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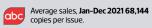
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From the Editor

I often feel like I'm being held to ransom by Bluetooth. About once a month it suddenly stops working, leaving my keyboard, mouse and headphones useless. If you listen carefully, you might hear the anguished cry of a magazine editor: "Not again Bluetooth - what do you want from me?".

I've always known that the problem is missing drivers, and for years that meant spending ages trying to install updates. But discovering Snappy Driver Installer Origin has changed all that. This superb (and free) program makes it as easy to update drivers

as it's ever likely to be. I wasn't surprised that Robert Irvine awards it gold in his Cover Feature. He also exposes all the dodgy driver updaters that either come with extras you don't need, or clobber you with hidden fees.

Avoid those rip-offs, stick with Snappy, and follow the rest of his tips (especially on identifying corrupt drivers) and you should escape much of the pain that comes when these small but vital tools go kaput. **Daniel Booth**

editor@computeractive.co.uk



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new MateBook laptop - p24

16 inches

Recommended

Screen size of Huawei's

5.2 million

Number of UK households that subscribe to Amazon Prime Video, Disney+ and Netflix - p9

HOW TO USE SNIPCA URLs

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren't websites themselves, which means they won't be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.





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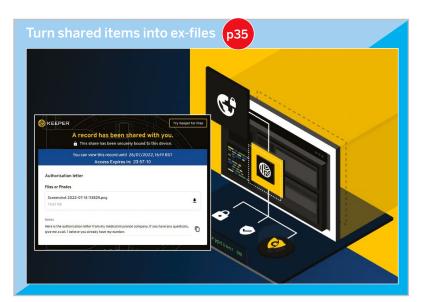
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Install them without problems so you NEVER lose vital PC functions p50

Why You Must Always...



First W11 Feature update 'coming on 20 September'

icrosoft looks set to release the first Feature update for Windows 11 on Tuesday 20 September, bringing significant changes to the operating system.

News

The date was revealed to our sister site Windows Central by sources close to Microsoft. It was later backed

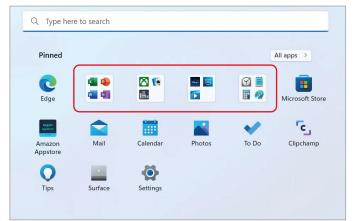
WHAT WE THINK

This release date is several weeks earlier than we had expected, which we hope means Microsoft is planning to follow it up before Christmas with tabs for File Explorer. While improvements to the Start menu and taskbar are welcome, and the new accessibility tools sound superb, we think Explorer tabs will be the biggest improvement to Windows 11 yet, and persuade many people to upgrade. With more people still using Windows 7 than 11, Microsoft certainly needs it to.

up by sources in contact with other sites, including The Verge.

Microsoft has already revealed many of the new tools in preview builds of 22H2 released in recent months. These include creating folders for apps in the Start menu (see screenshot right) and opening a file in a specific program by dragging it to the relevant icon on the taskbar. Both are popular functions in Windows 10, but were dropped from Windows 11 when it launched last October.

There's likely to be a new-look Task Manager as well, with the tabs moved from along the top to running down the left-hand side (see



screenshot below). Microsoft is also making Task Manager's icons bigger and increasing the space between the list of processes, in order to make the tool easier to use.

Another expected change is the ability to run tasks, such

₽	Processes	Processes	B Run new task	Ø	End task	C Efficiency	mode	View
•	Performance			16%	56%	0%	0%	
Ð	App history	Name	Status	CPU	Memory	Disk	Network	
0	App history	> 5 Sophos Endpoint Defense Soft		0%	337.0 MB	0 MB/s	0 Mbps	
cy.	Startup apps	> 🧔 Google Chrome (14)		0%	331.2 MB	0 MB/s	0 Mbps	
ŝ	Users	Sophos File Scanner		0%	216.7 MB	0 MB/s	0 Mbps	
0,	Gaild	> 🧊 Microsoft Teams (8)		7.3%	204.8 MB	0 MB/s	0.1 Mbps	
1	Details	Desktop Window Manager		2.6%	91.1 MB	0.1 MB/s	0 Mbps	
3	Services	nessus-agent-module		0%	81.7 MB	0.1 MB/s	0 Mbps	
		> 🏵 Settings		0%	76.6 MB	0 MB/s	0 Mbps	
		> 🔉 Task Manager		1.7%	61.0 MB	0 MB/s	0 Mbps	
		Secure System		0%	52.6 MB	0 MB/s	0 Mbps	
		Antimalware Service Executable		0%	50.8 MB	0 MB/s	0 Mbps	

SWITCH FROM DEFAULT EDGE IN ONE CLICK

Version 22H2 of Windows 11 might let you switch from its default browser Edge in just one click. A user called Leopeva 64, who is running a preview version of both 22H2 and Chrome, tweeted a video showing him how to switch from Edge to Chrome by clicking a 'Set as default' button (www.snipca. com/43041).

Microsoft has been strongly criticised for making it harder to switch from Edge in Windows 11 than it is in Windows 10. To switch from Edge currently, you have to open Settings, then click Apps, then 'Default apps', and under 'Set defaults for applications' scroll down to your preferred browser. Now click the browser icon then the 'Set default' button at the top right. as opening a folder or launching a program, directly from Task Manager.

Preview builds of 22H2 have also contained new accessibility features to help people with hearing or movement problems. The Live Captions tool will convert spoken words in videos and video chats into text you can read on screen, while Voice Access lets you speak commands to your computer, such as formatting documents and right-clicking links.

However, it now seems likely that the highly anticipated tabs in File Explorer won't be ready for 22H2. Instead, they're expected to be part of a smaller update to 22H2 released later in the autumn.

Microsoft is calling these minor updates "moments", and plans to release them regularly over the next few years to add new tools to Windows 11, in between the big annual Feature updates.

You'll like this... Prices for PC RAM could soon fall sharply (www.snipca.com/43040)

but not this... You can no longer buy ebooks directly on

old Amazon Kindles (www.snipca.com/43039)

Many older Freeview TV sets to lose ITV Hub

F reeview has warned that many older TVs will lose access to ITV Hub from 28 September.

This is due to changes ITV is making to its streaming technology ahead of the launch of its new TV-streaming service ITVX later this year.

Many older Freeview boxes won't work with these changes, or will continue to work for a period but without updates.

However, rather than listing the TV models affected, Freeview has identified them

FREEVIEW ADDS NEW SEARCH TOOLS

Freeview has added new categories to its Explore Freeview Play app (channel

100), including Food, History and Science & Nature. There's also a new Box Sets section for TV series, and a My



Shows feature for compiling a 'watch list' of shows. The changes

are part of a redesign of the app that adds a dark background and larger imagery (pictured). See www. snipca.com/43028 for more.

by the processor that powers

MTK5657 and MTK5658, and

them, such as the Hisense

the Sharp UMC MSD6486,

MS6586 and 6486X.

You should be able to see this information in your TV's manual, though it will be hard to find otherwise. Affected TVs will soon show a message when you try to use the ITV Hub app.

Other TVs losing ITV Hub include Panasonic MT5595, MT5581 and MT5810, as well as all CVTE and Avtex TVs sold since 2013 and 2016 respectively.

ITV Hub will remain on all modern smart TVs, as well as streaming devices such as Amazon Fire TV, Chromecast and Roku.

......

IN BRIEF

SPOTIFY EXTENDS FREE TRIAL TO 3 MONTHS

Spotify has extended the free trial of its Premium service (www.snipca.com/43027), which for £9.99 a month lets you listen to music without adverts and download any track. Anyone signing up before 11 September will get the first three months free, up from one month. It's available to new customers and those on the free version. while anyone who cancelled their Premium subscription before 15 July can get three months for £9.99 in total.

UPGRADE TO THUNDERBIRD 102

Thunderbird users can now upgrade to version 102 from within the program itself. To do so, select the threeline menu, then Help, About Thunderbird, and click the update button (see screenshot below). Until now you've only been able to upgrade by downloading the latest version from www.thunderbird.net. See Issue 638's Workshop (page 38) for what's new.



TOMORROW'S WORLD

If last issue's gripping dead spider wasn't unsettling enough (see www.snipca.

com/42942), here's a snake that can walk. It's lying inside a



plastic tube with four robotic legs. Creator Allen Pan says he wants to give snakes back the legs they lost 150 million years ago. Watch (if you dare) at www.snipca.com/43031.

Hackers attack 'wrong' water company

yber-criminals hacked South Staffordshire PLC, which owns South Staffs Water and Cambridge Water, but the company said the attack didn't affect its ability to supply water.

In a statement on 16 August the company said that its corporate IT network had been disrupted, but it took "immediate steps to respond to and manage the incident" (www.snipca.com/43030).

It follows warnings from security experts that hackers will try to exploit the current drought conditions to launch attacks on water companies.

The attackers, a group of hackers called ClOp, had claimed to have infected Thames Water's systems with ransomware. They said the attack had given them access to the tools that determine which chemicals are added to water supplies, and demanded money to hand back control.

The hackers published online scans of information they claimed they had stolen from Thames Water, including passports, spreadsheets, drivers' licences and screenshots of software used to treat wastewater.

But rather than Thames



Water, which denied it had been attacked, it seems the hackers mistakenly targeted South Staffordshire instead.

The firm, which supplies water to 1.6 million people, said it was "working closely with the relevant government and regulatory authorities and will keep them, as well as our customers, updated as our investigations continue". A Government

spokesperson said: "Following extensive engagement with South Staffordshire Plc and the Drinking Water Inspectorate, we are reassured there are no impacts to the continued safe supply of drinking water, and the company is taking all necessary steps to investigate this incident".

News

IN BRIEF

POWERTOYS TO GET A SCREEN RULER

Microsoft is planning to add a screen ruler to its PowerToys suite of tools, letting you measure the distance between two points on your screen. Details of the 'Measure tool' have been added to the GitHub page for PowerToys (www.snipca. com/43011), though it's not known when it will be ready. You can see how the tool works in this video: www. snipca.com/43012.

DISNEY+ PASSES NETFLIX WITH 221M VIEWERS

Disney+ has overtaken Netflix to become the world's most popular TV-streaming service. It added 14.4 million



subscribers between April and June, taking its total

to 221m, a few hundred thousand ahead of Netflix. The service has 6.2m UK subscribers, paying £7.99 a month or £79.90 for one year.

THE WORLD'S CO

So many people are taking selfies outside this house (pictured) in Notting Hill, west London, that its owner – 77-year-old Peter Lee – is having to spend thousands to fix damaged tiles and railings. It seems that 'influencers' seeking online fame can't resist the lure of its pink exterior. Time to paint it grey or start charging, we suggest.



MPs: force internet firms to tell residents about telegraph poles

nternet providers should be forced to consult residents about broadband infrastructure such as telegraph poles being built near their homes, a group of MPs has said.

Dame Diana Johnson, Labour MP for Kingston upon Hull North, has tabled a Private Members' bill in response to protests from homeowners angry about equipment being installed without detailed notification before the work began.

In one incident in Hull, a new pole carrying overhead wires was chopped down, while some residents have washed away the blue marks left by engineers that show where a pole needs to be erected.

The Telecommunications Infrastructure (Consultation) Bill, which is being co-sponsored by Hull's other



MPs Emma Hardy and Karl Turner, will make it compulsory for firms to discuss their plans with residents.

Planning rules were relaxed in 2017 to encourage broadband companies to upgrade their networks to full-fibre broadband. It means that firms don't have to get planning approval from local councils for either the equipment they install or where they plan to put it.

The only notification companies must give is a notice tied to a lamppost, or a letter sent to residents who will have poles built on or near to their property.

Companies typically use telegraph poles in areas where it would be too difficult or expensive to dig trenches and lay cables. But this work has

angered residents across the UK, triggering complaints in Fife, Peterlee, Southampton, Surrey and Totnes.

The bill is expected to be debated in the autumn. It's not known whether it will include other types of broadband equipment such as streetside cabinets.

Would you complain about telegraph poles being built in your area? Let us know: letters@ computeractive.co.uk

Govt makes it easier to sign up for discounted broadband

The Government is making it easier for people on benefits to apply for discounted broadband in a bid to encourage more eligible customers to sign up.

Many internet providers offer low-cost 'social tariffs' for people receiving benefits including Universal Credit, Pension Credit, Jobseeker's Allowance and Income Support.

These packages are priced from around £10 to £25, but take up has been extremely low. Ofcom's research shows that of the estimated 4.2 million households eligible for these packages, only 55,000 have signed up – just 1.2 per cent (see all the deals at www. snipca.com/41521).

Previously, customers wanting to sign up had to prove that they were eligible to receive a social tariff, such as by sending screenshots of their Universal Credit account.

Under the new system, which began on 22 August and will be run by the Department of Work and Pensions, providers will check the eligibility of customers, with their permission.

The Government's announcement follows internet providers calling for help in confirming a customer's eligibility.

Digital Secretary Nadine



Dorries said social tariffs were "vital for families struggling with bills".

"I urge anyone concerned about falling behind on payments to contact their supplier to see what support is available," she added.

The scheme will be run by the Department for Work and Pensions, which said that the only information it would share with firms is whether a customer was entitled to a benefit that qualified them for a discount.

Nearly 600,000 viewers cancel Amazon Prime Video

The number of people subscribing to Amazon Prime Video in the UK fell by 590,000 between April and June this year, as customers continue to tighten their belts to cope with the rising cost of living.

Many more people are likely to have cancelled since then because Amazon has announced that from 15 September the price of Prime Video is increasing by $\pounds 1$ a month (to $\pounds 8.99$) and by $\pounds 16$ a year (to $\pounds 95$).

The figure comes from Ofcom's annual Media Nations report (www.snipca. com/43032), which also found that Netflix lost 210,000 viewers in the same period.

Overall, the number of households subscribing to at least one streaming service fell by 350,000 to 19.2 million. Around 5.2m homes subscribe to all three of the world's biggest streaming services – Disney+, Netflix and Prime Video – at a cost of around £300 a year. Cost and lack of

interesting content were given as the two main reasons for cancelling. However, 73 per cent of people who had cancelled thought they would resubscribe if their circumstances changed.

Ofcom's report also found that young people are now watching seven times less live TV than the over-65s, as the generation gap in viewing habits widens.

People aged 18 to 24 spend only 53 minutes a day watching traditional broadcast TV, preferring instead



on-demand streaming services, YouTube and video-sharing service TikTok. This is down by two-thirds in the past 10 years. By contrast, those aged 65 and over spend nearly six hours watching television.

Across all ages, people are watching less video content in 2022 than they did in 2021 – down by 25 minutes to five hours and 15 minutes on average every day.

• Should you cancel Amazon Prime? Page 60

IN BRIEF

OH SH'T! 'POO-SENDING' SITE HACKED

A site that lets you send animal faeces in the post as a prank has been hacked. A customer spotted a security flaw at Sh*tExpress (www. snipca.com/43033) then stole the email addresses of customers, as well as the message they sent with the faeces. The site markets itself as a way to seek revenge on people "who annoy you the most", such as irritating work colleagues and ex partners.

MICROSOFT ADVERTISES 365 IN WORD DOCS

Microsoft has irritated some Office 2021 users by showing adverts for its 365 subscription service. The messages appear in a yellow bar at the top of documents as a 'limited time offer' (pictured below). The ads indicate how keen Microsoft is to move Office users to the subscription package offered by 365.



snipca.com/43034) to explain that the reason some printers stop working is because their pads can't absorb any more excess ink, and might leak into the printer's components.

It says that "depending on the level of use, the product may reach a condition where satisfactory print quality cannot be maintained, or components have reached the end of their usable life".

The clarification is intended to explain why some printers show an 'end of service life' message (pictured) even though the device seems to still be working fine.

It's more detailed than Epson's previous explanation (www.snipca.com/43035), which said the messages appear when "certain parts have reached the end of their usable life and that your printer will no longer work until it is serviced".

Epson has also changed its advice on what to do when a printer stops working, recommending asking the company about its "low-cost ink pad replacement service", or paying a local technician to replace the pad and "extend the use of the printer".

Previously it said it might be "more economical to purchase a new Epson product".

Epson's decision to update its support page may have been prompted by US customer Mark Tavern complaining on Twitter that his wife's printer had stopped working (www.snipca. com/43036).

He wrote: "Apparently she can pay to service it or buy a new one even though it was working fine. Outrageous!"

His tweet, which was sent to @EpsonAmerica, received more than 300 replies, with many people echoing his anger.



EE ADDS APPLE ONE SUBSCRIPTIONS

EE has become the first UK mobile network to offer Apple One subscription features, which for iPhone users includes access to Apple Music, Apple Arcade, Apple TV+ and 50GB storage of iCloud+. They're available in EE's Full Works package, one of three new pay-monthly deals. Visit www.snipca.com/43037 for details, including 'Smart Benefits' available for Android users.

Question of the Fortnight

Can the NHS survive another ransomware attack?

Its security will be tested by a new wave of healthcare hacks

t's hard to take seriously, but some hackers actually want us to think they have a conscience. In March 2020, as Covid started to spread around the world, the gang behind the Maze ransomware released a statement saying it would stop attacking medical organisations "until the stabilisation of the situation with virus" (www.snipca. com/43050). What did they expect in response – a thank-you card?

Maze's compassion was clearly fake, though hackers did lay off hospitals for a while in 2020. However, attacks quickly picked up again in 2021, as the pandemic eased. A report from security firm Sophos found that 66 per cent of healthcare organisations across 31 countries were hit by ransomware last year, up from 34 per cent in 2020. The figure for 2022 is likely to be much higher still.



were also affected, reducing their access to patients' records, as well as 1,000 care homes.

NHS bosses first hoped to fully restore the service within a few days, but later said it might take until September. Advanced, the software firm that provides the system NHS 111 uses, said it's working "tirelessly" with the National

We've definitely reached the end of the truce that ran during the Covid pandemic

One incident that will appear in the next batch of statistics was an attack in early August on the system that NHS 111 uses to refer patients for care. It forced staff to use pen and paper rather than computers, leading to delays in dispatching ambulances, issuing emergency prescriptions and booking out-of-hours appointments.

Nine mental health trusts

Cyber Security Centre (NCSC) to fix the problems. Patients were told to expect longer waits than usual when phoning 111.

The disruption highlights just how vulnerable the NHS is to ransomware, and it's unlikely to be the last attack this year. Research from security risk consultancy Kroll found that the number of attacks on health organisations around the world rose by 90 per cent between April and June compared with the previous three months.

Kroll boss Ioan Peters said the research showed that healthcare was the most targeted sector, and that "we've definitely reached the end of the truce that some criminal groups instituted earlier in the Covid pandemic".

One of the reasons hackers target healthcare is because they can use what Kroll calls a "double extortion" tactic. This involves stealing patients' data before hacking the system, then threatening to publish the data to force the organisation to pay the ransom.

However, the NHS is more prepared than it's ever been to handle such attacks, having learned the lessons of the WannaCry ransomware in 2017. Launched by North Korean hackers, WannaCry targeted Windows computers around the world, not just in

THE FACTS

- In early August hackers used ransomware to attack the software used by NHS 111, delaying ambulances and emergency appointments
- The number of health organisations hit by cyberattacks rose by 90 per cent between April and June
- NHS trusts now receive urgent alerts when they need to apply security updates to thwart attacks

healthcare. Microsoft acted quickly to release fixes for the attack, but many NHS trusts hadn't applied these by the time WannaCry swept through their systems.

Since then NHS Digital and the NCSC have worked to set up a system to notify trusts when they need to apply updates. Neil Bennett, chief information security officer at NHS Digital, calls this a "high-severity alerts process" that allows experts to "review and triage vulnerabilities".

Another priority was to move trusts on to regular backups – particularly online – so they could restore systems from a recent point should they be hacked.

Such measures mean you can't accuse NHS bosses of complacency, but hackers only have to be successful once to cause chaos. It's not hard to see how a major attack this winter would trigger the biggest crisis in the history of the service.

Protect your tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Malware in fake YouTube & WhatsApp apps

What's the threat?

Scammers are placing malware in fake versions of hugely popular Android apps, including YouTube and WhatsApp, according to a report from Meta (www. snipca.com/43015).

The company, which owns Facebook, Instagram and WhatsApp, named the malware Dracarys after a battle cry for dragons in the fantasy TV series *Game of Thrones.* Once it infects your phone or tablet, it can access information such as your contacts list and a log of phone calls you've made, as well as read your text messages, install other apps without your permission, and even take photos without you knowing.

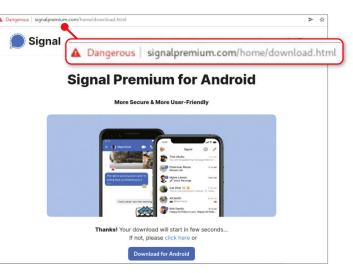
Meta said the attack is being carried out by hacking group Bitter, which is suspected to operate from India and has also created fake versions of the messaging apps Signal and Telegram. The malware is especially dangerous because antivirus tools are failing to detect it, and it has remained at large for "some time" without being spotted by security experts.

How can you stay safe?

Always stick to the official Google Play Store when searching for and installing Android apps. This will ensure you avoid accidentally visiting the websites that host

these fake apps. They have web addresses that sound official (see screenshot), and could easily trick you if you're not paying attention.

If you don't want to search for the apps through the Play Store, instead type these shortened URLs directly into your browser's



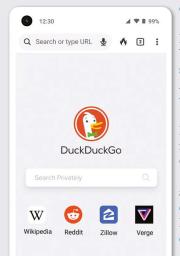
address bar: Signal (www.snipca.com/43017), Telegram (www.snipca.com/43018), WhatsApp (www.snipca.com/43019) and YouTube (www.snipca.com/43016). That's more secure than searching for them on Google, which may bring up results containing the fake apps.

New tools | DuckDuckGo's Microsoft blockers

As own goals go, DuckDuckGo's admission in May that it allows some Microsoft trackers on its mobile browser was more spectacular than a 30-yard volley (see Issue 633, page 6).

After all, the reason millions of people have switched from Google to its search engine is that it promises *not* to track your activity online.

Thankfully, DuckDuckGo has now changed its policy to block "third-party" trackers from sites that Microsoft owns, such as LinkedIn. This will apply not just on DuckDuckGo's phone and tablet browser, but also on its browser extension. Founder and CEO Gabriel Weinberg says this reinforces the company's ambition of making the internet "less creepy" (www.snipca.



com/43020). To install DuckDuckGo's mobile browser visit www. snipca.com/43024 (for Android, pictured) and www.snipca.com/43025 (for iPad/iPhone). The DuckDuckGo extension is available for Chromium browsers (Chrome, Edge, Brave and more, www.snipca. com/43023), as well as Firefox (www.snipca. com/43026).

ScamWatch Readers warn readers

Fake Ofgem 'rebate' text

I remember Computeractive warning about scams claiming to be from Ofgem and containing a link that lets you claim your energy rebate, so I wasn't tricked by a similar text message I received. I could tell the URL in the text was fake because it ended in .com, not .gov.uk which is how Ofgem's official URL ends. It also said you had to click the link to "complete your application" for the rebate, but the money will be taken off your bills automatically. I noticed that Action Fraud is warning about this scam (www.snipca.com/42865), so it must be quite common at the moment.

Nigel Cracknell

Warn your fellow readers about scams at letters@computeractive.co.uk

Letters Tell us what's on your mind

France scraps licence fee – will UK follow suit?

John Salt is entitled to think that £159 for the licence fee is of "immense value to all of us" (Letters, Issue 638), but that doesn't alter the fact that the success of other streaming services has left it feeling outdated. There's no point fighting the reality that the principle of a licence fee is now being seen as an unfair 'tax' on viewers.

It's not just many in the UK who think this. France for example has just voted to scrap its equivalent of the licence fee, with President Macron saying the move will help fight the cost of living. French citizens will now save \in 138 (about £117) a year. Some will point out that this isn't a fortune, and they'd be right. So I doubt the money-saving incentive is the *real* reason it's being ditched. Instead, the French authorities are ideologically opposed to it. It's a bold move, but I doubt our own leaders will have the vision to follow suit.

Jean Dubois

BBC licence fee needs 'watch with adverts' tiers

I would like to see the BBC's licence fee reformed so it's a hybrid between ITV Hub+ and Netflix. The BBC should start funding itself by showing adverts, but as with ITV Hub+ you'd be able to avoid adverts by paying a subscription. This would cover all UK stations as though they were part of a single organisation.

Now I bring in the Netflix component. The subscription can be tiered to cover different resolutions (SD, HD and 4K) and advert-free viewing sessions that are included in the subscription. Those running it would be able to check that users of an account are in the same house (connecting from the same IP address). This can be further extended to allow advert-free viewing for more IP addresses for family members who want to access the service while at university or other locations. Extra services such as BritBox could be added to an account for an additional monthly fee.

Richard Taylor



Pay as you go to avoid expensive monthly contracts

In reply to George Chappell's letter about phone contracts (Issue 638), I would like to remind him and everyone else that you don't actually need to pay for a monthly contract. I have a pay-asyou-go (PAYG) Android phone through Alcatel (see www.snipca.com/43010 for deals) on which I put around £30 a year, topping up when I run low. I pay for calls and texts, as well as mobile roaming charges if required. I can also log on to the internet with Wi-Fi when I need to. This could be the sort of deal which would suit George and others in his position.

Anne Passmore

Ofcom is failing to guarantee 999 calls

In Issue 637 (page 9), you asked whether any readers lost phone access during February's storms. We were knocked off the grid for two days during Storm Arwen, with some friends being affected for eight days. I remain

What's the Issue...?

I seem to recall you answering a reader's question on whether they could buy Windows 10 in order to upgrade to 11. Am I correct?

lan Atkinson

CA SAYS Yes, it was asked by Matthew Stone in Issue 628, page 65.

I've got a horrible feeling I've accidentally downloaded a fake Audacity app from the Microsoft Store. When did you warn about them? Gavin Sheldon CA SAYS It was in Issue 633's 'Named & Shamed' column, page 21.



With energy bills rising so much, I'm considering switching to a smart thermostat. Didn't you write about them last year?

unconvinced by Ofcom's pledge to

phone network.

implement a "monitoring programme" to

ensure adequate 999 access during power

Ofcom's duty is to look after the interests

of consumers and to regulate the businesses

concerned. But they have failed us -

indeed, they are part of the problem.

Their rules do not compel providers to

ensure 999 access is maintained. Their

'guidance' sets out "expectations" that

providers "should" have in place, but

"does not have binding legal effect".

It states that companies should provide

access to emergency organisations "for a

minimum of one hour in the event of a

power outage". It's unclear whether this

is an hour from the start of a power cut

power has been off for some time - an

It's not hard to specify criteria for

suitable backup systems for VoIP. There

must be an enforceable minimum time

that the phone is in stand-by mode

(mains off, phone not in use), and a

services can take). The customer must

supporting the homeowner's system,

mobile-phone mast, must also remain

whether the local fibre exchange or

As batteries are unreliable, minimum

test intervals must ensure these capabilities are maintained. The infrastructure

minimum accumulated talk time (bearing in mind how long calls to some

also be able to receive a call back.

hour of talk time from the moment

someone makes a 999 call.

