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Master WINDOWS 10 2020

The 10 most powerful NEW features you'll need to know inside out – start on page 50



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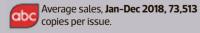
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From the Editor

Windows 10 has been with us for nearly four and a half years, which feels like several millennia in computer years. In the history of Windows, only XP has survived for longer as the most current version - and Windows 10 will overtake that in August 2020.

But the Windows 10 you're using now is different to the one that came screaming into the world on 29 July 2015. It may look the same, but Microsoft has since added loads of new tools that you can't afford to ignore. Our Cover Feature will show you the best ways to

master these, whether you upgraded back in 2015 or more recently.

If you're planning to buy a new Windows 10 PC when support ends for Windows 7, turn to page 70. We're selling Laplink PCmover for half price – it'll move all your files to a new PC.

Daniel Booth

editor@computeractive.co.uk

• **PS**: I'm glad to say we've got a new batch of Back Issue CDs on Amazon: www.snipca. com/30307.



THIS ISSUE IN NUMBERS



Number of inks the five-star Epson Expression XP-8600 printer uses - p26

4.128

Days a reader has been a Computeractive subscriber (worked out on Windows Calculator) - p42

£1.250

Price of the Palicomp AMD Navigator, our favourite PC of 2019 - p24

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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The 10 most powerful NEW features you'll need to know inside out



The top stories in the world of technology

W7 remains stubbornly popular as the end looms

ewer people appear to be upgrading their computers from Windows 7, with just weeks to go until Microsoft ends support for the 10-year-old operating system.

According to research for

WHAT WE THINK

With the election still fresh in the memory, let's pay tribute to Peter Snow's 'just a bit of fun' swingometers. If we project these figures a year into the future, Windows 7 will still be running on 14 per cent of computers. That's 210 million devices left wide open to attack. You can continue to run Windows 7 safely (as we'll explain in our next issue), but you can't take the decision lightly. Meanwhile, expect Microsoft to intensify its campaign to persuade people to upgrade. But will it win your vote?

November, Windows 10's market share of Windows computers fell by nearly one per cent, following large rises since the summer. It's the first time since February that Windows 10 has failed to increase its market share.

The figures, from analysts
Net Applications, also show
that the sharp drop in
Windows 7's market share has
stalled. In the four previous
months its share fell by a
massive 8.5 per cent, as
Windows 10 increased its lead.

But in November Windows 7's share fell by just one per cent. It now runs on 31.2 per cent (around 500 million) of all Windows computers worldwide.

This pattern echoes what happened to Windows XP in the months before Microsoft axed support in April 2014. Following large falls, XP's worldwide share in February 2014 actually *increased*.

In most months the



popularity of Windows 7 and 10 are directly related, with the former falling and the latter climbing.

However, the long-term popularity of Windows 10 seems assured. It remains the most popular version, on 46 per cent, having overtaken Windows 7 in December 2018.

If 2019's trend continues, by January 2021 it will be running on more than 86 per cent of Windows computers, and will overtake XP's record of 90 per cent (set in 2007) three months later.

With Microsoft not planning a successor to Windows 10, the operating system should eventually reach 100 per cent.

In total, Windows now powers 86.1 per cent of the world's personal computers, with macOS, Linux or Chrome OS running on the others.

 See 'Windows 7 users should bow to inevitable and upgrade' – Letters, page 13.

Openreach stocks up for winter woes

penreach has stocked up on 62,000 kilos of rock salt and 1,700 snow shovels to help its engineers fix problems and lay broadband during periods of extreme weather this winter.

It has also bought 3,400 ice and snow grips for footwear; 3,500 sets of snow socks for van tyres; 20,000 litres of screenwash; and 20,000 de-icer sprays.

In addition it has prepared a fleet of 4x4 vehicles in areas that have "proved susceptible to storms and wild weather in



recent winters", helping engineers reach isolated communities quickly.

An Openreach spokesperson said: "It's impossible to predict what kind of winter we're going to have, but we're doing everything we can to prepare for the worst it can offer".

Openreach said that anyone spotting damage to its network, such as dangling cables from telephone poles or missing manhole covers, can report it online at www. snipca.com/33499 or by calling

0800 023 2023.





More homes have smart TVs, but fewer have desktop PCs

ales of smart TVs and web-connected speakers like Amazon Echo and Google Home have risen sharply in the past few years, while sales of desktop PCs continue to fall, according to new research.

Ofcom's 2019 Tech Tracker survey found that 48 per cent of UK households now have TVs that connect to the internet, up from 42 per cent in 2018, and just five per cent in 2012. The number of homes with 4K TVs has more than doubled in the past two years, from 17 to 35 per cent.

Meanwhile, voice-controlled smart speakers are now found in a fifth of homes, up from 13 per cent last year. Smart watches have jumped from three per cent in 2015 to 23 per cent in 2019.

However, sales of more traditional technology devices show no sign of improving. In 2008, nearly 70 per cent of homes had a desktop PC: that



figure is now just under a quarter.

The popularity of music and TV streaming has led to a big drop in the number of homes with MP3 players and DVD players. But laptop ownership has stayed steady at around 60 per cent since 2012, suggesting people haven't lost their interest in computing.

Tablets and ebook readers also remain popular, with 54 and 25 per cent of homes

respectively owning one, showing hardly any change in the past five years.

For the first time Ofcom asked people whether they used 'smart home' devices to control utilities, such as heating and lighting, or to see who's at the front door. Eight per cent of people said they do.

Would you like to see more coverage of smart TV and speakers in Computeractive? Let us know: letters@computeractive.co.uk

IN BRIEF

NOVEMBER UPDATE BREAKS FILE EXPLORER

Some Windows 10 users are reporting that the November Update is freezing File Explorer when they type in the search box. Many have complained on Microsoft's community forums (www. snipca.com/33439) that they've had to force-restart Windows to get back control of their computer. Microsoft has yet to acknowledge the problem.

MOVE FACEBOOK PHOTOS TO GOOGLE

Facebook has released a tool that lets you move your photos and videos to Google Photos. For now it's available only in Ireland, before being refined and launched worldwide in 2020. The tool is part of the Data Transfer Project, set up by Google in 2018 to make it easier to switch files between services.

Send fewer emails to 'save planet'

omputer users have been urged to send fewer emails in order to help save the planet, after research shows people in the UK send 64 million "unnecessary" messages every year.

Researchers say one- or two-word replies such as 'thanks' or 'you too' are mostly pointless. If everyone sent just one fewer email every day it would help cut the UK's carbon footprint by 16,000 tonnes per year, they claim.

They say that in one year the energy produced by email servers, networks and systems creates a carbon footprint equivalent to 81,152 flights to Madrid.

The study, commissioned

by energy company OVO and led by Professor Mike Berners-Lee of Lancaster University, found that 49 per cent of Brits say they send emails to colleagues and friends within talking distance every day.

Nearly three-quarters of people aren't aware that sending emails leaves a carbon footprint.

Professor Berners-Lee, whose brother Tim invented the World Wide Web in 1989, called the figures a "broad estimate" of the environmental impact of emails.

He said: "The carbon happens when you're at your machine, when you're tapping your email out, and then you



send it and the network uses some electricity to send it, and then will end up being stored in the cloud, which again will take up electricity".

He added that while we're more efficient at storing data, we've become less disciplined at using it.

• See 'What's all the Fuss **About' on Smart Compose,** page 49

TOMORROW'S WORLD





News

IN BRIEF

AMAZON ALEXA TO SOUND HAPPY OR SAD

Amazon's Alexa can now sound excited or disappointed depending on the news it's speaking. It has added a "happy/excited" and a "disappointed/empathetic" voice to use at appropriate times, such as when giving your favourite team's sports score. To hear them, visit Amazon's blog (www.snipca. com/33435), scroll down to **How Alexa Emotions Work** and click one of the links. The voices will be added in the US first, but will probably be released worldwide soon.

MOZILLA RANKS 'CREEPY' XMAS GIFTS

Firefox maker Mozilla has rated the security of 2019's most popular electronic gifts, judging their potential to invade your privacy. Each is given a 'creepiness' rating, from 'Not creepy' to 'Super creepy'. Devices such as the Kindle and Apple Watch are deemed safe, while the Ring Video Doorbell gets the thumbs down. See the guide at www.snipca.com/33440.

THE WORLD'S GONE MAD!



Here's a question to make you scratch your head: why has the popularity of selfies among kids led to a rise in head lice infestations? Pharmacists say that when kids pose next to each other, gleeful lice take the opportunity to jump scalps. Look closely and you may even see them in this photo.



BT revamps speech-to-text app for deaf people

B T has launched a new service to help people with hearing and speech difficulties to communicate over the phone.

Relay UK (pictured with blue keyboard 'swipe') is a smartphone app that connects you to a BT employee (called a Relay Assistant) who will translate text to speech and vice versa. It replaces the Next Generation Text Lite app, though this service will still be available on traditional landlines.

When you make a call, you have to select which option you need: Type & Read, Speak & Read, or Type & Hear.

BT has added some useful new tools to the app, such as the option of saving conversations and letting you look up vital information discussed during the call.

You can also save commonly used phrases to quickly add into conversations. This will prove handy when companies ask for your name, address



and date of birth.

BT has built the app on behalf of deaf groups including Action on Hearing Loss, UK Council on Deafness, and National Deaf Children's Society.

BT said only one in 20 people who are deaf or have

hearing loss can complete tasks over the phone. The figure comes from a survey it conducted with the UK Council on Deafness, which found that 70 per cent of respondents ask friends or family for help when making calls.

Jesal Vishnuram, Technology Manager at Action on Hearing Loss, said that using the phone is a "big barrier" to communication for the 12 million people in the UK with hearing loss.

She said Relay UK "can be pivotal in keeping people with hearing loss and deafness in employment, accessing healthcare including emergency services and other services as well as helping to keep them in touch with friends and family".

The app is free to install, though calls are charged at the standard rate. It's available for Android and iOS (www. snipca.com/33415). A Windows version is coming in 2020.

Windows updates blocked on PCs with old Avast & AVG



icrosoft is blocking both the May 2019 and November 2019 Windows 10 updates on computers that run old versions of Avast or AVG antivirus, in order to avoid performance problems.

It said that users with Avast or AVG versions 19.5.4444.567 (or a lower number) won't be able to install either update.

The affected programs are AVG Antivirus Free, AVG Internet Security, Avast Free Antivirus, Avast Pro Antivirus, Avast Internet Security, and Avast Premier.

If you try to install either

Avast Free Antivirus / Pro Antivirus / Internet Security / Premier
Uninstall this app now because it isn't compatible with Windows 10.

Update your application to upgrade or lean more

update, you'll see a message follow instruction (www.snipca.com because it isn't compatible AVG's support pawith Windows 10' (see snipca.com/3343)

What needs your attention

saying 'Uninstall this app now because it isn't compatible with Windows 10' (see screenshot). You should see a list of programs that need your attention. If Avast or AVG appear, you should also see instructions on updating to the latest version. You can also follow instructions on Avast (www.snipca.com/33437) and AVG's support pages (www.snipca.com/33438).

This is the first time Microsoft has confirmed the problem, though some Avast and AVG users have been saying since August that they can't install the May Update.

Wi-Fi 6 factory trials hit record speed of 700Mbps

esearchers have hit speeds \mathbf{K} of 700Mbps in the first real-world trial of Wi-Fi 6.

The Wireless Broadband Alliance (WBA), an industry group promoting Wi-Fi use, claims it achieved 700Mbps while testing the new technology in the Mettis Aerospace factory in Redditch.

They performed a variety of intensive tasks designed to test the true potential of Wi-Fi 6 (technically called 802.11ax).

These included streaming 4K video from a webcam, sending large video files across a network, making a video call on a phone, and measuring machinery on a tablet using virtual reality (pictured).

Tiago Rodrigues, head of WBA, said the tests marked "a significant milestone for the adoption of Wi-Fi 6". He

explained that the Mettis factory was chosen because it's an "especially challenging environment for wireless communications, with furnaces, presses and heat, a lot of moving heavy machinery and the presence of dust and in-air particulates".

He added: "If Wi-Fi 6 can deliver highly reliable, high quality and high bandwidth communications in this type of factory environment, then it can deliver it almost anywhere".

While the theoretical top speed of Wi-Fi 6 is 10Gbps (10,000Mbps), this will be much slower in real-world environments like homes, businesses and factories.

However, this is dramatically faster than Wi-Fi 5 (802.11ac), which is



what your current router probably uses. This has a theoretical maximum of 1.3Gbps, but in reality peaks at about 200Mbps.

The main benefit of Wi-Fi 6 is that it splits the signal across multiple devices, keeping speeds fast in homes where two or more people use the internet simultaneously, particularly when streaming high-definition video.

It should become widely available to the public in 2020, when manufacturers release routers and computers that work with the technology.

IN BRIEF

PLEX LAUNCHES TV AND FILM STREAMING

Plex (www.plex.tv) has launched a new streaming service containing "thousands" of films and TV programmes. The service, which is free and contains adverts, is available through Plex's home screen. It will suggest content you might like based on your viewing habits. Read Plex's blog for details: www.snipca. com/33488.



BUY EPSON PRINTER FOR DEMENTIA DONATION

Epson is running a cashback scheme until 31 January allowing customers buying cartridge-free EcoTank printers to donate up to £50 to the Alzheimer's Society. To claim the donation and see which products are available visit www.epson.co.uk/ saveorshare. Epson says printers can make life easier for dementia patients by letting them print important notes such as medication reminders.

YORK STREET HAS UK'S **SLOWEST BROADBAND**

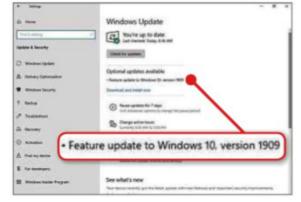
The UK's worst street for broadband is 800 times slower than the fastest, according to uSwitch's survey of households. It named Kingsclere, in Huntington, York, as the slowest, on a mere 0.22Mbps, with streets in Slough, Kilmarnock and Runcorn also among the 10 worst. Darwin Street in Livingston was the fastest at 182Mbps. Visit uSwitch's site for the full results: www.snipca.com/33483.

Microsoft forces November Update on to old PCs

icrosoft has started to force the November 2019 Update (version 1909) on to computers that haven't been updated since the October 2018 Update (1809).

Some computers still run version 1809 of Windows 10 because they've had trouble installing the May 2019 Update (1903), sometimes because they don't have enough hard-drive space to cope with the operating system.

Other problems preventing installation include antivirus software clashing with the update, and VPNs preventing Windows 10 connecting to Microsoft's update severs. Visit Microsoft's site (www. snipca.com/33504) to see its list of known problems with



the May Update, and whether any solutions exist.

Microsoft's decision to force updates comes six months before it will end security support for version 1809. It said that starting installations now will help to provide "adequate time for a smooth update process".

It has acted much earlier than it did when forcing computers running the April 2018 Update (1803) to upgrade to the May 2019 Update. It

started warning users in October that support for 1803 would end in November, then weeks later automatically installed the May 2019 Update on these computers.

The November Update contains all the

features also included in the May Update, plus several minor new tools (see page 46). If you're already running the latter, then installing the former should only take a few seconds because it's a mere 180KB in size.

But if you're upgrading from 1809 to 1909, skipping the May Update, the installation will be between 3-4GB, which is the normal size for a Feature Update.

Question of the Fortnight

Why did Windows 10 Mobile fail so badly? Microsoft has now ended support for the troubled system

s the computing world fixates on Microsoft ending support for Windows 7 on 14 January, another deadline passed unnoticed by many.

On 10 December, Microsoft pulled the plug on Windows 10 Mobile, ending the short life of a system that tried to take on the might of Google's Android and Apple's iOS, but failed miserably.

You can't blame Microsoft for trying. Its Windows operating system has dominated home computers for decades, so why shouldn't it also take over phones and tablets? In the 2000s Bill Gates and co had looked on in alarm and dismay as the upstarts of Apple and Google stole the mobile market.

It's important to remember that Windows 10 Mobile



tool – like Outlook or Word – to its mobile equivalent, so that they barely noticed they were using a different device.

f Microsoft wasn't just late for the party - it tried to attract people to its own party without getting any food, drink or music ""

wasn't Microsoft's first attempt to dethrone Apple and Google. In 2010, it launched Windows Phone, followed by an 8.1 version in 2014, but neither tempted users away from Android and iOS.

Microsoft's solution was to build a mobile system that worked more like a PC system. It launched Windows 10 Mobile in March 2016, eight months after Windows 10 arrived on computers. The aim was to make it easy for users to switch smoothly from a PC

Microsoft called these tools 'Universal Windows Apps', and hoped software developers would embrace the concept. But they didn't.

Their reluctance to buy into Microsoft's vision exposed the flaw at the heart of Windows 10 Mobile: apps designed for PC screens work very differently to those built for smaller mobile screens. Developers wanted to make apps specifically for phones and tablets, not one-sizefits-all tools for different

types of device.

Without apps, Windows 10 Mobile was always doomed. When it launched, 2.5 billion people already had a smartphone. Almost all of these ran Android or iOS, for which there were thousands of brilliant apps.

Microsoft wasn't just late for the party; it tried to attract people to its own party without actually getting any food, drink, music or balloons. Understandably, people stayed where they were.

That mistake was compounded by Microsoft's decision to make its own phones. It thought it could make a success of its Lumia range, unveiling the first batch to run Windows 10 Mobile in October 2015.

But the source of its failure lay in its slogan: "The phone that works like your PC". As Microsoft quickly learnt, customers want phones to be phones, and PCs to be PCs.

THE FACTS

- Microsoft ended support for Windows 10 Mobile on 10 December
- It will continue to provide security fixes for Office apps until January 2021
- The operating system launched in March 2016, but market share never rose above two per cent

The company later admitted that it should have focused on the operating system and let manufacturers make the phones, which is how Google has driven Android to success.

With feeble Lumia sales, it didn't take long for Microsoft to wave the white flag. In October 2017, it said it wouldn't make any new features or hardware for Windows 10 Mobile, effectively killing the system just 19 months after it was released. The party was over even before the guests had arrived.

But that's not quite the end of the story. In a surprise move, Microsoft said recently that it will continue to provide security updates for Office apps running on Windows phones and tablets until January 2021. The apps will work until this date, even if Microsoft has abandoned the operating system they run on.

This isn't Microsoft's last-ditch attempt to keep people using the system - it "strongly recommends" users switch to the Office apps on Android and iOS. It's sensible advice, though there may not be many users left to follow it.

Protect your tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Fake online stores posing as real

What's the threat?

Whether you're reading as you consider your last-minute Christmas shopping or during the January sales, you'll need to be more cautious than ever when you shop online. According to new research from US security firm Venafi, there are now four times as many fake shopping websites as real ones, double the number in 2018.

Criminals create fake stores by buying URLs that look similar to real ones, but have one or two letters different. They hope to lure shoppers who have mistyped the URL, or stumbled upon the site another way.

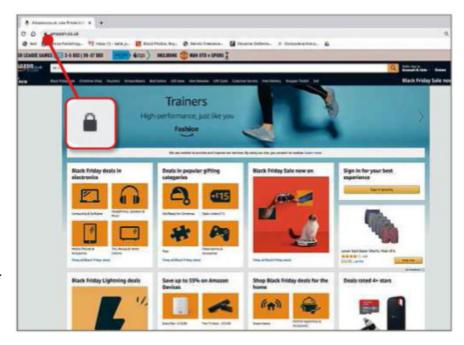
Worse still is the fact that many fake websites are making themselves appear authentic by obtaining free TLS certificates. This is the security protocol that displays the padlock symbol in your web browser, indicating that the transaction is encrypted and therefore safe.

How can you stay safe?

It's worth clearing up any confusion around that padlock symbol (see screenshot). Crucially, it can't actually guarantee that a website is safe (though obviously Amazon is). All it means is that your connection to whatever website you're visiting is secure – not that the site itself is legitimate.

Even the FBI warned about this earlier this year. TLS certificates can be obtained from places like Let's Encrypt (https:// letsencrypt.org), which will provide a free certificate to anyone who can demonstrate that they control the URL in

The simplest way to stay safe is to type



URLs perfectly every time. But that's not much comfort to those of us cursed with shaky fingers. Instead, you could consider a password manager (if you're not already using one). LastPass (https://lastpass. com), for example, protects you against fake websites by adding your password only on legitimate sites.

New tools | DuckDuckGo's Smarter Encryption

Forced Encryption

Forced Encryption

Unknown Privacy Practices

Manage Whitelist Report Broken Site

TRACKER NETWORKS TOP OFFENDERS

G 37% f 25% @ 15%

3 Trackers Blocked

Site Privacy Protection

It's easy to feel like someone's always looking over your virtual shoulder when you're browsing the web,

tracking your activity and waiting for the opportunity to grab your data. One way to curb this is to use DuckDuckGo's Privacy **Essentials Chrome** extension (www. snipca.com/33417) or its Privacy Browser mobile app (Android www.snipca.com/33418; iOS www.snipca. com/33419), which have been recently updated with a brilliant new feature. Both tools block

advertising trackers and let you search privately using DuckDuckGo's own anti-tracking search engine. The

> new Smarter Encryption feature now ensures your connection to websites is always as secure as possible. It does this by forcing a website to use HTTPS, even if the site doesn't do this by default (you'll see 'Forced Encryption' next to the padlock – see screenshot).

More sites are switching to HTTPS, which is great news. But there are still a great many that haven't, making tools like Smarter Encryption all but essential.





FedEx delivery email is fake

With so many deliveries arriving in the weeks before Christmas, your readers should be warned about a scam that claims FedEx tried but failed to deliver a package. You get an email saying that FedEx had "incomplete information of your physical address". If you click the 'Update my address' button you're taken to websites that try to steal your personal details. It's not the most convincing scam I've ever seen. It uses a rubbish fake FedEx logo, although the colours are accurate. You can see the email at www.snipca. com/33413. If you shop online, make a mental note of this scam.



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

Letters Tell us what's on your mind

Free broadband is 'an ill-conceived giveaway' ...

The political parties definitely found their money trees during the election

campaign, trying to bribe us with free this, free that, free everything. But the most ludicrous was Labour's promise of free broadband.

I won't get into the rights and wrongs of calling it 'free' (any economist will tell you that nothing is truly free – someone somewhere always pays the cost). The biggest problem with it is that if no company is making a profit, where would the incentive be to improve services? And what would happen to all the people employed by Virgin, Sky, TalkTalk, Plusnet and many others?

Broadband in the UK is far from perfect, but the solution to imperfection is not a state-controlled monopoly. It will amount to nothing more than an ill-conceived giveaway.

Martin Lee

broadband

...No, it's an investment in the future

对 I've read lots of claptrap about Labour's plans for free broadband, mostly from people saying it's an unaffordable fantasy. I wonder if the same people would've said the same thing about the NHS in the 1940s?

There's no doubt that giving broadband for free would cost a lot of money, but it should be seen as an investment in the future. Just imagine the potential that would be unleashed if every child had access to the internet at home. Business leaders are always telling us that the UK is falling behind in the technological revolution. This kind of grown-up intervention from the Government is urgently needed.

Ken Whiteside

CA SAYS As we write this, polling day is a few days away, so we can only guess what the result will be. But whoever has won, there's no doubt that the issue of broadband was one of the campaign's most controversial talking points. However realistic free broadband is. there are things you can do today to cut the cost of your bills. We'll explore your

money-saving options in our next Cover Feature, on sale Friday 3 January.

Registry clearout helped my PC update

I had very similar experiences to Malcolm Shore in (not) getting the May 2019 Feature Update to load (Letters, Issue 567). As he has experienced, on my laptop the October 2018 update never loaded, and many attempts to load the May 2019 update ended in failure. The diagnostic and help facilities provided by Microsoft were less use than a chocolate teapot.

In the end, almost in desperation, I ran a CCleaner sweep of the registry and found a great many broken links and other things left behind by previous Windows updates. I cleaned up the registry and tried the update again. Lo and behold, this time it worked first time. This worked for my father too. Perhaps Mr Shore might like to try this approach to getting a successful update.

Why are Microsoft allowed to get away with producing such shoddy software and disruptive updates? An update should not be allowed to leave behind loose ends that interfere with future operations.

Based on my experience, Windows 10 is an appalling piece of software, certainly no better than Vista or Windows 8. I have never once been able to

implement any of the updates without some sort of problem. In contrast, my PC running Windows 7 has never had a problem. I absolutely dread the day Microsoft stop supporting it early next year.

Colin Hornby

An old dog teaches young pups new tricks

In his 'From the Editor' column in Issue 568, Daniel Booth asked for our favourite things about computing. Mine is undoubtedly learning tricks then surprising my children (and now grandchildren) with my new skills. Over the years I've taught them many things, including how to set up monthly budgets in Excel, recording Skype conversations and - my proudest moment - switching Wi-Fi channels for faster signals.

I feel like I'm part of a growing army of older people (I'm 79) who are fed up of being patronised by the younger generations, and want to show them we're just as capable of mastering technology. It proves old dogs can learn new tricks. Do other readers share this feeling?

John Ferguson

CA SAYS We bet they do. Much of the media suspects older people are so out of touch that they barely know how to turn on a PC, let alone master many of its more advanced aspects. We know how

See Argos pages for Xmas flashbacks

Flicking through the Argos catalogue archive (http:// argosbookofdreams.co.uk) brought back many happy memories (News, Issue 568, page 7). I went straight to the 1984/85 book, which I remember well. As a 10-year-old I cut out the

page showing the ZX Spectrum 48K computer and stuck it on my wall. I begged my parents to buy me one for Christmas, claiming it would help with my school work (though secretly I just wanted it for games).

Sure enough, it arrived on Christmas



Day, and I must've pressed those famous rubber keys thousands of times every day over the next few years.

For a flashback, visit www. snipca.com/33453 to see page 239 of the 84/85 catalogue. As well as the magnificent Spectrum (£130), you'll see the ZX Microdrive (£50)

and 'interfaces' for controlling them.

Look at the bottom of the page and you'll see the two games that my parents bought with the ZX: The Hobbit and Computer Scrabble. I played both non-stop for months. Happy days!

Simon Howard

condescending and ill-informed that view is. It would be great to hear from other readers who take pride in learning new tricks later in life.

Broken Virgin box nearly broke *me*!

The attached picture tells a story (see below). It's a green box near a community garden I run and, as you can see, has been vandalised.

At first I thought this was a BT box and so contacted them with details. They told me to contact Openreach, who said it was Virgin Media's box. So I rang Virgin, who asked for my account number. I said I don't have one, which threw their call centre into problems.



I explained the problem, and was asked for the postcode for the vandalised box. I said I don't have one because it's at the side of the road. The call-centre operator tells me he will look into the problem. I then email Virgin Media with the information about the vandalised roadside box, and receive an email informing me the information has been passed to the relevant department.

Four weeks later and the box is still down. I write to Virgin, and up to now I have received three letters from different people telling me they are looking into the problem and suggesting I contact an independent adjudicator. I have also been given an account number.

Moral of the story is don't be a publicminded citizen with Virgin Media unless you want your blood pressure to rise.

Dave Auty

CA SAYS We love hearing stories of our readers taking on internet and mobile providers. Some you win, some you lose, some drive you mad. Please tell us more.

