

Issue 224

SPRING 2024

# ISLE OF WIGHT PC USER GROUP



# HOT KEY

APRIL 2024

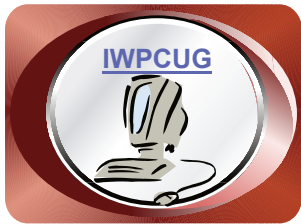


At our March meeting Dr Peter Huckle talked about his early life in computing, shown in the image is the Ferranti Pegasus, one of the first computers he worked on.

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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](http://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 4.



## FUTURE MEETINGS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
1 May	Email	David Groom
5 June	Varna Eye	Sean Colson
3 July	Summer BBQ	
7 August	No meeting	

## 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

### Note

Contact details removed prior to publishing on  
the internet.

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**

A review of the AGM held in February can be found on page 6.

Thanks largely to Roger Skidmore's efforts we have meetings planned through to July, however the calendar on page 2 may change a little as just as we went to press we had to change the April meeting and may move around subsequent meetings, so please keep an eye on the eGroup and website for updates.

Earlier this year Roger Skidmore suggested to the committee the "radical" suggestion of moving the BBQ from August to our July meeting, partly on the basis it tends to be warmer, and the evenings are longer. His second suggestion was that, in common with a number of organisations, we do not hold a meeting in August.

Numbers attending our Zoom meetings continues to be low, around only a third of our membership appearing. I would welcome feedback from members who do not attend, are our meetings too technical, not technical enough, is there anything we could do to encourage you to join us online?

**David Groom**

### **Saving Space**

Currently in my office I have three desktop computers, all in fairly large tower cases (approx 17" x 17" x 8"). One computer runs Windows 10 and is my "everyday" desktop, it has my email program, Affinity programs (see page 11), web design software, as well as a host of other software. The second desktop is my Linux web server, which I use as a web host for client web sites I am developing, before uploading them to a publicly accessible web host. The third desktop is a Linux computer which I use mainly for "play" (OpenStreetMap related stuff, etc.). As you may imagine these three computers take up a lot of space.

How can I reduce the amount of space I need? There appear to be five options.

1) I could perhaps have one computer with a dual boot option so that when I switch it on I have the option of booting into two different environments. Whilst in theory this seems the simplest, it does mean that I'd never be able to use all three computers at the same time. I don't think this would be a major inconvenience. Since I need to be able to use the Windows PC and the

Linux web server at the same time, it would be the “play” Linux computer which I’d have to “put” on one of the other machines.

2) If I don’t need regular access to the physical hardware I could relocate one or two of the cases to the attic, and connect to them from a computer in my office using VNC software. In theory this would work best for the Linux web server as I never really need to touch this computer.

3) Alternatively I could install virtualisation software on one computer, and essentially run a second or even third computer as a virtual computer. However as sometimes what I do on the “play” Linux computer needs intensive processor power I’m not sure it would be best to have this as a virtual machine. On the other hand the Linux webserver doesn’t need much processing capacity so could sit as a virtual machine on the Windows desktop computer. I might test this and update you in a later edition of HotKey. The one downside is that I would then have single point of failure for two “computers”. (I’d definitely have to be more rigorous in my backup regime!

4) My first idea is in some ways the simplest, though also likely to be the most expensive. I could replace all three large desktop computers with three mini PCs. It’s likely that the combined space of all three mini PC’s would be about the same as one desktop case. However I would need to go out and buy three new mini PC’s (some are available used on eBay – but are they powerful enough?). I am a bit of a “traditionalist”, I’m used to a PC with expansion slots, and things I can separately replace when they fail, and I would not get this with a mini PC.

5) The last option is one I have no experience of at all. Since Windows 10 version 2004 it has been possible access the power of both Windows and Linux at the same time on a Windows machine. The Windows Subsystem for Linux (WSL) lets developers install a Linux distribution (such as Ubuntu, OpenSUSE, Kali, Debian, Arch Linux, etc) and use Linux applications, utilities, and Bash command-line tools directly on Windows, unmodified, without the overhead of a traditional virtual machine or dualboot setup. I am unclear as to whether in WSL I can get a full web server (Apache with PHP, and a MYSQL database) running, and how I can access this for development and testing. Further investigation is needed!

