



Brahms & List

There are some things for which we still need good-old DOS. Tim Nott shares some tips for saving and printing file lists, and indulges in an icon-fest involving tubas and footballs. It takes all sorts...

Some things never change. Under Windows 3.1 it is impossible to save or print a directory listing without either running a DOS session or using a rather awkward kludge involving the back-up utility. In Windows 95 there's still no built-in way of saving or printing a list of the contents of a folder — believe me, I've tried. The Find File utility looked like a promising start, as you can save a Find together with its results — you end up with a *.FND file on your desktop. Alas, this is only usable by Find itself: if you try to open it with Notepad, for instance, you'll see mainly gibberish.

Having played around with File Find for a while, I can tell you one thing *not* to do. It must have been one of those "bad brain" days, as in a moment of absent mindedness I highlighted all the results of a search for *.TXT files, right-clicked and selected Print, in a misguided attempt to print the list.

Oh dear. The first file loaded into Notepa, and started printing. Though in hindsight this seemed perfectly reason-

able, it was not what I wanted. While it was doing so, the second opened into a new instance of Notepad, and that started printing. At this stage, I came to my senses and switched off the printer. This had the interesting result that Notepads kept on loading, but each also produced an error message. Trying to hit the Cancel button on the error messages and the Close button on the Notepads was rather like one of those arcade games where you have to move the mouse around very quickly and accurately, shooting things before they take over the world. It must have taken about 20 minutes to get everything under control, and I wasn't even invited to add my name to the "high score" table.

Doing it the easy way

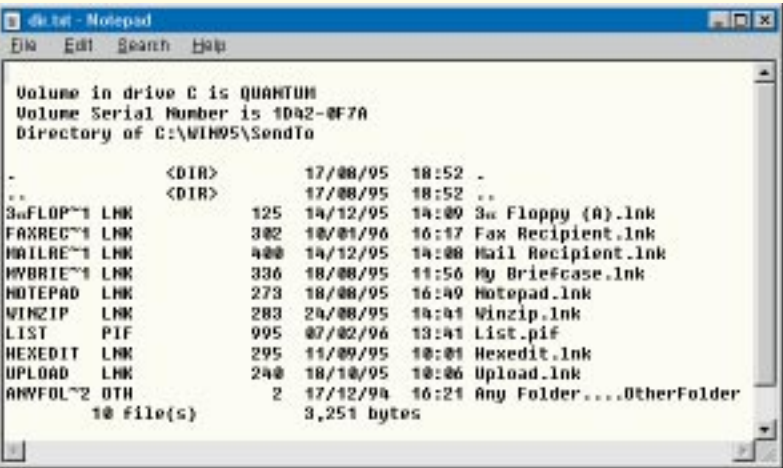
So, back to DOS, where it's easy, if a little primitive. Open a DOS session, change to the folder of your choice with the CD command, and type: DIR > DIR.TXT, omitting, as always, the single quotes. Lo and behold, the > sign redirects the output to a file rather than the screen, and you end up

with a text file, DIR.TXT, located in the current folder, containing a list of all the files and folders therein. By default, each line will contain the MSDOS filename (truncated to 8 + 3 characters), the size, creation time and date, and the long filename. You can change this using "switches". Typing DIR /V >DIR.TXT, for example, gives a "verbose listing" with the attributes, last date accessed and allocation size added.

Just to go an a brief tangent, this last tells you how much actual disk space the file is taking up. This is a factor of "cluster size" — the minimum chunk of hard disk that the operating system can allocate to a file which depends on the size of the disk (or partition). If you've got a 500Mb partition it's 8192 bytes, so each of those little shortcuts of a few hundred bytes waste over 7Kb of disk. Going up it gets worse — 16Kb over 512Mb and 32Kb over 1024Mb.

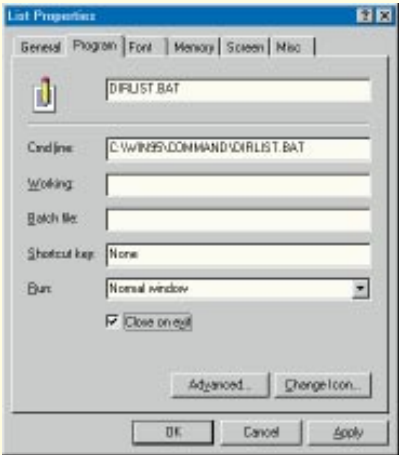
Switch glitch

There's a whole load of other switches: /S shows the contents of all sub-folders, /L displays everything in lower-case, and /B



Left
The results of sending the SendTo folder itself to the List shortcut

Right
Changing the properties of the PIF shortcut



Icon do anything....