Computing analogy is in the post

When my youngest son came home from his first day at infant school, I asked what he'd done. After

STAR LETTER

Windows 7 users should 'bow to inevitable' and upgrade

In Issue 568's Letters page, Bill Smith asks whether it's possible to keep Windows 7 running safely after support ends in January. While I appreciate his points that upgrading to Windows 10 would "involve considerable work and expense", it surprises me that a Computeractive reader would even contemplate running Windows 7 beyond January.

I wonder if readers don't quite grasp the seriousness of Microsoft ending support. I look after cyber-security for a small firm, and we've had to borrow a big chunk of money to upgrade to Windows 10. It was expensive, but it would've cost us more to recover from a hack.

In the same issue Keith Temple says Windows 7 users should email Microsoft to "protest" against the end of support. That seems rather drastic. I'd understand if Windows 7 was a few years old, but it launched way back in 2009. Take a few moments to remember what the world

was like back then: Gordon Brown was Prime Minister, Man United were Premier League champions, and nobody would've known what you meant by the word 'Brexit'.

I have sympathy for people who regard Windows 7 as Microsoft's best operating system. It's probably my favourite too. But that doesn't mean it's the most suitable for the demands of modern computing in 2020. Sometimes in life you have to bow to the inevitable and move on.

Keith Bowden

CA SAYS Keith's right that computing has advanced significantly since Windows 7 launched in 2009, but there remain many valid reasons for wanting to stick with the operating system. The risks are substantial though, so you need to know what you're doing. We'll give full instructions in our next issue, out on Friday 3 January.

The Star Letter writer wins a Computeractive mug!

telling me about playing in the sandpit he said he went on the computer. I told him how lucky he was, because I didn't get to go on a computer until I was in my twenties.

So I asked him what he did on the computer. He said that you have to turn it on and then you post a letter in the postbox. The letter asks the computer to do things, and when the computer has read the letter and done what it needs to and you've played on it, the computer then sends you back the letter. What an apt description of a floppy disk, disk drive and program, I thought.

Kevin Tidy

Online shopping addiction? **Another 'invented' medical** condition

What a strange world we now live in. When I was growing up in the

Fifties, with rationing a recent memory, the idea of anyone being "addicted" to shopping would've been ridiculed. Chance would be a fine thing: nobody had enough money to be addicted!

But in Issue 568 (page 9) I read that psychiatrists think addiction to online shopping should be classified as a mental illness. A few issues earlier you reported that the NHS was now treating addiction to video games.

Shouldn't we take a step back and actually ask who benefits from turning extreme behaviour into a medical condition? The answer: health professionals. The more so-called addictions we invent, the more doctors we need to treat ever-growing numbers of patients. I can't be the only one sceptical about this growing industry of addiction.

Lorraine Thomas

Consumeractive

We stand up for your legal rights

Who returns unwanted gifts - the buyer or recipient?



Amazon had some good deals on Black Friday at the end of November, so I bought my nephew a Fire tablet for Christmas and sent it to my sister (his mother). On realising what it was, she told me she'd already bought him a tablet as a present. She wants to return the tablet I bought him, but can she do this, or will I have to?

Ronald Blake

For items it sells directly, such as Fire tablets and Kindle e-readers, Amazon lets recipients return presents. However, this doesn't apply to items listed by third-party sellers who have their items "fulfilled" by Amazon (ie, stored and sent). In these cases, the buyer will have to pursue a refund. Amazon usually accept returns only within 30 days of



purchase, but has extended this for Christmas. Any items bought after 1 November can be returned up to 31 December.

Amazon provides a 'This is a gift' option when buying a product (see screenshot), which makes it easier for recipients to return presents they don't want. If Ronald had ticked this box when buying the tablet, his sister just needs to enter the order ID number (which Ronald can provide her). If he didn't tick the box, getting a refund will require more effort. Ronald's sister will need to contact customer service (0800 279 7234) and answer security questions. It may be easier for Ronald to do that.

Amazon would only be able to send a financial refund to Ronald, because he bought the tablet. The refund it would send to his sister would be in the form of a gift voucher to spend online, assuming she has an Amazon account. If Ronald starts the refund process, his sister won't need to return the tablet to him. Amazon gives several return options, including Hermes shop drop-off, Hermes pick up or Post Office drop-off. This means the tablet can be returned by his sister.

CASE CLOSED

How did my PayPal payment go through?

While shopping on www. tophatter.com I saw an LED cup that lights up when liquid is poured into it. I tried to buy it for my friend's daughter through PayPal, but I didn't complete the transaction. However, when I later checked, PayPal had taken the money. What should I do now?

Annie Lamb

We're not sure what happened here, so we asked Tophatter, hoping we could stop the item being posted. We were too late for that, but Tophatter showed a good understanding of consumer law by saying that Annie could refuse to accept delivery of the item. The Consumer Contract Regulations let you turn away a delivery under certain circumstances – for example, when you've not been given long enough to cancel an order. This means you don't have to pay to return the item.

Once she refuses delivery, Annie should contact Tophatter for a refund. She should also do this if the item doesn't arrive within 30 days of purchase. If Tophatter doesn't give her a refund within 14 days, Annie can ask PayPal for one.

CASE ONGOING

CASE UPDATE

Can 'shoddy' items be seen as faulty?



Some of the more complex

After reading the case, Computeractive

reader Susan Platter asked us whether Sadie could have avoided this fee by claiming the item wasn't as described, and therefore was entitled to a full refund. The problem here is one of quality. There was nothing technically wrong with the toy train: Sadie simply thought it wasn't worth the £19.99 she paid for it.

Sadie could have returned the train under the Consumer Contract Regulations, which give you 14 days to return items for any reason. However, unless the item is faulty,



you have to pay postage. In this case, Sadie would have had to argue that the item's lack of quality amounts to a fault.

That said, Amazon does let you return an item without paying postage if you give a valid reason, such as the quality not being as described.

Contact us so we can investigate your case

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

Who's responsible for sending my bank card?

When I lost my debit card, I contacted my bank, Santander, which immediately put a block on it, saying a replacement would arrive within five to seven working days. No replacement card arrived and to date around four different cards have been sent (according to Santander) but I've not received one.

Who's responsible, Royal Mail or Santander? Am I due any compensation because I can't pay bills or get money? And does it matter whether you apply for a card by phone or online?

Rick Berej

To answer the last question first: it makes no difference how you apply for a card - your rights are the same as were you to get one in person.

Responsibility for delivering the card lies with Santander, not Royal Mail. Rick's contract is only with the bank, which in turn has a contract with Royal Mail for items it posts. So, if Santander wants to pursue Royal Mail it can, but Rick can't.

His question about compensation isn't one we can answer. If he wasn't able to get some emergency money from his bank, or he wants an official ruling on the case, he should take his claim to the



Financial Ombudsman (www.financialombudsman.org.uk). Initially a case handler will review his complaint and make a recommendation. If Rick's not happy with that outcome, he can ask them to escalate the case, meaning the ombudsman will have to decide whether Santander was at fault for leaving him without money.

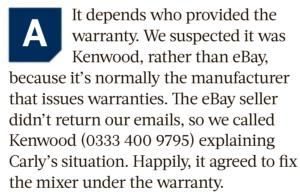
CASE CLOSED

Does eBay seller have to honour a warranty?

On 10 June last year, I bought a Kenwood food mixer with a two-year warranty from an eBay seller. It's now faulty, but the seller

isn't returning my emails. Who's responsible for getting this fixed?

Carly Grants



Had Kenwood not agreed to fix it, Carly could have contacted the eBay seller for a refund under the Consumer Rights Act. But after 17 months of use, she'd have had to prove the fault was inherent, and wasn't caused by fair wear and tear or accidental damage. To do this, she would

have had to pay for an independent inspection, hoping it would expose an inherent fault. If a flaw was found, she would have been able to claim a refund for the cost of the inspection.

EBay does offer warranties on some items through SquareTrade. The Standard plan protects against mechanical and electrical failures during "normal use" after the manufacturer's guarantee expires. It starts on the 46th day after purchase, and covers new, used and refurbished items. The more expensive 'Standard + accidents' warranty includes accidents. Read more at www.snipca.

CASE CLOSED

CREDIT WHERE IT'S DUE

TomTom updated my maps in five minutes



Nearly a year ago, I purchased a TomTom START 52 sat-nav (pictured) for my wife. It's only a basic model, but just right

for what we want.

Unfortunately, despite numerous attempts, I couldn't for the life of me add the lifetime maps update using TomTom's MyDrive app.

I eventually contacted the company's helpline and after a bit of a delay I was helped by a very competent girl called Nikita.

After taking my account details and serial number, she said she could see what was wrong and would put the problem right. Sure enough, after about five minutes I was able to update the sat-nav with the latest map.

It was such fantastic service that it deserves a mention in your great magazine. **Martin Howard**

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



Contact: TomTom

- **Phone** 020 7949 0132
- Support page http://uk.support.tomtom.com

Grow Your Family Tree





Think your research results are looking a little drab? Follow **Nick Peers'** advice to...

Colour-code your family tree

ne of the most effective ways to make a large family tree easier to view and navigate is to apply a colour scheme. Depending on the program you use, you can colour-code it by family lines or apply specific colours to individuals.

Several major programs support colour-coding, while RootsMagic is planning to add it to its forthcoming eighth version. Here we explain how colour-coding works in two popular tools: Legacy 9.0 Deluxe and Family Tree Maker (2017 or later).

Use Ancestor Colours in Legacy

Legacy Deluxe (www.legacyfamilytree. com) supports one type of scheme:



Add colours to your great-grandparents by selecting an Ancestor Group tab

Ancestor Colours. This colours a selected individual and their ancestors by surname, and currently allows four colours to mark lines to the grandparent level, or eight colours to go back to the great-grandparent level.

To see it in action, switch to Pedigree view, then click the Tools tab on the Legacy ribbon followed by Set Ancestor Colours. You can assign Ancestor Colours to two individuals in your tree at once using the Ancestor Group 1 and Ancestor Group 2 tabs (see screenshot below left). Each group has its own default colour scheme (Ancestor Group 2's is bolder).

Simply select the tab, click Change to choose your starting person, then choose which level to track up to. Finally, click 'Apply the Group x colours' button to refresh the tree with your chosen colour scheme. If you don't like it, click Edit Colours and choose from a range of different palettes.

Add eight colours in **Family Tree Maker**

Colour-coding was introduced in the 2017 version of Family Tree Maker 2017 (www.mackiev.com/ftm), and it's much more versatile than Legacy because colours can be attached to any individuals in your tree.



Family Tree Maker 2019 lets you add eight colours to your ancestor

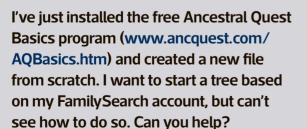
Select the People view and switch to the Tree tab, then select your first person so they appear in the Edit pane on the right. Next, click the Color Coding button above the Edit pane. A pop-up menu will appear giving you a choice of four schemes. The 'All Ancestors (4 colors)' option is the same as Legacy's Ancestor Colours at the grandparent level. There are also single-colour options for marking a person and all their ancestors or descendants.

The main option – 'Current person' – is the most flexible. It lets you apply one (in FTM 2017) or more (in FTM 2019) colours that only apply to that individual. Decide your own colour scheme on paper - up to eight colours are available (see screenshot above). You could, for example, use red to indicate a person with missing birth, marriage or death information, and blue to mark those who served in World War I.

Once you've selected a colour, you'll see a coloured bar appear under the ancestor's name in the Tree view, and a coloured circle next to their name in the Index. Add another colour and the bar will split in two and a second dot will

People can be assigned as an ancestor or descendant to multiple colour schemes – roll your mouse over one of the coloured bars beneath their name to see what each colour represents. If things become too confusing, consider reducing the number of schemes you use.

Your **Genealogy** Problems Solved 🕟



Andrew Curtis

Log into your FamilySearch account by clicking FamilySearch, Login, then open the FamilySearch menu again, but this time choose 'Import Family Lines'. Leave yourself selected as the ancestor, then choose how many generations to import (the default four will only go back as far as your great-grandparents – change this figure to at least 6). Finally, click Import.

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







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Best Free Software

Will Stapley recommends new programs that won't cost you anything

FILE MANAGEMENT

MobileFileSearch

www.snipca.com/33452

What you need: Windows 7, 8.1 or 10

With most phones having at least 16GB of storage, it's not hard to cram them with endless files. Apps such as Google Photos let you quickly hunt down specific photos, but locating other files – such as PDFs – isn't so easy.

MobileFileSearch from NirSoft (scroll to the bottom of the link above for the download options) helps by letting you run detailed searches on all the files on your phone. It's a portable program, so requires no installation - just run the EXE file.

The program is split into two windows: the Search Options window, which lets you define and run your searches, and another that displays your results.

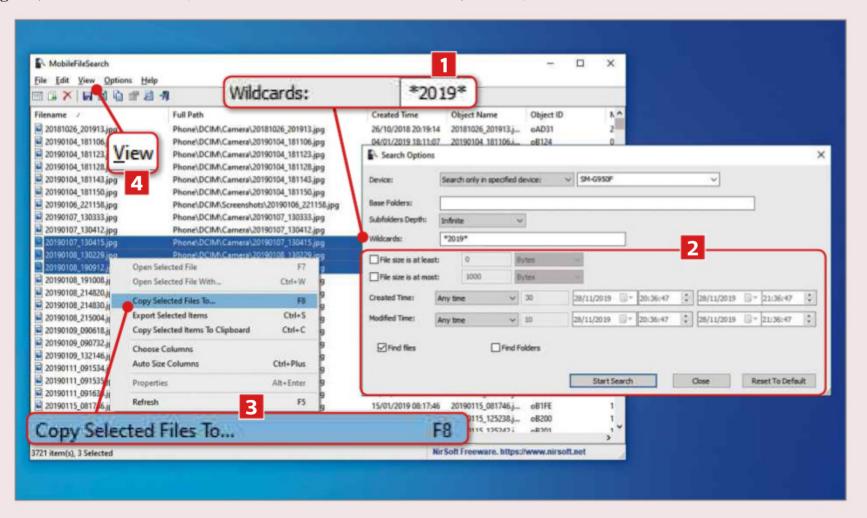
Before running the program, use the USB cable that came with your phone to attach it to your computer (we found that if you connect it after launching the program, it won't be detected). You should also make

sure you've signed into your phone.

To search for specific types of file, enter the file extension in the Wildcards box within the Search Options window. Typing *.pdf, for example, will find all the PDFs on your phone. To find all JPG files with '2019' at the start of their name, type 2019*.jpg, or for files with '2019' anywhere in their name, type *2019*.

Further down the Search Options window, you'll find settings to refine your search by file size, as well as by the date the files were created or edited.

Since MobileFileSearch doesn't create an index of your files, the results aren't instant. We'd like to see an option to create an index in a future release, but you don't have to wait too long – a full search of our 64GB phone (containing 13,914 files) took four minutes 57 seconds.



- Use the Wildcards box in the Search Options window to find file types or those with specific text in their names.
- 2 To search based on the size of files, set the minimum or maximum size (or both). You can also narrow your searches to files that were created or modified on a specific date.
- In copy any of the files to your PC, right-click them, select 'Copy Selected Files To...'. then choose where to save them.
- 4 All column headings are displayed by default. To hide those you've no interest in, click the View menu, then select Choose Columns.



DESKTOP TOOL



FalconX1.3

www.snipca.com/33454

What you need: Windows 10

The Windows 10 taskbar can be tweaked in lots of ways, but there's one thing the built-in settings can't do: centre the taskbar icons. FalconX does this and also lets you change the taskbar's background style, including a Blur setting (see screenshot), which gives it a translucent effect. Note that the Acrylic style is marked as unstable, so it may not display properly on your PC. This latest version improves the smooth animation effect when you add or remove icons from the taskbar. To download, visit the link above, scroll to the bottom of the page, then click the green 'Download latest' button.

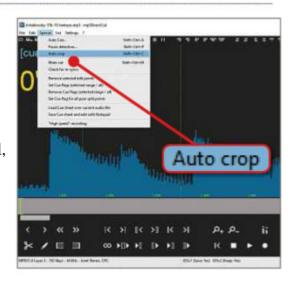
AUDIO EDITOR

mp3DirectCut 2.26

www.snipca.com/33468

What you need: Windows 7, 8.1 or 10

The mp3DirectCut audio editor lets you quickly cut, copy and apply basic effects such fade-ins and fade-outs - to your MP3 files (to download, select 'mp3DirectCut Windows' from the link above). To trim unwanted sections from an audio file, highlight the



appropriate section in the soundwave using your mouse, then press Ctrl+X to cut it. Pressing Ctrl+W saves the file. Select Special then 'Auto crop' (see screenshot) and the program will detect and cut silence from the start of an audio file - useful when trimming crackling silence from music you've recorded from vinyl, for example. This version makes several improvements to the menu layout, including a new cog icon on the toolbar to access the program's settings. It also adds a Mute Cut tool in the Special menu, which lets you replace sections of your audio file with silence.



Can I use my phone as a remote for my TV?

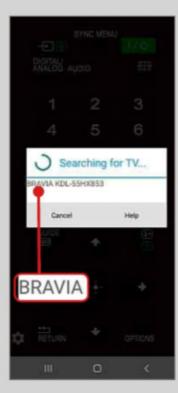
I enjoyed your How I Use article on using a phone to control your PC (Issue 564, page 20). However, what I really want is to use my phone to control my TV. Is this possible?

James Lester

Some older phones, such as the Samsung S6, have infrared (IR) transmitters that can mimic a TV remote-control's signals. However, like most phones these days, your S7 doesn't have IR. There are other options, though. If you have a smart TV that's connected to your home network, you may be able to use an app to control it over Wi-Fi. Most TV manufacturers have their own remote-control apps, including LG (Android www.

snipca.com/33456; iOS www. snipca.com/33469), as does Samsung (www.snipca.com/33458). And while Sony has stopped developing its SideView remotecontrol app, it's still available (Android only www.snipca. com/33459).

We tried it with our Sony Bravia TV and eventually got it to work after switching on a hidden setting called 'Remote Device/ Renderer', which was buried in the menus (Home, Settings, Network, Home Network Setup, then Remote Device/Renderer). Our TV was then found by the app (see screenshot) and the controller worked perfectly.



If you can't find an app for your TV, you may still be able to control other devices with it. For example, if you have a YouView box, download its companion app (www.snipca. com/33461), then follow the instructions to pair your phone with your YouView box. While the app can't change channels, you can set programs to record within the app's TV guide. Virgin also has an app (www.snipca.com/33462) that lets you control its set-top box using your phone. Sky has a similar app (www.snipca.com/33463), but it's not compatible with its Sky Q service.

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

Best Free Software

HOW I USE...

Podcast Addict



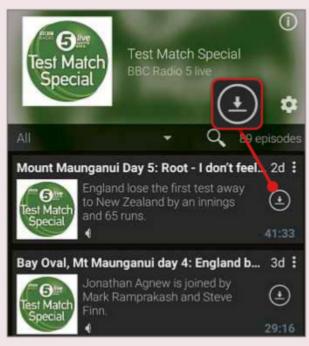
Will Stapley explains how this powerful app changed his opinion of podcasts

I'm a relative latecomer to podcasts. I never enjoyed the early, amateur efforts that were churned out in the mid-Noughties, and I usually prefer to listen to radio stations or my own music when travelling. However, since a friend recommended the Podcast Addict app (www.snipca.com/33423), I've started seeing them in a different light. It's currently only available for Android; if you have an iPhone, try Pocket Casts (www.pocketcasts.com).

Podcast Addict makes it so easy to search for and listen to podcasts. To search for one, I tap the '+' button (top right), then the search (magnifying-glass) icon. The app's own library has over 100,000 podcasts, but if my search draws a blank, I tick the 'Use iTunes search engine' option to trawl Apple's gigantic library instead.

Because I tend to listen to podcasts on the train, I download them to my phone rather than stream. This means they don't stop playing when I lose my 4G signal. To download a single podcast, I tap Episodes, then the Download button beside the episode I want (see screenshot above right).

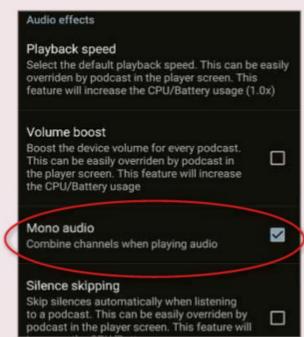
If I stumble upon a podcast that I want to hear more of, I tap Subscribe when viewing it, then return to the home page by tapping the Menu button (three horizontal lines, top left), followed by Podcasts. Next, I select the podcast I want, tap the three



By downloading podcasts, they'll continue to play even if you lose mobile reception

vertical dots (top right), then 'Download unplayed'. With the settings left to their defaults, this downloads the 20 most recent episodes. However, I usually like to start at the beginning and listen to them in order. This involves tweaking Podcast Addict's download settings - namely tapping the Menu button, the Settings cog, Download, then ticking 'Download older first'.

The problem with this is that you end up downloading a huge collection of podcasts. And although my phone has 64GB of storage, I always seem to be pushing its limit. I therefore restricted the number of podcasts that the app downloads. To do this, go back to the



When a podcast overuses the stereo effect, switch to 'Mono audio' mode

Download settings, then tap 'Batch download limit' and choose how many you want downloaded. Keep in mind this is the limit of episodes *per podcast*, so if you set it to 20 and you've subscribed to 10 podcasts, you could still end up with 200 downloads.

Downloading a flurry of podcasts can also take a bite out of your mobile-data allowance. To prevent this, I've limited downloads to when I'm connected to Wi-Fi - you can do the same by going to Settings, then Network. Ticking any of the options here (such as 'Episode download' and Streaming) means they will only move to your device when you're on Wi-Fi.

Finally, some podcasts go a little crazy with the stereo effect. Hearing one person in my left ear and another in my right sends my head into a spin, so I kill the stereo by going to Settings, Player, Audio Player, then swiping down and ticking 'Mono audio' (see screenshot above).

WHAT I'D LIKE TO SEE IN PODCAST ADDICT

While I mostly listen to podcasts on my phone, there are times when I like to finish listening to an episode at home. Sadly there's no Windows version of Podcast Addict, which means I can't

quickly pick up where I left off. I can work around this by pairing my phone with my Amazon Echo smart speaker, but I'd prefer to use a browser-based version or dedicated Windows app.

Named & Shamed

Jonathan Parkyn puts the boot into tech villains, jargon-spouting companies and software stuffed with junk

WARNING: JUNK AHEAD

Junk offender: CamStudio

f there's one thing that depresses me even more than dodgy, junk-filled software, it's programs that



are actually pretty good, but are plagued with sneaky installers that attempt to fill up your hard drive with unwanted tools.

CamStudio (https://camstudio.org) is a classic example of this. It's a free screenrecorder tool, designed to let you capture all the activity on your PC screen and convert it into a video file. You can use it to record a problem you're having with your PC and send the resulting video to a technically minded friend or family member so they can see exactly what's happening and diagnose the fault (or they could send one to you if you're the more technically gifted).

Unfortunately, most decent screen recorders are expensive. The biggest name in this arena – Camtasia – costs £240, for instance. And one of the things that makes CamStudio so great is that it offers loads of great features for free, including a wide selection of export format options and tools for annotating the footage you record - handy if you



This fortnight's junk, should you choose to accept it...

want to point out something specific.

But I can't bring myself to recommend CamStudio for one big reason: when you run the installer, it attempts to trick you into installing PUPs. The last time I tested it, I was presented with a screen trying to get me to install Avast Free Antivirus. If you're not paying attention, it's easy to end up clicking the Accept

button (see screenshot) by accident.

As it happens, Avast Free Antivirus is also a good tool. But I shouldn't have to worry about accidentally installing something I don't want. I understand that developers of free software have to find ways to fund their work, but tricking users into installing unwanted programs is not the way to do it.

WHAT ARE THEY **TALKING ABOUT?**



WHAT THEY SAY

Jared Spataro, Microsoft www.snipca.com/33410

"Fluid Framework will support multiperson coauthoring on web and document content at industry-leading speed and scale... it provides a componentized document model that allows authors to deconstruct content into collaborative building blocks... and combine them in a new, more flexible kind of document."

WHAT THEY MEAN

We've made it easier to write and share documents online.

JONATHAN'S VILLAINS OF THE FORTNIGHT

Calvin and Jared Ainsworth

There's always something reassuring about a family business. But what if it's a bogus recruitment agency run by two brothers, designed to con people out of thousands of pounds? Because that's exactly what Calvin Ainsworth (left) and his brother Jared set up.

In the scam, Calvin posted fake job adverts online, looking for 'trading assistants' to help sell phones and tablets on eBay. Victims who signed up



were asked to use their own accounts to sell goods at low prices. The Ainsworths pocketed the cash - at least £106,000 but the goods were never

sent. The victims, mostly from West Midlands, Blackpool, Manchester and Leeds, were pursued by eBay and PayPal for refunds.

Happily, Calvin and Jared Ainsworth are now behind bars for five and three years respectively.

Reviews

New products tested by our experts

PC | £1,400 from Overclockers UK www.snipca.com/33407

Overclockers UK Titan Falcon

On the light side

Reviewing PCs is partly a matter of making sense of different sets of jargon and numbers, so it's disconcerting when you start reading some and get a sense of déjà vu. AMD Ryzen 7 3700X processor? 16GB of memory? 8GB AMD Radeon RX 5700 XT graphics card? If it sounds familiar, that's because it's the same basic spec as the CCL Paladin (see our review, Issue 564, page 24).

That system cost £1,660, but has now been reduced to £1,579 (www.snipca. com/32838). This one has only half as much SSD storage, so price-wise there's not much to choose between them. And again, the all-AMD combination of components produces a really impressive all-round machine for the money.

ff An illuminated choice for video editing, multi-tasking and future upgrades ""

The cases have a similar shape, too, although CCL's was made by Cooler Master and this somewhat smaller one is from Phanteks. Where the Paladin's front grille was illuminated by the spinning lights on the twin fans behind it, this has a subtler strip of colour-changing LEDs



around the edge. And, visible through the glass left-sided panel within the white-painted interior (pictured below left), some more colour-changing LEDs on the motherboard... and on the graphics card... and on the memory sticks. OK, it's not clear if they were going for PC or Christmas tree.

As for fans, there's just one at the front to pull air in and, unusually, none at the back to push it out again. This seemed to work fine during our tests, which showed the Ryzen 7 3700X chip performing at its peak, even if the modest overclock applied to it showed less than dramatic gains. This is the kind of configuration that will have no problem tackling 4K video editing as well as general Windows 10 multitasking. This is helped along by the RX 5700 XT graphics card, which will run any 3D game smoothly in Full HD with full graphics quality, only requiring some small compromises with the most demanding titles at 4K resolution.

You don't get the Paladin's unusually generous 1TB SSD, and the supplied 500GB drive, despite taking up one of the two fast M.2 sockets, is an old-fashioned SATA unit, only reaching about 430 megabytes per second reading and writing speeds. That's still much faster than the 1TB hard drive that's also included for the rest of your files, and the second M.2 socket is there to add a quicker SSD. There are two spare memory sockets if 16GB isn't enough, two empty PCIe x16 slots and one x1 (two more are covered by the graphics card).

