



# Taking the register

Stephen Wells dips into the Registry to remove troublesome messages. Plus, adding background graphics to a worksheet, and problems with bins and cases.

**T**hese days, many Excel 7 add-ins have their own uninstall program. But when you start Excel after deleting an add-in, you may see a warning notice that such-and-such a file cannot be found.

If you right-click on the Start button and choose Explore, you'll find a program called Regedit.exe in the C:\Windows directory. If you can't find it, click the Name column and it will list the files in alphabetical order. Double-click Regedit to start it. Under the displayed MyComputer root directory you'll see several sub-directories starting with HKEY. You want HKEY\_CURRENT\_USER. Click on this to expand it, then successively expand Software; Microsoft; Excel; 7.0; Microsoft Excel. You are now six levels down from MyComputer. Go down to the sections with names starting with OPEN. If you double-click the first one it should read:

```
C:\MSOFFICE\EXCEL\LIBRARY\ANALYSIS
\ATPVBAEN.XLA
```

Go down to the last OPEN item. It may be OPEN4 or OPEN5. Click that and you'll probably see an entry like:

```
/F C:\MSOFFICE\EXCEL\
LIBRARY\Program.xla
```

The F switch simply tells Excel to add custom functions among the Insert, Functions menu items. An R switch would open the file as read only. If Program.xla is actually the name of the add-in you're trying to get rid of, just delete OPEN4 or OPEN5 entirely. Close Regedit. You won't have to restart Windows for the change to take effect. Just start Excel and the troublesome message will be removed.

This procedure is much like removing an entry to an .INI (initialisation) file.

Applications, like Excel 7, which only run under Windows 95, don't use .INI files. Everything they need to know is stored in the Registry.

Obviously, Windows 95 can run 16-bit software, like Lotus 1-2-3 Release 5 for Windows. What happens is that when Windows 95 is booted, it examines the WIN.INI, SYSTEM.INI and any additional .INI files, like 123R5.INI, to see if any unique device drivers need to be loaded. Then it moves on and takes its orders from the Registry, which could be defined as a database of everything Windows needs to know.

Look under User and you'll probably see your name. Font sets the default font which might be Times New Roman 10 or Ariel 10. Pos shows the co-ordinates, top, left, width and height of the opening position of the Excel application window. If Basics reads 0, the tutorial runs when Excel is started. If it reads 1, then the tutorial does not run. It's set at 0 when Excel is installed and changes to 1 after the first use.

The Options section offers numbers in hexadecimal and decimal. Choose decimal and it probably reads 87. This is the sum of the following values: 1 to show scroll bars, 2 to show the formula bar, 4 to show the status bar, 16 to use A1-style cell references (rather than Row 1 Column 1), and 64 enables DDE (Dynamic Data Exchange).

But I only pass on these additional details because they're interesting: the average user is well-advised to stay out of the Registry. Generally speaking, it's best to make everyday changes by choosing options in an application, or using Control

Panel, as Microsoft recommends.

## By design

It's always my little asides which get me into trouble. In a recent column I wrote that you can dress up your displayed worksheets by choosing Format, Sheet Background and selecting a graphic file. I should have left it there, but I slipped in the parenthetical thought that you could print sheets with a background if you have a colour printer. Wrong.

I didn't try it until Peter King emailed that only his worksheet would print. No background. Belatedly, I found Article Q134212 of 28/8/96, entitled Can't Print Background Graphic Included on Worksheet in the Microsoft Knowledge Base. It states: Although you can add a background graphic to a worksheet, this graphic will not be visible when you view your document in print preview or when you print it. The information in this article applies to Excel for Windows 95, version 7.0. And it goes on: This behaviour is by design of Microsoft Excel, because printing a background is extremely slow on most standard printers.

Time to call on Michael Rickard, an Excel guru at a leading West Coast university who has bailed me out before. He came back with a workaround. His instructions were in shorthand, so I'll spell out the steps I took to make it work.

Let's say you want to print the range A1 to H16 in OLDFILE over Microsoft's familiar Clouds bitmap:

- First make the Camera tool visible. (It's probably on the Utility toolbar.)
- Open OLDFILE.
- Now open a new worksheet. Select the empty range, A1:H16.

