Issue 168

January 2010

ISLE OF WIGHT PC USER GROUP

HOT KEY

WINTER 2010

Due to a camera problem, we had no picture of a talk in progress. This is the Editor putting Hot Key together !

In This Issue Pages

The Isle of Wight Personal computer User Group

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 held on the first Wednesday of each month at **The Riverside Centre, Newport** from 7.30 to 9.30 pm
Visitors are welcome. **Membership is £6 per annum**
A charge of £1 is made per meeting, which includes tea or coffee during the break.

If you would like to know more about us, you are most welcome to come along to one of our meetings, or you can contact one of our Committee Members listed on page 3.

The Club Website address is **www.iwpcug.org**
We also have an e-group discussion area
Yahoo iwpcusers: **iwpcusers@yahoogroups.com**
See page 5 for how to join

FORTHCOMING EVENTS

Date	Subject	Speaker
3 February	AGM & talk on Google Earth	David Groom

Roger Skidmore has taken over the task of arranging speakers and subjects for future meetings and is drawing up a complete schedule for the coming year.
He is anticipating having a speaker or two for the March meeting to talk about " Dealing with Common Computer Problems "
See our Web Site for future details

ISLE OF WIGHT PC USER GROUP COMMITTEE MEMBERS

Chairman : David Groom

Vice-Chairman : Cliff Maidment

Treasurer : Phil Rogers

Secretary : Susanne Bone

Membership & Database Secretary : Ray Boote

Committee Member : Roger Skidmore

HotKey Editor : Bob Groom

Contact details removed prior to publishing on the internet

Suggestions for new events, topics or speakers for talks are always welcome.

Please contact any committee member with your ideas.

If necessary we may be able to find a speaker for your subject.

Chairman's Report

First off, may I wish you all a happy New Year. I hope 2010 will be a good year for you and your family.

Page 5 of this issue gives notice of the IWPCUG AGM I hope as many of you as possible will attend the meeting. As ever there are still places available on the committee, so please do consider if you have time to spare once a month and if you are able to join us on the committee.

Since my report in October we have had three successful meetings, of particular interest was the November night, when we had three different speakers talking for shorter periods than usual. We hope to hold similar nights in the future. The committee have also decided to increase the time for the coffee / tea break to around 30 minutes to allow a longer chance for members to meet and talk with each other.

Microsoft pricing

For years I've been of the opinion that Microsoft's products are expensive, and I have looked wherever possible for cheaper or free alternatives.

However when I was reviewing Windows 7 a couple of months ago I did think that it wasn't as expensive as it I was expecting.

This month I happened to glance at the current pricing of Microsoft Office 2007 Home Edition and was surprised to see it listed at £55 inc VAT. This edition includes Word, Excel and PowerPoint. When it was released at the end of 2006 PCPro magazine said it cost £92 inc VAT.

So what might has caused this price drop? Is Microsoft about to release a new version of Office and is dropping prices to try and shift the old stock? It's possible, but the actual production costs of the DVD and packaging must be minimal, so I would have thought it would just make sense to trash the old stock and release a new version at a higher price. After all, if you have just brought Office for £55 you are unlikely to rush out and buy a new version anytime soon.

Is Microsoft feeling the squeeze from the alternative cheap or free alternatives available? I think this a more likely explanation. If so then even if you don't like the OpenSource alternatives to Microsoft products you are getting an indirect benefit from them, in the fact Microsoft is cutting its prices.

David Groom

NOTICE OF AGM

Notice is hereby given that the Annual General Meeting of the Isle of Wight PC User Group will be held on Wednesday 3 February 2010 at 7:30 PM at The Riverside Centre, Newport. Nominations are requested for the positions of: Chairperson, Treasurer, Secretary, Membership Secretary, and up to eight other committee members. Please send your nominations to the Secretary, Su Bone. Seconders are not necessary at this stage.

