

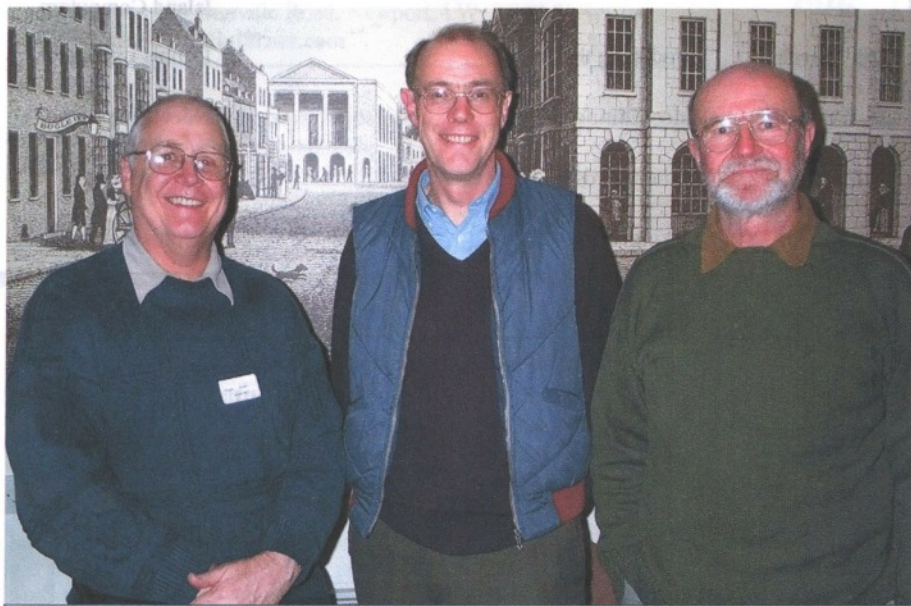
HOT KEY

ISLE OF WIGHT PC USER GROUP

www.iwpcug.org

MONTHLY JOURNAL

Issue 135 – February 2003



Roger Brown, Colin Boon and John Howard at a recent meeting at the Riverside Centre

There was an encouraging turnout of members and visitors to our Windows XP event at the Riverside Centre recently. The first half of the meeting was devoted to a presentation of a Microsoft Interactive Training video on the features of Windows XP. This was a step by step video on introducing XP and shown at the meeting were subjects such as managing open windows, setting up your computer for multiple users, protecting your computer, using the Windows trouble-shooters, changing desktop themes, adding a sound scheme, changing your personal settings and how to make your computer more accessible for people with disabilities. After the coffee break Denny Linzmaier mentioned the switching off of your computer automatically by checking the power options and ensuring that the hibernation feature setting was switched on. Denny went on to explain that switching to the French language was difficult with an English keyboard. Questions were then fielded and Denny explained how to copy your 'Favourites' folder to a floppy disk and how to create a shortcut to add to 'My Favouirites'. It was also mentioned that the ctrl/alt/delete feature in Windows XP has changed and that Task Manager and Processes appear on the screen instead of the previous one in Windows 98. Finally tiling several windows together and switching between Windows was demonstrated.

In This Issue

Future Meetings	2
Editorial	4
Humour	5
MP3 Jukebox	6
Round Cables	7
Computer Tune-up	8-13
Prize Puzzle	14
Q & A	15
Notice Board	16

FUTURE MEETINGS

5th February	AGM followed by talk by Bob Groom	
19th February	Family History Software	Tony Elgar (IOW Family History Society)
5th March	Windows Multimedia	Andy Martch Island Computers
19th March	Introducing the BIOS	Dennis Linzmaier
2nd April	Video Editing	Noel Stimpson
16th April	Motherboards and Processors	To be arranged
7th May	Backing Up	Dennis Linzmaier

We also have two e-group discussion areas:-
 Yahoo iwpcusers: iwpcusers@yahoogroups.com
 and for web designers:
IWPCUG-Web-group@yahoogroups.com



Bill Woodmore with visitors Carol Castle and Bob Castle

Honorary President:

Sir Norman Echlin,

Chairman:

Roger Skidmore,

Secretary/Riverside Liaison:

Sylvia Farley,

Treasurer:

Bob Groom,

Membership Secretary/Database Manager/Hot Key Distribution:

Ray Boote,

Vice Chairman/Hot Key Proof Reader:

David Broughton,

Hot Key Editor/Librarian:

