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**When Will Your
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BATTERY**

DIE?

Work it out using
hidden Windows data
(ours has 1,345 days left!)

p40

Master Your SMART TV

The **10 BEST THINGS** you didn't realise
your telly could do **page 50**

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p60



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Group Editor Daniel Booth
Deputy Editor Will Stapley
Production Editor Graham Brown
Art Editor Katie Peat
Contributors Adam Banks, Dinah Greek, Jonathan Parkyn, Nick Peers, Nik Rawlinson

ADVERTISING

Group Advertising Director Andrea Mason
Advertising Manager Alexa Dracos

MARKETING AND CIRCULATION

Subscriptions Rachel Hare
Marketing Production Manager Gemma Hills
For subscription enquiries ring 0330 333 9493

PRODUCTION

Group Production Manager
Stephen Catherall
Production Controller
Sophie Griffin

MANAGEMENT

Managing Director Dharmesh Mistry
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Growing up, I'm sure we all knew someone who was always first to get the latest technology. For me, it was my school friend Matthew. His dad was the first in our street to get an Atari games console, a video recorder and a home computer.

But seeing Ceefax on his (bigger-than-average) TV left the biggest impression. I rushed home and told my dad about the "magic words" that appeared on screen.

Those words may have gone, but TVs are capable of more now than even Matthew's dad

would've imagined. And yet do we realise their full potential? We know we can watch Netflix and iPlayer on them, but how about connecting it to your PC or NAS drive to play your own videos? Jonathan Parkyn explains how to do this and much more in our Cover Feature. Wherever Matthew is now, I'm sure he'd enjoy it.

Daniel Booth

editor@computeractive.co.uk

•PS Our Back Issue CD for 2019 is now on sale from www.snipca.com/33711.



THIS ISSUE IN NUMBERS

4 to 6 seconds

Time phone users are happy to wait for sites to load - **p8**

50°C

Temperature Lenovo's IdeaPad reached during testing, 15°C higher than what's safe - **p49**



4%

Fall in Windows 7's market share since support ended - **p10**

HOW TO USE SNIPCA URLS

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

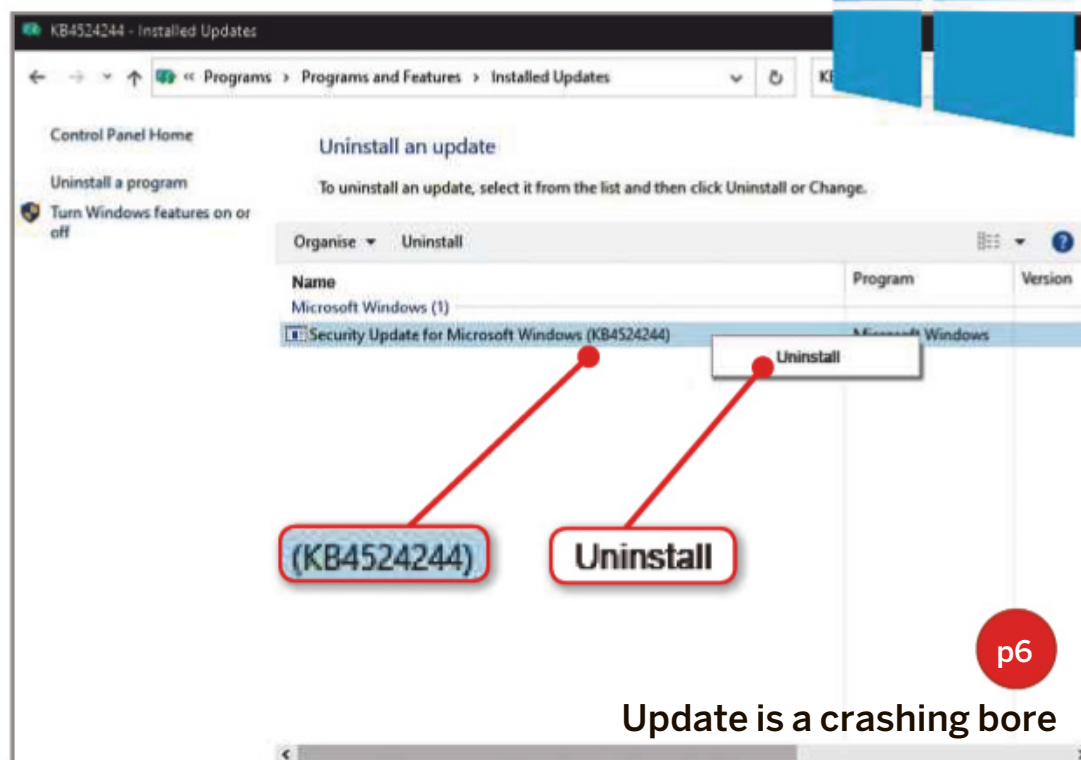
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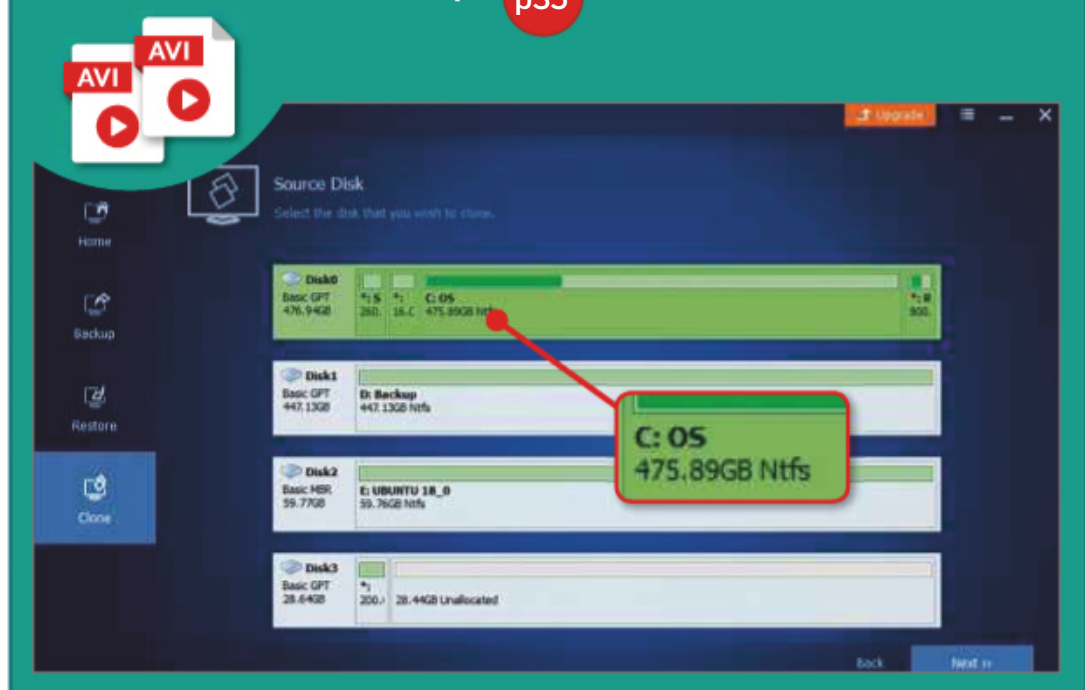
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Master Your SMART TV

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The **10 BEST THINGS**
you didn't realise
your telly could do



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device from
charging hacks

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Microsoft pulls Windows 10 update after it crashes PCs

Microsoft has removed a Windows 10 security update that was freezing computers and causing problems when booting.

The update, named KB4524244, was released as

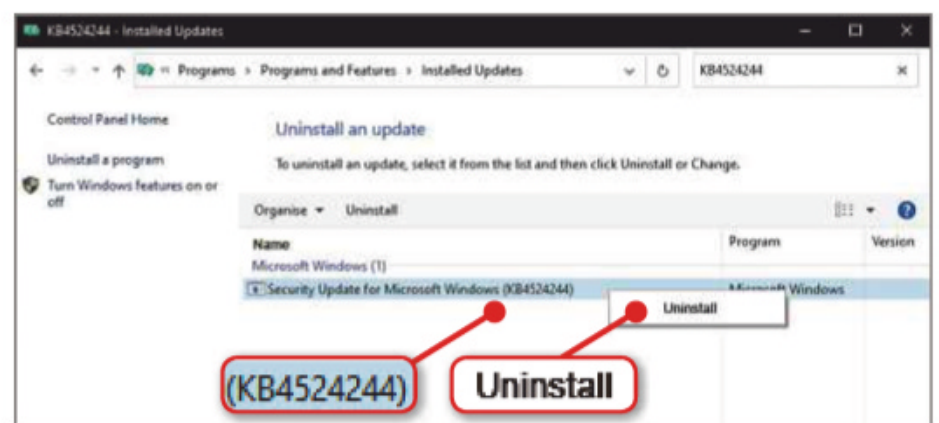
part of the company's 'Patch Tuesday' updates on 11 February. It was meant to fix a potential security flaw with the UEFI, which is the modern replacement for BIOS, but started to backfire within hours.

Microsoft confirmed online that it will not re-release the update (see www.snipca.com/34104), saying it was causing problems with the 'Reset this PC' feature (also called Push Button Reset).

It said that when restarting their PCs affected users might enter recovery mode with various options listed at the top of the screen. They may also load the desktop but see the error message, 'There was a problem resetting your PC'.

Microsoft added that it was working on an "improved version" of the update, which is for all builds of Windows from 2016's Anniversary Update onwards.

If the update is causing you problems, you can uninstall it following Microsoft's



instructions.

First, type **update history** into Windows Search or the Start menu, and select 'View update history'. On the following page click 'Uninstall updates' to load the 'Installed updates' box.

In the list of updates, look for KB4524244. If you can't find it, press Ctrl+F to open the top-right search box, then type the code. You'll either see the update, or a message saying 'No items match your search'.

If KB4524244 does appear, select it then click the Uninstall button (see screenshot above) and restart your device.

KB4532693 update also causing trouble

Another update released on 11 February has been giving users headaches, although Microsoft hasn't advised people to uninstall it.

Named KB4532693, the update is reverting some users' computers to their default state, wiping any changes they had made to its settings.

Many users have said they can't log in with their user account, and that icons have been removed from the desktop and keyboard layouts reset. It seems that the update is loading a temporary user profile as it's installed, and then failing to restore the user's original profile once completed.

Some said that uninstalling the update brings back their settings, but this is risky as it also removes security fixes that were part of the update. Others said that restarting their computer a few times fixed the problem.

The update was for PCs running either of 2019's Feature updates (versions 1903 or 1909).

WHAT WE THINK

Microsoft has been criticised in the past for taking ages to acknowledge problems caused by updates, so we're pleased it yanked this blighter (KB4524244) within days of it appearing. But why hasn't it said more about the KB4532693 problem? This kind of inconsistency is maddening. Microsoft needs to create a more effective way of telling users what to do. It could start by finding a better way to label updates because these numbers mean nothing to the average person. Why not include the year and month in the code to make it feel more relevant?

WINDOWS 7 USERS CAN'T SHUT DOWN THEIR PCs

A new Windows 7 bug is preventing users from shutting down their PCs, with an error message, "You don't have permission to shut down this computer". It's not known what's causing the problem, nor whether Microsoft will release a fix for it. The company has already released one fix for Windows 7 after ending support, to address a problem with desktop wallpaper (see Issue 573, page 6).

Some users say you can fix the problem by



creating a new temporary account each time you want to shut down your PC. To do this, type **add or remove other users** in Windows Search or the Start menu then click 'Add user' and follow the instructions.

Next, log into the new user account, then log back out. Now log back into your main admin account and try to shut down or restart as normal.

• See 'Why are so many people sticking with Windows 7?' on page 10.



You'll like this... A burglar was identified after his photo was posted on Facebook (www.snipca.com/34068)



but not this... Fraudsters stole over £1m in PayPal scams between Oct and Dec 2019 (www.snipca.com/34105)

Half of 10-year-olds use phones as parents' fears rise

Half of the UK's 10-year-olds now own a mobile phone even though more parents than ever think the internet does their child more harm than good.

The figures, from Ofcom's 2019 'Children's Media Use and Attitudes' survey, also show that nearly a quarter of three- and four-year-olds have their own tablet, while 15 per cent of them are allowed to take it to bed.

After interviewing 3,500 children and parents, Ofcom has declared 10 as the age when children gain "digital independence".

"The mobile phone is the device of choice for children", said Yih-Choung Teh, Ofcom's strategy and research group director.

He added: "I'm conscious that for these children who have never known a world without the internet, in many



respects their online and offline worlds are indistinguishable".

The survey also found that 27 per cent of children now use smart speakers like the Amazon Echo, a sharp rise from 15 per cent a year earlier.

Indeed, more children now use smart speakers than the radio, while a quarter watch no live TV at all, preferring on-demand videos on smart TVs or the internet, particularly on YouTube.

It's a sign that children are

increasingly rejecting the restrictions of traditional media. One nine-year-old girl told Ofcom's researchers: "I don't really like the TV because you can't pick what channels are on it".

But a rise in kids using technology has been mirrored by parents feeling more anxious about it. Around 45 per cent of parents feel the advantages of being online outweigh the risks, a rise of 10 per cent since 2015.

Parents are especially worried about the dangers children face when playing games online, such as being bullied by other players, and feeling pressured to buy items within the game.



Should parents give 10-year-olds mobile phones? Let us know: letters@computeractive.co.uk

Get more accurate broadband speed estimates

You'll soon get a more accurate estimate of your new broadband speed when you change provider, under rules being introduced by Ofcom.

At the moment, estimates are based on data from customers whose homes have similar characteristics, such as size of property or distance

from the exchange or street cabinet.

This method was designed for copper broadband lines, where signals can get slower over distance, particularly between the street cabinet and the home. But it can lead to misleading results because there are various environmental factors other



than the broadband connection that can affect speed. Ofcom wants to revise the rules to reflect the increasing number of homes that can get full-fibre connections.

The accuracy of a speed estimate is crucial because it lets you cancel your contract without a fee if speeds fall below those promised by your ISP.

Ofcom will add the changes to its Broadband Speed Code of Practice, which is a voluntary set of rules followed by BT, EE, Plusnet, Sky, TalkTalk and Virgin Media.

IN BRIEF

BT 5G NOW OPEN TO EVERYONE

BT has made its 5G mobile network available to all UK customers - previously it was limited to those signed up to its Halo broadband package. It's available in 50 towns and cities across the UK, covering major areas like London and Birmingham as well as smaller places such as Hamilton, Rochdale and Walsall. Packages start at £45 for 6GB of data. Check if you can get it in your area at www.bt.com/mobile/coverage-checker.

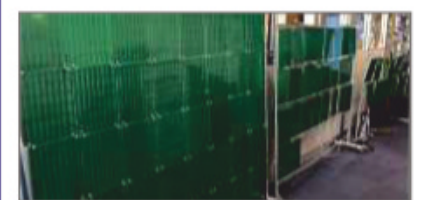
MOZILLA SAVES THUNDERBIRD TO MAKE MONEY

The future of Thunderbird seems more secure after Mozilla set up a new body to run it. Called the MZLA Technologies Corporation, it will explore ways to make money from the email client. Thunderbird's users had worried that it might close after Mozilla said in 2015 that it would stop developing it. Read more on Mozilla's blog: www.snipca.com/34026.



TOMORROW'S WORLD

If you're thinking about changing your wallpaper, maybe wait until these Wi-Fi panels (pictured) are available. Developed by the Massachusetts Institute of Technology (MIT), they're embedded with thousands of tiny antennas that boost your signal tenfold. When pasted to walls, they solve the problem of signals hampered by indoor obstacles.



UK BROADBAND 71st CHEAPEST WORLDWIDE

The UK is the 71st cheapest country for broadband, down from 61st a year ago, according to analysis from comparison site Cable.co.uk (www.snipca.com/34039). This falls even further, to 82nd place, when cost per gigabyte is measured. On average Brits pay £27.45 a month, double the cost in countries like India, Iran, Russia and Vietnam. However, the UK is the sixth cheapest country in western Europe.

IN BRIEF

PLAY FLASH GAMES SAFELY OFFLINE

Around 38,000 online games that use Adobe's Flash **plug-in** have been preserved in a downloadable archive, letting you play them safely offline. Visit www.snipca.com/33966 and download either Flashpoint 7.1 Ultimate (241GB) to get all the games, or 7.1 Infinity (296MB) to install each game as you play it. Adobe will stop supporting Flash at the end of 2020.

RANSOMWARE ATTACKS ON NHS FALL SHARPLY

The NHS has been hit by only six **ransomware** attacks since the devastating WannaCry in 2017, according to a new report. This marks a sharp fall from the years 2014 to 2017, when it suffered over 200 attacks. Website Comparitech got the figure from a Freedom of Information request, though only 184 out of 254 NHS trusts responded. After WannaCry, the Government pledged £210m to strengthen the NHS's cyber-security defences.

THE WORLD'S GONE MAD!

The fatuous desire for internet fame is making idiots of people. This is Canadian

musician James Potok being escorted off an aborted flight from Toronto to Jamaica, after he falsely announced that he'd just come back from Hunan – which he called “the capital of the coronavirus” – and said he wasn't feeling very well. He filmed himself, hoping it would “go viral” online. Not the wisest choice of words, James.



We want reliability over speed say phone users

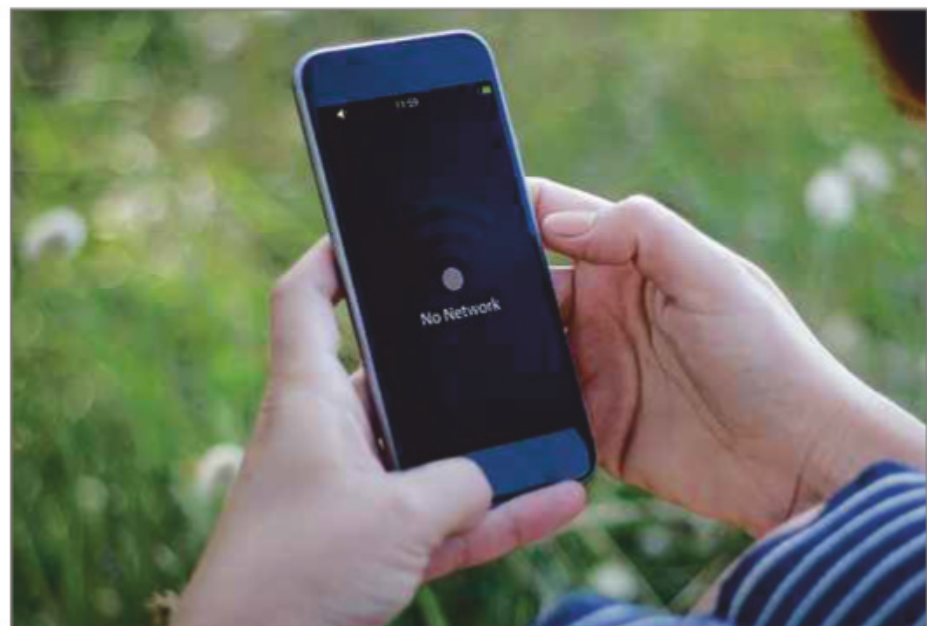
UK customers consider reliability to be more important than speed when choosing their phone network.

In a national survey by Global Wireless Solutions (GWS), 41 per cent said what matters most is reliably getting a connection, not its speed. Only one per cent said speed was more important while 36 per cent said they were equally important.

This view was reflected in the problems people commonly experience.

Around 30 per cent regularly suffer websites and apps failing to load, the survey found, while 19 per cent say phone calls often disconnect.

Customers seem to be reasonably satisfied by the current speed of phones. Nearly 80 per cent of people deem four to six seconds to be an acceptable time to wait to complete activities on their device, such as loading a website. GWS, which tests and analyses networks around the world, says UK operators hit



that speed 96 per cent of the time.

GWS said customer satisfaction with existing speeds casts doubt on how much public appetite there is for **5G**. Dr Paul Carter, head of the company, said that using your phone “is not a race”.

He added: “After all, what difference does it really make if your network is a few megabits faster if you can already stream your favourite video, and open apps without issues, but are still struggling

with dropped calls?”.

GWS's research also revealed that O2 was the most reliable network in half of the 36 UK locations where it ran tests, including Birmingham and Glasgow. EE came top in 14 places, including Liverpool and London, while Vodafone was top in only four areas. Three wasn't the most reliable network anywhere. See the full list at www.snipca.com/33973.



What's more important to you – reliability or speed? Let us know: letters@computeractive.co.uk

Google sends private videos to strangers

Google has apologised for sending users' private videos to strangers.

It admitted that between 21 and 25 November 2019, a “technical issue” meant some videos users downloaded from Google Photos (www.google.com/photos) were sent to other people by mistake.

The problem affected Google's Takeout service (<https://takeout.google.com>), which lets you download content saved in your Google accounts, including photos and Gmail emails, as

well as videos.

Between those dates, some videos being downloaded through Takeout would have appeared in the archives of other people using the service.

If you tried to download videos during that period, you should assume it didn't work properly and try again.

Google emailed users affected by the breach (see www.snipca.com/33979), saying the “underlying issue has been identified and resolved”. It has carried out an “in-depth analysis to help

prevent this from ever happening again”.

It didn't say how many people had videos sent incorrectly, but reports online say it was 0.01 per cent of Google Photos' users. This works out at 100,000 of the service's 1 billion members. Google also said it couldn't provide “a full list of impacted videos”.



New smartwatch to spot early signs of dementia

A new smartwatch is being developed to detect early signs of Alzheimer's disease in the person wearing it.

The project, which is being spearheaded by the charity Alzheimer's Research UK, forms part of the Government's wider ambition to use artificial intelligence (AI) to better understand and prevent diseases.

Researchers will recruit one million volunteers and monitor their gait, heart rate, eye movements and sleep patterns. They'll use this data to create 'digital fingerprints' – or common traits shown by people with dementia.

The watch will then be programmed to spot warning signs years before symptoms develop. Experts now believe these signs can appear two



years before diagnosis.

Carol Routledge, director of research at Alzheimer's Research UK, said studies show that 85 per cent of UK adults would take a test to check whether they were in the early stage of Alzheimer's.

She added: "Developing digital fingerprints that can be detected using phone apps or wearable technologies like

smartwatches would provide a low-cost approach to identifying those most at risk".

The project is part of the Early Detection of Neurodegenerative diseases (EDoN) initiative, bringing together top health institutions – including the Alan Turing Institute, University College London and the University of Cambridge – to share data.

It aims to raise £100 million of investment by 2030 and has already received money from Microsoft co-founder Bill Gates and the Iceland Foods Charitable Foundation.

Around 850,000 people live with dementia in the UK, Alzheimer's Research UK says. Globally, it's estimated that the number will increase from 50 million in 2018 to 152 million in 2050.

Hackers now target Apple Macs more than Windows PCs

Hackers are targeting Apple Macs more than Windows computers for the first time ever, new analysis shows.

Antivirus developer Malwarebytes said it detected 11 attacks per Mac in 2019, compared with 5.8 for Windows machines. It also found that Apple threats rose by 400 per cent over the same period, though this was partly down to an increase in the number of Macs running

Malwarebytes. By contrast, Windows attacks increased by just one per cent.

In its 'State of Malware' report for 2020, Malwarebytes said hackers are being attracted to Macs because of its increasing market share. Recent figures show that 17 per cent of all computers worldwide run macOS, up from 12 per cent a year ago.

The company added that Apple threats differ from



Windows because they're largely **adware** and **PUPs**, rather than malware. It claimed that Apple's security tools don't do enough to block these particular threats.

The figures counter the widely held belief that Macs aren't vulnerable to attack. Thomas Reed, head of Mac & Mobile at Malwarebytes, said this "makes macOS a fertile ground for the influx of new threats, whereas it's common knowledge that Windows PCs need security software".

FLAWS BIGGEST IN MICROSOFT SOFTWARE

Eight of the 10 security flaws most commonly exploited by hackers in 2019 were in Microsoft software. Research from security analysts Recorded Future found that

four of the vulnerabilities came in Internet Explorer, three in Office and one in file-compression software WinRAR. The other two flaws were in Adobe Flash Player.

IN BRIEF

GOOGLE UNVEILS 1,000 NEW EARTH PHOTOS

Google has added 1,000 spectacular photos of Earth taken from space to its Earth View gallery. The pictures, many of which are **4K**, span the entire planet, capturing seas, cities, deserts and many more landscapes. Read more on Google's blog (www.snipca.com/34085), and click a dot on this map to start exploring the images: www.snipca.com/34086.

GET SIX MONTHS OF BRITBOX FREE WITH EE

EE is giving pay-monthly customers a free six-month subscription to BritBox, the new TV-streaming service featuring shows from the BBC, ITV, and Channels 4 and 5. As well as avoiding the £5.99 monthly fee, customers won't have to pay for any data used to watch shows. You can cancel without cost at the end of the period. For full details visit www.snipca.com/34069.

FOLLOW SPREAD OF CORONAVIRUS ONLINE

Researchers at Johns Hopkins University in Baltimore have launched a website that tracks the spread of the Coronavirus in real time, using statistics from the World Health Organization among other bodies. Visit www.snipca.com/34047 to see incidents presented as red circles (see screenshot below), with numbers and locations on the left.

• Coronavirus scams – page 11



Question of the Fortnight

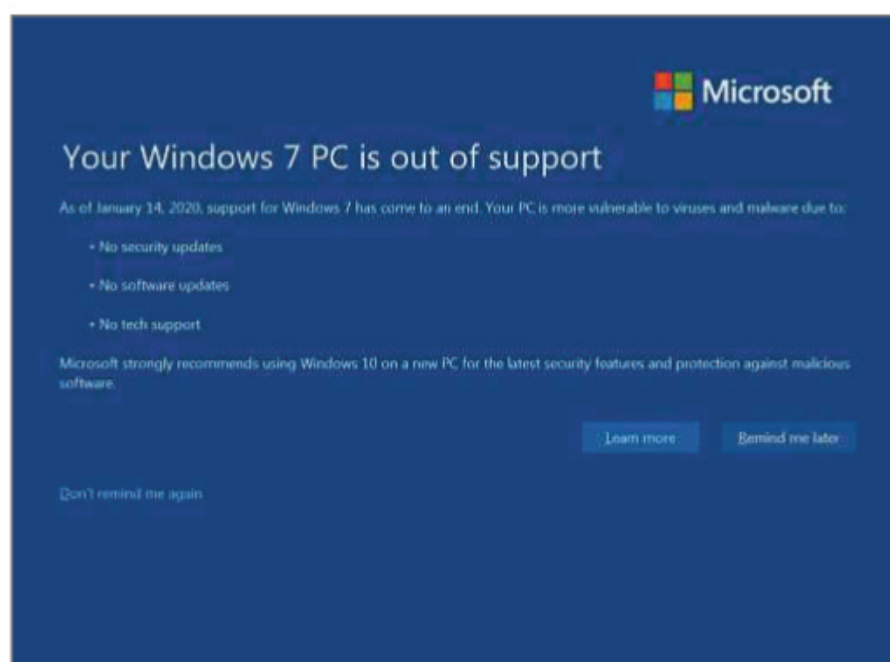
Why are so many people sticking with Windows 7?

Microsoft's end-of-support warnings have fallen flat

Take a look at the screenshot on the right. This was the warning Microsoft hoped would persuade Windows 7 users to upgrade to Windows 10. It started appearing on PCs on 15 January, a day after Microsoft ended support for the 10-year-old operating system. For months before, it had peppered Windows 7 PCs with similar warnings, urging users to upgrade without delay.

Nearly a month on from the deadline, we have our first indication of whether these warnings are working. In short, no they're not. Or at least, not by as much as Microsoft would've hoped.

Figures released by NetMarketShare, which



7 followed Microsoft's advice to upgrade, resisting the temptation to try rival operating systems, such as Linux, Google's Chrome OS and Apple's MacOS.

“There's a stubborn minority who'll live with the risk, suspecting that Microsoft exaggerates it to 'manipulate' people into upgrading”

monitors how many people worldwide use operating systems and browsers, show that in January Windows 7's market share fell to 25.6 per cent, a drop of four per cent from December. Nobody knows exactly how many Windows computers there are, but it's probably at least 1 billion, which means roughly 250 million machines are still running Windows 7.

Windows 10's market share rose by a similar amount, up to 57 per cent, suggesting that most of those leaving Windows

Creating this Windows conveyor belt is crucial for Microsoft, but how happy will it be that a quarter of all Windows PCs now run an unsupported version? January's fall in Windows 7's market share was the biggest since NetMarketShare's records began in 2016, but Microsoft was surely hoping for a sharper drop than four per cent.

The end of support made headlines everywhere, beyond tech magazines and websites. Given the extent of this coverage, it seems likely that

January's fall will remain the biggest throughout 2020 as the sense of urgency fades.

Much will depend on public perceptions of how unsafe Windows 7 has now become. There's a stubborn minority who'll live with the risk, suspecting that Microsoft exaggerates it to 'manipulate' people into upgrading. Remember that 10 per cent of Windows PCs were still running XP in 2017, a full three years after Microsoft stopped supporting it. The more people love an operating system, the likelier they are to shrug off an increase in threat.

And it's important to note just how popular Windows 7 is. It was only in December 2018, more than three years after it launched, that Windows 10 finally overtook Windows 7. This was despite Microsoft making it free to move to Windows 10 and plastering desktops with countless upgrade messages. For many, the familiarity of Windows 7 trumped the

THE FACTS

- Windows 7's market share dipped by only four per cent in January, despite Microsoft ending support
- Windows 10 remains the most popular operating system, with a market share of 57 per cent
- Microsoft released an update for Windows 7 just two weeks after it ended support

promise of new features.

Some users will be waiting to see how Microsoft responds to the first major attack on Windows 7 following the end of support. Hoping there's safety in numbers, they may conclude that 250 million computers is too many for Microsoft to ignore, and that it'll feel obliged to release an emergency fix, particularly if the attack is as big as 2017's WannaCry.

They'll feel encouraged that barely a fortnight after support ended, Microsoft released an update to fix a problem with desktop wallpapers (see News, page 6, Issue 573).

We doubt there'll be any more trivial fixes for Windows 7. Microsoft is more likely to be working on the next wave of warnings, testing different methods to see which will be the most effective. In January, it tried to grab the attention with the rather mild heading 'Your Windows 7 PC is out of support'. Expect a more forceful message soon.

Protect **your tech**

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Coronavirus scams and malware

What's the threat?

As the world reels from the global spread of Coronavirus infections, antivirus firm Kaspersky says hackers are exploiting people's worst fears to infect PCs with malware and steal personal data.

The company has spotted two types of attack. One takes the form of an email that claims to provide instructions for protecting yourself against the virus, and detecting it. However, the attachment included with the email (usually a Word document or PDF) is fake and contains malware. Opening the file will infect your PC.

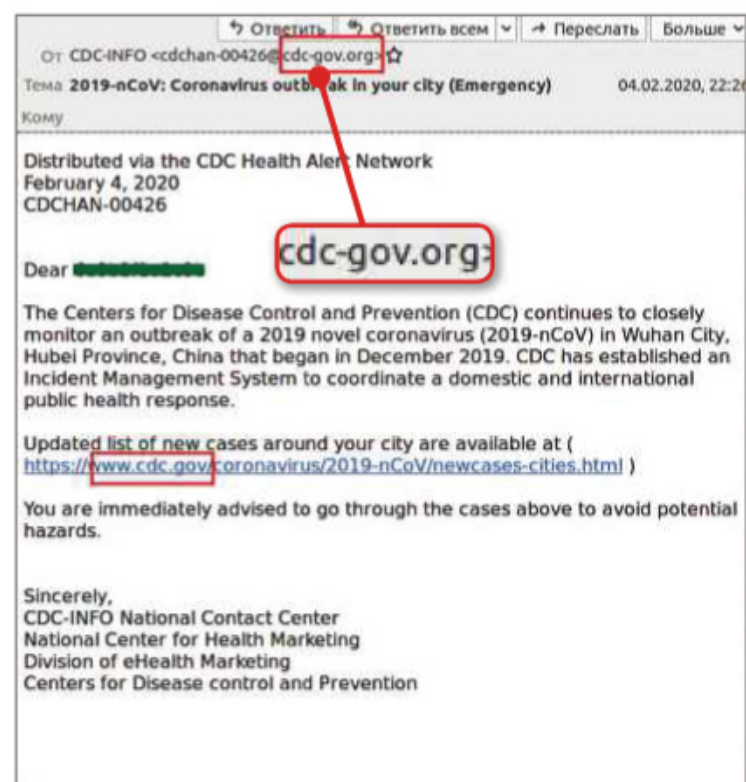
In the second threat, scammers send an official-looking email that claims to be from the Center for Disease Control and Prevention (CDC) in the United States (www.snipca.com/34032). It directs users to a legitimate-looking (but fake) website

that requests your Microsoft account login details.

How can you stay safe?

First, take this opportunity to remind yourself that scammers have no shame when it comes to exploiting human tragedy. As usual, the fake emails contain clues that they aren't genuine. Checking the CDC message sender's address, for example, reveals a fake domain name (cdc-gov.org instead of the genuine cdc.gov, see screenshot).

But, make no mistake, these are sophisticated attacks that look very convincing. The key thing to remember is that genuine health organisations would never use emails to inform individuals about public health issues. And, as ever, it's important not to



open attachments or click links in emails you weren't expecting, no matter how concerned you are about your health.

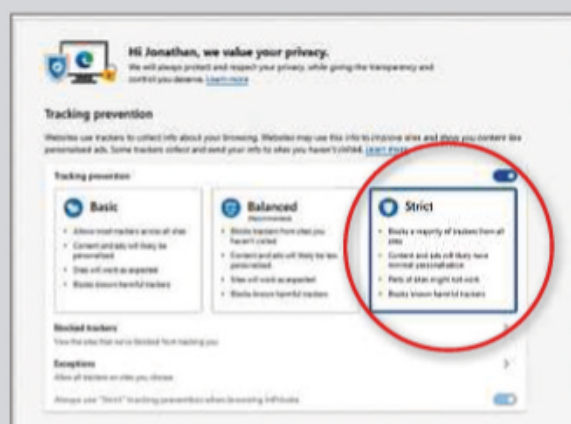
New tools | Edge's stronger privacy tools

The most pleasant surprise so far this year is that the revamped version of Microsoft's Edge web browser (www.microsoft.com/en-us/edge) is actually pretty good. Built using the same **open-source** code Google uses for Chrome, it feels fast and reliable yet reassuringly familiar.

Not only that, but its privacy options are more comprehensive and easier to

set than Chrome's. Click the top-right menu (three horizontal dots), Settings, then 'Privacy and services'. Choosing Strict here (see screenshot) is a quick way to block most trackers that follow you across the internet, tormenting you with the same adverts day and night. It's so strict it'll block some adverts even if you don't have an ad-blocker installed. By default, Strict tracking protection is turned on when you enable Edge's InPrivate browsing mode, which also disables **cookies** and browsing history.

This greater emphasis on privacy, combined with more extensions and slicker design, makes Edge a genuine rival to Chrome. We'll give more reasons for switching soon, plus instructions on how to do so without losing your existing browser settings.



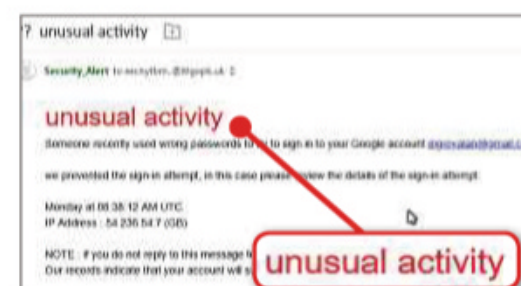
ScamWatch

Readers warn readers

'Unusual activity'? No, the usual trick

I've received a couple of emails that alert me to a possible security issue on my Gmail account. It has the red heading 'unusual activity' (see screenshot), and claims that someone tried to sign into my account with the wrong passwords. The poor phrasing and grammar in this scam are a dead giveaway.

Alan Ingrey



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

Letters

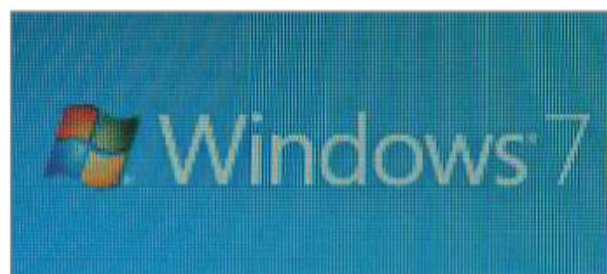
Tell us what's on your mind

What shall I do with my Windows 7 PC?

✉ I must be one of thousands of people wondering what they should now do with their Windows 7 computer. I have three PCs running this operating system, now consigned to history by Microsoft. I believe in reusing old tech, so I don't want to throw away these machines, and yet I'm not brave enough to keep running Windows 7 on them. Any ideas *Computeractive*?

Alan Foxton

CA SAYS Indeed we do. We agree that there must be a lot of Windows 7 PCs forlornly waiting for their owners to give them a second life. We'll come to their rescue soon in a forthcoming Cover Feature. Please tell us what you'd like us to cover.



Microsoft will release more updates for Windows 7

✉ Forgive me if I don't collapse with surprise at the news that Microsoft has released an update for Windows 7 (News, Issue 573, page 6). I can't believe that Microsoft is ready to turn its back on the tens of millions people still using that operating system. I know Microsoft always ends support eventually, but never before has it abandoned so many people in one go. I expect many more updates this year, despite what Microsoft says.

You have to realise that there's a different mindset among consumers now. They are less likely to tolerate waste. This isn't just physical waste (throwing devices on the tip etc), but also digital waste, or being told to upgrade for the sake of it. Remember, there's nothing inherently unsafe with Windows 7. It doesn't rot or decompose. The 'best before' date is purely arbitrary, a Microsoft invention.

The backlash will grow this year, so that when the first major vulnerability is exposed, Microsoft will have no choice but to release a fix. Remember where you read it first!

Fred Murray

CA SAYS Fred may well be right, but it's a high-risk strategy. Recent figures show that the drop in Windows 7's market share in January wasn't as sharp as analysts had expected, or Microsoft had hoped (see 'Question of the Fortnight', page 10).

We think Microsoft will feel a big enough sense of duty to fix security flaws that lead to attacks as devastating as 2017's WannaCry. We're less confident that it'll respond to smaller attacks. Our advice hasn't changed: upgrading to Windows 10 is the safest option, but there are ways to keep using Windows 7 as long as you take precautions (see Issue 570, page 60 and next issue's Cover Feature).

Sticking with Windows 7 is 'better the devil you know'

✉ In Issue 572's Letters John Hewett pours scorn on those sticking with Windows 7 as an "unsupported system". He wonders why everyone has not moved to Windows 10. He cannot have read *Computeractive* regularly. Every Windows 10 update has been followed by anguished letters from those who have lost files, folders and programs, or found that printers or other accessories no longer worked. Better to stick with the devil you know is an old but relevant maxim. I write as a reluctant mover to Windows 10. All of my needs were covered by Windows 7.

Eric Gendle

CA SAYS Eric's views represent those of many of our readers: people who loved Windows 7, but realised they had little choice but to upgrade to Windows 10. We know where he's coming from. Windows 10 is a great operating system and gets better with every update, but we were still sad to leave Windows 7 behind.

Pressure Govt to reinstate age-block porn laws

✉ It was encouraging to read that new rules will force social-media sites to do more to protect children (News, Issue 573, page 8), but the Government is sending mixed messages by dropping plans to introduce age restrictions on porn sites. The biggest danger children face online is being exposed to sexually explicit content. It can distort their expectations of what healthy adult relationships should be like.

I've heard all the arguments against an age restriction, but they all seem like excuses to me. When the tech industry doesn't want something to happen, it's very good at coming up with objections that people in power always seem to believe.