ISLE OF WIGHT PC USER GROUP ANNUAL GENERAL MEETING AGENDA

1. Approve the minutes of the previous AGM, held on 4th February 2009, (copies available from www.iwpcug.org/secure/minutes/AGM09.pdf)
2. Matters arising from the minutes.
3. Receive reports:
   3.1 Chairman
   3.2 Treasurer, including approval of the Club Accounts
   3.3 Secretary
   3.4 Membership Secretary
   3.5 Other activities: Computability, HotKey, Library, Cover Disk, Website, Egroup, Marketing, Riverside Liaison

4. Elect a new Chairperson, Treasurer, Secretary, and Membership Secretary.
5. Elect other new Committee members (up to a maximum of eight persons).
6. Set the Annual Subscription.
7. Appoint an Independent Examiner.
8. Any Other Business.

HOW TO JOIN THE E-GROUP

Send a blank e-mail to**: iwpusers-subscribe@yahoogroups.com**

All members are encouraged to join this e-group (which costs nothing and is private to all club members) in order to keep in touch with events and join in with discussions.
You can also keep in touch by regularly visiting **www.iwpcug.org.**

A LECTURER'S LOT IS NOT A HAPPY ONE

THE PITFALLS OF TEACHING INFORMATION TECHNOLOGY

Probably one of the most stressful lecturing jobs is the teaching of a computer application. Having taught computerised book-keeping packages in their many formats for over 15 years, I have experienced highs, lows, humour and despondency. Unlike many subjects, IT teaching relies on the cooperation and capability of the student. Reading on, you will discover the trials and tribulations of attempting to impart the essentials of the SAGE accounting package through a ten week course from 6.00pm to 8.00pm. Here goes!

Arrive in class at 5.30pm for the first week to switch on computers, ensuring they all have the program loaded. Being September, the technicians have given the equipment a thorough checking during the summer. At about 5.55pm the students start to arrive. On the first evening I allow some leeway for latecomers so about 6.15pm I commence a welcome to the college. During this time students are constantly arriving, having missed the bus, broken down, stuck in late enrolment queue or other miscellaneous reasons. By 7.00pm I am about to start so I issue pens and paper for those who think that such items are unnecessary and remind them to bring notepaper, pen and a memory stick for next week's class. I commence with an outline of the system and request they type in customers' names and addresses from a standard sheet issued at the start of the session. I notice an Asian gentleman is looking bemused and not attempting the task. After a brief conversation, I check his enrolment slip and discover he is supposed to be in the English as a second language class. After he departs, one student raises his hand to inform me he is having difficulty in finding where to enter the data. Upon inspection I find he has left SAGE and is now in WORD. Everyone has now typed in the data and I look at screens to check that all is correct. One student has a blank screen having failed to save the data, yet another has put the customers in the suppliers' file. It is now 7.25pm and the door opens as another student arrives, having originally gone to a different campus some four miles away. While I am dealing with the newcomer for some inexplicable reason someone is now printing and sheet after sheet is coming off the printer. The session proceeds to the end with students entering data. I close the class with a reminder to bring all necessary items for next week.

The next session commences with four new arrivals. I am the victim of management who only have finances in mind and require the fees without any consideration for the lecturer. Having missed the first week's data, I borrow a memory stick from a student and load this so they will have something to work on. I suggest they attend early next week so I can go over what they missed last week. Two students announce that their computer is not working. Using my mobile phone, I contact technicians

only to be told they are on break. I suggest the students sit next to a colleague and take notes while waiting for the technician. The students are now busy entering data and as I check on progress I notice some students are expert on the keyboard and are rattling through the data whilst some, using one finger, have not even completed the first task. Fortunately I have other exercises for the faster ones to complete. The technician arrives and declares the computers dead and takes them away. Two students in particular, James and Susan, have some prior knowledge of accounts and are proving to be quite competent. Some colleagues, noting their progression, appear to be despondent. I reassure them that I will sort out their difficulties. I ask the students to back up their work on their memory sticks and close the system. After their departure, I inspect the room and discover approximately a third have not been closed down and three memory sticks have been left in the machines.

