiple-choice questions.

The Desktop

Having got the menu bar out of the way, we can turn our attention to the rest of the screen. This is the Desktop, and in our example it's pretty bare. There's simply an icon in the top right called 'Hard Disk' (it may be called something different on your machine) and on in the bottom right called 'Wastebasket'.

The Hard Disk icon on your machine will not look exactly like this one (that's one of the beauties of the Mac – you can change the names and the appearance of icons to suit your own taste), but your Desktop will have an icon that represents your machine's internal hard disk.

The hard disk is where everything on your Macintosh is stored – your programs, your files, and all the files your Mac needs to run (we'll talk about programs and files shortly). You will often see desktops with many more icons, but these all represent items stored on this hard disk. Think of your hard disk as a 'box'. You can take things out of this box and leave them on your Desktop if you like, just to make them easier to get at. However, this is an illusion – they are still stored on the hard drive.

The Wastebasket is where you put all the things you don't want any more. In older versions of the System, this wastebasket would be emptied periodically, but now you have to tell the Mac when you want it emptied (choose the Empty Wastebasket option on the Special menu). This provides a bit more security – it's all too easy to throw things away accidentally. You can tell when your Wastebasket has something in it because it visibly bulges!

Getting back to the Desktop

Those, then, are the components of your Mac's Desktop. It's the place where you organise your files and information, and it's the starting point for all your activities.

And because it's so central to everything you do on your Macintosh, it's helpful to be able to get back to it when you need to.

We mentioned earlier that your Mac could run several programs at once, and each program you run will take over the screen. It will put its own menus in the menu bar, and almost certainly cover up much of your Desktop. This can be confusing if you don't know what's going on. Think of your screen in terms of layers. At the bottom layer is your Desktop, while on top of it you can have one or more programs running, in the same way that you might have one or more books open on a proper Desktop, one on top of the other.

This is where the applications menu (mentioned earlier) is so useful. Unlike most of the menus, it's always there, and you can use it to switch quickly between 'applications' (which is what Mac people call programs). When you choose a program from the menu, it brings that program to the front of the heap.

If you want to get back to your Desktop, simply choose Finder from the applications menu. However, the display will probably still be cluttered partially by other applications you have running. So, from the same menu, now choose Hide Others – your Desktop is now clearly visible.

Looking through windows

Most of the things that happen on the Macintosh happen in Windows. You can see an example of a window if you move the mouse pointer and double-click on your hard disk icon:
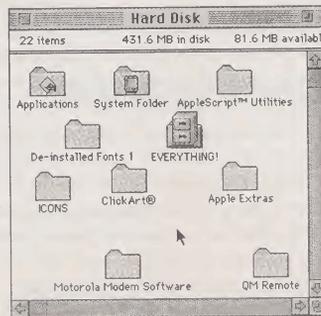
This will show you what's stored on your hard disk (what you see will be different to this, but the same principles apply). Depending on how your hard disk is organised, you will probably see a whole bunch of 'folders'.

Note that the window we've created has a title, which is the same as the icon we double-clicked on. Double-clicking on the icon was pretty much like saying 'let me see what's inside this'.

Folder icons look like this. Sometimes programmers change these icons to add a bit of style to their software, and Apple itself uses modified folder icons to indicate important folders (like the System Folder and Applications folder in the illustration above). Largely, though, they all share the same design.

Folders, as you may have guessed, are only containers for other things. To return to our earlier analogy of your hard disk being a box, folders are boxes within boxes. You use them to keep related documents together and in a certain place. Using folders you can create a complicated but efficient filing system. As usual with filing systems, though, you may well be the only one who understands it…

There will be more on folders and how you can organise your Macintosh in chapters three and four, but for now, let's return to windows. All Macintosh windows have the same basic structure. They are rectangular boxes that you can move about on the screen. You can also make them wider or shorter, and it's easy to arrange several windows on the screen so that they don't overlap each other.

To move a window (like the one we created when we double-clicked on the hard disk icon), move the pointer to the title bar:
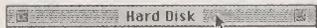
and, using the 'dragging' technique described on page 12 (holding down the mouse button while moving the mouse pointer), 'drag' the window to a new location (a flashing outline indicates the new position of the window while you're dragging it). Then let go of the mouse button, and your window is placed in its new position.

The problem with windows, though, is that they are a finite size – regardless of the number of items they contain. So how do you make sure you can see everything? Well, there are two approaches:

1. Do you see the little symbol at the bottom right-hand side of the window? This is the resizing box. If you drag on this, you alter the position of that corner of the window, which means changing the window's size and proportions. Again, the outline of the window is shown as a dotted line until you let go of the mouse button. You can use the resizing box to make the window bigger or to fit it in with other windows open on the screen at the same time. But there may be so many things in the window that you still can't see them all even if you increase the size of the window. How would you know? Look to see if the window's 'scroll bars' are grey or white:

2. This is a 'scroll bar'. You'll see one along the bottom of a window and down the right hand side. If the scroll bar is grey (like this one), it means that the window isn't big enough to show you everything it contains – you can use the scroll bar to move the 'view' of the window's contents. Imagine looking into a large room through a small window, and having to keep changing your position to see into the corners of the room. You can use the scroll bar either by clicking (or pressing) on the arrows at either end, or by dragging on the scroll box (seen here at the left-hand end of the scroll bar). It's important to get used to scroll bars, because you'll be seeing them a lot.

3. There's an icon in the top right-hand corner of every window. If you've changed the size or position of a window, clicking once on this will restore it to the old one. Click again to go back to the new one. If you haven't re-sized the window, clicking on this will increase the size of the window just enough to display everything inside it (if your screen is big enough).

4. Finally, look out for this icon in the top left-hand corner. This is the 'close box', and you click on this to close the window.

All windows on the Macintosh share these features, and you handle them all the same way. If you use a word processing

application, for example, your text document will appear in a window that you can resize, move and scroll around.

Although you can have more than one window open at once, only one of them is 'active' at any one time. You can easily tell an active window from an incative one by its appearance.
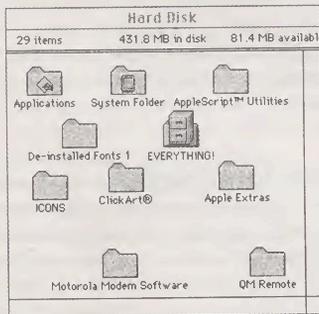
Compare this picture of the Hard Disk window with the one on page 19. In this version, the title bar is plain white and all the gadgets used for manipulating windows – the scroll bars, the close box and the resize box – have vanished. This is because this window is no longer active – there's another window on the screen which is active.

To make a window active, simply click on it once. The scroll bars reappear and you can now carry out the action you want. As you get more experienced, you'll find yourself regularly working with several windows open at the same time.

Launching an application

That's another way of saying 'running a program'. The Mac has a language all its own, and you do need to get used to it if Mac magazines and software manuals are going to make much sense.

Anyway, we've looked at the Desktop, windows, menus, icons and dialogs, which is pretty well all there is to know about the Mac's operating system (or 'Finder', which is the visible part). The point of having a computer, though, is to use applications – word processors,

drawing packages, business accounting programs and more. Launching Macintosh applications is easy. There are two ways:

1.   Every program on your Macintosh has an icon. This is the icon for ClarisWorks, a package that's pre-installed on most new Macintoshes now. To launch ClarisWorks, simply find the icon on your hard disk and double-click on it.

2.   There is an even easier way. Every document you create with a Macintosh program has a special 'signature' that identifies it as being generated by that program. Documents usually have an icon like the application's icon, too. Not only are ClarisWorks documents, for example, easily identified, you can double-click on them to open them up. This is one of the cleverest aspects of the Macintosh – you don't need to know where applications are stored, because if you double-click on one of the application's icons, it will open up with the right application automatically – it will find the application for you!

Once your application is running, what you need to do next depends on the application, and you should refer to its manual. Nevertheless, all the things we've looked at in this chapter – windows, icons, menus and dialogs – will work in the same way.

Applications and documents

'Application' is the proper Mac-speak for 'computer program'. An application could be a word processor, a drawing program or an accounts package. You use the application to create 'documents' which you can save and load up again another time. When you first switch on your Macintosh and 'launch' your application (Mac-speak for 'running your program'), it loads from the hard disk into your Mac's memory before it starts working. And when you create a new document with that application, it stays in the memory until you 'save' it. Don't forget to save your documents! Because when you switch off your computer, the memory is wiped clean. The same applies to any changes you make to existing documents already stored

on your hard disk – if you forget to save the changes before you shut down, you will, in theory, lose them forever. However, if you shut down your Mac properly, you get warned if you have any unsaved data, and it is hard to accidentally wipe it.

You have to get organised when saving files, otherwise you'll never be able to find and open them again. When you're working on a document, you'll find the Save option on the File menu. It's a good idea to save your document now and again even if you're still working on it. When you choose the Save option, it updates the file on your hard disk with all the changes you've made since the last Save. And since Macintoshes occasionally 'crash', 'hang', or 'freeze' (in other words, they lock up solid and won't work until you switch them off and restart them – thereby losing the contents of the memory), regular Saving will mean you're less likely to lose work as a result.

As well as a Save option, your file menu will also have a Save As… option. This is so that you can save your file with a different name. If you're experimenting with changes to a letter, for example, and don't want to lose the original, choose Save As… and then pick another name. This will leave you with two files on your hard disk – the original, and your experimental version.

Basically, though, there is one message that applies all the time you're working on your Mac. SAVE, SAVE, SAVE…! After a while, it becomes a conditioned reflex to hit the command-S keyboard combination (universal shorthand for Saving the file you're working on) in idle moments.

Expert tips
- If you drag an item to the Wastebasket and then change your mind about deleting it, double-click on the Wastebasket to open it, select the item and then hit command-Y. This puts the item back where it was before.
- Some multimedia titles and games don't display their menu bars while they're running a sequence or in certain modes. If you need the menu commands, try tapping the spacebar, clicking the mouse button or hitting the Esc key.

2: Memory, hard disks and Macintosh models

Now that you know the Macintosh basics, it's time to explain the difference between your computer's 'memory' and the information it can store.

Human beings both think with and remember with a single device – their brains. Computers aren't like that. They think with their 'memory' (yes, confusing, isn't it) but they store information on their internal hard disk.

When you switch your Macintosh off, its memory is wiped clean (it needs continuous electrical power to work). This means that you have to make sure whatever you were working on is stored on the hard disk before you switch off. When you switch your Macintosh on, it has to load its own operating system off the hard disk into its memory before it can work at all. Think of the hard disk as a filing cabinet and the memory as a working space which gets cleared whenever you leave (and the contents thrown out if you haven't filed them!)

Both the Macintosh's memory and its hard disk can handle a fixed maximum amount of data, depending on the machine's specification. And data is measured in Kilobytes (K) and Megabytes (Mb) – a Megabyte is 1,000 Kilobytes (strictly, it's 1,024 Kilobytes).

Macintoshes are sold with anything from 4Mb to 16Mb or more of memory, and hard disks that can store from 250Mb to 1,000Mb or more of information. To put this in perspective, a word processing program might take up about 10Mb of storage space on the hard desk, and need about 2Mb of memory to work in while you are using it. The text of a 300-page novel would take up only about 300-500K, while an illustrated book like this one might take up 15Mb.

Both the amount of memory your machine has and the size of its hard drive are important. The hard drive size tells you how much information you can store, while the memory size governs the complexity of the work you can do. Some programs require a great deal of memory to run. There is a program called Adobe Photoshop, for example, (used to touch up photographs for publication) which needs 16Mb of memory – or more – to work properly.

Memory is more usually called RAM, and it's a fact of life that few Mac owners have enough RAM. RAM is expensive to manufacture, and machines are usually shipped with the minimum amount to cut costs. You can increase the amount of RAM in your machine, though – speak to your local Mac dealer about the options.

RAM, megabytes and hard disks are all central computer concepts – now you know what they mean. Soon they'll be peppering your every sentence…

Your Mac's processor

So we know that a Mac stores information on its hard disk, and that it works with it in its memory – now we need to look at the 'processor'.

Note that you'll also see the processor described as the CPU (Central Processing Unit) or even 'chip' (after 'silicon chip').

The processor is your Macintosh's engine. The operating system uses the processor to carry out the countless millions of instructions necessary to perform even the simplest-looking task. While the operating system give's the Mac its identity, or personality, the processor governs its raw speed.