I urge charities like the NSPCC and newspapers like the *Daily Mail* to keep pressuring the Government so they reinstate these plans.

Lee Travis

Still love my old XP software

✉ Like Phil Grey (Letters, Issue 572), I sometimes boot up my old XP computer. It's an Evesham Axis 2600 purchased in 2003 for £999. It's still in use, but not connected to the internet.

I just love using some of the programs that won't work on Windows 10:

Picture it Publishing; Digital Image Pro 9; Live Pix; Print Shop Deluxe (pictured); Family Fun Train Town; and Microsoft Train Simulator. Such easy programs to use.



I find some of today's photo-editing programs complicated, so occasionally revert to my XP PC. In fact, I have just completed a montage of old photos spanning 50 years for my Daughter's 50th birthday, using Digital Image Pro 9. I wonder how many of your readers will remember these old programs?

Len Faulkner

CA SAYS Let's ask them. Do any of Len's beloved programs bring back happy memories of using XP? Or do you have your own favourites?



Not racist to want UK call centres

I'd like to congratulate BT for bringing all its call centres back to the UK (News, Issue 573, page 9). I knew someone who lost their job years ago when BT moved their support team to India. Loads of companies were doing this at the time – not just ISPs but also banks and energy companies.

I remember thinking at the time that it would backfire because people will always want to hear advice from someone they can understand clearly (whether that's British to British, or Indian to Indian). This attitude was called xenophobic or even racist when it was expressed, but it was simple common sense, and it seems that we were right all along! It feels nice to be vindicated. Hopefully large companies will never again disrespect their customers as badly as this.

Kevin Fuller

People power can stop companies closing services

I smiled at two pieces of news in Issue 573: the BBC suspending the closure of the Red Button, and Sonos saying old speakers will continue to work after they stop receiving updates.

Both outcomes are triumphs for the ordinary punter fed up with tech companies deciding what should and shouldn't be kept alive. But they only happened because the public responded so angrily, organising online petitions and raising the issue on social media. Companies are quick to buckle to public pressure these days, so the next time your favourite device or software is abruptly closed, take to the web and complain loudly.

Leonard Compton

Crooks target the post of vulnerable people

Regarding recent Consumeractive cases about credit cards getting lost in the post, I spent 21 years working for Royal Mail sorting letters. It had been

STAR LETTER

Switch between W7 and W10 for the perfect system

Ever since Windows 10 was launched back in 2015, I have followed its ups and downs using daily alerts courtesy of Google, and it has never made for pleasant reading. However, now that Windows 7 has come to an end, I had to make a decision regarding the future. Although my PC has been updated with more RAM and a faster graphics card, it is more than nine years old and therefore past its best. Equally, some of my favourite software is the same age.

I am a hobbyist cartoon animator and use several different programs to complete my work. Unfortunately, graphics software doesn't come cheap, so replacing both my PC and software for a hobby was financially out of the question.

So I was delighted in Issue 572 to see your offer to buy Windows 10 for £24.99. I bought and installed a cheap SSD (£35) as a secondary drive, and loaded it with Windows 10 plus several of my most used programs. I can now switch between the two systems, which allows me to evaluate the impact of Windows 10 in a safe environment.



So far, I've found Windows 10 relatively easy to work with, but I can see why some users get frustrated. For example, why bury 'shutdown' in a sub menu? Hopefully, my two-drive setup will let me continue to use both systems while separating Windows 7 entirely from the internet.

Barrie Pearce

CA SAYS Barrie's solution is certainly a clever one for people who want to keep Windows 7, while running Windows 10 as their main PC. We suspect there are many users in a similar quandary, so we'll explain how to keep both systems alive in our next Cover Feature, out on Wednesday 11 March. Barrie is one of nearly 900 readers to have bought Windows 10 through our Software Store, though due to circumstances beyond our control we've had to increase the price to £29.99. Turn to page 70 for full details.



The **Star Letter** writer wins a **Computeractive** mug!

known for crooks to sift through rubbish to get people's mail and use their IDs. They've never stalked posties – at least, not that I know of – but they do hang around places where they know there are vulnerable people and try to intercept their mail.

Personally, I've never been happy with how banks and other companies send cards via standard post. They make enough money to send important cards at least by recorded delivery.

Martin Fletcher

Keep comparing Android and Apple devices

I disagree with Alf King that you should stop comparing Android phones and tablets with their Apple equivalents (Letters, Issue 573). He thinks

Android users will always remain Android users, but where's the evidence for that? An Android tablet isn't so radically different to an iPad that somebody using one couldn't switch to the other. This makes comparisons between the two perfectly valid.

I speak from experience. The first tablet I bought was a Google Nexus, about seven years ago. I chose this relatively basic device to get up to speed with tablets. I always had my eyes on upgrading to a more advanced iPad, and it was reading *Computeractive's* reviews that persuaded me the leap would be manageable. If you stopped mentioning Apple devices in your Android reviews, you'll be doing your readers a disservice.

Pat Bloomfield





Can I get a refund if my Sonos speakers stop getting updates?



Q I've just heard that Sonos isn't going to update its older speakers from May of this year. I only bought one, the second-generation Play:5 (pictured), about a year ago for £438. If this stops working, will I be able to claim a refund?

Sarah Smith

A No, Sarah won't be entitled to a refund. The law doesn't tell manufacturers that they must continuously update their products to keep them working. It's true that the Consumer Rights Act (CRA) lets you make a claim for up to six years, (five in Scotland), but it doesn't specify that goods have to last that long.

However, one of the basic consumer rights provided by UK law is the right to information about your purchases. Customers thinking about buying a device that will soon become obsolete need to be told before making the purchase. If you're not told, you may have a claim under either the CRA and/or the Unfair Trading Regulations.

As it happens, Sonos has been upfront about the products it will no longer update (they're the "legacy" devices listed at www.snipca.com/33965). The first-generation Play:5 speaker is on the list, but not the second-generation version, which is what Sarah owns. Her device should be fine for many years to come.

These old devices will continue to work from May, and will receive updates to fix flaws and security vulnerabilities. But they'll no longer receive further software updates to add new features. Following a ferocious backlash, Sonos boss Patrick Spence apologised for any confusion (www.snipca.com/33978) and promised to offer "alternative solutions" for problems that customers with old devices may experience in future.



CASE CLOSED

Can I get Vax to fix my broken vacuum cleaner?

Q In July 2018, I bought a vacuum cleaner from Vax (www.vax.co.uk), but by May 2019 the on-off button had stopped working. After emailing Vax the cleaner's serial number and date of transaction, I was told my account couldn't be found. What can I do?

Alan Murfoy

A We contacted Vax. It promptly agreed to send Alan a new vacuum cleaner, including a 12-month warranty. That's an excellent result because it could have offered a refurbished cleaner and no warranty.

Had Vax not cooperated, Alan would have had two options. He could have argued that the warranty was still valid because he reported the fault within the required timeframe. His alternative would have been to claim a refund under the Consumer Rights Act. Vacuum cleaners are designed to be switched on and off multiple times, so fair wear and tear within 11 months would be a very weak defence for Vax. However, because six months had passed since purchase, it would have been within its rights to ask Alan to prove that the cleaner had an inherent fault.

CASE CLOSED

LEGAL UPDATE

Banks delay refund for APP fraud victims



Plans to set up a scheme to help victims of one of the fastest-growing scams have hit a major hitch. Banks agreed last year to establish a voluntary code to refund people who lose money in authorised push payment (APP) scams, in which they unwittingly send cash online to fraudsters posing as tradespeople, solicitors, bank staff or others they'd done business with recently. It's a lucrative tactic for scammers. In the first half of 2019 alone they stole £208m.

Banks have always been reluctant to refund in full because victims of this scam sent the money voluntarily, even though they were tricked into doing so. This stance has been widely condemned by campaigners after some victims lost thousands of pounds.

The APP Scams Voluntary Code committed banks to reimburse victims, but it was only intended as an interim measure until banks approved a permanent scheme. Due to end in December 2019, it has now been

extended until the end of March, by when the payment services regulator Pay.UK hopes banks will have agreed terms.

But banks still have reservations about how the refund kitty is funded, and whether it will harm competition in the industry. Some have suggested that it might encourage customers to take risks when sending money because they know they'll be refunded.

Some of these objections seem spurious to us, so we're hopeful a scheme can be set up soon.

Contact us so we can investigate your case

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

Can Virgin stop me keeping landline number?

Q I have Virgin's broadband and landline services, but have decided to switch to EE. However, EE has told me that Virgin won't let me keep my landline number. Can they do this?

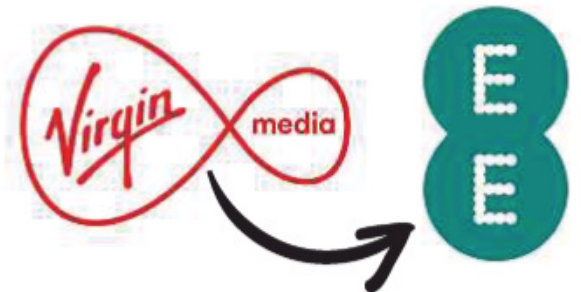
Jim Chadwick

A No, it can't. Moving a landline phone number, known as porting, is a service regulated by Ofcom, while the legal process is called 'Cease and re-provide'. If you're moving but staying within the same exchange area code, you can keep your old number.

The only reason Virgin can refuse to port Jim's number is if there's a technical problem that prevents it.

It seems like there's been a breakdown in communication. Virgin told us that EE hadn't even asked it to port Jim's number, and that it would do so when the company gets in touch. Normally, it's the old provider that is to blame, by taking ages to port the number. But in Jim's case it's the new provider, EE, that appears to be responsible for the delay.

The only cost to Jim would be if a new line needs to be installed to his house. He also needs to be aware that it can take a



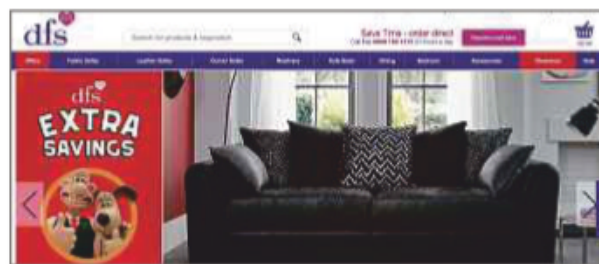
couple of weeks, which is longer than it takes when moving mobile numbers between networks.

If Jim continues to experience problems, he should complain to Ofcom, asking it to escalate his case to the Office of the Telecoms Adjudicator (www.offta.org.uk).

CASE CLOSED

My sofa isn't fit for purpose – what can I do?

Q A sofa I bought online from DFS (www.dfs.co.uk) in January 2018 had to be repaired three months later. But the leather section won't stay plump and firm like other sections. Now the sofa has a tear in a hardened section of the middle seat. Two questions: should I have refused the previous repair so soon after delivery? And should I contact Barclays because I've got an interest-free



loan with them that I took out through DFS when buying the sofa?

Peter Burnett

A In answer to the first question: Peter had no choice but to accept the first repair because he reported it more than 30 days after purchase. However, he doesn't have to put up with

another repair if the first didn't fix the sofa properly. Because he's owned the sofa for more than six months, Peter would have to prove the latest tear is an inherent fault, not accidental damage or wear and tear. If he can do this, he'll probably get a reduced refund to reflect the time he's owned it. He'd have got all his money back had he rejected the sofa after the first repair.

As for the second question, yes he should contact Barclays. Point-of-sale loans like this are covered by Section 75 of the Consumer Credit Act, but Barclays will also need proof that the sofa is not satisfactory.

CASE ONGOING

CREDIT WHERE IT'S DUE

ClimaxDigital rescued video of my grandkids

 I needed a new video-capture cable to transfer to my Windows PC some old VHS tapes of my grandchildren that I had taken in the early 2000s. I'd previously bought and returned three video grabbers, which I could not get to work.

In desperation, I emailed ClimaxDigital (www.climaxdigital.co.uk), based in Spennymoor, County Durham.



Within an hour they had emailed me to recommend their Video Capture Kit VCAP 302V2 (pictured). This arrived within 48 hours, but the CD-ROM wouldn't load.

Within minutes they replied to my email with downloads for **drivers** and ArcSoft software.

I then had one or two problems, so I emailed them again. Their response was almost immediate, with more download links for drivers and

a Windows registry tweak. So full marks to ClimaxDigital for an amazing response.

Eric Page

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

Contact:
ClimaxDigital

• **Online form** www.snipca.com/33964

Grow Your Family Tree



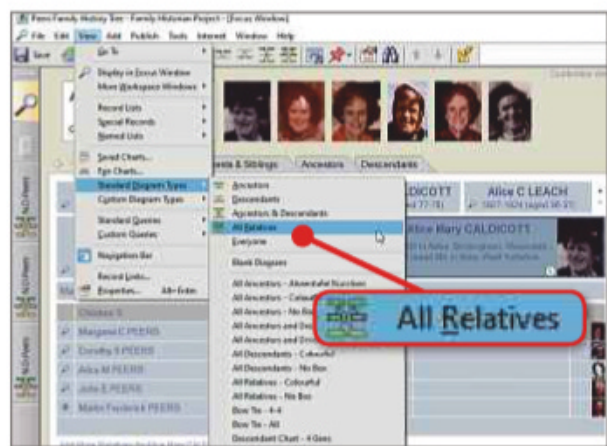
Want to add cousins and other relatives to your family tree?
Nick Peers reveals how to...

Create a horizontal 'pedigree' chart

Readers and keen genealogist Dave Selway got in touch to ask us whether we could recommend a program (preferably free) for creating and printing 'pedigree-style' charts that include all ancestors, including cousins.

A pedigree chart is more basic than complete family trees. Typically it displays only direct ancestors (*not* cousins), and presents them horizontally, not vertically. What Dave wants is to use the horizontal style of pedigree charts, but add cousins that would normally be excluded.

How practical these charts are depends on the size of your tree. Too many generations or ancestors can lead to branches spreading left and right, and trees spanning multiple sheets of paper.



Select 'All Relatives' in Family Historian to create a pedigree family tree with all your relatives, including cousins

Build pedigree charts using Family Historian

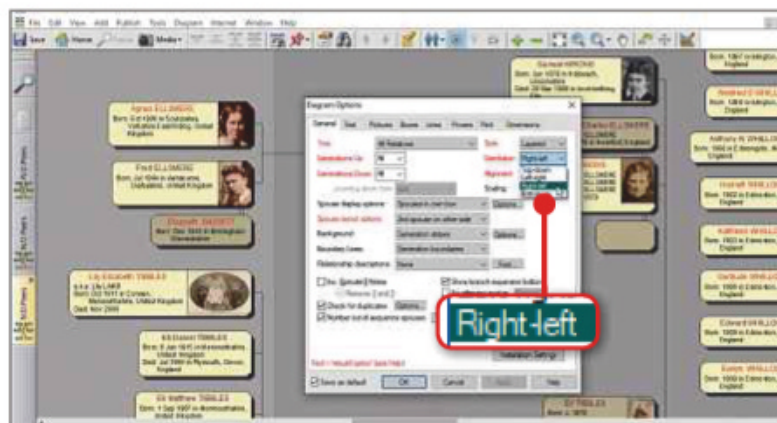
We checked all the major programs (free and paid-for) to see which could meet Dave's needs. Only one fitted the bill: Family Historian (www.family-historian.co.uk).

It costs £35.99, though a free 30-day trial should be enough to give it a test drive.

Family Historian works with **GEDCOM** files, but can import directly from other programs including Genbox, RootsMagic and The Master Genealogist. To do this, choose 'Import from other family tree file' when setting up your new project.

Once your tree has been imported into Family Historian, click the 'All Relatives diagram' button on the program's toolbar, or select this option from the 'View, Standard Diagram Types' menu (see screenshot left). This will generate a top-down diagram of your tree with all your relatives in it.

To switch this to a pedigree-style view, right-click on a blank space inside the diagram and choose Diagram Options. From here you'll be able to customise the chart to meet your exact needs – first though, you need to select 'Right-left' in



Click 'Right-left' in Family Historian to change the orientation of your pedigree trees

the Orientation dropdown menu (see screenshot above), then click Apply.

To determine what information is displayed in each person's box, switch to the Text tab where you can select from a number of templates or click New to define your own. This level of fine-tuning can also be used to change the appearance of your chart, from the photos shown to the colour and style of boxes and lines.

Changes are saved as you make them, and you can export your chart via the 'Diagram, Save Diagram as' menu as well as print it to multiple sheets of A4 paper.

Make pedigree charts on a Mac

The only other program we found that can produce a similar chart is for Macs, namely MacFamilyTree 9.0 (www.syniumsoftware.com). Again, import your family history file in the GEDCOM format then switch to Charts view. Select Tree from the list of available options to view a pedigree-style chart of everyone in your tree.

Click the Chart button at the bottom to reduce the number of generations shown. To limit the number of cousins, reduce the Descendants slider to just 1 or 2. Finally, to edit which facts are displayed next to each person, click the Style button and switch to the Content tab.

Your Genealogy Problems Solved

I've just upgraded to a **4K** PC monitor and have discovered my copy of MyHeritage's Family Tree Builder displays the text incredibly small, even after increasing the **DPI scaling**. How do I fix this?

Paul Derry

It's a problem with the program. The good news is that a minor update has been

released that fixes this, but it's currently not available by choosing 'Help, Check for Updates...' within the program itself. Instead, you'll need to go to MyHeritage's site (www.snipca.com/33916) and click a download link to get the latest version.

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

cycling electric

powered by
Cyclist



Find the right e-bike for you

Test a wide range of e-bikes at our London demo day in July

If you're thinking of getting an e-bike but aren't sure what to go for, why not try out a host of different models at the Cycling Electric demo day?

Whether you're a road cyclist, bikepacker, commuter or just someone fed up being stuck in traffic, e-bikes offer a fast, fun, environmentally friendly way to get around. Perhaps you're already an e-bike enthusiast, or perhaps you're considering buying one for the very first time - either way, this event has something for everyone.

We'll have loads of e-bikes from top brands to test on a traffic-free cycle track next to the iconic Olympic Velodrome in East London. Plus there will be experts on hand to answer all your e-bike questions.

Saturday 4th July 2020, 10am-4pm

Lee Valley VeloPark, London

Ticket includes

- ▶ Unlimited cycling from 10am-4pm
- ▶ A Cycling Electric goody bag worth £25
- ▶ Advice from our e-bike experts

Book now at

cyclingelectricevents.co.uk

How fast do
e-bikes go?

What are the
potential savings
on transport?

How heavy
is it?

Do I always
have to pedal?

What type
of e-bike is
right for me?

How much
is it?

**Don't
miss the
early bird
discount**

~~£25~~

£20



Best Free Software

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

SYSTEM TOOL

Ultimate Windows Tweaker 4.7

www.snipca.com/34089

What you need: Windows 10



Windows includes plenty of customisation options, but only for what Microsoft *wants* you to change. If you crave more control, download Ultimate Windows Tweaker (go to the link above and the download will start after a couple of seconds). It's a portable program, so there's nothing to install. Simply extract the contents from the [ZIP](#), then run the [EXE](#) file.

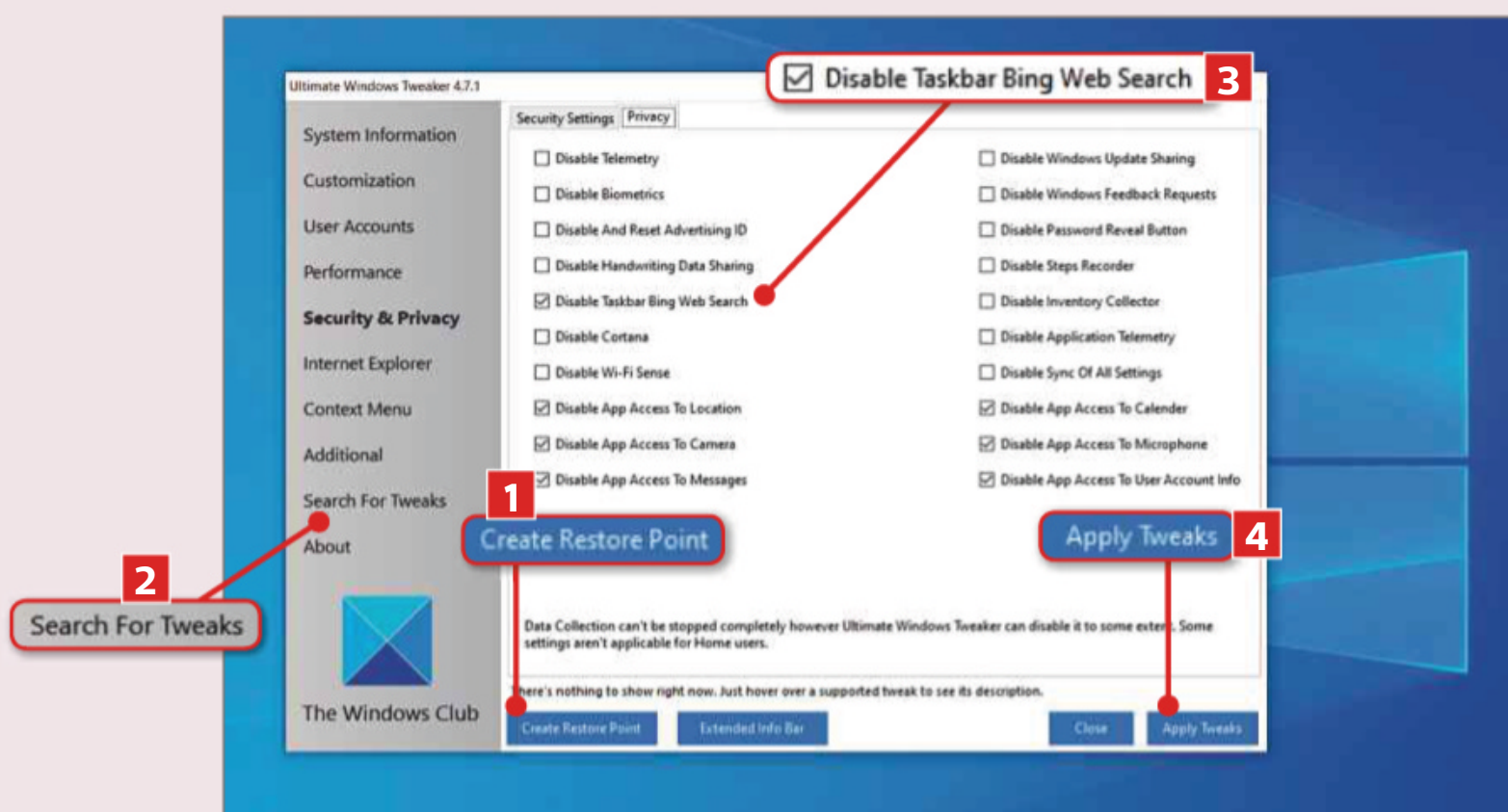
The various tools are split into sections down the left side of the window and cover everything from tweaking the taskbar to customising the context menu that appears when you right-click a file.

This version adds a particularly useful new option that stops your Start menu searches being blighted with results from the web. By default, if you open the Start menu and type something like [bank statement](#), the search results will (hopefully) include the file you're after, but also links for web searches on similar phrases, such as 'bank statement template' and so on. Click one of these (we often do so by accident) and the Edge browser will open, displaying Bing

search results. If you find this as annoying as we do, select 'Security & Privacy' on the left side of the main Ultimate Windows Tweaker window, select the Privacy tab, then tick 'Disable Taskbar Bing Web Search' (see [3](#) below), followed by Apply.

Fans of previous versions will notice that the Restore Defaults option, which reverted all settings to their Windows default, has disappeared (according to the developers, this is due to problems caused by Windows' default settings changing with each update). It's therefore a good idea to back up your files and create a [system restore point](#) before making any changes. Ultimate Windows Tweaker prompts you to create a restore point when you first run the program, but you can also create one at any time (see [1](#) below).

Note that although this version requires Windows 10, version 2.2 (which supports Windows 7) is still available from www.snipca.com/34090.



1 Before making any changes, it's best to back up your files. You can also create a system restore point by clicking this button, then 'Create...' in the window that follows.

2 There are hundreds of individual tweaks within the program. If you can't find the one you're after, use the built-in search tool.

3 Tick this option to stop web results appearing whenever you search for files within the Windows Start menu.

4 When you've selected your changes, click the Apply button. Note that only the changes within the current section will be applied.



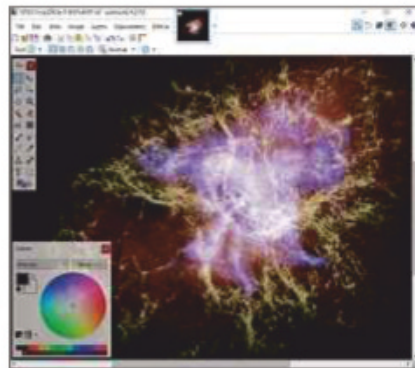
IMAGE EDITOR

Paint.NET 4.2.10

www.snipca.com/34091

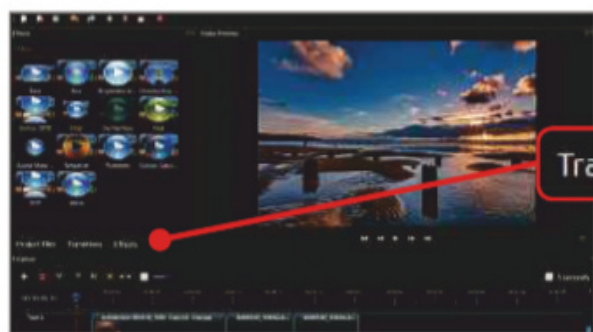
What you need:

Windows 7, 8.1 or 10



As well as being a very capable free image editor, one reason we love Paint.NET is the developer's commitment to reducing the program's impact on system resources - something that's hugely important when running it on older, less powerful computers. This latest release is no exception, promising a 30-per-cent reduction in memory usage when editing images. Keen to put it to the test, we loaded a stunning, high-resolution (20MB) image of the Crab Nebula (pictured), as recently seen by the Hubble telescope (www.snipca.com/34092). In the previous version, this gobbled up 379MB of RAM. However, in this new version, it was reduced by over 50 per cent to just 184MB, comparing very favourably with the 261MB image editor GIMP (www.gimp.org) used up. If you want a powerful tool for tweaking your photos that won't slow your PC down, this is the one to go for.

VIDEO EDITOR



OpenShot 2.5

www.snipca.com/34095

What you need: Windows 7, 8.1 or 10

MiniTool MovieMaker (see Issue 573, page 19) is great when you just want to quickly convert a selection of clips into a video, but it lacks any advanced features. OpenShot is a more powerful alternative, but is also easy to use. To get started, drag and drop your video files into the top-right pane, then move them on to one of the five tracks in the timeline at the bottom. You can then insert **transitions** and effects (including Blur, Chroma Key and Colour Shift) using the tabs just above the timeline (see screenshot). When you're ready to save your video, click the red Record button at the top.

This version includes support for hardware encoding (making the program much faster on PCs with a dedicated **graphics card**), and adds a recovery feature that lets you roll back to a previous version of your video if needed.

WHAT SHOULD I DOWNLOAD?

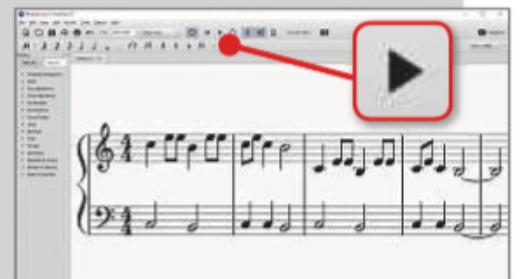
We tell you what software & apps to use

What can I use to create music scores?

Q I enjoyed your tip on using LibreOffice to write down ukulele chords (Issue 550, page 20). My grandchildren have now both started playing the piano and want to compose their own music. Is there a similar LibreOffice **plug-in** that will help me do this with them?

Paul Jackson

A There's a very simple LibreOffice plug-in called Music Paper Drawing (www.snipca.com/34099), that inserts a series of musical scores on to the page. However, a better option is to create and print blank scores from www.blanksheetmusic.net, which your grandchildren can then fill in with notes. Click the Piano icon at the top to add treble and bass clefs, then the Print button (bottom right).



Alternatively, you could download the excellent MuseScore (free from www.snipca.com/34093). Press Ctrl+N, then follow the instructions in the New Score Wizard. When you're prompted to choose a template file, open the General section and double-click Choose Instruments. In the window that appears, open the Keyboards section, double-click Piano, then click Finish.

You'll now see your empty score. To add notes, select them from the left side of the toolbar, then click the relevant place on the score. If you can't add the note, press N to switch Note Input mode on and off. You may find it easier to zoom into your score by holding Ctrl while using your mouse's scroll wheel (click and drag to move the score around the page). You can also enter notes using the corresponding keys on your keyboard. Use the up and down arrow keys to change notes to flats or sharps, and hold Shift to insert multiple notes as chords. If you get stuck, or want to explore MuseScore's other features, click Help, then Online Handbook.

At any point, click the Play button (see screenshot) to hear how your song's progressing. And when your masterpiece is complete, press Ctrl+P to print it.

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

HOW I USE...

NirCmd

When Chrome brings Will Stapley's PC to a juddering halt, NirCmd comes to the rescue

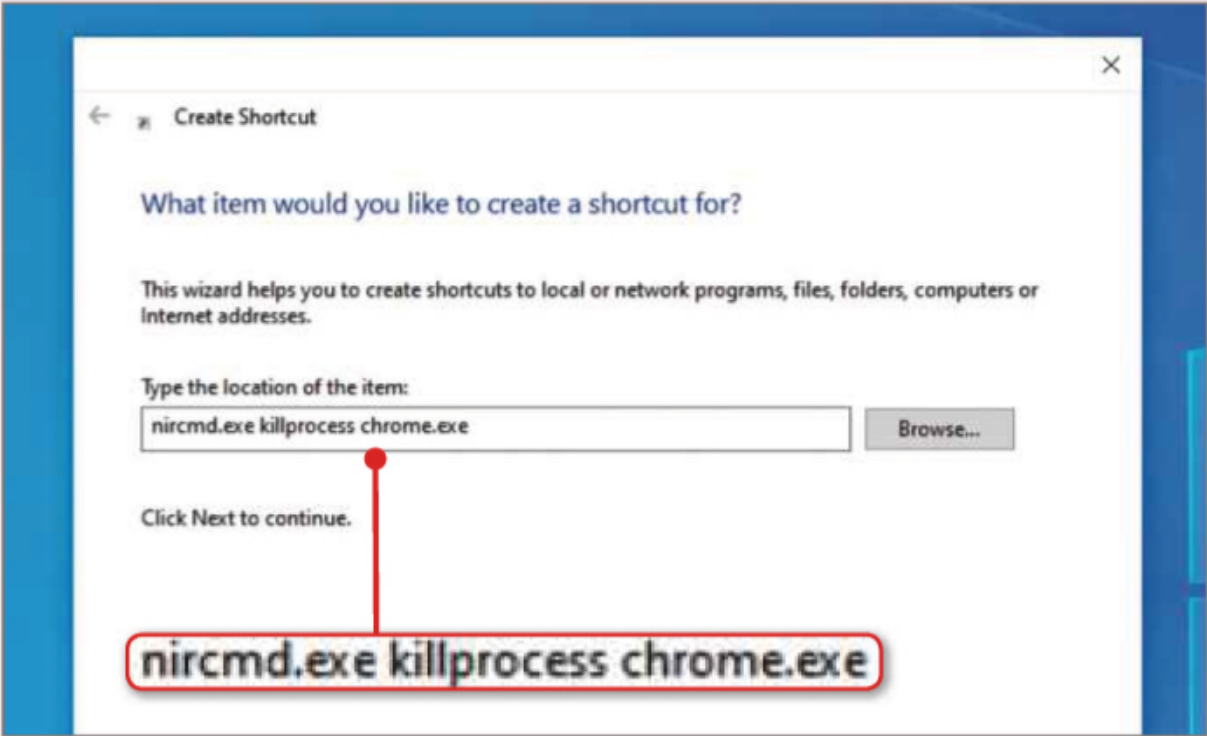


As much as I enjoy using Chrome, it does tend to hog my PC's resources. On rare occasions, it gobbles up so much memory it brings my computer to a standstill, leaving me no option other than to open Task Manager (Ctrl+Alt+Escape), locate the Chrome processes (usually more than 20 of the blighters), then close each one by right-clicking and selecting 'End task'. Trudging through Task Manager's entries to shut down Chrome is an annoyingly slow process.

I was delighted, therefore, to stumble upon NirCmd (www.snipca.com/33982, scroll to the bottom for the download links). Created by one of my favourite developers (Nir Sofer), this small tool lets you run more than 70 powerful system commands, including one that kills all Chrome processes in an instant.

NirCmd doesn't require installation and works simply by typing `nircmd` followed by whichever command you want to run (you can see a list of the available commands at the URL above). Before trying it, it's worth running the 'NirCmd.exe' file after downloading it and clicking 'Copy to Windows Directory' - this lets you run the program without first having to type the full name of the folder it's located in. Additionally, because some commands are designed to delete files or change Windows settings, I recommend you back up your PC before trying them out.

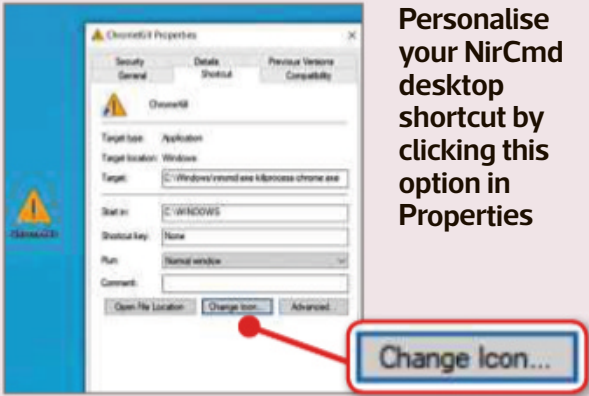
The NirCmd command that solved



The Internet Explorer 'killprocess' command can be tweaked to shut down Chrome

my Chrome conundrum is one that's actually intended for Internet Explorer (yes, some of the commands are a little dated). With a small tweak, I got it working for Chrome, with the resulting command being `nircmd.exe killprocess chrome.exe`. I should point out that this fix is the digital equivalent of taking a sledgehammer to Chrome - it simply kills *all* Chrome processes. However, it's also just what's needed when Chrome starts eating too many of your PC's resources.

I don't want to have to type this command each time Chrome plays up, so I've set up a shortcut. To do this, right-click an empty section of your desktop, select New, then Shortcut. In the 'Type the location...' box that appears, type the



Personalise your NirCmd desktop shortcut by clicking this option in Properties

`nircmd.exe killprocess chrome.exe` command (see screenshot at the top), click Next, then give it a name (I chose 'ChromeKill') followed by Finish.

You'll now see the shortcut on your desktop with the default Windows shortcut icon - I've changed mine to a yellow warning triangle. To change yours, right-click the shortcut, select Properties, 'Change icon...' (see screenshot above), then select from those available. For added convenience, I've also pinned the shortcut to my taskbar, meaning it's always within easy reach (drag the shortcut on to your taskbar to do the same). So now whenever Chrome takes my PC hostage, I click my ChromeKill button and show it who's boss.

WHAT I'D LIKE TO SEE IN NIRCMD

Being a command-line tool, NirCmd isn't particularly easy to use. Constantly having to visit the web page to find out what each command does and the text you need to type is far from ideal. You can create a desktop shortcut for

each of your favourite commands (as I've done above), but it would be much easier to have a simple window listing each command, along with a brief description and the option to create a desktop shortcut.

Named & Shamed



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

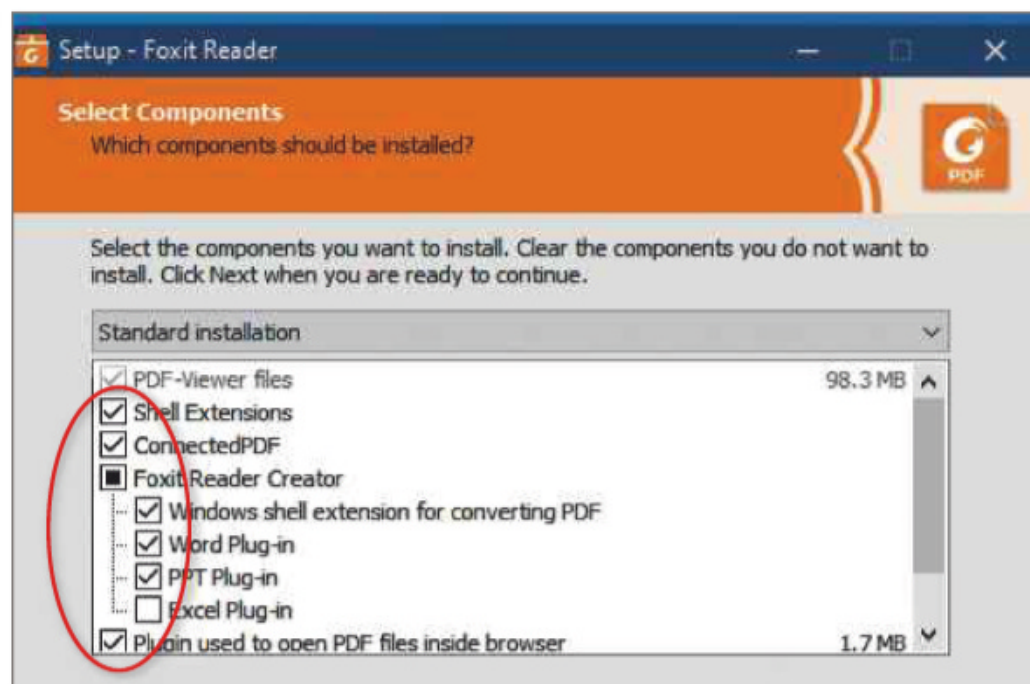
WARNING: JUNK AHEAD

Junk offender: Foxit Reader

I'm always dismayed when good software turns bad. Foxit Reader (www.snipca.com/34079) used to be a decent PDF reader with useful features, including some annotation and editing capabilities. Not so long ago, I used to recommend it as an alternative to Adobe's increasingly bloated Acrobat Reader program. Indeed, my records tell me that I recommended Foxit Reader in these very pages, back in Issue 515.

Since then, things appear to have gone downhill for the once-brilliant PDF tool. Start installing it and it's not long before you're greeted by a confusing screen with a pile-up of pre-ticked boxes that would see you adding several tools to your PC (see screenshot) if you weren't careful.

In fairness, some of these options are useful. Shell Extensions, for example, lets you access Foxit-related actions from your right-click context menu. But you won't need the PPT Plug-in unless you use Microsoft PowerPoint, and there's no point in installing the 'Plugin used to open PDF inside browser' because all browsers support PDFs as a



Install Foxit Reader and you'll get all these too

matter of course.

Foxit will also install ConnectedPDF unless you untick its box. This is a tool for tracking and packaging PDF files and just isn't useful for most normal users. It gets worse, too. A couple of screens later and it tries to shovel yet more unwanted junk your way – this time via a preselected option to install a trial of Foxit's PhantomPDF.

Batting away all this rubbish left me

wondering whether anybody even needs a PDF reader installed on their computer anymore. The world has changed since Foxit Reader's heyday and now most PCs can open PDF files without downloading software, thanks to Microsoft Edge. The browser even has some pretty decent annotation and editing tools built in. It's not hard to avoid Foxit Reader's junk, but maybe it's time to free up even more space and dump PDF readers altogether?

WHAT ARE THEY TALKING ABOUT?