Brian Sexton,

Marketing Manager/Computer Custodian:

Dennis Linzmaier,

Committee Member:

Cliff Maidment,

Committee Member:

Derek Cox,

Disability Resources Co-ordinator:

Helen Edom,

Contributory Managers**Museum Curator:**John Austin, 22 Coronation Road, Cowes, I.W. PO31 7JY - buzz_austin@yahoo.com 291673**E-mail Discussion Group "iwpcusers":**

Owner: Roger Skidmore

Moderators: David Broughton & Rob Webb

E-mail Discussion Group "IWPCUG-Web-group":Owner: Rob Webb, 46 Solent View Road, Ryde, I.W. PO34 5HX - rob.web@ic24.net 613693

Moderator: David Broughton



In this issue of Hot Key you will find an informative tune-up article for your computer as well as a report from one of our members on a portable 20Gb USB hard disk powered by 4 rechargeable batteries. Also featured in this issue, on page 7, is information on the latest round cables available to make your computer more tidy and of course the usual, much appreciated, Prize Puzzle on page 14. Following on from our recent Windows XP presentation at the Riverside Centre, I

would like to recommend the Personal Computer World's publication entitled "The Instant Expert Guide To Windows XP" available at your local newsagent for £4.25.

Letter to the Editor

From: David Broughton
To: The Editor
Subject: Windows Tips
Date: 18 January 2003 09:33

In the June 2002 issue of Hot Key there is a Windows tip for releasing disk space from the **TEMP** directory. This is a sub-directory of the **WINDOWS** directory and the tip was to add the following line in your **AUTOEXEC.BAT** file:

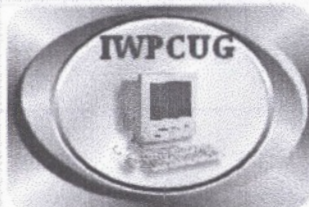
```
@C:\WINDOWS\COMMAND\DELTREE /Y C:\WINDOWS\TEMP
```

This does more than deleting the files and folders in **TEMP**: it deletes the **TEMP** directory as well. This is needed by some programs on installation. I recently had trouble installing two programs and both problems were cured when I restored the **TEMP** directory. The original advice is good, but an extra line should be added:

```
@MD C:\WINDOWS\TEMP
```

This restores the **TEMP** directory which, of course, will be empty.

David



The Isle of Wight PC User Group welcomes all owners and users of IBM Compatible Personal Computers. It is a group which seeks to exchange ideas and new information. Our meetings are bi-monthly on **Wednesdays of each month at The Riverside Centre, Newport, 7.30 - 9.30 pm.**

The first Wednesday has usually a formal talk whilst the third Wednesday is more informal, geared to the new user and aims to help out members with specific problems.

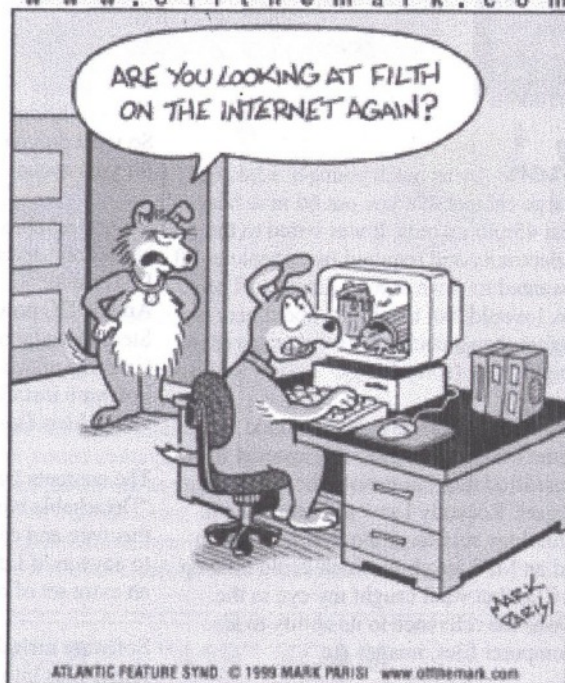
Membership is £12 per year.

Visitors are welcome.

This journal, "**HOTKEY**", is printed every month. If you would like to know more about us, either come along to one of our meetings or contact one of our Committee Members listed on page 3.