There are many Macintosh models on the market, and they use a variety of processors (even though they are all related). The simplest way to break Macintoshes up into categories is to doing it according to chip type, and there are two families:

1. **PowerPC Macs.** These are the latest models, and they use a brand new type of processor – the PowerPC – which is a lot faster than the older types. However, Apple have made sure that all the existing Mac software, printers and other gadgets work with the new machines, and the operating system looks just the same, and is the same to use. Most users won't notice any difference, apart from the extra speed.

2. **Non-PowerPC Macs.** These are older models which use processors manufactured by Motorola. This family of processors started way back in the 1980s with the 68000 model. Soon there was a faster version – the 68020, followed by the even-faster 68030 and finally the quickest of them all, the 68040. Machines based on the 68040 are not a lot slower than the cheapest PowerPC Macs, and because

Apple have only recently stopped making them, you can pick up some excellent bargains from the mail order companies which advertise in MACFORMAT magazine.

On the whole, the processor type is the single most useful guide to the speed and power of a Macintosh. There are a couple of secondary considerations, though:

1. 'Clock speed' is the rate at which a processor carries out its myriad calculations per second. The clock speed is measured in cycles per second (the processor 'oscillates' like the crystal in a quartz watch) – or MHz (MegaHertz). For example, the 68030 processor has been made available as a 25MHz model and a 33MHz model. Macintoshes with the 33MHz model are approximately 30% faster. Having said that, the 'slowest' 68040 processor is still faster than the fastest 68030 model. Generally, the slowest model of any new processor is faster than the quickest version of the previous one.

2. RAM, or memory, is also a vital ingredient in speed. Many programs require a great deal of RAM to work efficiently. If they don't get it, they have to keep shuffling data from the hard disk into memory, and then back to the hard disk again to make room for fresh data. Moving data to and from the hard disk is slow, and having too little memory can ultimately slow you down far more than having a Macintosh with an 'old' processor. Before you upgrade your Macintosh to a faster model, make sure that the speed problems you're encountering aren't due to a lack of RAM. One easy check is to keep watching your hard disk light while you're using your applications, and to watch out for pauses when the display 'freezes' up for a few moments. These are signs that the Mac is having to access its hard disk. This is normal when loading files stored there, but not when you're in the middle of working on one.

Although non-PowerPC Macs will soon become hard to buy, there are so many in circulation that software manufacturers will be

producing software for them for a long time to come. However, because the PowerPC processor works in a very different way to the older type, software designed specifically for it is much quicker than software designed for the older processors, so manufacturers increasingly producing versions of their programs specifically for PowerPC-based Macintoshes. These are called 'native' applications. If you have a non-PowerPC Mac, applications described as 'native' will not work. If you have a PowerPC Mac and you are offered a choice between a '68xxx' version and a 'native' version of a program, go for the 'native' version.

Mac-spotting

Macintoshes are usually sold in two forms: standard machines and 'Performas'. Performas are Macs specially designed for more inexperienced users and those using their Mac at home rather than in business. They are sold as complete packages, with practically everything you'll need to get started, and come with extra software and help for beginners. The standard machines, on the other hand, may be more 'expandable' – it can be easier to add specialist hardware later on, and you have more choice over the equipment that comes with your machine.

There are too many different models and variations to list them all here, but with the help of this brief overview you should be able to recognise most types and decipher the specifications printed in magazines.

Expert tips

● If memory's tight, you can save it by carefully running through your System Extensions (there's more on Extensions in chapter six). Using Extension Manager (included with System 7.5) or a third-party Extensions utility, you can pare down your extensions into minimal sets for specific jobs (if you're using a paint package, for example, you can probable manage without Adobe Type Manager, which is very RAM-hungry).

● Although PowerMac-native versions of applications need more RAM than their 680x0 versions, a design quirk of the PowerMac

means that switching on virtual memory makes the machine handle applications differently – they require a much smaller RAM allocation, frequently half as much. With 1Mb of virtual memory allocated, QuarkXPress, for example, runs in as little as 1.6Mb on a PowerMac.

● On 680x0-based machines, don't use virtual memory if you can avoid it. You need all the speed you can get, and shuffling data that should be in RAM to and from your hard drive is highly inefficient. If you really can't afford the extra RAM, get hold of a copy of the excellent RAM Doubler from Connectix – it really does work, and with a minimal speed penalty.

● Beware of RAM fragmentation! If you keep launching and quitting applications, your available RAM will get broken up into useless little segments – and applications need contiguous RAM to load into. If you hit unexpected memory problems, quit all your applications, then launch them all again – this will make them fill up the available memory without any 'gaps'.

● If you're having trouble running older applications, it could be that they're not '32-bit' clean. The Mac's OS is fully 32-bit these days, but older software may have been written in the old days of 24-bit addressing. If you're running System 7, turn off 32-bit addressing in the Memory control panel and try again. If you're running System 7.5 – tough. Time to buy some new software.

● Opinions are divided about the Disk Cache (Memory control panel). This is a segment of RAM that stores the last block of data taken from the drive on the assumption that it's quite likely to be needed again shortly. Everyone agrees that's a good idea, but what's not so well-known is that not everyone agrees the Mac's caching system is terribly smart. If you need more RAM, reduce the Disk Cache setting to 128K or even 64K. Many of the newer processors have their own caches, and some software has its own caching systems (interestingly, Photoshop and the Mac's Disk Cache can conflict badly).

3: Files, folders and drives

O nce you've started creating your own documents, it won't be long before you realise you need a proper, organised filing system for them. At its most basic level, the Macintosh has a very simple way of organising things. Items on your hard disk are either files (which could be applications, documents or other miscellaneous items) or containers (in other words, folders). You can put folders within folders to your heart's content, and you can call these folders what you like. And because documents you create can automatically 'find' the application that created them, you can basically put your documents anywhere you like.

'Files' and 'documents'

But it's as well right now to clear up one possible source of confusion. The term 'files' is a catch-all term to describe anything that's not a folder, basically. A file can be an application (program), it can be data used by the System, it can be information stored by applications for their own needs – and it can be a 'document'. The term 'document' is used in this book to describe files created by the user – you might have a word processor document, for example, or a database document. All documents are files, but not all files are documents... many applications create files that aren't designed to be seen by the user. These files can contain information on how the application is set up on your Macintosh – so-called 'Preferences' files. Applications can come with a whole host of 'support' files, like dictionaries, additional tools and functions and maybe on-line help. And – importantly – the Macintosh's operating system consists of many files which have to be kept in the right place and left untouched. These are all located in the System Folder, which you should only interfere with once you know what you're doing (see Chapter six).

Although certain files must be kept in certain places (this is usually handled automatically), everything else – your documents and often the applications themselves – can be stored where you like.

Moving things around

You can move files and folders around at will from the Desktop. We've already seen how double-clicking on a folder opens up a window that

shows you the contents of that folder. Well you can move any of these contents from one place to another simply by 'dragging' it to its new location.
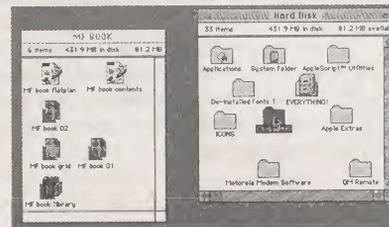
To do this, first position the pointer over the folder or file you want to move (don't forget you need to click once on that window to make it the active one, if it's not active already). Press down on the mouse button, and the folder/file will highlight (as above). Now, with the mouse button still pressed down, move the pointer to where the folder/file should be moved to – it will take a faint outline of the folder/file with it so that you can gauge the final position.
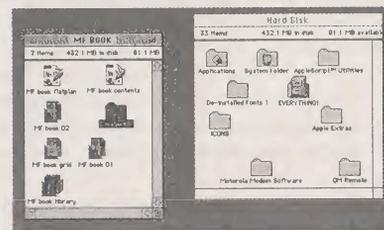
Then simply let go of the mouse button, and your folder/file will have been moved. Usually, you'll be moving items from one folder to another, but it can be easier to move them to the Desktop first. Or, if you prefer, you can leave things on your Desktop permanently. It makes the Desktop more cluttered, but it also makes commonly-used items easier to find.

How do you create a new folder?

File	Edit	View	La
New Folder			⌘N
Open			⌘O
Print			⌘P
Close Window			⌘W
Get Info			⌘I
Sharing...			
Duplicate			⌘D
Make Alias			⌘M
Put Away			⌘Y
Find			⌘F

Folders are simple to create. From the Desktop, choose the New Folder option from the File menu. This will create a new folder in the currently active window (or on the Desktop itself if you don't have any windows open). It's as simple as that! The only thing is, the new folder is simply called 'untitled' – how do you change its name?

What's in a name?

As well as being able to move folders and files around, you can also call them what you like – and it's very easy to change a name:

1. Move the mouse pointer over the name of the object you want to rename and click once (the object will now be highlighted).

2. If you wait a couple of seconds you'll see the icon change subtly. The label is now surrounded by a border...

3. ...which means you can now start typing in your new name (this must be less than 30 characters in length, but can include spaces).

Once you've typed in the new name, simply click anywhere else on the screen and the new name is saved.

Building an organisation

The Macintosh's operating system offers so much flexibility, that it's hard to know how to start organising your hard disk. The main hard disk folder must contain the System Folder (which you should leave alone), but beyond that, you can do what you like. System 7.5, the latest version of the Mac operating system, and the one supplied with all new machines, comes with two special folders for Documents and Applications. You may see these on the Desktop (remember that they are still stored on the hard disk – they've simply been 'left out'. These are set up so that you know where to put and where to find Documents and Applications respectively.

This is useful for beginners who are still struggling with the basic Mac concepts, but it is a little restrictive. While most of us will probably only have half a dozen or so applications, we may generate dozens – even hundreds – of documents, and clearly some higher level of organisation is needed.

One solution is to create additional folders within the documents folder. You might have different folders for different jobs, or clients or applications. As a freelance writer, I've set up folders for each magazine I do work for, and within these folders are other folders for each issue, or each specific job I undertake. You might like to do something similar, although there are as many ways of organising a hard disk as there are different Macintosh users. In the next chapter, we'll be looking at more ways to organise your Mac.

Other sorts of drive

All of your Macintosh's data is held on its internal hard disk. It gets its name from its construction – a hard disk stores its data on a stack of rigid metal discs, and moving heads read off the data as the discs rotate.

Floppy disks use a similar principle but in a cruder, cheaper form. They contain only a single, flexible disc (hence 'floppy') in a slim, rigid case.

Hard disks can hold a lot more information than floppy disks. This information capacity is measured in Kilobytes (K) and Megabytes (1000K). A floppy disk can hold approximately 1.4 Megabytes (abbreviated to Mb), while a hard disk can hold between 40Mb (older Macintosh models) and 500Mb or more (newer models).

All Macintoshes are equipped with an internal hard disk, and you can insert floppy disks into them too. You might copy a file to a floppy disk to give it to someone else, for example.

You can both move your files around and duplicate them in new locations. When you drag a file to another location on your hard disk, your Macintosh simply moves it to that new location. If you drag it to a floppy disk, though, being cautious, your Mac copies it over instead of transferring it (you keep the original file on your hard disk). This is an important general principle to remember: when you drag a file within a disk (either a hard disk or floppy disk) it gets moved; when you drag it from one disk to another, it gets copied.

You can make copies of your files on the same disk, however. To do this, select the file by clicking on it once to highlight it and then choose the Duplicate option from the File menu. This will create a duplicate of the file in the same window, which you can rename if you want to.

There is a third sort of disk drive. Although both hard disks and floppy disks store information on a magnetic surface (like audio cassettes), CD-ROMs store information optically (like a CD player). CD-ROMs are a special type of CD which store computer data rather than audio tracks. They have major advantages in computing:

1. They can store vast quantities of information. A CD-ROM can store 650Mb of data – more than most hard disks and 500 times as much as a floppy disk.

2. They are durable. Although you can't drill holes in them or scrape them across floors, CD-ROMs are pretty resistant to damage providing you handle them carefully.

3. They are inexpensive. CD-ROMs cost only a few tens of pence to manufacture. It's now possible for software publishers to sell much 'bigger' applications than was practical before and a single CD-ROM is much cheaper to manufacture and distribute than a box full of floppy disks.

There is one major disadvantage for the end user, though. You can't store any information on a CD-ROM yourself – you can only read it. Data can only be copied to CD-ROMs during a complex and highly-specialised manufacturing process. It is possible to buy CDs and special drives that let you store information of your own, but these are expensive and outside the scope of most users. The fact that CD-ROMs are 'read-only' doesn't matter greatly in the software market-place. They are ideal for multimedia products like talking encyclopaedias and games, and other products that feature animations, video sequences, high-quality sound and speech and special effects. All of these take up vast amounts storage space, and CD-ROM is the only medium which can handle them.