(which would be laughable) or - once the

cuts once VoIP has replaced the current

Martin Cotton

CA SAYS Yes, in Issue 619, page 62. You can read it on our 2021 Back Issue CD (www.snipca.com/42077).

Facebook: www.facebook.com/computeractive Twitter: @ComputerActive www.twitter.com/computeractive

active for an equivalent time. Finally, there must be far better resilience of the ordinary internet system on which 999 calls will soon depend.

Cliff Grover

Windows 11 makes my old software faster

I've used Windows continuously from 3.1, released in 1992, so have experience of the ups and downs of the operating system. I recently bought an All-in-One (AiO) computer from Dell, running Windows 11 and with an Intel i7 processor, and what a refreshing change it has made. It boots up quickly, and has an excellent interface, with all my apps along the taskbar. For just over £1,000 it will probably last me to my demise.

Old programs like Office 2007, and Adobe Dreamweaver and Fireworks, which I have used for many years, still work fine and even seem faster. After 40 odd years of loyalty, I feel happy with this version of Windows although I am sure there are readers who will disagree with me. Well done Microsoft.

Paul Hildreth

No surprise only 10% of PCs run Windows 11

It should surely come as no surprise to Microsoft that only 10 per cent of PCs are running Windows 11 ('Question of the Fortnight', Issue 637). I have Windows 11 installed on my relatively new desktop PC, and would dearly like to upgrade from Windows 10 on my Lenovo Yoga 710 laptop (pictured), but am prevented from doing so by the hardware requirements. I am sure that there are many other loyal Microsoft customers in the same position.

So, has Microsoft shot itself in the foot by imposing such limitations, thereby restricting the size of its potential market? Although my laptop is five years old and the battery now needs more frequent charging than when it was new, in all other respects it remains an excellent machine and meets all my computing needs.



STAR LETTER

No chance of a VAT cut on broadband

Issue 638's 'Question of the Fortnight' (pictured) raised the interesting prospect of a VAT cut on broadband and mobile contracts, but I can't see it happening – simply because the

issue isn't making the political weather at the moment. All the discussion in the media is on cutting or capping energy bills, and understandably so. I wouldn't call the internet a luxury these days, but it's not as essential as gas and electricity. Nobody is going to die if they can't access YouTube for a few weeks.

The astronomical rise in energy bills actually *helps* broadband and phone companies because their price rises seem small in comparison. If we're already drowning in energy bills, then what's another cupful of water from broadband firms? In fact, they might even get away with raising their prices by *more* than they're currently stating becausing most of the public's anger will be directed at energy companies.

Question of the Fortnight Will VAT be cut on broadband and mobile bills?



For similar reasons, Simon O'Sullivan's suggestion (Letters, Issue 638) about a "mass refusal" to pay broadband bills is a non-starter. Customers can always switch to a cheaper package to save

money. They don't have that option with energy.

We should be thankful that, unlike gas, there's no 'wholesale' price of the internet that will force BT, Sky and others to quadruple their prices. If broadband prices were increasing by the equivalent that gas is, the average broadband bill would soon be around £120 a month, not £30.

It seems clear to me there's no chance of a VAT cut, so don't bank on saving money that way. We'll only see broadband prices stabilise once firms no longer need to invest in improving their infrastructure to provide Gigabit speeds, and that's not going to happen for a few years yet.

Ray Patterson

The Star Letter writer wins a Computeractive mug

Will Windows 12's system requirements be as restrictive as 11's? I hope not.

Jim Livesey

End of apps, not OS, makes a device obsolete

In response to your article 'Should you ditch these old devices?' (Issue 636, page 60), I've just given up an old iPad Mini 2. Chrome and Firefox can't be installed on it as they both require a more recent version of iOS, as do Microsoft apps (Outlook, OneNote, Lens) and BBC apps (News, Weather, Sounds). For me, this effectively makes the device useless. This is in contrast to my old Samsung tablet, which despite being on Android 8 can still install all these apps.

Based on similar experiences with other devices (Palm OS, Windows 8 RT, Symbian and Windows 10 Mobile), I'd say the end of support for an operating system doesn't make a device obsolete, but the end of availability of apps does. Tim Howlett

Not using Twitter is like 'not watching BBC 2'

I'm always impressed by how quickly one can get a response from a company's customer services by contacting them on Twitter rather than via email. I've often received a reply within minutes. In addition, the Twitter address is always openly available, whereas many firms seem to hide their email address, or force one to use a cumbersome online form with several personal details as a "required field".

When I've mentioned this to colleagues, they sometimes reply that they don't use Twitter. This reminds me of the days when TV viewers complained bitterly when the BBC moved programmes from BBC 1 to BBC 2, because they "don't watch BBC 2". Allan Hailstone

Consumeractive

We stand up for your legal rights

Can Google fob me off with vouchers?

In November 2021, I bought the new Google Pixel 6 phone (pictured) for £599. This was £222 below the full price because I traded in my Pixel 5. However, the new phone constantly froze, so I returned it within a week and was refunded £599. But for the £222 Google will only give

bought the phone from Google using Amazon vouchers, Google would have to send him the same amount in Amazon vouchers, not vouchers to spend in its own store.

ones used. So, had Russell

Interestingly the same rules apply for

me vouchers to spend in its store. Is this legal? Russell Coop



No it's not. If Google is unable to return

Russell's Pixel 5, then it can't force him to accept the equivalent price in vouchers. Instead, he's entitled to the money sent either to his bank or as a cheque.

The only time this wouldn't be the case is if Russell had traded in vouchers rather than physical goods to get money off the new phone – and the vouchers would have to be of the same value and terms as the



online sales under the **Consumer** Contract Regulations. So, if Google insisted the phone wasn't inherently faulty it would have to prove this. Furthermore, if it was offering him a goodwill gesture it would still need to be made using the same means of payment. If Google insists on giving him vouchers, Russell can sue for damages under the Consumer **Rights** Act.

LEAD CASE

Our experience of such cases is that once we explain the law to Google, we expect it will do the right thing and refund Russell.

CASE ONGOING

Can I get refund for rejected order?

In March, I paid £49 to ProRepeater (www.prorepeater. co.uk) for a Wi-Fi extender, paying through PayPal. However, I wasn't given an order confirmation nor a delivery date, so when it arrived three weeks later I rejected it. PayPal has refunded me the cost of returning the item, but ProRepeater hasn't refunded me the purchase cost. Must it do so? Ronald Lalewicz

Yes it must, because Ronald rejected the item within 14 days of receiving it. You can do this when ordering an item from the internet whether or not it's faulty. Retailers have 30 days to deliver, so ProRepeater wasn't actually late, but it should have confirmed Ronald's order, and told him when to expect delivery.

We're worried about ProRepeater because it didn't answer our calls, and we couldn't find its address on its website. By law, this must be clearly shown. Also, its terms break the law by applying a 20-per-cent charge to the order if you cancel after 24 hours. We'll keep chasing the company, and also tell PayPal it should help Frank under its Buyer Protection scheme (www. snipca.com/42903).

CASE ONGOING

CASE UPDATE

Reader finally registers warranty after five months

We often warn that it can be tricky to get a successful resolution from a company based overseas, so we're delighted that US-based manufacturer SharkNinja responded to our emails quickly and helped reader Roger Pring register the five-year warranty for his vacuum cleaner.

As explained in Issue 638, he bought the item from Currys in March, but hadn't been able to register the warranty, despite submitting what he thought were the correct forms, and even emailing SharkNinja's CEO to complain.

Roger felt as though SharkNinja was ignoring him, but it's more likely that a technical glitch was to blame. We went above SharkNinja and contacted its parent company JS Global, which is based in Hong Kong. It didn't tell us why Roger had experienced such difficulties, but we presume our email had the desired effect.

Had he not been able to sign the warranty, Roger would still have been covered by the Consumer Rights Act (CRA) had anything gone wrong with the vacuum cleaner. But that's beside the point. He was entitled to a warranty, and SharkNinja was obliged to process his registration.

It's worth remembering that under the CRA, once six months have passed from purchase you have to prove that an item is inherently faulty. It's unlikely that a warranty will ask you to do that, and will probably cover more causes for a product's malfunctioning than just an inherent fault.

Contact us so we can investigate your case

Email: consumeractive@computeractive.co.uk Please include your name, phone number and address.

Has Currys broken Trade Descriptions Act?

Curry's website is offering £150 for trading in an HP Envy laptop whether it's "working or non-working". However, the terms and conditions apply only to laptops less than seven years old. I think this is misleading, so does it breach the Trade Descriptions Act?

Ed Wiliamson

No, it doesn't. While we appreciate that Ed believes Currys should have made the restriction clearer, retailers can't be

Who owes

me for failed

Now TV pass?

team Brighton & Hove Albion play

In May, I tried to buy a Now TV

pictured) to watch my football

day pass (priced £11.99,

Manchester United. I was on holiday in

Despite this, I was charged twice, so

ended up paying £23.98. Now TV refuses

Somerset, so tried to sign in using my iPad, but was told the process couldn't

expected to include every condition in their headline offers. currus When you click the Condition menu in the offer page (www. snipca.com/42842) and then select Working or 'Needs repair', vou'll see what Currys means by these descriptions. In both cases the laptop you're trading in has to be younger than seven years old.

This also appears if you click 'Need help?' next to the Condition menu. Importantly, this is seven years since the laptop was made, not since you bought it.

Moreover, although The Trade Descriptions Act hasn't been repealed,

to refund me and so does Apple. Who

Derek Fines

Join in

We're fairly sure Apple does, because Derek paid through iTunes, and his bank statement

We don't blame him for being confused because there's no indication when you're signing up for a Now TV pass that you'll be sending money to Apple.

We've asked both companies does say that if you ever want

consumers now rely on the updated, clearer and stronger protections provided by the Consumer Protection Regulations. These have specific wording about false endorsements, misleading advertising and aggressive sales tactics. Terms have to be available to read before purchase, and can't be misleading or unfair. We don't believe Currys falls foul of this law.

Also remember that an advert is only considered an 'invitation to treat', and isn't a legally binding contract. If a seller wishes, it can refuse to sell to you for any reason bar discrimination.

CASE CLOSED

owes me the money?

shows that it took the payment. MEMBERSHI £11.99 e-off payment

to clarify the situation. Now TV

to cancel a subscription you've taken out via another company, you need to do it through that company (see www.snipca. com/42880). That would suggest you need to seek refunds through them too. We can't think of a valid reason why Apple or Now would have prevented

> Derek from watching the match, so we're confident he's owed a refund.

Apple might argue that it should refund him only £11.99, to resolve the problem of him being charged twice, but we'll argue for a full refund of £23.98.

CASE ONGOING

CREDIT WHERE IT'S DUE

In 2016, I bought a

Safelincs upgraded my smoke alarm after battery failed



be completed.

FireAngel ST-622 10-year smoke alarm (pictured) from Amazon Marketplace seller

Safelincs (www.safelincs.co.uk). Recently, it started to chirp that its

battery was running low, having lasted about five-and-a-half years.

Expecting little after so long, I contacted Safelincs, which was still trading on Amazon, pointing out that the alarm had fallen well

short of the promised battery life. I proposed a 40-per-cent discount off a replacement alarm. To my surprise, I received a reply

within hours, politely requesting information such as model and batch number. as well as my address so they

could send a replacement. The original model is now discontinued, so they sent

Has a company impressed you with its customer service? Please let us know: editor@computeractive.co.uk

me the updated ST-622R. Not only that, but noting that I'm an Amazon Prime subscriber, they posted it for free. It was superb service well above and beyond the call of duty. Paul Mooney

Contact Safelincs

- Email support@safelincs.co.uk
 Phone 0800 612 6537





Grow Your Family Tree

If you think your ancestors were born abroad on British territory, follow **Chris Paton's** advice to...

Order overseas BMD records

s well as records from England and Wales, the General Register Office (GRO) and the National Archives hold records of births, marriages and deaths (BMD) of British civilians born overseas on territory controlled by Britain. These include registers from the armed forces, high commissions and embassies, events recorded at sea, and civil registration records for areas formerly under British control (eg, the Greek Ionian islands from 1815 to 1862).

Several of the registers predate the start of civil registration in England and Wales in 1837, such as the Regimental Birth Indices, which date back to 1761.

Filter your search on Findmypast

All these records can be searched on Findmypast (www.findmypast.co.uk). Note that it has a separate collection for Roman Catholics, sourced from the Bishopric of the Forces in Aldershot.

Records sourced from the National Archives have been digitised and can be viewed with a subscription. Those from the GRO have been transcribed and indexed, though you'll have to visit the GRO's site to buy copies of the documents, as we'll explain.

Here, I'll search for the birth record of



my great-great-grandmother Florence Teresa Halliday, who was aged 37 at the time of the 1901 Ireland census, which recorded that she was born in Gibraltar. My first step is to search the 'British Armed Forces and Overseas Births and Baptisms' database on Findmypast, found from the home page by clicking All Record Sets and typing its name in the search box at the top left.

I type Florence's name, ticking the 'Name variants' box (1 in screenshot above) to cover alternative spellings like 'Haliday', and then the birth year '1864 +/- 2 years' 2. In the Country field I used the Browse Country menu to select Gibraltar 2.

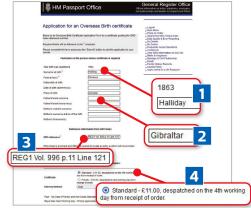
The 'Type' box lets you select three filters for where your ancestor was born: At Sea, Armed Forces and Consular/ Overseas. I know Florence wasn't born at sea, so I select the latter two **4**.

This information gives me only one result, which takes me to a transcript of the index. It tells me that Florence's birth was in 1863 and was indexed by the GRO in its 'GRO Regimental Birth Indices (1761 to 1924)' collection.

Order original records from the GRO

To order the original records from the GRO, visit www.snipca.com/42813 and click 'Order certificates online'. After registering with the site and logging in, select 'Order a Certificate or PDF' to go to the 'Start Application page'. Here, I ticked 'Outside the United Kingdom and registered by the British Forces, Consul or High Commission' when asked where the event took place. I also ticked the box stating that I know the GRO reference. Clicking 'Submit' takes you to the application page.

The year is already identified as 1863, but I now type Florence's name (1 in screenshot below), where she was born 2, followed by the GRO reference stated on Findmypast 2. I confirm I want a posted certificate 4, click Submit and then confirm my details and pay. The record should arrive within a week.



Fill in your ancestor's details, including the GRO reference, to order a certificate

Your **Genealogy** Problems Solved 🔽

I want to take my family tree as a PDF file on a USB stick to my high-street printer to turn it into a wall-sized banner. I'm using the free Gramps software, which only exports up to 98 A4 pages in PDF. How can I make a bigger chart in GEDCOM, SQLITE or CSV formats? Ted Green

The best option is MyHeritage's Family

Tree Builder (www.myheritage.com/ family-tree-builder), which lets you import your data from Gramps as a GEDCOM file, and make and export a PDF chart. The free version gives you three chart styles, with more available in the paid-for version.

Have a genealogy question for Chris? Email letters@computeractive.co.uk with 'Grow Your Family Tree' in the subject line.





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All information correct at the time of printing. Subject to change.



Best Free **Software**

Robert Irvine recommends new programs that won't cost you a thing

NETWORK SCANNER

Fing Desktop 3.0.0

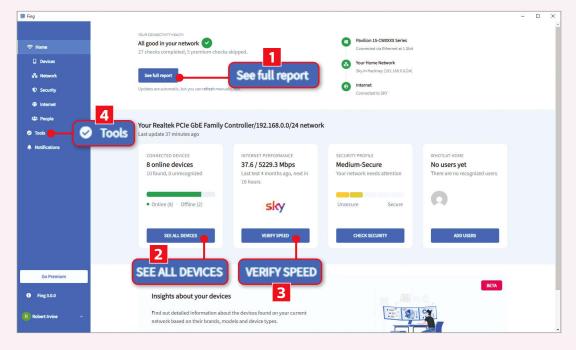
www.snipca.com/43014 What you need: Windows 7, 8.1, 10 or 11, or macOS

Fing Desktop provides a simple way to monitor your home network and ensure that you're getting a fast and reliable connection from your internet provider. Last time we looked at the program, in Issue 631's Easy When You Know How column (page 74), we were rather underwhelmed, so we're pleased to report that version 3 is a major improvement that addresses most of our concerns.

Fing's interface has been redesigned to place a wealth of useful info on your Home dashboard. This includes summary cards showing the status of your connected devices, your internet performance and the level of your Wi-Fi protection. Each card includes a button you can click for further details – for example, click 'Verify speed' to test your current download and upload speeds. You can also view a full report of all the devices on your network based on their type, brand and model.

Another welcome change is to the program's Tools tab, which now organises options for diagnosing problems into logical sections such as 'Troubleshoot your network'. Even better is that several tools that previously required a Fing Premium subscription (£4.99 a month) are now available to all free users. These include scanning your network for open ports, performing a DNS look-up and checking your Wi-Fi access points. We particularly like the Detect Outages option, which tells you about any reported problems in your area, not only for your own ISP but other internet providers – handy for helping friends and family who have been knocked offline. You can also compare the average speeds and customer ratings of different ISPs.

Some of Fing Desktop's best features are still limited to its paid-for version, such as scanning for router vulnerabilities, but the free edition is slicker and smarter than ever. You need to register with Fing to use the software, but can sign in using your Google or Apple account.



When you launch Fing Desktop, it runs through a series of checks to ensure your network is running smoothly and informs you of any connectivity problems. Click 'See full report' for more information. Fing detects how many devices are currently connected to your home network and whether they're online or offline. Click the 'See all devices' button for a full list and make sure you recognise all the entries. Click the 'Verify speed' button then choose 'Test speed' and Fing Desktop will test your download and upload speeds. It will then tell you how the results compare with other internet providers in your area. 4 The Tools section features plenty of useful options, most of which are now free to use. These include a Detect Outages tool that informs you about ISP problems in your area, and a tool for looking up DNS addresses.

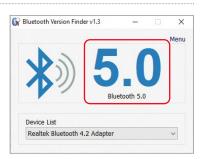


BLUETOOTH TOOL

Bluetooth Version Finder 1.3

www.snipca.com/43004 What you need: Windows 10 or 11

It's important to know which version of Bluetooth is on your PC, so you know whether you can use certain Windows features – for example, Nearby Share requires Bluetooth 4.0 or later – but most of us don't have a clue. This



tool reveals your Bluetooth version without you needing to delve into the Windows Device Manager and check your Bluetooth adapter's Properties. Simply download it from the link above (the Download button is at the bottom of the page), extract the contents of the ZIP file and double-click the EXE file – click 'More info' then 'Run anyway' at the security warning. It will instantly display your Bluetooth version number (see screenshot) and the corresponding adapter. Click 'Menu' and choose 'Bluetooth & other devices' to switch Bluetooth off or on. This update fixes a problem that prevented the program from identifying Bluetooth 5.3.

DRIVE-SPACE ANALYSER

WizTree 4.09

www.snipca.com/43013

What you need: Windows 7, 8.1, 10 or 11

WizTree offers a fast and free (for personal use) way to find out which files and folders take up the most space on your hard drive. Improvements in this update



include the ability to double-click an item in the program's Tree View or File View tabs to open it directly, without needing to right-click it and select Open. You can also now drag a file or folder from WizTree to File Explorer to copy or move it to another location. Another change is to the program's distinctive Treemap, which uses appropriately sized, colourcoded blocks to represent the contents of your PC. When you use the Select Multiple option (see screenshot) to scan more than one drive, the amount of free space will now be displayed separately for each drive, rather than as a total figure. This helps you quickly identify where large folders and files are taking up the most space. WHAT SHOULD I DOWNLOAD? We tell you what software & apps to use

How can I hide desktop icons until I need them?

I have set Windows to display photos from my Pictures library as my desktop wallpaper – these change automatically every three hours. However, the icons on my desktop often obscure my view of the wallpaper. Is there a free program I can use to hide these icons until I need them?

Colin Hennessy

Having a lot of icons on your Windows desktop not only obscures your view of your wallpaper but can slow down your PC, so it's useful to know how to temporarily hide them. The simplest method is to right-

click an empty area of your desktop and move your cursor over View to open the side menu. Untick the 'Show desktop icons' option and all your icons will instantly be hidden. Tick this option again to restore them.



Alternatively, you can use a tiny free tool called AutoHideDesktopIcons to hide the icons automatically. Download it from www.snipca.com/43021 - click the 'Download 109KB' tab at the top of the page and select the 'AutoHideDesktopIcons.zip' link – and extract the contents of the ZIP file. Double-click the 'AutoHideDesktopIcons.exe' file to run the program.

Use the Timer slider at the bottom of the window (see screenshot) to set your desktop icons to disappear after a specific period of inactivity, from one second to three hours. To make them reappear, simply left-click your mouse anywhere on the desktop. You can set AutoHideDesktopIcons to start when Windows does, and there's an option to hide your taskbar to give you a full view of your desktop wallpaper.

Do you need our advice on what software to use? Just email us at letters@computeractive.co.uk

Best Free **Software**

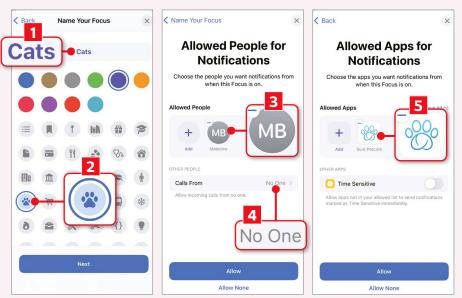
HOW I USE

My iphone's Focus Worried about his lost cat, David Ludlow set up alerts to wake him if it returned during the night

Smartphones and tablets have changed our lives, but not always in good ways. Being permanently connected often makes my life very annoying, with constant notifications and pings coming through on my iPhone. I started to use Apple's 'Do Not Disturb' mode (www.snipca.com/42872) to tame these annoyances, but it's a blunt instrument, lacking the nuanced options I wanted.

I was delighted, therefore, when Apple added Focus modes to the iPad and iPhone, as part of iOS and iPadOS 15 (released in 2021). These let you set alerts based on your location, or when particular actions take place.

When my family took in two rescue cats, one of them (called Logan) escaped through the cat flap and went missing. We've got a smart cat flap



Once David selects these settings, he'll get notifications from only his wife and Logan

ETEFAP"

David uses this smart cat flap to alert him when his cats pass through

WHAT I'D LIKE TO SEE IN FOCUS MODES

There's a Sleep Focus built into iOS, which turns on and off according to the sleep schedule you set. It also turns on an alarm automatically, which is

quite annoying.

decide to turn up.

Instead, I'd like to be able to set a manual alarm, and assign a particular Focus mode to it also.

(www.snipca.com/42881, pictured)

that sends a notification to my iPad/

iPhone when a cat enters or leaves,

reading a sensor on the collar to identify which cat it is. I wanted to know if

Logan had returned, so created a new Focus for overnight. This allowed

would wake me should he eventually

To do this, I opened my iPhone's

selected the paw icon 2, then tapped

next screen, I selected which contacts

Next. Under 'Allowed People' on the

I wanted notifications from (just my

settings, then tapped Focus followed by

'+'. I called it Cats (11 in our screenshot),

notifications from the cat flap, so Logan

wife **I**), then changed the Calls From section to No One **I** to block all other calls. I then tapped Allow.

I then added Sure Petcare (the catflap app) to the Allowed Apps section **5**, so that I would hear its notifications when the Focus is turned on. Finally, I tapped Allow, Done.

To turn on a particular Focus you have to swipe down from the top-right of the screen, then tap Focus. You then have to tap the '...' icon next to it and select how long it should be active for. I wanted this Focus to run automatically, so I went to Settings, Focus and tapped Cats. At the bottom of the screen, I tapped 'Add Schedule or Automation', and then selected Time and set it to run between 11.30pm and 9:30am. When I went to bed, the Focus turned on automatically.

Fortunately, Logan did come back: I got a notification that night and went downstairs to find the mischievous moggy.

Named & Shamed

Barry Collins puts the boot into tech villains, jargonspouting companies and software trying to trick you



L.....

Outbyte's hidden subscription shock

ow much would you pay for a piece of software that checks your computer has the correct drivers? If you answered 'nothing', congratulations – you've clearly found a decent free tool, such as SDIO (www.snipca.com/41568). Alas, some unsuspecting punters have paid a lot more for Outbyte.

Reader Geoff Miles emailed us to say how his friend ended up spending £260 after signing up for Outbyte's Driver Updater and PC Repair software. What Geoff's friend didn't realise when he stumped up £60 for the two programs was that the company had put him on a recurring three-month subscription, taking another £100 every quarter.

Judging by the TrustPilot reviews (www.snipca.com/42899), Geoff's pal was far from the only one taken in. "I purchased Outbyte PC Repair together with Driver Updater," writes one such reviewer. "Beware that the licence you purchase is only for three months. Not the usual year. You will be charged again

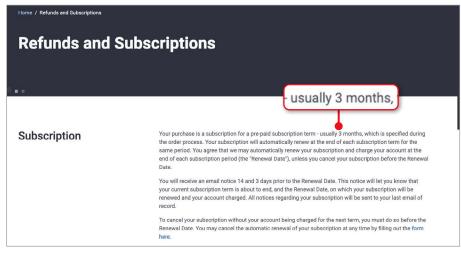
WHAT ARE THEY TALKING ABOUT?

WHAT THEY SAY

Huawei www.snipca.com/42879 "The MateBook X Pro features a skinsoothing metallic body, which weighs as little as 1.26 kg, so that your life's work and passions can always accompany you. The crafted form of micro-arc oxidation is as dazzling as it is durable and corrosionresistant, putting a professional face on everything that you do, from creation to office work."

WHAT THEY MEAN

We're bored of making laptops, and now want to sell expensive face moisturisers.



Outbyte's small print signs you up to a recurring three-month subscription

after three months."

Others make the same complaint, to which Outbyte's standard reply is that it's covered in its terms and conditions, which state: "Your purchase is a subscription for a pre-paid subscription term – usually 3 months, which is specified during the order process" (see screenshot). Fine, but this information should be front and centre on the software page, not buried in the small print. Other reviewers on TrustPilot complain that the software is impossible to remove, that it fills screens with pop-ups, that it crashes their computer and – most worryingly of all – that Outbyte staff try to remotely access customers' computers when customers demand a refund.

I sent an email to Outbyte's support team, asking them to comment on these allegations, but haven't received a reply. I strongly suggest you give this outfit the cold shoulder too.