WHAT THEY SAY

Rajiv Gupta, McAfee
www.snipca.com/33975

"The force of the cloud is unstoppable... Security that is data-centric, creating a spectrum of controls from the device, through the web, into the cloud, and within the cloud provides the opportunity to break the paradigm of yesterday's network-centric protection that is not sufficient for today's cloud-first needs."

WHAT THEY MEAN

If you run out of words, just keep saying 'cloud'.

JONATHAN'S VILLAIN OF THE FORTNIGHT

Tony Spencer

Technology has paved the way for human beings to achieve some truly incredible things: fly to the Moon, cure diseases, map our genetic makeup and more. But 38-year-old Tony Spencer from Suffolk set his sights low.

He used technology to hack people's Apple iCloud accounts and steal private, explicit photos, which he then posted online. And, if that wasn't enough, he also had a habit of filming women and children getting changed at his



local leisure centre.

But you'll be pleased to hear Tony's 'achievements' haven't gone unrewarded. He pleaded guilty to multiple offences under the Computer Misuse

Act, in addition to several charges of voyeurism and taking indecent photos of children. Justice caught up with him at Basildon Crown Court in January, where he was sentenced to 32 months behind bars, and put on the Sex Offenders' Register for life.



LAPTOP-TABLET | £1,099 from Lenovo www.snipca.com/33967

Lenovo Yoga C940

Generation X

Intel's 10th-generation laptop processors come with a choice of integrated graphics. This latest laptop-tablet from Lenovo opens the bidding with an i5-1035G4 chip, combining mid-range performance with a **graphics card** around 75 per cent quicker than the basic G1 GPU.

Notably, Dell's pricier XPS 13 2-in-1 (from £1,239, see our review, Issue 500, page 23) uses the i5-1035G1 chip. Where the C940 falls short is in its Full HD touchscreen, which we found covered only 91 per cent of the **sRGB** colour space with a **Delta E** of over 3, indicating only fair accuracy. According to the same meter, the XPS's new 13.4in screen covers 97 per cent with a Delta E of under 1.2, close to perfect. It goes a lot brighter, too.

“Classy design, flexible spec options and clever features”

The C940's screen isn't bad, though, especially once you track down the Intel Graphics Control Panel and turn off the power-saving dynamic contrast. It still wouldn't be our first choice for photo editing, but for entertainment the built-in Dolby Atmos soundbar is unusually effective. The webcam in the top bezel has a sliding privacy cover, and although it doesn't support Windows Hello facial



recognition, there's a fingerprint sensor for quick login. A battery-powered stylus is included for tablet mode, stowed in a handy slot.

The flat keys are well-spaced, even if they don't move much, and the large touchpad is responsive. The expensive-feeling slim aluminium case squeezes in a USB-A socket for older accessories and USB drives as well as two **USB-C** ports with **Thunderbolt 3** for the very fastest external storage. That'll match the internal **SSD**, starting at 256GB, which hit 2,585 megabytes per second (MB/s) **read speed** and 2062MB/s writing in our usual tests, up to three times faster than Dell's.

This helped to make our test model feel very fast across a range of tasks, helped along by its i7-1065G7 chip – one of a number of options you can add online (see www.snipca.com/33969). At an extra £170, this is overkill for many users, but doubling the SSD to 512GB for just £30 is worth considering, or even 1TB for £105.

You can also upgrade the screen to **4K HDR** for £100, but this cuts the quoted battery life from 'up to' 18 hours to just 10 hours 30 minutes. In our video-playback test, we got just over 11 hours of actual

use, so you can do the maths and decide whether sharpness or stamina is more important to you. Curiously, one specification not listed online at the time of writing was the 16GB of memory fitted in our model. Although the standard 8GB is adequate for many purposes, you might want more for editing large files or multitasking, so we hope Lenovo brings this option back.

At £1,099, the base configuration is reasonably priced, but not cheap. HP's Envy 13 x360 (www.snipca.com/33977, see Issue 570, page 23) starts at just £799 and comes with AMD's comparable Ryzen 5 3500U chip, with its **Vega 8** integrated graphics. Accurate sRGB colour is a bonus, and there's a range of specifications, but they're all based on older processors, and battery life with the Ryzen 5 fell short of 8 hours 30 minutes.



SPECIFICATIONS

1.3GHz Intel i7-1065G7 quad-core processor • 16GB memory • 256GB SSD • 14in 1920x1080-pixel screen • Webcam • 2x USB-C Thunderbolt 3 ports • USB 3.1 port • 802.11ax Wi-Fi • Bluetooth 4.1 • Windows 10 Home • 15.7x320x216mm (HxWxD) • 1.35kg • One-year warranty www.snipca.com/33968

VERDICT Sleek design complements long battery life and up-to-date specs in a versatile laptop-tablet

★★★★★

ALTERNATIVE HP Envy 13 x360 £799 Still great value, but its processors are now two generations behind Lenovo and Dell



ORGANISER/PHONE | £799 from Planet Computers www.snipca.com/33980

Cosmo Communicator

It ain't half bad

When smartphones arrived, keyboard-based personal digital assistants (PDAs) like the Psion Series 5 died out. But what if there was still a place for a clamshell pocket computer with a phone built in? Planet Computers, founded by former Psion designers, first set out to answer this question with the **crowdfunded** Gemini PDA (see our review, Issue 529, page 23). We didn't recommend it: the keyboard wasn't reliable, and taking phone calls was too awkward. But we were keen to see version 2.0, and here it is.

“Half pocket-sized laptop; half Android smartphone”

As before, it's basically a 6in Android phone hinged sideways to a keyboard. But there's now a small touchscreen on the back, so even when it's closed you can see status info and notifications (pictured below). When a phone call comes in, you know who it is, and you can make calls by tapping in a number or choosing it from your contacts.

The two screens integrate cleverly, so when you tap on the outside to reply to an email, then open the lid, the email app is ready. There's also a camera, which can take selfies previewed on the mini display, but this takes about a second to update. You can take pictures normally with the main screen.



This is a bulkier device than any mobile, and even closed it feels odd holding it up to your ear, not helped by a tendency to output audio from the wrong speaker. You could use earphones via Bluetooth or the 3.5in jack.

As a pocket computer, it's quite convincing. Although we still don't like the keyboard quite as much as the old Psion, we can type pretty accurately, and the space bar now works every time. For tasks involving text entry and keyboard shortcuts, it's a godsend.

You'll need sharp eyes to use the small screen down there by your fingers, though – it's not the most ergonomic setup. Not many Android apps favour keyboard input, and some won't even run in landscape, so you have to turn the Cosmo Communicator sideways, with the keyboard still in place (it can't fold round to the back).

You can also install Debian Linux and run compatible desktop apps on an **HDMI** monitor, but this is clunky. The new processor does run Android 9 smoothly, except that we sometimes had to remind it which Wi-Fi network to connect to.

The battery lasted 10 hours 38 minutes in our video-playback test. You'll certainly need to charge it every night, and maybe top it up if you use it a lot, but by laptop standards it's not bad.

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.

SPECIFICATIONS

MediaTek Helio P70 8-core processor • 6GB memory • 128GB flash storage • 6in 2160x1080-pixel screen • 24-megapixel camera • 802.11ac Wi-Fi • Bluetooth 4.2 • MicroSD card slot • Nano SIM tray • 2x USB Type-C ports • Android 9 • 17.3x171x79.3mm (HxWxD) • 326g • One-year warranty
www.snipca.com/33981

VERDICT A decent pocket computer, but a rather cumbersome phone; at this price, you'll want it to be both



LAPTOP | £845 from Ballicom www.snipca.com/33985

Acer Swift 5 SF514-54T

Light work

It's always been taken for granted that the slimmest, lightest laptops are overpriced for their performance. That works out fine, because their target customer is someone who's far too important to carry anything heavy or do any proper work. For some time, though, Acer has been selling the Swift 5 with better than minimal specifications at a price that risks attracting the 'wrong' sort of customer – people like us. We're quite keen on the idea of carrying something that weighs, almost incredibly, less than a kilo, or barely over two pounds. When it's still under 900 quid and has no hideous flaws, we're keener still.

“Super-lightweight, well-connected and a surprisingly decent screen”

Intel's i5-1035G1 processor is still pretty average, and its built-in GPU too slow to have much of a crack at 3D games. This isn't the system you'd choose for jobs like video editing, and even applying filters to high-resolution photos or flicking between several demanding programs might keep you waiting longer than you'd like. But it's much better than bargain-basement Pentium or Celeron chips, and faster than the low-power processors found in some fancier laptops and laptop-tablets. For everyday Windows 10 tasks, it doesn't feel like a compromise. It's not helped here by a slow SSD, which managed 1,199 megabytes per second (MB/s) reading and just 666MB/s writing in our tests – but that's still many times faster than a hard drive.

The Swift 5 is also available with an i7-1065G7 chip, but we weren't able to test that configuration, and after our experience with the eighth-generation model in this chassis we have some doubts about its ability to dissipate heat well enough to keep higher-powered processors running at full speed. Still, the



£1,300 asking price for the i7 (from which Acer was discounting £100 at the time of writing, at www.snipca.com/33986) also gets you 16GB of memory, a 2GB Nvidia GeForce MX250 graphics card and a generous 1TB SSD, which, because of the way SSDs work, might also be a bit faster. The screen remains the same, with no higher-resolution option.

It's a surprisingly decent screen, though, covering 94 per cent of sRGB with an average Delta E of 2.2, indicating good accuracy, and although it's not super bright, the semi-matt finish avoids distracting reflections. The backlit keyboard is well spaced, quiet and practical, and we had no problems with the medium-sized touchpad. The basic webcam doesn't have face recognition, but there's a fingerprint scanner to log you in via Windows Hello.

The less said the better about the downward-pointing stereo speakers, but there's a full set of ports on the sides, including a USB-C port with Thunderbolt 3 that you can use for charging, faster storage than that SSD, and many other purposes. There's a separate port for the included mains adapter if you prefer, plus

SPECIFICATIONS

1GHz Intel Core i5-1035G1 quad-core processor • 8GB memory • 256GB SSD • 14in 1920x1080-pixel screen • Webcam • 802.11ax Wi-Fi • Bluetooth 5 • USB-C Thunderbolt 3 port • USB-A 3 port • USB-A 2 port • HDMI port • Windows 10 Home • 15x320x211mm (HxWxD) • 990g • One-year warranty www.snipca.com/33983

USB 3.0, USB 2.0, an HDMI monitor output and an audio jack, although there's no slot for memory cards.

We're still a bit sceptical about how accident-proof a machine this skinny is, but unlike the last time we reviewed a Swift 5, our test model – finished in Acer's distinctive blue, with subtle gold highlights – came undamaged and working perfectly. Realistically, the all-metal chassis, using a combination of magnesium and aluminium alloys, is about as tough as you're going to get without lugging more weight.

If you don't mind lugging, you could buy an HP Envy 13 (see our review, Issue 568, page 23), with Nvidia GeForce MX250 graphics, or an Envy 13 x360 (see Issue 570, page 23), with a fold-back touchscreen, for about £50 less, and with longer battery life than the Swift 5's six hours and 22 minutes.

VERDICT It's a shame it won't run longer on the road, but you won't regret choosing to carry it

★★★★★

ALTERNATIVE

HP Envy 13 £779

Has an old but good i5-8265U chip, MX250 graphics and two hours' more battery life



PRINTER | £190 from HP www.snipca.com/34025

HP Color Laser 179fnw

Low beam

We're sceptical about the practicality of colour laser printers. Could this one change our minds? With USB (for Windows only), Ethernet, Wi-Fi and even fax, it's as flexible as any inkjet, even if its tiny LCD and numerous buttons make setup and operation a bit fiddly. It's a multi-function machine, incorporating scanning and copying, and unlike most laser models, which raise the scanner on little stilts, it's all in one. This makes it very compact, but means printed pages have to emerge from a high-up slit on to an unsatisfactory flap. And that wasn't our only complaint about paper handling. When laser printers overheat pages, they tend to jam. This happened several times during testing, so we wouldn't necessarily trust the 179fnw to churn out long documents without supervision.

“Does everything, but its flaws may be too many for some”

It wasn't especially fast, either, managing only 14.4 pages per minute (ppm) for black text and little more than a quarter of that for colour. HP's own OfficeJet Pro 7720 inkjet (£128 from Amazon www.snipca.com/26245, see our review, Issue 516, page 22) delivered up to 22.7 pages of black text per minute and 8.5ppm in colour. It also did a better job with photos, but for crisp text and solid business graphics the 179fnw didn't disappoint, delivering professional-looking output.

Scanning, assisted by a 40-sheet automatic document feeder (ADF) that tips up to reveal the glass for bulky originals, was reasonably quick, at 14.6

SPECIFICATIONS

600dpi maximum print resolution • 18ppm quoted print speed • 4800dpi maximum scan resolution • 150-sheet paper tray • 40-page ADF • USB 2.0 • 10/100 Ethernet • 802/11n Wi-Fi • 344x406x363mm (HxWxD) • 14.1kg • One-year warranty
www.snipca.com/34025



seconds for an A4 sheet at 300dpi or 17 seconds for a 600dpi photo scan. A black-and-white photocopy took 13.5 seconds, while colour was rather slow at 33.2. Neither printing nor scanning support duplex (both sides) automatically.

Laser printers use toner instead of ink, and if you thought ink was pricey, well' you may want to sit down. The 179fnw will at least print black even if one of the colour toners needs refilling, but note that it uses HP's chipped cartridge system. This makes it as difficult as possible to use cheaper non-HP refills, and official cartridges may refuse to work after their allotted number of pages, even if toner remains. With a black refill costing around £30 and each colour £36, running costs work out at about 2.9p for black and 15.5p for colour pages, the latter three times the running cost of the OfficeJet Pro 7720. If you like laser but don't need colour, Xerox's B215 (£162 from Printerbase www.snipca.com/33727, see Issue 572, page 25) is more than twice as fast and a little cheaper to run.

VERDICT A multi-function colour laser for the study is a nice idea, but this one suffers too many compromises

★★★★★

ALTERNATIVE HP OfficeJet Pro 7720 £128 This inkjet is faster, cheaper to buy and run, and can print single A3 pages



DO I REALLY NEED...

Edge AI?

What is it?

If you picture the cloud (which just means a shed somewhere full of computers) at the centre of a network, the 'edge' in this context is the gadget you're using, whether that's a PC, mobile device or **internet of things** gadget (for example, a smart speaker).

Nothing to do with...

Replacing the dude who plays lead guitar in Irish rock band U2 with a robot? No.

What does it do?

The same thing the data centre would do, but on a chip inside your device. At the moment, when you say 'Alexa' or 'Hey, Siri' or 'OK, Google', the app or smart speaker you're talking to streams what you say to its servers, likely to be somewhere in the US. These do all the voice processing and find what you're asking for.

However, Arm – the British company now owned by Japanese giant SoftBank, see its logo, pictured – that designs a lot of the processors used in smart devices, is working on chips that process this information within the device.

Apple and Google are also working on this. As well as helping their voice assistants, it could change the internet of things by freeing the things from the internet.

What you're really saying is, do I really need the cloud?

Yes. We wish we'd thought of that at the start.

So can I do without Edge AI?

Maybe, but it has the potential to reduce tech's reliance on constantly whizzing your personal data across the Atlantic, making devices faster and safer. This can only be a good thing.



EBOOK READER | £100 from Amazon www.snipca.com/33990

Amazon Kindle Kids Edition

Bedtime stories

Amazon's Fire tablets come in a Kids Edition, and now you can get a similar bundle with the Kindle ebook reader, normally priced £100 but reduced to £75 at the time of writing.

“A regular Kindle, plus a year's worth of classic kids' ebooks”

As with the tablets, the Kindle itself is the regular model (£70 from www.snipca.com/31621, see our review, Issue 555, page 23). It's already **IPX8** waterproof, and the Kids Edition cover adds some cushioning all round plus a cover to protect the screen. This snaps closed magnetically, like an iPad case, and doing so puts the Kindle to sleep, while opening it automatically wakes it.

We have two concerns about the case, though. One is that the inside of the flap has a soft-touch surface, which is no doubt screen-friendly but seems likely to

SPECIFICATIONS

6in E Ink touchscreen • 4GB storage • 802.11n Wi-Fi • Reads AZW and AZW3, MOBI, PRC, PDF, standard text and image formats • AAX audio • 162x119x14mm (HxWxD) • 288g • One-year warranty www.snipca.com/33990

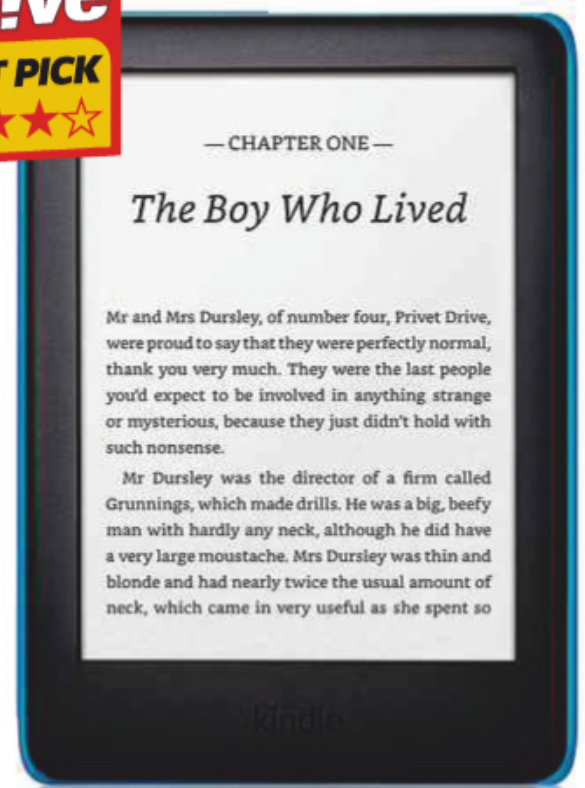
get grubby. The other is that it comes in two colours: yes, pink and blue. Some parents may feel a tad fed up facing that particular choice yet again.

Starting up the Kindle triggers an invitation to set up your child's 'profile' in Fire for Kids Unlimited. This gives you instant access to lots of ebooks, including some classics, like *The Wind in the Willows* and the whole Harry Potter series, but lacking others, like *The Hobbit* or *His Dark Materials*.

A year's subscription is included, after which it'll cost £3.99 a month, discounted to £1.99 if you also pay for Amazon Prime. All of this is optional; if you prefer, you can just add whatever free or paid-for ebooks you want, as well as audiobooks, which aren't part of Unlimited.

The package is rounded off with two years' accidental damage cover. But with its papery **E Ink** screen, the Kindle isn't particularly breakable anyway. Nor is it as versatile as a 7in Fire tablet (see Issue 558, page 23), which has a bigger colour screen and gives you far more content, including videos, with the same subscription.

You might see the Kindle's limitations as an advantage, of course, if apps and games are already too much of a distraction for younger members of your family.



VERDICT It's hard to argue with the value, but this won't be the only tablet most kids need



ALTERNATIVE Amazon Fire 7 Kids Edition **£100**

Not as easy on little eyes, but a more flexible education and entertainment device



WHAT SHOULD I BUY?

We solve your buying dilemmas

Can I upgrade my PC for less than £350?

Q I'm a non-gaming 'silver surfer' and use my desktop PC for general home tasks and streaming. It's now more than 10 years old. Last year, I upgraded it with Windows 10 on an **SSD**, but how difficult would it be to upgrade the whole system? On a budget of £300-£350, should I rebuild or go for a new or **refurbished PC**?

Ray Bingham



A Storage and memory are good candidates for upgrades, but your bottleneck now will be the main processor (CPU). Replacing this would also mean a new motherboard, and at this point you're not keeping much! We'd recommend a new PC with at least a quad-core Intel i3 or AMD Ryzen chip. Did you buy a retail copy of Windows 10? Palicomp's Carbon AMD Dual PC, for example (www.snipca.com/33987, pictured), can be configured with an AMD

Ryzen 5 3400G, Asus Prime B450M-A motherboard, 8GB of **RAM** and a 1TB hard drive for £340. Simply transfer your SSD and reactivate Windows 10. But if your Windows licence belongs to your old PC, a new copy costs £95. A refurbished PC could be the answer: Laptops Direct has an Acer Aspire XC-885 with an i5 processor and Windows 10 for £340 (www.snipca.com/33988).



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

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE • ICU

AvaxHome - Your End Place

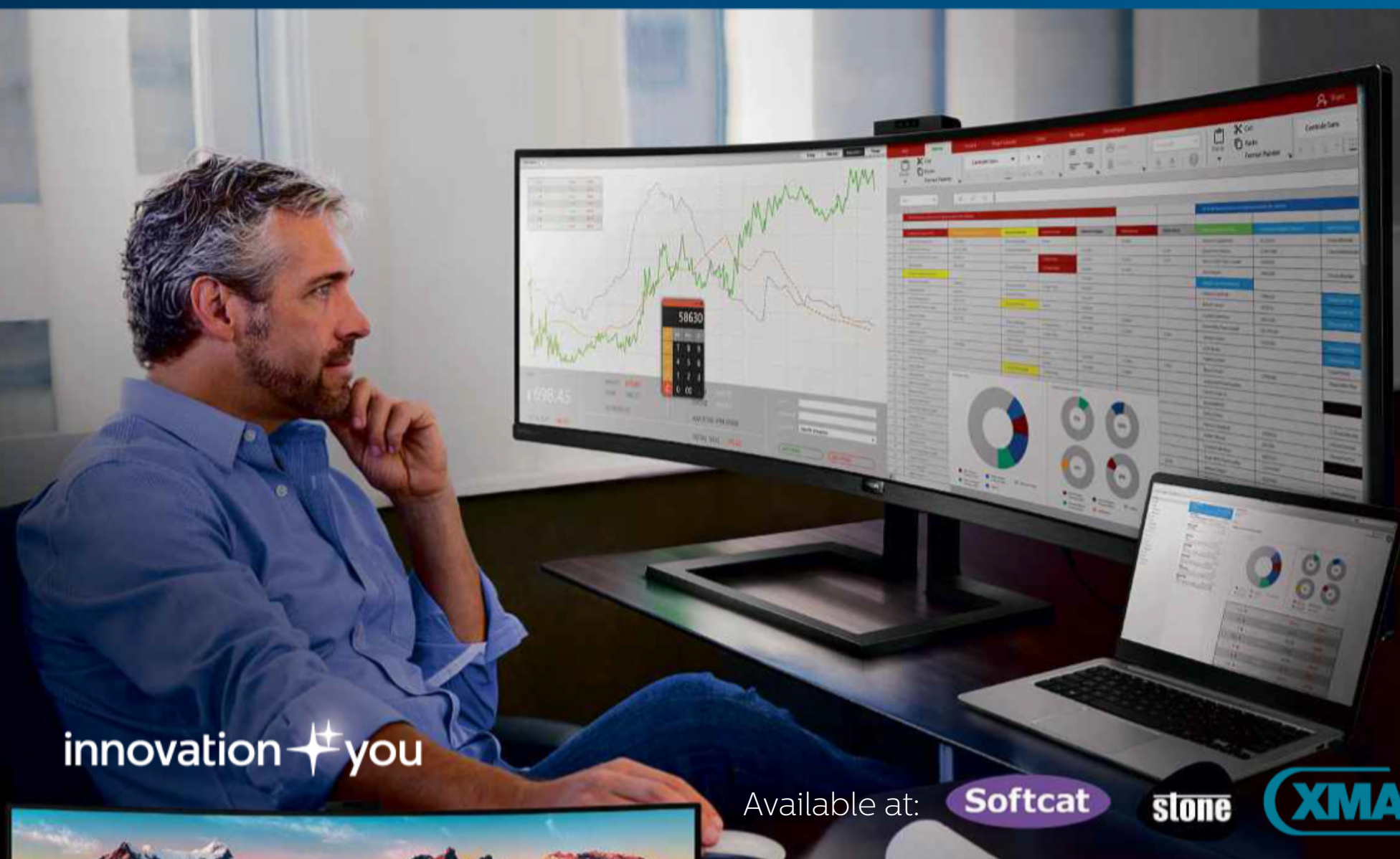
We have everything for all of your needs. Just open <https://avxlive.icu>

PHILIPS

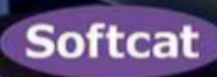
Monitors

Wide open possibilities

With two high-performance monitors in one



innovation  you

Available at:   



Brilliance 49" 32:9 SuperWide curved display 499P9H

-  Windows Hello
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Reviews

PHONE | £389 from Amazon www.snipca.com/34044

Xiaomi Mi Note 10

Snaps for a snip

The absence of 'Red' from the model name indicates that this is from Xiaomi's flagship rather than budget range. But where the top of some manufacturers' ranges means spending a grand, you can get the Mi Note 10 for less than half that, depending on whether you want the grey, white or blue-green version and who's discounting it. Do shop around.

The headline feature is a 108-megapixel camera based on Samsung's Isocell Plus sensor. Like the more common 48-megapixel units, it uses 'pixel binning', which doesn't throw away

SPECIFICATIONS

6.47in 2340x1080-pixel screen • Four rear cameras • 32-megapixel front camera • 128GB flash storage • USB-C port • 3.5mm audio jack • 802.11ac Wi-Fi • Bluetooth 5.0 with aptX • 3G/4G • 158x74.2x9.7mm (HxWxD) • 208g • One-year warranty www.snipca.com/34045

pixels but combines four into each one in the final image, improving detail and low-light accuracy. Although we found colours slightly off, it still took excellent pictures. There's also a 5-megapixel sensor with a 5x telephoto lens (which, like the main camera, has **optical stabilisation**) plus 20-megapixel ultrawide and 2-megapixel **macro cameras**.

Video goes up to **4K**, with slow motion at lower resolutions. A 32-megapixel selfie camera sits in a notch in the **AMOLED** screen, which produced perfect **sRGB** colour. Brightness is limited, but there's a sunlight mode.

The specification list continues with an in-screen fingerprint reader and 128GB of storage, but no **microSD** slot. The Snapdragon 730G processor is good, but not great, falling behind the 855 in the similarly priced OnePlus 7T and well

PHONE | £200 from Argos www.snipca.com/34034

Lenovo Moto G8 Plus

Gee, that's cheap!

In another victory for marketing logic, the Moto G8 Plus differs from the Moto G8 in that it has a 6.3in screen and 64GB of storage, while the Moto G8 doesn't actually exist. Still, if there was a Moto G8, the Moto G8 Plus would doubtless be better.

With a glossy pink or blue plastic back, it feels mid-range rather than budget, with a decent processor that runs Android 9 smoothly and can cope with all but the most demanding 3D games. The **IPS** screen has a bit of bezel at the bottom, and only covers 88.5 per cent of **sRGB**

SPECIFICATIONS

6.3in 2280x1080-pixel screen • 48-megapixel and 16-megapixel rear cameras • 25-megapixel front camera • 64GB flash storage • MicroSD card slot • 802.11ac Wi-Fi • Bluetooth 5.0 with aptX • 3G/4G • 158x75.8x9.1mm (HxWxD) • 188g • One-year warranty www.snipca.com/34037

colours, but goes exceptionally bright.

Fighting for space with the **NFC** fingerprint reader, the impressive rear camera array has only two actual cameras. The main sensor uses 48 megapixels to generate 12-megapixel images, with a fast **f/1.7** lens that gave convincing results in low light. There's also a laser focus sensor and a depth sensor for portrait mode, while the other wide-angle lens is for video. An **action cam** mode lets you shoot widescreen while holding the phone vertically, but only in **1080p** Full HD; **4K** is available in landscape, but lacks stabilisation.

Lasting just under 18 hours in our video-playback test, the Moto G8 Plus is a practical phone with no major flaws. Its problem is competition. Xiaomi's Redmi Note 8T (£166 from Amazon www.snipca.com/33950, see our review, Issue 573) has



short of current iPhones.

Battery life of 23 hours 12 minutes in our video-playback test rescued some stars in our verdict. One thing you won't find is a stylus, the hallmark of Samsung's Galaxy Note but not Xiaomi's brand.

VERDICT This is a fantastic phone for the money, lacking only top performance for ambitious apps and 3D gaming

★★★★★

ALTERNATIVE Huawei P30 Pro £600 This more powerful three-camera phone arrived before Huawei's Google ban



similar specs, three cameras, prettier colours, and costs £30-odd less.

VERDICT Like the best previous Moto Gs, this isn't the most exciting phone but gives you a solid spec for the money

★★★★★

ALTERNATIVE Xiaomi Redmi Note 8T £166 The macro (close-up) camera is gimmicky, but this is a decent phone for a bit less



FITNESS TRACKER | £29 from Amazon www.snipca.com/34080

Samsung Galaxy Fit E

Arm and no leg

When this whole idea started, we could see the point of an electronic wristband that monitors your exercise, but then the tech industry ran away with it and created the smartwatch, an electronic wristband that monitors your exercise, plays your music, replaces your travel card, runs your smart home and empties your wallet.

We're glad to see there's now a resurgence of proper no-nonsense fitness bands at down-to-earth prices.

Just as the Huawei Honor Band 5 (see our review, Issue 571, page 29) is an even cheaper version of the affordable Huawei Band 3 Pro, the Galaxy Fit E undercuts the plain Galaxy Fit, largely by omitting built-in GPS.

You still get a heart-rate monitor, which partly explains the typically chunky shape, but a sensible strap and comfortably rounded form make it easy to wear, and it's surprisingly light.

“A basic but effective budget fitness band that's comfy to wear”

It's arguably not as elegant as the Fitbit Inspire HR (£70 from Amazon www.snipca.com/31562, see Issue 554, page 29), but then it's less than half the price. The tiny LCD isn't exactly a touchscreen, but responds to taps, and yes, it tells the time. The only disappointment was that the battery lasted us just four days per charge with everything turned on, or seven eking it out – about half the life of the Honor Band 5.

As with the Galaxy Fit, the Galaxy Wear app sets it up and Galaxy Health fills in the tracking options, drawing location

SPECIFICATIONS

0.74in 128x64-pixel monochrome PMOLED touchscreen • Heart-rate monitor • Waterproof for swimming • One size • Colours available • Requires Android 4.4 or iOS 9 or later device • 11.5x40.2x16.0mm (HxWxD) • 15g • One-year warranty www.snipca.com/34082



data from the Android or Apple phone that you'll probably be carrying anyway. It's a good app that makes the most of the band's basic but effective capabilities, which include automatically detecting when you're exercising.

It's suitable for swimming, but not diving. Compared with much pricier devices, we found both step counting and heart-rate logging pretty accurate. Unlike Honor's software, the Health app can link you to compete with friends on platforms including Strava and Samsung's Together.

If you want a proper screen and more features you could spend 10 times more, but we really have no complaints for the money.

VERDICT Finally, an affordable fitness band we can recommend – it's comfy and does the basics well

★★★★★

ALTERNATIVE

Huawei Honor Band 5
£30 A colour screen and longer battery life are balanced by slightly more limited software



GADGET GRAVEYARD

Devices that never caught on
Cisco Umi



What was it?

Pronounced 'you-me', this set-top box was launched in 2010 as a consumer video-chat solution. For \$599 (then about £375, nearly £500 today) plus \$25 per month, the whole family could sit around their HDTV (not included) and talk to friends and family over broadband.



Why did it die?

Umi arrived in competition with software like Skype, which anyone could use on their PC for free, and Apple's new FaceTime, which users could also use for free. While some nerdy users praised the video quality, audio could be erratic. The price was quickly cut by \$100, then another \$100 for a lower-quality version, but oddly nobody wanted to pay even \$400 for something they could already do. At best, such a product was vulnerable to "mass-market options that sell for half, then a quarter and eventually a tenth of the price", commented a Skype executive, presciently. In 2012, Cisco admitted Umi was no longer being sold.

NEXT ISSUE

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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 tenth-gen, but there's no GPU option and the cheapest sensible configuration is £1,049 from www.snipca.com/33309

DESKTOP PC

Chillblast

Fusion Onyx Ryzen Family PC

£1,000 from www.snipca.com/33720

Tested Issue 572



With AMD's 6-core Ryzen 5 3600X processor plus a 6GB Nvidia GeForce GTX 1660 Super graphics card, 16GB of memory, 512GB SSD and 2TB hard disk, this is a good-value and well-balanced all-round system in a rather posh glass case.

ALTERNATIVE PC Specialist Inferno L2 Need more oomph? Try a 12-core Ryzen 9 and 8GB RTX 2070 Super. £1,499 from www.snipca.com/33860

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

£329 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

£320 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. £329 (64GB, or £549 for 128GB) from www.snipca.com/31683



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Buy It

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 Clara HD

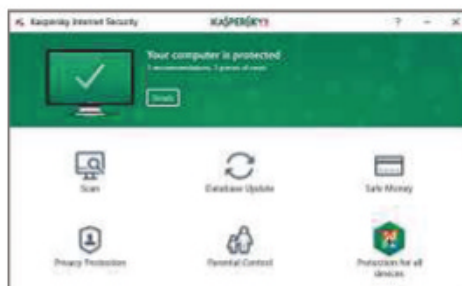
Not waterproof, but has more lighting options to avoid blue light. £110 from www.snipca.com/32586

SECURITY SOFTWARE

Kaspersky Internet Security 2020

£14.99 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, two-device licence for just £26.99.

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. £40 from www.snipca.com/26514

PC MONITOR

AOC Q3279VWFD8

£195 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. £180 from www.snipca.com/26850

ROUTER

D-Link DIR-1960

£75 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. £195 from www.snipca.com/30710

PRINTER

Canon Pixma TS6250

£118 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. £122 from www.snipca.com/28483

COMPETITION

Win 1 of 5... Rock Jaw Alfa Genus V2 earphones



Tuned to deliver great sound throughout the audio range, Rock Jaw's Alfa Genus V2 earphones come with 8mm dynamic drivers that pack a powerful punch, guaranteeing crystal-clear highs as well as booming lows.

You can use the three filters to customise the sound to suit your ears:

- The silver filter gives you an enhanced bass, ideal for rock, hip-hop, R&B, and electronic music.
- The black filter gives more treble, emphasising higher audible

frequencies for genres including classical, acoustic and jazz. It's also ideal for the spoken word, so will suit regular readers of ebooks.

- The gold filter gives a more balanced, natural sound overall, suitable for all music genres.

The aluminium casing makes the Alfa Genus V2 look robust and hard-wearing without sacrificing style. They'll blend in with whatever you're wearing, whatever you're doing, no matter where you are, delivering high-

quality sound on the move.

To enter this competition, email your address to cacomp@dennis.co.uk with 'Alfa Genus' in the subject line by midnight Tuesday 10 March. Good luck!

You can buy **Rock Jaw's Alfa Genus V2 earphones** for £29.99 from <https://rockjawaudio.com>. For more information, follow Rock Jaw on Twitter [@rockjawaudio](https://twitter.com/rockjawaudio) and 'like' www.facebook.com/rockjawaudio.

MESH ROUTER

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



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

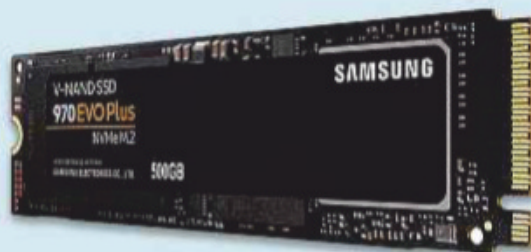
ALTERNATIVE Zyxel Multy X

These two pillow-shaped boxes are powerful enough for most homes and provide four Ethernet ports apiece. £250 from www.snipca.com/27309

SOLID-STATE DRIVE

PRICE DROP

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
£35 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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HOW TO...

Create a bootable clone of your hard drive

by Nik Rawlinson

What you need: External hard drive; AOMEI Backupper; TinyTask **Time required:** Two hours

What would *you* do if your computer suffered a catastrophic hard-drive corruption? If you have an external or online backup, your files would be safe. But unless you also had a way of resurrecting your hardware, they'd remain out of reach until you fixed or replaced your PC. That could take

some time.

That's why a backup, while essential, shouldn't be your only precaution against disaster. Here, we'll show you how to set up your PC so that it clones its internal hard drive every night to produce a bootable copy of its contents that you can fall back on should disaster strike.



1

Set up your hard drive

You'll need an external hard drive of at least the same capacity as your internal one. If you're reusing an old external drive, the process will wipe its existing contents, so make sure you have a backup if you want to keep them.

Alternatively, you can pick up a 1TB Toshiba drive for £36 on Amazon (www.snipca.com/33953), while £51 buys you a 2TB drive from WD (www.snipca.com/33954).

To find out the size of your internal drive, open a new File Explorer window (press Windows key+E), scroll down to (C:) in the sidebar, then right-click it and select Properties. Check the GB (gigabyte) number to the far right of Capacity, then buy an external drive of this size or higher.

2

Install AOMEI Backupper

We'll use AOMEI Backupper to perform the clone operation. You can do this using the standard edition of the software, which is a free download from www.snipca.com/33955. Click Download Freeware (see screenshot below - ignore the button to upgrade to the



Click 'Download Freeware' to download AOMEI Backupper, not the Pro version

pro version), provide an email address and, when the download has completed, launch the file. Select English as your preferred language, then click Skip when offered the chance to 'Try Pro for free'.

On the following screen, 'I accept the agreement' is already selected. Click the link beside it to read through the licence agreement before installing. Note also that the installation directory is hidden. We'd recommend leaving the default as it is (at C:\Program Files (x86)\AOMEI Backupper) but if you want to change this, click Path, then click the folder icon and choose an alternative location. Finally, click Install Now.

Once installation has completed, optionally untick the box beside 'Join the User Experience Improvement Program', then click the Enjoy Now button to launch the software.

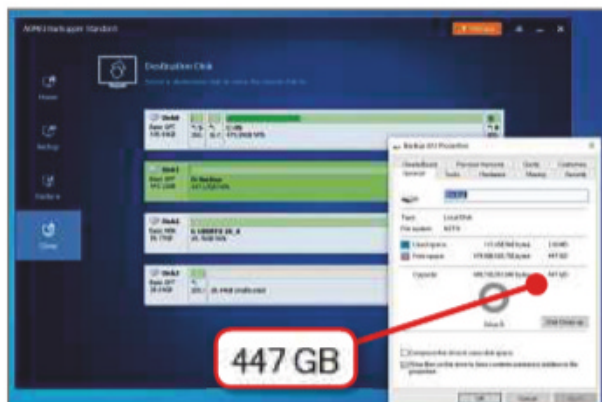
3

Create your first backup

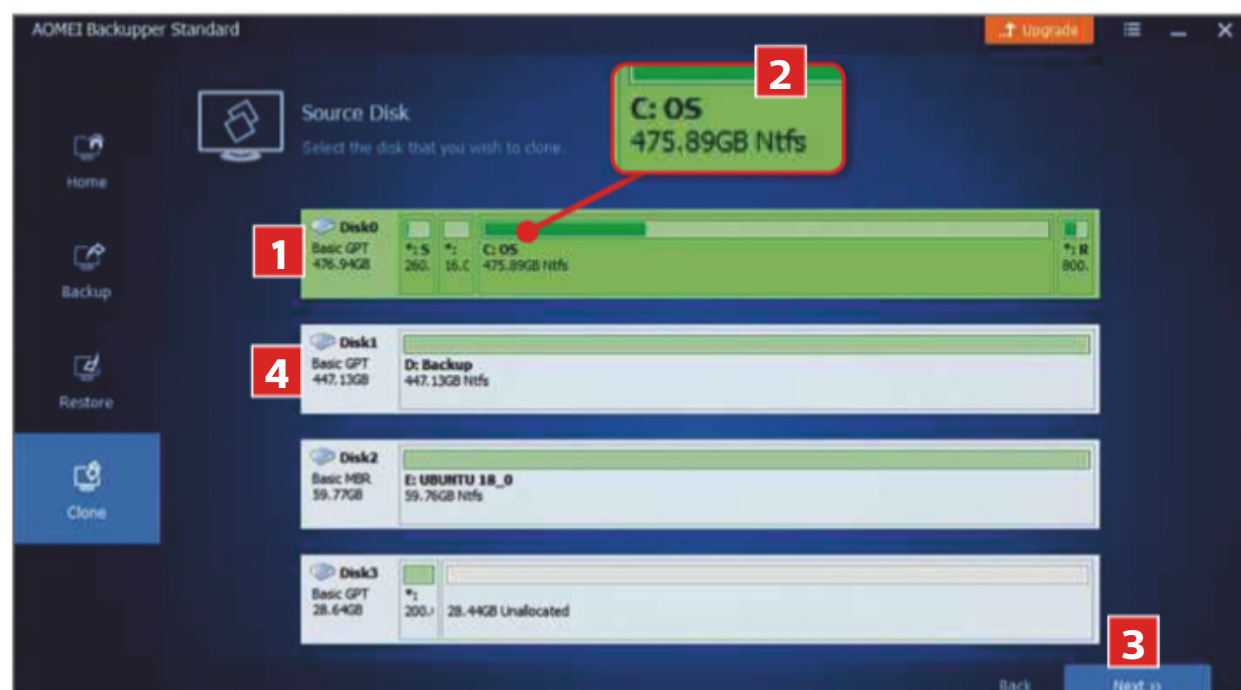
You'll notice when first launching Backupper that Windows asks if you're happy for it to make changes to your PC. Clicking Yes authorises it, but this would cause problems when setting a schedule to clone the drive because it's not possible to bypass this box. Keep this in mind later, when we explain how to set a routine to create a fresh clone of your drive every night.

