



# Boot fetish

Tim Nott does battle with bootups yet again, and "MSDOS Compatibility Mode" strikes a chord with readers. Some new Powertoys have a calming influence.

**C**harles Kirk read July's Windows 3.1 Hands On column, and wants to know if there is a similar method in Windows 95 for choosing whether to boot into DOS or Windows 95. "I find the F8 key option tedious. If my concentration lapses and I miss the moment, I end up in Windows 95 which does not like being interrupted and takes an age to load. When running an application in MSDOS mode, rather than a windowed DOS session, Windows restarts when the program is closed. I then have a long wait before I can switch off. I am not a patient man."

There are several things you can do, which involve editing the file MSDOS.SYS. This resides in the root of your boot drive and, unlike its DOS predecessors, is a plain text file. It is hidden and read-only, so open C:, go to View/Options/View and select "Show all files". Right click on MSDOS.SYS, choose "Properties" and uncheck the "Hidden" and "Read only" options. Then open it with Notepad. You'll see a section headed Options, to which you can add the following line:

```
BootDelay=n
```

where n is the number of seconds allowed to hit the F8 key after the "Starting Windows 95..." message appears. The default is 2. A better way is to add

```
BootMenu=1
```

which will always give you the boot options menu without having to press F8.

```
BootMenuDefault=n
```

chooses the default action if no key is pressed. This corresponds to the numbering of the menu items, and

```
BootMenuDelay=n
```

gives the number of seconds before that action is taken. It defaults to 30.

```
BootGUI=0
```

Use this without any of the options to stay with the C:\ prompt (equivalent to choosing "6. Command prompt only" on the menu). You can then do your MSDOS business, and either just switch off the PC or type "WIN" to load Windows. Remember to reset the properties of MSDOS.SYS to hidden, read-only after editing.

As a postscript, thanks very much to Ryan of London E14, who sent some tips on the boot menu, including the following invaluable information. "Normal: Start up Windows normally. Logged: I don't know what it does but it took a long time to start up Windows...". Empirically impeccable, Ryan, if a little lacking in hard information. What it does is create a file called BOOTLOG.TXT, recording the loading of all Windows' devices and drivers.

## Compatibility blues

My woes in *PCW* (June 1996) ("If at first you don't succeed...give up") struck chords with several readers whose systems had also started running in "MSDOS compatibility mode". This slows disk access down and seems to happen for no apparent reason. Control Panel/System/Performance reports that you have an "unknown driver" in CONFIG.SYS or AUTOEXEC.BAT, even if you don't have either of those two files. Despite virus-checking and attempting to re-install the affected devices, I couldn't make this go away and ended up reinstalling Windows. It seems to be a "your mileage may vary" problem. There are a

variety of answers, not all of which work for all users.

Someone who signs his or herself GrantsV mailed-in one solution: "I too have had the frequent joys of running in MSDOS Compatibility Mode when I install my backup HDD alongside my ordinary HDD, and load Win95. I have solved this little, if very irritating, Win95 bug. Remove your hard disk controllers from Device Manager, then 'Add New Hardware' and hey presto."

I tried that at the time but it didn't work for me. David Mulvaney had the problem on his home and work machines. "I thought it may be something due to the boot sector, so I replaced the hard disk master boot record using the FDISK/MBR command (you need DOS 5 or later), then from my Windows 95 Startup disk used the SYS command (A:> SYS C:) to replace the DOS boot sector." I haven't tried this, as the problem hasn't returned, but be careful with the FDISK command as you can destroy all the data on your hard disk. The /MBR switch isn't documented in the DOS help, but according to the MS Knowledge Base it "should not be used if the disk was partitioned using Storage Dimensions' SpeedStor utility with the /Bootall option, or more than 4 partitions exist or certain dual-boot programs are in use."

Simon Pomeroy got the problem when plugging in a removable hard disk and had to re-install Windows. Mike Turner-Sterling also had this happen after installing an Etherlink card. "To cut a long story short, Microsoft says this is a hardware problem. I have had an engineer on-site three times and, although we can recreate the problem with ease, we cannot cure it."

David Beattie of Gravesend also had the problem. He renamed AUTOEXEC.BAT and CONFIG.SYS so they would not be processed. Having rebooted, everything still worked but he was still in MSDOS compatibility mode. Next time he shut down and rebooted, lo and behold, he was back at optimal performance. "For no particular reason I thought I'd put AUTOEXEC.BAT and CONFIG.SYS back to normal and the

machine still ran at optimal performance."

The Knowledge Base has quite a lot to say on the subject of MSDOS compatibility mode, including a reference to "Unknown hooker MBRINT13". It goes on to explain that you may find a clue in a file named IOS.LOG, situated in the Windows folder, or by pressing F8 at boot and choosing to create a BOOTLOG.TXT file. It doesn't go much of the way to explain why this should happen out of the blue, when there are no CONFIG or AUTOEXEC conflicts and no new hardware.

