

Issue 226

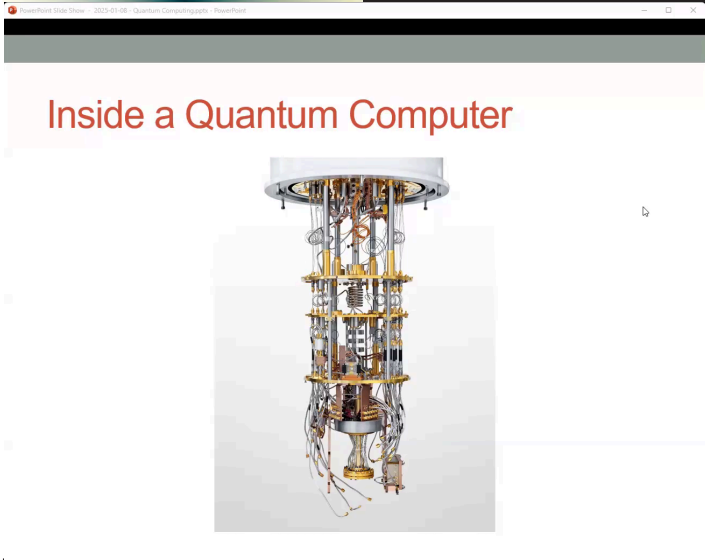
WINTER 2025

ISLE OF WIGHT PC USER
GROUP



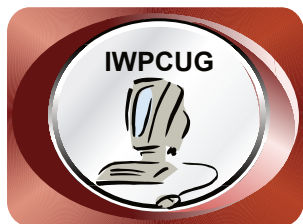
HOT KEY

JANUARY 2025



At our January meeting Jonathan Burt gave us an insight into the developments in Quantum Computing.

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The Isle of Wight Personal Computer User Group

We welcome anyone who has an interest in computers and related technology and what you can do with them.

We are a group which seeks to exchange ideas and new information.

Membership is £12 per annum

Our meetings are normally held on the first Wednesday of each month from 7.00 to 9.00 pm. Until further notice these will be held online via Zoom.

Visitors are always welcome.

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 web site address is **www.iwpcug.org**

We also have an e-group discussion area on

Groups.io: **<https://groups.io/g/iwpcug>**

Details of how to join are on page 15.



FUTURE MEETINGS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
5 February	AGM followed by Q&A panel	
5 March	No Meeting	
2 April	Mini Talk on Microsoft CoPilot	Mike Hoar

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman : David Groom

Secretary : position unfilled

Treasurer : Mike Hoar

Membership and Database Secretary : Roger Skidmore

Committee Member : Steve Sutters

Committee Member: Sven Alleblas

Committee Member : Susanne Bone

Treasury Supervisor : Phil Rogers

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

Please contact Steve Sutters, or any committee member, with your ideas.
If necessary we may be able to find a speaker for your subject.

Chairmans Report

Firstly an apology for not getting out an October edition of HotKey, I really did not have enough content to fill it. So a belated thank you to everyone who came along to the club BBQ at the start of July. Particular thanks go to Peter who came across from Eastleigh especially for the event. Although the weather wasn't as good as it could have been, it certainly was better than what we've experienced on many of the evenings since! Having had to cancel the BBQ's in the previous two years it was nice to be able to go ahead this year.

As noted on the next page our AGM is next month. The two most pressing issues to discuss are club funds, and once again the future of the club. As noted by the Treasurer at last years AGM by now we have exhausted club funds. Our major expenses is producing a printed version of HotKey which is posted to members. Should we wish to continue we will need to reintroduce subscriptions, I recently sent an email asking members to complete a quick survey on this point, if you haven't yet responded please do so.

After we conclude the AGM we will have a Q&A session, as in previous years it helps to start things off if one or two of you have thought in advance of a question to ask the panel.

Please note there will be no meeting in March, I am away on holiday and very unlikely to have any internet access, and with the difficulty in finding speakers the committee decided to skip a meeting this month.

Currently in April we have Mike scheduled to do a mini talk, if anyone else felt like doing something for short talk that would be welcome. Otherwise you may have me talking about "my 14 days on holiday without internet access"!

We have ideas for meetings through to September, though as these are not yet "firmed up" I have not put them in the calendar on page 2.

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 5th February 2025 at 7:00 PM via Zoom.

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 Chairman, David Groom. Seconders are not necessary at this stage.