BARRY'S VILLAIN OF THE FORTNIGHT

Remember James Howells? He's the IT engineer who threw away a hard drive in 2013, only to later realise it contained about £150m in Bitcoin. Since we first covered his sorry tale back in 2013, he's popped up every few years trying to persuade Newport Council

to dig up landfill to find the drive. Well, now he's back yet again, claiming to have the funds for a dig



team and an "AI specialist" to help him find it. What's more, he would use some of the proceeds to "reinvest in the ecosystem" and turn Newport and South Wales into a "crypto Mecca".

Spouting such nonsense, Howells is clearly full of

more rubbish than the landfill he's so desperate to excavate. It's time he dug himself out of this hole.

Credit: BBC

Reviews

New products tested by our experts

PC | £1,199 from Currys www.snipca.com/42769

Acer Predator Orion 3000

Power player

If you're looking for a new computer with enough graphics power to get the most out of demanding games like Microsoft Flight Simulator, your best bet is a PC with a separate graphics card. This takes the load of creating realistic 3D graphics off your processor and puts it on to the graphics hardware, which significantly improves the performance of such games. The downside is that the standalone graphics card can beef up the price of a PC considerably.

Worth the money if you intend to use it for playing games

Back in Issue 637 we reviewed the Cyberpower Infinity X123 Pro, which now costs £1,000 (from www.snipca.com/42532), up from £905 when we tested it. That's still good value though, and demonstrates what can be done on a tight budget. However, it comes with a four-core Intel Core i3-12100F processor. The Acer Predator Orion 3000 costs £200 more, but it comes with a six-core i5-12400F chip, so we were interested to see what difference this would make to our performance benchmark test results.

The Predator Orion 3000 scored 1,436



in the single-core test and 7,537 in the multi-core test. The Infinity X123 Pro improves on this in the single-core test with 1,553, but lags behind in the multi-core test with 5,541.

In our test for general Windows performance, things were much closer, with the Predator scoring 7,160 and the Infinity 7,159 – almost nothing in it. This means you really need to be using programs or games that make the most of the Predator Orion's extra cores, such as image- and video-editing software, to make it worth the extra money.

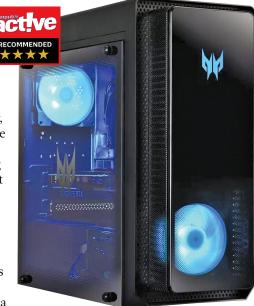
The processor in the Predator Orion is bolstered by 16GB of RAM. It also has two storage areas – a 256GB SSD for Windows and essential programs, and a 1TB hard drive for files. The graphics card is an Nvidia GeForce 3060 Ti, which is a good choice for gaming at Full HD 1080p resolution. In our tests it averaged 84fps at this resolution with games at ultra-high detail settings, and 193fps when set to low detail.

On the outside, the Predator has a classy-looking black design, with a few RGB lighting details within its relatively compact case. At the front there's a USB-C port, a USB 3.0 port and two 3.5mm audio jacks for headphones and microphones. The back panel has everything else most users will need, including more USB 3.0 and 2.0 ports, and both HDMI and DisplayPorts for connecting monitors.

It comes with a version of Acer's PredatorSense installed, which can monitor internal temperatures, control the cooling fans and configure the RGB

SPECIFICATIONS

Six-core Intel Core i5-12400F processor • 16GB of memory • Nvidia RTX 3060 Ti graphics • 256GB SSD • 1TB hard drive • 1080p webcam • Wi-Fi 6 • Bluetooth 5 • 1x USB-C port • 3x USB 3.0 ports • 4x USB 2.0 ports • 1x HDMI port • 3x DisplayPorts • Windows 11 Home • 392x175x386mm (HxWxD) • 9.5kg • One-year warranty www.snipca.com/42769



lighting. It should be noted that on full throttle, the PC's cooling fans are extremely loud, almost to the point of being distracting, even when using headphones at full volume.

Remember that a desktop PC with a graphics card is really only needed for gaming. If you're just looking for Windows performance, our current Buy It! favourite the Wired2Fire Ultima WS Home Office Workstation is great value for money at £772 (www.snipca. com/41500, see page 30).

VERDICT A powerful and versatile desktop PC at a reasonable price, but check you need all this graphics power before ruling out cheaper alternatives

ALTERNATIVE Cyberpower Infinity X123 Pro £1,000

Save money with this gaming PC that offers similar performance in all but the most demanding programs



LAPTOP | £1,549 from AO www.snipca.com/42774

LG Gram 16

Fair and square

If you're looking for a traditional Windows laptop that's sleek, slim and easy to carry around, the latest version of the LG Gram 16 is a very compelling option.

Our review model came with a powerful Intel Core i7-1260P processor, 16GB of RAM and a 1TB SSD. That's a similar spec to the Samsung Galaxy Book 2 Pro 360 we reviewed in Issue 633, which usually costs a similar price of £1,499, but at the time of writing is available for £1,299 (www.snipca. com/41999). The Galaxy Book can't match the Gram 16 for storage space, with only 512GB at that price, but has a more flexible screen that flips all the way over so you can use it as a tablet.

Lightweight and sleek laptop that offers strong Windows performance

The Gram 16 trails the Galaxy Book 2 Pro 360 in terms of performance, but it came reasonably close in our benchmark tests. If raw power is important to you, Samsung's laptop edges ahead, but the LG won't disappoint and is more than capable of running any Windows software you might want to throw at it.

What you do get with the Gram is a squarer screen. It's not a touchscreen and doesn't flip over; instead it conforms to a more traditional laptop format. However, its resolution of 2560x1600 pixels packs in a lot more detail than the Galaxy, and the squarer aspect ratio makes it much



better for general Windows work, if not for watching films and TV.

Unfortunately the screen uses IPS technology rather than OLED, so you don't get the stunning contrast and vivid colours we saw on the Galaxy. Instead the Gram is fairly muted, with a maximum brightness level of 350cd/m2, which isn't ideal for bright light. It does, however, have a matt coating, which helps reduce reflections if you're sitting next to a Window.

We have no complaints about the build quality and design of the laptop, though. For starters, it's incredibly light given its size. The bezel around the screen is wafer-thin on all sides, despite the top border accommodating a 1080p webcam.

It also has plenty of connections, including a full-size HDMI port, an audio connector and two USB-C ports on the left edge. There's a microSD card reader and two full-size USB 3.0 ports on the right (pictured below). It also has a full-size keyboard with a numeric keypad, and a larger-than-average touchpad.

SPECIFICATIONS

Twelve-core Intel Core i7-1260P processor • 16GB RAM • Intel Iris Xe graphics • 16in 2560x1600pixel IPS screen • 1TB SSD • Wi-Fi 6E • Bluetooth 5.1 • 2x USB-C ports • 2x USB 3.0 ports • 1x HDMI port • 1x microSD card slot • Windows 11 Home • 15.7x278x206mm (HxWxD) • 1.2kg • One-year warranty www.snipca.com/42774



HOW WE TEST

Computeractive is owned by Future PLC, which employs a team of specialist technical reviewers. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every phone and tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Future PLC also owns the magazines Maximum PC, PC Pro and T3, and the websites Laptop Mag (www.laptopmag. com), TechRadar (www.techradar.com) and Windows Central (www.windows central.com). This means we can test thousands of products before choosing the most relevant for Computeractive.

FAIR AND IMPARTIAL

Our writers follow strict guidelines to ensure the reviews are fair and impartial. The manufacturer has no involvement in our tests.

OUR AWARDS



 We award every product that gets five stars our
 Buy It! stamp of approval. It means we were

extremely impressed by the product, and we think you will be too.



Every product that gets a four-star review is given the Recommended award. We highly recommend these

products, although they just fail to meet the high standard of our Buy It! winners.

PRICES

Our reviews contain a link to the best price we found online at the time of press.

VERDICT A traditional laptop with plenty of power and a great design, but the screen is a little disappointing

ALTERNATIVE Samsung Galaxy Book 2 Pro 360 £1,249 Much cheaper and a tad more powerful, this laptoptablet also offers more flexibility



Reviews

LAPTOP | £1,000 from Huawei www.snipca.com/42779

Huawei MateBook D16

D for desirable

Those whose budget doesn't stretch to a luxury laptop such as the LG Gram 16 reviewed on page 23 might be more inclined toward the Huawei MateBook D 16. Huawei now offers a wide range of laptops for all kinds of needs and budgets, but the MateBook D series is its most affordable. This doesn't mean cheap and cheerful – its design is similar to the company's more expensive machines – but it makes sensible compromises to bring the price down to a reasonable level.

Performs well in everyday tasks and holds its own with more demanding software

There are two versions of the MateBook D 16. The chassis, build quality, storage (a 512GB SSD) and 16in screen are the same in both models. However, the £750 version comes with an Intel Core i5-12450H processor and 8GB of RAM, while the £1,000 model has an Intel Core i7-12700H chip with 16GB of RAM. We tested the latter.

In our performance benchmark test, it scored 799 in single-core tasks and 5,952 in multi-core. You'd expect it to outperform models with an Intel Core i5 processor and it does, but not by a huge margin. In comparison, the excellent Dell Inspiron 14 2-in-1 (see Issue 638, page 22), scored 1,672 (single-core) and 5,052 (multi-core).

This means the Inspiron performs better in everyday tasks and hold its own when running more demanding





software, though it's worth remembering it has smaller 14in screen and lower resolution.

The MateBook D's generous 16in screen will be one of the main reasons you might be attracted to it. It's slightly squarer than standard with a 16:10 aspect ratio, which offers a good balance between more desktop space when you're working without looking too odd if you're trying to watch films or TV.

It has a Full HD resolution of 1920x1200 pixels but, like the LG Gram 16 uses an IPS panel rather than an OLED. Sadly, the maximum brightness level of 300cd/m2 is even lower than LG's (which we found relatively dim to start with), so we wouldn't recommend it if you wanted a machine to work on outside.

Undoubtedly, some of the Gram 16's bigger price tag has been spent on keeping it light and slim. At 1.7kg the MateBook is far from cumbersome, but it's 500g heavier than the Gram. It's also significantly larger, measuring 18.4x357x248mm compared with 15.7x278x206mm. It's by no means an immovable object, but it's worth considering whether you might prefer to pay more to get a slimmer, lighter, more portable device.

Around the outside edge there are two USB-C ports: one that supports data, charging and a connection to a DisplayPort-compatible monitor; and another that supports data and charging only. It also has a USB 3.0 port, a USB 2.0 port, an HDMI port and a 3.5mm 2-in-1 headphone/microphone jack (all pictured left). The size of the model means there's plenty of room for a full-size keyboard and number pad. The keyboard is comfortable to type on, with a satisfying, muted click when pressed. The touchpad, located below the keyboard, is responsive and accurate, although we did find it a little cramped on occasions.

The battery life is reasonable, but didn't get us through a full day during testing, so it's not ideal if you need to work long hours away from a mains socket. It lasted about seven hours in our video-playback test, which is about average for a laptop at this price.

SPECIFICATIONS

Eight-core Intel Core i5-12450H or 14-core i7-1260P processor • 8 or 16GB RAM • 16in 1920x1200-pixel resolution IPS screen • 512GB SSD • 1080p webcam • Wi-Fi 6 • Bluetooth 5.1 • 2x USB-C ports • 1x USB 3.0 port • 1x USB 2.0 port • 1x HDMI port • 1x 3.5mm audio jack • Windows 11 Home • 18.4x357x248mm (HxWxD) • 1.7kg • One-year warranty www.snipca. com/42779

VERDICT There's plenty to like about this large-screen laptop, but the compromises required to bring the price down leave it trailing more expensive models

ALTERNATIVE Dell Inspiron 14 2-in-1 £699 A smaller screen but excellent

performance from a laptop that can also be used as a tablet



MONITOR | £485 from NZXT www.snipca.com/42832

NZXT Canvas 27Q

Too EXPV

Assuming your PC has the hardware to handle it, it's worth upgrading to a larger screen with a higher resolution. This new 27in monitor from US manufacturer NZXT is a sensible step up from a standard 1080p monitor, with a 2K 1440p resolution of 2560x1440 pixels. It's aimed at gamers, with a refresh rate of 165Hz and a response time of one millisecond, making games like Microsoft Flight Simulator flights look as smooth, detailed and impressive as your PC can make them.

Impressive colour accuracy and sensible design – but pricey

We tested the Canvas 27Q with a colorimeter and the results were excellent, reproducing 99.1 per cent of the sRGB colour standard and 90.1 per cent of the more demanding DCI-P3 standard. The maximum brightness couldn't match colour accuracy, however, peaking at just 260cd/m². That means it's not ideal if you're in a brightly lit environment, such as when your PC is next to a window. However, the matt finish on the IPS screen goes some way to reducing annoying reflections.

The build quality is impressive and there's a wide selection of ports for connecting devices, including two HDMI and one DisplayPort. There's also a

3.5mm audio jack and a generous selection of USB ports, including one USB-C, two USB 3.0 and a USB 3.0 type B port. The stand has a cable-management hole that lets you tuck the cables away

neatly.

It's possible to adjust the tilt, swivel, height and pivot of the screen, and even rotate it into portrait mode if you prefer. The power brick is external, which isn't a major problem because the



cable to it is long enough to reach the floor so it won't clutter your desk. It's a simple and sensible design.

At first glance, the Canvas 27Q looks like good value for money (the price is quoted as £349 on NZXT's website). However, this doesn't include the stand (an extra £40) and the site is based in the US so only adds VAT at the end of the purchasing process. While shipping is a reasonable £15, by the time you've added it all up, it will cost you £484.80. NZXT products are available through UK retailers including Scan (www.scan. co.uk), but this monitor hadn't become available there at the time of writing, so you may be stuck with buying directly from the US.

This makes it expensive compared with more readily available monitors. If you're simply looking to increase your resolution, for example, the 4K Asus CB282K (£329 from www.snipca.com/42030, reviewed in Issue 633) is well worth considering.

SPECIFICATIONS

27in IPS screen • 2560x1440-pixel resolution • 165Hz refresh rate • 1ms response time • 2x HDMI ports • 1x DisplayPort • 1x USB-C port • 2x USB 3.0 ports • 1x USB 3.0 Type B port • 527x615x220mm (HxWxD) • 6.3kg • Three-year warranty www.snipca.com/41721

VERDICT A well-designed and vibrant 2K monitor that's great for gaming, but works out more expensive than rivals

ALTERNATIVE Acer CB282K £329

4K resolution at a significantly lower

price, this is a better option for general Windows use but isn't as good for gaming



CHOOSE THE RIGHT SPECS





What does it do?

DDR5 RAM is the newest type of RAM you can buy for your PC. It was introduced alongside Intel's 12thgeneration processors, which remain the only processors that support it. DDR5 can process more commands than the older DDR4 standard, and supports capacities up to 128GB – twice the 64GB maximum capacity of DDR4.

How does it work?

RAM comes in modules, mounted on sticks (pictured), which clip into slots on your PC's motherboard. They hold all the temporary information your PC needs to keep it running smoothly, including the software you're using and the data that your PC processes, such as websites you have open in your browser. The more RAM you have, the less likely it is that your PC will need to transfer some of this data to your hard drive for safe keeping, which is what happens when you have too many items open and your PC starts to slow down.



What are the specs?

To use DDR5 RAM you need a 12thgeneration Intel processor. You can find out whether you have one by looking for your processor's name in your system settings - it should have a '12' at the beginning of the its number, such as the Intel Core i5-12600k. You also need a motherboard, with 'Z690' in its name. This is harder to find out, so you're best referring to the documentation that came with your PC.

Can I change it later?

No. DDR4 and DDR5 RAM slots on the motherboard are different, so you can't swap one for the other.

Reviews

PHONE | £399 from Google www.snipca.com/42807

Google Pixel 6a

Compromising photos

It's becoming a common trick of phone manufacturers to launch a range of high-end phones, sell them for a few months, then bring some of that technology to a cheaper range of models in an attempt to draw in those who can't or won't pay premium prices.

That certainly seems to be the reasoning behind the Google Pixel 6a, which takes the new technology we saw in the Pixel 6 (£599 from www.snipca.com/39985, reviewed in Issue 620) and the Pixel 6 Pro (£849 from www.snipca.com/42809) and puts it in a smaller, more affordable phone (with a launch price of £400).

However, it's worth pointing out that few phones stay at their launch price for long, and we've seen retailers offering significant discounts on the Pixel 6. Indeed, at the time of writing, Amazon was selling the black model for £445 (www.snipca.com/42810), which is only around £50 more expensive than the 6a. This may not be available by the time you

SPECIFICATIONS

Eight-core Google Tensor processor • 6GB RAM • 128GB storage • 6.1in 60Hz 2400x1080-pixel OLED screen • 12-megapixel rear camera • 12-megapixel ultrawide camera • 8-megapixel front-facing camera • Wi-Fi 6E • Bluetooth 5.2 • Android 12 • 152x72x8.9mm (HxWxD) • 178g • Two-year warranty www.snipca. com/42807

read this, but shop around and you may find similar bargains.

The big selling point of the Pixel 6a is that it's built around the same Google Tensor processor as its pricier stablemates. This provides it with the same raw performance as the Pixel 6, with scores of 1,050 in the single-core test and 2,833 in the multi-core test. This is more than enough to run Google's Android operating system smoothly, though it's paired with only 6GB of RAM rather than the 8GB that comes with the Pixel 6, so might slow down when running more demanding apps.

The screen has the same 2400x1080pixel resolution, but it's smaller at 6.1in, compared with the Pixel 6's 6.4in. This may actually appeal to some of our readers, because we're often asked to recommend phones with smaller screens, and its quality is otherwise excellent.

Perhaps the biggest area of cornercutting is with the main camera, which is reduced from a stunning 50 megapixels in the Pixel 6 to 12 megapixels. Photos are still decent, with the photo-enhancement tools built into Google's processor bringing out the best in the camera, but it can't capture the same level of detail as its predecessors. It does retain the same 12-megapixel ultrawide camera, however.



It also lags behind on battery life, which failed to last a full day during our tests. With the Pixel 6 only costing a few pounds more (if you shop around), we think it's probably worth seeking out a deal on that rather than opting for this cheaper copycat.

VERDICT A decent phone that's reasonably good value, but with superior rivals dropping in price there's no compelling reason to buy

ALTERNATIVE

Google Pixel 6 £445 Shop around to find the best price and you'll get a better phone for only a little more money



WHAT SHOULD I BUY?

We solve your buying dilemmas

Can you suggest a Wi-Fi 6 modem-router?

All the Wi-Fi 6 routers you've covered recently are nonmodem models. I currently have a TP-Link TD-W9970 VDSL/ADSL modem-router, and I'd like to replace it with a similar modem-router that can do Wi-Fi 6 and 5GHz Wi-Fi. **Rob Sedqwick**



We've trawled the internet for Wi-Fi 6 VDSL/ADSL modemrouters and they are few and far between. We suspect this is because it's easier for people to use the free modemrouter supplied by their internet service provider, and connect it to a better Wi-Fi router with an Ethernet cable. However,

> because you already use a TP-Link modem/router, you clearly have the know-how to set this up.

The only Wi-Fi 6 devices we could find of this type were from . DrayTek (www.

draytek.co.uk). They are mostly aimed at businesses and come with extra tools you won't need. The DrayTek Vigor 2865ax is our pick, available from Box for £316 (www.snipca.com/42818, pictured). If you're willing to stick to Wi-Fi 5, there are cheaper options available. For example, the TP-Link Archer VR600 V3 is a big step up from your current Wi-Fi 4 device and costs £75 from Box (www.snipca.com/42819).

Do you need advice on what you should buy?

Email us at letters@computeractive.co.uk

Now's the time to tackle your iPad (or Android tablet)

ablets – iPads and Android tablets – can be great once you know how to use them. It's amazing all the things

they can do.

And possibly the best thing tablets can do for you is help you keep in touch with family and friends. I don't just mean letting you send emails instead of writing paper letters, though that can be handy.

In just a few taps of the screen you could be talking to them as if they were sat right there beside you.

But when you buy a tablet, there's something missing.

It's not the charger (hopefully!).

It's not a case, though it's usually a good idea to buy one to protect your new tablet.

It's a manual – something to show you how to use the thing. The manufacturers seem to assume that you'll just know how to use it, as if by magic. It's "intuitive," they say.

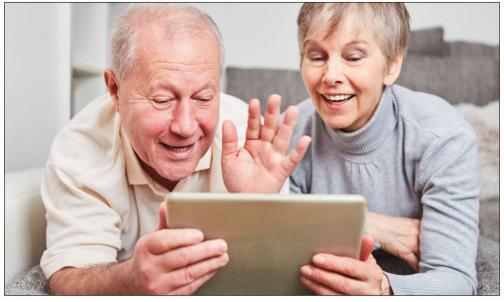
Well, it can be. In parts. But there are other things you simply need to know how to do. It's not obvious that you have to swipe from the top of the screen, pull up from the bottom or tap with two fingers instead of one.

Who would know you had to use two fingers and pull them apart on the screen or rotate them... or that they'd bury the option you want behind three little dots?

Things like that you just can't know – someone has to explain it to you.

But if you do ever find a book about it or get someone to tell you, they always seem to assume you already know how to do it. Daft, really – you wouldn't be asking if you did. But they whizz through it so fast you can't possibly take it in. Not to mention the steps they leave out because "everyone knows that"!

That's where a set of books from a small, employee-owned company based in Cumbria comes in. They're called The Helpful Book Company and lots of their customers say they certainly live up to their name!



These helpful books mean there's nothing to fear about using tablets – from sending a quick email to video calling your family and friends.

They've published *iPads* One Step at a Time and Android Tablets One Step at a Time – and these books have proved hugely popular with all sorts of people who have a tablet – but who aren't experts at using it.

Whether you're frustrated with the very basics, want to know what else it can do for you or wish you knew how to do some of the slightly fancier things, this book might be just what you need.

It explains everything nice and simply, in plain English, without all the confusing jargon and gobbledegook. And it has lots of pictures showing exactly what to do – where to tap the screen and so on.

**********		******	********
"Plain	English	without	all
the	confusing	jargon	and
gobble	edegook"		

The company has already published books about computers and smartphones that have helped thousands of people. But they actually started much smaller – the author wrote some notes to help his Mum and Dad on their PC and realised that other people might find them useful too. Several thousand happy people later, he decided to bring out a book on tablets as well – and if you've ever been frustrated with your tablet, it's worth finding out more.

As a small independent publisher, the books aren't in the shops or available on Amazon, but you can get a free information pack telling you about what's covered in the books, who they're suitable for and how to get hold of them.

Just ring 01229 777606 today (lines open weekdays 8am-5:30pm and Sat 9am-3pm). Or post back the coupon below or email your name and address to PC0622@helpfulbooks.co.uk

Yes, please send me a free info-pack about: <i>iPads O</i> and <i>Android Tablets One Step at a Time</i>	one Step at a Time Or call:
It's free & there's no obligation.	01229 77760
Name	Quote 'PC0622A'
Address	
Po	stcode

Post to **The Heipful Book Co, 13B Devonshire Rd Est, Millom, Cumbria, LA18 4JS** or Call **01229** 777606 We use the details you give us to send you information on the products mentioned. We store the details securely and only share them with the Royal Mail for posting the information. Full privacy notice at www.helpfulbooks.co.uk/privacynotice

Reviews

PHONE & 399 from Amazon www.snipca.com/42801

Nothing Phone(1)

Trick of the light

With many smartphones now looking pretty much identical, it's refreshing to see one that's trying to stand out from the crowd. Nothing is a UK-based company, launched by Carl Pei – co-founder of OnePlus – and it's caused something of a stir in the industry with its first – very distinctive – smartphone.

It's not exactly reinvented the wheel, however. The phone is the same shape and format as most, with familiar rectangular dimensions and a screen that covers almost the entire front. Where it differs is at the back, which is a translucent panel that lets you see some of its internal components, and there is also a series of unusually shaped lights, made up of 900 white LEDs (pictured below).

Its unique design is attractive and practical, but its battery and camera disappoint

It's worth looking at this in more detail, because it's the phone's main

point of difference. Nothing refers to the lights as its "Glyph Interface". That's a grand way of saying that they flash when something happens, but there is a bit more to it than that. The lights are arranged in different shapes, and they glow and dim in time with the noise of the ringtones. You can assign specific ringtones to certain contacts, so if your phone starts ringing when the device is on mute, you can still see who's calling from the configuration of the flashing lights.

They're also used to indicate how much charge the phone has left, and light up when you summon Google Assistant to show that it's listening. In addition, they produce a soft light when taking portraits or shooting video, which is less harsh than a regular flash. There's no denying there's novelty value to all this, but there are benefits beyond its gimmickry.

Aside from the attractive translucent case, the rest of the phone conforms with what we'd expect of an Android device costing around £399. It's better than the cheapest models, but can't keep up with high-end alternatives.

Performance is bang on the mark. Its Qualcomm Snapdragon 778 processor and 8GB of RAM achieved a single-core score of 797 and a multi-core score of 2,803 in our benchmark tests. This is almost identical to the results achieved by the Google Pixel 6a (see page 26).

To get better scores than this, you need to spend more money. Our current Android phone Buy It! favourite – the Realme GT 2 (see page 30) – achieved a multi-core score of 3,562, though this costs around £150 more.

The screen is a 6.55 in OLED panel, with a Full HD resolution of 2400x1080 pixels and a refresh rate of 120Hz. As you'd expect from this type of screen, it has perfect contrast. It's also dazzling, with a promised peak brightness of

> 1,200cd/m2. In general use, you can expect 500cd/m2, which means you'll see just about everything on screen even in brightly lit conditions.

Where the phone has compromised to keep the price down is with the battery life and the camera. In our tests, the battery lasted for around five hours in everyday usage before the low-battery warning messages started to show up, which is extremely disappointing.

Unusually there are two 50-megapixel cameras on the rear, with both the main camera and the ultrawide unit packing in a lot of pixels. The main camera takes good shots



in decent light, though the ultrawide lens produced more muted colours. In lower light the main camera was still better than the ultrawide, but shots were generally grainier than we would have liked.

SPECIFICATIONS

Eight-core Qualcomm Snapdragon 778G+ processor • Adreno 642L graphics • 8 or 12GB RAM • 6.55in 2400x1080-pixel OLED screen • 128 or 256GB storage • 50-megapixel rear camera • 50-megapixel ultrawide camera • 16-megapixel front camera • Wi-Fi 6 • Bluetooth 5.2 • USB-C connector • 4,500mAh battery • Android 10 • 159x79x8.3mm (HxWxD) • 1-year warranty www.snipca.com/42801

VERDICT A spirited attempt to freshen up the usual smartphone template, but it mostly amounts to a gimmicky light show

ALTERNATIVE Xiaomi Poco F3 £309 Fewer frills, but a similar screen and level of performance for less money





ROUTER | £153 from Amazon www.snipca.com/42845

Linksys Hydra Pro 6

Six shooter

As more laptops and smartphones arrive on the market with Wi-Fi 6 built in, you might be wondering if it's time to upgrade your home network to this new wireless technology. The Linksys Hydra Pro 6 is one of the easiest and most affordable ways we've seen for providing this kind of boost. It won't get you the fastest Wi-Fi 6, but it's a step up from Wi-Fi 5 and is certainly affordable.

