Defrag's a drag...

**...but it has to be done.
Tim Nott relates the triumphs
and the tears. And what about
the final cut of Windows 98?
The System Information tool
is just one of the features that
will cheer you up.**

These Hands On columns
are filed early in the *PCW*
production cycle and at the
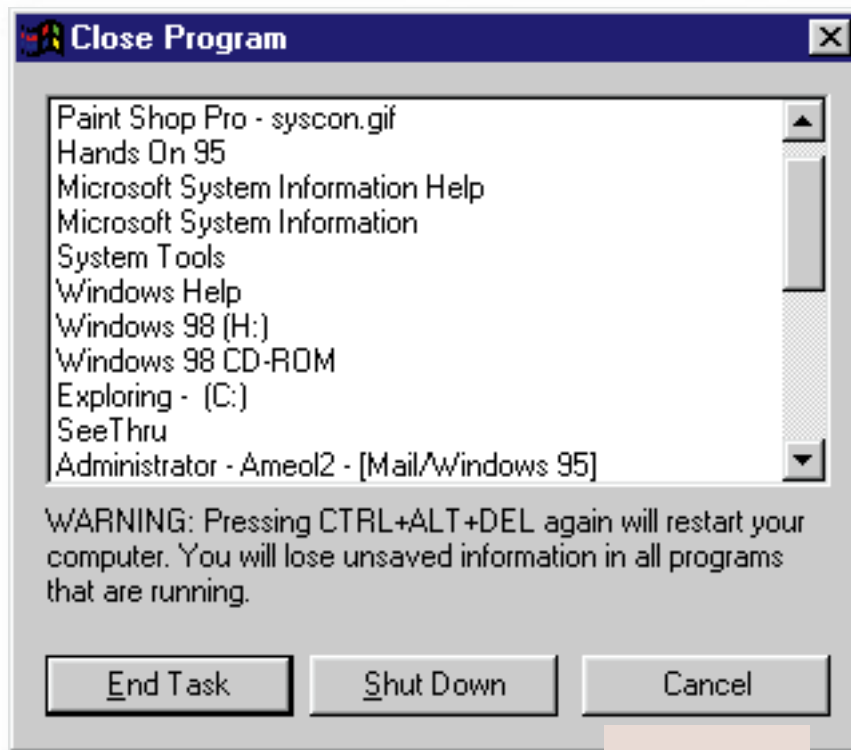time of writing I'd only been
using the final cut of
Windows 98 for a few weeks, although
I've been running the beta for several
months. One rather good feature is the
System Tune-up Wizard. It provides one-
stop shopping and scheduling for disk
utilities such as Scandisk and Defrag.

I had a joyous email from regular
Hands On correspondent Peter
McGarvey who stated that following a
defrag, the time to load Word 97 had
dropped from nine seconds to two. And
this on a modest P133 with 32Mb of
RAM. You're kidding, I quipped merrily. I
bet you're timing from a session where
Word has recently been loaded and
much of it is still cached in memory. And
lo, McGarvey restarted his machine from
scratch, clicked on the Word icon and
two seconds later had it up and running.

Unlucky for some

On this machine I have an even more
modest P100 but with 64Mb of RAM, so
my 13 seconds seemed comparable with
Peter's original nine. So, other things
being equal, I should see the load time
decrease to three or four seconds after a
good defragging. Given the marvellous
dual opportunity to speed up my system
and go out for lunch at the same time, I
set it optimising away. An hour later we
had both finished. I clicked on the Word
icon. But other things were evidently not
equal, as it still takes 13 seconds.

While we're on the fragging subject,
David O'Callaghan has requested that I
"stop betting food items to people that
Microsoft FindFast is the cause of all
their hard-disk-gnashing" (*Q&A, June*).
He cites screensavers, monitor power-
downs, background printing and

▲ **FIG 1 WHAT'S
GOING ON? CTRL +
ALT + DEL REVEALS
ALL**

Windows re-adjusting the swap file as
other possible defrag or scandisk
stoppers. Well, I wouldn't have thought a
screensaver would have caused
problems, but Roger Metcalf wrote from
Arlington, Texas, saying that he too had
experienced problems with night-
scheduled defrags. He wrote: "I was
finally able to trace the culprit back to a
screensaver program that occasionally
writes to the hard drive. Since I switched
back to a Microsoft screensaver I have
not experienced the problem."