ISLE OF WIGHT PC USER GROUP ANNUAL GENERAL MEETING **AGENDA**

1. Consider matters arising from the previous AGM, held on 7th February 2024, (<https://www.iwpcug.org/secure/minutes/AGM2024Approved.pdf>).
2. Receive reports:
 - 2.1 Chairman
 - 2.2 Treasurer, including approval of the Club Accounts
 - 2.3 Membership Secretary
 - 2.4 Other activities: Computability, HotKey, Website, Egroup, Facebook
3. Consider the future of the IWPCUG
4. Elect a Chairperson, Treasurer, Secretary, and Membership Secretary.
5. Elect other Committee members (up to a maximum of eight persons).
6. Set the Annual Subscription.
7. Appoint an Independent Examiner.
8. Any Other Business.

Fixing a Mac with Linux

OK, this is a PC User Club, but we're also a small charity providing recycled Laptops to Ukrainians (or whomever), so we do come across outliers like Apple Mac, etc. We have in stock an elderly MacBook Pro laptop and very recently a 27" iMac "all-in-one" with a dodgy mechanical hard drive.

The plan was to replace the old dodgy hard drive with a shiny new slick SSD, a replacement which will speed things up. We had done this before last year with our club member Sven Alleblas, which was quite an education. The glass screen is literally stuck onto the case and you have to cut round the adhesive with a mini pizza cutter until you feel it come free. About the same stress level as defusing a mine. Very heavy and then still attached by a number of those flat push-in cables.

A bit of screwdriver dis-assembly and re-assembly, testing and the stress of eventually getting the glass back in exactly the right place with specialised double-sided tape. Possibly akin to medical brain surgery.

The bit that justifies this article is my foolishness in inserting (by mistake) a Linux Mint installation USB into the MacBook Pro to see if what I thought was the new Mac installation USB would work. I thought it was the "Catalina" set-up USB I had just created to use on the iMac. But no; there suddenly appeared the installation screens for Linux Mint! How come, on an Apple Mac? Not supposed to happen.

The iMac hard disk was dodgy anyway so nothing lost: I transferred the Linux USB to the iMac and let it run to completion and there it was - typical Linux Mint installed but on Apple iMac. (I had to use an external WiFi dongle at first, but no big deal). Updates proved dodgy but that was anyway the problem with the original Mac installation.

There are YouTube references to doing this - a "bare metal" installation - but more often using a virtual machine to run Fedora etc. under Mac OS. The HUGE thing for us is that Mac has to be personalised like Chrome and now also Windows, but the free Linux can be installed for generic details etc without offering an email address. And of course Linux is lighter and faster. Note, this may only work on Intel based Macs, but its early days in this, our new experience.

Our iMac was a 27" iMac model A1419 late 2012 (details hidden under the stand - use a microscope).

Repair kit from iFixit: https://www.ifixit.com/Device/iMac_Intel_27%22_Retina_5K_Display_2019 (or maybe you could cut your own double-sided tape and risk a Stanley knife) and <https://www.ifixit.com/en-gb/products/imac-intel-27-2012-2019-adhesive-strips#guides>

If you really, really, want to put back a Mac operating system, learn from this YouTube: https://www.youtube.com/watch?v=TRPF_FZNwko

And find what Mac you have been landed with from here, e.g.: <https://everymac.com/systems/apple/imac/specs/imac-core-i5-3.2-27-inch-aluminum-late-2012-specs.html>



Mac original Catalina screen



Linux “Vanessa” screen on same iMac

Linux will run many typically Mac type programs, e.g. GIMP, Blender, and of course the usual suite of everyday software like Libre Office. An older Mac may not run the latest Adobe paid-for software but the latest Linux may well do free equivalents.

This article only refers to recent Linux “Mint” installation, so we do not know if your preferred flavour of Linux will also work like this.

Roger Skidmore for “Laptops for Ukrainians”

<https://laptops-for-ukrainians.weebly.com>

Upgrading Windows 10 to Win 11 without a TPM

Installing Windows 11 - with a bit of help from Google

So you've got a slightly older computer running Windows 10 and you are being nagged to upgrade to Windows 11 - but then it says you need a "TPM" so you can't?

Then you find out that "TPM" means "Trusted Platform Module" but you're no better off? Do you need a TPM - well, there are plenty of work-arounds on the internet so not sure there's an answer to that.

My "backup" computer has a motherboard socket for a TPM but my office computer doesn't. Anyway, early one morning I got Googling and found two ways around this. Preferred one was to use "Rufus". Rufus is usually to create a bootable USB from a suitable ISO file - typically a Linux ISO file to Linux bootable USB. Rufus will also download Windows 11 and on the way give you options to bypass the TPM obligation. This, however, didn't work for me - some error message. What seems to have worked was a command line script called "Skip_TPM_Check_on_Dynamic_Update.cmd" which seems to hack the registry into not bothering about not checking for a TPM.