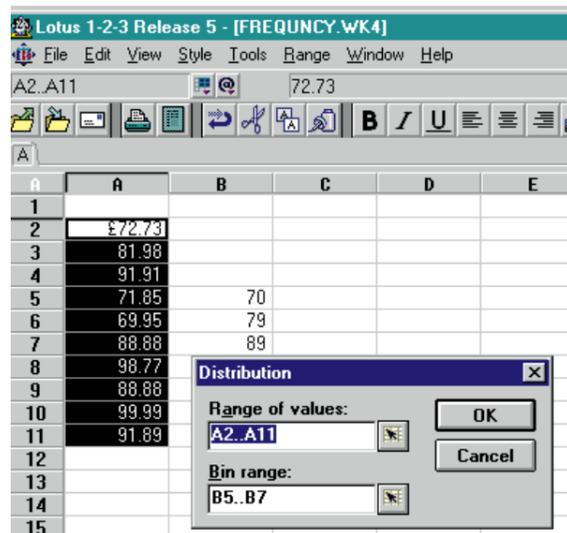


Fig 1 (left) Dividing the distribution of a data array into bins is easy in Lotus 1-2-3, using menu items

Fig 2 (below) Excel has a FREQUENCY function for arranging distribution, which takes a bit of getting used to

- Now choose Tools, Options, View, No Gridlines. Then cell A1, Insert, Picture, Windows Directory, Clouds.bmp.
- Save this file as NEWFILE. (This is the equivalent of a background picture.)
- Choose Window menu, OLDFILE. Select A1:H16. Click the Camera tool.
- Choose Window, NEWFILE, cell A1. (This pastes a linked picture of your data on top of the clouds image.) Drag this object the last little bit into the top left corner of the sheet.
- Right click and choose Format Object on the shortcut menu, then select No Border, No Fill. Click OK.

That's it. You can now view the combined image under Print Preview and print out a hard copy. I must send Michael a long overdue book token.

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### Binning it

I've got so used to all this column's enquiries arriving by email that it was almost a shock to receive a nice, old-fashioned, typed letter from Alistair P Campbell of West Sussex: "I think I have found a bug in Excel for Windows 95. When the Frequency function is selected to display the distribution of a data array, the only result is in the first bin. The remaining bins remain blank. I am using a new Dell Dimension XPS P166s and Dell agrees that there appears to be a bug. Your opinion would

be welcome. I use frequency distributions a lot, and am having to revert to my older Lotus 1-2-3 spreadsheet to provide results for this function."

I've discussed before how some 1-2-3 functions differ from Excel. What we have here is a very easy-to-use menu item in 1-2-3 being replaced by a function in Excel, which takes a bit of getting used to.

Let's say that in the range A2 to A11 you have ten prices. They are in no particular order and there might be duplicates, but they are all below £100. The objective is to see how many prices fall in the ranges £0 to £70, and £70.01 to £79, £79.01 to £89, and £89.01 to £100.

In either 1-2-3 or Excel, you indicate these groups — or bins, as both spreadsheets call them — by simply entering 70, 79, and 89. For this example, we'll enter those numbers in B5 to B7.

In Lotus 1-2-3 Version 5, as shown in Fig 1, you don't have to select any particular cell. You just choose Range, Analyse, Distribution, and a dialogue box invites you

to enter, or select with the mouse, the range of values (here, A2 to A11) and the bin range (here, B5 to B7). Then as soon as you click OK, 1-2-3 automatically puts the answers into the column next to the bin array — easy.

Excel's methodology would confuse anyone until they had become familiar with the full procedure. What you have to do, if you have four bins, is to select any four successive blank cells in any one column. I selected D5 to D8.

Click in the formula bar, then the fx (function) button. Select the Frequency function. This opens a similar dialogue box to the Lotus one.

Again you enter, or select with the mouse, the range of values (A2 to A11 again) and the bin range (B5 to B7). But when you click OK, you find yourself back in the formula bar at the end of the new formula.

Now you have to press Ctrl+Shift+Enter. Only then will you get the right answers, as shown in Fig 2. As this is an array, you don't enter the curly brackets which appear around the formula; you just press, all together, the three keys mentioned.

I sent a demo of this on a disk to Alistair. He graciously replied: "Success! I'm beginning to appreciate Excel more and more. Thank you for your help." Good. Another satisfied reader!

### On the case

John Young, of the UAE, asks: "Could you advise if there is an easy way to change the characters in Excel from lower case to upper case on multiple cells, on a spreadsheet? The format menu for fonts does not have the case change as an option. I have found this problem in both Excel 4 and 5, and it can arise when different people have input data to a spreadsheet using a different case (upper or lower). To ensure uniform presentation, I find that it is necessary to adjust each cell and that there is no quick method."

John doesn't specify which version of Excel he is currently using, nor whether he wants to end up with all lower case or all capitals, so I'll discuss a couple of approaches.

One solution for versions 4, 5 or 7 is to use the LOWER, UPPER or PROPER functions. They don't reformat text but will redisplay it in another cell in lower case, capitals, or by capitalising the first letter of

each word respectively. All three functions ignore characters which are not letters. An example is often the best way of clarifying usage:

If cell A5 holds the phrase *There are 2 Brown foxes*. In any cell, =LOWER(A5) would display, *there are 2 brown foxes*; =UPPER(A5) would display, *THERE ARE 2 BROWN FOXES*; and =PROPER(A5) would display, *There Are 2 Brown Foxes*.

