ISLE OF WIGHT PC USER GROUP

IWPCUG

HOT KEY

JANUARY 2018

Having been let down by our planned speaker, our own Steve Sutters stepped in at the November meeting to talk about electric bicycles

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 at
The Riverside Centre, Newport from 7.30 to 9.30 pm
Visitors are always welcome.

A charge of £2 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 web site address is **www.iwpcug.org**
We also have an e-group discussion area on
Yahoo groups: **iwpcusers@yahoogroups.com.**
Details of how to join are on page 12.

FUTURE MEETINGS

Date	Subject	Speaker
3 January	An Exploration of Linux	Mike Hoar
7 February	AGM followed by & Q&A Session	Jonathan Burt
7 March	TBA	James Pilcher
4 April	The Dark Web	Jonathan Burt

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman :   David Groom

Treasurer : Phil Rogers

Secretary :   Susanne Bone

Membership and Database Secretary :   Roger Skidmore

Committee Member :   Steve Sutters

Committee Member : Soren Johanson

HotKey Editor :   Bob Groom

Committee Member : Mike Hoar

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.

Chairman's Report

Firstly may I wish you all a Happy New Year, and give an apology for the later than usual arrival HotKey, it has been difficult this year to prepare it and get it to the printers in time for them to print before the start of the new year.

This is issue number 200 of HotKey, quite a milestone. Issue number one was in October 1991, and was 4 sides of A4 paper, so half the size of today's edition. Until January 2004 it was a monthly publication, but since then it has been quarterly. Most of the issues from 2004 onwards are on the web site if you want to look back at them.

Thanks to Roger & Steve' efforts we have quite a few speakers already booked for the first half of the year, so hopefully we we continue to see good attendance at our meetings.

At next months meeting we hold the the AGM, notice of this is on page 12. After the formal part of the AGM Jonathan Burt will host a question and answer session. Please do try and think of some questions beforehand as it will make the evening run a lot smoother.

David Groom

Car Sharing / Lifts

It is possible that a number of our members do not attend our monthly meetings because they find transport to Newport difficult and the committee have wondered if it might be possible to arrange lifts for those members. With a membership as large as ours it is not always obvious who might like to attend but has difficulty with transport, and secondly, who might live nearby and be able to offer them a lift.

As a first step, if you would like to attend the meetings, currently can't get to the Riverside Centre on a Wednesday evening and would like to see if there is a nearby member who might offer you a lift, then could you please get in contact with me. We will then try and find a member who might be willing to give you a lift.

From Copper to Fibre

At my old flat I had a very good internet connection as the cabinet was only about 50 metres away. TalkTalk was my service provider and my download speeds were 17 + Mb/s and upload normally 0.87 Mb/s.

My wonderful partner Judy kindly left me her house and as it was a much nicer place I moved in. Because I have had a brilliant service from TalkTalk I decided to stay with that service provider. The choice was between copper and fibre from the exchange to the cabinet. I was told a copper connection would only give about 10 Mb/s download and as fibre connections had come down to a very affordable £21.50 a month for a 24 month contract that is what I ordered + the £7.50 any time calls boost. This should have cost me £28 a month so was amazed when without even asking for a further discount they gave me a £3 a month reduction for being a loyal customer. Not only that but they are continuing to give me free calls (200 minutes) texts (unlimited) and data downloads (500 mb) for my mobile phone! I could kiss them! The day I moved in the engineer connected the phone line and I was delighted to see Speedtest showing 37+ Mb/s download and about 9.5 Mb/s upload .

This speed continued for a week or so but then slowed to a download speed of just over 12 M/bs 6 weeks later. At this point I complained. The engineer was sent round a couple of days later and he replaced a length of cable running up the house which had 2 parallel wires when it should have had a twisted pair. This would not have made much of a difference and the engineer was mystified at why my BB speed was so slow until I told him that I only turned the router on when the I turned the PC on. He said it would be fine to turn off for a few minutes but not for hours and in general LEAVE IT ON ALL THE TIME. Otherwise the router will see a dropped connection which it thinks could be a potential fault. It then lowers the connection speed to maintain stability. That was a week ago and the connection is now as fast as ever and as usual superb fast service from TT. He also said it was best to keep telephone wiring systems as simple as possible and not have any extension sockets from the master socket and to connect other PC's wirelessly or if wired connections are wanted straight from the routers ethernet ports to the PC's for maximum speed and reliability.