For now, connect your external drive, then click Clone in the Backupper sidebar, followed by Disk Clone. Depending on how many drives you have connected – both internal and external, including USB – you will see at least two, but possibly more drives on the Source Disk screen that this opens.

Click the drive that you want to back up. This will probably be Disk0 (1 in our screenshot, bottom of the page), because it's the one most likely to contain the C: drive (2). If the numbering system used on your computer is different, look for the disk that includes C:. Click anywhere within the disk that contains this partition to select the whole drive,



File Explorer reports that the capacity of our external drive is 447GB, which is the same as Disk1 as shown in Backupper



Backupper's Source Disk screen will show you how many drives you have connected – select the one containing C:

How I use cloned drives

Even if you don't think you'll ever need to boot from an external drive, creating a clone is an excellent way to make sure you've captured every file on your internal drives. In many ways it's less complicated than setting up a bespoke backup routine. Having a mirror of my internal drive makes me feel more confident when trying out new software, but it's not something I'd ever use as my solo backup routine. The more backups you have – in different formats – the better.

Nik Rawlinson



How do you back up your data?

Please let us know: letters@computeractive.co.uk

then click Next 3.

You'll now be presented with the same selection of drives and asked to click the destination drive. In our case, that's Disk1, which includes D: 4. This is the letter Windows gave our external drive when we plugged it in. If you have more drives than us and you're not sure which one you need to use, check the capacity of the drives against the capacity reported by File Explorer.

In the screenshot left, we've right-clicked our external drive in File Explorer, clicked Properties, then checked its capacity in the box that appears (as we did earlier when checking the capacity of our internal drive). Its reported capacity of 447GB matches the capacity of Disk1 in Backupper. Disk1 is therefore the drive to which we want to back up our internal data.

Once you've clicked your destination disk, click Next. Backupper will warn you that the contents of the backup drive will be wiped if you continue. Click OK, followed by Start Clone.

4

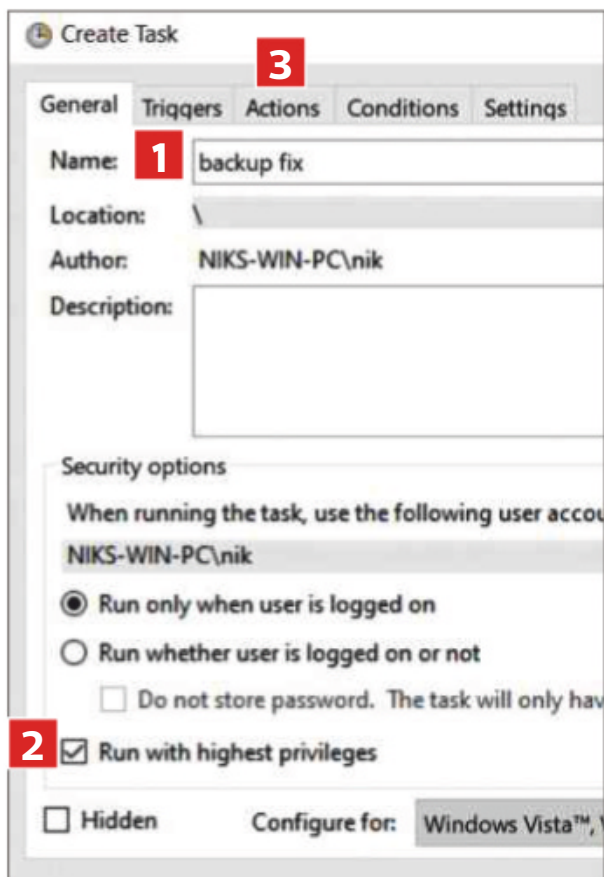
Automate your future backups

Be prepared for the backup to take a while to complete. In our case, it took over an hour, but you can continue using your computer in the meantime. When it's finished, quit Backupper so that you can manually re-open it in the steps that follow.

If you're going to create an up-to-date archive of your computer each night, you ideally need to automate the process so that you don't need to remember to do it yourself each time you've finished using your computer. This would be easy if you were just creating a regular backup because Backupper lets you schedule these within the program itself. However, this feature is absent when cloning the drive. There is a fix though: use a small program called TinyTask, and Windows' built-in Task Scheduler.

Launch Task Scheduler by clicking the Start menu and typing **scheduler**, then clicking it in the list of results. You'll need to create two separate tasks: one gets around that security alert we mentioned earlier when launching Backupper, and the second creates the clone. Click Create Task in the right-hand sidebar then type **backup fix** in the Name box (1 in our screenshot above right). Tick the 'Run with highest privileges' box (2 at the bottom of the box, then click the Actions tab 3. Click New followed by Browse and navigate to **C:\Program Files (x86)\AOMEI Backupper**. Select 'Backupper.exe' and click Open, followed by OK. You'll be back at the Create Task box now; click OK, then minimise Task Scheduler, but don't quit it.

Open a new Finder window and navigate to your Documents folder. Right-click any blank space, hover over New

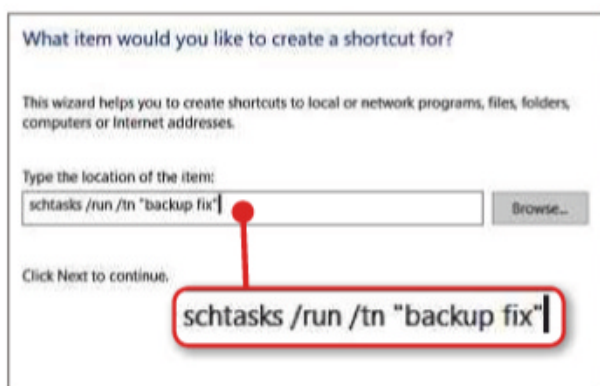


Name your task then set it to run with the 'highest privileges' to bypass Windows' security alert

in the menu and click Shortcut in the menu that appears. In the only field in the box this opens, type `schtasks /run /tn "backup fix"` (see screenshot below). This shortcut launches the task you just created, which in turn starts Backupper with the highest user privileges, thus bypassing the Windows security screen. Click Next, type `fixshort` into the only field on the following box, then click Finish.

Next, download TinyTask from www.tinytask.net by clicking '.exe' in the blue Download box on the right. Launch the 'TinyTask.exe' file this places in your Downloads folder, then click Rec.

Click Start and type `fixshort`, then click the top result, which will be the shortcut you just created. It will launch Backupper without showing the warning. Meanwhile, TinyTask will be watching what you're doing and logging every keystroke and mouse click in the background.



Create a shortcut to launch a Windows task, such as automating backups



Select '1 day' to repeat a task every 24 hours

Click Clone in the Backupper sidebar, followed by Disk Clone. Click C: as your source drive, followed by Next, then click D: as your destination drive, followed by Next. Once again Backupper will warn you that the operation you're about to begin will wipe the contents of your backup drive. Click OK to confirm that you're happy to proceed. Finally, click Start Clone.

Switch back to TinyTask and press Rec again to end the **keylogging** process, then click '.exe'. This saves the sequence of mouse clicks and button presses you just performed as a program that can be run at will, to precisely replicate your actions. Type `system clone` in the 'File name' box then click Save (see screenshot below). When TinyTask pops up a 'Compile successful' message, click OK.

5 Schedule your nightly clone

Quit Backupper and return to Task Scheduler to create your second task. This one will kick in nightly and launch the sequence of actions you just recorded in TinyTask.

Click Create Basic Task in the right-hand sidebar and, in the Name box, type `System clone`. You don't need to add a description if you don't want; it's only for your reference. Click Next.

Leave Daily selected on the following page and click Next again. On the page that follows, set the time you'd like the routine to run. Ideally this should be when you're not using your computer, so it doesn't interrupt you. We're going to set ours to kick off at 2am every day

so that by the time we come back to the computer each morning it has finished. Click the calendar icon in the first box to the right of Start then click tomorrow's date and set the time to 2am in the second box. Leave 'Recur every' set to '1 days' (see screenshot above) then click Next.

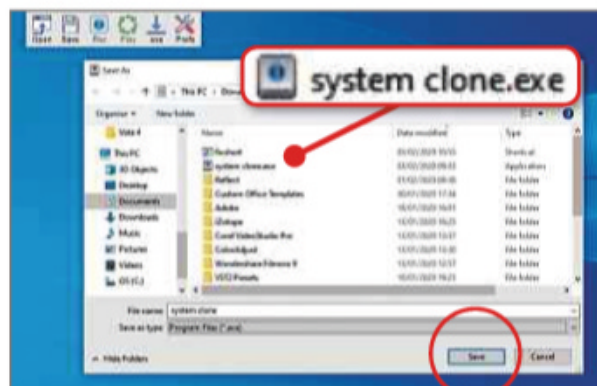
Leave 'Start a program' selected as the action you want to perform, then click Next, followed by Browse. Navigate to the 'system clone.exe' file you created in TinyTask. If you didn't change TinyTask's default options, you'll find this in your Documents folder, so click Documents in the sidebar, click 'system clone.exe' in the main part of the window, then click Open. Click Next, followed by Finish.

You've now set up your nightly automatic clone. If you ever want to delete the process, click Task Scheduler Library in the left-hand sidebar, click 'System clone' in the upper pane at the centre of the window, then click Delete in the right-hand sidebar.

Now, all you need to do is make sure you leave your computer switched on when you go to bed, with the external drive attached. Windows will take care of backing up its configuration in a format from which you can reboot your PC should the internal hard drive corrupt.

If disaster does strike, restart your computer with the hard drive attached and press whichever shortcut button opens its BIOS (often F2, F10 or F12). The BIOS is the lowest-level code, stored not on the hard drive but on its motherboard, that handles booting and setting up the computer's internal components. The exact key you need to press will usually appear on screen during the boot process but, if it doesn't, check your manual.

Within the BIOS, you'll find a setting that controls the device your computer starts from. This will detect your attached drives, often including the corrupted internal unit. Click your external drive and let the PC restart. This time, it will boot from your clone, rather than its internal drive.



Give your TinyTask recording a name, then save it

Workshop1

Make phone calls on your PC

What you need: Android phone; Your Phone apps; Windows

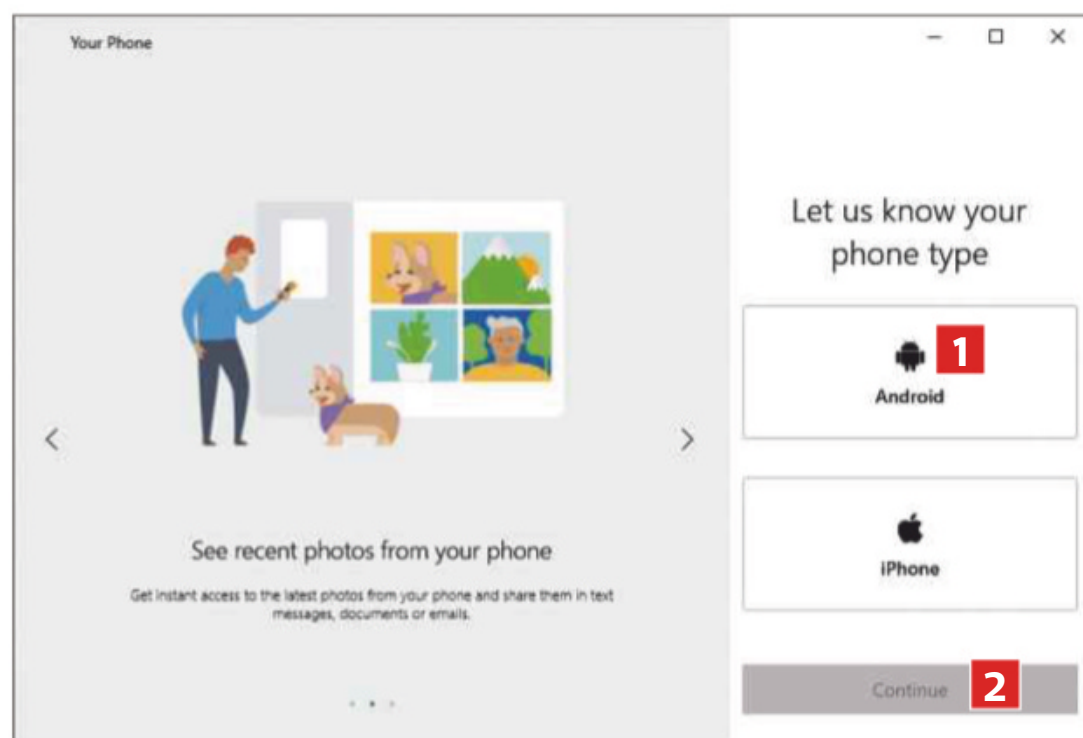
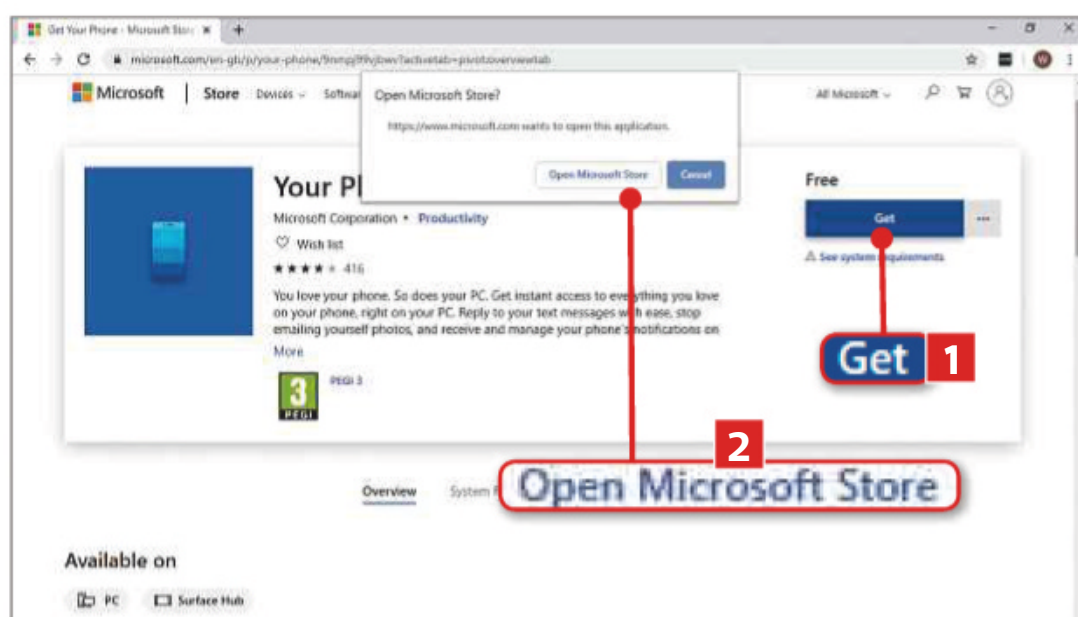
Time required: 20 minutes

Sometimes a tool comes along that's so useful, it's hard to imagine how we managed without it. That's exactly how we feel about the new calling feature in Microsoft's Your Phone app. By linking your phone to your PC, it lets you answer calls

without having to scurry into another room to grab your phone. You can also make calls directly from your PC; and even switch active calls between your phone and PC. Be aware though that the calls feature only currently works with Android phones.



STEP 1 First, go to the Your Phone page on the Microsoft Store at www.snipca.com/33972. If you see a Get button **1**, click it, follow the link to open the Microsoft Store on your PC **2**, then click Install. If you already have Your Phone installed, a Launch or Update button will appear in place of the Get button; click whichever one is displayed. If this is the Update button, follow the instructions to download the latest version. Once installed/updated, click the Launch button that appears in the top-right corner or click the Start menu and search for **your phone**.



STEP 2 The Your Phone program will now ask whether you have an Android phone or iPhone. As mentioned earlier, the calling feature only works with Android - assuming you have an Android phone, click this option **1**, then Continue **2**. Next, click 'Sign in with Microsoft' and enter your Microsoft account details. You'll now see a message prompting you to 'install the app', so it's time to switch to your phone.

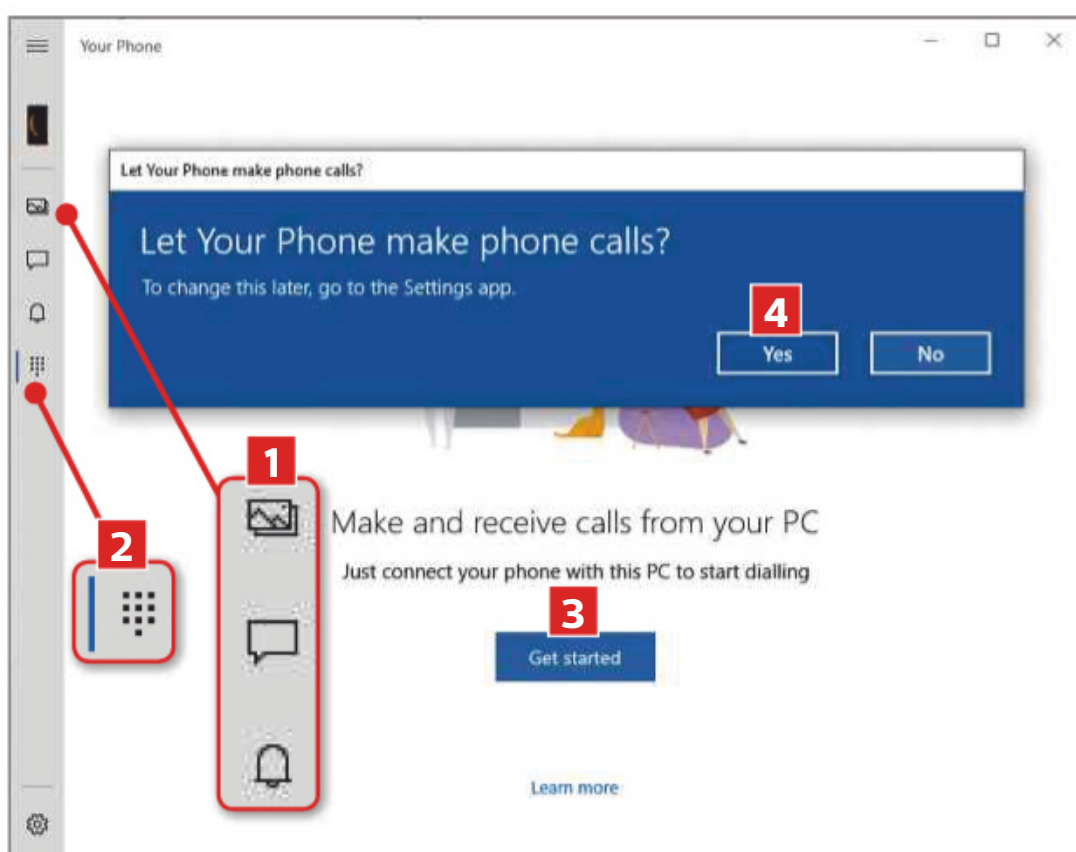


STEP 3 If your phone is already linked to your Microsoft account, you should receive a text message with a link to the Your Phone Companion app. Tap this link to be redirected to the Play Store on your phone and install the app. Don't worry if you don't receive a text message - just go to the Play Store on your phone, then search for **your phone companion**. The app will appear in the results. Make sure the developer is listed as Microsoft Corporation **1**, then tap Install **2** and open the app.



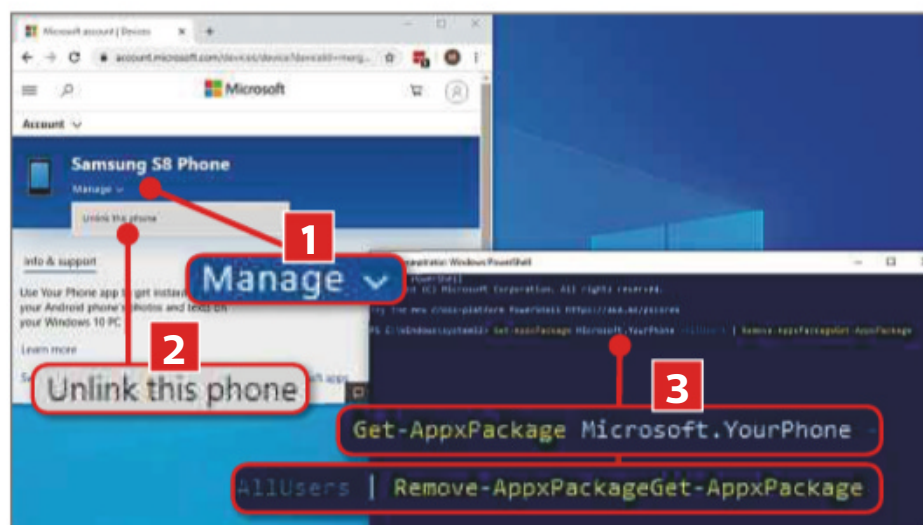
STEP 4

Next, tap 'Sign in with Microsoft', then enter your Microsoft details. At this point, the Your Phone program on your PC should display a 'Check your phone' message. On your phone, tap Continue, then follow the instructions to set up permissions for the app in your phone's Settings menu. Next, return to the Your Phone Companion app and follow the instructions to allow it to run in the background. Finally, you'll see a message prompting you to set up Your Phone on your PC. We've already done this, so tap 'My PC is ready'. In the next screen, click Allow **1**. A notification should now appear at the top of your phone's screen - tap Allow **2** to finish linking your phone to your PC (if you don't see this, check your notifications by swiping down from the top).



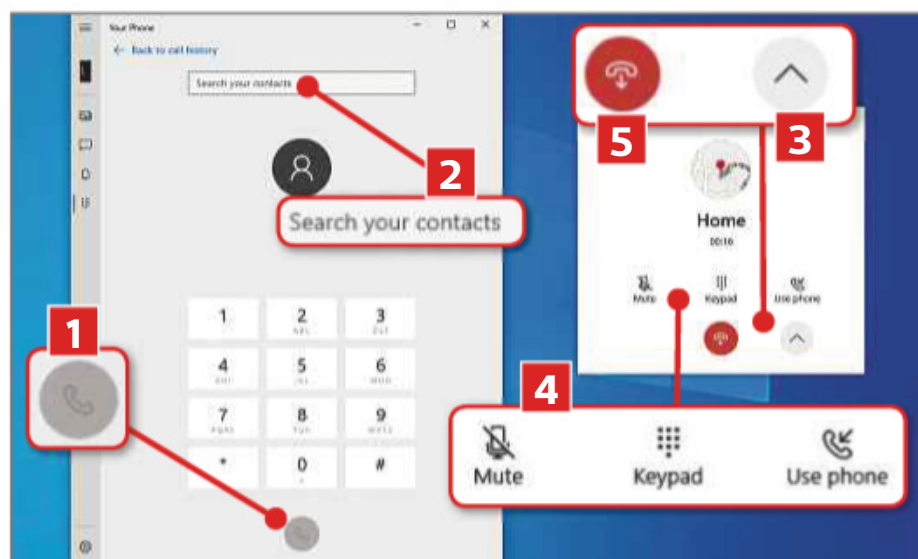
STEP 5

Return to the Your Phone window on your PC. The first three buttons down the left **1** let you see the photos on your phone, send/receive text messages, and view notifications. To set up the calling feature, click the keypad button **2**, then 'Get started' **3** followed by Yes **4** when asked whether you want Your Phone to be able to make calls. If you don't see the keypad button, try restarting the Your Phone program. If it still doesn't appear, follow our troubleshooting advice in the next step. Otherwise, skip to Step 7.



STEP 6

If you can't see the calls feature, it's best to start from scratch by first unlinking your phone using your Microsoft account. To do this, log into your account at <https://account.microsoft.com>, then click Manage under your phone's entry in the Devices list. Select Manage **1** again, then 'Unlink this phone' **2**. Next, reinstall the Your Phone program by clicking Start, typing **powershell**, then right-clicking Windows PowerShell and selecting 'Run as administrator'. Next, type **Get-AppxPackage Microsoft.YourPhone -AllUsers | Remove-AppxPackage** **3** (copy this text from www.snipca.com/33971), then press Enter. Now return to Step 1 to reinstall the app (you'll be asked to re-link your phone during setup).



STEP 7

To make a call, use the keypad to enter the number, then click the call button **1**. Alternatively, enter a name into the search box at the top **2** (this searches your contacts). Another window will appear and the call will begin. Make sure your PC's speakers aren't muted and that you have a microphone attached/built in. Click the arrow button **3** to reveal options to mute, bring up the keypad or switch the call between your phone and PC **4**. To end the call, click the red phone button **5**. When your phone receives a call, a notification will appear in the bottom-right corner of your PC desktop with buttons to Accept or Decline.

Workshop 2

Find out when your laptop battery will die

What you need: LibreOffice Calc or Excel; Windows 10
Time required: 30 minutes

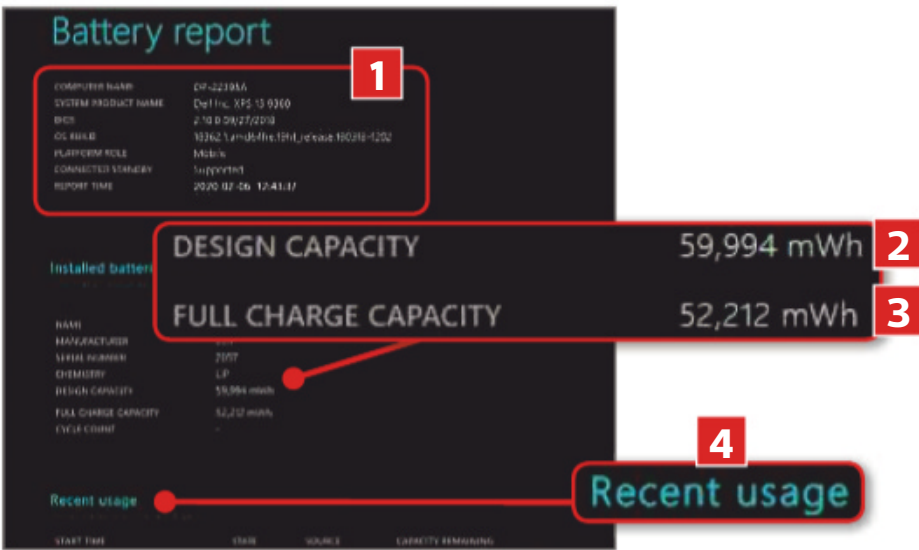
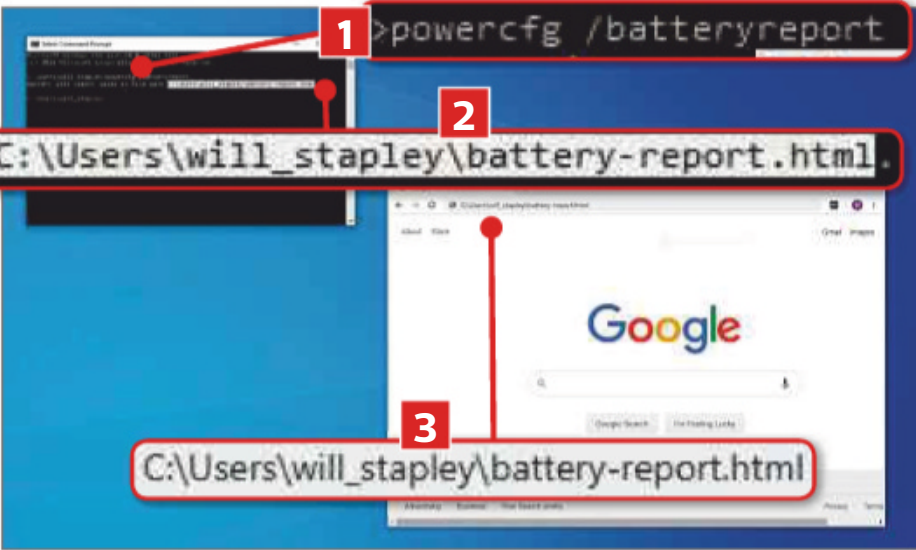
From the moment it's made, your laptop's battery starts to deteriorate. Use your laptop for a year or so and the length of time its battery can keep it powered will be noticeably shorter. Here, we show you how to find out your battery's

current capacity compared to when it was made, then use Windows' built-in logs to create a chart giving you an idea of when it will stop working completely. We've used LibreOffice Calc to create the chart, but it's a similar process in Excel.

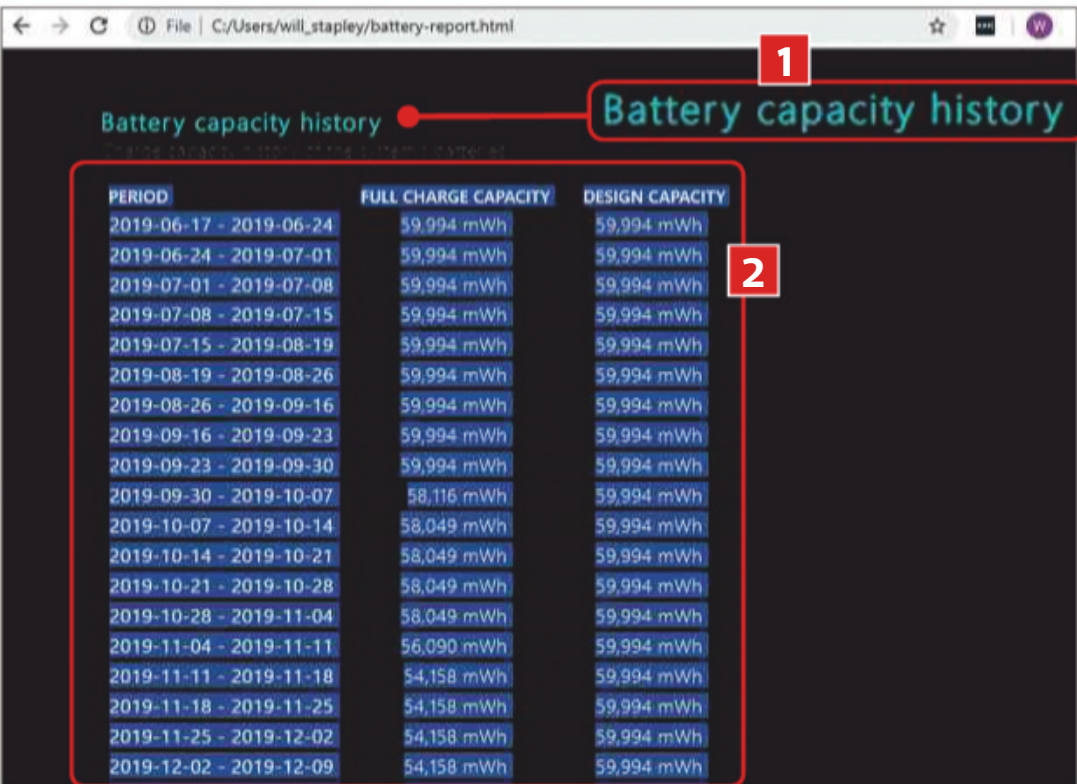


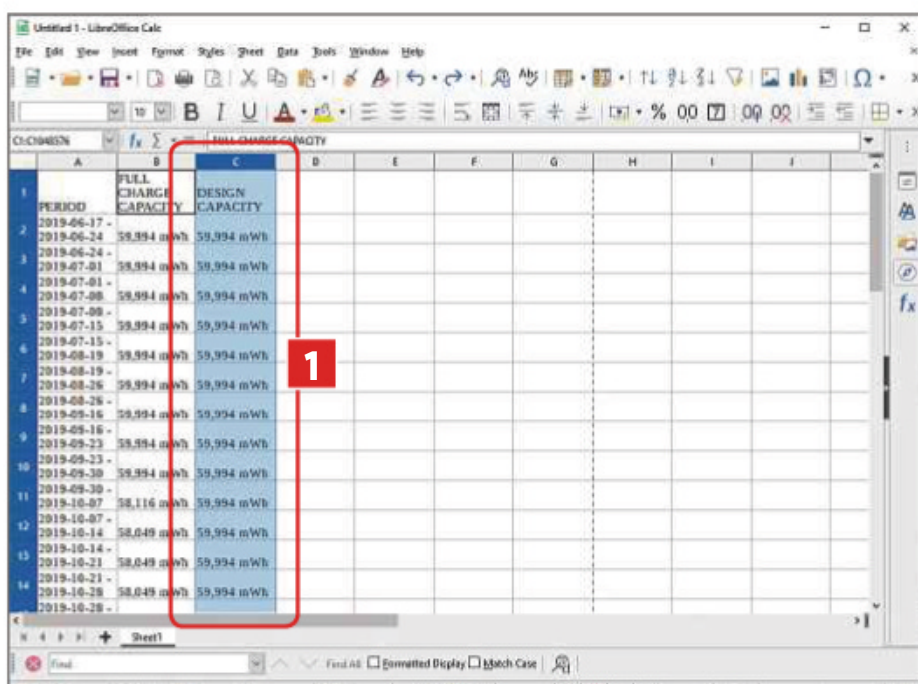
STEP 1 Open a Command Prompt window by clicking Start, then typing `cmd.exe`. Type `powercfg /batteryreport` to run a quick scan of your battery and retrieve all relevant logs. After a couple of seconds, the location of the report will be displayed in the Command Prompt window. It's saved as an **HTML** file, so you can open it in any browser. Simply highlight the full file name (including the file path) **2**, press `Ctrl+C` to copy it, then `Ctrl+V` to paste it into the address bar of your browser **3**.

STEP 2 At the top of the report, you'll see details including your computer's name and when the report was generated **1**. In the 'Installed batteries' section, you can see by how much your battery has deteriorated since it was manufactured – the Design Capacity **2** shows the original capacity of the battery, while the Full Charge Capacity **3** shows its current capability. In the 'Recent usage' section **4**, you'll see the times over the past few days when your battery was charging and discharging.

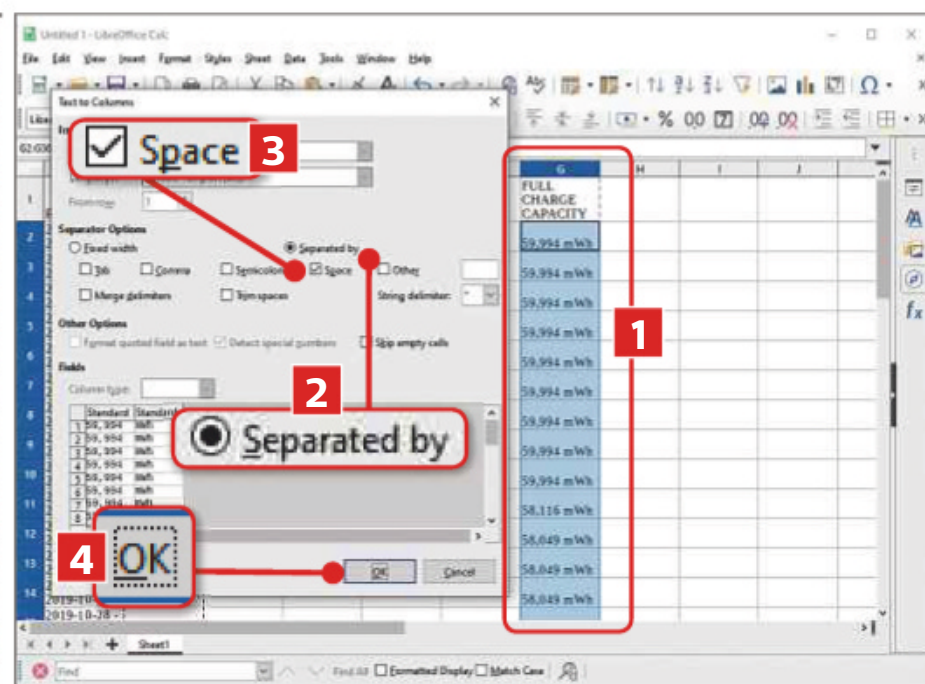


STEP 3 We've now got a good idea of how our battery is currently performing, but we want to work out how long it's likely to last. Scroll down to the 'Battery capacity history' section **1** and you'll find all historical data for your battery. How far this goes back varies, but it's usually to the last time you reinstalled Windows. To make this information easier to digest, we're going to copy it into a spreadsheet. Using your mouse, select all the data in this section (including the headings) – as you do so, it'll be highlighted in blue **2**. Once you've done this, press `Ctrl+C` to copy it.

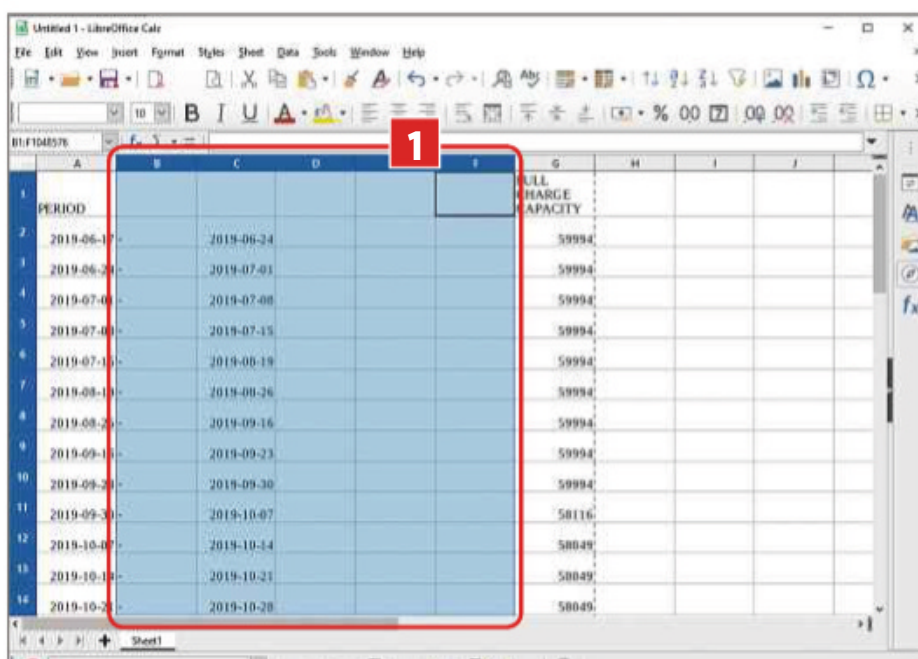




STEP 4 Open your spreadsheet program. Select the top-left cell, then press Ctrl+V to paste the battery data from Step 3. Before we can turn the data into a chart, we need to tidy it up. First, we can delete column C (headed Design Capacity **1**) because this contains the same value for each entry, so highlight this column, then press Delete. Next, we need to temporarily place some spacing between the two remaining columns, so highlight column B, cut it (Ctrl+X), then paste it (Ctrl+V) into column G.