This week the students have made sufficient progress to work at their own pace. Four weeks into the course and I have another new arrival. Apparently the admin staff did not check the course data otherwise they would have noticed that the class was full. There is no computer for this student so I suggest he returns tomorrow when I can see him and go through what he has missed and ensure a computer will be available next week. The students load their data from memory sticks. Within five minutes three students are complaining that the data on the screen is not theirs. They have backed up again instead of restoring and have wiped their data and copied another student's work from a different class. I borrow someone's stick to give them the current data. We are now well into the system and working through the depreciation module. The students have to purchase a vehicle and depreciate it by 25%. I discover one student has decided to purchase Fixtures and fittings and depreciate them by 20% and has screwed up what I was going to do next. There is now sufficient data to demonstrate the monthly Profit and Loss and Balance Sheet. Students are instructed to click on month - end, post the depreciation and check their Profit and Loss and Balance Sheet. One student declares that his final accounts are not there. He has clicked on year - end and zeroed all the accounts. His data is completely shot.

We are now halfway into the course and starting on the stock file. Everything seems to be going smoothly until half the class cannot access the sales ordering system. On checking their computers the sales order module appears to be missing. I have to abandon this part of the lecture and show them some other module until I can discover the problem. It transpires the computers are used by a visiting lecturer demonstrating programming and using SAGE for his lectures. He has demonstrated how to remove parts of the program but has not bothered to put it back! The technicians need to reload the program on the affected computers.

This week we are starting practise papers for the exam in four week's time. After busily entering the data, some do not appear to have the correct trial balance figure. Upon inspection I find one has, for reasons best known to himself, changed the vat rate, another has entered the gross figure in the net column and vatted the vat, yet another has posted credit notes as invoices. All this despite doing it correctly for four weeks. James and Susan are dashing through the papers – all correct – they leave early as I have run out of papers to give them. Some students look wistfully as they leave since they are still on the second paper.

The following week the inspectors are in college. I spend hours preparing all the bureaucratic nonsense required for this circus including pointless powerpoint presentations on accruals and prepayments in glorious technicolour. No inspector visits during the entire session.

This is the week before the examination. The students are eager to continue their practise papers. Ten students complain in unison about the computers. It transpires that some well-meaning lecturer has taken a class of little charmers from the local secondary school and left them unattended. Their single brain cells have induced them to pull out leads, pilfer the mice, ram sweet wrappers into every orifice and scribble with felt tips over the screens. The class is delayed for 30 minutes whilst the technicians put the room in order.

Examination week arrives. I have requested the technicians to delete all the data and check that the printers are working and have new cartridges. Mindful that my supervisor checks examination results, I am confident my star students, James and Susan will achieve A grades. Fifty minutes into the exam the fire alarm sounds and all students exit to the car park. It is a foul night, with rain lashing down. They return to the classroom after the false alarm absolutely drenched. Fifteen minutes left and students are starting to print their work. Lines of black ink down the page indicates the technicians did not change the cartridges as requested and one has run out of ink. Another mobile call brings a technician running to rectify the situation. The exam has now ended and the students leave. I have a sneak look at their papers to see how many I think have passed. One has omitted an entire page of entries, three have printed incorrect reports, including the ones I specifically instructed them to ignore.

What of my star students? James didn't turn up thinking the exam was next week, neither did Susan as her son was sent home from school ill and she had to take him to the doctor. That's my year-end statistics down the pan. Happy days!!

Phil Rogers

DIGITAL DECISION MAKING

Synopsis of the October 2009 Talk

We are all aware that computers are making decisions all day long and in a variety of different fields from aviation to banking. Many of these digital decisions will be very straightforward in nature: turn a heating system on or off, determining a maximum income tax rate or sending luggage to Rome rather that Rio!! This talk discusses some cases where there are many answers to choose from, possibly as many as tens of millions.

Whilst the nature of decision making programs will vary widely, in essence the process can be broken down into three stages: data collection, data analysis and then the calculation of the outcome. This method will be seen in all the examples that follow, which vary quite widely in nature.

There was a brief discussion of the use of random numbers, which have a variety of uses although mainly in games for obvious reasons. Random numbers can be generated on many hand held calculators, spreadsheets and computer languages such as BASIC, C++, Java. They can be generated as whole numbers, decimals or even to give positions of space debris in 3 dimensions. The first example makes use of random numbers in several ways.