Using other drives

Other drives (like CD-ROMs and floppy disks) work in the same way as your hard disk. They have an icon you can double-click on to open a window showing the contents. And you can work down through layers of folders, just as you do with your hard disk.

Your hard disk icon is always visible on your Desktop, but you won't see an icon for a floppy disk or a CD-ROM until you insert one (logically enough). This illustration shows my main hard disk icon (top), a CD-ROM (many Macs can actually play audio CDs, which is what this is) and a floppy disk (bottom).

You can eject any disk (except your hard disk) by dragging it to the wastebasket. (This doesn't delete the contents of the disk!)

Installing applications

When you buy an application, you'll get a box containing a set of floppy disks, or maybe a CD-ROM. You have to copy the application and its associated files from these on to your hard drive before the application will work. Although we've already looked at how you can drag files from one drive to another, in the case of applications it's not quite that simple.

1. There are many different Macintosh models, and the software publishers need to cater for as many of them as possible. This

often means supplying more than one version of some of the files, and files that won't be needed for all machines.

2. Although applications themselves can usually be stored anywhere you like on your hard disk, many of the files which go with them, and which they rely on, have to go in certain, very specific places. These can include System Extensions (we'll meet those in the chapter on the System), control panels (next chapter) and preferences files (which store set-up details for the application.

To make life easier for everyone, the software suppliers include an 'Installer' with their application. The installer is a mini-application in itself. You double-click on its icon (the instructions will tell you which disk to find it on) and it checks your Mac hardware to see which files will be needed, then copies the appropriate files to the appropriate location. Very clever.

Once the installation is complete, you may be asked to restart your Macintosh. Don't worry, this is quite common. It simply means that the application has had to install some modifications to your System which will only come into effect if you shut down your machine and then start it up again.

Expert tips
● Macintoshes can read PC-formatted disks, but PCs can't read Mac disks. If you need to swap files with a PC-owning colleague, use disks that they have formatted or format them as PC disks yourself. If you have PC Exchange (with System 7.5) you can do this as an option when you select the Erase Disk… command, while if you have Apple File Exchange, launch it and format the disk from there.
● SyQuest drives combine bulk external storage with a portable data medium. The 3.5-inch models are more compact, but the 5.25-inch models are the most commony-used.
● If you have a SyQuest drive, get SCSI Probe – if you switch on your SyQuest drive after you start up your Macintosh, you'll probably need SCSI Probe to get your Mac to recognise the drive at all.

# 4: Windows, aliases and the Apple menu

Once you've mastered the basics of using a Macintosh, you can start experimenting with the different ways in which you can adapt it to suit your needs and preferences.

Window views

One of the first things you can do is change the way items are displayed within a folder. Usually, new Macintoshes are set up to display items as icons. This is an easy-to-understand method that lets you quickly tell folders from files, and one type of file from another.
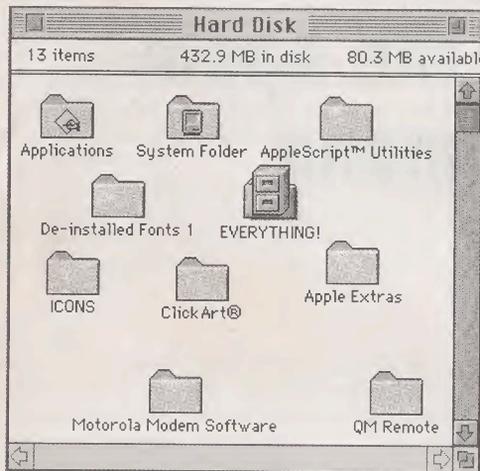
There are other ways of looking at the contents of windows, though. Click on the window you want to modify to activate it, and then click on the View menu to see a whole list of options. You'll notice that currently the by icon option has a tick next to it (left) – that means it's the option currently selected. Try choosing the by Small Icon option instead:
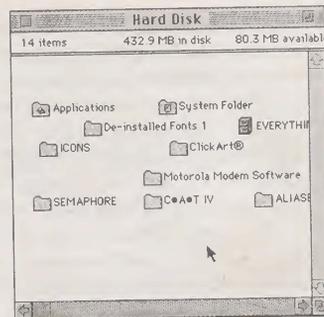
Predictably enough, this has made the icons much smaller. They are a little harder to see, but you can see more in the window, meaning you either have to use the scroll bars less to see everything or you don't need to enlarge the window quite as much.

Here's a quick tip. If your window isn't large enough to show you all the contents, click on the box at the far right-hand side of the title bar – this will enlarge the window to the right size automatically (assuming your screen is big enough).

What about the by Name option – what does this do?

This is the third way of looking at the contents of windows (all the remaining options are variations on this one), and it's arguably the most useful. As you can see, folders and files don't have icons any

more – they are simply displayed as a list. But this list can give you lots of useful information, like whether items are folders or files and, if they are files, the name of the application that created them. You can also find out how big your files are, and when you last made any changes to them. (The window illustrated above doesn't have any files in it, only folders, so some of this information is left blank.)

In this view, files and folders are listed alphabetically, but the remaining options on the View menu can change this order so that you display items in order of the largest, or the most recently modified or by the applications that created them (useful for sorting out and separating your documents). You can also view them by 'label' – we'll look at labels on page 43.

As well as the list of folder and file names, you'll notice right-pointing arrows at the start of each folder name (only folders, not files). These are very clever. You store things on your hard disk by creating folders within folders in a kind of nested structure according to your own organisational system. Normally, you might find a file by opening your hard disk window, then double-clicking on a folder within it, then another within that… until you 'work down' to the file you want. The View by Name option gives you another method. If you click on one of these right-facing arrows, it turns downwards, at the same time revealing, offset to the right, a list of all the contents of that folder.
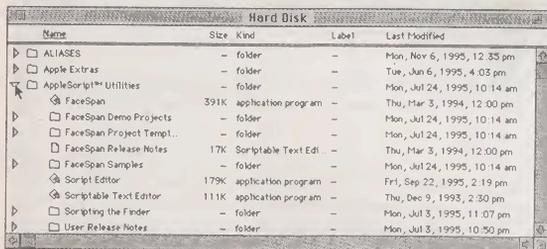
This is another way of 'navigating' through the layers of folders on your hard disk. You'll see in the above illustration that the

AppleScript™ Utilities folder contains both files and folders. The files have their sizes quoted, and the folders have right-facing arrows – you can click on these arrows too to find out what these folders contain. And so on, down to the file or files you are looking for.
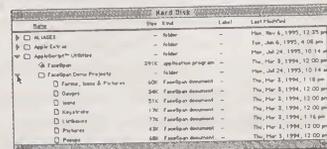

This is called an 'outline' view, and you may come across it in word processing documents. It's a way of organising things in an easy-to-understand hierarchy. Simply click on a downward-facing arrow to 'close up' the outline again. With a little experimenting you'll quickly grasp how it works.

Note that the changes you make with the View menu apply only to the current window. And you can still find files by successively double-clicking on windows to open them, or you can set up your hard disk window in View by Name mode and use the outline arrows to find the things you want without ever having to open another window. Or you can use a combination of both methods. That's the beauty of the Macintosh – there is always more than one way of doing something, and you can choose the method which suits you best.

What's a label?

Labels are a rather under-used part of the Mac operating system. They are not useful to everyone, and most Macintosh users don't understand them too well. But you may find them a godsend.

Click once on a file or folder to select it. Then choose a label from the Label menu. If your window is set to either of the icon view you won't see any change in your file/folder. But if you switch to View by Name, you'll see that file/folder now has the label you chose. (If you can't see the Label column, increase the width of the window.)
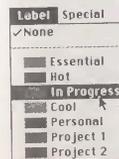
Now, if you choose the View by Label option for that window, your files/folders will be sorted out according to the labels you've given them.

You're not stuck with the labels currently on the menu, either. You can change these via one of your Macintosh's Control Panels, and we'll be looking at these in the next chapter.

Finding your files

It's easy to create complex filing systems on your Macintosh – and as a result it can be easy to forget where you left certain files. Thankfully, there's a quick way of finding any file. From the desktop, choose Find... from the File menu. You'll then see this dialog.
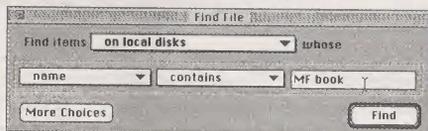
There are various options here for changing the way your Mac searches for files, but for now, we don't need to change any of them. Simply type the name of the file you're looking for (or even part of the name) in the box just above the Find button, then click on the Find button. After a few seconds, your Macintosh will have found all of the matching files, and will display them in the following window:
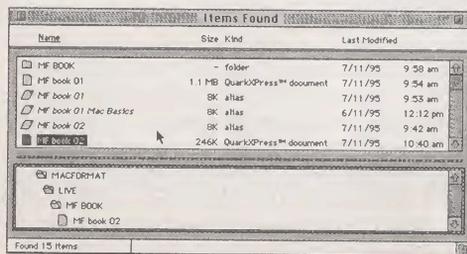
This shows you two things. It shows you the names of all the matching files and folders in the top part, and if you click on any one of them to highlight it, the bottom part shows you where you can find it (in other words, the route through the various nested folders).

Note that you only see these dialogs if you have a newer machine with System 7.5. Older versions of the System have a less sophisticated Find... dialog which gives you fewer options. This older dialog only shows you the first matching file your Mac finds – to find any others you have to use the Find Again option on the File menu.

For more information...

There are other interesting options on the File menu. One of these is Get Info. If you highlight a file or folder and then select Get Info, you'll see a window like this one.
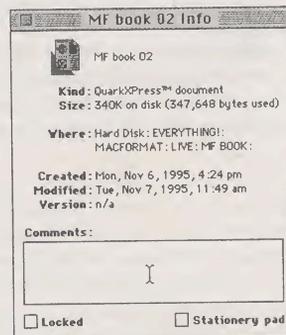
This window tells you a lot more about the item you selected. At the top is its name, and below that you'll see what kind of item it is (this one is a QuarkXPress document – QuarkXPress is the application MACFORMAT uses for designing the magazine). Below that is the size of the document, where it's stored, when it was first created, when it was last modified, its version number (not applicable to documents like this one) and – below that – a box where you can type messages to colleagues (or yourself) or any other information about the document

you like. Right at the bottom of the window are two check-boxes. Click on the box on the left and you 'lock' the file. This makes it impossible to delete or modify it until you open this window again and 'un-check' the box. The one on the right turns the document into an item of 'stationery' – it becomes a template for other documents, so that you can open it and make changes to it, but you must save it as something different – the original template document is left intact.

Creating short-cuts with aliases

There's another interesting option on the File menu – Make Alias. Again, first select a folder or file, and then choose this option. This creates an 'alias' of the original item (you can tell it's an alias because its name is italicised). You can double-click on this alias to open the document or folder, in the same way that double-clicking on the original would. The difference is that you can leave the original where it is, for the sake of efficient organisation, but put the alias any where you like – on the Desktop, maybe, if you want quick access. Aliases take up very little disk space, and can be really useful short-cuts. If you wanted to, you could create several aliases for a document you used often, and keep them in different places.
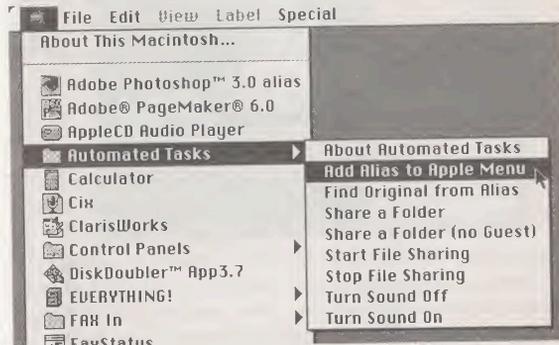
The Apple menu

There is one very good place to put aliases, and that's in the Apple menu. We haven't looked at this properly yet, but it's a very important menu which is visible all the time – not just on the Desktop, but while you're working with other applications too.

The Apple menu is where you'll find the Mac's Calculator, Notepad, Scrapbook and other built-in utilities. But you can also add your own items to it – like aliases. To add an alias to the Apple menu, you'll need to first create the alias and then drag it to the Apple menu items folder in your System folder. The alias will be on the Apple menu next time you look.