External ports are again limited to 10Gbps USB Gen2, while the Paladin's 802.11ac Wi-Fi card is omitted. That's no

SPECIFICATIONS

4.2GHz AMD Ryzen 7 3700X eight-core processor • 6GB memory • 500GB SSD • 1TB hard drive • 8GB AMD Radeon RX 5700 XT graphics • USB-C 3 Gen2 port 2x USB-A Gen2 ports • 7x USB-A Gen1 ports • Gigabit Ethernet port • HDMI and DisplayPort outputs Windows 10 Home • 450x200x455mm (HxWxD) • Three-year warranty www.snipca.com/31963



big deal, considering you're more likely to want a cabled Gigabit Ethernet connection to your broadband router for your main PC, but leaves the extra cost of the CCL machine looking justifiable. Having said that, the Falcon is cheaper, and if you don't need a huge SSD capacity right now, it could be the more appropriate choice, with room to add to it later – as long as you don't throw anything too hot in there.

VERDICT More fans and fewer lights might have made sense, and the SSD is so-so, but this is a very capable PC



CCL Paladin £1,579 Similar spec but with a bigger, faster SSD and a larger case with more cooling



LAPTOP-TABLET | £1,449 from Microsoft Store www.snipca.com/33369

Microsoft Surface Pro 7

Super, official

Who wants a Windows 10 tablet? Don't all rush at once - it's a rhetorical question, not a giveaway. Our point is, cramming a proper PC into an extremely portable touchscreen sounds like the kind of innovation that sets established markets on fire. Yet here we are, on the 11th version of Microsoft's Surface, and it's still nowhere near as popular as conventional laptops.

66 Not a great improvement, but still the best W10 tablet ""

Eleventh? Well, there's the budget Surface Go too, previously known as the Surface. There's now also a 12th edition, the Surface Pro X, which ditches Intel-type chips for an ARM processor more like those in smartphones. The Surface Pro 7 isn't so groundbreaking. In fact, you could mistake it for a Surface Pro 6 (see Issue 546, page 23), until you spot that its single USB port is now accompanied by a USB-C. This supports twice the speed, up to 10Gbps. It's a shame that's still slower than many current SSDs, but upgrading the port further to Thunderbolt 3 would only have helped the few demanding users who'd shell out extra for Thunderbolt 3 drives. What else has changed? Not the 12.3in



touchscreen, which is sharp, bright and accurate, though more comparable to, say, the basic iPad than an iPad Pro. Nor has the case been redesigned, and that creates problems for the new components on the inside. Microsoft sent us a configuration with Intel's 10th-generation i7-1065G7 processor, a low-power quad-core chip. Without better cooling, this couldn't complete our tests any faster than last year's i5 model.

The new built-in Iris Plus graphics processing unit did boost 3D graphics, but not to a different league; this is still not a machine for serious gaming or advanced creative work. At £1,449 (including the Surface Pen) with a 256GB SSD, it doesn't seem great value. Worse, it ran the battery down in seven hours and 20 minutes, 40 minutes less than our Surface Pro 6. The cheaper i5-1035G4 options might last longer. The range starts at £799, but that dual-core system with only 4GB of memory and a 128GB SSD isn't worth buying.

It's still a good device though, and it's the best Windows 10 tablet you can buy, even if it has little competition. But we had expected a bigger improvement. At 1.1kg with the optional Type Cover keyboard (from £125), it's barely lighter than many 13in laptops, and costs more for just-about-adequate performance.

SPECIFICATIONS

1.3GHz Intel i7-1065G7 quad-core processor • 16GB memory • 256GB SSD • 12.3in 2736x1824pixel touchscreen • 8-megapixel rear camera • 5-megapixel webcam • microSD slot • USB port • USB-C port • 802.11ax Wi-Fi • Bluetooth 5.0 • Windows 10 Home • 292x201x8.5mm (HxWxD) • 775g • One-year warranty www.snipca.com/33371

HOW WE TEST

Computeractive is owned by Dennis Publishing, 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.

Dennis Publishing also owns the magazines PC Pro, Computer Shopper and Web User and the websites Expert Reviews (www. expertreviews. co.uk) and IT Pro (www.itpro.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 Great Pick 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 Still the best Windows 10 tablet, but some will find it too expensive, others too slow



ALTERNATIVE Lenovo ThinkPad X1 Tablet (3rd gen) £1,560 Has a beefier i5-8250U processor and the keyboard is included, but it's bulkier

__Reviews ____



Best of 2019 Awards

We tested over **200 products in 2019.** Here's our pick of the best...

BEST PC

Palicomp AMD Navigator

Tested Issue 567 £1,250 from Palicomp www.snipca.com/33102

Intel processors and Nvidia graphics cards have ruled the roost in recent years, but this all-AMD system showed the incredible value available elsewhere. We'd got used to seeing AMD's multicore Ryzen processors start out barely on a par with their Intel Core i5 and i7 rivals. But the sixcore Ryzen 5 3600X excelled across a full range of Windows 10 tasks, combining with the capable

RX 5700XT graphics card to produce a great allround PC at a fair price.

HIGHLY COMMENDED

Chillblast Fusion Akula RTX 2060 Super **Tested** Issue 566 £1,230 from Chillblast www.snipca.com/33037

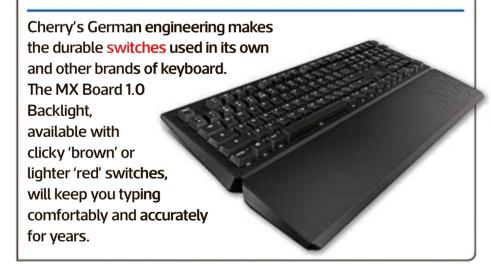
PC Specialist Inferno R1 **Tested** Issue 563 £1,199 from PC Specialist www.snipca.com/26306



BEST KEYBOARD

Cherry MX Board 1.0 Backlight

Tested Issue 552 £81 from Amazon www.snipca.com/33424



BEST PC SPEAKERS

Creative Pebble Plus

Tested Issue 559 from £30 from Argos www.snipca.com/33426



BEST TABLET



Apple iPad 10.2in

Tested Issue 566 £349 from Apple www.snipca.com/24022

Coming up to its 10th birthday, Apple's incredibly popular tablet still isn't quite a PC, but beats Android rivals on value for money. Cheaper alternatives, like Amazon's Fire models, can't match the iPad's quality and versatility. This year's update kept the same format while increasing the size of the bright and responsive screen, boosting processing power even further for advanced apps and games, and introducing iPadOS for better file management and multitasking.

BEST WI-FI ROUTER



D-Link DIR-1960

Tested Issue 564 £90 from Amazon www.snipca.com/32849

Next year will see big changes in Wi-Fi, with the 802.11ax standard – officially rebranded 'Wi-Fi 6' emerging into the market to give us even faster and more reliable connections. For now. D-Link's DIR-1960 uses 802.11ac Wave 2 tech to boost signals, meaning you don't need to pay £200 for mesh Wi-Fi. There's a £45 range extender option if you need to stretch it further, and a friendly app to set it all up.

HIGHLY COMMENDED

TP-Link Deco M9 Plus **Tested** Issue 554 £236 from Amazon www.snipca.com/31527

BEST SMARTPHONE

Apple iPhone 11

Tested Issue 565 £729 from Apple www.snipca.com/32938



couldn't afford. Worryingly, competitors followed. With the iPhone 11, the premium smartphone comes back down to Earth, or at least a level you might be able to stretch to. With top-quality features including superb cameras, it's worth the asking price.

HIGHLY COMMENDED

Samsung Galaxy A70 **Tested** Issue 564 £310 from Amazon www.snipca.com/32856

BEST MONITOR



IIyama ProLite XUB2792UHSU-B1

Tested Issue 560 £380 from Scan www.snipca.com/32369

Monitors with 4K resolution got more affordable this year. This 27in screen stood out from the crowd for its perfect sRGB accuracy, suiting photo and video editing as well as games and films.

HIGHLY COMMENDED

AOC Q3279VWFD8 **Tested** Issue 541 £195 from Amazon www. snipca.com/29564

BEST MINI PC

Jetway JBC420

Tested Issue 556 from £234 from Mini-itx.com www.snipca.com/31789



Most desktop PCs we test come in tower cases that are made big enough for high-end components and fan-driven airflow. But what if you need a machine for simpler tasks that you can slip into a TV unit or behind a monitor? This one strips everything down just enough to give you a functional configuration with completely silent, low-power operation at a very affordable price.

BEST LAPTOP

HPEnvy13

Tested Issue 568 from **£799** from HP

www.snipca.com/33233

At Computeractive we're fans of the happy medium, and HP has cracked it with the Envy 13. Inside the aluminium case, this year's breakthrough is the Full HD touchscreen, which covers the sRGB colour space with fine accuracy. Considering most of us now tweak photos and videos, watch films and do more



creative tasks, this has more benefit than 4K resolution, and it's complemented by an Nvidia GeForce MX250 GPU. Performance and specs are top-notch for the money.

HIGHLY COMMENDED

Acer Nitro 7 **Tested** Issue 566 £1,200 from Currys www.snipca.com/33041

BEST SSD

Samsung 970 Evo Plus

Tested Issue 552 £99 from Amazon www.snipca.com/31265

Samsung's SSDs have become the popular choice in recent years. The first 970 Evo should have been a great option for the M.2 interface now provided in most desktop PCs, but its performance in practice was underwhelming. The Plus revamp fixed this, delivering more than enough speed for most users.



BEST HARD-DRIVE



Seagate Backup Plus

Tested Issue 553 £42 for 1TB from Amazon www.snipca.com/31346

Hard drives are still essential for high-capacity storage, but they're much slower than SSDs and there's little to choose between them. However, this portable drive distinguished itself with decent performance and a very acceptable price.

BEST PRINTER

Canon Pixma TS6250

Tested Issue 568 £85 from John Lewis www.snipca.com/33425

Among a slew of new Canon printers, this multi-function device ticked our boxes with solid performance, comprehensive features and reasonable running costs. Neat and practical styling completes an everyday printer that covers all the essentials.



BEST MOUSE



Rapoo MT550 Multi-mode

Tested Issue 564 £30 from Amazon www.snipca.com/32863

It may have the most ridiculous brand name since rival accessories maker Anker first registered a site on the World Wide Web, but this no-nonsense mouse feels great, works smoothly and covers both Bluetooth and USB wireless connections for up to four PCs or Android devices.

Reviews

PRINTER | £90 from Amazon www.snipca.com/33420

Epson Expression Photo XP-8600

Picture perfect

They may have similar names, but this inkjet printer/scanner/copier is everything the Epson Expression Home XP-4100 isn't (see Issue 567, page 25). Comparing them helps to explain why you may want to pay nearly twice as much.

Where the XP-4100 takes four inks, the XP-8600 uses six, adding light cyan and light magenta to help it reproduce the subtlest gradations in tone. Besides the same USB, online and Wi-Fi connections, the latter supporting Apple AirPrint for iPhone and iPad users, there's an SD card slot to print straight from your camera. The 4.3in colour display is a touchscreen, leaving just one button to contend with rather than the XP-4100's 14 (we're not kidding!).

Photos are certainly this printer's forte, and we found both prints and scans admirably crisp, detailed and colour-



It uses six inks to help reproduce subtle gradations in tone

accurate. Just over a minute for a 6x4in photo is reasonably speedy. We can't say the same for black-text printing, which only reached 8.6 pages per minute, but there's a draft mode that nearly doubled that – although it didn't get anywhere near Epson's bizarre claim of 32ppm.

A photocopy took about 20 seconds, regardless of whether we used colour, and scanning a 6x4 at a sharp 1200dpi, which slows most multi-function devices to a crawl, took just 45 seconds. There's a single-sheet feed for one-off prints on different paper, as well as the main 100-sheet tray.

We liked the neat design and the expensive damped feel of the tilting front panel. The motorised output tray, also a feature of Canon's latest inkjets, seems like an unnecessary extra mechanical

SPECIFICATIONS

5670x1440dpi maximum print resolution •
1200x4800dpi maximum scan resolution • USB
2.0 • 802.11n Wi-Fi (with Wi-Fi Direct) • SD card slot
• 142x349x340mm (HxWxD) • 6.7kg • One-year
warranty www.snipca.com/33421



part to go wrong, and indeed ours did, so we just pulled it out manually (no doubt it could have been fixed).

At just under 12p per standard colour page – bearing in mind that photos will use several times more ink – it's cheaper to run than the XP-4100. That's still a bit higher than average, but if high-quality photo prints are your priority, it'll earn its keep.

VERDICT For a printer specialising in photos, this is pretty versatile, and among flimsy budget models it feels more expensive than it is



ALTERNATIVE Canon Pixma TS6250

£85 A more balanced general printer that's a bit faster and cheaper to run



WHAT SHOULD I BUY?

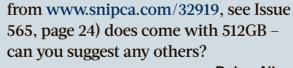
We solve your buying dilemmas

What's the best affordable PC with 500GB of storage?

I subscribe to Computeractive and I'm a great fan! My Dell Inspiron PC is getting old and

I'd like to upgrade to a Windows 10 system before 14 January, Microsoft's

'end of support' date for Windows 7. I need at least 500GB of storage, but most affordable PCs seem to have a 128 or 256GB SSD. The CCL Alpha Mini 2400G (£484



Dylan Allman

The move from hard drives to SSDs has traded an increase in speed for a drop in capacity.

Many desktop PCs compromise with a 256GB SSD plus a 1TB hard drive, so you can keep Windows and some files on the former, the rest on the latter. If that doesn't suit, there are options with

a 512GB SSD, like the Chillblast Billet Core (£530 from www.snipca. com/33228, see Issue 568, page 22) and Palicomp AMD Impulse RYZ7 (£500 from www.snipca.com/32913, Issue 565, page 22). UK companies like these, as opposed to the international giants, can often vary their specs at a small extra cost. See if there's a 'configurator' for the machine on their website, or phone and ask.



Do you need advice on what you should buy? Email us at letters@computeractive.co.uk



Wide open possibilities

With two high-performance monitors in one



Reviews __

PHONE | £100 from Laptops Direct www.snipca.com/33381

Xiaomi Redmi 7A

Seven up

Xiaomi, China's biggest smartphone company, is best known here for offering phones with high-end features at mid-range prices. But the same cost-cutting skills are behind this budget model, which is so cheap that it has hardly any competition.

We can't pretend it looks more expensive than it is: the back is plastic, and the front has the borders above and below the screen that most phones got rid of a couple of years ago. But it's nicely designed and feels well made. In fact, we'd be less worried about the occasional drop or knock than with some pricier devices. The neatly rounded splashproof case, reminiscent of the old iPhone 5c, comes in black, blue or red, although which colours are actually stocked seems to be pot luck.

Makes all the right compromises for a £100 phone

The medium-sized screen isn't super-sharp, and although it goes quite bright, it's limited in contrast, giving it a slightly dull look. Still, we've seen much worse, and colour accuracy isn't too far off. Inside is a Snapdragon 439 processor, slightly slower than the 450 in some low-end rivals but in practice on a par with many other phones under £200. At 13 hours 30 minutes in our video-playback test, battery life is decent too.

In an age of three, four and five-camera phones, the Redmi 7A has just one on the front and one on the back, but takes decent pictures and doesn't go to pieces in low light. The big miss is a fingerprint reader; login is by passcode or not terribly smart

SPECIFICATIONS

5.45in 1440x720-pixel screen • 12-megapixel rear camera • 5-megapixel front camera • 32GB flash storage • MicroSD slot • 802.11n Wi-Fi • Bluetooth 4.2 • 3G/4G • 146x71x9.5mm (HxWxD) • 165g • One-year warranty www.snipca.com/33382



facial recognition, and there's no NFC chip for contactless payments. The 32GB of storage will fill up quickly with apps, photos and videos, but you can add up to 256GB with a microSD card. An even cheaper 16GB version can be found for around £75 from Amazon sellers, or on contract from Giffgaff at £25 up-front and £3.68 a month for two years, a total of £113. Such a small amount of built-in storage can be limiting, though.

Xiaomi's 'MIUI' version of Android 9 isn't our favourite, but at this price there's really nothing to complain about. Vodafone's Smart X9 would be a strong rival, with a fingerprint reader, but seems to have been discontinued. The Alcatel 1X (£100 from Argos www.snipca. com/33389) has dual cameras but takes poor pictures, and runs Android 8 in only 16GB. Frankly, we'd suggest paying a bit more, but at £100 the Redmi 7A is your best bet.

VERDICT If you don't want to spend more, you won't find a better unlocked Android 9 phone than this

ALTERNATIVE

Motorola G7
Power £140
Worth the extra,
with 64GB, bigger
screen, fingerprint
reader and huge
battery

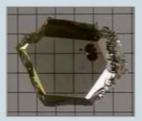


DO I REALLY NEED...

Gallium nitride?

What is it?

Gallium nitride (GaN, pictured right) is a binary III/V direct bandgap semiconductor.



Er, OK. So, what actually is it?

It's a lab-grown compound with a Wurtzite crystal structure.

Right. And what does it do?

In electronics, roughly the same things as silicon, but sometimes better. One of its talents is giving off blue light - the basis of Blu-ray disc readers. It can also withstand high temperatures and voltages. That means it can be used in places where silicon can't, pack more into the same space and achieve greater power efficiency. Makers of chargers have recently cottoned on to this. Last year, Anker launched the PowerPort Atom PD 1, a 30-watt USB-C mains adapter, capable of charging a laptop, which is as small as a phone charger. Meanwhile, US firm Hyper is seeking funding for an only slightly bigger 100-watt unit (pictured below), which is enough to charge two laptops at once.



What's the catch?

Like silicon, GaN is fiddly to make and has various trade-offs, but there's potential for it to keep getting more efficient beyond silicon's limits.

So can I do without it?

One way or another, you're likely to benefit from it in the next few years.

MESH ROUTER | £239 from Google www.snipca.com/33431

Google Nest Wifi

Throw your voice

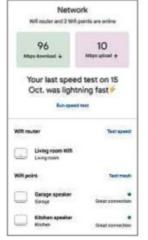
What's trending this year? Pet grooming! Electric cars! What shall we launch for Christmas? This is the kind of reasoning Google must have followed with Nest Wifi, combining the hot consumer tech categories of mesh network and smart speaker. It should really have a folding screen and five cameras, too. And a collar with a bell.

The best place for a smart speaker may not be where you want to boost Wi-Fi

As it stands, this is a set of two dinky plastic blobs that look like someone left the original Google Wifi (see Issue 523, page 24) out in the rain. The first replaces your existing Wi-Fi router, or can be added with an Ethernet cable (for example, if you have a combined modem router, and need the modem function to keep your broadband connected).

The second acts as an extra access point; you can add more for £129. Reflecting advances in 802.11ac Wi-Fi – just in time for it to be replaced by 802.11ax - the radio parts have been upgraded to 4x4 MU MIMO, handling more data

streams at once.



Not so welcome is the removal of Ethernet ports from the satellite unit, so hard luck if you wanted to connect a PC or games console that lacks Wi-Fi. But it gains a speaker and four built-in microphones, so you

SPECIFICATIONS

Wi-Fi router • Access point with Google Assistant speaker and mic • Supports 802.11n and 802.11ac • Requires a mobile device with iOS 11 or Android 5 or later for setup • Hub: 90.4x110x110mm (HxWxD) • Two-year warranty www.snipca.com/33433





can talk to Google Assistant, the equivalent of Amazon's Alexa. We were impressed with the sound quality, but the best place in your house for a smart speaker may not be where you need to boost Wi-Fi reception, making it awkward to decide where to put it.

Setup is through the Google Home app on your Android or Apple device (there's no web interface), which worked nicely once we'd reinstalled it after it initially refused to work. You can set up a guest network, and there are parental controls and priority options. Techie stuff like port forwarding is available via the old Google Wifi app (pictured left).

As before, our tests showed Google hasn't really grasped that the point of mesh networking is fast Wi-Fi. It barely kept up with BT's Whole Home Wi-Fi (£170 for three units from Argos www. snipca.com/33432), which has been overtaken on speed, though not value, by rivals such as Netgear's Orbi (see Issue 532, page 25).

VERDICT The speaker's smart, but the Wi-Fi still isn't. If you just need a bit of a reception boost, it might be enough to get by

ALTERNATIVE BT Whole Home Wi-Fi £170 As long as you already have a usable router with Gigabit Ethernet ports, this trio of add-on mesh dishes is unbeatable value

GADGET GRAVEYARD

Devices that never caught on

Life-logging cameras

What was it?

Developed at Microsoft in the early 2000s, the SenseCam was a wearable camera that shot still images. It was conceived as a 'dashcam for people' (albeit taking photos rather than capturing video) but became most successful as a way for dementia patients to record and recall their recent activities. Although it was never sold as a consumer product by Microsoft, the SenseCam was the basis of two licensed life-logging cameras, the OMG Autographer (pictured) and the Vicon Revue, which were marketed as a way to automatically record your memories.

Why did it die?

Personal cameras are still in use for medical purposes, but as a consumer concept, life logging never took off. Users found still images from random angles didn't really capture the moment, not helped by the quality compromises required for all-day operation and mass storage. Perhaps the final straw for life logging was Instagram, the antithesis of objective documentary.

NEXTISSUE

On Sale Fri 3 Jan

Amazon Fire HD 10 (2019) Faster full-size



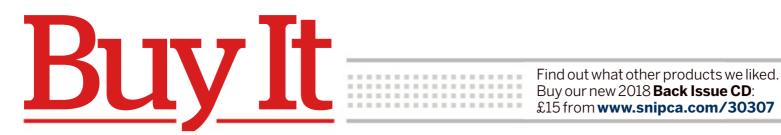




HP Envy x360 13 £799 Windows 10 touchscreen laptop-tablet

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Our pick of products that have won the Buy It award

LAPTOP

HP Envy 13 (2019) **£1,149** from www.snipca.com/33308 **Tested** Issue 568



Thanks to eighth-gen Intel processors and dedicated Nvidia MX250 graphics, this sleek aluminium laptop offers a practical combination of all-round processing power and portability, topped off by 8 hours 30 minutes battery life - and the touchscreen is now excellent too.

ALTERNATIVE Dell XPS 13 Gets the most out of Intel CPUs, now tenthgen, but there's no GPU option and the cheapest sensible configuration is £1,199. www.snipca.com/33309

DESKTOP PC

Palicomp

AMD Impulse RYZ7

£500 from www.snipca.com/32913 **Tested** Issue 565



This could be the best £500 you've ever spent. It's fast, has a powerful SSD and dedicated graphics card - something its budget rivals lack. There's room for expansion, with two bays for internal hard drives and plenty of USB 3.0 ports.

ALTERNATIVE PC Specialist Inferno R1 Budget-beating performance from a Ryzen 5 3600X and 8GB GTX 2060. £1,199 from www.snipca.com/26306

APPLE iPAD

Apple iPad 10.2in

£349 from www.snipca.com/24022 **Tested** Issue 566



This enlarged edition of the basic iPad is superb value. With a great screen and plenty of processing power, it supports Apple's Pencil stylus (£89) and Smart Keyboard (£159). The 32GB storage could be tight, so consider 128GB at £449.

ALTERNATIVE iPad Mini With 64GB, the improved Mini has an even better, but smaller, screen than the otherwise similar 10.2in iPad at a similar price. £399 from www.snipca.com/33050

ANDROID TABLET

Samsung Galaxy Tab S3 9.7 **£350** from www.snipca.com/30707 **Tested** Issue 501



Now discounted and with a stylus included, this full-size HDR tablet is a better deal than the new Tab S4 (see Issue 540). Apple's faster £319 iPad with optional £89 Pencil is superior, but lacks microSD expansion.

ALTERNATIVE Amazon Fire HD 8 Fewer apps work with Fire tablets, but you get the essentials plus hands-free Alexa. Now just £80 (16GB) or £100 (32GB) from www.snipca.com/29340

APPLE IPHONE

Apple iPhone 11 £729 from www.snipca.com/32938 **Tested** Issue 565



At over £300 less than the iPhone 11 Pro, this has two rear cameras rather than three, but it's a superb phone for the money and takes fantastic photos and video. With full-day battery life, the only flaw is its 64GB of unexpandable storage – 128GB is £50 extra.

ALTERNATIVE iPhone XR

Feels much more up to date than the £479 iPhone 8, lacking little except the iPhone 11's enhanced cameras. £629 from www.snipca.com/32947

ANDROID PHONE

Samsung Galaxy A70 £310 from www.snipca.com/32856 **Tested** Issue 564



This eagerly awaited phone hasn't let us down. The cameras are great, taking photos with a clarity to rival Google's Pixel phones, while the screen is exceptional. Battery life is staggering -25 hours in our video-playback test. An outstanding phone.

ALTERNATIVE Xiaomi Mi 9

This year's surprise mid-range phone, with superb screen and triple camera. £499 (64GB, or £50 extra for 128GB) from www.snipca.com/31683



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ASUS TUF X570-Plus Gaming

CORSAIR 16GB DDR4 3600Mhz - RGB

INTEL 512GB M.2 nVME 660P

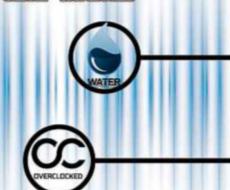
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Our pick of products that have won the Buy It award

EBOOK READER

Amazon Kindle (2019) £70 from www.snipca.com/31621 **Tested** Issue 555



Now with built-in light and audiobook support, this budget model is fine for most users, though limited by its 4GB of storage. The Paperwhite (£120) is even sharper, waterproof, and has bigger storage options as well as a cellular data option (£100 extra).

ALTERNATIVE Kobo Aura H20 This 8GB waterproof reader is a good alternative but can't play audiobooks. £150 from www.snipca.com/24473

SECURITY SOFTWARE

Kaspersky Internet Security 2020

£16.99 from www.snipca.com/21532 **Tested** Issue 564



Kaspersky Internet Security has won our past nine antivirus tests and the 2020 version is now available at an exclusive reader discount on our Software Store. Go to the link above for a one-year, one-device licence or buy a two-year, three-device licence for just £34.99.

ALTERNATIVE Norton 360 Deluxe

Almost as good as Kaspersky, but blocks more legitimate software. £15 from www.snipca.com/32069

PHOTO EDITING

Serif Affinity Photo

£49 from www.snipca.com/23739 **Tested** Issue 498



Designed for both full-time professional image retouchers and the rest of us keen amateurs, this is a beautifully designed and comprehensive program for both Windows and Mac users, although so far it performs better on Macs.

ALTERNATIVE Xara Photo & Graphic

Designer For all-round design and drawing plus photo filters, this affordable app has a lot to offer. £50 from www.snipca.com/26514

PC MONITOR

AOC Q3279VWFD8

£189 from www.snipca.com/29564 **Tested** Issue 541



This 31.5in 1440p IPS screen is now cheaper than AOC's similar 27in model, so it's become our new top choice. It's great value for reasonable colour accuracy and a full range of inputs.