Brings faster Wi-Fi 6 to your entire home and is easy to set up

One reason it doesn't cost more is because it's restricted to dual-band, so uses one 2.4GHz radio (for older devices) and one 5GHz Wi-Fi 6 radio. If you have a lot of devices to connect and your network spreads over a large area, you will certainly be better off with a tri-band router, such as TP-Link Deco X90 (see Issue 633, page 29). However, for more modest setups, the Hydra Pro 6 is ideal.

The design is basic but has everything you need. There are four Gigabit Ethernet ports for connecting wired devices, as well as the Ethernet port (all pictured below) you'll need to link it to your ISP's modem or router. There's also a USB port dedicated to attaching storage for sharing across your network.

The accompanying app has no frills but is easy to use. It automatically creates a single network that combines the 2.4GHz and 5GHz bands, and provides an overview of all connected devices. You can pause the internet on any device, or





create a schedule to limit devices to specific times. You can also prioritise three devices so they can benefit from maximum performance for demanding tasks such as gaming or streaming video.

Our current Wi-Fi router, provided by our internet service provider, works perfectly well for nearby devices, letting us achieve the maximum 100Mbps available from our broadband service, and 12.5MB/s downloads from Steam. As we expected, the Linksys Hydra Pro 6 matches that performance when connecting to devices at short range.

However, we also have an office towards the back of the house where our Wi-Fi signal is so erratic we normally have to rely on Powerline adapters. The Hydra Pro 6 coped admirably as we moved devices further away, maintaining the same speeds across the entire house during our tests.

SPECIFICATIONS

Dual-band Wi-Fi 6 • 5x Gigabit Ethernet ports • 1x USB 3.0 port • 155x215x158mm (HxDxW) • 570g • One-year warranty www.snipca.com/42845

VERDICT An affordable way to unleash the power of Wi-Fi 6 to extend your network coverage

ALTERNATIVE Netgear Nighthawk RAX80 £300 The fastest Wi-Fi 6 router

we've tested, but this level of speed doesn't come cheap



Reviews

DO I REALLY NEED...

My doorbell streamed to my TV?

What is it?

Google recently announced that it has added a new feature to its Nest video doorbell range that lets you stream video live to your TV (read more at www.snipca.com/42850).

How does it work?

It sends a live video stream from your doorbell straight to your TV set, and works with any Google Nest Cam or Nest Doorbell. It's integrated into Google Assistant, so all you have to do is say "Hey Google, show me the front door camera" and your TV will switch to your stream.

What's the catch?

It only works with TVs that have a Google Chromecast with Google TV fitted (£60 from www.snipca. com/42849, pictured).

So can I do without it?

Google's video doorbells already send alerts and video to devices when it rings, so the main benefit is bigscreen footage of your doorstep when there's nobody there. Surely there are more interesting things to watch on TV.

NEXT ISSUE

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Our pick of products that have won the Buy It award

LAPTOP

Lenovo Yoga 6 Gen 7

£699 from www.snipca.com/42509 Tested Issue 637



Lenovo's new laptop has an amazing screen, a fast processor and lasts 15 hours on a single charge. It has all the ports you need, including two USB-C, two USB 3.0 and HDMI. At £623 it represents stunning value.

ALTERNATIVE Dell XPS 13 New Intel CPUs and a taller screen make this a more powerful, all-round slim laptop. Prices start at £949 from www.snipca.com/42979

ANDROID TABLET

Samsung Galaxy Tab S8

£649 from www.snipca.com/42211 Tested Issue 634



Samsung has replaced its own Tab S7+ to become our favourite Android tablet. It's fast with a stunning 11in screen, and has a longer battery life than the iPad. This model gives you 128GB - you'll need to pay £699 for 256GB.

ALTERNATIVE Lenovo Tab P11 Pro It's slower than the Tab S7 and the screen is duller, but has a detachable keyboard so you can use it as a laptop. £599 from www.snipca.com/41101

DESKTOP PC

Wired2Fire Ultima WS Home Office Workstation £772 from www.snipca.com/41500 Tested Issue 630



With an overclocked eight-core chip and a 1TB SSD, this PC performs Windows tasks at a blistering speed. It comes with Wi-Fi 5, and has plenty of ports, including five USB 3.0 and three for monitors (DisplayPort, HDMI and VGA).

ALTERNATIVE Palicomp Intel Mercury Over two years old and with a slower processor, but still a mighty PC with a speedy SSD. £600 from www.snipca. com/34223

APPLE iPHONE

Apple iPhone 12

£679 from www.snipca.com/36582 Tested Issue 595



Released in 2020, this model has a modest increase in already exceptional processing power plus even better photos and videos from the front and twin rear cameras. It comes in a redesigned case with aluminium frame and even tougher glass. Consider paying the £50 extra for 128GB of storage.

ALTERNATIVE iPhone SE With a single camera and smaller screen but the same powerful A13 processor and 64GB storage as the iPhone 11, it's great value. £419 from www.snipca.com/34773

APPLE iPAD

Apple iPad 10.2in £319 from www.snipca.com/36178 Tested Issue 566



The basic iPad is great value, especially now it's been updated with a powerful A13 processor and iPadOS 15. It includes Scribble handwriting recognition with the £89 Apple Pencil. Storage isn't expandable; consider 256GB at £459.

ALTERNATIVE iPad Mini With an even better, but smaller, screen than the 10.2in iPad, the Mini also supports the Pencil and has 64GB of storage. £479 from www.snipca.com/33050

ANDROID PHONE

Realme GT 2 £549 from www.snipca.com/41667 Tested Issue 631



China's Realme has made a phone with a powerful processor, excellent battery life, bright screen and a 50-megapixel camera that takes great photos. It's more expensive than our former favourite (below), but its superior performance justifies this extra cost.

ALTERNATIVE Xiaomi Poco F3 This remains an excellent phone, with 6GB RAM and 128GB storage. The only phone under £450 that's faster is the iPhone SE. £309 from www.snipca.com/41102



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"We're not sure if you can ask for any more than this when spending around a grand."

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RYZEN RADE

Buy It

Our pick of products that have won the Buy It award

EBOOK READER

Kobo Libra 2

£160 from www.snipca.com/40645 **Tested** Issue 624



A fantastic 7in screen, 32GB of storage and Bluetooth connectivity make this a rival to Amazon's Oasis ebook reader, yet it's £70 cheaper. Battery life is superb – we managed 54 hours of use per charge. It supports OverDrive, so you can borrow ebooks from libraries.

ALTERNATIVE Amazon Kindle This low-cost option remains a good choice, especially now it has 8GB of storage. £70 from www.snipca.com/41103

PC MONITOR

Liyama ProLite XU2492HSU-B1 **£129** from www.snipca.com/39701 **Tested** Issue 618



This 23.8in screen is superb value, with a resolution of 1920x1080 pixels. Colour is good, covering 88 per cent of the sRGB colour range. Connect your computer via HDMI, DisplayPort or VGA, and there's a USB hub to connect your mouse and keyboard.

ALTERNATIVE AOC 27P2C

This also has a 1920x1080 resolution but it's 27 inches, so pixel density is lower. But you'll only notice if you look really closely. $\pounds 258$ from www.snipca.com/41609

SECURITY SOFTWARE

Norton 360 Premium **£19.99** from www.snipca.com/33247 **Tested** Issue 629

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Security				My Norto
Security				My Norte

Norton has always performed strongly in our antivirus tests, regularly making the top three. Owned by US firm NortonLifeLock, it's available at a discount on our Software Store. Click the link above for a 10-device, two-year licence. Other versions are available, including Norton 360 for Gamers.

ALTERNATIVE Bitdefender Total Security Another top performer that we're offering at a discount. £19.99 from www.snipca.com/41141

ROUTER

Netgear Nighthawk RAX80 **£290** from www.snipca.com/42896 **Tested** Issue 603



This is the fastest Wi-Fi 6 router we've ever tested, transferring data at speeds of 520Mbps in the same and adjacent rooms of our test house. Also works with Wi-Fi 5, and comes with four spare Ethernet ports and two USB ports.

ALTERNATIVE Asus RT-AX82U Slower than the Nighthawk on Wi-Fi 6, but faster on Wi-Fi 5, so a better choice for older devices. Has four Gigabit Ethernet ports. £175 from www.snipca.com/41106

WEBCAM

Logitech C925e Business Webcam £75 from www.snipca.com/41104 Tested Issue 608



Despite the name, this webcam is also great for home users. Its standout feature is automatically adjusting itself to keep your picture looking sharp. It offers a 78-degree field of view, which is fine for everyday video chats with one person in front of the camera.

ALTERNATIVE Anker PowerConf C300 Good image quality, crisp audio and lots of features. £90 from www.snipca. com/41105

PRINTER

Epson EcoTank ET-1810 **£160** from www.snipca.com/41232 **Tested** Issue 627



An inkjet printer that comes with enough ink to print 4,500 mono and 7,500 colour pages, making it exceptionally cheap to run. It's not the fastest printer, but quality is good, especially on photo paper – we've never seen better on an inkjet.

ALTERNATIVE Brother DCP-J1140DW Compact multifunction model with rare features at this price, including double-sided printing. £135 from www.snipca.com/41480

COMPETITION

Win a Synology RT6600ax router

Winner of a Recommended award in Issue 637, Synology's RT6600ax router uses

Wi-Fi 6 to deliver speeds of up to 6.6Gbps. The quad-core 1.8GHz processor ensures everything stays fast even when more devices are connected.

The three bands (one 2.4GHz and two 5GHz) provide plenty of bandwidth for all your devices, especially when combined with



Synology's Smart Connect technology to automatically optimise each device's connection

for range or speed.

It's wonderfully easy to set up and use, with options to create several user profiles, which is useful when you want to control which websites people can access. There's also a security tool that blocks malware, while the web-based interface is like using a version of Windows that's dedicated to your router.

To enter this competition, answer the question at www.snipca. com/42905 and submit your details. It runs until midnight Tuesday 13 September. Good luck!

You can buy **Synology's RT6600ax** router from Scan for £280 (www. snipca.com/42545). For more information on Synology's products visit www.synology.com/en-uk and follow @synology on Twitter.

MESH ROUTER

BT Whole Home Wi-Fi £180 from www.snipca.com/26990 Tested Issue 496



BT's set of three discs, managed from an Apple or Android app, connects to your broadband and spreads high-speed Wi-Fi all around the house. Reception is far better than from a single router, and the price is lower than any rival.

ALTERNATIVE Zyxel Multy X

These two pillow-shaped boxes are powerful enough for most homes and provide four Ethernet ports apiece. £271 from www.snipca.com/41109

SOLID-STATE DRIVE

Corsair MP600 Pro LPX 500GB **£84** from www.snipca.com/41547



In our tests, this M.2 SSD hit speeds of 7,364MB/s and 6,870MB/s when reading and writing data – astonishingly fast scores. It's compatible with the new PCIe 4.0 standard, which is twice as fast as PCIe 3.0. The 1TB model costs £130; 2TB costs £250.

ALTERNATIVE Crucial MX500 500GB

As fast as an SSD can get in the traditional 2.5in SATA format, this is a great-value upgrade. £55 from www.snipca.com/37304

SMART SPEAKER

Google Nest Audio £90 from www.snipca.com/36475 **Tested** Issue 593



Produces a rich, clear sound, and better understands your questions than Amazon's Echo devices. You can use Google's app to control audio from other units around your home (pair two of them for £140). The clever Ambient IQ tool increases the volume if it detects external noise, such as a hairdryer.

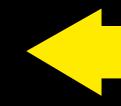
ALTERNATIVE Amazon Echo (4th generation) The latest version of the Echo changes the shape from a cylinder to a ball, which improves sound quality – though the Nest's is still superior. £90 from www.snipca.com/41111



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Issue 639

48 In the Club: Add a 'donate' button

HOW TO... Share files that selfdestruct after a set time

What you need: Keeper Password Manager Time required: 30 minutes

o you worry where your shared files might end up? When you upload a file to online storage, then share a link to it, there's often very little to prevent the link being forwarded on. Just as worryingly, what's to stop anyone who's snooping on the recipient's

> Install Keeper Password Manager

Download Keeper Password Manager from the Microsoft Store at www.snipca.com/42790. Click the 'Get in Store app' button to launch Microsoft Store and, when the Store window opens, click the Get button to install. When it's finished installing, the Get button becomes an Open button. Click it.

inbox - or even your Sent folder - from

That's why our ears pricked up when

we heard about a new feature in Keeper

Security's Password Manager. As well as

storing passwords, it incorporates a file

vault, with the option to set any links you

following the link themselves?



1

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share from there to work once – and *only* once – and to expire after a set period. There are some limits on its use, as we'll explain, so it pays to think carefully before uploading unimportant files. Nonetheless, for specific and sensitive data, it's an option worth exploring.

The first thing you need to do is create an online account. Click 'Create Account', then enter your email address and choose where you want your online data to live, by clicking the USA button, then choosing USA, Europe (EUR) or Australia (AUS). From a practical standpoint, it doesn't make much difference which you choose – you'll hardly notice any difference in the amount of time it takes to retrieve a password.

What's more important is the legal jurisdiction under which your data is handled, though this is likely to be more important to business users than home users. We'll select EUR from this menu, so our data will be stored in Keeper's Dublin data centre.

Now click Next, then set a master password. This should be secure, unguessable, and not recycled from anywhere else, as it's the one password that unlocks everything else saved in

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your Keeper Password Manager vault. Our usual advice in this instance is to think of a sentence that would naturally include numbers and capitals, such as 'my favourite car was my Renault 5', which is easily remembered.

Reduce this to just the initials of each word - mfcwmR5 - then add a couple of special characters, and the first three letters of the website or program you're logging into. If you chose \$\$ as your special characters, and added 'kee' from the beginning of 'keeper', your password would be mfcwmR5\$\$kee, which is not too hard to remember, but tricky for anyone else to guess.

Repeat this formula for any other site or software you need to log into, changing the last three characters as appropriate. So, for Gmail you'd create the password mfcwmR5\$\$gma, and, for Outlook, mfcwmR5\$\$out.

This guarantees that if the password for one service was leaked, each of the others would remain secure. Needless to say, don't use our suggested sentence as the basis of your password: choose something unique, and meaningful to vourself.

Read through the terms of use by clicking the blue link and, if you agree with them, click the box beside 'You accept Keeper's Terms of Use', then click Next. Keeper will send a verification code to the email address you supplied when signing up. Copy this from the email and paste it into the Enter Verification Code box, then click Verify.



Import your passwords

When you've verified your address by entering the code, you'll be logged into your account. The first thing Keeper Password Manager

How I share expiring links

I share links using pCloud, having signed up for a lifetime 2TB plan, and set them to expire one month after sharing them. It works with the mix of Linux, macOS and Windows computers that I use, so I always have access to my files, whichever machine is in front of me. It means I can manage my shared files no matter where I am.



Nik Rawlinson

What type of files would you send with an expiry date? Please let us know: letters@computeractive.co.uk

offers to do is import the passwords stored in your browser. Click 'Next' followed by 'Add to Keeper' if you want to do this, and 'Later' if not.

There's no harm in doing so and, if you're not already using an alternative password manager, we'd recommend proceeding with importing, as password managers in general are a far more secure and convenient option than trying to remember every login yourself.

The instructions will now offer to create your first Keeper Record (a password, file or photo), add details of a payment card, and turn on two-factor authentication. For any that you don't want, click Skip.

Share your first file 3 You're now ready to share your first file. Let's imagine it's a letter from your medical insurance company that you need to share with a consultant, authorising a procedure.

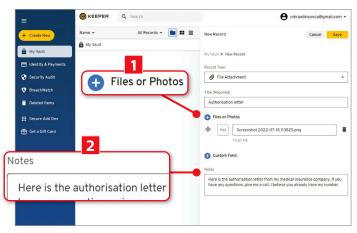
Make sure you have a copy of the letter on your computer. If you don't already have it in a digital format, the easiest way to do this is to take a picture with your phone and email it to yourself.

Now, in Keeper Password Manager, click Create New and select Record from the dropdown menu. In the New Record box, click the menu below Record Type and select File Attachment. Now click in the Title box and give the attachment a name, such as 'Authorisation letter'. Click Next.

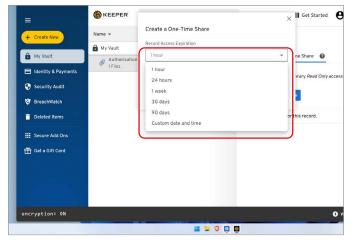
The 'New Record' box now switches to a sidebar format on the right. Click '+ Files or Photos' (1 in our screenshot below left) and navigate to the letter stored on your computer. Select it and click Open. Optionally, add some explanatory text in the Notes field at the bottom of the sidebar 2. Click 'Save' to store the new record in your vault.

If the file wasn't sensitive and you wanted to share it in the usual manner, vou could now right-click it in the My Vault pane and click share. However, as this is a personal matter and we want to make sure that only the authorised recipient can open it, instead right-click it and pick One-Time Share.

In the right-hand sidebar, click 'Create a One-Time Share', then specify how long you want the link to be accessible for by clicking the menu beneath Record Access



Upload your file, then add a few explanatory words in the Notes section



Choose when you want access to your file to expire

BEST ALTERNATIVES TO KEEPER PASSWORD MANAGER

Keeper Password Manager isn't the only service that lets you share files that selfdestruct. You could try **WeTransfer** (www. wetransfer.com), which lets free users send files of up to 2GB, which expire automatically after seven days. **Dropbox**'s expiry-link feature is only available to users on the Professional and Business tiers, prices for which start at £198.96 per year. Likewise, **pCloud** lets paying users set expiry dates on their shared files as part of its Premium and Premium Plus packages, which start at £175 for lifetime use, or £49.99 per year.

Another excellent option is to use Microsoft's **OneDrive**, though you'll need to be a Microsoft 365 subscriber. To share a file through your browser, log into your Microsoft Account at www.onedrive. com and upload the file to your OneDrive storage if it's not already there. Now, right-click the file, select Share, then at the bottom of the box that appears click 'Anyone with the link can edit', followed

Expiration, and choosing a timespan. These range from '1 hour' to 'Custom date and time' (see screenshot below left). However long you choose, even if you make it accessible for a year, its use will be restricted when it has been clicked for the first time. Now click Generate.

Keeper Password Manager will now generate a unique link for your file, and embed it within a suggested invitation. Click 'Copy Invitation' if you want to use Keeper's suggested wording (which explains to the recipient that the link will expire and can be used once only), or click Copy Link if you'd prefer to write your own invitation. Paste the link or text into an email, and send it to your recipient.

When they follow the link, they will see your covering notes, a link to the file, and a countdown to its expiry. Clicking the file lets them save it to their local drive.

Cleverly, the shared file is not only set to expire, but is restricted to the first browser window that opens it (see screenshot above). This means that, should anyone else try to open the same link, even if the intended recipient hasn't yet downloaded the file, they'll be met with an error message.

This warns them that 'The record

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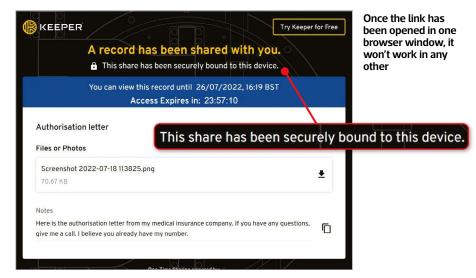
by 'Set expiration date'. This opens a floating calendar. Find and click the date on which you want the file share to expire (see screenshot). You can optionally add a password too, which the recipient will need to enter before the expiry date if they are to gain access to the file.

At this point, the file will be accessible to

anyone who has the link. If you want to restrict who can open it, click 'Specific people' above the calendar link, then enter the email address of the person with whom you want to share the file. Finally, click Apply. OneDrive will now generate a unique link for your file, which you can copy and paste into an email.

To do the same using the OneDrive software on your PC, click the OneDrive cloud icon on the Windows taskbar and, if the file you want to share was uploaded so recently that it appears in the panel, click the three dots to the right of its name, followed

by Share. If the file doesn't appear here, instead click 'Open folder' to display the OneDrive folder in a File Explorer window. Navigate to the file, then right-click it, hover over OneDrive and click Share on the menu. This opens the same box as the browser version. Click 'Anyone with the link can edit' to find the link-expiry option.



you're trying to access expired or does not exist' and suggests they get in touch with the sender to request a new link.

If you receive such a request, check with the intended recipient that their inbox hasn't been hacked.

The beauty of sharing sensitive files this way is that, once you've sent the link, keeping it secure is no longer your responsibility. There's no need to go back into your account and delete or 'unshare' it: Keeper Password Manager takes care of locking it down for you.

While useful, this method does have

some limits. With a free account you're allowed to upload and store five files in your vault, to a maximum storage size of 100MB. We tested this by uploading five files, after which our attempt to upload a sixth was blocked. We deleted one of our existing files to see whether this allowed us to upload a replacement, but it didn't.

Keeper said that to do so we'd need to upgrade, which costs £30 a year for a personal account, or £72 for a family account with five vaults. If these limits put you off, try one of the Keeper alternatives in the box above.

Workshop

Add new options to the Windows system menu

What you need: SmartSystemMenu; NET Framework 4.0 Time required: 10 minutes

You're probably familiar with the system menu in Windows even if you don't know its official name. It's the menu that opens when you right-click the title bar of a program or folder window, which contains the options Move, Size, Minimise, Maximise and Close. You can make this menu much more interesting and useful using the free program SmartSystemMenu, which

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expands it with 19 new options for performing various tasks for the current window. These include making it 'always on top', turning it transparent, capturing a screenshot of its contents, launching other programs and more. You can also customise the menu to add and remove options. SmartSystemMenu doesn't require installation but it does need

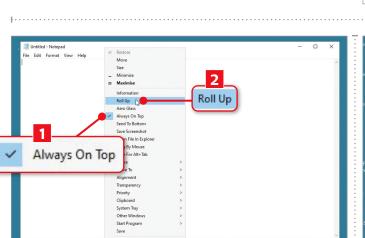


NET Framework 4.0 or later – download this from www.snipca.com/42952 if you don't already have it.



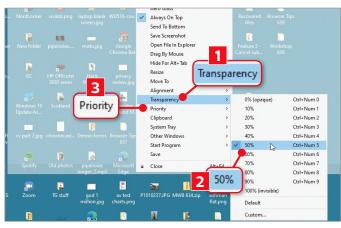
Download the ZIP file of SmartSystemMenu from www.snipca.com/42949 – click the

SmartSystemMenu_v2.21.1.zip link under Assets. Extract its contents and double-click the 'SmartSystemMenu. exe' file 1 to run the program. If you see a Microsoft SmartScreen Defender warning, click 'More info' 2 then 'Run anyway' – SmartSystemMenu is completely safe to use. When Windows prompts you to allow the app to make changes to your device, click Yes.



Step 2 SmartScreenMenu will automatically add a range of new options to the system menu of most Windows tools. You can view these by opening a program or folder and right-clicking its title bar. We're using Notepad in our screenshot, which you can launch by typing **notepad** in the Windows search box and selecting the 'Best match'. Useful options to try first include Always On Top **1**, which ensures the current window is always visible while you use other programs; and 'Roll Up' **2**, which shrinks the window so only the title bar is shown.

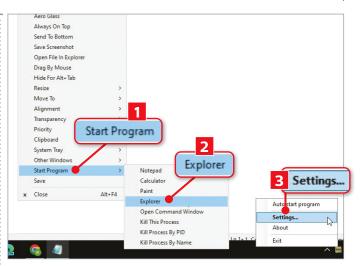




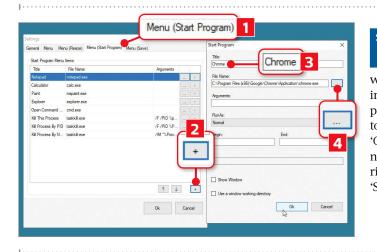
One of SmartScreenMenu's cleverest features is Transparency **1**, which lets you make the current window see-through. Select the level of transparency from the side menu, from 'Opaque (0%)' to 'Invisible (100%)', or use a keyboard shortcut. For example, Ctrl+Num 5 (the 5 on your numeric keypad) will make the window 50 per cent transparent **2**. Equally handy is the Priority option **5**, which lets you allocate more processing power to the active program by choosing High in the side menu, or reduce its resource usage by selecting Below Normal.

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h Music	📙 TMX	02/08/2022 11:38	NordLocker conta			
E Pictures	V Last month (4)					
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Another useful feature is the ability to take a screenshot of the program or folder window without needing to use a separate screen-capture tool. To use it, right-click the title bar of the window and choose Save Screenshot. This will silently take a screen grab and open a Save Window Screenshot box **1**. Choose where you want to save the screenshot, enter a file name and select an image format from the 'Save as type' menu **2**, such as BMP, JPEG or PNG. Click 'Save' **2** and open the screenshot in your usual image viewer.



Step 5 SmartScreenMenu lets you launch several Windows tools directly from your system menu, by selecting them in the Start Program side menu **1**. These include Notepad, Calculator, Paint and [File] Explorer **2**. Usefully, you can also open a Command Prompt window. To add further programs to this side menu, right-click the SSM icon in your taskbar and choose Settings **2**. If you can't see this icon, click the up arrow in your system tray to reveal it.



Click the 'Menu (Start Program)' tab **1** to see a list of programs currently included in the Start Program – click the Delete button (minus sign) next to any you want to remove. Click the Add Start Program button (plus sign) in the bottom-right corner **2** and type the title (name) of the program you want to add **3**. Click the three-dot button **4** next to 'File name' to find and select the program's **EXE** file. Click 'OK', then OK again to save the program to your list. You'll need to restart SmartScreenMenu for the new entry to appear – right-click its taskbar button, choose Exit then run the 'SmartSystemMenu.exe' file again.

To remove options from your expanded system menu, open SmartScreenMenu's Settings and click the Menu tab **1**. Untick the boxes next to all the entries you want to exclude. You can also create your own keyboard shortcuts for menu items by clicking the three-dot button next to them and choosing the relevant keys from the dropdown menus **2**. Finally, to ensure SmartScreenMenu always starts alongside Windows and retains your customised system menu, right-click its taskbar icon and choose 'Auto start program' **2**.