Club's Website - <http://www.iwpcug.org/>

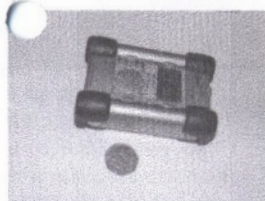
H
U
M
O
U
R





Not just a Jukebox

by Peter Scovell



When I was much younger a Jukebox was a large cabinet that you put 6d in to hear the latest 45rpm records. It was wired to the mains electricity and required two people to lift if you wanted to clean around the back. The Jukebox I would like to tell you about here is a little bigger than a packet of twenty cigarettes and weighs 12oz (sorry 350g).

Portable MP3 players have been around for some time now, I have generally ignored them as I considered them as mainly for the young, and joggers. Recently I saw a short article in the technology section of a newspaper which detailed an MP3 Jukebox which could hold up to 500 CDs, but what caught my eye in the article was the reference to its ability to also store computer files, images etc.

The Archos Jukebox Studio 20 is a 20GB USB Hard Disk powered by four rechargeable AA batteries. To me this device was like a dream come true, I had seen some time ago the Apple Mac Pod, which at that time was a 5GB device. The Archos has a greater capacity and can be used on both PC and Mac platforms.

Work means that I'm on the move for lengthy periods but I do have access to computers. In the past I have taken my Digital Camera image files copied onto CD-R media so that whilst away I could practice the techniques offered by PaintShop Pro graphics editor. The down side of this was that I had no means of saving my work as in general the file was greater than a floppy could hold and the company's computers do not have CD-RW drives.

With the Studio 20 I can save my CD collection (I haven't many) in MP3 format thus saving suitcase space of those bulky CD wallets. Install PSP and either copy digital image files to the hard disk or keep them on a CD-R to modify and save to the Jukebox hard drive later.

So what do you get for your money?

Archos Jukebox with pre-installed 4 x AA NiMH rechargeable batteries
USB cable
Archos DC power adaptor/battery charger
Stereo Headphones
Carrying pouch
Software installation CD
Quick Start Guide.

The contents listed in the guide mentions a "Detachable wire remote control", I didn't get this wire and can't see where it would connect to anyway if I did have it. My package included an extra set of rechargeable batteries.

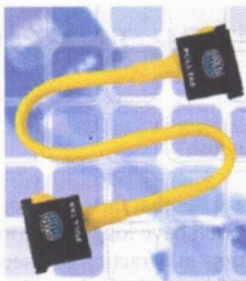
Software includes programs for converting music files into MP3 format, compiling playlists and connection to the Internet for downloading MP3 music. I would think that if you were to store 500 CD titles it would be very tedious to scroll through to find the tracks you wanted to hear on its small LCD window when in the portable mode.

As an external USB Hard drive when connected the device appears as a Hard Drive letter in My Computer window so that you can drag and drop, or copy and paste as with any other HD.

There are also connections for Stereo Line In and Line Out.

The Archos Jukebox costs about £270 and I must say I find it very easy to use and in my situation worth the cost. I also purchased the optional Universal Power Adapter which was £15. The biggest problem I have encountered so far is preventing my daughter from taking it over completely.

For more details of this and other Archos products go to www.archos.com
Archos (UK) Ltd is based in Swindon.



Available for UDMA (ATA 66/100/133) standards to support IDE/ATAPI hard drives, CD-ROMs, DVD, CD-R/CDRW, LS-120s, tape drives and other IDE/ATAPI devices. Also available for Floppy drives in black and various colours.

- Round cables for minimal clutter and better air flow
- Colour-coded connectors for easy installation
- Integrated pull tab on connector to ensure ease of removal
- There are different lengths of cable

<http://www.thetechzone.com/display.php?i=195&p=2>

<http://www.scan.co.uk/products/cables.htm>

BEWARE - "419" SCAM IS ON THE INCREASE

The Trading Standards Service is again warning local businesses to watch out for the "419" scam. This worldwide fraud is now coming into the U.K. in the form of emails.

In a typical "419" letter, the author purports to be a senior government or bank official from an African country who is appealing for the use of a UK bank account in order to smuggle several million US dollars out of the country. In exchange for the use of your bank account you are offered a percentage - usually 10%-30%.

At first no money is requested, but once drawn into the scam the victim is persuaded to part with several thousands of pounds for 'administration fees', 'legal fees' or 'bribes'. Victims have lost hundreds of thousands of pounds in some cases. Of course the transfer of the 'smuggled money' to your bank account never happens.