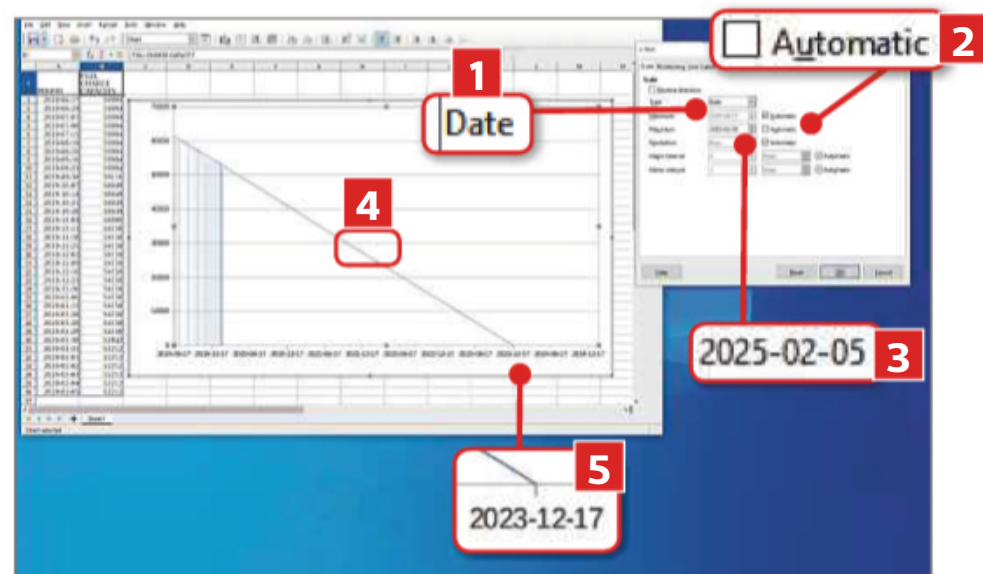


STEP 5 We now need to remove the **mWh** measurement text after each figure in column G so that Calc recognises it as a numerical value. Highlight the relevant cells in column G **1**, click the Data menu, then 'Text to Columns'. In the window that appears, select the 'Separated by' option **2**, then tick the the Space box **3** (this tells Calc to split the existing data into separate cells after each space). Leave the other boxes in this section unticked, then click OK **4**. You'll notice the 'mWh' text is now moved to column H. We only need the capacity figure, so highlight column H and press the Delete key.



STEP 6 In our example, some of the **timestamps** (in column C) appear as ranges rather than single dates. Calc will only create a chart based on the latter, so we need to adjust these. Highlight all date cells, then select 'Text to Columns...' in the Data menu. Tick the Space option, then press OK. You can now highlight and delete columns B to F **1**, so that your table comprises just two columns. To create your chart, select these two columns, then select Chart from the Insert menu. We'll use the default chart settings, so click Finish to create it.

STEP 7 Finally, we need to extend the chart so it shows how our battery is likely to deteriorate in the future. Double-click the chart's x-axis, change the Type to Date **1**, then untick Automatic **2** next to Maximum and change the date to 2025 **3**. Now double-click the y-axis, untick the Minimum box and change the value to zero. Click one of the bars on the chart then, in the Insert menu, select 'Trend Line...'. Type **5000** into the Extrapolate Forward section (this extends the trend line by 5,000 days), then click OK. In our example, the trend line indicates our battery will drop to 50 per cent of its original capacity by the end of 2021 **4**, before dying completely a few days before Christmas 2023 **5** (at least we'll now what to ask Father Christmas for).



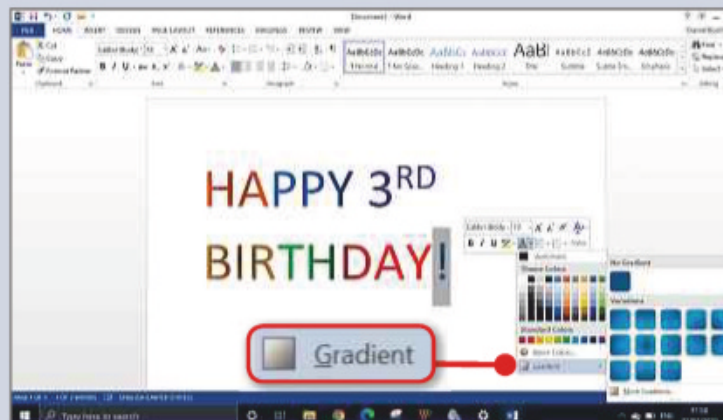
Readers' Tips

TIP OF THE FORTNIGHT

Add colour gradients to Word headings

If Daniel Booth designs another birthday invite for his children's parties (Easy When You Know How, Issue 572, page 74), he may want to make it look more interesting by using various effects in Word.

One effect he and readers could try is creating a multi-coloured 'gradient' effect to a heading or phrase. This would be perfect for kids' parties. First, type your message, selecting the size, font and colour you want. You now need to open the Gradient tool. Doing this may vary depending on your



version of Office, but in Word 2013 you need to highlight the phrase you're colouring. In the box that appears, click

the small drop-down arrow next to the capital A, followed by Gradient (see screenshot). You'll then see light and dark gradients to apply.

If your phrase has several different colours, you'll need to apply the gradient to each one. So, in the example I've sent you, 'HA' is in orange, 'PPY' is in blue, and so on. I'd love to see more advanced designs created by other readers.

Martin Salmond



Martin wins a copy of our 2019 Back Issue CD

Buy it on Amazon www.snipca.com/33711

BROWSERS

Turn off website notifications in Edge

✓ I enjoyed your guide to Microsoft's new version of Edge (Issue 573, page 60). Hopefully, it'll encourage more people to give it a go, rather than simply following the crowd by using Chrome.

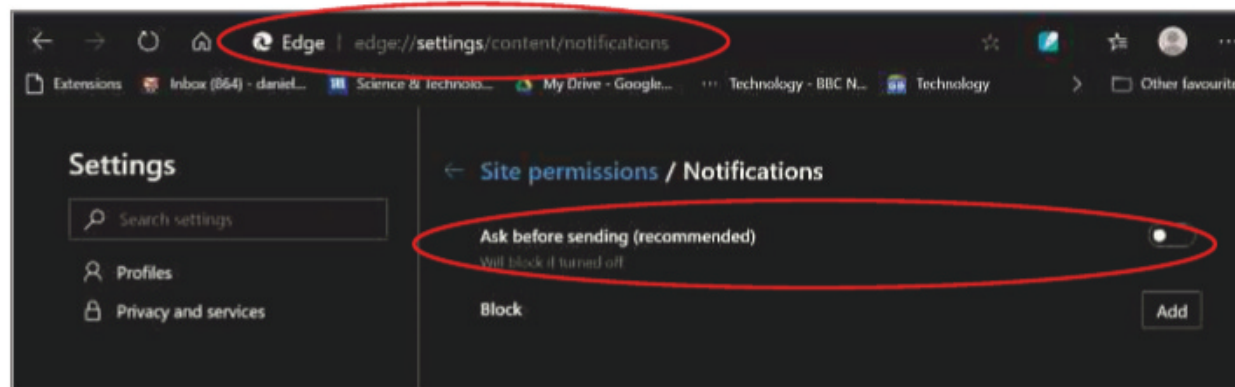
One tip you could've mentioned was

how to prevent websites showing you those boxes asking whether you want to see notifications. It feels like I spend half my time online closing these blasted boxes.

To disable them, open Edge then type `edge://settings/content/notifications` into the browser bar and turn off the 'Ask before sending' slider (see screenshot

below). May I take the opportunity to ask fellow readers to send more tips for Edge.

Pat Newman



SOFTWARE

Export your browser downloads as a file

✓ The fantastic NirSoft does it again! I refer to BrowserDownloadsView (www.snipca.com/33826), which you recommend in Issue 572 (Best Free Software, page 19). As you say, it's an easy way to show what you've downloaded through your browsers. One handy feature is to export this list of downloads into a file.

To start, select some files in the main window, or press Ctrl+A to choose them all. Next, press Ctrl+S and choose the type

Why I stopped using...

Windows Snip & Sketch

✓ Your 'How To' on using Windows tools to take screenshots (Issue 572, page 35) was very thorough, but it came a few months too late for me. I've moved on to another tool that's easy to use.

...And what to use instead

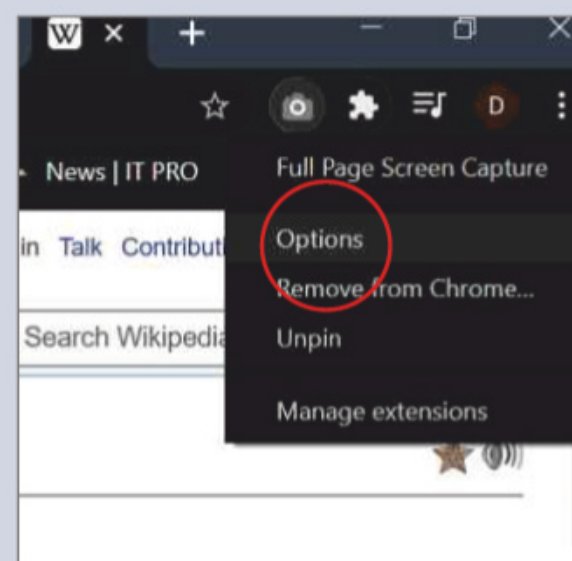
The screenshots I take aren't especially complicated, so I just need a quick one-click tool.

Instead of using software, I recommend the Chrome browser

extension Full Screen Capture (www.snipca.com/33946). When you want to take a screenshot, just click its camera icon in your browser bar. You'll see a message saying 'screen capture in progress'. It takes just seconds to take a full-screen shot.

For settings, right-click the icon, then choose Options (see screenshot right). On this page you can choose the format to save screenshots in, and tell the extension to automatically download them.

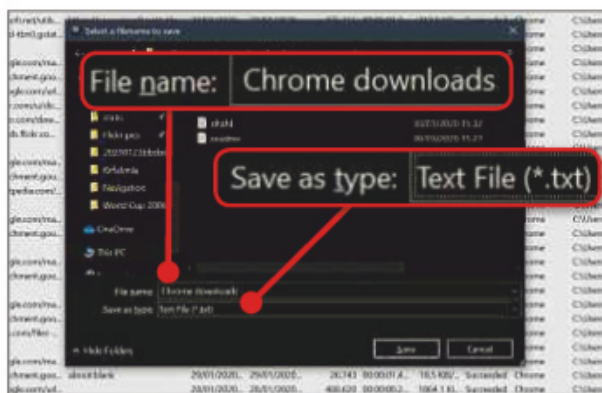
Steve Burke



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

Handy hints and tips from your fellow readers

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



of file you want to export (all the usual options are there: Text File, HTML file and so on, see screenshot above). Type a file name to save it, then click the Save button.

Ian Bedford

EMAIL

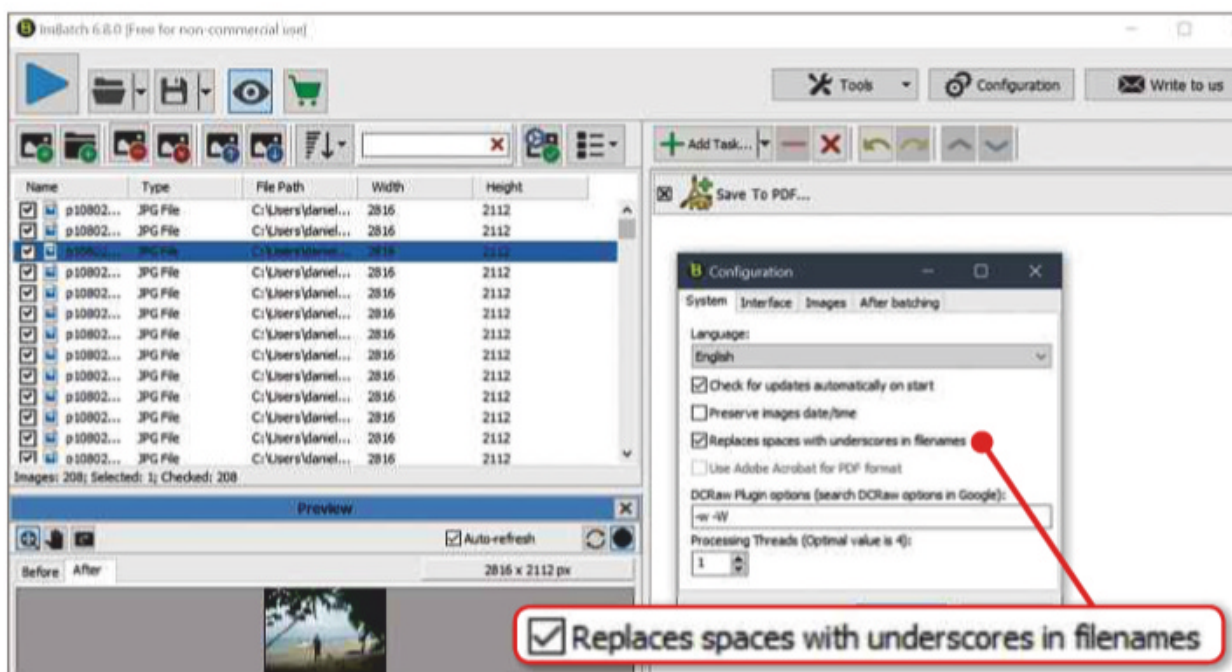
Add numbers to your address to avoid confusion

✓ I recently sent a file attachment to our club's treasurer, but it didn't arrive. I later received a reply from a different person who had the same name as our treasurer. It turns out that instead of typing .co.uk in the email address, I had typed .com, and as they were both using the same name, the wrong person received the email. Fortunately, they are both nice people and we sorted it out.

I always thought it was cool to have an email address that just used my name without having to add numbers.

This episode shows how wrong I was! Let's imagine that my name is Jack Madeup and my email is **jack.madeup@hotmail.com**. I now realise that **jack.madeup@hotmail.co.uk** could easily end up receiving my email instead of me. Some of my email addresses just use my name, but my Gmail includes three numbers (not sequential) that make it unique, and a lot safer.

Ken Gaskell



Reader recommends...

Palicomp AMD Impulse RYZ7

£500 from Palicomp
www.snipca.com/32913

✓ Back in August I started to think seriously about how to upgrade from the doomed Windows 7. I carefully read every PC review in *Computeractive* looking for a suitable Windows 10 computer, and came across this Palicomp model.

I have to admit that a lot of the specifications in your review (Issue 565, page 22) went over my head. All I wanted to know was the speed, its memory and the price. The answers: very fast, 8GB and only £500. It was the last of these that convinced me to take the plunge.



A few months on, and I'm delighted with my purchase. In particular, I was surprised by how many ports it has (seven **USB 3.0** ports alone!). Windows 10 is great too.

Pamela Atkinson

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



SOFTWARE

Name files with underscores in ImBatch

✓ I'm a fan of the image-editing program ImBatch (www.snipca.com/33827), so was pleased to see it in Best Free Software (Issue 572, page 19).

Here's a little tip for readers who still use the underscore when creating file names (eg, 'wedding_uncle'). I know it's no longer necessary, but I still do it out of habit. Open ImBatch, click the

Configuration button at the top, then the System tab. Tick 'Replaces spaces with underscores in filenames', then click OK (see screenshot below left), and from now on ImBatch should do just that!

Steve Fleetwood

EMAIL

Search for messages between specific dates in Gmail

✓ Roy Houghton's tips on finding old and large emails in Gmail were very useful (Issue 573, page 43). I'd like to tell readers that you can also search for emails you received between two specific dates – for example, 1 January 2019 and 31 January 2019.

You need to make sure you type this period in the correct format. This is YYYY/MM/DD: so year first, followed by month, then date. You don't need to add a zero when the month or day is a single digit.

Therefore, in my example, you'd type **after:2019/1/1 before:2019/1/31** and press Enter. The results will include conversations that began during the date period, but continued after it ended.

Geoff Hilton

Phone and Tablet Tips

iOS

Find out your altitude using elevation sensors

 Your phone is packed with more sensors than any of us use on a regular basis. One of those, if you have an iPhone 6 or later, is a built-in elevation sensor. To find it, open the Compass app (if you don't know which folder it's in, swipe down on your home screen and type **comp** into the search box, then tap the result), which as well as showing your orientation and geographical coordinates, displays your elevation at the foot of the screen (see screenshot right).

If you don't have an iPhone 6 (or later), you'll need to resort to an app, which will draw the relevant data from highly accurate, publicly accessible databases after searching them based on your location. There are several to choose from, but My Altitude is among the highest rated. It's free with adverts (99p to remove) from www.snipca.com/34005.

Launch it, tap 'Allow while using App', and it will supplement the data that the Compass app presents with barometric pressure, the mercury level (both useful for setting up an old-fashioned barometer), accurate water-boiling temperature (which varies from 100 degrees Celsius depending on your altitude, so this could be useful when camping), and the current weather conditions.

By default, the atmospheric



measurements – excluding the weather – are taken from your phone's internal sensors but, by tapping Data Files at the foot of the screen, you can download supplementary information from the US National Oceanic and Atmospheric Administration. It will automatically download the relevant files for your current location, but by tapping the sectioned map you can retrieve extra files for other areas you're interested in. If your phone doesn't have a built-in sensor, using these data files instead quickly and easily overcomes that limitation.

ANDROID & iOS

Manage your Outlook calendar more easily

  Microsoft has released updates for the Outlook Android and Apple mobile app. If you already have Outlook installed, check for updates in Google Play or the App Store. If not, you can download it (Android www.snipca.com/34006; iOS www.snipca.com/34007) for free.

Once updated, Android users gain support for ICS-formatted calendar events. ICS is an industry standard supported by a huge number of calendar programs, so if you're an Android user, this is really handy because it simplifies the task of making – and accepting – invites while on the move.

On Apple devices, the biggest change is on iPads, where the update helps Outlook work better in split-screen mode, letting you open, for example, your inbox and calendar side by side, and drag content from one to the other.

ANDROID & iOS

Talk like a native with SwiftKey

  "Autocorrect that actually works" is how Microsoft sells SwiftKey's benefits, but we're just as interested in its multilingual abilities. SwiftKey is a free download for both Android (www.snipca.com/34008) and iOS (www.snipca.com/34009).

Once installed, you can activate up to five languages simultaneously. Alongside

BEST NEW APPS

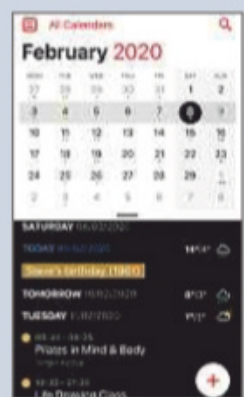
What you should install this fortnight

Fantastical 3

Free

iOS www.snipca.com/34010

Fantastical by name, fantastic by nature. We've long loved this calendar app for its ability to interpret plain-English input. Type **Lunch with Dan at 1pm next Monday at his office** and it breaks up your



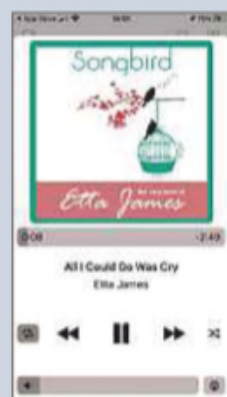
sentence, using 1pm, next Monday's date and 'office' as the time and location, and 'Lunch with Dan' as the subject. So simple, so effective. The new Fantastical 3 introduces weather forecasts.

SongOwl

£1.99

iOS www.snipca.com/34011

Using your phone's existing music library, SongOwl introduces tools that let you control how your music is sorted and grouped. It creates 'paths' that help you organise your library in the sequence that makes most



sense to you, not just what Apple's developers think works best. The interface adapts to match the cover art of what you're playing. You can swipe this art to switch tracks, something Apple Music doesn't do.

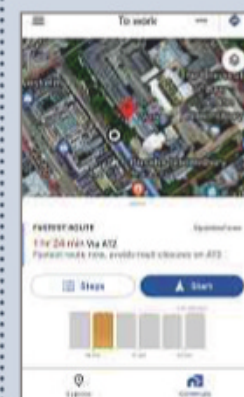
Google Maps

Free

iOS www.snipca.com/34012

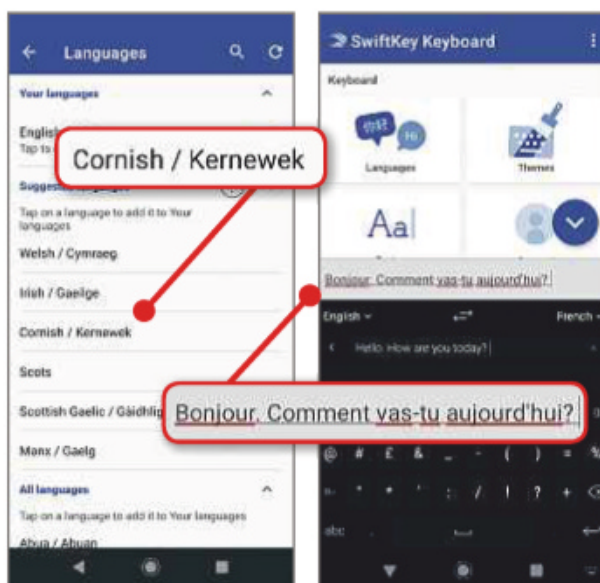
Android www.snipca.com/34013

Google is marking Maps' 15th birthday with new features, including dedicated commute and favourites tabs, which make it easier to keep watch on known



traffic hotspots. Add your home and work addresses, and a single tap calls up the quickest route between them, plus a bar chart showing the difference an alternative departure time would make.

Brilliant things to do on your device



the usual – German, French, Italian and so on – there's a wide range of less common tongues, including Uzbek, Esperanto and Cornish (see screenshot above left). Once you've chosen the ones you want to use, tap the translation button (Chinese and Western characters with arrows circling between them), choose a language pair, such as English and French, then type in your mother tongue to see it translated above (see screenshot above right).

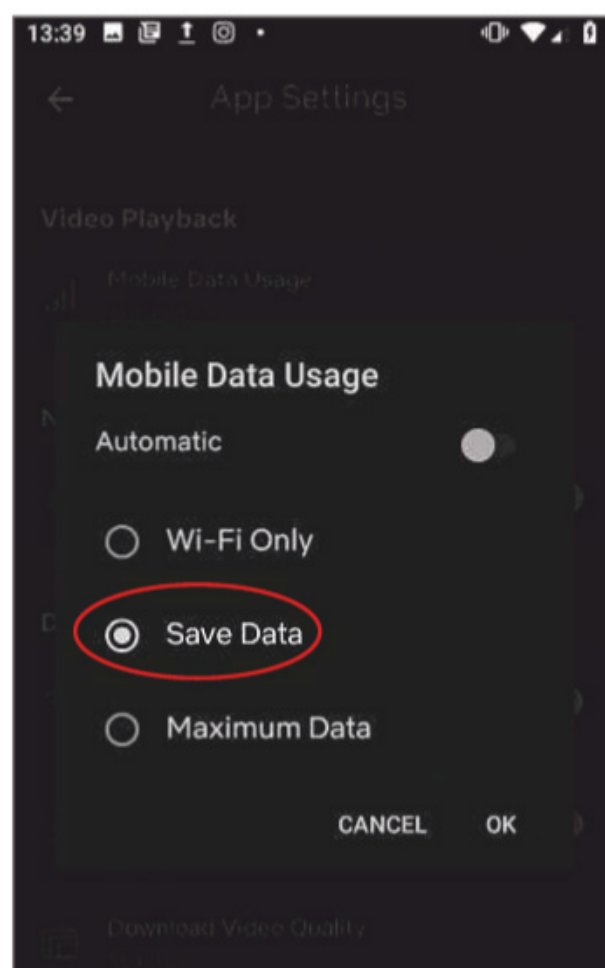
You don't need to set SwiftKey as your default keyboard to use this feature, so you could stick with the built-in keyboards and save SwiftKey just for translations.

ANDROID

Watch Netflix on the go without using all your data



After reading ebooks and listening to podcasts, streaming TV is one of



the best ways of whiling away a long journey. But, if that journey puts you out of Wi-Fi range, it can be a data-heavy activity, which risks exceeding the cap on your contract unless you have an unlimited package.

Netflix sees this as an opportunity to attract new viewers by offering a less demanding data format for **3G** and **4G** connections. Although it's currently only available to Android users, the company plans to roll it out to iOS devices soon.

The format, officially called AV1, is a new, **open-source** standard developed by the Alliance for Open Media, of which Netflix is a founding member. It promises to reduce data consumption by 20 per

cent through more efficient file compression, meaning either that you can save **bandwidth** for other uses, or simply watch more TV.

To enable it, open the Netflix app, tap More on the bottom bar, then tap Mobile Data Usage. Tap the switch beside Automatic, to turn that off, then tap Save Data (see screenshot below left). If you want to disable mobile-data use entirely, tap Wi-Fi Only instead.

Of course, if you're already signed up to an unlimited deal, you can ignore this particular tip – as can Three subscribers with Go Binge, which lets you consume as much content as you like from Netflix, Soundcloud, Deezer and more.

BEST APPS FOR...

BBC content

BBC+

Free

iOS www.snipca.com/34014

Android www.snipca.com/34015

The BBC publishes a huge amount of new content on its website every day. With BBC+ installed, it's easier to find what interests you. It gathers every new video and, the more you watch, the more it learns about your tastes and pushes the kind of content you enjoy to the top of the list.

Best for Discovering fresh content

Attenborough's Story of Life

Free

iOS www.snipca.com/34018

Android www.snipca.com/34019

Enjoy more than 1,000 of the greatest wildlife moments ever filmed, drawn from 60 years of the BBC's natural history programmes. The range of content is truly impressive, there are themed collections, and everything is subtitled.

Best for Wildlife fans

Civilisations AR

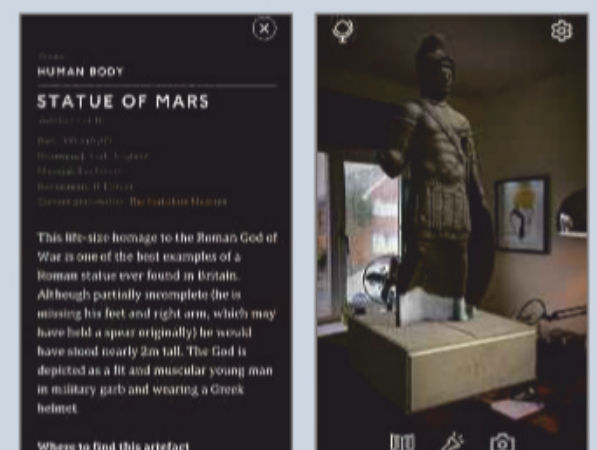
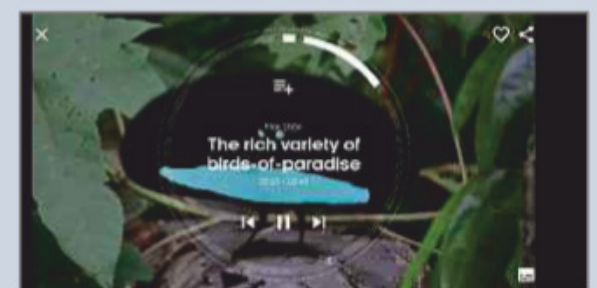
Free

iOS www.snipca.com/34016

Android www.snipca.com/34017

Explore landmark exhibits from more than 30 museums across the UK. The app senses its surroundings, then places the artefacts within the room you're in. It's all virtual, obviously, but as you move your phone you can walk around items on display and tap to read their history. It's engaging and addictive.

Best for History buffs



*Contains in-app purchases

WINDOWS 10

Hide Microsoft's adverts for its new Edge browser

Microsoft isn't averse to pushing its own software and services on Windows users. Run a search in the Start menu, for example, and any web results will load in Edge (even if you've set a different default browser). And now Microsoft seems set on persuading Firefox users to upgrade to the new version of Edge.

When they open the Start menu, Firefox users now see a message urging them to try Edge. It appears in the Suggested section at the very top of the Start menu.



If you're perfectly happy with Firefox and don't want to see ads for Edge, you can turn off the Suggested section of the Start menu. Open Settings (press the Windows key+I), click Personalisation, then select Start in the list on the left. On the right, scroll down and switch off the 'Show suggestions occasionally on Start' slider (see screenshot above).

WINDOWS 7, 8.1 & 10

Open Command Prompt at any location

Command Prompt (click Start, type **cmd.exe** then press Enter) has a bygone feel to it. No fancy graphics, no buttons, no silly sounds – just an impatient flashing cursor waiting for you to type your commands. However, this simplistic approach can cause headaches.

For example, if you want to navigate to a specific folder via Command Prompt, you need to type the entire file path. This

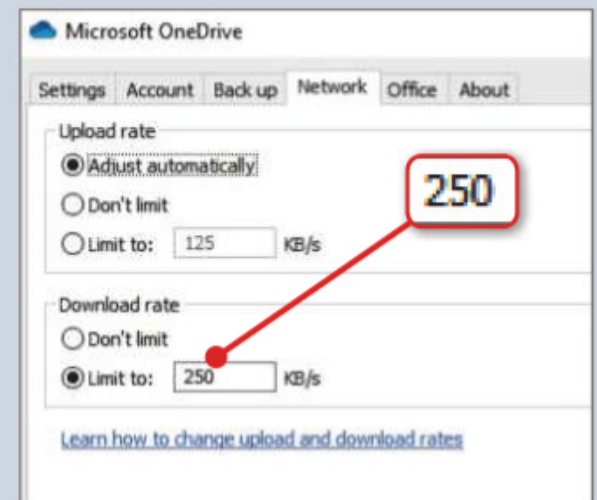
WINDOWS 10

Stop OneDrive hogging your internet connection

If you use Microsoft's OneDrive tool (which is pre-installed on Windows 10) to back up your personal files, you may find it uses more than its fair share of your **bandwidth**, particularly if you're transferring multiple large files between your OneDrive account and your PC. This can cause video streams to **buffer**, downloads to slow down and more problems.

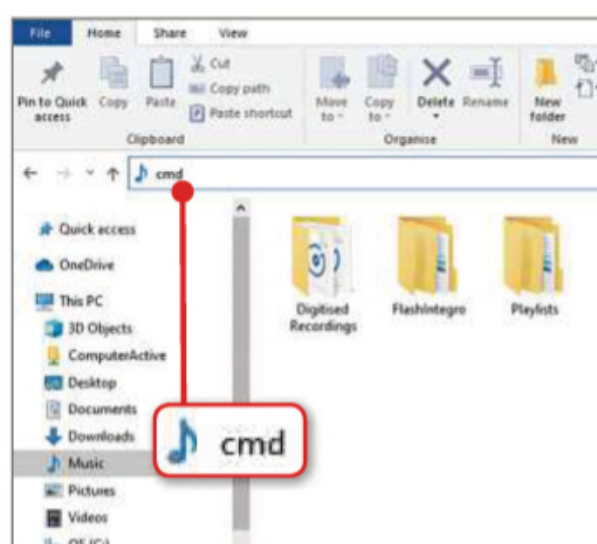
To avoid this, you can restrict how much of your bandwidth OneDrive can use. First, right-click the cloud-shaped OneDrive icon in your system tray (far right of your taskbar – you may need to click the up arrow to reveal the icon), then click More, followed by Settings.

In the window that opens, click the Network tab. By default, both the 'Upload rate' and 'Download rate' sections are set to 'Don't limit', which means OneDrive can use as much of your bandwidth as it needs. To apply a limit, click the 'Limit to' box for uploads, downloads, or both, and set a



value. Note that this setting is in kilobytes (KB), not the usual megabits (Mb) used for broadband speeds. 1Mb is equal to 125KB, so if you only want OneDrive to use a maximum of 2Mbps when downloading, set the 'Download rate' to 250KB (see screenshot).

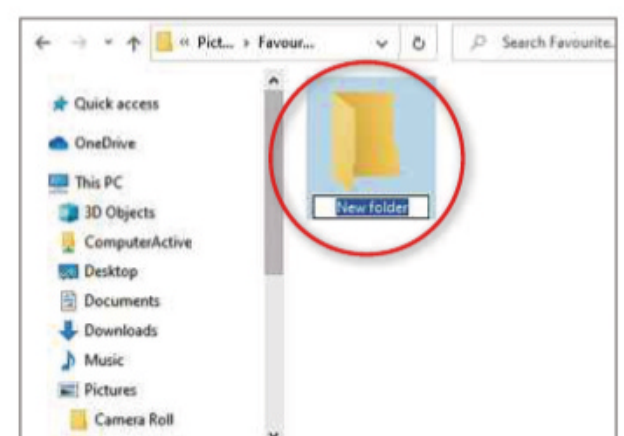
The 'Upload rate' offers an additional 'Adjust automatically' setting. Select this, and OneDrive will attempt to adjust its upload rate so that it doesn't affect other programs that are using your internet connection.



can take time and, more often than not, leads to typing errors.

Help is at hand in the form of File Explorer. Whenever you want to run a Command Prompt window in a specific folder, first open File Explorer (press Windows key+E), then navigate to your chosen folder as normal. Press Ctrl+L to select File Explorer's address bar, type **cmd** (see screenshot above) and press Enter.

A new Command Prompt window will now appear, set to the folder you navigated to in File Explorer.



WINDOWS 7, 8.1 & 10

Create a new folder in a flash

Following on from the File Explorer tip above, here's another that will save you from having to reach for your mouse every time you want to create a new folder. With a File Explorer window open, press Ctrl+Shift+N. A new empty folder will appear. Its default name – 'New folder' – will already be highlighted blue (see screenshot above), meaning you can change it simply by typing the name you want then pressing Enter. It might only save a few seconds, but it's the type of shortcut we love.

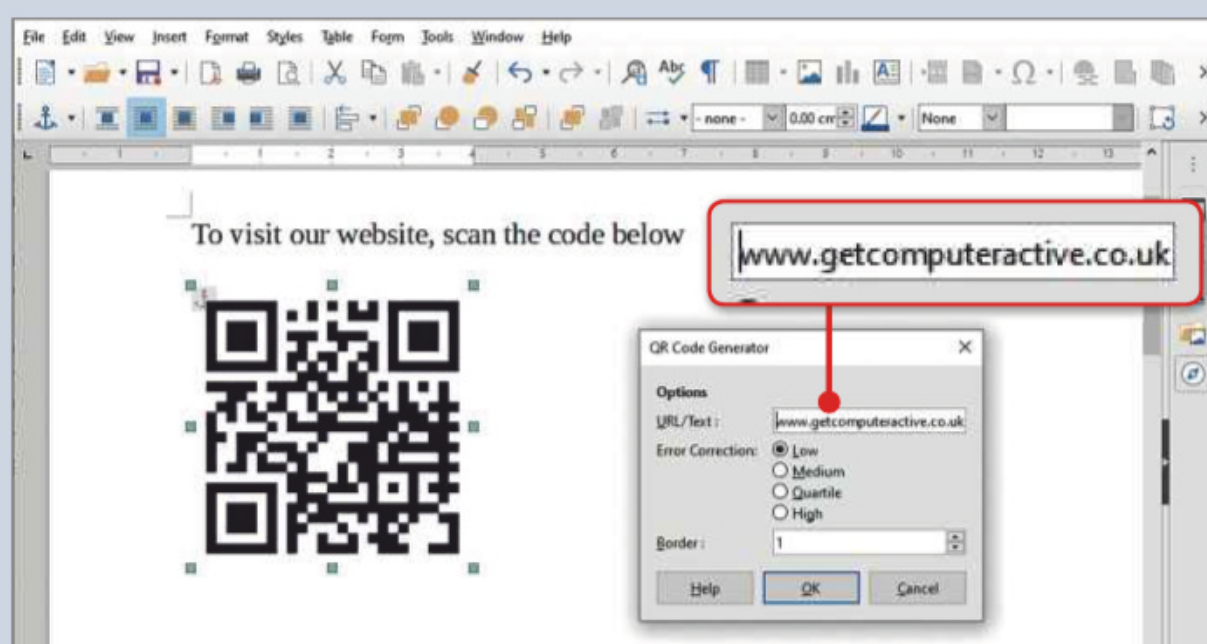
LIBREOFFICE WRITER

Create your own QR codes



If you've ever wondered what those strange boxes containing a mix of black and white blocks are (usually seen on emails, product packaging, billboards and websites), they're called QR codes and are essentially a type of barcode. The idea is that you scan the QR code with your phone, which then displays information or sends you to a website.

LibreOffice 6.4 (released in January) includes a built-in QR code generator, letting you add them to your documents. You could, for example, add a QR code to a printed newsletter, directing readers to a specific website. Instead of having to type the full web address, recipients would just need to scan the QR code with their phone. All modern phones have a QR-code reader



built in, so all they'd need to do is open their Camera app, then tap the link to view the website.

To create a QR code, open Writer, click Insert, Object, then 'QR Code..'. In the 'URL/Text' box, type a message that you want to appear when someone scans the QR code or, as we've done, a web address (see screenshot). Next, choose an Error Correction level. Setting this to High

creates a more complex QR code that's more resilient to smudges and tears (bear in mind the more complex a QR code, the larger it will need to be printed). Finally, choose the thickness for the border that surrounds your QR code, then click OK to insert it into your document. To make changes to a QR code you've already created, right-click it and select 'Edit QR Code...'.

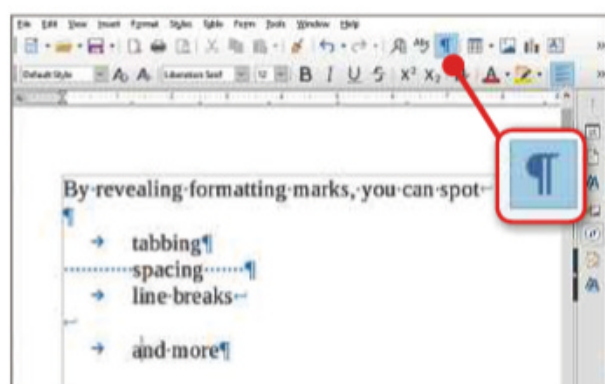
MICROSOFT WORD & LIBREOFFICE WRITER

Reveal hidden formatting marks



If you're struggling to get the document you're working on to look right, it's worth revealing its hidden formatting marks - you may find you've inserted a rogue line break or a few double spaces.

To switch formatting marks on and off in Writer, press Ctrl+F10 or click the button with a pilcrow symbol (this looks like a backwards P) in the toolbar at the top (see screenshot below). In Word, press Ctrl+Shift+8 or click the pilcrow button. All formatting marks within your document will be displayed. All spaces are replaced with small circles (useful for spotting rogue spaces at the start of a sentence, for example), tabs are marked with a right-pointing arrow, while pilcrow symbols appear at the end of paragraphs. If



you spot any left-pointing arrows, these represent line breaks (where you've pressed Ctrl+Enter to start a new line).

MICROSOFT EXCEL & LIBREOFFICE CALC

Print only specific cells



It doesn't take long for a spreadsheet to become unwieldy, spanning many rows and columns. If you want to print and review a specific section of your spreadsheet, don't waste time (and money) printing the entire spreadsheet. Instead, print only the section you're interested in. First, highlight the cells you want to print. Next, press Ctrl+P to open the Print window.

