



# The upper hand

Don't be a slave to convention: Tim Nott saves you hours of work with an unusually stress-free way to migrate your Win95 installation to a new hard drive — show it who's master.

**R**emember that new hard drive you bought a short while ago? Remember how roomy it felt when you first installed Windows 95? Remember that feeling of alarm one month later, when your Windows folder and its contents effortlessly topped 200Mb? Is that 1.2Gb drive starting to feel a little cramped? Fortunately, hard disks aren't that expensive. My first disk upgrade (to 65Mb in 1990) cost under £200, as did its 200Mb replacement, the 500Mb job I bought to replace that, and the current 1.7Gb incumbent. I'm now wistfully looking at the ads for 4Gb drives at a similar price.

The hair-tearing problem is how to add the drive. Modern motherboards can usually take two IDE devices on each of two channels, with each channel having a master and a slave device. Usually the new driver is faster, so you want it as master; in other words, as C, not D. So how do you migrate your carefully acquired Windows installation to the new disk without hours of tedious reinstalling and reconfiguring all your settings? Here's how to do it. Please note I haven't tried this myself, but I'm assured by the writer that he's done many of these.

1. First, back up anything irreplaceable, then create a Windows 95 floppy boot disk and make sure FDISK.EXE is copied onto it.
2. Set the old and new drives as master and slave respectively, using their jumpers.
3. Start up in MSDOS mode, then Fdisk and Format the new drive. Use the /s switch with the format command to make it a system (bootable) disk.
4. Load Windows, then disable virtual memory from Control Panel/System/Performance/Virtual Memory. (You have to choose "Let me specify..." to wake up the "Disable" check box.)



**Fig 1 Transform your icon titles with Mike Strong's See Thru**

bad idea anyway as you cannot be certain that the lettering will contrast sufficiently well with the background to be legible.

But, as ever, I'm always delighted to be proved wrong, so hats off to Mike Strong whose See Thru utility not only does this very thing but also lets you choose any colour your system supports, for the text itself. My only criticism is that it is yet another addition to the Task

5. Steel yourself for a severe bollocking from a message box and close down the system.
6. Restart Windows. Open Explorer and check that "show all files" is enabled from "Options/View". Use Ctrl + A to select everything in drive C: then right-click and copy.
7. When it has finished, shut down Windows and turn off the PC. Swap the jumper settings so the new drive is the master.
8. Boot from the floppy, run Fdisk and make C: the active partition. Reboot, restart Windows, go back to Control Panel to turn virtual memory back on, and the job's done.

## Keeping paint off the wallpaper

Over the past two years I've had lots of enquiries about how to make the background of text labels transparent so that only the letters themselves are displayed and the wallpaper appears between them. My stock answer is that firstly, you can't do this, and secondly, it's a

Bar System Tray. I suppose that's better than giving it a whole button to itself but I'd rather see it integrated into Control Panel. Anyway, it works, and I like the effect: see the little snippet of my Desktop (Fig 1). I have set the text colour to a subtly pale grey.

See Thru is on our CD-ROM as STUP102V.ZIP, including the runtime Visual Basic files required. If you already have MSVBVM50.DLL and COMDLG32.OCX, then the file you want is STUP102.ZIP. Members of CIX can also download it from the Windows/ Files\_32 topic.

## Hide and seek

Darren "loyal subscriber"(sic) — unusual surname, that — emailed me with the following: "As you know, there is a way of hiding selected system files in Win95, such as real or virtual device drivers, DLLs, SYS files and hidden files. I would like to know if there is a way of changing these file endings to include others or exclude the current file

## Tim'll fix it

**Q** How can I get rid of all the .TMP files that clog up my hard disk? They seem to get everywhere, not just the Windows\Temp folder.

**Carol Dickinson**

**A** Choose "Find -Files or Folders..." from the Start menu. Select the drive you want to search and type \*.TMP into the "Named" box. Make sure "Include subfolders" is ticked. When it's finished, you can delete all the files that weren't created since you last started the PC. (Hint: click on the "Modified" column header to arrange these by date.)

Now for the clever bit. From the Options menu, make sure Save Results is not ticked. Now Save Search from the File menu. You'll get an icon on your Desktop (which you can move elsewhere) that will open a new search dialog with the details already filled in. You can use this for other file types you might want to weed out regularly, such as .BAK.

**Q** My wife is cross-stitch crazy and searches the net looking for designs. Is it possible to convert a scanned image into a pattern suitable for cross-stitching by using Windows' ability to display individual pixels for, say, a 100 x 100 grid in 16 colours?

**Graeme Elliott, Sri Lanka**

**A** No worries, Graeme. Open the image in Windows Paint (Fig 4), it must be a BMP, then look under Image/Attributes with the Pels button ticked. This will tell you the size of the image in pixels. Now use the Image/Stretch and Skew command to reduce this to the number of squares you want: you'll have to work out the percentage and repeat the process for the vertical and horizontal axes. Now "Save As..." a 16-colour bitmap.

Go back to Attributes and note the size, with inches or centimetres selected. Using the Stretch command again, increase this to the printed size you want. If you want to stretch by more than 500 percent you'll have to do it in two stages. The image will enlarge, but will display and print as enlarged square pixels.

It's easier if you've got PaintShop Pro and you can use more formats: just resize the picture to the required pixels, reduce to the number of colours required, then tick the Use Full Page option in Page Setup before printing.

**Q** Help! How can I recover deleted data from a floppy disk? It does not go to the Recycle Bin.

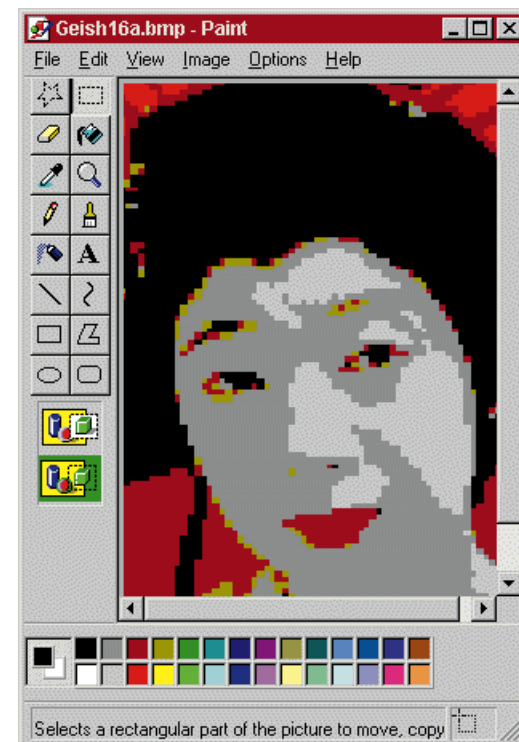
**Chris Wicks**

**A** First, check that you have UNDELETE.EXE in the C:\WINDOWS\COMMAND folder. If not, you should copy it from the OTHER\OLDMSDOS folder on the Windows 95 installation CD.

Restart the PC in MSDOS mode and at the command prompt type

```
LOCK A:
UNDELETE A:
```

If nothing has written to the disk since the deletion, then for each deleted file you will receive a message that shows the deleted file name with a question mark replacing the first letter and asking if you want to undelete it. Answer "Y", and you will be prompted to supply the first letter. When you have finished undeleting, type:



**Fig 4 Stitch it up in Windows Paint**

## Tim'll fix it (contd)

### UNLOCK A:

Remove the disc from the drive and restart the PC. Explorer should then show the file returned from the dead, although it will no longer possess a long file name.

**Q** How can I get Notepad to save files to a custom default folder? I know that I can open the folder and right-click "New" then "Text Document", but it's a rather long-winded process.

Jill Gordon

**A** This one is easy: create a shortcut to Notepad wherever you like, and then right-click and select Properties. Go to the Shortcut tab and type the path to your chosen folder in the Start In box.

**Q** How can I get Notepad to start up with wordwrap "on"?

Cameron Smith

**A** Sorry, you can't. It is a "feature" that has always been part of Notepad. To add insult to injury, if you open a file, turn on wordwrap and subsequently close the file without altering it, you will be informed that the file has changed and asked whether you want to save the changes — even though it hasn't altered.

**Q** Can anybody tell me how to draw my own icons using Paint or any other software, apart from Microangelo which I think is quite useless for this purpose?

Stephen Muirhead

**A** Well, I would not describe Microangelo as useless, but Windows Paint does have the tremendous advantage of being free and simple.

Start it up, set the "Image/Attributes" to 32 x 32 pels, and paint away. If you "View/Zoom/Custom/800%" and then turn on the Thumbnail display and the Grid from the same menu, you will find it much easier to work.

Save the file as a normal bitmap but give it the .ICO extension. You will then see it in folders as an icon and be able to assign it to shortcuts, via the shortcut properties, Change Icon, Browse. ■

types? For example, just hide all the files with the 'hidden' attribute enabled so that I can still see the DLLs, and VXD's etc."

The fact that these are shown in a scrolling list (see View/Options/View from any folder) looks promising (Fig 2). So how do you edit this list? Well, after a long search through the MS knowledge base and a rampage through the Registry, I have to admit it's not possible. Of course, if some clever-clogs out there knows otherwise, then I'd love to be let in on the secret.

### Department of incredibly obscure tips

In the August column we had "how to change the Internet Explorer toolbar background image". Now, thanks to Stuart Taylor, we have the answer to one of life's Big Questions: how do you change the spinning globe-e thingy up in the corner?

First, catch your bitmap. This must be 60 pixels wide by an integer multiple of 60 high. In fact, the existing logo is less than this but 60 x 60 x 10 worked for me, using IE3.02 and having all the Toolbar options checked. Each 60-pixel square acts as one frame of the animation, starting from the top, so I'll leave the artistic bit to you (Fig 3). Save the result as a 256-colour .BMP.

Now it's time for a dive into the Registry. Go to

`HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Toolbar`

and (if it isn't there already) create a new string value called BrandBitmap, with a value that is the path to your .BMP file. Next time you start Explorer, you should see your new custom animation whizzing away. Stuart adds that there is also a SmBrandBitmap setting, which presumably can point to a smaller version used with text-less buttons, but neither of us has tried this yet.

### Over to you

Now here's a weird tip, strictly for advanced dabblers. I'm withholding this reader's name, for reasons that will become apparent. But he is adamant: the following Registry setting changes the default font of Notepad from "that awful system font (fixedsys)" to 9pt Courier:

`[HKEY_CURRENT_USER\Software\Microsoft\Notepad]  
"iPointSize"=dword:0000005a  
"lfFaceName"="Courier New"`

It doesn't work for me, yet the chap insists that it works for him, using Windows OSR2 release. I don't have this, so if anyone wants to try it we'll be able to



Fig 2 Hiding files: It's all or nothing



Fig 3 Trivia galore: Your own animation in IE3

determine whether this is a fabulously useful tip deserving of a book token, or a shameless attempt to take the mickey.

September's "Over to you" concerned Richard Hall's challenge to pass a number to the Windows Phone Dialer. To the rescue comes Jason Ozin, who writes: "The way applications launch Dialer.exe and pass it a number to ring is via API calls using the TAPI library. So there is no command line way of passing it a number.

"However, I have just written a small freeware program called Dial-Now that will take a command line argument and pass it to Phone Dialer. Having played with it, I actually found it quite useful. It saves having to dig your way into Schedule or Outlook to find a number and ring it. You just place shortcuts to your common numbers in a folder, or on your desktop."

It's clever and simple, especially if you rename each shortcut with the name of the person you're calling. The program itself is only 10Kb, but the installation and VB runtime libraries take this up to 1.4Mb. Run SETUPDN.EXE from this month's CD.

### PCW Contact

Email **Tim Nott** at [win95@pcw.co.uk](mailto:win95@pcw.co.uk) or write to him c/o the usual PCW postal address (on p12).



# Painless extraction

When Powertoy from our CD-ROM failed to install, Tim Nott diagnosed a file compression problem. Some of your “problems”, however, are driving him to distraction — or worse.

**D**ick Stuart-Grenville had a problem installing Powertoy from our June CD-ROM.

*“Clicking on Powertoy.exe only results in an MS-DOS prompt window with message ‘PKSFX: Can’t create: APLAYEXT.DLL’. PCW’s CD helpline was flummoxed, but suggested I delete DirectX if I had loaded it. Well, I did, because I had. Even restarted Windows. Same message. Don’t you just love it, when this happens?”*

He must have caught the CD helpline on an off day, because the answer is quite simple and nothing whatever to do with DirectX. Most software supplied on cover disks or via the internet comes in compressed form — not just to save space, but to keep a whole bunch of files wrapped up in a single container file. There are various file formats, but the most common in the PC world is .ZIP — you need the shareware PKunzip or WinZip to extract the contents. With self-extracting files, you have an executable (.EXE) that has its extraction software built in. However, there are several flavours. The more recent varieties, created with WinZip, pop up a dialog asking where you’d like the files extracted to. The older type is actually a DOS program, and extracts the files to its own folder unless you specify another in the command prompt, e.g.

```
POWERTOY C:\WINDOWS\TEMP\
```

Note that the final backslash is mandatory: I’ve just discovered this the hard way. Omit it, and you end up with a load of files in the Windows folder called

TEMPAPLA.DLL, TEMPAPLA.INF instead of APLAYEXT.DLL and APLAYXT.INF. Obviously, double-clicking on the .EXE won’t pass it a path, so it will try and extract the files to its own folder. But it can’t, of course, write to a standard CD-ROM. And if it’s on a floppy, it will probably bomb out after a few files when the disk is full. Hence the error message. So if you get this, either supply a path via a DOS box (or the Run command) or copy the .EXE to your hard disk first.

While we’re on the subject of extraction, last December I mentioned that you could view the contents of .CAB files with the DOS program EXTRACT.EXE, but that the contents scrolled off the screen and the MORE pipe didn’t work. Thanks to Alan Bennett, who pointed out that you can get round this by opening a DOS prompt in the Win95 folder on the CD-ROM and typing:

```
extract win95_02.cab /a /d
>c:\windows\desktop\cabstuff.txt
```

This will send the contents of all the

## Really dumb tip of the month

Sometimes I come across a tip that is just mind-bogglingly stupid. Here’s one that takes the prize for ingenious idiocy. You doubtless all remember the tip that makes Control Panel a cascading menu off the start menu. You don’t? Well, it does come on the “Tips.txt” file that is copied to the Windows folder on a standard installation; but if you don’t have, or can’t be bothered to look for this, the trick is to open the Start Menu. Right-click Open on the start button or use last month’s tip of having a shortcut to

```
EXPLORER.EXE
```

```
/e,/root,C:\Windows\Start Menu
```

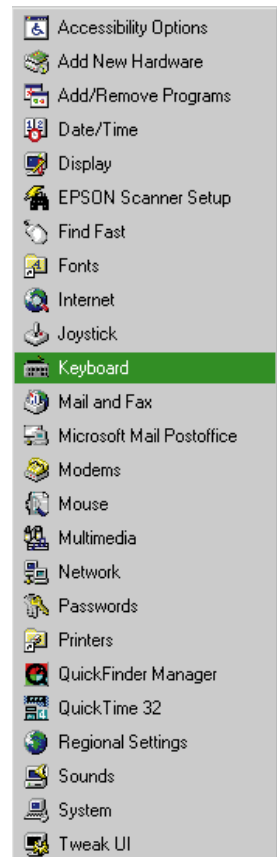
In the top level of the Start menu, or any other folder if you wish, create a new folder and rename it

```
Control Panel. {21EC2020-3AEA-1069-A2DD-08002B30309D}
```

See the screenshot for the results — and please don’t write in to ask me why my Quick Finder is showing QuickTime’s icon and QuickTime is showing PaintShop Pro’s. I don’t know. They get it right in the “real” control panel. Anyway, you can do a similar trick with printers and dial-up networking connections, but that’s old hat. What’s new hat — and a very silly hat, too — is doing it with your Internet History folder. Just create a folder in the Start Mmenu called

```
Internet History. {FF393560-C2A7-11CF-BFF4
444553540000}
```

and watch your entire screen fill when you summon it.



Control Panel on the Start menu



## Quick ones

- If you want to copy a filename to the clipboard, click on the file, click again to open the title for renaming, then press Control + C, Esc.
- You can open a free-range Explorer window from any "File/Open" dialog, by right-clicking on a folder icon and choosing "Explore" rather than "Open". You can also open a file in its associated application, by right-clicking and choosing Open. Which is handy, but it will come as no surprise that this doesn't work in Microsoft Office, which resolutely tries to open everything in the current application. You can, however, use the "Send to..." command from the right-mouse menu, and another trick is to QuickView the file, then click the "Open" button.
- To speed up Help searches, click on the "Find" tab, then the "Options" button. Select "Immediately after each keystroke" and uncheck "Wait for a pause...". Thanks to Andrew Daniels for that one.

.CAB files to a file, which you can search at your leisure.

## What the font...?

Back to Dick Stuart-Grenville, who had a rather more serious problem with fonts. He uses DTP software and a font management utility, and, if I understand correctly, wanted to keep a load of fonts elsewhere than his Windows\Fonts folder. If you open the latter in Explorer, you'll notice that you have different column headings and menu commands. Thinking it would be useful to have the "List fonts by similarity" command available for his reserve fonts, he copied the entire folder from C:\Windows to D:\.

*"However, when I emptied this folder, prior to moving other fonts in, I was appalled to find I had simultaneously cleaned out the fonts folder on drive C:!* Absolute panic... But thank the gods for the Recycle Bin's Restore command."

Surely some mistake I thought, so always a sucker for the "Do not touch this switch" syndrome, I tried the same thing myself. I only deleted a few fonts, as I may be daft, but I have it under control. But he's right you know: they disappeared from the original fonts folder as well. Stranger still, the Recycle Bin showed they had been deleted from C:, not D:. This rang a vague bell about a similar thing happening on networks, so I fired up the Microsoft Technet CD but couldn't find anything relevant. I did a little more experimenting.

For an idea of what's really on your hard

disk, the old Windows File Manager (WINFILE.EXE) has a lot to recommend it, even though it won't show long file names. What it showed here was that all the font files I'd deleted from D:\Fonts had, in fact, vanished from C:\Windows\Fonts. But they were still present in D:\Fonts, even though Explorer couldn't see them. At around this time, I started getting messages popping up saying that Windows had found an error in the Registry, and would I kindly shut down and kiss my work goodbye.

Looking at the folder in File Manager (or DOS) also reveals another file, DESKTOP.INI, that isn't visible in Explorer. And it's this that gives the fonts folder its special powers; other folders such as the Recycled one on each drive and the Internet Explorer History and Temporary File folders also have a file of the same name, but different contents. In the case of the Fonts folder, DESKTOP.INI points at a Registry key that in turn points at FONTEXT.DLL which contains the special features. What you see "in" the Fonts folder has nothing to do with the files therein. Although some fonts appear with the shortcut icon if the .TTF hasn't been copied to the Fonts folder, there isn't a .LNK file as with a normal shortcut. The visible content of the folder actually corresponds to a list kept in the Registry at

```
HKEY_LOCAL_MACHINE\SOFTWARE\
Microsoft\Windows\CurrentVersion\
Fonts
```

Naturally, it's going to get rather confused with two special Fonts folders, and this, I assume, was the cause of the error messages.

Another peculiarity of the Fonts folder is that because it has the System attribute set, its contents are invisible to the Find File command: a search for \*.TTF won't find anything unless you keep some fonts elsewhere. Anyway, the moral of the story is that you can't have the benefit of "View by similarity" without the rest of the special attributes. And this is going to cause the weird problems described above. So, if you want to copy fonts to another drive, move the

contents of the Fonts folder into a new folder. Don't move the folder itself.

## It's that man again!

Did you know you can concatenate help files? Nor did I; but thanks to the irrepressible talent of Peter McGarvey, who joins Jason Ozin in the exalted ranks of second book token winners, I do now. What I mean by this is that you can open one help file from another. Some of this is already set up in Windows: if you go to Help on the Start menu, then click through Find, Options, Files, you'll see that this apparently seamless help is actually composed of several files and can be updated when you install, for example, the Intellimouse software.

You, too, can do this at home. The secret is in editing the contents (.CNT) file of the "host". If you open the Windows\Help folder, you'll see as well as the .HLPs, a bunch of .CNTs. These contain the list you see when you open the Contents tab of a help file as well as the links to other files. For the purpose of this exercise, we'll add the Windows Resource Kit help file to the standard Windows Help. So start by copying WIN95RK.HLP and WIN95RK.CNT from the Windows 95 CD — you'll find them in the \ADMIN\RESKIT\HELPPFILE folder — to your hard disk in C:\WINDOWS\HELP.

Next, load WINDOWS.CNT into Notepad or your chosen text editor, and add to the end of the file the line:

```
:include win95rk.cnt
```

followed by a (vital) return. Save the file. This will add the Windows Resource Kit help contents to that of Windows Help. The

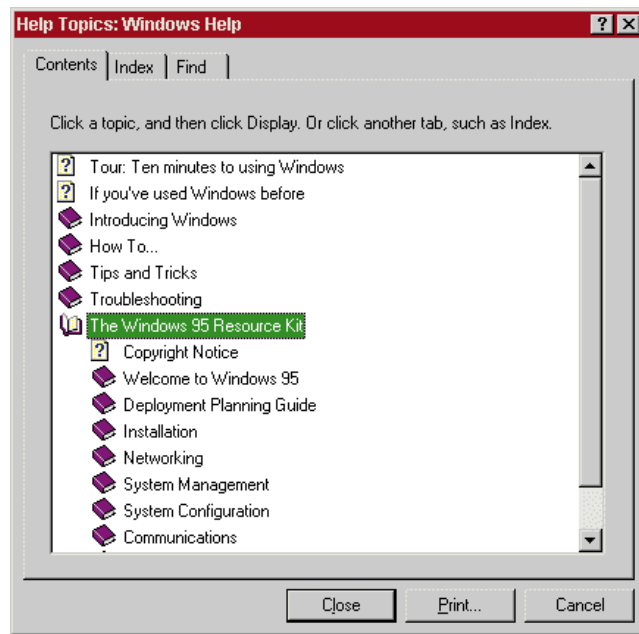
## Fig 1: Editing WIN95RK.CNT

```
:base win95rk.hlp>View
:title Microsoft Windows 95 Resource Kit
:index Windows 95 Resource Kit = win95rk.hlp
1 Copyright Notice = CP_0_
2 Welcome to Windows 95
2 Introduction = RK0_WEL_1_
```

## Fig 2: The new start of the file

```
:base win95rk.hlp>View
:title Microsoft Windows 95 Resource Kit
:index Windows 95 Resource Kit = win95rk.hlp
1 The Windows 95 Resource Kit
2 Copyright Notice = CP_0_
3 Welcome to Windows 95
```

Fig 3 What it should look like - the final result.



only snag is that the entire top level of the WRK appears with the rest of the Windows contents: it would look better if it expanded down from a single book. This entails some rather heavier editing of WIN95RK.CNT. You can't use Notepad to edit this as it's too big; WordPad or any word processor will do, but remember to save as plain text.

