



**GET TRI-BAND
WI-FI NOW!**

Keep ALL your devices
super-fast **p35**

**RING THIS NUMBER
TO CHECK SCAMS**

But be careful! **page 9**

ISSUE 617 | 20 OCT – 2 NOV 2021

Computer **active**

What a brolly good idea! **p49**

Learn something new in every issue

WINDOWS

11 

The first **FIVE**
changes you
should make

Turn to **page 38**

ERASE YOURSELF FROM Google

p50

How can I delete my data from...



How can I delete my data from... **Search**

How can I delete my data from... **Gmail**

How can I delete my data from... **Drive**

How can I delete my data from... **Maps**

How can I delete my data from... **YouTube**

How can I delete my data from... **Street View**

**DELETE
PHOTOS
TOO!**



PLUS

**DON'T BUY THE
WRONG KEYBOARD** **p60**

STOP USING 2FA

Ditch those annoying **phone texts**
for easier and safer methods **page 62**



From the Editor

History's more famous Daniel Booths include an American drag queen called Sweetie and an 18th-century Governor of the Bank of England (shame those two never met). They help to push me off Google's first page of search results. I'm there on page two though, linked to some interviews I've given as editor of this magazine.

I'm happy with this level of fame. I'd hate to be plastered all over Google, any embarrassing exploits exposed for the world to see. There are ways to remove yourself, as Robert Irvine

explains in our Cover Feature, but even if you do that you still have to erase your Facebook profile from search results, not to mention any photos and videos. Robert reveals how to do all this too.

My relationship with Google is simple: I want to use it without it using me. It's why I tell Google Maps to delete my location history every three months. Why does it need to know I spent a sunny weekend in Swanage in June?

Daniel Booth
editor@computeractive.co.uk

EDITORIAL

Group Editor Daniel Booth
Deputy Editor Robert Irvine
Production Editor Graham Brown
Art Editor Katie Peat
Contributors Dinah Greek, Jonathan Parkyn, Nick Peers, Nik Rawlinson, Andy Shaw, Wayne Williams

ADVERTISING

Group Advertising Director Andrea Mason
Deputy Advertising Manager Rebecca New

MARKETING AND CIRCULATION

Subscriptions Charline Kuehn
For subscription enquiries ring 0330 333 9493

PRODUCTION

Head of Production
Stephen Catherall
Senior Production Manager
Lawrence Brookes

MANAGEMENT

Managing Director Dharmesh Mistry
MD of Advertising Julian Lloyd-Evans
Commercial and Retail Director David Barker
Chief Executive James Tye
Company Founder Felix Dennis

BRAND USAGE AND REPRINTS

Companies can obtain a licence to use approved quotations from articles, the Computeractive logo and Buy It! logo. Reprints of articles are also available.

Please contact Simon Flavin for more information and rates

Email: simon_flavin@dennis.co.uk
Requests to use quotations from articles will need to be approved by the editor. Please send requests to: editor@computeractive.co.uk

OVERSEAS LICENSING

Computeractive is available for international licensing. Contact Carlotta Serantoni at carlotta_serantoni@dennis.co.uk or +44 0203 890 3998

ONWARD RESALE

This publication may not be resold or otherwise distributed, whether at, below or above face value. Nor can this publication be advertised for sale, transfer or distribution.

PERMISSIONS

Material may not be reproduced in any form without the written consent of the publisher. Please address such requests to Dharmesh Mistry, Dennis Publishing, 31-32 Alfred Place, London, WC1E 7DP

LIABILITY

While every care was taken preparing this magazine, the publishers cannot be held responsible for the accuracy of the information or any consequence arising from it. All judgments are based on equipment available to Computeractive at the time of review. Computeractive takes no responsibility for the content of external websites whose addresses are published in the magazine.

DENNIS PUBLICATION

Computeractive is published fortnightly by Dennis Publishing, 31-32 Alfred Place, London, WC1E 7DP. Company registered in England. ISSN 1461-6211

Average sales, Jan-Dec 2020 59,649 copies per issue.

© Copyright Dennis Publishing Limited 2021. All rights reserved

Computeractive is a registered trademark. Neither the whole of this publication nor any part of it may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the written permission of the publishers

Distributed by Marketforce

Computeractive
Printed in the UK



THIS ISSUE IN NUMBERS

159

New number to ring to check whether bank emails are scams - p9

The next 90 minutes

Period that Google says it can predict whether it will rain - p49

£120

Price of the Eufy SoloCam E40 security camera, recommended by a reader - p41



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.

Contents

20 October – 2 November 2021 • Issue 617

- 6 News** Windows 11 breaks Start menu and File Explorer
- 10 Question of the Fortnight** Is fast broadband about to get *much* cheaper?
- 11 Protect Your Tech** Facebook Marketplace scams
- 12 Letters** Microsoft's Windows 11 policy is 'irresponsible'
- 14 Consumeractive** Is Sky responsible for fixing my TV?
- 16 Grow Your Family Tree** Track down medical ancestors
- 18 Best Free Software** O&O ShutUp10++
- 21 Named & Shamed** PDF Extra's 'free' editor

Reviews

- 22 Acer Swift 3**
Slim laptop punches above its weight
- 23 Lenovo Legion T5i**
Tower PC fails to scale the heights
- 24 Samsung Galaxy Tab S7+**
Stripped-back tablet is light fantastic
- 25 Apple iPad mini**
Apple's latest small-screen tablet
- 26 HP OfficeJet 8012e inkjet**
Home-office printer is photo averse
- 28 Teamgroup PD1000**
1TB SSD for a hard drive on the move
- Meross Smart Wi-Fi Plug Mini**
Plugs that make other items smarter
- 29 TP-Link Deco Voice X20**
Is it a mesh router or smart speaker?
- 30 Buy It/Competition**
Win a Chillblast WAP 2500U mini PC





Workshops & Tips

- 35 Howto... Set up a tri-band Wi-Fi router**
- 38 Change these Windows 11 settings today**
- 40 Readers' Tips** Set expiry period for local account passwords
- 42 Browser Tips** Set Brave or Firefox as your default Windows 11 browser
- 44 Phone and Tablet Tips** Let Netflix find something for you to watch
- 46 Make Windows Better** Change where you save your screenshots
- 47 Make Office Better** Hide errors in your spreadsheet
- 48 In the Club** Draw on PCs with TeamViewer whiteboard

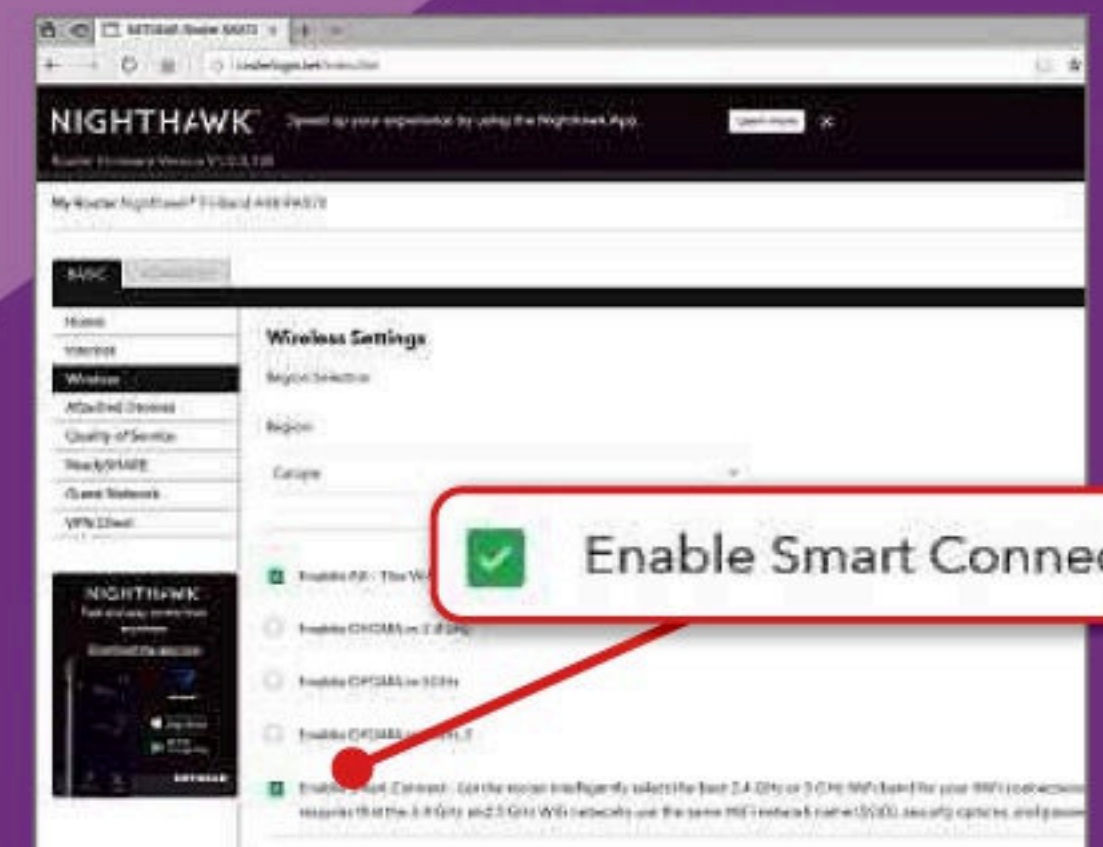
- 49 What's All the Fuss About?**
Precipitation nowcasting
- 50 COVER FEATURE**
Erase yourself from Google
Strengthen your privacy by removing traces of yourself from Search, Maps, YouTube and more
- 60 Don't buy the wrong keyboard**
Get a keyboard that's just your type and has the keys you need
- 62 Stop using 2FA**
Receiving codes by text provides security but can be slow. We reveal the best alternatives that'll save you time
- 64 Problems Solved**
Can I copy my MiniDiscs to my PC?
- 71 Reader Support**
How do I scan the Royal Mail QR code?
- 72 Jargon Buster**
- 74 Easy When You Know How**
Robert Irvine turns his phone into a webcam

Tri this for size

p35

Choose the Wi-Fi network that you would like to use with your Chromecast

- NETGEAR07
- NETGEAR07-5G2
- Ovingo
- Ovinguest
- NETGEAR07-5G
- Digger
- DIRECT-83-HP ENVY 5000 series
- gogogo



ERASE YOURSELF FROM Google

COVER
FEATURE
P50

How can I delete my data from...

How can I delete my data from...
How can I delete my data from...
How can I delete my data from...
How can I delete my data from...
How can I delete my data from...
How can I delete my data from...

Search

Gmail

Drive

Maps

YouTube

Street View

DELETE
PHOTOS
TOO!

Stop Using 2FA

p62



Windows 11 hit by Start menu and File Explorer bugs

Microsoft has suggested a solution for a problem in Windows 11 that has left users unable to type anything after opening the Start menu.

The problem was widely reported just a few hours after Microsoft released the

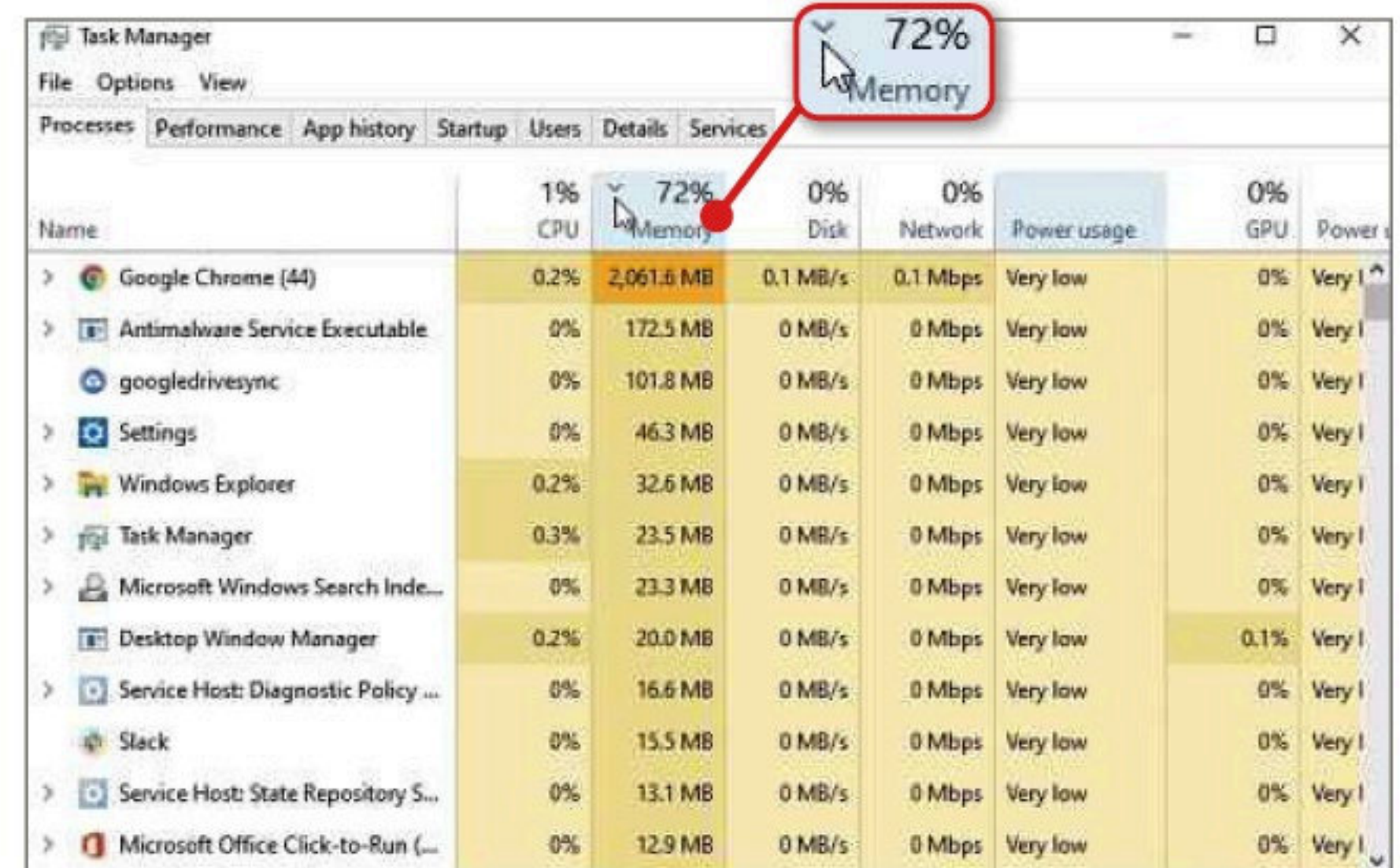
operating system on 5 October. Users complained that it meant they couldn't search using the Start menu.

Microsoft says affected users can fix the problem by launching Run (Windows key+R), then clicking Cancel to close it. The company didn't say whether this was a serious problem that will need fixing in a forthcoming update.

The Start menu has moved to the centre of the taskbar in Windows 11, in one of the biggest design changes to the new operating system. If you don't like it there, you can move it back to the left by tweaking the relevant settings – as we explain on page 38.

File Explorer's memory leaks

Other problems reported by early users of Windows 11 include File Explorer suffering major 'memory leaks'. This is when a program allocates too much RAM to a task, but then doesn't release any unused



cache memory.

The problem appears to continue until File Explorer has seized 1GB of RAM, severely slowing PCs or making them unresponsive. The only solutions seem to be to restart File Explorer from the Task Manager or reset your computer.

You can use Task Manager to check how much RAM File Explorer and other tools are using. Press Windows key+X, select Task Manager, then click the Memory tab (see

screenshot). This opens a list of processes ranked by how much memory they're using. If the RAM sharply increases when you use File Explorer (called 'Windows Explorer' in Task Manager), you may have a problem.

Microsoft acknowledged in late September that preview versions of Windows 11 suffered from memory leaks, leading some to ask why it didn't fix the problem before launching the system a week later.

Turkish hacks increase, but Russia still biggest threat

Hackers backed by Turkish authorities are a growing threat, Microsoft has warned, though Russia is still by far the world's most active attacker.

In its Digital Defense Report 2021 (www.snipca.com/39726), Microsoft listed Turkey as a "new entrant" in its analysis, saying its Sea Turtle hacking group has

attacked telecommunications companies in the Middle East and the Balkans. Microsoft also mentioned threats from China, Iran, North and South Korea and Vietnam.

However, Russia remains by far the world's biggest cyber-terrorist, responsible for 58 per cent of attacks in the past year. Its success rate has

improved, jumping from 21 to 32 per cent. The UK was one of the top three countries targeted by Kremlin-backed hackers, behind the United States and Ukraine.

Industrial espionage and intelligence gathering were the main reasons for hacking, Microsoft said. Only Iran prioritised the



destruction of another country's infrastructure, in its repeated attacks on Israel.



You'll like this...

Historic England's new map shows 30 years of archaeological digs (www.snipca.com/39723)



but not this...

A 'BT scammer' stole £30,000 from a pensioner (www.snipca.com/39654)

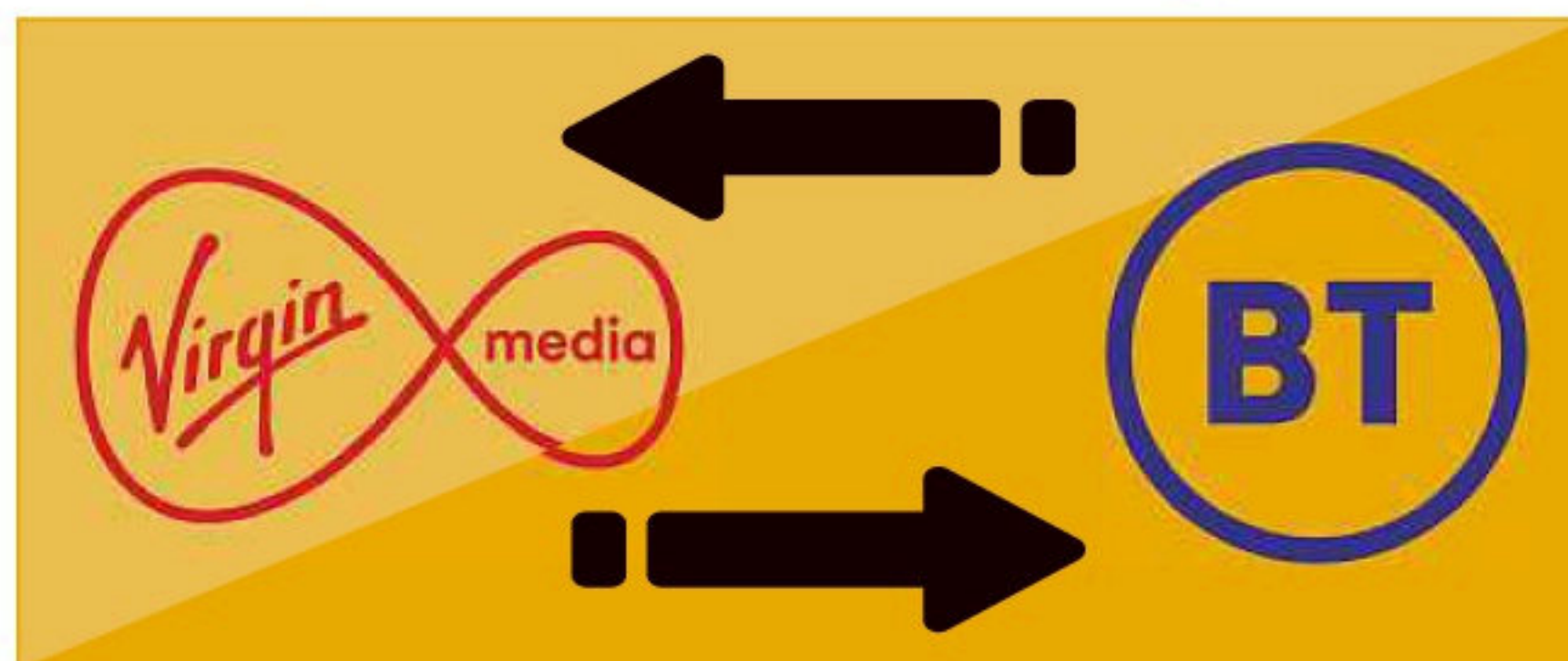
Switch from Virgin to BT (and vice versa) more easily

You'll soon be able to switch more easily between Virgin Media and Openreach networks like BT, Sky and TalkTalk under Ofcom's new One Touch Switch process.

Currently it's relatively straightforward to move between providers that operate on Openreach's copper network – you just need to contact your new provider and it will do the work for you, including asking your old provider to send you a final bill.

But switching has remained a lot harder when moving between an Openreach provider and one that runs its own cables, such as Virgin and CityFibre.

In such cases you have to contact both your old and new provider in order to implement the switch. This can lead to



many frustrating phone calls as you try to co-ordinate the move. You're also likely to be without internet access for a time between the old service ending and the new one beginning.

Ofcom's new rules will change that, but they won't come into force until April 2023, four months after the date it initially proposed. The regulator says the move is a "complex change" for providers, and it wants to give them enough time to update their systems so they "work

well for customers".

The regulator said your new provider would have to pay you compensation if things go wrong and you're left without a service for more than one working day.

The same system will also apply to switching landline phone lines. Ofcom said that it will give customers the right to keep their existing phone number for one month after they've terminated their contract, and ban companies charging to move ('port') their number.

Social-media sites must tackle financial scams or 'face action'

Facebook, Twitter and other social-media firms will face action if they don't do more to crack down on financial scams, the UK's financial watchdog has warned.

The Financial Conduct Authority (FCA) said there was a surge in "dodgy financial promotions" advertised online during the pandemic lockdowns, as more people shopped online and experimented with online investment schemes.

Its head of enforcement Mark Steward said it was putting sites "on notice that we expect them to be involved in this process of protecting the community".

Fraudsters stole nearly £570m in 12 months to April, a wave that trade body UK

Finance calls a "national security threat".

There are signs that websites are beginning to take financial scams more seriously. Last month Google banned investment ads that aren't authorised by the FCA, including those promoting gold and **cryptocurrencies**.

Steward praised this move, claiming it was "having an impact already in curtailing the increase in suspicious financial promotions on Google searches".

He said that the FCA will stress to social-media firms that it will take action unless they "change their processes and procedures". Websites need to be regulated, he



added, because it's so easy for scammers to hide their identity and be located anywhere in the world.

"There is something systemically and fundamentally wrong that needs to be fixed in order to create a safer environment for consumers to operate," he said.

IN BRIEF

GIFFGAFF INCREASES 'GOODYBAG' DATA

Giffgaff (www.giffgaff.com) has increased the amount of data you get in its pay-monthly 'Goodybag' deals. Proportionally the biggest increase is in its £6 plan, which doubles from 500MB to 1GB. The largest increase by volume is in its £12 plan, rising from 12GB to 20GB. Use Giffgaff's online calculator to work out how much data you need: www.snipca.com/39648. All its plans come with unlimited UK calls and texts.

TALKTALK GIVES JOB SEEKERS FREE INTERNET

TalkTalk is now offering six months free 35Mbps broadband for job seekers, in partnership with the Department for Work and Pensions. At the end of the six months customers can then choose to move on to a TalkTalk contract or cancel with no fees. The offer is available nationwide, after being trialled last year in Greater Manchester and Cheshire. Read more information at www.snipca.com/39639.

TOMORROW'S WORLD

This is Amazon's Astro (www.snipca.com/39643), a 'household robot' that can play music, carry small objects and even follow you around with its periscope camera while you're on a video call.



For this companionship you'll have to pay \$1,000 (about £740). Would be cheaper – and more fun – to train your dog.

IN BRIEF

NOKIA'S £180 TABLET LASTS 15 HOURS

Nokia has released a £180 Android tablet (www.snipca.com/39713, pictured below), which it claims lasts 15 hours when browsing the web, or 10 hours when watching films online. Called the T20, it has a 10.4in 2K screen, 4GB of RAM and 64GB of storage, expandable up to 512GB with microSD card. We'll review it soon.



SHELL TO RAISE PRICES WHEN CONTRACTS END

Shell Energy has dropped its pledge to never increase broadband bills at the end of a contract, and will in future raise prices by the CPI rate of inflation plus three per cent. Previously, Shell said prices for new customers would go up every year by just the rate of inflation. Call charges have increased by three pence to 18p per minute, while paper billing has doubled to £2.

THE WORLD'S GONE MAD!



There are now so many stupid internet crazes that nobody knows if they're real or not. US schools have told pupils not to film themselves slapping a teacher, after such videos were reportedly being shared on TikTok. But TikTok says this 'dare' is a hoax. Still, the fact that it sounds plausible is worrying enough.

BT landline customer? You could get £500 'rip-off' compensation

BT could be forced to pay £500 each to more than 2.3m customers after a tribunal backed a class action claim accusing the company of overcharging people on landlines.

The Competition Appeal Tribunal agreed unanimously that the case against BT should move to a full trial. If successful, BT could end up paying a total of £600m.

The claim aims to win compensation for "voice-only customers" who paid for a BT landline between October 2015 and April 2018, but didn't receive broadband service from BT or any other provider.

It will also represent "split purchase customers" who have bought a joint BT landline and broadband service since October 2015, but not as part of a discounted package.

In 2016, BT cut its landline prices by £7 a month following Ofcom concerns



that some customers, particularly elderly or vulnerable, were getting poor value for money.

However, BT didn't offer compensation at the time, which has led to the current court case. It's being brought by Justin Le Patourel, who worked for Ofcom for 13 years in roles "focused on empowering and protecting telecoms consumers".

Le Patourel, founder of Collective Action on Land Lines (CALL, www.callclaim.co.uk), said: "We believe that BT has been overcharging millions of its most loyal customers for years. We

are thrilled that this decision will bring us one step closer to putting right this injustice."

BT said it will "vigorously defend" itself against the "speculative claim", adding that Ofcom's investigation found no evidence of excessive pricing or a breach of competition law.

All affected customers will be automatically represented, so you don't need to do anything to join the action. You can opt out through the CALL website if you prefer. An initial hearing was due to take place on Tuesday 19 October.

Ditch your dish! Sky launches streaming TV

Sky has launched its first smart TV, letting viewers watch shows streamed over the internet without needing a satellite dish or TV box.

Called Sky Glass (www.snipca.com/39707), it will require a Sky subscription and provide content from BBC iPlayer, Amazon, Netflix, Disney+, ITV Hub and All4, as well as Sky's range of programmes.

The 4K quantum-dot screens come in three sizes – 43in, 55in and 65in. It's available in five colours – black, pink, green, white, and blue (pictured left to right) – and has a Dolby Atmos 360 soundbar, with six speakers at



the side, centre and top.

Sky is promoting Glass as "no-fuss TV", drawing attention to the device containing a single wire (to connect to the internet) and just one plug. Industry analysts said it should hasten the demise of the satellite dish and streaming box.

You can buy the TV outright (from £649) or pay for it as part of a subscription (from £13 a month).

Customers who cancel their Sky subscription after buying the TV will still be able to use it, but will lose some advanced features, such as voice control and playlists.

Phone 159 to report scams – but be careful when doing so

Consumer campaigners have warned people that scammers can easily exploit the new 159 number you can phone to check whether a message from your bank is genuine.

The service, set up by industry body Stop Scams UK and supported by the Financial Conduct Authority and Ofcom, puts you through to a representative that confirms whether an email or text you've received is authentic.

When you phone 159, you can choose your bank by pressing numbers on your keypad. You're then put through to someone at your bank's customer-service department. Calls to 159 will cost the same as making a national-rate call.

Most of the UK's leading banks have signed up, including Barclays, Lloyds, NatWest and Santander (though not HSBC), and it

works on all major mobile networks.

However, MoneySavingExpert founder Martin Lewis warned that scammers could 'spoof' the number by calling and tricking you into thinking you're talking to your bank.

He said: "The obvious thing that many people will do is to stop, hang up and call 159 back. But I'm afraid even that does not guarantee you safety, because sophisticated scammers can spoof a dialling tone so you think you're calling your bank – but the scammer provides a ringtone and an answer."

To be totally safe Lewis recommended dialling 159 on another phone, or waiting half an hour before calling.

He added: "But you all have to be aware that these scammers are dedicated, talented and will stop at nothing to get your money – stay alert".



Stop Scams UK says it will run the service as a trial for 12 months hoping to prove it's effective at fighting fraud, before pushing for 159 to be a "universal number – available on all phones and for all banks", just like 111 and 999. Read more at <https://stopscamsuk.org.uk/159>.

IN BRIEF

YOUTUBE BANS ALL ANTI-VACCINE VIDEOS

YouTube will now remove videos that spread misinformation about all approved vaccines, expanding a Covid-19 ban already in place. In a blog post (www.snipca.com/39656) it gave as examples videos that claim vaccines cause autism, cancer or infertility. It has already taken down 130,000 videos that made false claims about the Covid jabs.

HTTPS EVERYWHERE WILL SOON BE NOWHERE

The browser extension HTTPS Everywhere is likely to be removed within the next year after the privacy group that runs it said it's no longer needed. The Electronic Frontier Foundation (EFF) launched the extension in 2010 to add HTTPS encryption to websites. It now says browsers have built-in HTTPS protection, rendering its extension "redundant". Read more on EFF's blog: www.snipca.com/39692.

AMAZON LAUNCHES IMDB TV IN UK

Amazon has launched streaming service IMDb TV in the UK. It's available for free with adverts to both Prime Video and non-Prime customers within the Prime Video app. Shows and films available include *Magnum PI*, *Babylon 5* and *Lawrence of Arabia* (pictured below, see more at www.snipca.com/39672). It will soon be available on Amazon's Fire TV Sticks.



New USB logos for 240-watt power

New USB logos have been unveiled to indicate whether a cable or charger can reach the new power rating of 240 watts.

They've been designed by the USB Implementers Forum (USB-IF) after the group approved the 240-watt rating earlier this year.

The current limit of 100 watts is seen as too low, particularly by those who need more power for faster gaming in laptops.

Manufacturers will be able to use the logos on their packaging and product listings, though they won't be obliged to do so.

	Packaging Logo Examples	Cable/Port Logo Examples	Combined USB4™ Data/Watts Logo Examples
Certified USB4™ 40Gbps*			
Certified USB Type-C® 240W Cable*			
Certified USB 240W Charger		N/A	N/A

* Certified Logos available for USB Type-C® 60W Cables and USB4™ 20Gbps solutions.
**Only for use on Certified USB Type-C® Cables.

The logos (www.snipca.com/39693 and pictured) are split into three categories: for USB 4, USB-C and chargers. The USB 4 logo shows the maximum file-transfer speed of 40Gbps (1 in our screenshot), while the charger logo has a lightning bolt (2).

There's also a combined

logo to indicate both faster charging (using 240 watts) and 40Gbps transfer speed (3).

Jeff Ravencraft, USB-IF president, said the logos will help support "an ever-expanding ecosystem of consumer electronics from laptops and smartphones to displays and chargers".

Question of the Fortnight

Is ultra-fast broadband about to get *much* cheaper?

Openreach has cut the price providers pay for its cables

If your broadband comes from Sky, TalkTalk or Vodafone, then what you pay every month is partly determined by what *they* pay the BT-owned Openreach for running their service through its cables. And that wholesale figure is about to fall, raising hopes that your bills might follow suit.

This is because Ofcom has approved Openreach's 'Equinox' proposal to give providers a discount if they prioritise 'ultra-fast' 1Gbps Fibre-to-the-Premises (FTTP) packages to customers, rather than older, slower Fibre-to-the-Cabinet (FTTC) connections.

Openreach said it was "great news for homes and businesses all over the UK" because it makes FTTP broadband "the default choice wherever it's available".

It's a canny move by the company. It'll get less money for each individual service that a provider runs on its network, but more money overall because those providers will be incentivised to promote faster – and more expensive – packages.

“You’ll get more bits for your buck, but your bills won’t go down”

You may end up paying more, but that's because you'd be on a faster service – and that service might cost less than it would have done had Openreach not slashed its prices. In other words, you



could get a lot more for your money.

But notice those two words: 'might' and 'could'. In theory, given enough competition, providers will pass on these savings to customers – albeit most prominently as offers to new customers to tempt them to switch.

There are several reasons why this might not happen though. One is that rather than cut prices, providers may keep them the same but increase the speed you're getting. You'll get more bits for your buck, but your bills won't go down.

Those wanting faster speeds will be keen, but it should never be underestimated how many people are happy on connections up to 50Mbps (still fast, just not *ultra* fast). They'd rather pay less for the

same speed than pay the same for *more* speed.

Another effect of the cut is that cheaper FTTC packages will become rarer, forcing people on to more expensive FTTP deals. To qualify for Openreach's discounted prices, providers must hit an 80-per-cent target of new FTTP after the first year. The overall amount UK customers pay for broadband is bound to increase sharply simply because there will be fewer slower (and cheaper) deals.

But perhaps the biggest question mark is over competition – not between services provided on Openreach's network, but between networks themselves. Firms that provide broadband on their own cables, including Virgin Media, CityFibre and Gigaclear, criticised Ofcom's decision, claiming it will reduce the financial incentive to invest in their networks.

The Independent Networks Co-operatives Association (INCA), which represents many smaller networks,

THE FACTS

- Ofcom has approved Openreach's plan to cut how much it charges providers to use its broadband network
- Sky, Vodafone and TalkTalk welcomed the move, which might lead to cheaper prices if they pass on the savings to customers
- Providers that use their own networks, such as Virgin Media and CityFibre, slammed the decision, saying it will harm competition

accused Openreach of "using its market power to reinforce its dominant position", and that in the long run customers will end up paying more for a worse service.

INCA chief executive Malcolm Corbett said that the discount could also lead to delays in fibre broadband being rolled out to rural locations that are hard to reach.

Ofcom is confident it made the right decision, having concluded that Openreach's discount "does not raise concerns requiring intervention, and is consistent with network competition".

It's a significant verdict because guaranteeing competition is Ofcom's key broadband policy, not an afterthought. It may reconsider in future if it finds evidence that the discount is restricting customer choice. It's likely to be checking whether your bills rise or fall just as closely as you will.

Protect your tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Facebook Marketplace scams

What's the threat?

Police have warned about a rise in scammers using Facebook Marketplace (www.facebook.com/marketplace, pictured right) to steal money from both buyers and sellers.

In one scam, fraudsters hack someone's Marketplace account in order to sell a non-existent item. Once the item is 'sold', they direct the buyer to a fake website and ask for their payment details.

More common though is when scammers pose as buyers, and offer to send cash by a delivery driver, who will also collect the item. The scammer asks you to pay insurance for the item, promising to refund it when it arrives safely. They send you a link to a fake insurance site which can steal your personal information.

Another ploy is to impersonate well-known courier companies by sending a



earlier this year that the surge in online shopping during the lockdowns increased the number of Marketplace users worldwide to one billion. That's a lot of potential victims.

The key to avoiding scams, whether buying or selling, is to be suspicious of any unusual requests. In particular, stick to the official payment methods: Facebook Checkout, PayPal or cash. And when using PayPal don't select the 'friends and family' option because you won't be able to get a refund.

Never send items before you have received the verified

payment, and check that the money is cleared in your account and that it's not still 'awaiting confirmation'.

Finally, be wary of anyone who overpays and then requests an immediate refund. Wait until the money is in your account first, and then talk to the buyer about the mistaken payment.

fake invoice to the seller. They also send emails claiming to be from the buyer's bank that state money won't be released until the seller sends proof of purchase.

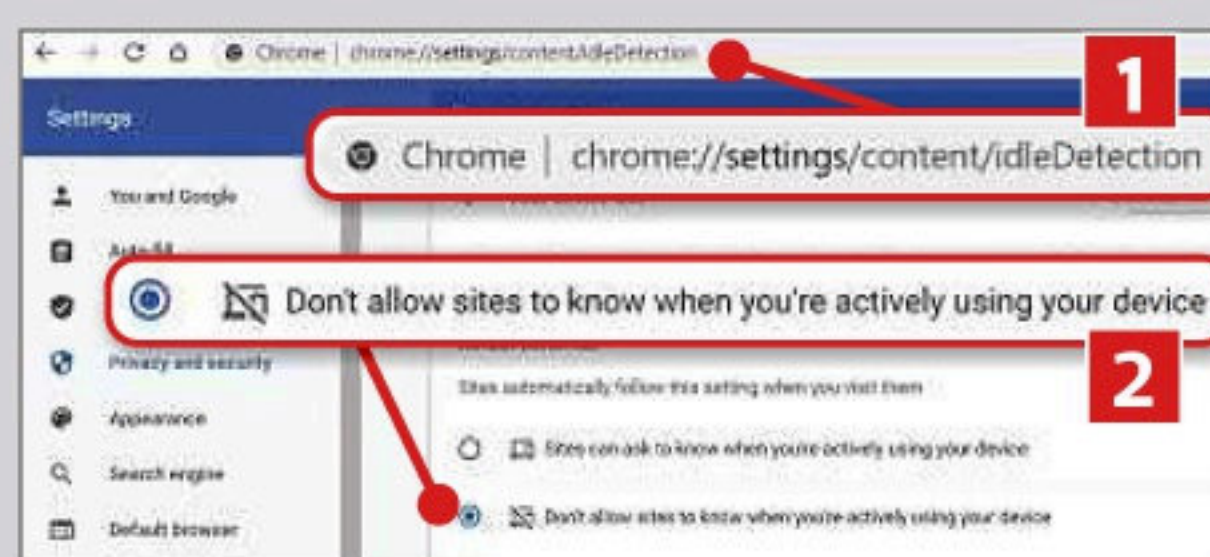
How can you stay safe?

It's no surprise that scammers are targeting Marketplace. Facebook said

New tools | Turn off Chrome's Idle Detection

When you're idle, it's probably because you're lying on the sofa with a mug of tea. When your device is idle, it remains switched on but hasn't been used for a while.

You might assume this was nobody's business but your own, but Google thinks websites should know, and has added a Chrome setting that tells sites to detect whether your device is idle. Google says sites can use this information to tell other users that you're not available to chat online, or turn off **Kiosk mode**. Critics, including Apple and Mozilla, say it could be abused by malicious websites to monitor what you do online, and even run expensive tasks on your computer while it's inactive.



We agree with Apple and Mozilla. Yes, it's true that sites need to ask your permission before using the feature, but clever scammers can easily trick users into doing so. Worse, it's turned on by default.

To disable it, type `chrome://settings/content/idleDetection` into your browser bar (1 in our screenshot), then select 'Don't allow sites to know when you're actively using your device' (2).

ScamWatch

Readers warn readers



'Jet2 booking' text

I fly with Jet2 from time to time so my eyes widened when I got a text to contact @jet2helps.com on Twitter to "discuss booking and queries". I've never used Twitter, so I thought this was a bit odd. I phoned Jet2 (0333 300 0042), and they told me it was a scam, and to use only its official Twitter accounts. I don't fancy getting bogged down by Twitter, but I did see this announcement (are they called 'tweets'?) from Jet2: www.snipca.com/39629. It warns not to give personal information to the scammers. I shall heed that warning.

Raj Singh



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

Letters

Tell us what's on your mind

When will you start reviewing Windows 11 PCs?

✉ Windows 11 has come at just the right time for me. I'm still using a computer that originally had Windows 7. I skipped Windows 8, and installed Windows 10 in 2017, taking advantage of Microsoft's generosity in making it free.

This 10-year-old computer is now older than all three of my grandchildren combined. It's almost as noisy too. I'm surprised it's lasted this long, and I wouldn't expect it to run Windows 11. Frankly, it's time I bought a new computer – which is where you come in, *Computeractive*! How soon until you start reviewing them?

Dennis Trollope

CA SAYS Good question. Some of our favourite PC builders, including Chillblast, PC Specialist and Scan, are finalising their first Windows 11 machines, and we hope to get our hands on them within the next month or so, with several reviews to follow before Christmas.

I'll wait until early problems are fixed

✉ My PC came with Vista installed, and I upgraded to Windows 7 Pro when it came out. I tried both versions of Windows 8, but reverted to 7. After several attempts I'm now successfully running Windows 10 Pro. I've replaced the **graphics card**, the **RAM** and the power pack. I've also installed an **SSD**, and am still using the original peripherals (all with the help of *Computeractive* – thanks a million).

Rather than try to upgrade I think I'm due a new setup, but will wait a few months for teething problems to be ironed out – though I am reluctant to give up on a PC that's been so reliable.

Pete Ashmore

China spy on me? I'm not important enough

✉ I use two Huawei phones, and one Xiaomi tablet, so my eye was drawn towards Issue 616's 'Question of the Fortnight' ('Is it safe to use phones made in China?', pictured above right). I share much of the concern raised by security services in the West, and it feels like we are heading into a second cold war, with Beijing replacing Moscow. I also

have no doubt that China wouldn't think twice about monitoring its own citizens through technology.