The truth is that the easiest option is what I have now, three separate desktop computers, but I do need to reduce space. How I eventually achieve this I’m not yet sure, but I will update you in a later edition of HotKey.

**David Groom**

## IWPCUG AGM - February 2024

There follows a brief summary of the AGM for those who did not attend, and do not wish to read the longer official minutes.

The subscription level was set at £12 but, as in the last few years, it would be left to the committee's discretion whether this be collected. The current committee were re-elected in their current roles.

Reports were given outlining the main activities of the IWPCUG over the previous year. The accounts showed we have had no income, and our expenditure (mainly HotKey printing & postage) totalled £256.61. With our budgeted expenditure for 2024 of £260 that would leave us with a balance of £77.65 at the end of 2024, unless we took the decision to start collecting subscriptions again.

We have 25 current members, 7 members are Honorary, 1 Retired (a member from the Portsmouth Linux User Group), 2 Consultants, and 2 Associates. Giving a total of 37 members.

The Chairman said the number attending our Zoom meetings was dwindling, and it is difficult to ask speakers to put effort into preparing a presentation when the audience will be so small. Plus it is getting harder to find topics to talk about, partly because we are relying on the same few people to give our presentations, and partly as there does seem to be less going on on the traditional personal computer world. This might indicate that the IWPCUG has reached the point where it should be wound up. As a committee this was foreseen many years ago and a conscious decision was made to wind down our funds, particularly through the non collection of subscriptions.

Members suggested a number of topics which might form a basis for talks.

The general feeling was we carry on as we are and maybe revisit things this time next year, particularly as this years calendar of events seems to almost be filled.

There was some discussion on whether restarting physical meetings might improve attendance at our monthly meetings, which will be discussed further on the eGroup.

**David Groom**

## That Itch Again

I had that itch again... I already had a computer case, a decent power supply, a modest CPU fan and some spare time now that the Ukrainian rush has quietened down. I also had that itch to put a computer together, especially after Jonathan Burt's adventures with [PC Partpicker](#).

Years ago Steve Sutters had recommended using an AMD processor for my first go-faster PC on account of its speed and relatively low thermal design point. I think for thermal efficiency AMD is still ahead, but I have never worked with Intel chips - preferred of course by Jonathan Burt. So why not try Intel this time?

At the back of my mind were the dire warnings of transferring a hard disk installed system from one hardware configuration to another. I have long recognised that a Linux Mint installation created on one computer almost always works quite happily in another, different system. Clearly the installed system contains enough drivers etc. to adapt quickly to its new environment. I do this all the time with a variety of laptops for Ukrainians, keeping a stock of "ones I prepared earlier" for the next incoming laptop. The only caveat seems to be whether the recipient computer is configured for the more modern GPT filing system, so I keep a few HDD's configured for GPT and a few for MBR format. Whether AMD or Intel doesn't seem to matter, otherwise.

My new motherboard would have to support legacy booting, of course, meaning it needs to be set in CSM, or compatibility, mode. That apparently means I can't cut corners on using integrated graphics. Probably needs to have "Secure Boot" disabled as well if I want to play across formats including Linux.

I have a plain micro-ATX case (no flashing lights) in traditional format with the power supply at the top - the correct position to take advantage of its air-expelling fan with fortunately a generous 650W power supply. And of course a twin front-loading HDD caddy. The motherboard I chose was an Asus B760M which has the Intel B760 chipset and takes an LGA 1700 CPU chip (with 1700 pins). This has three full length PCI slots and unbelievably, a parallel printer header (LPT). How I love legacy stuff! And then a modest i5 processor (non-graphic to allow for CSM mode – i.e. legacy mode) but newer DDR5 memory which the motherboard supports, and a basic 4Gb Asus Radeon RX6400 graphics card. (This is only for play, not serious gaming.)

It also takes a M.2 NVME drive - plugged and screwed to the board, but my

ambition is to find out if there is a front-loading M.2 adapter. I do like to play.

And to find out if Windows can be machine-tolerant to swapping HDD's between AMD and Intel boards, as Linux appears to be. And this will be my first Intel machine.

I have used PartPicker for compatibility checks but ordered everything from Novatech - all under one roof. Watch the next edition of HotKey for the results of this adventure.