The first program is one that throws virtual dice: perhaps not the best way to make a decision. The software is written in Java3D for easy display on a web page and consists of a transparent container holding between 1 and 30 dice. When the dice are “thrown”, random numbers generate the speeds, positions and spins of each die. From that point, physics takes over so that in each time step the new positions can be calculated allowing for gravity, friction and collisions. When the dice have settled, the decision has been made. An option is given for the user to write their own choices on the dice faces (e.g. Pub,IWPCUG,cinema,etc.)

The next example is a game of skill where the human pits himself against the computer in 3D noughts and crosses. This software is written in C++ with Directx(8) graphics. The board consists of a 4x4x4 cube and each player attempts to make a line of 4 in any direction, there being 76 winning lines. The computer can be set at 3 levels of difficulty (easy,standard,difficult). In easy mode, the computer selects a random but legal move and can be beaten even by the author. In standard mode the computer can scan all of the possible 64 positions to block the human or try for a line or just occupy a valuable place. In difficult mode, the computer can carry out more advanced analysis to look for highly advantageous

strategies to force the human into some very tricky places. The computer has a distinct advantage in speed and ability to work in 3 dimensions (or even 4 or 5 dimensions!!)

The third example is another game: Russian Backgammon. This was written in C++ but uses standard 2D graphics to display the board. The rules are quite different from standard backgammon and so the author wrote it, as no other software appeared to be available. As with many games, much of the code has to be written to make sure that players adhere to the rules, but of course the computer is programmed to make only legal moves. However, the computer may have tens of millions of legal moves to choose from, so the problem tends to lie in making a good decision. Once the virtual dice have been thrown, the program can begin to work through all possible moves, so again this is a brute force approach. On a slow machine, this can be a frustratingly slow event, but even with a 1.5 Mhtz CPU there is little discernable delay. Here, each potential move is given a weighted score to indicate how good it is, taking note of how many vulnerable counters are exposed, how much damage is done to the opponent,etc. After all the scores are in, the top one can be selected and acted upon. Crucially the weightings can be altered to give the computer a more aggressive or defensive stance, or even a good old random approach.

The final example is a computer model as opposed to a game, where the individual components have to act autonomously. This is Java3D software demonstrated on a web page and called “Friday Night at The Pub” (see screen shot on back page). A hundred individuals (or agents) are released into a bar area where they have to decide which bar to head for, which serving position to use, how to navigate the doorways and find the “facilities”, all the time avoiding the other drinkers. Once the model is set running, the agents can be seen rushing to the various bars (at different speeds), crowding around them waiting to be served and then dashing off to find the loos, where more crowding takes place. Then it is back to a bar to fill up again whilst trying to navigate the busy doorways. Most of the agents display a purposeful air as they jostle at the bar or try to get through a doorway, but interestingly some dither as they make one decision, then alter it again and again. Almost human! Like many similar models, the decision process is quite simple: determine a goal based on whether you are thirsty or need the loo and head there. All the time look for empty areas to move to and avoid others. There was a brief discussion about the use of a chequered and numbered map to help the agents navigate around. An audience discussion arose about the use of such models as planning tools for fire evacuation.

Richard Burkill

TrueCrypt

At the December meeting Dennis Linzmaier gave us an insight into the data encryption practices employed by the Isle of Wight Council to keep data safe. The program he highlighted was TrueCrypt, an opensource disk encryption utility.

The program is on this months coverdisk, and can also be downloaded from www.truecrypt.org

The following paragraphs explaining what TrueCrypt is and how it works, are taken from the TrueCrypt web site, and are their copyrighted material.

TrueCrypt is a software system for establishing and maintaining an on-the-fly-encrypted volume (data storage device). On-the-fly encryption means that data is automatically encrypted or decrypted right before it is loaded or saved, without any user intervention. No data stored on an encrypted volume can be read (decrypted) without using the correct password/keyfile(s) or correct encryption keys. Entire file system is encrypted (e.g., file names, folder names, contents of every file, free space, meta data, etc).