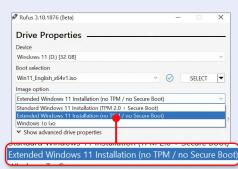


Readers' Tips

TIP OF THE FORTNIGHT

Use Rufus to install Windows 11 on an old PC

In Issue 637 (page 67), Cee Lewis asked whether they could upgrade their old PC to Windows 11. This should be possible without buying a new motherboard and processor. I can vouch for the effectiveness of a procedure that *Computeractive* explained in Issue 628 (page 38), which alone is worth the price of a subscription. It showed how to use information about using Rufus (www.snipca.com/41183) to create a bootable USB stick to install a copy of Windows 11 (see screenshot), bypassing all the hardware restrictions (processor type, TPM version and more).



I followed the instructions to install Windows 11 Pro on several PCs that were deemed to be obsolete, including a couple of self-built computers dating back to the early 2010s, and a Dell Latitude E7240 laptop. I installed Windows 11 about six months ago, and have since received regular updates. Of course, I can't be sure that something won't go awry in the future, but for the moment all systems are

running fine. Peter Baker



Peter wins a copy of our 2021 Back Issue CD Buy it from us at www.snipca.com/42077

OFFICE Use pre-printed letterheads in LibreOffice's letter templates

One tip you didn't mention when explaining how to use LibreOffice Writer's letter templates (Issue 637, page 47) is that you can select the option to 'Use paper with pre-printed letterhead elements'. You'll find this by clicking File in a document, then selecting Wizards, Letter. Select 'Business letter' at the top,

✓ Use paper with pre-printed letterhead elements

Modern

Modern

✓ Use paper with pre-printed letterhead elements

~

Business Letter

Page design

O Formal Personal Lette

Page design

then tick the box below 'Page design' (see screenshot below left). This option is available only when creating a business template, not formal or personal.

James Nutter

HARDWARE Use drills or grinders to destroy drives

Following your How To on destroying old hard drives (Issue

637, page 35), I take a simpler and quicker route. First, I deal with the software by deleting all the partitions using Disk Management in Windows, or a specific partition-management program, and then formatting them. Next, I deal with the hardware by taking the drives to the garage and cutting large slots or holes in them, right through to the platters, using one of my electric drills or angle grinders (which many people have) – or the faster option of my motoroperated metal 'cut-off' saw (like these at

www.snipca.

com/42858, pictured), though not many people have them!

These methods completely destroy the drives. It's obvious just by looking at them that retrieving any data would be almost impossible.

John Allen

Why I stopped using...

GnuCash

Steps

2. Letterhead Lavout

4. Recipient and Sender

6. Name and Location

3. Printed Items

In Issue 637's 'Cancel Your Software Subscriptions' feature (pages 62-63), Robert Irvine recommended GnuCash (www.snipca. com/42656) as an alternative to 'You Need a Budget'. I used it for a couple of years a long time ago, when Microsoft stopped supporting Money, but I never really got on with it.

And what I use instead Now I use MoneyManager Ex (https:// moneymanagerex.org, pictured), which is a free open-source program that covers everything I want: multiple accounts, categories, repeating transactions, split transactions, reports, and import and export. The database can be encrypted and password-protected.

It also supports multiple currencies, stocks and shares, budgeting, asset tracking, and storing related documents as attachments. It's available for Windows, MacOS and Linux, and has an active and responsive development group



offering support. I recommend it.



Tell us why you stopped using a website, app or program: letters@computeractive.co.uk

Handy hints and tips from your fellow readers

Email us your tips: letters@computeractive.co.uk



Re-use old drives in a caddy

As an alternative to destroying a hard drive from an old computer, why not continue to use it as an external drive so you can back up files? You just need to slip it inside a caddy, such as this £24 model from Amazon (www.snipca. com/42859, pictured above). I've got one and it works well.

Mike Conder

SOFTWARE

Use MusicBee to rip your CDs

In your 'What's All the Fuss About?' article on ripping CDs in Issue 637 (page 49) you mention Windows Media Player, but MusicBee (www.getmusicbee. com, pictured below) does a better job. I installed it for that very purpose after reading your recommendation back in Issue 598 (page 19).

Ripping CDs might be irrelevant for young people brought up on downloads, but for those of us with a good library of music on CDs it's a godsend. Most cars nowadays don't have a CD player, and music-streaming services like Spotify don't offer everything (especially not

General	cd ripping	
Layout (1)	encode as: FLAC v profile: Archiving	
Layout (2)	En	coder Settings
Hotkeys	save to folder:	
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Library	<album artist="">\<album>\<disc-track#> <title></td><td></td></tr><tr><td>Tags (1)</td><td>file naming when ripping the entire disc as a single file:</td><td></td></tr><tr><td>Tags (2)</td><td><Album Artist>\<Album></td><td></td></tr><tr><td>orting/Grouping</td><td>pre-gap handling:</td><td></td></tr><tr><td>Internet</td><td>automatically start rip on CD insertion</td><td></td></tr><tr><td>CD Ripping</td><td>v automatically retrieve album artwork from the internet</td><td></td></tr><tr><td>Tools</td><td>analyse volume and write replaygain tags</td><td></td></tr><tr><td>File Converters</td><td>rip completion sound:</td><td></td></tr><tr><td>Devices</td><td></td><td></td></tr><tr><td>Plugins</td><td>- drive settings</td><td></td></tr><tr><td></td><td>v read offset:</td><td>Lookup</td></tr><tr><td></td><td>validate rips using AccurateRip.com rip speed:</td><td>¥</td></tr><tr><td></td><td>○ quick rip ○ secure rip with error recovery □ check C2 errors</td><td></td></tr></tbody></table></title></disc-track#></album></album>	

Reader recommends...

Canon Pixma TS305 printer £64 from www.snipca.com/42885

For a few months I was tempted by your Buy It! printer, the Epson EcoTank ET-1810 (see page 32), but at £160 I eventually concluded I couldn't afford it (times are hard, you know!). Instead, I saved myself almost £100 and bought the Canon Pixma TS305, which has far fewer features, but is easy to use and has good print quality.

My 'deal breaker' was finding a printer that could connect with both Bluetooth and AirPrint, so it was an obvious contender. It also has a 'low noise' mode for printing quietly, which I activate late at night when my better half is asleep. I never would've thought that such an option would prove useful.

I've used more advanced printers in



the past, and they all had more features than this. They were probably faster too. But when money is tight, a £64 printer like this for occasional use is a good choice.

Alan Northwood

Want to recommend hardware or software to fellow readers? Email letters@computeractive.co.uk



new computer. Think carefully about how you plan to use it, and choose a specification to match. For example, if you're not a serious gamer, you probably don't need a high-powered graphics card. These cards can become very hot and require active cooling. Instead, choose a device that has processors with integrated graphics. This reduces the number of components that generate heat, and means you may not need a heatsink or fans.

Likewise, consider a PC with a case that allows **passive cooling** through the use of conductive metal. This draws heat away from internal components and uses the surrounding air to reduce temperatures.

Liam Duncan

niche music tastes).

So ripping CDs is not, as you describe, "the ancient practice of copying music from a CD you bought online or in a shop to your PC" – it's the future too!

Ken Blakemore

WINDOWS Press shift and click Restart to enter BIOS

Here's a shortcut I've used many times to dive into the BIOS/UEFI of my laptop. By clicking the power button that appears on the Start menu, then holding down the Shift key while pressing Restart (see screenshot right), you get access to all of Windows'

> recovery and troubleshooting tools. I find it faster than opening Settings, clicking 'Update & Security', then Recovery in Windows 10, and clicking the 'Restart now' button in the 'Advanced start-up' section.

David Peacock

HARDWARE Choose the right components to prevent overheating

In addition to the useful advice you gave on stopping your PC overheating (Issue 638, page 60), I'd urge anyone to consider this potential problem when looking to buy a

Browser Tips

BRAVE

Settings

E Appeo Ŧ New Tab Pag

Shields

A Get started

Customise your address bar's auto-complete suggestions

All browsers offer an auto-complete function that suggests matching websites when you start typing a word in your address bar. This often saves you having to type the whole thing but, if you share your computer, it can compromise your privacy because other people can see sites you've previously visited.

Version 1.42 of privacy-focused browser Brave, released at the beginning of August, solves this problem by letting you customise your auto-complete suggestions. This means you can enjoy the feature's benefits without revealing details of all your web activities.

Click the three-line menu in the top-right corner of the browser and choose Settings, then Appearance. In the section 'Show autocomplete suggestions in address bar' (see screenshot below),

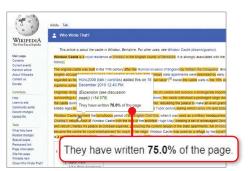
disable or enable the options to include 'top sites' (those you visit most frequently), suggested sites (those that Brave thinks are relevant to what you're typing), pages from your browsing history and sites that you've bookmarked. Alternatively, you can switch off autocomplete suggestions altogether.

See our Easy When You Know How column on page 74 for more about Brave.

CHROMIUM & FIREFOX Discover who wrote what on Wikipedia 0 🖸 🔿 🕤

Wikipedia is such an essential source of information that it's easy to forget its articles are collaborative efforts and often undergo hundreds of revisions. A new extension called Who Wrote That (www. snipca.com/42913) shows you exactly which content was contributed by each

editor of a Wikipedia page, as well as other articles they've edited on the site. Install the add-on in Chrome or another Chromium browser (www.snipca. com/42910) or Firefox (www. snipca.com/42911), then open a Wikipedia article and click the new Who Wrote That link . in the left-hand sidebar. A . blue bar will appear across the top of the page to show that . the tool is active.



Hover your cursor over a word and Who Who Wrote That will highlight in vellow all the content the author contributed to that article. Click the text to see the name of the contributor, when the edit was made and the percentage of the article written by that person (see screenshot above). Select 'contribs' to see details of their edits to other Wikipedia pages. To switch back to standard view, click 'Close Who Wrote That'.

CHROME

View Google Photos memories on your new tabs

Chrome 104, released at the start of 0 August, has a hidden feature that displays images from your Google Photos account on your new tabs. Similar to the Photos mobile app, these include 'memories' of pictures that were taken on the same date in previous years.

To activate the feature, type chrome:flags into the address bar and press Enter to access the Experiments page. Search for the entry NTP Photos Module, click the

Top site: A Brave Rewards Sugges Social mi Privacy and se Show autocomplete suggestions in address bar Sync Sync Search engin * Extension Always show bookmarks on new tob pac G Wallet Always show full LIRLs IPFS Show tab search betto

WORKSHOP Access Internet Explorer in Windows 11

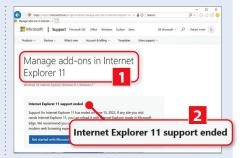
Microsoft officially excluded Internet Explorer from Windows 11, but there is a way you can still access the browser. However, because support for IE ended on 15 June it's not safe for everyday browsing, so this trick is really for nostalgic purposes.

1 Programs Internet General Security Privacy Content Connection Programs Advanced Manage add-ons Enable or disable browser add-ons installed in your system. Manage add-ons Internet programs -Select the programs you want to use for other Internet services, such as Set programs Manage add-ons 2

Click the Search button on the Windows 11 toolbar, type internet options and choose the 'Best match'. When the Internet Properties box opens, select the Programs tab 11 and click 'Manage add-ons' 2.

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This will open Internet Explorer's 'Manage add-ons' window, which will look familiar if you ever used Microsoft's old browser. Click the 'Learn more about toolbars and extensions' link 1 in the bottom-left corner.



Internet Explorer will open, displaying Uthe 'Manage add-ons in Internet Explorer' page 1. Although you can visit other sites, this isn't recommended because IE support has ended 2 and the browser is no longer secure.

Secret settings and the best extensions

BEST EXTENSION FOR...

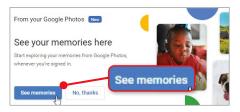
Email Hunter

Chromium

www.snipca.com/42943

There are plenty of reasons why you might want to contact the person or team behind a particular website – from seeking further information to requesting the removal of content – but it's not always easy to find the relevant email address.

Email Hunter automatically detects all the email addresses on a web page and lets you view them by clicking its toolbar button. You can then export the contact details as a text file or copy and paste them into an email or your address book.



dropdown menu next to it and select Enabled (ignore the 'Fake memories' options). Relaunch Chrome and you'll see a new 'From your Google Photos box' on your new tab page. Click 'See memories' (see screenshot above) to view pictures from your account. You can remove the box by clicking the three-dot icon in the top-right corner and choosing 'Don't show memories' or 'Hide memories for today'.

FIREFOX Select options faster using keyboard shortcuts

Firefox 103, released at the end of July, extends the browser's range of keyboard shortcuts so you can navigate its toolbars and select options without using your mouse. This takes the strain off your wrist and the fingers you use to click, and makes Firefox quicker to use.

Finding email addresses

Usefully, the extension searches for email addresses both on the current page and

Current page	All emails	Options
mails from all pages (1	3):	
@gmail.com haveyoursay@bbc.co robert_irvine@webus you@company.com	.uk	
851b54d7fc0841a4t ntry.io	64fad1f07004dfc@	036448.ingest.se
851b54d7fc0841a4b		036448.ingest.se

For example, pressing Ctrl+L makes the address bar active so you can type web addresses and search queries; pressing the Tab key moves you through options in your tab, navigation, add-ons and bookmarks bars from left to right; and pressing Shift+Tab takes you in the opposite direction. Press Enter or Space to select an option, and Shift+F10 to open a right-click menu.

If you find the new shortcuts more of a hindrance than a help, perhaps because you keep pressing them accidentally, you can disable them. Type **about:config** into Firefox's address bar, press Enter, then click 'Accept the Risk and Continue'. Search for the preference browser.toolbars.keyboard_navigation (I in our screenshot below) and either double-click it or click its Toggle button 2 to change its value to 'false' E.

OPERA Protect your PC using Opera's new VPN

Opera is one of the few browsers to have a built-in VPN, but – as we've mentioned before – this free feature is really a proxy because it only encrypts



across all open tabs, and stores the data until you click Clear (see screenshot) or switch off 'Keep emails from all pages' in its Options.

If you don't like that, try... **Hunter**

Chromium & Firefox

www.snipca.com/42944 This professional tool finds every email address associated with the website you're viewing, even when no contact details are provided. However, you need to register to use it and only get 25 free searches per month.



your data while using the browser. In March, Opera added a *proper* VPN to its Android app (see Issue 630, page 44) and this is now also available in the desktop browser.

As well as encrypting all incoming and outgoing internet traffic on your computer, Opera VPN Pro (www.snipca. com/42937) lets you use more than 3,000 servers in 33 countries, with no monthly data limit, so you can beat geographic restrictions and access content unavailable in the UK.

Opera VPN Pro costs £4.89 for one month, £14.34 for six months and £19.08 for a year's subscription (which works out at £1.59 per month), after a seven-day free trial.

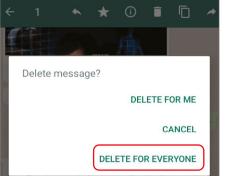
To use the service, download the latest version of the browser (90) from www. snipca.com/42938, sign into or register for an Opera account, then choose 'Subscribe to VPN Pro' (see screenshot above) and select your preferred plan. A subscription protects up to six Windows, macOS and Android devices.

Phone and Tablet Tips

ANDROID & iOS Delete WhatsApp messages after two days

WhatsApp has offered an 'unsend' feature since 2017, which lets you delete messages you've sent to private or group chats accidentally or have had second thoughts about. Initially, you only had seven minutes to unsend the message, but this was later extended to one hour and eight minutes, after which you could only 'delete for me' - meaning other people can still see what you wrote. WhatsApp has now increased the time limit to "a little over two days" (www.snipca.com/42993), which gives you much longer to change your mind about your contribution to a chat. In fact, users have already discovered that the limit is actually two-and-a-half days, or 60 hours.

To unsend a message in the app, longpress it, tap the bin icon and choose 'Delete for everyone' (see screenshot below). The

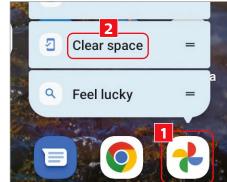


only catch is that WhatsApp still tells the people you're chatting to that '[your name] deleted this message', which may draw more attention to it than if you'd left the message alone.

ANDROID Access Google Photos shortcuts from your home screen

Google has quietly updated its Photos app for Android to let you access some useful shortcuts directly from the home screen of your phone or tablet. Rather than add a widget to the screen to use these options, all you need to do is long-press the Google Photos icon (1 in our screenshot below) and they'll pop up in a menu.

These shortcuts include Screenshot, which you can tap to access screenshots you've saved in the Photos app. More useful is 'Clear space' 2, which lets you reclaim storage by removing photos and videos from your device that you've



already backed up online – we freed up 1.3GB of space using this option. You can also tap 'Feel lucky' to view your pictures from a randomly chosen location.

Each of the options can be dragged from the menu to your home screen to create a separate shortcut. Tap 'Widgets' in the menu to add the Photos app's 'People and pets' and 'Your memories' widgets to your home screen (see Issue 624, page 45).

ANDROID & iOS Use separate Shuffle and Play buttons on Spotify

Spotify has finally fixed one of the most annoying things about its mobile app, by separating the Shuffle and Play options. Previously these were combined into one button, which was useful for listening to randomly selected songs, but frustrating when you wanted to hear a playlist from start to finish, in the order it was intended – especially if there were segues between tracks.

Provided you're a Spotify Premium user, you'll now see two separate buttons for Shuffle and Play at the top of playlists

(see screenshot right), so you can choose the playback mode you prefer. Free users will have to keep putting up with the single combined button.



BEST NEW APPS

What you should install this fortnight

OneNote

Free

Android www.snipca.com/42778 Microsoft has refreshed its OneNote app for Android with an improved Home



Improved Home screen that lets you quickly save notes you scrawl on your screen, capture with your phone's camera or record using your voice. You can sort notes by date or alphabetically, and tap to share, edit, delete and organise them.

1Password 8 £3.79 a month

Android www.snipca.com/42994 iOS www.snipca.com/42995

This password manager has been redesigned to let you pin login shortcuts for services to its Home screen. 1Password has also improved

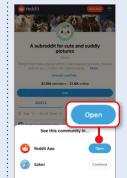


has also improved its Watchtower feature, which alerts you when your passwords are involved in data breaches, to give your accounts an overall security score. A 14-day free trial is available.

Banish for Safari £1.79

iOS www.snipca.com/42996

If you ever get annoyed by those 'open in app' pop-ups that appear when you tap a link on a site such as Reddit (see



screenshot), Twitter or LinkedIn, you'll appreciate Banish. It automatically blocks these messages so that you always view pages in Safari. You'll need to enable it as an extension in the browser.

Brilliant things to do on your device

ANDROID & IOS Immerse yourself in Iandmarks in Google Maps

Google Maps has added a new 'immersive view' to its Android and iOS app, which offers a 3D aerial tour of nearly 100 famous landmarks around the world. The feature combines AI with high-definition Street View, satellite and aerial imagery to let you experience



tourist attractions as if you were flying around them in a helicopter.

To try the new immersive view, search for a landmark in Google Maps – options currently include Big Ben (or the Palace of Westminster, to be accurate), the Empire State

Building and Alcatraz Island. You'll see a video playing next to the photos below the map – tap this to open it full-screen and immerse yourself in a photorealistic tour. Tap the pause button (see screenshot above) to stop and admire the view.

ios Use an iPhone with a cracked screen

Without the Home function on your iPhone, which you access by swiping up on newer models and by pressing the Home button on older ones, you wouldn't be able to open your phone or access apps. But if you've shattered your screen or broken your Home button after dropping your iPhone, you can keep using your device through a hidden option called Assistive Touch. Primarily an accessibility feature for iPhone (and iPad) users who have trouble touching their screens, Assistive Touch also provides a workaround for breakages.

To switch it on, you'll first need to unlock your iPhone, which is tricky to do without using Home. To get around this problem, long-press the side button to wake Siri, or say "Hey Siri" if the smart assistant is already active. Say "activate Voice Control" and a Voice Control banner should appear at the top of your screen. Say "open Settings" and when your lock screen opens, say "tap" followed by the first number of your passcode. Repeat this for all the numbers until your phone is unlocked.

Next, say "turn on Assistive Touch" to activate the feature. Alternatively, go to Settings, Accessibility then select Touch. Tap 'Assistive Touch' and switch on the option there (see screenshot right). A circular icon with grey and back rings will now appear on your screen to serve as your new Home button. Tap this for options including the Home function, Control Centre and Siri, then tap Device for further options, such as Lock Screen and Volume Up and Down.

You should now now be able to use

BEST APPS FOR...

Touch AssistiveTouch AssistiveTouch Image: Comparison of the series of the

your iPhone until you can have it repaired or replaced.

Managing your budget

Billbot

Free

Android www.snipca.com/42997 iOS www.snipca.com/42998

Billbot lets you monitor all your monthly and annual subscriptions in one place, and notifies you when a payment is imminent. It supports more than 200 services, including Netflix, Spotify, Amazon Prime (see page 60), Sky and O2 – just specify the subscription cost, frequency and your next billing date.

Best For Keeping track of subscriptions

Monefy: Money Tracker Free*

Android www.snipca.com/42999 iOS www.snipca.com/43000 Rather than connect to your bank account, Monefy lets you add your expenses manually, then displays how much you spend each month, in total and in different categories (as a simple, colour-coded chart). The Pro version costs £26.49 per year, but the free app has everything you need. Best For Monitoring your expenses

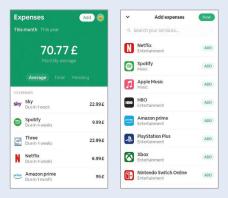
Snoop Budget Free*

Android www.snipca.com/43001 iOS www.snipca.com/43002

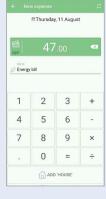
If you're comfortable with granting an app access to your bank account, this one makes it easy to track every penny you spend, manage your bills, set up spending alerts, create expense reports and track refunds. Snoop also suggests moneysaving tips and recommends cashback deals and discounts.

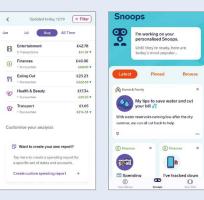
Best For Analysing your spending

*Contains in-app purchases









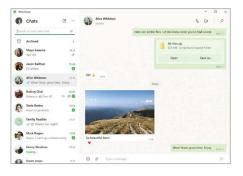
Make Windows Better

Expert tips for every version

WINDOWS 10 & 11 Use WhatsApp without connecting your phone

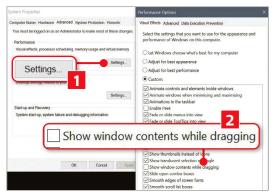
WhatsApp has moved its Microsoft Store version out of beta, and revamped it so you no longer need to connect it to your phone to send and receive messages. This means you'll still receive WhatsApp messages on your desktop even if your phone is not connected to the internet. It's also been redesigned to look neater (see screenshot below) and more in keeping with other Windows 11 apps, rather than simply a bigger version of the phone app.

To get the app, search for WhatsApp on the Microsoft Store, or visit www.snipca. com/43042, then click the blue 'Get in Store app' button and confirm to open the Microsoft Store when prompted. Finally, click the Get button on the page that appears next. Read more on WhatsApp's site: www.snipca.com/43043.



WINDOWS 10 & 11 Hide window contents when dragging

Windows has plenty of screen effects that, while looking nice, can affect how smoothly your computer runs – particularly if it's old and not as fast as it once was. One of the effects you probably don't need is showing what's contained in a window (ie, files and folders) when you move it. Instead you can make the



WINDOWS 10 & 11

Group video and audio items for easier editing in Clipchamp

One of the smartest tools in Microsoft's video-editing app Clipchamp is Grouping, which makes it easy to move and edit bits of content (videos, audio and text) together, reducing the amount of individual actions you have to perform.

To do this, hold down the Shift key then click the items in your timeline that you want to group. A green border

will appear around them. Now right-click any of the items then select Group (1 in our screenshot), or press the Ctrl+G keyboard shortcut. You'll now see your group given a number, ready to be dragged around the timeline. Right-click your group to see options to duplicate and copy it 2, or press Ctrl+D and

window appear only as an outline, slightly reducing the processing demands on your computer.

To do this, press Windows key+R, then type SystemPropertiesAdvanced into the box and click OK. This will take you to the

Advanced section in System Properties. Now click Settings in the Performance section (1 in our screenshot below left) and untick 'Show window contents while

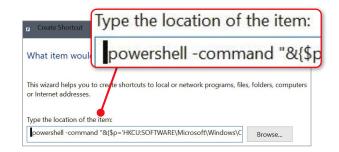
> dragging' 2, followed by Apply. Finally, reboot your computer.

WINDOWS 10 & 11 Create a shortcut to hide your taskbar

In the Personalisation section of Settings there's an option to automatically hide the taskbar, making it appear only when you move your cursor over it. A quicker way to turn on Ctrl+C respectively. To separate your items, right-click your group and select Ungroup **E**, or press Ctrl+Shift+G. Clipchamp explains all these options on its blog at www.snipca.com/43044.

If you've yet to install Clipchamp, do so from the Microsoft Store at www. snipca.com/43045. It's expected to be added to Windows 11 as part of the 22H2 Feature update – see page 6 for details.





this option is to create a desktop shortcut for it. To do this, right-click your desktop, then select New followed by Shortcut.

In the box that appears you need to enter a PowerShell command. This is too long to type, so instead copy it from our Pastebin account at www. snipca.com/43046 then paste it into the 'Type the location of the item' box (see screenshot above).

Now click Next then give the shortcut a name, such as Hidetaskbar.exe, making sure you use the .exe file extension. Click Finish. You'll now see a desktop shortcut appear with this name. Now simply double-click it whenever you want to make your taskbar vanish from your screen.

Make Office Better Top tips for MS Office & LibreOffice

LIBREOFFICE WRITER & MICROSOFT WORD

Tweak the kerning in your documents

W

Kerning is the act of slightly adjusting the space between

characters so that they are easier to read. Each font has its own default kerning value, which you can tweak to your taste. First, highlight the relevant word, then click the Home tab at the top followed by the small arrow at the bottom right of the Font section (11 in our screenshot).

Now click the Advanced tab at the top, then the Spacing dropdown menu to show three options: Normal (default), Expanded (increases space between characters) and Condensed (reduces space). In our example, we want to increase the space between the vertical lines of MINI PC, so we chose Expanded 2. You now have to pick a distance in the 'By' menus 1 to expand or shrink the spaces between

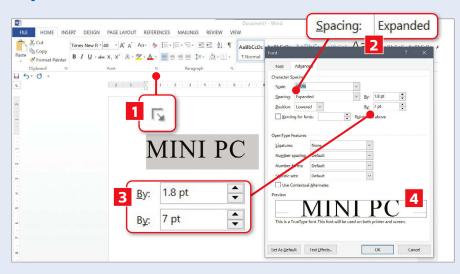
ONLYOFFICE

Change regional settings to UK By default, the regional settings for OnlyOffice's Spreadsheet editor are set to the US, meaning the currency is the dollar, and the month comes before the day in the date (for example, 8/31/2022 for 31 August 2022). You can make this UK specific (pounds and 31/8/2022) by opening a spreadsheet then clicking File at the top left, followed by Advanced Settings at the bottom. Click the Regional Settings dropdown menu on the right, then select 'English (United Kingdom)' – see screenshot below. Finally, click Apply at the bottom.



