Dirty **DOS**-ing

Tim Nott gets his hands dirty in DOS and brings news of Calypso, a freeware utility which brings you two of the best bits of Win95.

As I have mentioned before, this column now flies the DOS as well as the Windows 3.1 flag. I haven't given the former much coverage over the last two months so let's rectify that now.

A perplexed Henry Bevan emailed, saying: *"In my c:\ directory, I have got these copies of Autoexec and Config. Which ones can I delete? Autoexec.000, Autoexec.001, Autoexec.bak, Autoexec.bat (I know I can't delete that one…), Autoexec.cdd, Autoexec.dos, Autoexec.old, Autoexec.bat, Config.000, Config.cdd, Config.dos, Config.old and Config.sys (…nor that one)."*

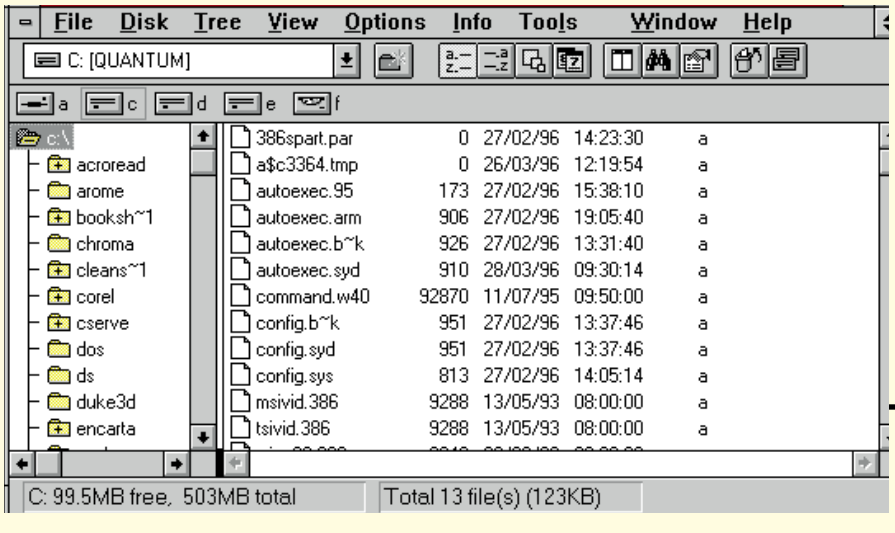
Good question. As Henry and I would imagine everyone else realises, Autoexec.bat and Config.sys are the startup files in current use. So what are all the rest and where do they come from?

The most likely explanation is that an installation of new hardware or software has changed these files and backed up the originals. There's no real rhyme or reason to the naming but if you've recently installed a "Cacophonous Custom Doomblaster" card, that's probably where the .CCDs came from. Any polite installation routine that makes changes to these files should firstly make backups, and secondly tell you what it's called them. Really polite installation routines will comment the new files, something like this:

```
REM - Following line added by
Doomblaster
device = c:\dblaster\bignoise.sys
REM - Previous line added by
Doomblaster
or if it removes a line
REM - device = c:\oldcard\oldcard.sys
- removed by Doomblaster
```

REM statements (REMarks) tell the PC to ignore the rest of the line — they are just there to inform humans. If the setup routine didn't comment the lines it added, you can always compare with the backup and add your own REMs. It's worthwhile doing it at the time as you can then delete the relevant backups. If not, it's worth keeping them around, at least until you're sure everything is working correctly. Though I said there's no rhyme or reason to the naming, there are a couple of exceptions. If you use the Windows System File Editor (SYSEDIT.EXE) to edit these files, it will automatically create backups with the extension .SYD.