The first few lines are shown in Fig 1.

What you need to do is replace every number at the start of a line with the next higher number, e.g.

```
2 Copyright Notice = CP_0_
3 Welcome to Windows 95
3 Introduction = RK0_WEL_1_
```

This kicks everything down a level. If you've got a decent editor you can do this with a few search-and-replaces. Bear in mind, though, that you want to search for <return> number, not just the number on its own, as you don't want to change any numbers that don't start a line. Secondly, start at the highest number (4) and work down: I leave the reason as an exercise for the reader. Finally, add a title on line four, with number 1 in front.

Fig 2 shows how the start of the file should now read, and the Windows Help contents should then look like Fig 3.

## The Riot Act

This column wouldn't exist without your feedback, but it can sometimes be too much of a good thing. So perhaps it's about time to read the periodical riot act.

Please bear in mind that my job is to write a column, not to provide free, round-the-clock technical support. Although I do try to respond to each and every email or letter, there aren't always enough hours in the day. For the best chance of a reply, please observe the following.

■ If it's a problem, please make some effort first. If you can't be bothered to find something that's conspicuously covered in Windows Help, then I can't be bothered to tell you.

■ Don't ask me questions that would be better directed elsewhere. This is the Hands On Windows 95 column, not the Networking column, nor the DOS column, nor the Unix column. Nor can I help with specific hardware problems: if your Acme printer won't work with your Zygon computer, ask the supplier's technical support. Don't ask me to supply device drivers or other files. I don't keep stocks of such things.

■ I live in a foreign country. They do things differently there, so please don't send SAEs or stamps. Unless they are French ones. I can usually run to the price of a stamp, so don't feel guilty about this.

■ Don't send any email attachments without prior agreement. That means you, and that means any. One of the other things they do differently here is charge me a lot of money to pick up my email. If it isn't text, stick it on a floppy and snail-mail it (sorry, but I can't guarantee a return). There are some Very Strange People out there, including the person who shall remain nameless (unless they do it again) who sent me copies of their USER.DAT and SYSTEM.DAT files. Just what I was supposed to do with them I don't know, but at a total of nearly three megabytes, I was not amused.

■ Above all, do keep writing. I do enjoy getting your mail, and I don't bite. Really.

## PCW Contact

Email **Tim Nott** at [Win95@pcw.co.uk](mailto:Win95@pcw.co.uk) or write to him c/o the usual PCW postal address.



# What does **this** switch do?

...and well may you ask. Tim Nott explains the command lines behind switches and gives instances of their use to modify program behaviour. And, how to get the ideal folder window.

**B**ack in April, I mentioned the trick of using command line switches to prevent Explorer expanding the contents of the C:\ drive. I mentioned it again in June and several readers have emailed to ask, not unreasonably, what does all this "/n,/e, /select" guff actually mean? There's a file titled Tips.txt which should end up in your Windows folder after a standard installation, and this explains all. But not in anything you could describe as English, so let's see if I can do any better.

Some programs support "switches" when launched from a shortcut or the "Run" command. Switches modify the behaviour of a program. For instance, if you run the Media Player with the play switch, by typing Mplayer.exe /play into the Run command line, it will go straight to the file/open dialog. When you pick a file, it immediately begins playing in a slimline version of the interface and shuts down when finished.

Explorer has four switches and two path parameters which can be used in various combinations. Each is preceded by a forward slash and separated by commas.

1. The /e switch forces a two-paned view, as when you "Explore" rather than "Open" a folder, but only when a folder is specified. Explorer.exe on its own opens two panes, with the C:\ drive expanded. The command Explorer.exe /e, C:\ does exactly the same, although you can change the drive letter to expand other drives. Leave out the /e, and you'll get a single-pane view.
2. The /n switch opens a new window, even if the folder is already open — you don't need to include this if you use the /e switch as that always opens a new window anyway. Yes, I know I did so in April, and again in June... I was wrong.
3. The /root switch governs where you want

to start from: use it with the /e switch to define the top level of where you want to explore; you can't go up beyond this ceiling.

It's useful, for instance, when comparing the contents of drives or moving files between them. If you set the drive letter as the root, e.g. Explorer.exe /e, /root,C:\ then you have a view that's as near as damn it to the old File Manager sub-windows.

You can specify a folder to expand by adding a comma, then the folder name. Explorer.exe /e,/root,C:\windows will expand the Windows branch in the left pane and show the contents of C:\windows in the right. Note that if you leave out the comma, the Windows folder will be the root; you won't see anything higher or be able to navigate to other folders in C:\.

4. Finally, there's the /select switch. This selects whatever follows it without opening

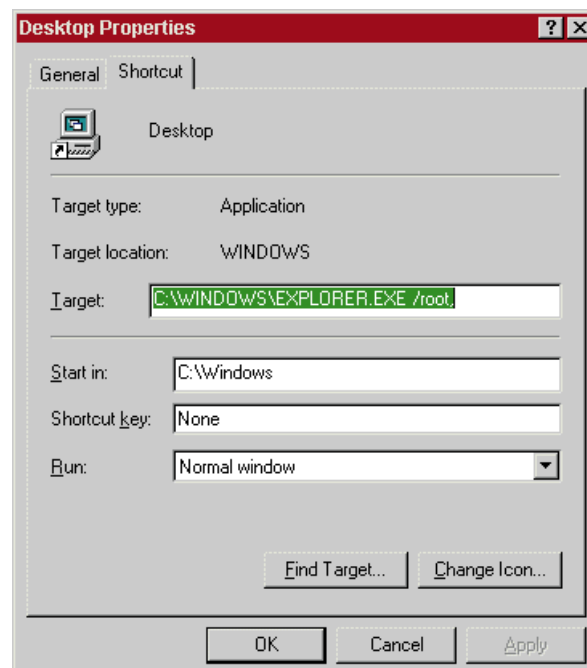
the branch, so Explorer.exe /e,/root,C:\./select,windows will show the contents of C:\ in both panes with the Windows folder highlighted on the right. Which, repeating myself for the third time this year, should explain why Explorer.exe /e,/select,C:\ opens a two-paned Explorer with C:\ selected, but not expanded.

## Somewhere on the desk...

Having read through all that, those who haven't dozed off might be wondering what they can do with this new-found knowledge. OK, in the past we've looked at various ways of Getting At The Desktop. It's a good metaphor, because like my real-world desk, it gets cluttered. I know, for example, that there's a pen near at hand, yet somehow it's buried deep beneath piles of books, readers' letters, bills, magazines, old sandwiches and so on.

Similarly, the shortcut I want is buried under two word processors, Paintshop, my off-line mail reader, three instances of Windows Explorer, one of Internet Explorer, a French-English dictionary, Regedit, and a game of Freecell that I started in the middle of a long download and then forgot about.

There are two schools of thought here. My preferred method is to clear the Desktop: the equivalent of sweeping



**Fig 1** Will the real desktop please stand up?

everything off the desk and onto the floor. I've got a Windows 95 keyboard, so I can do this with the Window key + M to minimise everything. Adding shift puts it all back. If you haven't got a Windows 95 keyboard there is some incredibly tedious key sequence, which I forget. You can also do it by right-clicking on a spare bit of taskbar... if you can find a spare bit of taskbar, that is (hint: try the clock).

The other school of thought is to have a utility that lives in the system tray and pops up a list, menu-style, of the contents of the Desktop. I've tried a couple of these: one had a bug and it would only list one column.

A third approach is the DIY method, which several readers have suggested. Just create a shortcut to C:\Windows\Desktop and stick it on the start menu. Click this and up pops a folder with the contents of the Desktop. The only trouble with this is that you won't see the system icons such as My Computer, Recycle Bin and so on. And if you create shortcuts in the folder to redress this, you'll get these appearing on the actual Desktop as well, duplicating their targets and looking stupidly redundant.

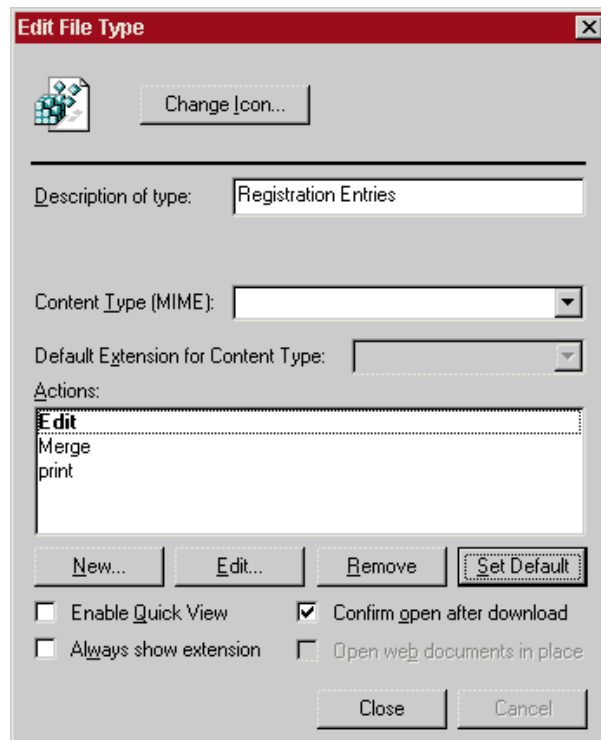
However, I've now found a way to do this properly. Create a shortcut, anywhere, to point at EXPLORER.EXE /root, – the final comma is important, as is the space before the slash (Fig 1). It opens Explorer with the default root, the Desktop. But as we've used the /root switch without the /e switch, it opens in single-pane view. Call it something imaginative, like "Desktop". Right-drag this onto the Start button and choose "Move": one click on the menu item will open a folder showing all the contents of the Desktop, system stuff included.

#### Starter's orders

OK, here's another one. Have you ever hit the Start button and seen, either in the top menu or perhaps buried deep in the labyrinth of sub-menus, an entry you really should have got rid of, or put elsewhere?

My Start menu doesn't seem to stay tidy for long but by the time I'm in a branch or two I can never be bothered to close it all and right-click the button to get the "Explore" or "Open" options. What I'd like to see is a right-button menu at each level that lets you do the usual file stuff with folders and shortcuts.

But the Start menu is one of the few bits of Windows which doesn't respond to right-clicking. So here's a way to bring exploration a little closer. Create a shortcut



**Fig 2** How to stop double-click accidents with .REG files

panel. I am certain the PC manufacturers (not to mention Microsoft) would be unhappy to learn that their customers had removed their logo." He gives me a further rollicking concerning my derogatory comments about Escom and asks me to "please vet your articles for suitability in future". It's comforting to know such brand loyalty exists. I bet he's still got the sticky label across one corner of the screen, too.

#### Folder settings

How do I get Windows to

(on the Desktop will do fine) and point it at EXPLORER.EXE /e,/root,C:\Windows\Start Menu. If you don't keep Windows in C:\Windows, amend it accordingly. Rename it to "Edit menu" or whatever you like and drag it onto the Start button. You'll then have an "Edit menu" command in the top section of the Start menu to Explore the latter. The /root switch means you get a nice uncluttered left-hand pane just as if you'd right-clicked on an empty bit of Taskbar, selected "Properties", picked the "Start Menu Programs" tab and clicked the "Advanced" button.

#### Crapola revisited

Apologies to the many readers who wrote in asking for details of how, exactly, you add a logo to the System Properties box (July's column). It seems, in a spate of over-zealous self-editing, I omitted to state that the bitmap should be saved in the Windows\System folder as OEMLOGO.BMP.

Thank you, Mat Philips, who wrote: "Normally there is little in PCW of which to disapprove but I do protest at the contents of your July column where you encourage users to remove the existing OEM information from their computers. OEMs spend much time and effort creating the pre-installation files needed to install Windows on their computers as quickly as possible, but once done the only thing distinguishing one installation of Windows from another is the details in the control

remember my folder settings? This is a question that has baffled philosophers for years. There is the Platonic Ideal of a folder window which has everything the way you want it: the toolbar, the icon, list or details display, the status bar and so on. But real Windows folders never seem to stay like that and the situation is further confounded by the fact that you do not necessarily want all folders the same.

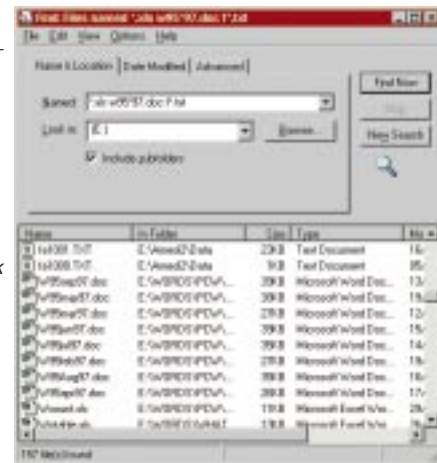
I like to see most folders in details view, with the toolbar and status bar on, but in My Computer and Control Panel I prefer large icons. I thought I almost had it once, but gave up – most of us give up. However, I think Richard Lewin has cracked it: assuming you have multiple folder windows enabled, open My Computer and get everything the way you want the default to be. Hold down Control and double-click on the C:\ drive. This should appear in the same window with the same settings. Close it with the X-button. Re-open My Computer (it should still have the "ideal" settings) and repeat the process for the other drives. Finally, open My Computer, set it to large icons, turn off the toolbar and close it.

Having tried this on a freshly installed Windows, it seems to have worked. The only thing that won't stick is the size of the folder window: the height seems to be related to the amount of contents and the width related to the height, which latter is pretty dumb in details view but that's Windows for you. Have a record token, Richard.

## Quick fixes

■ Ray Daniels wrote to say that in Windows 3.1 File Manager "there was a feature I liked under 'View' called 'By File Type'. I know this caused a lot of problems to inexperienced users who left it set to something rare and then couldn't see anything any more, but I found it quite useful. Is there some deeply buried switch in Windows 95 that puts it back on or is it lost forever?"

Well, you can still dig out File Manager (hint: run WINFILE.EXE) and use it in the traditional way. Change the file type from the default \*.\* to, say, \*.TXT and you'll see only text files. Any valid character and wildcard combination works. You don't get the option in Explorer, but what you can do is use the Find tool. Right-click on a folder and select "Find". When the Find window appears, enter the file type you want to see in the "Named" box (e.g. \*.TXT). Alternatively, you can choose a file type from the "Advanced" tab, but this way is quicker and has the additional little-known bonus that you can use more than one search pattern. Just leave a space between each. Untick the "Include Sub-folders" option if you just want to see files in the current folder (Fig 3).  
 ■ Paul Morgan wants to know how to change the spacing of icons: "In Windows 3.1 this was in Control Panel, Desktop, but in Win95 there doesn't seem to be a way of doing this." Oh yes there is: Control Panel, Display, Appearance tab, open the "Item" list and there are options for both horizontal and vertical spacing.  
 ■ John Richardson writes: "After you've delved deeply (four or five sub-folders deep) and found what you were looking for, can you close all the open windows with a simple keyboard combination command?" Yes, Alt + Shift + F4 (or Shift + click the X-button) closes the current folder and all its ancestors.  
 ■ Finally, Peter McGarvey fans (see April and August columns) will be delighted to know that he relented on his decision not to upgrade his cookie program for Windows 95. Version 2.0a is now freely available to all under the terms of the GNU public licence and you will find it on this month's PCW CD-ROM. You can run COOKIE.EXE from the CD to install the program on your PC. The source code is also included on Cookie\_2p0a.src.zip. Peter adds: "Yes, I've updated it. However, I made damn sure that all the added features were essentially 100 percent useless. If you want documentation, then by all means feel free to write it yourself."



**Fig 3** Multiple find patterns – not a lot of people know that

#### The urge to merge

If you are a compulsive Registry meddler, then you probably know you can export bits of it as text files with the .REG extension. Also, you can merge .REG files into the Registry with a right-click "Merge". As this is the default action, a left double-click will also achieve this, which is fine and dandy until the time you do it by accident.

I conscientiously exported the Registry branch containing the original Microsoft "Tips of the Day" before replacing these with less suitable but much funnier ones. Some months later I found the backup .REG file and absent-mindedly double-clicked it. My collection of wit and wisdom, which I had spent considerable time and effort stealing, promptly disappeared without so much as an "Are you sure?"

Not too much of a disaster, but merging an unknown set of Registry settings could be an excellent way of really screwing up a PC. I mean, I've had people send me .REG files as email attachments (by the way, please don't).

So, if you want to protect yourself from this, leap to the "View/ Options/ File Types" box from the nearest folder window, scroll down to the "Registration Entries" file type and hit the "Edit" button. Three actions are listed: "Edit", "Merge" and "Print" (Fig 2). The default action, Merge, appears in bold type. Selecting Edit, then hitting the button labelled Default will change this, and in future a double-click will load the branch into Notepad for viewing and editing.

## Here's a challenge for you

Richard Hall wants to know whether it is possible to invoke the Windows phone dialler and pass it the number you want to dial. I've drawn a blank on this, so over to you. Please let me know if you come up with a solution.

## PCW Contact

Email **Tim Nott** at [Win95@pcw.co.uk](mailto:Win95@pcw.co.uk) or write to him c/o the usual PCW postal address.





# Dangerous liaisons

Beware of those following you on the internet and don't get too friendly with strange emails, says Tim Nott. Plus, how to speed up Paint and replace the squiggle on the Explorer toolbar.

**L**ast month I warned that clearing the contents of your Internet Explorer History and Temporary Internet Files folders doesn't cover your tracks. If you examine the folders with good old File Manager (Start/ Run Winfile.exe) you'll still find a load of .DAT files remaining. Load these into a text editor and you'll find they contain details of sites you've visited and searches you've made.

Microsoft has now come clean on this. In an article entitled "Ten Ways to Configure Internet Explorer for the Enterprise User" in the May edition of *Microsoft Technet*, Bryan Pfaffenberger says: "It isn't much fun to think about, but somebody snooping around on your system could learn a great deal about what you've been up to. Suppose, for example, you've gone off to lunch, left your door open and your PC running. Anyone who walks in could learn a

lot about where you've been online, just by looking in the folder where Internet Explorer caches the pages you've downloaded.

"Users can delete these files, but that's not a bullet-proof solution. Unbeknown to most Internet Explorer users, the program keeps an exact byte-by-byte record of where they've been online. This record is stored in .DAT files located in the Temporary Internet Files folder. Amazingly, these files also include an exact byte transcription of everything you've uploaded and everything you've downloaded, right back to the time you installed the program.

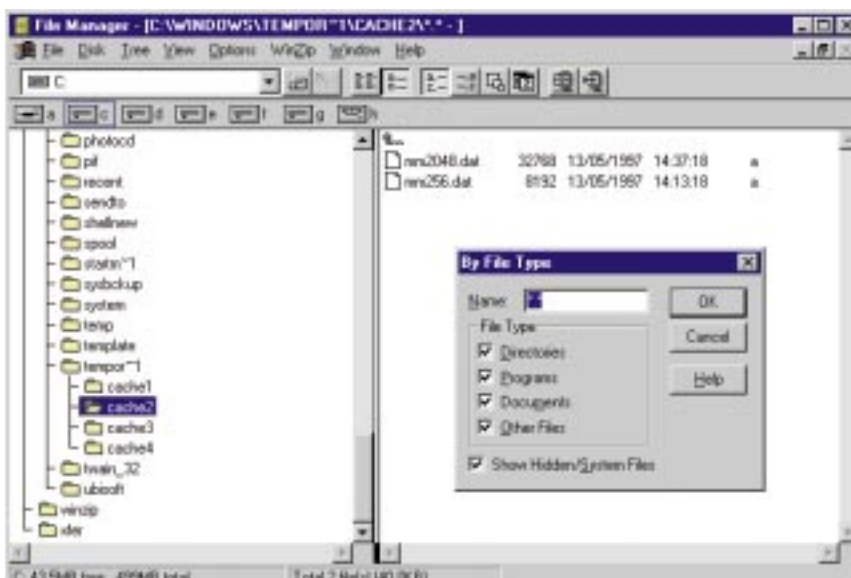
"Here's the rub. Unlike files stored in Internet Explorer's cache, you can't delete these .DAT files. Try it — you'll be denied access. By copying these files and inspecting them with a binary decoder, a knowledgeable intruder could reconstruct your user's every move going back months,

even years. If you're worried about snooping, the best defence is to install a bullet-proof, password-based authentication program on your computers." This shows commendable candour on Microsoft's part but perhaps a poor grasp of reality.

The following are my own observations. Firstly, you can't see these files in Explorer, even with the Show All Files option enabled. Secondly, you don't need a binary decoder — you can see the URLs and search criteria in WordPad, for example. And thirdly, the sentence "Amazingly enough... back to the time you installed the program" would appear to be utter nonsense unless Microsoft has discovered a new, infinitely recursive compression algorithm.

Fourthly, you can delete these files. And here's how. First start Internet Explorer, clear the History folder (View/ Options/ Navigation/ Clear History) and the Temporary Internet Files (View/ Options/ Advanced/ Settings /Empty Folder). Close Internet Explorer and run File Manager. Expand the Windows folder, making sure that under View/By file type... you have Name set to \*.\* and everything else ticked. You'll see two .DAT files in each of the following six folders: Cookies, History, and Tempora~1\Cache1 to Cache4. And, true enough, you won't be able to delete them at this stage or load them into WordPad. You should, however, be able to drag copies onto the desktop and load them from there, if you're curious.