**Roger Skidmore**

## **Unveiling the Software Heritage Initiative: Safeguarding Software for Future Generations**

As technology continues to advance at an unprecedented pace, the significance of preserving software for future generations becomes increasingly apparent. The Software Heritage Initiative ([www.softwareheritage.org](http://www.softwareheritage.org)) is a groundbreaking project that aims to safeguard software and ensure its availability for years to come.

Why is software preservation important?

Software plays a vital role in our modern society. It powers our computers, mobile devices, and countless other technological systems that we rely on daily. It underpins critical infrastructure, supports scientific research, and drives innovation across various industries. Preserving software is essential because it not only ensures the continuity of these systems but also allows future generations to understand the development of technology and how it has shaped our world.

The challenges of preserving software

Preserving software presents unique challenges compared to other forms of digital preservation. Software is complex, constantly evolving, and often relies on specific hardware or operating systems. Additionally, the rapid obsolescence of technology can render software inaccessible or unusable within a matter of years. Furthermore, intellectual property rights and licensing agreements can further complicate preservation efforts. Overcoming these challenges requires a dedicated and comprehensive approach, which is precisely what the Software Heritage Initiative aims to provide.



## The Software Heritage Initiative: Goals and objectives

The Software Heritage Initiative, launched in 2015, is a project of monumental importance in the realm of software preservation. Its primary goal is to collect, preserve, and share all software ever written. By building a massive and publicly accessible archive, the initiative aims to ensure the longevity of software and provide a valuable resource for researchers, developers, and future generations. The Software Heritage Initiative also strives to foster collaboration among various stakeholders, including academia, industry, and the open-source community, to collectively address the challenges of software preservation.

### How does the Software Heritage Initiative work?

The Software Heritage Initiative employs a multifaceted approach to achieve its goals. It utilises advanced techniques to collect and archive software from a wide range of sources. This includes crawling the web, extracting software from repositories, and partnering with organisations and individuals who contribute their software collections. The initiative also focuses on preserving the entire software development process, including source code, build systems, and associated metadata. By capturing this comprehensive information, the Software Heritage Initiative ensures that software can be fully understood and re-executed in the future.

### The importance of open source software in the preservation effort

Open source software plays a crucial role in the preservation efforts of the Software Heritage Initiative. Open source software, with its transparent and collaborative nature, aligns perfectly with the initiative's mission. The open source community actively contributes to the project by sharing their software and expertise, thereby enriching the archive. Additionally, open source software provides a valuable model for long-term software sustainability, as it allows for continued development and maintenance by a distributed community of contributors. The Software Heritage Initiative recognises the significance of open source software and actively encourages its adoption and preservation.

### Success stories of the Software Heritage Initiative

Since its inception, the Software Heritage Initiative has made significant strides in preserving software for future generations. One notable success story is its collaboration with the European Space Agency (ESA). The initiative has archived the source code of key software systems used in space

missions, ensuring their availability for future space exploration endeavours. Another success story revolves around preserving historical software, such as early computer programs and games, which provide insights into the evolution of computing. These success stories highlight the tangible impact of the Software Heritage Initiative in safeguarding software heritage.

The future of software preservation: Innovations and advancements

As technology continues to evolve, so too will the field of software preservation. The Software Heritage Initiative is committed to staying at the forefront of innovation in this domain. It is constantly exploring new techniques for capturing and archiving software, improving the accessibility and usability of the archive, and developing tools for analysing and understanding software artefacts. Additionally, advancements in artificial intelligence and machine learning hold great promise for automating various preservation tasks. The future of software preservation looks bright, thanks to the ongoing efforts of the Software Heritage Initiative.

Conclusion: The impact of the Software Heritage Initiative on future generations

By collecting, preserving, and sharing software, the Software Heritage Initiative ensures that future generations have access to our technological heritage. It fosters collaboration, encourages the adoption of open source software, and actively engages individuals and organisations in its mission. The Software Heritage Initiative stands as a testament to the importance of preserving software and the profound impact it can have on shaping the future. Join the initiative, contribute to the preservation effort, and help safeguard software for generations to come.

**Writesonic AI, edited by David Groom**

### **Forthcoming Talk on Email**

Soon I shall be giving a talk on the subject of email. If there is anything in particular you would like me to cover then let me know soon.