In my case, where no new hardware or disk changing was involved, the virus theory looks the most likely, despite the lack of alarms from the usually reliable McAfee. Fraser Smith had the same problem and wrote that "Thunderbyte, S&S and McAfee failed to detect a virus, yet Norton came up with WelcomeB. It just goes to show that virus checkers are not infallible."

I did come up with a quick fix for the situation where anti-virus software fails, as in Fraser's case, yet an unknown 16-bit TSR/driver has apparently been loaded before Windows 95. All you need is a bootable floppy disk. Copy SYS.COM to this floppy and set write-protect on. In the event of something tampering with your BOOT sector, booting from the floppy and running SYS C: from the prompt will replace the offending boot sector." That would seem to be supported by David Mulvaney's experience, although it's worth trying SYS on its own before the more scary

FDISK/MBR stuff. In the meantime, beware of "unknown hookers" bearing viruses.

## Powertoys revisited

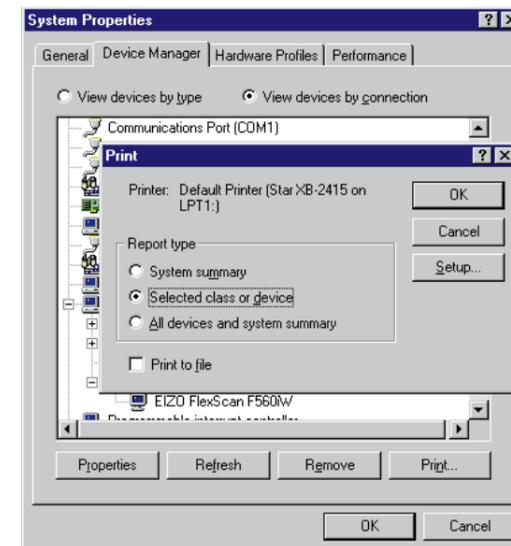
I think I'm starting to get the hang of this desktop thing. Apart from the shortcuts that Windows installs there, I find I tend to use it for temporary things like shortcuts to folders and documents I'm working on, screenshots, copies of email messages, to-do lists and so on.

Like junk on my real desk, it tends to pile up, and the thing that I really find annoying is that the icon I want is always buried beneath a stack of windows. Even though I've got an enhanced keyboard, where the Windows + M keys will minimise everything (you can do this on a normal keyboard with Ctrl + Esc, Esc, Alt + M), I've never really got into the habit of doing this, or right-clicking on the Taskbar and selecting "Minimize all Windows".

Although it's attractively ruthless, like sweeping the contents of a real desk on to the floor, it's often similarly counter-productive. If you want to drag an icon into an open folder or application, you either have to restore the minimised destination and then move it out of the way, or drag the icon to its taskbar button, wait for it to open while still holding down the mouse button, then drag it back up. If you let go of the mouse button, you have to start again. One answer is to have a shortcut to the desktop. You can put this in the Startup folder so you can access the desktop folder from one

## All you ever wanted to know...

Just to make a change from things going wrong, here's a tip for when everything is going absolutely swimmingly. Open the System icon in Control Panel and select the Device Manager tab. Click on the Print button. You'll get a choice of a System Summary with or without details of all devices and drivers. The former runs to two pages, the latter to nine on my PC, though real power-users claim thirteen or more. Keep this somewhere safe and it should save much messing around should you get any hardware conflicts. Thanks to Andrew Katz for that advice.



Print those hardware settings now, while it's all working

click on the Taskbar.

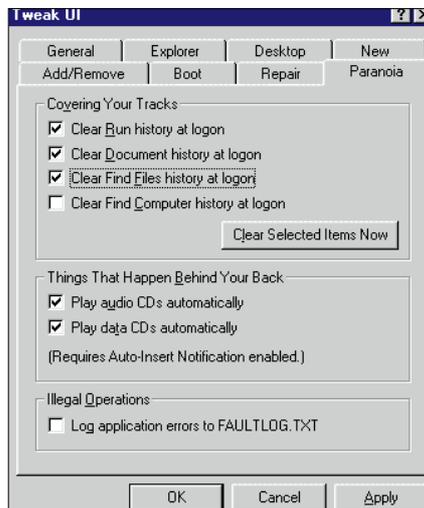
The snag with this is that it reveals the difference between the physical folder, c:\windows\desktop, and the metaphysical desktop entity that sits at the top of the tree containing c:\windows\desktop and all the stuff like My Computer and the Recycle Bin. In other words, the latter aren't shown in the folder. You can create shortcuts to them, but then you'll find that the metaphysical Desktop has both the "real" My Computer and Recycle Bin and the shortcuts as well. What a mess!