My family and friends are delighted with TalkTalk. Web pages load fast and

scrolling down Ebay listings is silky smooth. In general so far I can't say I notice a big difference in speed between my new and old connection but there should be a big difference with Skype when I can find my HD webcam.

TalkTalk are the 2nd most complained about ISP in the UK. Not surprisingly BT (or B____y Terrible) is the most complained about. My family and friends have found TalkTalk to be cheap, fast in every way, reliable (mostly) and friendly which has made us all cheerful.

By Stephen Sutters

Every now and then I get tempted by the possibility of upgrading to fibre. I'm lucky that I get a 14Mb/s download on the old metal telephone wires, but sometimes more speed might be nice. Whenever I've given my phone number to the ISPs to estimate what speed I might get with fibre it always comes back as only slightly higher than what I currently get, even though the cost would be more.

In most cases the upgrade to fibre is only from the exchange to the cabinet, the last part of the route from the cabinet to the house is still over wire cable. I had a look along the road for my nearest phone cabinet. I could only find one cabinet between my house and the exchange, and it was just round the corner from the exchange. As a consequence any upgrade to fibre would mean only the first 143m between the house and the exchange would get upgraded to fibre, while the last 915m would remain as wire! No wonder I would not get much increase in speed.

Hopefully it wont be too long before we all get fibre all the way from the exchange to the house. In the meantime I wonder how many people upgrade to fibre but don't see much improvement in their connection.

David Groom

How to Avoid Being a Phishing Victim

The online phenomenon of phishing -- getting tricked through email into revealing your personal information to a scammer -- has been around since the mid-1990s. But people are still getting caught, and phishers are still sending out their bait.

I recently received a phishing email that was purportedly from the Web hosting company where I keep several of my websites. The email told me that my site had been flagged for malware. A phone number and link were provided.

If I were to have called that number, I suspect I would have been asked to confirm my credit card and other compromising financial information. If I were to have clicked on that link, I suspect this would have installed malware on my computer.

Phishing originated with the online service America Online in 1995 when teenage tricksters enticed naive users into revealing their password to "verify your account" or "confirm billing information." It later evolved into a more nefarious mode, involving credit cards and other financial information, but with the same kinds of pitches being used. By 2005 it was a full-scale crisis. It still is.

The word "phishing" is a relatively new coinage, deliberately meant to sound like "fishing" because bait is used to try to catch victims. Here's how to avoid getting caught.

Phishing emails try to excite you or scare you into doing stupid things such as opening an attachment that loads malware onto your computer or clicking on a link that takes you to a fake website. The malware may spy on you, capturing your keystrokes to steal your login and password to your bank. The fake site may look just like your real credit card site, prompting you to type in your login and password.

If you see a message, "You've won a prize!" and you never entered that contest, chances are extremely high you're being preyed upon. If you see a message that your information has been stolen and you should "click here," chances are extremely high that you're being preyed upon. If you see a

message that Microsoft has remotely detected a virus on your PC, chances are extremely high that you're being preyed upon.

Instead of clicking on a link or opening an attachment, use your Web browser to go to the company's website, log in as you normally would, and check if you have any messages there.

If you're using a laptop or desktop PC, you can "mouse over" a questionable link to see what Web address it will take you to. Phishers often use the correct Web address as the name of the link but code the link to take you to the bogus address. If the two aren't the same, chances are extremely high that you're being directed to a phishing site.

Be especially wary of Web addresses that include the @ symbol or email messages that ask you to click on an image. You should also be careful when typing Web addresses into your browser so a typo doesn't land you at a phishing site by mistake. Using a bookmark or favorite to navigate to the site will prevent this.

Alternately, you can phone and talk to customer support. Look up the company's phone number yourself rather than using a number provided in an email message.

Be careful Facebook and other social networking sites. Scammers troll these waters looking for innocents to bait, tricking them into revealing financial information, Social Security numbers, mother's maiden names, and so on.

Keep your Web browser up to date, whether you use Google Chrome, Microsoft Internet Explorer, Mozilla Firefox, or any other. Modern browsers include some phishing protection.