Files can be copied to and from a mounted TrueCrypt volume just like they are copied to/from any normal disk (for example, by simple drag-and-drop operations). Files are automatically being decrypted on the fly (in memory/RAM) while they are being read or copied from an encrypted TrueCrypt volume. Similarly, files that are being written or copied to the TrueCrypt volume are automatically being encrypted on the fly (right before they are written to the disk) in RAM. Note that this does not mean that the whole file that is to be encrypted/decrypted must be stored in RAM before it can be encrypted/decrypted. There are no extra memory (RAM) requirements for TrueCrypt. For an illustration of how this is accomplished, see the following paragraph.

Let's suppose that there is an .avi video file stored on a TrueCrypt volume (therefore, the video file is entirely encrypted). The user provides the correct password (and/or keyfile) and mounts (opens) the TrueCrypt volume. When the user double clicks the icon of the video file, the operating system launches the application associated with the file type - typically a media player. The media player then begins loading a small initial portion of the video file from the TrueCrypt-encrypted volume to RAM (memory) in order to play it. While the portion is being loaded, TrueCrypt is automatically decrypting it (in RAM). The decrypted portion of the video (stored in RAM) is then played by the media player. While this portion is being played, the media player begins loading next small portion of the video file from the TrueCrypt-encrypted volume to RAM (memory) and the process repeats. This process is called on-the-fly encryption/decryption and

it works for all file types, not only for video files.

Note that TrueCrypt never saves any decrypted data to a disk - it only stores them temporarily in RAM (memory). Even when the volume is mounted, data stored in the volume is still encrypted. When you restart Windows or turn off your computer, the volume will be dismounted and files stored in it will be inaccessible (and encrypted). Even when power supply is suddenly interrupted (without proper system shut down), files stored in the volume are inaccessible (and encrypted). To make them accessible again, you have to mount the volume (and provide the correct password and/or keyfile).

Vive la différence

A Spanish teacher running a Spanish language class explained that, unlike English, nouns are designated either masculine or feminine. 'House' for example is feminine, while 'pencil' is masculine. A member of the group asked "What is the gender of computer?"

Instead of giving the answer, the teacher split the group into two groups, men in one and women in the another. Each group then had to decide whether a computer should be masculine or feminine, backing up their decision with four reasons for their recommendation.

The men's group decided that 'computer' should be feminine gender because:

1. No one but their creator understands their internal logic.
2. The native language they use to communicate with other computers is incomprehensible to anyone else.
3. Even the smallest mistakes are stored in the long term memory for possible later retrieval.
4. As soon as you make a commitment to one, you find yourself spending half your salary on accessories.

The women's group however concluded that 'computer' should be masculine gender because:

1. In order to do anything with them you have to turn them on.
2. They have a lot of data but can't think for themselves.
3. They are supposed to help you solve problems, but half the time they are the problem.
4. As soon as you commit to one, you realise that if you had waited just a little longer, you could have got a better model.

David Broughton

CoverDisk

There are four completely new programs on the cover disk this month, plus a major new version of AdAware, and updates to the security software and some utilities.

TrueCrypt
This is a disk encryption Utility allowing you to encrypt USB sticks, parts of a hard drive, or indeed a whole hard drive and thus secure your data from those who you don't want to have access to it.

For more details see the article on page 11.

ImgBurn,
ImgBurn is a lightweight CD / DVD / HD DVD / Blu-ray burning application that everyone should have in their toolkit!

I use it mainly for burning ISO images, but it has many more uses.

ImgBurn supports a wide range of image file formats - including BIN, CUE, DI, DVD, GI, IMG, ISO, MDS, NRG and PDI.

It can burn Audio CD's from any file type supported via DirectShow / ACM - including AAC, APE, FLAC, M4A, MP3, MP4, MPC, OGG, PCM, WAV, WMA and WV. You can use it to build DVD Video discs (from a VIDEO_TS folder), HD DVD Video discs (from a HVDVD_TS folder) and Blu-ray Video discs (from a BDAV / BDMV folder) with ease.

It supports Unicode folder/file names, so you shouldn't run in to any problems if you're using an international character set.

ImgBurn supports all the Windows OS's - Windows 95, 98, Me, NT4, 2000, XP, 2003, Vista, 2008 and 7 (including all the 64-bit versions). If you use Wine, it should also run on Linux and other x86-based Unixes.