Anyway, then running "Windows11InstallationAssistant.exe" caused Windows 11 to download and eventually install uneventfully on my backup PC. The particularly good bit (so far, touch wood) is that a clone of this installation (using Macrium) now works on my office computer which Windows said was impossible.

BTW, after applying the command-line fix to my coffee table laptop it thinks it's got a TPM but its 7th generation i5 processor puts it beyond the pale as regards Win11.

So, provided Windows doesn't discover my misdeeds, I have joined the elite in now running Windows 11.

Roger Skidmore

Search for: "Skip TPM Check on Dynamic Update" and also look at:

<https://www.tomshardware.com/how-to/bypass-windows-11-tpm-requirement>

<https://www.zdnet.com/article/i-tried-another-way-to-bypass-windows-11s-installation-restrictions-heres-how-it-works/>

Getting Family Tree Data Into a Searchable Database

I have been a system developer for the IOW Family History Soc. since 2017 and was involved in the design and development of the current web site. Part of my work is concerned with transcribing records and inserting the data into a MySQL database.

Since May 2023 I have been the Pedigree Index Administrator. The Pedigree Index is a collection of 1,600 plus family trees donated to the society over the last 20-25 years. The idea is that members can ask if there are any entries concerning people of interest. Originally this was done by the administrator ploughing through an excel sheet with all 500,000 entries and, if anything interesting is found, acting as intermediary between the questioner and the tree owner.

Two years ago I started work on a web-based system in which a member could search the trees themselves by means of a searchable database. A pilot web ‘page’ was published early in 2024. Only entries from trees for which the donor had given permission are displayed and only for those recorded as dead, or presumed to be dead (older than 100).

The pilot database contained a lot of errors and was incomplete, so in July I decided to start again from scratch. I use the following procedure.

The donor trees are in the form of a so-called gedcom file. This is a proprietary flat database file which can be read by genealogy software – I use Family Tree Maker.

Step 1. Load the tree into the software via a conversion routine. The smallest tree in the collection has about 10 entries the largest 13,500.

Step 2. Examine the entries for wrongly formatted entries such as forenames used as the surname, husbands surname used instead of the woman’s maiden name, comments added in the wrong field, dates recorded in a wrong format. There are a myriad of ways to label an entry as unknown person and this is used as a trigger for other correction later in the insertion program, so has to be changed to a standard. It is a long list. They all have to be corrected.

Step 3. Produce a list of all individuals in accordance with a previously defined template. Export this to a csv file.

Step 4. Select the *Privatise* function (replaces forenames with “Living” for all those younger than 100 with no recorded death date (or married less than 75

years). Adjust the chart template by adding a couple of data fields not included in the csv chart. Regenerate the chart and export as a pdf file.

This has to be done for all 1,600+ trees.

In order to transfer the csv data into the database I have written a program in PHP which I run from a web page on my private development web server on my PC. I use Apache for Windows together with PHP and a MySQL database (all freeware).

The web page is used to specify the name of the csv file.

Step 5. Run my php program. This extracts each line from the specified csv file and parses each line into a list of variables. In the process various checks are made, and if necessary, corrections made to date entries for example. In order for a search to be performed year values are extracted from dates for birth, marriage and death, these are added as additional columns in the database table. Finally the line is inserted into the database. The name of the tree, its start and end table line ids in the database, and its transferred status is inserted as a record in a separate table containing the names of every tree, the donor id is added later.

Step 6. Go back to Step 1.

At the time of writing this article I have about 100 trees left to process – deadline end of November (only 3 weeks away, so no problem).

To complete the job, I have to produce new versions of the web pages to provide an enhanced search facility for our members.

Postscript

Some of you may be asking why I didn't adapt the csv file with the required additional columns etc., and then upload directly into the database (which you can do easily). The reason is simple, Excel treats any entry which looks like a date into a serial number (seconds since the base date – which I think is 1st Jan 1905). This is OK if it is a real date but if you just have the year then it assumes this is a serial number and displays that as a date somewhen in 1905. Also although dates are displayed as formatted, when inserted into a database Excel inserts the serial number. I experimented with a large number of methods to prevent this but none of them worked.

If a csv file is parsed line by line in a php program and then the line is saved to the database as is, the problem disappears. It also enables me to

programmatically make corrections and add columns instead of doing this manually in Excel or in the database. The csv file is never opened and saved within Excel as that series of actions results in the complications I have described.