But I'm a semi-retired solicitor living in Suffolk. I'm not organising pro-democracy protests in Hong Kong. I can't think why China would want to eavesdrop on my messages, but even if it did, it wouldn't find them very interesting (unless it thinks I'm plotting the overthrow of Xi Jinping by organising bridge nights and pub quizzes).

I like the devices I've bought from Huawei and Xiaomi. They're affordable, easy to use and have regular updates. I admit that I had a fleeting doubt about their security, but realised that I'm not important enough for China to worry about. I wonder though for how long we'll be allowed to buy Chinese-made devices. Will they soon be deemed too much of a threat to national security?

George Shipton

✉ I've had Blackberries, LG and Samsung phones, and an iPhone, but the best device I've ever had is the five-year-old phone I'm still using – the 3T from Chinese company OnePlus. The only time I ever have to reboot it is after installing updates. It's still got a good



battery life, and still does everything I want. I won't be throwing it away until it dies.

Patricia Trueman

Add delays to passwords to make them safer

✉ Regarding recent features and letters about passwords, I've long been puzzled by the ease with which hackers are given access to websites. Many websites allow a small number of attempts (typically three for banking services) before the user is locked out. If every website put a one-second delay into the system that verifies the password, human users would barely notice the delay but any automated hacking system would have to run for many days. Increasing the delay with each failed attempt would make things even harder. Even 'P@SSw0rd' would be relatively secure in this case, though I still wouldn't recommend it.

Phil Verity

✉ One method I use for memorable passwords is to take the first letters of each word in the opening line of a poem, with a number at the end. For instance: 'Toatpwtsiabpb9'. This isn't one I use, by the way. Can you spot the poem?

Brian King

CA SAYS We struggled with this, despite having a couple of English graduates on the team. In the end we cheated, and

What's the Issue...?

✉ I'd love to use WhatsApp on my iPad, and vaguely remember you explaining how to do this. Can you direct me to the right issue?

Lee Mangle

CA SAYS Yes, it was in Issue 612, page 45

✉ When did you write about Microsoft's new tool for turning Word documents into PowerPoint presentations?

Allan Petersen

CA SAYS It was in Issue 608, page 47.

The tool is available in the online version of Word, called 'Word on the web'.

✉ What was the 64GB USB stick that you recently said you could buy for just £10?

Len Crooks

CA SAYS It was SanDisk's Ultra Flair, which is now £10.20 from Amazon (www.snipca.com/39113). We recommended it in Issue 613's 'Ditch Your Old USB Sticks' Cover Feature (page 50).

asked Brian for the answer. Now that we know, let's open it to everyone else. The first reader to name the poem wins a *Computeractive* mug.

EU wants to replace miles of cable with miles of cable

I don't understand why the European Union wants to force Apple to use **USB-C** (Issue 616, page 7). If I follow their logic correctly, what they are proposing is the dumping of millions of miles of cable (Apple's Lightning) so people can buy millions of miles of another type of cable (USB-C). Isn't this just meddling for the sake of it?

Rick Peacock

Why is Apple getting hot and bothered about the EU's desire to make all companies use USB-C? Apple has already added USB-C ports to some iPads, so presumably they've realised – albeit belatedly – that not everyone is happy using Lightning connections. Adding USB-C to iPhones seems to be the logical next step.

Apple may talk about the EU's decision harming innovation, but the real reason it's kicking up a fuss is that it hates to be told what to do. Apple famously told the world to 'think different'. That radical philosophy doesn't sit well with the EU, where collectivity is more important than difference.

Ivan Hurlow

Why I hate cookies

I've been surfing the net for more years than I care to remember, starting back in the days of CompuServe. The most annoying things today are pop-up **cookies**. I hate them. Many sites blank the whole page with their cookie request, so you can't even see if you are on the right page. If I have to search a site and there's no way around the annoying cookie, I accept them, then delete them later using CCleaner. All that's needed is a small window with 'Do you accept – yes or no'.

Graham Gartside

CA SAYS We share Graham's pain – cookie pop-ups drive us mad too. We're pleased that the UK's Information Commissioner's Office recently urged G7 countries to find a solution to reduce the amount of clicking (Issue 615, page 8), but we're not holding our breath.

STAR LETTER

Microsoft's Windows 11 policy is 'irresponsible'

Having read your insightful Cover Feature in Issue 616 ('Windows 11 - Should you upgrade?'), I feel Microsoft needs to be held to account for its irresponsible policy of making millions of computers obsolete overnight.

I have three computers at home. I've run Microsoft's checks, and only one of these has the components required to upgrade. What should I do with the other two? I'll obviously continue to use them with Windows 10, but they're now on borrowed time, and eventually I'll have to get rid of them before I'd like to.

Microsoft's decision couldn't have come at a worst time. The lockdowns have caused a severe shortage of computer processors worldwide. This has created unprecedented demand, which in turn will drive prices higher than many people can afford.

For many people the only route to



upgrading to Windows 11 will be buying a new computer, but will they be able to afford one? I doubt Microsoft's bosses with their big bonuses will lose much sleep over this. They want to get the public spending again.

I also wonder how Microsoft's policy sits with its green credentials. It wants to be seen as eco-friendly, and is aiming to be "carbon negative" by 2030. I don't know whether that's possible, but forcing users to abandon computers that have nothing wrong with them feels like the wrong message.

I have nothing against Windows 11. From what I've seen it looks like a decent system that makes small but useful improvements on Windows 10. I will install it on the computer that's fit for it. But it still feels like an upgrade that Microsoft shouldn't have bothered with.

Roger Ley



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

Instead, we'll explain the most effective ways to block them in our next issue – out Wednesday 3 November.

1960s PC had only 4,000 words of 39bit memory

In recent letters readers have spoken about their old memory sticks. As a parallel, may I tell you about my degree project? Back in 1962 my college gained an Elliott 803 computer (pictured right), and students were encouraged to learn to program it via a six-hour series of lectures. My project was to write a program which would produce the schematic diagram for the circuitry for frequency filters which were 'low pass', 'high pass', and 'frequency



range pass'.

The problem was that the machine had only 4,000 words of 39bit memory, and the operating system plus assembler took all but 409 of those words. Despite every trick I could find, my program required at least 413 words! That meant I had to read the program from punched paper tape and punch the output code on to paper tape via a 50bit-per-second teletype.

I then restarted the operating system without the assembler, and had to load the new tape at 50bps before running the output to the tape punch before printing *this* on the teletype! In total each test took more than 35 minutes. Yes, it did work, but only after many sleepless nights alone in the college buildings.

Happy memories of a long career in computing before I retired from teaching software engineering in 1996.

Mike Stranks



We stand up for your legal rights

Is Sky responsible for fixing my TV?

Q I have an ongoing problem with Sky Protect (www.skyprotect.com) insurance refusing to fix a problem with my TV even though I should be covered. Sky Protect's customer service keeps saying it's a problem with my Sky Q box, which Sky must fix. But I don't think that's true, so can you help?

Brian Ford

A We'll do our best, because Brian is baffled by the number of companies involved in this case. Sky Protect, which costs from £9 a month, is carried out by Domestic and General (D&G), and is the only insurance service endorsed by Sky. In turn, D&G pays repair firm Equinox to fix broken devices.

Untangling this web of companies leaves D&G as the firm responsible for dealing with Brian. He has four devices covered under Sky Protect, including a Sky Q box. But despite what D&G says, there's nothing wrong with this box, as confirmed by a Sky engineer who visited his home.

Brian explained this to D&G, which then asked Equinox to send an engineer to repair the TV, but he came with the wrong part. Since then, D&G appears to have washed its hands of the problem, and refuses to authorise Equinox to send another engineer with the correct part. None of this changes the fact that, unless the problem with the TV isn't covered by Sky Protect's terms and conditions, D&G must fix it. We'll explain all this to the company.

As an aside, Brian doesn't need to insure his Sky Q box, unless he wants to protect it against accidental damage. This is because customers don't legally own the new Sky Q boxes, unlike Sky's old units. This means that any inherent fault, or even wear and tear, must be fixed by Sky.

LEAD CASE



Can I get new laptop after two years?

Q In 2019, I bought what I thought was a 15.6in HP laptop from Argos, paying £330. However, I've just discovered that the screen is only 14in. Can I do anything about this?

Arthur Middleton

A Yes, Arthur should make a claim under the Consumer Rights Act, which lasts for six years after purchase (five in Scotland). He should say that the laptop was not as described, though Argos may argue that because two years have passed he is deemed to have legally accepted it.

If Argos no longer stocks the laptop, it can use a legal defence called force majeure, which relates to events beyond its control. It could then offer Arthur a partial refund to reflect the difference in price between a 14in and 15.6in laptop, and also the time he has already spent using it.


We doubt this would amount to very much, and Arthur might refuse it anyway because he wants the larger laptop. That said, he may be entitled to compensation if he can prove he lost money as a result of using a smaller laptop for the past two years.

CASE ONGOING

CASE ONGOING

CASE UPDATE

Reader squeezes £100 more out of Currys

 Currys has agreed to replace David Bulford's faulty microwave (see Issue 614) even though it now costs £100 more than when he bought it in 2015.

David renewed his extended warranty for the oven in December 2019, which is just as well because it stopped working a few months later, during the first Covid-19 lockdown. Currys told him the oven was beyond repair, so David looked for a replacement online – eventually finding one for £349.99.



The key question was whether the warranty entitled David to a replacement that has the same specifications as the original. He argued that

it does, which is why he refused Currys first offer of vouchers for £249.99, which was what he paid in 2015. He said he couldn't now buy the same oven for that price, and held firm for £349.99 instead.

Currys' next move was to cut its offer to £200. We don't know why it thought David would accept this, given he had earlier refused £249.99. Only after we stepped in did Currys finally agree to give him £349.99. He has now ordered the oven – hopefully bringing this protracted case to a close.

Can BT charge me for phone I didn't order?

Q I have BT broadband, but in March BT sent me a mobile phone that I didn't ask for, and ever since has been charging me between £57 and £64 a month. I've written to BT explaining that I didn't order the phone, but it refuses to deal with my complaint. Can you help me resolve this please?

Irene Lukacs

A We'll do our best because BT has taken more than £300 from Irene for goods she didn't order and hasn't used. Normally we'd advise

her to cancel BT's direct debits, but it has Irene's account details because she's a broadband customer with the company – and she hasn't actually set up a direct debit for the phone. She could block BT's broadband payments, but if she does this without also cancelling her contract, BT might threaten her with non-payment. This could end up in a legal mess, with Irene facing fines she shouldn't have to pay.

Irene wasn't aware of her right to contact an ombudsman about her problems. BT is



covered by The Communication Ombudsman (www.snipca.com/39634), which asks customers to wait eight weeks before filing a complaint, to give

companies time to resolve problems before formal proceedings begin. Because BT is refusing to help Irene, she can file a complaint with the ombudsman now. But we're confident we can persuade BT that there's been an error, and that it should refund Irene. An apology wouldn't go amiss, too.

CASE ONGOING

Why won't Garmin honour 'free updates for life'?

Q In 2017, I bought a Garmin sat-nav from Amazon, which was meant to come with free map updates for life. I've updated it a couple of times recently, but I'm unable to download the Europe 2021 map. Garmin says that it won't help me because I didn't buy the device directly from it. Is this a valid reason to refuse help?

James Boyd

A It can be a valid reason, though we don't yet have enough information to be sure.

However, Garmin's excuse appears to be legally dubious. In the numerous emails it has sent to James, it talks only about it not having "exchanged" the device, and so therefore isn't responsible for offering upgraded maps. But James has never exchanged the sat-nav, and previously never had any problems receiving free map updates. We'll ask Garmin to clarify.

Also, even though the sat-nav was sold through a third-party (ie, Amazon), the free updates are still a service that

was offered by Garmin: not the seller. The only reason Garmin wouldn't be legally responsible for providing him with this particular update is if it's somehow incompatible with his current sat-nav. Perhaps it requires more memory or processing power than it can handle.


The other conundrum is what exactly is meant by 'lifetime' updates. We understand why James would think this guarantees updates forever, but in legal reality it just means for as long as a device is able to receive them.

It's a horribly misleading term, and we wish manufacturers would just stop using it.

CASE ONGOING

CREDIT WHERE IT'S DUE

Amazon replaced shattered Fire 10 tablet

 In September, my eight-year-old grandson told me he had dropped the Amazon Fire 10 HD (2019) (pictured) I'd lent him over the summer and shattered the screen. He was apologetic and even offered to pay for a replacement from his savings. Needless to say I refused his offer and was touched by his honesty. Not sure what to do for the best, I



contacted Amazon via web chat. I wasn't expecting them to help, but they actually said they'd send a replacement if I returned my damaged tablet. They even provided a 48-hour returns label. I know Amazon gets a lot of stick

for some things they do, but as far as I'm concerned this is excellent service.

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

Also, the Amazon Fire 10 HD is an excellent tablet (£150 from www.snipca.com/38713). Granted, it's not as quick as the iPad, but for the price it's excellent.

Paul Banes

Contact Amazon

- **Online help:** www.snipca.com/39633
- **Phone:** 0800 279 7234

Grow Your Family Tree



Are there doctors and nurses in your family tree?
Nick Peers reveals how to...

Track down medical ancestors

Do you have ancestors who worked in medicine? Although there's no database of NHS staff records to access online – most hospital staff records are housed in the local county record office and haven't been digitised – there are still rich sources of information on ancestors with medical backgrounds, from doctors and nurses to midwives and dentists, stretching back centuries.

To start, visit The National Archives' research guide (TNA, www.snipca.com/39494). While its own records aren't online, you can browse the index of record sets you may want to visit in person, such as the records from the General Nursing Council for England and Wales from around 1860 to 1984. If you find something of interest, click Details to find out how to request access to a physical copy at the archives in Kew.

Doctors and dentists

The TNA guide also reveals several useful databases that are accessible to anyone with an Ancestry Premium subscription (£13.99 a month). These include two databases that list doctors who practised between 1845 and 1959. Most interesting is the UK Medical Registers 1859-1959 (www.snipca.com/39507), which reveals their residence, qualification and date of registration as a doctor – the screenshot above shows the 1903 entry for Sherlock

Name	Registration Date	Registration Number	Qualification
Doyle, Sir Arthur Conan	1903	1000	MB, BS, Lic. Phys. Lond., Lic. Med. Lond., Lic. Phys. Edin., Lic. Med. Edin., Lic. Phys. Glasg., Lic. Med. Glasg., Lic. Phys. Camb., Lic. Med. Camb., Lic. Phys. Oxon., Lic. Med. Oxon., Lic. Phys. Lond. (hon.), Lic. Med. Lond. (hon.), Lic. Phys. Glasg. (hon.), Lic. Med. Glasg. (hon.), Lic. Phys. Camb. (hon.), Lic. Med. Camb. (hon.), Lic. Phys. Oxon. (hon.), Lic. Med. Oxon. (hon.), Lic. Phys. Lond. (hon.), Lic. Med. Lond. (hon.)

How did we find Sir Arthur Conan Doyle in the UK Medical Registers? Elementary...

Holmes creator Sir Arthur Conan Doyle.

You can use the other collection, UK & Ireland Medical Directory 1845-1942 (www.snipca.com/39508), to trace a doctor's movements through their career (it published an annual list of doctors' names and addresses across Britain and its colonies). Registration wasn't compulsory though, so there's no guarantee your ancestor will appear.

Another rich source is the British Medical Journal's archive, which is free to use, and contains every issue since it launched in 1840. Search for an ancestor's name at www.bmj.com/archive. Also try the UK Medical and Dental Student Registers (www.snipca.com/39519), which lists students of medicine or dentistry in the UK or Ireland between 1882 to 1937.

Nurses and midwives

Sticking with Ancestry, look through its Midwives Roll 1904-1959 (www.snipca.com/39520) for names, addresses, date of enrolment and qualification. In the

screenshot below you'll see my great-great-grandmother Sarah Anne Leach, who delivered her own granddaughter – my grandmother Mary Caldicott – in her family home in Aston Brook Street, Birmingham, in 1908.

Ancestry also offers three nursing record sets: registers held at the Royal College of Nursing from 1898-1968 (www.snipca.com/39521); the Queen's Nursing Institute Roll of Nurses 1891-1931 (www.snipca.com/39522); and Scotland Nursing Applications between 1921-1945 (www.snipca.com/39523).

Beyond Ancestry, you'll find record sets are smaller and more niche. Most of Ancestry's medical records are physically housed in the Wellcome Library, which itself has placed collections online (all free). Go to <https://wellcomecollection.org/works> to browse or search its catalogue – make sure you tick the 'Online' box below the search bar. One example is the complete records of the Crichton Royal Hospital, in Dumfries, from 1823 to 2008 (www.snipca.com/39524).

Elsewhere, The Genealogist offers four narrow record sets, including the Medical Who's Who from 1912 and Institute of Ophthalmic Opticians Official Directory from 1927 (www.snipca.com/39525 for full details on both). Find My Past has the 1913 Medical Register along with patient and staff records from Bethlem Hospital (www.snipca.com/39526) covering 1683 to 1932. Finally, if your medical ancestor belonged to one of the relevant Royal Colleges (such as the Royal College of General Practitioners), visit www.snipca.com/39527.

Name	Registration Date	Registration Number	Qualification
Leach, Sarah Anne	1908	1000	MB, BS, Lic. Phys. Lond., Lic. Med. Lond., Lic. Phys. Glasg., Lic. Med. Glasg., Lic. Phys. Camb., Lic. Med. Camb., Lic. Phys. Oxon., Lic. Med. Oxon., Lic. Phys. Lond. (hon.), Lic. Med. Lond. (hon.), Lic. Phys. Glasg. (hon.), Lic. Med. Glasg. (hon.), Lic. Phys. Camb. (hon.), Lic. Med. Camb. (hon.), Lic. Phys. Oxon. (hon.), Lic. Med. Oxon. (hon.), Lic. Phys. Lond. (hon.), Lic. Med. Lond. (hon.)

Nick found his great-great-grandmother in Ancestry's Midwives Rolls

Your Genealogy Problems Solved

I'm looking to upgrade Family Tree Maker 2006, but need a program that can display an entire tree. Any suggestions?
Malcolm Ruscoe

Most family history programs limit your working view to four-to-six generations at a time, but several can display a full tree. A

good example is My Family Tree (<https://chronoplexsoftware.com>) with its Ancestor Chart view, while Family Historian (£59.95, www.family-historian.co.uk) lets you do so by clicking View, Charts, All Relatives.

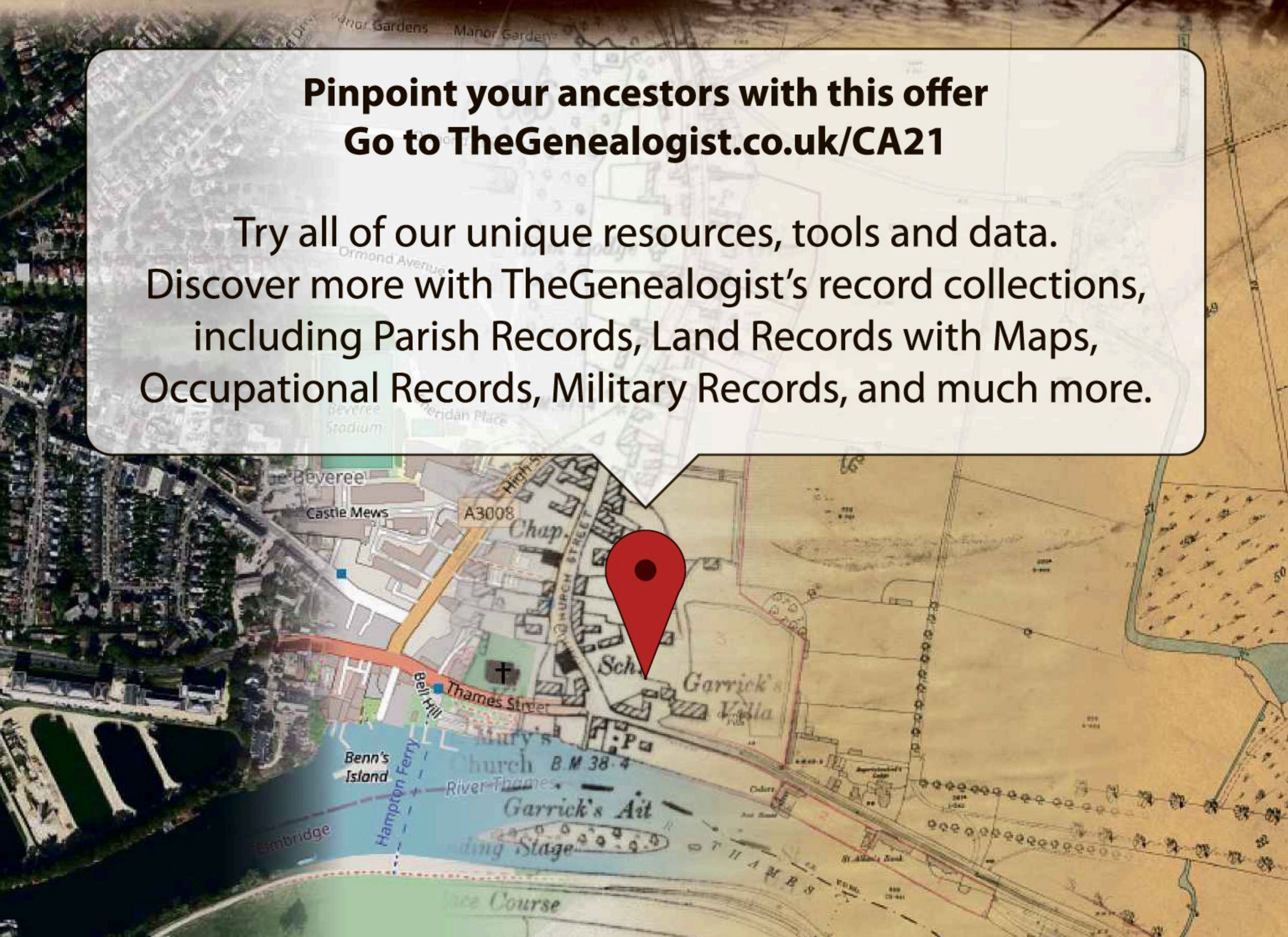
Have a genealogy question for Nick?
Email letters@computeractive.co.uk with 'Grow Your Family Tree' in the subject line.

Take a trip back to your past with a free Diamond Subscription



Pinpoint your ancestors with this offer
Go to TheGenealogist.co.uk/CA21

Try all of our unique resources, tools and data.
Discover more with TheGenealogist's record collections,
including Parish Records, Land Records with Maps,
Occupational Records, Military Records, and much more.



Best Free Software

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

SYSTEM TOOL

O&O ShutUp10++ 1.9.1424

www.snipca.com/39704

What you need: Windows 10 or 11

O&O usually updates its free 'antispy tool' ShutUp10 when Microsoft releases a major update for Windows 10, so that users can regain control of all the settings that have been changed. The program has now been updated to fix privacy problems and other annoyances in Windows 11. It even has a new name, with a '++' on the end, to denote that it works with both Windows 10 and 11.

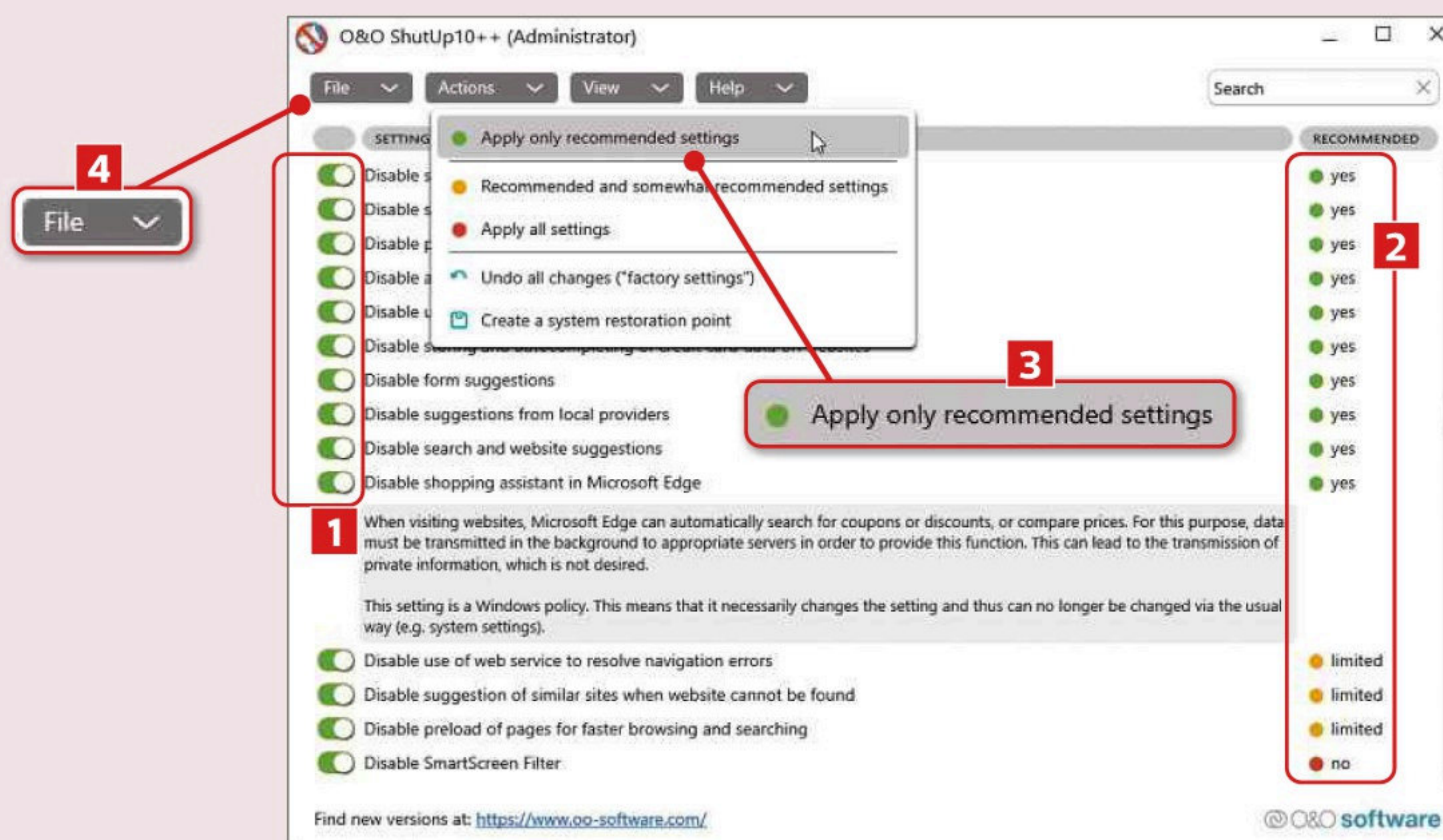
Thankfully, O&O has resisted the urge to give ShutUp10++ a fancy Windows 11-style makeover, and the program retains its simple interface. This consists of little more than a long list of Windows settings, each of which can be turned on or off with a single click. New options in this version include disabling Cortana while your system is locked, switching off the Shopping Assistant in Edge and preventing apps from taking screenshots without your permission. You can also stop apps accessing your music library and downloads

folder, so that Microsoft can't spy on your data.

The other big new feature is a **dark mode**. This isn't an option within the software itself, but is dependent on whether you have Windows 10 or 11's own Dark mode enabled – go to Settings, Personalisation, Colours to turn it on or off.

As before, ShutUp10++ prompts you to create a **system restore point** before you make your first change, which you can also do before further changes by clicking the Actions menu and choosing 'Create a restoration point'. In the same menu, you can select 'Undo all changes' should your system start behaving strangely.

O&O ShutUp10++ is an essential tool for making Windows work the way you want, and we're delighted that it's already been upgraded to cover Windows 11.



1 To activate a setting in ShutUp++, click the slider next to its name to switch it from red to green. Click the option's name for a short description of what it does.

2 ShutUp10++ provides a recommended setting for each option. 'Yes' indicates you should enable it, 'limited' suggests it affects only some Windows features and 'No' means it's best left untouched.

3 Rather than tweak all the program's settings individually, you can click the Actions menu and choose 'Apply only recommended settings' or 'Apply all settings'. However, it's always wise to check what you're changing.

4 To copy your settings to a new PC or a **clean install** of Windows, click the File menu, choose 'Export settings' and save the configuration file. Install the tool on your new or clean PC, click File, then choose 'Import settings'.



ASTRONOMY

Stellarium 0.21.2

www.snipca.com/39695

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

This fantastic free PC-based planetarium has been updated to make studying the sky from your computer even more fascinating. Among the changes in Stellarium 0.21.2 are one that the developers call “annual aberration correction”, which means the positions of the planets in the program’s star maps are now more accurate. The handy Bookmarks feature, which lets you save the celestial objects you’re viewing to return to them later, has been given the more logical name of Observation Lists, but can still be accessed by pressing Alt+B. Stellarium has added two new Greek ‘skycultures’, which overlay the stars with stunning artwork showing how ancient cultures visualised the heavens (see screenshot). To apply these, click the View button in the left-hand panel, select Starlore and choose a skyculture. It has also improved its data relating to lunar eclipses and rising, setting and transit times.



IMAGE EDITOR

Paint.NET 4.3.2

www.getpaint.net

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

The latest update to Paint.NET relates mainly to the second section of its name, because it has switched from using Microsoft’s ‘.NET Framework’ software-development platform to ‘.NET 5’. This means the popular image editor will now work much faster on modern PCs, with promises of speed improvements of “20 per cent on average” when performing resource-intensive tasks. It will also open more quickly, use less memory and offer smoother application of tools such as custom shapes, Magic Wand (for selecting colours from an image) and Paint Bucket (for applying colours). You don’t need to worry about installing .NET 5 because it comes packaged with the Paint.NET installer – just make sure you download the free desktop program (www.snipca.com/39696) and not the paid-for version from the Microsoft Store. A portable edition you run from a USB stick is also available (www.snipca.com/39697).



WHAT SHOULD I DOWNLOAD?

We tell you what software & apps to use

How can I run Android apps in Windows 10?

Q

Can you recommend a free **emulator** program for Windows 10, so that I can download and use Android apps on my PC?

Dave Sycamore

A

The best free Android emulator for Windows is BlueStacks, which you can download from www.bluestacks.com. Although it’s designed for playing mobile games on your PC, it also lets you install other Android apps, so you can use them on the large screen of your monitor rather than your phone or tablet’s smaller display.

Once you’ve installed BlueStacks (this can take a while as it’s a hefty 400MB), you’ll see the Home screen, which includes links to the Game Center and ‘System apps’ (see **1** in our screenshot) such as Settings, Chrome and Camera (this uses your PC’s default webcam). To ‘install’ further apps, which actually means ‘emulate’ them, click the Play Store button **2** and sign into your Google account.

The Play Store will now load in BlueStacks, and let you browse and search for apps and games as you would on your Android phone or tablet. Once you’ve found an app you want to emulate, click the Install button in the top-right corner of its page to ‘download’ it. You can then either click Open to start using the app or return to the BlueStacks Home screen – just click the house icon **3** in the top-left corner – and launch the newly added app from there. BlueStacks also creates desktop shortcuts for apps.

Apps that are optimised for tablets open horizontally to fill the main emulator window, while others are shown in a phone-shaped vertical window that you can resize using your mouse. To remove an app from BlueStacks, go back to its Play Store page and click Uninstall.



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

HOW I USE...

WizTree



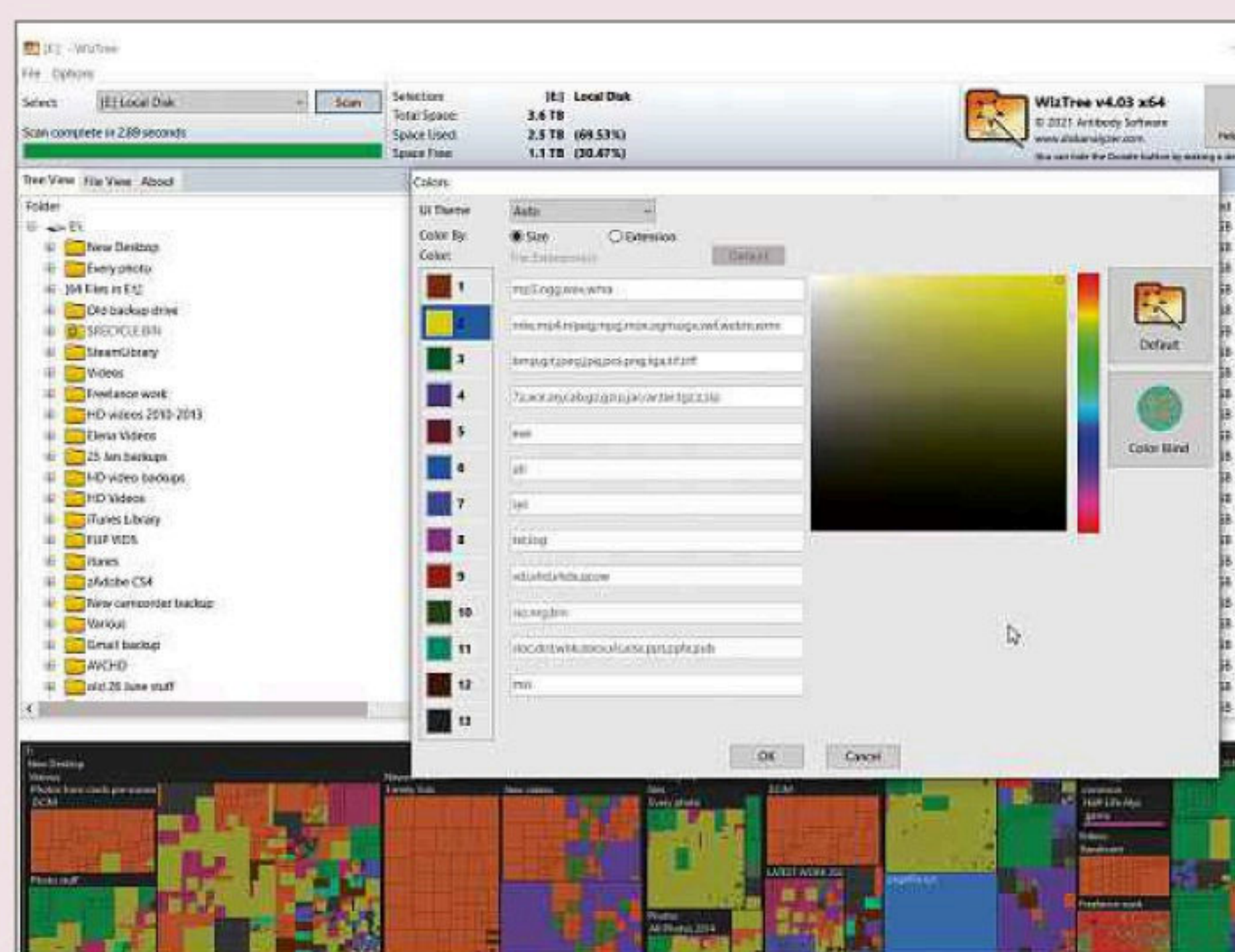
Wayne Williams has 20TB of files scattered across his drives, so he asks WizTree to find them. It might even help him launch a comedy career

I have a lot of large drives in – and attached to – my main PC. My total storage space is around 20TB, although not all my drives are permanently connected. Years ago, I would never have managed to fill all that, but I now have sizeable collections of 4K videos, high-res photos and demanding games. I'm also awful at organising my data, so I have loads of folders with the same content sitting in different drives.

Helping me out of this mess is the fantastic and free WizTree (<https://diskanalyzer.com>), which identifies my largest folders and files so I can easily delete anything bulky I don't need. It's brilliantly simple.

Once you've opened it, just use the dropdown menu at the top left to choose a drive to search. If you have more than one drive, it's worth doing what I do, which is to choose Select Multiple then tick them all. Wait for the scan to complete – even across 20TB it doesn't take long – and the program will show you the full contents.

The Tree View tab shows a colour-coded graphic at the bottom (see screenshot) that lets you see the type of content taking up space (orange is MP4 video files, while yellowy-green is JPEGs), as well as what percentage of space they use. I don't mind this colour scheme, but you can change it by clicking Options and selecting



Wayne ditched WizTree's colour gradient to make the blocks easier to distinguish

Colors in the menu. Hover your mouse over a block in the graphic to see what it is, how big it is, and where it's located on your computer.

The program uses an old-fashioned gradient design for the coloured blocks, so some areas look brighter than others. I'm not a fan of this, so I turned it off using a clever trick.

Open the 'WizTree3.ini' file in Notepad by going to `C:\Users\username\AppData\Roaming\WizTree3` (replace 'username' with your actual Windows username) and double-clicking it. Find the `gradientenabled=1` entry and change it to `gradientenabled=0`. Save the file and restart WizTree.

For me, WizTree's most useful feature

is in the File View tab, which lets you search for anything you have stored – and does so astonishingly quickly. Unlike Windows Search, which looks through your computer's entire content, WizTree scours a drive's MFT (Master File Table), which is an index of everything stored on it. Use the dropdown menu to select the drive(s), then type your search term in the File Search box.

The latest version of the program (4.03 at the time of writing) adds a search filter that I love. By typing `=files` next to your search query, WizTree will only show you files that match, not folders. Typing `=folders` reverses this.

It helped me the other day when I was looking for an old comedy novel I wrote back in the day, but never got published (I might turn it into a podcast). Windows failed to find it, but by searching in folders only WizTree found 17 instances of it scattered throughout my system. Note to self: must get better organised.

WHAT I'D LIKE TO SEE IN WIZTREE

WizTree should make it easier to remove the dated-looking gradient effect in the coloured boxes. A box in settings that you could untick would do

the trick. I'd also like to see a simple Select All Drives option, alongside Select Multiple. It would do away with one extra, needless click.

Named & Shamed



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

SOFTWARE WARNING!

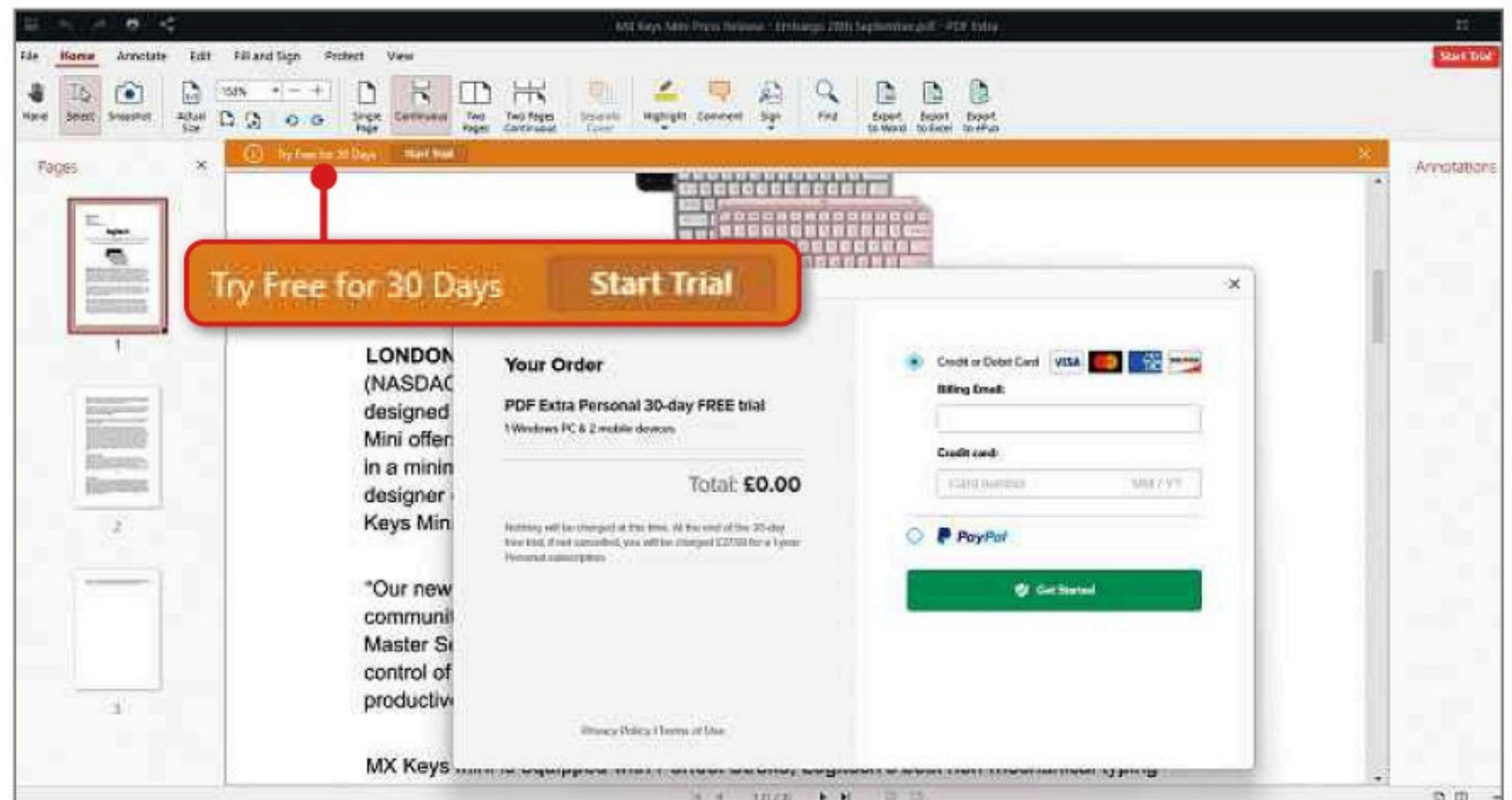
PDF Extra's 'free' editor

Perhaps because Adobe requires you to take out a second mortgage for its official PDF editor – Acrobat DC – the market for 'free' PDF editors is packed. Packed with chancers, that is. My predecessor in this column wrote about so many iffy PDF editors that he's had to go for an extended lie down. Now I've stumbled across another: PDF Extra (<https://pdfextra.com>).