If you have System 7.5, there is a much quicker method. First select the item you want to make the alias of, then choose Automated Tasks from the Apple menu. From the sub-menu that appears

alongside, choose Add Alias to Apple Menu. (Don't worry if your Apple menu looks nothing like mine – I've adapted mine for my own needs.)

Your Mac will automatically create the alias and put it in the Apple menu items folder. It takes a few seconds, but once the process is finished you'll find the alias in the Apple menu.

Adding things to the Apple menu

You can drag anything into the Apple menu items folder, including both applications and documents. But it's best to use aliases rather that the items themselves, because that leaves you free to organise the originals properly, rather than cramming everything into the Apple Menu Items folder.

Aliases aren't the only things you can add to your Apple Menu. The release of System 7.5 has added a very interesting new feature. If you add a folder (preferably, an alias of the folder) to the Apple menu, when you select it from the menu, it displays a sub-menu listing all the contents of that folder. And if that folder contains other folders, an arrow appears alongside them. Move the mouse pointer to select those, and their contents appear in turn… in fact you can delve up to five folders deep using this method (although you can nest folders as many layers deep as you like on the hard disk).
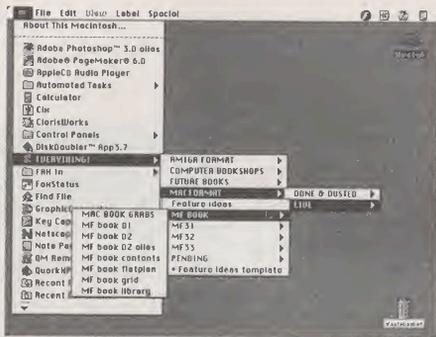
I keep all my work files in a single folder called (imaginatively) EVERYTHING! By putting an alias of this folder in my Apple menu I can work through to individual files via the publication I'm working on, through live versus finished work and the specific project folders.

Expert tips

● You can keep more windows open by using WindowShade (System 7.5). This control panel lets you shrink open windows to just their title bar by double-clicking on the title bar (or using any other keyboard/mouse combination you specify in the control panel). Simply repeat the operation to expand the window again.

● The extended Find… dialog you get with System 7.5 is worth exploring. You can specify file sizes, labels, creators, creation dates and other characteristics to perform some pretty sophisticated searches. It might not save you much time on a single Mac, but it could make searching a server a lot, lot faster.

● If you like icons but you also like the neatly sorted information in list views, go to the Views control panel (see also chapter five) and click the largest icon size in the List Views area.

5: Control Panels

You use the Macintosh's control panels to set your machine up the way you want, and to configure some of the software that comes with your machine. You may not have all of the control panels mentioned in this chapter, depending on the age of your machine, and you may have additional control panels to go with software you've installed. At any rate, these are the control panels you are most likely to see.

There are three ways to access the control panels:

1. Choose Control Panels from the Apple menu (you can do this from within any application, don't forget). If you have System 7.5 you can choose the one you want from the list that appears in the sub-menu.

2. If you have an earlier version of the System, choosing this option won't display a sub-menu, but will return you to the Finder and open the Control Panels window.

3. You can open control panels directly by first opening your System Folder, then finding and opening the Control Panels folder.

The control panels shown in this illustration won't necessarily match those on your machine because I've installed many applications, some of which come with control panels of their own.

But each Mac owner has a certain 'core' set of control panels. These are some of the more useful control panels supplied with System 7.5. Earlier versions of the System will have most but not all of these control panels, and some of the options may have moved from one control panel to another.

Some of the changes you can make in these control panels will only come into effect if you shut down and restart the machine – a small warning dialog will tell you if this is the case.

Apple Menu Options
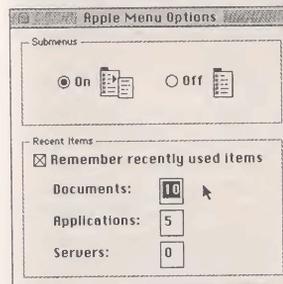
Earlier on we saw how adding a folder (or its alias) to the Apple menu let you view deeper layers of folders via sub-menus. Here's where you switch this feature on or off. The Apple menu also lists your most recently-used files and applications – you can use the lower part of this control panel to choose how far back it 'remembers'. (The Servers option is for more advanced use.)

ATM (Adobe Type Manager)
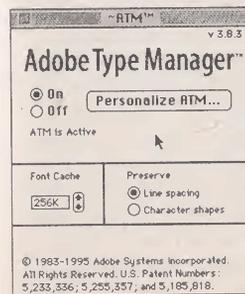
Adobe Type Manager is supplied as part of System 7.5. Previously, it had to be bought separately, although many Macintosh applications were (and still are) supplied with it. Including it is Apple's concession to the ubiquity of PostScript fonts (see the System chapter for an explanation of fonts), despite the fact they would dearly love everyone to use their own TrueType font format. ATM helps fonts display and print properly.

Colour
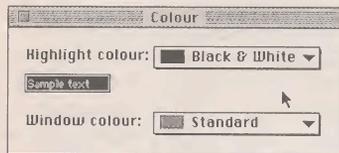
This control panel lets you choose the highlight colour. When you select text in a word processing document, for example, it will be shown against a solid colour to indicate it's highlighted. If you want a different colour to the standard black highlight, choose it here. The lower part of the control panel lets you change the coloured border of your windows. The standard colour is blue, but you can choose from a whole range via the pop-up menu.

Date & Time
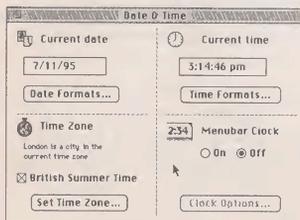
Your Mac has a built-in clock. Should you ever need to reset the time, this is the control panel you use. You can also switch the menu bar clock on and off from here, as well as cater for your own specific time zone and even British Summer Time.

Desktop Patterns
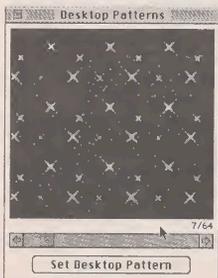
You're not stuck with the plain grey Desktop pattern that your Mac arrives with. Using this control panel you can choose one of 64 colourful designs to brighten up your machine. You use the scroll bar/scroll arrows to cycle through the choices, and the window above the scroll bar shows what the pattern looks like. Click on the Set Desktop Pattern button once you've made your choice.

Extensions Manager
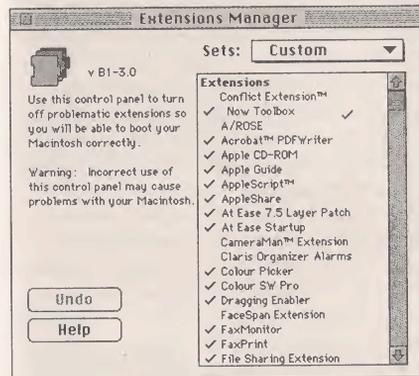
You'll find out more about Extensions in the chapter on the System, next. Extensions Manager is a control panel that lets you prepare 'sets' of System extensions that load up when you start your Macintosh.

General controls
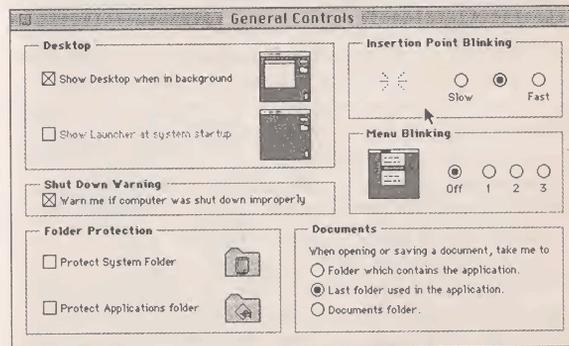
There are many options here which can make a lot of difference to your Mac. When you're working in an application, your Mac's

Desktop, including your hard disk and wastebasket icons – and any others you've left out – is visible in the background. If you don't want to see this extra clutter, click the Show Desktop when in background option off.

Below this is an option for showing the Launcher on startup. You may already have seen the Launcher. It's Apple's latest idea for making the Mac easy to use. It's a Desktop window containing buttons which launch your favourite applications with a single click. It's not to everyone's taste, so here's where you can switch it off.

Below this is an option for warning you if your Mac was shut down 'improperly'. You always need to use the Shut Down option when you switch off, and if you have small children or inexperienced users using your Macintosh, you might want to leave this feature on because it gives them a gentle reproach when they restart the machine after an 'incorrect' shut-down. Otherwise, switch it off.

In the bottom left are two options for folder protection. If you click these on it means that no-one can make any changes to your System folder and the special Applications folder set aside in System 7.5 for all your programs. If other people are using your Macintosh, or you're worried about doing some damage accidentally, click these on. Otherwise, leave them off.

To the top right you'll see options for changing the blinking speed of the cursor when you're editing text, and the number of times a menu flashes when you make a selection. The first choice is purely cosmetic, but if you want your Mac to be appreciably quicker to use, you'll turn off menu blinking altogether.

Lastly, in the bottom right-hand corner, you'll see a series of options for storing files. When you save a file, you are always given the chance of finding exactly the folder you want to save it in. However, it saves a bit of effort if the right folder comes up automatically. You can get half way there by choosing the right option here. By default you are offered either the folder than contains the application you're using, the last folder you saved anything in with that application or the Documents folder (part of System 7.5, and the 'twin' of the applications folder). It all depends on how you work, but for my money the middle option is by far the most useful.

Keyboard
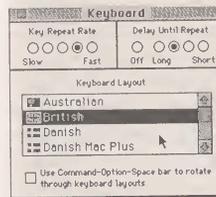
The Americans (bless 'em) have a slighly different keyboard layout to us Brits (as do many other countries). If you want to make sure that your pound signs come out as pounds (and not hash symbols), choose the British option here. The only other things to set are the Key Repeat Rate (how fast letters appear if you hold down one of the keys) and the Delay Until Repeat (how long you have to wait after pressing a key before they start repeating).

Labels

Earlier on we saw how you could use labels to categorise and organise your documents. This control panel lets you change the standard label names. Just drag the mouse pointer over the text and start typing to change it. You can also change the label colours – simply click on a colour and up pops a big 'colour wheel' which you can use to pick a shade.

Map
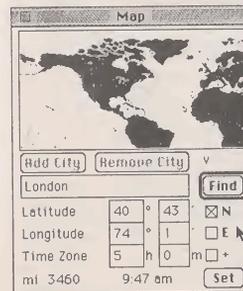
This is an excellent control panel which is almost like a miniature application. It displays a map of the world and stores a list of major cities and their locations. Once you've chosen your 'home' city you can use it to find the time anywhere else in the world. You can also add and remove cities from the list. An excellent but often overlooked tool.

Memory

If your Mac is a little short of RAM (and most of us could use more) you'll be making fairly frequent trips to this control panel. The first option, Disk Cache, can usually be left at the default setting – it's a segment of memory kept aside for storing frequently used bits of programming code, and is handled automatically by your Mac. The next option, Modern Memory Manager, is for users of later Macintosh models having trouble running older software. Sometimes, switching this option off can help troublesome software run – otherwise, leave it on. Virtual Memory is becoming increasingly significant. On any Macintosh with a 68030 processor or better, you can use virtual memory to supplement the machine's RAM. With virtual memory switched on, the Mac uses part of its hard disk as 'pretend' RAM. It does get you out of a hole if you don't have enough memory for a certain application (or for running several together), but it does slow the machine down.
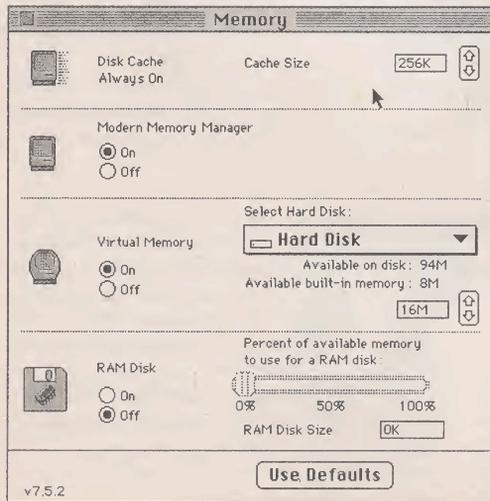
But here's a big tip for PowerMac owners. Because of quirks in this machine's operating system, applications designed specifically for the PowerMac often need less RAM if virtual memory is switched on (you only need to set aside as little as 1Mb virtual memory for this to work). Strange, but true. There is a speed penalty, but this is usually more than outweighed by the extra freedom it gives you.