ALTERNATIVE Philips Brilliance

241B7QPJKEB With a great picture, stylish design, speakers and webcam, this 24in Full HD IPS is an excellent smaller screen. £185 from www.snipca. com/26850

ROUTER

D-Link DIR-1960

£88 from www.snipca.com/32849 **Tested** Issue 564



Giving us download and upload speeds of 460Mbps and 375Mbps respectively, this is phenomenal value. Even two floors away we got 329Mbps and 284Mbps. It has four Ethernet ports for wired devices and a USB 3.0 socket to share storage via your network.

ALTERNATIVE Synology RT2600ac

Comprehensive sharing features, controls and plenty of add-on apps complement excellent long-range performance. £196 from www.snipca. com/30710

PRINTER

Canon Pixma TS6250

£105 from www.snipca.com/33324 **Tested** Issue 568



At up to 12.7 pages per minute, this nicely designed USB/Wi-Fi inkjet isn't the fastest, but print and scan quality are good and the five-ink system is no pricier than average to run. There's no automatic feed for the scanner, but you can print both sides of the paper.

ALTERNATIVE HP OfficeJet Pro 6960

Decent speeds, plenty of features (including automatic document feed) and reasonable running costs make this a solid buy. £130 from www.snipca. com/28483



COMPETITION

Win 1 of 8 **CHERRY STREAM** and GENTIX 4K packs

In this competition we're giving away eight prize packs each containing the latest CHERRY STREAM keyboard and a GENTIX 4K mouse.

The Stream has an integrated metal plate, making it stiff and sturdy. The two feet and eight rubber pads on the underside ensure a firm stand when folded in and out.

The LEDs for CAPS LOCK, NUM and SCROLL LOCK are built into the key, a feature usually found on more expensive keyboards. Ten additional

CHERRY

keys make it easier for you to work in Microsoft Office and multimedia programs such as video players. Logging out is easy - simply press the dedicated Lock button.

The CHERRY GENTIX 4K mouse has an ultra-high resolution optical sensor that offers sufficient precision and speed to satisfy even the most demanding users of 4K monitors.

To enter, email your address to cacomp@dennis.co.uk with 'CHERRY' in the subject line by midnight Thursday 2 January. Good luck!

The CHERRY STREAM will be available soon priced £23.99 and the GENTIX 4K is available now for £12.99 from www.scan.co.uk. For more info on CHERRY keyboards and mice visit www.cherry.co.uk and follow @org-cherry on Twitter.

MESH ROUTER

BT Whole Home Wi-Fi **£170** 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 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. £245 from www.snipca.com/27309

SOLID-STATE DRIVE

Samsung 970 Evo Plus **500GB**

£95 from www.snipca.com/31265 **Tested** Issue 552



Although its price has fluctuated since we tested it at £99, this is a very fast (over 3GB per second) M.2 SSD unfazed by tests that make others slow to a crawl. Also consider the Adata XPG SX8200 Pro if you find it a bit cheaper.

ALTERNATIVE Crucial MX500 500GB

As fast as an SSD can get in the traditional 2.5in SATA format, this is a great-value upgrade. £58 from www. snipca.com/30188

WEB DESIGN

Xara Web Designer Premium

£70 from www.snipca.com/29294 **Tested** Issue 453



This visual program makes creating sites more like laying out a document than writing HTML code, and sites can be responsive, meaning they look good on big and small screens. A cheaper, basic version is also available for £35.

ALTERNATIVE Incomedia WebSite X5

v13 Evolution It may feel basic, but this program outputs efficient HTML code and responsive pages. £39 from www.snipca.com/31179



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Issue 569

Workshops & Tips

14 pages of easy-to-follow workshops and expert tips

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- **38** Check whether your USB stick is a fake
- 40 Scan barcodes to check online prices while you shop
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HOWTO...

Add Bluetooth to your

desktop PC by Nik Rawlinson

What you need: Bluetooth adapter (around £11) Time required: 30 minutes

luetooth has featured on laptops since 2001's IBM ThinkPad A30, but desktop PCs have been slow on the uptake. If your PC is a few years old, there's a good channce it won't have Bluetooth, and instead rely on wireless hardware or cables to hook up external

keyboards and mice.

This is a shame, because Bluetooth does more than just connect input devices. Today, you're just as likely to find Bluetooth in a smart speaker or a stylus for your tablet – and each of these has what's known as a profile, which defines

how it works with the PC, phone or tablet to which it's connected.

In this issue, we'll be adding Bluetooth to a laptop using a cheap USB adapter. Follow our advice and you'll be able to beef up your PC security, transfer files and stream your music wire-free.

Buy a Bluetooth adapter You can pick up Bluetooth adapters for less than £6. However, having researched several options we bought something a little more expensive: the Asus USB-BT400 (£11 from Amazon www.snipca. com/33337, pictured above right). Why? Because it works as soon as it's plugged in, and unlike others doesn't require you to install a driver from a CD. Granted, when the BT400 arrived at our home, it, too, was accompanied by a driver disc, but Windows recognised it as soon as it was plugged in and set it up without any hassle other than a reboot.

If you do need to install a driver, don't worry if your PC lacks an optical drive - you can download them instead from Asus's website: www.snipca.com/33329. Select your operating system in the dropdown menu, then click Download. Unzip the files, then install the driver.

The adapter works with Windows XP and later and supports Bluetooth 4.0, 3.0, 2.1 and 2.0. This makes it extremely versatile, and ready to use with most existing mice and keyboards. Later revisions to the Bluetooth standard have been knocking around since 2016 (Bluetooth 5) and January 2019 (Bluetooth 5.1). Although several devices, including recent Sony, Samsung and Apple smartphones – and HomePod, Apple's smart speaker – have adopted



Bluetooth 5, they also work with some previous versions.

Connect external devices Click the up arrow on the right-hand side of the Windows taskbar to reveal your hidden icons, then click the Bluetooth icon. Click 'Add a Bluetooth Device' on the menu (see screenshot below left), followed by '+ Add Bluetooth or other device'.

Click 'Bluetooth' on the 'Add a device' panel, and your PC will start searching for Bluetooth devices that are within range. As a low-power radio technology, Bluetooth signals are designed to work over short distances, so make sure that whatever you want to connect is within 10m (33ft) and that its own Bluetooth interface is enabled.

Windows shows a list of all detected devices, which won't all appear simultaneously. We found that our





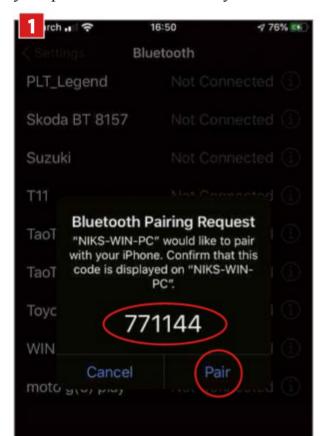
Your PC will look for Bluetooth devices within a 10-metre range

printer (the 'Envy 5000 series' in the screenshot above) appeared around 20 seconds before the iPhone (called Wonderphone in our screenshot). If the device you want to connect doesn't appear within a minute, check whether it needs to be put into discovery mode, where it actively advertises its presence. We'll show you how to do that in each of the sections below.

Connect a phone or tablet

When connecting an iPhone or iPad, open Settings on the device, tap Bluetooth, then scroll down to the bottom of the screen to check which devices it's discovered. You'll find your PC here. Tap it and both your iPhone or iPad (see screenshot **1**) and your PC (screenshot **2**) will display a code. If the same code is displayed on both, tap Pair on your iPhone and Connect on your PC.

When connecting an Android device, open Settings and tap 'Connected devices' followed by '+ Pair new device'. Again, your phone will search for any other



How I use Bluetooth

From keyboards and mice to smart speakers and my car, I connect to as many things as I can using Bluetooth to cut down on the number of wires that trail across my desk. Or, I should say, desks. I split my time between a regular desk and a treadmill desk on which I can walk and work at the same time. Even that has

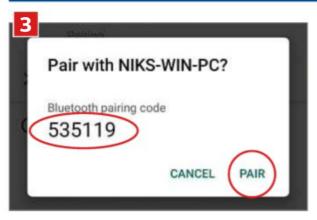
a Bluetooth connection, which it uses to send my distance and number of steps to my phone. This uploads them to an online fitness tracker.



Nik Rawlinson



What do you use Bluetooth for? Let us know: letters@computeractive.co.uk





When pairing a PC with an Android device, tap Pair and Yes

devices within range, including your PC. Tap its name and both the Android device (see screenshot **3**) and the PC (see screenshot 4) will show a six-digit code. If they match, tap Pair on the Android device and Yes on Windows.

Set up 'Dynamic lock' Apple's iOS and iPadOS use Bluetooth to connect AirDrop with macOS, allowing iOS and Mac users to send photos and other files between their devices. However, AirDrop doesn't work with Windows, so you can't use

Add a device Make sure that your device is turned on and discoverable. Select a device below to 771144 771144 Cancel Connect Cancel

Bluetooth to transfer photos or other data between a PC and iOS device.

What you can do, though, is use it to secure your PC with 'Dynamic lock', which detects when your phone is out of Bluetooth range and returns your PC to the lock screen. Keep your phone in your pocket and, whenever you wander off, your PC will be password-protected.

To set this up, open Settings on your PC (Windows+I) then click Accounts followed by 'Sign-in options'. Tick the box beside 'Allow Windows to lock your device automatically when you're away' (see screenshot below) and it will search for paired, compatible devices, whether they're running iOS or Android. When it spots one, it will use this as the remote lock device. To turn off the feature, untick the box, turn off Bluetooth on your phone, or unpair the phone from Windows.



Set up 'Dynamic lock' to secure your computer whenever it's unattended

If the codes on your iPad or iPhone and PC match, tap Pair and Connect respectively



Share files between an **Android phone and PC**

If you have an Android device, you can use it for more than just 'Dynamic lock'. In particular, you can use it to wirelessly transfer files between your tablet or phone and a Windows PC. Start by clicking the hidden Bluetooth icon on the taskbar, then click 'Receive a file'.

Now switch to your tablet or phone. If you want to send a photo, open the Photos app on your phone, tap the relevant photo, then tap the share icon, (a left-pointing chevron with dots on the ends of each arm). If you want to send anything else, open the Files app, longpress the file you want to send and, when it's been selected, tap the same share icon.

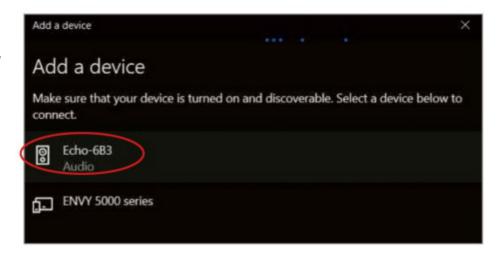
In either instance, next tap the Bluetooth icon, then tap the name of your PC in the list of devices that can accept the file. Windows and your mobile device will transfer the file and choose a default folder. If you want to change this, click Browse when the transfer has completed and choose somewhere else. Click Finish to save the file.

Connect a keyboard or mouse

Most keyboards and mice have a button on the underside that pairs it with a computer. For those that don't, a long press of the power button often enters pairing mode. In either case, an indicator

If you have a Bluetooth-enabled Amazon Echo device. you can use it as a wireless speaker

6



What about Bluetooth headsets?

If you already have a Bluetooth headset for use with your phone, then so long as your PC supports the same or a more recent Bluetooth standard, you should be able to connect it directly, without using an adapter. If you do need to use an adapter, the Asus USB device we've used in this feature will be suitable for headsets using any version of Bluetooth up to and including 4.0. We used it to set up a Plantronics Voyager Legend headset (www.snipca.com/33335) without using the optional Plantronics Bluetooth USB adapter (www.snipca.com/33336).

Put your headset into pairing mode, which is usually done with a long press on a button. On the Voyager Legend, this button is on the nearest end of the microphone arm and, when held, it causes the light on the back of the earpiece to flash between blue and red. At the same time, click the Bluetooth icon on your PC and click 'Add a Bluetooth device', followed by Bluetooth on the

Bluetooth & other devices Find a sett Audio PLT_Legend 0 Other devices

box that opens.

Your headset name will appear under the Audio heading of the 'Bluetooth & other devices' pane and will reconnect to the PC every time it's switched on (it's called PLT_Legend in our screenshot). If it instead connects to your phone, then rather than unpair it from the phone each time you want to use it with your PC, turn off Bluetooth on your phone or tablet before switching the headset off and on again to reinstate the connection to your PC.

light will usually flash to show that it's searching for a device to pair with.

In Windows, again click '+ Add Bluetooth or other device', followed by Bluetooth, then select your mouse or keyboard from the list. When pairing a mouse or trackpad you won't need to enter a code, but when pairing a keyboard, you will. Type the code displayed on your screen and press return to authorise the connection.

Connect a speaker This is the easiest pairing job of the lot. Make sure the speaker is switched on and in range. Bluetooth speakers enter pairing mode when first turned on, so if your speaker doesn't appear when you click to add it in Windows, switch it off and on again.

You don't need to enter a code, but the speaker will usually make a noise to confirm a successful connection.

If you have a Bluetooth-enabled Amazon Echo device, you can use this as a connected Bluetooth speaker. Say 'Alexa, pair my PC' so that it initiates the pairing sequence and, in Windows, repeat the process of adding an external Bluetooth device, this time clicking on Echo-xxx, where xxx is a unique code that distinguishes your device (6B3 in the screenshot below left).

Alexa will give you spoken confirmation that the speaker and PC are connected, after which playing music on your PC will send it to the smart speaker. When you've finished, say 'Alexa, unpair my phone' (not unpair my PC) and, next time you want to connect your PC and smart speaker, say 'Alexa, pair my phone' (again, not PC).

We found that, even when our laptop was sleeping with the lid closed, it frequently reconnected to our Echo device throughout the night, causing the Echo to issue a spoken confirmation, and then chime again a few minutes later upon disconnection. If you sleep close to a paired Echo device, consider turning off your computer's Bluetooth (or unplugging the adapter) overnight.

Workshop1

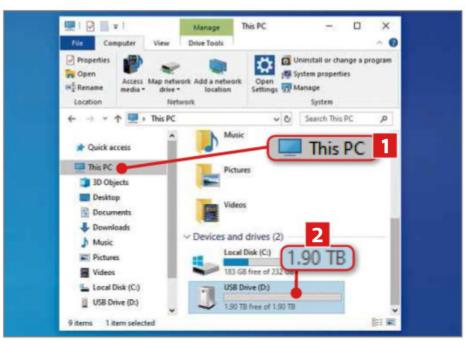
Check whether your USB stick is a fake

What you need: Windows 7, 8.1 or 10; H2testw

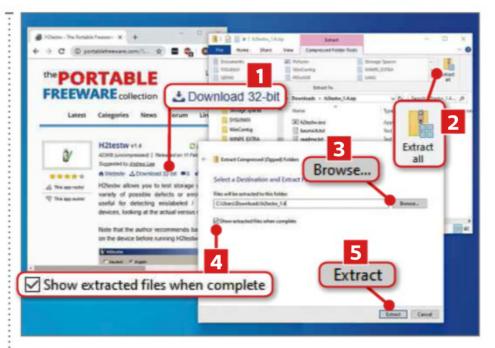
Time required: 20 minutes

ow would you like a 2TB USB stick for under a tenner? You'll find plenty of them on sites like Amazon and eBay, but the sad truth is they're likely to be fakes, with a fraction of that capacity. And you can't rely on Windows to tell you their real size - scammers hack the USB sticks so that Windows recognises them as having 2TB of storage. While ludicrously large capacities at such low prices are blatant scams, others are less obvious, such as 8GB sticks advertised as 64GB. Worse still, if you copy files to a fake USB stick beyond its *actual* capacity, they'll start to corrupt. Here, we'll show you how to find out whether your USB stick is genuine.



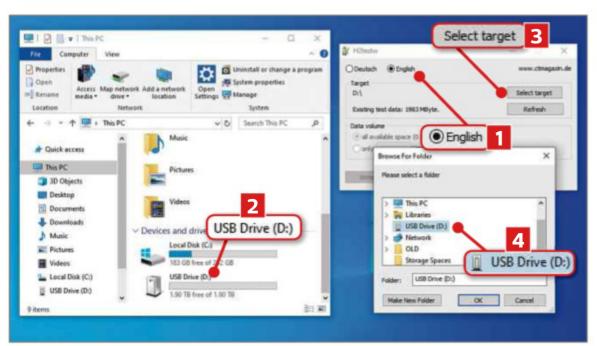


Before you start testing a USB stick, check what capacity Windows reports it as having. To do this, open File Explorer (Windows key+E), then select This PC 1. Now insert your USB stick. After a few seconds, it will appear alongside your other drives. Below the USB stick's name you'll see how much free space it has, along with its total size. In our example, we're using a 2TB USB stick that we bought online for about £5, suspecting it was fake. Windows reports it as having 1.9TB free space 2 (just short of the advertised 2TB), but we think the real size is much lower (probably 16GB).



To test the USB stick, download a free tool called H2testw from www.snipca.com/33375 - click the 'Download 32-bit' link 1 at the top of the website.

Because this is a portable program, you need to open the ZIP file that downloads, then click 'Extract all' 2 at the top of the File Explorer window. Choose where to extract the file to 3, leave 'Show extracted files when complete' ticked 4, then click Extract 5. A new File Explorer window will now open – double-click the 'h2testw.exe' file to run the tool.



You may see German-language menus – if so, select English 11 at the top. Next, make sure the USB stick you want to test is still connected to your PC, then return to File Explorer and make a note of its drive letter (in our example, it's D 2). Although H2testw won't delete any existing files on your USB stick, we recommend moving all files from your stick to your hard drive – this lets the tool test the *entire* USB stick. Once you've done this, switch back to the H2testw window, click 'Select target' 13, then choose your USB stick from the list 14.

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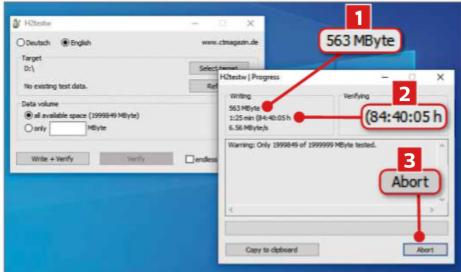
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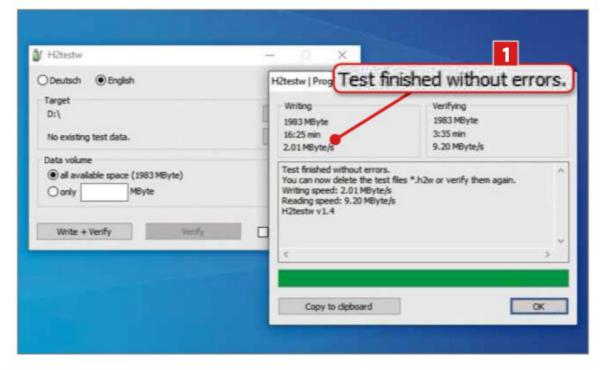


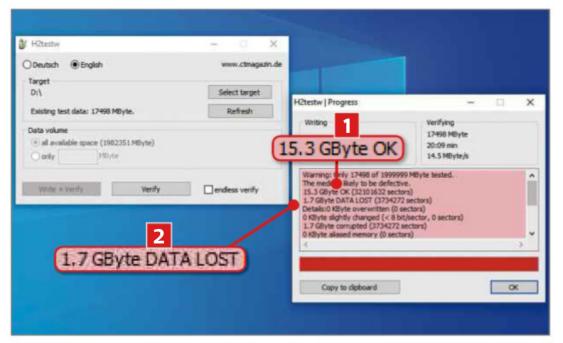
H2testw works by copying data to a test file on your **STEP** USB stick until it reaches the stick's reported capacity. Once complete, it then inspects the test file to check whether it was copied across successfully. A full test of a 2GB stick can take around 20 minutes, or a couple of hours for a 32GB stick. To start the test, click 'Write + Verify' 1. Don't worry if you see a message that a small portion of the USB stick can't be tested (most sticks reserve a few megabytes when formatted) iust click OK 2 to continue.



The test will now start. At the top, you'll see how much **STEP** data has been written to the USB stick in megabytes 11, along with the estimated time left **2**. For our apparent 2TB USB stick, it's estimated to take a jaw-dropping 84 hours. We decided to cut the test short by clicking Abort **2** after it had written 17GB as we were fairly sure the actual size wouldn't be more than 16GB. However, unless you're testing a similarly large USB stick, it's a good idea to let the test complete fully. Avoid using your computer while running the test and don't remove the USB stick until it's finished.

Once H2testw has copied the entire test **STEP** file to your USB stick, it will start the verification process. If you see a 'Test finished without errors' message when the process completes (as shown here on a 2GB stick we tested **1**), it means the test was a success and your USB stick is genuine. You can then click OK and close H2testw. Your USB stick will still have the test file on it (this has a '.h2w' extension), so return to File Explorer and delete this file from the stick (there may be more than one).





When we tested our 2TB stick, while **STEP** H2testw verified the first section of the test file successfully, it started reporting errors after 15.3GB 11 (the test window turns red at this point, indicating there's a problem). The remainder of the 17GB test file (1.7GB 2) didn't copy successfully, confirming that our 2TB USB stick is actually a 16GB stick that's been hacked to show a bigger capacity. If H2testw shows similar errors on one of your USB sticks, we recommend you stop using it immediately. If you still have files on it, remove them now and store them elsewhere. They are likely to be erased at some point if you keep them on the stick.

Workshop 2

Scan barcodes to check online prices while you shop

What you need: Android or iOS phone; Idealo app

Time take: 15 minutes

hen shopping on the high street, you can compare products and see them in the flesh before purchasing. The downside is you often pay more than you would online. Using Idealo you can check online prices in a

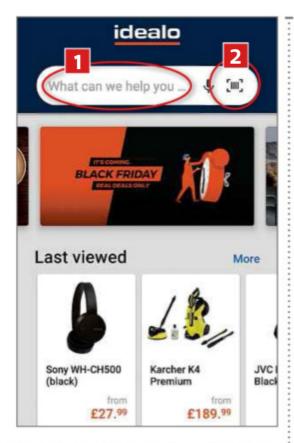
shop by scanning each product's barcode. Idealo checks prices for many online stores (including Amazon, John Lewis and Currys) to give you a good idea if the in-store price is reasonable or not.



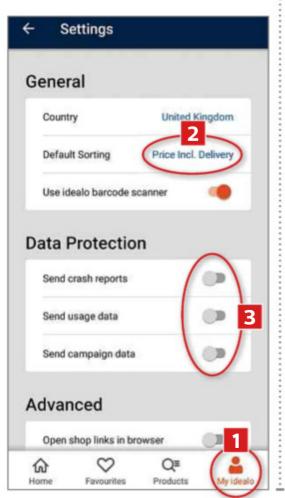
First, install the Idealo app **STEP** on your phone (Android www.snipca.com/33363;

iOS www.snipca.com/33364).

When you run it for the first time, you'll be prompted to set your location (don't worry if you accidentally select the wrong one we'll show you how to change it in Step 2). You can search for product prices by typing the product name into the search bar at the top 11, but when out shopping you need to tap the barcode button **2**, which lets you check prices by scanning a product's barcode. This also ensures you're checking prices for that specific make and model.



Before going bargain STEP hunting, it's best to adjust the app's settings. From the home page of the app, tap the My Idealo button **1**, then Settings. To get an accurate picture of how much cheaper products are online, set the Default Sorting option to 'Price Incl. Delivery' 2 – this means standard delivery charges are added for each retailer. Always keen to protect our data, we also decided to turn off the three options in the Data Protection section **3**, which means information relating to how we use the app isn't sent back to Idealo's developers.

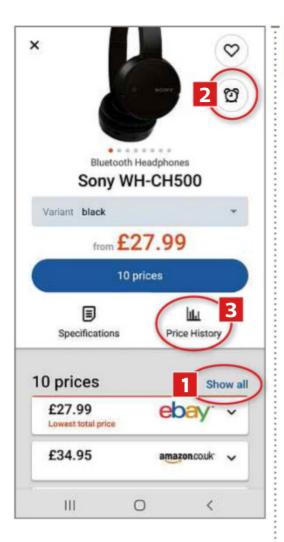




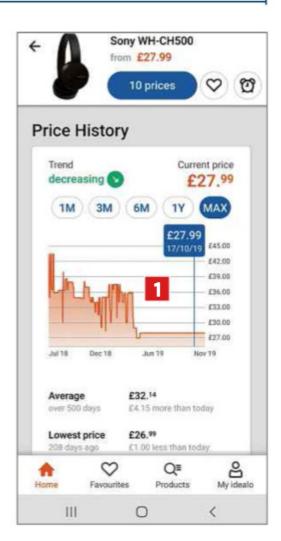
Next time you're at the shops, open the app, then press the barcode scanning button (as shown in Step 1). Next, point your phone at the product so that the barcode is in the centre square **1**. You don't need to get too close – we found it scanned barcodes from a distance of around 40cm. If the barcode won't scan, try turning the flash on 2 or looking for a different barcode on the product. Although the app recognises most products, it doesn't work with some items, such as niche or own-brand products.

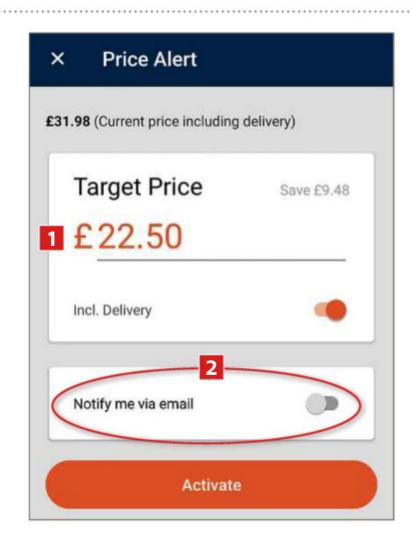
If it recognises **STEP** the barcode, the 4 app will list the

best price for that product from its database of retailers. We recommend tapping 'Show all' to see the full list of stores the app has prices for (the cheapest option may be an eBay store, which you might not be comfortable purchasing from). In our example, we discovered a set of £55 Sony headphones in Tesco can be picked up on Amazon for just £34.95. If you want to go to a particular store, tap the relevant To Shop button in the results. While on this page, also take note of the Price Alert **2** and Price History 3 options – we'll be looking at these next.

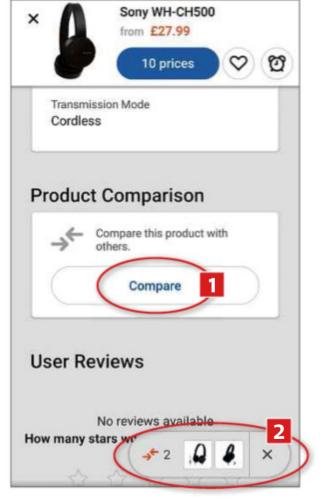


Before leaping at **STEP** the cheapest result, tap the Price History option (as shown in Step 4). Although not available for all products, this reveals how its price has fluctuated over the past year or so 1. Somewhat frustratingly, the price history doesn't include delivery, so you need to factor this in. In this example, we can see that since June the headphones appear to have plateaued at a low of £27.99, which is what they're going for on eBay.





If the price history indicates the product is currently **STEP** more expensive than usual – or you think the product 6 is just too expensive – you can set up a price alert. Tap the Price Alert button (shown in Step 4), then enter a price you'd be happy to buy it at **1** and tap Activate. The app will then notify you when the price drops to or below this amount. You can also get notifications by email 2, but this also means you'll be sent marketing emails from Idealo, so we've opted to stick with just the app notifications.