When I searched on Google for 'free PDF editor Windows 10' up popped an advert, with the headline 'Free PDF Extra Editor – Edit any PDF file'. Couldn't be clearer than that. So off to the website I clicked, where I was met with a front page promising 'All your PDF tasks, sorted' and a lovely blue 'Free download for PC' button at the bottom.

Only when I'd downloaded the software, installed the app and tried to open my first PDF for a spot of judicious editing did a little orange banner appear at the top of the screen: 'Try Free for 30 Days – Start Trial' (see screenshot).



The 'Extra' in PDF Extra is that you have to start paying after 30 days

You see, as soon as you start to do anything more than read a PDF – something you can already do for free in every web browser known to man – the software wants your payment-card details. This will unlock the editing features for 30 days, after which you'll be charged £37.99 for a one-year subscription. That, in nobody's definition of the word, qualifies as 'free'.

I've got no problem with free trials of paid-for software. In fact, they're a brilliant idea, letting you kick the tyres before you buy the car. But I do have a massive problem with software advertising itself as 'free' when it's actually a 30-day trial that requires you to part with your Mastercard details virtually before you pass Go. Ironically, PDF Extra needs a good editor.

WHAT ARE THEY TALKING ABOUT?

WHAT THEY SAY

Amanda Silver, Microsoft
www.snipca.com/39621



"We aim to build a more inclusive future by fostering confidence, resilience and a sense of belonging across industries. Our approach outlines clear and simple skills to making belongingness, growth mindset and other core problem-solving and collaboration strategies top of mind and actionable."

WHAT THEY MEAN

We believe in inclusive working, as long as you're willing to swallow dollops of jargon like 'belongingness', 'top of mind' and 'actionable'.

BARRY'S VILLAIN OF THE FORTNIGHT

Hayder Aljarryash

Cheating has come on a bit since I was at university, when Biro on sleeved arms was still considered cutting-edge. Masters student Hayder Aljarryash is now doing 20 months at Her Majesty's Halls of Residence after he hacked into servers at the University of South Wales, downloaded exam papers and their answers, and then sold them to fellow students for a grand total of £20,000.



The hack was rumbled when five students submitted the exact same answer to a question, including a typing error made by the lecturer who wrote the answer in the first place.

The university was forced to spend £100,000 to beef up its IT security. Perhaps it should stretch to a further £25 to buy the lecturer a copy of the Concise Oxford English Dictionary.



LAPTOP | £1,000 from Acer www.snipca.com/39576

Acer Swift 3

Turns it up to 11

Acer continues to update its popular Swift series of ultra-slim laptops, improving the core components while maintaining the same external case. Our pick of the latest crop has been given an 11th generation Intel Core i7-1165G7 processor, 16GB of memory and a generous 1TB SSD, all for £1,000.

These make it a hard worker when it comes to running Windows, with more than enough power to cope with everyday tasks. In fact, it's one of the fastest laptops we've tested around this price, significantly outperforming the Microsoft Surface Laptop 4 we tested last issue. It comes with the integrated Intel Iris Xe graphics, which isn't ready for intense gaming on the latest titles, but will hold its own with less demanding games. It manages to do all this and still have a decent battery life.

The 14-inch IPS screen has a resolution of 1920x1080 pixels. It's bright and has good colour saturation. In our tests it proved to be not quite as accurate at reproducing colours as the average laptop of its type, but this is countered by its potential to be turned up nice and bright for viewing in all lighting conditions.

The laptop's case is robust, enclosed entirely in metal. When closed it measures 16x323x219mm (HxWxD) and weighs 1.2kg, so is light and slim for carrying around.

It comes with a decent collection of ports. On the right there's a USB 2.0 port and an audio jack. On the left it has a USB-C port, a USB 3.2 port and an HDMI port for connecting to a monitor.

The built-in 720p webcam sits above



“ A fast laptop for its price, with good audio, screen and battery ”

the screen. The colour is a little off and the details are grainy, especially if the lighting isn't right. The microphone picked up our voice clearly with minimal background noise, though. Overall, it's not brilliant but it's sufficient for video calls.

The speakers score points for good sound quality, particularly from such a small laptop. The audio is clear, offering some depth in the lower audio ranges. It's not a bass thumper, but the two speakers did a nice job of creating very discernible bass, mid and high notes, which were loud enough to hear clearly in a medium-sized room.

The backlit keyboard is small because the whole laptop is small, but we still

found it comfortable to type on.

It also has a fingerprint scanner that's compatible with Windows Hello, letting you lock and unlock the laptop without typing a password.

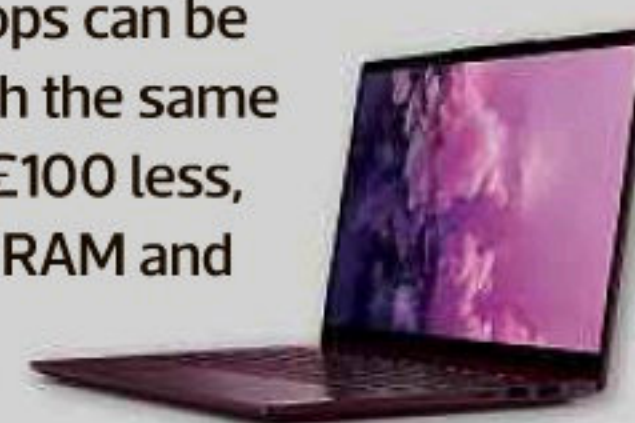
Our current favourite Yoga Slim 7 laptops are now available with the same Intel processor for £899 (www.snipca.com/39577), which is £100 less than this Acer model.

However, you get only 8GB of memory and a 512GB SSD in the Yoga. That's still a good option if you want to pull back on the price, but Acer's higher specification is worth investing in, if you're prepared to pay the extra.

VERDICT This slim and light laptop is packed with surprisingly powerful components, making it a solid purchase for the price

★★★★★

ALTERNATIVE Lenovo Slim 7 82A3005UUK £899 Lenovo's ultra-thin laptops can be configured with the same processor for £100 less, but halves the RAM and storage



SPECIFICATIONS

Four-core Intel Core i7-1165G7 processor • 16GB of memory • Intel Iris Xe graphics • 14in 1920x1080 pixels IPS screen • 1TB SSD • 720p webcam • Wi-Fi 6 • Bluetooth 5.0 • 1x USB-C port • 1x USB 3 port • 1x USB 2 port • 1x HDMI port • Windows 10 Home • 16x323x219mm (HxWxD) • 1.2kg • One-year warranty www.snipca.com/39576

PC | £950 from Argos www.snipca.com/39586

Lenovo Legion T5i

Losing the generation game

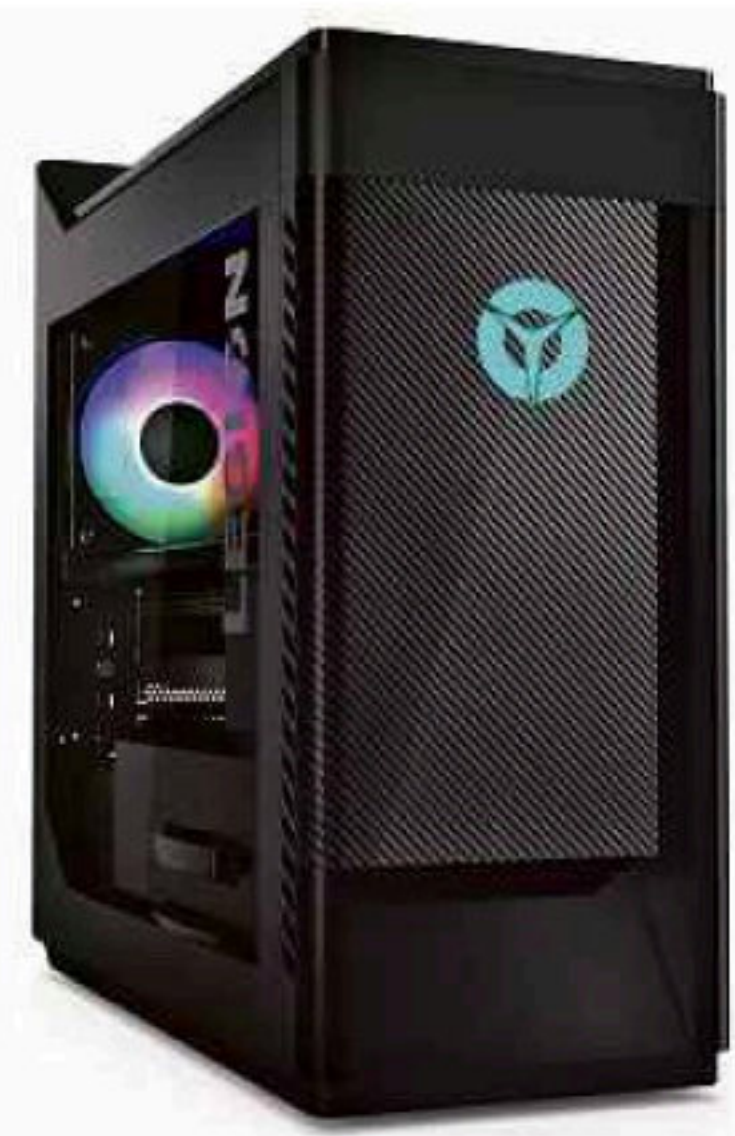
This is one of Lenovo's mid-range desktop PCs and is available in a range of configurations. Fans of Microsoft Flight Simulator should take particular note of this £950 specification, because it's clearly aimed at occasional gamers.

The first thing to note is that Lenovo has definitely compromised on the processor, which is a 10th-generation Intel Core i5-10400. This has probably been done to leave room in the budget for a Nvidia GeForce GTX 1660 Super **graphics card**, which is capable of cranking up the detail settings on games at Full HD (1920x1080-pixel resolution) without dropping the **frame rate**. This is all bolstered by a meaty 16GB of **RAM** and a 512GB **SSD**.

“No slouch in Windows tasks, but gaming is limited”

This is a very reasonable specification for a PC at this price, except for the older Intel processor. We've seen this chip in other models recently, but these have been mostly smaller, cheaper desktop PCs, such as the Dell Inspiron 3881 (see our review, Issue 611). This has recently been superseded by the 3891 model (£579 from www.snipca.com/39591), which also has the same processor, but comes with less RAM, a smaller SSD and no dedicated graphics card, so isn't suitable for gaming.

In **benchmark** tests, the Lenovo



PC performed well. It could certainly be improved with one of the latest chips, but the i5-10400 is still no slouch when carrying out Windows tasks. Supported by its generous amount of RAM, the Legion T5i never gets bogged down, no matter how many browser tabs you like to keep open.

There's also a wide array of ports to plug your peripherals into. On the top of the case you'll find the headphone and microphone sockets, along with two **USB 3.2** ports. On the back there's an Ethernet socket, three audio ports, and the ports connected to the graphics card – in this instance an **HDMI**, a **DisplayPort** and a **DVI** port. Besides that there's one USB-C, two more USB 3.2 and two **USB 2.0** ports.

If you're looking for a PC for under £1,000 that's capable of running programs such as Flight Simulator smoothly on a **1080p** monitor, the Legion T5i should fit the bill. However, if most of your time is spent working in Windows, look for a model with the newer Intel Core i5-11400 processor instead, such as the Dell XPS Tower (see Alternative).

SPECIFICATIONS

Six-core Intel Core i5-10400 processor • 16GB memory • Nvidia GeForce GTX 1660 Super graphics card • 512GB SSD • Wi-Fi 6 • 1x HDMI port • 1x DisplayPort • 1x DVI port • 1x USB-C port • 5x USB 3.0 ports • 2x USB 2.0 ports • Gigabit Ethernet • Windows 10 Home • 457x185x456mm (HxWxD) • One-year warranty www.snipca.com/39586

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 magazine *PC Pro* and the website *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 Recommended award. We highly recommend these products, although they just fail to meet the high standard of our Buy It! winners.

PRICES

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

VERDICT An affordable PC with some ability to run games well in Full HD, but compromises have been made to keep its price under £1,000



ALTERNATIVE

Dell XPS Tower **£899**
Dell includes an 11th-generation Intel processor, though for this price you get less RAM and a smaller SSD



TABLET | £799 from Samsung www.snipca.com/35749

Samsung Galaxy Tab S7+

Takes a bite out of Apple?

Samsung's Galaxy Tab S6 tablet fell awkwardly between the basic iPad and iPad Pro, but like the blue Angry Bird it's continuing its attack in three forms. While the S6 Lite (£329 from Amazon www.snipca.com/34950, see our review, issue 582) takes on the 10.2in iPad, the S7 and S7+ tackle the 11in and 12.9in iPad Pros respectively. Here, we test the S7+, which is £170 cheaper than its Apple rival. If you'll need to get online where there's no Wi-Fi, Samsung offers 5G for £200, while 4G adds £230 to the iPad Pro – both require a network contract.

“This is a fantastic tablet in its own right, but is limited when used as a laptop”

Finished in black, bronze or silver, the design is pleasingly simple, wafer thin, and an ounce and a half lighter than the slightly larger iPad. The two rear cameras match the iPad Pro's, but the webcam on the front now sits in the middle of one of the long sides, on the assumption you'll want to have video chats in landscape mode rather than portrait. That makes a lot of sense, considering a tablet used for



work will often be attached to a keyboard.

Samsung's keyboard (pictured below left) incorporates a trackpad and snaps on to a magnetically attached cover with hinged kick stand. It costs £190 extra, and there's no equivalent of Apple's more ergonomic Magic Keyboard (£349).

An enhanced S Pen stylus is included, however, saving you £119 on Apple's Pencil 2. Unlike the iPad Pro, the S7+ has a microSD card slot for extra storage, but the maximum built-in storage is 128GB. The battery lasted about 11 hours (similar to the iPad Pro).

Like Apple's tablet, the screen now goes up to a 120Hz refresh rate, so it looks even more realistic. HDR10+ is supported, and the high-contrast Super AMOLED makes colours pleasingly vivid. Oddly, it doesn't cover the wider P3 colour space, although sRGB accuracy is impressive. The 11in version offers an LTPS LCD screen with P3 but not HDR10+.

Inside, the Snapdragon 865 Plus processor can't match Apple's A12Z, especially when dealing with graphics, but it beats many mid-range laptops. To run Android, this processor is plenty. And here's the problem. Because Google has given up trying to rival iPadOS' features, you need to use Samsung's DeX platform,

which adds multi-tasking in resizable windows, drag-and-drop functionality, mouse support and the option to use an external monitor. However, very few apps are designed to work on DeX so this limits what you can do on it. It's still a good tablet, but if you need one for work, consider Microsoft's Surface Pro 7 (see Alternative).

SPECIFICATIONS

Snapdragon 865 Plus 8-core processor • 128GB flash storage • 12.4in 2800x1752-pixel screen • 13- and 5-megapixel rear cameras • 8-megapixel webcam • USB Type-C port • microSD card slot • 802.11ac Wi-Fi • Bluetooth 5.0 • Android 10 with DeX • 285x185x5.7mm (HxWxD) • 575g • Two-year warranty www.snipca.com/35755

VERDICT A stripped-back addition to the Galaxy Tab S7 range offers a huge screen and decent battery at an affordable price

★★★★★

ALTERNATIVE

Microsoft Surface Pro 7 £899 With Windows 10 and an i5 CPU, this feels like what the S7+ wants to be



TABLET | £470 from Amazon www.snipca.com/39652

Apple iPad mini

Small wonder

The iPad mini is the smallest of Apple's tablets, sitting between the company's largest iPhones and its standard iPads. However, unlike most manufacturers, whose smaller-screened tablets cost less, Apple's 10.2in iPad only costs £319, while this smaller 8.3in model is available for £150 more.

Its rationale is that the reduced size isn't a compromise, but a desirable feature (only Apple would think it could get away with charging more for less!). Here's a tablet with all the functionality of larger iPads, but in a smaller case that's easier to hold and carry.

“A portable tablet with a stunning screen that's bright, crisp and sharp”

The other reason why the mini is more expensive than some larger iPads is its six-core A15 Bionic processor. This is faster than the A13 chip in the basic iPad and A14 in the iPad Air, though it doesn't have the power of the iPad Pro's M1 processor. This was confirmed by our **benchmark** tests, which revealed it to be a little faster than the iPad Air but lagging significantly behind the iPad Pro.

The screen has a resolution of 2266x1488 pixels, which is slightly lower than the basic iPad (2160x1620 pixels). On the smaller screen, this gives the mini a much higher pixel density of 326 pixels per inch, which means there's a lot more detail.

As a result, the screen looks crisp and sharp, and bright enough to use outside

SPECIFICATIONS

Six-core Apple A14 processor • 64GB or 256GB storage • 8.3in 60Hz 2266x1488-pixel screen • 12-megapixel rear camera • Wi-Fi 6 • Bluetooth 5.0 • iPadOS 15 • 6.3x135x195mm (HxWxD) • 293g • One-year warranty www.snipca.com/39652



on even the sunniest of days. The only element that lets the screen down is its scrolling. The high resolution means that it sometimes struggles to respond instantaneously to **gestures**, which makes the screen wobble slightly at times. This is disappointing on an otherwise stunning screen.

If you simply want a small tablet to sling in a bag and carry around, there are plenty of cheaper Android alternatives. The Amazon Fire HD 8, for example, costs £90 with ads or £100 without (www.snipca.com/39649). However, you will be restricted to Amazon's app store and it comes with only 32GB of storage.

Even Samsung's smaller Android tablet, the Galaxy A7 Lite, costs only £130 (www.snipca.com/39655) and can be expanded by up to 1TB of storage with a **microSD card**, though its resolution is only 1340x800 pixels.

VERDICT Apple's latest mini tablet is more expensive than both its direct rivals and the 10in iPad, but it's powerful and its screen is packed with detail



ALTERNATIVE

Samsung Galaxy A7 Lite £130 Samsung's smaller tablet is much cheaper, but it has a significantly lower-resolution screen



CHOOSE THE RIGHT SPECS

eMMC storage



What does it do?

The very cheapest laptops sometimes come with eMMC storage (pictured) rather than the more typical **SSD**. eMMC stands for 'embedded multimedia card'. This is like running your laptop from a **flash storage** memory card, albeit one that's soldered to the motherboard and can't be removed. One example is Microsoft's Surface Laptop Go (pictured right), which we reviewed in Issue 596. The cheapest model (£549) comes with 64GB of eMMC storage.



How does it work?

Memory cards and eMMC drives typically run on a single chip and otherwise contain very little hardware. This makes them small and cheap to produce. SSDs, on the other hand, use multiple memory chips and contain more hardware, which lets them perform complex tasks, such as saving a lot of data to multiple memory chips at the same time. And because the chips used in SSDs are larger and more reliable, they help your computer perform significantly faster

What are the specs?

When you're buying a laptop, check whether the built-in storage is an SSD (also sometimes referred to as **M.2** or **NVMe**) or an eMMC. You don't have to avoid eMMC drives completely, but just be aware that they are a compromise, and won't provide the same performance as an SSD drive. The upside is that they can make a laptop considerably cheaper.

Can I change it later?

You can't remove an eMMC drive and replace it with an SSD, but you might be able to bypass the eMMC by using an external drive instead, especially if the laptop has a **USB-C** port.

PRINTER | £110 from HP www.snipca.com/39632

HP OfficeJet 8012e

Text appeal

Colour inkjet printers tend to be aimed at photo enthusiasts looking to print their snaps or home-office users looking to produce letters, homework and business documents. HP's OfficeJet range is usually targeted at the latter group, and the 8012e is no exception.

“A great fixture for any home office, but it can't match rivals when reproducing photos”

It comes with a built-in scanner and a 35-sheet automatic feeder to make copying documents that much easier. It also has a surprising number of other features considering the reasonable price. However, poke around in the specifications and you'll soon spot where the corners have been cut.

SPECIFICATIONS

4800x1200-dpi print quality • 600-dpi scan quality • 2.2in mono touchscreen • Duplex printing • 225-sheet input tray • 60-sheet output tray • 35-sheet automatic document feeder • USB or Wi-Fi connection • 233x460x338mm (HxWxD) • 8.2kg • Three-year warranty www.snipca.com/39632

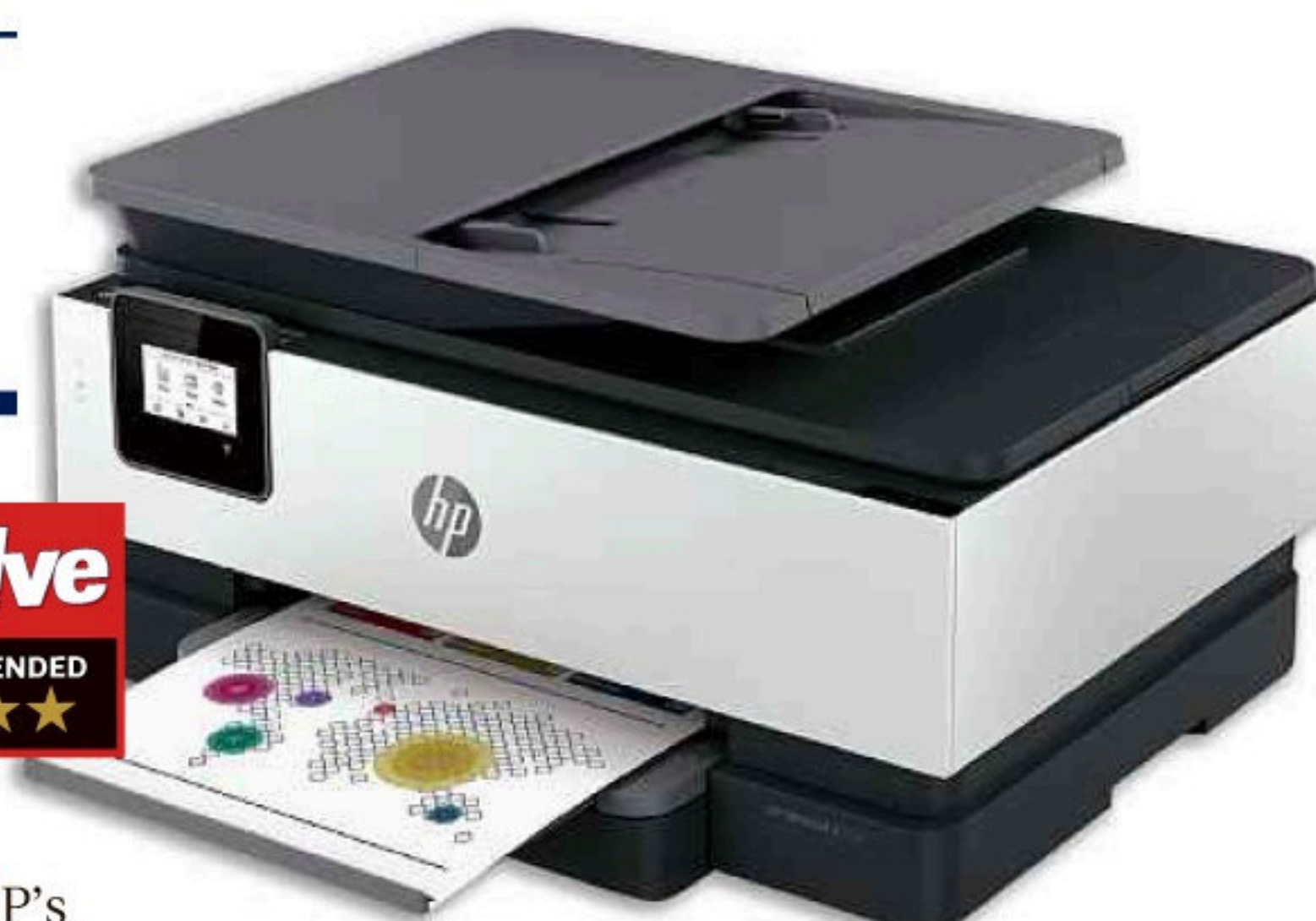
For example, the screen is black and white rather than colour, but it's still a touchscreen and performs as well as the colour screens on HP's pricier printers. The single paper tray holds 225 sheets, which isn't bad, though 250-sheet trays are more common.

The starter cartridges only come with enough ink for 225 mono or 270 colour A4 prints, but the printer comes with a free six-month subscription to HP's Instant Ink subscription service, so you don't need to worry about ink as long as you're prepared to pay per page printed rather than per cartridge used.

A subscription of 100 pages per month costs £3.49, though you can increase or decrease this if your needs change in the future (visit www.snipca.com/39637 for details). It can print on both sides of a sheet (duplex) automatically, which is useful for keeping paper waste to a minimum.

Text prints dark and clear, while mixed colour documents look crisp. However, colours are a little subdued compared with prints from models aimed at photo enthusiasts, lacking vibrancy and – on close inspection – appearing grainy.

For better all-round printing for a little



more money we'd recommend our current favourite printer, the Canon Pixma TS8350 (£140 from www.snipca.com/39641). This is a little more expensive, but it prints photos brilliantly and reproduces text impressively, though it doesn't have an automatic sheet feeder if you find yourself needing to print in bulk.

VERDICT A great printer for office documents and homework, but photo enthusiasts need to look elsewhere



ALTERNATIVE Canon Pixma TS8350 £140 It's more expensive and lacks a document feeder for the scanner, but it's a better all-round option with higher-quality photo prints



WHAT SHOULD I BUY?

We solve your buying dilemmas

What's the best phone for the visually impaired?

Q I've been searching for a mobile phone for a friend who is visually impaired. She wants basic functionality plus the ability to install WhatsApp. The budget is around £60.

Emrys Davies

A Your friend's budget is relatively small for a mobile phone and excludes any chance of her getting a smartphone. However, if all she wants is a basic

phone with the ability to send WhatsApp messages, a non-smart phone should suffice. Be aware that, without a proper on-screen QWERTY keyboard, she'll be writing messages by selecting letters assigned to numbered buttons – this means pressing them repeatedly.

We think a Doro phone would be the best option for her because they come with large text on reasonably sized screens. Phones from



bigger manufacturers tend to be smaller, which is handy for slipping into your pocket but no good if you're struggling to see what's on the screen.

Ask your friend to consider the Doro 7010. It's available from Amazon (£58 from www.snipca.com/39640, pictured) – just squeaking under budget, and it comes with WhatsApp installed.



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

Now's the time to tackle your smartphone

Are you missing out on everything you could do with it? With these helpful books, there's nothing to fear about using smartphones.

Find out more...

Modern mobile phones – smartphones as they're called – can do so much more than just make phone calls.

From browsing the web wherever you are, checking train times, acting as a sat-nav... And best of all they can make it so easy to keep in touch with family and friends – in so many ways, from sharing photos to making video calls.

But using them isn't always as easy as you'd want – and that's putting it mildly!

Do the manufacturers do it on purpose?

Sometimes it can seem like the manufacturers deliberately make them complicated – and how you do things is often hidden away. It might be easy once you know, but until you've been shown the easy way, it can drive you mad.

In fact only yesterday I was talking to someone whose Mum had got a new all-singing-all-dancing phone – but she couldn't work out how to answer a phone call on it! She's not daft – it's just that it's different from what she'd used before and the phone didn't come with a manual telling her what to do.

Whether you have similar problems or you're trying to do something slightly more advanced, the thing is, it can be easy to use them... once you know how. But until you've been shown, it can be like talking a different language.

That's why we've published these books: *iPhones one Step at a Time*, *Android Smartphones One Step at a Time* and *Doro Smartphones One Step at a Time*.

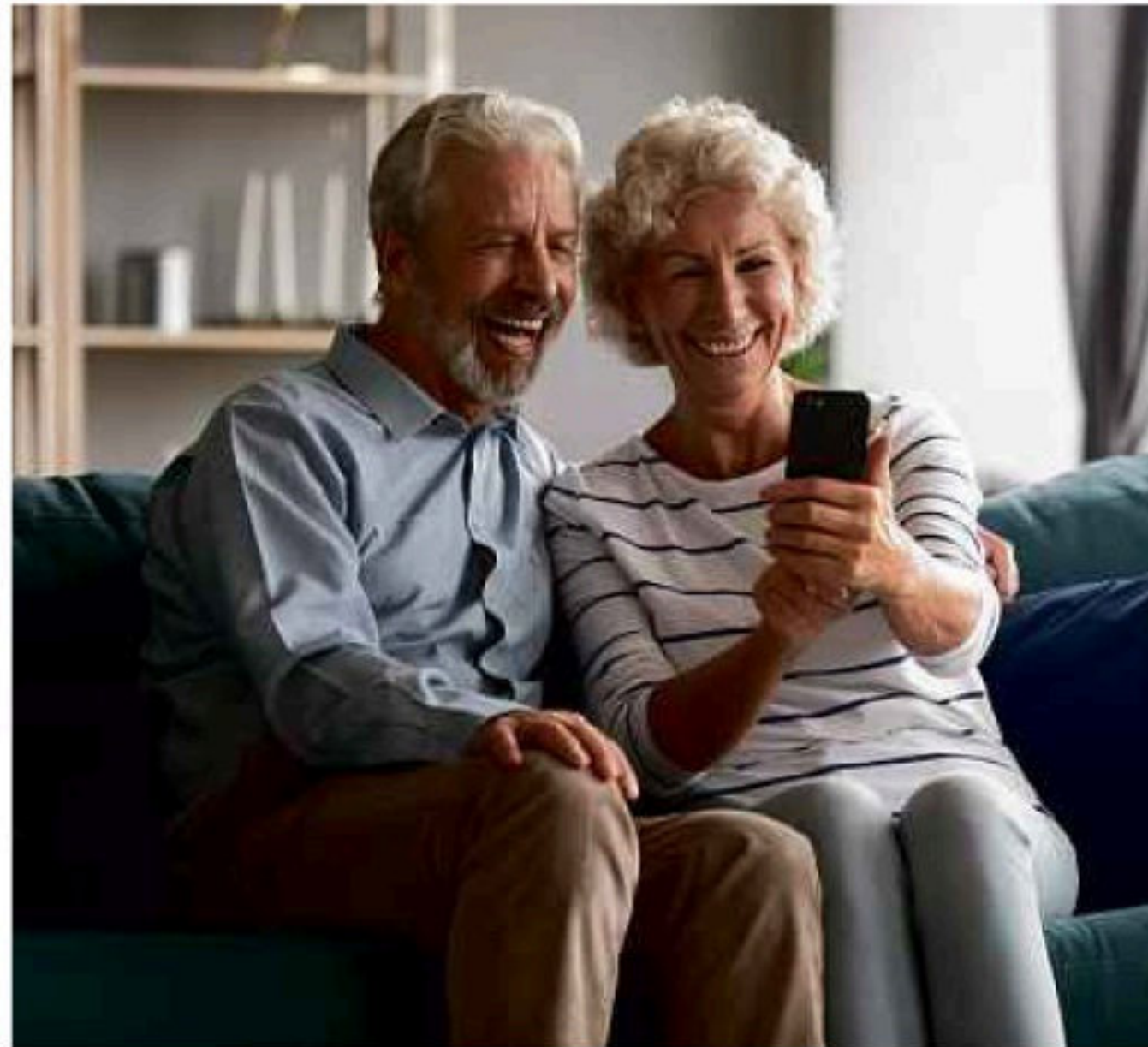
Plain English... and that's not all

They explain how to use the phone, in plain simple language with pictures of the screen showing you exactly where to tap or slide your fingers. No jargon!

What's covered?

I can't list it all here. But amongst other things, you'll discover:

- The basics of controlling it – swiping, tapping, opening apps & so on.
- Send emails from your phone.
- Most phones have a good camera so you can take photos: here's how to use it properly (and for videos).



Suitable for iPhones and Android smartphones like Samsungs, and DORO (not sure what phone you have? Best send off for the free info pack)

- Video phone calls – a great way to keep up with family who live a long way away
- Share photos with friends around the world – quickly and easily.
- See updates, photos and video clips from friends and family – as soon as they "post" them.
- Browse the web at home or out and about.
- Instant messaging and how to use it.
- Make it easier to read the screen.
- How to use it as a sat-nav... in the car or even on foot.
- Choosing and downloading apps.
- And obviously, you can make phone calls and send and receive text messages. ("Voicemail" is covered, too)

All explained nice and simply. (Find out more in the free information pack – read on...)

What one reader had to say:

"Thanks for a fantastic smart phone book. Very pleasant staff as usual.

I think this book should be sold with every smart phone. I have learnt so much from it, the info you get with the phone is non-existent.

Smart phones are quite complex, and your books speak in plain English."

Only half the story

That's only half the story but I don't have

room to explain here. I've put together full information on the books – who they're for, what they cover and so on.

What's more the books also come with a free gift – no room to explain that here either.

Don't buy now, do this instead

The books aren't available in the shops or on Amazon – only direct from the publisher. Send off now to get a completely free, no-obligation information pack. It'll explain what the books cover, who they're suitable for and so on – showing you just how it could help you.

Just call **01229 777606** and talk to Jade, Alicia, Karen or Steph. You can call us weekdays between 8am - 6pm or Saturdays between 9am - 3.30pm.

Or email PC1021@helpfulbooks.co.uk or post the coupon to The Helpful Book Company, 13B Devonshire Road Estate, Millom, Cumbria LA18 4JS today to get your full Smartphone infopack – we'll put it in the post to you straight away (and we'll keep your details private).

Even if you don't know what type of smartphone you have, the information pack will show you how to tell.

Best order your Smartphone infopack now and soon you could be getting so much more from your phone – with much less hassle.

Simply tear out this coupon and send it to the address below for full information on the books.		Or Call: 01229 777606
Name <input type="text"/>		Quote 'PC1021S'
Address <input type="text"/>		
Postcode <input type="text"/>		
Call 01229 777606 or email your address to PC1021@helpfulbooks.co.uk		
Or post to: The Helpful Book Company, 13B Devonshire Road Estate, Millom, Cumbria LA18 4JS.		
We use the details you give us to send you information on the products mentioned. We store the details securely and only share them with the Royal Mail for posting the information.		
Full privacy notice at www.helpfulbooks.co.uk/privacynotice		

Reviews

SOLID-STATE DRIVE | £123 from Amazon www.snipca.com/39622

Teamgroup PD1000

Tough nut to crack

Teamgroup isn't a household name, but it's one you should certainly consider if you're thinking of boosting your PC's storage capacity with an external SSD. The PD1000 is one of the fastest **USB-C** drives we've ever seen at transferring large files to a PC.

It's also built to last, with a shockproof case that's water- and dust-proof to the **IP68** standard. Its aluminum enclosure is scratch resistant, and it acts like a giant **heat sink**, keeping the drive cool as it's working. It also comes with a generous three-year warranty.

Given its high build quality and 1TB

SPECIFICATIONS

1TB (2TB and 512GB versions also available) • USB-C port • USB-C and USB 3 cables included • 11x40x107mm (HxWxD) • 71g • Three-year warranty www.snipca.com/39622

storage capacity this represents great value for money. A 2TB version is also available for £242, and there's a 512GB model as well, though at £88 it's more expensive per GB than the other two.

Carrying the device around is no problem. It's compact and light, measuring 11x40x107mm (HxWxD) and weighing 71g. It comes with two cables: one USB-C, while the other has a standard USB 3.0 connector, letting you use it with older devices. The cables are braided for strength and longevity and are around 300mm long.

If you're willing to forgo the convenient size and hard casing, you could opt for an external 1TB SSD costing less, such as the Samsung T5 (£101 from www.snipca.com/39624). However, we think the tough build of the PD1000 is worth the



extra money if you're likely to carry it around with you.

VERDICT With strength and speed on its side, the Teamgroup PD1000 is a great 1TB external SSD for the price



ALTERNATIVE Samsung T5 1TB

£101 It's not as sturdy but this external drive offers more storage for your money



SMART PLUG | £13 from Amazon www.snipca.com/39623

Meross Smart Wi-Fi Plug Mini MSS110

Walls have ears

Smart plugs are fantastic for making your existing devices smarter. Plug a standard floor or table lamp into one that's plugged into a wall socket, and you can turn it on and off by shouting simple commands at it, without having to scramble around finding all the switches.

This plug, available individually or in multipacks, connects to your home's Wi-Fi network. You can then control the power to the socket using its app. Alternatively, link it to Google Assistant, Amazon Alexa or Apple's Siri to control it with your voice.

You can even schedule it to switch on and off at a particular time, or use the

SPECIFICATIONS

Wi-Fi 4 (2.4GHz only) • UK 3-pin plug and pass-through socket • On/off switch • 50x55x62mm (HxWxD) • 100g • One-year warranty www.snipca.com/39623

sunrise and sunset options, which adapts to the changing daylight hours through the year – handy for automating lights to make it appear you're home even when you're not.

The design is neat and compact, only slightly bigger than a standard plug, so it doesn't overlap on double sockets. However, they will protrude some distance from the wall, particularly when you factor in the plug of the device they're controlling. This may require you to pull out furniture that backs on to an occupied wall socket.

These Meross models are very affordable, but there are even cheaper smart plugs available. TP-Link's Tapo range doesn't include Apple SmartKit for voice control via Siri, but has most of the other functions (a twin pack costs £14 from www.snipca.com/39627).



VERDICT A compact smart plug that can give you voice or app-based control over any gadget you can plug into a wall socket



ALTERNATIVE TP-Link Tapo Smart Plug twin pack £14 If you don't need to integrate with Apple's smart home system, TP-Link's Tapo range is even more affordable



MESH ROUTER | £280 from Amazon www.snipca.com/39660

TP-Link Deco Voice X20

Alexa, speed up my Wi-Fi

TP-Link's Deco Voice X20 is a **mesh Wi-Fi** system, which uses multiple Wi-Fi devices placed around your home to extend the reach and strength of your wireless network beyond that of a standalone router. However, it adds an extra dimension as each device is also a smart speaker that's powered by Amazon Alexa. This means you can control it with your voice and use it to stream music, control smart home devices, and perform all kinds of other tricks.

“Increases coverage but speeds are so-so for a Wi-Fi 6 device”

It's not a completely new idea: Google's Nest Wi-Fi already does something similar with its Google Assistant, though this is Wi-Fi 5 and only the satellite units (not the router) have the smart-speaker capability. The X20, on the other hand, offers **Wi-Fi 6**, but is more expensive. This two-node pack costs £280, £41 more than Google's equivalent.

The X20 kit consists of two units: you connect one to your existing router via Ethernet; you place the other elsewhere in your home wherever your Wi-Fi signal needs a boost.

The devices' circular footprint is 105mm in diameter and they are 170mm tall, on a conspicuous red base. As is standard with many Amazon devices, a ring around the top glows blue when the voice assistant is active.

The smart-speaker element worked well in our tests and was recognised immediately by our Alexa app and listed alongside our other Echo devices, and we had no problem getting it to react to our commands. There are a few router-specific voice commands too, such as

SPECIFICATIONS

Dual-band Wi-Fi 6 • AX1800 speed rating • 2x Gigabit Ethernet ports per unit • 170x105x105mm (HxDxW)
• Three-year warranty www.snipca.com/39660



rebooting the router or turning the guest network on and off.

Sound quality wasn't great, though, with very little bass punch. It's fine for background music, but it sounds flat and boxy if you turn the volume up.

Network coverage was excellent, providing a strong signal throughout our test house, with plenty of **bandwidth** available. However, the speed of the network was unexceptional by Wi-Fi 6 standards. More nodes would help with this, but you can only buy them in pairs, so a three-node option isn't currently available.

VERDICT This combines Alexa smart speakers and mesh Wi-Fi into a single system, but it's neither the fastest Wi-Fi 6 network nor the best speakers

★★★★★

ALTERNATIVE Google Nest Wi-Fi **£239** This is a little cheaper as it's limited to Wi-Fi 5 and the speakers are only in the satellite units, not the router



DO I REALLY NEED...