Snooping around

Tony Bolton still had the problem after
disabling FindFast. Doing a Ctrl+Alt+Del
(always a good idea to be able to know
what's really running, see Fig 1) revealed
several possible culprits, including:
"Tk_schen, a virus-check scheduler;
Loadwc, a web checker but I don't know
what it does; Iowatch, something to do
with my Zip drive; and Ptsnoop (I have
no idea what this does). As far as I know,
the only other thing running is Dr.
Solomon's WinGuard."

The short answer to all this is that
anything which writes to the disk being

scanned or
defragged will
cause the
process to restart. And I'm rather surprised
at the lack of warnings telling you this
when you start. It's best not to have
anything else running. Applications which
Autosave are another possible culprit, as is
anything that logs data to a file.

Tooled up

One thing I don't like about Windows
98 is the hideously slow Welcome to
Windows tour, which is a triumph of
design over content. But it did lead me
to (eventually) discover something I *do*
like: the System Information tool. This is
squirreled away in Start menu,
Programs, Accessories, System Tools,
which is why it took a little time to find
it. And it's not a brand-new invention, as
Office users have had a similar feature
available from the Help, About box.

There's loads of wonderfully techie
information here about IRQs and DMAs.
This alone is enough to keep a seasoned
anorak happy for hours but the really
joyful, and mostly new, stuff is all in
the Tools menu.

Q Is there a way of creating a shortcut to change the resolution and colour depth? I have several games that will not run in my normal 1024 x 768 x 16.7 million colour mode, and it's a pain to have to change back and forth to play them.

MICHAEL ESKIN

a *Not that I know of. Some games are better-behaved in that they do this for you automatically (or sometimes after asking). The nearest thing I can recommend is QuickRes. This is part of the free MS Powertoys and gives quick access to all the resolution/depth combinations your display adapter can support from an icon in the System Tray.*

Q I'm network manager at our school and have over 100 PCs. I currently use POLEDIT to restrict access to the Start button functions like Control Panel and Printers. What I'd really like to do is restrict access to drive C: for everyone but particular users.

NICK FURNELL

a *Although there are more secure third-party solutions, you can hide drives in Explorer with the later versions of TweakUI (see screenshot, above). You should (at least according to the Windows Resource Kit) be able to do this with POLEDIT, too. But for a straight Registry hack try the following, having taken the usual precautions:*
HKEY_CURRENT_USER\ Software\Microsoft\Windows\ CurrentVersion\Policies\ ExplorerNoDrives= hex:04 00 00 00.

You may have to create the NoDrives entry as a Binary Value. The "04" will hide C: and all zeroes shows everything. And no doubt some bright spark will tell us how the other drives are calculated.

Q I have a large file called SYSTEM.1ST in my C:\ folder. What is it, and can I get rid of it?
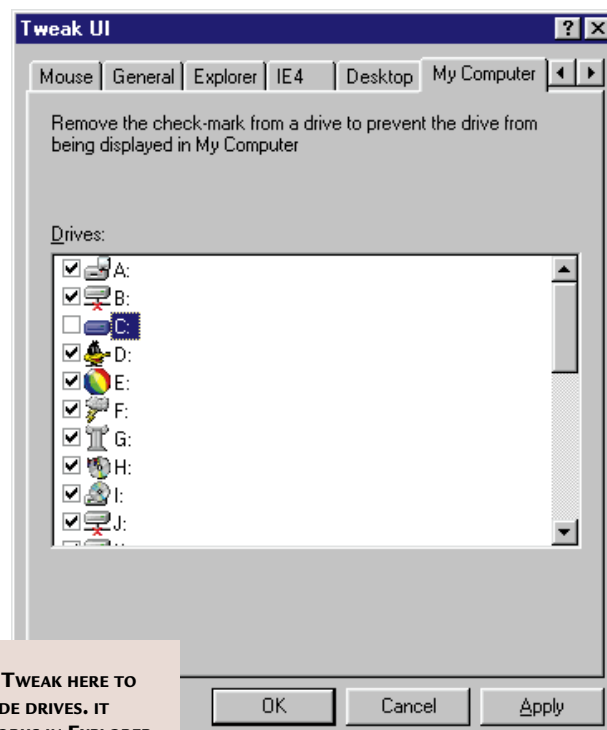
BARNEY RISSINGTON

a *This is a copy of the original Registry created when Windows was installed. It isn't essential to the working of Windows but provides a last-line backup should the Registry become corrupt. If you're desperate for disk space you could zip it up (unset the hidden and read-only attributes first) and stick it on a floppy.*