Armed with up-to-date pricing information, you'll probably end up comparing similar products. Idealo lets you compare not only the prices of each product but also their specifications. To add a product to your comparison list, scan the barcode, then scroll down to the Product Comparison section and tap Compare 1. Now repeat this to add other products to the list. As you add them, they'll appear in a small window at the bottom of the screen 2. ightharpoonup Tap this to view their prices and specs side by side.

Readers' Tips

TIP OF THE FORTNIGHT

Add rounded corners to photos in GIMP

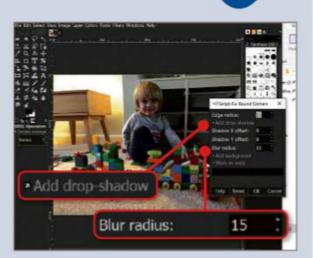
Over the years I've read lots of tips for the image-editing program GIMP (www.gimp.org) in Computeractive, but none have mentioned an option I use all the time: rounded corners. It's probably just down to personal taste, but I really like the way photos look with rounded corners rather than sharp right angles.

Once you've added your photo to GIMP, select Filters at the top, Decor, then Round Corners. This will bring up a box where you can adjust the settings.

The most important setting is 'Blur radius' (see screenshot), which determines how round the corners are. The default is 15, but I usually increase this to 30. Have a play to see what suits you.

To add a touch of professionalism, consider using the 'Add drop-shadow' option. This creates the effect of depth around the border of your photo. My next favourite option in the Decor section is Fuzzy Border. Its name says it all!

Malcolm Staines





Malcolm wins a copy of our 2018 Back Issue CD

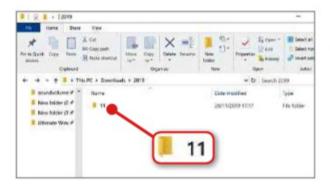
Buy it on Amazon www.snipca.com/30307

CHROME

Organise your downloads by date

In all my time using computers (over two decades now), the one aspect I've never mastered is downloads. I've never devised a method for downloading software and files so that they're easy to store and find.

But I have discovered a Chrome extension that helps - it's called 'Organise Downloads by Date'. Whatever you download, it gets added to a folder with



the month numbered - so 1 is January, 2 is February and so on (it's 11 for November in the screenshot below left). OK, this is hardly revolutionary stuff, but I like it because it just works automatically, with no effort. Once it's installed, you just forget it's there. You download it from the Chrome Web Store at www.snipca.com/33368.

Alan Reynolds

WINDOWS

Work out the difference between dates in Calculator

Reading Alison Pearl's question about Windows Calculator (Issue 567, page 67) reminded me to try the tool, which I hadn't used for years. I noticed an option that I think wasn't there when I last used it. It's called Date Calculation, and lets you work out how long has passed between two dates.

■ Date Calculation 01 August 2008 20 November 2019 11 years, 3 months, 2 weeks, 5 days 4128 days

Open Calculator, then click Date Calculation on the left and enter your first and last dates. I worked out how many days I've been a Computeractive subscriber (see screenshot above): 4,128 days and counting.

Katherine Potter

Why I stopped using...

Virgin Media

I switched to Virgin to get 100Mbps broadband speed and its TV package. Regrettably, they failed to port my telephone number, which I had had since 1964. They said it was impossible to recover.

And what I use instead...

I moved back to **EE** after my brief experience with Virgin. To be honest, I had been happy with EE, and on the third day after returning I had my old

phone number back.

Compared with Virgin's dismal customer service, EE is a doddle - you actually get to speak to a human being in the UK, not abroad. I have to say though that Virgin eventually reimbursed all my costs of joining and leaving, including costs incurred using the phone and broadband.

David Butler

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

PHONE Stop WhatsApp saving photos to camera roll

Thanks for the tip about avoiding being added to WhatsApp groups (Issue 567, page 7) – I turned it on straightaway. Another useful tip is to stop photos that get sent to your chats appearing in your phone's camera roll. It annoys me that the photos I've taken get mixed with all sorts sent by others

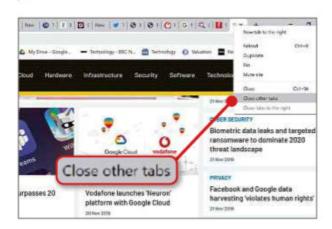
to WhatsApp. It's dead simple: tap Settings at the bottom right of WhatsApp, then Chats and slide off 'Save to Camera Roll' (see screenshot right).

Chat Backup Archive AF Chats Clear All Chats Save to Camera Roll

Warren Leslie

Handy hints and tips from your fellow readers

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



CHROME

Right-click to close other tabs

It looks like Google has brought back a Chrome feature that it should never have got rid of. If you right-click an open tab in Chrome you'll now see the option to 'Close other tabs' (see screenshot above). This had always been in Chrome, but was inexplicably removed when version 78 was released in October. Anyway, it has returned in an incremental update (78.0.3904.108) you'll need to update to this if you don't see the option.

I love this little option because I often end up with a dozen or so tabs open. When I want to focus on just one, I can right-click and shut them all.

Jonathan Doyle

WEBSITES Visit astronomical-clock websites

It was interesting to read your recommended astronomical-clock apps in Issue 567 (page 45), but I'd like to suggest the following two websites. Timeanddate.com (www.timeanddate. com) gives not only solar data, but also moonrise and moonsets, and lots of other info for anywhere in the world.

Heavens Above (www.heavens-above. com) gives sky charts for all celestial

Reader recommends...

PC Specialist Cosmos VIII

£799 from www.snipca.com/32494

Until October I'd never bought a laptop. I've tried a few at friends' houses, but they always seemed under-powered. They never had a processor as powerful as those in the desktop PCs I've had over the years.

But I was tempted by the PC Specialist Cosmos VIII, which you gave four stars to in Issue 561. You made a big deal of its fast processor ("power to burn"), so I took the plunge. I can confirm you were right - the processor is blisteringly fast. It performs many of the video-editing tasks that I thought only desktop PCs could do.



You also mention the battery life - just over three hours. That'll be the biggest downside for some people, but I use it plugged into the mains, as a replacement for my ageing PC, so it doesn't bother me.

Phil Rodgers

Want to recommend hardware or software to fellow readers?

Email letters@computeractive.co.uk

objects, as well as the International Space Station (see screenshot below), rocket remains and obscure satellites.

Bob Parke

WINDOWS Search for file types in **PowerRename**

As a fan of Microsoft's original PowerToys, I'm pleased they've resurrected the concept with some new programs. I'm now using PowerRename, as you suggested in Issue 567 (page 19). One thing you didn't mention is the 'Use Regular Expressions' option, which lets you perform more advanced searches when looking for words and phrases to rename. Just tick the Use Regular Expressions box in the PowerRename controls (see screenshot above right).



You can see Microsoft's list of advanced search terms at www.snipca.com/33359. One that I find helpful is searching for particular file formats by typing (.*).png. This can be any file type, not just .PNG.

lain Crown

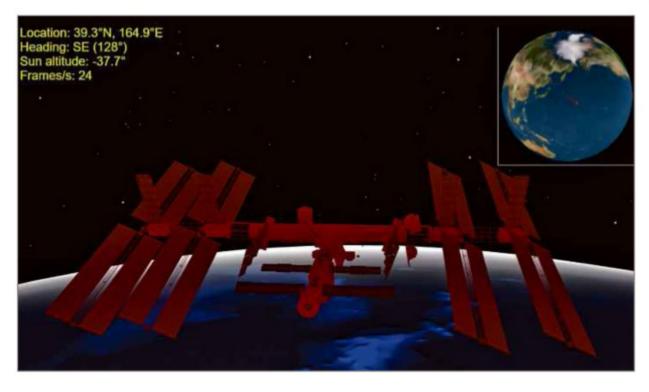
WINDOWS

Use Mouse Keys to click links

I enjoyed your answer to Frank Shields' question ('What Should I Download?', Issue 567, page 19) about clicking links without using a mouse. I've made a note to try the tools you suggested, Vimium (www.snipca.com/33200) and ClicklessMouse (www.snipca.com/33215), but I'd also like to suggest readers try the Mouse Keys option built into Windows 10.

I should say it's suitable only for full-size keyboards with numeric keypads. To open it, press the left Ctrl and Shift keys, together with Num Lock. The 5 key on your numeric keypad now acts as your mouse button. To switch it between left and right buttons, press the / (forward slash) and - (minus) keys (also on the numeric keypad). You can also use the keys around 5 to control the cursor.

Larry Sherringham



Phone and Tablet Tips

iOS

Make your battery last longer

A power source that can no longer hold its charge quickly becomes frustrating (almost exactly as quickly as it goes flat, coincidentally). Replacing an exhausted battery through official channels costs £49 on an iPhone 8 and earlier, and £69 on anything more recent, and can leave you without your phone for between six and eight days (see www. snipca.com/33441). If you're still covered by the warranty it will be swapped out for free, but that doesn't get around the issue of not having your phone to hand when you need it.

So, anything you can do to keep it in peak condition is a real money- and frustration-saver, and could put off the

Maximum Capacity 79

This is a measure of battery capacity relative to when it was new. Lower capacity may result in

Peak Performance Capability

fewer hours of usage between charges.

This iPhone has experienced an unexpected shutdown because the battery was unable to deliver the necessary peak power. Performance management has been applied to help prevent this from happening again. Disable...

Optimised Battery Charging



79%

To reduce battery ageing, iPhone learns from your daily charging routine so it can wait to finish charging past 80% until you need to use it.

day you need to replace the phone.

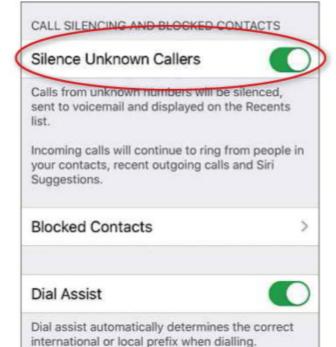
Recognising this, Apple has introduced Optimised Battery Charging with the roll-out of iOS 13 to iPhone 6S and later models (it's not included in iPadOS). It's a feature that learns when you most often leave your phone plugged in for long periods, and uses this information to tailor its charging cycle, taking it to 80 per cent charge until shortly before you'd usually unplug it, at which point it tops it up to the brim. For anyone who charges overnight, this is perfect.

That 80 per cent figure is key: batteries are happiest when between 20 and 80 per cent charged. Sitting at either extreme – totally empty or full – stresses them, which is why leaving a phone, tablet or laptop plugged in once it's reached 100 per cent is not recommended.

To turn on Optimised Battery Charging, open Settings and tap Battery, followed by Battery Health. Tap the switch beside Optimised Battery Charging so that it slides to the right and takes on a green background (see screenshot left).

ios Block calls from people you don't know

Your iPhone displays the number and, if it's in your contact list, the name of any person who's calling. That's great if your phone is beside you, as you'll know right away whether it's worth answering. If it's in your bag or pocket, though – or another room – it's less



handy, as you'll have to find your phone first, which could be a waste of time.

Fortunately, iOS 13 has the answer: ignoring calls from anyone who you haven't added to the Contacts app.

Start by making sure the important people in your life are listed, and anyone who shouldn't be able to call you has been erased. Then, open Settings and tap Phone. Scroll down the following screen and tap the switch beside Silence Unknown Callers (see screenshot above). While this doesn't block unrecognised numbers, it does send them straight to voicemail without sounding the ringer. You can then check in with the messages at a convenient moment. In many cases, spam or marketing callers won't bother leaving a message at all.

BEST NEW APPS

What you should install this fortnight

Orbitrack

£4.99 iOS www.snipca.com/33444 £4.69 Android www.snipca.

com/33445

Spin the planet on your screen and Orbitrack overlays it with details of satellites – including the International Space Station – and space debris. Tap one

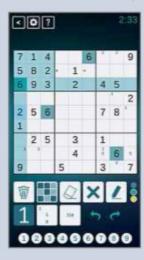


to view its trajectory, or step through the database of satellite stats to see who owns them and where it they are. It's the perfect companion to one of the many stargazing apps available on both Android and iOS.

Classic Sudoku

£4.99 iOS www.snipca.com/33447 **£4.59 Android** www.snipca.com/33448

There are plenty of Sudoku apps to choose from, many of which are free, but this one looks great and has been



developed with the aim of helping you improve your game. Each of the puzzles is graded and you'll only progress to the more difficult entries as you solve the simpler ones. Note-making and error alerts help greatly – particularly for novice users.

Graphite

iOS Free with in-app purchases ranging from £1.99 to £25.99 www.snipca.com/33446

You no doubt have several 'arty' filter apps installed already, but Graphite caught our eye for the realism of its results.

Tap between the different finishes, then



zoom in and you can see the simulated pencil strokes, and the peaks and troughs in digital paint. All of the filters and basic editing tools are included for free. In-app purchases unlock more advanced options.

Brilliant things to do on your device

As you'll notice from the on-screen notes, the feature does let through calls from any numbers you've recently used, so it would let the garage call to tell you know your car was ready for collection if you'd recently used your iPhone to book it in for an MoT. To empty your recent calls list, open the Phone app (not the Phone section of Settings) and tap Recents on the toolbar. Tap Edit at the top right, then clear at the top left.

ANDROID Block incoming texts

You can block specific numbers from sending you texts using Android's default Messaging app, which is an easy way to stop persistent text spammers. Open Messages and tap the three dots at the top of the screen, followed by 'Blocked contacts'. Once there, tap 'Add a number' and type the nuisance contact's details. You can also block numbers directly from each unwanted text. Open the message, tap the three dots at the top, followed by Details, then tap 'Block & report spam'.

Android's default messaging app doesn't have a mass text-blocking feature to filter out incoming messages from unknown numbers. However, the way that Android separates services, like the text service, from applications, such as the program that receives and sends your texts, means you can replace the latter without losing access to the former (this isn't possible on iOS, although you could switch to WhatsApp or Hangouts).

The Calls Blacklist app for Android can block calls and texts from unknown numbers, but you can choose to block just texts. It's a free download from www. snipca.com/33442, with an in-app purchase to remove the ads. Launch it, tap the switch beside SMS and set it to be your default messaging app. Tap the three dots at the top of the messages screen, followed by Settings, then Blocking. Tap the checkbox beside 'Unknown numbers' to block all numbers that don't appear in your contacts list.

ANDROID Edit your photos' metadata

Every time you take a photo, your phone attaches what's known as metadata – information like where and when it was taken, what settings the camera used and so on. Apps like Google Photos and online services like Flickr use this information to create your photo

collections and albums.

However, the metadata that's added by default is just a fraction of the full info that can accompany a photo (and, because it's written into the photo file itself, will follow it from computer to computer).

Graphie (£1.39 from www.snipca.com/33443) reveals all the standard metadata when you tap an

image, from the lens aperture and sensitivity (ISO) to the file size and resolution. However, subsequently tapping the two circles at the bottom of the screen lets you add details of your



own and set defaults that can be applied without further input from yourself by instead opting for 'Edit tags (Automatically)'. This will be useful for anyone who shares their photos online, as you can specify your name, what software you've used (if any), location and so on. This info will be applied to each image you tag.

Aside from this, we also like the colour-extracting tool, which identifies your photo's dominant

tones (see screenshot). If you want to paste the picture into a document or use it online, this would allow you to develop an overall theme, with headings or links coloured to match.

BEST APPS FOR...

Compasses

Digital Compass

Free (with ads) **Android**

www.snipca.com/33450

Overlay a Google Map with a compass to monitor your bearings while navigating. It's a similar principle to the one used by hikers who press a transparent compass to their trusty Ordnance Survey. This app requires a magnetic sensor, so check your phone specs before downloading.

Compass

Free

iOS www.snipca.com/33449

Best For Keen walkers

Compass does a simple job well: it displays your heading in the largest font it can fit on the screen, with the option to switch between magnetic north and true north. Your bearing, in degrees, is shown in smaller text below. It works either flat, which is most appropriate for walking, or when mounted vertically in your car.

Best For Drivers



Commander Compass £5.99

iOS www.snipca.com/33451

Commander Compass is more than just a direction finder. It also shows your inclination (up and down), speed, altitude, course and more using both metric and imperial measurements. It is overlaid on a map, and you can even navigate by the stars, sun and moon, and switch quickly between daylight and night-time views.

Best For Off-road navigation







Make Windows Better

Expert tips for every version

WINDOWS 10 Turn off all audio notifications

All notifications in Windows play a sound by default when they appear – if you get a flurry of notifications, the barrage of 'dings' soon starts to grate.

Prior to the November Update, the only way to change this was to turn audio alerts off for each program individually. Now, however, you can silence notification alerts for *all* programs in one go. To do this, go to Settings, System, 'Notifications & actions'.

You'll now see a new 'Allow notifications to play sounds' box (see screenshot below), which is ticked by default. To mute all notifications, untick the box.



To adjust the notification setting for individual programs, scroll down and select the relevant program. You'll now see new preview windows for the banner and Action Centre notification styles, showing you how they appear.

Also new is the option to change settings whenever a notification appears by hovering over it, then clicking the cog icon. A menu will now appear, allowing you to select between opening the notification settings for that specific program, going to the general notifications settings for all programs, or simply turning notifications off for that program.

WINDOWS 10 Talk to Alexa from the lock screen

Originally only available with an Echo smart speaker, Amazon's Alexa voice assistant made its way on to PCs and laptops late last year via the Alexa app (free from the Microsoft Store at www.snipca.com/33427).

With the November 2019 Update, Microsoft lets voice assistants other than its own Cortana work when your computer's locked. This means you can

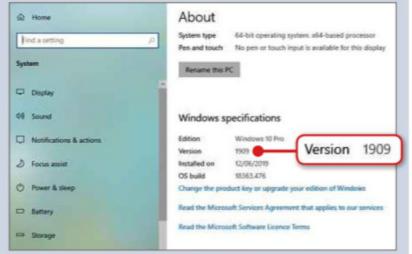
WINDOWS 10

Get the November 2019 Update

Microsoft recently released the November 2019
Update for Windows (also goes by the names 19H2 and version 1909).
Although not a major Feature update (the next big one will come in the spring next year), it does bring some notable improvements.

You may have already downloaded and installed the update. If you're not sure, open Settings (Windows key+I), then go to System and click About on the left. Now scroll down the right side of the screen until you get to the 'Windows specifications' section. If the version listed here is 1909, you've got the latest update (see screenshot).

However, if it's listed as 1903 you've still got the May Update. In most cases, running a scan for updates will kick-start the download. To do this, return to the Settings home page (click the Home button, top left), then select 'Update & Security' and click 'Check for updates' on the right. Downloading and installing the update shouldn't take



more than half an hour, and you'll need to restart during the process.

As well as improvements to notifications and Alexa (see opposite and below), Microsoft has also enhanced the search tool within File Explorer so that it returns relevant files stored on OneDrive as well as those on your hard drive. Additionally, you can now create tasks for the Windows Calendar from the taskbar (click the clock, then enter the task name).

Microsoft also claims the update brings "general battery life and power efficiency improvements for PCs with certain processors", but that's horribly vague and we haven't noticed an improvement on any of our computers.

treat your computer just like an Echo smart speaker and speak commands without having to first log into Windows.

You'll need an Amazon account to use it (create one for free at www.amazon.co. uk). When you see the Alexa On Lock Screen message during setup, select Turn On Lock Screen Access.

Alternatively, if you've already got the Alexa app installed, make sure you've got the latest version by visiting the Microsoft



Store link above – if you see an Update option at the top, click it. Now open the Alexa app, click the Menu button (three horizontal lines, top left), and set Lock Screen Access to On (see screenshot below left).

WINDOWS 7, 8.1 OR 10 Remove unwanted File Explorer shortcuts



Windows attempts to make your files easier to access by adding

recently opened folders to the 'Quick access' (or, in Windows 7, Favourites) section in File Explorer.

Sometimes, however, you open a folder by accident, only to find it then added to these shortcuts. To stop this, right-click the offending folder, then select 'Remove from Quick access'. The folder itself won't be deleted – it'll just be removed from the 'Quick access' or Favourites section.

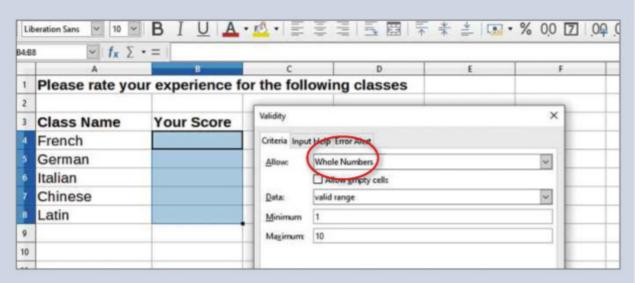
Make Office Better Top tips for MS Office & LibreOffice

LIBREOFFICE CALC

Create rules for your cells

LibreOffice Calc includes a data validation tool for an entire sheet or specific cells. This is useful if you're creating a spreadsheet for others to fill in, allowing to control what they enter into each cell. Create as many validation rules as you like, but each cell can only have one applied to it.

To start, highlight the cells you want the rules to apply to, then open the Data menu and select 'Validity'. In the Allow box, choose the type of data that you want entered into the cells. In our example, we're asking people to score language classes they attended from 1 to 10, so we'll select Whole Numbers (see screenshot). To ensure all cells are filled in, untick the 'Allow empty cells' box. You can further define your validation rule in the Data box below



- for our scoring sheet, we'll set this to 'valid range', then set the Minimum to 1 and Maximum to 10. You can also set a message to appear for each rule, helping people to fill your sheet correctly. To set this message, select the Input Help tab, tick the 'Show input help' box, then enter what you want to appear. Finally, to force people to follow the rules, select the Error Alert tab, tick the 'Show error message' box, then enter what you want to appear if invalid data is entered. Click OK to apply the rules to your spreadsheet.

MICROSOFT WORD Remove entries from Word's dictionary

Word checks your spelling as you type, underlining mistakes in red. Right-clicking an underlined

word displays suggested spellings, along with an 'Add to Dictionary' option select this and the word will no longer be picked up in spell checks. Adding words (such as your surname) to the dictionary in this manner is useful, but it's easy to accidentally add a misspelt word, meaning it will then no longer be underlined in spelling checks. If you do this, or want to review all words you've added, click File, Options, then select Proofing on the left. From here, click 'Custom Dictionaries', then 'Edit Word List'. To remove a word, highlight it, then click Delete (see screenshot). Alternatively, to revert to the original Word dictionary, click Delete All, then OK when asked to confirm your action.



While here, you can add new words by typing them in the top box, then clicking Add. Finally, click OK to save the changes.

MICROSOFT WORD Quickly add screenshots to Word

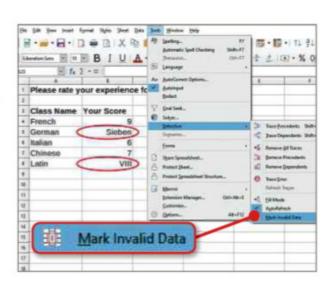


There's no shortage of free screenshot tools. Along with the two built into Windows

(Snipping Tool and Snip & Sketch), you can download free alternatives such as PicPick (https://picpick.app), which provides tools such as scrolling captures. However, when you want to simply take a screenshot and insert it into a document, Word's screenshot tool works well.

To do this, select the Insert tab at the top of your Word document, then click the Screenshot button in the Illustrations section of the toolbar. You'll see previews of your open windows. Either select the one you want to take a screenshot of, or click the Screen Clipping button at the bottom. The latter temporarily hides the Word window, allowing you to take a screenshot of whatever is behind it. Click and drag the mouse to the portion of the screen you want.

Once you've taken your screenshot, it will appear in your Word document. You can resize this by clicking and dragging the edges. For additional options, right-click the screenshot, then select 'Size and Position' or 'Format Picture'.



LIBREOFFICE CALC Highlight invalid cells



If you've applied data validation rules to a spreadsheet (as explained in the main tip), you

This is particularly useful if you've sent a sheet to be filled out as above, but decided not to show an error

message if invalid data is entered.

can use Calc to highlight all invalid cells.

To do this, open the Tools menu, then select Detective, followed by Mark Invalid Data (see screenshot above).

Any cells that don't adhere to your validation rules will now be marked with a red circle.

Note that this view doesn't update automatically, so if you make changes to your validation rules you'll then need to re-run the Mark Invalid Data from the Tools menu.

In The Club



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

Design a logo for your club for free

Professionally designed logos can cost hundreds of pounds - something few clubs can stretch to. But don't let that stop you giving your club an eye-catching brand identity. There are plenty of online tools to help you create your logo, which you can then put on emails, websites, documents and clothing.

However, you need to take care when choosing which service you use. You could spend hours crafting your perfect logo, only to find that the 'free' version of only lets you download a small preview image, with the full-size version costing a small fortune.

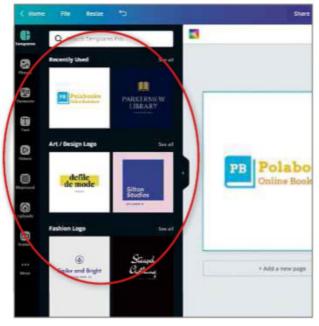
We recommend giving Canva a go (www.canva.com). With a free account, you can create and download a logo of up to 500x500 pixels (larger than most free services). However, sign up for a free trial of Canva's Pro plan and you can create and download a 1500x1500-pixel logo – big enough to print on large posters.

You need to provide payment details to register for the trial, but you can cancel your subscription immediately and still use the Pro features for 30 days, giving you plenty of time. To cancel your subscription, click your name at the top-left of the home page, select 'Account settings', click the 'Billings & Teams' tab, then scroll down to Subscriptions and click 'Cancel subscription'.

Design your logo

Once you've created your account, click 'Create a design' (top left), then select Logo. The logo page is split into two, with a preview on the right and artwork you can add to it on the left. You can create a logo from scratch, but if you need some inspiration select Templates on the left, then scroll or search the list (see screenshot above right).

When you see one you like, click it and it will appear in the preview. Even if the template you've chosen looks impressive, it's worth tweaking it to avoid using the same logo as another organisation - the Elements option on the left has plenty of artwork to choose from.



You can create a logo from scratch or choose from a choice of templates then tweak it

You can move individual elements of artwork within your logo by clicking and dragging. To resize an element, click it once, then drag the corners. As you move or resize these, lines appear to show they are centered or in alignment with other elements. Right-clicking lets you shift elements above or below others.

The toolbar along the top lets you adjust each art element's settings, such as its colour, as well as flip it horizontally or vertically. You can also adjust an element's transparency by clicking the small chequered button top right.

If there's text on the template, doubleclick it to edit. To add new text, select Text on the left, then choose from the templates or click one of the 'Add a...'



Create variations of your logo to suit different backgrounds

options at the top.

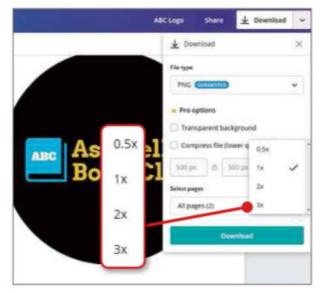
Once you've finished arranging your logo, try creating a few variations - make it smaller and change its colour scheme to suit different backgrounds. To create a copy of your logo on which you can apply your tweaks, click the 'Copy page' icon just above the preview (see screenshot below left). You can create up to 100 variations of your logo.