Car keys on my phone

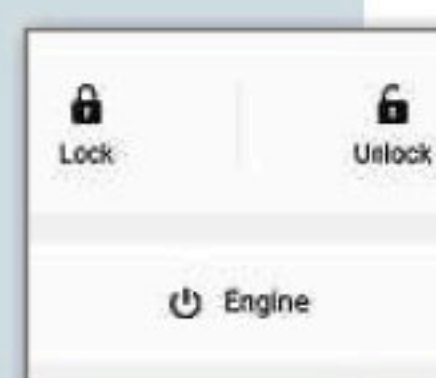
What is it?

Samsung now lets you use some of its phones to unlock your car, freeing you from carrying your car keys around with you. If you already use your phone as a digital wallet, this is the next logical step.

What does it do?

Compatible Samsung phones use UWB (Ultra-Wideband) technology, which is a bit like Bluetooth but faster and more secure.

As you approach your car you can unlock it and start the engine (see screenshot). It will even adjust the seats to your preferences.



What's the catch?

You need one of Samsung's latest phones, it currently works with only one model of car (the Genesis GV60), and you have to live in South Korea, where Samsung is trialling the system.

So can I do without it?

Although it's not widely available, we think this is likely to catch on. We'd all welcome one less thing to remember as we leave the house. Just try not to lose or break your phone.

NEXT ISSUE

On Sale Weds 3 Nov

Xiaomi Pad 5
New Android tablet takes on the iPad



PC monitor group test
Find the best screen you can buy for £250 or less

These and much more...

Subscribe to Computeractive at www.getcomputeractive.co.uk

Our pick of products that have won the **Buy It** award

LAPTOP

PRICE DROP

Lenovo Yoga Slim 7 (256GB)
£599 from www.snipca.com/39635
Tested Issue 601



Weighing just 1.16kg, this is an excellent lightweight laptop with a great screen and an AMD processor faster than many Intel rivals. It has two USB-C ports, two USB 3.0 ports and a microSD card reader. Battery lasts nearly 16 hours.

ALTERNATIVE Dell XPS 13 New Intel CPUs and a taller screen make this a more powerful, all-round slim laptop. Prices start at £1,399 from www.snipca.com/36642

DESKTOP PC

Palicomp Intel Mercury
£600 from www.snipca.com/34223
Tested Issue 576



If you don't need advanced gaming, your money's well spent here on a six-core Intel i5-9600K processor overclocked to 5GHz. 16GB of memory and a full terabyte of fast SSD storage round off a powerful PC with good expansion potential.

ALTERNATIVE Chillblast Create Zen Fast Ryzen 5 CPU plus adequate GPU makes a superb work PC. £1,700 from www.snipca.com/35840

APPLE IPAD

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



The basic iPad is great value, especially now it's been updated with a powerful A12 processor and iPadOS 14. It includes Scribble handwriting recognition with the £89 Apple Pencil. Storage isn't expandable; consider 128GB at £429.

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

ANDROID TABLET

Lenovo Tab P11 Pro
£600 from www.snipca.com/38585
Tested Issue 609



A fast tablet that comes with a magnetic stand and keyboard that means you can also use it as a laptop. It has an outstanding screen, 128GB storage and a 17-hour battery life, while its excellent dual mics make you sound clear in video chats.

ALTERNATIVE Samsung Galaxy Tab S6 Lite Slower than the Lenovo Tab P11 Pro, but the 64GB storage and decent 10.2in screen make it good value. £290 from www.snipca.com/38606

APPLE IPHONE

Apple iPhone 12
£679 from www.snipca.com/36582
Tested Issue 595



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

ALTERNATIVE iPhone SE With a single camera and smaller screen but the same powerful A13 processor and 64GB storage as the iPhone 11, it's great value. £389 from www.snipca.com/34773

ANDROID PHONE

Xiaomi Poco F3
£299 from www.snipca.com/38395
Tested Issue 608



This is a phenomenal phone for the price. It's 5G, has a brilliant screen, and comes with 6GB of RAM and 128GB storage (256GB costs £349). Performance is exceptional – in fact, the only phone under £450 that's faster is the iPhone SE.

ALTERNATIVE Google Pixel 5 Cheaper than previous Pixels, this has great cameras, wireless charging and a superb screen. Battery life is 23 hours. £599 from www.snipca.com/36586

COMPETITION

Win a... Chillblast WAP 2500U mini PC



Winner of a 'Recommended' Award in Issue 612 (page 22), Chillblast's WAP 2500U mini PC is a superb space-saving computer that takes the performance of the incredibly popular 'Work and Play' range to the next level.

Armed with the powerful AMD Ryzen 5 2500U processor, the WAP Ultimate boasts extremely rapid performance for everyday computing tasks. It uses modular components for storage and memory, so the capability of the unit can grow with your requirements.

As standard, it has 16GB of DDR4 memory, a 500GB M.2 SSD and comes with Windows 10 Home 64bit. As well as the 2.5in drive mount, there's an M.2 NVME 2280 SSD slot. Connectivity is great too, with three high-speed USB 3.0 ports, two USB 2.0 slots and dual HDMI ports to support two screens via the integrated Radeon Vega 8 graphics.

The integrated Vega graphics gives this WAP the capability to play the world's most popular games including Minecraft, Fortnite, Dota and Counter-

Strike: Global Offensive at fully playable frame rates.

To enter this competition, answer the question at www.snipca.com/39535 and enter your details. It runs until midnight Tuesday 2 November. Good luck!

Visit Chillblast's site to buy the **WAP 2500U mini PC** for £540: www.snipca.com/38987. For more information follow @Chillblast on Twitter and 'like' www.facebook.com/chillblast.

MESH ROUTER

BT Whole Home Wi-Fi
£200 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. £295 from www.snipca.com/27309

SOLID-STATE DRIVE

Samsung 970 Evo Plus
500GB
£75 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. £60 from www.snipca.com/37304

SMART SPEAKER

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



Produces a rich, clear sound, and better understands your questions than Amazon's Echo devices. You can use Google's app to control audio from other units around your home (pair two of them for £160). The clever Ambient IQ tool increases the volume if it detects external noise, such as a hairdryer.

ALTERNATIVE Amazon Echo (4th generation) The latest version of the Echo changes the shape from a cylinder to a ball, which improves sound quality – though the Nest's is still superior. £70 from www.snipca.com/36602

Workshops & Tips

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

35 Set up a tri-band Wi-Fi router

38 Change these Windows 11 settings today

40 Readers' Tips

42 Browser Tips
Set Brave or Firefox as your default browser

PLUS

44 Phone & Tablet Tips

46 Make Windows Better

47 Make Office Better

48 In The Club: Use TeamViewer whiteboard

HOW TO...

Set up a tri-band Wi-Fi router

by Nik Rawlinson



What you need: Tri-band router **Time required:** One hour

How many devices are connected to your home's Wi-Fi network? It's probably more than you think. With PCs, laptops, TV-streaming sticks, smartphones and tablets – not to mention games consoles, web-connected thermostats and video doorbells – the number can quickly grow.

Most routers can theoretically host 255 connections, so you're unlikely to run out of capacity at home (if you're wondering why 255, read the box on page 37). However, as you connect more devices, your network becomes congested. Devices effectively queue to send or receive data and, inevitably, older devices will end up slowing down the network.

The solution is to run several separate networks. There's a good chance your existing router does this already, broadcasting an 'older' 2.4GHz signal alongside a faster 5GHz. It won't host twice as many devices, but it will separate them based on their inherent

speeds, and slower devices won't get in the way of your faster laptop, tablet or phone. It's like dividing a single carriageway road so faster cars can overtake lumbering delivery vans.

Tri-band routers go one step further, adding a third network stream, so you have one 2.4GHz and two 5GHz bands. Why two 5GHz signals? Because the maximum theoretical speed that each signal can support is split between each of the devices it's hosting. Therefore, if you have two 5GHz signals rather than just one, they can split the workload, and the impact on the overall speed experienced by each device will, in theory, be halved.

More importantly, one of the 5GHz bands can be dedicated solely to connecting other access points elsewhere in your home. This will extend your network, and ensure that it doesn't slow down when connections are shared with TV streaming sticks, tablets and so on.

Tri-band routers start at around £143, for which you can pick up the Linksys MR9000 (www.snipca.com/39579). It has a range of around 2,000 square feet, which you extend by adding extra satellite nodes. At £169, the ASUS AC3000 (www.snipca.com/39580) extends coverage to 2,430 square feet, which you can push to 5,400 with nodes.

But here we'll explain how to set up Netgear's powerful Nighthawk RAX70 router (£219 from www.snipca.com/39572, pictured above), which stretches to 2,500 square feet. It has a flexible set of options, including separate passwords for each signal, so you can stop devices encroaching on the stream reserved for nodes you've added.

The 2.4GHz signal supports speeds up to 600Mbps, which is more than enough for streaming high-definition video (Netflix recommends 25Mbps for 4K video – see www.snipca.com/39571). The 5GHz signals can hit 1,200Mbps and 4,803Mbps.

1

Install the Nighthawk app and connect to your router

Like most routers, you need to set up the Nighthawk through an app – in this case it's the Netgear Nighthawk app for iOS (www.snipca.com/39581) or

Android (www.snipca.com/39582). Once installed, click Continue when prompted to 'Allow local network access', followed by OK. On the next screen, allow or block notifications, depending on your preference (we suggest keeping them on to begin with, then turning them off later

if you find them annoying). On the third screen decide whether you want to allow the app to detect your location (this will help your phone connect more easily to the router).

Finally, fill in the form to create a Netgear account. You'll need to confirm





Connect the router's Ethernet cable to the back of your modem

the account by clicking the link Netgear sends you by email.

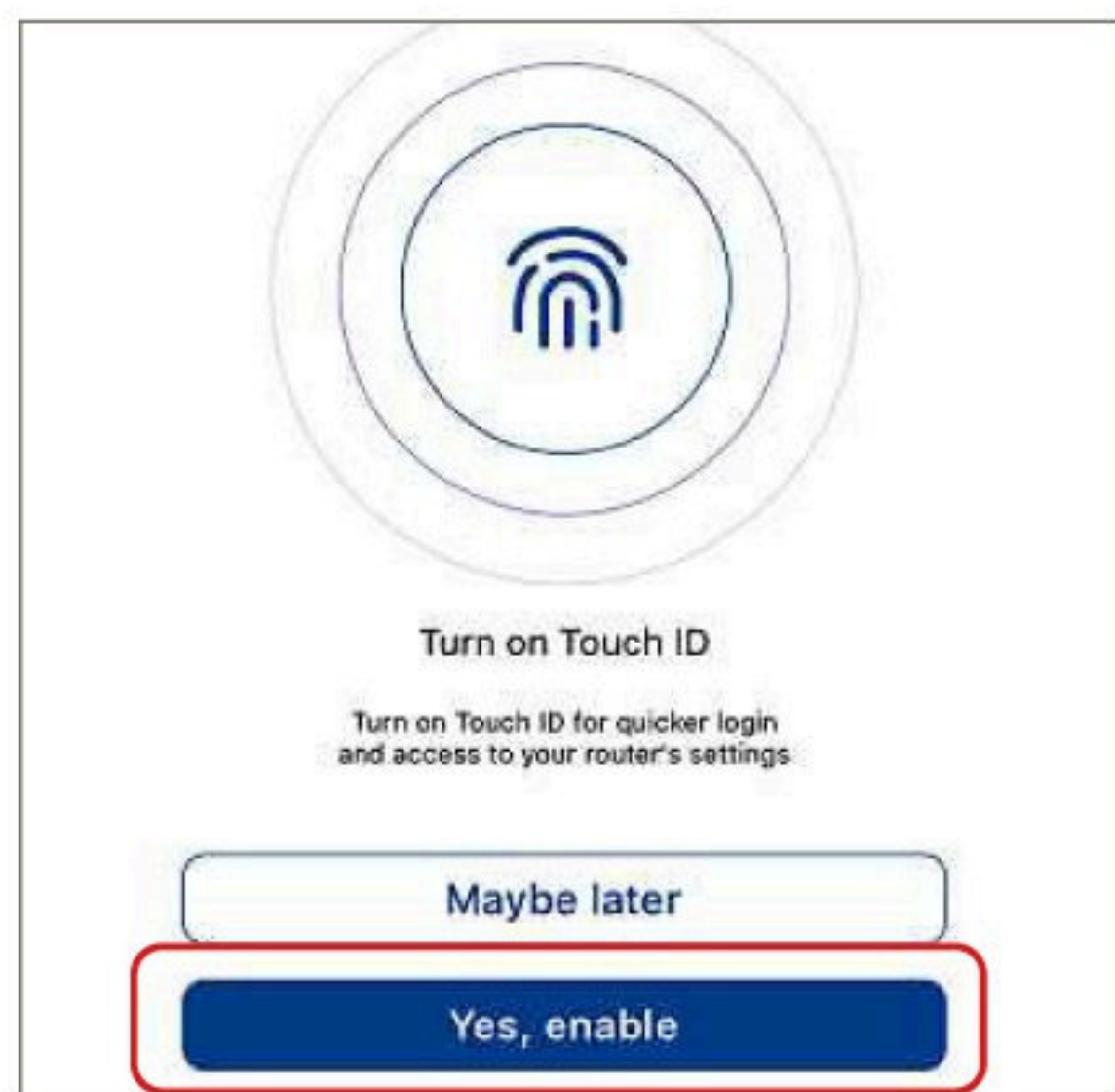
Next, connect your router to power, then use the Ethernet cable that comes with the Nighthawk to connect the internet port on the router to one of the Ethernet (or LAN) ports on the back of your modem (pictured above). Tap 'Yes' when the app asks if you want to set up a new product, followed by Get Started, then WiFi Router. Next, tap 'Enable camera and scan', then scan the square barcode stuck to the router.

Alternatively, tap the option to set up the router manually. To do this, go to your phone's Wi-Fi settings, connect to the network named on the barcode sticker, and use the Network Key shown on that sticker as its password.

2

Personalise your settings and log into your router

Tap 'Next' on the 'Personalize your settings' screen, then Next again on the Create WiFi Network screen that follows. Now enter a preferred password for the admin account, which you can use to access the router's configuration settings.



Tap this option to use fingerprint recognition to access your router's configuration settings

How I use a tri-band router

I have 45 (yes, 45!) devices on my network, including nine Raspberry Pis, eight smart speakers and four laptops. Some of the older devices, such as a handful of security cameras, can only connect to 2.4GHz. Using a tri-band router means I need only one access point to handle all of them, allowing me to connect my phone, tablet and computers to the faster 5GHz signal.

Nik Rawlinson



How do you use your tri-band router?

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



Type **admin** and your password to access Netgear's router settings on your PC

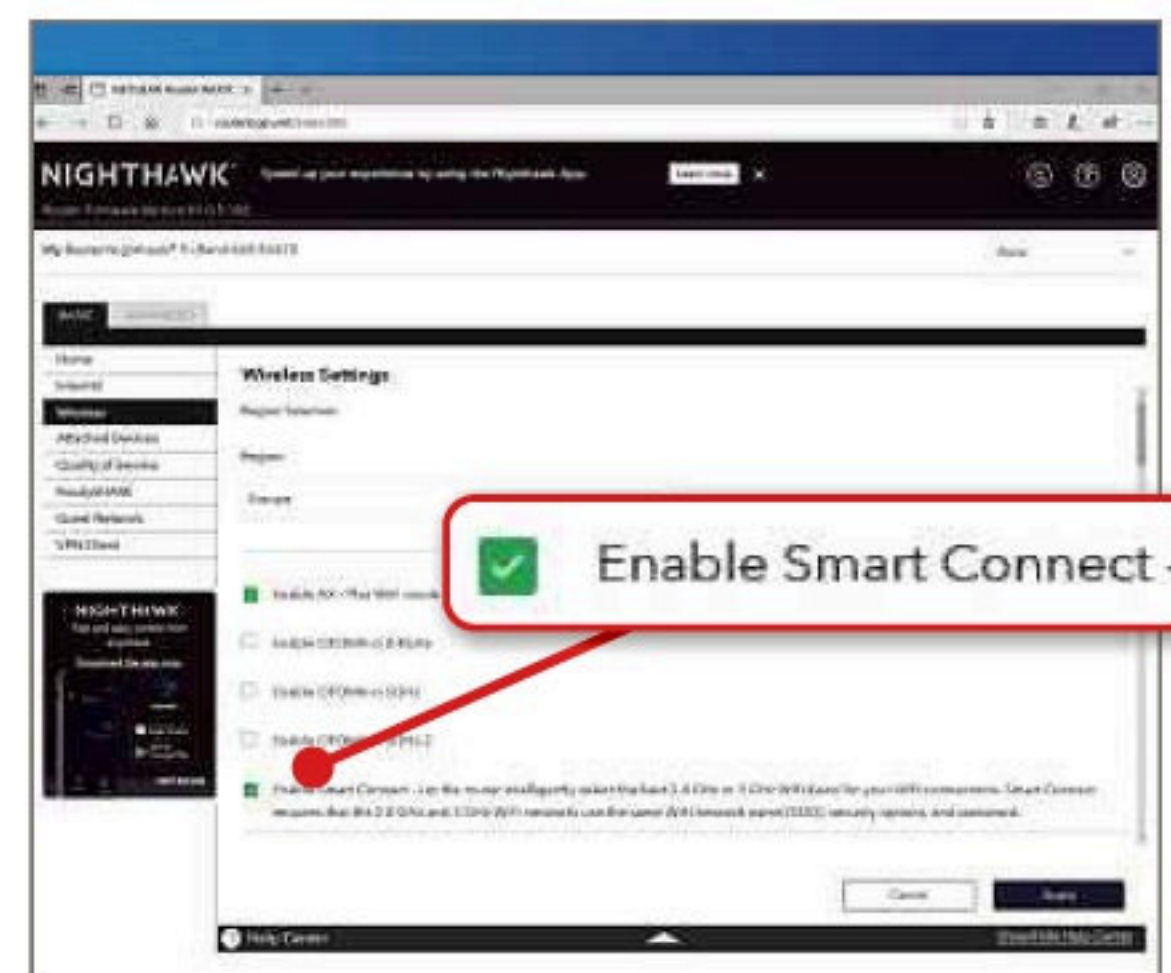
Tap 'Next' and, on the following screen, choose whether you want to enable logging in using your fingerprint (see screenshot below left). Finally, give the answers to two security questions that can be used to prove your identity if you forget your password.

Your router will check for, download and install any updates to its **firmware**, then the app will log you into the configuration screen. At this point, switch to your computer, and connect to the network whose name is shown on the sticker on your router (followed by -5G). In our case, the network name on the sticker is NETGEAR07, so we'll connect to NETGEAR07-5G. Use the Network Key on the sticker as the password. Now open a browser and visit www.routerlogin.net. When asked to log in, type **admin** (1 in our screenshot above) for the username, along with the password (2) you created earlier.

3

Personalise your settings and log into your router

Click 'Wireless' in the sidebar to open the Wi-Fi settings. In its default configuration, the router is set to broadcast three separate networks, with individual names (and, optionally,



Tick 'Enable Smart Connect' to specify which devices use which networks

different passwords) so you can specify which devices use which network. You can change this, so the router broadcasts a single network name and automatically allocates devices to the most appropriate stream, depending on their detected speed. To do this, tick the box next to Enable Smart Connect (see screenshot above), then click OK followed by Apply.

If you prefer to manually connect devices to different signals, leave the settings as they are. Use the Wi-Fi menus on each device to select the network name (without adding anything) to connect to the 2.4GHz network ('NETGEAR07', 1 in our screenshot above right), or the same name with -5G to connect to the faster 5GHz bands 2 and 3. Note that 5G here refers to 5GHz, not the 5G network for phones.

Check your device's specifications for its supported networking standard. If this is stated as 802.11b or 802.11g – and nothing else – connect to the 2.4GHz stream (the network without -5G or -5G2 in its name). If it supports 802.11a, 802.11n, 802.11ac or 802.11ax, connect to the -5G stream. Whichever stream you connect to, regardless of the device you're using, you'll need to provide the password shown on the

WHY CAN A ROUTER CONNECT TO A MAXIMUM OF 255 DEVICES?

You may think that 255 devices sounds like an arbitrary cap, but there's a good reason (and a long history) behind it. If you were to break down a computer (of which a router is just a specialised example) to its fundamental components you'd see that it's simply a collection of switches. Each can be on or off, and those states can be represented using the numbers one (for on) or zero (for off). These same digits are used in the binary counting system.

But binary isn't easy for humans to work with, in part because it quickly gets much longer than decimal equivalents. For example, 86 is 1010110 in binary.

To make things less complicated, we break down these long strings of numbers into groups of eight, which we call 'octets' or bytes. Each of the eight ones and zeros that make up a byte is called a 'bit'.

Everything your computer does is based on bytes, and the binary ones and zeroes (bits) that make them up. When you save a file, it's converted to and written as a

string of bits, then converted back into a copy of your original document the next time you open it.

Likewise, when you connect a device to your router, it's given a binary address, so the router knows where it's receiving data from, and which device it's sending data to. This address is converted to a decimal number in the router's configuration screens (see screenshot right), as well as by Windows, Android and iOS, to make it easier for us to understand.

Engineers working on the earliest networks probably never imagined we'd have as many connected devices as we now take for granted, so they assigned a single byte's-worth (eight digits) of slots (or addresses) for each group of connected devices. But how many is that?

Remember, a byte is made up of eight bits (or binary numbers), and each bit can have two states – one or zero. So, to work out how many devices can be accommodated in a single group on a device like a router,

Network Device Host Address IP Address
 192.168.1.1 Router 192.168.1.1 192.168.1.1
 192.168.1.2 Device 1 192.168.1.2 192.168.1.2
 192.168.1.3 Device 2 192.168.1.3 192.168.1.3
 192.168.1.4 Device 3 192.168.1.4 192.168.1.4
 192.168.1.5 Device 4 192.168.1.5 192.168.1.5
 192.168.1.6 Device 5 192.168.1.6 192.168.1.6
 192.168.1.7 Device 6 192.168.1.7 192.168.1.7
 192.168.1.8 Device 7 192.168.1.8 192.168.1.8
 192.168.1.9 Device 8 192.168.1.9 192.168.1.9
 192.168.1.10 Device 9 192.168.1.10 192.168.1.10
 192.168.1.11 Device 10 192.168.1.11 192.168.1.11
 192.168.1.12 Device 11 192.168.1.12 192.168.1.12
 192.168.1.13 Device 12 192.168.1.13 192.168.1.13
 192.168.1.14 Device 13 192.168.1.14 192.168.1.14
 192.168.1.15 Device 14 192.168.1.15 192.168.1.15
 192.168.1.16 Device 15 192.168.1.16 192.168.1.16
 192.168.1.17 Device 16 192.168.1.17 192.168.1.17
 192.168.1.18 Device 17 192.168.1.18 192.168.1.18
 192.168.1.19 Device 18 192.168.1.19 192.168.1.19
 192.168.1.20 Device 19 192.168.1.20 192.168.1.20
 192.168.1.21 Device 20 192.168.1.21 192.168.1.21
 192.168.1.22 Device 21 192.168.1.22 192.168.1.22
 192.168.1.23 Device 22 192.168.1.23 192.168.1.23
 192.168.1.24 Device 23 192.168.1.24 192.168.1.24
 192.168.1.25 Device 24 192.168.1.25 192.168.1.25
 192.168.1.26 Device 25 192.168.1.26 192.168.1.26
 192.168.1.27 Device 26 192.168.1.27 192.168.1.27
 192.168.1.28 Device 27 192.168.1.28 192.168.1.28
 192.168.1.29 Device 28 192.168.1.29 192.168.1.29
 192.168.1.30 Device 29 192.168.1.30 192.168.1.30
 192.168.1.31 Device 30 192.168.1.31 192.168.1.31
 192.168.1.32 Device 31 192.168.1.32 192.168.1.32
 192.168.1.33 Device 32 192.168.1.33 192.168.1.33
 192.168.1.34 Device 33 192.168.1.34 192.168.1.34
 192.168.1.35 Device 34 192.168.1.35 192.168.1.35
 192.168.1.36 Device 35 192.168.1.36 192.168.1.36
 192.168.1.37 Device 36 192.168.1.37 192.168.1.37
 192.168.1.38 Device 37 192.168.1.38 192.168.1.38
 192.168.1.39 Device 38 192.168.1.39 192.168.1.39
 192.168.1.40 Device 39 192.168.1.40 192.168.1.40
 192.168.1.41 Device 40 192.168.1.41 192.168.1.41
 192.168.1.42 Device 41 192.168.1.42 192.168.1.42
 192.168.1.43 Device 42 192.168.1.43 192.168.1.43
 192.168.1.44 Device 43 192.168.1.44 192.168.1.44
 192.168.1.45 Device 44 192.168.1.45 192.168.1.45
 192.168.1.46 Device 45 192.168.1.46 192.168.1.46
 192.168.1.47 Device 46 192.168.1.47 192.168.1.47
 192.168.1.48 Device 47 192.168.1.48 192.168.1.48
 192.168.1.49 Device 48 192.168.1.49 192.168.1.49
 192.168.1.50 Device 49 192.168.1.50 192.168.1.50
 192.168.1.51 Device 50 192.168.1.51 192.168.1.51
 192.168.1.52 Device 51 192.168.1.52 192.168.1.52
 192.168.1.53 Device 52 192.168.1.53 192.168.1.53
 192.168.1.54 Device 53 192.168.1.54 192.168.1.54
 192.168.1.55 Device 54 192.168.1.55 192.168.1.55
 192.168.1.56 Device 55 192.168.1.56 192.168.1.56
 192.168.1.57 Device 56 192.168.1.57 192.168.1.57
 192.168.1.58 Device 57 192.168.1.58 192.168.1.58
 192.168.1.59 Device 58 192.168.1.59 192.168.1.59
 192.168.1.60 Device 59 192.168.1.60 192.168.1.60
 192.168.1.61 Device 60 192.168.1.61 192.168.1.61
 192.168.1.62 Device 61 192.168.1.62 192.168.1.62
 192.168.1.63 Device 62 192.168.1.63 192.168.1.63
 192.168.1.64 Device 63 192.168.1.64 192.168.1.64
 192.168.1.65 Device 64 192.168.1.65 192.168.1.65
 192.168.1.66 Device 65 192.168.1.66 192.168.1.66
 192.168.1.67 Device 66 192.168.1.67 192.168.1.67
 192.168.1.68 Device 67 192.168.1.68 192.168.1.68
 192.168.1.69 Device 68 192.168.1.69 192.168.1.69
 192.168.1.70 Device 69 192.168.1.70 192.168.1.70
 192.168.1.71 Device 70 192.168.1.71 192.168.1.71
 192.168.1.72 Device 71 192.168.1.72 192.168.1.72
 192.168.1.73 Device 72 192.168.1.73 192.168.1.73
 192.168.1.74 Device 73 192.168.1.74 192.168.1.74
 192.168.1.75 Device 74 192.168.1.75 192.168.1.75
 192.168.1.76 Device 75 192.168.1.76 192.168.1.76
 192.168.1.77 Device 76 192.168.1.77 192.168.1.77
 192.168.1.78 Device 77 192.168.1.78 192.168.1.78
 192.168.1.79 Device 78 192.168.1.79 192.168.1.79
 192.168.1.80 Device 79 192.168.1.80 192.168.1.80
 192.168.1.81 Device 80 192.168.1.81 192.168.1.81
 192.168.1.82 Device 81 192.168.1.82 192.168.1.82
 192.168.1.83 Device 82 192.168.1.83 192.168.1.83
 192.168.1.84 Device 83 192.168.1.84 192.168.1.84
 192.168.1.85 Device 84 192.168.1.85 192.168.1.85
 192.168.1.86 Device 85 192.168.1.86 192.168.1.86
 192.168.1.87 Device 86 192.168.1.87 192.168.1.87
 192.168.1.88 Device 87 192.168.1.88 192.168.1.88
 192.168.1.89 Device 88 192.168.1.89 192.168.1.89
 192.168.1.90 Device 89 192.168.1.90 192.168.1.90
 192.168.1.91 Device 90 192.168.1.91 192.168.1.91
 192.168.1.92 Device 91 192.168.1.92 192.168.1.92
 192.168.1.93 Device 92 192.168.1.93 192.168.1.93
 192.168.1.94 Device 93 192.168.1.94 192.168.1.94
 192.168.1.95 Device 94 192.168.1.95 192.168.1.95
 192.168.1.96 Device 95 192.168.1.96 192.168.1.96
 192.168.1.97 Device 96 192.168.1.97 192.168.1.97
 192.168.1.98 Device 97 192.168.1.98 192.168.1.98
 192.168.1.99 Device 98 192.168.1.99 192.168.1.99
 192.168.1.100 Device 99 192.168.1.100 192.168.1.100
 192.168.1.101 Device 100 192.168.1.101 192.168.1.101
 192.168.1.102 Device 101 192.168.1.102 192.168.1.102
 192.168.1.103 Device 102 192.168.1.103 192.168.1.103
 192.168.1.104 Device 103 192.168.1.104 192.168.1.104
 192.168.1.105 Device 104 192.168.1.105 192.168.1.105
 192.168.1.106 Device 105 192.168.1.106 192.168.1.106
 192.168.1.107 Device 106 192.168.1.107 192.168.1.107
 192.168.1.108 Device 107 192.168.1.108 192.168.1.108
 192.168.1.109 Device 108 192.168.1.109 192.168.1.109
 192.168.1.110 Device 109 192.168.1.110 192.168.1.110
 192.168.1.111 Device 110 192.168.1.111 192.168.1.111
 192.168.1.112 Device 111 192.168.1.112 192.168.1.112
 192.168.1.113 Device 112 192.168.1.113 192.168.1.113
 192.168.1.114 Device 113 192.168.1.114 192.168.1.114
 192.168.1.115 Device 114 192.168.1.115 192.168.1.115
 192.168.1.116 Device 115 192.168.1.116 192.168.1.116
 192.168.1.117 Device 116 192.168.1.117 192.168.1.117
 192.168.1.118 Device 117 192.168.1.118 192.168.1.118
 192.168.1.119 Device 118 192.168.1.119 192.168.1.119
 192.168.1.120 Device 119 192.168.1.120 192.168.1.120
 192.168.1.121 Device 120 192.168.1.121 192.168.1.121
 192.168.1.122 Device 121 192.168.1.122 192.168.1.122
 192.168.1.123 Device 122 192.168.1.123 192.168.1.123
 192.168.1.124 Device 123 192.168.1.124 192.168.1.124
 192.168.1.125 Device 124 192.168.1.125 192.168.1.125
 192.168.1.126 Device 125 192.168.1.126 192.168.1.126
 192.168.1.127 Device 126 192.168.1.127 192.168.1.127
 192.168.1.128 Device 127 192.168.1.128 192.168.1.128
 192.168.1.129 Device 128 192.168.1.129 192.168.1.129
 192.168.1.130 Device 129 192.168.1.130 192.168.1.130
 192.168.1.131 Device 130 192.168.1.131 192.168.1.131
 192.168.1.132 Device 131 192.168.1.132 192.168.1.132
 192.168.1.133 Device 132 192.168.1.133 192.168.1.133
 192.168.1.134 Device 133 192.168.1.134 192.168.1.134
 192.168.1.135 Device 134 192.168.1.135 192.168.1.135
 192.168.1.136 Device 135 192.168.1.136 192.168.1.136
 192.168.1.137 Device 136 192.168.1.137 192.168.1.137
 192.168.1.138 Device 137 192.168.1.138 192.168.1.138
 192.168.1.139 Device 138 192.168.1.139 192.168.1.139
 192.168.1.140 Device 139 192.168.1.140 192.168.1.140
 192.168.1.141 Device 140 192.168.1.141 192.168.1.141
 192.168.1.142 Device 141 192.168.1.142 192.168.1.142
 192.168.1.143 Device 142 192.168.1.143 192.168.1.143
 192.168.1.144 Device 143 192.168.1.144 192.168.1.144
 192.168.1.145 Device 144 192.168.1.145 192.168.1.145
 192.168.1.146 Device 145 192.168.1.146 192.168.1.146
 192.168.1.147 Device 146 192.168.1.147 192.168.1.147
 192.168.1.148 Device 147 192.168.1.148 192.168.1.148
 192.168.1.149 Device 148 192.168.1.149 192.168.1.149
 192.168.1.150 Device 149 192.168.1.150 192.168.1.150
 192.168.1.151 Device 150 192.168.1.151 192.168.1.151
 192.168.1.152 Device 151 192.168.1.152 192.168.1.152
 192.168.1.153 Device 152 192.168.1.153 192.168.1.153
 192.168.1.154 Device 153 192.168.1.154 192.168.1.154
 192.168.1.155 Device 154 192.168.1.155 192.168.1.155
 192.168.1.156 Device 155 192.168.1.156 192.168.1.156
 192.168.1.157 Device 156 192.168.1.157 192.168.1.157
 192.168.1.158 Device 157 192.168.1.158 192.168.1.158
 192.168.1.159 Device 158 192.168.1.159 192.168.1.159
 192.168.1.160 Device 159 192.168.1.160 192.168.1.160
 192.168.1.161 Device 160 192.168.1.161 192.168.1.161
 192.168.1.162 Device 161 192.168.1.162 192.168.1.162
 192.168.1.163 Device 162 192.168.1.163 192.168.1.163
 192.168.1.164 Device 163 192.168.1.164 192.168.1.164
 192.168.1.165 Device 164 192.168.1.165 192.168.1.165
 192.168.1.166 Device 165 192.168.1.166 192.168.1.166
 192.168.1.167 Device 166 192.168.1.167 192.168.1.167
 192.168.1.168 Device 167 192.168.1.168 192.168.1.168
 192.168.1.169 Device 168 192.168.1.169 192.168.1.169
 192.168.1.170 Device 169 192.168.1.170 192.168.1.170
 192.168.1.171 Device 170 192.168.1.171 192.168.1.171
 192.168.1.172 Device 171 192.168.1.172 192.168.1.172
 192.168.1.173 Device 172 192.168.1.173 192.168.1.173
 192.168.1.174 Device 173 192.168.1.174 192.168.1.174
 192.168.1.175 Device 174 192.168.1.175 192.168.1.175
 192.168.1.176 Device 175 192.168.1.176 192.168.1.176
 192.168.1.177 Device 176 192.168.1.177 192.168.1.177
 192.168.1.178 Device 177 192.168.1.178 192.168.1.178
 192.168.1.179 Device 178 192.168.1.179 192.168.1.179
 192.168.1.180 Device 179 192.168.1.180 192.168.1.180
 192.168.1.181 Device 180 192.168.1.181 192.168.1.181
 192.168.1.182 Device 181 192.168.1.182 192.168.1.182
 192.168.1.183 Device 182 192.168.1.183 192.168.1.183
 192.168.1.184 Device 183 192.168.1.184 192.168.1.184
 192.168.1.185 Device 184 192.168.1.185 192.168.1.185
 192.168.1.186 Device 185 192.168.1.186 192.168.1.186
 192.168.1.187 Device 186 192.168.1.187 192.168.1.187
 192.168.1.188 Device 187 192.168.1.188 192.168.1.188
 192.168.1.189 Device 188 192.168.1.189 192.168.1.189
 192.168.1.190 Device 189 192.168.1.190 192.168.1.190
 192.168.1.191 Device 190 192.168.1.191 192.168.1.191
 192.168.1.192 Device 191 192.168.1.192 192.168.1.192
 192.168.1.193 Device 192 192.168.1.193 192.168.1.193
 192.168.1.194 Device 193 192.168.1.194 192.168.1.194
 192.168.1.195 Device 194 192.168.1.195 192.168.1.195
 192.168.1.196 Device 195 192.168.1.196 192.168.1.196
 192.168.1.197 Device 196 192.168.1.197 192.168.1.197
 192.168.1.198 Device 197 192.168.1.198 192.168.1.198
 192.168.1.199 Device 198 192.168.1.199 192.168.1.199
 192.168.1.200 Device 199 192.168.1.200 192.168.1.200
 192.168.1.201 Device 200 192.168.1.201 192.168.1.201
 192.168.1.202 Device 201 192.168.1.202 192.168.1.202
 192.168.1.203 Device 202 192.168.1.203 192.168.1.203
 192.168.1.204 Device 203 192.168.1.204 192.168.1.204
 192.168.1.205 Device 204 192.168.1.205 192.168.1.205
 192.168.1.206 Device 205 192.168.1.206 192.168.1.206
 192.168.1.207 Device 206 192.168.1.207 192.168.1.207
 192.168.1.208 Device 207 192.168.1.208 192.168.1.208
 192.168.1.209 Device 208 192.168.1.209 192.168.1.209
 192.168.1.210 Device 209 192.168.1.210 192.168.1.210
 192.168.1.211 Device 210 192.168.1.211 192.168.1.211
 192.168.1.212 Device 211 192.168.1.212 192.168.1.212
 192.168.1.213 Device 212 192.168.1.213 192.168.1.213
 192.168.1.214 Device 213 192.168.1.214 192.168.1.214
 192.168.1.215 Device 214 192.168.1.215 192.168.1.215
 192.168.1.216 Device 215 192.168.1.216 192.168.1.216
 192.168.1.217 Device 216 192.168.1.217 192.168.1.217
 192.168.1.218 Device 217 192.168.1.218 192.168.1.218
 192.168.1.219 Device 218 192.168.1.219 192.168.1.219
 192.168.1.220 Device 219 192.168.1.220 192.168.1.220
 192.168.1.221 Device 220 192.168.1.221 192.168.1.221
 192.168.1.222 Device 221 192.168.1.222 192.168.1.222
 192.168.1.223 Device 222 192.168.1.223 192.168.1.223
 192.168.1.224 Device 223 192.168.1.224 192.168.1.224
 192.168.1.225 Device 224 192.168.1.225 192.168.1.225
 192.168.1.226 Device 225 192.168.1.226 192.168.1.226
 192.168.1.227 Device 226 192.168.1.227 192.168.1.227
 192.168.1.228 Device 227 192.168.1.228 192.168.1.228
 192.168.1.229 Device 228 192.168.1.229 192.168.1.229
 192.168.1.230 Device 229 192.168.1.230 192.168.1.230
 192.168.1.231 Device 230 192.168.1.231 192.168.1.231
 192.168.1.232 Device 231 192.168.1.232 192.168.1.232
 192.168.1.233 Device 232 192.168.1.233 192.168.1.233
 192.168.1.234 Device 233 192.168.1.234 192.168.1.234
 192.168.1.235 Device 234 192.168.1.235 192.168.1.235
 192.168.1.236 Device 235 192.168.1.236 192.168.1.236
 192.168.1.237 Device 236 192.168.1.237 192.168.1.237
 192.168.1.238 Device 237 192.168.1.238 192.168.1.238
 192.168.1.239 Device 238 192.168.1.239 192.168.1.239
 192.168.1.240 Device 239 192.168.1.240 192.168.1.240
 192.168.1.241 Device 240 192.168.1.241 192.168.1.241
 192.168.1.242 Device 241 192.168.1.242 192.168.1.242
 192.168.1.243 Device 242 192.168.1.243 192.168.1.243
 192.168.1.244 Device 243 192.168.1.244 192.168.1.244
 192.168.1.245 Device 244 192.168.1.245 192.168.1.245
 192.168.1.246 Device 245 192.168.1.246 192.168.1.246
 192.168.1.247 Device 246 192.168.1.247 192.168.1.247
 192.168.1.248 Device 247 192.168.1.248 192.168.1.248
 192.168.1.249 Device 248 192.168.1.249 192.168.1.249
 192