Mike Hoar

5G Broadband Review

In the last edition of hotkey (July 2024) I wrote about how I had got rid of my landline and switched to a 5G broadband router. I had only recently done so prior to publication of HotKey, and so wasn't able to share my experiences with you, but it is now seven months on and it seems an appropriate time to do so.

You may remember that prior to switching to mobile 5G I had a very slow broadband connection due to the distance of my house from the exchange. I wrote in the article of the high speeds that I was now achieving with 5G and although I don't always get such high speeds I have never found an issue with the speed, and it is always been considerably much higher than what I achieved on the fixed line.

Occasionally when opening the web browser and browsing the internet for the first time in a session I do find that the browser cannot reach the website, but a quick refresh of the browser cures this problem. It's almost as if the broadband connection has gone to sleep due to inactivity and doesn't wake up fast enough for the initial request from the browser to be completed. Though to be honest I've not found this to be a problem.

Twice in the last seven months I have experienced a complete outage in the connection. The first was on the evening of 10 October. I had a look on the Three website and there were no reported issues. The following morning I still had no internet access, so I spent some time initially trying to check the router, rebooting it, rebooting the computer, checking my settings etc, all to no avail; again the website showed no reported problems. After a few hours I decided to ring Three, only to be told that there was a UK wide outage starting from 7:00pm the previous evening! Why they had not put this on their website's status page I do not know.

The second outage lasted for over a day in December, at least this time there was a note on the status page. Over 24 hours is a long time to be without the internet and so I started to use my mobile phone (which is on the Vodafone network) to set up a mobile hotspot which I could then connect my computers to. On my Vodafone plan I only have 10 Gb data allowance per month and I ended up using a fair chunk of this whilst I was not connected to Three. In fact I ran out of data from Vodafone two days before the monthly renewal.

On another one or two occasions I've noticed either poor connectivity or slow speeds which have been cured by rebooting the router.

Overall, compared to my old connection with its slow speed, I would have to say that I am pleased I made the switch to 5G broadband, particularly as it is cheaper than my old fixed line broadband. Although most of this article talks about the negatives, for 99% of the time everything has worked well. When I complete my house move I will have the option of WightFibre, whether I switch to that instead of 5G I'm not sure, but I would say I haven't ruled it out.

David Groom

My PC History

My first PC was second hand with an Intel single core processor. Worked fine but was noisy with a small case fan.

I built my first computer in 2008 I wanted it as a media centre to play DVD's including Blu-ray discs and music recording, as well as for general internet use, so I wanted it as silent as possible. It was based on a motherboard with built in graphics (Gigabyte GA-MA78GM-S2H). I bought an energy efficient processor that didn't need much cooling and one of the newly newly available affordable 30 Gb SSD's. I remember it being one of the fastest computers in the club with its dual core 2.5 gigahertz AMD processor. It used to boot up in 30 secs with a fresh install of Windows 7. I modified the case to take a bigger and quieter 120mm cooling fan.

How times have changed in the computing world in the last 16 years! In computing terms it has become an antique. Now I'm getting remarks like 'Where do you shovel the coal in Steve' and 'don't you think you ought to put it out of its misery'. Even Zoom gives me a hardware warning of 'it's best to use at least a quad core processor'. This program is where the PC stumbles

most as the video and audio freezes for many seconds at a time with screenshots that don't keep up with speakers! It works OK for basic tasks but YouTube videos do pause momentarily if I'm looking something up on web pages.

I did try installing Linux Mint XFCE on a new SSD on the old PC. It surfed the internet fine but took 1 minute 20 seconds to boot up (enough to bring a PC enthusiast to tears), it also kept asking me for passwords when I had deliberately not given one during the installation so I would not have to bother in future! Also it refused to print despite putting in the correct model of printer. I expect these problems could be overcome but it would take me several hours of faffing about.

The motherboard and processor packed up years ago so I replaced these, and the silent power supply packed up this year. The cost of a new one would have been about £200 as I wanted another fanless one. I looked into what else I could buy with that amount of money and was surprised to find that a mini computer (similar to a laptop without the screen and mouse), which had a higher spec in every way than my old PC, could be bought for about £200. I came across a WEIDIAN Fanless Industrial Mini PC, Core i5 10210U, 4.2GHz (maximum clock speed), with Windows 11 pre installed on eBay (see image on back cover). I looked up the specs and it surprised me that its performance in every way was superior to my old PC. Faster, more energy efficient, smoother graphics, smaller, lighter and TOTALLY SILENT as it is fanless! Placed a winning bid of £196. Works great. Being a mini PC it doesn't have drive bays for a CD player or card reader but I could get an SD Card Reader to USB 2.0 Adapter and an external CD drive, but I will probably use the desktop PC for these duties.