Use security software that provides additional phishing safeguards, such as Norton Security (www.symantec.com). Alternately, you can use a free browser add-on such as McAfee SiteAdvisor (www.mcafee.com/siteadvisor).

Though these protections aren't foolproof, they can warn you if a site you're about to visit is suspected of malicious activity.

Some tip-offs are more obvious. If a questionable email includes incorrect spelling and grammar, chances are it's from a scammer from abroad whose native language isn't English. If the email's "To" field is blank or if the salutation reads something like, "Hello, [blank]," chance are it's part of a mass emailing from someone more malicious than sophisticated.

You may be savvy enough to avoid the above mistakes. Make sure family members, friends, and coworkers are as well. Nobody wants to spend tedious hours trying to straighten out the mess after a scammer has stolen their identity.

Reid Goldsborough

The Public Versus the Private Cloud

The "cloud" remains a bright spot in the computing world, an area of growth.

Cloud computing is the latest incarnation of an old concept in computerdom, the use of remote computer services. Instead of running programs on your desktop computer or your organization's network server and instead of needing lots of processing power and storage space at your location, you use resources delivered over the Internet by a service provider.

Thus the Internet is the "cloud." The term "Internet computing" would be easier to understand than "cloud computing," but the computer world has never been very good at coming up with clear terminology.

Cloud computing can save time and money. You pay for only what you need, and you delegate the updating and troubleshooting of software to the service provider.

Market research firm Gartner (www.gartner.com) just did an analysis in which it placed cloud service providers into four quadrants based upon completeness of vision and ability to execute. In the highest quadrant, considered "leaders," were Amazon Web Services (aws.amazon.com) and Microsoft Azure (azure.microsoft.com), with Amazon ranked higher because of its better ability to execute.

In the second highest quadrant, in order, were Google Cloud Platform

(cloud.google.com), Alibaba Cloud (www.aliyun.com), IBM Cloud (www.ibm.com/cloud-computing), and Oracle Cloud (cloud.oracle.com). The rest of the public cloud providers looked at by Gartner were considered "niche players."

Amazon also has the highest cloud market share by far, followed in order by Microsoft, Google, and IBM. Gartner predicts that public cloud services as a whole will grow by 18 percent this year.

If you're a home, school, or small business users, you're probably already using the cloud in one way or another.

With a Web-based email account such Gmail (mail.google.com), Yahoo Mail (mail.yahoo.com), or Microsoft's Outlook.com (www.live.com), or if you've ever uploaded your photos to a photo sharing service such as Snapfish (www.snapfish.com) or Shutterfly (www.shutterfly.com), you've experienced the cloud. These services are free, supported by advertising or optional pay services.

The most fully featured cloud offering today is G Suite (gsuite.google.com), which used to be called Google Apps. It was designed to be used with the browser Google Chrome and a live Internet connection, but you can also use much of its features with other browsers and work offline.

G Suite includes word processing, spreadsheets, presentations, forms, diagramming, calendaring, instant messaging, video chat, social networking, wiki creation, email, and offsite storage. It's free for consumers, part of the Google Drive service (www.google.com/drive). Various business offerings start at $5 per user per month.

Another popular application for cloud computing is computer games. Without needing a high-performance computer, you can use the cloud to play state-of-the- art computer games with others from around the world. Online games by are available among other places from Miniclip (www.miniclip.com) and Big Fish Casino (www.bigfishgames.com/online-games/index.html).

Less exciting but more necessary are cloud backup services. Well-regarded

options include IDrive (www.idrive.com), CrashPlan (www.crashplan.com), and SOS Online Backup (www.sosonlinebackup.com). Offsite backup, as opposed to backing up onsite, offers protection against fires, floods, and theft in addition to crashed hard drives and other hardware failure.

Other popular cloud services include Microsoft Office 365 (www.office.com) for Microsoft Word, Excel, and other Office programs, Salesforce.com (www.salesforce.com) for managing customer relations, Dropbox (www.dropbox.com) for remote storage and synchronization, and MailChimp (www.mailchimp.com) for email marketing.

For hardcore business use, some companies go private rather than public. "Direct connect" as its name implies provides a direct, dedicated connection to a cloud service provider. Unlike with the public cloud, data doesn't flow over public wires.