Download your logo

Before downloading your logo, give your project a name by clicking the box to the left of the Share button (top right). Next, click the Download button (also top right), then Download.

You can choose the format of your logo in the 'File type' box. In most cases, PNG works best - this keeps the file size small without noticeably affecting quality, making it suitable for use on the web as well as small printed items such as letters. The 'Transparent background' option helps the logo blend in with whatever background you've chosen, and you can select from four sizes (see screenshot below). If you're using a printing service to create a large poster or similar, the PDF Print option is best (do make sure the printing service you're using accepts this format).

Don't forget, when your Pro trial ends you'll lose access to some of these formats, so make sure you download them before the 30-day trial is up.



Make sure you save your logo in different formats before your free trial ends

What's All the

Fuss About...



Smart Compose

Google thinks it knows what you're about to type

What is it?

Google's method for trying to guess what you're about to type, then suggesting words you can click to add. Until now, it's been available only in Gmail, but Google says it will also add the service to documents you write in Drive, its online suite of office tools.

How does it work?

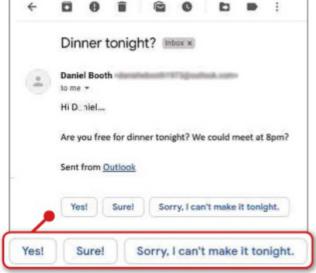
Like many of the web's cleverest tools, it uses a form of artificial intelligence called machine learning. In Gmail, it 'reads' what you're typing and suggests the end of a word or phrase, similar to autocomplete on phones. For an example, look at our main screenshot: after we typed 'Good afternoon, I hope you had' Gmail suggested (in grey) 'a good weekend'. Gmail knew it was a Monday, and thought this would be a suitable greeting. Pressing the Tab button on your keyboard (top left, sometimes showing two opposite-pointing arrows) adds the words to the email. You can also ask it to 'learn' your writing style and offer words that match it.

How do I do that?

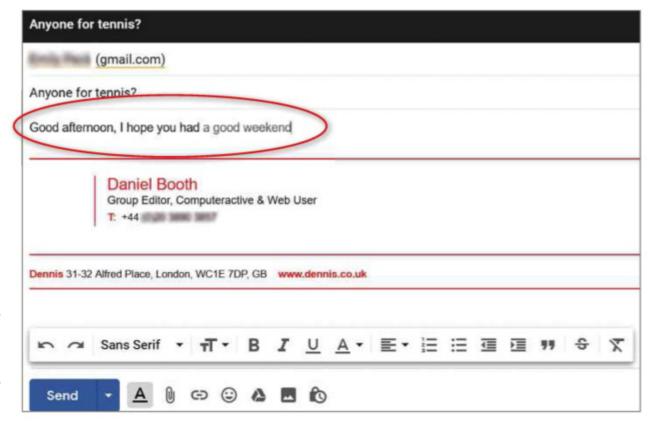
Click the cog icon at the top right of Gmail, then Settings. Scroll down and make sure 'Smart Compose' and 'Smart Compose Personalisation' are 'on'.

Will it work the same in Google Drive?

So it seems. As an example, Google shows someone typing instructions on using



Fancy dinner tonight Daniel? Yes! Sure!



Google Maps for a visit to London (www. snipca.com/33411). It looks smooth and simple, though you may have to wait a while to use it.

Why's that?

Because for now Google has added it only to its G Suite of paid-for office tools, aimed at selected businesses, not the free equivalents used by the public. But we think it will arrive in the free versions within the next year. After all, Smart Compose in Gmail was added first to free accounts before coming to G Suite soon after. There's no sign that Google sees this technology as being something only paid-for users should enjoy.

What if it comes up with inaccurate suggestions?

Well, it's bound to get it wrong sometimes, but the more you use it the better it gets at learning the phrases you're likely to need. In our experience, it does this well when we write emails, and is even cleverer when suggesting one-click replies.

What are they?

Short replies you can click to insert into your emails, suggested by Gmail based on the subject line and content of the

message (turn it on by clicking the cog icon, Settings, then scrolling down and selecting 'Smart Reply').

Have a look at the screenshot below left. In what must be an early sign of madness, we sent ourselves an email asking whether we'd be free for dinner this evening. Gmail understood the message, helped by the subject line ('Dinner tonight?). It suggested three answers: 'Yes!', 'Sure!' and 'Sorry, I can't make it tonight'. Clicking one of these adds it to your reply, saving you the effort of typing it.

What's the difference between 'Yes' and 'Sure'?

The tone. If you click the latter, Gmail will learn that you prefer an informal tone, and will tailor its suggestions accordingly. Use it for a few months and you'll notice Gmail choosing increasingly more sophisticated and specific responses. The only problem is exclamation marks.

Too many?

Far too many. Not everyone wants to sound like an over-excited toddler full of fizzy drinks ('Thanks!', 'Wow!', 'That's great!'). Google should let you turn off exclamation marks in replies. That would be brilliant!

Master WINDOWS 10 2020

Whether you're a long-time user or a recent convert from the doomed Windows 7, keeping pace with the changes in Windows 10 can be daunting. **Nik Rawlinson** explains the new and updated tools you need to be using in 2020

icrosoft's radical decision to release Windows 10 for free in July 2015 ensured the operating system was taken up by huge numbers of users. Since then, a series of major updates have continued to enhance what was already a huge improvement on

WHAT YOU CANDO

- Stop Windows updating while you're using your computer
- Remove tiles you never use from the Start menu
- Create a schedule to reclaim hard-drive space
- Force Windows to search your entire drive

its predecessor Windows 8.

But it seems not everyone is convinced. An estimated one in four PCs worldwide still run Windows 7. And if yours is one of them, you need to consider what to do next. Microsoft is ending support for Windows 7 on 14 January, after which it will no longer receive further updates and become increasingly risky to use as vulnerabilities and glitches go unfixed.

It's not too late to switch, though. You can still upgrade from Windows 7 to Windows 10 for free by downloading the Windows Media Creation tool from (www.snipca.com/33390) and following the onscreen instructions to update your PC. We think you'll be glad you made the switch, because Windows 10 is a slick, easy-to-use system that builds upon the best parts of Windows 7.

But even long-term Windows 10 users can learn how to 'master' the operating system rather than simply 'use' it. Here we'll explain how you can take control of Windows 10 by fixing update problems, reshaping your Start menu, optimising the Narrator function, searching more smartly, removing junk and more. We'll explain the new Your Phone tool, which blurs the distinction between Android devices and the Windows desktop, making it easier to keep in touch with your contacts, whichever device you're using.

We've focused on tweaking Windows 10 so that it works the way you want. Where there are similar tools in Windows 7, we explain how recent converts to 10 can apply their existing knowledge to the new tools they'll need to master.

MASTER WINDOWS UPDATE

Stop updates interrupting your work

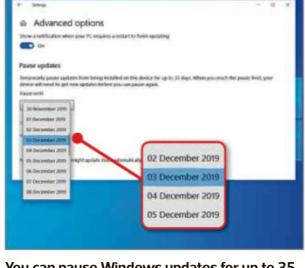
Along with twice-yearly Feature updates, which add new features to Windows 10, Microsoft releases regular security updates and other minor fixes. While these are vital to the smooth running of Windows, this constant barrage of updates can be infuriating.

Improved earlier this year, Microsoft's new 'active hours' feature is designed to ease the pain of constant updates. The idea is that the longer you work with Windows 10, the more it adapts to your habits, and will learn to apply updates when you're less likely to be using your computer. Bear in mind, if you're a recent Windows 10 adopter, the system will take time to learn your routines.

To check (and, if necessary, change) your active hours, open Settings (Windows key+I), then select 'Update & Security', followed by Windows Update. On the right-hand side of the window, click 'Change active hours'. Here, you'll see what your PC considers to be your current busy periods, during which no updates will be applied. To change these hours, switch off 'Automatically adjust active hours', then click Change.

Use the time boxes to define the start and end time of your active hours (these can be a maximum of 18 hours apart, see screenshot below). If you tend to leave your PC switched on overnight (even if it's asleep), you might want to set your active hours to extend late into the evening, for example, to make sure it only updates when you're asleep. So you may want to start your active hours at 5am to finish at 11pm (23.00), 18 hours later, as our screenshot shows.

Set vour active hours so that updates are applied when you aren't using your PC



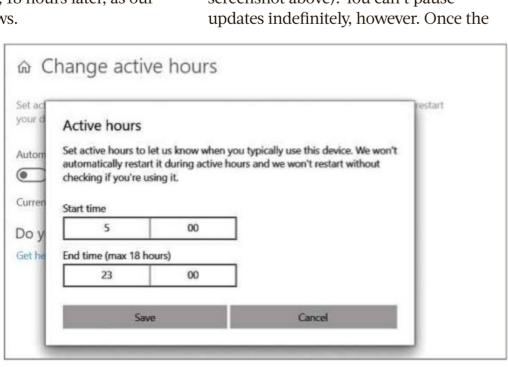
You can pause Windows updates for up to 35 days in 'Advanced options'

Avoid teething problems in **Feature updates**

Windows Feature updates have earned a terrible reputation for causing problems - in particular causing old devices to no longer work. Thankfully, Microsoft recently added a feature that lets you pause updates for up to 35 days in Windows 10 Home (this was previously only available in Windows 10 Pro).

When a Feature update is released, you can pause it until you're happy that it won't cause any problems. Because most major problems are discovered shortly after a Feature update is released, waiting a few days (or even weeks) can save you from a lot of frustrating glitches and lets you make an informed decision as to whether to proceed with the update.

To pause updates, go to the 'Updates & Security' section in Settings, then, in 'Advanced options', scroll down to 'Pause updates'. Here, click the dropdown menu and select the date after which Windows should next check for updates (see screenshot above). You can't pause





If an updated driver is causing problems, you can roll it back to a previous version

maximum 35 days is up, Windows will force an update on you.

Fix problems caused by driver updates

Windows Update doesn't only deliver updates for the operating system, but also for drivers and Microsoft programs. If you prefer to be in control of how updates for programs are installed, click 'Advanced options', then turn off 'Receive updates for other Microsoft products when you update Windows'.

This doesn't opt you out of driver updates, however, and these have been known to cause problems. In 2015, for example, Microsoft pushed out an update for Nvidia graphics cards that stopped multiple-monitor setups from working. Thankfully, if new driver updates cause any problems, you can roll back to a previous driver version.

To do so, click Start, type device manager, then click Device Manager in the results. Find the device that's stopped working by expanding the relevant category and double-clicking its entry. Click the Driver tab, followed by Roll Back Driver (see screenshot above).

We recommend you create a system restore point before you carry this out, so you can reverse the change if necessary. To do so, press Start, type system restore, then click 'Create a restore point'. Check the list of drives in the Protection Settings box and if it doesn't say 'On' beside your C drive, click Configure, followed by 'Turn on system protection'. Next, click Apply, OK, then Create to save an image of your settings.

MASTER THE START MENU

Introduced in Windows 95, the Start Menu is one of the operating system's most recognisable features. It's undergone several transformations over the past 25 years. Its most radical overhaul was the addition of tiles in Windows 8, which initially hogged the entire screen when Start was clicked. After much uproar, Microsoft relented and allowed users to shrink these tiles to less intrusive dimensions, but the current Start menu remains a contentious issue. However, with a bit of tweaking, you can tame this unwieldy tool to suit your needs.

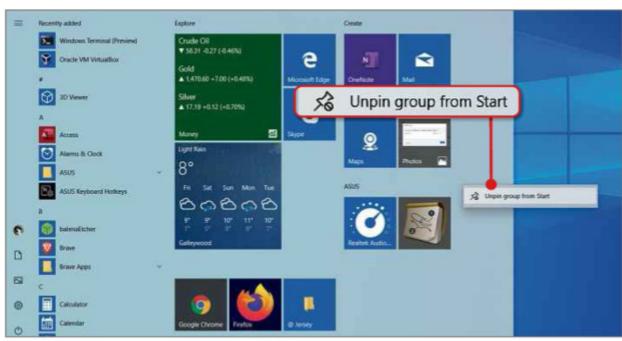
Remove unwanted tiles

In its default state, the Start menu provides quick access to Windows' most commonly used tools. But it also serves to push you toward programs Microsoft would like you to use, such as Skype and Windows Mail, and games like Candy Crush. Fortunately, you can now do away with any tile that you never use - or even an entire group. Simply right-click its heading, followed by 'Unpin group from Start' (see screenshot above right).

The programs within this group won't be uninstalled from your PC and will still be displayed in the Start menu's column on the left, but removing their tiles makes space for other, more useful tiles - or just a more streamlined Start menu.

You can also rearrange a group in the Start menu by clicking and dragging it (other groups will shuffle out of the way to accommodate its new position).

For more nuanced control, drag individual tiles to move them between



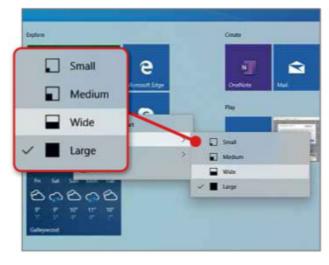
You can now remove an entire group of tiles from your Start menu

groups, and right-click a single tile to unpin it from Start.

Make your Start menu more useful

Some tiles provide information without needing to launch the program they're associated with. Known as 'live tiles', these flip over to reveal the extra information as soon as you open the Start menu. For example, the Weather tile will display the forecast for your local area. The amount of information displayed depends on the size of the tile. To change the size of a tile, right-click it and hover over Resize, then try the different sizes (see screenshot above right) to see how each setting affects the tile's display.

To add a program to a group of tiles, find it in the list of software on the left of the Start menu, right-click its name and



Increasing the size of a live tile displays more information

select 'Pin to Start'. If it's a program you use all the time, you can go further by right-clicking it, hovering over More in the menu that opens and clicking 'Pin to taskbar' instead.

This adds it to the collection of program icons to the right of the Start menu, where it can be launched by holding down the Windows key and pressing the number that correlates to its position from the left.

So, if your taskbar displays (from the left) the Windows icon, Cortana, Search and Task View buttons, followed by four program icons, pressing Windows+1 would launch the first program, Windows+3 the third, and so on (ignoring Windows' default tool icons).

You'll notice that there are quick links to your Documents and Pictures folders on the left of the Start menu (the second and third icons down on the far left). You can remove or add icons here via Settings. Click Personalisation followed by Start, then click 'Choose which folders appear on Start' and use the sliders to enable/ disable the various options.

How will Windows 10 change in 2020?

Microsoft is planning to launch a new version of its built-in browser Edge on 15 January. This will run on Chromium the software that also powers Google's Chrome browser. This means Edge will also run Chrome extensions - dramatically expanding its current meagre range.

Windows Update will also get an update of its own. Microsoft is currently testing a new 'optional updates' feature that lets you decide whether to install certain updates. It's likely to appear in the first Feature Update next year (due in the spring), but it's not yet clear exactly what kind of updates will be made optional.

We also expect to see a new 'cloudreset' feature in the Recovery section of Settings that will make it easier to install a fresh copy of Windows. By downloading the very latest version directly from Microsoft's servers, you won't have to go through the rigmarole of installing numerous updates after reinstalling Windows yourself.

And finally, Cortana is getting a makeover. Microsoft's much-hyped but unloved virtual assistant will let you type questions about your PC - or anything else – within a WhatsApp–style chat window (no, we don't like the sound of this either).

MASTER NARRATOR

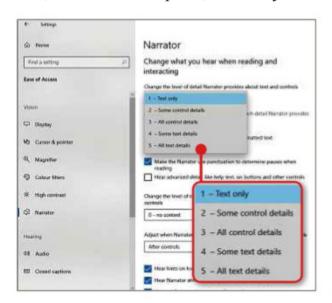
Narrator can read aloud whatever is displayed on your screen. However, like a friend who has had one glass of wine too many, it can talk too much. In fairness, because it's primarily designed for the visually impaired, it tends to read out every on-screen element for fear of leaving the user in the dark – from button names and menus to detailed descriptions of window elements like scroll bars. It also provides feedback when you press buttons like volume up and down.

In the most recent Feature update for Windows 10 (released in November), Microsoft introduced more keyboard shortcuts for Narrator, giving you greater control over the amount of detail it reads out. So even if your eyesight is 20/20 vision, it may be time to give it a go. It's great for reading text from a website when you're doing something else. It also works as an excellent proofreading tool. Whenever you read back an email you've just written, for example, it's too easy to read what you think you've written, not what's on the page. Narrator says what it sees, word for word.

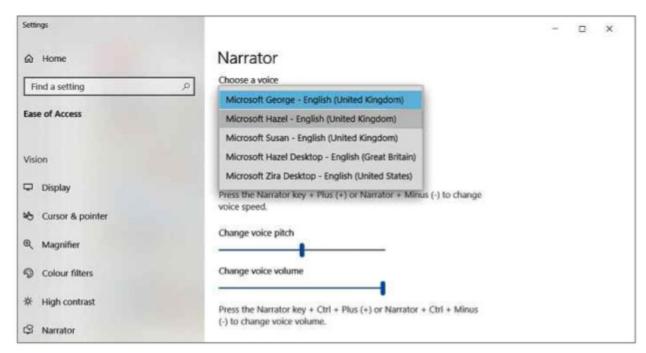
To tweak Narrator, go to Settings, 'Ease of Access', then Narrator. Alternatively, you can launch Narrator immediately by pressing Windows+Ctrl+N.

Control how much Narrator reads out loud

As mentioned above, Windows now lets you adjust the level of detail Narrator goes into. These levels are on a scale from one (minimum detail) to five (maximum). You can change your level via the Narrator pane in Settings (see screenshot below), or press Caps Lock+V to cycle through them. If you only want to hear on-screen text, select the first option, 'Text only'.



Tweak this setting to select how chatty Narrator is



Make Narrator easier on your ears by choosing the accent, speed, pitch and more that suits you best

Repeat or skip entire sentences

Narrator lets you skip back and forth when it's reading a document, and it can repeat any points you have missed. Press Caps Lock+Space to enter scan mode, which lets you move around a document in your preferred order. To read the entire contents of a window, press Caps Lock+W. Alternatively, press Caps Lock+R to start reading from the current cursor position – a blue box indicates which word is being read (see screenshot below).

Following the May 2019 update for Windows, you can now use Caps Lock+Ctrl in combination with M, ',' (comma) or '.' (full stop) to listen to the previous, current and next sentence. The three keys are next to one another, making it easier to use (in theory). You can listen to entire paragraphs by pressing Caps Lock+Ctrl combined with J, K and L for the previous, current and next paragraph respectively.

When reading online in either Chrome or Edge, scan mode also lets you go back

Welcome to Narrator Ш 5 settings, Eat Novator Minimize Start Namous after sign in

The blue box indicates the current word being read by Narrator

and forth between headings, so you can jump to a specific section on a web page, skipping whatever precedes it.

Professionally formatted web pages use a variety of headings, known as levels, with level one the most important, two next and so on. If you've ever had to write the code behind a web page, these are the H1, H2 and H3 tags you see. To jump to the next major heading, use Caps Lock+1 (add Shift key to that combination to skip backwards). To navigate to level two headings, use Caps Lock+2 (add Shift to move backwards) and so on.

You can download Microsoft's PDF list of Narrator's shortcuts (www.snipca. com/33376), then print it for reference.

Make Narrator easier to understand

You can now also change how Narrator reads text, including the pitch, speed, volume and accent (see screenshot above). Go to Settings, 'Ease of Access', then Narrator to see the options. You can also add new voices. Return to the Settings page, click 'Time & Language', then Language. Click your default language on the right, select Options, then 'Add additional speech voices'. Now choose from the list (including Irish and Australian), then click Add. Finally, return to the Narrator settings to select vour new voices.

When listening to Narrator, press Caps Lock in combination with '+' and '-' to speed up and slow down the narration. Combining those shortcuts with Ctrl increases and decreases narration volume, without affecting the overall level of your speakers.



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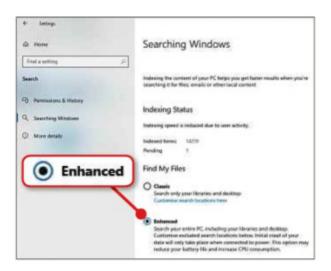
MASTER WINDOWS SEARCH

The Search tool built into Windows is often accused of being slow compared with free alternatives such as Everything (www.voidtools.com). However, by letting you run searches directly from the Start menu, it's also very convenient, and in recent years Microsoft has started adding new features.

Make Windows search everywhere

To perform fast searches, Windows creates a search index - a record of where your files are stored. By default, Windows only indexes your user account folders this means only your Documents and Pictures folders, desktop and so on appear in search results. There's a good chance you have other files stored outside your account folders. To index your entire drive, open Settings, click Search, then Searching Windows. In the Find My Files section, switch from Classic to Enhanced (see screenshot).

Alternatively, to add specific folders (perhaps on an external hard drive) rather than your entire main hard drive, click 'Customise search locations here' under the Classic option, then Modify.



Switch to Enhanced if you want all files on your PC to be indexed by Windows Search

Click the arrow beside the drive with the folders you want to index and expand the sections within it until you reach the folders you need. Check the box beside your chosen folder or folders, then click OK.

Run smarter searches

One problem with Windows' search tool is that it often returns irrelevant results. By using wildcards in searches, you can give Windows a clearer idea of what you're looking for. Wildcards are special characters you include in your searches to find specific files. For example,?

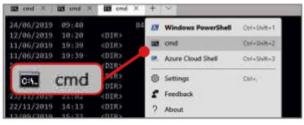
replaces a single unknown character, while * (asterisk) replaces one or more. So, if you had spreadsheets tracking a share portfolio over the past three decades, each called 'shares-' followed by the year, you could find just those relating to the first 10 years of this millennium by searching for shares-200?.

Likewise, tax*.docx would find any Word document whose name begins with 'tax', so might find your letters to HMRC, regardless of what the rest of the filename is. Typing tax.*, on the other hand, would return any file called tax, regardless of its file extension (such as .txt, .docx or .pdf).

You can also use search operators to find files. For example, searching for computer AND active will return only files whose name contains both of those words, while computer NOT active will search for filenames containing the word 'computer' but exclude any that also contain 'active'. Going further, you can combine operators with plain-English date searches. So, computer AND active date:last week would limit the hits to those files created within the last seven days. Use 'last month' or 'last year' in place of 'last week' as appropriate.

MASTER WINDOWS TERMINAL

The Command Prompt has long been a feature of Windows (click Start, type CMD, then press Enter to launch it). It's a powerful, text-based alternative to the windows, buttons and controls within Windows, and very little has changed since Windows 7. However, earlier this year, Microsoft released a beta version of a new Command Prompt-style program called Terminal. Microsoft has since announced it's not intended to replace Command Prompt, but it's more powerful and is hugely customisable. It also lets you launch both Command Prompt and PowerShell (a more powerful version of Command Prompt mainly used by programmers). You can download Terminal from the Microsoft Store at www.snipca.com/33377.



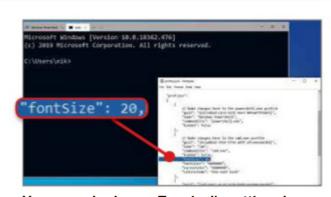
Windows Terminal lets you open multiple **Command Prompt tabs**

Use Command Prompt tabs

Like your browser, Terminal uses tabs, allowing you to have multiple instances of Command Prompt open within the same window. You can then quickly switch between them by pressing Ctrl+Tab. To open the first Command Prompt tab, run Terminal, then click the down arrow on the title bar at the top. From the list of options that appear, select 'cmd' (see screenshot left) alternatively, press Ctrl+Shift+2. You can repeat this as many times as you like, with each new instance of Command Prompt opening as a new tab. You can close and move tabs, just as you would in vour browser.

Make Terminal easier to read

Unlike most programs, to change Terminal's settings you need to edit a text file. Although not as easy as using buttons and controls, once you master this method you'll find it's very powerful. Start by pressing Ctrl+, (comma) to open the settings file in Notepad. Scroll to the section called 'Command Line's



You can only change Terminal's settings by editing a text file

appearance', click at the end of '// Make changes here to the cmd.exe profile', press Enter then type "fontSize": 20, – don't forget that comma at the end (see screenshot above). Press Enter again, followed by Ctrl+S and you'll notice that the text in the Command Line window increases in size. Thanks to a recent update, you can now reorganise tabs and open multiple panes in each one. To achieve the latter, press Alt+Shift and either '+' (horizontal pane) or '-' (vertical). The new pane will open with PowerShell, but you can switch it to Command Prompt by typing cmd then pressing Enter.

MASTER PC STORAGE

Reclaim hard-drive space

Storage Sense (a tool built into Windows that removes unwanted files and frees up space on your hard drive), goes further than the Disk Cleanup tool in previous versions of Windows by letting you set a schedule to delete junk from your PC.

Click Start, type storage sense, then select 'Turn on storage sense'. Before switching it on, however, click 'Configure Storage Sense or run it now', and check that you're happy with what's about to be deleted. Earlier this year, Microsoft updated Storage Sense to include your Downloads folder. Although not enabled by default, it's easy to accidentally select your Downloads folder, which would mean everything in it is deleted each time you run Storage Sense.

To prevent Storage Sense from deleting your downloads, change this setting to Never

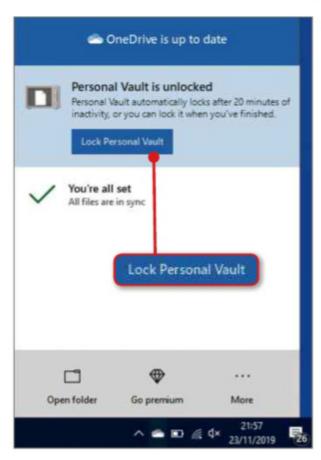


To make sure this doesn't happen, change the second box in the Temporary Files of the Storage Sense section to Never (see screenshot below left). Next, use the options lower down the page to set how often Storage Sense should run. When you're happy with your settings, click the back arrow (top left), then click the switch at the top of the Storage pane to activate Storage Sense.

Use OneDrive's Personal Vault

In previous versions of Windows, OneDrive – Microsoft's online storage service – was an optional extra. However, in Windows 10 it's installed by default and launched at startup. Open it by clicking the cloud icon on the taskbar or searching for it in the Start menu. If you haven't already done so, you should now see an alert to set up your Personal Vault, which Microsoft has been rolling out in stages throughout 2019. Personal Vault is an encrypted area within OneDrive that can only be opened with a password, a code sent via text message, or a fingerprint scan. It also automatically locks again after 20 minutes of inactivity (or three minutes when accessed on your phone).

While setting up your Personal Vault, you'll be asked to verify your identity. Choose your preferred method, then enter the code you receive. Your newly



OneDrive Personal Vault will lock after 20 minutes inactivity, but you can lock it yourself

created Personal Vault will be unlocked immediately and you can drag files into it in the usual way. If you want to secure your vault immediately, click the taskbar's OneDrive icon, followed by Lock Personal Vault (see screenshot above). The next time you try to open it, by clicking Personal Vault in the OneDrive app or in an Explorer window, you'll need to verify your identity again.