Enter the latest issue of Powertoys. If you missed out on previous versions, Powertoys is a collection of unofficial Microsoft add-ons and utilities. They are free, they're on this month's CD and pack an amazing amount into the quarter-megabyte file. The installation can be a little confusing, so copy PWRTY4\_7.EXE to a temporary folder and run it. It's an MSDOS (ho ho) self-extracting file, and will expand into .INF, .EXE and other files. Somewhere in that lot will be README.TXT, so do. You can then right-click on INSTALL.INF (if you have the folder View/Options/View/Hide MSDOS file extensions checked you'll just see INSTALL) and select Install. If it starts moaning that it can't find files or asking for disks, it's probably because your temporary folder has a long filename. It is rather daft, but that's Microsoft and ours is not to reason why, so rename it to an eight-letter or shorter one.

Once installed, restart Windows and you'll find a whole lot of new goodies to play with. You can also install them piecemeal as each Powertoy has its own .INF file. However, it's probably easier to install everything and then remove anything you don't need from Control Panel/Add-Remove Programs.

There's a lot here and as such I'm going to leave things like the round clock, the enhanced CD Autoplay gizmo, the truly wonderful Quickres and the truly horrible Xmouse as an exercise for the reader, and concentrate on the real goodies. Getting back to what I was banging on about earlier, you'll find a new shortcut in your Startup folder called Deskmenu. This produces a corresponding icon in the System Tray. If you click on this, you'll see a menu of everything on the desktop.

Next step is Control Panel to check out the latest version of TweakUI. I covered this back in February, but briefly it allows you to do all sorts of things that usually involve some heavy Registry editing. You can



Cover your tracks with the latest TweakUI

customise desktop icons, remove arrows from shortcuts, set boot options, disable "save settings" so that you don't start a new session by re-opening all the folders that you hadn't shut when you last closed down, and much more. Check out the Help file which you can reach from the "Tips" button on the "General" tab.

This version also brings some new stuff.

There's a "Repair" tab for mending icons, the font folder, associations and system files, and there's also a wonderful section entitled "Paranoia". This is the answer to Stephen Hollis' query in August's column, as you can clear the contents of the Recent Documents list, the Run list, and the Find list either on a one-shot basis or automatically at logon.

Then there are all sorts of new right-click enhancements. You can "Send To..." various flavours of email and the command line, and copy the path of a file to the clipboard. You can see the contents of a folder as a menu without opening it, although this doesn't always seem to work, and start an MSDOS session in any folder. There's a System Tray to change your dialling location, and a driver to print to an HTML file from any application (you have to install this by right-clicking on HTML.INF).

#### PCW Contacts

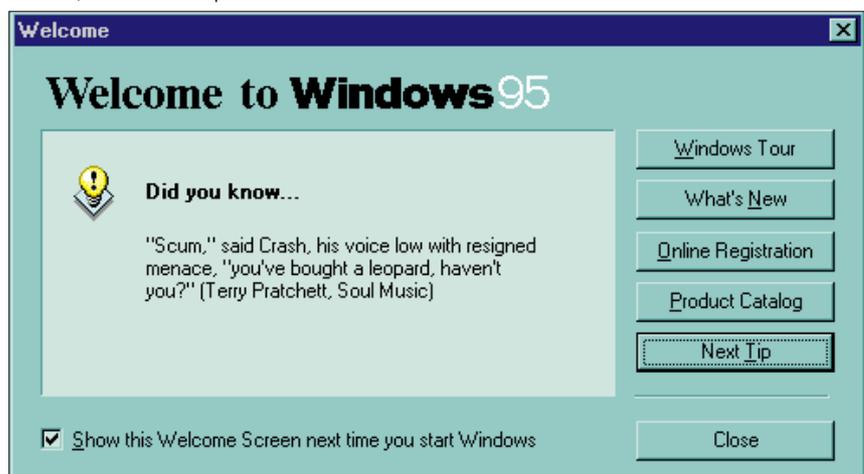
Tim Nott can be contacted either by post c/o PCW or by email at [timn@cix.compulink.co.uk](mailto:timn@cix.compulink.co.uk)

#### Tips, what tips?

Getting back to more serious matters. Where are your "Tips of the Day"? The response so far has been bitterly disappointing, with just one contributor. Fortunately, Ian Hogg, who describes himself as a writer, student and bon vivant, displayed a rare generosity of spirit with 48 tips. Well, Terry Pratchett's spirit, to be precise, as Ian is not so much a Pratchett fan as a complete ventilation and air-processing solution. All the quotes were either from Mr Pratchett's books, the man himself, or the alt.fan.pratchett Usenet

newsgroup. A couple of the best include: "Luck is my middle name," said Rincewind, indistinctly. "Mind you, my first name is Bad." And: "This isn't life in the fast lane, it's life in the oncoming traffic."

Thanks, Ian, and if you could let us have a few tips on how you can combine being a student and a bon vivant without Resource Conflicts, I'm sure the readers would be glad to know. As for the rest of you, send me your tips, and later in the year I'll compile a complete Registry set for the cover CD.



Nice one, Terry. Well spotted, Ian. Shame about the colour scheme.