The people behind the scam are mainly involved in fraud and drug trafficking.

If you receive a '419' letter, hand the letter or email to your local police station marked for the attention of the Fraud Squad.

DO NOT reply to these letters, even companies who have sent polite refusals have had their letterheads abused. If the letter is sent by email you should also send a copy to the Internet Service Provider from where the '419' was generated. These emails should be addressed to: abuse@the ISP name e.g. abuse@yahoo.com or abuse@hotmail.com. By doing this the ISPs can terminate any accounts that abuse their systems.

Contributed by Roger Skidmore



COMPUTER TUNE-UP

Is your PC a little sluggish?

Just as a new car soon loses that factory-fresh smell, your once-nimble PC may well have long since lost its cutting edge. Where once it sprang into life and loaded programs in a fraction of a second, do you now have time to make a cuppa while it grinds into action of a morning? If so, it's time for a tune-up.

All the tips outlined in the text on these pages are, of course, perfectly safe. However, as always, you should make a full backup of all your files before wading in. Finally, these tips work with both Windows Me and Windows XP. Most of them apply to Windows 98 but the steps may not be exactly the same.

Vision off

One of the attractions of a touchy-feely, point-and-click graphical interface is that you can set up your computer to look and behave more or less exactly as you please. However, the price you pay for fancy interface features is a corresponding drop in performance.

Turning off your Desktop wallpaper can help improve your PC's performance

Let's cut to the quick, beginning with the Desktop itself - the screen you see when Windows has finished loading when you switch on your PC. If you have a background picture on display here, this means that the graphics card has to continually redraw the image many times every second.

Switch to a blank screen and you should find that windows pop up on screen just that little bit faster. To turn off your background, right click any blank area on the Desktop, click on Properties to open up the Display Properties dialogue box, move to the Background tab (or Desktop tab in Windows XP), highlight None in the Wallpaper dialogue box (called Background in XP).

To be fair, this alone isn't going to turn a sluggish PC into a super computer but now right-click on the desktop again and look in the Settings tab. In the Colours section you'll find a drop-down menu that lets you adjust the colour depth. This is a measure of how many colours your monitor displays, which in turn has a bearing on how hard the graphics card has to work. Shifting down from 32-bit to 24-bit colour relieves the burden a little. From 24-bit to 16bit is a little more and all the way down to 8-bit (256 colours) a good deal more (although Windows won't look so pretty). You can easily restore the settings should you wish to with high-resolution images or to play games.

Still in Settings, try lowering the display resolution. Again, this will gain you a microsecond or two in all you do. Now look in the Effects tab and uncheck the 'Show window contents while dragging' option to spare your computer the effort of continually redrawing a window's contents as you move or resize it.

Bells and whistles

Other useful Windows features may safely be given the boot are mouse-related fripperies such as animated pointers and cursor trails.



Mouse settings are accessed by clicking the Start button followed by Settings and Control Panel (or simply Start and Control in Windows XP. Incidentally, XP users please switch to Control Panel's 'Classic View' in order to follow these and subsequent directions). While in Control Panel, disable all those Windows-generated sounds.

Each sound is a file that must be from the hard disk, which takes time and serves little purpose. In Windows Me, double-click on the Sounds and Multimedia icon in Control Panel, look in the Sounds tab and select No Sounds from the Scheme drop-down menu; in XP, the Control Panel icon is called Sounds and Audio Devices.

If this all seems a little fussy, Windows users have a welcome shortcut. Right-click on the My Computer icon on the Desktop, move to the Advanced tab in the System Properties window and click on the Settings button in the Performance area. Now you can play around with all manner of XP-specific features like sliding Taskbar buttons and fading menus to your heart's content or-and this we heartily recommend for a speed boost - just select the 'Adjust for best performance' option.

Delving deeper

Windows comes with an array of maintenance and tweaking utilities. Perhaps the most obvious but the most effective is Disk Defragmenter. Run regularly - preferably weekly - to stitch together and realign files that have become split apart through repeated use. Click on Start followed by Programs (All Programs in Windows XP), Accessories and look for Disk Defragmenter in the Accessories or System Tools folders. Run ScanDisk occasionally too to find and fix any errors with the files.