The last option, for creating a RAM disk, is when you don't have a shortage of RAM but you do have a shortage of speed. A RAM disk is a 'pretend' disk drive which is actually held entirely in the machine's RAM. Because transferring information in and out of RAM is dramatically faster than transferring it from disk, this will give you a speed boost. Bear in mind, though, that when you switch off your machine the contents of your RAM disk will be lost forever – so make sure you save them to a 'real' disk first!

Finally, the Use Defaults button returns all the settings to the factory defaults – useful if you get everything hopelessly wrong, or you just want to start again from settings you know will work.

Monitors
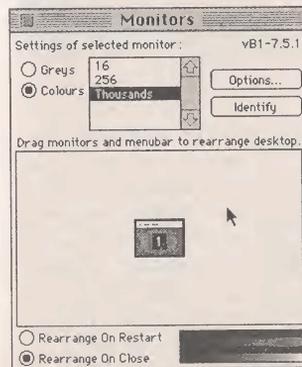
This control panel changes the number of colours your screen displays. Some older programs insist you set your Mac to display only 16 colours, for example. You can get a bit of a speed boost by setting your display to reduced colours, or even black and white, but for the most part you can leave it set to display 256 colours or 'Thousands' for the best quality. The rest of this control panel (the Options… and Identify buttons and the lower, main, window) are for people using more than one monitor – which is a pretty specialist area.

Mouse
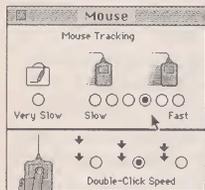
Does your mouse pointer skate around too quickly? Do youind it hard to double-click quickly enough for it to register? You can control both of these options from this control panel. The Very Slow option for mouse tracking is useful if you're using a drawing program, while a slower double-click speed is often essential for beginners not yet fluent with the Mac mouse.

Numbers
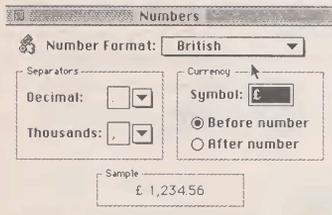
The British, like other nationalities, have their own chosen way of displaying numbers and currency. You can choose a national preference from the pop-up menu, top right, and add your own preferences using the other options.

PC Exchange
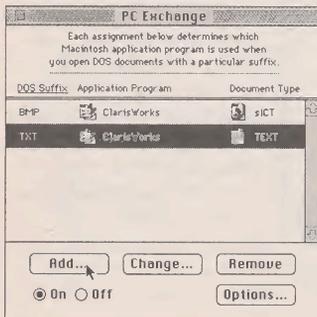
PC Exchange is a valuable addition to System 7.5, and much better than the old Apple File Exchange, which did the same job. It lets your Macintosh read PC disks, and via this control panel you can choose the Mac application that opens specific types of files that PCs generate. For more advanced users, this one.

Sound
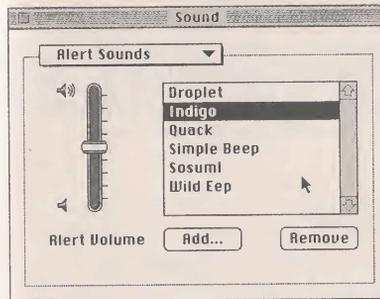
Your Mac emits a warning sound whenever you do something wrong, or try to do something impossible. In fact it has a small repertoire of noises to choose from, and you can control the volume they're played at. If you have access to other sound files, you can add them to the list. You can also use this control panel to record sounds of your own – all current Mac models have sound-recording hardware, and the 5200 and 5300 have microphones built into the monitor (you need an external microphone for other models).

Views
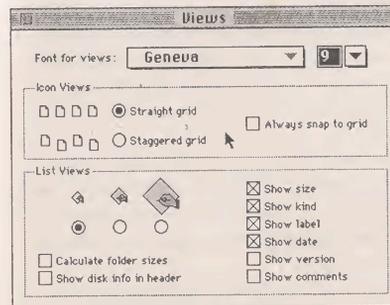
This control panel changes the way items appear in windows. The standard font (Geneva) is very legible at small sizes, and is the ideal choice for most users. If you find it ugly, though, you can change to another font via the pop-up menu and another size via the menu alongside.

The Icons Views affect the way icons are arranged in folder windows. The Always snap to grid option will align them to a fixed

but invisible grid on the screen for extra neatness (although you can't pack icons together to make best use of the space).

The List Views options control the size of icons displayed in windows when you view by name rather than icon, while the other options control how much information is displayed.

Quick tip: to speed up the rate at which windows are opened when you double-click on their icons, switch Calculate folder sizes off.

WindowShade
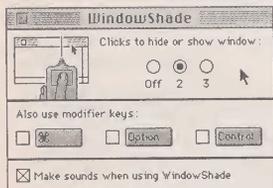
WindowShade is a neat little feature that can keep your Desktop that much neater. If there are windows getting in the way – but you don't want to close them – simply double-click on the title bar to shrink them to just the title bar. You double-click again to expand them back to their previous size. You don't have to double-click – you can set other key/mouse combinations via this control panel.

Expert tips

● If you're on a network, open the Apple Menu Options control panel and type a number into the Servers field in the Remember recently used items area. This doesn't record the names of the servers you most recently used – it actually records the folders within those servers that you accessed.

● How large a font cache should you set aside in the ATM control panel? Adobe recommend around 50K per font you use regularly, so if you use lots of fonts you'll have to make some tough choices between available memory and font-drawing speed (the font cache works on a first-in, first-out basis).

● If you've got £50-60 to spare, get a Kensington Thinking Mouse. They feel and work ten times better than the standard model, and you can program their four buttons to offer amazing things, including speed-switching, programmable short-cuts and custom acceleration.

6: The System

The System is what makes your Mac a Mac. It's the software that handles files, folders, drives, menus, displays, dialogs and everything else that happens on your machine. And all the nuts and bolts are located in the System Folder on your hard disk.

It's very dangerous for beginners to tamper with the System Folder (which is why System 7.5 lets you protect it via the General Controls control panel) but more experienced Mac users will find themselves working with it a lot.

And one of the easiest ways of grasping how the System works is to take a tour through some of the items in the System Folder…

Apple Menu Items

If you want an item to appear in your Apple menu, simply drag it (or an alias) into this folder. If you want to find out more about the Apple menu, turn back to chapter four.

Clipboard

Whenever you copy anything while you're working (a picture, or a piece of text, for example) it's saved to this temporary Clipboard file. When you 'paste' what you've copied into a new document or new location, it's the contents of the Clipboard you paste. The Clipboard stores the last thing you copied indefinitely – until you copy something new.

Quick tip: you can see what's currently stored in the Clipboard file by choosing the Show Clipboard option from the Edit menu when you're in the Finder (i.e. back at the Desktop and not within an application).

Control Panels

This is the folder where the control panels are stored (see chapter five for more on control panels). Control panels are part of the operating system and they let you modify the way your Mac does things. As your Macintosh starts up, it loads control panels and System Extensions (which we'll look at shortly) as

part of the operating system before even the Desktop appears. Some applications install control panels of their own in addition to those that come as part of the Mac's operating system. That's because these programs offer features that need to interact with the operating system at a very basic level.

Quick tip: it's a big feature of System 7.5 that you can drag control panels, System Extensions and fonts (see the next two items) onto your System Folder icon, and the System will put them in the right place.

Extensions

Extensions are very similar to control panels, in that they load up alongside the System software when you start up your Macintosh. That's why they're called 'Extensions' – they extend the capabilities of the System software. Many Extensions are supplied with your Macintosh, and many more are installed when you install new applications. The real difference between Extensions and control panels is that Extensions don't have any settings for you to adjust.

Note that both control panels and Extensions can cause 'conflicts'. It all depends on whether they have been programmed according to the 'rules' laid down by Apple's engineers and how many extra Extensions and control panels have been added to your System Folder. A conflict occurs when two Extensions/control panels 'fight' for the same bit of memory, or other Macintosh resource. If this happens you need either the patience of a saint and a great deal of trial and error or a special piece of 'conflict catching' software to track down the problem. Problems usually occur while your Mac is trying to start up, but can occur during normal use.

Quick tip: if you hold down the Shift key as you start your Macintosh up, the System will load without any Extensions or control panels (a message will appear on the screen to confirm this). If your Mac now starts successfully, it's a sure-fire certainty that you've got an Extensions/control panels problem.

Extensions and control panels also eat up valuable memory, and you often don't need them all running at once. System 7.5 has a control panel (how ironic) called Extensions Manager which lets you

choose sets of Extensions and control panels to load up. You could have one set for word processing, one for games, one for accounts and so on.

Finder

The Finder is the application that runs all the time in the background, handling the Desktop display and sorting out your files and folders. Do not rename this file, delete it or move it out of the System Folder. It's a crucial part of the System and your Mac can't work without it. You may see other files with the same icon in your System Folder called System Enabler or System Update. Don't touch these either. As their name suggests, they are updates and modifications to your basic Finder application and work alongside it.

Fonts

Fonts are the different typefaces you see on your screen, and which you can choose from in word processing documents and other Macintosh applications. The font used for the menu bar is called Chicago and the font you see in windows is Geneva. Fonts are stored as files in the System Folder, and your Mac is supplied with half a dozen or more. You can get hold of fonts from a variety of places, and installing them is easy with System 7.5 – you just drag the font files on to the System Folder icon and your Mac sorts out the rest.

A font can be set to any size you like, and can be made italic or bold, underlined or turned into an outline and more. This was one of the factors in the early success of the Macintosh – the way it could display and print fonts.

Fonts are slightly tricky in that there are different types. These have come about because your Mac has to be able to both display fonts on the screen and to print them smoothly. The traditional solution has been to provide fonts as a 'pair' of files – a 'screen' font to look after the screen display, and a 'printer font' to provide the much smoother output you need on paper.

Because the Mac's display is made up of dots, screen fonts too are made up of dots. In the past, you had to have a screen font file for every size you wanted to display on the screen. Happily, that's now

been sorted out by both Adobe Type Manager and, even more neatly, by the TrueType font format.

By contrast, printer fonts are made up of geometric shapes. This means that your Mac can instruct the printer to print them at any size and they will still come out with smooth outlines.

Having to keep pairs of font files has always been a nuisance. Adobe, the American company that practically invented Desktop publishing technology, provide an excellent tool in the form of Adobe Type Manager (see the control panels chapter). This software uses the printer font to draw the screen image. You still need a screen font file, but you don't need one for each type size and the screen representation of fonts is much smoother and more faithful.

Indeed, this is the system now used by the publishing industry (which is almost exclusively Macintosh-based in this day and age). Adobe's PostScript printing system, universally used for producing professional publications electronically, uses 'PostScript fonts'. This means having a single screen font, and single printer font and Adobe Type Manager (supplied with System 7.5 but available from a variety of sources – often with commercial applications – for owners of earlier Systems).

In System 7.5, both screen fonts and printer fonts are stored in the Fonts folder. In earlier Systems, printer fonts were stored in the Extensions folder and screen fonts formed part of the System file.

Having to cope with two font files is still a bit of a nuisance, though, and it can cause problems if they get separated, or one gets lost, or one is replaced and the pair doesn't match any more.

This is one of the reasons why Apple invented the competing TrueType font format. TrueType fonts are single font files that handle both the screen display and printed output. They use a little more memory, but they are much more convenient, and the fonts supplied with newer Macintoshes are in TrueType format.

However, the publishing industry still revolves around PostScript fonts, so Apple is in the strange position of having to support both TrueType fonts (by including them with the machine) and PostScript fonts (by now supplying Adobe Type Manager as part of the System software).

Just to make things even more complicated, Apple have released a competitor to PostScript called QuickDraw GX. It aims to integrate the same kind of printing features and quality of PostScript with the Macintosh operating system and the applications that run on it.

To find out more about QuickDraw GX, see the chapter on Apple Extras. For now, though, don't give it too much thought. For the time being, QuickDraw GX has made little headway, and it's still at the stage of being a curiosity. It also gobbles up lots of precious memory if you install it as part of your System.

Note Pad file

The Note Pad, like the Scrapbook, is a standard Mac utility. It lets you jot down notes while you work, and this is the file where your notes are stored. Again, you can double-click on it if you want to see the Note Pad (which is on the Apple menu anyway).

Preferences

Most Macintosh applications need to store information about how they've been configured or how individual users have customised them. They do this by creating small 'preferences' files. In previous versions of the System they would turn up all over the place – usually, loose in the System Folder. In System 7.5 they are grouped together in this Preferences folder.