The next step differs slightly depending on which program you're using. In Excel,

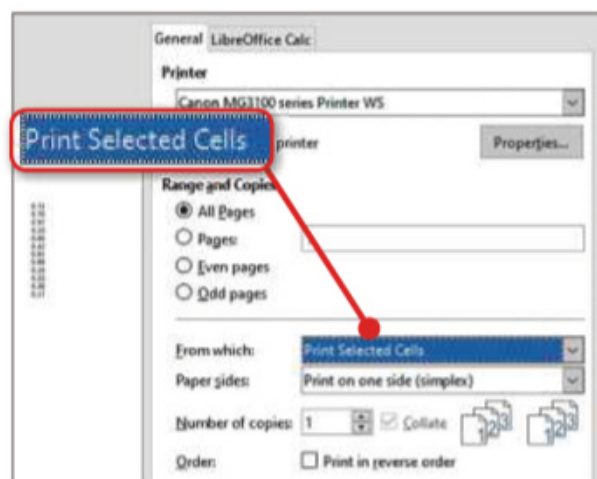
click the Print Active Sheets button, then select Print Selection. In Writer, locate the 'From which:' box (this is set to Print Selected Sheets by default) and choose Print Selected Cells (see screenshot below left). In both programs, the preview window will adjust to display only your selected cells. Now click Print (Excel) or OK (Writer) to print them.

MICROSOFT EXCEL & LIBREOFFICE CALC

Stop leading zeros disappearing in spreadsheets



Both Excel and Calc try to help out by removing what they believe to be unnecessary leading zeros from cells containing numbers (021, for example). However, sometimes you actually want these leading zeros - for example, when entering phone numbers or product codes. There are several ways to prevent this happening, but the easiest is to simply add an apostrophe at the start of your number. For example, type '007 into a cell and, when you press Enter, the apostrophe will disappear, leaving just 007. The apostrophe tells Excel and Calc to format the cell as plain text, but you can still use the cells in formulas (for example, when calculating the sum of a group of cells).



In The Club



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

Raise money for your club by selling on eBay

If your club's finances could do with a boost, why not consider asking your members to donate items that you can then sell on eBay? While your existing members will probably be happy for all auction proceeds to go to the club, you might get more people willing to donate items if you pledge to donate a portion of all sales to charity.

Create your charity listing

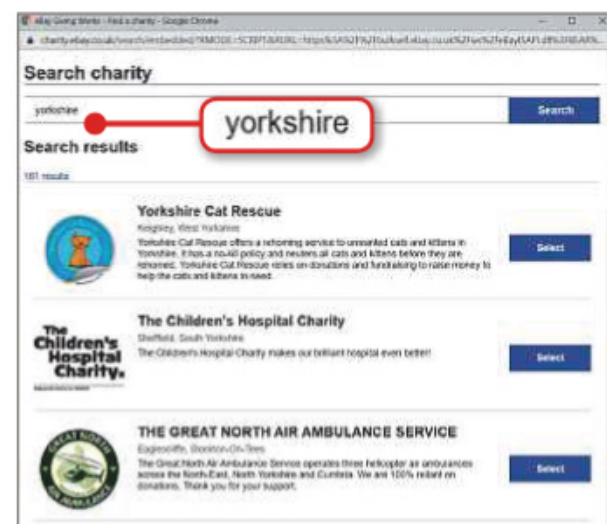
Once you've collected items to sell, you need to create your eBay listings for them. Don't worry if you've never used eBay before - simply register for a free eBay account at www.snipca.com/33995, then click Sell (you'll find this at the top-left of the main eBay window) and follow the steps to list your item.

When you reach the 'Selling details' section, tick the 'Make a donation' box. Next, decide how much you want to donate to charity (between 10 and 100 per cent, with five per cent increments possible). eBay's featured charity will be listed here (currently BBC Children in Need), but you can choose a different one by clicking 'Or select another charity...' directly below it (see screenshot below).

A new window will appear showing a list of other featured charities. You can choose one of these or search for alternatives using the box at the top - either by typing a specific charity's name or searching using keywords relating to the kind of cause you want to support, the charity's location and so on (see screenshot right). Most high-profile charities are registered with eBay, but you'll also find plenty of smaller, local charities.

When your listing goes live, it will have a small ribbon icon next to it, indicating that some of the sale goes to charity - this might encourage people to bid for *your* item over a similar one that doesn't include a charity donation. Your listing will also appear on your chosen charity's eBay homepage.

You'll still need to pay eBay's standard fees when the item sells (currently 10 per cent of the final sale value, capped at £250), but only for the portion of the sale that you receive - eBay doesn't charge fees for the portion donated to charity. For example, if you set the charity donation to 50 per cent and your item sells for £100, you'll only pay £5 in fees



You can search for a charity in eBay by name, type or location

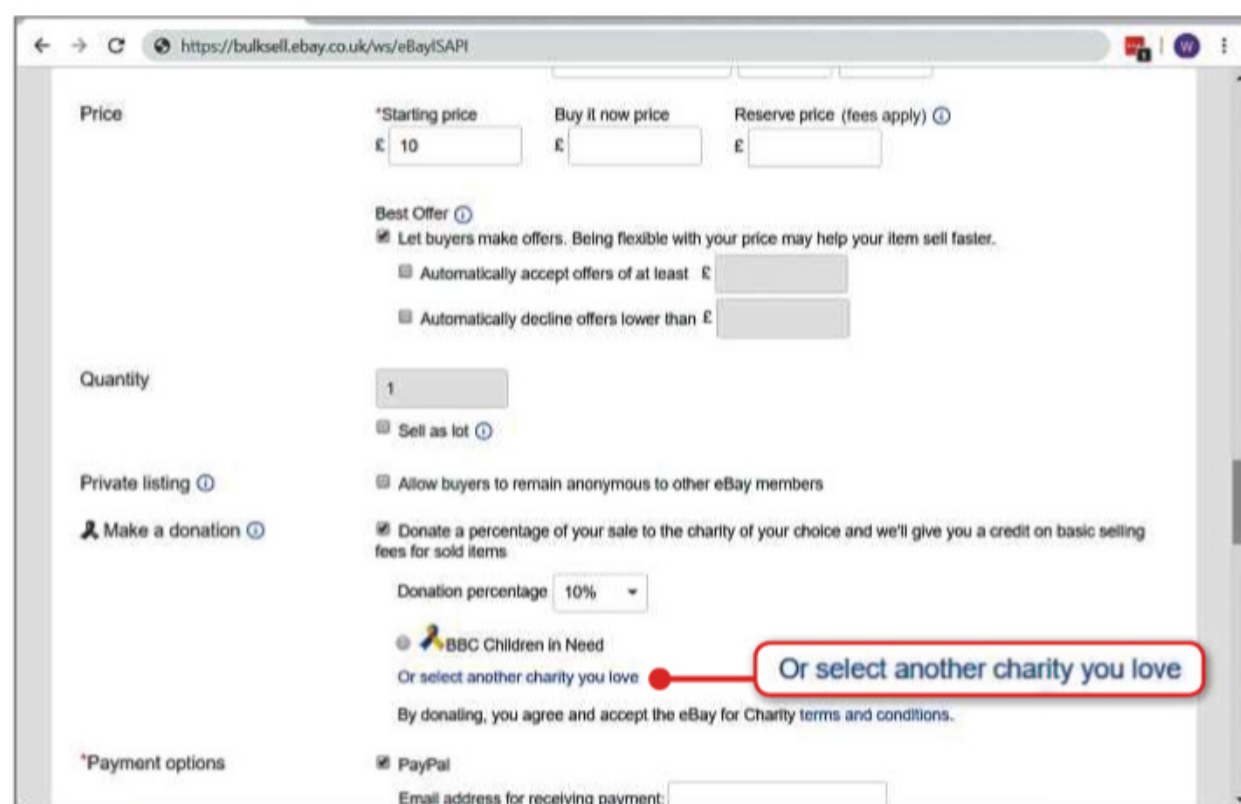
(half the normal £10 fee). Bear in mind that the buyer will still pay you the full winning bid amount (either in cash or to your PayPal account). PayPal will then take the charity portion from your account 21 days later and pay it into the account of your chosen charity.

Register your club with eBay

If your club is a registered charity, it's worth setting it up with the eBay Charity scheme, meaning anyone will be able to select it as their chosen charity when selling items. This scheme is linked to PayPal's Giving Fund service, so you'll first need to create a PayPal business account that's registered in your charity's name. Go to www.snipca.com/33996 and click the blue 'Enrol my charity' button to start the process. You'll need information such as your club's registered charity number and bank-account details to hand.

Once your application is approved, you'll be asked to link your new PayPal account to an eBay account. Note that with all future auctions through this eBay account 100 per cent of the proceeds will go directly to your club, so you may want to avoid using your personal eBay account and create a new one specifically for it.

If you have other members who want to donate *all* proceeds from their eBay auctions to your club, you can add them as Direct Sellers. Neither eBay nor PayPal charge fees for this service, so it's a great way to maximise donations and top up your club's finances. To set up or remove Direct Sellers, log into your charity's PayPal account at www.snipca.com/33997.



You can choose to donate a portion of your eBay auction to charity when creating a new listing

What's All the Fuss About...

Modern Standby

Your Windows laptop may be having some hot dreams

What is it?

A Windows 10 feature that puts your laptop into a light doze rather than a deep sleep. This means it's able to perform important tasks in the background, and jumps back to life the instant you press the power button. Microsoft's idea is to recreate in laptops the same always-connected nature of smartphones.

What's the benefit of that?

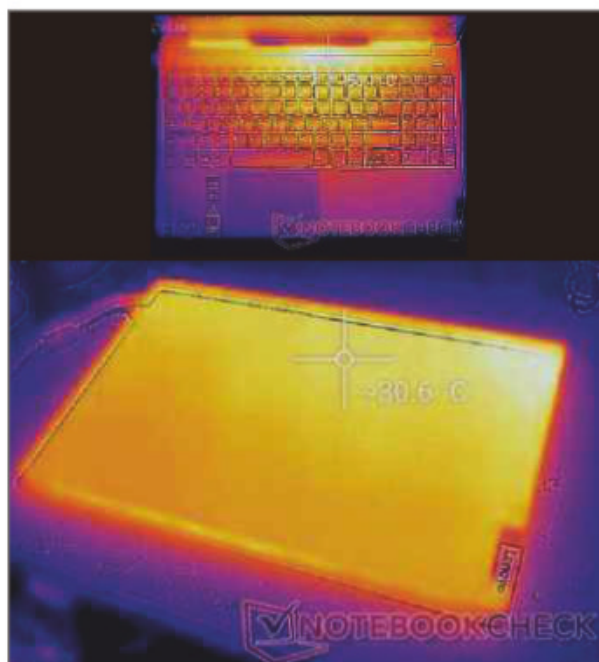
Well, when you turn on your phone, it's ready to use straight away because, while asleep, it still updates itself, without draining your battery too severely. Unlike PCs, it doesn't take ages to boot. Modern Standby works in a similar way. It comes in two types. Connected Modern Standby keeps the laptop connected to Wi-Fi, meaning it can alert you about new email messages. This is handy, but does drain the battery power faster. Disconnected Modern Standby is the opposite: it doesn't send alerts, but the battery lasts longer.

Very clever. So Modern Standby is worth having?

Yes, but only if it works safely. You wouldn't be very happy if it made your laptop hotter than the Sahara.

Oh. Is that happening then?

So it seems. While reviewing a batch of new laptops, the website Notebookcheck (www.notebookcheck.net) noticed that three models were overheating while in Modern Standby mode: Dell XPS 13 (7590), Asus ZenBook 15 and Lenovo IdeaPad S740 15. The IdeaPad reached the



highest temperature at 50 degrees celsius, far higher than the 35 degrees that's considered a safe maximum. Judging by the thermal images of the IdeaPad taken by Notebookcheck (pictured above), you could fry an egg on its lid.

Did any of the laptops catch fire?

No, but those high temperatures mean there's a risk of the lithium-ion battery suffering from thermal runaway. When a battery's temperature hits around 100 degrees celsius, its materials begin to break down. This triggers a chemical chain reaction releasing energy that accelerates the heating in a snowball effect. In this situation, the temperature can keep increasing until the battery catches fire.

Crikey. Has Microsoft said anything?

Not much. It released this statement: "Microsoft is working with our device partner/s to understand the issue that has been reported and will work together to address it as soon as possible".

What should you do if you own one of those laptops?

We'd advise avoiding Modern Standby until Microsoft releases a fix. Not every laptop with the feature is overheating, so

You wouldn't be very happy if it made your laptop hotter than the Sahara

the problem may be isolated to just a few models.

Can I disable Modern Standby?

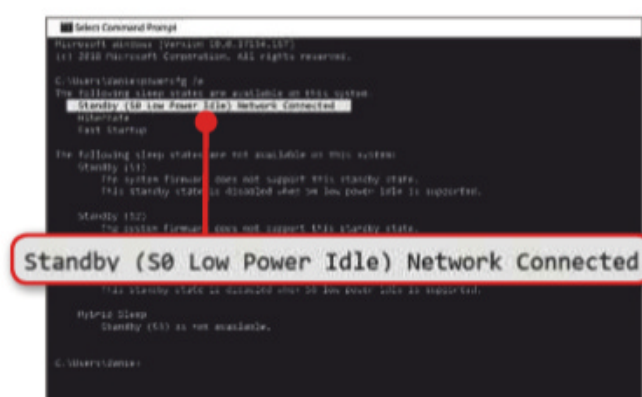
Potentially, by hacking the Windows registry. You'll find instructions in web forums, but we're not confident that they work, nor that they wouldn't cause more problems.

Can I check whether my laptop has Modern Standby?

Yes, in Command Prompt - open it by typing `cmd` in the Windows search bar then pressing Enter. Next, type `powercfg/a` and press Enter. You'll see all the sleep states you can put your laptop into. Modern Standby's official name is S0 Low Power Idle (that's a zero after the 'S'), so check for this in your results. 'Standby (S0 Low Power Idle) Network Connected' means you're using the connected version of Modern Standby (see screenshot left). 'Standby (S0 Low Power Idle) Network Disconnected' means the disconnected version is enabled.

Will these problems kill off Modern Standby?

No. All laptop manufacturers now promote it as a key feature in their latest models, and processor giant Intel wants more devices to follow suit. The heat is on Microsoft to find a fix quickly.



Use Command Prompt to check whether your laptop has Modern Standby

Master Your SMART TV

Your lounge may contain one of the most under-used computers in your home. Jonathan Parkyn reveals 10 amazing ways to start making the most of your smart TV



From phones to motorways and even bottled water, these days there's no end of things that describe themselves as 'smart'. It's not always clear what qualifies them to adopt this mantle of intelligence. Take smart TVs, for example. Manufacturers have been

pre-fixing this buzzword to their pricier sets for a while now, and it would be easy to dismiss it as little more than a sales gimmick to justify inflating their prices. In fact the prices of smart TVs have been falling for some time now and the sets themselves probably offer more features than you realise.

What defines a TV as 'smart' is its connectivity. In simple terms, a smart TV is one that can connect to the internet and other devices via your home network. Most models now support Wi-Fi and setup is usually very simple. How you do this varies from one model to another, but typically you simply need to enter your Wi-Fi's security passcode into the TV's Network settings.

With some models, you may be prompted to do this when you first

switch on and set up the TV. But you may need to enter the passcode manually by pressing the Menu button on your remote and looking for the Network or Internet settings. Most smart TVs have an Ethernet socket for a wired connection to your router. This can be more stable than Wi-Fi and is worth considering if your signal is unreliable.

Once connected, a smart TV is able to do a surprising number of things. Key features will normally include the ability to install apps, stream content, connect to other smart devices around your home and carry out tasks that you would normally need multiple devices for.

Over the following pages, we'll explore the brilliant – and sometimes unexpected – features of your smart TV and explain how you can take full advantage of them.

WHAT YOU CAN DO

- Record TV programmes to a USB drive
- Stream photos, videos and music from your PC to TV
- Watch webcams being broadcast live online
- Mirror your phone or tablet to make TV Skype calls



1 RECORD PROGRAMMES ON YOUR USB DRIVE

PVRs (personal video recorders) are great for recording and storing TV shows, but they can be expensive and bulky. If you have a smart TV, you may not need a standalone PVR at all.

Built-in PVR is something that TV manufacturers often hide away. Indeed, it may not be immediately obvious – even after reading your manual – whether or not your TV supports recording. There is, however, a quick and easy way to find out: plug in a USB hard drive (this is better than a stick, as we'll explain). With many models, connecting an external storage device to one of your TV's USB ports will automatically enable it to make, schedule and play back recordings.

Bear in mind that, unless your TV has two internal tuners (which is currently rare), you'll probably only be able to record one channel at a time and recording one channel while watching another probably won't be an option. If you need abilities like these, then a dedicated PVR may still be your best bet.

Choose the right drive

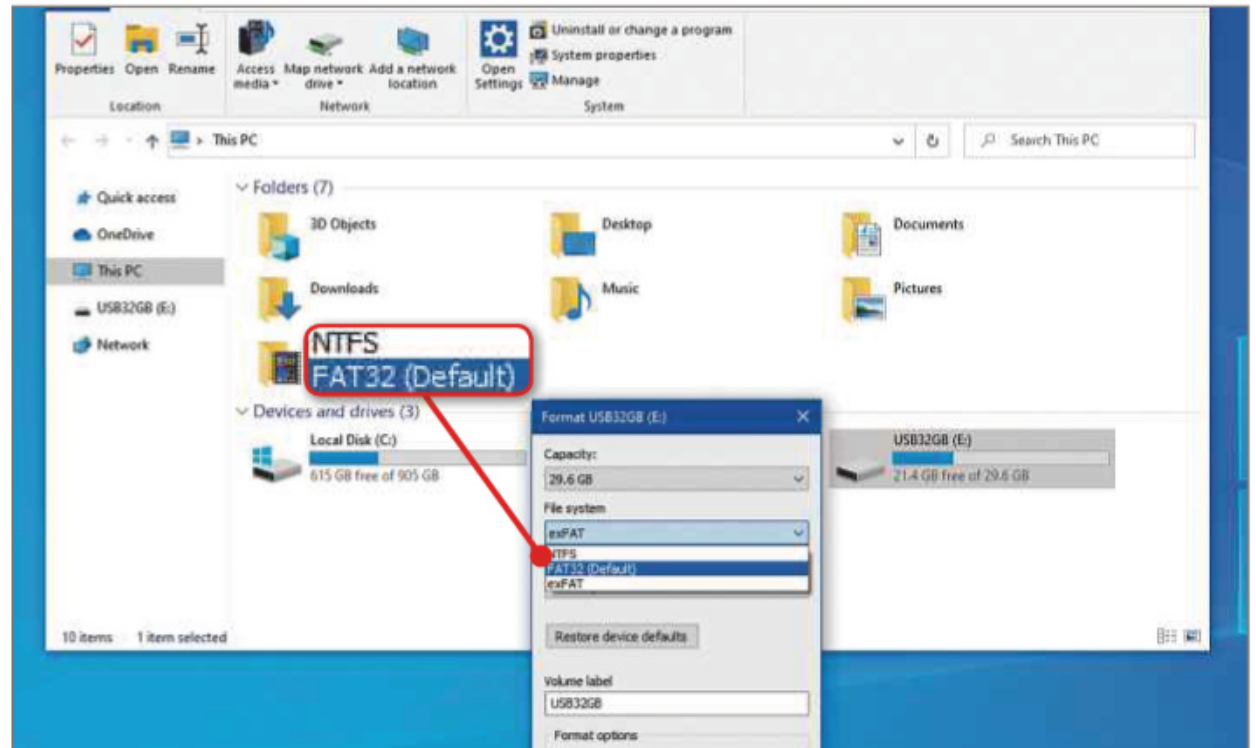
If you're tempted to use an old USB stick to record video, be warned: you may face an uphill battle. Older USB 1.1 sticks simply won't be fast enough to record HD video, and some TVs (for example, most Panasonic models) refuse to deal with them at all, regardless of their speed.

Of course, there's nothing stopping you trying some of your old USB sticks with your TV, but they're still not the best option – USB sticks have a limited number of **write** cycles, so are unsuited to the constant recording, erasing and re-recording of TV programmes.

Any USB hard drive, on the other hand, will be up to the task of recording video – even older drives will be fine, meaning you could repurpose that vintage drive that's been gathering dust for years rather than buy a new one.

Smart TVs usually support both standard 3.5in desktop drives and smaller 2.5in portable versions. If you opt for the latter, bear in mind that many portable drives draw their power over their USB connection, and not all smart TVs are equipped with USB sockets that can deliver sufficient power. If you hear a repetitive clicking sound after plugging your USB drive into your TV, it's a sign it's not getting enough power.

In terms of capacity, obviously the more space on the drive, the more



If your TV doesn't recognise your hard drive, try formatting it as Fat32 or NTFS

programmes you can record and store. Video data can use anything up to 2.5GB per hour for HD recordings, so if you're intending to keep a lot of content, you'll need a drive with a decent amount (preferably over 1TB) of space.

Format, connect and configure your drive

Using external USB drives for TV recording will, in most cases, erase anything currently stored on the drive, so first make sure you transfer any files you want to keep somewhere else before plugging the drive into your TV.

Check the back or side of your TV for a USB socket. There may be more than one and it's usually fine to connect to any of them, but some models may have a dedicated socket for hard drives, which may be labelled 'HDD' or display a hard-drive symbol next to it.

If your drive isn't recognised when you connect it to your TV, try connecting it to a PC and formatting it using either the **Fat32** or **NTFS** file system – your TV's instructions should state which file system USB drives need to be formatted



On some Panasonic TVs, you access your recordings via its built-in Media Player app

with, but it might be a case of trying both to see which works. To format your drive, open File Explorer (Windows+E), right-click your drive, select Format, then select either Fat32 or NTFS from the 'File system' menu (see screenshot above).

How you configure your drive will depend on your TV model. On recent Samsung sets, for example, pressing the Record button on your remote control will automatically test and configure the drive for recording. However, some TVs may require you to dig into the menus first. On some Panasonic sets, you need to press Menu, Setup, then USB Device Setup and follow the on-screen instructions to format the drive.

Schedule, view and manage recordings

Pressing the Record button on your TV's remote control will record whatever you're currently watching, but you can also schedule future recordings via your TV's electronic programme guide (EPG). Press the Guide button on the remote and navigate to the programme you want – highlight it in the planner and press the Record button.

Playing or erasing recordings is handled differently from one model to another. You may be able to select your USB drive from the Source or Input menu, for example, or you may have to use a built-in app. With many Panasonic Viera smart TVs, for example, viewing or managing recordings is done by pressing Apps on the remote, then selecting the Recorded TV or Media Player app (see screenshot left).

2 STREAM PC CONTENT TO YOUR TV

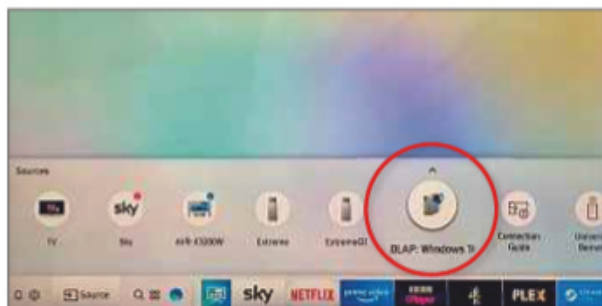
Smart TVs can connect directly to other devices on your home network, such as your PC, and access the photos, videos and music files stored on them. You can browse and play these files using your TV's remote control, or using your PC.

Browse media using your TV

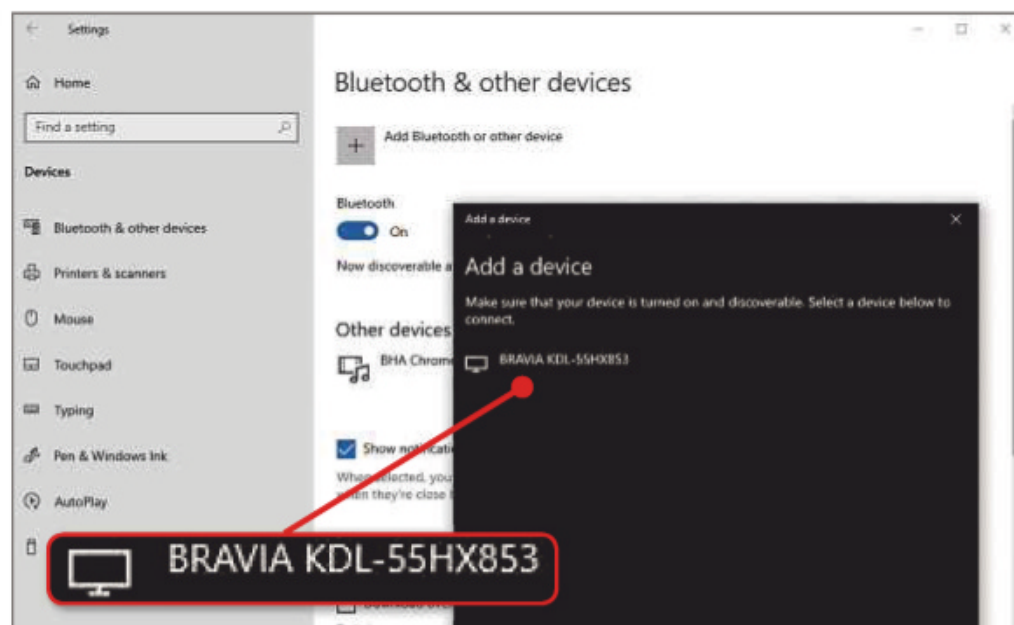
Most smart TVs can stream media from a **DLNA** server on your network, and it just so happens that Windows 10 has one of these built in – you simply need to enable it. On your PC, go to Settings, 'Network & Internet', then select 'Network and Sharing Centre'. In the window that opens, click 'Media streaming options' on the left. If you see a 'Media streaming is not turned on' message, click 'Turn on media streaming'. By default, this will enable streaming for any content stored in your Pictures, Music and Videos folders to any DLNA devices on your local network – including your smart TV.

With many Samsung models, for example, you'll find your PC's media server listed in the Sources menu (see screenshot below). On recent Panasonic sets, you need to press the Home button on your remote and open the Devices menu.

One drawback with this method is that



Some Samsung TVs let you access your Windows 10 library via the Sources menu



Windows lets you add your smart TV as a connected device

if your TV doesn't support the file format of the video you're trying to stream, it won't play. One alternative is to use the media-streaming software Plex.

To do this, first install the free Plex server tool on your PC (www.snipca.com/34020). Next, click Settings (top right), Libraries (bottom left), then Add Library and tell it where your media files are. You now need to install the Plex app on your TV (most of the latest smart TVs offer it for free via their app stores). Once you've connected your Plex devices using an on-screen code, you can browse your PC's photo, music and video libraries from Plex's impressive Netflix-like interface on your TV. Best of all, Plex uses your PC to convert formats, meaning you won't encounter any video-file compatibility problems.

Browse media using your PC

If you find browsing media using your TV fiddly, you can instead browse on your PC then send your chosen files to your TV.

You first need to connect your TV to your PC. Open Settings on your Windows 10 PC, then select Devices. If your TV isn't already displayed in the list of devices, click 'Add Bluetooth or other device', then select 'Everything else'. When your TV appears in the list, click it (a Sony Bravia in the screenshot above).

Now open a File Explorer window and navigate to the folder containing your media files. Hold down the Shift key, then click each file you want to play. When they're all selected, right-click one of them and select 'Cast to Device', then your TV (see screenshot below).

A new window will now open, with all the files you selected ordered into a playlist. Use the controls at the bottom to play, pause or skip each file on your TV. You can change the order of your playlist by dragging the files up and down; remove files by selecting and pressing Delete; and add new files by right-clicking them in File Explorer and selecting 'Cast to Device'.

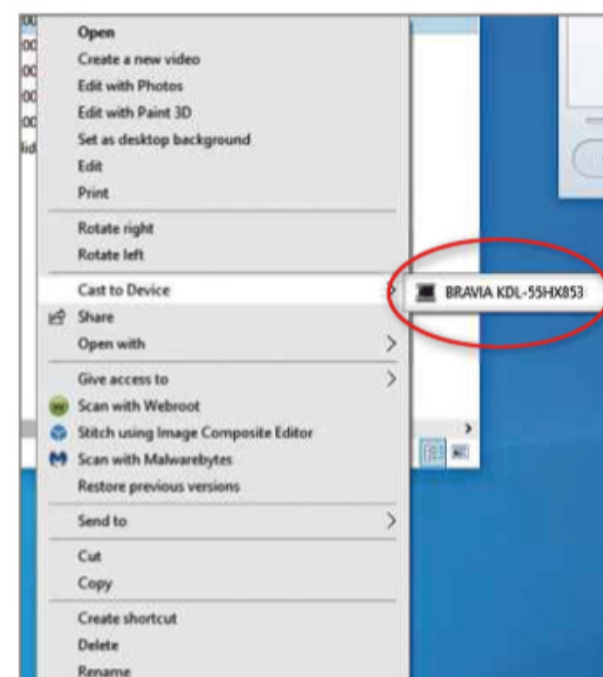
Can your smart TV be hacked?

Internet connectivity may make TVs smart, but – like any other connected device – it also makes them vulnerable. If a hacker gains control of your smart TV, they could steal your personal information or even access its webcam (if your TV has one). Don't panic, however. Although theoretically possible, it's highly unlikely your TV will be hacked, and we're not aware of any widespread attacks in the past. That said, it's still worth ensuring your smart TV's software is always up to date (see box on page 56 for more on this).

It's actually far more likely that your

smart TV's manufacturer is snooping on you by monitoring what you're watching. You can, however, turn off this data-gathering feature.

For example, on Samsung TVs go to Settings, Support, then 'Terms & Policies'. Here, turn off options for Viewing Information Services and Interest-Based Advertising. On some LG TVs, you need to go to Settings, General and turn off LivePlus. Your TV's manual should explain what data is collected and how to turn it off. If not, contact your TV's manufacturer for advice.



Browse files on your PC, then cast them to your TV

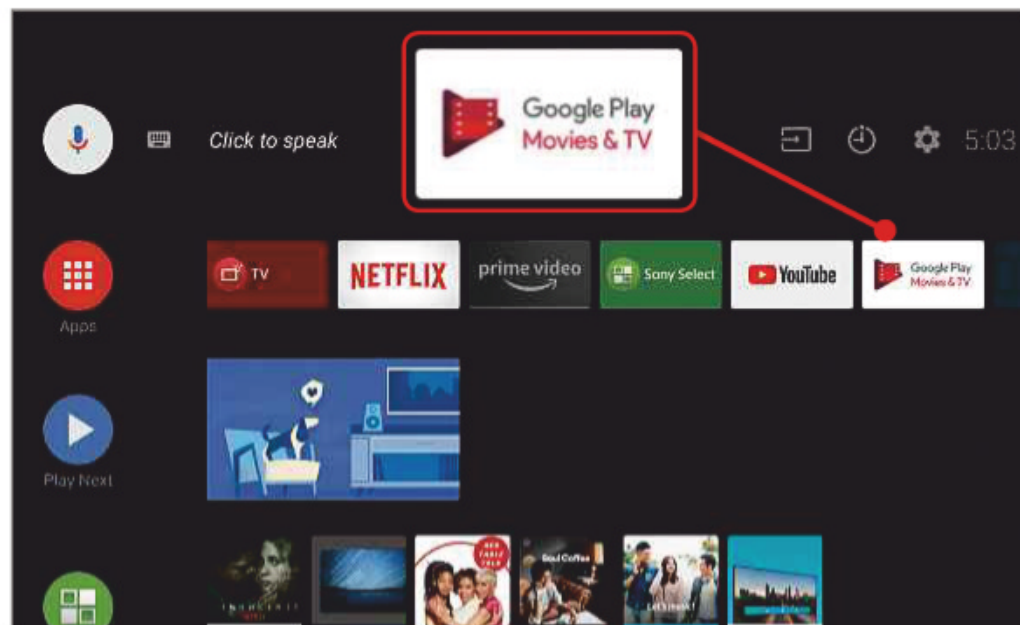


3 ENHANCE YOUR SMART TV WITH FREE APPS

In a world before smart TVs, you'd need a separate box attached to your TV set to stream films and shows from Netflix and BBC iPlayer, videos from YouTube or music from Spotify. With smart TVs, however, you can stream this content directly to your screen without a separate device. This is usually done using apps – much like those on your smartphone or tablet.

Not all smart TVs are born equal in terms of the apps that are available to them. Some – mostly older (2014 or before) or cheaper (£150 or less) sets – come with a fixed set of preinstalled apps that can't be added to. Newer smart TVs, however, tend to run more advanced operating systems that let you add apps via built-in app stores, similar to those found on phones and tablets.

Many of the latest Sony Bravia smart TVs, for example, come with an Android operating system (known as Android TV), complete with a dedicated version of the Google Play Store. Press the Home button on your remote control, then select All Apps and open the Google Play



Newer Sony TVs let you download Android TV apps from the Google Play store

app (see screenshot).

Similarly, recent Panasonic Viera TVs use a version of Mozilla's 'Firefox OS for TV', which also has its own app store – press the Apps button on your remote control to see which apps are installed, then select Apps Market to install new ones.

In addition to the usual suspects (such as Netflix and iPlayer), your smart TV's app store should offer a supply of other useful tools, including weather and news

apps, games, and more. If you have a Sony TV running Android, we recommend downloading the VLC app for Android TV – it's just as easy to use as the popular PC version and will play just about any video format.

You could also get the TuneIn Radio app, which lets you listen to radio stations from across the world. To download any app, simply open your TV's app store and search for it by name.

4 STREAM LIVE WEBCAM FEEDS TO YOUR TV

Most smart TVs come with a built-in web browser that lets you view web pages on the big screen. Panasonic sets come with a version of Firefox, for example. Android TV-based sets, such as recent Sony Bravias, don't currently support Google Chrome, but you can download other browsers for free from the Google Play Store – the Puffin TV browser is a popular choice and works in a similar way to Chrome.

However, browsing the web while curled up on your sofa isn't as easy as it should be. Without a mouse and keyboard, as you have with your PC, loading and navigating around web pages can be frustrating – especially if you stick to using the standard remote control, which usually requires you to use arrow buttons to move the cursor around the screen.

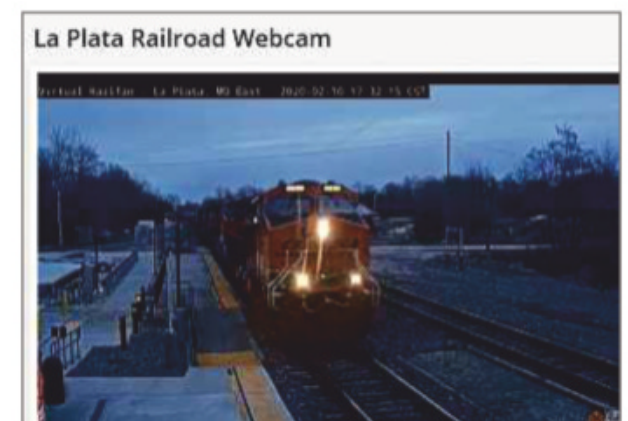
Many new smart TVs are now sold with two separate remote controls: a standard one and a 'smart' one. The smart type (such as the Samsung One remote pictured above right) often has some kind of touch or **gesture** capability, allowing you to move the on-screen cursor by tilting the remote or using a built-in



Modern smart TVs come with remote controls that make browsing the web easier

touchpad. Even with these aids, entering text – such as a web address – can still be a pain. However, there are ways to overcome this. If your smart TV has its own smartphone or tablet app, then you may be able to control your web browser and enter text via your mobile device – see page 57 for more on improving your smart TV's controls.

Although a little fiddly to use, your TV's browser will let you visit most of the websites available on other devices, though some are obviously better suited to your TV than others. For example, using the browser, you can turn your TV into a window on the world by streaming



Using your smart TV's browser, you can stream live footage from all over the world

video from sites such as EarthCam (www.earthcam.com) and WorldCams (<https://worldcams.tv>), both of which stream live footage from cameras all over the planet.

If you're a plane enthusiast, you could stream live air traffic control footage from Zurich airport (www.snipca.com/34040). More into trains? Then load the La Plata Railroad webcam stream (www.snipca.com/34041) from the US. Just don't make the same mistake we did and leave your TV's volume turned up high – it can be quite a shock when a large freight train thunders through the station.

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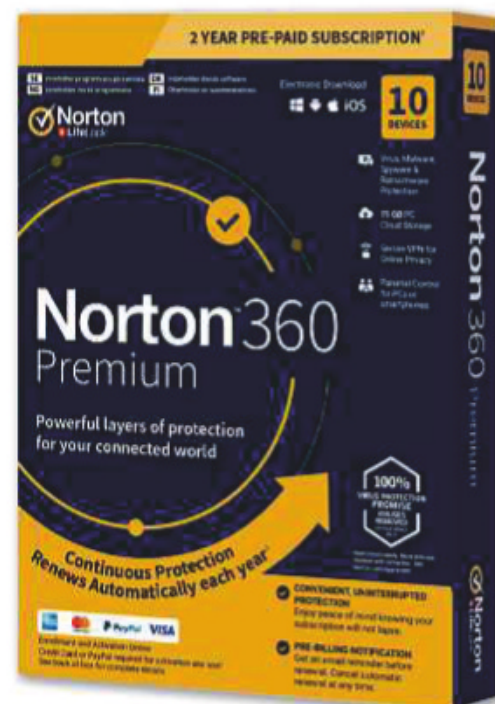
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5 MIRROR YOUR PHONE & TABLET'S SCREEN

Whether you want to show off your photos, browse the web, or stream videos, duplicating your phone or tablet's screen (a process known as mirroring) on a much larger TV screen can come in very handy. One simple way to do this is by using a cable connection (such as a **Lightning-to-HDMI** for iOS devices), but cables are messy and expensive (an Apple cable, for example, costs £50 www.snipca.com/34053). Mirroring wirelessly is more convenient, cheaper and makes full use of your smart TV's capabilities.

Apple and Android devices now feature built-in support for screen mirroring – iOS devices use Apple's AirPlay 2 and Android uses Google Cast (the same casting technology used by Google's Chromecast devices).

If you bought your smart TV within the last three years, there's a good chance it will support one (or both) of these casting standards without the need for additional hardware. To find out, you can check the manual that came with your set – or simply follow our instructions to find out if your TV is visible to your phone or



Most modern smart TVs let you mirror your phone or tablet's display

tablet's casting app.

Switch your TV on, then open your device's casting tool. To do this on an iPhone, swipe up from the bottom of the screen (or swipe down from the top right of the screen on an iPhone X or later) to

open the Control Center, then tap Screen Mirroring. On an Android device, swipe down from the top of the screen to open the Quick Settings menu, then tap Cast. In either case, your device will now look for a compatible smart TV. If it finds yours (as it detected our Samsung Q9 smart TV in the screenshot), tap it to connect. Once connected, your device's screen will be mirrored on your TV.

If your device can't detect your TV, make sure the two are connected to the same network. If you still have no luck, your smart TV probably doesn't support your device's mirroring standard. If that's the case, the only way to mirror your device's screen wirelessly is to use a third device to bridge the gap, such as an Apple TV box (from £150, www.apple.com/uk/tv) for iOS devices or a Chromecast (from £30, www.snipca.com/34054) for Android devices.

Once your Apple TV or Chromecast device is connected to your TV and set up correctly, repeat the process above and your device should now be able to connect.

6 CONTROL YOUR SMART TV WITH YOUR VOICE

Most smart devices can be controlled with your voice, and that includes smart TVs. You can change channels, adjust the volume, access apps and more – simply by asking your TV nicely.

The extent to which you can control your TV this way depends on your TV's make and model. For example, all Sony TVs that run the Android TV OS have Google Assistant built into them – simply press the microphone button on your remote control to dish out spoken commands.