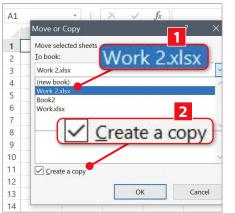
MICROSOFT EXCEL Move and copy tabs between workbooks

You can move and copy a tab from one workbook to another, which is useful if you need to start with the same data. First, open both workbooks, then right-click the tab you



characters. You'll see the tweaks applied in the Preview box below 4.

In LibreOffice Writer, highlight the word, then click Format, Character and select the Position tab. Tick the 'Pair kerning' box in the Spacing section, then click the arrows to increase and decrease the space between characters. You'll see the effect in the box below.



want to copy and select 'Move or Copy'. In the box that appears, click the 'To book' dropdown menu and select the workbook you want to move the tab to ('Work 2', 1 in our screenshot above). In the 'Before sheet' box, select the sheet (tab) before which you want your tab to be inserted. Choose 'move to end' if you want it to go at the end.

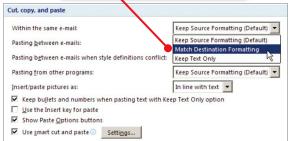
If you're copying a tab and not moving it, make sure you tick the 'Create a copy' box 2 at the bottom. When it's copied, the tab will have the same name as your original followed by a version number. Tabs that are moved but not copied don't have a version number.

MICROSOFT OUTLOOK Keep email formatting when you paste text

When you copy and paste text into an email, Outlook will apply the same formatting from wherever you copied it, overriding the existing formatting in the email.

To change this, open Outlook, click the Tools menu, then select Options. Next, click the Mail format tab, followed by Editor Options at the bottom. Now click Advanced on the left, then in the 'Cut, copy and paste' section click each dropdown menu then select Match Destination Formatting (see screenshot below).

Match Destination Formatting



In The Club



Run a club or society? Here's how your tech can make it easier

Add a 'donate' button to your site

Iubs often live on the generosity of their members, but actively asking for donations can feel awkward. A more delicate option is to add a 'Donate' button to your website, letting visitors donate in their own time. There are plenty of options for doing this, but the easiest is using PayPal, as we'll explain.

Choose your donation amounts

To begin, you'll need a PayPal account. If your club has its own bank account, you can sign up for a business, charity or not-for-profit account. Otherwise, you'll have to use a personal account (as we do in this example). Once you've got an account, you can create a button by visiting www.snipca.com/42822.

The bottom-left 'Get a link' option lets you create a landing page for donations, which could be handy when emailing requests because you can include a link to it. But we're interested in the 'Customise a button' option, so click that. You'll be given options for creating a button size, as well as country and language. The defaults will probably suit you, so click Continue.

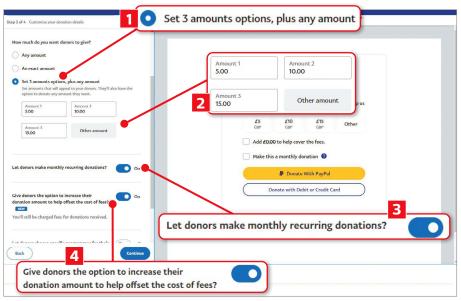
On the next page, PayPal takes your Display Name from your account (you can't change this). On the left you can upload your club's logo and add an image to your donation page. There's also the option to add an "inspiring message" to your donation page. Click Continue.

On the next page, decide how to accept donations. The default is to let people choose any amount, but you can change this to 'An exact amount' or 'Set 3 amounts options, plus any amount' (1 in screenshot top right), which we think is best.

You'll need to enter the three amounts as a whole number (you don't need the pound sign) 2.

Leave 'Let donors make monthly recurring donations' 3 on if you want donors to sign up for regular amounts.

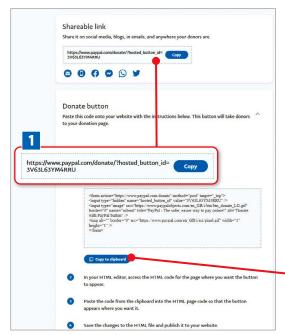
The 'Give donors the option to increase their donation amount to help offset the cost of fees' **4** option can be useful. PayPal will automatically work out how



We've given our members three amounts to pay, plus any other amount they'd prefer

much extra a donor should pay to help cover the processing fees.

Click Continue. The final page of these instructions concerns how you get information about a donor. The default options ask for a postal address and let donors leave you a personal message, but you can turn these off. Leave the other settings alone and click Finish.



Copy and paste the button's code

The final page gives you a 'shareable' link (1 in screenshot below) to the donation page that you can send to people.

To get the button on a website, click 'Copy to clipboard' in the 'Donate button' section 2. You need to paste this code on any web page where you want it to

> appear. How you do this will depend on the type of site you have. If it's built from scratch, you'll need to edit the HTML file. If it's hosted on a service such as WordPress or Blogger, you need to go into its HTML view, then paste the code where you want the button to appear.

Clicking the button will take members to the donation page with the information you provided.

You can use the code multiple times, to put it on different pages on your site.



copy and paste the HTML code on to vour site to add a button

2

What's All the **Fuss About... Leap seconds**

We may need a different way to deal with changes in Earth's rotation

What are they?

Extra seconds added to Coordinated Universal Time (UTC) to account for the difference between precise time (as measured by atomic clocks) and 'solar' time, which varies due to slight changes in the Earth's rate of rotation. This stops the planet drifting into an unsettling future where sunsets take place in the morning.

What's Coordinated Universal Time?

It's the main standard by which the world regulates clocks and time, and is considered the successor to Greenwich Mean Time (GMT). Since 1972, 27 leap seconds have been added to Coordinated Universal Time, with the most recent coming on 31 December, 2016. That gave us an extra second of excited anticipation before the start of 2017, but party-pooping computers didn't like it one bit.

Why not?

Because it disrupted their highly ordered sense of time. They've been programmed to know that there are 60 seconds in a minute, 60 minutes in an hour, and 24 hours in a day. But when leap seconds arrive, their internal clocks tick from 23:59:59 to the illogical time of 23:59:60. This always causes problems.

Such as?

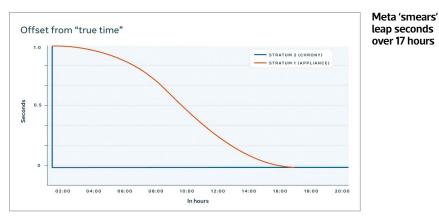
In 2012 sites including Reddit, LinkedIn and Yelp crashed. Developers were better



prepared in 2015 and 2016, but even then there were major glitches knocking websites offline. Fearing a repeat in future, Facebook's parent company Meta has called for leap seconds to be scrapped, saying it's a "risky practice that does more harm than good" (www. snipca.com/42843).

Do they suggest an alternative?

Yes – smearing. That's not spreading malicious lies about leap seconds in the tabloids, but slowing down digital clocks over a longer period so the extra time can be added gradually. It's an effective alternative, but the problem is there's no accepted way of doing this. Some companies start smearing at noon the day before the leap second is added, and continue for 24 hours. Others begin just two hours before, while Meta itself 'smears' the leap second throughout 17 hours, starting at midnight (illustrated in the graph below). All these discrepancies could end up causing more confusion



and outages, even leading to a "split-brain situation".

Is that as painful as it sounds?

For computers it is, yes. It refers to the inconsistencies triggered when two separate data sets overlap, or don't synchronise with each other. Another problem is that at some point in the future you might need to *lose* a second, depending on changes in the Earth's rotation. If smearing isn't widely adopted, Meta's other solution is to scrap leap seconds altogether.

But won't that mean sunsets in the morning?

Eventually maybe, but not for a long time. Meta predicts that leaving things as they are would be fine for at least the next 2,000 years.

Do other firms agree?

Yes, notably Google, Microsoft and Amazon, as well as influential groups in the international measurement community, including the US National Institute of Standards and Technology (NIST) and France's Bureau International de Poids et Mesures (BIPM). The support of the latter two is crucial, because ultimately it will be governments and scientists, not tech firms, who'll approve any changes. The UN's International Telecommunication Union is due to publish a report on the issue next year. Only then will we find out if time's up for the leap second.

Why You Must Always... UPDATE YOUR DRUGERS

Don't let old and corrupt drivers slow and crash your PC, or stop vital features working properly. **Robert Irvine** explains how to keep all your device drivers updated – for free



WHAT YOU CAN DO

- Install optional driver updates that Windows Update ignores
- Download the latest drivers from device manufacturers
- Update all your drivers with the best available versions
- Manually add a driver to the Windows driver store
- Avoid driver updaters that install junk and malware
- Remove old drivers for devices you no longer use
- Undo driver updates that cause problems on your PC

rivers are an essential element of your PC. Without them none of your internal or external devices would work. But as with most 'under the bonnet' technology – from cars to computers – you don't usually need to worry about them until a vital feature stops working or your system becomes slower or crashes.

This happens more frequently than you might think.Microsoft says that 70 per cent of blue screen of death errors are caused by third-party driver code (see www.snipca.com/42992).

Ensuring your drivers are up to date and functioning properly will keep your system running smoothly, though it's not a task you need to perform every week like a virus scan. Windows 10 and 11 generally do a good job of automatically updating drivers in the background. However, as we explain in this feature, Windows doesn't always install the best versions of drivers for all your devices, as soon as they're available, so it's useful to know how to update your drivers manually.

We reveal the easiest and safest free methods for keeping your drivers current, using options built into Windows, and by downloading the latest versions from the manufacturers.

We also recommend the few thirdparty tools you can trust to check for and install driver updates, and name and shame the dubious programs you should definitely avoid.



YOUR DRIVER QUESTIONS ANSWERED

What are drivers and why are they important?

Every component of your PC's hardware, whether internal such as your motherboard and graphics card, or external like your mouse and keyboard, requires a small piece of software called a driver. This tells Windows exactly what that component is and does, and enables the devices to interact with each other.

For example, your printer's driver allows your operating system to identify your printer, convert data into a printable format and send it to the device to be printed using settings you've specified. Without a driver, your PC can't properly communicate with a device, rendering it useless.

How do I install device drivers?

There was a time when you needed to install device drivers manually, from a floppy disk or CD-ROM that came in the box with the device. Nowadays, with a few exceptions such as printers and some scanners, Windows does the hard work for you.

As soon as you connect a device to your PC, Windows searches its huge database of drivers for the best one, then downloads and installs it, displaying a 'Your device is ready to use' message when this is done (see screenshot below). This system is known as 'Plug and Play' (PnP) and, though there's a common misconception that no drivers are involved, it simply means Windows automatically identifies the device and loads the latest available drivers with "minimal user intervention" – see Microsoft's 'Introduction to Plug and Play' page at www.snipca.com/42959.

However, Windows doesn't always get it right and may fail to find a driver – especially for devices from more obscure manufacturers – or install one that causes problems rather than fixing them.

Why do I need to update my drivers?

An outdated driver may still let your PC communicate with a device, but it can also cause performance problems. For example, if the driver for your graphics card isn't up to date, you may experience a pixelated or flickering picture, or colours that are slightly off, when watching a video or plaving a game.

Likewise, an outdated audio driver may distort or entirely silence your system's sound, while having an incorrect or corrupt driver for your network

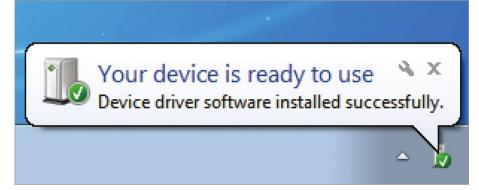
adapter can prevent you from connecting to Wi-Fi. If your motherboard's chipset drivers aren't the latest versions, your PC may become frustratingly slow and keep crashing without warning.

Failing to update your drivers can mean missing out on new device features, bug fixes and performance improvements. More seriously, it can leave your computer susceptible to hackers and malware, because an old driver may contain security vulnerabilities that attackers can exploit.

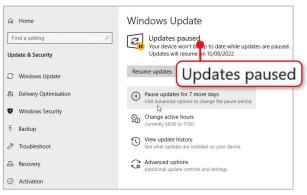
When should I update my drivers?

Most drivers are updated automatically through Windows Update, so you don't need to worry about installing the latest versions. However, this doesn't always happen, especially on older computers, or you may have 'paused' updates to stop them being installed (see screenshot above right).

If you've started experiencing problems with your PC, updating your drivers can help solve them – even if you're unsure which device is responsible. It can also prevent hardware-compatibility



Windows automatically finds and installs the best drivers available for 'Plug and Play' devices



If you've paused Windows Update, your drivers won't be updated automatically

problems and keep your system running smoothly and securely.

Furthermore, when you buy a new, second-hand or refurbished PC, or reinstall Windows on your current PC, it's essential you ensure you're using the correct drivers. These may not necessarily be the latest versions, but the best drivers available for each PC component. For example, the drivers provided for graphics cards by manufacturers such as Nvidia and AMD will offer far superior performance and features to any generic drivers selected by Windows.

Are there any risks to updating drivers?

The biggest danger is installing drivers you find online from unofficial sources, which may not be 'digitally signed' (ie, verified by Microsoft) and may contain malware or cause performance problems. Windows should detect and block such drivers, but there are ways to bypass the restriction.

Occasionally, drivers released by manufacturers contain security flaws or cause compatibility issues, but they're still much safer than those from thirdparty sites and are usually swiftly patched to fix reported bugs. For example, in May, Nvidia released an update that fixed 10 vulnerabilities in its GPU drivers, after they were discovered by cyber-security company Cisco Talos (www.snipca. com/42960).

You should also be wary of software that claims to scan your system for outdated drivers and install new ones. On page 53, we've picked three driver updaters you *can* trust, but there are many more you can't. Such programs often come with PUPs, display pop-ups that nag you to upgrade to their paid-for versions and install incorrect drivers that can mess up your PC.

HOW TO UPDATE YOUR DRIVERS

Install drivers through Windows Update

The latest updates for drivers can take a while to appear on Windows Update, but it's still the simplest and safest way to download and install them. Not only are you getting updates through a trusted source, but you can be sure the drivers will be compatible with your devices.

When manufacturers submit drivers to Microsoft to be digitally signed, they mark them as either 'automatic' or 'optional'. Automatic driver updates are important for security and performance reasons and are installed automatically through Windows Update, while optional ones usually fix minor bugs or add new features.

To check for optional updates in Windows 10, open the Settings app (press the Windows key+I), click 'Update & Security' and select Windows Update. Click 'View optional updates' and open the 'Driver updates' list. In Windows 11, click Windows Update on the left-hand side of the Settings app, choose 'Advanced options' then 'Optional updates' and select 'Driver updates'. Tick the boxes next to all the driver updates you want to install and click 'Download and install' (see screenshot below).

Before you do so, it's worth searching for the driver's version number online to check if there are any known problems with the update. If you can't see a 'View optional updates' option, then none are currently available through Windows Update, but that doesn't mean you can't install them using other methods.

If you want to update all your drivers manually or by using a driver-updater tool (see opposite page), you can stop Windows Update installing automatic driver updates. Right-click the Start button in Windows 10 or 11 and choose System then 'Advanced system settings'. When the System Properties box opens,



Manually install optional driver updates through Windows Update

select the Hardware tab and click Device Installation Settings. Choose 'No' under 'Do you want to automatically download manufacturers' apps...?' and click Save Changes.

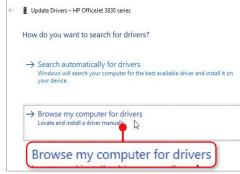
Update drivers via Device Manager

If a device driver is not yet available through Windows Update, you can download it from the manufacturer's official support website, and install it through Device

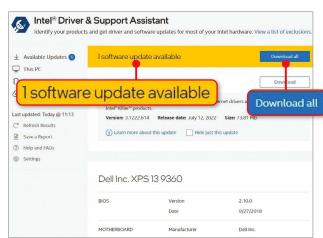
Manager. Search for the model of the device in the drivers section of the site to find and download the latest driver update. Some drivers are provided as EXE files, so can be installed by double-clicking them, but if they're packaged as ZIP files you'll need to extract their contents.

Either way, open Device Manager by typing device manager into the Windows search box and clicking the 'Best match'. Click the arrow next to the type of hardware you want to update, then right-click the device and choose 'Update driver'. Select 'Browse my computer for drivers' (see screenshot below), click Browse and find the folder containing the drivers you downloaded - click 'Let me pick from a list of available drivers on my computer' to view only relevant folders. Select the folder, click OK and tick the box to 'Include subfolders', then click Next to install the updated drivers.

You can also use Device Manager to update the drivers for your printer, network adapter, monitor and other hardware. Right-click a device, select



Install drivers you download from the manufacturer through Device Manager



Intel's 'Driver & Support Assistant' updates drivers for the company's hardware

'Update driver' and choose 'Search automatically for updated driver software'. Windows will then search your PC and the web for the latest drivers. Although it does this through Windows Update, there's no harm in double-checking and it may speed up installation.

Install new drivers for your graphics card

Graphics-card manufacturers periodically release updates to improve the performance, security and features of their products. You can either download these from the company's website and install them through Device Manager double-click 'Display adaptors' to view the name of your GPU – or use the manufacturer's driver-assistant tool to automatically identify and install the drivers you need.

You'll be prompted to install Nvidia's Update tool when you download a GeForce driver from its website (www. snipca.com/42961). AMD's 'Auto-Detect and Install' tool for Radeon graphics cards is available from www.snipca.com/42962,

while a more advanced program called AMD Software: Adrenalin Edition, which also includes performance reports and game statistics, can be downloaded from www.snipca.com/42964.

You can get Intel's 'Driver & Support Assistant', which detects the latest drivers for the company's graphics cards, sound cards, processors and wireless network adapters, from www.snipca. com/42963, and use it to download and install available updates (see screenshot above).



BEST FREE TOOLS FOR UPDATING DRIVERS

s we mentioned on page 51, there are plenty of tools that claim to detect and update outdated drivers, but either charge you a hefty fee, come bundled with junk or install drivers from dubious sources. It's for these reasons that some tech experts suggest you avoid using driver updaters altogether and rely on Windows Update for the task. However, there are a few programs that do work as promised and give you more control over your drivers than Microsoft and device manufacturers do.

Here we review the three best tools for managing your drivers, which are all free, safe and reliable to use. We also reveal which driver updaters you should avoid.

GOLD AWARD Snappy Driver Installer Origin

www.snipca.com/42966 Snappy Driver Installer Origin (SDIO) is by far the best tool for identifying outdated drivers, and installing newer and/or better versions. Free of charge, free of junk and lacking premium-only features, it's a program you can either use occasionally to try and fix performance problems, or regularly in tandem with Windows Update to keep all your device

drivers updated. To use SDIO, you first need to install its 20MB indexes pack, which scans your PC to detect which drivers need to be updated. You can then review the results and decide which ones to install. Unlike Windows Update, the program helpfully tells you when a driver is newer but "less optimal" than what's already installed, but it also includes unsigned drivers, which you should ignore.

Create a system restore point (1 in our

How I used Snappy to update my drivers

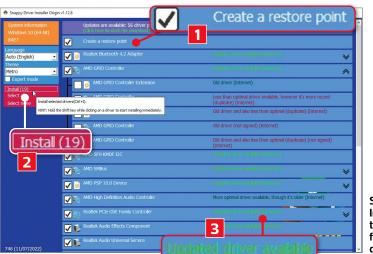
Having used Snappy Driver Installer Origin before, but not for several months, I knew the first thing I needed to do to update my drivers was click the button to download its indexes. Actually, that was the second thing after changing its theme to the more readable Coax option. Snappy then scanned my PC and listed drivers for all my devices.

Working through these from the top, I saw that updated drivers were

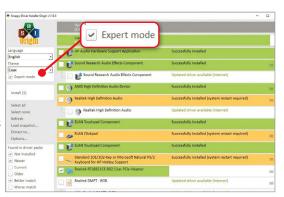
available for my Realtek Bluetooth 4.2 adapter; several AMD controllers related to my processor and graphics card; audio components from different manufacturers; my laptop's ELAN touchpad and clickpad; and an HP driver for the keyboard. The latter was labelled 'Updated driver available which is also more optimal', which seemed like the best of both worlds, so I ticked the box next to it.

Other entries were initially more confusing because clicking the button next to them revealed a choice of drivers, some of which were 'older and less than optimal', while others were 'less than optimal but more recent'. After experimenting with options with SDIO's 'Expert mode' (tick the

screenshot below) before updating any drivers, so you can roll back if anything goes wrong. Installing selected updates is as simple as clicking the Install button **2** – recommended drivers are highlighted



Snappy Driver Installer Origin is the best free tool for updating your device drivers



Snappy's 'Expert mode' lets you decide which drivers to include in its list

box on the left to activate this – see screenshot), I realised that the drivers it lists first are always newer and/or better than what you already have installed. So I ignored everything except the 'Updated driver available' recommendations and selected those entries – 17 in all. I then ticked the box to 'Create a restore point' and clicked Install.

Snappy downloaded and installed just over 2GB of drivers, which took around 15 minutes. I could have been more selective, but thought I might as well do the lot in one go. Once finished, I restarted my PC and found everything in working order. In fact it seemed to load and respond more quickly – or more *snappily* – than before. Robert Irvine

in bright green **B**.

We like the control Snappy gives you over which updates to download, and that you can press Ctrl while hovering over an entry to compare your current driver version with the one that's available.

It's a portable tool that doesn't require installation, and lets you install drivers offline if you download its massive (26GB) collection of driver packs. SDIO's default interface isn't particularly attractive, but you can tailor it to your taste by applying a different theme

Note that Microsoft Defender's SmartScreen may flag SDIO as 'unrecognised', but it's totally safe to use – see its VirusTotal results at www. snipca.com/41003 – so just click 'More info' then 'Run anyway'. See our Workshop in Issue 630 (page 38) for our full guide to using SDIO.



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Select Old Driver(s)

SILVER AWARD DriversCloud

www.driverscloud.com

If downloading Snappy's driver packs sounds like too much hassle, DriversCloud offers an alternative – albeit less thorough – solution that partly works within your browser.

Select 'Scanning and drivers download' on its homepage (or go straight to www. snipca.com/42968), click Start Detection and choose 'Automatic installation' to download the DriversCloud 'agent'. Install and run this tool and it will scan your PC for drivers and open a web page showing its results. These include entries for your graphics card, motherboard and network adapter, which tell you the version number and release date of the drivers you have installed and whether newer versions are available. If so, you can download those drivers, either individually or by clicking the Download button in the See Recommended Downloads box (see **1** in our screenshot below), and install them through the agent – click Save/Restore **2** to create a backup first. A handy offline mode lets you check your drivers without an internet connection and get the results when you're back online.

Sign up for a free DriversCloud account to be notified by email when a new driver becomes available. Just be careful not to click the deceptive ads on its website.

BRONZE AWARD Driver Store Explorer www.snipca.com/42969

This free tool is more of a driver manager than an updater. It provides a way to browse the Windows 'driver store' – the secure area of your hard drive where all



Driver Store Explorer lets you manually remove old drivers and add new ones

your device drivers are installed – and remove outdated entries. You can also add drivers you've downloaded, but only if Windows can verify that the driver package is trusted.

Download the 'DriverStoreExplorer. v0.11.79.zip' file from www.snipca. com/42970, extract the contents and double-click the 'Rapr.exe' file. Click 'More info' then 'Run anyway' if you get a security warning. When it opens, you'll see a list of all your drivers, along with details of their type, device name and manufacturer, version number, release date and size.

Click the Select Old Driver(s) button (see screenshot above) to tick the boxes next to old versions of drivers that have been superseded by updates, but that still take up space on your PC. Click 'Delete Driver(s)' to remove these, taking care not to delete anything you're unsure about. Tick the Install Driver box and click Add Driver to install a new driver to the store (if Windows allows it). Usefully, you can click the File menu to export the list of your drivers, or back them up to an external drive.

Worst of the rest - driver updaters to avoid

SlimDrivers

Flagged as malicious by 29 antivirus engines on VirusTotal (www.snipca. com/42972), this free driver updater – also known as Slimware Driver Update – has now been removed from its official website, but it's still available from other download sources. It's bundled with junk and reportedly contains Trojans, so don't be tempted to try it.

DriverPack

"Some antiviruses can give a false reaction to the installer" states the official site of this free tool, but as Windows Security instantly detects and blocks PUPs in its download, those tools are correct to warn you. Unsuspecting users have found it swamps your system with junk. Beware.

DriverMax

Although not as dangerous as the other tools we've mentioned here – with a mere five negative results on VirusTotal – DriverMax's free version is very frustrating to use. You can only install two driver updates per day and are constantly nagged to subscribe to its paid-for Pro edition.

IObit Driver Booster

Don't be fooled by its claim to update more than eight million drivers from 1,200

manufacturers – the free version of Driver Booster is very limited. It's mainly a means of advertising other IObit products, including its paid-for Pro version (see screenshot), and tries to install unwanted junk.



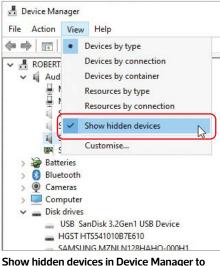
EXPERT TIPS FOR UPDATING YOUR DRIVERS

Remove drivers left behind by old devices

Every device that you remove or replace on your PC – whether it's a printer, webcam or graphics card – leaves its drivers behind on your hard drive. As well as taking up valuable space, these drivers can clash with newer devices and prevent them from working. We've already explained how to use Driver Store Explorer to delete old driver packages from the Windows driver store (see page 55), but you can also remove leftover drivers through Device Manager.

By default, Device Manager doesn't list drivers for devices that have been removed, but you can tweak Windows to show these entries. Type cmd into the Windows search box and click 'Run as administrator' under the Command Prompt result.

When Command Prompt opens, type set devmgr_show_nonpresent_devices=1 and press Enter – you can copy and paste this command from our Pastebin



Show hidden devices in Device Manager to remove old leftover drivers DriverView tells you which companies aside from Microsoft made your drivers

account (www.snipca. com/42974). Next, open Device Manager by typing device manager into the Windows search box and clicking the 'Best match'. Click the View menu and select 'Show hidden devices' (see screenshot below left). Click each device category in the Device Manager list and look for entries whose

icons are greyed out. These are drivers for devices that are no longer connected to your PC. Right-click a device and click Uninstall to remove its drivers from your system, free up space and prevent potential conflicts.