The only way I know to change the actual text in place (that is, not repeat it in another cell) is to run a macro. But if you're going to do that, you may as well enter the text, initially in a dialogue box. Then it can be translated before it's used. To broaden the interest for other readers, let's say the text to be entered is a special password.

The regular way of protecting an Excel file with a password is via File, Save As, Options. But suppose you have prepared your own application and want to use a password to protect a part of it. If it's for internal company use, you could make it easier to remember the password by letting the staff member enter it in upper or lower case. You could even give them the first letter as a prompt.

As a gateway, the starting point could be to create a button, which can be done automatically from the Drawing toolbar. You can then assign a macro to it. In other words, the user clicks the button and the macro runs. If the macro is written in VBA, you can use two of its standard functions, Lcase and InputBox. See Fig 3 for the listing.

The password I've used is "mchenry", but because the user-defined GetTheWord function incorporates Lcase, it can be

## Dear Santa...



Obviously you read PCW or you wouldn't see all these notes in the Hands On section, so look in the Spreadsheets section of our CD-ROM for pressie hints. Click on Excel 97 demo.exe and you'll see how the coming version of Excel can include hyperlinks to import data from web pages and send mail.

Yes, I'd like a beta copy of Office 97. It will have a new, improved Excel as well as updated versions of Word, Access and PowerPoint. It will also include the web authoring and management application, FrontPage (which I've raved about before), and Publisher, the easy-to-use DTP package. In Excel, the AutoCorrect feature (which irritates me but is beloved by many, I'm sure) will be even more intelligent: popping brackets in formulas if you forget them, for instance.

Microsoft's gone internet bonkers, so the latest Office will be supplemented by a wide range of animations, audio files, clip-art, fonts, help files and templates downloadable free from the MSOffice web site.

After a year, I've still never totally mastered Exchange and Schedule+, so I will welcome the new program, Outlook, which will replace both of them. Maybe the new Office Assistant animated wizards will make things clearer for me, too.

In the same section of our CD, have a look also at the files 123p1.pdf and 123p2.pdf, which run under Acrobat. These will remind you that I'm dying to see the new 32-bit Lotus 1-2-3 97. It, too, will feature shortcuts to the internet, as well as automated demonstrations of common tasks, enhanced printing facilities, new autototalling, and an easier way to create dialogue boxes.

The third present is not for me, but the people who write manufacturers' service contracts: a good pocket dictionary. My current PC came with a one-year free Next Business Day Repair Service Warranty, on-site at their discretion. Or, you could buy two- or three-year warranties. When the year was over, I wanted to pay for an annual renewal, but they've since dropped the one- and two-year options. I was told I could only buy a three-year warranty, which, amazingly, starts from date of purchase. So by purchasing that, I lost my first free year. They also have a Lifetime Return to Factory Warranty; but lifetime isn't defined in the way you or I would. And the right is retained to send parts and tell you, over the phone, how to replace them. They are entitled to offer any services they like, but I wish they wouldn't redefine simple words like "three", "lifetime" and "return".

entered as McHenry, or MCHENRY, or any other case combination. The InputBox function takes a number of arguments, but here I've used the first three and let the defaults be used for the remainder. The prompt in the input box asks "What is your password?", and the title of the box is Password. The third argument here is, M. This means that when the box appears,

application", and can continue.

The button and the macro are in the Excel 7 file, Passes.xls, in the Hands On Spreadsheets section of our cover-mounted CD this month.

### Fig 3 Assigning a macro

```
Sub Entering()
    Dim TheWord As String
    TheWord = GetTheWord
    If TheWord = "mchenry" Then
        MsgBox "Welcome to this application."
    Else MsgBox "Sorry. Wrong password."
    ActiveWindow.WindowState = xlMinimized
    End If
End Sub

Function GetTheWord()
    GetTheWord = LCase(InputBox("What is your password?", "Password", "M"))
End Function
```

the first letter (here, M as a capital) is displayed at the start of the password entry line.

If the user enters Matthew or MacHenry, or makes some other mistake, they receive the message "Sorry. Wrong Password". When the user clicks the OK button in this message box, the workbook is minimised in this macro to symbolise no entry.

If the correct password is entered, the user sees the greeting, "Welcome to this

## On the PCW CD-ROM

The Hands On Spreadsheets section has a short animated file, Excel 97 demo.exe, which previews the availability of hyperlinks in the forthcoming Excel 97. The files 123p1.pdf and 123p2.pdf are Acrobat files which give some details of the anticipated 32-bit Lotus 1-2-3 97, designed to run under Windows 95 and Windows NT. The Excel 7 file, Passes.xls, has the macro shown on these pages as Fig 3 and a button for running it.

### PCW Contacts

Stephen Wells welcomes comments on spreadsheets, and solutions to be shared, via PCW at the usual address or at Stephen.Wells@msn.com. Files can be attached with MAPI-compliant software. The UUE program, XferPro, works. It can be downloaded from the CompuServe Internet Resource Forum.