The other extensions to watch out for are .DOS and .W40. If you're dual-booting between Windows 95 and Windows 3.1, the system maintains two sets of AUTOEXEC.BAT and CONFIG.SYS, which are renamed on startup. When you're in Windows 95 or DOS 7, then the Windows 3.1/DOS 6 (or earlier) set is renamed with the .DOS extension. When you're in the earlier version, the 95 set is renamed with the .W40 extension, so don't delete these. Just to confuse matters, you may not have these files under Windows 95, as it doesn't need them if "Protected Mode" drivers are installed for all your devices. But if you have; again, don't delete them.



Will the real configuration files please stand up?

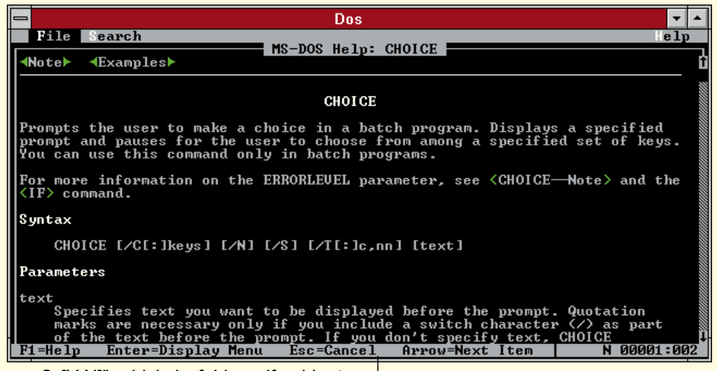
A matter of Choice

Reader Mike Coe asked: *"I believe there is a way of defining alternative startup configurations for DOS. Specifically, I like to boot into Windows by default (i.e. just by turning the computer on and waiting). However, I would like to be able to boot to a DOS prompt as an alternative, just by pressing a single key on start-up, so that AUTOEXEC.BAT is processed in its entirety, except for the last line, 'WIN'."*

Well, there's an easy way and a complicated way to do this. The easy way involves using the MSDOS "CHOICE" command. This comes with version 6.x but was widely available before that. You can only use it in batch files and what it does is prompt the user for a choice, then act according to the "ERRORLEVEL" returned. To do what Mike asks is simple but let's first practice on a dummy batch file. Create this with Notepad, or DOS EDIT and save as "CHOOSE.BAT".

```
@ ECHO OFF
CHOICE /C:YN Start Windows now?
IF ERRORLEVEL 2 GOTO SKIP
ECHO You pressed Y
GOTO END
:SKIP
ECHO You pressed N
:END
```

The "@ ECHO OFF" stops the commands "Echoing" to the display: without this you see everything twice. The next line invokes the CHOICE command and will produce the prompt "Start Windows



The DOS help file gives the full lowdown on this versatile command

now? [Y,N]" which is fairly self-evident. CHOICE returns an ERRORLEVEL depending on the key pressed — the first choice produces 1, the second 2. In this example, we have only two choices but you can have more.

What's important is the way DOS interprets ERRORLEVELS. "IF" statements will be deemed to be true if the ERRORLEVEL is equal to, or greater than, the number specified. Hence, in a simple two-way choice, "ERRORLEVEL 1" will always be true so we have to process the ERRORLEVELS in descending order. The next line, therefore, tells DOS to go to the label "SKIP" if the ERRORLEVEL is two — i.e. the user pressed "N". Note that labels themselves (:SKIP and :END in this case) are preceded by a colon, but references to the labels (…GOTO SKIP) aren't.

If the user pressed "Y", then the "IF" statement is false and the first GOTO ignored. The message "You pressed Y" is ECHOed to the screen, the next GOTO bypasses the SKIP label and the "You pressed N" message.

CHOICE is a fairly user-friendly command — it isn't case sensitive, unless you use the /S switch to make it so, and if the user types any other key it will just sit there and beep until "Y" or "N" is pressed, or Control + C which cancels the batch file.

There remains, however, one further refinement to satisfy Mike's brief. Add the switch "/T:Y,5" to the CHOICE command. This will instruct CHOICE to wait five seconds (values can be from 0 to 99) before returning a default choice of "Y".