Q I am about to purchase a new PC with a 6Gb disk. Although I am sure you covered the subject some years ago, I am unable to find the particular issue of *PCW* that dealt with using Windows 95 and Windows 3.11/DOS as alternatives. Can this still be done? And if so, how?

HAROLD ALEXANDER

a *Yes. First you will have to FDISK the hard disk into smaller partitions, less than 2Gb each. Next, install Windows 3.11. Then install Windows 95 or 98. Ignore all the blandishments to replace your existing operating system and insist it installs the new version to a different directory. You'll then be able to dual-boot by pressing F4 or F8 at boot-up.*

Q I have just bought a PC to help my wife who has started using them at work. The system at her

▲ TWEAK HERE TO HIDE DRIVES. IT WORKS IN EXPLORER, TOO

office uses Windows 3.1. Is there any risk in installing 3.1 on the same machine as Windows 95, as long as the installation directory is called something other than WIN or WINDOWS? The idea is that I would close down 95 and go into DOS from where I would start 3.1 from the other directory.

EDDIE MCCABE

a *You cannot run Windows 3.1 that way but see the answer to Harold Alexander's query (previous column). But, as Mr Blair would say, there is a Third Way. Practically all Windows 3.1 programs will work fine in 95 (or 98) and you can still use the Program and File Managers that Windows 3.1 users have come to know and, possibly, love.*

Q Following a spate of crashes and Safe Mode starts, I now get the

StartUp option screen every time I switch on the PC. Eventually, if I don't press anything, it counts down and launches into Windows, but it's rather a nuisance. How can I stop this?

NIGEL COMLEY

a *Open Explorer and make sure that "View all files" is selected in "View, (Folder) Options, View". Then in the root of C:\ you will find a file called MSDOS.SYS. Make a backup, then right-click, Properties, and turn off the Read-only and Hidden attributes. Open the file in Notepad — despite the name it's a simple text file, but if you use the "Open with" command make sure the "Always use…" option is not ticked. You'll see a section headed [Options] and in here will be an entry named BootMenu=. If this is set to 1, then you will always get the Start Up menu. If it is set to 0, you only get it when you press F8.*

● There's a System Configuration utility [Fig 2] that lets you disable entries in Autoexec.bat, Config.sys, Win.ini and System.ini. More importantly, it lets you disable all those things that start up automatically when you load Windows, but are triggered from deep in the bowels of the registry rather than the StartUp menu.

Star turns

Then there's a System Report tool, to let you inform Microsoft in the unlikely event of your having any problems, and various other bits and pieces. The stars of the show, for those of a diagnostic bent, are the Version Conflict Manager and the System File Checker.

The first of these shows a list of all files that have been replaced with newer versions by software installation (including the Windows 98 upgrade). If you get problems with a particular application you can try restoring the original file.
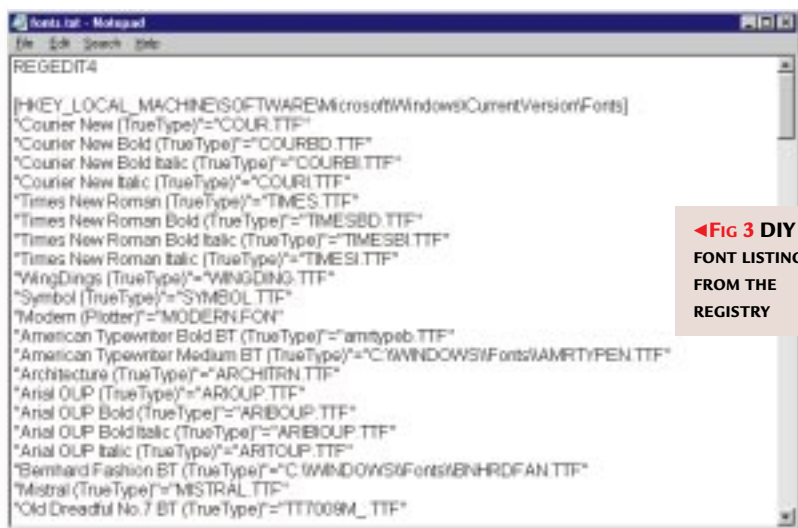
The second, as its name suggests, checks all your system files (with lots of options) and should it find any corrupted, will winkle out a fresh replacement from the CD-ROM without the user having to trawl about in the CAB files.