MASTER REMOVING PRE-INSTALLED APPS

When Windows 10 launched, it came with a large selection of pre-installed apps that, infuriatingly, could not be uninstalled. Thanks to recent updates, you can now remove many of these and clear the clutter from your Start menu (see page 52). If you've recently upgraded from Windows 7, you'll be very familiar with the 'Uninstall a program' tool in Control Panel. Although this tool remains in Windows 10, you can't uninstall pre-installed apps from here. Instead, open Settings (Windows+I), click Apps, then scroll down the list on the first page ('Apps & features') and click any that you don't use to reveal an Uninstall button. Click this to remove the app.

However, on some pre-installed apps (such as Microsoft Maps), you'll notice the Uninstall option is greyed out. To remove these, you'll need to use PowerShell. Click Start, type powershell,

```
1527c705-839a-4832-9118-54d4Bd6a0c89
Microsoft.MicrosoftOfficeHub
Microsoft.Getstarted
Microsoft.Office.OneNote
microsoft.windowscommunicationsapps
Microsoft.BingWeather
Microsoft.XboxApp
Microsoft.WindowsCamera
Microsoft.XboxGameOverlay
Microsoft.WindowsTerminal

PS C:\WINDOWS\system32> Get-AppxPackage Microsoft.WindowsMaps | Remove-AppxPackage
```

Use PowerShell to remove those pre-installed apps that won't uninstall in Control Panel

then right-click Windows PowerShell in the results and click 'Run as administrator' (you can also use Window Terminal – see page 55). Next, type Get-AppxPackage | Select Name, then press Enter. Search the resulting list for the app you want to remove or find it by right-clicking the title bar at the top, then Edit, followed by Find. In this case, the app we want is called 'Microsoft.

WindowsMaps'. Highlight this entry using your mouse, then right-click to copy it to the clipboard. Now, to remove the app, type Get-AppxPackage [NAME] | Remove-AppxPackage (press Ctrl+V to replace '[NAME]' with the entry you copied earlier, see screenshot), then press Enter. If you want to reinstall the app, simply search for it in the Microsoft Store (www.microsoft.com/store).

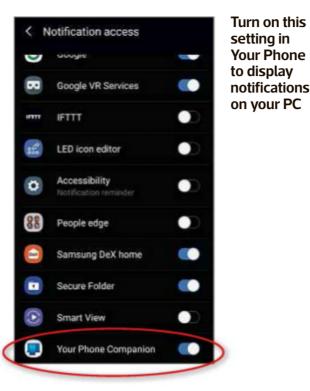
MASTER 'YOUR PHONE'

Microsoft no longer makes Windowsbased phones, which is good news if you have an Android phone. Since the demise of its mobile operating system, Microsoft now appears focused on linking Android with Windows, courtesy of its Your Phone feature (iPhone support remains limited at present).

It's worth becoming familiar with it now, because Microsoft will soon start rolling out a new feature to let you make and receive phone calls directly from your PC. To use it, install the Your Phone Companion app (www.snipca.com/33379) on your phone and the Your Phone program (www.snipca.com/33380) on your PC, then log into both using the same Microsoft account.

Get phone notifications on your PC

Your Phone can now send phone notifications directly to your PC, where they'll slide on to the screen like other Windows 10 alerts from Mail or Windows



Defender. Some of these, such as alerts from Facebook Messenger, you can reply to directly within Your Phone.

You need to set it up first, however. Click Notifications in the Your Phone PC program, then 'Open settings on your phone'. Next, go to your Android phone

and, as long as you've already installed and signed into the Your Phone app, it will display the Notifications settings page. Scroll down and enable the option for Your Phone Companion (see screenshot). If you're receiving too many alerts, click Customise within the Notifications section of Your Phone on your PC, then click the sliders beside the programs you want to mute.

Use your PC to send text messages

You can also use Your Phone to write and send text messages. If you're often left infuriated – and who hasn't been? – by your phone's autocorrect tool when it transforms your messages into gobbledegook, you'll appreciate being able to use your PC's keyboard to quickly type error-free messages. Open Your Phone on your PC, then click the Messages option from the list on the left. Here, you can either write a new text message, or reply to existing ones.

MASTER WINDOWS HELLO

Weak passwords are relatively easy to crack, while complex ones are easy to forget. To help, Windows 10 includes a tool called Windows Hello, which lets you log in using biometrics (a scan of your fingerprint or facial recognition). It also allows you to use a USB stick such as a YubiKey (www.yubico.com) to access your PC – for more on YubiKey see Issue 563, page 35.



Not all webcams work with Windows Hello

Depending on its age and specification, your PC might not support the full range of Windows Hello login options. To find out, open Settings (Windows+I), then click Accounts followed by 'Sign-in options'. As you can see from our screenshot, our laptop doesn't let us log in using facial recognition, despite having a webcam.

However, we can use its fingerprint reader. To make use of this, click Windows Hello Fingerprint, then follow the instructions to add your fingerprints. It doesn't matter which finger you set up, and you can add as many as you like, so could also include those of other family members if you share a single account. Once set up, you'll be able to log into Windows and authorise purchases with a single press of your finger.

Log in using a PIN

If you don't have a fingerprint reader or compatible webcam, or if you've set up fingerprint/facial recognition but it fails to recognise you, you can use a PIN instead. For security purposes, your PIN can only be used to unlock the PC you set it up on - it can't be used to access your Microsoft account on other PCs. Set one up by clicking Windows Hello PIN and following the prompts to specify your chosen code.

If you can't recall your PIN when logging in, click 'I've forgotten my PIN'. This new feature lets you reset your PIN using your Microsoft account password. If you've set up two-factor authentication on your account, you'll need to confirm vour phone number so Microsoft can text you a security code. 🕰

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Download & keep your

Don't risk losing your sentimental or important emails. Nik Rawlinson explains how to download and keep them forever, no matter which email service you use

here do you keep your emails? For most of us, the answer to that question is, 'my inbox', but that's not always the most appropriate option. Leaving them in your inbox leaves them at risk of being accidentally deleted, especially when you clear out your old emails to free up space. So if you've got important emails you want to preserve, it's worth taking action today by downloading

PC-BASED EMAIL CLIENTS

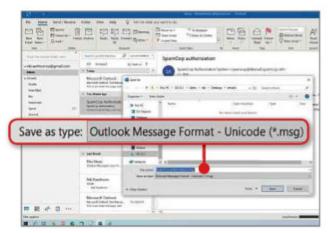
view them whenever you want.

them to your PC, where you'll be able to

Outlook

To save an email in Outlook, select it, then click File,

followed by Save As. Navigate to the folder in which you want to store it, then click Save and the email will be exported as a '.msg' file (see screenshot below). You can then view an email saved in this



Save individual Outlook emails as '.msg' files, which you can view by double-clicking

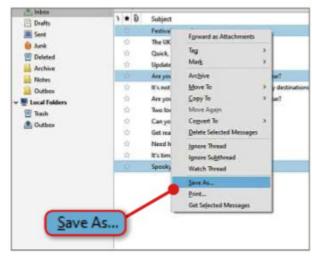
format by double-clicking it. It will open in a new Outlook window. The email won't be added back into your inbox, though the original will still be there unless you've already deleted it.

To save multiple emails in one go, hold the Ctrl key while clicking each email you want to save, then click File followed by Save As. Instead of each email being saved as individual '.msg' files, however, they will be combined into a single plain text document, which can then be opened using Notepad, Word or any other document editor.

Thunderbird

Thunderbird (free from www. thunderbird.net) is a popular desktop email client and includes many of the same features as Outlook and also lets you save your emails.

To save a single email, right-click it, then select 'Save As...' (see screenshot



Thunderbird lets you save multiple emails in one go as separate files

below). Navigate to the folder you want to save it in, then click Select Folder.

To save multiple emails, hold Ctrl while clicking each one, then right-click one of them and select 'Save As...'. Each message will be saved as a separate '.eml' file. As with Outlook, when you double-click one of these files your email is displayed within Thunderbird but stays in your chosen save location, allowing you to keep an archive of important messages completely separate from your inbox.

Windows Mail

It's easy to use and comes pre-installed with Windows 10, but Windows Mail is also very limited in

features and lacks a tool for saving multiple emails. It does let you save emails one at a time, however.

Select an email, click the three dots at the top of the preview pane, then select 'Save as...'. Navigate to your chosen save location, then click Save. As with Thunderbird, Windows Mail saves emails as '.eml' files, meaning you can open them in Windows Live Mail, Thunderbird and several other email clients - simply right-click the file, select Open With, then choose what program to open it in.

Unlike Outlook and Thunderbird, Windows Live Mail doesn't let vou save several emails in one go, so you'll need to save each one in turn, which can take time if you have a lot of emails to archive.

WEB-BASED EMAIL SERVICES

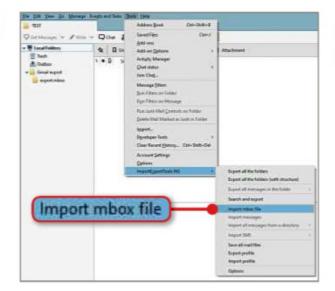
Gmail You can download individual emails in Gmail by selecting them, clicking the three vertical dots at the top right, then selecting 'Download message'. Your email will now be saved as a '.eml' file, which can then be viewed using email clients such as Thunderbird.

To download multiple emails, however, you'll need to use Google's Takeout service. While relatively easy to use, downloading then viewing emails in this way requires a few involved steps.

Unless you want to download all your emails, you first need to apply labels to those you want to save. To do this, use Gmail's built-in search box to locate the emails you want, then tick the boxes to the left of each one. Next, right-click one of your selected messages, hover over 'Label as', then type the name of your new label (for example, Saved) on the top row and press Enter.

You could use an existing label (if you've already created some), but you'll then be adding your messages to a group that already exists, so when you carry out the export process all the emails in that existing group will also be exported.

Open a new browser tab and go to Google's Takeout service at www.snipca. com/33353. Click 'Deselect all' (by default, this tool is configured to export all of your data from every Google service), scroll down and tick the box to the right of Gmail. Next, click 'All mail data included', untick the box beside 'Include all messages in Mail', then click



Google's Takeout lets you save several emails in one go, which you can view in Thunderbird

the name of the label you just created. Scroll to the bottom of the page and click 'Next step'. Leave 'One-time archive' selected and click 'Create archive'. Google will combine the selected emails into a single file and email you a link from which you can download it.

Your email will be downloaded as an MBOX file, but viewing these also requires a bit of work. You need to install Thunderbird, along with the ImportExportTools add-on (search for this by pressing Alt+T, then Add-ons, then install it). Once installed, right-click Local Folders in the left pane, then select 'New Folder...' and name it something like Gmail export.

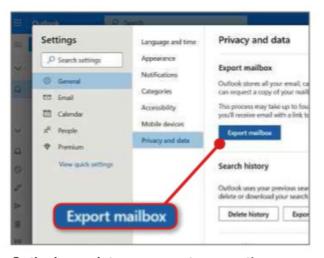
Next, press Alt, T, then select ImportExportTools, 'Import mbox file' (see screenshot above). Follow the onscreen instructions, selecting the MBOX file downloaded from Gmail. You should now see your saved emails in your new 'Gmail export' folder.

Outlook.com

Microsoft's web-based email service doesn't let you save individual emails, unlike its desktop client - take a look at the box below for a workaround. And although Outlook.com has a built-in export tool, it isn't as flexible as Google's in that it only lets you export your entire mailbox. This will be exported as a '.pst' file, which can only be opened in the desktop version of Outlook, and the link to download this file can take up to four days to arrive by

If you're willing to live with these limitations and press on regardless, log into your account, then click the settings (cog) icon at the top of the page, followed by 'View all Outlook settings' at the bottom of the sidebar that opens. Click General in the floating pane, followed by 'Privacy and data'. At the top of this section, you'll find the Export tool. Click the blue 'Export mailbox' button (see screenshot below) and Microsoft will bundle your emails into an archive.

email.



Outlook.com lets you export your entire mailbox, but not individual messages

Another option is to simply shift from using Outlook.com to a desktop client such as Thunderbird, which allows you to save emails more easily, as detailed above. To do this, open Thunderbird, go to Options, Account Settings, then click Account Actions, followed by 'Add Mail Account...'. Now enter your Outlook.com email address and password, then choose IMAP when prompted (this means your email will also be available on Outlook.com).

Yahoo Mail

yahoo!

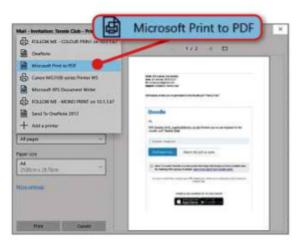
Yahoo Mail seemingly has no interest in letting you save

emails. You can't save individual emails, nor does it have an export feature. One option is to forward emails you want to save to another free service, such as Gmail. Alternatively, if you only want to save individual emails, take a look at our box (left) on creating PDFs.

Save your emails as PDFs

The methods we've covered here allow you to save emails in the format you received them, meaning you can open them within your email program. However, if you simply want to preserve an email, another option is to turn it into a PDF. This is easier and quicker than it sounds, but the process differs slightly depending on which email service you use.

First, open the email you want to save, then look for the Print option. In desktop email clients, you can usually print an email simply by pressing Ctrl+P. In web-based email services, however, this will print the entire browser window, so instead look for a small printer icon (as in Gmail) or click the menu button



(usually three dots) and look for a Print option (as in Outlook.com). Next, instead of sending the email to your printer, select 'Save to PDF', 'Microsoft Print to PDF' (see screenshot) or similar, then click Print. The result will be a permanent record of your email in an easy-to-share PDF file.

Know Your



Confused by your cables? Not sure what goes where? Will Stapley untangles those you need to know about and explains how to use them

DATA CABLES

USB

The sheer variety of USB cables (or more specifically the connectors on either end) is mind-boggling. These connectors come in three main styles: Type A (rectangular), Type B (square) and Type C (flattened oval), but you can also get Mini and Micro versions of A and B.

Then there are the many 'proprietary' cables developed by manufacturers specifically for their own devices - lose one of these and you'll need to buy a replacement directly from the manufacturer (assuming they're still in business) or second hand.

Happily, these are less common now, with most new devices sensibly using standard connections.

USB-C cables (which use the Type C plug) are the most recent and also the most versatile, letting you connect the latest phones to your PC. Because they can carry data, audio, video and a power supply, you can use a USB-C cable to connect a compatible laptop to a docking station (such as this £30 Anker model

www.snipca.com/33414). This will not only power your laptop, but serve as a connection point between it and your keyboard, mouse, monitor and speakers. And, unlike other USB connectors, you can plug in USB-C either way.

And there's no need to worry about plugging a USB cable into the wrong port – if it fits, it will work. However, transfer speeds will vary depending on the devices at either end of the cable, as well as on the cable itself. There are three USB standards: USB 1.1, USB 2.0 and USB 3.0 (which has now reached 3.2). Each new generation is faster than the one before.

For example, USB 3.0 can transfer a 1GB video in two seconds, compared with 16 seconds with USB 2.0 and around 11 minutes on USB 1.1. In other words, to get the fastest speed possible, both devices and the USB cable that connects them need to use the USB 3.0 standard.

Most new devices support USB 3.0, but on some laptops only via specific USB

From left to right: **USB-A, USB-**B, Mini USB, MicroUSB and **USB-C** You can identify a **USB 3.0** cable by the five extra connectors behind the front four

ports. Take a look at the ports on your laptop - if you spot a small SS symbol next to a USB port, it supports USB 3.0. If your USB connector is blue, it's a USB 3.0 standard. You can make sure by peering inside the plug itself and checking the number of metal pins within: older cables have just four metal connectors, while USB 3.0 cables have an additional five connectors at the back (see photo above right).

Ethernet

Wireless connections might be more convenient and make for a tidier working environment, but in many ways cables are superior. They aren't hampered by nearby networks and other interference, meaning they can maintain fast speeds at all times. Most routers have Gigabit Ethernet (also known as Gigabit LAN) ports, which can transfer at speeds up to 1Gbps (1,000Mbps). To benefit, however, the device you're

connecting it to needs to support Gigabit Ethernet, as must the actual cable. The good news is that

15 years is likely to be Cat5e or higher and will therefore support Gigabit Ethernet speeds. If you're using older cables, they may be the slower Cat5 type, which will reduce speeds to around 100Mbps. If you're not sure which you have, the Cat rating cables will support speeds

any Ethernet cable bought in the last will be on the cable (pictured).

PS/2

It's likely that your keyboard and mouse connect to your PC wirelessly or using USB. If you have a particularly old set of peripherals, however, they may use PS/2 cables (with green and purple plugs). While PS/2 ports are still found on some newer computers, it's uncommon. But if you have a PS/2 keyboard or mouse that you can't bear to part with, you can carry on using it with your new computer by buying a PS/2-to-USB adapter (around £8 on Amazon www. snipca.com/33409, pictured). Simply plug your old keyboard and mouse into the two PS/2 sockets on the adapter, then the other end into a spare USB port on your PC.



Don't bin your old keyboard and mouse use a USB adapter like this to connect them to PCs that lack PS/2 ports

Cat5e or Cat6 Ethernet

of 1Gbps

VIDEO CABLES

VGA

Back in the 1970s and 1980s, computers like the Acorn Electron used coaxial cables to connect to standard, low-resolution TV sets. However, by

the 1990s most computers were using VGA cables to connect to dedicated monitors, which were able to

produce a much sharper picture. VGA cables are still widely used today, mostly

connecting older monitors or PCs. They can only carry analogue signals, so the quality can't match digital alternatives such as DVI and HDMI (see below). However, aside from a few rare exceptions, VGA cables are universal, so you're unlikely to run into any compatibility problems.



HDMI

HDMI cables improve on VGA and DVI by carrying audio as well as video signals. Because of this HDMI is commonly used to connect PCs to monitors, and TVs to DVD players or set-top boxes.

If you're using HDMI to connect your PC to a 4K monitor, make sure you use a High-Speed HDMI cable, which ensures better image quality. Almost all HDMI cables sold in the last few years are high speed, but you can check by looking for a High-Speed or Cat 2 label on the cable or on the plugs at either end.

If your cable is not high speed, it's worth buying one that is. Ignore expensive options - cheap cables are fine (such as the £5 Amazon

Basics HDMI cable from www.snipca.com/33412).

Devices like camcorders and portable projectors often have Mini or Micro HDMI ports, which take up less space. For these, you'll need an HDMI cable with a Mini/Micro HDMI plug on one end and a standard HDMI plug on the other, which lets you connect it to a display.

However, you may prefer to buy an adapter that lets you use any standard HDMI cable with your device. Make sure you buy the correct adapter - either Mini HDMI (www.snipca. com/33428) or the smaller Micro HDMI (www.snipca. com/33429). Check your device's specifications if you're not sure which one you need.



DisplayPort

Given their similar appearance and function, it's easy to confuse DisplayPort and HDMI connectors. However, DisplayPort connectors have an asymmetrical design, which means you can't plug an HDMI plug into a DisplayPort socket – and vice versa. They're not as common on home computers as HDMI, but if you do have one and your monitor only has HDMI ports, you can buy a cheap adapter (such as this £6 Benfei model from www.snipca. com/33408). There's also a Mini version of the DisplayPort connector, which was common on Macs until recently.

DVI

Despite

new digital

analogue

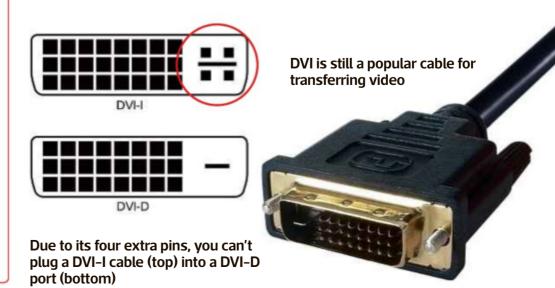
are still

VGA cables

The DVI cable started appearing around 2000, offering a digital and higher-quality alternative to VGA. While modern computers mostly provide HDMI ports for sending video signals, it's fairly common for them to also have one or more DVI ports.

There are two main types of DVI cable: DVI-I and DVI-D (there's also a less common analogue version – DVI-A). If you find your DVI cable doesn't fit the port on your PC or monitor, it's likely that you're trying to connect a DVI-I cable to a DVI-D port. Although they look almost identical, there is a difference. DVI-I has four extra pins (see image below left) that prevent you from plugging a DVI-I cable into a DVI-D port.

If you are experiencing this problem, you can buy an adapter, but you're far better off simply buying a DVI-D cable instead (for around £6 from www.snipca.com/33406, pictured below right), because these work with both DVI-I and DVI-D ports.



Problems Solved

Our experts solve all your tech problems

PROBLEM OF THE FORTNIGHT

Do I need to partition my new drive?

I'm a relative computing newcomer with a Windows 10 laptop. The main drive is already quite full so a friend suggested getting an external drive, which I've done. My friend also said that I should 'partition' this new drive. I didn't really know what that meant and, so far as I know, wasn't offered any options to do so during setup. I don't understand what this term means, or how a partition differs from a drive. Do I need to partition my new drive? If so, how? **Chris Holmes**

Let's start by considering 'partition' and its meaning. So, just for a moment forget computers and hard drives and imagine instead a very large, open-plan office. You could use that office to store filing cabinets all over the place.

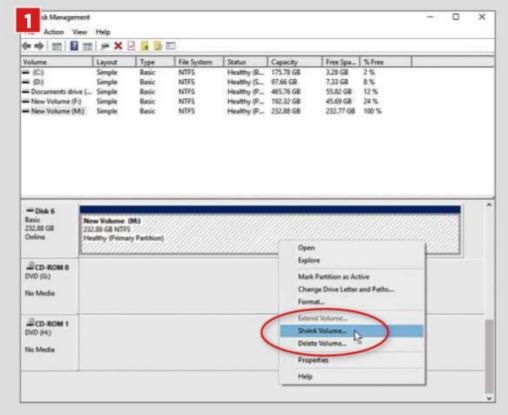
That would obviously work but, as a human, you might find such a vast space tricky to navigate. Is the filing cabinet you're looking for today at the far end of the room? In the middle? Near the door?

So, now imagine installing partition walls to divide this office into smaller spaces. This would allow you to organise things in whatever logical fashion you choose. Suddenly, it becomes much quicker and easier to locate a particular filing cabinet.

That, fundamentally, is the benefit of partitioning a hard drive: you take one large, digital storage system and divide



Type in the megabytes by which you want to shrink the drive, and click 'Shrink'

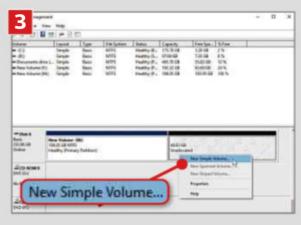


The first step to partitioning is to locate the drive and select 'Shrink Volume'

it into a number of smaller 'logical' spaces, each of which is assigned its own drive letter. The result is that one big physical drive becomes several 'logical' drives – allowing you to organise your files however you want.

For instance, your new physical external drive is probably labelled 'D', as that's the next available drive letter after C – and C is the letter given to your laptop's original hard drive. As an aside, you could create partitions on drive C, but we don't want to get distracted. So, on the new physical drive D you could, for example, create a partition for your photos. You could label that partition with the drive letter 'P' for 'photos'. That logical drive P will then appear in File Explorer, alongside drives C and D. From your perspective, it's just another drive – albeit one that's really a partition of D.

Partitioning is not a requirement, but if you decide it's for you, first press Windows key+X, then click Disk Management. Now, in the Disk Management window, locate the relevant drive (almost certainly 'Disk 1') and then right-click the bar to the right of this and choose Shrink Volume (see screenshot 1.



Right-click the Unallocated volume and choose 'New Simple Volume'

Next, type an amount in megabytes by which you'd like to shrink drive D with each 1000 amounting to 1GB. Click Shrink (see screenshot 2). Now right-click the new box, labelled Unallocated, and choose New Simple Volume (see screenshot **3**). Click Next. Then, type the number of megabytes for the new partition and click Next.

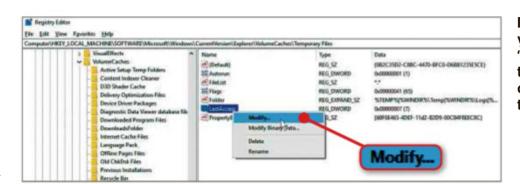
In the box that opens, use the dropdown menu to choose the desired drive letter, then click Next. Finally, choose the 'Format this volume with the following settings' option, ensure NTFS is set as the 'File system', tick 'Perform a quick format' and then click Next followed by Finish.

Why won't Disk Cleanup delete my temporary files?

I've been told that it might help to speed up my PC if I made regular use of the Disk Cleanup tool, which I've been doing now for several weeks. In doing so, I've noticed something odd. When I use it I tick all the boxes and then click OK, and the tool goes about its business. However, if I then launch the tool immediately afterwards, without having done anything else at all, both the Temporary Internet Files and 'Temporary files' entry often still show that some files need deleting, though the number is usually lower than before. Instructing Disk Cleanup to once more delete these files doesn't usually do anything. So, why is it that?

Steven Crab

Two reasons. First, when it comes to temporary files, Disk Cleanup by default ignores files created in the past week. This is based on the assumption that, even though the files are intended to be temporary, a program might still be making use of



In Registry Editor vou can modify 'LastAccess' so that Disk Cleanup cleans files up to the previous day

newer entries. Second, unless you close down virtually every single running program and Windows service, then it's inevitable that some temporary files will be in use when Disk Cleanup runs – so the tool will not remove those.

As such, there's nothing unexpected here, and Disk Cleanup is actually working as designed. The main problem is one of information, as the tool really could do a better job at communicating these facts.

However, if the situation bothers you, it's possible to tweak the registry to force Disk Cleanup to clean everything up to the previous day (meaning there's still likely to be some temporary files left

over). As with anything related to the Registry, making a mistake could have dire results - so back up before starting.

Then, launch the Registry Editor tool by pressing Windows key+R, typing regedit and hitting Enter. Now, use the left-hand navigation pane to drill down to HKEY_ LOCAL MACHINE\SOFTWARE\ Microsoft\Windows\ CurrentVersion\ **Explorer\VolumeCaches\Temporary Files**. Next, in the right-hand pane, right-click the LastAccess entry and choose Modify (see screenshot). Finally, in the 'Value data' field, type 1 and click OK. Click the cross to close the Registry Editor window, restart your PC and you're all done.

Is Xtra-PC worth the money to revamp my computer?

I've seen adverts for Xtra-PC (www.xtra-pc.com), claiming it'll make my computer "like new". It seems the gadget loads Linux instead of Windows. I know Linux is free but I wonder if this thing might earn its cost (about £28) by simplifying the loading procedure? I have an old Windows XP and a slow Windows 7 laptop. Will programs that work well with my present Windows machines also work with Linux? If the Xtra-PC stick is later removed, will the PC revert to Windows?

Tom Marshall

There's nothing magic about Xtra-PC: it's just a modified version of Linux (specifically Lubuntu, which is a free download from https://lubuntu.net) on a USB stick. We don't have the space here to explain all the steps to make a live-boot version of Lubuntu, but it's not that



Any live-boot Linux USB stick, like the Xtra-PC stick, will make an old PC feel faster

complicated and there are plenty of online tutorials.