Restart Windows, restart File Manager and you'll find you will be able to delete all the .DAT files and all the information hidden in them. Since you're doing this from File Manager, they will bypass the Recycle Bin. If you're really, really, paranoid, note that it is still possible for someone to recover this



It may be old, but it tells the truth...

data from your hard disk using the DOS undelete utility or a disk sector editor until it is overwritten by new data.

#### Health warning

If you use email, you've doubtless received one of those "public service" messages that go something like: "If you receive an email named 'Penpal Greetings' DELETE IT WITHOUT READING IT. It contains a dangerous Trojan Horse virus which will infect the boot sector of your hard drive and will destroy all data. It is a self-replicating virus which, once read, automatically forwards itself to all of the addresses in your mailbox! DON'T READ IT!"

Variations on the warning mention "Good Times" and "Make Money Fast" in the message title, and they are all untrue. You can no more catch a virus from an email text message than you can get pregnant — especially if you are male! So, if you receive (as I did) the following email, you can safely ignore it: "The CIA issued the following warning this morning. There is a computer virus that is being sent across the internet. If you receive an email message with the subject line 'Free Money', DO NOT read the message. DELETE it immediately, UNPLUG your computer, then BURN IT to ASHES in a government-approved toxic waste disposal INCINERATOR.

"Once a computer is infected, it will be TOO LATE. Your computer will begin to emit a vile ODOR. Then it will secrete a foul, milky DISCHARGE. Verily, it shall SCREECH with the tortured, monitor-shattering SCREAM of 1,000 hell-scorched souls, drawing unwanted attention to your cubicle from co-workers and supervisors alike. After violently ripping itself from the wall, your computer will punch through your office window as it STREAKS into the night, HOWLING like a BANSHEE. Once free, it will spend the rest of its days TORTURING household PETS and MOCKING the POPE. Some filthy, disgusting miscreant...some no-good, low-down, good-for-nothing DIRTY SNAKE, in twisted pursuit of their own sadistic dreams, is sending this virus across the net via an email entitled 'Free Money'. What is so terrifying about this virus is that you do not even to have to open the email for it to activate. In fact, you do not even need to RECEIVE the email. You do not even need to OWN a COMPUTER. 'Free Money' can infect even minor HOUSEHOLD APPLIANCES. How it does this with straight ASCII code is, frankly, a

matter of some debate...but BELIEVE YOU US, if this weren't a SERIOUS situation, we wouldn't be discussing it in ALL CAPS."

#### Beware of geeks bearing gifs

All right, quieten down now. There is a serious side to this, too. Although reading a plain text message can't harm your computer, running (or in some cases, loading) an attached file can. At the simplest level, a DOS batch file (\*.BAT) can contain a variety of simple but effective methods of trashing your hard disk.

Data files, like Microsoft Word and Lotus WordPro documents, can contain macros that wreak similar havoc. You'd be mad to run an EXE file of doubtful provenance and I'm sure there are others. If you use something like WinZip, you can see the contents of a ZIP file before unzipping it (although the contents may be harmful) and as far as I know graphics files are harmless.

Think carefully before opening any kind of attachment. Some kind, anonymous donor sends you a free screensaver? Don't touch it with a barge pole. Why? Well, try this: copy (say) Freecell.exe to the desktop, rename it Penguin.scr. Double-click on it. It still runs Freecell, right? So any executable could be masquerading as a screensaver (SCR) file, including those that really make your PC SCREECH with the tortured, monitor-shattering SCREAM of hell-scorched souls etc. For this and other reasons, can I ask readers to please not send me encoded mail attachments of any kind, without prior arrangement.

#### Watching Paint dry

Nigel Wilson had a problem with the Windows Paint accessory. "For some reason, the program takes an entire minute and 45 seconds to load up, and a mind-numbing two minutes and 15 seconds to exit. I've defragged my hard drive, and approached Paint from three directions — the Desktop, the Start Menu and through the 'My Computer' route — all to no effect."

He didn't mention, but I suspect also found, that Paint runs like a tortoise on tranquillisers in between starting and shutdown. Almost certainly the problem is one of default image size. Paint manages memory like, well, I forget what, but it is very bad at it. Start Paint, go to the Image/Attributes dialog and change the height and width to something fairly low (I use 150 x 150 pixels). Close Paint and you will find this setting is saved as the



**How to slow your PC right down... Knock a zero off to speed it up again**

default new image size.

Paint will load and exit more speedily.

#### Temp trouble

It takes all sorts, including a reader who shall remain nameless. His problem was: "My Temp folder keeps filling up with files. Most of them seem to start with a tilde (~) and have the extension .TMP. It won't let me delete the most recent ones, and if I leave it for a few days I end up with hundreds of the things."

Yes, well. I'm sure we've all asked even dafter questions. I certainly have. So here's a straight answer. This is what your Temp folder is for. Many applications create temporary files — for printing, autosaving, undoing and so on. Usually these files will be deleted when the application is closed and, understandably, Windows won't let you delete them while they are in use. If the application, or Windows, crashes, then it can leave them behind. The same thing can happen if you switch off the computer without first shutting down as, I suspect, my correspondent had been doing. In any case, it doesn't hurt to have an occasional look in the Temp folder and delete anything whose date and time is prior to the last booting of the PC.

#### Department of incredibly obscure tips

■ You know that rather pointless squiggle on the toolbar of Internet Explorer? Well, the former editor of a well-known technology magazine wanted to know how to replace it with a bitmap of his own choosing. The tricky bit was finding out how and where in the registry the information was stored. The key HKEY\_CURRENT\_USER\Software\Microsoft\Internet Explorer\Toolbar looked promising but made no mention of the background bitmap. I then had the bright idea of turning off the background bitmap from Internet Explorer's View/Options. And there it was in the registry; a new string value, BackBitmap = "". Stick a path and file name of a .BMP between the quotes, and there you are. The bitmap will be tiled or



**Make Internet Explorer more pretty with a fern or two**

three mice, two monitors, two printers, a set of speakers, many CDs and sod-all space. I have a piece of wood which I place on the arms of my chair. On top of this goes the keyboard of the computer I'm currently using, and the mouse.

cropped to fit the space available.

■ Did you know that you can drag files into DOS windows? If you have EDIT.COM installed in your Windows\Command folder, try opening a DOS session, typing Edit (with the space) and dragging a text file from any folder, or the desktop. You'll see the file name and path appear on the command line: press enter and the file itself will appear in the DOS text editor. It saves a lot of typing when using things like the FC command to compare the contents of two files. Something I do a lot when footling about trying to track registry changes with "before" and "after" exported versions.

It also works with folders: try DIR and drag. You can perform similar tricks with the Run command on the start menu dragging files and folders into the Open box. If you want to use resident DOS commands, such as DIR, you need to type COMMAND /K before the command itself.

#### Gilding the lily

It's gratifying to come up with a tip and have readers improve on it. At least it means they are reading my column! Daren Chandisingh read the hint about selectively deleting file types from the Documents menu [PCW July] and made the following observation that you don't need to enclose the file names in double quotes.

DEL C:\WINDOWS\RECENT\*.GIF.LNK will delete all the shortcuts to GIF files in the Start Menu Documents folder. He points out that although you can't run this command from Autoexec.bat, you can create a file called Winstart.bat and put it there: it will be run automatically when Windows starts. You are right on both counts, Daren. Thanks.

Peter McGarvey, who starred in April's column, has a different way of muting the PC sound when the phone rings. He writes: "I have three computers, three keyboards,

To get out of my chair I stand, turn 180 degrees and place the board back on the arms of the chair. I turn around again and step over the mountains of kipple that have accumulated since I sat down, avoid the odd cat and wander off.

"My computer's speakers are the best in the house so I use them to listen to music while I lounge on the bed to read the latest issue of PCW. If the phone rings I have to stop my computer from making so much noise. Getting to the volume control is a bit of a problem when I'm heading for the phone so I used to try to hit mute with my mouse. This is actually a very difficult thing to do when your monitor is situated about a foot behind you, under your right armpit — try using your mouse after turning it 180 degrees and you'll see what I mean.

"When I thought about it, it wasn't the computer's sound that was the problem, it was the CD. So I worked out how to pause the CD from a hotkey. A shortcut with the target C:\WINDOWS\FLEXICD.EXE /resume and the shortcut key CTRL + ALT + P (which also corresponds to Alt Gr + P). I can hit it with my right hand as I move it towards the phone. When I've finished on the phone I hit it again and my music continues."

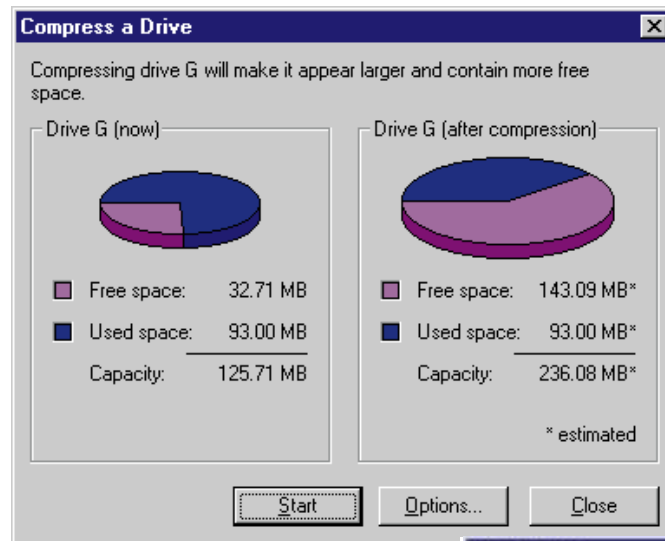
You need FlexiCD from the MS Power Toys to do this. As far as I'm aware there is no equivalent method using the standard Windows CD player. If you don't want to download or install the whole Power Toys caboodle, I've included FlexiCD on this month's PCW CD-ROM. It's a neat little improvement on the Audio CD player that sits in the system tray, and it's freeware.

#### PCW Contact

Email **Tim Nott** at [Win95@pcw.co.uk](mailto:Win95@pcw.co.uk) or write to him c/o the usual PCW postal address.







Left Drivespace — disk space for free?

Below Customise your 'System/General' information

Bottom The indispensable TweakUI to the rescue again

(Original Equipment Manufacturer) tag.

The next way to save cluster space is by partitioning. I've been using the word "drive" rather loosely, but there's a difference between a physical drive and a logical drive. For example, I've got two hard disks in my PC: I can open the box, then see and touch them if I've really got nothing better to do. However, Explorer shows I've got drives C, D, E, F and G, in addition to the floppy A and the CD-ROM H. Of these, C, E, F and G are all partitions of the same 1.7Gb disk. DOS and Windows treat these as separate drives; hence, as each is under 512Mb, I get away with 8Kb clusters.

The standard way of achieving this is by using the DOS utility, FDISK, to create primary and secondary partitions. It is quite simple to use (you follow a series of prompts) but the problem is that it

destroys all data on the hard disk. So unless you're starting from scratch with a new hard disk, it means backing up all your data and applications.

In practice you'll probably have to reinstall all the applications from scratch, as they will no longer fit onto (logical) drive C, and all shortcuts, registry entries and so on will no longer be correct. This is a dreary prospect, and if you reckon it's worth £50 or so not to have to do this, there's an application called Partition Magic which will create or resize partitions, including those for OS/2 and Windows NTFS, without



destroying data. I haven't actually tried it but I have heard good reports. (See "PCW Contacts", p???)

#### Spaced out

Yet another way is to use the Drivespace utility that comes with Windows 95. This has the tremendous advantage of being free, and easy to set up. Go to

"Accessories/ System Tools" from the start menu, and you should find it. If not, launch C:\WINDOWS\DRVSPACE from the Start Button "Run" command. You'll see a list of all your floppy and hard drives (or partitions).

It works rather like ZIP, in that it creates a single file on the partition that serves as a container for all files and folders. By compressing and decompressing the files as they are read from, and written to, the disk, it claims to save around 50 percent of disk real-estate. The program warns you that it could take several hours to compress the drive and you should back up data first.

Having created a compressed partition, it's completely transparent; it just appears as another drive. You can hide the "host" drive if you want to and adjust the compression level. Astute readers will notice that even without any compression, there's still a substantial saving, as the One Big File is never going to leave more than one unfilled cluster.

The real worry is security: if the One Big File gets corrupted, you're in One Big Heap of trouble. In mitigation, however, I would say that although I'm in the rare state of having enough hard disk space at present, I've used various brands of disk compression over seven years, and only once had a major disaster, which was probably my fault. In further mitigation, I'd say that you don't have to compress everything. You can keep irreplaceable data on an uncompressed partition.

#### Whose computer is this anyhow?

In the May edition of this column, we discussed how to change the user name and company of your PC, either by editing the registry or by using the "real man" method of a disk sector editor. That takes care of the "Help/About" box, but there's more, as Rick Mason kindly pointed out.

If you've bought a PC with Windows 95 pre-installed, you might well have more information in Control Panel System Properties. Typically, there will be a logo, the make and model of the PC and a helpful-looking button titled "Support Information". If you don't have this, but would like to or, like Rick, you bought your PC from the late, unlamented Escom and would rather forget about this, here's what to do. First, forget the Registry, as this is all in an old-fashioned .INI file. Then, find, or create with Notepad, a file in Windows\System, called OEMINFO.INI. Use your imagination and good taste to edit it accordingly — anything to the right of the equals sign is up to you:

```
[general]
Manufacturer=Crapola Corporation
Model=The Cheapest
[Support Information]
Line1=At that price you have to be joking
Line2=Figure it out for yourself
Line3=You can have up to ten lines of this
```

And now for the classy logo. Create a .BMP file in Paint or the bitmappy application of your choice. According to

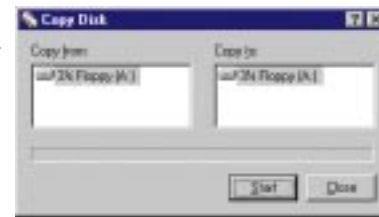
### Cool tips

■ If you want to open Internet Explorer without connecting to the internet — to browse HTML files on your hard disk, or change the settings, say — and don't want the bother of cancelling the "Connect to..." dialog, create a shortcut to any HTML file on your PC. The BLANK.HTM file in the Windows folder does just fine.

■ You can create a shortcut not just to a document, but to any point in it. Highlight, for instance, a word or phrase in a WP document, then right-drag it out of the application window and on to a folder or the Desktop. Release and choose "Create document shortcut here". After you've saved and closed the document, double-clicking on the shortcut will re-open it at the chosen phrase — a great way of saving your place in a long document.

■ Floppy copy? Right click on the floppy drive in My Computer or Explorer, and lo, a "Copy Disk" option presents itself. Follow the prompt to change disks, but beware — you don't get warned that this will destroy all the data on the destination disk.

If you want to copy one or more files between floppies, without erasing the contents of the destination disk, then you might think the smart way is to right-click, "Copy", change disks, hit F5 to refresh the folder window, then right-click "Paste". But, no, it doesn't work with removable media, as the "Copy" command only stores the path and file name, not the contents. So when you change disks, it can't find the file. Instead, right-drag "Copy" to the Desktop (or any handy folder), change disks, then right-drag "Move" from the Desktop (the files should still be highlighted) to the destination disk.



Copying an entire floppy disk

Rick: "The maximum size is 180 (w) x 114 (h) pixels. BMPs do not have built-in transparency, like GIFs, but in this case transparency seems to be set by the colour of the second pixel from the left on the bottom row of the image." If you don't want to make your own, Rick continues: "Take a look at [www.geocities.com/TelevisionCity/3981/crap\\_pcs.htm](http://www.geocities.com/TelevisionCity/3981/crap_pcs.htm) to see the logo I use: it's a fictional company from BBC2's Red Dwarf, as should be obvious from the rest of the site."

Thank you, Rick. I am now the proud possessor of a Crapola and only have to right-click "My Computer" and choose "Properties" to be reminded of this.

#### Tiresome tildas...

In May's column we also considered a way of changing the default DOS short filename, so it truncated non-ambiguous filenames rather than using the ~n ending.

Alex Nicholls warns: "I did this a long time ago and also (manually) changed the short name of the 'Program Files' folder from 'PROGRA~1' to 'PROGRAMF'. It turns out that a lot of installation programs from Microsoft (notably Internet Explorer) insist not only on installing into Program Files, but work with the short form, in the PROGRA~1 version. So does the link from NotePad to call WordPad to edit a large file (although this can be adjusted in the registry). So the change can cause trouble and I find myself wishing I hadn't done it."

#### Iconoclasm

Alex Slack's icons have gone all funny... no, don't laugh, commiserate. "I was fiddling with virtual desktops when I found all my icons had been turned duller," writes Alex. "For example, white had turned to light grey and dark grey had turned to dark red, but it didn't affect any other Windows graphics. So far I've tried changing resolutions and colour depths, reinstalling the drivers which came with the card and the Windows default drivers, fiddling with colour spaces and gamma correction, but the problem remains. Even stranger is that icons that were put in after the problem, are fine."

There is a simple cure for this. You certainly shouldn't have to reinstall any drivers or fiddle with colour spaces (whatever they may be). If you've got TweakUI installed in Control Panel, then there's a "Repair" tab with a button to mend it. If you haven't got TweakUI (and you really should — it's part of the Powertoys collection and features regularly on our cover-mounted CD), open the Windows folder and delete the file named ShellIconcache. This file keeps all the icons used in one place to speed performance, and Windows will rebuild it in the fullness of time.

### PCW Contacts

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Partition Magic from POW! Distribution  
01202 716726



# A luvverly bunch

...of bananas, pretzels, clusters, unfeasibly large fonts, loud music and phones. Tim Nott has something useful to say about the lot of 'em, fixing and tipping all over the place.

**P**hilip Dodd has asked, "Can you suggest a way of instantly muting the audio, via the keyboard? The problem with clicking the loudspeaker symbol on the taskbar to get the volume control displayed, and then clicking the mute box, is that it takes a few seconds to accomplish, by which time the phone could have stopped ringing."

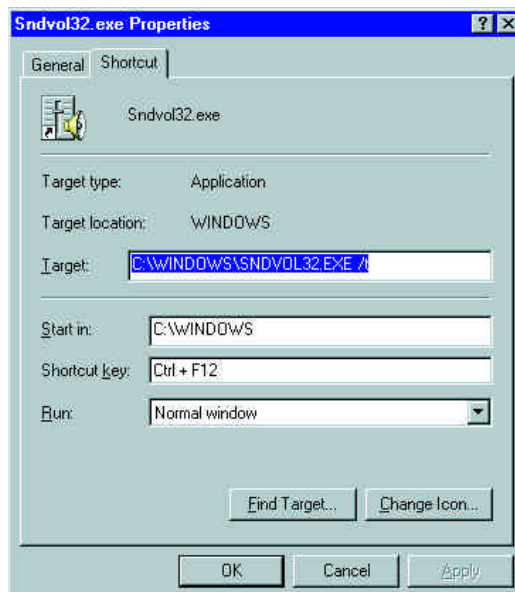
You must have some rather impatient callers, Philip, but this problem has never occurred to me before as I have my sound card plugged into a tuner/amplifier because sometimes I like to listen to the radio. The phones sit on top of this so I've perfected the technique of turning down the volume knob and picking up the phone in one fluid movement! But this is a challenge, so I've squandered some time researching the undocumented command line switches for the volume control.

The first thing is to know what you are looking for. In this case, the filename of the volume control: it's SNDVOL32.EXE and lives in the WINDOWS folder (Fig 1). There isn't, as far as I can tell, any direct way of getting this to mute the sound on launch, but running this with the /s switch produces a compact form of the multi-slider window. The /t switch produces the same minimal single-slider and mute box as a single click on the speaker icon in the system tray.

So, create a shortcut on the desktop, with the target

**C:\WINDOWS\SNDVOL32.EXE /t**

and a suitable shortcut key — I've used Control + F12. To mute the sound, hit the shortcut key followed by M (another M will toggle it back on again). Although the



**Fig 1** Shortcut for the tiny volume control

minimal volume control doesn't have a close button, clicking anywhere off it, or pressing Alt + F4, closes it.

## The great Explorer

Further to the tip on getting Explorer to start without any drives expanded by using

**C:\WINDOWS\EXPLORER.EXE /n, /e, /select,C:\**

as the shortcut command (*PCW April*), Ray Daniels and Mike Davis complained that they can't find a way to make this work when opening Explorer by right-clicking on the Start button, so is there a way around this? Sorry guys, no. The whole idea of the "Explore" and "Open" menu options on the Start button is to jump straight to the "Start Menu" folder so that you can organise the shortcuts therein and the folders below. It isn't intended to be a general-purpose launcher for Explorer. But as you've got it

open, you can create a shortcut to Explorer, as shown earlier, in the top Start Menu level. And that's still only two clicks away.

## One-stop restart

In January we did the tip on how to close down Windows without the "Shut Down Windows" confirmation dialog.

For those of you who missed it, the trick is to create a shortcut to **C:\WINDOWS\RUNDLL32.EXE user.exe,ExitWindows**

This bypasses the confirmation, but will still prompt you to save any open files.

Since then, several of you have asked whether it's possible to restart in a similar manner. Well, it's not *really* similar, but Ralph (*no surname*) offers this tip. Create a batch file with the single line:

**@EXIT**

Save it as, say, RESTART.BAT, anywhere you like. Create a shortcut to it on the Desktop or anywhere else that's easily accessible. Right-click the shortcut, choose "Properties" and go to the "Program" tab. Tick the "Close on Exit" option, click on the "Advanced" button and tick the "MS-DOS mode" box. Untick the "Warn before" box. And that's it.

It took me a little while to figure it out, but what it does is the same as the "Restart in MS-DOS mode" option from the "Shut Down" menu; as normal, you still get prompted to save any open files. As soon as it has done this, it runs the DOS "EXIT" command which in turn restarts Windows. Very ingenious, but I would warn you that when I tried this, with Exchange running, my PC ground to a halt and I could only restart by turning it off. So, you might say, nothing





Fig 2 Paint magic —  
“just like that”

Although the Display Properties sheet doesn't have such an icon, the keystrokes still work. Next, press M for “Move” then use the arrow keys to move the window. Hit “Enter” when it's in the desired position.