**David Groom**

## Affinity Creative Suite - version 2

During 2019 I started using a beta version of Affinity Publisher (see HotKey Autumn 2019 page 11), purchasing the first production release during that year, and producing the first edition of Hotkey using it in January 2020. In late 2022 version 2 was released, but I didn't upgrade.

In March 2024 I got an email stating there was a spring sale (30% off) on all Affinity products, and on further investigation found that as I was an existing user I could get an additional upgrade offer, meaning I could get version 2 of Affinity Publisher, Affinity Photo & Affinity Designer all for £83.99, an offer too good to miss (especially as I had never had a copy of Designer before).

If all goes well this will be the first issue of HotKey produced using Affinity Publisher 2.

One interesting fact was that Version 2 did not overwrite version 1, so I can open both versions at once and directly compare the two. However although version 2 opens version 1 files, but once saved these can't be opened again in version 1.

First impressions of the new version of Publisher was that not much had changed, so I could immediately start using a familiar interface. In fact I had to look online to see what the major changes were in this version. There are apparently performance improvements, a reworked "new document" interface, and a reworked "layers panel" and "color panel".

I've also been using Affinity Photo, and one of the changes in version 2 is the main reason I decided to upgrade. When designing websites I've been increasing using the WebP format to save images, as it has often has smaller image file sizes for the same level of detail. Affinity Photo 1 could not export an image in the WebP format, so I had to export it as a PNG or JPEG, and then use an online conversion tool to create a WebP version. Affinity Photo 2 does have the option to export to WebP, so my workflow will be a little quicker. There are other changes in the new version as well, but nothing which will impact me greatly.

Just before this issue went to press it was announced that Canva had acquired Affinity, it will be interesting to see what the change in ownership brings.

**David Groom**

## Recordings of Our Zoom Meetings

Since we started having our meetings on the Zoom platform I have recorded the meeting so that anyone who was unable to view it live could watch the recording. The standard plan which I pay for on Zoom only includes 5Gb of storage, which is only enough for a few meetings, so I have got into the habit of downloading the recording to my computer, and then deleting it from Zoom after 30-40 days.

The amount of disk space all the recordings has consumed is now 45Gb, and I now have it backed up across two different NAS drives so that I can delete it from my main computer storage.

Of course, once the recording has been deleted from Zoom it is no longer accessible by anyone.

I have been exploring the possibility of putting these online, so that they can be accessed by people other than me, and the only option which doesn't seem to cost a significant amount of money is to upload them to YouTube.

I wanted to use this article to kick start a discussion, which can be continued via the eGroup once you have had a chance to read this issue of HotKey.

Firstly do members think it is worthwhile putting these recordings online? As someone pointed out to me, prior to holding meetings via Zoom we never had recordings of meetings, and no one seemed to think we were missing anything.

If it is felt it would be good to have the recordings accessible the next question is should these be publicly available? Using a free account at YouTube all videos are publicly available if someone knows the right link, though you do have the option not to list the video on YouTube. This means that anyone with the link to the video can watch it, but the video won't appear on our channel page. It also won't appear in YouTube search results, unless someone adds it to a public playlist. I could then add the links to the video to a password protected area of the club web site, and share access details to members.

Do you think we need to get permission for all those who appear in the recordings for them to be made available? Note in theory this means not only those who presented the talk, but anyone who made a comment, and whose voice / web cam appeared during the video

There is a technical issue preventing me uploading them at present, which is my broadband speed for upload is so slow its a very long process to upload the files, but I could get round this by putting the files on a laptop, and finding some fast public WiFi point I could use.

I look forward to further discussion on the eGroup.

**David Groom**

## **Old(er) Equipment**

This article slightly follows on from the themes of “Frustrations at Lack of Updates” and “Everything Has a Use to Someone” in the last issue of HotKey.