It's a very flexible application with several advanced features that are often lacking in other tools, especially when it comes to burning DVD Video discs. It supports all the latest drives without the need for updates (including booktype / bitsetting / advanced settings on many of the major ones - i.e. BenQ, LiteOn, LG, NEC, Plextor, Samsung, Sony).

(cover disk continued)

BulkRenameUtility

BulkRenameUtility is a free file renaming software for Windows, demonstrated by Vic Shears at the November meeting. BulkRenameUtility allows you to easily rename files and entire folders based upon extremely flexible criteria.

You can add date/time stamps, replace numbers, insert text, convert case, add auto-numbers, process folders and sub-folders....plus a whole lot more see screen shot on back page)!

- Rename multiple files quickly, according to many flexible criteria.

- Rename files in many ways: add, replace, insert text into file names. Convert case, add numbers. Remove or change file extensions.

- Check the detailed preview before renaming.

- Rename photos using EXIF meta data (i.e. "Date Picture Taken", "Resolution" and other information embedded in all JPG photo files) Rename your holiday pictures from a meaningless dsc1790.jpg to NewYork1.jpg in a flash.

- Rename MP3 files using ID3 tags (a.k.a. MP3 ID3 tag renaming).

- Change files' creation and modification time stamps.

BullZipPdf Printer

There are a number of programs available which allow you to create a PDF from any document, simply "printing" to a PDF driver rather than to a physical printer. One of my favourites is Pdf factory from FinePrint, but it costs £33. There are also a number of free programs and BullZipPDF Printer is one of them.

One thing about this program is that as well as producing the output in PDF format, you could if you wish output it as an image file, a number of file types are supported: BMP, JPEG, PNG, and TIFF.

David Groom.

What is Chrome OS? by David Groom

Chrome OS is the new "operating system" which Google hopes to release late in 2010. News of Google's foray into the OS market has been around for some time, and in November 2009 more details were released by Google, and at the same time they released the source code under an opensource licence, using the project name Chromium OS. To read some of the write ups in the mainstream press (rather than the more computer literate specialised press) you would be led to believe that Windows and Linux systems soon will have a new competitor to deal with.

I've put "operating system" in quotes in the earlier paragraph because its not quite like any operating system we are currently used to, whether that be Windows, Linux or even a Mac. Google themselves say "it is a fundamentally different model of computing", and what it appears to be is basically the Google Chrome web browser (launched in Sept 2008) with a few other bits of software built around it to boot the computer and allow the browser to connect to the internet.

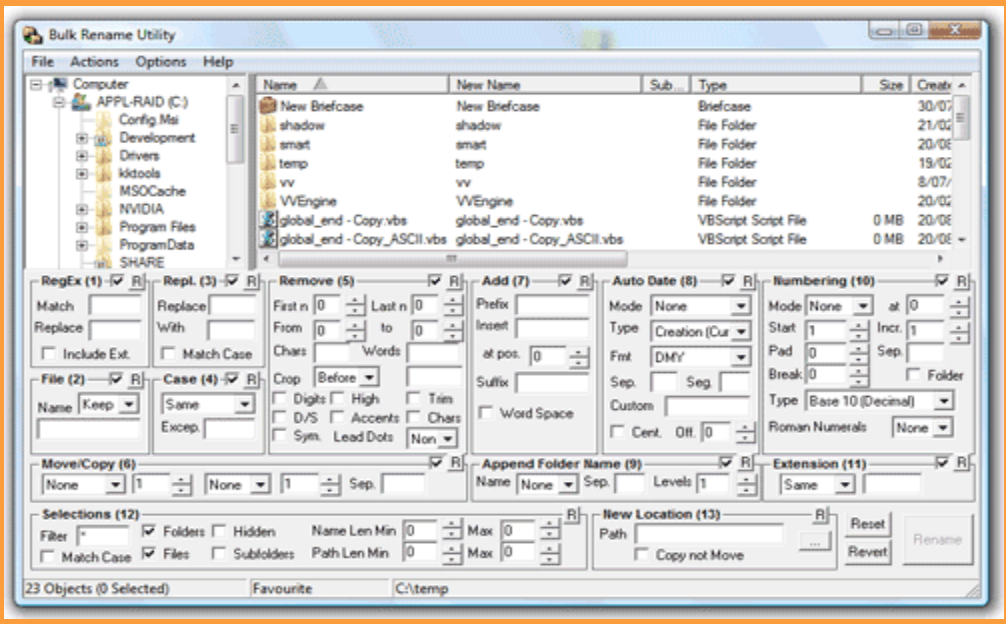
What this means is that all the programs you use are web applications residing on Google's, or a third party's web server, no programs are installed on your hard disk. Essentially this means you will need a decent broadband permanent connection (either hard wired, WiFi, or mobile broadband) to use the computer. It's not yet clear whether storage of documents you create will be allowed on your hard disk, or whether these too will be stored on the web server, much like the default for Google Docs at present.