Discover which companies made your drivers

One obstacle to downloading the latest drivers from the manufacturer's site is that you might not know which company made the device. Help is at hand from a tiny, free and portable tool called DriverView from the prolific developer NirSoft (www.nirsoft.net). This reveals all the drivers currently loaded on your PC, including details of their corresponding hardware, manufacturer, driver type, version number and more.

Download DriverView from www. snipca.com/42975 (the link is below the Feedback heading about two-thirds of the way down the page), then extract the contents of its ZIP file and double-click 'DriverView.exe'. The program will load a comprehensive list of drivers, so you can quickly see the relevant companies for specific components.

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You'll notice that the majority of your drivers are made by Microsoft, so will be updated automatically through Windows Update. You can hide these by clicking the View menu and choosing Hide Microsoft Drivers (see screenshot above)

Another useful option lets you rightclick an entry and choose Google Search to find info about that driver online. In addition, you can select multiple items then right-click and choose Save Selected Items to save their details as a text file.

Use your PC manufacturer's driver updater

If you don't trust Windows Update to keep your drivers up to date, and you'd prefer not to use a third-party tool, you could try your PC manufacturer's own driver updater. This will ensure you only receive updates that are compatible with the exact make and model of your system.

For example, you can scan your Dell computer for missing and outdated drivers, and install the latest updates using its 'Drivers & Downloads' service (www.snipca.com/42976). Similarly, HP's Support Assistant, which you can download from its 'Software & Drivers' website (www.snipca.com/42977) will

Where to download commonly used drivers

Acer

www.snipca.com/42989 Search for your Acer PC or laptop model to find and download the latest drivers.

AMD

www.snipca.com/42982 Get drivers for AMD's Radeon graphics cards and Ryzen

processors and chipsets.

Asus

www.snipca.com/42991

Asus makes it easy to update the drivers for your whole PC or just specific components.

Lenovo

www.snipca.com/42978

Use Lenovo's System Update tool to install drivers for its desktop PCs and laptops.

Logitech

www.snipca.com/42985

Install new drivers for Logitech mice, keyboards and webcams to improve their performance.

Nvidia

www.snipca.com/42984

Nvidia provides drivers for its GeForce and Titan graphics hardware and laptops.

Realtek

www.snipca.com/42987 You can get Realtek audio drivers directly from its website or from your PC manufacturer.

Samsung

www.snipca.com/42986 Samsung offers drivers for all its computing products including laptops and SSDs.



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Run WhoCrashed to find out which corrupt driver is causing your PC to

HP's Support Assistant checks your PC's drivers and recommends updates

identify driver problems and recommend updates that you can download and install (see screenshot above). See our box at the bottom of page 56 for links to other manufacturer's official driver-download sites.

Reverse driver updates that cause problems

As we've mentioned, newer isn't always better when dealing with drivers, and updates can cause problems ranging from lost sound and error messages to excessive memory usage and system crashes. Thankfully, it's usually easy to undo a problematic driver update. Launch Device Manager in Windows 10 or 11, find the device that's misbehaving and double-click it. When the Properties box opens, click the Driver tab and select Roll Back Driver.

If rolling back to a previous version of the driver doesn't help or isn't available, choose Uninstall Device then click Uninstall. With a USB device, you can simply unplug it from your PC, then reconnect it and Windows will search for and install the best available driver.

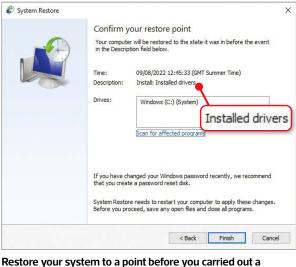
With internal components such as your sound card, click the Action menu in Device Manager and choose 'Scan for hardware changes'. This will prompt Windows to re-detect the device and download the correct driver.

If you're unsure which updated driver is causing the problem, you can perform a system restore to revert your PC to a state when everything was working properly. To do so, type system restore in the Windows search box and select 'Create a restore point' to open the System Properties box. On the System Protection tab, click System Restore and select 'Recommended restore' – this may mention that a restore point was created when you installed drivers (see screenshot below). Click 'Next' then Finish and choose Yes to restore your system.

crash

Identify which drivers are causing crashes

If your PC has started crashing or rebooting for no apparent reason, a corrupt driver is



Restore your system to a point before you carried out a troublesome driver update

probably to blame, but identifying the culprit can be tricky. One of the best ways to diagnose the problem is to run WhoCrashed (www.snipca.com/42980). This free tool, which was recently updated to add support for Windows 11, analyses the 'crash dump' files to determine which driver caused the crash. You can then replace that driver with a functioning version using one of the methods or tools we've covered here.

To use WhoCrashed, download the Free Home Edition from www.snipca. com/42981, install and launch the program, and click the Analyze button (see screenshot above). Once the analysis is complete, scroll down to

> read the report about the responsible driver and suggestions on how to fix the problem.

Alternatively, you can use the Reliability Monitor that's built into Windows to try and identify your troublesome driver. Type reliability into the Windows search box and select 'View reliability history'. This will show you recent hardware and Windows failures, and may list malfunctioning device drivers under 'Critical events'. Click the 'View all problem reports' link for more information.



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Should you CANCEL ANALON BRUZZON As money gets tighter and Amazon

increases its prices, you may think it's time to cancel Prime. Or perhaps you're keen to subscribe but want to know what you get. Either way, **Daniel Booth** has you covered

f 2020 was the year of subscribing, 2022 is becoming the year of cancelling. When lockdown began in March 2020, millions of people signed up to online services not just for entertainment (like Netflix), but so they could get essential products without visiting the shops. Remember the rush for toilet rolls and hand sanitiser?

One of the main beneficiaries was Amazon. Its Prime service was already popular before the pandemic, but lockdown helped boost the number of UK households subscribing to around 13.3 million – that's a staggering 53 per cent.

Times are different now. With inflation soaring, customers are cancelling those lockdown subscriptions. Netflix has been the most high-profile casualty, losing 1.2 million subscribers this year. But Prime's growth might also be at risk following Amazon's decision to increase prices. Monthly subscriptions will rise by £1 to £8.99; annual membership from £79 to £95. The increase has prompted yours truly to cancel, though Deputy Editor Robert Irvine is staying put (see opposite page).

The new price kicks in on 15 September, and will be applied when your membership is next due to be renewed. If you pay monthly, consider switching to an annual account before 14 September, saving you £30 by locking you into the lower price until it's time to renew a year later.

Cancelling is easier than ever, as we'll explain. First though, we'll outline what

you get for your money. If you don't subscribe to Prime, this will help you decide whether it's good value. And if you do, you may end up realising you no longer want it – or, conversely, discover benefits you didn't know you had. We haven't got room for every benefit, so visit Amazon's site for the full list: www.snipca.com/42846.

Incidentally, we're not going to use 'free' to describe the benefits because these are precisely what you're paying for. It's as misleading as describing the BBC as free, forgetting the £159 you pay for the licence fee. Instead, they're all provided 'at no extra cost', which, to its credit, is the phrase Amazon typically uses.

Fast delivery

The most notable benefit is fast delivery. It was Prime's standout feature when Amazon launched in the US in 2005, promising two-day delivery. The fastest delivery Amazon now offers is 'Same Day & Overnight', which guarantees items by



With Prime, you can get these HP ink cartridges delivered at no extra cost the same day them

7pm or 10pm (see screenshot above) if you order before midday (1pm in Scotland). If you order after this time, you'll receive your item by 1pm the following day. See the table below for the savings you'll make on each delivery.

It's not available everywhere, though – check Amazon's list of ineligible postcodes (www.snipca.com/42947). These include many areas of Aberdeen (AB), Belfast (BT), Dumfries and Galloway (DG), Inverness (IV), Llandudno (LL),

WHAT YOU GET WITH & WITHOUT PRIME								
BENEFIT	WITH PRIME	WITHOUT PRIME						
Same-Day	No extra cost	£5.99 per delivery						
One-Day or Overnight delivery	No extra cost	£3.99 for media items*/ £4.99 for other products						
Prime Video	No extra cost**	£5.99 a month						
Amazon Music Unlimited	£8.99 a month	£9.99 a month						
Amazon Photos	Unlimited photo storage; 5GB video	5GB free photo and video storage***						
Prime Gaming	Twitch subscription	£3.99 a month****						

*Books, music, DVDs, video games and software. **Additional subscription for channels ***Pay £1.49 a month for 100GB; £7.99 for 1TB ****Included with standalone Prime Video subscription

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	Use your benefits today	Am	azon Prime Terms and Conditions
		Need help	Don't see your question? <u>Click here for</u>

Amazon now lets you cancel Prime with just two clicks

Shrewsbury (SY) and York (YO). Also, it's available only on selected products – look out for this button on the product page.

Many more items are eligible for the next fastest delivery, which is 'One-Day', and is selected by default when you buy an item. There are some cut-off times for ordering though, so check these on the product page, and also read Amazon's terms at www.snipca.com/42950. After 'One-Day' comes Priority Delivery, guaranteeing items two days after order. Visit www.snipca.com/42946 to see all other delivery options.

Prime Video

Amazon added Prime Video (www. snipca.com/42958) to its Prime subscription in 2014. You can watch it on your TV, phone and tablet via the internet – and also download content on your phone and tablet. It contains many exclusive shows, including Top Gear spin-off The Grand Tour, Clarkson's Farm, Star Trek: Picard and the new Lord of the Rings prequel The Rings of Power, as well as sporting events and thousands of films.

However, as you browse you'll also find plenty of content that you can't watch without paying extra to subscribe to specific channels within Prime Video, such as Discovery+ (\pounds 4.99 a month), BritBox (\pounds 5.99), MGM (\pounds 4.49) and the newly added Paramount+ (\pounds 6.99).

A Prime Video subscription lets you stream on three devices simultaneously, though the same title can be streamed only on two devices at the same time.



Amazon still tries to manipulate you into signing up for Prime

Amazon Music

A Prime subscription gives you access to the Prime Music streaming service (www. snipca.com/42967), which contains two million songs, as well as thousands of playlists and radio stations, and lets you listen offline and skip tracks. There's a free version that doesn't require a subscription, but this contains adverts you can't avoid. If that isn't enough for you, sign up to Amazon Music Unlimited (www.amazon.co.uk/music), which increases the catalogue to 90 million. This costs £8.99 a month if you're a Prime subscriber, and £9.99 if not.

Ebooks, photos and games

As well as video and music, Prime covers other types of entertainment. Prime Reading (www.snipca.com/42954), which launched in May, gives you over a thousand ebooks to borrow, plus comic books, magazines and audiobooks. You can keep up to 10 titles at a time, and there are no return dates.

Amazon Photos (www.snipca. com/42955) lets you store unlimited full-resolution photos, and 5GB of video. Non-subscribers are restricted to 5GB for photos and videos, but can buy more.

Prime Gaming (www.snipca.com/42953) gives you an account with the Amazonowned Twitch, which lets members stream themselves playing games. You also get several games every month to keep forever, and extra items to use while playing. Note that a standalone Prime Video subscription includes Prime Gaming.

How to cancel Amazon Prime

For years it was easier to swim the length of the Amazon than to cancel Prime, but the company has been forced by EU regulators to simplify the process. As explained in Issue 636 (page 49), you can now unsubscribe in just two clicks. First, click 'Continue to cancel' (see screenshot 1 above left) and then 'End membership Now' (see screenshot 2 above). This method was introduced in EU countries in July, but Amazon said it should be

Will you cancel Amazon Prime?



Daniel Booth, Editor I decided to cancel a few weeks ago, on the day the price rise was announced, after spending an hour trying

(and failing) to find anything I wanted to watch on Prime Video. That set the dominoes falling: do I shop on Amazon these days? Much less than I used to, and I can happily wait a few days for items. Do I ever listen to Amazon Music? No, YouTube has all the music I need (without adverts on Brave). Do I store photos on Amazon? No, Google Drive is easier to use. I'm going to wait until my monthly MGM subscription expires, check we've got enough toilet rolls to last 24 hours, then press cancel and end five years of Prime membership.



Robert Irvine, Deputy Editor

I always leave buying presents until the last minute, so Prime's next-day

delivery proves a lifesaver at Christmas, as well as for urgent household items. I even used its same-day delivery to order ear plugs when my neighbours had noisy guests.

The idea of having to work out delivery charges when ordering, and not knowing when they'll arrive, fills me with dread. I also watch plenty of TV shows and films on Prime Video – 67 in the last year, apparently – and use Prime Reading to get free ebooks on my Kindle. I may even ditch my £9.99-per-month Spotify Premium subscription for Amazon Prime Music. The new annual £95 fee works out at £7.92 per month, which is still pretty good value considering all the benefits you get.

added to the UK in August.

What Amazon hasn't ditched are the tricks for signing you up in the first place. When we ordered something recently, we were shown the page left, where the bright yellow button to 'Continue with Prime' 1 contrasts with the small 'Order without Prime. Decline free trial' link 2, inside a miserable grey box. If you shop on Amazon but you're not interested in Prime, make a mental note to be aware of these manipulative techniques.

Extend your

If your cables aren't quite stretching to where you need them, you should consider extending them. **Jonathan Parkyn** explains how to do this easily and cheaply

e might live in an increasingly wireless world, but most of us still rely on cables to connect many of our devices – whether that's to plug peripherals into our PCs, connect our routers to the internet or hook up a video connection to a monitor or TV. But what if the cable you have isn't quite long enough for your needs? You could, of course, buy a whole new cable, but that would be a waste. Instead, you could save money by lengthening your existing connection with an extension cable.

But before you buy, you'll need to make sure you're getting the right extension cable for the job, taking into account any potential compatibility issues or other limitations.

USB

When you buy a USB device it usually comes with a cable. But manufacturers often like to save money by providing the cheapest, shortest USB cable they can feasibly get away with, meaning the supplied connector frequently fails to go the distance.

Thankfully, USB is one of the simplest connections to extend. The most basic (and cheapest) way is using a cable that has a male USB plug at one end and a female one – similar to a USB port – at the other. Plugging your existing USB cable into the female end will effectively convert it to a much longer lead. To get the correct extension cable, however,



JSAUX's USB cable is braided, making it more durable and less likely to become tangled

you'll need to consider the type of USB connector on your existing cable and the length you want to extend it by.

For example, if the devices you're connecting use a traditional USB-A connector, you could pick up something simple like the Amazon Basics USB 3.0 A-Male to A-Female Extension Cable (www.snipca.com/42916), currently available in 1m (£7) and 1.8m (£9.17 for two) lengths. It's certified to work with USB 3.0 (and above) connections, but is 'backwards compatible', so it works with USB 2.0 and older, too.

If you're prepared to spend a little more, you could get something like the JSAUX USB 3.0 Extension Cable (www. snipca.com/42917, pictured above), which starts at £7.99 for 1m and goes up to £9.99 for 3m. This extender's braided coating makes it more durable and less prone to tangles.

The same principle applies to USB-C extenders, though here compatibility becomes more of an issue. USB-C connections are used for a variety of purposes, including fast charging and video output, so you will need to check that the extender supports the functions you need.

For example, if you need your extended USB-C cable to carry up to 100W of power or connect to a 4K 60Hz screen as well as transfer data, then you should look for something like the UGREEN USB C Extension Cable (www.snipca. com/42918, pictured below), which costs £12.49 for 0.5m and £13.99 for 1m.

Or, if you need a USB 4.0-compatible cable, capable of lightning-fast data rates of up to 40Gbps (to connect an external SSD, for instance), then you'll need to opt for an extender like the YIWENTEC USB4 8K (www.snipca.com/42919), which starts at £25 for 0.8m.

You can also get extension cables for microUSB, such as the InLine Micro USB Extension Cable

UGREEN's cable carries up to 100W of power – ideal for transferring data or connecting to a 4K screen



(www.snipca.com/42920, from £7.62 for 1.5m) or Mini USB connections, such as the INNOV8 Mini 5Pin USB B Type cable (www.snipca.com/42921), which costs £5.95 for 1.5m.

One limitation to bear in mind when extending USB connections is maximum cable length. USB 1.1 and 2.0, for example, stipulate a maximum length of 5m for full-speed connections – that's 5m in total, including your extension. USB 3.0 standards don't specify a maximum cable length, but beyond 3m the signal will start to degrade, causing data speeds and power delivery to drop off.

There are a few ways around this. You could opt for an 'active' USB extension cable. This is a cable with built-in technology designed to boost the USB signal.

MutecPower makes active USB 3.0 extension cables up to 30m long (£97 from www.snipca.com/42923), but this route can be costly and is not guaranteed to work with every device.

Another option would be to extend your connection via a powered USB hub. A basic device like the RSHTECH Aluminum 4-port USB 3.0 Hub (£20.99 from www.snipca.com/42925, pictured below) would effectively allow you to double the maximum USB length.



Using RSHTECH's four-port hub effectively lets you double your maximum USB length

HDMI

As with USB extenders, an HDMI extension cable will have a male connection at one end and a female at the other, such as the Rhinocables Gold High-Speed HDMI Extension Cable, which starts at £4.99 for 0.5m (www. snipca.com/42926). Alternatively, you could go for a female-to-female HDMI coupler, such as the Amazon Basics HDMI Coupler (£5.49 from www.snipca. com/42927), to string your existing HDMI

Should you extend your cables wirelessly?

In an ideal world you would be about to cut the cable and link faraway devices via an ad-hoc wireless connection. There are products that claim to achieve this, but they're often expensive, erratic and complicated to set up.

For example, you can connect a USB device to your computer over a network via a technology called 'USB over IP'. StarTech.com's Gigabit USB-over-IP device server (£82 from www.snipca. com/42933) claims to provide "a simple and convenient way to extend and share a USB device over long distances". But a quick look at the user reviews ("flakey,

cables together.

Another great use for an HDMI extension cable is to provide easier access to sockets that are hard to reach. If your TV is close to a wall, for example, permanently plugging in an extension cable can prevent you having to feel around for the right socket when you need it. For this, you may only need a shorter extender – something like the VCE 14cm HDMI Extension Cable (£3.99 from www.snipca. com/42928, pictured right) should do the trick.

The good news is that, unlike USB, HDMI has no official length



restrictions. The bad news is that the longer your extension, the more likely it is that your video will show signs of degradation. As a general rule, around 9m (including the length of the original cable and the extension) is about the limit for HDMI. To go beyond this, you could consider buying an HDMI extender,



Use this modem-extension lead to move your router and get a stronger Wi-Fi signal

unreliable and awkward") will tell you to be extremely wary.

Similarly, you can get wireless HDMI transmitters, such as the Redlution 4K Wireless audio Transmitter BIN-850 kit (£110 from www.snipca.com/42935), which is effectively a pair of wireless bridges with HDMI connections in them. We haven't tested that particular product, but our experience with such devices is that they can be fiddly to set up and, depending on a number of factors (including the layout of your home), picture and sound quality can be disappointing.

This 14cm VCE HDMI cable gives you easier access to sockets that are hard to reach

such as the OREI HDBaseT HDMI Extender (£109 from www.snipca. com/42936), which can send an HDMI signal up to 152m over Ethernet cabling.

ETHERNET

Extending a wired network connection is cheap and straightforward. All you need is a product like the Rhinocables Ethernet RJ45 Extension Cable (from www.snipca. com/42930). Prices start at £5.49 for 0.5m and go up to £11.99 for 10m.

Ethernet cable length maxes out at around 90m. If you need to extend further than 10m – to get your internet connection all the way to your home office in your garden, for example – then we'd suggest running a length of Ethernet cable (the heavy-duty waterproof sort, if you're connecting outdoors) to an Ethernet switch, such as the five-port TP-Link TL-SG105S (£16 from www.snipca.com/42931), as a way of bridging the gap between your router and your far-flung wired network devices.

ROUTER

Positioning your router centrally in your home is key to improving Wi-Fi coverage, but the short ADSL cable supplied with most models means you're often restricted to keeping it within a few feet of wherever your telephone master socket is – unless you extend it with a cable like the Aquarius ADSL RJ11 (www. snipca.com/42932, pictured left). Available lengths range from 3m (£4.89) to 10m (£4.99).

Problems Solved

PROBLEM OF THE FORTNIGHT

Why does my IP address show the wrong location?

I make use of the What Is My IP Address? (WIMIPA?) website, at www.

whatismyipaddress.com, which shows that my IP address changes. Sometimes it says I'm in London, but I live in south Wales. When I use the Update My IP Location option, I correct my location to south Wales. However, when I check again later the IP address is still shown as London.

What is going on?

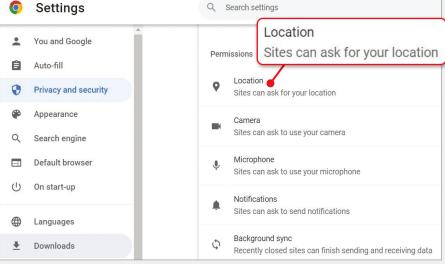
Steve Hughes

What's going on is that your internet service provider (ISP) issues 'dynamic' IP addresses. These can change at any time on the ISP's command, typically once a week, or once a day. Moreover, while an ISP will generally try to assign individual subscribers with IP addresses that at least approximate their real-world location, this is by no means a given. If the ISP has issued to other subscribers all the 'south Wales' IP addresses it controls, then you'll end up with one that is tied to a location that is geographically more distant.

Most of the time, for most users, a dynamic IP address is fine – and they are commonplace. A static alternative, which won't change unless you ask for a change, generally commands a premium fee.

But a problem can arise when there's a benefit to having a geographically





In Chrome, click Locations under Permissions to see your location options

accurate location. That typically means a benefit to you, as the user, but plenty of websites benefit from knowing your location – if you let them. Google Maps (www.google.com/maps), for example, has obvious and legitimate reasons for wanting to know a connected device's location.

We say all this because, while we're not suggesting that WIMIPA? (pictured below left) is doing anything underhand with location information, by clicking the Update My IP Location link on its website you are not changing your ISP-issued dynamic IP address (or notional geographical location of that IP address). Rather, you're allowing the site to access to other methods your web browser has for identifying your location.

We'll come back to those methods, and how to manage them. But, to be clear, letting WIMIPA? know your precise location is of no practical benefit to you, and would anyway be 'useful' only on the WIMIPA? website.

If you want to change your IP address so that it better reflects your real

geographical location, and ensure that it doesn't change, then only your ISP can do that. Contact them and request a static IP address (and, as noted, be prepared to pay for the privilege).

Finally, you should know that web browsers use multiple methods to determine your location. The IP address is available to any website you visit (unless you're using a VPN to mask it), but other methods are just for your benefit, and some websites may ask for permission to use them. You can manage which are allowed to do so.

In Chrome, first open the menu (three dots, top right) then choose Settings, followed by 'Privacy and security' and then 'Site settings' and then, under Permissions, click Location (see screenshot above). In Edge, open Settings in the same way, then click 'Cookies and site permissions' and then, under 'All permissions', click Location. In Firefox, click 'Privacy & Security' and then, under Permissions, and next to the Locations label, click the Settings button.

Is it safe to continue using Windows 8.1 after January?

As far as I'm concerned, Computeractive is the only place for common-sense advice. That's why your recent story about the impending end of Windows 8.1 support was interesting to me. Our very small business relies on this, and it's been a good workhorse. We don't need anything more modern or complicated to do the iob, hence my hesitation to use Windows 10. We don't do internet banking on either of our PCs and they do not hold sensitive information. Plus, with so few users now, I can't imagine scammers will waste time hacking Windows 8.1. After support for it ends, Windows 10 and 11 are ripe for plunder. We have Avast protection and were thinking of continuing. What do you think?

Oliver Rogers

Your hope that the attention of hackers will move on from Windows 8.1 is not without merit. After all, few serious scammers

say. However, as we noted in our News report in Issue 635, Windows 8.1 still makes up around three per cent of the total user base for the Windows operating system (see screenshot right) – and any percentage of a very large number is still a large number. Microsoft reckons some 1.5 billion people use Windows overall, so there could be 45 million folks still using Windows 8.1. We'd say that's plenty enough to motivate hackers, especially with Microsoft planning to end security updates come January.

would bother targeting Windows 98,

But, as we've mentioned regularly in relation to support ending, what Microsoft says and what it does aren't always the same. The company has repeatedly fixed major flaws in older operating systems for months and even years after the scheduled end of support. We imagine it would do the same for Windows 8.1, should a major hole be exposed – because the cost of not doing



Windows 8.1's market share is just over three per cent, or around 45 million users

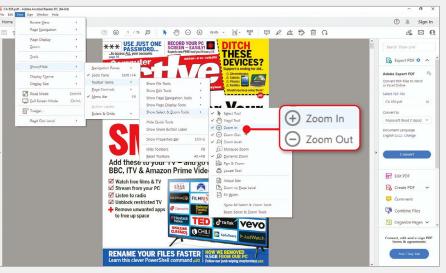
so would be mountains of bad publicity from millions of angry users.

So, given the way you use the PCs – and with your antivirus software kept up to date – we think you'll be all right for a while yet. However, we'd encourage you to upgrade to Windows 10. It has proven itself reliable and isn't all that hard to learn. Moreover, it's still a free download (from www.snipca.com/42862) and Microsoft will keep releasing security updates until October 2025, at least.

Where's my magnifier gone?

As a longstanding reader, I hope I can ask two simple questions. First, with regard to File Explorer in Windows, I feel sure that you have mentioned superior alternatives, but I can't find the reference. Second, with Adobe Acrobat Reader, I've always been happy with this, until recently. That's because it's stopped showing a way to magnify the view shown, which to my ancient eyes is anyway only just legible. Is there a setting I've missed or lost? Or has that resizing feature been removed? Ray Magill

Over the years we've recommended numerous alternatives to File Explorer, so we don't know if there's a specific one you have in mind. However, a current favourite of ours – and one we've recommended a few times recently – is



In Reader, select which Zoom tools you want to appear as defaults in your Reader toolbar

Files App. This is a free download from www.snipca.com/42861.

As for your Reader problem, this is pretty straightforward to resolve, though we're not sure exactly which of the various magnification tools you're missing. To figure it out, in Reader, open the View menu, then point to 'Toolbar Items' followed by 'Show Select & Zoom Tools'. In this submenu you'll find a variety of tools, with Zoom In and Zoom Out being the default ones (see screenshot above).

Just click to tick the ones you want to appear on your Reader toolbar and that's that.

Problems Solved

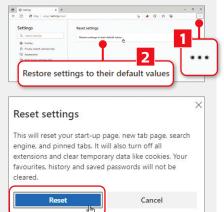
Why are PDFs opening in the background?

Until recently, when I selected a PDF file it opened in front of the folder. Now, it opens behind the folder, so I have to close or minimise the folder before accessing the document. This doesn't happen with Word documents, for example. My laptop runs Windows Pro 10, and the PDFs open in Edge. Bob Shilson

This is definitely odd. Windows doesn't have any built-in options to have particular windows stay on top or open behind others, so we're not too sure what's going on here.