#### Pretzel logic

How do you thread a banana through a pretzel? How do you

new there. When I tried it again, it was OK. So, I'd advise treating this with caution: make sure you have nothing unsaved until you've tried this out a few times, especially with any messaging services open.

**Icons, folders and unfeasibly large fonts**  
“How,” asks Michael Lucas, “can I change the icons of folders on my desktop? With Windows 3.1

*I had a thing called Icon Do-It, which let me change the Program Manager group icons. I'd like to do a similar trick to make my desktop folders more distinctive.”*

Well, you can change the default icon with an icon-management tool like Microangelo (or by rummaging in the registry) but it's still “one size fits all”; you won't get distinctive icons for each folder. The only way to achieve this is to move all the folders elsewhere, then create shortcuts to each one on the desktop. Then you'll be able to change the icons individually from the properties sheets of each shortcut.

If you don't see what you want in SHELL32.DLL, the default choice, use the browse button to get to either a standalone .ICO file or another collection. There are some good ones in PIFMGR.DLL.

Andrew Romer was messing about, as one does, with display settings. Running at 1,600 x 1,200 “...made the desktop items rather small, so I was trying to see what happens when you change the font size. Recklessly, I increased it five-fold and the window became so huge that I could not access the portion of Screen Properties which changes the font size back. I had to restore Windows from a backup. Is there a way of moving the window up and down using the keyboard?”

Yes, there is, and it's the same as in Windows 3.1. Pressing Alt + Spacebar produces the window menu, the same as clicking on the icon at the left of the title bar.

get a rabbit into a hat? You're allowed to use whatever clipart you can find and Windows Paint (Fig 2).

First, catch your rabbit and the rest of the clipart in bitmap format. I cheated here by raiding the clipart gallery in Corel Xara, resizing the four images to suit and taking screenshots of them, which I pasted into a blank 800 x 600 Paint file.

Make sure the background colour is set to white, by right-clicking on the white swatch in the colour palette, and pick the rectangular selection tool. You'll see two rather meaningless-looking icons appear in the tray below the painting tools. Make sure the bottom one is selected, as this means that selections can be pasted “transparently” (in other words, the underlying colours show through any part of the clip that's in the background colour).

Draw a rectangle around the pretzel, and Control + drag it down to the bottom of the screen, to make a copy. Click anywhere outside the selection to paste it into place.

Repeat with the banana, Control + dragging it on top of the pretzel. Now pick the freeform selection tool, again making sure the transparency option is on. This is the bit that takes a little skill. Drag around the centre of the original pretzel to capture the area that will sit on top of the banana. Control + drag this into place, so it aligns seamlessly with the rest of the pretzel. The rabbit was done in a similar way, pasted transparently over a copy of the hat, then a copy of part of the hat pasted over the lot. Fairly pointless, but rather cool, I think.

#### Be selective

Every so often someone asks if there's a way to filter the contents of the “Recent Documents” list automatically.

So far, we've only been able to clear the entire list, either by right-clicking on the Taskbar and going to “Properties/ Start Menu Programs” and pressing the “Clear” button, or getting TweaktUI (or a batch file) to do it on startup. Although I've yet to find a way to stop files getting on the list to start with, I have discovered the next best thing — selective deletion by file type.

If you open a DOS box and go to the Windows\Recent directory (Fig 3), DIR will get you a list of the contents. Note that there are more files here than actually appear on the “Documents” menu. Also note that the long filename format, on the right of the listing, takes the format “my document.doc.lnk” or “picture.gif.lnk”. So if you want to get rid of all the links to .GIF files, for instance, type into the DOS box (be sure to include the double quotes):

```
del “*.gif.lnk”
```

Repeat for any other extensions you might want to remove. You could automate this with a batch file on startup or close-down, but it won't work from AUTOEXEC.BAT; Windows has to load before long filenames are recognised.

#### Bugwatch

Although Win95 applications are supposed to include a de-installation routine, bitter experience has taught us that this doesn't always work. And, of course, Windows 3.1 applications installed under Win95 aren't able to register for de-installation either. Quarterdeck's Cleansweep 95 (v.2) has an “Install Monitor” feature that records changes to your hard disk, system files and registry. I used it a lot until one day I noticed that it wasn't recording changes to the registry. I was sure it used to, so I double-checked some old logs and, sure enough, it did, once upon a time. The culprit appears to be Internet Explorer 3, which, according

### “Tip of the Day”

From Mahatma Gandhi, courtesy of Andrew Stratford

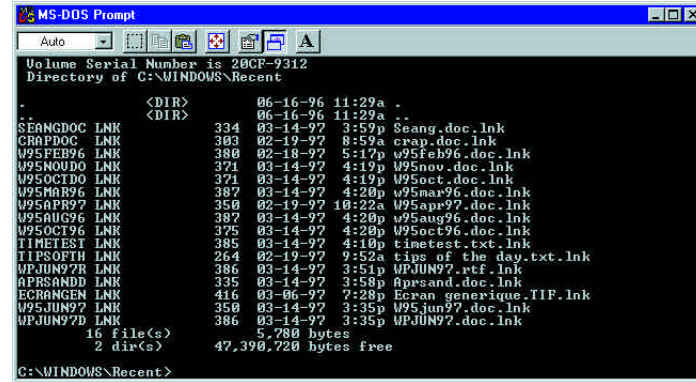
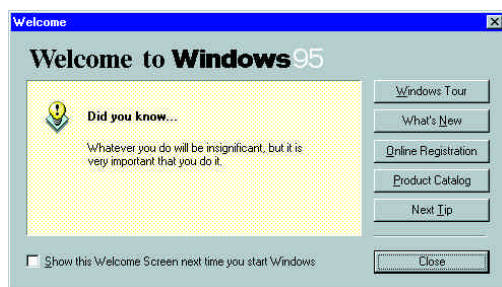


Fig 3 The DOS names  
of all those recent  
document shortcuts

size. On a 1.6Gb partition, disk space is allocated in units of 32Kb. Any file under this will occupy a full 32Kb cluster. Lots of tiny files are, therefore, extremely wasteful of disk space. But

to Quarterdeck, “Updates the files ADVAPI32.DLL and OLEAUT32.DLL in the Windows\System directory. These updates cause the problems with Install Monitor. To work around this problem, replace ADVAPI32.DLL and OLESAUT32.DLL with older versions of these files. *Note: You will be unable to use Internet Explorer 3.0 if you do this.*” Hey, what a great workaround! The cure, apparently, is to “Download and install the latest IE 3.0 patches from Microsoft's web site”. Microsoft makes no mention of Cleansweep on the Explorer site, except to say that version 3 can cause problems installing Office 97. Nor does Quarterdeck explicitly state that version 3 solves the DLL conflict problem. Which makes the honours (or rather the lack of them) about even.

#### Cluster's last stand

Simon Roberts has a 1.6Gb drive and noticed that it backed up 719Mb or thereabouts. But if he right-clicks on C:\ and looks at the “Properties” in Explorer, he sees used disk space of 1.14Gb and free disk space of 371Mb. On the other hand, if he goes to the right pane, selects all in C:\ and right-clicks Properties, he gets a total size of 719Mb again. So where is the other 400Mb? It's not in the recycle bin, and he has tried defragmenting and a thorough scandisk.

There are two things to realise here. First, any report on the free space on drive C:\ has to be taken with a pinch of salt as the swap file (the part of the hard disk used as “Virtual Memory”) is constantly changing. Open C:\Windows and find Win386.swp. It will probably be the biggest file there, so click on the top of the “Size” column in “Details” view to bring it to the top. Now do something like starting another application. Go back to C:\Windows and hit F5 to re-read the disk. Watch the figure change.

Having said that, the thing that's largely responsible for the missing space is cluster

400Mb? Surely not *that* wasteful. Well, I couldn't believe it either, until I used the “Find...” command to wrinkle out all files on my own 1.6Gb drive under 4Kb. Find gave up when it reached 10,000. So, at 28Kb wasted for each, that would account for 280Mb.

Were one to iterate the exercise for progressively larger file sizes, a total of 400Mb doesn't seem unreasonable. See next month's thrilling episode for some solutions to this problem.

### Quickies

- Double-clicking in the title bar toggles full-screen/windowed view: i.e. it replicates a single click on the middle of the right-hand group of buttons on the title bar.
- Right-clicking on the title bar brings up the same menu as a left click on the icon at the left of the title bar (or Alt + spacebar).
- Lost the volume control on the Taskbar? This should do the trick: Control Panel/Multimedia — Audio tab. Tick the box that says “Show volume control on taskbar”.
- If your NUMLOCK key refuses to start enabled despite the settings in the BIOS or CONFIG.SYS, add a key named “Keyboard” to the registry branch: HKEY\_CURRENT\_USER\Control Panel\Microsoft Input Devices. Add a string value named “NumLock” to the key and set this to “ON”.
- If you're faxing from a word processor (or other application) use the “Print to” rather than the “Send to” fax option. It's more reliable and less hassle.
- You can detach the WordPad toolbars or the toolbar and colour palette in Paint and move them anywhere.
- It's not new, yet few people know that any Notepad file with .LOG as the first line will automatically add the date and time to the end of the file each time it's opened.

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# Name that PC

Fed up with being called "A. User"? Been working for "My Company" too long? You need REGEDIT. Tim Nott shows you how to change the user name and company on your computer.

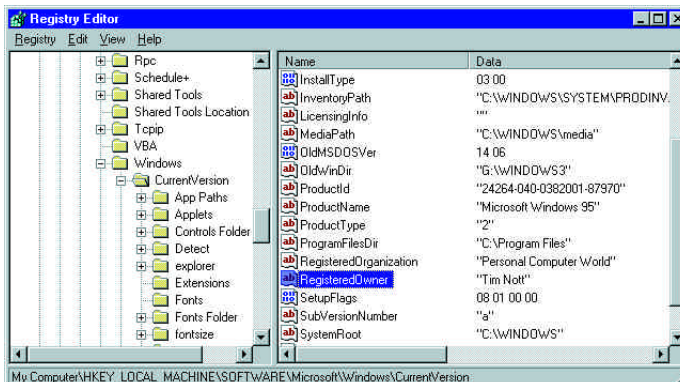
This month, a friend asked me how she could change her name. Not the one her parents had given her, but the one her computer dealer had branded, seemingly permanently, into her new PC. It's what you see in the "Help/About..." boxes, and forms the basis for all sorts of things such as installing new software or creating templates, so it's a comfort to get it the way you want it. By a happy coincidence, in an attempt at self-improvement, I'd been reading the column of the illustrious sci-fi author and PC guru, Jerry Pournelle, who had been tackling this very thing. You may think I'm mad, but this guy is barking. He has a fine, robust style: phrases such as "...the new Orchid Fahrenheit Video 3D board. That sucker screams" are bounced around the column. He also doesn't shirk danger or excitement. "Cyrus, still running, fell about three feet to the floor. The bezels popped off the front, and the CPU-Cool chip fan I'd attached to the Barracuda hard drive hung out the front looking for all the world like an eyeball popped out of its socket." (Cyrus is a computer, I think.) What really amazed me was his scornful attitude to some of our best-loved Windows utilities. Okay, I admit to defaming the Great British Car Industry by comparing one of its most successful products with Poledit, but you should hear what Mr P says about Poledit's dear brother, Reg.

So, he wanted to change the user name and company on his PC, as the person who configured his new hard disk had



What's in a name: the problem...

...and how to fix it



misspelled both. "The books say that a program called REGEDIT.EXE comes with Win 95... all the books warn you to be extremely careful. I tried it a couple of times, but I wasn't sure what I was doing so I never saved any changes I made. However, it became clear that what I wanted was in a hexadecimal file called SYSTEM.DAT." Uh-oh, Jerry. You don't save changes: they change dynamically. It gets better. Having made two backups of SYSTEM.DAT, he "attacked that file with the Norton Disk Editor. It turned out to be easy enough to find the hexadecimal equivalent of the word

'Mazgne'. A bit of study showed how the user and company names are stored, including what is used to terminate the string: it's an 01 followed by blanks. I looked up the hexadecimal equivalents of the English letters I wanted, used Disk Editor to fix my name and spell Magazine properly, terminated the strings with 01, and all's well." I won't bore you with the rest, but if you want chapter and verse, then I suggest you point your webby thing at [byte.com/art/9701/sec14/art1.htm](http://byte.com/art/9701/sec14/art1.htm).

Anyway, I'm inspired by this no-nonsense macho stance and in future I'm going to write this column using EDLIN. For all those of you who've bought machines from box-shifters and are forever known as "A. User" of "My Company" but are too wimpish to deploy a disk sector editor, fire up that Regedit sucker and mosey on down to HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion. Look for the two

keys Registered Owner and Registered Organization: double-click on each to change.

## Waltzing ma tilde

Every file on your disk has two names. One is the name that you see in folders, and the other is the one you'll see in DOS or File Manager. If you want to see both at once, open a DOS box and type "DIR /P" (the /P switch stops the listing scrolling off the screen). You'll see the Windows 95 long file name on the right and the DOS-compatible one on the left. If the Windows 95 extension is more than three letters — e.g. .HTML, the



Breaking the sound barrier

DOS extension — it will be truncated to three, .HTM. If the name itself is more than eight letters, it will be truncated to six, followed by a tilde (~) and a number; the number increments for each file with the same six first letters.

You can change this behaviour so that the full eight first letters are shown, so Tyrannosaurus.txt appears as Tyrannos.txt, not Tyrann~1.txt. Start Regedit and go to HKEY\_LOCAL\_MACHINE\System\CurrentControlSet\control\FileSystem

You should see an entry entitled "Win31FileSystem" in the right-hand pane. If you don't, search the Registry for that text. Right-click anywhere in the right pane, and select "New/Binary value". Type NameNumericTail over the "New Value #1" default and hit enter. Double-click on the new value and type 00 in the box. Close Regedit and reboot.

Note that this only applies to new files; it won't update existing ones as their short names are already created. Also, if you create more than one file with the same first eight letters, subsequent ones will revert to the six + tilde + number format.

## Sound advice

When God didn't make little green applets, he didn't make them much greener than the Sound Recorder. Its most annoying feature is that you can only record very short clips: depending on the quality (which you can select from File/Properties) this varies between six and 60 seconds on my machine. Although you may well have better recording software bundled with the sound card, there is a way around this limitation. Hit the record button and wait until it reaches the end. Don't bother actually recording anything at this stage, this is just preparation. Hit the record button again: it will have a little shuffle around, then record another slice. Repeat until the number of seconds shown in the "Length" panel is enough for your needs. Then rewind to the

beginning and do the real recording. Warning: you can produce some very big files this way, and they might break up on playback if you don't make as much memory free as possible. The Media Player seems to cope better with playback than the Sound Recorder. Thank you, Peter Darton, for that tip.

## Recent files and recalcitrant colours

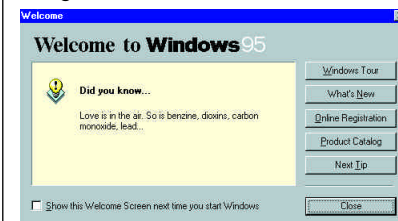
Two queries this month on the "Documents Menu". Dave Smith was having problems getting the Windows 3.1 versions of Lotus 1-2-3 (.wk4) and WordPro (.lwp) files to appear on this, the list of the last fifteen files worked on. The problem is that 16-bit programs can't add their files to the MRU (most recently used) list. This, at least, is the word according to Microsoft. But Dave goes on to say that this does work with old Ami Pro (.sam) files, and also with any 1-2-3 files that are opened from a shortcut on the desktop. I can't reproduce this strange situation, so I throw it open to the floor.

Tim Parkinson has the opposite problem: "How can I exclude filetypes from the Documents Menu? I don't really want

## Tip of the day

Welcome back to the section where we endeavour to improve upon the wit and wisdom of the Windows "Tip of the Day". Remember, you can view these at any time by running Welcome.exe, and you can edit the existing tips by diving into the Registry at HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\explorer\Tips — BUTR first. A couple of good one liners from Andrew Stratford. "I refuse to have a battle of wits with an unarmed person" and "I never make predictions — and I never will". Mike Kirk achieves screenshot stardom (below), but the Mrs Smegma prize for utter weirdness goes to Dave Ives of Hebden Bridge. "Mary had a little cow It could not walk properly Bovine spongiform Encephalopathy"

Thank you, Mike Kirk, for this inspirational thought...





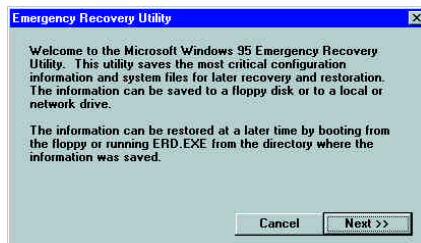
gifs and jpegs excluding the latest Word documents or text files I've opened." Sorry, Tim, and others who have mentioned this, you can't. Not unless you use a 16-bit program for editing bitmaps, anyway.

Noel Gallagher (no, not that one) had a little problem with his desktop settings. No matter what he changed the fonts and colours to, in Control Panel Display, every time he started, they reverted to Windows Standard. Noel did once have multiple users enabled, but not any more. This sounds very much as if someone has been playing with the System Policy Editor, and the cure is to load the latter again (Poledit), go to :File/Open Registry... double-click on the Local User Icon, and expand the branch named "Desktop". Clear any check marks by "Wallpaper" or "Colour scheme", and close the property sheet. Unlike Regedit, Poledit doesn't save changes automatically, so "File/Save" before you close Poledit.

David Nichol wanted to know how to convert a fax to a normal bitmap format. Faxes are stored in one big mailbox file, and although you can export them as individual .AWD files, I don't know of any software (apart from the Exchange Fax Viewer) that will read this. The trick is, while viewing the fax, to click on the "Select" button, drag out the area of the fax you want, then "Edit/Copy" or just "Edit/Copy Page". You can then paste this into any bitmap editor, though Windows Paint tends to choke on hi-res full pages.

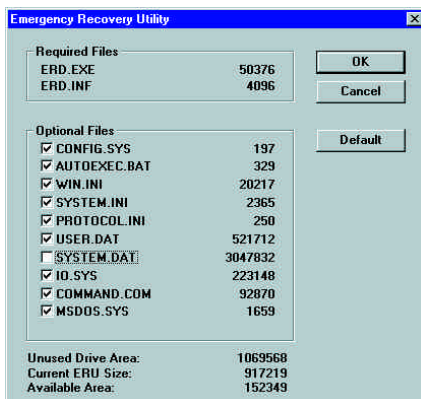
## Quick Explorer tips

1. If you want to select nearly all the files in a folder, highlight the ones you don't want, and Edit/Invert selection.
2. If you hold down the Shift key when double-clicking a folder in folder view, that folder will open in Explorer (i.e. two-paned) view.
3. Often, you want to make a safe copy of a file in the same folder, prior to messing around with the original. In Windows 3.1 File Manager this was simple — and still is if you run Winfile.exe in Windows 95. You highlight the file, hit F8, and then type in the new name. There's no direct equivalent in Windows 95, but if you right drag and drop a file in the same folder, then choose "Copy here", you'll get a copy of the file, named, appropriately enough, "Copy of xxx".
4. To open Explorer with all drives showing but not expanded, create a shortcut with the command line Explorer.exe /e, /select, C:\.
5. Clicking on a heading in "Details" view orders the files by that category. Clicking again reverses the order.



The ultimate Windows 95 survival disk?

Not quite. There isn't room...



## PaintShop power users only

Here's a clever tip for PaintShop Pro 4 users, sent in by Tim Bailey. It let users browse pictures by right-clicking on a folder.

1. In Regedit, go to

```
HKEY_CLASSES_ROOT\ Directory\
Shell
```

2. Right-click on this and add a new key, called "Browse Pictures".
3. Right-click on this new key and add another new key called "Command".
4. In the right pane, double-click the "Default" entry and edit it to read

```
drive:\path\psp.exe /BROWSE %1
```

replacing "drive" and "path" to suit.

(PaintShop 3 users should use

```
drive:\path\pspbrowse.exe %1.)
```

## Safe keeping

I've lost count of the times I've written "but first, back up the Registry". What's worse is that I've just noticed that this month's column has already offered three Registry tweaks and none of them contained the magic words. So, before you try them, BUTR. But how? The simple way is to make copies of SYSTEM.DAT and USER.DAT, which live in your Windows folder, to a safe place — for argument's sake, C:\Safe. Note that these files have the System, Read-only and Hidden attributes set, so to restore them you'll need to boot to DOS (press F8 at boot and choose Safe Mode Command Prompt) and do the following.

```
CD C:\Windows
```

```
attrib -h -r -s system.dat
```

```
attrib -h -r -s user.dat
```

```
copy c:\safe\system.dat
```

```
c:\windows\system.dat
```

```
copy c:\safe\user.dat
```

```
c:\windows\user.dat
```

```
attrib +h +r +s system.dat
```

```
attrib +h +r +s user.dat
```

There's also the Configuration Backup utility. It's located on the CD-ROM at Other\Misc\Cfgback, and lets you keep up to nine Registry backups in compressed form. However, you have to be running Windows to restore the Registry from these, which is a bit of a challenge if it won't load due to a corrupt Registry.

Digging further into the Windows CD-ROM (Other\Misc\Eru) reveals the rather more useful Emergency Recovery Utility. If you copy this folder to your hard disk and run ERU.EXE, you get the chance to back up not just the Registry files themselves (SYSTEM and USER.DAT) but various other essentials, such as CONFIG.SYS, AUTOEXEC.BAT and various .INI files — you can choose which. By default, these get backed up to a bootable floppy disk — i.e. one that has had the system files copied on to it. In the event of catastrophe, restarting the PC with the disk in the drive will magically restore everything. There's a snag to this, however. After creating a boot disk, there is only about 1Mb left on a standard floppy. So when I tried this, it couldn't copy my SYSTEM.DAT file which somehow, behind my back, had grown to over three megabytes.