For reasons too long winded to go into, some years ago on eBay I purchased a second hand DJ console, a Behringer BCD2000. This has an integrated soundcard, plus many knobs, sliders, and buttons to allow you to mix sound tracks, and all the other fancy stuff which apparently DJ’s need to do. I never got round to using it, so recently decided to sell it back on eBay. However I wanted to



test it first, and then I had a problem, no drivers had been released which worked on Windows 10. After a few days of thinking about the problem I decided to run a copy on Windows XP within a virtual machine using VirtualBox software (see HotKey October 2008). Luckily I had a Windows XP installation disk, so created the virtual machine, installed the Behringer software and drivers, plugged in the USB cable to connect to the console, and nothing happened. Windows XP in the virtual machine did not see the console. Either the console was faulty, which I doubted, or there were problems trying to access the USB through the VirtualBox software. It was then that I remembered that buried at the bottom of a cupboard was an old laptop, I dug it out, switched it on, and was presented with a Windows XP desktop, the Behringer software and drivers were installed, the console connected, and all appeared to work. Of course all this rigmarole could have been avoided if Behringer had provided software and drivers to work on more modern versions of Windows! Knowing that it worked allowed me to list it on eBay, where it sold for £25.

The second piece of equipment I wanted to test before selling / donating to charity was an Epson scanner. But when I connected the USB cable the computer did not recognise the scanner was connected. A quick investigation showed a badly damaged USB socket on the back of the scanner. Luckily only two screws were needed to be undone to take the top off the scanner. The USB socket was soldered to a printed circuit board (PCB) in the scanner, and the socket itself was beyond repair. However a number of USB sockets were available on eBay, and I purchased one for £1.89 (inc. postage!), hoping that the spacing on the pins connecting it to the PCB were the same. The replacement USB socket arrived, and so it was time to un-solder the old one, which was considerably more difficult than I had expected. As well as the four electrical pins soldered to the board, there were two lugs on the casing of the socket which were also soldered to the board, and all had to be un-soldered to remove the socket. In the end I had to pull the socket apart and un-solder each pin & lug separately. Then the moment of truth – would the new socket fit the same pin layout? It was a perfect fit, and soldering it to the board took no time, re-assembling the scanner took a few minutes, and then it was time to test it.

Much to my relief the computer now recognised the scanner, and I was able to scan a test document. So for £1.89 and an hour or so's work I now have a working A4 scanner. The manual that came with it was printed in 1998, so it's an old scanner, but with a maximum resolution of 1200 dpi it's a little difficult to know what improvements a new scanner would give. As far as software to operate the scanner does I have no idea if the original software supplied still works, I suspect not, but as I use VueScan scanning software (see HotKey April 2022) it's not a problem.

**David Groom**

### **Joining the Email Discussion Group**

Send an email to: [iwpcug+subscribe@groups.io](mailto: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](http://www.iwpcug.org)

## Advantages of Small Image File Sizes

Sending and storing small files results in less CO2 being produced using the internet and space taken up on storage devices.

My Nikon D40 is working great and I'm finding the small sensor of 6 mega pixels (by modern standards) easily big enough for all of the photos I've taken except of the moon where I could have done with an 18Mp sensor which, with my 6 X telephoto lens, would have filled my 1080p monitor and given 1:1 pixel mapping. Two photos taken with the Nikon are on the back cover.

eBays maximum displayed image size is 1000 x 1600 pixels so there is no point in sending images with more pixels. The smallest file size on the D40 is 1000 x 1500 so this is ideal for eBay. Wightbay won't accept an image of more than 2Mb.

6" x 4" photos are a handy size to put in a folder and pass around so I decided to buy an Epson Picturemate 500 and try to get an Epson Picturemate 100 working (both had clogged inkjets). I made up a solution of rubbing alcohol (80% isopropyl alcohol 20% water). Using a syringe and tubing I managed to get the Epson Picturemate 100 working well but not the Picturemate 500. I have heard that ammonia can be used to clean clogged jets but also this can damage the jets. As usual with inkjet printers it is best to use them on a regular basis to stop them getting clogged up. Excellent quality photo prints require a resolution of at least 300 dpi (dots per inch). Therefore, an image file should ideally measure at least 1200 pixels by 1800 pixels to print an excellent quality 4x6 print. This is because 4 inches x 300 dpi = 1200 pixels and 6 inches x 300 dpi = 1800 pixels. So 2.16 mega pixels would be needed.

For 1:1 pixel mapping on a 1080p monitor only just over 2 mega pixels are needed.

**Stephen Sutters**





Two photos taken with Steve's Nikon D40, see page 15

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