Workshop1

Change these Windows 11 settings today

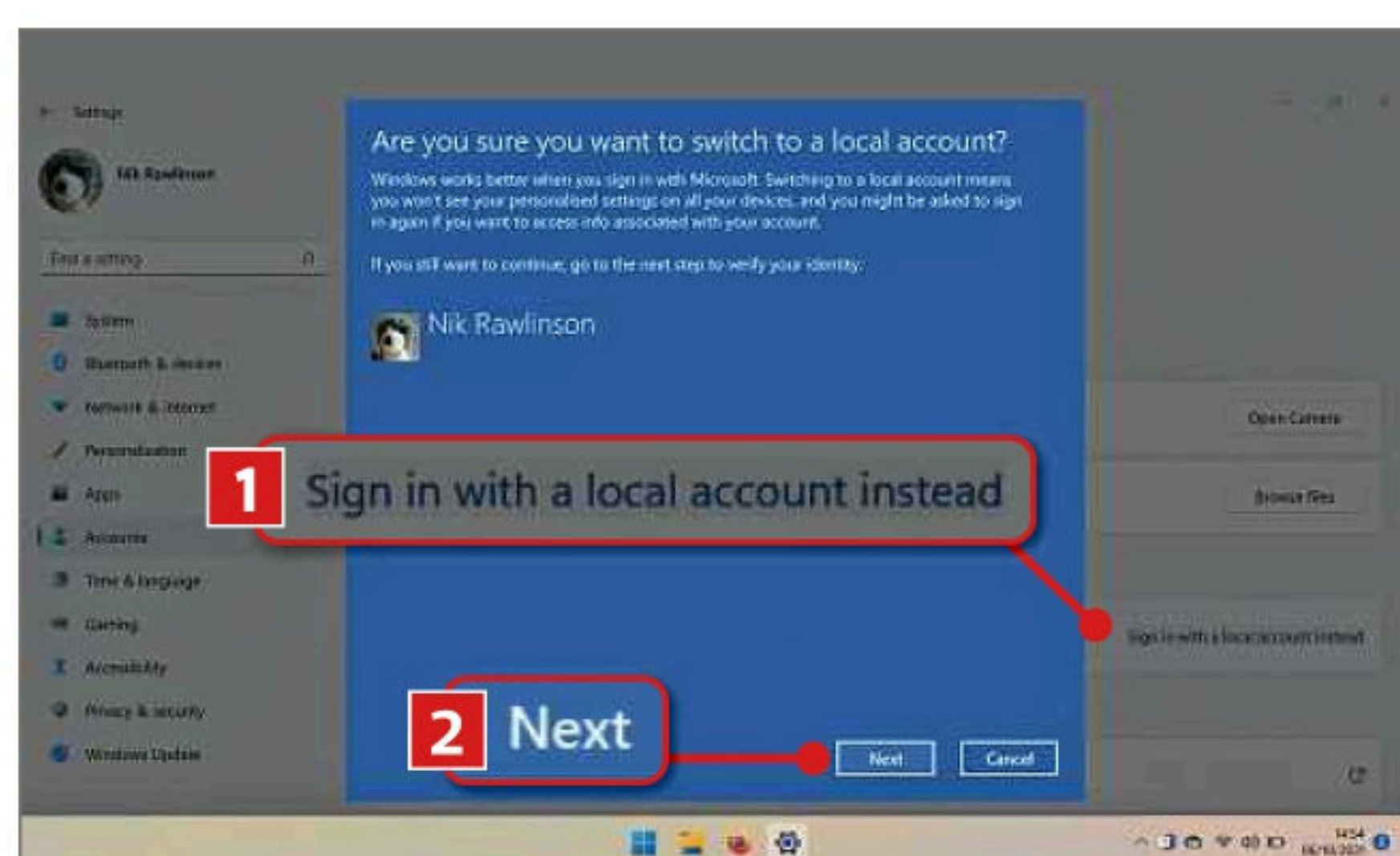
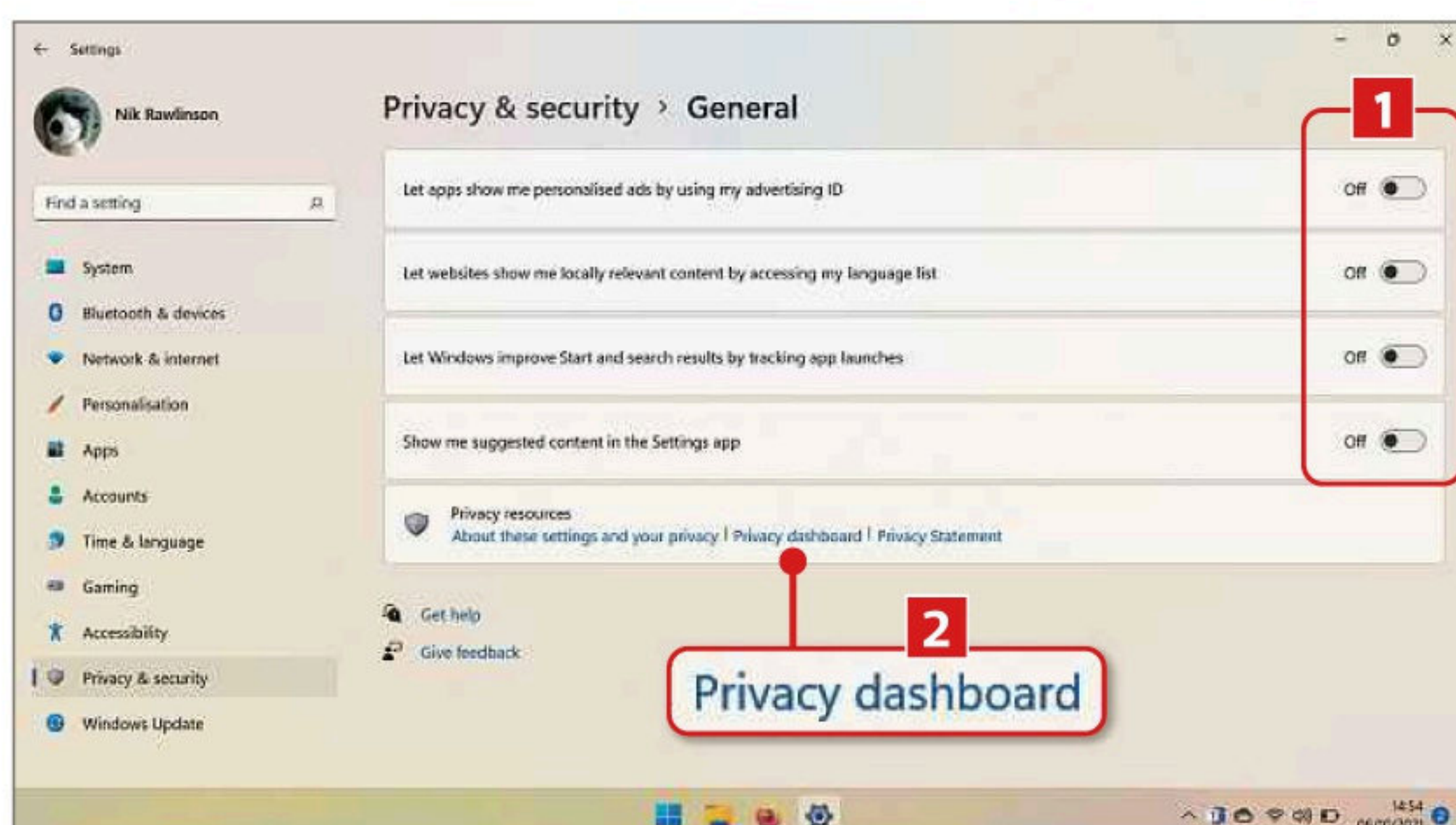
What you need: Windows 11 **Time required:** 30 minutes

Windows 11 has finally arrived. While there are plenty of improvements behind the scenes, the most obvious changes are those you'll interact with on screen. These changes won't suit everyone, so if you're struggling to get to grips with the new look and feel, we have a few tweaks you can try. Most of these can be made through Settings, which you can

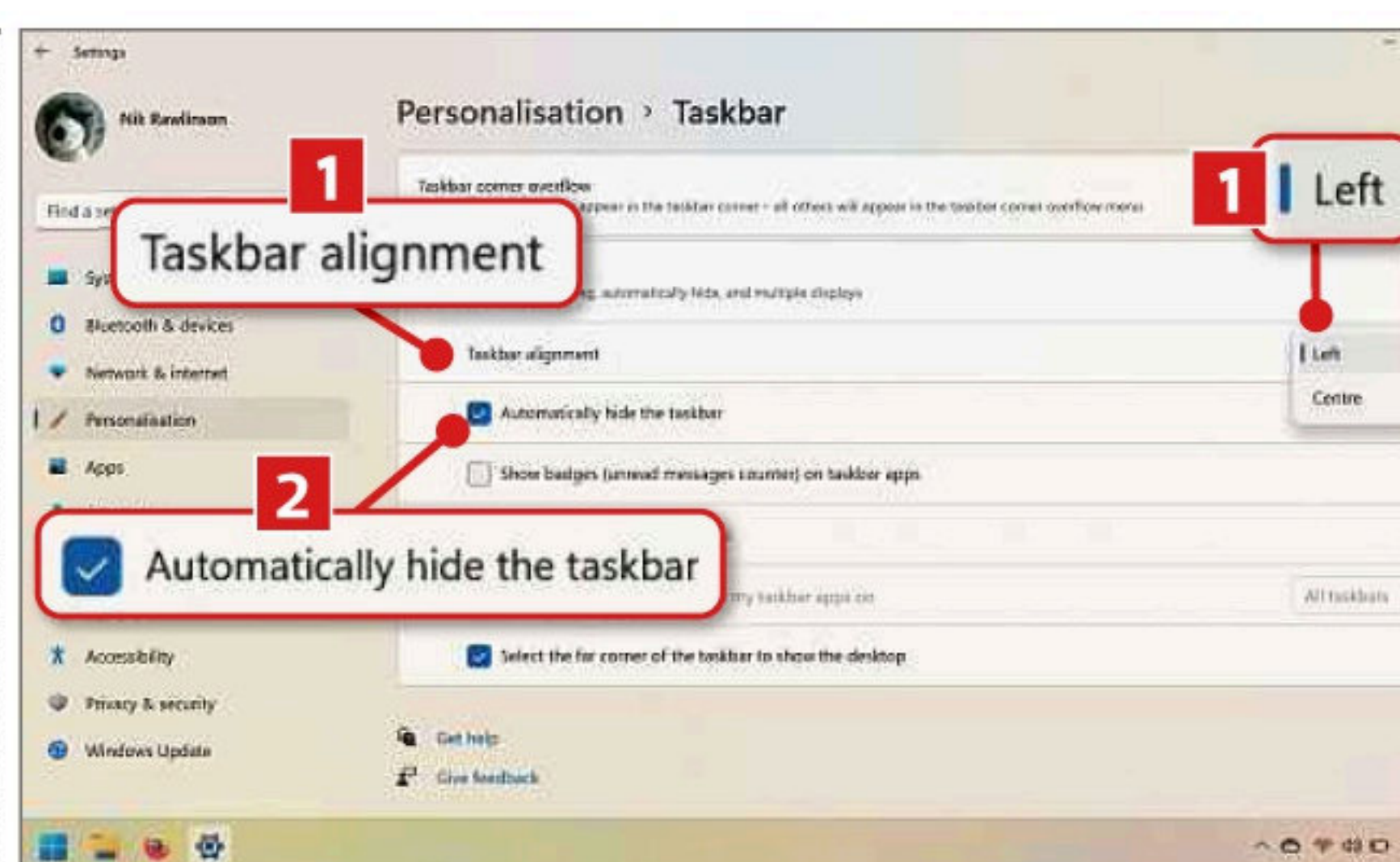
launch by pressing Windows+I. Anything you change in Settings should be easy to reverse. However, with a couple of our tweaks, you'll need to edit the registry, which is where Windows organises all of its core settings. Making a mistake here can cause more serious problems, so before going any further, make a full backup of your system and files.



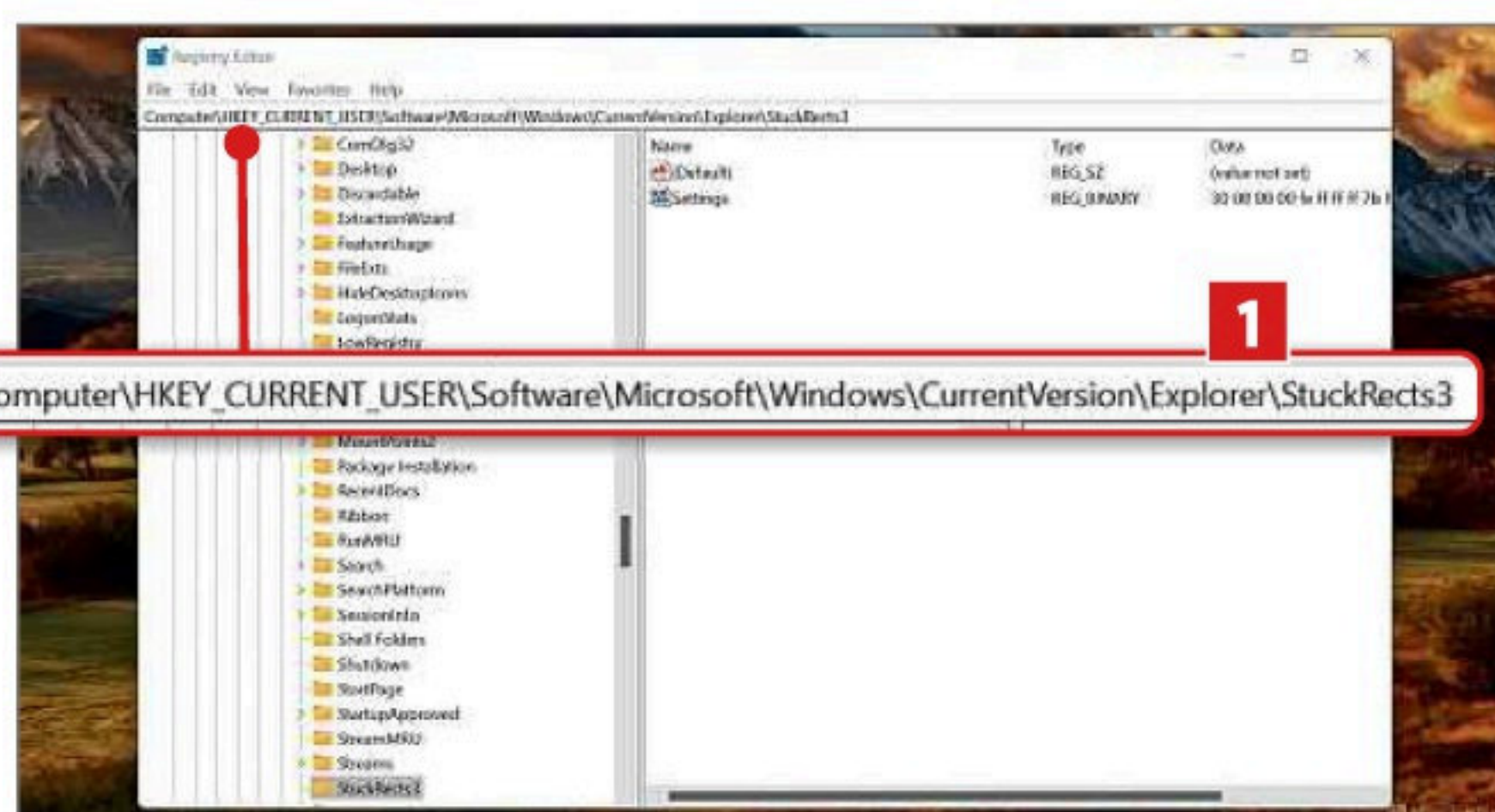
STEP 1 Windows 11 can show 'suggested content' in Settings, while websites can use information gleaned from Windows (such as your list of installed languages) to display adverts that they deem more relevant and that you're more likely to click. To stop both of these happening, open Settings and click 'Privacy & security', followed by General. Turn off the sliders beside the four options **1**. Optionally click the 'Privacy dashboard' link **2** and log in using your Microsoft account to access more extensive online privacy controls.



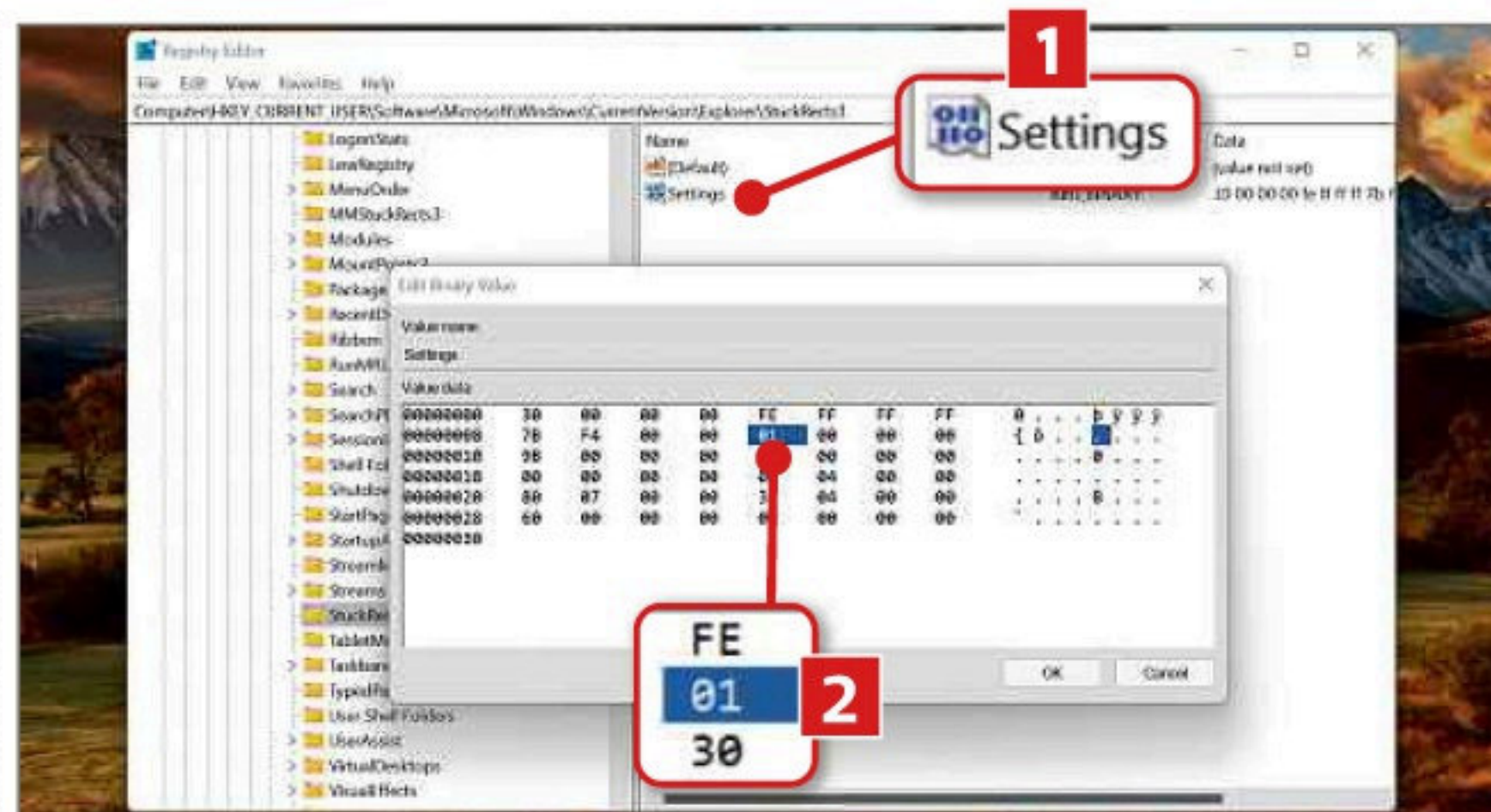
STEP 2 Microsoft would prefer you use a Microsoft account to log into Windows 11, so it can sync your data. To use a local account instead, open Settings then click Account, followed by Your Info. Click 'Sign in with a local account instead' **1**. Windows will warn you that using a local account means your settings won't sync across your devices. If you're happy with this, click Next **2**, then enter your existing Microsoft account password. You'll now be prompted to create a new local account by entering a username, password, and password hint to remind you should you forget it.



STEP 3 We like the new centralised taskbar, but if you want to move the icons and Start menu to the left, you can. Open Settings and click Personalisation, followed by Taskbar. Click 'Taskbar behaviours' to expand the hidden section, then select Left in the dropdown menu beside 'Taskbar alignment' **1**. While here, you can also set the taskbar to slide off the bottom of the screen when not in use by clicking the box beside 'Automatically hide the taskbar' **2**. This will help you regain some useful space. To reveal it when it's hidden, move your cursor to the bottom of your screen and it pops back up.

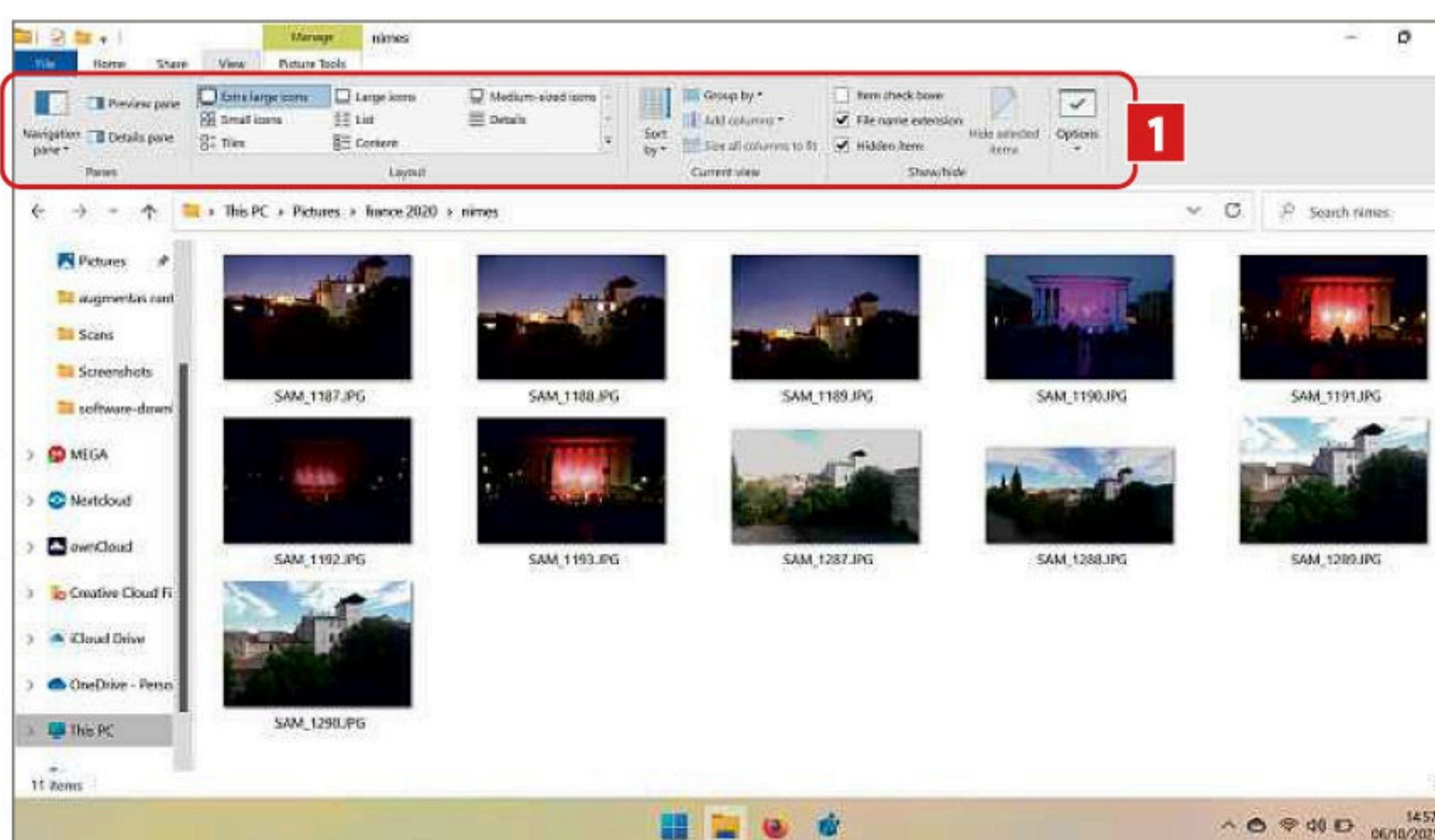
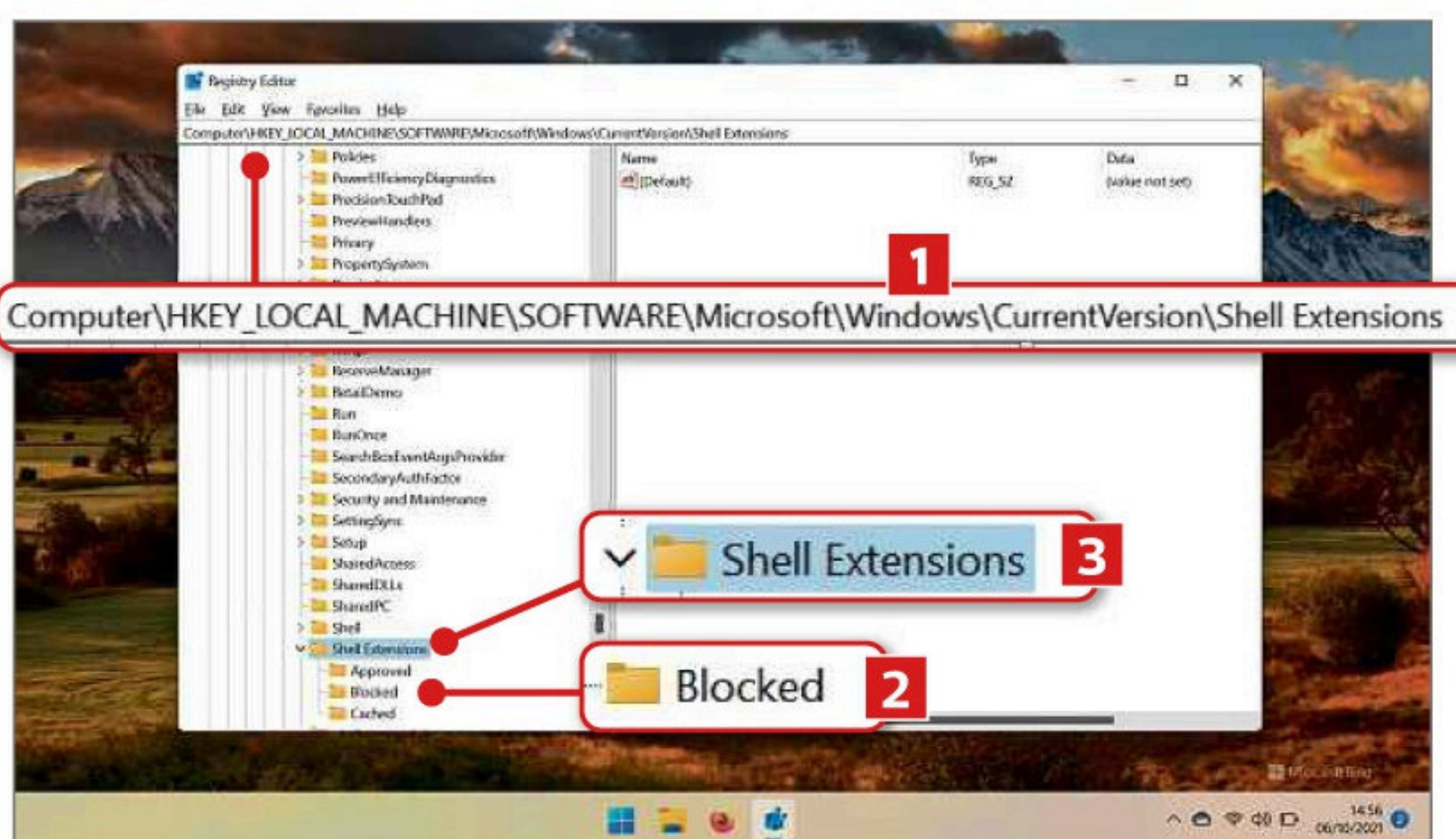


STEP 4 Some rival operating systems put their taskbar at the top of the screen, which we think makes a lot of sense. We're already used to dropdown menus at the top of program windows, so why not do the same with the Start menu? To do this in Windows 11, press the Windows key, type **regedit** then click Registry Editor. When asked if you want to make changes to your system, click Yes. Double-click in the address bar at the top of the window (just below File), delete any existing contents then type **Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\StuckRects3** **1** (copy and paste from www.snipca.com/39715) and press Enter.



STEP 5 Next, double-click Settings **1** in the right-hand pane and, in the spreadsheet that opens, double-click the '03' in the fifth column of the second row (below 'FE') and replace it with 01 **2**. Click OK, then close the Registry Editor. Press the Windows key and type **CMD**, right-click Command Prompt and select 'Run as Administrator'. Click 'Yes' when asked if you want to make changes to your device. At the prompt, type **taskkill /f /im explorer.exe** and press Enter. Next, type **start explorer.exe** then press Enter again. Your taskbar will reappear at the top of your screen. If the taskbar is set to hide (see Step 3), move your cursor to the top of the screen to reveal it.

STEP 6 File Explorer's new slimmed-down menu bar lacks a few useful features, such as the ribbon. To restore it, press the Windows key, type **regedit** then click Registry Editor. Click 'Yes' when asked if you want to make changes to your device. Double-click the address bar at the top of the window and replace any existing content with **Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Shell Extensions** **1** (copy and paste this from www.snipca.com/39714) then press Enter. If there's a folder in the sidebar called Blocked **2**, double-click it. If not, right-click Shell Extensions **3** and hover over the New menu, then click Key on the menu that appears. Call the new key Blocked, press Enter, then click it to open the folder.



STEP 7 Right-click inside the main pane of the Registry Editor window, hover over the New menu, and click String Value on the menu that appears. Type the following: **{e2bf9676-5f8f-435c-97eb-11607a5bedf7}** (copy and paste from www.snipca.com/39706) Double-check you've got it correct (including the curly brackets before and after it) before pressing Enter. Close Registry Editor, reboot Windows, then open File Explorer to see the restored ribbon **1**. If you ever want to undo this change, return to Registry Editor and go back into the Blocked folder and remove the String Value that you added (the one beginning with '{e2bf9676...'}), then restart your PC.

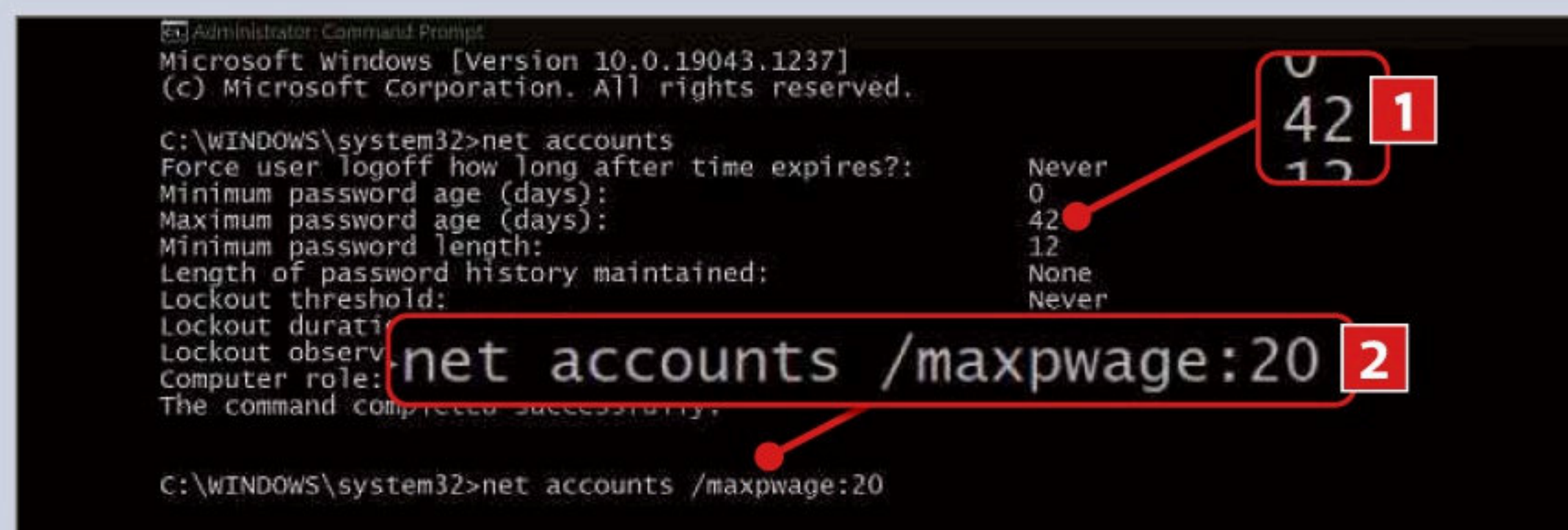
Readers' Tips

TIP OF THE FORTNIGHT

Set expiry period for local account passwords

Further to your tip on setting a minimum password length for local accounts in Windows 10 (Issue 616, page 46), you can also set how long to leave it before users of your PC have to come up with a new password. This is what I do in Windows 10 Home.

It requires tweaking Command Prompt (as an administrator), but first you have to turn off a setting that prevents your password from expiring. Press Windows key+R then type **netplwiz** in the Run box then click OK. Click the Advanced tab at the top, then the Advanced button in the 'Advanced user management' section. Next, click Users on the left, then right-click your account in the central pane, followed by Properties. In the next box make



sure 'Password never expires' is unticked, then click OK.

Once that's done, open Command Prompt in your preferred way - I right-click Start then choose 'Command Prompt (Admin)'. Type **net accounts**, and check 'Maximum password age'. It will probably show Microsoft's default of 42

days (1 in our screenshot). To change this, type **net accounts /maxpwage:XX**, where XX is the number of days you want to set (20 in my example 2). Press Enter and you should see a message saying it has been successfully changed.

Chris Painter



Chris wins a copy of our 2020 Back Issue CD

Buy it on Amazon www.snipca.com/38164

SOFTWARE

Use tinySpell in any text program

✓ In Issue 614's How I Use column (page 20), Will Stapley lamented how he can't get a decent spell-checker to work in Notepad++ (www.snipca.com/39288). He should try tinySpell (www.tinyspell.com), which works well

in any text program. There's a great free version, while more advanced editions start from \$10 (around £7.22).

To get the free version, visit the download page (www.snipca.com/39428) and click one of the two 'Download installer' links on the left (see screenshot below left).

Robert Bull



APPS

Add Gboard to your Amazon Fire Tablet

✓ I love my Amazon Fire HD 10 tablet (£150 from www.snipca.com/38713 - who needs an expensive iPad?), but I admit that the default

keyboard isn't the best. This is both easy and difficult to fix!

It's easy because you can install Google's excellent Gboard keyboard as a replacement. It's difficult because first you have to install the Google Play Store's APK files on your Fire tablet. I've done this, and it worked, though it takes a lot of clicking and installing. So, this tip is for the benefit of those who have already done likewise (and may I suggest *Computeractive* explains how to in a future issue?).

Now comes the easier part. Open the Google Play Store, then search for and install Gboard. Next, open the Settings cog on your Fire, then tap Device Options,

Why I stopped using...

LastPass

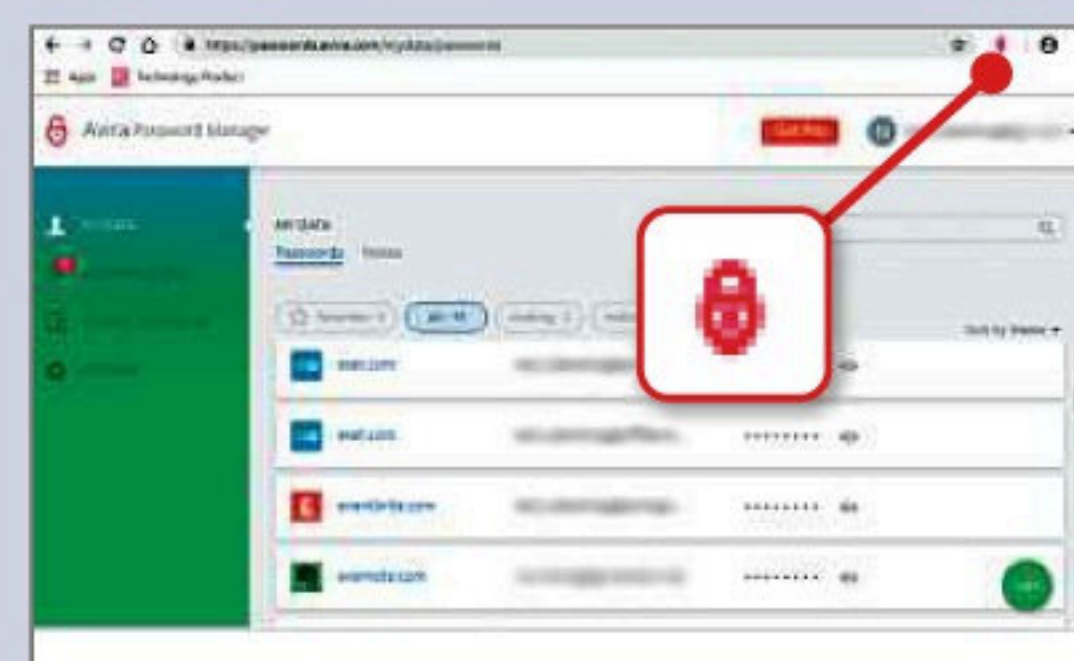
✓ I had been looking for an alternative to LastPass ever since users of the free version were forced to choose between having it on their computer or phone. I hated how it imposed this change on people, after getting them hooked.

And what I use instead...

Most of LastPass's rivals also charge for more than one device, but I did

eventually find a free alternative: Avira Password Manager (www.snipca.com/39604). There is a paid-for version, but I'm not bothered about the premium tools it offers, such as checking for re-used or weak passwords.

I switched to Avira about two months ago, and it's filled in every online form I've come across via the Chrome extension (www.snipca.com/39605, see screenshot). I've read it described as a beginner's password manager, and I



think that sums it up. It doesn't baffle you with endless advanced options.

Daniel Evans

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



followed by 'Keyboard & Language'. Now tap 'Show/Hide Keyboards' (1 in our screenshot above), then turn on the Gboard slider 2. Go back and tap Current Keyboard, then select Gboard. That's now your default keyboard.

William Cavendish

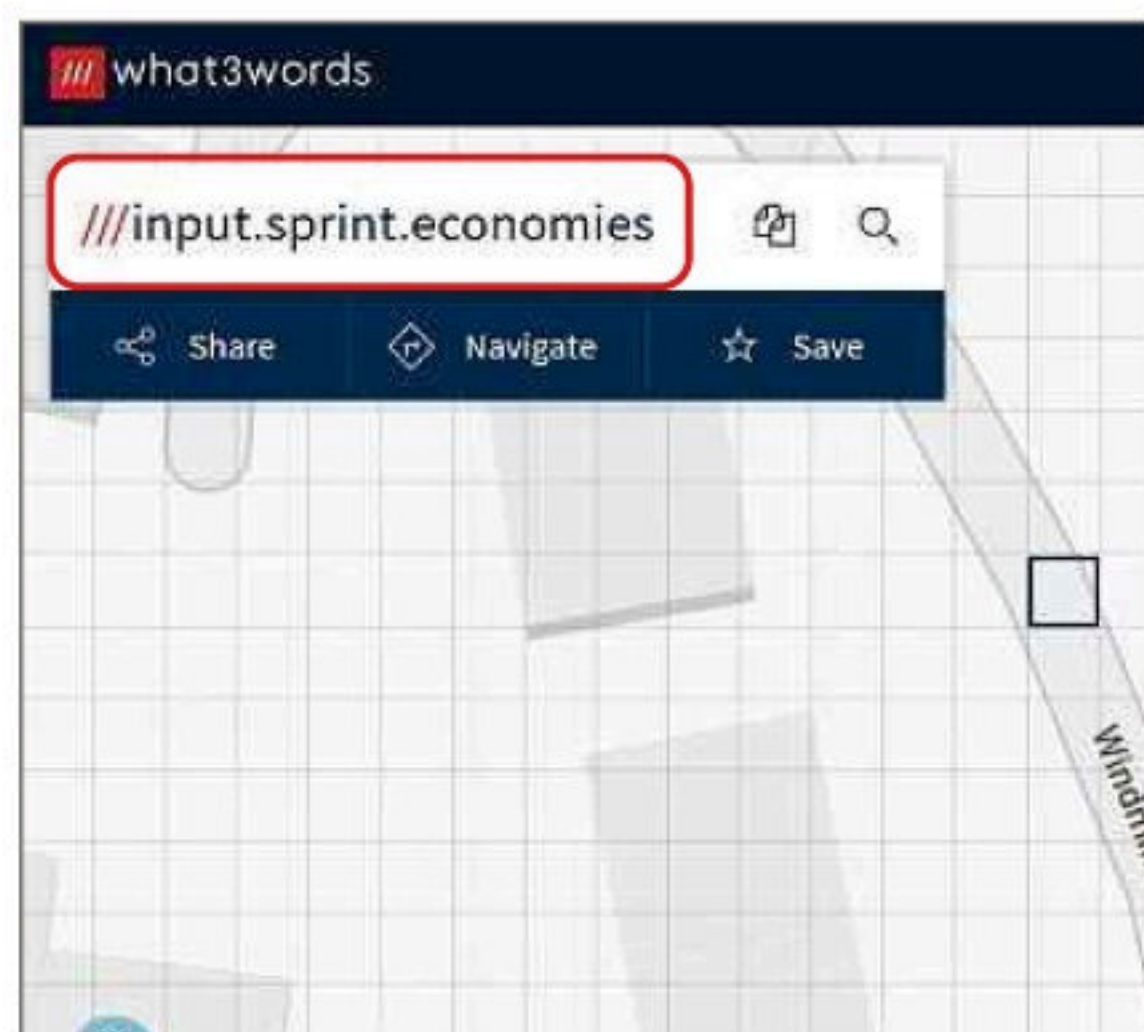
MICROSOFT TOOLS Transfer files using Your Phone Companion

✓ In Issue 610 (page 74), Robert Irvine recommends Feem (<https://feem.io>) to transfer files from your phone via Wi-Fi, but there is an easier tool if you mainly want to send photos. It's a Microsoft app called Your Phone Companion, and gives your computer access to the most recent 2,000 photos on your Android phone, which you can easily drag and drop into File Explorer. Microsoft has instructions at www.snipca.com/39601.