So what are the advantages? Speed for one, it is anticipated the computer will boot up in 7 seconds. Cost may be another plus point, the OS is likely to be free, and since you don't install programs on the computer the hard disk size is likely to be small.

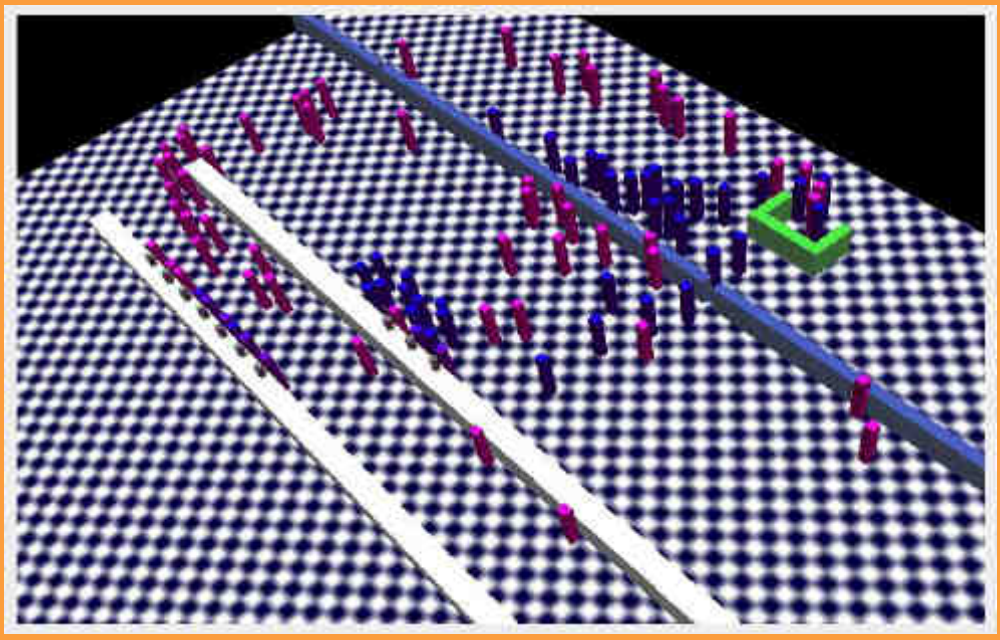
The disadvantages? You'll going to need a broadband connection to be able to use the computer, and many places simply do not have a reliable connection. Secondly the sort of applications we are used to using are just not available as web applications at the moment, and to be honest are unlikely to be in the future. The complexity of modern programs mean they are just too large to sensibly be made available as a web application.

I may be proved wrong, but it seems to me that unlike the impression given so far in the mainstream press, Chrome OS will be a relatively large niche market, useful for cheap netbooks, but not really a serious operating system that most of us in the IWPCUG would expect to use as our only OS.

As this is an Opensource project the source code is available for download, and you can then build the operating system yourself, details are available at www.chromium.org/chromium-os and I may well have a try some time in the future.



Screen shot of BulkRenameUtility See page 14



Screen shot of Friday Night at the Pub See page 10

We try to publish HOTKEY quarterly in April, July, October and January
This edition was compiled using Serif PagePlus 9 and printed by Island Printers
East Street, Ryde. No responsibility can be accepted with respect to any advice or suggestions made in this journal