It's a good idea to periodically sift through your Macintosh's hard disk, weeding out old and unwanted files. Outdated preferences files for applications you've long-since discarded are prime candidates for the wastebasket.

PrintMonitor Documents

If your Mac is printing something, you don't have to sit quietly and wait until it's finished before you start working again. When you set up your printer you have the option of switching 'background printing' on. When background printing is on, you can carry on working on your Macintosh while it's feeding data to the printer.

The only drawback is a jerky mouse and sluggish response. There seems no way round this, and it afflicts even the fastest Macintosh models. Still, it's better to be able to work jerkily than not at all.

Scrapbook file

The Scrapbook is one of the Mac's handy little utilities – it lets you store any number of pictures in a kind of scrolling gallery window (see the chapter on Mac gadgets for more). This is the file that contains all the images. Double-click on it if you want to see the Scrapbook.

Startup Items

If there are applications you use constantly, you can save yourself time and effort by putting them, or a file you use all the time, or an alias of either, into the Startup Items folder. For example, if you have a Mac with a CD-ROM drive and like a little music while you work, you can put an alias of the System 7.5's audio CD player into this folder. Then, when your Mac has started up, you can put a CD in straight away. More importantly, if you use personal organiser software, you can put your diary file in the Startup Items folder and leave the application running all day in the background, ready for when you need to refer to it.

Shutdown items

This works in exactly the same way as the Startup Items folder except that it waits until you shut down your Mac before it activates the contents. It could be useful if you need to remind yourself to update tomorrow's to-do list before you finish work – just put your to-do list file in here and it will be opened automatically when you attempt to shut down your Mac.

System

In older versions of the System, this file contained the bulk of the Mac's operating system. With later versions of the System, the relevant files are split up into different folders within the System Folder. The System file still contains the basic Mac sounds,

though, plus the various keyboard layouts for different countries (as described in the control panels chapter).

The System file is actually a special kind of document called a 'suitcase'. You can recognise suitcases by their distinctive icon. In the old days suitcases were used much more, but now, the only other time you'll see suitcases is in the Fonts folder, where they're used to store screen fonts and TrueType fonts.

Suitcases are a lot like folders, in that you can double-click on them to open them up, and you can drag items from one suitcase to another (only certain sorts of file can go into suitcases, though).

Expert tips

● The Finder and the System are usually updated in pairs. However, you may need to check the version numbers of both if you have a compatibility problem.

● Let's face it, that 'Welcome to Macintosh' box you see during startup does get faintly tedious when you've already seen it fifty billion times before. But you can create your own startup screen if you have an application that can save in StartupScreen format (the excellent shareware GraphicConverter, for example): just create a file called 'StartupScreen' and drag it into your System Folder. (In Photoshop, save it out as a PICT Resource.)

● Unless you're working on documents for publication, stick to TrueType fonts. Not only does it make your System folder less cluttered, it saves you RAM too. Oh yes it does! Although TrueType fonts use more memory than PostScript versions, you can switch ATM off, and that's the biggest memory hog of all.

● System 7.5's Note Pad is much better than the previous version. You still only get eight pages, but they expand to full screen size and they have scroll bars so that you can write a lot more. Why not maintain a to-do list using Note Pad, and put an alias of Note Pad in both your Startup Items and Shutdown Items folders? Every morning you'll be reminded of what needs doing, and every night you'll be reminded to plan tomorrow's work. It works for me! (In as much as anything does…)

7: Mac accessories

There are a number of options on the Apple menu that lead to built-in accessories and a couple of more important Macintosh controls. Here's a guided tour:

About this Macintosh…
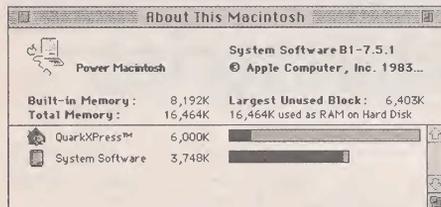
This is the first option you see on the Apple menu if you are at the Desktop, and this is the dialog that appears if you select it. It tells you what type of Macintosh you have, which version of the System software you're using, how much memory is built in and how much memory you have in total (which includes any virtual memory you may have set up). To the right is a very important figure: Largest Unused Block. We'll come back to this shortly.

In the bottom part of the window you'll see a list of all the applications currently running, and the amount of memory they are consuming. The System is always running, and basically gobbles up as much memory as it needs to, depending on how many fonts you have, how many Extensions and control panels are installed and other techie details like that.

Other applications, though, don't take as much memory as they need at any one time. Instead, you have to choose the amount of memory to allocate to them. From the illustration above, we can see that of the 6,000K (6Mb) I've allocated to QuarkXPress, it's currently using only about 10-15%. Earlier on we looked at Info windows. Let's look at the Info window for the QuarkXPress application file (remember, you do this by activating the Finder, then selecting the file you want, then choosing Get Info from the File menu – or using the keyboard shortcut command-I):
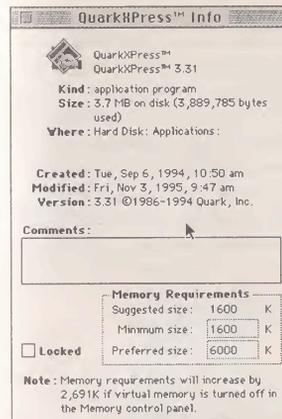
This window gives us a lot of information about the QuarkXPress application, but the part we're interested in is down at the bottom in the Memory Requirements segment. The top figure, Suggested size, is set by the manufacturer and is a good guideline to the minimum amount of memory you can practically allocate to the application. The next figure, Mimimum size, is set by you. If you already have several applications running when you try to launch an application, you may not have much memory left.

If you have less left than the minimum size you specify here, the application won't attempt to load. You can sometimes get away with specifying a minimum lower than the manufacturer's suggested size, but frankly it's not worth it. The Preferred size is the amount of memory the application will take for itself when you launch it, providing that amount of memory is available. To go back to the About this Macintosh window illustrated on page 70, we can see that I launched XPress when there was more than 6,000K of memory available, so it reserved its entire quota. If there had been less than 6,000K available, but more than the minimum, it would simply have taken what it could.

So why set a high 'preferred' figure and risk leaving valuable memory unused? As your documents get bigger and more complex (as you work on them, basically), so the application's memory requirements get bigger and bigger. By setting a large 'preferred' size you avoid the risk of the application running out of memory. If it does, nothing really bad happens, it just means it has to start shuffling data to and from the hard disk, instead of being able to keep it all in memory at once.

Incidentally, note the remark right at the bottom of the Info window. Remember how I mentioned earlier that a quirk in the PowerMac design meant that virtual memory actually reduced application memory requirements? Here's the proof!

Lastly, let's get back to the figure at the top of the About This Macintosh window – Largest Unused Block. When applications take over a segment of memory, it has to be in a single block. When you quite an application, the remaining applications still running don't shuffle up to take up the space – as a result, you get smaller, irregular chunks of memory becoming available, not larger, single chunks. Take a look at this simplified diagram:

Available memory

QuarkXPress (6,000K)   Largest unused block (12,000K

Available memory

Free memory left behind   QuarkXPress (6,000K)   Largest unused block
by quitted application   (6,000K)
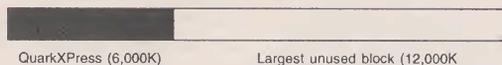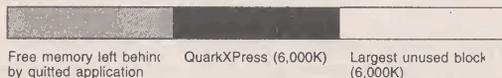
In the top example, XPress was the first application to be launched, and it has taken 6,000K to leave 12,000K free out of a total of 18,000K. In the second example, though, XPress was launched while another application, itself taking up 6,000K, was still running. When you quit that application, and free up its 6,000K of memory, it's split up from the rest, so that even though there's 12,000K of memory free, the largest single block is only 6,000K.

This is called 'memory fragmentation'. If an application tells you there isn't enough memory when you try to launch it – and you know darned well there is – it could be because your memory has become fragmented. Quit all the applications currently running, then launch them all again and you will find that the remaining memory is now in a single block.

Incidentally, you can get hard disk fragmentation too, but this is less of a problem and you seldom need to worry about it (unless you're in the habit of keeping your hard disk 99% full).

That just about covers the About this Macintosh... option on the Apple menu. But note that this option changes if you access the Apple menu while you're within an application. Instead, it reads about ClarisWorks... (or whatever the application you're running). When you choose this option it will bring up a title or info screen created by the software publisher:

AppleCD Audio Player

This is an excellent toy given away with System 7.5 and CD-ROM-equipped Macs. It offers all the controls of a hi-fi CD player, including shuffle, program, repeat and fast forware/reverse modes. You program tracks by dragging from the track list into the playlist. There are numerous options for customising the display, too.

Automated Tasks
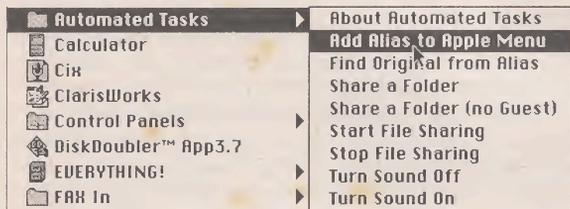
One of the major additions to System 7.5 is the AppleScript programming language (it's been available for some time, but only as an extra). Apple are keen for Mac users and Mac software developers to use AppleScript, so they've included some sample automated tasks to demonstrate its abilities. The most useful (I think) is the Add Alias to Apple Menu script.

(A 'script' is a cross between a program and a list of actions that you could carry out yourself, but you're getting your Mac to do it for you instead.)

You can find out more about the AppleScript language in the 'Apple Extras' chapter.

Calculator

The Macintosh calculator has survived unchanged for practically a decade. Sadly. It offers only the basic arithmetic functions, no memory, no specialist trigonometrical, mathematical, financial or scientific functions and no fancy design. But it's useful now and again, nonetheless. **Quick tip:** when you've finished your calculation, select Copy from the Edit menu, and the result is copied to the clipboard, ready to be pasted into a letter, a spreadsheet or whatever else you're working on.

Oh, and another tip – you can use the number keys on the keyboard (and keypad) instead of trying to click on the buttons with the mouse.

Key Caps
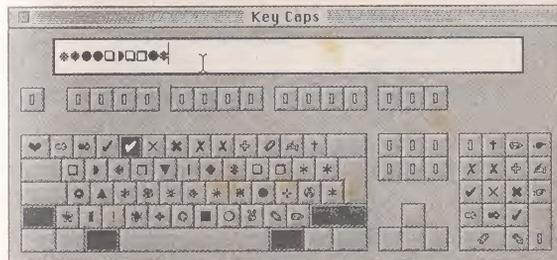
Are you having trouble finding the right character on the keyboard? This happens often if you're trying to find the right symbol from the Dingbats font (in the illustrated example above). Select Key Caps from the Apple menu and you see this window. Choose the font you want to examine from the Key Caps menu and then press the shift, command and option keys individually or in combination until you've seen all the characters that font can produce. (You can cut and paste characters from the sample window into your documents.)

Note Pad
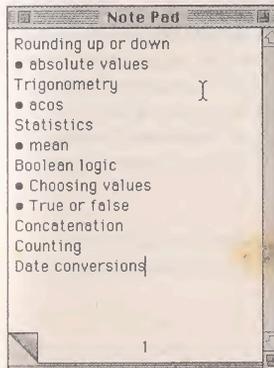
New and improved for System 7.5, Note Pad is a very simple word processor which lets you jot down ideas and notes as they occur to you. There are 8 pages to write on (you can erase text too, of course) and in the latest version you can enlarge the size of the pages by dragging on the resize box, bottom right-hand corner or clicking on the expand box, top right, which will expand the pages to full-screen size.

Scrapbook
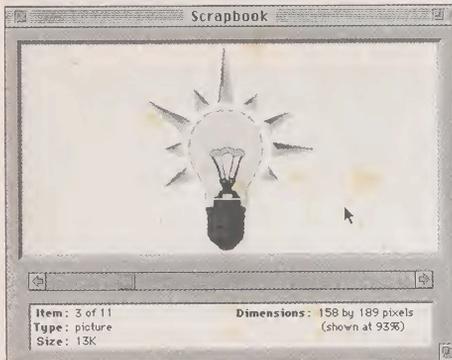
The old Scrapbook was a place where you could store pictures, either for transporting them from one document to another, or just because you like them. The new version stores pictures, text and sounds, and you can resize it to fill the whole screen if you like.

Stickies

> Don't forget to phone home...