Any live-boot Linux USB stick will make an old PC feel faster. However, neither Xtra-PC nor a stick you create yourself will make Windows apps compatible with Linux - they're different operating systems. Remove the stick and your PC will launch back into Windows.

The Xtra-PC business model is straightforward: it takes cheap USB sticks, plonks on a slightly modified free operating system and then does a lot of savvy marketing to convince people it's technology's second coming. However, it's really just a ready-made Linux live-boot stick. There's nothing wrong with that, but it's no miracle.

Problems **Solved**

Why won't Windows recognise my memory card?

When inserting my photo memory card into my Windows 7 desktop PC, I used to receive an option with regards to the destination for the images. Now, though, I receive no such options.

In the Computer window I see the entry in 'Devices and Portable Storage' and I can transfer the folders to wherever I choose – usually my Pictures folder.

After spending time trying to correct this I have not solved the problem. Please help me to obtain my previous options.

Colin Stuart

The feature you're looking for is called AutoPlay. We don't know how or why it's been disabled, but it's easy to reactivate.

First, in Windows 7, click Start followed by Control Panel, and then click 'Hardware and Sound' followed by AutoPlay. Next, if it's not already ticked, click the box labelled 'Use AutoPlay for all media and devices' (see screenshot).

Then, scroll down the Media/ Devices. Here, you can tell AutoPlay how to handle various types of media and devices. For example, for photos, open the Pictures dropdown menu and choose your preferred option.

Use AutoPlay for all media and devices



Select to use AutoPlay and then choose an option for your photos or other media

How do I auto-lock Windows 10?

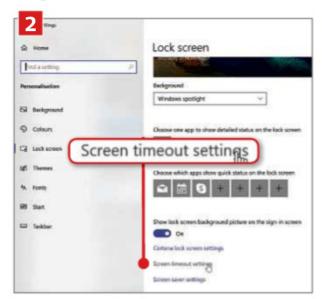
On my old computer I set up a password as part of the startup process. It prompted me to enter said password before allowing me to get to the Windows desktop screen. It also prompted me to re-enter the password every time the screen went black, which happened if I didn't use the machine for 30 minutes. I now have a new PC on which I would like to set up the same security measure, but can't remember how I did it. Can you help?

Dave Orchard

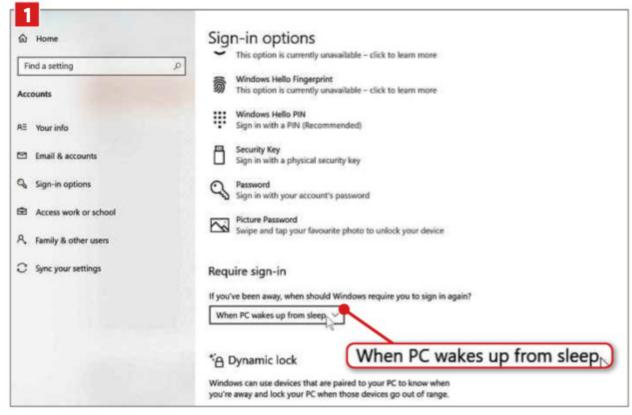
There are two stages here. First, you need to ensure that your PC is set to require signing in after it wakes from sleep. To do this, click Start followed by the Settings cog, and then Accounts followed by 'Sign-in options'. Next, in the right-hand pane, scroll down to reach the 'Require sign-in' heading. Below this, click to open the dropdown menu and then choose 'When PC wakes up from sleep' (see screenshot 1).

Next, you need to tell Windows 10 to

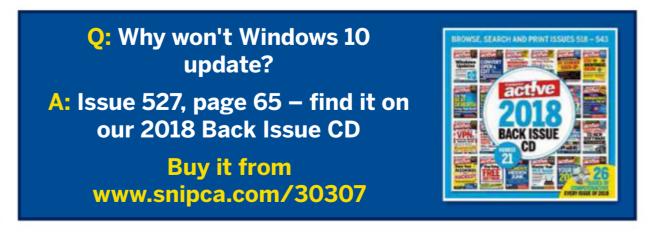
put your PC into sleep mode after your desired period. So, return to the Settings home screen and click Personalisation followed by 'Lock screen'. Next, in the right-hand pane, scroll down to find and then click the 'Screen timeout settings' link (see screenshot 2). Finally, below the Sleep heading, open the dropdown menu labelled 'When plugged in, PC goes to sleep after' and choose '30 minutes'.



Select 'Screen timeout settings' and choose when you want your PC to go into sleep mode



In 'Sign-in options' you can choose to require a sign-in when your PC wakes from sleep



Can I enable an iPhone battery alert?

Is there a way to have my iPhone issue an audible alarm when the battery reaches a predetermined low? I find the lack of this facility a terrible omission from Apple. I read Computeractive from cover to cover, usually in the loo, but I've never seen this mentioned. I've been a subscriber for over 10 years, incidentally – it's a super magazine!

Paul W Hunt

That's a lot of lavatorial reading. We won't ask what you do with each issue when you're done!

As for your question, we think you already know that iOS - the iPhone's operating system – does not have this ability. It does deliver visual notifications. They can't be disabled so you'll definitely have seen these, appearing when the battery level reaches 20 and then 10 per cent.

However, it's possible to add this feature using an app, of which there are several in the App Store. A free option

Current battery level: Alarm will sound when your battery reaches **≤** 20 % Play Alarm in Sleep mode? This uses a little more batt..

Battery Alarm Duck other music & sound when this alarm plays Random sounds Phone Clock Веер Clock Ding Baby Beep Old phone Ding Whistle White noise

Select the battery level at which you'd like an alert (far left), and then the sound you prefer when the alarm goes off (left)

that we've put through its paces is Battery Life Alarm (www.snipca.com/33081).

It doesn't have the prettiest of interfaces, but it's easy to use. To set it up, launch the app and then, next to the smaller percentage figure (coloured blue), tap to switch the indicator to the 'less than' symbol ('<'), and then just tap the minus ('-') or plus ('+') buttons to set the

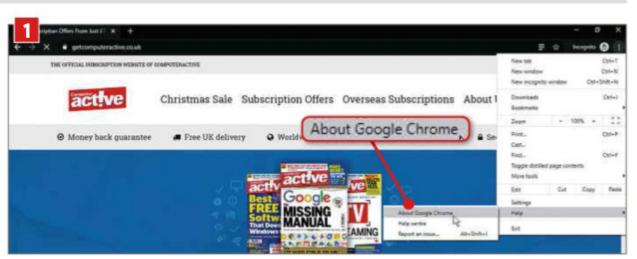
level at which you'd like an alert (see screenshot 1. Next, at the bottom, tap Melody and then tap to tick the sound you want (see screenshot 2). Note that this alert will continue sounding until the battery level goes above your set minimum, either through charging or by you going into the app to manually adjust the alert's trigger level.

Why can't I type emojis in Outlook.com?

I use Outlook.com for email. For some reason, I have lost access to emojis. The emoji icon is there but when I click it nothing happens. I don't know what caused it, but I suspect one of Microsoft's updates, though I was unable to find anything in various online forums to confirm this. I am sending this email via the Windows 10 Mail app, as Outlook now seems to be refusing to open the dropdown address menu! Could you throw any light on these anomalies? **Peter Rodway**

This is likely to be a problem with your browser, or particular browser setup.

Web services like Outlook.com are continuously updated, so if you're using a browser version that's a little bit older than the latest edition, then you can run into quirks like this. We've not been able to



If you're using Outlook.com via a browser, such as Google Chrome, check it is up to date

recreate this problem, and we've not had similar complaints from other readers.

So, in the first instance, make sure your browser is up to date. Microsoft Edge will get renewed automatically by Windows Update. But in Chrome, for example, you can check for a new version by clicking the menu button (three dots, top right), then clicking Help followed by About Google Chrome (see screenshot 1). It's similar in Firefox (click the three horizontal lines, top right), then Help followed by About Firefox. Now let any updates download (see screenshot 2), then click the Restart button.



Download any Firefox updates and then click the Restart button

Problems **Solved**

Can I group ALL my photos?

I'm running Windows 10. Is there a simple way to navigate the many different photo folders? Sometimes downloaded photos disappear, ending up somewhere other than my Photos folder. Nor is the image always in the Downloads folder.

Are there several photo folders and is it possible to connect them together? The Photos folder is my main folder for images. Thanks for helping this 'recycled teenager'!

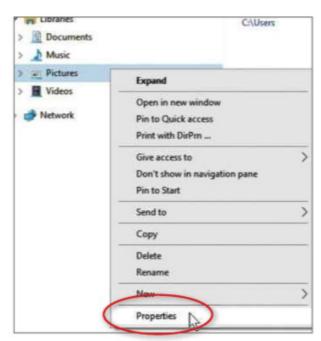
Les Marshall

A PC could host any number of folders containing photos. The default choice in Windows 10 is

Pictures, which is stored in your user profile folder – typically C:\Users\
YourUsername\Pictures. It sounds like you've created other folders, including one called Photos. This could exist anywhere on your drive but, again, is most likely in your user profile folder.

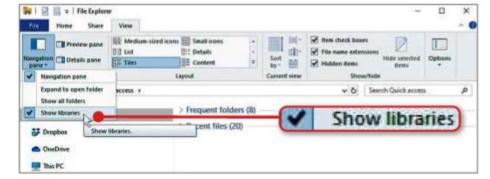
It's possible to use a feature called Libraries to 'pool' folders containing similar content so that they all appear in one place. Microsoft has by default disabled this in Windows 10, but it's easy to re-activate. First, press Windows key+E to launch File Explorer. Now select the View tab, then click the 'Navigation pane' button and tick 'Show libraries' (see screenshot left).

Using Libraries, you can bring all your photo folders together in one place



Select Properties and then the Add button to choose photo folders to pool with 'Pictures'

Libraries will appear in File Explorer's left-hand navigation pane. Click to expand this category, then right-click the Pictures library and choose Properties (see screenshot above). Now click the Add button, then use the 'Include Folder in Pictures' box to navigate to your Photos folder. Click to select it, then click the 'Include folder' button. Repeat for other folders that contain photos.



How do I re-attach my GIMP panel?

I'm a novice computer user and amateur birdwatcher. I've been experimenting with GIMP for editing some of my photos of our feathered friends.

Somehow I've managed to 'detach' the Brushes panel from another toolbox, so now it sits on top of everything else. I don't know how to get it back to where it was before. Do you even understand my problem?

Peter Gayford

We understand! You've inadvertently 'undocked' the Brushes tab from your toolbox, thus creating a standalone Brushes box (see screenshot 1). This is done by clicking the tab's heading and then dragging and dropping, which is easy to do by accident when editing.

The solution is the same but in reverse. However, with Brushes now in a separate pane it's perhaps not obvious that it also has its own little tab. So, look closely below the new toolbox's Brushes heading, and you'll see there's



It is easy to create a standalone box for Brushes by dragging its tab away from the toolbox

also a Brushes tab (see screenshot 2). Just click on this then keep the mouse button held down as you drag it back over and into your other toolbox, then release the mouse button to 'dock' it.

Click the Brushes tab, below the Brushes heading, and drag it back to the toolbox



WHAT'S THE DIFFERENCE BETWEEN...

Messages and iMessages?

I was happy with my old Nokia phone until it broke after a drop. I've now got an iPhone 7 that I picked up cheaply. I quite like it, but I'm confused about its text facility. On this handset I think they're called Messages or iMessages. Either way, when I'm sending texts to friends, sometimes my messages are coloured blue but at other times they're green. Could you explain this? Helen Webber

A decade or so ago, sending a 'text' meant making use of a standard system known as the Short Message Service, or SMS. A text message that you wrote on your old Nokia would become a little bit of digital data that would be sent over the SMS system, and could be received by any other compatible phone. That meant pretty much every phone, just about anywhere in the world.

That's still largely true, as SMS is active and still supported, but it's a dated and limited system. Many companies – Apple included – wish to both improve and control messaging in their own way, so have invented their own (typically incompatible) 'platforms'. Apple's messaging platform is called iMessage. On an iPhone and some other Apple devices, the Apple Messages app is used to send and receive via the iMessage platform.

However, only other Apple devices can receive (or send) iMessage messages. So, if you send a message to someone who doesn't have an Apple device, then your iPhone will revert to sending that message via SMS – so it becomes a traditional text message. The Apple Messages app distinguishes traditional SMS texts by colouring them green; messages that have been transported via iMessage are coloured blue.

The iMessage platform relies on internet access, be it Wi-Fi or a 4G or 3G mobile connection. SMS texts, on the other hand, work even on basic 2G, which is useful when signal is poor. Your iPhone will handle any switches automatically. However, if you so desire, you can force your iPhone to work only with the SMS system. To do this, first tap



You can set your iPhone to work only with SMS by switching off iMessage

Settings followed by Messages, then tap to slide the iMessage switch to its Off position (see screenshot).

Want to know the difference between technical terms? Email noproblem@ computeractive.co.uk

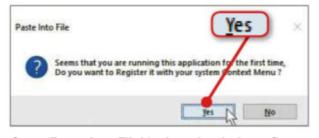
Can I print or save Windows Clipboard items?

I read Issue 565's Workshop about using Ditto instead of Windows Clipboard. I've used similar tools, but never worked out how to save or print information stored in the Clipboard. Will Ditto help with that?

John Whitley

Windows Clipboard has never had the ability to do either of these things. Up until Windows XP, Microsoft did include a tool called Clipboard Viewer that allowed individual items to be saved but, for whatever reason, the firm removed this from Windows Vista – and it's never returned.

To be fair to Microsoft, Windows Clipboard was intended as a 'background' service, rather than an app: a holding place for stuff that you want to transfer from one program to another. That is how it still works. Ditto merely improves upon this functionality. It will save hundreds of



Once 'Paste Into File' is downloaded, confirm you want to register it with your context menu

items in its database, but doesn't allow selective saves. Nor can it print.

There's no straightforward solution to printing, because the process depends on what's been copied. Still, all you need to do is paste the current contents of the Clipboard (or a Ditto item) into a suitable app and use that app's own Print option.

But we can help with saving, by suggesting a free tool called Paste Into File (www.snipca.com/33127). Double-click the downloaded 'PasteIntoFile.exe file to install, clicking Yes when asked if you want to register it with your system's right-

click (context) menu (see screenshot). Now, you can save the last item copied to your Windows Clipboard by rightclicking on a blank area of the desktop and then choosing Paste Into File. The tool detects the type of content, so just type a name for your file, pick the correct file extension (if needed) then click Save.

Next Issue



- Is my upload speed substandard?
- How do I print Calc's grid lines?
- Why won't iCloud update? ...And many more

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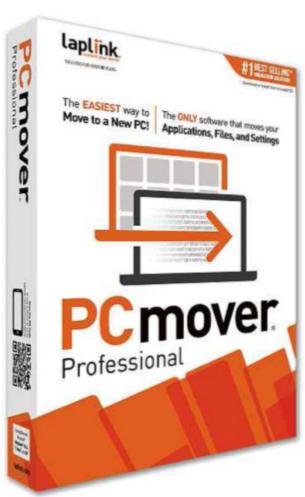
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Problems **Solved**

Reader Support



Having a problem with our recommended software or expert tips? Email editor@computeractive.co.uk and we'll do our best to help

Why is my NirLauncher empty?

Thank you for an informative and interesting magazine. However, I have a problem with NirLauncher, which you recommended on page 19 of Issue 565. I've followed the link you provided (www.snipca. com/32984), then downloaded and extracted three files plus one folder (typing in the password when requested). However, when I run 'nirlauncher.exe', I'm presented with a user interface that has no programs. I've checked the menus, but can't see anything obvious to help. In the NirSoft folder, there are 39 program files (not the expected 200), their names commencing with an A or B. What am I doing wrong?

Nigel Ashfield-Bowers

There are a couple of possibilities here. The first – and perhaps most likely – is that the ZIPextraction process went wrong. We say this is the most likely because it sounds like all the programs up to B are in the folder, but then no more. So the extraction got that far and then, for whatever reason, failed. So, in the first instance we'd suggest simply trying the process again.

However, another strong possibility is that your security software stepped in to wipe suspect files or to stop the process



Switch off this setting in Windows Security to enable the extraction of ZIP files

in its tracks. The very nature of many NirSoft tools means they're frequently falsely identified as harmful (or potentially harmful). We don't know which security software you're using, but you might need to momentarily disable it in order to successfully extract all files from the NirLauncher ZIP package.

Windows Security, for example, does identify and quarantine some NirSoft tools. To stop it doing this on installation, click the Start menu followed by the Settings cog, 'Update & Security' then Windows Security. Next, click 'Virus & threat protection' then, under 'Virus & threat protection settings', click 'Manage settings'. Now switch off the 'Real-time protection' slider (see screenshot below left). Don't forget to re-enable this (or other security software) after unpacking the NirLauncher ZIP.

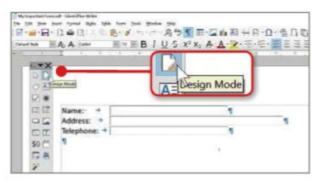
Why can't I edit my LibreOffice form?

In Issue 565's In The Club (page 48) you showed us how to create editable PDF forms, using LibreOffice Writer. I tried this and found it very useful. However, once I close the Writer document from which the PDF was generated, the next time I open the same file the Form Control toolbar choices are greved out, meaning the contents of the text boxes, tick boxes and other elements of my form are no longer editable. As a result, in Writer I can only enter data in the boxes and not amend their properties. Is this normal? Or am I doing something wrong?

Bill Lodge

It is normal. The problem is that, by default, Writer opens saved forms with Design Mode disabled, but Design Mode needs to be enabled in order to make changes to existing designs. We probably should have mentioned this point.

Fortunately, it's easily fixed. You just need to click the Design Mode button (see



Click the Design Mode button to edit existing forms in Writer

screenshot above) in the Form Controls toolbox to switch between enabled and disabled. Incidentally, this switch provides a handy way to test the functions of your form before turning it into a PDF, because it lets you flip instantly between data entry and design.

Was your Show Desktop advice overdone?

In Issue 566's Problems Solved (page 65) you answered Neil Stanley's question, about the missing Show Desktop button in Windows 10. The answer you gave looks rather involved to me! All one needs to do in order to see the Windows desktop is press Windows key+D. You should try it! Jeremy Arnold

It's a useful tip, and one that we're happy to pass on. Indeed, we use Windows key+D often ourselves.

However, Neil asked a specific question, which was why he could no longer click to see the desktop – so that's the question we answered. Admittedly, we could have thrown in the Windows key+D shortcut as a bonus tip, but it just didn't occur to us while writing our reply. Besides, we know that many of our readers struggle with the finger contortions required to perform keyboard shortcuts, so it's good to have alternative methods to hand.

We're sure that Neil and other readers will have benefited from our original advice, and that still more will thank you for mentioning this keyboard shortcut.

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- TRY NEW SOFTWARE FIRST
 Sign up to betas and preview builds
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Jargon **Buster**

2.1 Stereo speakers with a separate subwoofer.

3G/4G/5G Technologies that deliver faster mobile speeds.

4K Video with a resolution of at least 3840x2160 pixels.

720p/1080p/1440p Common types of high-definition video of 1280x720, 1920x1080 and 2560x1440 pixels respectively.

802.11ac A standard for wireless networks that allows for much higher transfer speeds than 802.11n.

802.11ax Wi-Fi standard with speeds up to 10 times faster than 802.11ac. Also called Wi-Fi 6.

Add-on A program that adds extra features to your browser.

Augmented reality Lets you view the real world on a screen and add digital elements.

Beta A version of software that's being tested. Beta versions are often released so problems can be ironed out.

Biometric Using measurable personal characteristics, such as fingerprints, for identification.

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.

Client A program that acts as an interface between PC and server.

Core Units on a processor that carry out program instructions.

dpi Dots per inch. A measure of printed image quality, or the size an object will be shown on screen.

Driver A file that tells Windows how to work with an external device.

Force restart To force a device to restart when software freezes, such as by holding down the power button.

Graphics card A component in a computer that produces the image shown on the monitor.

Hotspot A public area covered by a Wi-Fi network that allows you to access the internet, either free or for a fee.

HTTPS Hyper Text Transfer Protocol Secure. The secure version of HTTP, the technology that sends data between your browser and the web.

Hyperlink A clickable link that takes you to a new document or website.

IMAP Internet Message Access Protocol. A method for email that lets the user manage messages stored on a remote server.

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 better, more accuratelooking colours compared with monitors that do not use this technology.

ISO The light sensitivity of a camera. Higher ISO numbers allow you to shoot without flash in darker situations.

LCD Liquid-crystal display. The technology used to create almost all flatscreen monitors.

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.

MAC address Media Access Control. A unique code that

Machine learning The science of teaching computers how to learn by themselves, without further human input.

Metadata A set of data that gives information about a file.

MicroSD card A small type of memory card. Can be converted to SD size using an adapter.

MS-DOS Microsoft Disk Operating System. The standard PC operating system before Windows.

MU MIMO Multiple-user multiple-input multiple-output. Wi-Fi technology that increases the number of antennas that can be used.

NFC Near-field communication. A technology that allows two devices to communicate by being touched together or placed near to each other.

OCR Optical character recognition. The process by which printed text is scanned and converted into documents that can be edited.

OLED Organic light-emitting diode. A thin-film organic lightemitting diode used in computer displays and television screens.

Overclock Make a processor work faster to boost performance at the cost of it getting hotter and requiring more power.

PCIe Peripheral Component Interconnect Express. A faster version of PCI - a slot on the motherboard for expansion cards, such as for sound and memory.

Phishing A form of internet fraud that tries to trick you into revealing personal details.

Plain text Text in a document that doesn't contain any formatting, such as bold characters and italics.

Port forwarding Choosing which computer in your network a router should connect to.

PUP Potentially unwanted program. A program that may not be desired, despite the user consenting to it being downloaded. Examples include unnecessary plug-ins, toolbars and browser hijackers.

Ransomware Malware run by hackers who lock files on your PC and demand a payment to release them.

Read speed How long it takes a hard drive to 'read' data, and respond to it.

SD card Secure Digital card. A popular type of memory card.

Search operator Characters you can add to a search query to narrow the results.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts. Faster but more expensive than conventional hard drives.

SSID Service Set Identifier. A name used to identify a wireless network.

Switch Mechanism under a keyboard that determines whether a key has been pressed.

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.

Tag A keyword used to describe a file or web page. Many programs use tags to organise related information quickly.

Thread Smallest sequence of instructions that can be managed by your processor.

Two-factor authentication A system that uses two different means to identify the user. For example, a PIN in addition to a password.

UEFI Unified Extensible Firmware Interface. A modern replacement for the BIOS.

USB-C A new connector that's reversible, letting you plug it in upside down.

USB 2.0/3.0/3.1 Faster successors to USB.

VPN Virtual private network. Keeps all internet communication safe and private.

Wildcard A character that can be substituted for one or more characters in a web search.

Write speed How long it takes a hard drive to save data.

ZIP file A file that contains compressed documents or files.

Easy when you

nowHow

Daniel Booth is safe for the winter, but what about his computer? Worried about tech flu, he explains how to...



Test your security with fake malware

finally got around to getting a flu jab, after much nagging from my better ■half ("for the kids' benefit – I don't care about you"). I'm confident it'll work but don't feel the need to put it to the test by getting too close to some poor chump who's sweating, shivering and sneezing.

So why, then, am I so keen to inject malware into my PC's bloodstream? It's protected by several security tools that have kept me safe for years. Or, at least, I think that's what they've been doing. But malware is so sneaky these days it can run silently in the background without your PC showing any symptoms.

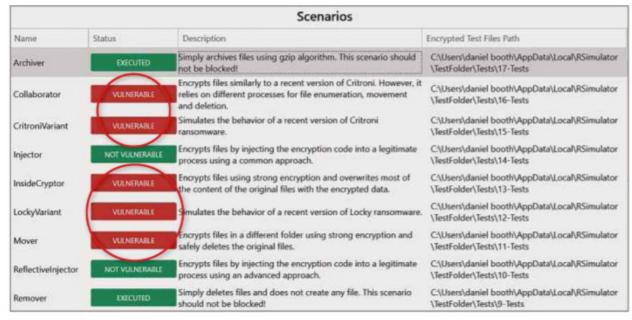


Kaspersky blocked the malware within seconds, bodyslamming it like Giant Haystacks in his World of Sport prime



I know my home's burglar alarm works because I've inadvertantly triggered it several times at hours my neighbours didn't appreciate. The computing equivalent of this test is less likely to end in a neighbourhood brawl. It involves installing files that mimic viruses, then seeing if your security software detects it.

You'll find these files on a site run by EICAR, a group of European security experts who built a mock virus so they could test their products against it. You can download the file from their site, if you dare. Nothing ventured etc, so I go to www.snipca.com/33464, where EICAR points out that it "cannot be held



Red alerts: Daniel's files would be toast in a ransomware attack

responsible" if the files damage your computer, before going on to warn (with Caps Lock pressed): YOU DOWNLOAD THESE FILES AT YOUR OWN RISK.

OK, point taken. But antivirus companies consider these files to be safe, so EICAR's disclaimer feels excessively cautious, which doesn't mean you should click every link on the site. Look at the second box on the web page, and focus on the files under the snappy 'Download area using the secure, SSL enabled protocol https' heading.

First I tried downloading the 'eicar. com.txt' link, but my antivirus Kaspersky blocked it within seconds, body-slamming it like Giant Haystacks in his World of *Sport* prime. Following this relatively simple test, I turned my gaze to the riskier zipped files on offer, which might prove harder to remove from my PC (even though they pose no harm). Trusting to my defences, I downloaded them, and this time Windows Defender threw up an alert to steer clear. Antivirus 2 Malware 0.

Another way to test your security is to simulate a ransomware attack. You can do this by downloading RanSim from US firm KnowBe4 (www.snipca.com/33466). Don't be put off by having to give some personal details in the right-hand panel - these can be fake (Marvin Malware. perhaps, or Violet Virus), and you can use a disposable email address from Guerilla

Mail (www.guerillamail.com).

Once you've completed the form, click the 'Get RanSim!' button, then the orange download link on the next page and make a note of the password (which you'll need to enter when launching the file). Click the 'SimulatorSetup' file, then the Launch button at the bottom. You'll see RanSim ready to go. Click 'Check now' at the top, then await the results.

RanSim throws 16 "separate infection scenarios" at your PC, recreating real ransomware. Just one is enough to lock your files and freeze your desktop. My PC allowed through 13, all shown in bloodred as leaving my files 'Vulnerable' (see screenshot). Crikey!

To hammer home what this means, RanSim tells you how many files you'd have lost had the threats been real, much like those chilling nuclear-attack simulations that estimate the death toll of a strike on a major city. I'd have waved goodbye to 62 documents, 996 photos and 127 videos. All those memories of my kids throwing Lego at each other – gone.

It's a sobering reminder how important prevention is, and that ransomware can overcome even the strongest security. Yes, you need antivirus, but you should also stick a large Post-it note on your PC saying 'Have you backed up today?'.

Need help testing your security software? Let us know: noproblem@computeractive.co.uk





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