Other TVs can connect to a smart speaker (if you have one). LG TVs, for example, support the company's own smart-home system ThinQ. And all LG's ThinQ devices (which also includes fridges, washing machines and more) are compatible with both Google Assistant or Amazon Alexa, letting you manage them using your voice or your smart speaker's phone or tablet app. The same goes for Samsung devices, which use the company's SmartThings platform.

Regardless of which model of TV or smart speaker you have, connecting the two will involve a similar process. First, install your TV manufacturer's own

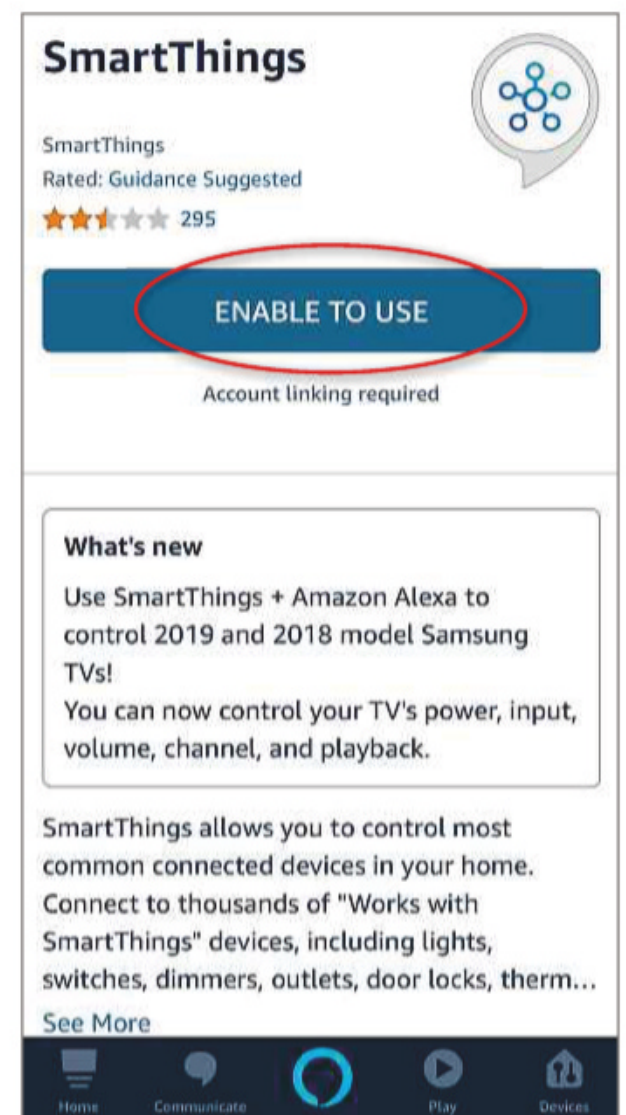
smartphone app – such as LG's ThinQ app (www.snipca.com/34055) or Samsung's SmartThings app (www.snipca.com/34056).

Once you've done this, open the app and follow the onscreen instructions to connect it to your TV. Next, open your smart speaker's app on your phone or tablet and connect it to your smart TV's app. In the Alexa app, this is done by enabling the 'skill' (essentially a **plug-in**) for your smart TV's app and linking your accounts. Tap the menu icon, then 'Skills & Games' and search for your smart TV app's entry (for example 'SmartThings').

Select this option, tap 'Enable to Use' (see screenshot) and sign in with your Samsung (or other TV manufacturer) account, then tap Authorise when prompted.

Alexa will then search for your TV. Once it has found it, you can control your TV with voice commands such as "Alexa, turn on living room TV".

Exactly what commands you can use depends on your TV. You can see a list of Samsung's Alexa commands at www.snipca.com/34057.



Connect your Alexa smart speaker to your smart TV's app, then control it with your voice

7 MAKE VIDEO CALLS ON YOUR TV

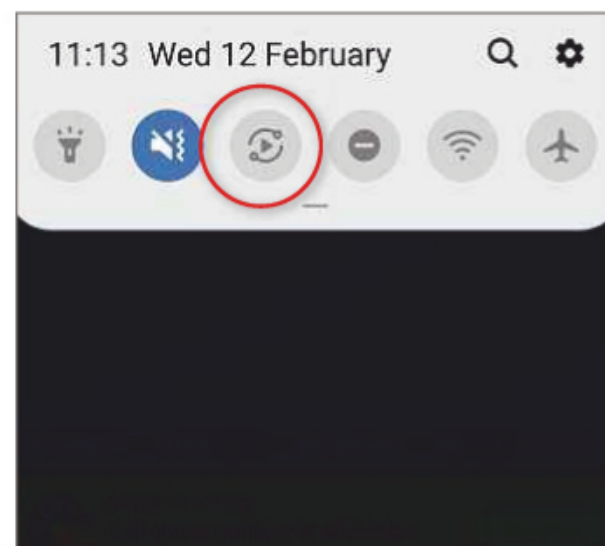
Video calls are a great way to stay in touch. You can do this from your PC, or via a smartphone or tablet app, but using your smart TV instead opens up the possibility of life-size video conversations with friends and family that everyone can join in with.

However, there's one slight problem. Until a few years ago, Microsoft produced Skype apps for several smart TV platforms. Unfortunately, the app was plagued by technical problems and the company decided to kill it off, meaning you can no longer make Skype calls solely through your TV.

One way around this is to make your

video call on your phone or tablet using Skype, FaceTime or Google Hangouts as normal, and then use one of the phone or TV connection methods we described in Tip 5 to mirror your device's screen on your TV set.

For example, if you use a Samsung phone, load the Skype app on your phone, start the call as normal, then swipe down from the top and tap the Smart View button (see screenshot) and select your TV from the list. During the call, place your phone or tablet just under or above your TV, so that its camera captures you while you're watching the call recipient on your TV.



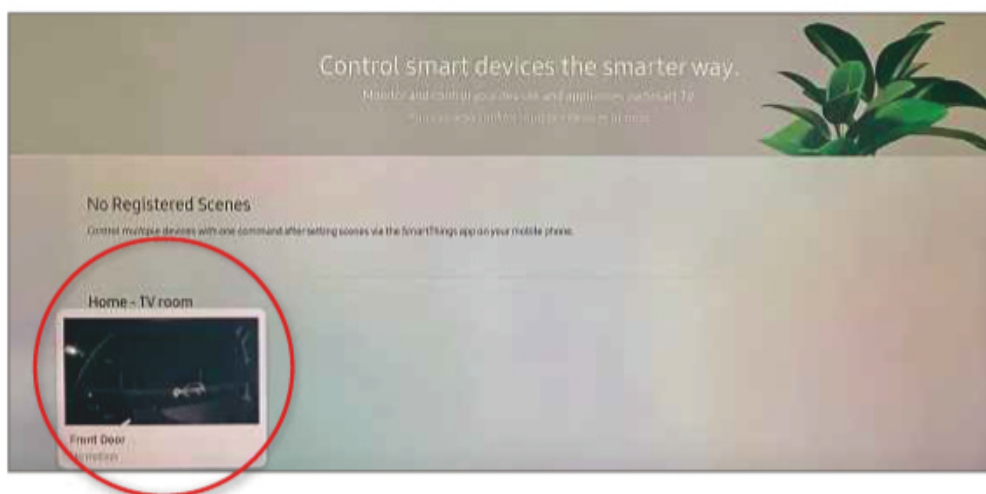
By mirroring your phone's screen to your TV you can make Skype video calls that everyone can join in with

8 KEEP AN EYE ON YOUR SECURITY CAMERA

Imagine being able to view the live feed from your networked home-security camera or video doorbell on your smart TV. The security camera/doorbell doesn't even need to be in the same property as your TV - it may be monitoring a holiday home or workplace, for example.

There are a couple of ways to do this.

Monitor your Ring doorbell's video stream direct on your TV using Samsung's SmartThings TV app



The first is to link your smart doorbell to your smart TV using their respective smartphone apps. For example, you can connect a Samsung smart TV to a Ring doorbell via the Samsung SmartThings phone app (www.snipca.com/34056). To do so, open the app, tap Devices, then tap the '+' button and select 'By brand'. Tap

Ring, then tap Doorbells and select your Ring device. Follow the remaining steps, signing in with your Ring login when prompted to 'Authorise Connection to Ring'. Once set up, watch the Ring doorbell's live feed by pressing Home on your TV's remote control and selecting the SmartThings app in the quick launch bar at the bottom of the screen (see screenshot).

Another option is to open the web browser on your smart TV (see Tip 4), then enter the camera's **IP address** or URL for the live feed. Once this has loaded, you can use your TV's **picture-in-picture** (PiP) mode, allowing you to watch TV while keeping an eye on your camera. To activate your TV's PiP feature, go to the main Settings page, then look in Picture for a Picture-in-Picture (or PIP) mode.

Is your smart TV running out-of-date software?

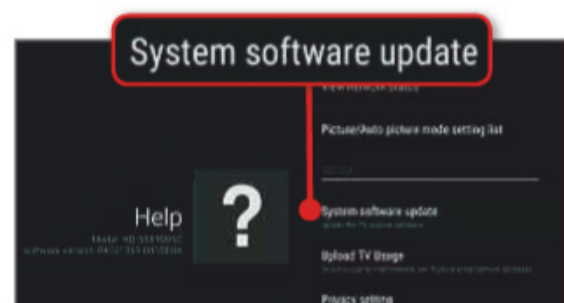
Like all tech manufacturers, TV makers release **firmware** updates to fix problems with their products, including security vulnerabilities, and to improve features or add new ones. Keeping your smart TV up to date, therefore, can help prevent it from being hacked and make sure you are getting the most out of it.

On most smart TVs, firmware updates are sent automatically over your internet connection. Typically, updates are downloaded and applied when the set is in standby mode (without you needing to do anything). However, if the automatic update fails, you could be left running

out-of-date software. It's therefore a good idea to occasionally check for and apply any updates yourself. To do this on Sony TVs, for example, press Menu on your remote control, then Help, followed by 'System software update' (see screenshot).

If, for whatever reason, you're unable to update via the internet, you can usually download the update file to your PC from the manufacturer's website (look for the Support or Downloads section). Once you've done that, transfer it to a USB drive, then plug this into your TV.

You need to be careful when updating



your TV's firmware. Don't unplug your set from the mains while the updates are being carried out and always make sure you're installing the correct software for your TV (it's easy to mix up the model names of TVs). If in doubt, contact the manufacturer to check this before carrying out the update.

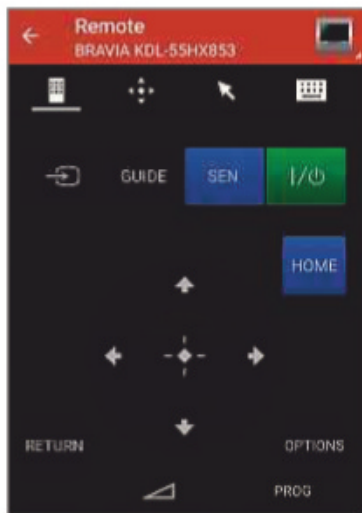


9 CONTROL YOUR TV USING YOUR PHONE OR TABLET

We've already described several ways you can make your TV easier to use (such as using voice commands in Tip 6). Another handy option is to download the official mobile app for your TV, letting you control your set using your phone or tablet. This often adds features that you won't find on a standard TV remote – including voice and gesture control – as well as a more comfortable way to enter text when using a web browser and other apps.

Most manufacturers offer a companion app for their smart TVs, which often even support older TVs (as with our 2014 Sony model). These include simple remote-

Sony's SideView app can replace your TV's remote control and let you type using its on-screen keyboard



Logitech's compact K400 Plus is ideal for use with your smart TV

control apps, such as Google's Android TV Remote Control (Android www.snipca.com/34059; iOS www.snipca.com/34060) and Sony's SideView (www.snipca.com/34070 – see screenshot left). There are more advanced apps, such as Samsung's SmartThings (www.snipca.com/34071) that integrate TV remote-control functions with several smart-home features. Most require your phone and TV to be on the same Wi-Fi network, but some – including the Android TV app – also work over Bluetooth.

If you prefer a physical controller, consider attaching a keyboard and mouse to your smart TV. Most pre-2015 smart TVs won't support keyboards, but anything since probably will.

One way to test whether yours does support keyboards is to simply plug one

into a spare USB port on your TV and start typing. Some models will recognise the keystrokes immediately, while others may need to be set up first.

If you have a recent Samsung model, go to Settings, General, then External Device Manager and select Input Device Manager to configure your keyboard or mouse. On Android-based smart TVs, you can connect Bluetooth keyboards and mice (you'll need to pair them first, just as you would with a PC).

There are keyboards that are designed specifically for use with smart TVs, such as Logitech's wireless K400 Plus (£19, www.snipca.com/34063, pictured above), which includes a built-in touchpad. We recommend plugging in a standard USB keyboard before buying, to check your TV supports external keyboards.

10 TURN YOUR SMART TV INTO A WINDOWS 10 PC

Smart TVs are becoming more and more like large-screen PCs, but they're still not as smart as a proper PC. They can be



Jetway's superb JBC420 turns your TV into a Windows 10 PC

limited by compatibility problems and simple tasks, such as making a video call, can involve awkward workarounds. If you want to give your smart TV a boost, why not plug a PC into it? This lets you edit photos, send and receive emails, browse the web, download files and carry out any other PC task on the biggest screen in the house from the comfort of your sofa.

If you have a PC or laptop with an HDMI connection, the process couldn't be easier – simply attach your PC or laptop to your TV using an HDMI cable. But if you're prepared to spend a little money, you could instead buy a mini PC – a tiny computer that's designed to be

connected to a monitor.

Some of these devices, such as Intel's Compute Stick (£117, www.snipca.com/34073) look like oversized USB sticks and plug straight into any free HDMI socket. While Compute Stick runs Windows 10, it isn't particularly powerful and is only capable of carrying out simple tasks such as Skyping, streaming and browsing the web.

Much more powerful is Jetway's JBC420 (from £260, www.snipca.com/34072, pictured), which comes with special mounts that let you attach it to the back of your TV, keeping it neatly out of view.

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Stay 100% safe when charging



Thanks to charging stations in public spaces, topping up your phone and tablet's battery when out and about is easier than ever. But as **Nik Rawlinson** explains, there may be hidden dangers lurking behind the USB port you're plugging into

What's on the other end of your charging cable? It's easy enough to answer that question when you're at home, but what about when you're plugged into a public charging point at a train station, pub, coffee shop, airport or on a bus (pictured below)? Behind the USB socket, there could be a tiny computer quietly stealing your data – a hacking attack known as 'juice jacking'.

The concept of juice jacking is as simple as it is scary. You believe you're plugging into a standard powered USB socket when, in reality, you're connecting your phone or tablet to a computer run by hackers designed to do a simple job very effectively: siphon off your personal data so that hackers can use it to steal your identity or install malware on your device, so even when you disconnect, the

hackers will retain a degree of control over your device. While the risk of becoming a victim of this kind of attack is relatively small, the consequences for those who do can be grave.

Computers are becoming smaller all the time. When you consider that even modern charging cables (such as Apple's Lightning connector) contain processors that regulate the charging process, think how powerful a concealed computer in a USB adapter or desk-mounted plug socket might be.

Juice jacking is a growing threat. It first came to prominence at the 2011 Defcon security conference in Las Vegas. Since then several law-enforcement agencies, including the FBI, have issued warnings.

In 2013, researchers at the Georgia Institute of Technology developed a juice-jacking device that installed a fake

Facebook app on iPhones and iPads in under 90 seconds. Although this was just a theoretical attack and the fake app wasn't actually malicious, it illustrated how hackers could use the same approach to secretly install malware.

Buy a USB 'condom'

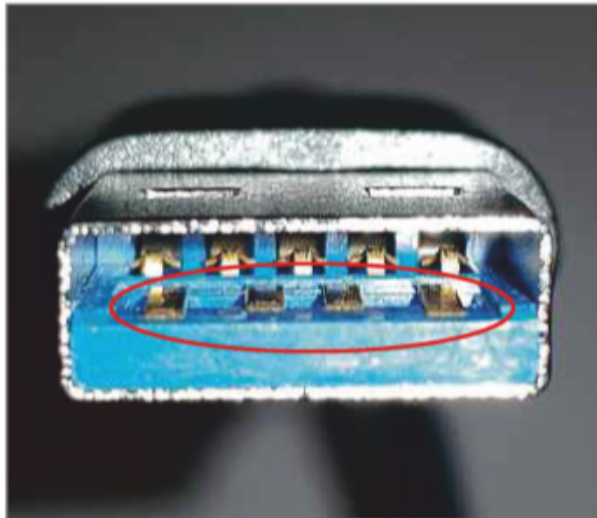
Juice jacking is only possible because USB cables typically fulfil two roles: they carry both power and data. Look inside the connector that plugs into an adapter or your PC's port, and you'll see at least four small metal contacts (pictured below left). Some **USB 3.0** adapters have as many as nine contacts.

The two outer contacts are used for power, the two inner ones data. Knowing this, it's easy to combat juice jacking by disabling the two data contacts. You could feasibly create your own power-only USB cable by forcibly removing these contacts, thereby preventing any data transfer, but it's not something we recommend because you could end up damaging both the USB cable and the device you plug it into. Instead, you should consider buying an inexpensive data-blocking adapter – often referred to as a 'USB condom'.

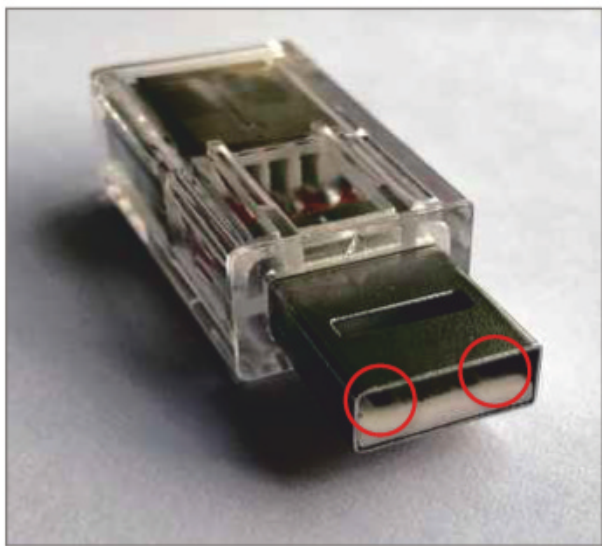
We bought a Pure USB Data Blocker from UK-based company PortaPow (£6 from Amazon www.snipca.com/33993), opting for the clear version that shows the tiny circuit board inside and how the two inner connectors don't carry through



USB charging points can be found everywhere these days – even on buses



USB adapters have four primary metal contacts – two for power, the other two for data



Unlike standard USB adapters, the PortaPow Data Blocker only has two data connectors



A USB condom sits between your USB cable and the device you're plugging into



Avoid carrying a separate adapter by buying a USB cable with a data blocker built in

from one end of the adapter to the other (see photo above). These are used purely for charging, not transferring data. It's also available in red or black with a SmartCharge chip (more on this later) and with a **USB-C** connector for newer devices.

Using the Data Blocker is simple: just plug it into the PC port, charger or public USB socket you're using to power your device, then plug your phone/tablet's USB cable into its output socket (see photo above right). When you do this, power will flow to your device, but data will be blocked.

This doesn't let your computer connect to your phone like an external drive, and your phone won't pop up any alerts if you use it to charge from an adapter in your car's cigarette lighter, which will help avoid distractions when driving.

This does mean you can't synchronise your device when using the Data Blocker, but as you'd only want to do that when connected to your own computer – or when using online backup services – that shouldn't be a problem.

PortaPow is just one of several manufacturers of USB condoms. If you choose to use another manufacturer,

and you can't see inside the USB condom, check that the middle two visible contacts have been removed, so you can be sure there's no chance of data leaking in or out.

Nor are you restricted to buying an adapter that relies on your current cable. If you're about to replace your existing charging cable, and your device doesn't use an older or less common USB connection, you can buy a USB connector cable with data-blocking capabilities (for example, PortaPow's USB-C Data Blocker cable – £5 from www.snipca.com/34029).

However, if you're like us (we need to charge two phones, one which has an Apple Lightning connector, the other **microUSB**), the PortaPow adapter is a compact and convenient option.

Carry your own personal charging station

Alongside using a USB condom, the safest way to charge your tablet or phone is to use the adapter and cable supplied with your device, plugging it directly into a three-pin power socket. However, this isn't always possible, so what are your other options?

We recommend using a portable power pack, which has the added benefit of letting you charge your battery when you're nowhere near a power outlet – such as when on rural walking holidays.

These can be fairly cheap at around £15 for a 5,000mAh unit (such as this Energizer power bank from www.snipca.com/33999). This should be enough to charge new phones and tablets twice over. However, a 5,000mAh power bank would only top up the 11in iPad Pro to around 60 per cent, and the 12.9in version to just over 50 per cent.

If you're heading off on a longer excursion, consider spending more on a higher-capacity power bank. These will be larger, but they'll also charge your devices several times over before they need to be charged themselves.



The Zendure A6PD may be expensive (£84 from Amazon at www.snipca.com/34000, pictured), but its 20,000mAh capacity means it can even recharge a laptop. If you're going on a remote holiday, it could be the perfect solution – letting you charge your phone, tablet and camera when you're out on your day trip. Simply recharge the power bank overnight before your next outing the following day.

Fast charging with a USB condom

You can charge any phone or tablet using a USB condom, as long as it uses a matching USB connection. However, phones with fast-charging features, like those with Samsung Adaptive Fast Charging or Motorola TurboPower, will take longer than normal to charge when using the PortaPow data blocker. That's because these features rely on a technology called 'active data transfer' to communicate with the charging source. Because these fast-charging features can't use active data transfer with a data blocker, they reduce the charging rate to avoid causing damage.

PortaPow also makes a data blocker that includes a SmartCharge chip (£6 from Amazon at www.snipca.com/33994). This switches the blocker's charging profile between Apple, Samsung and Universal standards, and passes a 2.4-amp current to allow faster charging. **ca**

VIEW & SHARE PHOTOS ON YOUR PC

Microsoft Photos

www.snipca.com/34074



If you don't like the thought of uploading your photos to an online service, there are plenty of free offline tools that will help you sift through them. However, before downloading a new tool, it's worth taking a closer look at the one that comes pre-installed within Windows: the Photos app (if you've previously uninstalled it, you can download it from the Microsoft Store using the link above).

To open the Photos app, click Start, type **photos**, then press Enter. Next, tell it where your photo library is located by clicking 'Add a folder'.

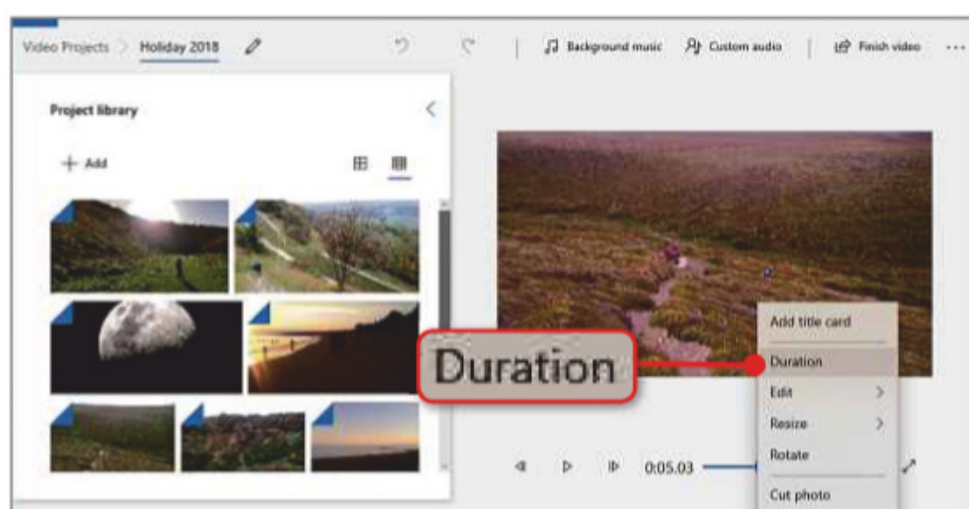
Once you've done this, Photos will start indexing your library – this can take a while (our library of just over 5,000 photos took an hour to index). When complete, you can then search your library based on when and where photos were taken and what's in them (Microsoft uses artificial intelligence to recognise objects). Just type your search query in the box at the top of the window.

Photos also lets you quickly create impressive slideshows, which is great if you want to enthrall dinner-party guests with your latest holiday snaps (or perhaps nudge them to leave). Hover over the photos you want to include, ticking the box (top-right) of each.

If you're in a hurry, click 'New video' in the top toolbar, then 'Automatic video' and the app will produce a slideshow complete with transitions, zoom effects and some (rather cheesy) background music. If you're not impressed, just click 'Remix it for me' and Photos will have another go. Once you're happy, click 'Finish video', then Export to save the video slideshow as an **MP4** file, ready to share with others or play on a big screen (such as your smart TV – see our Cover Feature on p50).

Alternatively, if you want to make changes, click 'Edit video'. In this screen,

Microsoft's Photos app creates impressive slideshows, which you can then tweak



you can change the music, filters, overlaid text and more. Right-click a photo in the timeline to reveal further options, including changing how long each appears for (see screenshot below).

FastStone Image Viewer

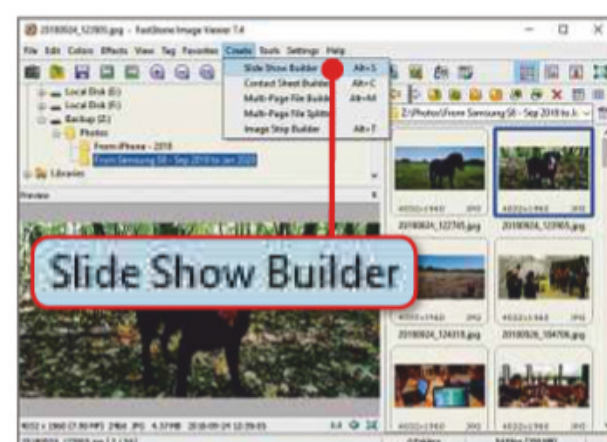
www.snipca.com/34075



It doesn't have the same polished feel as Microsoft Photos, but FastStone Image Viewer has plenty of features. It's split into three

panes: folders (top-left), thumbnails (right) and a larger preview window (bottom-left). It lets you browse your photos and provides editing tools (crop, resize, lighting adjustments and more), along with batch-editing tools that let you apply changes to a selection of photos (open the Tools menu to view these).

We recommend setting your photo library as the default folder, so it appears when you launch the program. To do this, press F12 to open the Settings window,



FastStone Image Viewer isn't short of features and lets you build slideshows

Organise your photos

PART 3

View, create and share

With your photos in one place and in good order, it's time to do the most important thing: enjoy them. In the final part of this series, **Will Stapley** reveals the best offline and online tools to view and share photos

click the box next to Startup Folder, select Specified, then, in the box to the right, navigate to your photo library folder.

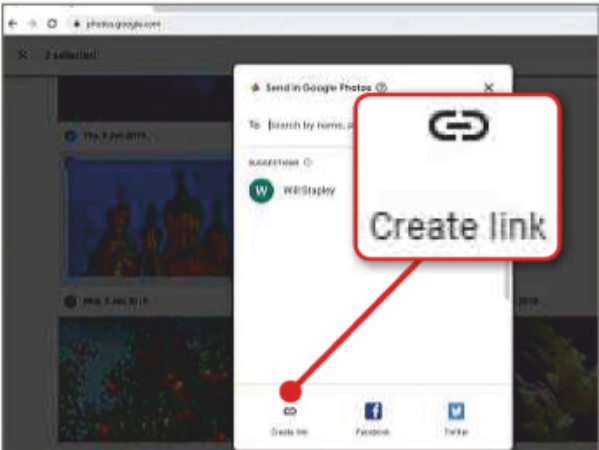
If you want to create a slideshow to share with others, select the photos to include (hold Ctrl while clicking each one), then click Create at the top, followed by Slide Show Builder (see screenshot, below on opposite page). You can then use the various controls to change the duration of the slideshow, set it to loop and more. You can also add music, but unlike the Photos app, you'll need to supply your own MP3 tracks (tick the Music box, then the three dots to the right of it). Click Create when you're done, and the slideshow will be compiled into an EXE file. To view your slideshow, simply double-click this file.

VIEW & SHARE PHOTOS ONLINE

Google Photos

www.google.com/photos

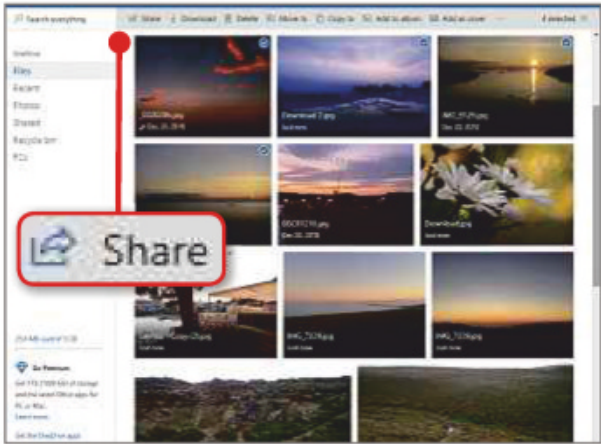
If you want to access your photos online, Google Photos is the best option. It lets you access all your photos on any device (your phone, tablet, laptop – just as long as you're signed into the same Google account). Your photo library won't be downloaded to each device you sign into. Instead, it'll show you thumbnails of each. Only when you click a thumbnail will the file photo be downloaded. The only caveat is that the device you're using must be connected to



Click 'Create link' to share photos with people who don't have a Google account

the internet to download photos. Google Photos has a hugely impressive search tool. Search for beach july 2019 france and it will show you all seaside photos taken in France in July last year (like Microsoft's Photos app this uses a combination of artificial intelligence and metadata, but it's much better). What makes Google Photos stand out, however, is that it lets you upload as many photos as you like, so you can store a copy of your entire library online. The only stipulation is that you select the High quality setting, which uses compression to reduce the size of photos. If compression concerns you, take comfort in the fact that it's almost impossible to tell the difference between the compressed and original versions. And should you ever want the originals, you'll still have them on your PC.

To upload your photo library, it's best to



OneDrive lets you quickly share your favourite photos with other people

use Google's 'Backup and Sync' tool (www.snipca.com/34076), which we covered in Part 1 of this series (see Issue 572, page 62). If you want to share photos with other people, just hover over each one and tick the box (top-left), then click the Share button (three circles joined by two lines, top-right) and type their email addresses. Bear in mind you can only share photos in this way with people who have Google accounts. To share with someone who doesn't, select 'Create link' at the bottom (see screenshot above left), then email them the link. If you want to check which photos you've shared, click the Sharing button on the left. To stop sharing photos with someone, click the three vertical dots to the right of their name, then select Leave.

Microsoft OneDrive

<https://onedrive.live.com>

Like the Microsoft Photos app, OneDrive comes pre-installed with Windows 10. It lets you view and share your photos from any device, and doesn't clutter the screen with endless options, making it easy to browse your library. Sharing photos is similarly easy. Just tick the photo you want to share, then click Share (see screenshot above), followed by 'Invite people' and enter the relevant email addresses.

The free OneDrive service only gives you 5GB of storage. This equates to around 1,000 photos, so it's very unlikely to hold your entire photo library. However, if you subscribe to Office 365, you get 1TB of OneDrive storage, which will hold over 200,000 photos.

OneDrive does, however, have a drawback: it only uploads files from your PC. So if you've got your photo library on a separate drive, you'll need to move it to either your Windows account's Pictures folder or your OneDrive folder. If you don't fancy doing that, we recommend using Google Photos instead. **ca**

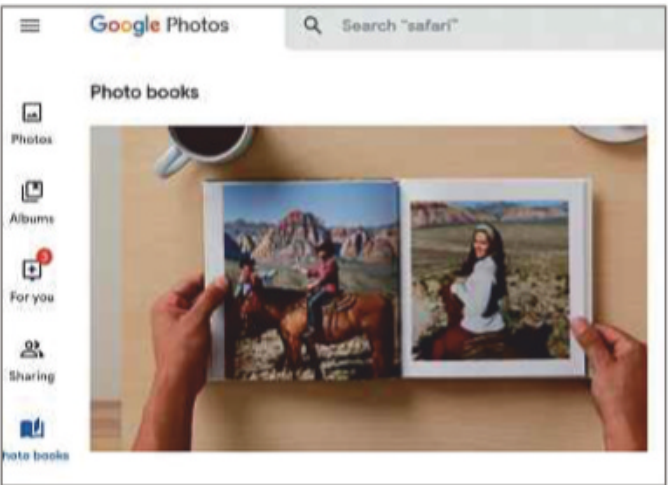
Share your photos the old-fashioned way

One downside to digital photos is that they tend to stay just that: digital. If you fondly remember passing around treasured family albums, why not turn your favourite snaps into photo books? They don't have the same feel as traditional photo albums, but they're still a great way to show off your favourite photos or to use as gifts to friends and family (plus you won't have to worry about the photos falling out

when the kids get hold of them). Google Photos (pictured) has a built-in tool that lets you order a book containing selected photos. Simply click the 'Photo books' button on the left (or at the bottom of the app), then choose which photos you want in it.

There are just two options: a 7in book with a soft cover for £11.99, and a 9in hardback book for £22.99. Each includes 20 pages, and you can add pages for 49p and 69p respectively (watch out for the delivery costs, though, which start at £4.99).

For something a little cheaper, try Snapfish's 6x4in soft cover book (www.snipca.com/34077), which includes 20 pages for £7.99, with delivery for just £2.99. Both services will warn you if any of your selected photos aren't of a high enough resolution to publish.



Problems Solved

Our experts solve all your tech problems

PROBLEM OF THE FORTNIGHT

What's causing my PC to freeze?

Q My problem has various computer geeks baffled. My two-year-old PC with a 3.79GHz AMD Ryzen 5 1600 six-core processor, 16GB RAM and Windows 10 often freezes for about 30 seconds then continues as though nothing had happened. It can occur at any time. For example, halfway through typing an email the cursor stops and there's nothing for it but to remain patient until the PC carries on again. I'm a fan of *Computeractive*, having taken the magazine since the first copy.

Chris Witts

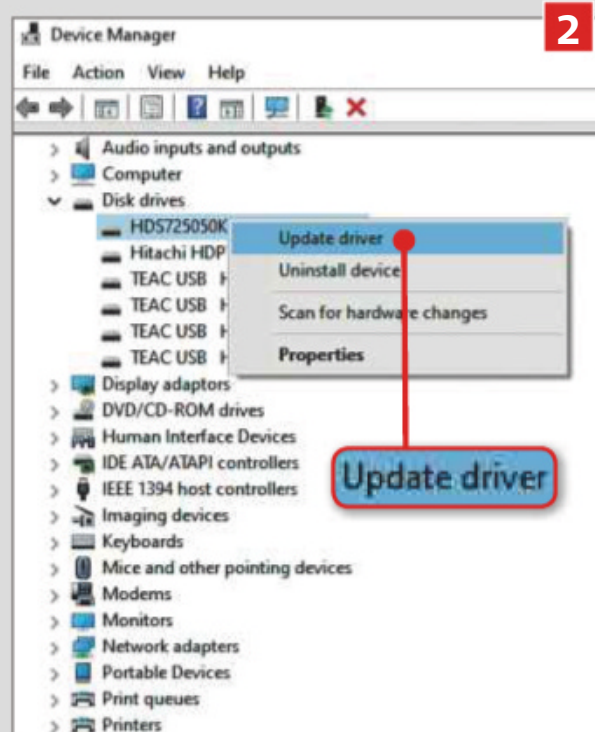
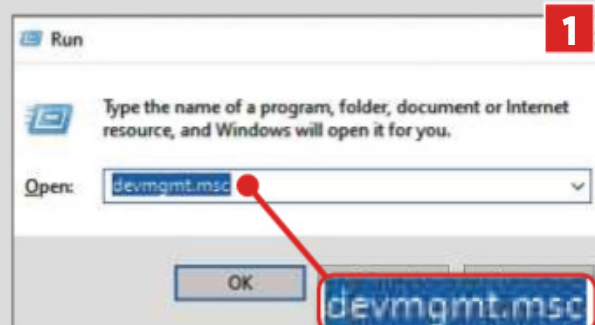
A It's always great to help such a loyal reader. If we had to wager on the single most likely cause then our money would be on the hard drive.

An ailing disk or flawed drivers can lead to precisely this problem. This is because the PC relies on a response from the hard drive for almost everything it does, from opening cached web pages to auto-saving an email you might be writing. If the hard drive is on the way out, or its drivers are dodgy, frustrating freeze-ups are symptomatic. Windows 10 is pretty good at keeping everything up to date but, even so, in the first instance we'd suggest checking that your hard drive is being operated by the latest drivers.

You can do this in Device Manager. First press Windows key+R to open the Run box, then type `devmgmt.msc` (see screenshot 1) and press Enter. Next, in Device Manager, left-click the 'Disk drives' heading to expand the category and then right-click on your hard drive and choose 'Update driver' 2.

Now click 'Search automatically for updated driver software' 3 and follow the prompts.

Alternatively, you could look for the latest drivers on the manufacturer's support website. Then, either follow the maker's instructions, or repeat the



You can update your driver software (1-3) or run tests on your hard drive (4-5)

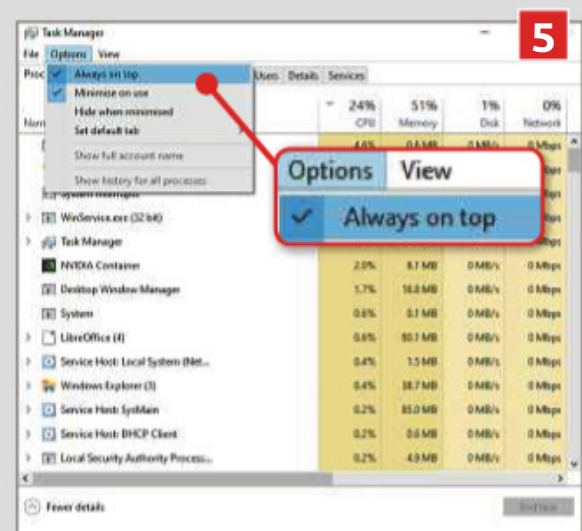
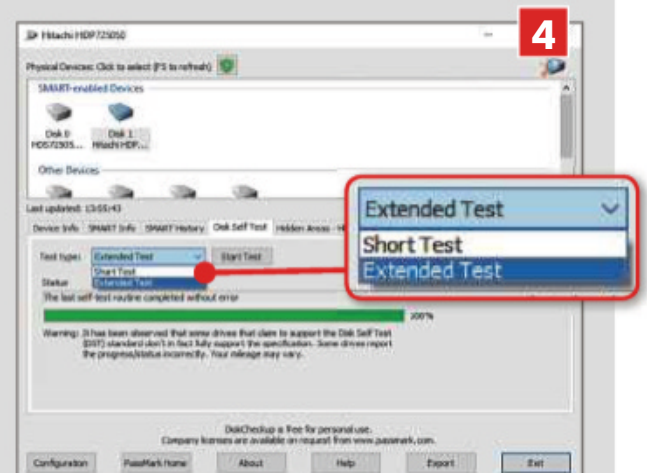
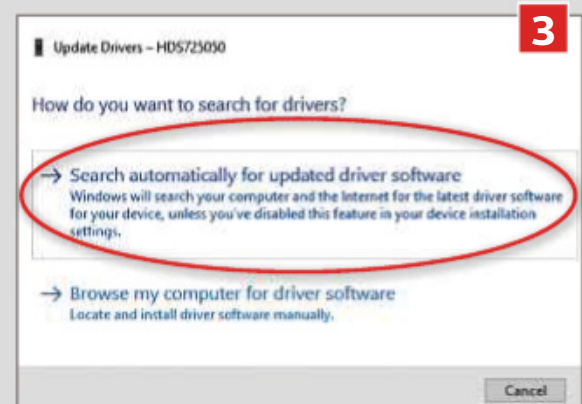
above steps but clicking 'Browse my computer for driver software' before navigating to the folder that contains the drivers downloaded from said website.