Russell Greene

SECURITY Choose your passphrase from What3words

✓ I enjoyed Issue 615's feature on using passphrases rather than passwords (page 62), but there's no guarantee you'll always remember your passphrase. One technique I use is to pick a favourite place on <https://what3words.com> and use the three-word phrase associated with it (see screenshot below), or a slightly altered version of it. If you ever forget the phrase, hopefully you'll remember the place instead. That should



Reader recommends...

Eufy SoloCam E40

£120 from Amazon www.snipca.com/39381

✓ I was delighted to read your five-star review of Eufy's SoloCam in Issue 615 (page 28) because I can now stop boring my neighbours about it and show them your review instead. Your main point – that it has on-board storage and doesn't charge to access recorded footage online – is the main reason I bought the device.

I attached it to the outside wall of my conservatory, from where it has captured clear pictures both day and night. These are easy to access through my fairly basic Samsung phone.

Our Wi-Fi isn't the fastest, but I've not suffered any video stuttering. It's a great choice for anyone who, like me,



became disenchanted by Y-cam's decision to end 'lifetime' free storage a few years ago.

Simon Carlisle

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

jog your memory. There are 57 trillion places on the site, which equates to 57 trillion phrases, so plenty to go round!

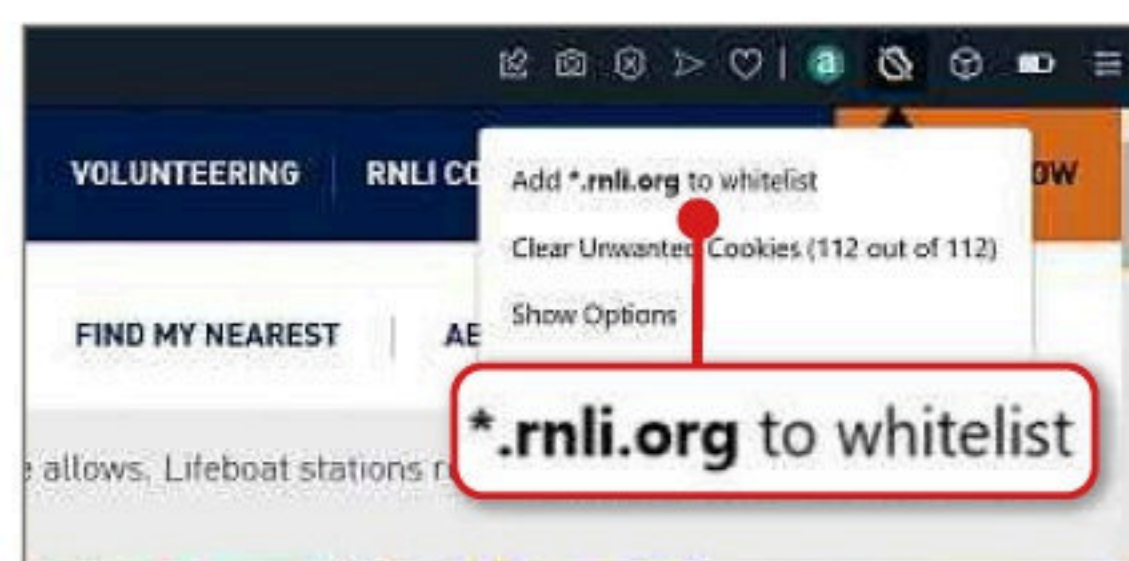
Ralph Lowe

BROWSERS Block, save or approve cookies in Opera

✓ I use the excellent Opera browser and have installed the 'I don't care about cookies' extension (www.snipca.com/39592), which so far has proved to be highly effective in blocking these unwarranted and unwanted notifications. I have also set Opera to delete all cookies after each session and this works very well.

To preserve the cookies that I want to keep I use the Vanilla Cookie Manager extension (www.snipca.com/39608) which gives me the option to save, delete or whitelist (see screenshot below) any cookies that I encounter. Vanilla also has a whitelist-protection option which ensures that the cookies I need are protected and therefore not deleted on each closure of Opera.

Fred Cheshire



SMARTPHONES Register your phone in case it's stolen

✓ In Issue 615 (page 45) you explained how to check whether your second-hand phone was stolen, which recommended reporting it to <https://imeipro.info>. An important site that you failed to mention is www.immobilise.com, which is a national property register for the UK. It should be given more publicity, so I hope you mention it more in future.

You can log your devices there using serial numbers and photos. This makes it easy to report a device as stolen, should it happen, and allows the police to check its details on its National Mobile Phone Register (<https://thenmpr.com>).

In addition, traders can conduct checks to see if a device is reported stolen via www.checkmend.com. All these websites are part of the same system.

Alex Robey

✓ Further to your tip on finding your phone's IMEI number, typing




*#06# on the dialling keypad (see screenshot left) will bring it up too. This is an even easier way!

Caroline Chapman

Browser Tips

BRAVE & FIREFOX Set Brave or Firefox as your default Windows 11 browser

 It's not difficult to change your default browser in Windows 10 if you don't want to use Edge. You can either go to Settings, choose Apps, click 'Default apps' and choose your preferred browser from the 'Web browser' list, or access that setting by clicking the 'Make default browser' button in the new browser. However, Edge will still open when you perform certain tasks, such as searching the web through the Windows search box or clicking links to Microsoft support pages.

Windows 11 makes switching from Edge much trickier because it removes the 'Web browser' option from 'Default apps'. Instead, you need to manually set your desired browser as the default for all the different file and link types you want it to open, including **HTML**, **PDF** and **HTTPS**. This is incredibly tedious and very pushy on Microsoft's part – unsurprisingly, you can still switch to Edge at the click of a button – so we're pleased that a couple of browsers have already fought back.


The latest versions of Brave (1.30 – download it from <https://brave.com>) and Firefox (93 – www.getfirefox.com) beat Windows 11's unfair restriction, so you

can set either as your default browser without needing to tweak a series of settings. See our Workshop below to find out how to make Brave your default choice.

In Firefox, switching from Edge is even easier: just click the browser's menu button, choose Settings, then click Make Default on the General tab (see screenshot below left). This will instantly override Windows 11's settings to make Firefox your default browser.

When you upgrade from Windows 10 to Windows 11, your default browser will be retained, so you shouldn't need to worry about Microsoft forcing Edge on you. But we're glad that Brave and Firefox now provide workarounds for anyone buying a new PC or laptop. Additionally, the updated browsers stop Edge opening any links in Windows 10.

CHROME View images of space on your New Tab page

 Make your browser look truly out of this world with a new extension called Spatium, which customises your New Tab page with stunning pictures of space. It's available from the Chrome Web Store (www.snipca.com/39650), which means it can also be installed in other Chromium browsers (Brave, Edge and Vivaldi).

It's updated daily with a new image of the cosmos, spanning stars, planets, moons, galaxies, nebulae, comets and more. Spatium's dashboard includes a Sun **widget**, which tells you the sunrise, sunset and first and last light times for your location, and a Moon widget that includes the current moon phase – 'waning crescent' at the time of writing




(see screenshot above) – and a countdown to 'moon events' such as the next full moon.

These widgets can be shown or hidden as required, as can the extension's clock and its 'inspirational quotes' (which are rather random and not space-related). There's also a link to a Spatium Playlist on Spotify, if you fancy a "beautiful journey into cosmic perspective".

Spatium is a simple idea, but it looks great – we just wish the pictures were updated more frequently. A Firefox version is apparently coming soon (www.snipca.com/39663).

OPERA Install Opera from the Microsoft Store

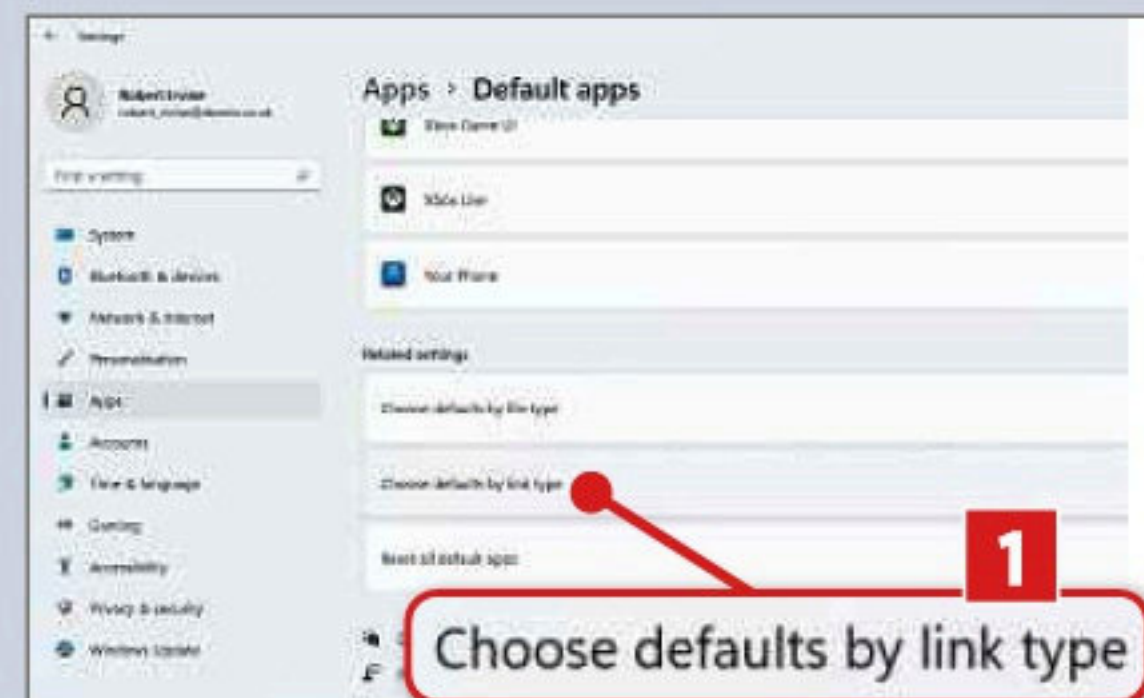
 Although we don't approve of Microsoft making it harder to ditch Edge, we must give it credit for finally letting Windows users install an alternative browser from the Microsoft Store. Opera is the first of the big browsers to be offered through the store – there were already several there that we've barely heard of, such as Lion Browser, which presumably pose no threat to Edge. The change will make Opera quicker to install – rather than having to find and download it through

WORKSHOP Ditch Edge for Brave in Windows 11

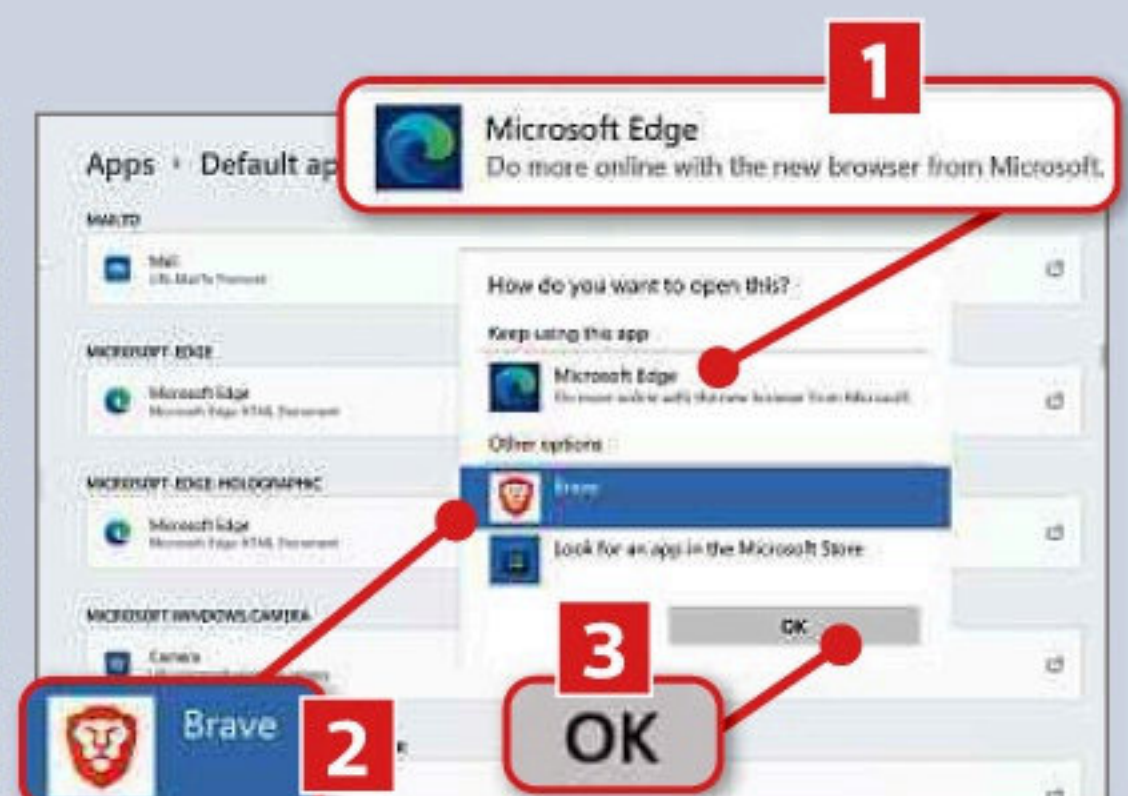
3 Make Brave the default browser



1 Open Brave in Windows 11, click the three-line menu button in the top-right corner of the browser and choose Settings **1**. On the 'Get started' tab, click the 'Make default' button **2** next to 'Make Brave the default browser' **3**.



2 This will open Windows 11's 'Default apps' section. You'll notice there isn't an option to change your default web browser, as there was in Windows 10. Scroll down to the bottom of the screen and click 'Choose defaults by link type' **1**.



3 Scroll down to the MICROSOFT-EDGE section and click 'Microsoft Edge' **1**. When Windows 11 asks 'How do you want to open this?', select Brave **2** and click OK **3** to make it your default browser for every relevant file and link type.

BEST EXTENSION FOR...

Blocking ads on YouTube

Adblock for YouTube

Chrome www.snipca.com/39664

Firefox www.snipca.com/39658

YouTube now seems to show more and longer adverts than ever, which makes watching videos on the site a real test of your patience. Many standard ad blockers are unable to skip this nuisance, but we can confirm that 'Adblock for YouTube' (see screenshot) thankfully lives up to its name.

The extension doesn't require any configuration: simply install it in Chrome (or another Chromium browser) or Firefox, then go to YouTube and you'll be able to play videos without having to sit through

boring commercials. It can also block annoying annotations that obscure your view. You can disable ad blocking when you want to support the creator of a video.

Some user reviews suggest the add-on doesn't always work, but we haven't seen



a single YouTube ad since we installed it. We're actually surprised Google hasn't banned 'Adblock for YouTube' from the Chrome Web Store, as it usually frowns upon tools that threaten its ad revenue!

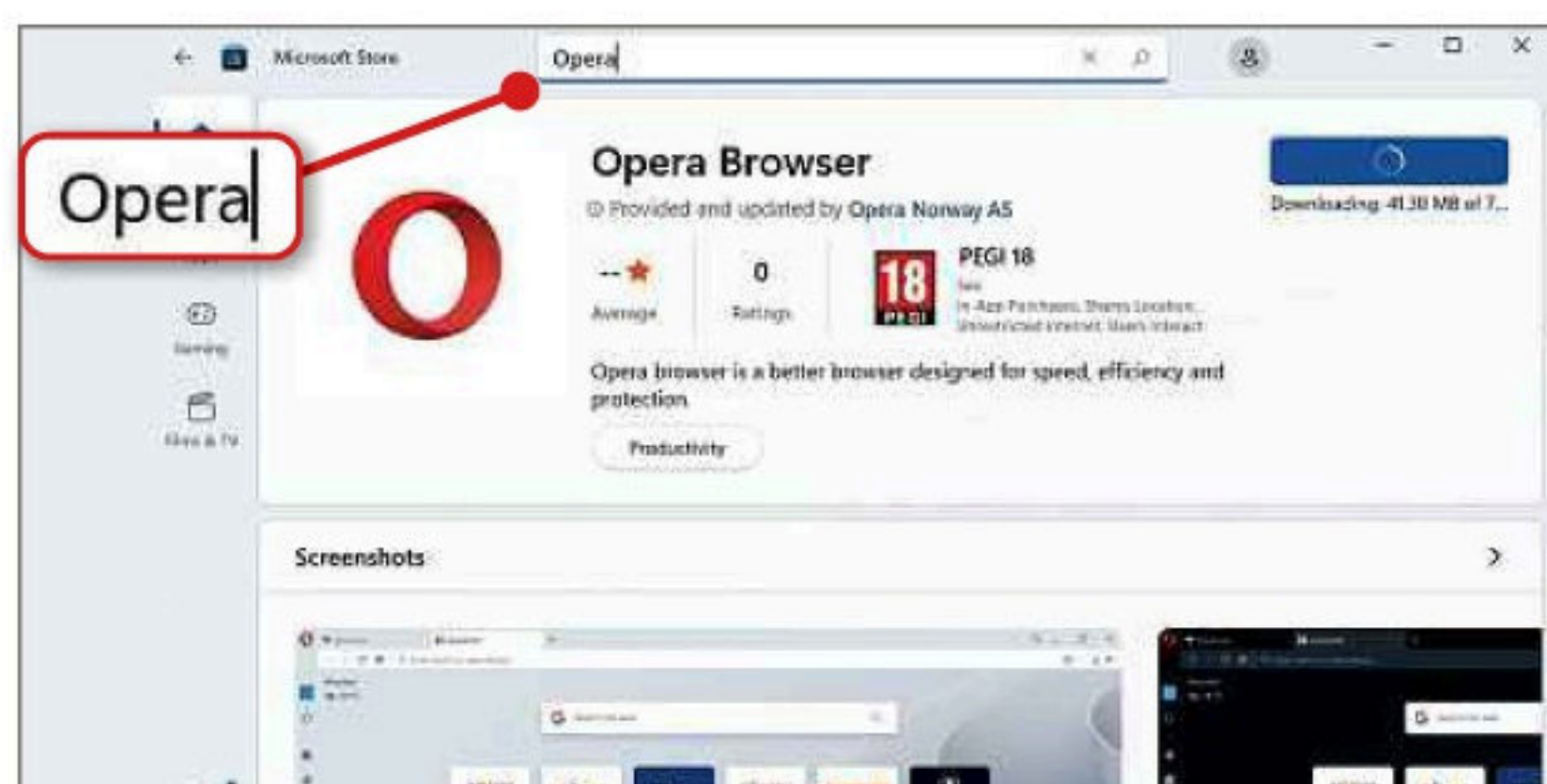
If you don't like that try...

Adblock Pro for YouTube

YouTube & Chrome

www.snipca.com/39659

This extension works both on the YouTube website and videos embedded on other sites, but some users report a short delay between an ad being skipped and a video playing.



another browser, you can just search for 'opera' in the store (see screenshot above). And don't worry about this version being a streamlined 'app' – it's the same desktop program that we know and love, with useful features such as a **VPN**, ad blocker and messaging tools.

The catch is that Opera is currently available only through the redesigned Microsoft Store, which launched alongside Windows 11. The new store will be rolled out to Windows 10 "in the coming months" (see www.snipca.com/39653 for details).

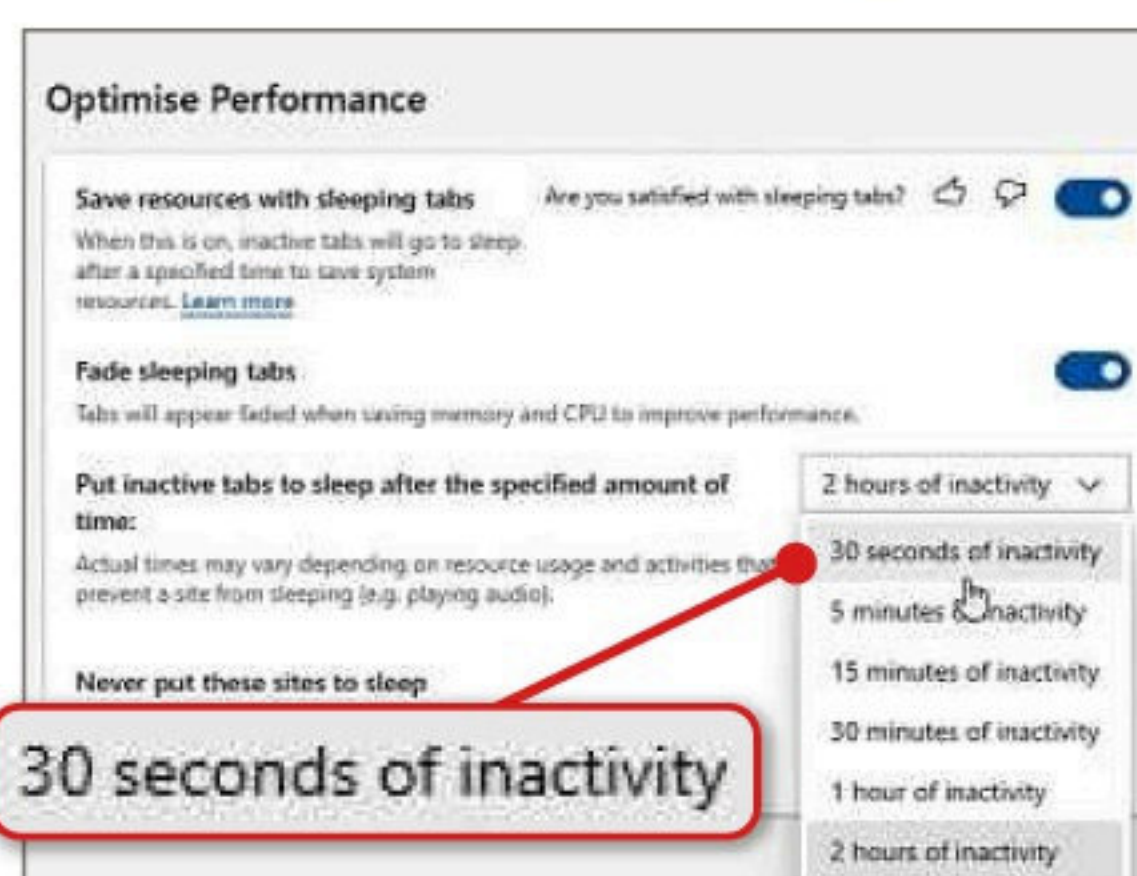
EDGE

Put tabs to sleep after 30 seconds of inactivity

One of our favourite features in Microsoft Edge is Sleeping Tabs, which saves memory, battery and processing power on your PC by suspending background tabs that you're not using. Previously, tabs were only put to sleep after two hours of inactivity, but the latest version of the browser lets you reduce the waiting time to as little as 30 seconds, so you can free up system resources as quickly as possible.

To activate Sleeping Tabs and choose when tabs should automatically be snoozed, click the three-dot menu in the top-right corner of Edge and choose Settings, then select System on the left. In the 'Optimise performance' section, switch on 'Save resources with sleeping tabs', then click the dropdown menu next to 'Put inactive tabs to sleep...' and choose a waiting time – from 30 seconds (see screenshot below) to 12 hours.

You can also opt to 'Fade sleeping tabs', so you know which ones are idle. Click a sleeping tab to wake it and restore the resources needed to reload the relevant web page. Edge lets you specify which sites should never be put to sleep.



CHROME, FIREFOX & EDGE

Learn a language as you browse the web

Many language-learning tools either try to teach you too much at once or train you with isolated phrases that mean little on their own. Toucan (<https://jointoucan.com>) adopts a smarter approach by letting you pick up words in context as you browse the web.

Install the extension, choose the foreign language you want to learn – options include Spanish, French, German, Italian and Japanese – and grant Toucan permission to modify websites. You'll now start noticing highlighted words and phrases in your chosen language on web pages (see screenshot above), which you can click for a translation.

Once you've registered for a free Toucan account (you can try the add-on without one), you'll be able to save words to a personal dictionary.

Toucan also offers fun games and quizzes, though you'll need a Premium subscription (£4.99 a month) for unlimited, ad-free usage. We think it's a *muy bueno* way to learn a new lingo.

Phone and Tablet Tips

ANDROID

Discover what's new in Android 12



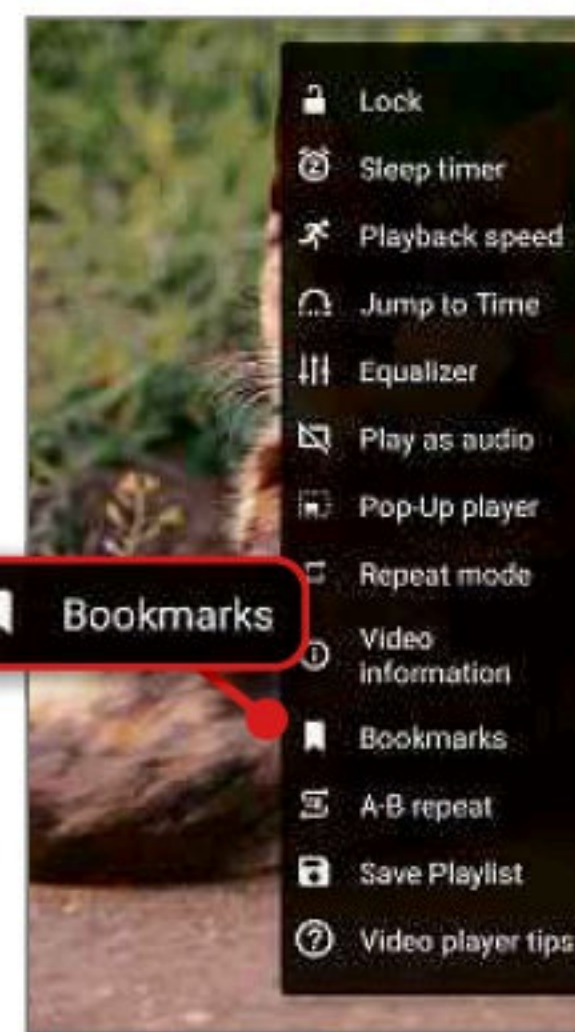
Android 12 was released on 4 October, but don't get too excited because it may take several months to 'roll out' to your phone and tablet. Even Google's Pixel smartphones, which were expected to get Android 12 on the day of release, will have to wait a few weeks according to Google's official blog post (www.snipca.com/39675). These will be followed by Samsung Galaxy, OnePlus, Oppo, Realme, Tecno, Vivo and Xiaomi devices "later this year".

The biggest change in Android 12 is the introduction of the new Material You design language, which enlarges on-screen buttons to make them easier to tap and adapts system colours to match your home and lock screen backgrounds (pictured below left). Notable new



features include Privacy Dashboard, which alerts you when apps are accessing your camera and microphone; AppSearch, which lets you search for content inside apps, even when your device is offline; and the ability to take 'scrolling screenshots' of entire web pages.

For a better idea of if and when your phone will be updated to Android 12, see the unofficial timeline at www.snipca.com/39676.



the three-dot menu button in the bottom-right corner of the VLC player and choose Bookmarks (see screenshot left). Tap the plus sign to create a bookmark for the current playback position, which will then be added to your Bookmarks list.

You can also now group related videos in a playlist to keep your collection tidy. On the Video tab, tap the three-dot icon in the top-right

corner of a video and choose 'Add to video group'

ANDROID

Add bookmarks to audio and video files in VLC



The Android version of our favourite media player VLC has been updated with several new features that make playing video and audio on your mobile device even easier and more enjoyable. VLC for Android 3.4 (www.snipca.com/39679) has a redesigned interface that gives you quicker access to media files stored on your phone, tablet or network server, and provides more ways to browse them, such as by artist, album, genre or alphabetically.

Best of all is the new Bookmarks option, which lets you save specific points in an audio or video file to return to later – this is particularly useful when you're listening to podcasts and audiobooks, or watching full-length films. To use it, tap

ANDROID

Let Netflix find something for you to watch



Netflix has added a new feature to its Android app (www.snipca.com/39678) called Play Something, which suggests TV shows and films to watch, when you're tired of idly scrolling through the streaming service. Rather than pick completely random content, Netflix will choose titles based on the types of series and films you've already watched, including new releases, 'timeless classics' and things you've saved to your watchlist.

Look out for the Play Something 'shuffle' button (see screenshot above right) as you browse the Netflix app on your Android phone or tablet or smart TV – it will be added to iOS in the coming months. If you don't like the content that

BEST NEW APPS

What you should install this fortnight

Scannerate

Free

Android www.snipca.com/39681

Scannerate provides a fast, ad-free and private alternative to Google Lens when you want to scan text from images on your Android device. Simply tap the Create



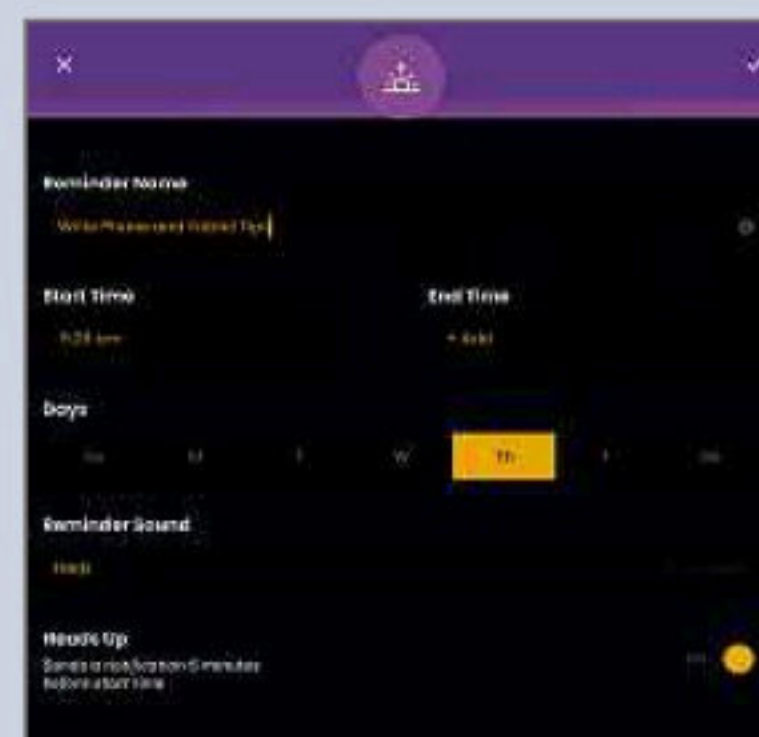
Scan button and select a picture to extract all the text from it. You can then edit the scan to remove any unwanted words and either print the result or save it as a PDF.

Nudge: Daily Reminder

Free

iOS www.snipca.com/39677

Forgetful types will appreciate this app, which lets you set reminders for tasks that often slip your mind, from taking your medicine to walking the dog. Nudge uses custom alarms to spur you into action, which



can be repeated for as many days as required and play sounds including car horn, jazz lick and harp.

DriveScore

Free

Android www.snipca.com/39683

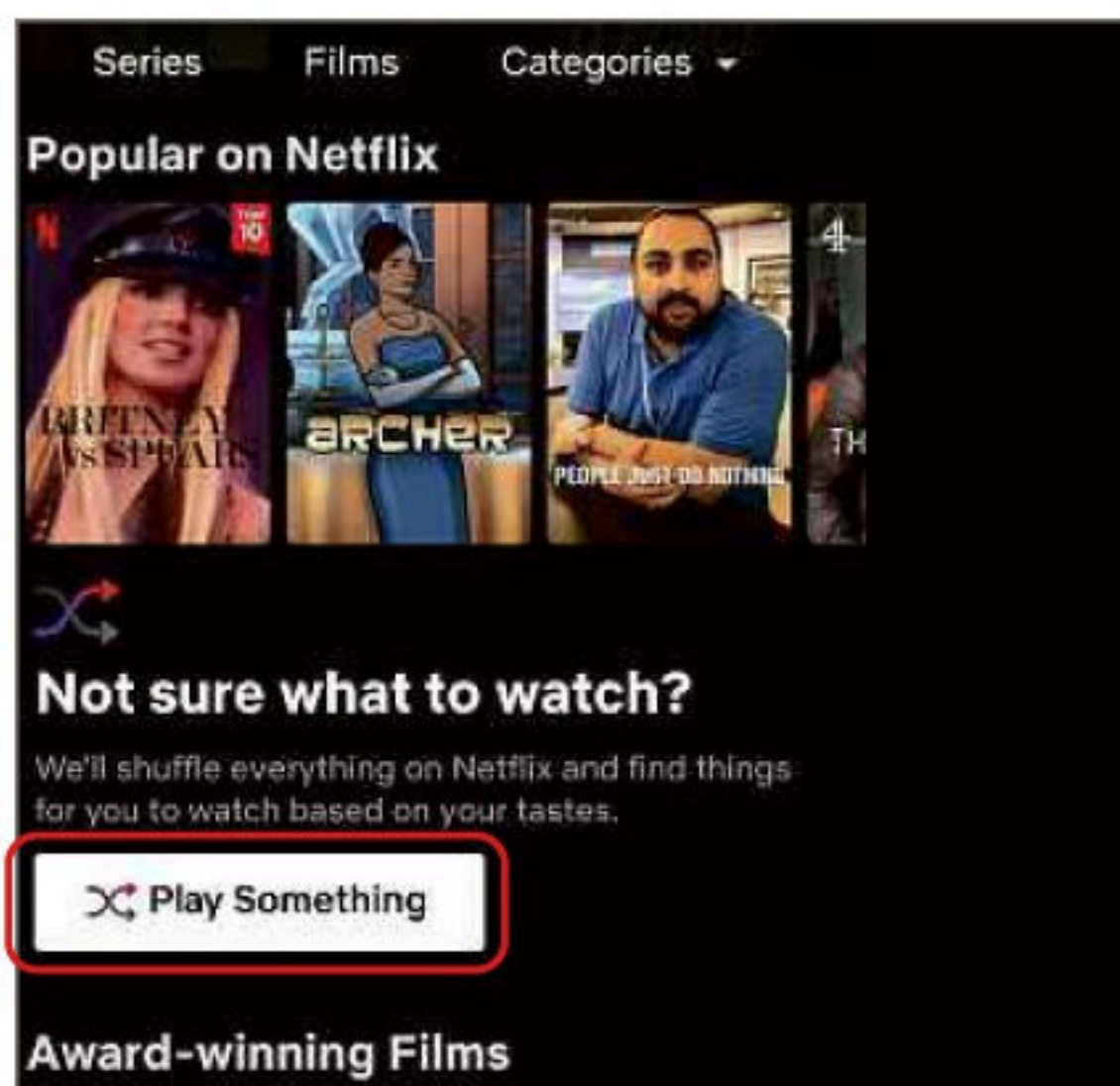
iOS www.snipca.com/39684

This app from credit-score company ClearScore aims to help you save money on car insurance. It monitors your driving through your phone, then provides



feedback (such as "try not to speed") and an overall score to help you prove to insurers that you're a good driver. You're not obliged to share your score with insurance companies.

Brilliant things to do on your device



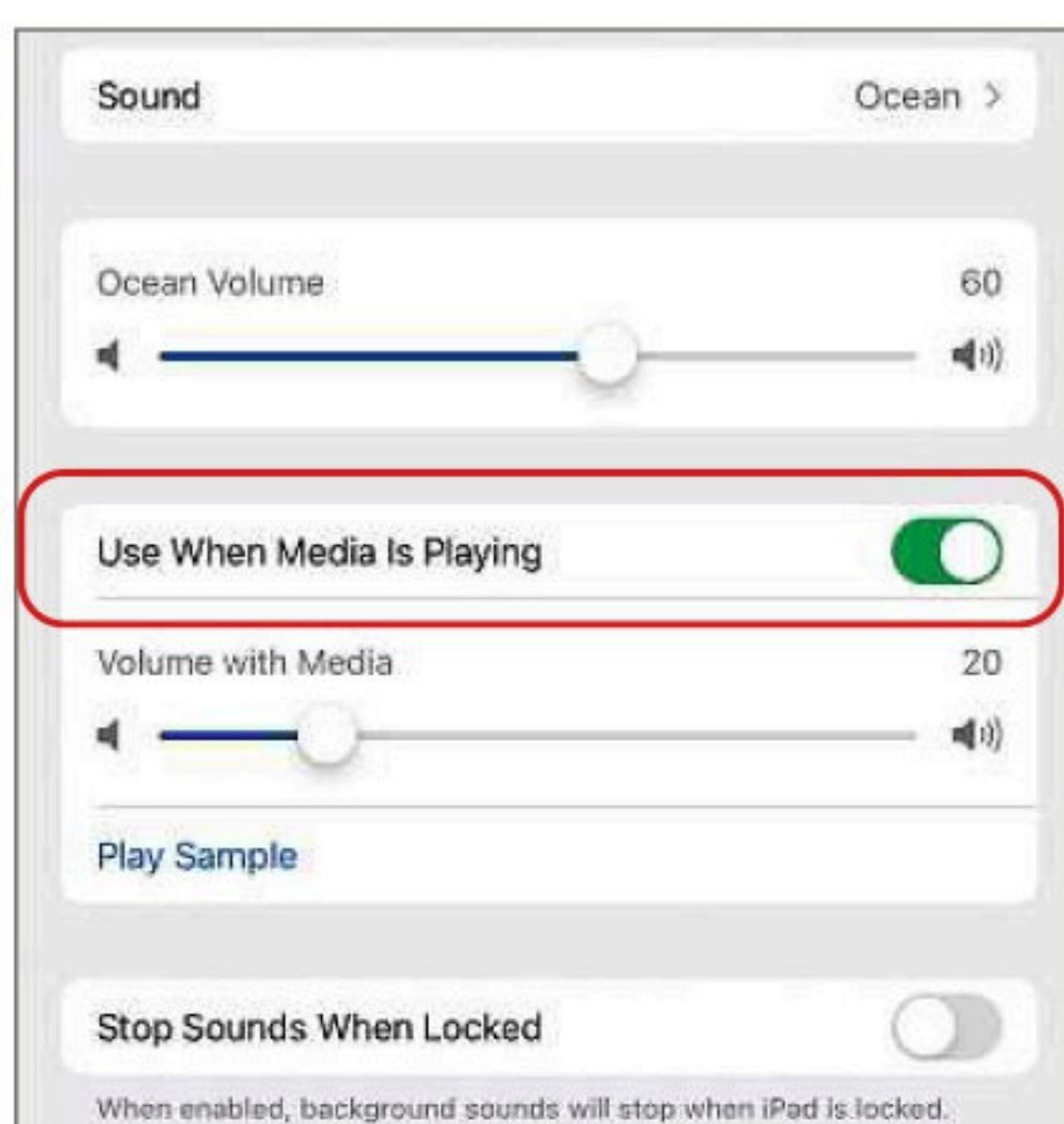
starts playing when you select the button, either choose Play Something Else to shuffle again, or navigate back to the Home screen.

iOS Listen to soothing and relaxing background sounds

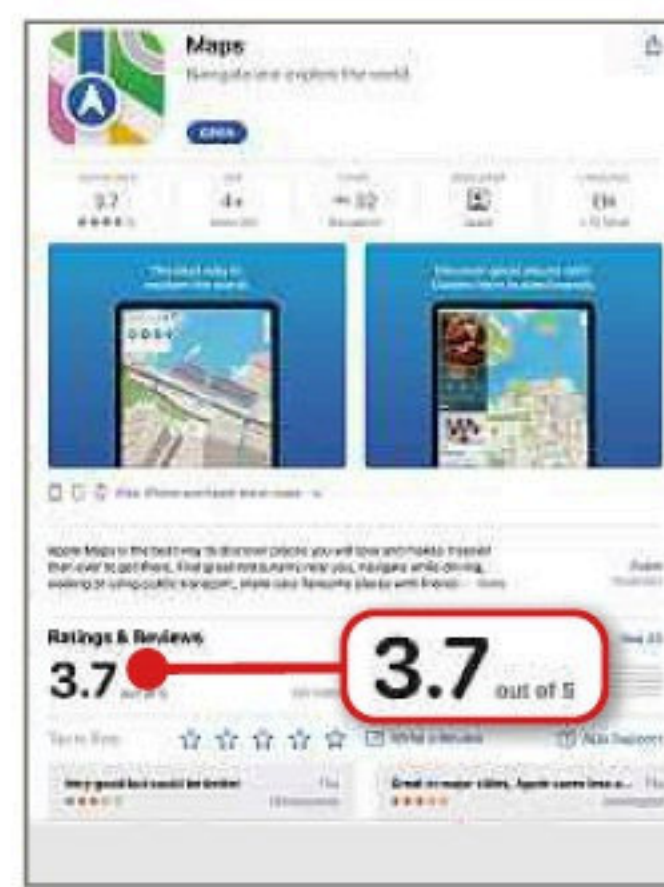
One of our favourite new features in iOS 15 and iPadOS 15 is Background Sounds, which masks environmental noise with soothing ambient audio to help you relax, sleep and concentrate better. The default sound is Rain, while the other options include Ocean and Stream, and different types of white noise (Dark or Bright).

