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.
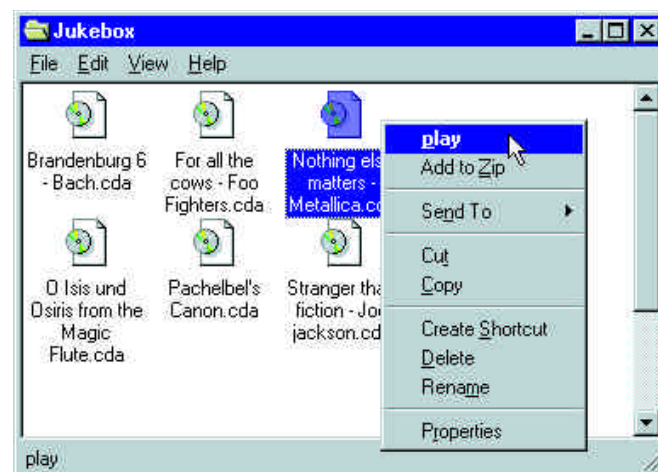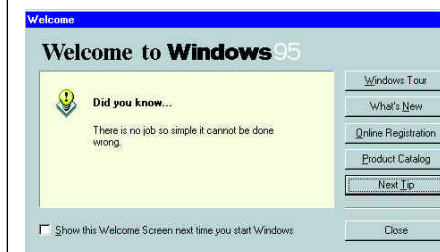

Geoffrey Solomon asked why, when you look at an audio CD in Explorer, all the tracks are 44 bytes long. By a strange coincidence, the same batch of email produced a similar query from Oliver Couzens. I had to admit that even I had never been so perverse as to Explore a music disk, but promptly did so. 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 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.

A witty thrust from James Dagger

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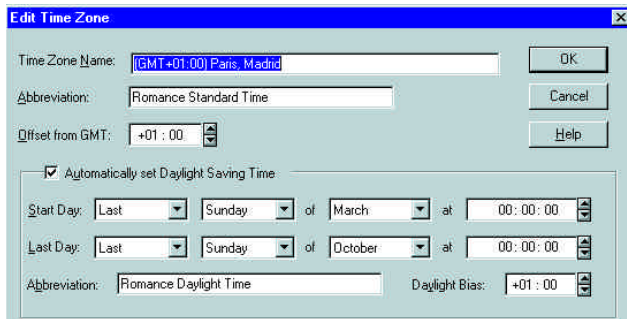
a good excuse to ferret around the registry in an effort to put things right.

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.

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

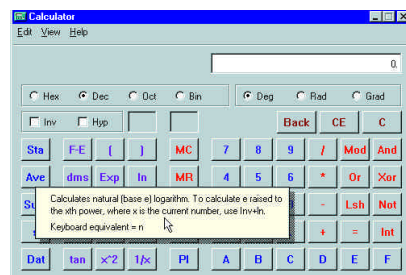■ Richard Ansdell has a tip for your autoexec.bat:

"*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.

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.