We're not clear if it's just PDF documents that are affected or whether Edge itself launches behind other windows. In the first instance, we'd try resetting the browser to see if that fixes the problem. First, open the Edge menu button (three dots, top right, **1** in the screenshot below) and then choose Settings. Next, on the left, click 'Reset settings' and then, on the right, click 'Restore settings to their default values' **2**. Then confirm by clicking the Reset button (see screenshot bottom).

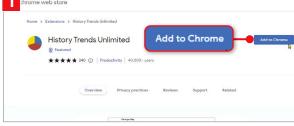
If this doesn't help, get back in touch with more details and we'll have another think. We'll also pass on any ideas that other readers offer.



Click the Edge menu button (1), select 'Restore settings...' (2) and finally Reset

Why is my internet history being deleted?

As a longstanding *Computeractive* reader, I hope you can help me. I've noticed that Microsoft Edge now deletes history older than about three months. My understanding was that all browser history is retained



Click 'Add to Chrome' to add the History Trends Unlimited extension to Microsoft Edge

unless manually deleted? I have searched various websites, but they assume you have deleted history by mistake, and the proposed remedies do not work for me. Stephan Flubacher

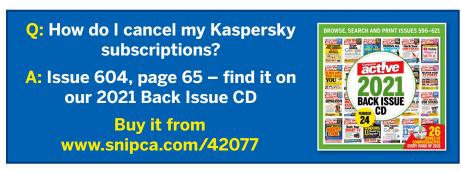
This isn't a new situation, but we suspect you've only recently noticed it. It started a couple of years ago, when Microsoft switched the 'engine' behind Edge from its own to one based on Chromium – the same underlying code that powers Google's Chrome web browser. For better or worse, the Chromium-based Edge stores history for only 90 days, just like Chrome. For now, and until such time as the Chromium engine is amended to allow this period to be extended, that's just how it is.

Of course, that's not a very satisfying situation. However, one advantage of the Chromium-based Edge is that it's now compatible with extensions designed for Chrome – and there are free tools that will fill the history gap. History Trends Unlimited, for example, will keep your history indefinitely. It's a free download from www.snipca.com/42863 (see screenshot **1**).

The only caveat is that you must click its toolbar button rather than Edge's own History option. Then, just click Search to browse your history **2**.

lhkdloeffcdi	nbgdnedheme/trends.html			Α _θ	to	
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Options			Limit results to: All time	~		6
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	Top 10 Most Visited Doma	ains	Visit Count	:		
	duckduckgo.com		12	:		
	bing.com		6			
	microsoft.com		6	i -		
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	google.com		4	ŧ.		
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	getcomputeractive.co.uk		2			
	bbc.co.uk		1			
			Filter by Domain: example.com Go	5		
	Top 10 Busiest Days	Visit Count	Daily Stats			
	Tue, May 31, 2022	8	Average Visits Per Day: 4			
	Tue, June 21, 2022	8	Median Visits Per Day: 5			
	Tue, July 19, 2022	8	Today: 8			
	Wed. May 18, 2022	6				
	Thu. April 21, 2022	5				
	Mon. June 06. 2022	4				

History Trends Unlimited keeps your browser history indefinitely - hit its toolbar button to view



Should laptop batteries be removed?

I've had laptops since the late 1980s, including a Toshiba T3100 (pictured) that was mains only! People say that a battery's life is shortened every time it's recharged. This is great because I can plug my laptop into the mains all day and the battery is never used, or charged, so its life is never depleted.

In the past I've removed the battery and run a laptop on the mains alone, but modern machines don't have removable batteries. The best part of the deal is that I am effectively running my laptop off the mains with an uninterruptible power supply (UPS). Does everybody do this, or is there a counter-argument?

John van Someren

It's an age-old concern, but the answer has evolved. The ability of any rechargeable battery – even a modern one – to store power diminishes over time. That happens even if the battery is not used, albeit very slowly. However, each charge-discharge cycle degrades the capacity a little more. Eventually, a rechargeable battery is simply unable to retain sufficient charge.

However, technology doesn't stand still. Today's batteries are hugely more efficient and resilient than those of yore, and modern

computers are also much better at managing the charging process.

In theory, occasionally disconnecting a removable battery from mains power could extend the expected life cycle a little. However, given that most laptop batteries are rated to last many hundreds of full charge-discharge cycles – and that



The Toshiba T3100, released in 1986, was a 'portable' PC that nevertheless relied on a mains power supply

both Windows 10 and 11 are good at automated battery management – it's not worth worrying about.

Besides, as you note, having a UPS effectively built in is one of the joys of using a laptop – and we'd say that peace of mind outweighs any concerns about diminishing battery life.

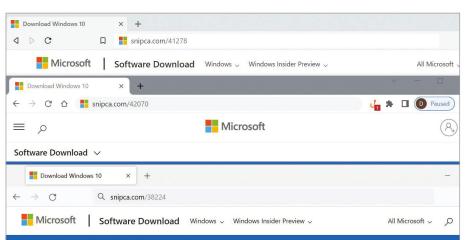
Why do your Snipca addresses keep changing?

I've noticed that when printing links to websites you mention a lot, the associated www.snipca. com address seems to change every time. For example, when talking about the Windows 10 download page in the recent past, you've published www.snipca. com/38224, www.snipca.com/41278 and www.snipca.com/42070. All still seem to work but all link to the exact same page (see screenshot). So why do you keep altering the Snipca code? It seems like a waste of time to me!

David Marks

On the surface, what you say is correct: it does seem like wasted effort creating new shortcuts for a website address that we refer to regularly. However, there is a good reason why we do this – and that's because we have no control over the long URLs to which our snipca addresses point.

Now, while it's true that the Microsoft website hasn't for a long while changed the long URL for that Windows 10 page,



Download Windows 10

Before updating, please refer to the Windows release information status for known issues to confirm yo These three Snipca URLs all redirect to the same Windows 10 download page

there's no guarantee that it won't do so tomorrow, next week or next year. So, if we were to routinely reuse old Snipca codes, that little bit of laziness could catch out both us and our readers. We might very occasionally publish an 'older' Snipca address, but the more aged they get, the less likely we are to publish them.

Our Snipca shortcuts won't ever 'run out', so we believe our general strategy of creating fresh ones for each new issue is the most sensible approach.

Problems **Solved**

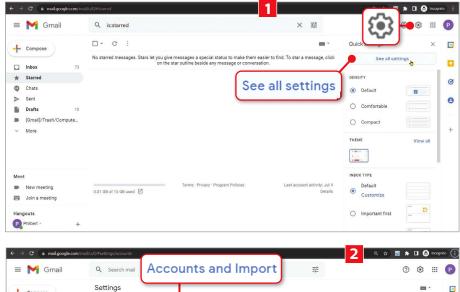
How do I stop Gmail grabbing my BT Mail messages?

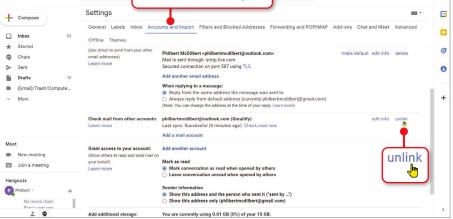
I use BT Mail, which is my preferred email service. I also have a Gmail account used only for setting up a new Chromebook recently. During that, in error, I altered some or other setting so that now all of the incoming emails to my BT Mail are grabbed by Gmail, leaving the former empty. How can I reset things so that BT Mail once more has control of my messages?

Keith Jones

This is because you inadvertently allowed Gmail to set itself up to check mail from your BT Mail account. It's not a bad or unwanted feature, per se, but Chromebooks could be a little clearer about its effects, and if you didn't expect it then it is certainly annoying. To revert to how things were, you need to disconnect your BT Mail account from Gmail.

First log into your Gmail account in the normal way, at www.gmail.com. Next, click the Settings cog at the top right, followed by 'See all settings' (see screenshot 1). Then, select the 'Accounts and Import' tab 2, before scrolling down to find the 'Check mail from other





Go to 'See all settings' (1), then select the 'Accounts and Import' tab (2), and hit the Unlink button

accounts' heading. To the right of that, click the Unlink button and confirm by

clicking Unlink once more – and that should be that.

How do I release my Windows 10 licence?

I'm going to replace my old PC, which is too old to upgrade to Windows 11. I'd like to make use of my existing retail version of Windows 10, as I don't see the point paying again. I tried to do this on an old laptop, but it wouldn't let me remove Windows as it was the only operating system. I suppose I could just move the SSD into the new PC, but I want to install Windows on to an M.2 and use the old SSD for storage. Is there any way I can 'release' the Windows 10 licence so that I can install it on a new PC afterwards, and then upgrade that to Windows 11?

Select Windows PowerShell P5 C: \> slmgr /upk Yes, you can use Microsoft's bidden Software Licensing (see screenshot above) and press Enter. After a couple of moments, the product

hidden Software Licensing Management tool to do this, via PowerShell.

First, press Windows key+X to open the Quick Link menu and, there, click 'Windows PowerShell (Admin)'. Then, in the PowerShell window, type slmgr /upk (see screenshot above) and press Enter. After a couple of moments, the product key will be duly 'uninstalled' from the current Windows setup, freeing it up for use on your new computer.

If you want to know why your computer can't upgrade to Windows 11, ask us and we'll explain in this box every issue ?;

WHAT'S THE DIFFERENCE BETWEEN... Normal Windows 11 and Windows 11 in S mode?

My wife and I recently bought new Windows 11 laptops. I tried to download an office suite but it failed, telling me that it was because the machines are in 'S mode'. It says I can switch that, but that could put my computers in danger. At nearly 80, we don't really understand. Is this Microsoft's way of getting users to pay for Office 365? My Windows 10 computer downloaded a free office suite five years ago, without a problem – though I'm told it's also in S mode.

With so many versions of Windows and Office to consider, we understand your confusion. To summarise, S mode is a version of Windows that affords Microsoft extreme control over the operating system. This includes restricting app installations to those 'approved' by the company – meaning only apps found in the Microsoft Store.

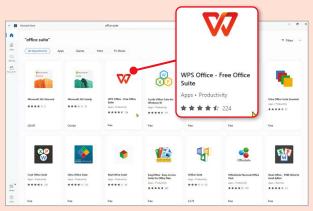
The upsides for Microsoft are obvious, but there are benefits for users too. A Windows PC in S mode is so heavily locked down that it's almost impossible for it to be infected by malware. But a downside is, as explained, that you can install only Microsoftsanctioned apps.

Disabling S mode would allow you to do anything you want with your PC, including the possibility of exposing yourself to dodgy downloads. That is the full and 'normal'

Windows experience. If that's what you want, switching out of S mode is both free and easy – but it's a one-way process (so you can never go back).

To do this, first click Start followed by the Settings cog, and then System followed by Activation. Now click to expand the 'S mode' section and, there, click the Open Store button. Finally, in the Microsoft Store, under 'Switch out of S mode', click the Get button.

Alternatively, you can stick with S



A popular alternative to Microsoft 365 is 'WPS Office – Free Office Suite', which is downloadable from the Microsoft Store

mode and download all your apps from the Microsoft Store. Yes, the company will happily sell you Microsoft 365 (the new name for Office 365), but there are free alternatives. Just search for 'office suite'. A popular option is WPS Office (pictured above, www.snipca.com/42860). Perhaps this is what you installed on your old Windows 10 PC, via the Microsoft Store?

Want to know the difference between technical terms? Email noproblem@ computeractive.co.uk

Why is LibreOffice Writer showing empty image frames?

I've had a continuous subscription to *Computeractive* for the past 11 years, not least because I enjoy the endless solutions to problems others have written to you about.

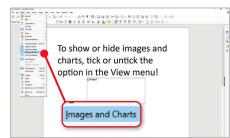
Now I find I need some help. I have a problem with LibreOffice Writer. When I try to import images into a Writer document, all I get are empty frames as placeholders.

I have tried looking through LibreOffice's own Help pages and I found a result that said: "If the Images and Charts icon on the Tools bar is activated, no graphics are displayed – only empty frames as placeholders".

Fine, but how do I deactivate the 'Images and Charts' icon in order to import images?

Any advice you can offer would be greatly appreciated.

Bryan Oldaker



Go to LibreOffice Writer's View Menu and select 'Images and Charts'

Help is only helpful if it's both up to date and accurate. We're not sure that the LibreOffice Help page you found, at www.snipca. com/42864, is either. The icon depicted in this guide is in fact the Show Draw Functions tool, at the far-right of the toolbar – and it doesn't control the function you need!

So, that's a double failure to help with your problem. Fortunately, the solution is

straightforward, with the right directions.

All you need to do is open the View menu and, there, click to tick the 'Images and Charts' option (see screenshot left).

For those wondering why this option even exists, it's because a document with a lot of images (or charts) can soon become slow to navigate.

Next Issue

- Can I run Windows 11 on a Chromebook?
- Can I block all email promotions?
- Can I still activate Windows 7? ...And many more

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Having a problem with our recommended software or expert tips? Email **editor@computeractive.co.uk** and we'll do our best to help

How can I convert ebooks in Calibre?

Following your recommendation of Calibre 6.1 (www.snipca. com/42716) in Issue 637 (page 18), I find it impossible to convert Kindle ebooks so I can add them to Calibre's library. Also, the text-to-speech function sounds great, but I can't use it with many books. Can you help?

Hilary Munday

It is possible to convert Kindle ebooks to other formats using Calibre. However, it involves installing a third-party plug-in designed to strip out the Digital Rights Management (DRM) used to protect Amazon's ebook files, and this would break copyright law.

As for Calibre's Read Aloud function, this relies on Windows' own text-tospeech feature and whether this has been configured correctly. To check, click Start, Settings, 'Time & Language', then Speech and make sure 'English (United Kingdom)' is selected under 'Speech language' and that there's a voice shown under 'Choose a voice'.

If these options are greyed out, you'll need to install speech for your Windows language pack. Again, click Start, Settings, then 'Time & Language'. In Windows 10, click Language on the left, then click where it says 'English (United Kingdom)' below 'Preferred languages' and click the Options button that appears.



Check that Speech is downloaded in Windows' language options so Calibre's Read Aloud feature can work

In Windows 11, click 'Language & region' on the right, then click the three-dots button next to 'English (United Kingdom)' and select 'Language options'. In both cases, look next to Speech – if it's not installed, you'll see a Download button here (see screenshot below left). Click this to install speech on your PC. You may need to reboot your PC.

Bear in mind that Read Aloud won't work with DRM-protected content, such as Kindle ebooks. Instead, install the Amazon Alexa app on your phone or tablet and sign in with the same account you use for Kindle. Once it's set up, tap the Play button. Scroll down and you should see your Kindle library. Tap 'See All', find the book you want and tap it, then choose This Device (or another Alexa device, if you have one) from the Play On options.

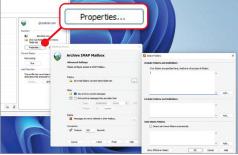
What does 'ERROR 189' mean on my smart TV?

I'm trying to install apps on my Samsung smart TV, as explained in Issue 636's cover feature, but I keep getting an 'ERROR 189' message. What does that mean?

Ronald Lucia

It means that your TV can't contact Samsung's servers. This could be because it has lost its connection to the internet, so the first thing to check is whether you can stream from within your TV's built-in apps, such as BBC iPlayer. If that works, it means your TV has an active internet connection but is having problems connecting to the app store. Try turning your TV off, unplugging it from the mains, then plugging it in and turning it on again.

If that doesn't work, check whether your TV is running out-of-date firmware. On most recent Samsung TVs, you can find the firmware version by opening the Settings menu and choosing Support, then either Software Update or About



Add your Hotmail account, then click Properties to select which folders you want to archive

This TV. The easiest way to check whether there's a new version available is to go to Software Update and select Update Now.

Another possibility is that your Samsung account has become corrupted. Samsung TV owners with similar problems have reported that changing their Samsung account password fixes this. Sign in at https://account.samsung. com – click Security, then 'Change password' and follow the prompts.

How can I back up selected Hotmail folders?

I use Hotmail web-based email and would like to back up only certain folders in my email account, for archive purposes. Is this possible using MailStore Home, which you recommend in Issue 621 (page 19)? Tom Thurrell

Yes, you can use MailStore Home (www.snipca.com/42973) for this. Start the program and add your Hotmail account by entering the address under E-mail Account and clicking Start. Sign in with your Hotmail password when prompted and finish setting up. By default, the tool will archive all folders, but you can change this by selecting your Hotmail account under Profiles, then clicking Properties on the right. Click Next, then click the three dots next to Folders. Here you'll be able to specify which folders you want to include (or exclude, if that's easier).

Jargon Buster

1080p Of the common types of high-definition video, this is the best quality: 1920x1080 pixels.

1440p High-definition video of 2560x1440 pixels.

4K Video with a resolution of at least 3840x2160 pixels.

8K Video with a resolution of 7680x4320 pixels. Currently the highest resolution available.

Active cooling Using fans to reduce the heat of computer components.

AI Artificial Intelligence. Intelligence demonstrated by a machine rather than a human being. Often used to describe technology that can perform human-like tasks.

APK Android Package Kit. The file format Android uses to install apps.

Aspect ratio A measurement of the shape of a display. Traditional computer screens are 4:3. Widescreen displays are 16:9 or 16:10.

Benchmarking Comparing software and products with an accepted standard.

Beta A version of software that's being tested.

BIOS Basic Input-Output System. Software built into every PC that connects the vital components. It's visible for a few seconds when the PC starts.

Bitcoin A digital currency, not controlled by governments, that can be used to send money to individuals.

Blue screen of death Technically called a 'Stop error', this is shown when your PC crashes.

BMP Bitmap. A type of image file.

Bootable Describes a device or disc with system files on it so it can be used to start up your computer.

CD-ROM A CD containing data that can be read by a computer but not overwritten or erased. cd/m² Candela per square metre.
 Standard unit of brightness.

Chipset A group of microchips. Often used to refer to the chips used on a computer motherboard that link the processor with other components.

Code Describes the various programming languages used to create programs.

Colorimeter A tool for measuring the colour accuracy of monitors by calibrating its brightness, contrast and colour.

Cookie A small text file stored on your computer by a website. Used to store browsing preferences, website log-in details and so on.

Core Units on a processor that carry out program instructions.

CSV Comma Separated Value. A standard file format that can be opened by most spreadsheet programs.

DCI-P3 A colour space that has a wider spectrum than sRGB. Used by US film industry.

DisplayPort A new socket for connecting monitors.

DNS Domain Name System. A technology that associates computers with their addresses on the internet.

Driver A file that tells Windows how to work with an external device.

DRM Digital Rights Management. Software that limits the copying of a file.

Dual-band router A Wi-Fi router that operates on two bands: 2.4 and 5GHz. Wireless networks working at 2.4GHz have longer range, but are more prone to interference. Wireless networks working at 5GHz have shorter range, but tend to be faster.

Ethernet A standard used for almost all wired computer networks.

EXE A program file designed to run in Windows. Has the file extension .exe.

Firmware Basic software stored on hardware, such as a processor, to control its operation.

Fps Frames per second. Used to indicate gaming performance.

GEDCOM Short for Genealogical Data Communication. A file format used by genealogy programs to share data.

Geo-restricted Content such as TV programmes and films that's intended to be watched only in a specific country.

GHz Gigahertz. A measure of how many instructions a chip can process per second. 1GHz is equal to 1,000MHz.

Gigabit Internet connection offering speeds of at least 1Gbps (1,000Mbps).

Gigabit Ethernet A very fast networking standard that can transfer data at up to 1,000Mbps.

GitHub A place where software developers can share code, and where users can download programs. Owned by Microsoft.

Graphics card A component in a computer that produces the image shown on the monitor.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

Heatsink A block of metal used to help dissipate the heat from a computer chip.

HTML Hypertext Markup Language. The language used to write most web pages.

Hz Hertz. Measures the frequency something happens: 1Hz equals once a second.

IP address Internet Protocol address. A unique set of numbers used to identify computers and websites on the internet.

IPS A screen technology. Monitors that use it have wider viewing angles and more accurate colours than monitors that do not use this technology.

JPEG Joint Photograph Experts Group. A common type of image file created by most digital cameras. Some image quality is lost with each save.

LED Light-emitting diode. An electronic device that emits light. Used on almost all electronic devices, and to provide the backlight for some LCDs.

M.2 A standard specification for internal PC expansion cards and connectors.

MicroUSB A miniature version of USB, often found on smartphones, tablets and portable hard drives.

NET Framework Microsoft's tool for building software.

Network adapter A socket for connecting a PC to a network or some broadband internet connections.

OLED Organic light-emitting diode. A thin-film organic lightemitting diode used in computer displays and television screens.

Open source Software that can be modified by anyone, rather than just by the employees of the company that created it.

Partition A large hard drive can be split into two or more partitions or 'virtual' drives.

Passive cooling Cooling a computer by slowing the speed at which components such as the processor operate. Contrasts with active cooling, which often uses fans to cool the components.

Plug-in A small program that adds extra features to software or to your web browser.

PNG Portable Network Graphics. A format for images that shrinks file sizes using compression but without discarding any data.

PowerShell A Windows tool for automating commands.

Product key A unique serial number issued by software companies that must be typed in by the user before a program will launch for the first time. **Proxy server** A computer that sits between your computer and the internet and filters the connection.

PUP Potentially unwanted program. A program that may not be desired, despite the user consenting to it being downloaded.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on.

Ransomware Malware run by hackers who lock files on your PC and demand a payment to release them.

Refresh rate Measured in Hertz (Hz), the number of times per second that the image on your monitor is redrawn. Slight changes in the image each time it is updated combine to give the illusion of movement.

Refurbished A second-hand device that has been repaired by its manufacturer so that it can be resold and reused.

Response time How fast a coloured pixel turns to white and back again.

RGB image A colour picture created on a monitor, by combining a value for red, green and blue channels to determine the colour of each individual pixel.

Roaming charge Fee incurred for using your phone to receive data through overseas mobile networks.

Sideload To install apps without using the official Android or iOS stores.

Sound card An expansion card that lets a PC create game sound effects, music, and so on. Almost all PCs have a sound card built in but more powerful sound cards can be bought and fitted.

SQLITE A database stored in a file.

sRGB A standard RGB colour space for use on monitors, printers and the internet.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts.

System restore point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

TPM Trusted Platform Module. A chip that allows your hardware to perform security-related tasks.

Tri-band A router that broadcasts on three radio bands – one on 2.4GHz, two on 5.0GHz.

Trojan A malicious computer program that's disguised as a different, harmless program. For example, a Trojan may be disguised as a game but it's actually a program that steals your internet username and password.

Two-factor authentication

A system that uses two different means to identify the user. For example, a code sent to your phone in addition to a password. **UEFI** Unified Extensible Firmware Interface. A modern replacement for the BIOS.

Ultrawide Offering a field of view that's wider than traditional digital cameras.

UPS Uninterruptible Power Supply. A device that sits between a computer and its main power supply to provide a (usually brief) emergency power supply in the event of a cut.

USB-C A new connector that's reversible.

VPN Virtual private network. Keeps all internet communication safe and private.

Wi-Fi 6 Wi-Fi standard with speeds up to 10 times faster than 802.11ac. Also called 802.11ax.

Widget A small program such as a calendar that runs on the Windows desktop.

ZIP file A file that contains compressed documents or files.

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Easy when you Know How



Wanting to browse the web privately on his big screen, **Robert Irvine** tries to...

Install Brave on a smart TV

he first web browser I ever used was Netscape Navigator 3, back in 1997. As my window to the exciting new world of the internet, I have fond memories of waiting for it to slowly load poorly designed pages piece by piece, before crashing and taking my Mac with it. Once I moved to a Windows 98 PC, I became a devoted Internet Explorer user – which was the style at the time – and stuck with it until IE7, which I still maintain was a great browser, even if it did copy most of its features from Firefox.

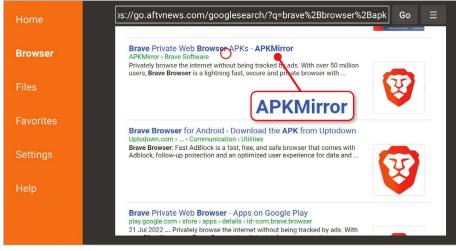
Nowadays, I switch between eight or nine different browsers on my computer, phone and tablet, and the idea of limiting myself to one would be like eating nothing but chips for the rest of my life. Still, if I had to pick a favourite browser, it would be Brave (https://brave.com), which automatically blocks annoying ads, trackers and cookies.

Limiting myself to one browser would be like eating nothing but chips for the rest of my life



So I was intrigued by a recent email from *Computeractive* reader Tony Shapps, which asked if it was possible to install Brave on your smart TV. As my Google TV doesn't have a browser installed, and Brave is ideal for private, bother-free browsing on a big screen, this seemed like what Americans call a 'no-brainer', so I resolved to find out.

My first stop was to check if the Brave



Robert found a way to install Brave on his smart TV, but there was one big problem

app for Android could be installed directly from the Google Play Store to my TV. This seemed too simple to be true, as indeed it was because the name of my TV was greyed out when I clicked 'Install on more devices' on Brave's store page (www.snipca.com/42906), with the message "this item is not compatible with your device". Nor was Brave available when searching my TV's app store.

This left me with no choice but to try to sideload an APK of the app. To do so, I first needed to unlock 'Developer options' on my Google TV. I opened Settings from my profile menu on the home screen and chose System, then About. I scrolled down to 'Android TV OS build' at the bottom of the list and kept selecting it until the message "You are now a developer!" appeared – well, I've been called worse.

Next, I installed an app called 'Downloader by AFTVNews' from the app store (www.snipca.com/42945) – it's also available for Fire TV devices (www. snipca.com/42473). I went back into Settings and chose Apps, then 'Security and restrictions' and selected 'Unknown sources'. I switched on permission for Downloader to install unknown apps, then returned to my apps screen and opened the Downloader app. I typed Brave browser APK into Downloader's search box, selected the APKMirror result (see screenshot) and chose the most recent version of Brave. I then pressed See All Available Downloads and selected the download button next to the top-listed APK file. This took me to yet another download page where I chose Download APK. Finally, something happened and the file downloaded successfully.

Suspecting that all this hassle may have been a waste of time, I tentatively pressed Install then Open and was delighted when Brave launched on my Google TV. Its interface was initially narrow and vertical as if I were using the app on my phone, but once I'd skipped through the setup steps, it switched to a full-screen horizontal view.

A much bigger problem was that there was no equivalent of a mouse cursor to select menu items, click links or activate the keyboard to enter web addresses – all I could do was scroll up and down. Sadly, there's no way around this until a proper smart TV version of Brave becomes available, but to answer Mr Shapps' original question: yes, you can install the browser – you just can't do much with it.

Need help installing browsers on your TV? Let us know: noproblem@computeractive.co.uk



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