Fortunately, you can save the back-ups to a folder anywhere on your hard disk: ERU will copy the files, plus the program that restores them, ERD.EXE, to this folder. Let's say you choose C:\ERD as the folder. Restoring is then a little more complicated than from floppy. First, *don't* try to restore from within Windows. Either boot from a start-up floppy, or hit F8 during normal boot and choose "Safe Mode Command Prompt Only". Then change to the directory (CD C:\ERD) where you saved the files, and run ERD.EXE. Once the restoration is finished, you'll see a triumphant message. Reboot in the normal way; if you just booted from a floppy, make sure you remove it first.

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# Cycling to work

Tim Nott explains the technique known as colour cycling, which you can use to “animate” your startup screen. And the History folder: web skeletons in your cupboard... revealed.

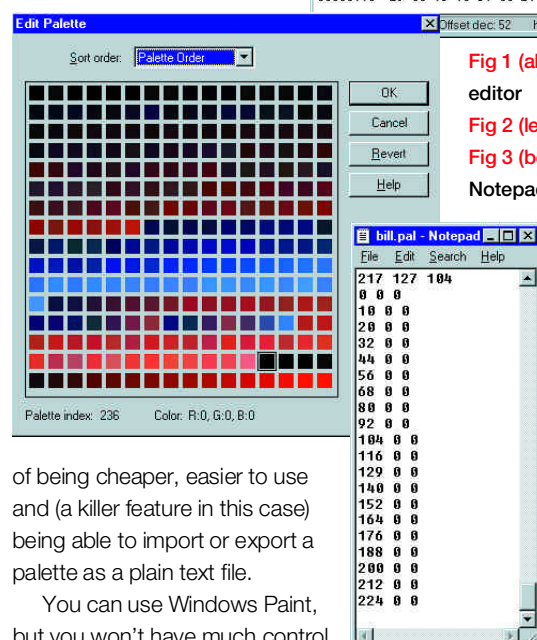
We've dealt before with changing the Windows start-up screen, but just to recap, the trick is to create a 256-colour .BMP file, 320 (w) x 400 pixels (h), and save it as “LOGO.SYS” in the root directory of the disk from which you boot (normally C:\). This doesn't change anything permanently; if you delete it, the default screen, embedded somewhere in the innards of Windows, will return. But what has hitherto eluded us, is how to achieve the animation: those jolly blue flashing bars at the bottom of the screen that keep us amused while Windows is loading. Now, thanks to the efforts of Jason Ozin, who wins a book or record token for his pains, all can be told.

What you see isn't, strictly speaking, animation. It's a technique known as colour cycling. In a 256-colour bitmap, also known as an “indexed” image, each pixel is stored as a one-byte number that refers to a place in a palette of 256 colours. The palette, stored in the same file, is optimised for the image: a clouds-and-sky scene would have lots of shades of blue and white; an autumn-trees scene lots of shades of red and brown. This, incidentally, is why you sometimes see bizarre colour changes when viewing multiple images on a 256-colour display: the altered image is being displayed in the palette of another image.

Each colour in the palette is stored in three bits corresponding to 256 values each of red, blue and green. Colour cycling scrolls some or all of the values in the palette, so each pixel cycles through the range available. If the graduations are subtle, this gives the illusion of a flowing “plasma” effect, as seen in the Chromazone screensaver (*Hands On Win3.1, Sept 1996*).

To create a cycling image you'll need a

bitmap editor. You can use something like Corel Photopaint or Adobe Photoshop if you want to be posh, but I used Paintshop Pro (Fig 2); there was a trial version on February's CD-ROM. It has the advantage



of being cheaper, easier to use and (a killer feature in this case) being able to import or export a palette as a plain text file.

You can use Windows Paint, but you won't have much control over what's animated as you won't be able to edit the palette. You'll need a hex editor and a sturdy anorak. For the former, I used Hedit (Fig 1): it's old but simple to use and there's a copy on our CD-ROM in Hedit.ZIP.

Catch your bitmap (preferably in 16 million colours) and resize or crop it to 640 x 400. Although the final image will be half as wide, it's actually stretched to this size when displayed, so you'll be working in WYSIWYG mode. Do everything you want (like adding anti-aliased text that won't

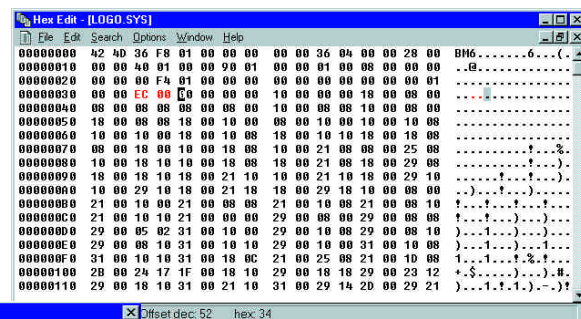
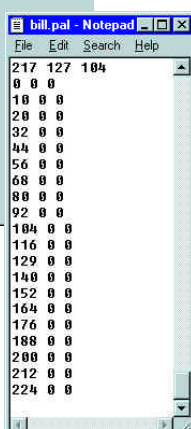


Fig 1 (above) Enabling animation with a hex editor

Fig 2 (left) Editing the palette in Paintshop...

Fig 3 (below) ...but it's easier to export it to Notepad



show the “staircase” effect) while in this mode. Reduce the colours to 236. In Paintshop, you can do this by going to Colours/Decrease Colour Depth/X Colours. Select Nearest Colour and deselect Include Windows Colours. This will leave 20 spare colours for your animation.

If you then go to Colours/Edit Palette you should see that the last 20 colours are all black and have values of 0,0,0. Double-click on one of these and you'll

be able to edit it, either by dragging the sliders or entering red, green and blue values in the boxes. This is the tedious bit, as you must make sure that none of the new colours have already been used. There is an easier way: save the palette, from the Colours menu, and you'll find you can load this file into Notepad (Fig 3); you'll see a three-line header, followed by a line for each of the 256 colours in the form (for example, 256 0 0 is bright red). The last 20 should all be 0 0 0. I wanted some shades

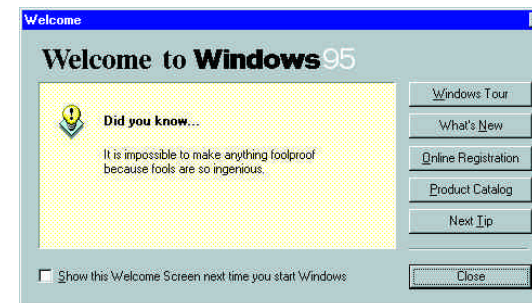


Fig 4 Thank you, Peter McGarvey

developed strange properties:

1. “Double-clicking the desktop icon reveals nothing: 0 objects, 0 bytes.
2. “DOS says there are 313 files in c:\recycled.
3. “Choosing File, Empty Recycle Bin elicits ‘Are you sure you want

to delete these 1041 items?’

4. “With the Recycle Bin window open, a newly deleted item will appear in the Bin, but not after it's closed and re-opened. The number of files in 2 and 3 above are both increased by 1.”

The most likely causes are that one or both of two hidden files in c:\recycled has been damaged, or that someone has moved files to C:\recycled using File Manager or DOS. Although the Bin

## Sod's law

It's tip of the day time again. For those of you who haven't been following the saga, the communal goal is to create a set of suitably amusing replacements for the Windows “Tips of the Day”.

Stephen Oman offered a generous selection including “Programming is an art form that fights back”. Dave Ives came up with three including the oldie-but-goodie: “It doesn't matter who you vote for, the government always gets in”. But star of the month is Peter McGarvey, whose example graces our screenshot (Fig 4, above).

His covering letter was even better: “Once upon a time I wrote a program, in C, to display a short piece of amusement, at random, from a large text file of amusements every time my computer started. This program was written for MS-DOS, the greatest operating system in the universe. All my friends saw this program and asked for a copy.

“However, the next greatest operating system in the universe, Windows 3, soon appeared. I wrote a program, in C++, to display a short piece of amusement at random from a large text file of amusements every time Windows started. All my friends saw this program and asked for a copy.

“However, the next greatest operating system in the universe, Windows 95, soon appeared. Alas, the program written in C++ started to misbehave and all my friends started to complain. To placate them I hacked the Windows registry using a subset (180 out of 2,000+) of the large text file of amusements to rewrite the built-in ‘Microsoft Tips of the Day’.

“The next greatest operating system in the universe, Windows NT 4.0, has just appeared. However, all my friends, and Bill Gates, can sod off.”

of red going to black, so I edited these to read 0 0 0, 10 0 0, 20 0 0 going up in steps to 228 0 0. Make sure none of the colours are already in the file. If it's a photo this will be unlikely, but if so, skip around them with a slightly different value. Save the file and with the original image open in Paintshop, load the altered palette. Using only the 20 new colours, create the bits you want to animate (double-click on the foreground and background swatches to choose).

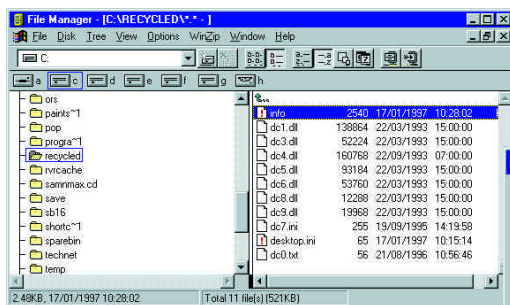
I wanted to create a shaded circle effect but you can't use shaded fills in 256-colour mode. The workaround is to create a new file in 16 million colours, create the shaded fill using the same start and finish colours (by double-clicking the swatches and typing in the RGB values), then use the elliptical selection tool to copy and paste into the original file. When you're happy with everything, resize the image to 320 x 400 (Image/Resize), making sure that Maintain Aspect Ratio is unticked. Save the file as a .BMP (Windows RGB encoded).

Copy the file to C:\ and rename it to LOGO.SYS. Load it into the hex editor and go to byte 00000032. Change the value to EC (the hex equivalent of 236) which will mark the start of the cycling part of the palette. Change the following byte to 00 or 01: the former cycles through the colours and jumps back to the beginning, the latter cycles up and back down again, smoothly.

Save, exit and restart the computer: your new animated start-up screen should greet you. To give you some idea of what can be done, I've included two I made earlier on our CD-ROM (in Logos.ZIP). Bill.sys uses the red shaded circle effect mentioned earlier, as well as some static text that changes colour. Psyched.sys is a slightly doctored screen grab from Chromazone; in this case the cycling starts at hex 85. Copy either to C:\ and rename it LOGO.SYS.

## Loony Bin

Following the exposé of the Recycle Bin (*November 1996*), Matthew Connor wrote to tell me that his Bin had recently



**Fig 5 (left)** What's in the bin? File Manager gives a drive-by-drive view

**Fig 6 (below)** Connect to a web site from the "Run" command



appears as a single entity, you get a Recycled folder on each hard drive or partition (Fig 5).

If you look at C:\recycled in File Manager (Run winfile.exe with View/All Files ticked and View/By File Type... everything ticked) you'll see a number of files named Dcn.\* where "c" is the drive letter, "n" is a number and "\*" the extension of the original file.

There should be two other files with the "hidden" flag set (i.e. an "h" in the right-hand column) named "Info" and "Desktop.ini". (There may also be Dcn.\* files with the "h" attribute set, but this isn't important.) The Info file maps the Dcn numbers to the original file name. If it's damaged, nothing may show in the bin. Try deleting it. According to Microsoft it should be recreated when you start Windows, although this didn't work for me.

Alternatively, it may mean one or more of the recycled files themselves are damaged. If this is the case, Microsoft recommends you create a copy of the Recycled\Desktop.ini file in another folder, then delete the entire contents of the Recycled folder. Next, restore the Desktop.ini file to the Recycled folder and repeat the process for each drive or partition.

Note that doing this permanently deletes all files in the Recycle Bin.

## Grovel

■ Stephan Freeman asks, re February's Hands On: "Does audio data really take up 10Mb/sec? So a one-minute long recording is 600Mb, and 72 minutes is 43.2Gb? Sorry, I had to point it out — I couldn't resist it." Thank you, Stephan. That should, of course, have been 10Mb/minute.

■ Concerning my comparison of Poledit with a well-known all-British motor vehicle, Jack Dobson complained: "Having just spent £9,000 on a new Reliant Robin, I am less than pleased at your sneering remarks. For me, it spoilt an otherwise good article." Sorry, Jack. I'll add the Reliant Robin to my list of politically incorrect subjects for humour.

## History lesson

Those of you using Internet Explorer 3 will have noticed that Windows maintains a History folder, listing the URLs of recently-visited sites. This is in addition to the Temporary Internet Files folder that caches the web pages and graphics themselves. Like the Recycle Bin, Fonts and others, these are special folders: if you open them in File Manager, you'll again see a file called Desktop.ini. You'll notice, too, that things are not as they seem: under DOS or File Manager, the Temporary folder contains four sub-directories and the History folder contains, apart from Desktop.ini, just two files; MM256.DAT and MM2048.DAT. The former makes sense as it's more efficient to store and retrieve lots of small files in this way, rather than all in one directory. The latter makes sense as it saves disk space: if several hundred links were stored as individual files, each would take a "cluster" of hard disk space (on a 1Gb partition, that's 16Kb each).

Dig into the View/Options of Internet Explorer and you'll find you can empty both these folders. Or can you? Having cleared the History folder, you'll still find the two DAT files in File Manager. Load these into a text editor and you'll discover details of all the URLs and searches you thought you'd deleted. I'm not sure whether this is a gross breach of personal privacy or a heaven-sent tool for supervisors to crack down on unauthorised web browsing. But I think we should have been told.

## Quick tips and clever tricks

■ Following January's tip for shutting down the computer without the confirmation dialog, Nick Mortimer and Tariq Atchia wanted to know if this shortcut could be modified to restart Windows. I have to confess that I haven't been able to find out, although it would seem likely. However, there is a quick way to log on as a different user. Press the Window key + L. If you

haven't got a Windows 95 enhanced keyboard, then you can use the Key Remap utility in Kernel Toys (on February's CD-ROM) to make the right-hand Ctrl and Alt keys behave as if they were the Window and Menu keys. Thank you, Ed Scrase.

■ Martin Short wrote: "In Win3.1 programs running under Win95, the drive letter heads the directory tree in Save As... This can be frustrating if I want to save some work on the desktop. Is there a way to modernise these trees?" In a word, no. Windows 3.1 applications use the old, common Open/Save dialog which maps folders directly to the DOS directory structure. This can't cope with the peculiarities of Win95, such as having C:\Windows\Desktop as a container for other drives.

■ Kev Baldry asks: "When opening Explorer, drive C: is always shown expanded. If I wish to browse, say, my CD-ROM on D: I have to scroll up drive C's listing until I can contract it. Is there a way to display all the drives just as their icons and not expanded when starting Explorer?" Yes, there is. Open the Start Menu folder, find the Explorer shortcut and right-click on it. Select Properties, go to the Shortcut tab and change the Target to read

```
C:\WINDOWS\EXPLORER.EXE /n./e./select,C:\
```

■ Steve Luby writes: "When 32-bit programs lock up in Win95, I usually press Ctrl-Alt-Del which brings up the Close Program dialog box. Instead of proceeding to press the End Task button to terminate the program, just wait three or four seconds and press Cancel. For some reason this seems to purge the affected memory area and in a couple of seconds you are returned to your application, complete with all the data input up to the moment of lockup. I have tried this with several applications (most often with Word 95) and it seems to work very well most of the time." Word 95 locking up, Steve? Surely not! I've yet to try this, but it sounds like it's worth a go.

■ A quickie, from Peter Smith — I thought we'd had this before, but it seems not: "I have just realised that with Internet Explorer installed you can connect to web sites via the Run command on the Start menu. This led me also to find that you can put internet shortcuts onto the start menu as well."

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# Do it to music

Go beyond Control Panel/Sounds and add your favourite .WAVs on a per-program basis. Tim Nott shows you how to do it without third-party help. Plus, a surprise trip to the future.

**B**ack in the days of Windows 3.0, I had a shareware toy called "Whoop-it-up". It went beyond the capabilities of the Control Panel/Sounds feature in that it enabled you to assign sounds not only to overall system events (Open, Close, Maximise, etc) but also on a per-program basis. It offered hours of entertainment and displacement activity. You could have your word processor opening with a few bars of Buddy Holly's "Words of Love", or watch CorelDraw crash to a clip of Murray Walker saying "Oh my goodness, he's spun off... again!" Anyway, the good news is that you can do it all in Windows 95 without any third-party help. It does involve a little registry editing, so back up SYSTEM and USER.DAT first.

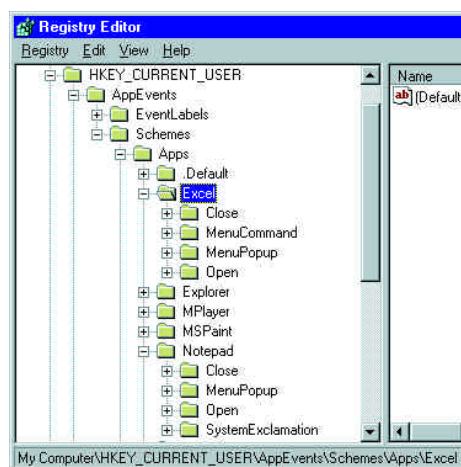
Fire up Regedit, and boldly go to **HKEY CURRENT USER\AppEvents\Schemes\Apps**.

Under this, you'll see a key for ".Default" but there may be others. With "Apps" selected, right-click and pick "New Key". Type in the name of the program you want to add; that's the filename of the executable, without extension or path (e.g. "Notepad" or "Excel"). Highlight it and create new "Event" keys below it (e.g. "Open"). A list of the possible keys, and what they do, is in **Fig 1**.

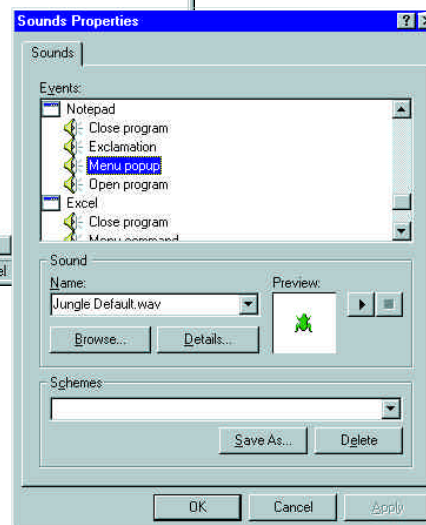
Continue adding program and event keys until you're bored but don't assign any values to them. Close Regedit. Open Control Panel/Sounds. All your new applications and events will be sitting there, waiting for sounds to be assigned. Browse away to your favourite .WAV files.

## What's app, Doc?

**Q.** Julian Toler has a mysterious file named "~oleapp.doc" which appears in C:\TEMP. He says it "is strange because I have 'SET



Add programs and events via Regedit (left) then find them in Control Panel to assign sounds (below)



TEMP=C:\WIN95\TEMP' in my AUTOEXEC.BAT. It appears immediately after boot-up, with a size of 1,536 bytes, and is not write-protected. I usually delete it manually if I spot it, and have a line in my AUTOEXEC.BAT which does the same, but like a bad penny it keeps on turning up."

**A.** Relax, Julian, for this is mostly harmless. The official Microsoft explanation is that if you have Office Fast Start loading in your StartUp folder, and a folder named TEMP in the root of the hard disk, "Fast Start creates the file in order to test OLE calls. Fast Start does not create the file if the temporary folder is set to a path other than the one at the root level." Which latter doesn't quite ring true with your experience, or mine: even with the TEMP environmental variable set elsewhere, it still gets created. Incidentally, you don't need an explicit SET TEMP = line in AUTOEXEC.BAT. It automatically gets set to the TEMP folder in the Windows folder. If you remove the entry and type "SET" from a DOS box, you'll see what I mean.

**Q.** "How can I run a screensaver on demand?" asks David Garrett. "I have seen

an undocumented tip referring to 'live' corners of the screen, but I've never managed to get it to work."

**A.** Me neither. It seems you need the Plus! pack installed and System Agent running. A method which will work, however, is to drag a shortcut from the screensaver (\*.SCR) file to the Desktop (or wherever). Double-click to start saving. Right-click to fiddle with the settings. You'll have to go via Control Panel to enable or change a password but once you've set this up it works for all .SCR shortcuts. Without the password, no-one can get back into Windows except by switching off the machine.

Once they've done this, and probably lost your unsaved data, left your machine full of TMP files and generally messed things up, then it's simple enough to disable

**Fig 1 Sound event keys**

<b>AppGPFault</b>	Application GPF error
<b>Close</b>	Close program
<b>Maximise</b>	Maximise program
<b>MenuCommand</b>	Select from a menu
<b>MenuPopup</b>	Menu drop
<b>Minimise</b>	Minimise program
<b>Open</b>	Start program
<b>RestoreDown</b>	Restore from maximised
<b>RestoreUp</b>	Restore from minimised
<b>SystemAsterisk</b>	Asterisk message
<b>SystemExclamation</b>	Exclamation mark message
<b>SystemHand</b>	Stop sign message
<b>SystemQuestion</b>	Question mark message

password protection on screensavers. Just go into Control Panel/Display/Screensaver and untick the box. Changing the password is simple, too, as you don't need to know the old one. (There is a known bug which causes passwords with more than 19 characters to hang, but that shouldn't be a problem for any but the obsessive.)

**Q.** Clive Tomkin was wondering where all his disk space had gone, until he "found a huge file in C:\Exchange named Mailbox.pst".

**A.** This, as he correctly guessed, is the Exchange database containing all incoming and outgoing mail messages, including faxes which, as they are essentially bitmaps, can be large. So go through your Inbox and Sent Items, delete everything you don't want to keep, and you'll find that Mailbox.pst has remained the same. This is because Exchange doesn't delete or send the items to the Recycle Bin; it simply flags them as "deleted items" and shows them in the pseudo-folder of that name.

Clive was wise to this, of course, so promptly deleted the entire contents of "Deleted Items" and they disappeared. A quick check on Mailbox.pst showed that the file size was... exactly the same. It seems as if Exchange just doesn't want to let those old messages and faxes go. The answer is to go to Tools/Services in Exchange (or right-click on the Inbox icon, Properties/Services) and highlight "Personal Folders". Click the "Properties" button and in the ensuing dialogue, click "Compact now". Intuitive, I don't think.