A new study by Krystallize Technologies (www.krystallize.com), which tested IBM Cloud, offers measurable evidence that connections are faster this way, sometimes considerably faster. The reason is decreased "latency," which is a delay caused by bottlenecks at one or more spots over the public Internet. It's the same phenomenon that renders Internet phone calls choppy.

Direct connect can also improve security. The major public cloud providers offer direct connect, at a price.

For individuals as well as businesses, there will still be a place for programs used locally and for data stored locally, on your desktop or laptop computer or within an organization. But indications are that the cloud is the wave of the future.

Cloud computing represents a paradigm shift no less significant than the move away from mainframe computers to PCs in the 1980s. Its proponents often use the analogy of the electricity grid. Just as with electricity, computer services are there when you need them and when there's a charge you pay for just what you use.

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 7th February 2018 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. Consider matters arising from the minutes of the previous AGM, held on 1st February 2017, (http://www.iwpcug.org/secure/minutes/AGM17.pdf).
2. Receive reports:
   2.1 Chairman
   2.2 Treasurer, including approval of the Club Accounts
   2.3 Secretary
   2.4 Membership Secretary
   2.5 Other activities: Computability, HotKey, Website, Egroup, Facebook
3. Elect a Chairperson, Treasurer, Secretary, and Membership Secretary.
4. Elect other Committee members (up to a maximum of eight persons).
5. Set the Annual Subscription.
6. Appoint an Independent Examiner.
7. Any Other Business.

Joining the Yahoo Group

Send an email to: **iwpcusers-subscribe@yahoogroups.com** with "join" in the subject line.

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**
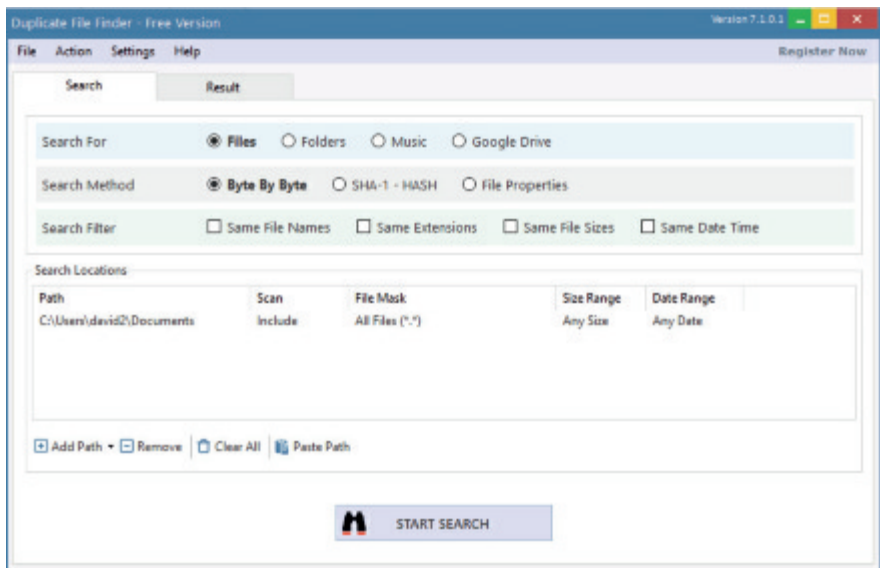

Duplicate File Finder

In the last edition of HotKey I wrote about my quest to find what was taking up so much space on my hard disk. One problem I find with my file management, or rather lack of it, is that sometimes I have duplicate copies of the same file on my hard disk.

Having more than one cop of the same file is problematic because:
- it wastes hard disk space
- it increases the time and media size used for backups
- it increases time used to perform virus scanning

A search on the internet led me to a program named Duplicate File Finder, which was free to download. Duplicate Finder offers advanced search capabilities. The program can scan selected set of folders only, skip hidden files and folders or protect system folders. It can search local PC and removable devices or perform search over network. The list of duplicate files discovered by the program can be sorted, exported, and acted upon. Search session results can be saved for later review.

The image below shows the main screen from where you choose how to perform the search.