Now click Start, then click Run, type MSCONFIG and click OK. Why? Because this opens up one of Windows' best hidden tools. Browse to the Startup tab and you'll find details of programs that start automatically when you switch on your computer, including those that run idly in the background all day long, gnawing on memory and slowing everything down. Weed out the dead wood here by deselecting the programs you know you don't need but if in doubt, leave well alone.

Another way to disable background programs is to find their get-out clause. For example, Windows XP users with no use for MSN Messenger (aka Windows Messenger) can click on the Tools button on its toolbar, followed by Options and then move to the Preferences tab. Uncheck 'Run this program when Windows starts' and Messenger will cease to be a constant companion in the System Tray - except that it still springs maddeningly into life every time you open Outlook Express and the darned thing just can't be completely uninstalled. We looked high and low for a solution and eventually settled on a free tool written by Doug Knox, a Microsoft MVP (Most Valuable Professional) (www.dougknox.com). This killed it dead.

Continued on page 10

Tightening up

A leaner hard disk makes for a swifter computer to get shot of the junk cluttering up your computer. By far the easiest method is by using Disk Cleanup utility (click the Start button, Programs, Accessories and System Tools). You should also uninstall any old programs that you no longer use and even delete space hogging old System Restore points: see the More Options tab in Disk Cleanup for details.



Let's not forget about email. If Outlook Express is starting to stutter, its folders could be overloaded with junk mail. Spend a few minutes dragging unwanted messages to the Deleted Items folder and delete the lot by right-clicking on the icon and selecting Empty Deleted Items Folder. Now speed things up further by compacting all folders that contain stored messages to remove any wasted space. Highlight Outlook Express in the folders pane, click the File button on the toolbar, then Folder and finally Compact All Folders.

In Outlook 2000 or XP, clear out unwanted messages and then right-click on Outlook Today in the Folders List window, select Properties, click on the Advanced button and click on Compact Now.

Swapshop

Getting just a touch more advanced now, we come to consider the swap file. This is a file on the hard disk that Windows uses as surrogate memory when there isn't enough of the real thing. However, Windows continually expands and contracts the file in line with its workload, which eventually leads to fragmentation and slows the turgid swapping process further.

In Windows Me, open Control Panel, double-click on the System icon to open System Properties, move to the Performance tab and click on the Virtual Memory button. In Windows XP, click on Systems, move to the Advanced tab, click on the Performance Settings button, move to the Advanced tab and click on the Change button in the Virtual memory area. Now uncheck the 'Let Windows manage my virtual memory settings' option - or click on the Customise option in XP - and enter the same figure in both the Minimum and Maximum boxes. This determines a fixed size for the swap file, with the result that it can not fragment. XP users then need to click on the Set button to fix the swap file size.

But what size swap file exactly? Well, as a tried and tested rule, the swap file should be one and a half times the amount of physical memory available to the PC. That is, if you have 64Mb of memory, make the swap file 96Mb; if you have 128M make it 192Mb.

If you have two hard disks in your system, you should also move the swap file to the faster disk. For example, a disk with a 7200rpm spin speed will be quicker than one with a more common speed of 5400rpm.

Boosting BIOS

When restarting your computer, press the Delete, F1, F2 or whichever key it shows is required to enter the BIOS set up screen. There are three things you can do in the Advanced Settings (or similar) area but the precise wording varies with each brand of BIOS so do proceed with care and take note of the changes you make.

First, enable the Quick Power-on Self-test option. This forces BIOS to skip a few routine checks when the PC is restarted, with the result that Windows loads marginally faster. Secondly, disable the Boot Up Floppy Seek option. This stops BIOS checking the floppy drive for a disk it can use to boot the PC, shaving off a couple of seconds from the start-up time. Finally, nominate the C: drive as the first and only device in the Boot Sequence.

Continued on page 11

Exit the BIOS setup, usually by pressing the Escape a couple of times) and be sure to save your changes when asked.



High-speed driving

A driver is a set of software instructions that lets a piece of hardware, such as a CD-ROM drive or graphics card talk to the rest of the computer system. New drivers are developed all the time to resolve bugs, to improve compatibility with other devices, to offer additional functions and, in particular, to keep the thing working when you change your computer's operating system.

It really does make sense to periodically check the manufacturers' websites for performance enhancing updates and nVidia graphics cards are a case in point. The company's own high-octane Detonator XP driver can significantly boost the performance of any graphics card with an nVidia chip on-board.