## Top tips of the month

An encouraging response this month to my request for readers' suggestions to replace Windows' "Tips of the day": a

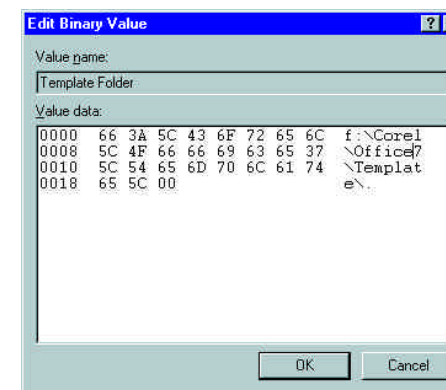
bumper email from Neil Jarvis included "Avoid tumbling off the cliff of triteness into the black abyss of over-used metaphors" and "Who is General Failure? And why is he reading my drive C:?" Adrian Sutton's selection included this fine quote from Douglas Adams; "The secret of flying is to throw yourself at the ground, and miss." Do keep them coming.

## A hex on it — and other tips

■ Some applications store information in the registry in hexadecimal format. Usually this is used to encode things like user preferences or toolbar settings, but some applications use it to store things normally expressed in plain text (e.g. file locations). I'm too ignorant to fathom why this should be desirable, let alone necessary, but suffice it to say, according to Regedit, WordPerfect stores its templates at 66 3a 5c 43 6f 72 65... (Fig 2). Not very helpful. But if you double-click on the entry, the dialogue box provides a translation; in this case f:\Corel\Office7\Templat

■ To display the size of a folder and all nested folders, right-click the folder, select "Properties" and (if there's a lot below) wait. ■ It isn't compulsory to have all shortcuts branching off the "Programs" item in the Start menu. Right-click the start button and select "Open". Right-click in the "Start Menu" and select "New". Create a new shortcut and this will appear at the top level of the start menu: create a new folder, and any shortcuts created within will branch straight off the top level.

■ The tip (Hands On, October) for getting a permanent record of your hardware settings from the "Print" button of Control Panel/System/Device Manager has been enhanced by Howard Anderson, who complains that there's no way to get all this



**Fig 2 What the hex? Regedit provides a translation**



info on-screen. His workaround is to "Print to HTML", using the driver that comes with Power Toys, to view the file in his web browser. Do not forget the old standby of installing the "Generic/Text Only" printer driver and printing to file — this produces plain text.

■ Further developments in Graham Slope's query about how to get Startup shortcuts to load in the desired order (Hands On, January). Malcolm Burch reckons they execute in the order they appear in the DOS directory and the secret is to move them all to another folder, then move them back in the desired order. Doing a DIR from an MS-DOS prompt should list them in the order they will execute. I've tried it, and it seems to work, but I've noticed that slow-loading apps tend to get "leap-frogged" by faster-loading ones. And this also applies to my solution of using a batch file. So hats off again to Alex Nichol, who pointed out that you can use the "/W" switch with the DOS "START" command. This waits until the called program has loaded (or finished doing whatever it does) before returning control to the batch file.

■ This tip may also solve Rab Steven's query on CIX. He wanted to *"run a couple of utilities, just before the computer is shut down (file tidies and the like). It's easy to get the beast to do it at start-up, but how do I get it to do something automatically at shutdown?"* Bearing in mind January's tip about exiting Windows without the confirmation dialogue, the following batch file should do the trick, where THIS and THAT are the utilities concerned:

```
START /W THIS.EXE <parameters>
START /W THAT.EXE <parameters>
C:\WINDOWS\RUNDLL32.EXE
user.exe,ExitWindows
```

■ Here's another tip from Alex Nichol (which takes him into the realms of CD/book token winners). Sending files to a printer in Win95 usually involves launching an associated application, if only to add word wrap. But there is sometimes a need to send a file directly to the printer, say as a print image or PostScript code. Launching the application is time consuming and may not even be available. You can do it with the COPY command in a DOS box, but this tip automates the business. With NotePad make a small file containing only

```
COPY %1 LPT1:
```

and save it in the Windows folder as PRINTIT.BAT. Now right-drag this to the Desktop, and choose "Make Shortcut".

## Back to the future — strange days indeed

There I was, having just finished a feature minutes ahead of my deadline, when I opened the folder, selected the .DOC file, the .XLS feature table and sundry .GIF screenshots. I right-clicked and selected "Add to Zip": WinZip duly fired up, barfed, and fell over. I eventually managed to Zip the files using raw PKZip from a DOS window and went to start Ameol (the off-line reader for CIX) so that I could send the zipped files to PCW. Ameol duly fired up, barfed, and fell over.

In the end, I managed to transmit the file using Hyperterminal, two tin cans and a piece of wet string, but something was obviously VERY WRONG. Having tried a few obvious things such as rebooting, virus checking, running ScanDisk and going out for a few beers, the problem remained. Just by chance I happened to waft the pointer over the Taskbar clock — and up popped the date. The day and the month were as expected but somehow I was in year 2096.

Now, I've dozed off at my desk before, but this was ridiculous. Strangely enough,

Name it, say, "Copy to Printer". Right-click Properties/Program and add "%1" (including the double quotes) to Cmd Line. It should read C:\Windows\PRINTIT.BAT "%1". Set it to run minimised and tick "Close on Exit". You can also change the icon to something appropriate, like the printer icon in Shell32.dll. Dropping any file onto this icon will copy it "raw" to the printer. Note, though, that text files may or may not have hard returns in them; if they don't, they will still need to go via Notepad or WordPad to add word wrap.

### Error messages

Thank you, Colin Green, for pointing out that the new Microsoft Mouse Wheel (Hands On, January) also works in Help. Thanks, also, to Robert Bruce for pointing out that *"The registry Hearts cheat key lurks in .../Windows/Applets/Hearts and not in .../Windows/Hearts as stated."* Alex Nichol pointed out that my problem with not getting "MORE" to work (Hands On, December) is because I didn't have the DOS keyboard driver loaded. Honestly, I did know that once... You need both

```
COUNTRY 044,850,C:\WIN95\
COMMAND\COUNTRY.SYS
```

in CONFIG.SYS, and

2096 looked and felt very much like 1996. So, taking into account this weight of empirical evidence, I reset the computer's date and all my problems disappeared. Well, almost, because I still had loads of files with 2096 creation and modification dates. Loading them into the relevant application and resaving them cured this for some, but not all. And there were rather a lot of them.

Somewhere, a little bell rang, and I restarted ScanDisk, blew the cobwebs off the "Advanced" button, and there it was: a "Check for invalid dates and times" option waiting to be ticked. This found even more invalid dates in files and folders, including places like the "Fonts" folder that "Find File..." doesn't. And it seems to have mended them.

As to what caused this great leap forward remains a mystery. Fellow sufferers blame everything from a particular Compaq BIOS (which I don't have) to rogue software, of which I have lots. Anyway, should strange things start to happen on your PC, *check the date.*

### KEYB UK

in AUTOEXEC.BAT. You can put this directly into the "batch file" pane of the DOS Prompt shortcut.

## Relax...

Let all troublesome thoughts, such as getting any work done, float away as you listen to Syntrellium's Wind Chimes (WC1SETUP.EXE on this month's cover-mounted CD-ROM, or available from [www.syntrellium.com](http://www.syntrellium.com)). This uses the MIDI capabilities of your sound card to generate more or less random tunes. You can choose the instrument and any one of 64 preset scales. You can control the number of chimes, the distance between them and even the variation in the wind speed. And if this all sounds far too complicated, there are over 40 predefined schemes. Two things you must try are: running your fingers (well, your mouse pointer) through the chimes at the top right of the control dialogue, and running two or more instances of Wind Chimes. It's quite the most delightful thing I've had on my hard disk for a long time, and so relaxing that... I really don't... think... I can write another... Zzzzzzz.

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# Secure in the knowledge

Psst! Want to know the secret of making folders invisible? Lend an ear to what Tim Nott has to say. Plus, making a PC jukebox and entering a new time zone.

Not long ago, we looked at ways of securing a standalone PC from the ravages of multiple users, with System Policies. Many readers have had difficulty getting this to work. Others complain of settings "migrating" between users or getting lost, and how alarmingly easy it is to crack the system. There is a general consensus that Poledit is a fairly horrible utility, with the power of a Reliant Robin and a front-end to match. In my opinion, the biggest failing of Windows 95 is that you can't secure drives or folders.

So let's welcome Magic Folders. This makes any folders you choose, and all the files therein, invisible to others. They can't be deleted, viewed, modified, or run. For all practical purposes (unless you have the password) they don't exist. Install Magic Folders, and you're prompted for a master account password and to make a key floppy disk, which will save your bacon should you forget your password. You can have up to five (or possibly ten, but the documentation is inconsistent on this) other accounts, but only the master can create new accounts or uninstall Magic Folders. The master account, however, can't see other users' private folders unless they uninstall Magic Folders.

It has its drawbacks, the principal one being that it relies on entries in AUTOEXEC.BAT and SYSTEM.INI. The help file suggest you rename the program so that other users don't know Magic Folders is running, or put multiple references to differently-named copies in autoexec.bat (it will only load once but hackers would need to remove every reference). All of which is rather pathetic, but anyway... Another drawback is that you can't use it to stop

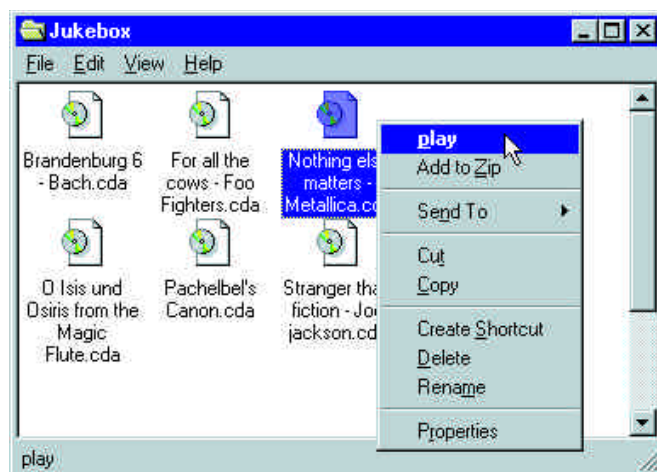
**Fig 1 Desert island discs — stick your favourite CD tracks in a folder**

others meddling with system files. It won't let you hide the Windows or System folders, because then Windows won't be able to find itself, if you see what I mean. The other big problem I found was that you only get one chance to make the key disk. Sod's law prevailed and although the install program reported this as successful, the disk was corrupt to the point of crashing Windows. So I had to uninstall and reinstall to make another. Had I forgotten my password I would have been in deep doody, and would have had to undertake the scary business of editing autoexec.bat and system.ini.

It also works with Windows 3.1, but don't use Chkdsk or you risk losing invisible folders. Use Scandisk instead. If you're using third-party disk fixing utilities, you should keep them in an invisible folder so they can only be run when all folders are visible. It's shareware, so registration is \$29. I cut my 30-day evaluation period to one, but maybe you'll like it better than I did. It's on the CD-ROM in MFD.ZIP. Treat it with caution and read all the documentation.

## Now here's a funny thing...

If you're fascinated, as I am, by things that are fairly useless, but which no-one intended you to do anyway, read on.



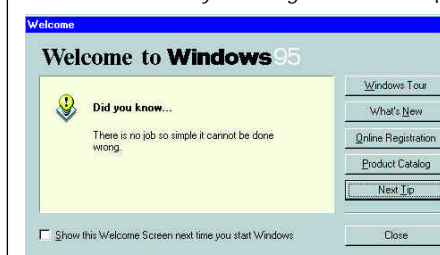
Geoffrey Solomon asked why, when you look at an audio CD in Explorer, all the tracks are 44 bytes long. By a strange coincidence, the same batch of email produced a similar query from Oliver Couzens. I had to admit that even I had never been so perverse as to Explore a music disk, but promptly did so. And they're right. Moreover, all the files seem to have been created on 1/1/95, regardless of whether you're playing Mozart or Metallica.

Geoffrey continues: "If you try to copy a track to the desktop you only get a shortcut (except it's not really a shortcut) to the track on the CD. I say it's not a proper shortcut because it has no arrow in the bottom-left corner and displaying its properties doesn't give a shortcut's properties. Yet if you activate it with no disc inserted, you are prompted for one. What is the purpose of this? Would a real audio track on computer take up too much space?"

Well, first bear in mind that audio CD predates CD-ROM, and the designers of the technology weren't really intending

## Did you know...

Let us look at readers' suggestions for replacing the Windows "Tips of the day". James Dagger sent in a wonderful and varied collection, composed of truisms such as "You never really learn to swear until you learn to drive", and twisted truisms: "If at first you don't succeed, get someone who knows what they are doing". Further word play included Tom Swifties, where a pun is



**A witty thrust from James Dagger**

formed on an adverb: "Take the plane up to 30,000 feet," Tom said, loftily. And Hermans, where a pun is formed on a name: "She's my woman," said Herman. And the wonderfully dreadful "That's quite a storm," said Abigail. All of which has nothing to do with Windows 95, but is considerably more fun.

Keep them coming, and remember, one good one stands a better chance of being printed than lots of not-so-good, or esoterically-themed, contributions.

listeners to hack into them with a PC. But Geoffrey is right; despite the wonders of modern data compression, you can't get three minutes of audio into 44 bytes (the .CDA files you see are pointers, or shortcuts) to the actual audio data. And the data itself is huge. If you consider that an audio CD can hold about one hour of music, and a CD-ROM 650Mb of data, then this roughly equates to 10Mb/sec.

## What do you want to hear today?

Enough of the boring technical stuff, for here comes my latest invention, the Windows 95 Jukebox (Fig 1).

Create a new folder. I wanted to call mine "What do you want to hear today?" (© Tim Nott Enterprises) but as we all know, you can't have question marks in file or folder names.

Stick your favourite music CD in the drive, open the CD in Explorer, and drag the track you want into the new folder. Rename it from, say, "Track03.cda" to something meaningful like "O Isis und Osiris from the Magic Flute" or "For all the Cows by the Foo Fighters", but keep the .CDA extension. Repeat for other tracks and other CDs.

Keeping the pile of CDs to hand, double-click on a title in the jukebox folder. If the correct CD isn't in the drive you'll get a message telling you to rectify this. I find it adds considerably to the effect if you make whirring noises and jerky arm movements as you load and unload the disks. Once the correct disk is inserted, a double-click will take you straight to the track.

You might find yourself in an argument with the Autoplay feature; if you click too soon it will switch to track one after a few seconds of the chosen track. So either let it start first, or hold down Shift when you load the disk to prevent it Autoplaying.

If nothing happens and you do not get an icon of a CD-on-a-sheet-of-paper for each track, it's probably because you don't have a registry entry for .CDA files. Go to the View/Options/File Types dialogue from the folder and look for "CD Audio Track". If it's not there, you can create it from the "New Type" button.

"Description of Type" should be "CD Audio Track" and "Associated Extension" should be .CDA. Click "New" under actions, and type "Play" in the "Action" box and `c:\windows\cdplayer.exe -play` in the "Application used..." box (modify the path if you don't keep cdplayer.exe in c:\windows).

Finally, when you copy the .CDA files, make sure you really do copy them. If you create a Shortcut, this will play the corresponding track (if it exists) on the currently-loaded CD. OK, it's not a very good jukebox, as it continues playing the following tracks and you can't stack up a playlist. But I'm working on it.

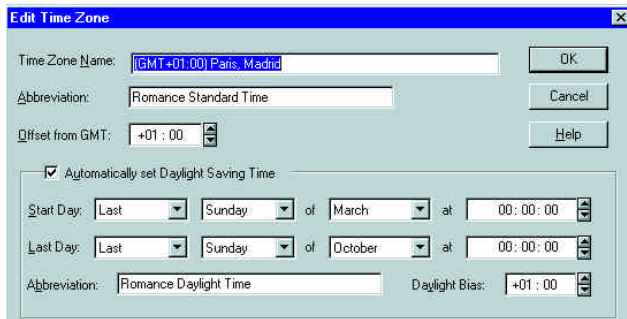
## Spring forward, fall down?

In Autumn 1995, I was delighted to find that Windows 95 not only knew about putting the clock back, but got it right. Similarly, it sprung forward at the right moment in Spring last year.

Last Autumn, though, it got it wrong. France moved the change date to coincide with the UK. Of course, nobody told me, and such is my unshakeable faith in Win95 that I believed it right up until the moment my children turned up an hour late for school the following day. Other European countries have changed, too, thanks to the charismatic Euro-force of John Major.

Nigel Hinton emailed me from Italy with the same problem. Although it's no great hardship to reset the clock manually, it was

**Fig 2**  
Edit time  
zone  
settings  
with a  
Kernel  
Toy



a good excuse to ferret around the registry in an effort to put things right.

There are two lots of settings. The first, which hang out at:

```
HKEY_LOCAL_MACHINE\SOFTWARE\
Microsoft\Windows\CurrentVersion
\Time Zones
```

show a list of settings for each time zone in the world. These reflect the choices you get in Control Panel/Date/Time/Time Zone.

The second lot, at:

```
HKEY_LOCAL_MACHINE\System\
CurrentControlSet\control
\TimeZoneInformation
```

contains the settings corresponding to the zone you have chosen. Details of the change dates are held in the TZI key for the former, and the slightly more informative StandardStart and DaylightStart keys for the latter. Unfortunately, the values of all of these keys are long hexadecimal strings. Although it looked possible that 0A (ten in hex) might signify October, I really didn't want to mess with that stuff.

Fortunately, there's an easier way. Control Panel only lets you change the zone and switch daylight saving adjustment on or off (you can't change the dates). The Microsoft Kernel Toys, which are like a dull relative of Power Toys, will rectify this with a Time Zone Editor (Fig 2). In addition, you get a Control Panel add-on for remapping the shift, control, alt, caps lock and (if you have it) Windows keys, although I don't really know why you'd want to do this. But I do find it useful to disable the Caps Lock key which I OFTEN HIT BY ACCIDENT. There's a tool to train the MS-DOS configuration Wizard and a thing called WinTop that shows exactly what processes are running through your, er, processor.

More power-anorak stuff comes in the form of CONVMEM.VXD, which "tracks the amount of memory allocated by virtual device drivers (VxDs) in conventional memory" ...and as we all know: "Normally, all this memory is reported against the VMM32 device rather than being broken down". Anyway, Kernel Toys is free and on

this month's PCW CD-ROM (as KRNLTOYS.EXE) or it can be downloaded from the Microsoft web site. The file is self-extracting, so create a new folder, move KRNLTOYS.EXE into it, run it, and find the README.TXT file.

### Le Phoneday fun

France recently had the equivalent of our "Phoneday", when all of us with eight-digit phone numbers were upgraded to ten digits and the code for dialling out changed from 19 to 00. So I spent a few hours changing everything in my address book — sorry, contact management database — dial-up settings and Word templates. All was well, or so I thought, until I wanted to send a fax to the UK. It still dialled 19, not 00. It wouldn't even let me enter the 00 manually. Ha! I thought: open the registry and search for "19". Not a good idea. Do you realise how many times those digits appear next to each other?

I will draw a veil over the next hour or so, but at the end of this I was doing a fairly accurate recitation of the opening dialogue from the film, "Four Weddings and a Funeral". I had also discovered that the dial-out-of-country number wasn't stored in the registry — Oh no!

I eventually found good, old-fashioned TELEPHON.INI except this doesn't contain the number either. But it does contain a reference to a table that is, would you believe, hard-coded into TAPI.DLL. So I did what I should have done in the first place and searched France Télécom's web site.

## A handful of quickies

■ Simon Grant wrote: "I've tried to create a folder called 'CON' and Win 95 told me that it 'Cannot create or rename file. Filename is invalid or too long'. Any ideas what this may be?"

Yes, "CON" is a reserved word in Windows and DOS.

Reserved words are names for system devices. If you open a DOS session and type "COPY MYFILE.TXT CON:" it will output the file to the screen. Other reserved words include LPTn (the printer ports), COMn (the serial ports) and NUL (nothing — see the next tip).

Windows won't let you use any of these for a file or folder name, but you get a variety of misleading error messages.

■ Richard Ansdell has a tip for your autoexec.bat:

"Putting '> NUL' at the end of any line which outputs to the screen stops the flickering back and forth between the Win95 startup screen and autoexec messages during bootup. This redirects the output to nowhere. It doesn't work every time, though. The line which invokes my Dr Solomon's virus protector won't go quietly."

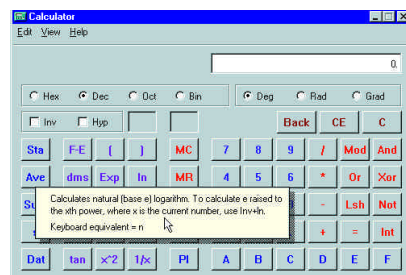
Well, quite. If you have a virus protector you want to know what it's saying. Turning off "Display the full MS-DOS path in the title bar" from a folder "View/Options/View" box will make Taskbar buttons far more legible as only the final folder name is shown. If you right-click on any button in the Windows Calculator a one-line menu appears: "What's this?" Click for a short explanation of the function.

■ Andy Thilo remembers reading that you can have Control Panel and Printers as cascading sub-menus on the Start Menu, but he can't find the article in which it was originally mentioned... and strangely enough, nor can I. It's much easier to do this with Powertoys, but if you want to do it the hard way, create new folders in the Start Menu folder named:

```
Control Panel.{21EC2020-3AEA-1069-A2DD-08002B30309D}
```

```
Printers.{2227A280-3AEA-1069-A2DE-08002B30309D}
```

The bit before the dot is the text that will appear on the menu, the weird stuff afterwards is the CLSID of the relevant folder as listed under HKEY\_CLASSES\_ROOT in the registry.



**Blinded by science? Right-click any button for an explanation**

This led to Microsoft and a tiny 6Kb file named MAJTAPI.INF. Having downloaded and right-clicked on this, it added a [CountryOverrides] section to TELEPHON.INI fixing the problem not just for France but for countries ranging from Azerbaijan to the Wallis and Futuna islands.