Background Sounds doesn't have its own app, but is tucked away in your device's Accessibility settings. To turn it on, open the Settings app, tap Accessibility and choose Audio/Visual. Select 'Background Sounds', then tap Sound to hear the Rain option. You can then set your preferred volume and decide whether sounds should keep playing while you're listening to music or watching a video (see screenshot below), and when your device is locked. Select a different sound and iOS 15/iPadOS 15 will download it for you.

For easier access to the feature, you can



create a Control Centre shortcut that lets you turn it on or off simply by swiping down from the top-right corner of your screen. Open the Settings app on your iPhone or iPad, select Control Centre and tap the green plus sign next to Hearing. This will add a shortcut to Background Sounds to the Control Centre - just tap the ear icon to switch it on.



Previously, built-in apps such as Maps, Mail, Podcasts and Music couldn't be reviewed or rated by users, which made it difficult to tell how they compared with similar tools from other developers, and to share details of problems you'd had with the apps. Apple has now changed its policy and reviews and ratings have

been flooding in - Maps, for example, is rated 3.7 out of 5 (see screenshot above left), whereas Google Maps is rated 4.7.

Apple has also restored its 'Report a problem' button to the store and added a useful option to its menu that lets you 'Report a scam or fraud' if you believe you've been ripped off by an app.

iOS Rate apps in the App Store

Apple is finally practising what it preaches by letting iPhone and iPad users rate its own apps in the App Store - provided you've upgraded to iOS 15.

BEST APPS FOR...

Finding petrol

PetrolPrices

Free

Android www.snipca.com/39685

iOS www.snipca.com/39686

Although this app struggled to keep up at the start of the fuel crisis, it's a great way to find cheap petrol and diesel nearby. You can read and write reviews of petrol stations, including details of facilities, and earn points for information you provide. PetrolPrices is free to use but some features require registration.

Best For Filling up for less in the UK

Shell

Free

Android www.snipca.com/39691

Shell's mobile app shows the other petrol-station chains how it's done, with its friendly design and customer rewards via its Shell Go+ loyalty scheme. You can only use it to find Shell garages, but at least the 'Pay at pump' option means you won't need to queue after filling up.

Best For Buying petrol from Shell stations

Google Maps

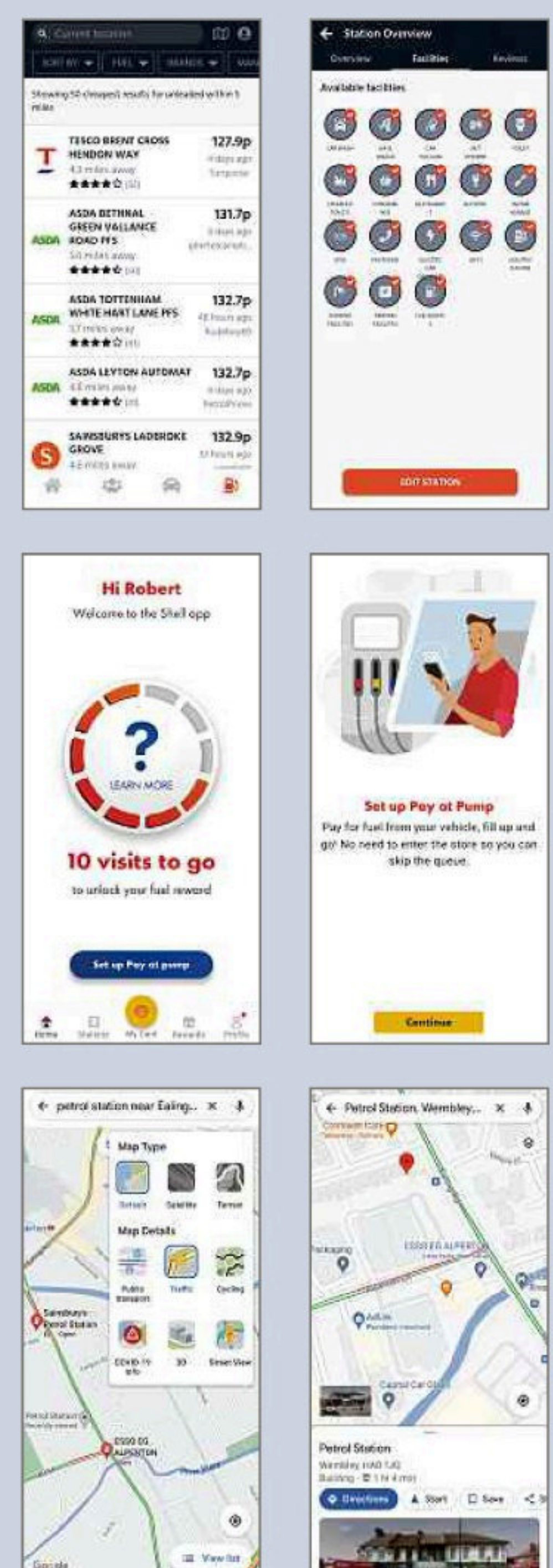
Free

Android www.snipca.com/39688

iOS www.snipca.com/39689

Google Maps isn't just useful for finding your nearest petrol station, but also makes sure you won't have to queue when you get there. Turn on its traffic updates by tapping the Layers icon in the top-right corner and choosing Traffic, then look for red lines leading into garages that indicate a long wait.

Best For Avoiding queues at petrol stations

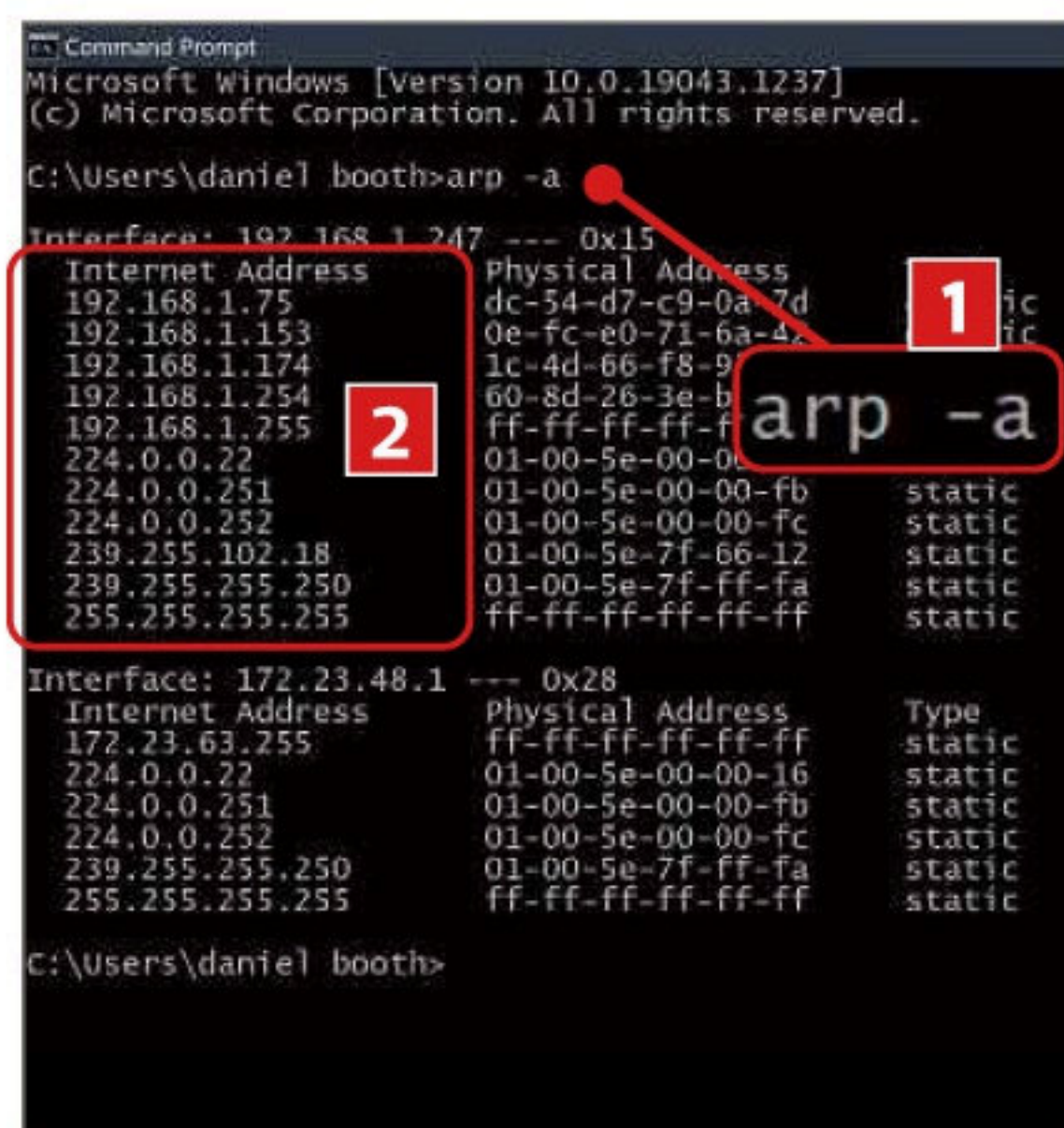


WINDOWS 10

List devices on a local network

You can quickly use Command Prompt or PowerShell to see which devices are connected to your local network. Press Start, type **cmd** or **powershell**, then select 'Run as administrator' on the right. In the Command Prompt or PowerShell window, type **arp -a** **1** to see connected devices. The devices' **IP addresses** will be listed in numerical order under the Internet Address heading **2**.

You'll be able to identify some of those devices through their IP addresses. Type **ping -a** followed by the IP address (for example, **ping -a 192.168.1.75**), then press Enter. If available, the device name will be listed on the first line. Routers, computers and **NAS** drives should be shown, but some other devices won't be.

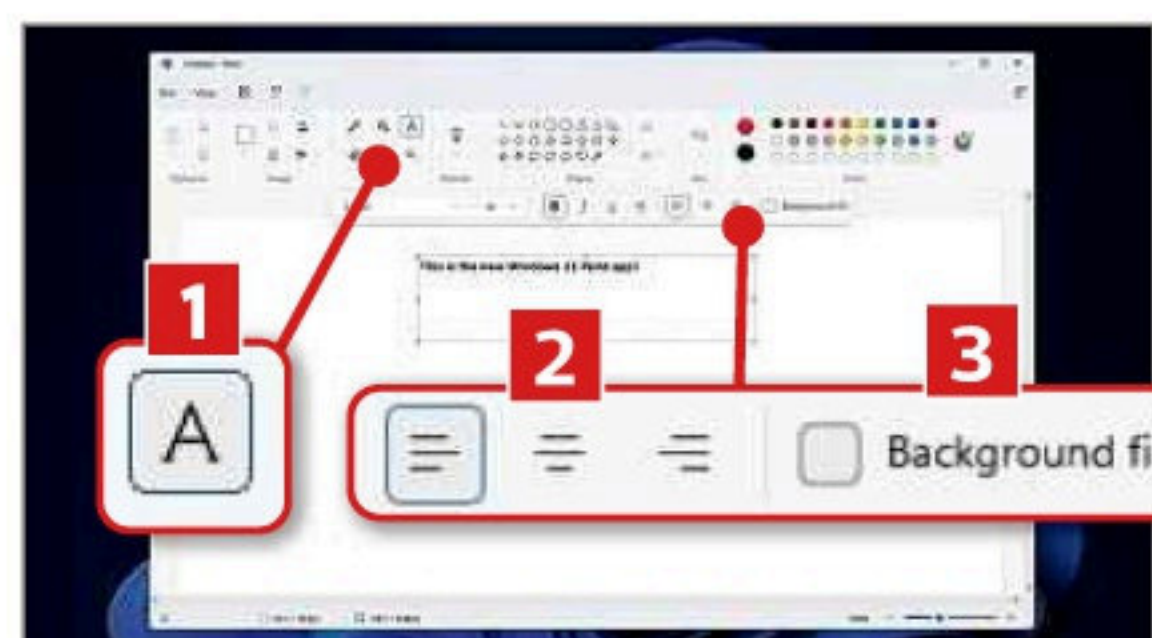


WINDOWS 11

Align text in new Paint app

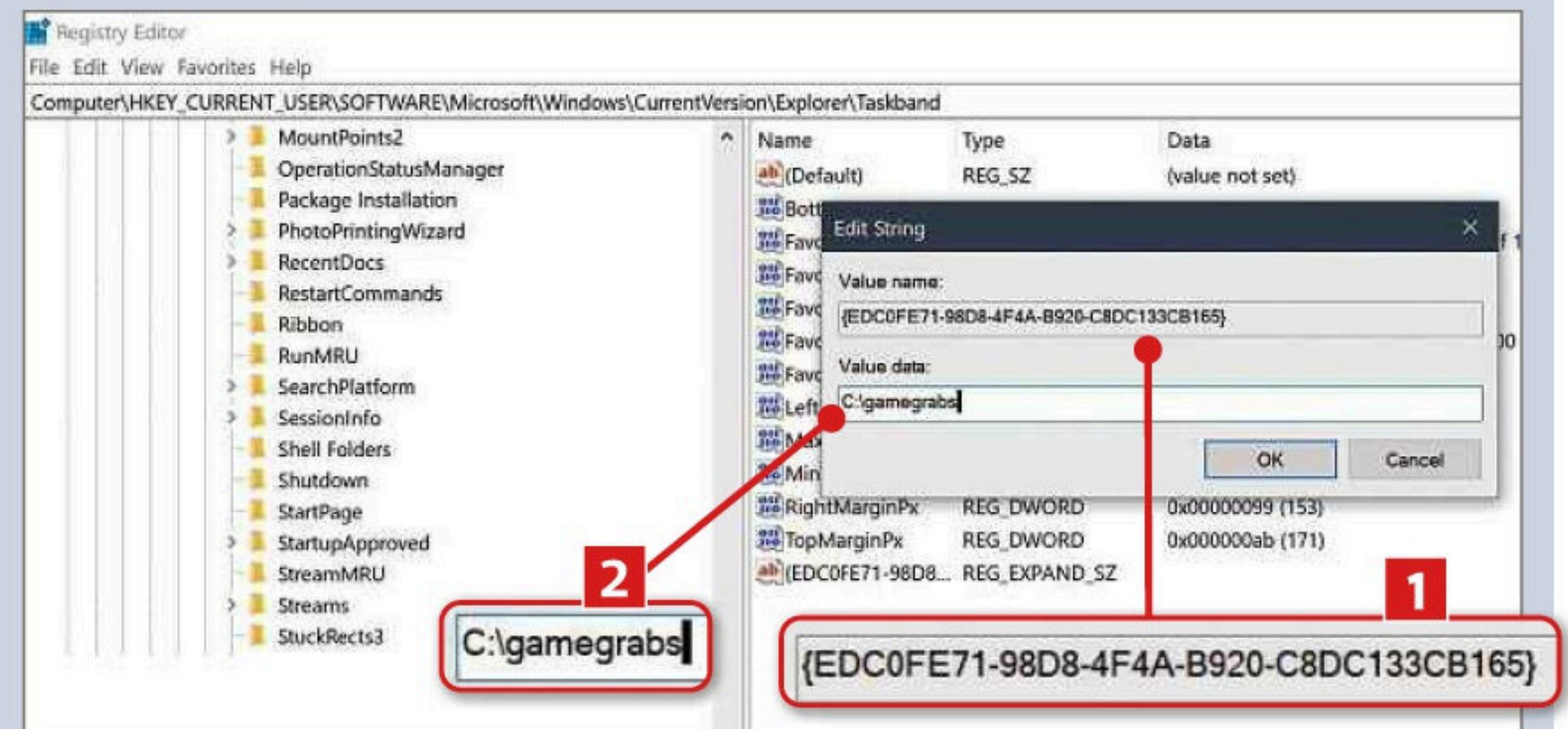
The Windows 11 version of the Paint app adds a tool that should never have been left out in the first place – text alignment.

First, you'll need to install Paint from the Microsoft Store (www.snipca.com/39680). Next, open it, then press the **A** icon **1** in our screenshot below) at the top to activate the text tool. Drag and drop a text box on to your canvas, or simply click anywhere on it. You can then select the colours, font and text formatting you



WINDOWS 10

Change where you save your gaming screenshots



If you play games as visually dazzling as Microsoft Flight Simulator, you may want to save and share screenshots using Xbox Game Bar, which works on Windows computers. You'll find this by pressing Windows key+I to open Settings, then clicking Xbox Game Bar on the left. By default screenshots are saved in the Captures folder – **C:\Users\[User Name]\Videos\Captures**, but you can change this to a more accessible location by tweaking the Registry Editor.

Open the Editor (type **regedit** in the Start menu), then navigate to **Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\User Shell Folders** (or copy this path from www.snipca.com/39673 and paste it into

Editor's address bar at the top). Now look in the central pane. If the **{EDC0FE71-98D8-4F4A-B920-C8DC133CB165}** **registry key** already exists, double-click it then add the new folder location, as explained below.

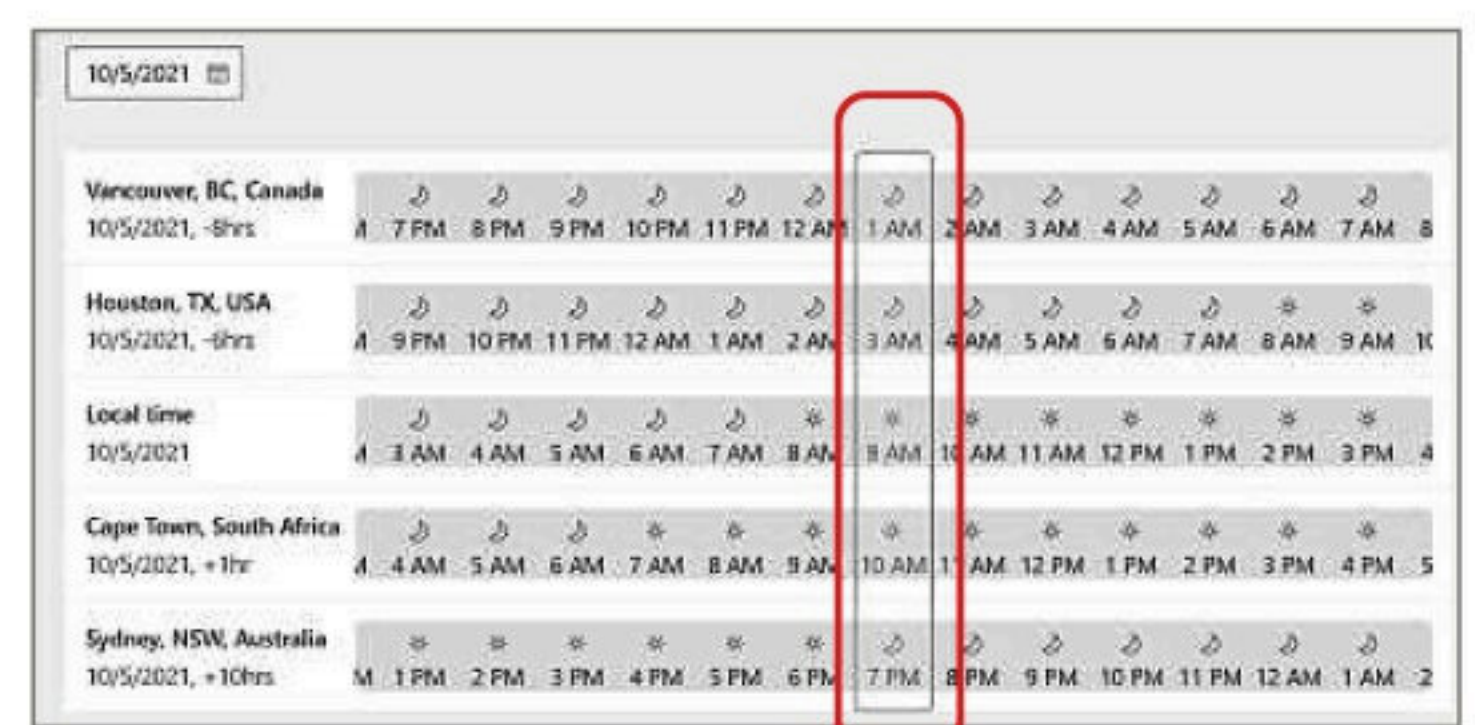
If you don't see that registry key, you'll need to create it. Right-click the left panel and select New, then Expandable String Value. Give it the name starting 'EDC0FE71...' as above (or copy and paste this from www.snipca.com/39674), then double-click it **1** in our screenshot). Type the new capture folder path – an existing folder or one you've created – in the 'Value data' box then press OK. We've called ours **C:\gamegrabs** **2**. Any new screenshots you take with Xbox Game Bar will be saved here.

want to use. To align your text, select one of the text-alignment options **2** before you start typing. To add a background colour to your text box, tick the 'Background fill' box **3**.

WINDOWS 10

Compare time zones from around the world

You can use Windows 10's 'Alarms & Clock' app to find out the best time to chat with friends and family in different time zones. Press Start, then type **Alarms & Clock** and click Open. Next, click World Clock on the left, then add a location by clicking 'Add new city' at the bottom right. Use the search



bar at the top to find and add a new location.

Next, click the Compare icon at the bottom-right (two clocks connected by an arrow). Use the sliders in the next menu to match the time. As you move one slider, the time in the other location will line up (see screenshot above).

LIBREOFFICE CALC & MICROSOFT EXCEL

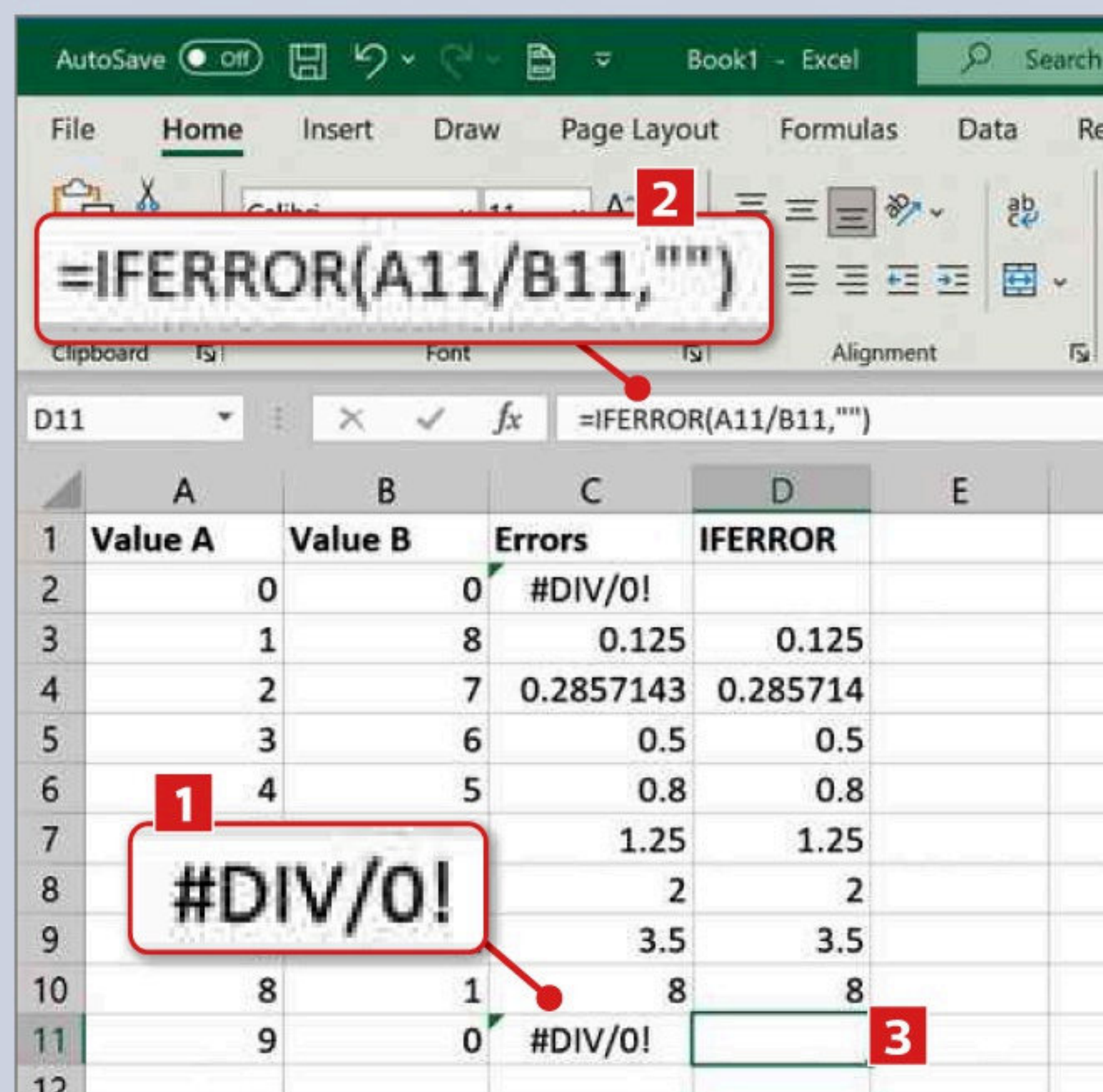
Hide errors in your spreadsheet



Error messages can clutter up a spreadsheet, especially if you're looking to print your data. You can hide or replace error messages in Excel and Calc using the IFERROR formula, which you can use with any spreadsheet functions.

First, click a cell containing a function that's showing an error message, or an otherwise empty cell, then type `=IFERROR(function,"message")` and press Enter. Replace 'function' here with the function creating the error. Alternatively, use the cell reference (for example, `A2`) containing the function. Replace "message" with the message you'd like to see instead of an error, or leave the quote marks empty (") to show no message.

In our example, the `=A11/B11` function creates a '#DIV/0!' error message (1 in our screenshot). Replacing this with `=IFERROR(A11/B11,"")` formula (2) hides the error message (3).



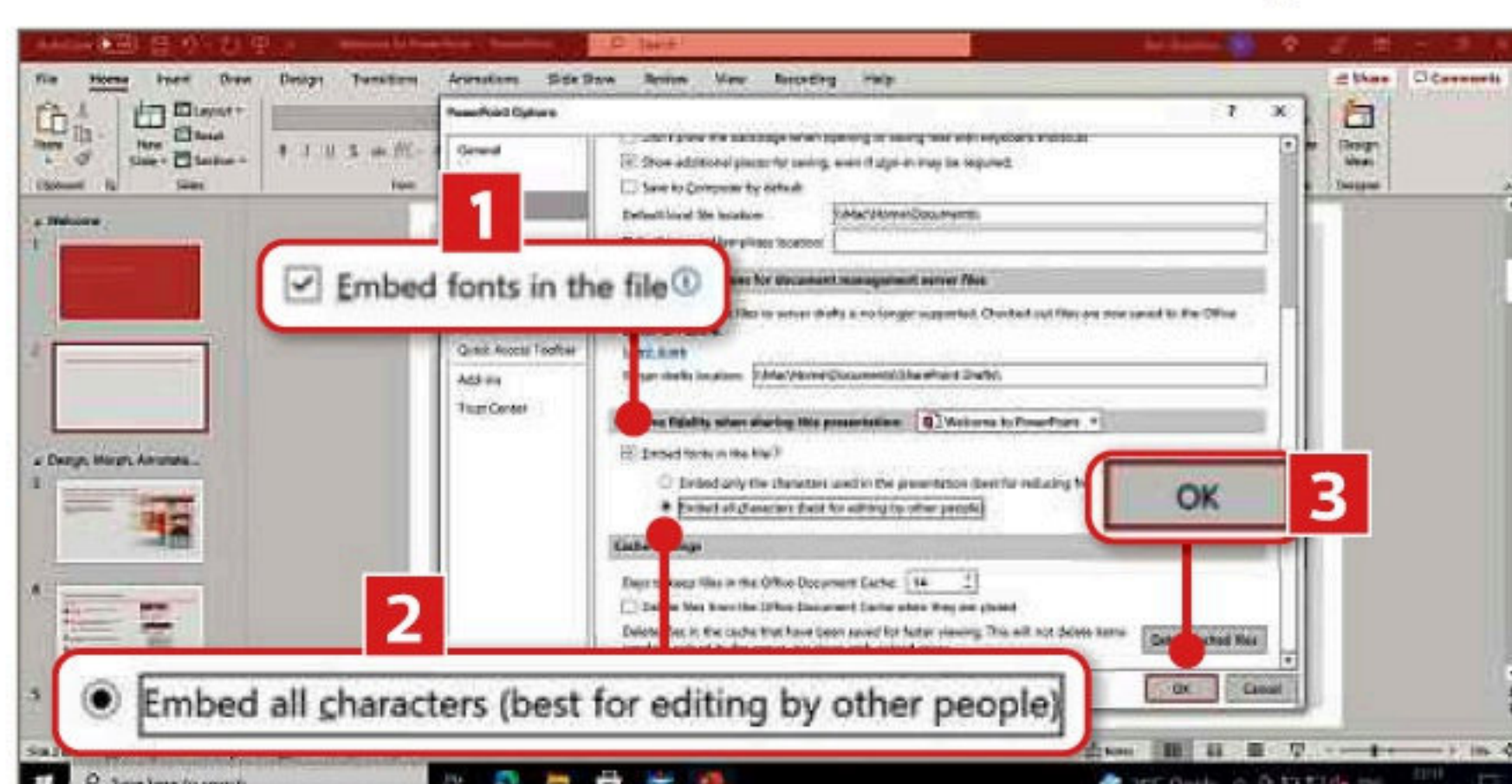
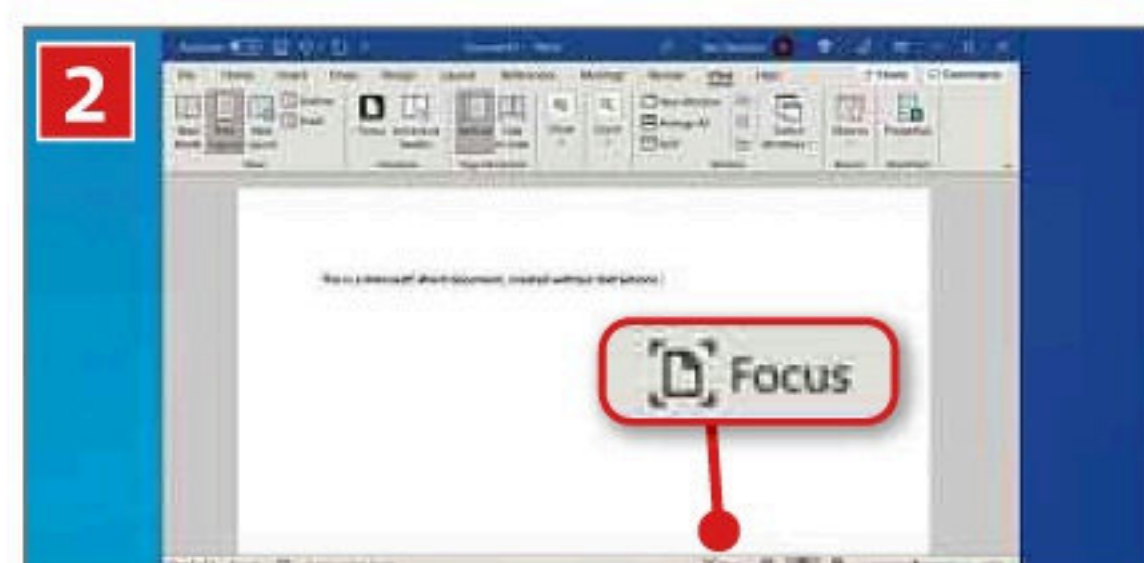
MICROSOFT WORD

Remove distractions using Focus mode



Word 2019 and 2021 (and also Office 365) have a Focus mode that removes distractions while you're typing. With it switched on, your documents will be shown full screen, surrounded by black bars (see

screenshot 1 below left), with other Word elements hidden. Turn it on by clicking View, then Focus, or click the Focus icon at the bottom (see screenshot 2).



MICROSOFT POWERPOINT

Embed your fonts to preserve formatting



If you're using a custom font in your presentations, you'll need to embed it into the file itself to maintain the formatting on another PC.

To do this, open your presentation file, making sure the fonts you want to add are already in place. Next, click File, Options, then Save in the menu on the left. Under the 'Preserve fidelity when sharing this presentation' section, make sure your presentation file is selected in the dropdown menu. Next, tick 'Embed fonts in the file' (1 in our screenshot below left) then select the 'Embed all characters...' button (2, before clicking OK (3).

When you've finished, make sure your

fonts are saved to your file by clicking File, then Save (or 'Save as').

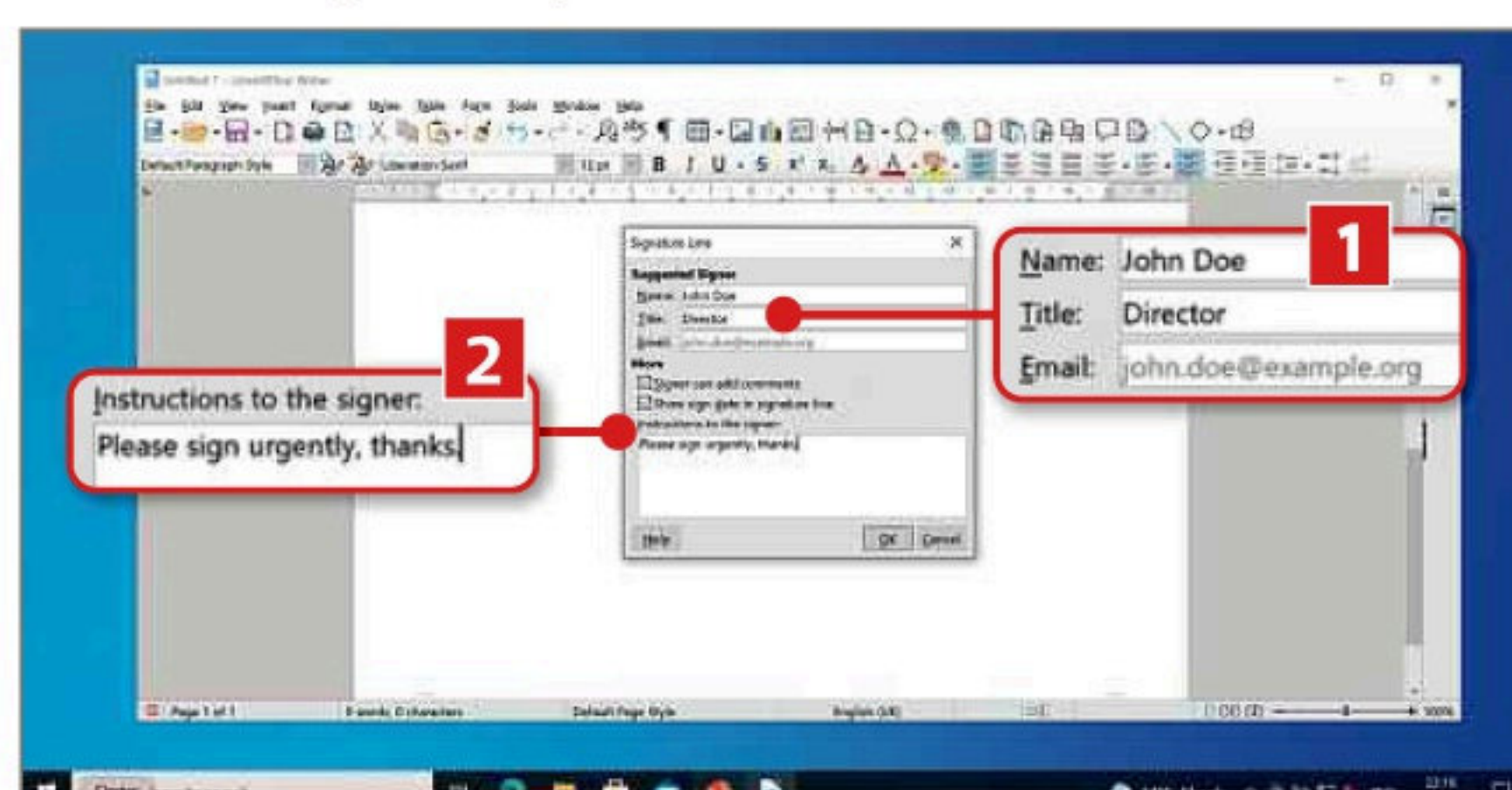
LIBREOFFICE WRITER

Add a signature to your documents



To add an 'X' signature line to a Writer document, place your cursor where you'd like the line to appear, then click Insert, followed by Signature Line (at the bottom of the options). In the Signature Line box, confirm the name, title, and email address of the signatory (1 in our screenshot below). Add any additional instructions (2, then click OK.

A signatory can then sign the document digitally by right-clicking the signature line and clicking Sign Signature Line. You can also print the document and get it signed manually, or insert an image containing the signature (click Insert, then Image) and place it on the line.



In The Club



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

Draw on PCs with TeamViewer whiteboard

TeamViewer (www.teamviewer.com) lets you take control of another person's computer screen over the internet (with their permission, of course). Once connected you can show that person how to do something – like use a particular program – or help to fix a problem they might be having with their system. There's also a whiteboard feature that lets you annotate and draw on the other person's screen. Anyone can use it, but we think it's particularly handy for clubs that involve one-to-one help sessions, or play move-based games like chess.

Set up a remote session

Launch the TeamViewer installer on your main club PC and you'll see three options – these are a default installation; an installation that sets up unattended access to that device (so you can access it from anywhere); or to run the software only (for a one-time use). Select the default installation and follow the steps to install it.

Tick the 'I want to use the free version for personal use' option, then click Finish. Tick the box to accept the licence agreement then click Continue. The TeamViewer interface will load and show your ID and Password (1 in our screenshot below). To take control of someone else's PC, they need to install or run the software on their computer. Once they've done that you need to ask them



Use the whiteboard tools to draw on the other person's computer

for their ID and password. For security reasons, they should provide both items separately, preferably by phone.

Now, on your computer, type their nine-digit ID code into the Partner ID box (2 in our screenshot above) then click Connect (3). When prompted in a new window, type their password. You will then be connected to their machine, letting you see what's on their screen and control their PC as if you were sitting in front of it.