And now for something more frivolous.

Tobie Osmond emailed from Devon to say that "For a few months now you have been saying that it is possible to change the icons in Windows 95 through the properties sheet by right-clicking. For some reason, I still can not work out how... I am getting bored with some of the icons I have and would like to change them."

I think we've covered most of this in bits and pieces before, but let's take the opportunity to indulge in a comprehensive icon-fest. The first thing to notice is that all icons are not equal. Taking the easiest first, shortcuts initially assume the icon of the target. If that is a folder, you get the default folder icon. With a program, you normally get the icon built in to the .EXE file, and if the target is a data file then you get the program icon associated with that kind of file. In all cases, you get a small arrow added to the bottom left of the icon. Changing a shortcut's icon is simple — right-click, choose Properties, click the Shortcut tab and you'll see a button labelled Change icon. This opens another dialogue box showing the icons available in the current file. If this is a program file, you'll usually only get one icon to choose from, though some applications — Notepad, for example — have more. If the shortcut is to a folder you'll probably get a choice of all the icons in WINDOWS\SYSTEM32.DLL, which contains all the system-wide icons such as folders and the Help book, as well as a few others such as a rather fine tree. If none of those turn you on, you can use the Browse button to explore any file on your system. Icons can be embedded in .EXE or .DLL files, in standalone .ICO file or in third-party "libraries". Check out PIFMGR.DLL in WINDOWS\SYSTEM for some nifty examples.

No matter which icon you choose, you'll still have the little arrow in the corner. Personally, I find this a great help — I like to know if I'm about to delete a shortcut or an

actual file; but some people take a strong dislike to it. TweakUI (February's *Hands On* and *CD-ROMs*) will remove these, but beware — there are bugs (see the readme file) that can land you in trouble.

Program (.EXE) icons can't be changed, unless you want to use a programmer's resource editor to hack them. In which case, what are you doing reading this column? Data files can, however. Let's say, for instance, you want all Text files to have a football icon rather than the rather dull Notepad one. Go to the View menu of any folder or Explorer window, select Options and click the File Types tab. Scroll down to Text Document (hint — type T to save a lot of scrolling) and highlight it. You'll see the icons for both the file type and the application it opens with below. Click the Edit button, and at the top of the next dialogue box you'll see Change Icon. The procedure is then exactly the same as for shortcuts, so browse to WINDOWS\SYSTEM\PIFMGR.DLL and scroll through the icons until you find the football. Personally, I prefer the tuba, but it takes all sorts. Close your way back through the dialogues and all your .TXT files will now be represented as footballs, as will all future shortcuts to .TXT files.

Although there are file types — at least on my system — for File Folders and Folders, both of which let you change the icon, this doesn't actually seem to do anything apart from change the icon in the file type list. If anyone has found a way to change the default folder icon, please let me know.

The system desktop icons can't be changed by mortal means — right-click on My Computer or Recycle bin and the Properties dialogue doesn't offer an option for changing the icon. To do this you either have to edit the Registry (see the Tips panel in February's column) or use something, such as TweakUI or MS Plus! that will do this for you.

gives a "bare" listing with just the file and folder names. You can combine switches — /V /L will give a verbose lower-case listing, and if you want the full switch list, type DIR /?. Avoid using the /P (pause) switch if you're redirecting output to a file: this is for screen use only and stops the output after each screenfull.

To move around folders you use the CD (Change Directory) command. Normally, CD STUFF takes you from the current folder to the folder STUFF one level

below. If you want to go elsewhere, CD C:\OTHER\THINGS takes you there. If you want to change drives, just type the drive letter and a colon — e.g. D:. If you want to go up a level, type CD.. — three dots takes you up two levels, and so on. I don't know if there's a limit to this, but my current record is five levels (six dots). With Windows 95 long folder names, there is a problem. You probably have a folder called Program Files in your C: drive. But if



you type CD Program Files you'll get an error message, as DOS doesn't like the space. The way round this is to either type the MSDOS name, which in my case is PROGRA~1, or enclose the folder name in double quotes — CD "Program Files".

On the right path

At this point you may be thinking: "Stop! I only wanted a file list, not a dissertation." Fair enough — here comes the clever bit. Start up Notepad, and type in, on the first line:

```
DIR%1%> C:\WINDOWS\DESKTOP\DIR.TXT'
```

then press the Enter key. If that isn't the path to your desktop, or you want to save the list elsewhere, modify accordingly. Save this wherever you like as DIRLIST.BAT.