### •PCW Contacts

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**Kernel Toys:** [www.microsoft.com/windows/software/knlttoy.htm](http://www.microsoft.com/windows/software/knlttoy.htm)

**Magic Folders:** [www.PC-Magic.com](http://www.PC-Magic.com)

**Majtapi.inf:** [www.microsoft.com/france/products/windows/numero.htm](http://www.microsoft.com/france/products/windows/numero.htm)





# The wheel thing

Not a creature was stirring, not even a mouse — or even that funny little wheel thing on Tim Nott's new Microsoft Mouse. Many happy hours were spent when he finally sussed it out.

I was very excited this month to receive a sample of the new Microsoft Mouse. This is the one that looks very much like the last. It's vaguely kidney-shaped but with a third thingy to twiddle — part-button, part-wheel, it sits between the two existing buttons.

Somewhat perplexed that the far end of the lead terminated in a PS2 (I think that's what it's called) plug rather than the screw-on 9-pin job that we know and love, I dug an adaptor out of the pocket of an old anorak and fired up the PC.

When Windows got to the bit when its internal checking orders "All those with mice take one step forward", I got the error message "Where do you think you're going, Mr Nott?" or words to that effect. Several changes of adaptor later, it was the same old story. Maybe, I thought, if I install the software first... (and no, I didn't RTFM as there was no FM to R — we press wallahs

don't get that kind of cossetting). But still no joy, so I carried on with my distinctly shabby-looking Mouse Mark 2 and explored all the new Intellimouse goodies on offer apart from the wheel.

This brightened up the day considerably (it was about one o'clock), because I discovered all the labour-saving devices I'd missed since Windows 3.1 days. "Which way is up" is a clear winner. I'm left-handed and although, paradoxically, the asymmetrical MS mouse fits nicely in my left hand and I'm now well accustomed to using my middle digit as the main clicking appendage, I do tend to hold the thing slightly (well, very) skew-whiff.

Likewise, it's great to have "snap-to" back again — the trick that automatically moves the pointer to the default button of a dialogue box. And let's not forget the thing that causes the mouse pointer to disappear from one side of the screen and reappear

on the other. Not much of an aid to productivity, but a superb practical joke.

The next stop was the brand new automatic lightup, as I call it. Waft the pointer over an icon or title bar, and it automatically grabs the focus without having to click. Cool, but for some strange reason often much slower than clicking normally. If you wish, you can also slow the pointer

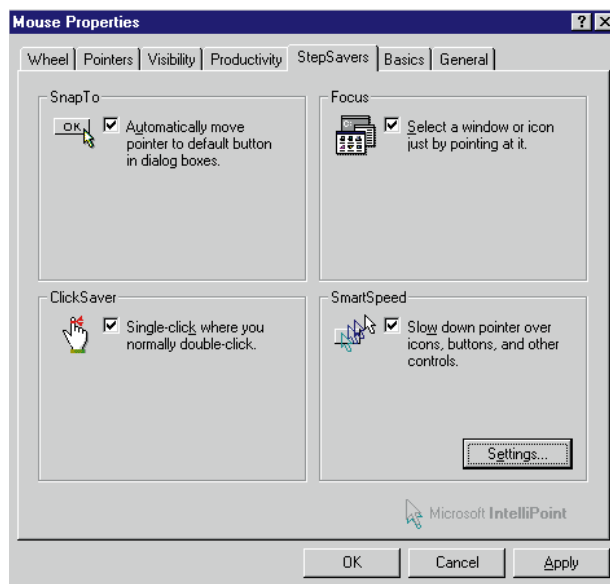
down automatically over icons and buttons, so I whacked this into gear as well.

Now, having watched someone with motor neurone disease struggle bravely and patiently to position the pointer exactly on a button or icon, I can appreciate the value of this. But it does strike me that Microsoft has gone a little over the top in the degree of the effect. At the slowest speed, it's rather like running across a field and suddenly putting your foot into a deep pit of mud. There you are, mousing away, when suddenly you grind to an abrupt halt. After picking the mouse up and scrabbling it repeatedly across the desk, rather like launching a toy car, the pointer will suddenly take off and whizz across the screen.

There's a happy end to the story, because the proper adaptor arrived and I was at last able to use the new mouse, complete with wheel. This does all sorts of wonderful scrolling, panning and zooming things. And very lovely it is too. But it only works in Explorer, Internet Explorer, and Office 97. The latter was still in beta at the time of writing, and although exciting and fascinating in its own right, wasn't yet at the stage where I'd forsake my existing software to use it for daily work. So, human nature being what it is, I spent many happy hours wheeling around Internet Explorer, then switching to the word processor and twiddling away ineffectually before realising for the umpteenth time "Oh, silly me, it doesn't work here, does it?"

## Got those old MSDOS compatibility blues again...

But enough of my problems; how about yours? The "compatibility mode" problem continues to maintain a high chart placing.



**Fig 1** New Intellimouse goodies. All but the wheel work with older mice

## A handful of quickies

■ Notepad is fussy about extension names that haven't been registered as Notepad files. Save a file, say, as MYPROG.BAS and you'll find you've actually saved MYPROG.BAS.TXT. Using the "View/Options/File Types" dialogue to register, say, .BAS or .SCR as Notepad files is one way around this, but you might well want to preserve the existing association in order (in these examples) to run Basic listings or scripts. The way around this is to save the file as "MYPROG.BAS", with double quotes around it, which avoids the gratuitous .TXT on the end.

■ Tom Fitzgerald wants to know how to change the "Tips of the day". Start Regedit, search for "Tips" and keeping hitting F3

till you see the tips in the right-hand pane. Double-click on the number of the tip you wish to change and an edit box appears. Speaking of which, thanks also to Nicholas Metcalfe, who sent a complete set of tips culled from Twin Peaks, and Mark Harrop with a set of seventies aphorisms from Brian Eno and Peter Schmidt. Now, that's what I call obsession. But no more themed

collections, please, be they

Douglas Adams, Star Trek (especially not) or Coronation Street.

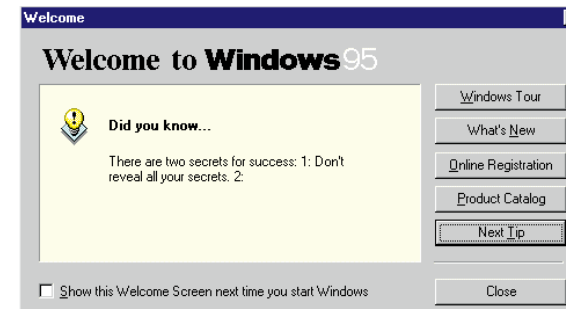
■ Alternative tips are still trickling in, but I need more, so get your imagination and/or plagiarism going. For a pointer to the sort of thing I'm after, see Fig 2 for a very fine "Tip of the Month", stolen from Robert Winstanley's email signature.

■ You can cheat at Hearts in Windows 95, too (see the Windows 3.1 column on page 273 for the full story). Open the Registry and go to Hkey\_Current\_User/ Software/ Microsoft/ Windows/ CurrentVersion/ Hearts. Right-click in the right pane and create a new string value with the name ZB and the value 42. As with 3.1, Ctrl+Alt+Shift+F12 will then reveal your opponents' hands. You

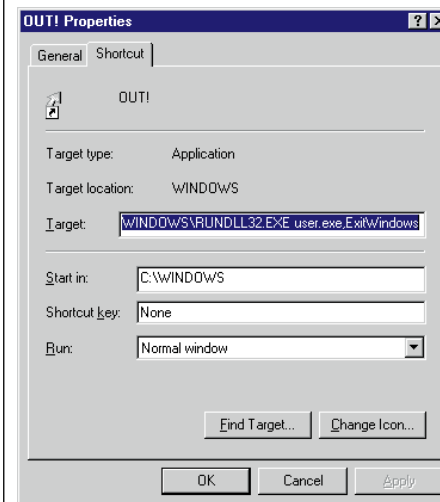
can also change the default names by adding string values for p1name, p2name and p3name.

■ Are you sure you want to: shut down the computer?; restart the computer?; restart the computer in MSDOS mode?; close all programs and log on as a different user?; get rid of this annoying confirmation? If your wish is the lattermost, create the following shortcut on the Desktop, Start Menu or folder of your choice. The command line should read RUNDLL32.EXE user.exe,ExitWindows. Note there is no space after the comma or in ExitWindows. You'll get the usual prompts asking if you want to save any open,

changed, files. If so, you can cancel the command, too. Apart from that, you're out. Finished. Shut down without further ado.



**Fig 2** Thank you, Robert Winstanley, for this "Tip of the Day of the Month"



**Fig 3** A quick getaway from Windows

To briefly recap, this is the one where, seemingly out of the blue, your hard disk performance declines drastically and Control Panel/System/Device Manager shows that your disk controllers have been demoted to "MSDOS compatibility mode".

Mark Hewitt had this problem when installing Windows on an old-ish Elonex P90. Phil Kelly, of Elonex support, pinpointed the problem instantly and precisely. The Neptune motherboard does not support Plug and Play (P&P). But Win95 installs it anyway. Solution? Remove P&P

from Device Manager, restart the PC, then manually "Add new hardware", select PCI Bus. Restart again and all should be well.

David Ingham had a similar problem after assembling his own PC. This time it was an unnamed hero at Microsoft tech support who stayed behind for 30 minutes after close of play to establish that the combination of Award BIOS and Windows 95 PCI-IDE drivers was the problem. New drivers from the motherboard supplier cured the problem. Robert Winstanley upgraded from 3.11, experienced the same

p272 ➤

problem and tracked it to SYSTEM.INI. So look for DEVICE= lines that refer to files with the .386 extension. These are "legacy" devices from 16-bit days and can cause compatibility mode (and other) problems. Try commenting the line out by preceding it with a semicolon.

### Order! Order!

Grahame Slope came up with an interesting challenge: "How can I get the shortcuts in my StartUp folder to execute in a particular order?" I really tried on this one. It seems to make no difference how, or in which order, the icons are displayed. Nor does the alphabetical order seem to matter. At one point, I thought I'd cracked it with the creation dates of the shortcuts but this, too, was a red herring. Stranger still, restarting the PC would sometimes load the applications in a different order. Then I remembered the other way: the load= and run= lines in WIN.INI. In conventional wisdom, the first runs a program minimised, the second in a normal window, and the trick is to leave a space between each item. For example:

```
run=notepad.exe charmap.exe
calc.exe
```

This actually worked, at least initially, but it must have been a fluke as re-ordering the same items or adding more didn't run them in the order specified.

Then of course, there's the other, other way, which is far more high-tech and involves editing the Registry to add new string values to:

```
HKEY_LOCAL_MACHINE\ SOFTWARE\
Microsoft\ Windows\
CurrentVersion\ Run
```

So I went there, did that, and needn't have bothered. Sure, the programs ran, but not in any perceivable or consistent order. So moving on to the other, other, other

### Bugwatch

Remember the Windows 3.x Calculator bug? Well, you'll be delighted to learn that Windows 95 has one all of its own. Switch to scientific view, and multiply 0.57 by 100. If you don't get 57, that isn't a bug, that's you. Now press the INT key. What this should do is return the integer part of a number — that is, everything to the left of the decimal point. Whoops! Yes, I get 56 as well, with 0.58 and 0.28 giving similar results. There may well be others. In each case the Inverse INT function, which should return all to the right of the decimal point, gives 1. So at least there's some kind of method to the madness.

## A glimpse of Christmas stocking



As I write this, the sun is shining and the window (strictly non-™) is wide open. The trees are turning gold and there's a faint smell of woodsmoke from the first log fires of the season. At the top of my page it says "January issue, 1997" so it must be Christmas. And you thought Windows 95 was confusing. Anyway, in accordance with the time-honoured tradition believed to date back to at least 1995, here is my Christmas wish-list.

But first, did last year's wishes come true? These all concerned various tedious aspects of the Windows 95 interface. One wish was that Microsoft Office would take a leaf out of Microsoft Windows' book and put the filename before the application. In fact, I've beefed about this at great length so I won't bore you further, except to say that the beta of Office 97 I saw still doesn't do this but adds the refinement (at least in Word) of putting your name between the application and file name. Just in case you forget it, I guess.

Tiled Windows in Office Binder didn't happen either, and nor did the ability to add files such as Notepad or Paint to a binder. Another wish was to reinstate the JPEG and GIF Quickviewers that appeared in the betas of Win95 but not in the final cut. A little progress here — you can get an enhanced Quickview (for money) or view them in Internet Explorer (free). My last wish was "Please give me the patience and understanding to get to grips with the way Windows 95 saves settings". A little progress here, too: the free Tweak UI gizmo has an option for globally enabling or disabling "save settings", so at least you can stop all the folders you left open from opening again. But it's far too little, too late: saving general and particular folder settings is still largely a matter of guesswork and pot luck whether a folder opens in list view, icon view, with or without the toolbar, and so on. So let's put that as this year's number one.

### This year, I wish...

1. Let's have explicit folder menu options for "Save this folder settings" and "Save these settings for all folders below this one". And nipping the inherent contradictions in the bud, the latter will produce a confirmation dialogue if this includes a previously-saved "one-off". And while we're about it, a separate setting for re-opening (or not) folders, which were open when you quit.
2. Let's have a totally easy and effective way of securing a standalone PC. This, after all, is the age of the family computer. We need to be able to restrict access not just to applications and settings but to folders, too.
3. And can someone explain to me what I have to do to persuade the PCW cover-mounted CD that I already have the Acrobat viewer installed and working?
4. Returning almost to where I started; a patch to make the new mouse wheel work in all applications.

way, I remembered that you can start a Windows program from a DOS prompt. I must admit, I'd never appreciated why you might want to: even if you don't have a shortcut for the program, it's quicker to launch it from the "Run..." command. But it figures that if you can start a Windows program from the DOS prompt, then you should be able to do it from a batch file.

With trembling fingers I put together a batch file in Notepad, each line launching a different Windows application. I created a shortcut to this file in the StartUp folder, and, just to be flash, edited the properties of the shortcut to close the DOS window on exit. I restarted Windows for the umpteenth time that day. And guess what? It works. Certainly, it's slow and kludgy, but preliminary testing shows that the batch commands are processed in the order listed. Obviously the department of obfuscation and bloody-mindedness slipped up there.

While I'm winning, I'll pass on the following ancillary tips. If you want the batch

file to open a folder, or an associated file, use the "Start" command. And if long file or folder names are involved, enclose them in double quotes. Here's an example:

```
c:\windows\calc.exe
"c:\Paint Shop 4\psp.exe"
c:\windows\notepad.exe
c:\windows\charmap.exe
start "c:\Program Files"
start c:\bootlog.txt
```

This starts the Calculator, then Paintshop, Notepad and the Character Map, opens the Program Files folder and opens bootlog.txt in Notepad.

■ By the way, Chris Marriott's SkyMap, mentioned in my *Windows 3.1* column, is on this month's CD-ROM in 32-bit flavour as well, in the same Zipfile: Skymap.zip. Happy stargazing and a happy Christmas, to y'all!

### PCW Contacts

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# Tasty morsels

Tim Nott reveals his sources and serves up some choice cuts of information about .CAB files, MS Knowledge Base and the Recycle Bin.

**R**oger Castle-Smith, of Milton Keynes wrote me a very long letter showing that there is, after all, something to do there in the evenings, if only write to *PCW*!

One point he raised is that he “rather suspects that I might have access to useful sources of information which are not available to us lesser morsels!” Unless this is a clever pun about bytes that has gone over my head, I presume he means “mortals”, but I rather like “morsels” so I’ll pinch it.

Journalists have a traditional obligation to protect their sources but I’m happy to come clean on mine. First, there’s the stuff that all we morsels have, if we possess the Windows 95 CD-ROM. The resource kit help file (Win95rk.hlp) is mainly geared towards system administrators, with whole sections on topics such as Deployment Planning Basics, but there’s a great deal of information on Windows architecture and the finer technical points.

At the risk of stating the obvious, you should also find 17 text files installed in your Windows folder. These cover everything from mice to memory managers, and there’s an especially fine file called Tips.txt — so now you know where I get them from. If, by chance, these files aren’t installed on your PC, you can find them on disk three of the floppy set or win95\_03.cab on the CD.

## Call me a cab

This gives me a good excuse to go off on a tangent. What is a CAB file and how do you get things out of it? Cabinet (.CAB) files are simply a bunch of other files compressed into a single entity, rather like a ZIP. They are stored on the CD-ROM or floppy disks. If you got Windows pre-installed on a PC

with no disks, the dealer should have copied the CABs to the hard disk. Just to complicate matters, the floppies are in Distribution Media Format (DMF), which means they can hold more than the standard 1.44 Mb, and they can’t be copied by normal means. Each floppy may contain one or more .CAB files and others. And .CAB files can be split across floppies.

The easiest way to see the contents of a Cabinet and to extract files from them, is to use the Cabview utility that comes with Powertoys. With this installed you can right-click on a .CAB file, view and extract the contents as if it were a normal folder. For those who don’t have Powertoys, or prefer the standing-up-in-a-hammock way of life, there should be a tool named EXTRACT.EXE in the Windows\ -Command folder. If not, it’s on disk one, or in the CD-ROM Win95 folder and can be copied normally. It’s a DOS application and if you run it without any parameters you’ll get instructions. I will draw your attention to a couple of rather cool features.

If you know the name of the file you want but not which .CAB it’s in, the /A switch will search the .CABs starting with that specified. This works on floppies, too, and you are prompted to insert disks until the file is found. The

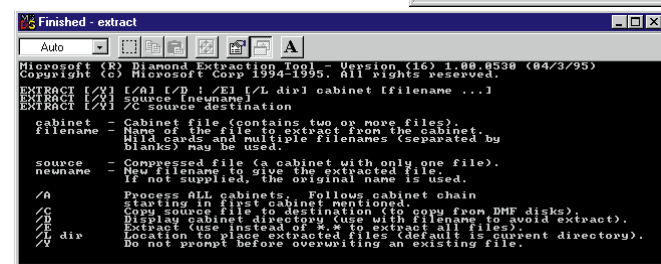
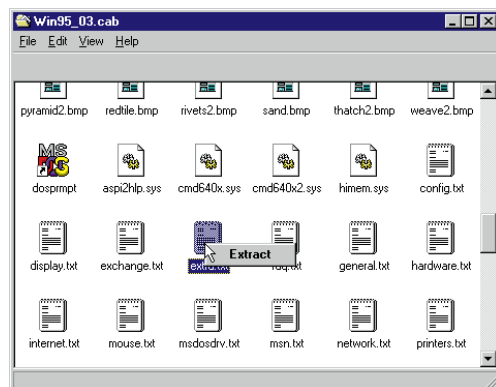
/D switch, with a .CAB but no file specified, will list the contents of the Cabinet.

You can also use the /D switch with the /A switch to find but not extract a file. There’s a catch here, as even after it’s found the file it searches the rest of the CABs so the “hit” can scroll out of the DOS box as can the listing produced by /D alone. There’s no switch to page the results and the old tricks of redirecting the results to MORE.COM, or sending them to a file don’t seem to work. (See the first tip in the panel on page 262 for a partial work-around).

Anyway, let’s get back to sources of information. There are many online sources of information and discussion. I have little to do with most of them as there aren’t enough hours in the day. The one notable exception is the Windows\_95 conference on CIX which, besides being a great place for gossip and argument, has some of the country’s finest 32-bit minds poised to solve each other’s problems. The sheer number of members means that even the most obscure problems are likely to find resonance. Someone there will have BTDGTTS (been there, done that and got the T-shirt). For simpler problem solving, don’t overlook the obvious. The first resort is on the Start Menu. Select Help and check out the Troubleshooting sections.

## Sound advice

The one big “morsel” that I do get is Microsoft Technet. This is a subscription-only monthly issue of three (or four) CDs containing everything you could conceivably want to know about Microsoft and its



(Above) It looks like a normal folder but it’s Cabview excavating a .CAB file the easy way...  
(Left) ...and for those who prefer the hard way: Extract.exe

products, including Bill Gates’ syndicated press homilies to the world at large.

The gold standard, however, is the Microsoft Knowledge Base, which is full of problem reports, tips and general answers to one’s prayers. And it’s all searchable. For example (to go off on yet another tangent), I received an email message a few minutes ago from Nicholas Hill.

He wrote: “I have no soundcard in my PC (and I don’t really want one) but the inbuilt speaker doesn’t feature either. The sound options in Control Panel are greyed out and there doesn’t seem to be any speaker driver on the CD. Am I missing out on something?”

Bunging this month’s Technet CD in the drive, I ran a search for “speaker” and “Windows 95”. Soon, I was able to reply that a speaker driver isn’t included with Windows 95 but that the file SPEAK.EXE is available from Microsoft’s web site.

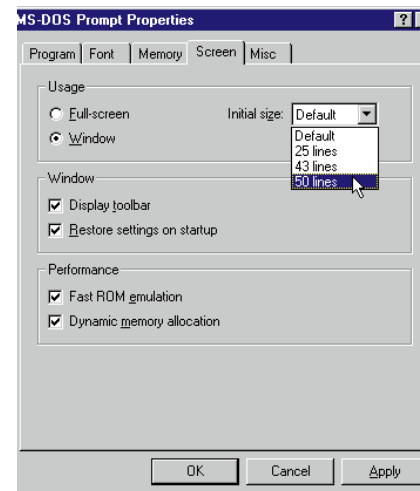
Before you all rush off looking for it, it’s the same as the Windows 3.1 speaker driver and has been around since 1992. It’s on our cover-mounted CD this month (see *Hands On Windows 3.1* for details). Returning from the tangent, the Technet subscription price is £249 per year but lesser morsels can search the MS Knowledgebase online. Go to [www.microsoft.com](http://www.microsoft.com) and click on “Support”.

## Raising the dead

Roger Castle-Smith had a lot of useful advice on the Recycle Bin and deleting files, most of which we covered in last month’s column, written before I received his letter. He did reveal some interesting problems about undeleting — a subject about which I was flippant.