You will note that there are three ways of search for duplicate files: "Byte By Byte", "SHA-1 – HASH", and "File Properties". These are explained on the web site as follows:

File Properties

This method will match file properties like (file name, extensions, size and date). Select the fields you want to use when searching for duplicate files. The more fields you select, the fewer duplicates will be found.

SHA-1 HASH

Files that are possibly a duplicate of another, are read from the beginning to the end, and a unique hash(160-bit) is calculated from its contents. This hash is stored and used to compare with another file's to determine if they are truly identical.

90% Faster for repeated searches: SHA-1 hash comparison is fast, but to really speed up repeated scanning the program will store "Calculated Checksum" of your files. This way if you scan again, or scan it against a new folder, the cached checksum will be used.

If any property regarding a file changes between scans (name, type, size, timestamp) the checksum will be recalculated.

Byte By Byte

Byte-by-byte comparison of files means that the contents of two files to be compared, is read byte-by-byte (in parallel) and checked for equality. This method gives 100% accurate results.

Ashisoft Duplicate File Finder matches file contents regardless of file names.

Scanning the contents of my Documents directory using a byte-by-byte search identified 9,274 duplicated files taking up 393MB of space. In my defence I have to say that quite a few of these were in a directory I had copied from a client (it was the client which had duplicated the files – not me!) An image

on the back page of this magazine shows part of the result. Looking at the three 4.9MB files identified as duplicates you can see that these were identified even though one of them had a different file name.

Duplicate File Finder comes in both a free and a Pro version, the difference being that the free version will identify duplicate files, but you cant delete them from within the program.   It can be downloaded from www.ashisoft.com. At the time of writing this article the Pro version was available for $29.95 (about £22).

David Groom

Interesting Facts about Bitcoin

1) Probably the most widely currently known fact about Bitcoin is that it's value increased by more than 1,000% in 2017.

2) The energy requirements for all the computing power required to mine Bitcoins are *"quite large"* ! I've put this in italics because the estimates of the power requirements vary hugely. The first estimate which caught my attention was that by 2020 mining Bitcoin was going to use more power than the entire energy use of Denmark! A quick search on the internet estimated that the current power requirement for Bitcoin mining was already higher than that in 159 countries! However to call these "estimates" is probably giving more credence to the figures than they deserve, "guestimates" might be a better description, as no one really knows how to calculate the power consumption required.

3) Despite all the hype, Bitcoin did not have the largest gain during the year. XRP, a cryptocurrency created by the fintech company Ripple was easily the best performing cryptocurrency of 2017, registering an astonishing 37,000 per cent gain.

David Groom

At our December meeting Denny explored some of the privacy issues surrounding our use of Google services.
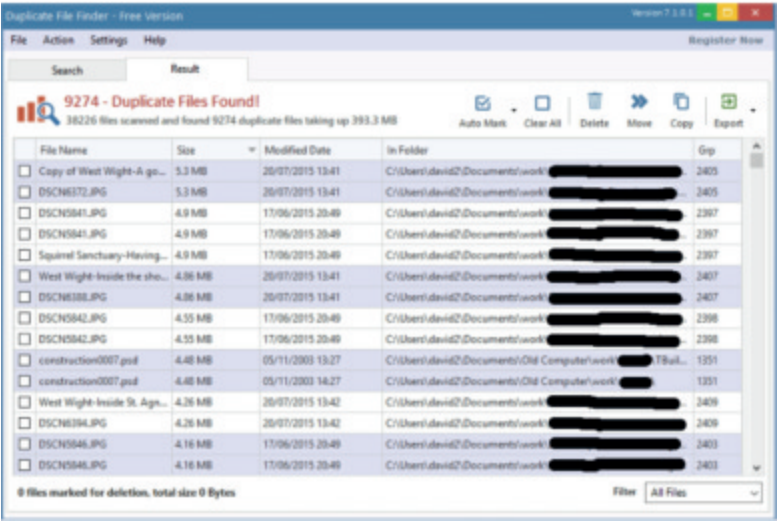
A screenshot of the scan results from Duplicate File Finder reviewed on page 13.

We try to publish HOTKEY quarterly in April, July, October and January
This edition was produced using Serif PagePlus X9
and printed by Island Digital Printers, East Street, Ryde.

No responsibility can be accepted with respect to any advice or suggestions in this journal, and the views expressed are those of the contributors.