◄**Fig 3** DIY FONT LISTING FROM THE REGISTRY

◄**Fig 2** START-UP MYSTERIES REVEALED
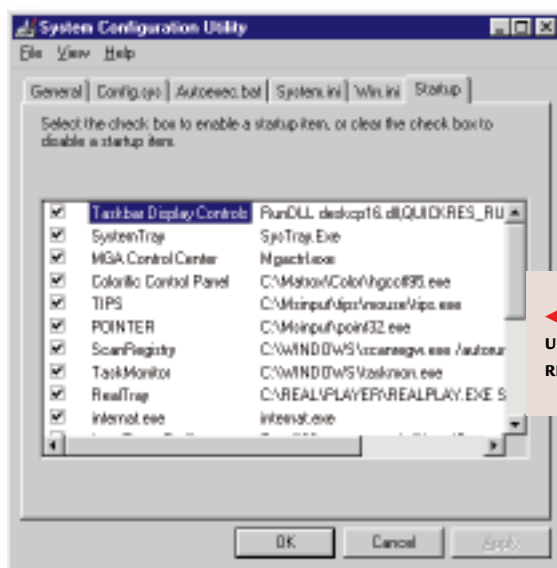
Font list tips ride again

● **More tips on the font list front**. You may remember the problem of getting a printable or saveable list of font names, together with their file names (*July issue column*)? Brian Handscombe has written a purpose-built DOS program that does just this. You can get it free from www.users.globalnet.co.uk/~cdman/.
● **One thing I'd add to the Readme file** is that to save the list, use the redirection symbol (for example, TTFNAMES C:\windows\fonts > fontlist.txt).
● **And here is a beautiful** piece of lateral thinking from David Mooney. Run Regedit. Go to MyComputer\HKEY_LOCAL_MACHINE\SOFTWARE|

Microsoft\Windows\CurrentVersion\Fonts. You will see a list of names and files in the right hand pane. Export the branch as, say, FONTS.TXT and then load it into Notepad [Fig 3].

If all else fails...

Here is a little lesson for us all. Following an enquiry from Duncan Stewart on why his CD Autorun didn't, I rounded up the usual suspects — Auto Insert Notification in Device Manager, AutoPlay as default action, and so on.

It still would not work, so Duncan took the eminently sensible step of contacting the supplier, because the machine was still under warranty. And they advised him to pop down to

Woolworth's and spend £9.95 on a CD-ROM cleaner disc. So he did. And now it all works perfectly.

Crazy as a fox

Regular readers may remember that this all started with the obscure tip of changing the "Quick brown fox..." text in Windows font viewer (*PCW*, March). There is nothing like a bit of trivia to get the correspondence flying, and the response has been so great that I don't have room to name names. The search for the perfect 26-letter pangram produced, among others:
● **Veldt jynx grimps Waqf zho buck**. Yes, all in the dictionary. But I can't really make any sense out of it.
● **Cwm fjord-bank glyphs vext quiz**. Very popular, but I'm a bit uneasy about this Nordic sea inlet in a Welsh valley.
● **XV quick nymphs beg fjord waltz**. I'll let the XV stand, but surely not a good place to dance?

None of the French ones I received consisted of just 26 letters but they comfortably beat the 73-letter default screed: *Servez a ce monsieur le petit juge blond assis au fond, une biere hollandaise et des kiwis*.

No more! You'll get me into trouble.

PCW CONTACTS