At the very core level, a new driver for your motherboard from the likes of Intel, SiS or VIA can also inject extra juice into your PC, especially AGP performance for games-playing. It may even add support for DMA (see below). One noted example is VIA's 4in1 package that addresses several areas simultaneously.

However, if you don't have your motherboard manual to hand, it can be tricky establishing just who made what. Try **Computer Tech On-Line's BIOS guide** or **Intel's downloadable chipset-identifying utility** or if you're feeling bold, **SiSoft Sandra** (see page 13). If you do manage to successfully identify your motherboard's components, check the Support or Download section of the manufacturer's website and follow the instructions.

Fast access

DMA stands for Direct Memory Access, a computer's method of allowing a hard disk or CD-ROM/DVD-ROM drive access to memory without going through the processor. This is a very good idea because it leaves the processor free to concentrate on more important tasks, such as running your applications.

Unfortunately, Windows Me does not have DMA enabled by default. Open the Control Panel, double-click System and look in the Device Manager tab. Now click on the plus sign next to Disk drives, highlight your hard disk (probably called Generic IDE Disk Type 40) and click the Properties button. In the Settings tab, check the DMA box and restart your computer when prompted.

Repeat this process with your CD-ROM and/or DVD-ROM drives, one at a time. Do be aware, however, that it's not unknown for DMA to cause problems, particularly with CD-ROM drives, so disable DMA if your PC starts behaving oddly.

If the DMA box is greyed-out, a driver upgrade for the device or the motherboard (or both) might bring DMA into play. Again, check those manufacturers' websites.

In Windows XP, the procedure is rather different. DMA is enabled by default here in most circumstances but it pays to check. Open Device Manager as described above but this time click on the plus sign next to IDE ATA/ATAPI Controllers. Now double-click on the Primary IDE Controller entry. In the Advanced Settings tab, ensure that 'DMA if available' is shown in the Transfer Mode field for both Device 0 (the master device on this channel) and Device 1 (the slave). Then repeat with the Secondary IDE Controller.

So far, we've looked mainly at hands-on performance-wrenching tweaks. But as ever, there are plenty of free utilities around that can make life a little easier. Here's a quick round-up (see page 13 for website addresses).



TweakUI

An old favourite, now available in Me and XP flavours. This is the Microsoft-developed (but resolutely unsupported) tool that lets you fiddle with normally inaccessible settings - for instance, edit the Registry - without fear. By making Windows work more to your liking, you can get more done more quickly. Or something like that.

MaxMem

This top freebie from AnalogX that forcibly reclaims memory left in limbo by inefficient applications and minimises Windows' use of the slow swap file. The effects are immediate and can be startling.

BootVis (Windows XP only)

A curiosity from Microsoft, BootVis shortens the time it takes a Windows XP PC to fire up from a cold start. Use the Optimise System option in the Trace menu to let BootVis rearrange the start-up files on the hard disk. This should shave a few seconds off the boot process.

SiSoft Sandra

Sandra 2002 Standard (System Analyser Diagnosing and Reporting Assistant) is an impressive diagnostic utility that's worth the download time for its Performance Tuneup Wizard alone. Find out just what's under your PC's covers, which bits are underperforming and what steps you should take.

REGISTRY EDITORS

Yes, the scary old Registry, home of all your computer's configuration settings. A badly fragmented Registry or one that harbours references to programs long gone can hamper and delay Windows. However, any attempt to optimise, clean or fix it is inherently dangerous. That's why we strongly suggest - nay, insist - that you back up your Registry right at the outset.

There are two easy methods to do this in Windows Me and XP. For one, simply make a new System Restore point. Click the Start button, Programs, Accessories, System Tools, System Restore and follow the wizards. Just revert to this safe point should anything go awry.

Alternatively, click on Start, then Run, type REGEDIT and click on OK. Now click on the File button on the toolbar and Export the Registry as a text file (for instance save it with a sensible name like 'myregistrybackup' to a folder on your hard disk). For safety's sake, we recommend that you copy the backup file onto a floppy disk as well. If you need to restore this copy of the Registry, use the import command in Registry Editor's File menu.

Thus protected, here are three useful programs to try.

NTREGOPT (Windows XP only)

This quick, simple and seemingly effective Registry optimiser requires absolutely no manual intervention.

Continued on page 13

RegCleaner

It's a good deal more hands-on but this tool offers non-experts a safe way to prune the Registry without breaking the computer. Treated with care, it works a treat, especially for clearing out redundant files left behind by previously uninstalled software.