Open the folder where you've just saved DIRLIST.BAT, and open also the SendTo folder which should be in your main Windows folder. Right-drag DIRLIST.BAT into SendTo and choose Create Shortcut. The shortcut you have is not a normal .LNK file, it's a DOS Program Information File, or PIF. Right-click it, select Properties and go to the Program tab. Clear the box labelled Working and tick the Close On Exit box. Leave Run as Normal Window — it won't work minimised. You can rename the shortcut to something more elegant than Shortcut to dirlist.bat if you like — mine's just called List.

It only takes a second

And that's it. Right click on a folder, select Send To and click on the new shortcut. In a second or so you'll have a Notepad file on your desktop entitled DIR.TXT with a listing of the contents of the selected folder. Pretty cool, or what? Note that any existing DIR.TXT will get overwritten with each Send To... You can change this so the file gets added to, rather than replaced by, replacing the > sign with >>. If you want to save DIR.TXT in the folder you are listing, rather than the desktop, then change DIRLIST.BAT to read:

```
cd %1%
dir %1% >dir.txt
```

The %1%, by the way, instructs DOS to take the folder name as the target of the CD and DIR commands. You can of course incorporate any of the switches mentioned earlier.

Finally, you can send a list straight to the printer by putting LPT1: (or whatever your printer's connected to) to the right of the > sign. If for some reason it's not working, go back to the shortcut: Properties and clear the Close On Exit box — you'll then be able to see any error messages that occur.

Fig 1 DDE speed test macro

```
Sub MAIN
channel = DDEInitiate("Excel", "rob.xls")
If channel = 0 Then
    MsgBox "Failed to initiate conversation"
Else
    start$ = Time$()
    For count = 1 To 5000
        cell$ = "R" + Mid$(Str$(count), 2) + "C1"
        DDEPoke channel, cell$, "123"
    Next count
    DDETerminate channel
    end$ = Time$()
    MsgBox "Started at " + start$ + " finished at " + end$
End If
End Sub
```

Strange goings-on in the Office

There's something strange about Microsoft Office 95, as reader Rob Thompson points out, and that is Dynamic Data Exchange. Now I know we're all supposed to be using OLE these days, but there are certain things that OLE just won't do. Perhaps when Word eventually gets equipped with Visual Basic for Applications this will change, but at the moment, if you want, say, Word and Excel to communicate automatically you still need to use DDE.

If you haven't a clue what I'm talking about, turn to this month's Windows 3.1 column (page 258) for a brief explanation and tutorial. Everything there applies to Windows 95 too, and the macros work under Word 7/Excel 7.

Anyway, Rob sent in the short Word macro listed in Fig 1 (page 254). All this does is make a note of the time, then fill 5000 successive cells in Excel with the value 123, then take a second time check. You need to run this from any open Word document, and have an empty spreadsheet called ROB.XLS open in Excel. I've changed Rob's original macro slightly to show the seconds. As it happens, seconds aren't terribly important in Windows 95, as the total time taken was over 9 minutes. Under Windows 3.1 it was around 30 seconds, and 40 seconds under Windows NT.

Rob did his tests on a different Pentium machine, so I thought I'd try on my humble dual-booting 486/50. Though the contrast wasn't quite as spectacular, the job was completed in 1 minute 12 seconds under Windows 3.1/Word 6/Excel 5 as against 8 minutes 38 seconds in Windows95/Word 7/Excel 7. Being a sucker for punishment, I tried once more under Windows95, this time using Word 6/Excel 5. One minute 28 seconds, this time. According to the

Microsoft Office Support person Rob spoke to, this is a "32-bit problem" and DDE was "an outgoing function". However, he had no suggestions for achieving the same end with OLE and couldn't explain why the "32-bit" problem didn't arise under NT.

Roll-your-own-icon update

Should you want to roll your own icons then the news at present is not encouraging. The only icon utilities I've managed to track down for Windows 95 are the Microsoft Imagedit utility that came with some Beta versions of Windows 95, and a program called Ezicons by Paul Traver. The former is an icon editor; it will import and export .ICO and .BMP files but can't extract icons from .EXE or .DLL files. It also carries an extremely forthright copyright message, so we can't include it on the cover CD. The second is an icon management utility — it will extract icons from any file, and save them as .ICO files, .BMPs or in its own libraries. It doesn't, however, have any built-in icon editing facilities, though there is a rather awkward way round this using Windows Paint. It's also still in a Beta version and the author forbids inclusion on CD-ROM without express permission, so I'm afraid you're out of luck on this one too. If you want to contact him, however, his email address is 72144.422@compuserve.com. I'll dig further into icon editors in a future column, but meanwhile, if you've written or know of one please let me know.

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