So, moving on to the real thing, it's even simpler. If you substitute the following for the "WIN" line at the end of AUTOEXEC.BAT, you'll get five seconds in which to opt for Windows or DOS. Do nothing, and Windows will load as before.

```
CHOICE /C:YN /T:Y,5 Start Windows now?
IF ERRORLEVEL 2 GOTO DOSPROMPT
WIN
:DOSPROMPT
```

Number nine dream

One of my all-time favourite DOS utilities is just coming up for its ninth birthday. It's a text viewer that, unlike Windows Notepad, can display any size file. It will search for text, view in hex or ASCII, filter out junk, split the display into two windows, and you can load a series of files by using wildcards. Type *.TXT at the load prompt, and Ctrl + Page Down/Up will cycle through all the .TXT files in the current directory.

You can change the number of lines and the display colours, shell to DOS without closing the current file, and there's even online help.

Unbelievably, all this packs away into just 8,192 bytes of code. It's called LIST.COM and it was written by Vernon D Buerg in 1987. While it's not — as far as I know — marketed as shareware, the help screen suggests that: "If you find LIST of value, a gift of $15, or any amount, would be greatly appreciated." I don't have an online source, but it's on this month's cover-mounted CD-ROM.

Vernon Buerg's file viewer — vintage 1987, but still excellent

PCW Contacts

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Keeping control

Last month, the Shift key had the spotlight — this month it's the turn of that ever popular denizen of the keyboard, the Control key.

1. File Manager
When dragging files between directories, holding down Control forces a copy, even on the same drive.

2. Program Manager
The same trick works for copying Program Manager icons between groups or to the same group.

3. Clipboard
Control + C copies to it leaving the original, Control + X copies and removes the original. Control + V pastes from it.

4. Write
Control + click in the margin selects the whole document.

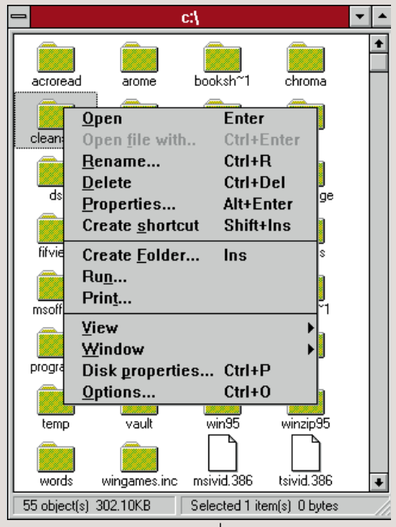
5. More Write
Control + B, I or U toggle Bold, Italic and Underline on and off.

6. Even more Write
Control + Enter forces a page break. All these work with Word, too.

7. Most applications
Control + Z undoes the last action.

8. Paintbrush
Dragging a "cut-out" with the Control key held down leaves the original in place.

Tripping the light Calypso



Nested folders and right-button shortcuts — Calypso brings the Windows 95 look to 3.1

Back in the gloriously GUI-world of Windows, the most fun I had this month was with a prototype model of Li-Hsin Huang's Calypso. This was written in Borland Delphi and there's no complicated installation routine — you just copy the files to a new directory. Run Calypso and two little icons appear at the left of your screen: one entitled "System", the other "Trash". Double-click on the System icon and a window with all your disk drives appears. Double-click on one of these and all the directories and files in the root appear in a separate window, and so on down the line. You can drag files to the Trash icon, drag them between windows and create shortcuts to files or directories on the desktop. And if all this sounds terribly familiar, well, it *is* almost like Windows 95. It's on the cover CD as Calypso.zip, and the author can be contacted as Lhh@doc.ic.ac.uk. Remember though, this is a prototype and hence, freeware. Read the documentation for a list of possible problems. You should also note that it won't work with the "large fonts" option of display drivers and that the Trash Can auto-empties itself on exit.