ART (Advanced Registry Tracker)

Use ART to compare and cross-reference ongoing snapshots of the Registry and revert to any previous version. It's more for the expert bug tracker but it can certainly keep the Registry firing on all cylinders. Try it free for 30 days or pay \$40 (about £26) to make it your own.

Get to it

So there you have it - a hatful of handy tweaks that can restore a lumbering, lame PC to spring-chicken sprightliness. At a total cost of zero pence, we reckon that's a pretty fair deal.

Our thanks to Kyle MacRae and Computer Active Magazine for these extracts

Contacts

Doug's Windows Tweaks and Tips - www.dougknox.com

Nvidia - www.nvidia.com/view.asp?PAGE-drivers

Intel - www.intel.com/support/chipsets/chipsetid.htm

Sis - www.sis.com/support/driver/stepl.htm

VIA - www.viaarena.com

Computer Tech On-Line - <http://computertech.server101.com/identifymb.htm>

Annoyances.org (for TweakUI)- www.annoyances.org/exec/show/tweakui

AnalogX (for MaxMenn) - www.analogx.com/contents/download/system/maxmem.htm

BootVis - www.microsoft.com/hwdev/platform/performance/fastboot/BootVis.asp

SiSoftWare Sandra - www.sissoftware.co.uk

NTREGOPT - <http://home.t-online.de/home/lars.hederer/erunt>

RegCleaner- <http://www.vtoiy.fi/shtml/regcleaner.shtml>

ART - www.eicomsoft.com/art.html

Ontrack My PC Tools - www.mypctools.to.uk

XP-erience- www.xp-erience.org

TweakXP - www.tweakxp.com

XPTuncup - www.xptuncup.com

Also: PC Pitstop - www.pcpitstop.com

Browser Tune - www.browsertune.com

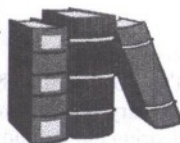


PRIZE PUZZLE CORNER

FEBRUARY 2003

by David Broughton

H



In thinking up puzzles for this magazine I often find them in every-day life. The puzzle this month was inspired by the pattern of coloured tiles on our kitchen floor.

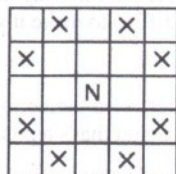


fig 1: Knight moves in chess

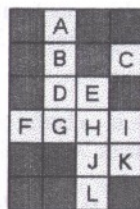
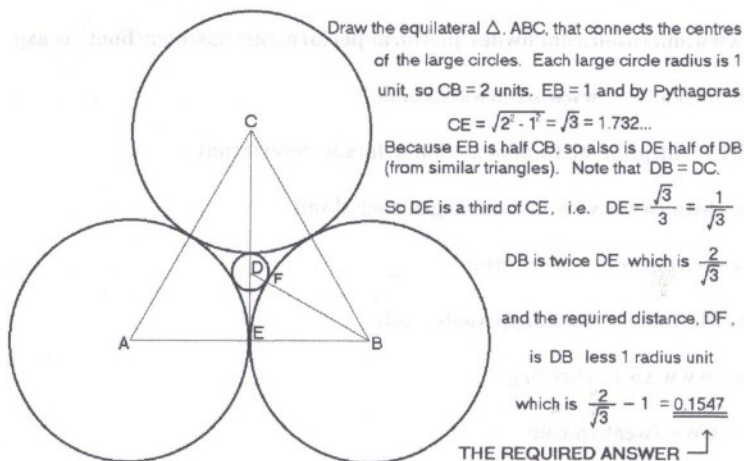


fig 2

Most people know the Knight move in chess, but just to recap, the knight moves one square in one direction and two squares at right angles in the other direction (or the other way round). In fig 1, the Knight (shown with the symbol N) can move to any of the eight squares marked X. The puzzle this month is to start the knight on any of the lettered squares in fig 2 and find a route that includes all 12 lettered squares once and once only and no other squares. Represent your answer as the sequence of 12 letters in the order used. Please send your answer to me, David Broughton (for address details see page 3), to arrive by 5th March. E-mails will be acknowledged.