The smart looking aluminum case has many matt black fins which act as a big heat sink and they never become more than tepid to the touch. Setting up was a breeze. Was able to surf the internet straight away and it instantly recognised the HP mono laser printer. Not only did it boot up in half the time of the old PC but it gives smooth playing of YouTube videos at 1080p. The old PC kept freezing at this resolution. Idles at around 15-20 watts compared to 77 ish watts of the old PC.

The old PC works as well as ever but a lot of modern programs need higher spec. machines. I have had great value for money with this PC and my PC building will not have created much e-waste when the PC finally gets thrown away (or better still recycled).

Stephen Sutters

Cyberattacks

British Telecom (“BT”) identifies more than 2,000 signals of a potential cyber attack every second – over 200 million per day – as it defends critical networks across the world, according to new data pointing to an accelerated cyber security threat.

The data, unveiled at BT’s Secure Tomorrow cyber security festival at its Adastral Park research centre, showed that web-connected devices are scanned over 1,000 times a day by known malicious sources – an average of once every 90 seconds. While some scans are conducted legitimately for security monitoring, three in four (78%) are not harmless – indicating that hackers are looking for weaknesses in the online systems of businesses and essential public services, as smart tech becomes common. The data revealed a 1,234% annual rise in new malicious internet protocol (IP) scanners recorded across BT’s networks in the 12 months to July. The increase reflects how cyber criminals are increasingly scanning for vulnerabilities through automated, ‘one time use’ disposable bots, in an attempt to evade existing blocking and security measures.

BT’s analysis also showed that IT, defence and financial services are the three most targeted industries for cyber attacks but, increasingly, less traditional sectors like retail, education, and hospitality – which may not have focused as much on their security – have also found themselves in the hackers’ sights.

Businesses worldwide are navigating a once-in-a-generation digital revolution, with AI, Internet of Things, and cloud technology being incorporated into everyday operations. While these give organisations the opportunity to futureproof themselves and gain a competitive edge, they also introduce new risks.

The National Cyber Security Centre (NCSC) has said that AI will “almost certainly increase the volume and heighten the impact” of cyber attacks over the next two years [www.iwpcug.org/url/NCSC1], while cyber criminals are increasingly using the tech to conduct their reconnaissance and carry out more sophisticated attacks. The global ransomware threat is also set to increase due to AI, with the NCSC explaining it will make it easier for novice cyber criminals to hack into businesses.

BT research suggests UK business tech investment will rise by a third (31%) in 2024, yet many companies are upgrading their systems and adding more connected devices without a comprehensive cyber security plan to back them up, leaving them vulnerable to attacks.

To help businesses better understand the cyber security landscape – and stay one step ahead of hackers – BT has teamed up with international digital intelligence expert Ben Owen, best known for his role as global hunter on the reality TV show Hunted, to share insights into the mind of a cyber criminal.

The former spy said that hackers' natural desire to increase their volume of scam attempts means many have been early adopters of AI. He warned that UK organisations need to match the hackers' evolution by using advanced technology and tools in their cyber defences. An example is BT's security platform Eagle-i, which uses AI to predict, detect and neutralise cyber attacks, and machine learning to help improve its knowledge of threats.

Cybersecurity expert Ben Owen said: "Businesses are connecting more devices and adopting new AI tools every day; but hackers are using the same tech to break their defences. It's an AI arms race that companies can't afford to lose. Importantly, while advanced technology is set to boost the number of cyber attacks and lower the bar for rookie criminals, it will not change their primary target – low-hanging fruit. Putting security first is the only way to protect businesses, their people and the economy."

Tris Morgan, Managing Director – Security at BT, said: "Today, every business is a digital business, and our data shows that every 90 seconds hackers are checking connected devices to find a way in – like opportunistic burglars looking for an open window. Tools like AI provide new routes of attack, but they can also be the first line of defence. At BT, we're constantly evolving our network security to stay one step ahead and protect more than a million businesses, day in, day out."

British Telecom
Press Release 12 September 2024
[www.iwpcug.org/url/BTCyber]

Joining the Email Discussion Group

Send an email to: **iwpcug+subscribe@groups.io**, you will receive a confirmation email, follow the instructions in that email, and then wait for your approval request to be approved by one of the moderators.

All members are encouraged to join this group (it's free and private to club members) so you can keep in touch with events and join in with the discussions.

You can also keep in touch by regularly visiting **www.iwpcug.org**



Steve's WEIDIAN Fanless Industrial Mini PC, see page 13.



Apologies for the rather corny joke, which I did find amusing.

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