As I stated last month, the DOS or File Manager delete commands bypass the bin, as does Shift + Delete. To recover a file deleted in this way, you first need to make sure you have the necessary tools, as the MS-DOS “Undelete” command is not installed by default.

If you’ve got the CD-ROM of Windows 95, then go to the OTHER\OLDMSDOS folder. Although you can copy the files piecemeal, there’s a batch file (INTSUPP.BAT) that does it for you. Run this from a DOS prompt, or the Start button “Run...” command. If you don’t want the files installed to the default destinations of C:\WINDOWS and C:\WINDOWS\COMMAND, type the preferred path after INTSUPP.BAT. This will restore all your old



## Take 50 lines and get more into a DOS box

favourites such as MEMMAKER.EXE, QBASIC.EXE and, more germane to the subject in hand, UNDELETE.EXE. Restart your computer as instructed.

Ideally, you should do all this before the need arises, then you won’t risk overwriting the files you wanted to undelete. Lesser “morsels” who don’t have the CD can get the files from [www.microsoft.com/windows/software/cdextras.htm](http://www.microsoft.com/windows/software/cdextras.htm).

To undelete a file, first restart the computer in MS-DOS mode. Change to the directory from whence the files were deleted and type LOCK x: (where x: is the relevant drive). This, logically enough, unlocks the drive so you can then run UNDELETE. You can then tap through the list of deleted files and see if, by some remote chance, the file you want is available for undeletion.

Sod’s law prevails here, so you’ll probably find that whereas the files you deleted weeks ago are still available, the “starting cluster” of the file you want has already been overwritten when Windows shuts down. When you have finished, type UNLOCK to lock the drive again, and restart the PC.

If the file was deleted from the Recycle Bin, then you have a whole load more problems. For a start, you need to go to the “Recycled” directory on the relevant drive — the Windows Recycle Bin doesn’t exist as a DOS entity. As Roger points out, the DOS names for files in the Recycle Bin don’t correspond to the originals. If you use the DIR command, or File Manager in the “Recycled” directory, you’ll see a list of names in the format DCnn.EXT, where nn is a number and .EXT the original extension. And these DC... filenames are what you’ll



## Take five tips

## 1. DOS boxes

You can get more lines in a DOS box by going to "Properties" in the System (top left icon) menu, or the button that looks like a hand holding a document. Switch to the "Screen" tab and choose the number of lines from the "Initial size" box. Windows will save this setting and use it next time the DOS application is run.

## 2. Copying files

Oh for the days of File Manager when you could copy and rename at the same time by pressing F8 — highly useful for making a backup, in the same folder, of a file you're about to tamper with. After having fought the system for months I discovered Windows 95 does just this, but even more easily. If you right-drag, right-button copy then paste, or select Control C, Control V, you'll end up with "Original.ext" and "Copy of Original.ext". Additional pastes will give you "Copy (2)...", "Copy (3)..." and so on.

## 3. More pasting

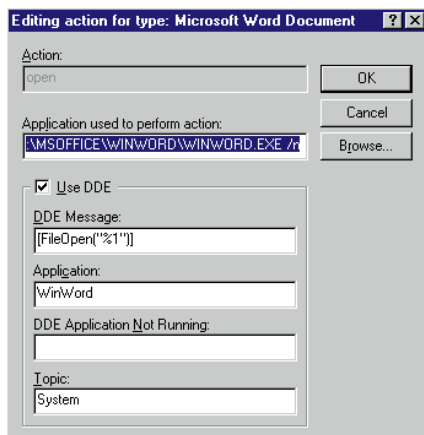
You can paste complex commands, say from a help file, straight into the Run command. You can also drop files into the Run... box. This can save a lot of typing. For example, if you want to compare two files with the DOS FC command, type FC in the Run... box then drag and drop in each of the two files. The entire path name appears as if by magic, suitably enclosed in quotes if it's a long file name.

## 4. Policy Editor

If you found (*Hands On Windows 95*, September) that clicking on the book symbols does nothing, make sure that you're using the right template. This should be ADMIN.ADM in Windows/Inf. You'll find the original in the same folder on the CD as POEDIT.EXE. You can set the template from the Poedit Options Menu.

## 5. Tip of the day

For an instant "tip of the day" fix, stick a shortcut to Welcome.exe on your desktop.



## The quotes stop Windows choking on filenames with spaces

you're looking for. Even then your troubles aren't over. When the file is restored (*hint: use some letter other than "D" at the "first letter" prompt*), it won't miraculously appear back in the Bin. Oh no, that would be too easy. You'll have to find it from DOS or File Manager, and copy it somewhere else. Really the whole business doesn't bear thinking about, but if you're really desperate, I hope this helps.

## Lost copy

Back to Roger, who seems to have taken over this column and earned himself a book token to help while away those long, Milton Keynesian evenings. He also asks why Microsoft Works (and Word, for that matter) have seemingly unusable "Copy" and "Cut" commands on the right-click menu.

With Notepad or WordPad, if you highlight some text and then right-click anywhere in the window, you get the Copy and Cut options. With Word and Works the selection disappears and the options are greyed-out. The answer is that it's not impossible to copy the selection, it's just one of those loveable Microsoft inconsistencies.

In Word (I'll confess I haven't tried this in the Works word-processor but I imagine it's similar) right-clicking outside the selection

moves the insertion point, just as left-clicking does. Hence, the selection is lost and there is nothing to copy or cut. Right-click inside the selection (note that the margins alongside more than one line, count as inside) and the "Copy" and "Cut" commands remain available. To complicate matters, if you hold down the right button, you get the drag-and-drop cursor, exactly as you do with the right button, so keep the click short and sweet.

## Quote, unquote

Another mystery is when long file names stop working properly. I've noticed this with Word (the suspected culprit was a macro virus detector) but it can happen with other applications as well. What I mean is that if you double-click on a file (or shortcut) called, say, C:\MYFILES\PERSONAL\LETTER TO MY AUNT.DOC you get an error message that Word cannot open C:\MYFILES\PERSONAL\LETTER.

There's a Help button which offers some totally irrelevant advice and an "OK" button. Click the latter and you'll get a similar error message, this time referring to C:\MYFILES\PERSONAL\TO.DOC. OK this and the message repeats for "MY" and "AUNT". Then, just to be really perverse, the file usually opens. If you have long folder names as well, it will extend the barfing process through these.

The explanation for this is the way in which Windows 95 and DOS handle long file names. DOS doesn't like spaces: it treats them as delimiters. The cure is to go to "View/Options/File Types" and scroll to the offending entry. Click "Edit", select "Open" from the list of actions and click "Edit" once more. Under "Application used to perform action", you'll generally see something like C:\WHATEVER\WHATEVER.EXE %1. The %1 is rather like a batch file parameter: it passes the filename to the application. If you enclose this bit in double quotes so the line reads C:\WHATEVER\WHATEVER.EXE "%1", the entire filename will be passed along instead of "breaking" at the spaces. Note that in DDE-aware applications (like Word or Excel), the "Use DDE" box will be ticked and the %1 will appear in the "DDE Message" box, but the same double-quote technique applies.

## PCW Contacts

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see from the Undelete command. You can get some clue from the file size, date and extension but there will usually be many deleted files thrown up by undelete.

However, if you've only just deleted a file from the bin without emptying it completely there may be some further, rather slender, hope. Start File Manager (WINFILE from the Run... command) and make sure that "View hidden/system files" is checked in the "View/By file type" options. Open the "Recycled" directory and you should see a file named "Info". Drag this into Notepad and you'll see the original filenames, listed in order of the numbers. Using inspired guesswork, you should be able to correlate the missing number with the missing filename. Then you can do the whole restart in MS-DOS mode, lock, undelete, unlock rigmarole and have some idea of what



# Where you bin?

Hanging around the Recycle Bin, probably, wondering what on earth it's for. Tim Nott takes the lid off this enticing little mystery. He takes some Notes as well, and gets FAT.

**M**any people seem confused about that fine bit of desktop furniture called the Recycle Bin. The following dialogue should help. For added effect, read it in a variety of silly voices.

*Q. What is the Bin and how does it work?*

A. It's a holding area for deleted files. When you send a file to the Bin, it stays there until you empty the Bin or...

*Q. So my hard disk is filling up with stuff I don't want?*

A. If I can finish... or the Bin is full, when items get permanently flushed on a first-in first-out basis. You can control the size of the Bin as a percentage of disk space, either globally or on a per-drive basis, from the Recycle Bin properties dialogue.

*Q. Can I empty just some of the contents?*

A. Certainly — open the Bin, select the files you want removed and delete them. The quickest way of clearing the entire contents is to right-click and "Empty" on the Bin icon.

*Q. As in real life, I keep missing the Bin. I end up copying, moving or creating shortcuts on the Desktop instead of dropping the files cleanly in the Bin.*

A. Just because you can drag items on to the Bin icon, it doesn't mean you have to. It's much easier to right-click on the file(s) and pick "Delete" or select them and press "Delete" on the keyboard. If you really want to drag and drop, open the Bin first to give yourself a bigger target.

*Q. Why did Microsoft put the Bin on the Desktop? And how can I get rid of it? Or even rename it to something less twee?*

A. Good question. It can be hidden with the System Policy Editor (see September's column) or TweakUI (see October's column). If you don't have either of these, and feel brave enough, then back up the

Registry and run Regedit. Go to:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\explorer\Desktop\NameSpace

Depending on your setup, you'll see several keys below this, one of which is

{645FF040-5081-101B-9F08-00AA002F954E}

Deleting this key will remove the Recycle Bin icon from your Desktop. The problem with these methods is that you have to dig into Explorer to access it, and it will (misleadingly) report that it "belongs" to the current drive or partition, if you have more than one. If you want to rename it, back up the Registry, run Regedit and go to:

HKEY\_CLASSES\_ROOT\CLSID\{645FF040-5081-101B-9F08-00AA002F954E}

Double click on "default" in the right-hand pane and change the name in the dialogue box that appears.

*Q. I have several Recycle Bins — one on each disk partition and one on the Desktop. Can I delete the redundant ones? If so, which?*

A. The Desktop Bin is a "special" folder that shows everything in the Bin. The actual files themselves are stored on a per-drive basis in folders named "Recycled". These all appear to have the same contents from Explorer, but if you use File Manager

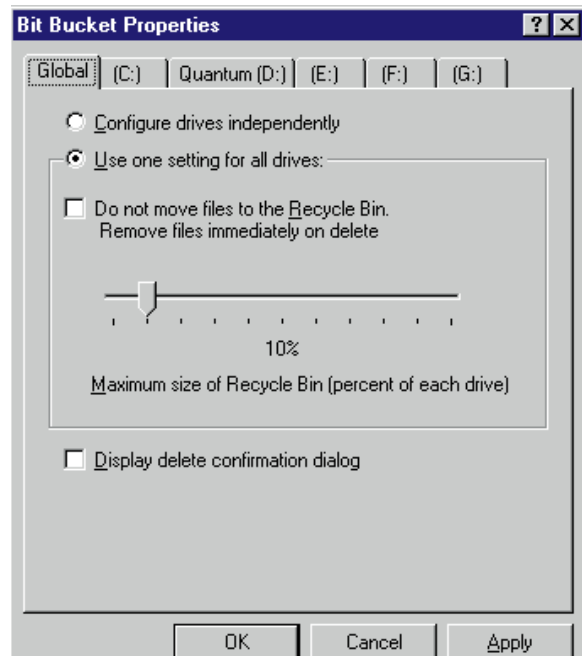
you can see what is really going on: as well as the deleted files (which have cryptic names), an "Info" file records the original name and path for each file. So leave them all alone.

*Q. How do I retrieve something from the Bin?*

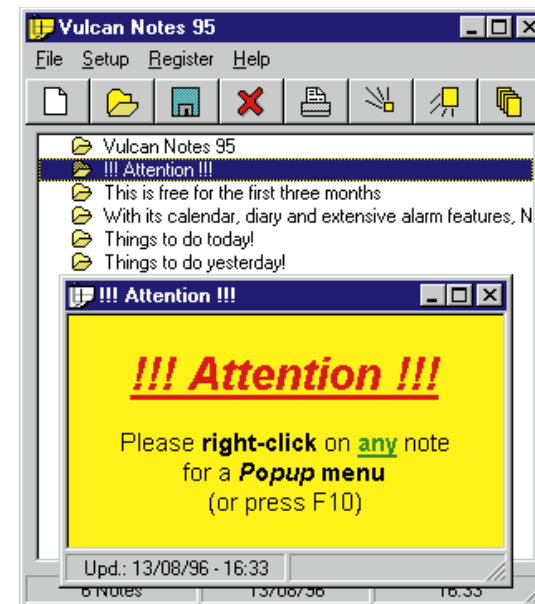
A. If you've just deleted it, right-click in any folder, or the Desktop, and choose "Undo delete". Open the Bin, right-click on the wanted file and select "Restore" to put it back where it was. You can drag files out of the Bin to any open folder, or the Desktop.

*Q. I don't make mistakes. If I want to delete something, I want it really deleted and I want it to stay deleted. How?*

A. Four ways. If you Shift + Delete a file, it bypasses the Bin and goes straight to oblivion. Alternatively, right click on the Bin, select "Properties" and check the "Do not move files to the Recycle Bin. Remove files immediately on delete"



**The (renamed) Recycle Bin properties. You can limit the size overall or on a per-drive basis**



Vulcan's main window, with a sample note inset

to create the file, two to be able to rename it and two more clicks to open it. By which time, I've forgotten what it was I was going to type or paste in.

Moving on, I then found it much simpler, although less exciting, to have a shortcut to Notepad on the Desktop, with the properties set to "Start in..." my C:\WINDOWS\DESKTOP folder. A double-click to create, and a "File/Save As..." to name it, with the destination already set to the Desktop. This worked fine for a while, until I found I either had to excavate below various

windows to find the various Notepad icons, or confine my word processing and other activities to the right-hand three inches of the screen.

*Q. As I said, I know what I'm doing, and get very annoyed when Windows asks me for confirmation on delete. How do I stop this?*

A. You can turn off "Display delete confirmation dialogue" from Properties, but this only applies to sending items to the Bin. If you bypass the Bin, as above, or empty some or all of its contents, you're stuck with the confirmation dialogue. There's one rather curious exception to this. A single .EXE or .COM file is deleted without further ado.

*Q. Er, how do I undelete something that has been bypassed or deleted from the Bin?*

A. You close down Windows and restart in single MSDOS mode. You use the Lock, Undelete, and Unlock commands. You run a risk of losing Long File Names, but this is the least of your worries, as you also run a risk of shutting yourself out of Windows and screwing up your system drastically. But then, as you said, you don't make mistakes. For further reading see Clive Akass' column on page 34 of PCW March 1996. And in a dictionary, check "hubris" and "nemesis".

## Nota bene

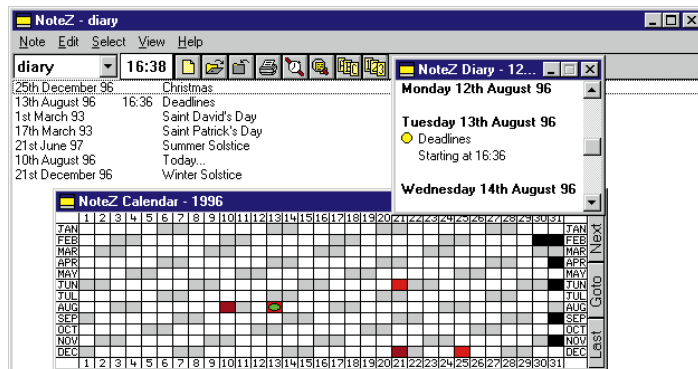
One thing I find myself doing a lot is making notes. Bits and pieces from email and the internet; details of commissions and deadlines, ideas, reminders, shopping lists — you name it, I scribble it. In the puppy-love stage of my relationship with Windows 95, I took a shine to the way you could create a new text file on the Desktop from the right mouse-button menu. This infatuation did not last. It takes three clicks

windows to find the various Notepad icons, or confine my word processing and other activities to the right-hand three inches of the screen.

Plan C saw a radical departure. I created a new folder on the Desktop called, with unashamed explicitness, "Notes". Doubtless I shall hear from Lotus' solicitors, but I like to live dangerously. I could have created the folder elsewhere and put a shortcut with the icon of my choice on the Desktop, but I decided to save that little treat for another day. I then redirected the Notepad shortcut "Start In" to here, set the Notes folder view to "List" and moved all the Notepad files into it. With this stroke, I reached the long-sought objective of just one row of icons on the Desktop.

There are, of course, better ways to manage this. Over the years, several electronic versions of sticky yellow (I'm not allowed to use the P-word for legal reasons) notes have appeared. And I think I've tried most of them. Winpost was my favourite for years, but its author, Higgy Higashyma, took a job with Microsoft and ceased developing it further. In April, I mentioned another product, which had two rather crippling limitations. You can only have one note, and its unauthorised use of the P-word means I'm not allowed to mention it.

So, I've been looking at two newish shareware note products. In the red corner, weighing in at 291Kb, from Colorado, USA, comes Vulcan Notes 95 (Vn95.zip on our CD-ROM). In the blue corner, all the way from Chester, England, comes the latest version of John Rennie's Notez, a wiry 151Kb under the name of Ntz324.zip.



**NoteZ main window with the calendar and diary inset**

search (but no replace) feature where notes containing the search string are highlighted in the list. You can

“logical” drives, or use disk compression software that packs everything into one big file. Or, depending on your point of view, one big disaster-waiting-to-happen.

FAT32 supports partitions up to two terabytes. Yes, I had to look it up as well, but a terabyte is a mega-megabytes, which will probably be just enough for Windows and Office 2005. Cluster size is down, with a sub-8Gb partition using 4096-byte clusters. Other good news is that it is more robust, working from a backup copy of the table, and there is no limit on the number of entries in the root directory. It also allows dynamic resizing of partitions without data loss, but this won't be available in this release. (To go off at a slight tangent, there is a commercial utility called Partition Magic which does just this with a normal FAT.) The bad news is that you won't be able to dual-boot. Only Windows 95 supports FAT32, not Windows 3.1 or previous DOS versions.

Windows NT users have had these advantages for some time, with NTFS, which allows compression and password-protection on a per-file basis. So why didn't Microsoft offer this as the way forward for 95 users? The official answer is that it “would have precluded the use of many MS-DOS mode games and applications.”

This seems a patronising message. The platform for business users is NT Workstation, at about £250 a seat. Windows 95, at about £60, is just for game players and home users. The fact that it's the SoHo and family users who need built-in security to stop children or colleagues messing with their files, remains to be addressed.

#### At the double, left click

Let's have a happy ending this month, with a great little tip from Richard Ansdell of Coventry. In Explorer or any other window with column headings, move the cursor to a join in the column headings so that the cursor changes into a two-headed arrow. Instead of dragging, if you double left-click, the column expands or contracts to fit the widest entry.

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 01202 716726  
**Vulcan Technology** can be found at [www.webcom.com/vulcan](http://www.webcom.com/vulcan)  
**John Rennie** can be contacted at [jrennie@cix.compulink.co.uk](mailto:jrennie@cix.compulink.co.uk)

Vulcan is simple enough to use. The “master” window contains a list of your notes. You can have up to 100 and each one takes its title from the first non-blank line in the note. Above the list are buttons for creating new notes, opening an existing text or RTF file into a new note (the original is left), saving, printing, deleting, and showing or hiding all notes. You can also do all these things, and more, by right-clicking on any open note. The whole thing consists of just one executable, and each note is saved as a separate file. You can “alarm” notes to serve as reminders, and they are automatically saved when you quit.

The USP (unique selling point) is that notes can be formatted much as a word-processed document, with alignment, font, colour, bullets and so on. The file format is a subset of Rich Text Format (RTF), but unlike the latter doesn't support things such as graphics or multiple columns, so perhaps we should call it Comfortably-off Text Format. There's a facility to search (and replace) text in all notes. The note with the searched string is brought “on-top” with the string highlighted. Unfortunately, this doesn't work on minimised or closed notes.

Like Vulcan, NoteZ, apart from its data and help files, consists of one .EXE, but it does add its .INI file to your Windows folder. It starts to get complex, as when you first start the program, three windows appear. A calendar, diary and a list of notes. This, and the lack of status bar or pop-up hints, sent me scrambling for the Help file, but I soon had everything under control.

NoteZ's USP is the way notes can be organised into folders — the samples include a rather mouth-watering collection of Italian recipes — and with its calendar, diary and extensive alarm features, NoteZ has more leanings to a personal organiser. Like Vulcan, it stores notes in RTF, and will open and save RTF files. Although the formatting facilities aren't quite as extensive, you can mix fonts in a note. There's a

open them all at once, but the strings themselves aren't highlighted.

NoteZ sticks an icon in the system tray: double-clicking creates a new note, and a right-click offers further options. Another touch I liked very much is the way you can drag and drop text between notes and other applications, which is something you can't do in Vulcan. Dislikes? There are no “Tooltips” on the buttons and there's no quick way of hiding all notes.

So there you have it. On the one hand elegant simplicity, on the other, feature-packed complexity. It's a question of personality, I reckon, as to which you prefer. Try the picnic test. Do you take along a bulky Swiss Army knife to cover all eventualities? Or do you prefer the bare necessities of a sharp blade and a corkscrew in a slim, sculpted handle?

#### Chewing the FAT

This autumn will see the release of FAT32 as part of OEM versions of Windows 95 — that is, installations that are pre-installed on new PCs. So what is it, and how does it affect us? The original FAT (File Allocation Table) dates from 1977 and was originally designed for storing data on floppy disks. Since then it has been fattened up to include hard disks, but it has several limitations which FAT32 seeks to overcome.

Two problems with the existing FAT concern large hard disks. First, FAT will only support disks up to 2Gb — a gigabyte being either 1000 or 1024Mb, depending on whether you're buying or selling. Secondly, FAT stores small files very inefficiently: each one takes up a “cluster”, which is the smallest unit the FAT can allocate. The larger the disk, the larger the cluster size. A 250Mb disk uses 4096 bytes per cluster, and a gigabyte-plus disk uses 32768 bytes. Which means an 800-byte shortcut is rattling around like a pea in a cabin trunk. The partial solution to this problem is to partition the disk into smaller,