ANSWER TO THE DECEMBER 2002 PUZZLE

In this puzzle you had to find the radius of the central small circle, given that the radii of the three large circles are one unit. This did not prove too difficult as I received nine correct answers. Nearly everyone used trigonometric functions to work it out, though this was not necessary. To show that it is not necessary I have given my own workings in the diagram below.



continued on page 15

Most people have found that trying to represent mathematical symbols and layout with even the most sophisticated word processor (other than specifically mathematical ones) is doomed to failure. But I have found that the program Paint that comes with every version of Windows, can be made to represent most things mathematical and provides the maximum flexibility on layout. I use it extensively for most diagrams that go with puzzles. Here you will find my solution to the puzzle using the Microsoft program Paint.

The nine correct answers were received from David Groom, John Amos, Jerry Tepper, Les Burrige, Rosemary West, Alan Ash, Peter Wreford, John Amos and Ken Cameron. Congratulations to Rosemary West who won the £5 book token and better luck next time to the others.

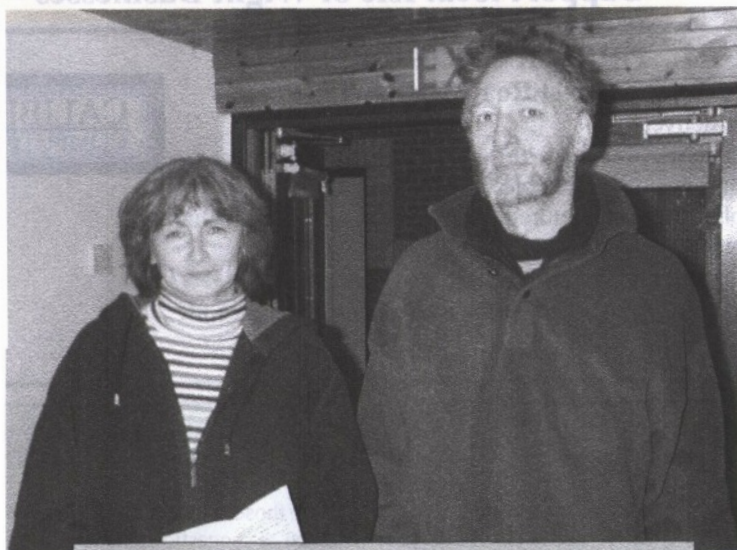
QUESTION AND ANSWER



Question: The program Belarc Advisor (http://www.belarc.com/free_download.html) helps you to determine what hardware is in your machine. There is another application that helps determine the unknown hardware on your computer. Is there a program like this?

Answer: There are some great programs that will tell you about the hardware on your computer and one of those programs is **AIDA32** (available at <http://aida32.ngemu.com/>). **Sandra** by SiSoftware (available at <http://www.sisoftware.co.uk/>) may do the trick too. Karenware has a computer program called **Computer Profiler** (<http://www.karenware.com/powertools/ptprofiler.asp>) that will give you information about your computer environment, which I would recommend that you use in conjunction with **AIDA32** to get the most information about your computing environment.

Our thanks to Chris Pirillo at www.lockergnome.com for the above advice



Dale Godfrey and Peter Finnimore at the "Windows XP" talk

MEMBERS NOTICE BOARD

FOR SALE

PRINTER

**Epson Stylus Photo 1200
A3 Printer**

With 2 new colour cartridges and one black cartridge plus manual and CD with printer software

£60

Contact: Peter Deacon

Tel.721286

Email - peterandjoan@btinternet.com

FOR SALE

MONITOR

15" Packard Bell
with speakers at side of monitor
Special Price - £10

COMPUTER CHAIR

£10

Contact:

David Lee

Tel. 564890

FOR SALE

SCANNER

Mustek BearPaw 1200F Flatbed

48Bit 3D 19200dpi USB

With user's manual, power adapter, installation CD, software and drivers CD

£30

Contact: Roy Hollis

Tel. 611433

Support local Isle of Wight Businesses

PRINTER CARTRIDGES

Forest Road, Newport

- Free delivery
- Easy to use website
- Vast range of compatible Ink-Rite cartridges
- Alphajet remanufactured cartridges for all makes including Hewlett Packard and Lexmark
- All prices include vat

www.calibrecomputing.co.uk

Tel. 08707 700637

**CALIBRE
COMPUTING**

Hot Key is published on the first Wednesday of every month. This edition was compiled using Microsoft Publisher 2000 and reproduced on an Epson Stylus C80 colour ink jet printer and Epson Stylus 880 inkjet printer.

The views and opinions expressed here are those of the contributors alone. No responsibility can be accepted with respect to advice or suggestions made in this journal.