Stickies are the electronic equivalent of those sticky yellow labels people stick to your monitor screen when you're not at your desk. You can change their font, type size, colour and window size, and have them loading automatically on start-up so that they're always there to remind

you of the things you haven't done (a bit like being married, really).

Expert tip

● You can find dramatically superior versions of the Clipboard, Scrapbook and Note Pad in the public domain/shareware market.

8: Apple Extras

S ystem 7.5 owners have got lots to explore on their machines. As well as enhancements to the System itself and improvements to its various accessories (see the last chapter), System 7.5 also comes with the following add-ons which you can use or install as you wish:

Apple Backup

Welcome to Apple Backup!

Welcome to Apple Backup!

What would you do if your Macintosh's hard disk broke? Given that it contains probably all the things you've ever done with your Macintosh since you bought it, a spell in a psychiatric hospital followed by intense counselling is the most likely outcome. But you can safeguard against losing your precious data with this application. It lets you copy the entire contents of your hard disk on to floppy disks, or just the contents of the System Folder (sometimes, all that's gone wrong with your hard disk is that the System information has become damaged in some way and simply needs replacing).

Apple Backup can do either of these things but – unfortunately – no more. Backing up my hard disk, for example, would take 284 floppy disks and 174 minutes! Which means that it's hardly going to prove a feasible weekly safety measure. Backing up your hard disk is a chore at the best of times…

Instead of using Apple Backup, look out for back-up applications from third-party suppliers. These can do all manner of useful things – the most useful of which is 'incremental backups' – once you've made your first, full back-up, the following backups only back up the things which have changed since last time. This method is much quicker, and much more efficient.

AppleScript

Add Alias to Apple Menu

▽ Description:

Add Alias to Apple Menu - This script creates aliases to items and places them in the "Apple Menu Items" folder. The items

Record | Stop | Run | Check Syntax

```
on run
    tell application "Finder"
        set theList to selection
        if (count items in theList) = 1 then
            if class of item 1 of theList is applicati
                if name of (info for (theList as ali
                    set theList to {}
                end if
```

AppleScript

We met AppleScript in the last chapter when we took a look at the sample automated tasks available from the Apple menu. AppleScript is supplied with System 7.5, and you'd be wise not to remove it because many applications now depend on it to run. In the AppleScript folder, you'll find some more sample scripts, the AppleScript editor (shown) where scripts can be created and edited, and a two-part guide to what AppleScript is and how you use it. Don't expect to be able to leap straight in and start scripting – this is strictly programmers' territory.

Quick tip: you can create your own scripts the easy way, though. The Finder in System 7.5 is 'recordable'. This means that if you start the Script Editor 'recording' then go back to the Finder and carry out a sequence of actions, the Script Editor will record these as an AppleScript script, which you can then save and use again. Be careful, though – don't inadvertently create and distribute a script that empties all your files into the wastebasket…

Apple Video Player

Apple Video Player

Some new Macintosh models are sold with video cards – you can display and record TV and video in windows on your screen. This is the program that displays the TV/video. (If your Mac doesn't have a TV card, you might still be able to buy one separately.)

At Ease

Tucked away this corner of your hard disk is a completely different interface for your Macintosh, one that hardly ever gets a mention in the Macintosh press or in books.

The Macintosh is by far the easiest machine for beginners to master (and that includes PCs equipped with Windows 95), but it's still tough for absolute beginners. The screen is covered with icons, you have to do strange things with the mouse and you're terrified you're going to wreck things.

At Ease is a replacement interface that consists solely of big colourful buttons you can click on to do the things you want. It's ideal for parents who want to make their Mac foolproof for the kids, or for those teaching someone else how to use a Mac for the first time.

When you set At Ease up you can choose which applications, files and folders are available and you can use passwords and other security measures to prevent users straying, accidentally or otherwise, into the Finder, where they might trash valuable data.

You can even set up many different 'users', each with their own user name and password and unique configuration of applications, files and so on.

At Ease is much maligned amongst the 'serious' Mac fraternity, but it's an excellent way of helping beginners use your machine and of controlling access amongst a body of students, for example.

CloseView
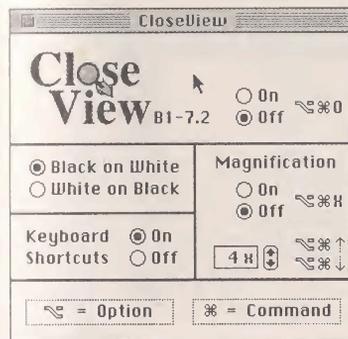
You'll find CloseView in the Special Needs folder. It's a control panel which, once installed, lets users with poor vision magnify the display by a chosen amount, view the screen white-on-black or black-on-white and use keyboard shortcuts to control the magnification.

Easy Access
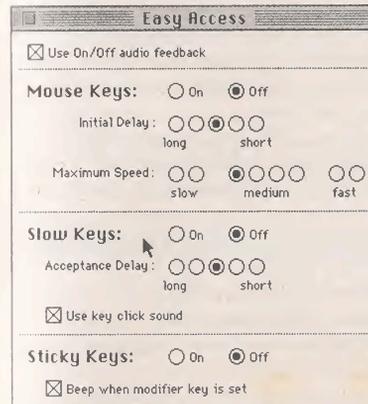
The Easy Access control panel is also in the Special Needs folder. It's for people with physical disabilities and lets them configure various keyboard and mouse options to make using their Macintosh easier. Inexperienced users could find the Sticky Keys option useful – with this switched on, you don't need to hold down the shift,

command or option keys when you have to type a complex keyboard combination (a tiny symbol at the far right of the menu bar shows you when you've pressed one of these 'modifier' keys).

HyperCard Player
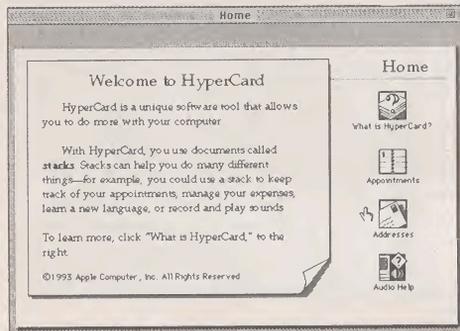
HyperCard is an application that's been around almost as long as the Macintosh itself. They practically grew up together. Indeed, HyperCard has been given away with Macintoshes right from the start, usually in 'player' form. The HyperCard Player can show HyperCard documents ('stacks') that other people have created, but provides only limited tools for creating or editing your own stacks.

HyperCard is a cross between a database and a programming language, but is a lot more fun that either of those two definitions make it sound. When it was first developed it had to do very complex things in a small amount of memory on slow machines – and it was a marvel. Now, the hardware has moved on, and HyperCard is showing its age, not helped by the multimedia add-ons that Apple continually bolt on to it in an effort to keep it up to date.

Your main use for this HyperCard Player is likely to be for viewing stacks created by others – many companies or individuals distribute information, catalogues and indexes and HyperCard stacks.

Newton Demo

If you don't have one of Apple's clever little Newton hand-held computers/organisers, this demo will give you a taste of what you're missing.

Performa Extras

Owners of Performa Macintoshes get several useful little help files and 'tours' which explain how to use their computers and some of its more important features. These guides are now provided with System 7.5 in the Performa Extras folder.

PowerTalk

Phew. PowerTalk is a new-for-system-7.5 System Extension designed to make networking and communications dramatically simpler and straightforward. You can use it to handle voicemail, faxes, email from co-workers and more. It comes with 'catalogues' for storing contact details, and can be used to organise working groups amongst other things. You can also get 'gateways' so that your Mac and PowerTalk

can interface directly with the Internet and other on-line services. PowerTalk is a serious networking tool outside the scope of home users – it also takes up a big chunk of RAM once it's installed.

If you want to find out more, though, take a look at the documentation files that come with the PowerTalk software in this folder – especially the animated tour (illustrated above).

QuickDraw GX

The first thing you need to know about QuickDraw GX is that if you install it your System will occupy about 8Mb of RAM (16Mb on a PowerMac). The second thing you need to know is that you need to take special precautions with your existing PostScript fonts to make sure it will be able to work with them subsequently. The third thing you need to know is that your printer may not yet have a QuickDraw GX driver (or your fax modem) and the fourth thing you need to know is that there are still relatively few applications which support the features offered by QuickDraw GX anyway.

It had better be good.

QuickDraw GX promises the following:

● 'Intelligent' fonts with more control over tracking, kerning, font weights and a greater range of special characters.
● Many new graphic effects (transparency, rotation, skewing and more).
● Files can be saved in a new format (PDD) which other QuickDraw GX-owning Mac users can view even if they don't have the application that created them.
● Improved printer sharing on networks.
● You can print files by dragging them on to a desktop printer icon.
● Files in a print queue can be more easily re-ordered.
● It accepts extensions that allow printing effects like watermarks and multiple-page 'thumbnail' printing on single sheets (these two extensions can be found in the QuickDraw™ Extras folder).
● You can mix page sizes in a single document.

It's hard to be convinced, not least because of the colossal RAM overhead. (Will everyone really go out and buy another 4Mb of RAM just to run QuickDraw GX?)

And many of the 'enhancements' are to allow the Mac's in-built printing language (i.e. QuickDraw) to compete with Adobe's PostScript. Macs with QuickDraw GX will be able to get QuickDraw printers (the lower end of the market) to jump through hoops. But most serious Mac users have PostScript printers already (the price differential is diminishing), and professional Mac applications like QuarkXPress and Photoshop output in PostScript because it's the standard format in the publishing industry. QuickDraw GX may be able to outshine PostScript in some areas, but PostScript is here, now, and supported by the whole Macintosh industry. (And doesn't need another 4Mb of RAM.)

Expert tips

● Apple's venerable HyperCard application has been given a new lease of life with AppleScript scripting support. Since version 2.2, programmers have been able to attach AppleScript scripts to HyperCard handlers – this dramatically improves HyperCard as a programming tool, and gives AppleScript scripts a decent front-end to work from.
● If you want to do more with AppleScript, get the official AppleScript package from Apple. With it you get documentation (which is more precise than understandable, alas) and the FaceSpan interface application, which lets you create more complex and better-looking (easier to use, too) AppleScript applications.
● If you fancy the idea of QuickDraw GX's universal document format, but don't fancy losing all that available RAM, take a look at Adobe's Acrobat software. This creates a PDF (Portable Document Format) file out of any Macintosh document, and anyone else with a copy of the Acrobat Reader (freely distributable) can read and print your documents without the original application. You can also add goodies like hypertext links, 'hot' tables of contents and pop-up annotations.
● If QuickDraw GX catches on, Mac users will be able to create much

more complex documents without the expense of a PostScript printer. However, part of the expense of a PostScript printer is due to its internal processor, which takes a valuable workload from your Mac's own CPU when you print. And remember: all PostScript printers can print QuickDraw output, but QuickDraw printers can't cope with PostScript.

● If you do have a PostScript printer, and you keep getting PostScript errors, the chances are you need more RAM in your printer. PostScript is singularly unhelpful in explaining why it's turned up its toes, but RAM is almost always the culprit. If you're printing DTP layouts, 2Mb might just cope with a single page. If you're printing several pages at a time, you'll need 4-6Mb minimum.

● Still getting PostScript errors? Check the Chooser, to make sure you're using the right printer type, and check your software's Page Setup and Print dialogs to make sure the right printer driver is selected. It's easy to overlook.

9: System tips

The Macintosh System and Finder are already pretty simple to use, but there are certain little tips and wrinkles that can make it easier still. Here's a selection:

How much hard disk space is there?

If you want to make your windows that little bit smaller and cleaner, switch off the Show disk info in header option in the Views control panel. This does mean you don't know how much hard disk space is available, though… but switching to icon view tells you straight away.

How big is that folder in the window?

It's always useful to know how big folders are, but it takes your Mac precious moments to calculate the folder sizes when you open a window, and you can speed it up no end by switching off the Calculate folder sizes option in the Views control panel. After all, if you need to know how big a folder is, you can just select it and hit command-I to call up its Info window.

Keeping stationery
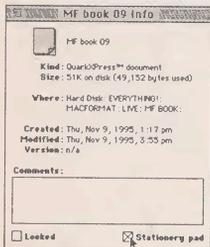
Some applications let you create template files that you can use to create new documents, and which you can't accidentally overwrite. System 7 made this feature redundant with the Stationery pad option in a file's Info dialog (select the file, then hit command-I). Rather neatly, the file's icon is changed to reflect its new stationery status.

Clever aliases

The more you play around with aliases, the more you realise how useful they are. For example, if you're regularly moving between two or more folders, keep an alias of the others in each. And if you like windows so big that they cover up the wastebasket, put an alias of it in the folder!