However, as noted, it's possible that the hard drive is on the way out. You'll need to use software to keep an eye on the drive to see if it's encountering regular problems reading or writing data.

PassMark DiskCheckup is a good free option, which you can download from www.snipca.com/33717. Fire it up then click Disk Self Test.

Next, open the 'Test type' dropdown menu and choose Extended Test 4. Now click the Start Test button then sit back and wait. Do this over several days or weeks, then click the SMART History tab to check the results.

If this endeavour turns up nothing then another idea would be to try Task



Manager for an insight into what might be causing these hold-ups. Launch it by holding down the Control (Ctrl) and Shift keys and then tapping Escape (Esc) – so Ctrl+Shift+Esc.

Next, to ensure that Task Manager will definitely be in view the next time a freeze strikes, open the Options menu and tick 'Always on top' 5.

Then, wait for your PC to freeze and glance at whatever entry or entries might be highlighted in red, as this colour indicates items that are using a lot of your PC's resources.

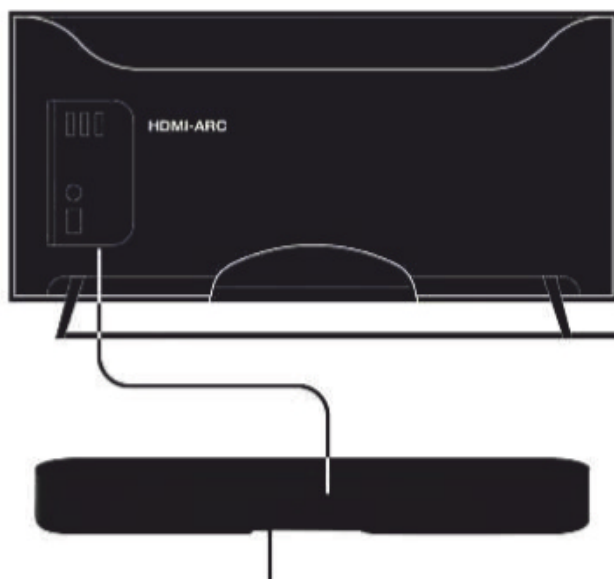
Can I control my smart TV's speech volume?

Q A few years ago I bought a Panasonic TX-L32E5B smart TV. It's very nice but, as I've recently become hard-of-hearing, I'm more aware of how loud the background music is in so many TV programmes. During a favourite archaeology show the studio shots without music are perfectly clear, but I find it difficult to determine the speech. Is this a fault on my television? It seems obvious that the speech and music are recorded separately, so is it possible to have the TV distinguish these two sources, and to turn one off? I'm an avid reader, incidentally!

Dan Jones

A Thanks, Dan. It's not a fault. The speakers that are built into TVs – even the modern 'smart' variety – tend to range from poor to terrible, with the diminutive noise-makers squashed into a typical 32-inch set like yours sitting closer to the terrible end of the scale.

Part of the reason for this is that many TV manufacturers expect shoppers to buy a separate sound system, such as a



The Audio Return Channel can connect to a soundbar or surround system for better sound

soundbar or a multi-speaker, surround-sound setup. While such systems differ greatly in quality and capabilities, a decent model would certainly deliver better all-round clarity – and costlier kits will offer fine-tune controls over their audio output.

The smartphone app used to control Sonos soundbars, for example, has both Night Sound and Speech Enhancement

modes. With both enabled, loud sounds are reduced and dialogue is made more prominent in the overall 'soundscape'.

Your particular television offers both optical audio output and an **HDMI Audio Return Channel (ARC)**, so you can connect it easily to pretty much any modern soundbar or surround system (pictured left).

However, before spending any money we'd advise experimenting with the TV's own audio controls. According to your set's manual, which we found at www.snipca.com/33722, there are a bunch of settings that might help. On your remote, at the top left, press the Menu button. Now use the arrow buttons and OK to select Sound followed by Mode, and then choose Speech – as this promises to enhance the spoken word.

See how things sound now. If it's not much better then summon the Sound menu once more and select in turn Bass and Treble, using the arrow keys to reduce the first and increase the latter. As well, you can further experiment with the levels under the Equaliser heading.

Can I remedy poor mobile reception?

Q I have a Motorola One phone on the Three network, but I get no reception in my house. I have invited friends in who are on other networks and they have the same problem. I have aluminium windows with leaded lights. Could this be the problem? Do I live in a **Faraday cage**? I do not want to take calls in my garden!

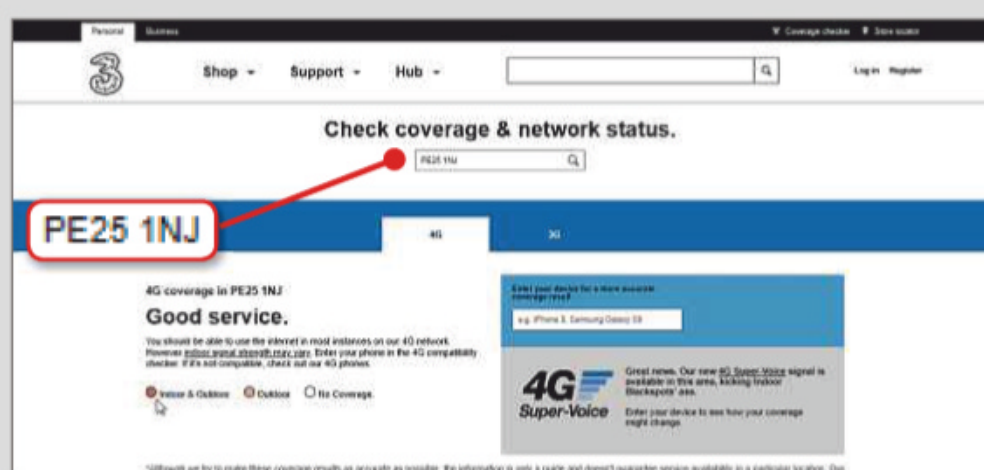
John Scoote

A Many things affect mobile reception, so aspects of your house might have an impact. Equally, it could just be that you're on the edge of a signal area, and therefore heading indoors means your phone can no longer maintain communications with the nearest mast.

Now, knowing that users of other networks suffer the same problem in your house does tend to point more

towards the building's construction rather than the signal strength. However, if you're in a village, say, then it could be that all networks struggle to reach your spot.

In the first instance, we'd suggest tapping your postcode into Three's coverage-checker – at www.snipca.com/33872 – because this will give you a good idea what strength of signal you can expect (see screenshot above).



Three's coverage-checker will give a good idea of signal strength in your area

If it shows good expected indoor reception then give Three's customer services a call to explain the situation, by dialling 333 on your phone.

The company offers a free gadget called Home Signal (www.snipca.com/33874). This acts as an indoor **4G** mini mast for your mobile phone.

The device itself then piggybacks on your domestic broadband connection to carry calls to the Three network.

Can I attach Ikea speakers to my amp?

Q The Ikea Symfonisk bookshelf speaker (pictured below) caught my eye, as it is well-priced and has had good reviews, including in *Computeractive* (Issue 564, page 29). Would it be possible to use two of them as independent hidden rear speakers in our lounge? They seem to be tied to Sonos gear but I would want them to work with an Onkyo amp, through which my Windows 10 PC plays. I cannot easily see how to drive them individually if they cannot be connected by wire to the individual rear left and right posts on the amp.

Peter Skillern

A We're afraid the answer is a straightforward no. The Symfonisk speaker range (there's a matching lamp, too) is designed for use over Wi-Fi or an Ethernet cable, with control provided by the Sonos app on an iOS, iPadOS or Android device. There are no auxiliary sockets for connecting them to a traditional amp.

The Sonos connection arises because it built the audio side of these Ikea speakers. The firm is at the forefront of the wireless speaker market, so it's not interested in promoting traditional wired setups.



Why can't I activate Office 2010?

Q I've used Microsoft Office Outlook 2010 for years. However, I recently had to replace my motherboard and whilst the Windows 7 re-install and activation was completely successful, I cannot activate Outlook 2010 – getting a message that tells me my **product key** has already been activated the maximum number of times! It advises me to check the terms for the details. Well, I have looked and the only restriction is that it can only be installed on a single machine, which it is. What should I do?

Ray Jennings

A As we've noted many times over the years, Microsoft licences are enormously complex. Moreover, depending on how you first came by the software, there can be significant

variations in what is and isn't allowed.

However, with a retail version of Outlook 2010 what really matters is that you can only use it on one PC at any one time.

So, we think you're bang on with your assessment: you should be able to activate this software again on your PC. But yes, because of the new motherboard, Microsoft's servers are concluding that it's a different machine.

The solution is to call Microsoft's telephone-activation line (see screenshot below). It doesn't shout about it but you'll find details at www.snipca.com/33880. The UK number is 0800 018 8354.

Incidentally, the trick to reaching a human who can actually help you is to go through the motions of activating and then, if it fails, stay quiet until a Microsoft staff member says hello.

Tip: If you still can't activate Office, call the activation number, but don't enter anything or say anything. You'll be transferred to someone who can help you.

Activate Office 2010 on a different or restored computer

Your Office 2010 license allows you to reinstall Office on the same computer, and some licenses allow you to activate Office on more than one computer. **But if you try activating Office and you get a message that you have installed it too many times, use the telephone option in the Activation Wizard to contact a support technician.** To learn more about what the license terms allow, read the Microsoft Software License Terms for your Office product.

What happens if you don't activate Office 2010

If you don't activate your software, eventually Office 2010 switches to Reduced Functionality mode where it lets you open files to view them but not edit them. You can still activate by going to **File > Help > Activate Product Key**. In the Activation Wizard, choose the option for activating by telephone, and when you call the activation number, but do not enter anything or say anything. You'll be transferred to someone who can help you.

See Also

Activate a volume edition of Office

Got a message saying you've installed Office too many times? Try the telephone-activation line

Q: Why does Ethernet kill my Wi-Fi?

A: Issue 564, page 68 – find it on our 2019 Back Issue CD

Buy it from
www.snipca.com/33711



Why can't I move apps to microSD card?

Q My 2014-era Moto G phone is dragging its heels in many apps. It was reporting low storage, which I assumed to be the problem. I installed a 32GB **microSD card** and moved some apps on to this but I find I cannot move other apps. I've deleted several apps to keep the phone operable. Neither Motorola nor Google's websites offer much help. Is there a way around this? Am I doing something wrong or should I just move on and buy a newer phone?

John Banner

A Unfortunately, not all Android apps can be moved to or even installed on a microSD card – that's just how some apps are designed. This will go for most if not all apps that originally came with the phone, but also plenty of others from third-party developers. There's no solution, other than hoping the developers make later versions compatible with this facility.

However, the inescapable fact is that in an industry that moves incredibly rapidly you're now using a phone that's six years old and counting.

Moreover, it was a pretty basic model even back in its heyday. The problem isn't really storage but that you're running ever-newer apps on a phone that will never get any faster.

A **factory reset** would certainly see the phone return to its original performance, but only for the pre-installed apps – and at the cost of your existing setup and data. Moreover, as soon as you install anything new, or update those original apps, the problem will recur.

If you're prepared for that and wish to press ahead then tap Settings followed by 'Backup & reset', and then Factory Data Reset. Now confirm by tapping Reset Phone.

Realistically, though, it might be time to accept that your ageing phone is no longer up to your expectations.



New or updated apps may affect the performance of a 2014-era Moto G phone

How do I play my Video CDs?

Q I have acquired some VCDs that contain rare concert footage, but I don't know how to play them. These were produced in the US, if that's relevant. What are these? My normal DVD player can't read them, and nor can the drive in my PC. Can you recommend a solution so that I can view the footage?

Martin Brown

A VCD stands for 'Video CD'. This is a blast-from-the-past disc format that's probably best considered as something of a stopgap between the demise of good-old VHS videotapes and the arrival of DVDs. All this was largely played out by the end of the 1990s, consigning VCDs to being a technological afterthought.

VCD playback is still supported by Windows Media Player (WMP), if you have that app enabled in Windows 10. If not, click Start, then type **features** and click 'Turn Windows features on or off'. Now click to expand the Media Features heading and then tick the Windows



Use Windows Media Player (left) or VLC (below) to play VCDs

Media Player box (see screenshot **1**). Next, click OK and restart your PC. Finally, launch Windows Media Player from the Start button, pop your VCD into your PC's drive and then click Play.

Alternatively, download and install VLC media player **2**, from www.videolan.org. This popular free program plays almost any video or disc format. Many people prefer to use it over WMP, *Computeractive* staff included.



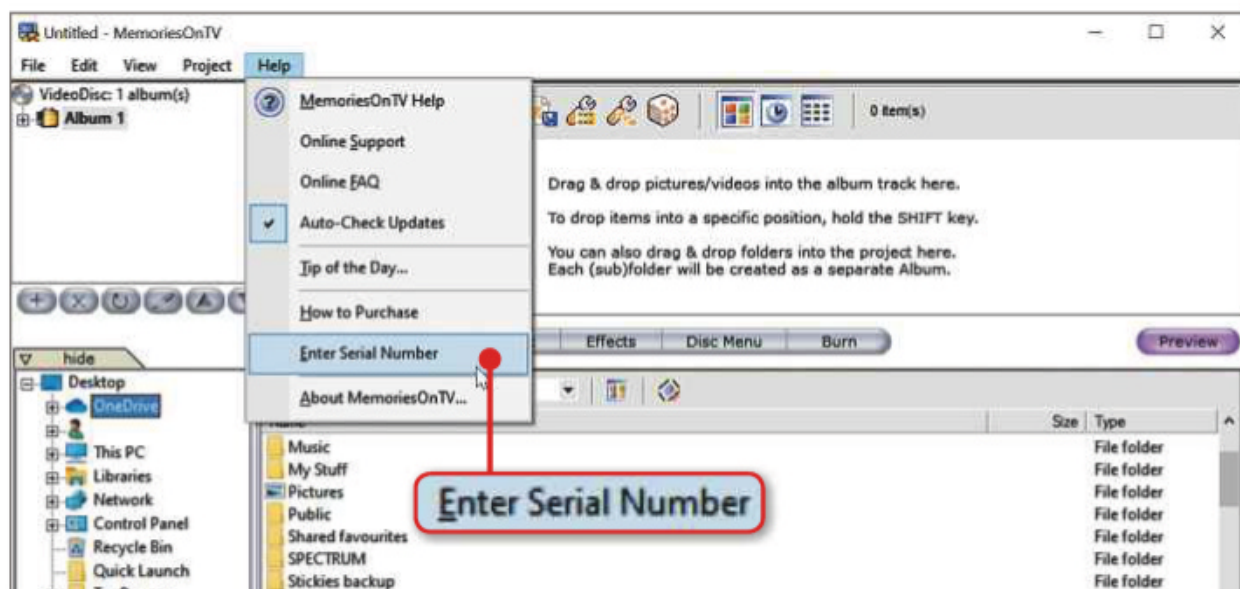
Problems Solved

Can I activate this old program?

Q My computer died, leading to the reinstallation of the operating system. Prior to that, I had for years used a program called MemoriesOnTV to make slideshows. Due to said failure, I've lost the serial number needed to remove the 'evaluation' digital watermark from MemoriesOnTV. CodeJam, from whom I purchased the program, is no longer in business – but there is a residual website where the tool can still be downloaded. However, only the evaluation version is available, with no option to purchase or recover the serial number. I know there are many slideshow tools available but I really understand this one and would dearly love to continue using it. Is there any way this problem can be resolved?

Warwick Adams

A We're afraid that there's no easy way to fix this problem, though you certainly have a legitimate



If the serial number for MemoriesOnTV is lost, it may be worth emailing its former backers

case for unlocking the software. There are 'keygen' tools that promise to crack the software in order to generate working keys, but we wouldn't trust any of these.

One slim hope is to be found in the License.txt file that's installed along with the program, as it contains an email address for the company – **info@codejam.com**.

It's obvious that the company has been dormant for years, but someone is



evidently still paying for the domain name and hosting.

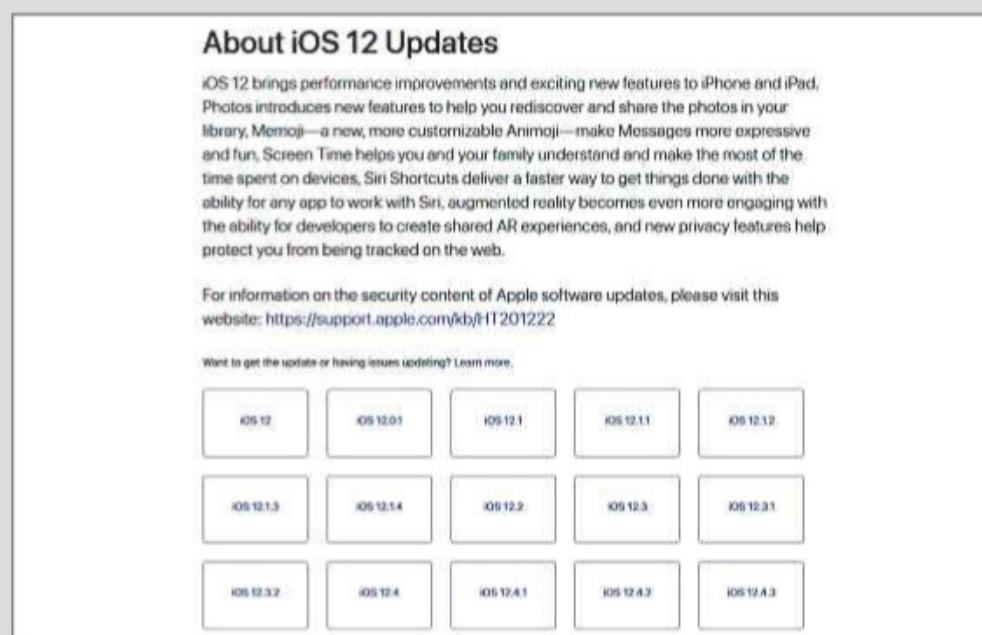
The whole thing appears to be a cottage industry, so you've little to lose by firing off a speculative email. It might just land in the inbox of a kind-hearted person that can help out.

Are my old iPads insecure?

Q Between us, our household has four iPads – none of which are supported by the new iPadOS software. I currently use one of these for banking and buying but, from comments in your magazine, I understand that this will no longer be safe. My question is whether using my iPhone 5s would be a safer way to access these accounts? If not, would using a 'secure' tool, such as Chrome's Incognito mode, be a safe alternative when using my iPads?

John Sanderson

A Let's start with Chrome's Incognito mode. This, and similar features in other browsers, is designed to provide privacy rather than security – so that stuff you do online isn't saved 'locally', so can't be found by others that might use your computer or tablet. But if you're using Incognito mode on a device running an insecure operating system, then it offers no protection against that inherent insecurity. So,



Apple provides a list of all its iOS 12 updates

wipe that thought from your mind.

However, it's important to remain level-headed here. Older iPads that do not support iPadOS will only ever become less secure, but that doesn't mean that the devices are unsupported. Yes, Apple has written off the earliest iPad models, but the last major iOS version – iOS 12 – received a security update as recently as December 2019 (specifically to version 12.4.4, www.snipca.com/33837).

Apple might issue more iOS 12 security updates if new flaws are found.

We don't know your iPad models but even the original iPad Air – released back in 2013 – will run iOS 12.4.4, so your devices may well still be safe to use. The same goes for your iPhone 5s, incidentally. You'll find Apple's full list of iOS 12 updates, and the supported devices, at www.snipca.com/33838 (see screenshot).



WHAT'S THE DIFFERENCE BETWEEN...

SD cards and TF cards?

Q

I was lucky enough to receive a quadcopter drone from my wife as a present. This has a built-in camera that can stream video live to my Android phone, where it's duly saved to my phone's own memory. However, the instruction manual – written in what I can only describe as finest 'Chinglish' – suggests that for higher resolutions I need to insert a 'TF card' directly into the drone. I've found the card slot and, to my eye, it looks like a **microSD card** hole. Indeed, I took a punt and inserted an SD card and the drone duly recorded to it. So, I don't seem to have a problem – but I'm wondering what the difference is between an SD card and a TF card?

Barry Mottram

A

TF stands for TransFlash. This is a term we haven't heard for a while now. It was coined by SanDisk, which is one of three founder members of the SD Association (www.sdcard.org), the industry body that's responsible for the Secure Digital (SD)



These days there is no practical difference between a TransFlash and a Secure Digital card

flash-memory-card format. The SD card, and its smaller microSD sibling, are today the ubiquitous memory-card formats for mobile devices and digital cameras.

But that wasn't always the case. Back in the early 2000s, SanDisk concluded that the various competing memory-card formats of the day – including SD card – were too big for the beckoning mobile revolution. So, it came up with a smaller card format that it called TransFlash.

Brushing over a fair bit of commercial cut and thrust, the TF card format soon became known as the SD card – and the

TF name was left in the past. From a user's perspective, nowadays there's no practical difference: an SD card is a TF card. Evidently, though, there are still some old stick-in-the-mud companies that refuse to get on board with the modern reality. That fact, perhaps coupled with some ropery translation, explains why your drone's manual refers to a TF card, when more usefully it should tell you to use an SD card.

 Want to know the difference between technical terms? Email noproblem@computeractive.co.uk

How do I add totals in separate cells in Calc?

Q

I regularly follow your advice, so I'm currently trying LibreOffice. I find it a good alternative to Microsoft Office, but I'm struggling to find a way to add totals in separate cells in Calc. In Microsoft Excel it could be achieved by holding down Control (Ctrl) and clicking on the individual cells. I

have looked in the LibreOffice Help section, but without success. Any ideas?

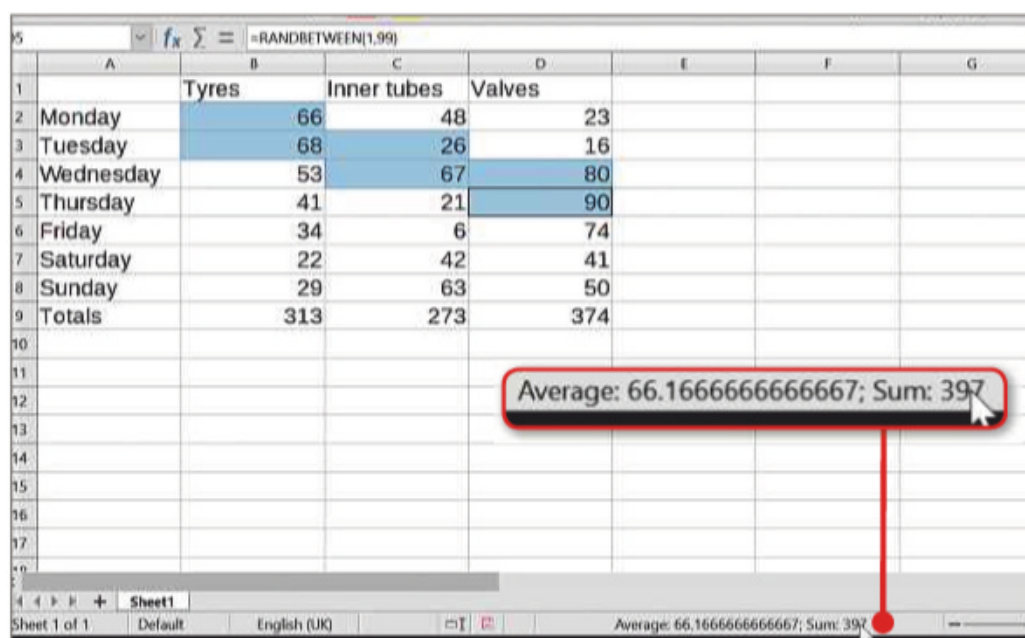
Barbara Batty

A

We're confused. Calc offers the same functionality as Excel. Moreover, it's executed using the same method and with the results

displayed in the same location in Calc. So, just hold down Ctrl, then in turn left-click on each relevant cell. Calc will display a running total of the sum near the bottom right (see screenshot).

Our guess is that you've inadvertently disabled the Status Bar, where this info is displayed. To fix this, just open the view menu, then click to tick Status Bar.



	A	B	C	D	E	F	G
1		Tyres	Inner tubes	Valves			
2	Monday	66	48	23			
3	Tuesday	68	26	16			
4	Wednesday	53	67	80			
5	Thursday	41	21	90			
6	Friday	34	6	74			
7	Saturday	22	42	41			
8	Sunday	29	63	50			
9	Totals	313	273	374			

Select the cells you want a running total for, then check the calculation sum

Next Issue

ONSALE
Weds
11 Mar

- How do I connect my dashcam to the cloud?
- How do I open HEIC files?
- Should I ditch my Windows 7 laptop?
- ...And many more

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Why can't I scan with Google Drive?

Q I really liked the idea of being able to scan documents using Google Drive, as described in Issue 570's In The Club (page 48). However, I can't get them to work. I've tried on both an iPhone and iPad with the latest iOS and iPadOS, and the Google Drive app was a fresh install. When I tap the '+' (plus) button I don't see any option to scan. What am I doing wrong?

Martin Parton

A You're not doing anything wrong. We were using the Android version of the app and, while we did provide a link to the iOS version, this doesn't have a Scan button. Instead, it has a 'Use camera' option. This is because it doesn't actually support the option to turn captured images into editable documents. It's a strange omission, because iPhones and iPads are no less capable of performing this job as Android devices, but perhaps Google just wants to drive people towards its own platform.

So, if you just want to capture and save images, that's the button to tap. However, if you want to go on to create editable documents, currently at least, the Google Drive app for Apple devices won't help.

There are plenty of alternatives, though not too many free options. If you use Microsoft Office apps, the Office Lens app is ideal: it offers much the same functionality as Google Drive, in terms of recognising text in captured images and turning the results into editable Microsoft Office documents. It's a free download from www.snipca.com/33929.

To use it to capture a document, first tap Document, then aim your device at your document and tap the round snapshot button, then Done. Now tap the type of document you want – choose Word if you want editable text, for example (see screenshots above right). Finally, tap the new document to open it in the app or web version of Word.



In Office Lens, tap Document, then Word to turn images into editable documents



Can I get stock data in Excel 2019?

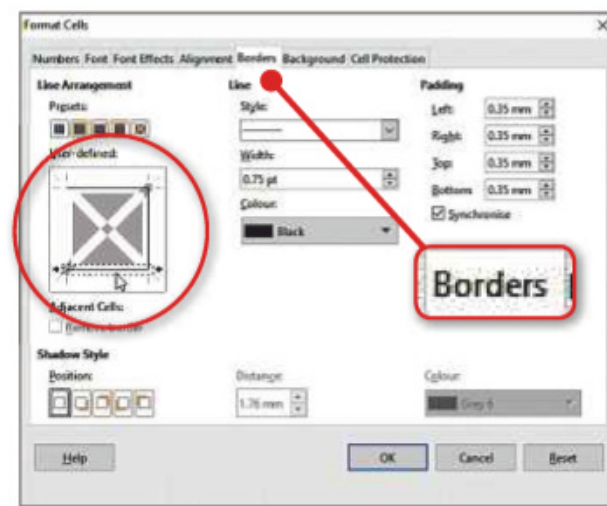
Q I really enjoyed Issue 566's How To feature on how to use Excel's live data feed to add stock prices to a spreadsheet. I currently use Excel 2016. What I would like to know is does this work with all versions of Excel 2019 or just the version included with an Office 365 subscription? I tend to buy the retail package, as it's a one-off payment. Really enjoy the magazine and appreciate more articles like this, please!

A S Smith

A This particular feature is restricted to Office 365 subscribers. Indeed, strictly speaking the version of Excel in Office 365 is called simply 'Excel' – Microsoft does not itself apply year suffixes to any of the apps included with an Office 365 subscription. So, Excel in Office 365 is just Excel, not Excel 2019.

Now, admittedly we did state 'Office 2019' in our introduction but that was a mental slip. So, no, you won't be able to make use of Microsoft's feature in the traditional Excel 2019, as the Stocks buttons don't exist in that edition.

However, while not as elegant, remember that you can still import live data into Excel 2019 (or even the 2016 or 2010 editions) by following the instructions in the 'Import live data in



In the Borders tab you can manage the borders of individual cells, but not grid lines

older versions of Excel' panel published as part of that same Issue 566 How To feature, on page 36.

Was your Calc advice off-grid?

Q In Issue 570's Problems Solved (page 65) you told Richard James, with reference to LibreOffice Calc, that the ability to add grid lines in a spreadsheet display was "deeply buried". Unless I've misunderstood, it is quite evident. If a block of cells is highlighted, the Format tab opened followed by the Cells option chosen then the Borders tab clicked (see screenshot above), one can do what one likes with grid lines – to one's heart's content. Perhaps I have misunderstood?

Martyn Hodgson

A Yes, we think you have misunderstood. Richard's specific request was to print grid lines for the whole sheet, not borders applied to selected cells. The grid lines are obviously visible on screen, because they're the very essence of the spreadsheet, but they are not printed: our solution explained how to make those invisible lines appear on the printed page also. So, grid lines and borders are different things.

However, the setting you've described – to add borders to one or more manually selected cells – is a useful tip and one that we're more than happy to pass on here.

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Jargon Buster

1080p High-definition video with 1920x1080 pixels.

3G/4G/5G Technologies that deliver faster mobile broadband.

4K Video with a resolution of at least 3840x2160 pixels.

Action cam A digital camera designed to record action while attached to a person's body or equipment.

Adware Unwanted adverts that come with software.

AMOLED Active-Matrix Organic Light-Emitting Diode. An alternative technology to LCD for creating flat-panel screens.

ARC A format for compressing files, used in the late 1980s and early 1990s.

Bandwidth A measure of how much data can be transferred through a connection at one time.

BIOS Basic Input-Output System. Software built into every PC that connects the vital components.

Buffering Downloading a certain amount of data before starting to play a video. Can cause delays to your streaming.

Cache A temporary space for storing information.

Client A program that acts as an interface between PC and server.

Cookie A small text file stored on your computer by a website.

Core Units on a processor that carry out program instructions.

Crowdfunding A process where a company gets the financing to launch a new product from prospective customers online.

Delta E A measurement that shows how the human eye perceives different colours.

DLNA Digital Living Network Alliance. A technology that enables devices such as TVs, network media players and NAS devices to communicate with each other and display media files.

DPI Scaling Items on a screen are made bigger or smaller to match the resolution.

Driver A file that tells Windows how to work with an external device.

E Ink Electrophoretic ink. A special type of ink used to display content in electronic devices.

EXE A program file designed to run in Windows. Has the file extension .exe.

f/17 Size of aperture. The lower the number, the wider the aperture.

Factory reset A software restore of an electronic device to its original system state.

Faraday cage A shield made of conducting material that blocks electromagnetic fields.

FAT32 An old system used for formatting hard drives, and still used for some portable drives.

Firmware Software stored on hardware to control its operation.

GEDCOM Short for Genealogical Data Communication. A file format used by genealogy programs to share data.

Gesture Finger movements on a screen that perform an action, such as pinching to zoom.

GPU Graphics Processor Unit. A chip designed to create 3D graphics.

Graphics card A component in a computer that produces the image shown on the monitor.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

HTML Hypertext Markup Language. The language used to write most web pages.

Internet of things Umbrella term for electronic devices that are connected to the web.

IP address Internet Protocol address. A unique set of numbers used to identify computers and websites on the internet.

IPS A screen technology that provides wider viewing angles and better, more accurate colours.

IPX8 An official industry rating classifying the level of protection in a product against outside intrusion. IPX8 means a device is suitable for continual submersion in water.

Keylogging Recording everything someone types.

LCD Liquid-crystal display. The technology used to create almost all flatscreen monitors.

Macro camera Lets you take sharp, detailed, close-up photos of small objects.

Metadata A set of data that gives information about a file.

MicroSD card A small type of memory card.

MicroUSB A miniature version of USB, often found on smartphones, tablets and portable hard drives.

MP3 A type of digital audio file often used on music players.

MP4 A type of digital video file often used for portable players.

mWh Megawatt hour. Equal to 1,000 kilowatts of electricity used continuously for one hour.

NFC Near-field communication. A technology that allows two devices to communicate by being touched together or placed near to each other.

NTFS New Technology File System. A file system used by all recent versions of Windows.

Open source Software that can be modified by anyone.

Optical stabilisation A mechanism built into digital cameras that compensates for any shaking or vibrations.

Picture-in-picture Shows video in a small moveable screen while you browse the web or watch TV.

Plain text Text in a document that doesn't contain any formatting, such as bold characters and italics.

Plug-in A small program that adds extra features to software.

Product key A unique serial number that must be typed in by the user before a program will launch for the first time.

PUP Potentially unwanted program. A program that may not be desired, despite the user consenting to it being downloaded.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on.

Ransomware Malware run by hackers who lock files on your PC and demand a payment to release them.

Read speed How long it takes a hard drive to 'read' data, and respond to it.

Recovery mode A part of Windows that appears when you can't boot your PC, offering repair tools.

Refurbished A second-hand device that has been repaired by its manufacturer so that it can be resold and reused.

sRGB A standard RGB colour space for use on monitors.

SSD Solid-state drive. Storage that uses no moving parts.

System restore point Collection of system files stored on a given date and time to which Windows can revert if a problem occurs.

Thunderbolt A very fast port for connecting external storage to a PC.

Timestamp The time which an event is recorded by a computer.

USB 2.0/3.0/3.1 Faster successors to USB.

USB-C A new connector that's reversible.

Vega 8 Radeon's built-in graphics card for laptops.

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 **Know How**

Feeling all fingers and thumbs when he types on his laptop, **Daniel Booth** tries to...

Learn advanced touchpad gestures

I'm one of those annoying people that sits on trains tap-tap-tapping loudly on their laptop, disturbing people trying to skim-read that morning's *Metro*. I've tried tapping more softly, but my fingers are like pneumatic road drills. If you've sat next to me over the past few years, please accept my apologies.

When my laptop goes quiet, it's usually because I'm attempting to do something with its touchpad: right-click a browser tab, perhaps, or highlight a block of text. The problem with this is that my touchpad rarely does what I want it to. Copying and pasting text somehow ends up opening 15 websites; scrolling down is more a case of screwing up.

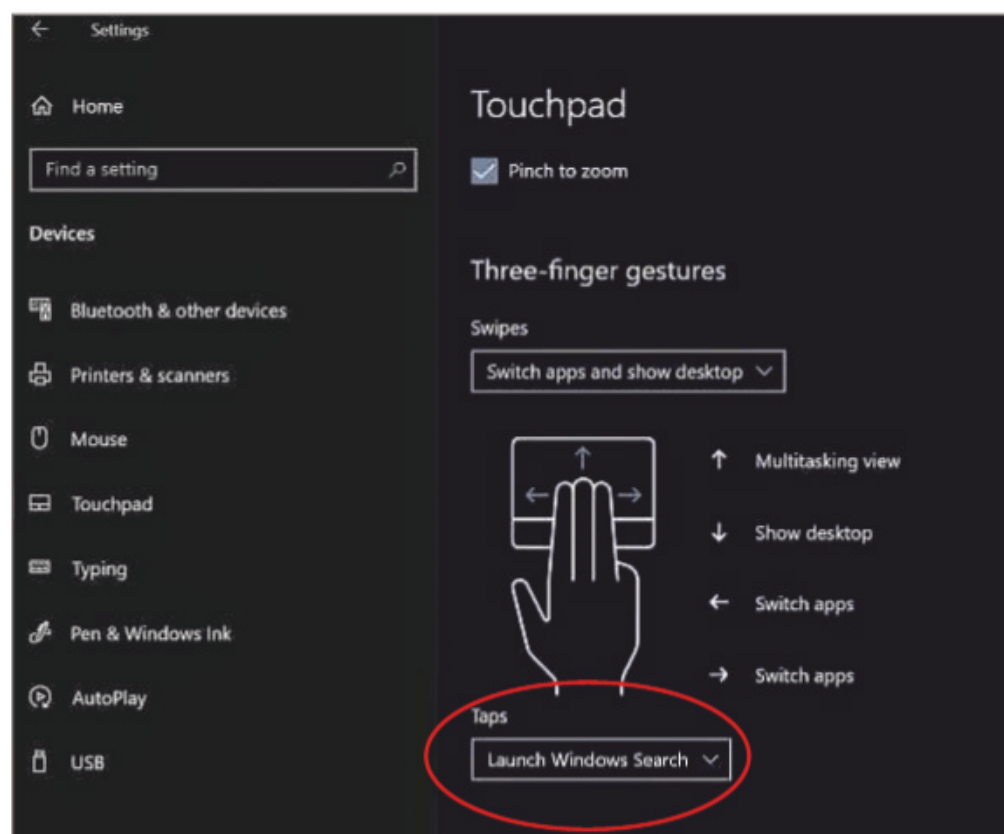
“

To perform these gestures, surely you'd need fingers as dexterous as Ted Rogers in his 3-2-1 prime

”

The biggest irony is that my laptop has a 'precision' touchpad. Introduced with Windows 8.1, these are supposed to let you perform advanced tasks with your fingers as you tap-dance across your touchpad. These finger movements are known as 'gestures'. This always struck me as an unwise name, given the particular one- or two-finger gestures you're likely to give a laptop that doesn't do what it's supposed to (not that I'd do this in public, of course).

Not all laptops have precision touchpads. Check if yours does by opening Settings (press Windows+I), then clicking Devices followed by Touchpad: you'll see



Daniel's puttin' on his top hat, tyin' up his white tie, openin' Windows Search

confirmation at the top. As I said, mine does, but it feels like the level of precision you get chucking a dart wearing boxing gloves, blindfolded, while standing on a beach ball.

I wondered if I could improve my touchpad technique by learning more gestures. I knew the basic, instinctive actions like bringing up the right-click (context) menu by clicking the bottom-right of the touchpad, and pinching to zoom.

But scroll down the touchpad settings page and you'll see more gestures, first for three fingers then, implausibly, for four. I was sceptical. Surely to perform these, you'd need fingers as dexterous as Ted Rogers in his 3-2-1 prime (for those under 40, watch this video: www.snipca.com/34088).

What these multi-finger gestures do depends on what you select in the Swipes and Taps dropdown menus. So if in the former you choose 'Switch apps and show desktop', swiping left and right moves you between open programs. Select 'Change audio and volume' in the menu and you can swipe your touchpad to make sound louder or quieter, and skip tracks.

That's the theory, at least. In reality, it

worked only half the time. I tried different speeds and pressures, but it didn't help. I thought I might need to update the touchpad's drivers, so pressed Windows key+X to open the Quick Access menu, then clicked Device Manager, followed by 'Mice and other pointing devices'. Windows calls my touchpad a 'HID-compliant mouse' (HID stands for 'human interface device'), so I clicked that, followed by the Driver tab, Update Driver, then searched my PC and the web for new drivers. Nothing. Zilch. The only conclusion I can reach is that my fingers aren't made for swiping.

I briefly considered throwing my laptop in the Dusty Bin (under 40? Again, watch the aforementioned video). But then I tried tapping with more than one finger, and it worked beautifully. I set the options so a three-finger tap opens Windows Search (see screenshot), and four fingers opens the Action Centre. You can also make taps play and pause video, and act as a middle mouse button. Before long I was tapping like Fred and Ginger. And there's no excuse for not knowing who *they* are, whatever your age.



Need help getting to grips with more touchpad gestures?

Let us know: noproblem@computeractive.co.uk



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