Aliases and networks

Plodding through the Chooser to log on to another Mac or a server on your network can be a real chore. But once you've set up an alias for the machine or destination folder you regularly use, it's just a double-click away (and a user name/password dialog).

Aliases as catalogs

This one is really smart. If you keep lots of files on external floppies (poor soul) and you have the patience to create an alias of each file for storage in a folder on your hard disk (or another floppy), you can:

1. Enjoy an alphabetical list of all your files.

2. Find out which disk contains any one file by double-clicking on the alias (your Mac will obligingly tell you where the file is).

Finding originals

You've got an alias of a file, but you don't want to load the file, you just want to find it – what do you do? Hold down option when you double-click it!

Unmounting external drives/disks

There's an 'undocumented feature' in System 7 (fixed in 7.5) that stops you ejecting a SyQuest cart or CD-ROM while you've got File Sharing turned on. This happens when you're not even 'sharing' that disk. To get round it, find a copy of the UnmountIt utility.

Recording Finder scripts
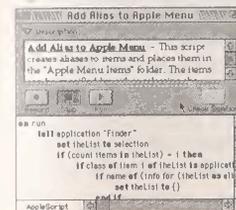
System 7.5 owners are lucky in that they have AppleScript and a 'recordable' Finder. Locate the AppleScript Script Editor (probably in the AppleScript folder in your Apple Extras Folder), launch it, press the record button and then go back to the Finder to carry out a sequence of actions. When you've

finished, go back to the Script Editor, stop the recording and save the script as an application. For example, you could record a script that opened up half a dozen regularly-used windows and tiled them neatly on your Desktop – and you could put this script in your Startup Items folder if you wanted to be really cool.

Don't accept scripts from strangers!

You can assume that commercial software publishers know what they're doing with AppleScript, but if a bungling workmate offers you a script and says 'run it', don't even *think* about it until you've examined it with the script editor. Using the script recorder, it's easy to create an application that dumps everything on your hard disk…

Silent running

If you're sick of your Macintosh going 'boing' every time you do something stupid, go to the Sound control panel and drag the volume slider down to zero. Your Mac won't give up – it won't be able to go 'boing' any more, so it will flash the menu bar when you do something daft. How obliging of it.

Change your name, fast

Tired of waiting for folder and file names to highlight when you're trying to highlight them? Try clicking on the file/folder and straight away moving the mouse slightly – the name highlights immediately (or hit the Return key). Once you've changed the name, you don't have to click somewhere else to make the change permanent – just hit the Enter or Return key.

Quick copying

Making copies of files or folders in new locations is a bit of a pain. First you have to duplicate the file/folder (command-D) and then drag it to its new location and maybe take the words 'copy of' out of its name. There's a dramatically quicker way. Simply hold down the option key while you drag the item to its new location. Hey presto – identical files, and even with the same name.

Synchronising folders

If you keep one Mac at home and another at the office, and you keep duplicate 'work' folders, you're going to want to make sure they're both up to date. You *can* simply replace one folder with another, but this does mean that items in the older folder you've deleted in the new one will be lost. So open up the latest folder and *drag its contents* into the old one. If the same item exists in both folders, your Mac will ask you whether you want to overwrite the old one with the new, or vice versa – this way you maintain a full set of all the files you've worked on, and the most up-to-date version of each.

Changing your mind

If you've started dragging or copying a file/folder from one location to another, and then changed your mind, drag it up to the menu bar, and your Mac will pretend the whole thing had never happened.

Ordered icons

Using icon views for your folders makes your Desktop look pretty, but it's frustrating that they don't sort themselves out alphabetically – they just stay where you plonk them. Ah, but if you hold down the option key when you go to the Special menu, the Clean up Window option has changed to Clean up by Kind (or whichever was the last list view you used)…

Selecting multiple icons

To select more than one icon (for dragging or deleting lots of files/folders at once), select the first normally and then hold down the shift key while you select the rest. Or, if there are only a couple of items you *don't* want to select, do a Select All (command-A) first and then shift-click on the ones you *don't* want.

Closing all the windows

To close all open folder windows at once, hold down the option key while you click on the close box of any single window.

Moving windows

You can move a window that isn't active without making it active. Simply hold down the command key as you drag it.

Keeping it tidy

If you want a folder that's buried about ten layers deep in your hard drive, you can either put up with having nine folder windows stacked up behind the one you finally want, or hold down the option key as you double-click the successive folders. This closes the parent folder as soon as the new folder is open.

Tracing your parents
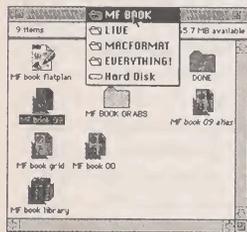
You've been super-efficient. You've only got one folder window open on your Desktop. But now you need one of the folders further up in that window's hierarchy – what do you do that won't mean about thirty-seconds'-worth of window opening and closing? Hold down the command key and click on the title to get a pop-up menu of all the parent folders and simply select the one you want.

A different view

It's nice that you can view folder contents alphabetically, or by size, or by date, kind or label. It's even nicer that you don't have to haul the mouse pointer up to the View menu to do it. Providing you are not currently viewing by icon (and that the folder window is wide enough) you can simply click on one of the categories in the header bar to choose that view.

Rapid expansion

In list views you can examine the contents of folders as an outline. We know that clicking on a right-facing arrow turns it downwards and displays, indented, a list of all the folder's contents. What we may not

know is that by holding down the option key while clicking on the arrow expands all the various sub-levels of folders too. We also may not know that we can select all of the folders in our folder window (command-A) and hit command-option-right arrow to do the same trick with all of them at once.

Get me out of this!

If your Mac has got stuck in a rut carrying out a task, or you're just fed up of waiting – and there isn't a Cancel button in sight – hit command-. (full stop) or even the Esc key.

Instant wipe-out...
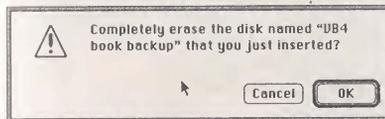
...well, nearly instant. If you want to erase a floppy disk, hold down command-option-Tab while you insert it (it helps if you have recently broken all your fingers in a freak accident) and you go straight to the Do-you-want-to-erase-this-disk dialog. Well, it could save you three or four seconds maybe...

Get that floppy out!

To eject a disk without having to haul it down to the wastebasket, select it and then hit command-E. Use command-Y to avoid leaving a ghost image of the disk. If you hit shift-command-1, the disk doesn't even need to be selected (but you are left with a ghost image).

Get lost!

Locked files are a pain because when you try to empty them from the wastebasket they won't go. Hold down the option key while you select Empty Wastebasket, though, and your problem's solved!

Getting back to normal

If you've hopelessly mucked up your control panels, you can get everything back to the defaults by holding down command-option-P-R while you start your Mac up.

Make it snappy

Using the Views control panel you can make files and folders snap to an invisible grid as you move them. It keeps things neat, but it can leave icons a little widely-spaced. And it's a bit of a nuisance to haul yourself over to the control panels to change the setting. Anyway, you might like to know that by holding down the command key as you drag you reverse the current settings until you release the mouse button again.

Hiding other applications

If you only want the current application to be visible (i.e. no other windows lurking behind it), you can choose Hide Others from the applications menu – but it happens automatically if you hold down the option key while you select your application.

Use Extension Manager!

Or use some other Extensions/control panels-handling application. For each job you do on your Mac, many of its control panels, Extensions and fonts are redundant. If you create sets of Extensions needed for specific tasks and disable the rest, you can save a lot of RAM (it's not hard to save 1Mb or more). It does mean restarting your Mac every time you swap Extension sets, but overall you can save yourself a lot of time which would otherwise be spent twiddling your thumbs, waiting for your Macintosh.

Upgrade or die

If you don't have System 7.5, get it now! It's true that it takes up a fair bit of hard disk space, but in this day and age most of us aren't struggling too much to find room on our hard drives. And it's a myth that it gobbles up RAM – unless you install bloated

options like QuickDraw GX and PowerTalk, it doesn't use up significantly more RAM than 7.0 or 7.1. So do it now! System 7.5 incorporates heaps of fixes and features that people were screaming for in earlier versions (and which software companies were charging you good money to provide).

Quick file access

If you have System 7.5, move a folder alias into the Apple menu, make sure Submenus is switched on in the Apple Menu Options control panel and luxuriate in the hierarchical sub-menus that appear in the Apple menu – you can dig out files and folders buried up to five levels deep without having to let go of the mouse button. If you select a folder, you go back to the Desktop so that the folder window can open; if you select a file, it's the same as double-clicking on it.

Get tooled up

If you have a CD-ROM drive, buy a copy of *The Little Mac Toolkit* (Publishers: Peachpit Press, Author: Clay Andres, ISBN:1-56609-042-3). This 550-page book comes with a CD-ROM containing hundreds of top PD/shareware utilities for everything from converting weird file formats to providing hierarchical pop-up folder menus anywhere on-screen (it's true). As well as telling you how to use each and every program, the book also gives some real insight into how your Mac and its operating system work.

Subscribe to MACFORMAT!

FREE Textures for Professionals (worth £93 inc VAT) when you subscribe

Textures for Professionals includes 360 seamless textures in 640 x 480 resolution and 60 element images at 1,024 x 768 in both TGA and TIFF formats. Textures include: stone, river rocks, adobe, petunias and mums, rocks – including crushed shale and pebbles, dirt and grass, trees and bark, 32 wood patterns, five fences, 12 granites, dozens of laminates, vinyls, flowers and water; 27 varieties of food – including chocolate, chips, red chilli peppers and spinach noodles; 40 fabrics, floor coverings, tiles, metals, prints, shingles, stripes and clouds, old cracked leather, nuts and bolts and alligator skin.

PLUS you have Britain's best-selling Mac magazine delivered to your door every four weeks, and you can save money on every issue of MACFORMAT!

Eight FREE issues

By subscribing to MACFORMAT now, you'll get a FREE copy of Textures for Professionals worth £93 inc VAT, and you can make a saving of £39.60 if you take out a two-year subscription. That's 24 issues for the price of 16!

To take advantage of this money-saving offer, fill in, cut out and return the form on the reverse of this page. No stamp required.

Offer ends: 31st January 1996

Yes! I would like to subscribe to MACFORMAT, get up to EIGHT free issues and claim my FREE disc

☐ Please start my subscription at the discount rate below

☐ Please extend my subscription at the discount rate below

Personal details

Title _____ Initials _____

Surname _____

Address _____

_____ Post code _____

Daytime telephone no _____

EC VAT reg no _____

With which issue would you like your subscription to start? (Issue no) ☐
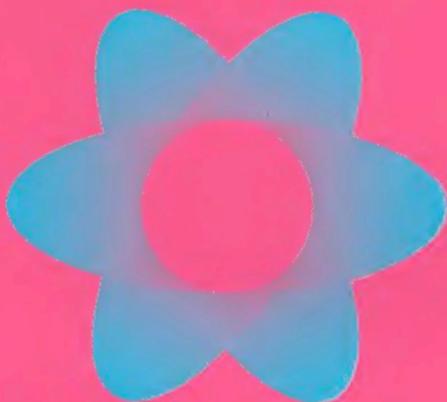
Please choose your method of payment

1. I would like to pay by ☐ cheque (payable to Future Publishing Ltd. We can only accept sterling cheques drawn on a UK bank account)

2. I would like to pay by ☐ Visa ☐ Access

Card no _____ Expiry ___/___

Signature _____ Date _____

Return this coupon by Freepost (no stamp required in the UK) to: MACFORMAT Subscriptions, Future Publishing Ltd, FREEPOST BS4900, Somerton, Somerset TA11 6BR

Please start my subscription at the discount rate ticked below

	UK	Europe	Rest of World	
24 issues CD	☐ £84.15	☐ £104.55*	☐ £141.35*	24 for the price of 16!
12 issues CD	☐ £49.50	☐ £59.70*	☐ £78.10*	12 for the price of 10!

* Overseas prices quoted are for airmail only. For information on alternative rates please telephone our Subscriber Hotline on +44 1225 822511 ☐ Please tick this box if you would prefer not to receive information on other offers

MCFS196

The Mac may be friendly, but what if you're
new to it all? This practical book tells you all
you need to know, from the basics of using a
mouse and menus to icons and folders, then
shows you how to get to grips with aliases,
control panels and System extensions. It's
packed with helpful advice and tips that will
benefit even Mac veterans.