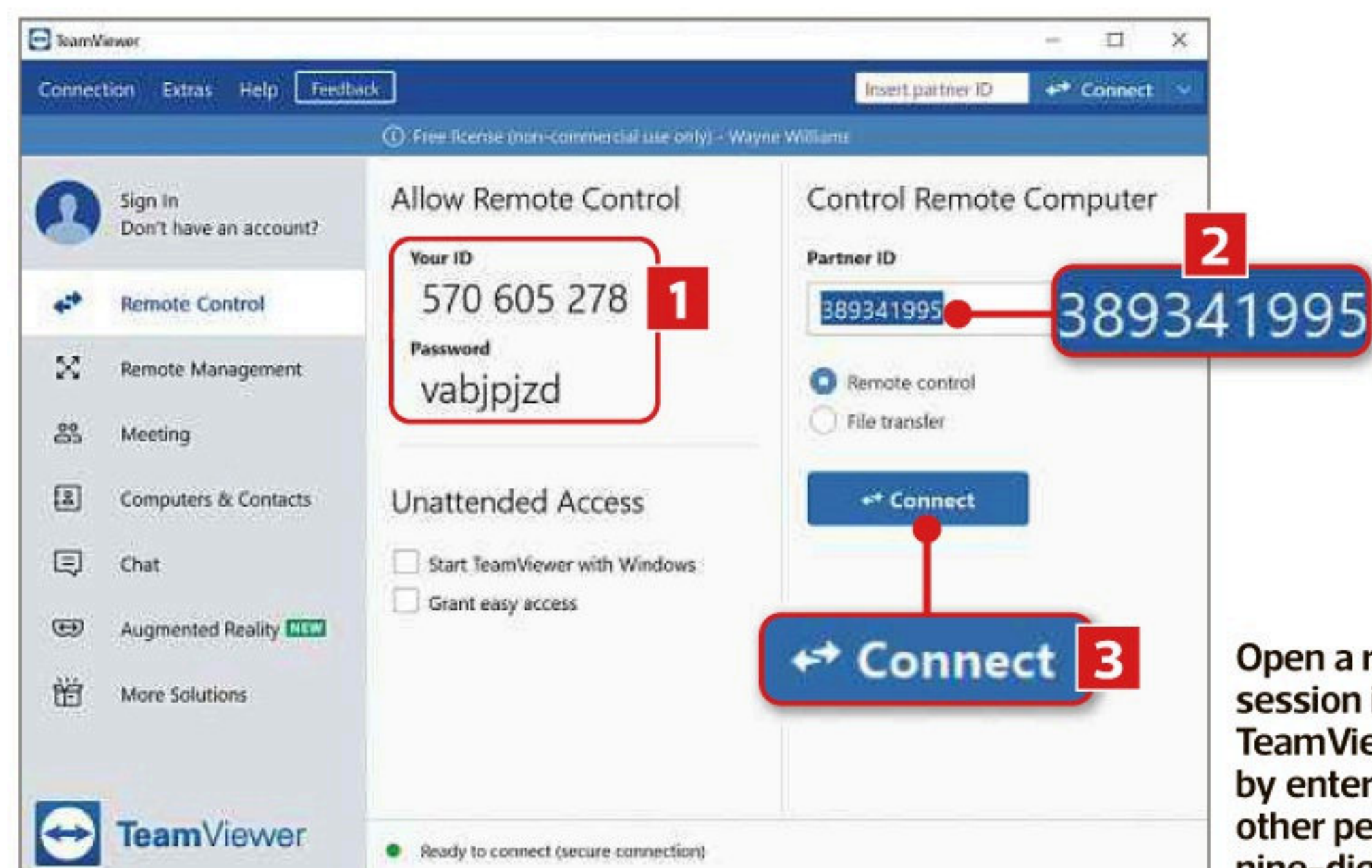
The toolbar at the top of your TeamViewer window (above your view of their screen) lets you perform actions like change the view and switch sides – so they can view *your* screen if necessary

Draw on the other person's screen

To open your whiteboard click the paintbrush icon in the floating panel (1 in our screenshot above), or click the Communicate tab at the top of the screen (2) followed by the Annotate button on the right (3). Turn the whiteboard feature on (4) and you'll be able to use the tools in the box (5) to draw on the other person's screen.

You'll probably use the red-pen icon and yellow highlighter most. Right-click them to change the colour and thickness. In our screenshot above, a chess club is working on different opening moves. The person with the remote computer (the one we're connected to) has a top-down view of a chess board on their screen. We can use the pen tool to draw our opening move and this appears – in real time – on the other PC. It's now their move, so they select the pen tool in the whiteboard on their computer and draw their response. TeamViewer will automatically choose a different colour, so it's easy to see who drew what.

The whiteboard tools are a little limited. There are no arrows or other shapes, and you can't undo a mistake by pressing Ctrl+Z – instead you must use the eraser. But it's still a good way to draw on screen, and if you click the Communicate tab at the top and select Chat or Video, you can discuss what's happening.



Open a remote session in TeamViewer by entering the other person's nine-digit code

What's All the Fuss About...



Precipitation nowcasting

A new system for more accurate weather forecasts? Brolly good!

What is it?

The science of estimating whether it's going to rain soon.

I can do that already – by looking out of the window

Yes, but do you use anything as clever as artificial intelligence (AI) to make that assessment? Computer scientists at London AI firm DeepMind (owned by Google) have developed a method of analysing high-resolution radar data from the past 20 minutes to estimate whether it's likely to rain in the next 90 minutes (see image below). Writing online (www.snipca.com/39671), DeepMind says it's more accurate than any of the current 'nowcasting' systems, such as the ancient method of 'through-aperture vertical observation' – the scientific name for looking out of your window.

How does it work?

The radar repeatedly fires a laser into the lower atmosphere, where its speed is affected by how much water vapour there is. This data is analysed to assess the "amount, timing and location" of rainfall. What's really smart is that the system was trained to predict rainfall by studying maps showing the weather at five-minute intervals. This helped it to learn which cloud patterns produce rain. DeepMind claims this method, called the Deep Generative Model of Rain (DGMR), is more accurate than Numerical Weather Prediction (NWP), which forecasters currently use.



What's the difference between the two?

DeepMind's method gathers data in real time, which lets it make accurate predictions for the next few hours. NWP relies on mathematical equations based on air pressure, moisture and the temperature of Earth's atmosphere. This is effective at making "planet-scale predictions several days ahead", but less so for more recent timeframes.

How do we know it's more accurate?

Forecasters have already said so. It was shown to 50 experts at the Met Office, who rated it as their first choice for "accuracy and usefulness" in 89 per cent of cases when compared with existing methods. DeepMind says this means the system is not just "good", but "good in several different ways".

Why is that important?

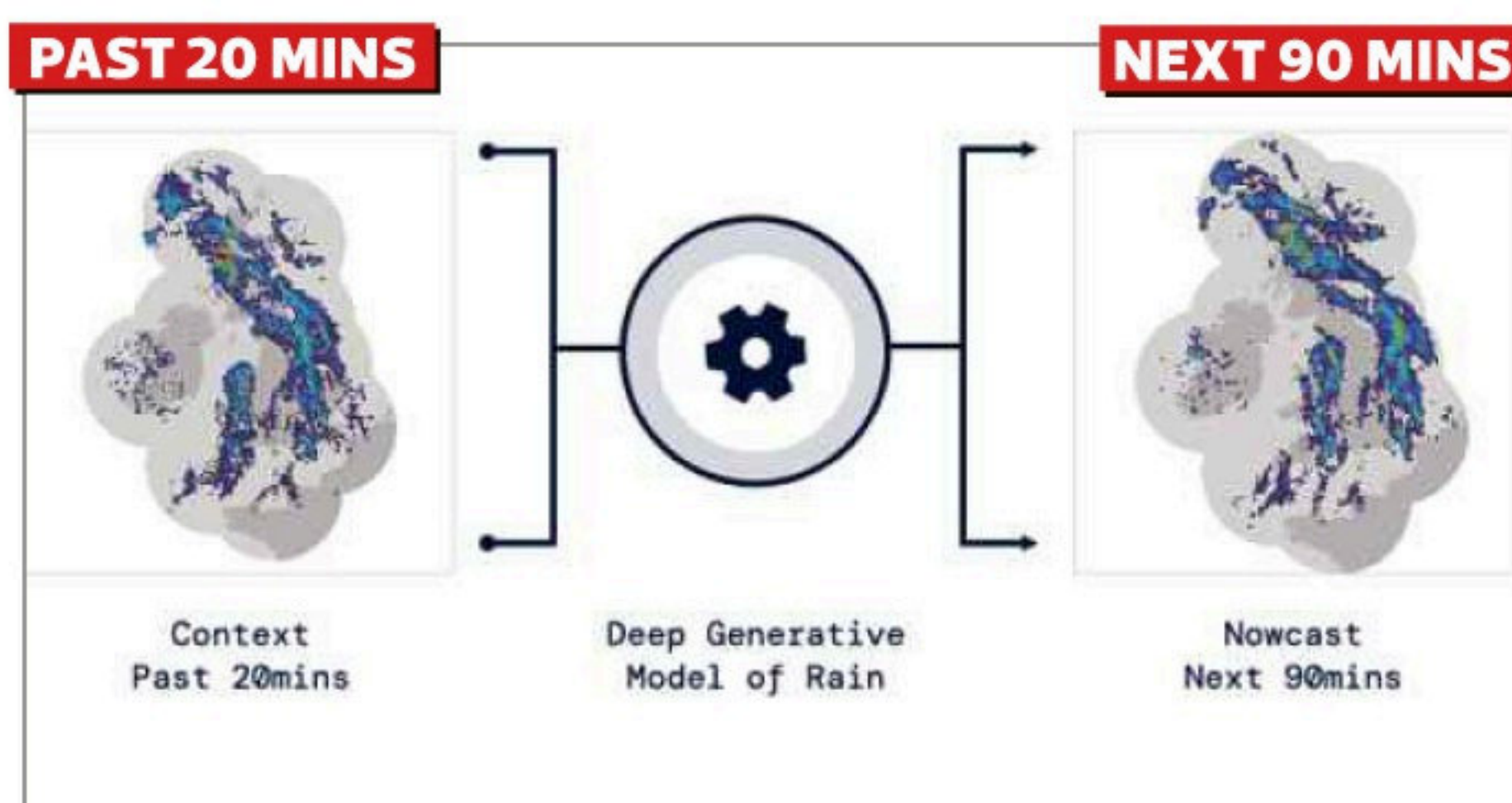
Because AI techniques that involve **machine learning** typically aim for one simple measure of how 'good' a prediction is. This isn't suitable for weather forecasts because they're dealing with a lot of uncertainty, and can be good or bad in many different ways, such as by getting the amount of rain correct but the location wrong (or vice versa). DeepMind wanted its algorithm to work "against a wide suite of metrics", so it could be accurate no matter how varied the weather it encountered.

Will the Met Office start using it soon?

Not for a while. It says it needs to build new tools before it can use the system for regular and reliable forecasts. This means the benefits DeepMind foresees might take a while to become reality.

What are those benefits?

Broadly, DeepMind wants to make better predictions of the "medium- to heavy-rain events" that seriously impact people and the economy, helping authorities to prepare better for sudden floods. On a personal level, you can have a bit more confidence that leaving your umbrella at home won't mean you'll get soaked. Best to keep peeking through your window too, though, just in case.



DeepMind uses rainfall data from the past 20 minutes to predict the next 90 minutes

ERASE YOURSELF FROM Google

Don't let Google violate your privacy by gathering and sharing your personal data. Robert Irvine explains how to wipe your Google footprint for good by deleting everything it knows about you

WHAT YOU CAN DO

- Remove content about you from Google search results
- Prevent Google from finding your Facebook profile
- Stop your house appearing in Google Street View
- Delete all your search and activity data in one go
- Remove videos that you appear in from YouTube
- Stop Google stalking you wherever you go
- Wipe recordings Google secretly makes of your voice

Google is notorious for hoovering up our personal information when we go online, and yet its tools are too good, too easy to use and – let's face it – too free for us to boycott them all on privacy grounds. Unless we share our personal data, we're not of much use to Google, but Google can still be very useful to us.

Nevertheless, it's still unnerving to feel that you're being watched every time you go online or take your phone with you when leaving the house. It's even more disturbing when you come across a negative mention or photo of yourself in Google's search results, without knowing how to get it removed.

Fortunately, it's easier than you think

to erase yourself from Google, whether it's data you've inadvertently shared with the company through your daily web activities, or content that someone else has posted about you.

In this feature, we'll explain the most effective ways to delete your private information from Google products and services, including Search, Maps and YouTube, without having to stop using those tools (we covered deleting Chrome data in our 'Wipe your web history' feature in Issue 612, page 62).

And if you want to take the ultimate step, we'll reveal how to completely wipe your Google footprint by closing your account, once you've downloaded all your important content.

REMOVE YOURSELF FROM GOOGLE SEARCH

Stop your details appearing in Google search results

Searching for your name on Google may find information that you'd prefer wasn't out there, such as details of a regrettable incident in your past, a libellous comment about you or personal data such as your address or phone number. To erase this content from Google, you should first try contacting the webmaster of the site it appears on and ask for it to be taken down. After all, Google is just linking to existing material rather than creating or publishing it, so it's usually quicker to go straight to the source.

Most website owners will be happy to oblige if you politely explain why you want the information to be deleted. They can either take down the whole page, edit the article to remove all mention of you or add a **noindex meta tag** to the page's **HTML** code to stop it being indexed by Google (see www.snipca.com/39620 for details). Use the 'Contact us' email address or form provided on the site, or look up the domain name on Who.is (<https://who.is>) to get the contact details of the person who registered the URL.

Once the webmaster has removed the offending content (assuming they comply with your request), it will eventually disappear from Google results as part of the search engine's "regular updating process" - this may take a few weeks.

If the relevant details don't disappear, or if you want to speed up the process, go to Google's 'Remove outdated content' tool (www.snipca.com/39593) and click 'Request removal', then 'New request' (see screenshots above right). Enter the URL of the page you want removed and click Submit.

You can also use the tool to ask Google to remove pictures of you from its Image

Remove outdated content

Important: if you've already made a change to a live page, you don't need to fill out the form. If content was deleted from a site but still comes up in Google search results, the page de-cache might be outdated.

Request to remove outdated web pages

1. Select Request removal below.
2. Select New request.
3. On the "Page" tab, enter the URL (web address) of the page that has the outdated content to remove.
4. Select Submit.

Request removal

Request to remove outdated images

Part 1: Copy the image URL

1. Search for the image.
2. In search results, click the image to see the full-size image.
- Note: Different browsers may have different names for copying link location.

Part 2: Request removal from Google search results

1. Select Request removal below.
2. Select New request > Image.
3. Select Enter "Copy link address" URL from Image Search results.
4. In the "Search results URL" box, paste the link address.
5. Select Submit.

Request removal

Tip: You can check the status of your request on the Remove outdated content page.

Search results, provided they've already been deleted from or modified on the source web page. Google will tell you the status of your removal request at www.snipca.com/39594.

If the site owner refuses or ignores your request, you can ask Google directly to stop including the content in its search results. Google will remove personal information such as financial, medical and identity data, 'doxxing' content that exposes your contact details "with an intent to harm" (see screenshot below left) and content about you on 'exploitative' sites that charge you to delete it, as well as intimate personal images.

Each of these types of information has its own removal request process: visit the 'Remove your personal information from Google' hub (www.snipca.com/39599) for advice about the type of content you want removed, and instructions on how to proceed. You'll need to provide your legal name, the name that finds the page

Ask Google to remove outdated content about you from its search results via the Remove Outdated Content tool

Remove outdated content from Google Search

Guidelines

- This tool works only for pages or images that have already been modified or removed from the web.
- To remove personal information or content with legal issues that still exist on a page, submit a legal request instead.
- Read this doc for more information

New request

you want delisted (if different), the URL and the reason for removal.

Bear in mind that you're only making a request and not issuing a legal demand (see next tip for more on this). Google says it will provide a "brief explanation" if your request is denied, and let you re-submit it if you have "additional materials to support your case".

Remove personal content from other Google tools

Google is more likely to take your removal request seriously if it's for legal reasons, especially if content that "violates the law or your rights" is hosted on one of its own services. These reasons may include copyright infringement, defamation and - most pertinently for this feature - privacy intrusion, as well as **phishing**, violent threats and explicit material.

To report content you want removed from Google under "applicable laws", visit its legal troubleshooter tool at www.snipca.com/39596 and select the relevant service. The list covers everything from Google Search (see screenshot left), Photos and YouTube to Blogger, Google Maps and Drive. Specify your reason for reporting from the options provided - for example, 'content contains my personal information' - click 'Create request' and enter as much information as you can about the data you want deleted.

Google says it may send a copy of your request to the Lumen project (www.lumendatabase.org), which analyses legal requests for the removal of online material, but promises that your contact details will be redacted.

Remove my contact information due to "doxxing" from Google Search

We understand it can be distressing when your contact information is shared in a malicious way, including threatening language, and/or calls to engage in harassing behavior. This is often referred to as "doxxing". This article is intended to support you through the process to request removal of such content from Google search results.

Requirements

For us to consider the content for removal, it must meet both of these requirements:

1. Your contact information is present.
2. There's the presence of:
 - Explicit or implicit threats, or
 - Explicit or implicit calls to action for others to harm or harass.

Important: We will not take action under this policy on ordinary uses of contact information, such as online directories, business and real estate records.

Request to remove doxxing

You or your authorized representative can submit a request to remove links to the content from Google search results. Any authorized representative will need to explain how they have the authority to act on your behalf.

Important: We only review the URLs that you or your authorized representative submits in the form.

Start removal request

Request the removal of 'doxxing' content that maliciously exposes your contact details

Removing Content From Google

This page will help you get to the right place to report content that you would like removed under applicable laws. Providing us with complete information will help us process your request.

If you have non-legal issues that concern Google's Terms of Service or Product misuse, please visit <http://support.google.com>

We ask that you submit a separate notice for each Google service where the content appears.

What Google product does your request relate to?

- ☒ Google Search
- ☐ Blogger/Blogspot
- ☐ Google Maps and related products
- ☐ Google Play: Apps
- ☐ YouTube
- ☐ Google Images
- ☐ A Google Ad
- ☐ Drive and Docs

Use Google's troubleshooter to request the removal of content for legal reasons

Hide your Facebook profile in Google results

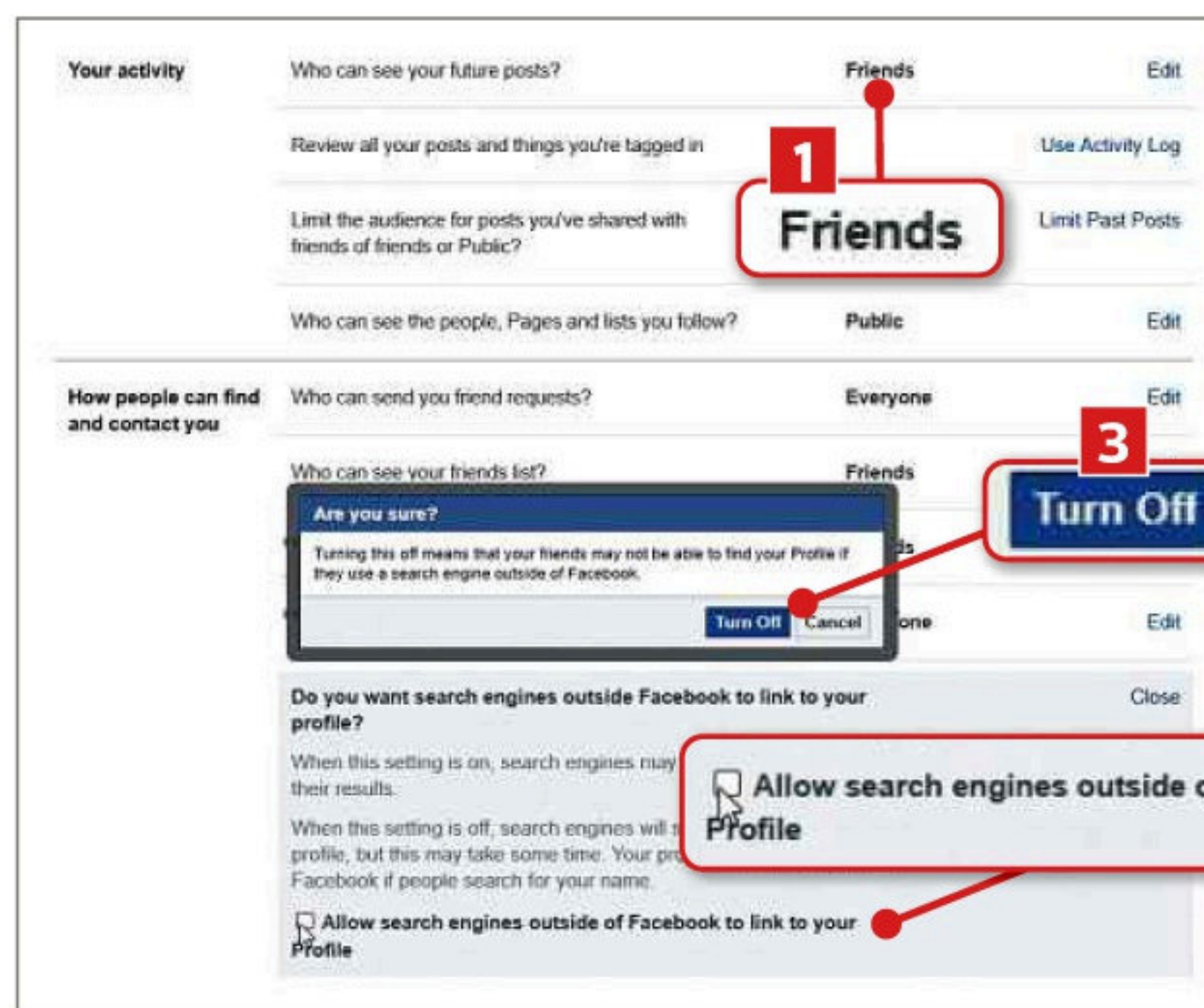
Because Facebook (unlike Twitter) requires you to use your real name, anyone who Googles you will be able to find your profile and posts in a matter of seconds. You can prevent this from happening by tweaking your Facebook privacy settings to make your profile less public.

On your PC, click the down arrow in the top-right corner of the Facebook website and choose 'Settings & Privacy', then Settings, and click Privacy in the menu on the left. In the 'Your activity' section, click the Edit button next to 'Who can see your future posts?' and change the setting from Public to Friends (1 in our screenshot above right). Click the Limit Past Posts button next to 'Limit The Audience for Old Posts on Your Timeline' to stop anyone apart from your friends viewing content on your timeline.

Finally, in the 'How people can find and contact you' section, click the Edit link next to 'Do you want search engines outside Facebook to link to your profile?' and deselect the 'Allow search engines outside of Facebook to link to your Profile' option (2). Click Turn Off (3) to confirm and Facebook will block Google from showing your profile in search results for your name, though it may take a few days for this to take effect.

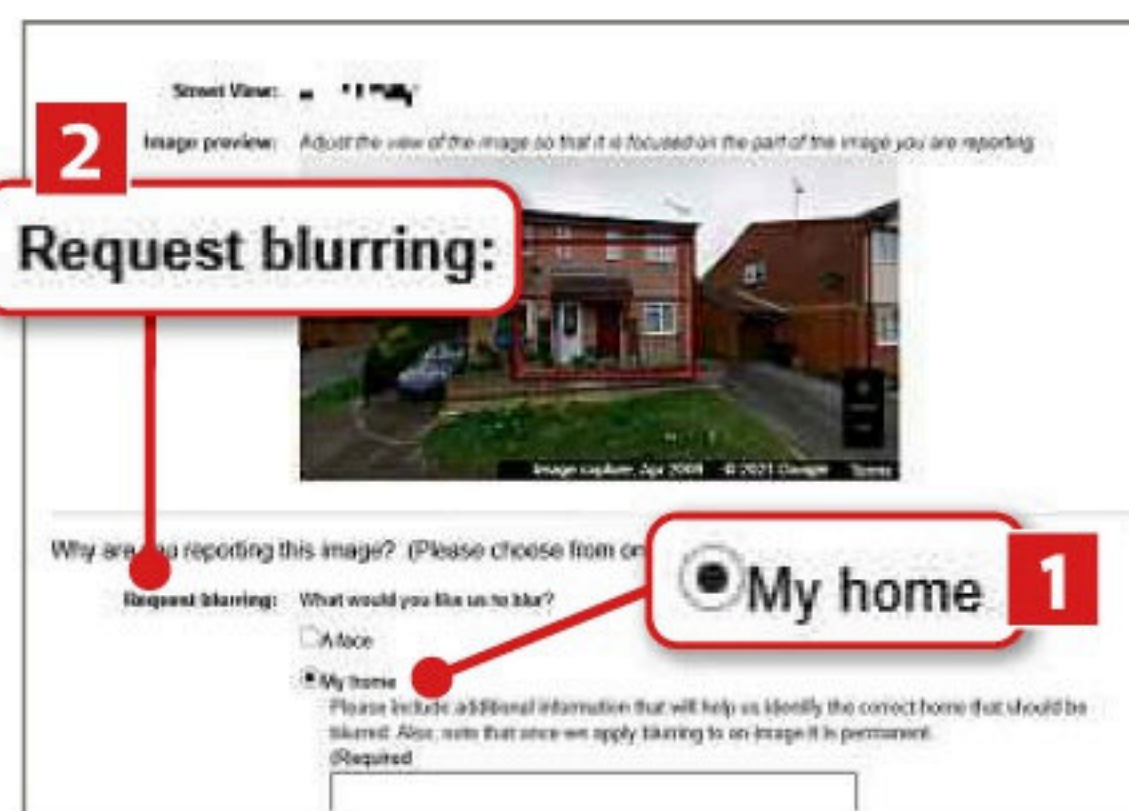
Stop your home appearing on Google Street View

Most of us have looked up our homes on Street View in Google Maps, but you may not want other people seeing where you



Lock down your Facebook privacy settings to hide your profile and posts from Google

live. Whether you want to protect your privacy, you're worried about burglars or your front garden looked messy when the photo was taken, you can ask Google to blur your home. Just search for your postcode in Google Maps, drag the yellow peg man on to the marker to switch to Street View and click the tiny 'Report a



Stop your house appearing on Google Maps Street View by asking Google to blur it

problem' link in the bottom-right corner.

Click and drag the image so that your house appears within the red rectangle, then select 'My home' (1 in our screenshot below left) in the 'Request blurring' options (2) – these also let you blur cars and faces, though Street View should do the latter automatically. Enter additional information to help Google blur the correct property, then enter your email address and click Submit. The blur will be applied to your home within a few days, but be aware that this is permanent and you can't reverse it later.

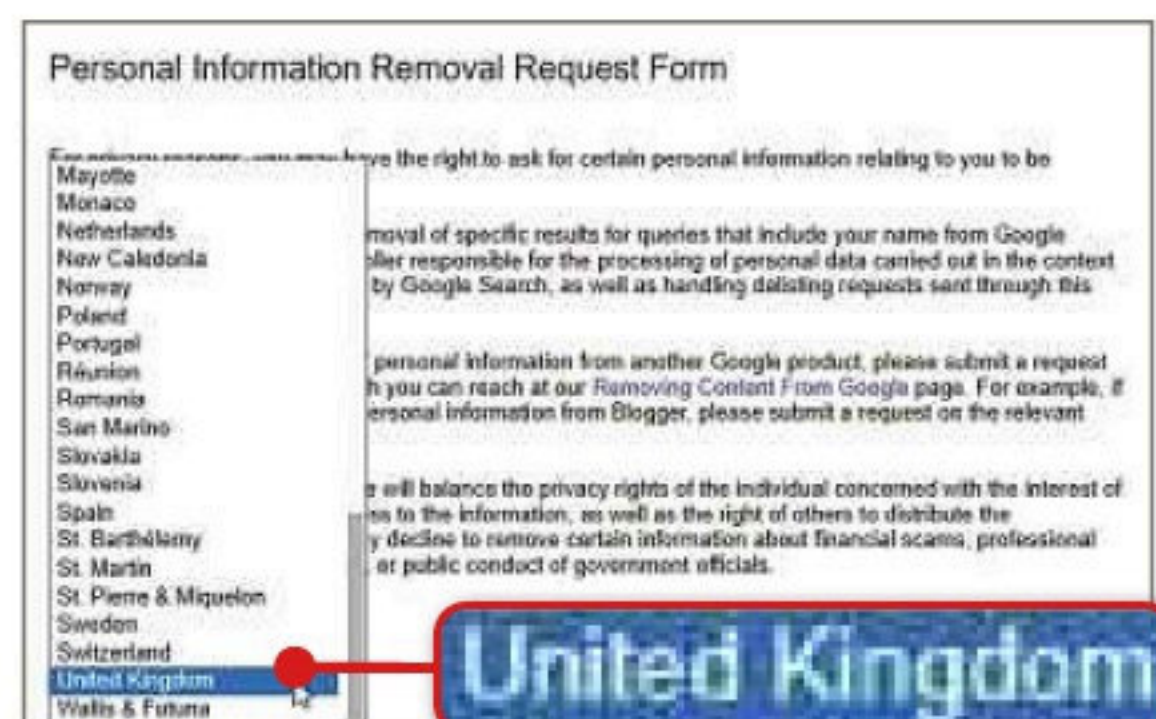
Bury bad content about you in Google search results

If neither the owner of a site nor Google will help you remove personal info from search results, there are lots of online services that promise to make the

Do you still have the right to be forgotten?

The 'right to be forgotten' was introduced by the European Union in 2014 to allow people to ask for old, inaccurate or irrelevant data to be permanently removed from search results. The ruling applies to all search engines operating in the EU, but because Google is so dominant – it performs around 90 per cent of all searches in Europe – it has been most affected and has received millions of requests to remove URLs from its search results.

In 2019, Google won a court case against a French privacy regulator that tried to extend the right to be forgotten globally, but now the UK has left the EU, you may wonder whether the law still applies to us.



The answer is that it does, because a 'right to erasure' is enshrined in the General Data Protection Regulation (GDPR) rules, which were absorbed into UK law as part of the European Union (Withdrawal) Act 2018 (www.snipca.com/39630). Prior to Brexit, right-to-be-forgotten applications were processed by Google Ireland, but they're

now handled in California – otherwise the rules remain the same.

According to the Information Commissioner's Office (ICO) the right to erasure is just another name for the right to be forgotten, and lets any individual request the removal of their personal data (see www.snipca.com/39598). Companies including Google must respond to such requests within one month, and tell you whether your data has been erased or the request refused.

Google's online form for requesting the removal of your personal information (www.snipca.com/39597) still lists the United Kingdom alongside EU countries (see screenshot), confirming that Brexit hasn't affected our right to be forgotten.

undesirable content more difficult to find. There's nothing particularly clever about how these companies work: they simply help you create a more positive online presence through blog posts, social-media profiles and personal websites, then use Search Engine Optimisation (SEO) to drive traffic to that content, pushing the negative stuff further down Google's search results.

BrandYourself (<https://brandyourself.com>, see screenshot right) is one of the best known services and claims to specialise in helping individuals deal with unwanted Google results, including

court documents, press coverage and photos. However, it's expensive, with prices starting from £300 per month, so not worth the money unless you need a lot of negative content fixed. BrandYourself offers a free reputation report to identify if your online presence is "hurting you", but we didn't find this accurate: our test search for 'Darren Brown' found results for the illusionist Derren Brown!

Rather than pay a company to clean up your reputation, you can try some of its tricks for free by creating new social-media profiles and editing existing ones, making sensible posts on consumer-



BrandYourself tells you your reputation score for free but charges you to bury bad results

review sites and forums under your real name, and sharing as much content publicly as you can that proves what a good, honest person you are.

ERASE YOUR PRIVATE DATA FROM GOOGLE

Delete your search and activity data from Google

Google stores details of everything you search for on every device on which you're signed into your Google account. Officially, this is to "make services more useful for you", but unofficially it's so that Google can use the data it collects to build a profile of your interests and target you with relevant adverts.

In fairness to Google, the company has responded to privacy concerns by making it easier to review and delete your data. Go to <https://myactivity.google.com> in your browser and log into your Google account if prompted. Here you'll see details of your search queries and other activity across all Google tools, including videos you've watched on YouTube (which we'll come to later).

To delete your search data from Google,

you can scroll through the list and click the 'X' next to specific entries or days, or save time and effort by wiping the whole lot in one go.

To do this, click the Delete dropdown menu above your activity (see screenshot below), or the 'Delete activity by' option in the left-hand menu, then click Always, which will erase all the activity data Google has ever collected about you. Choose which Google products and services you want to delete activity from – 26 are listed, including Android, Chrome, Drive, the Google Play Store and Search – then click Next and click Delete to confirm. Alternatively, select 'Custom range' to delete data from a specific time frame, or opt to erase your activity only from the last hour or day.

You can also tell Google to delete your activity data automatically after a specific



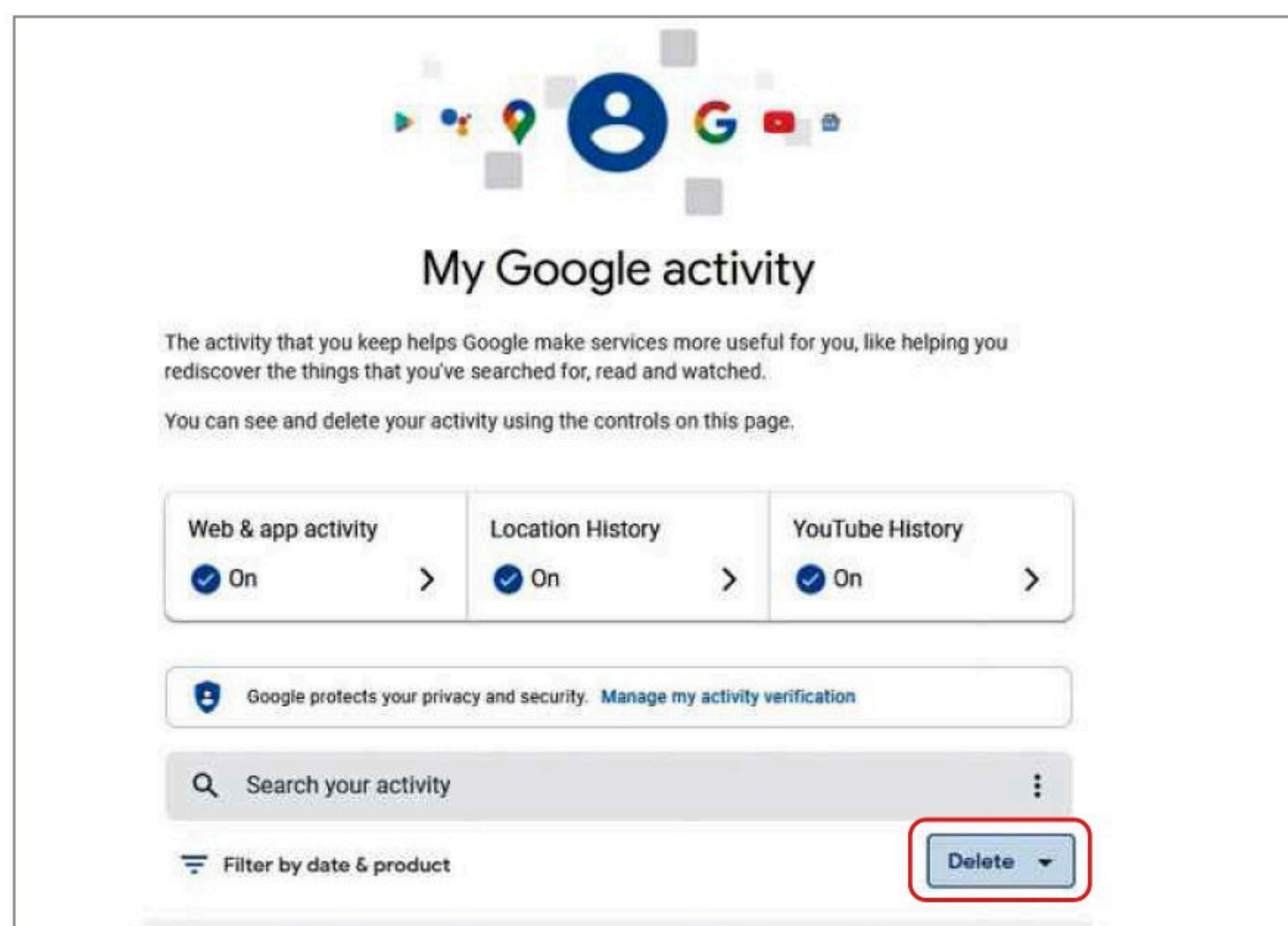
Tell Google to delete your activity data automatically after three, 18 or 36 months

period of time. Click 'Web & app activity' to open the 'Activity controls' page and choose 'Auto-delete'. Select 'Auto-delete activity older than' (see screenshot above), then click the dropdown menu to decide how long you want Google to store your data for: three months, 18 months or 36 months (admittedly, this isn't very flexible). Click 'Next' and then Confirm.

If you'd prefer that Google didn't store your search and activity data at all, go back to the 'Activity controls' page and switch off 'Web & app activity'. Click 'Pause' in the confirmation box that opens to stop Google spying on you on all sites, apps and devices on which you're signed into your account, including your Android phone and tablet.

Wipe your viewing history from YouTube

When you click the History link in YouTube's left-hand menu, you're likely to be surprised by the number and variety of videos you've watched over the last few weeks, months and years. To wipe the slate clean, both to protect your privacy and to stop YouTube recommending



Visit your 'My Google activity' page to review and delete all your search data from Google

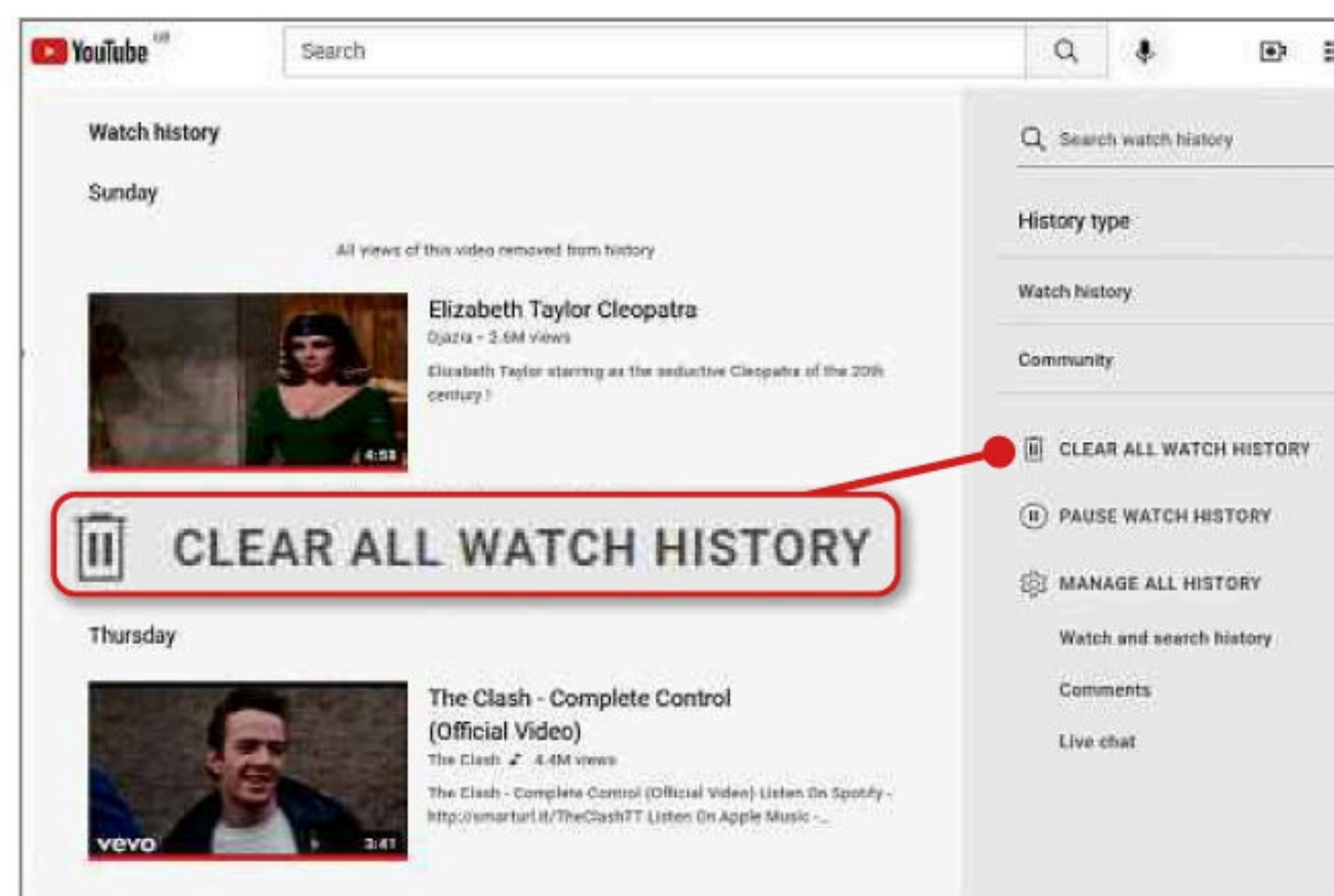
things to watch, click the 'Clear all watch history' button (see screenshot right) or hover over individual videos and click the 'X' to delete them from your history. Do the same for videos you've searched for by selecting 'Search history', then 'Clear all search history'.

You can prevent YouTube from storing what you watch and search for in future by clicking 'Pause watch [or search] history'. While you're there, you can also review and delete every comment you've ever posted on YouTube. To set your YouTube data to delete automatically after three, 18 or 36 months, click Manage All Activity, then 'Auto-delete' and select your preference.

Remove YouTube videos that you appear in

It's easy to remove YouTube videos that you've uploaded yourself. Just open the YouTube Studio (<https://studio.youtube.com>), click Content in the left-hand menu, select the video(s) you want to erase and choose 'Delete forever' in the 'More actions' menu. Alternatively, you can hide a video by making it 'Private'.

Removing a video you appear in that doesn't belong to you isn't so simple, especially if it's been posted without your permission. Your best option is to contact the person who uploaded the clip and ask them to remove it – click the About tab on their YouTube channel page and click 'View email address' to get their details. If they're unlikely to take down the video, perhaps because it's attracting lots of



Click this option to remove your entire YouTube viewing history

views, you can request that they blur your face or other identifiable elements using the Blur tool in YouTube Studio (see www.snipca.com/39625 for instructions).

If the video uploader won't comply with, or reply to, your request, click the 'Report user' flag button (1 in our screenshot below) on their About page and select 'Report user', then Privacy (2). Click 'Next' to begin YouTube's Privacy Complaint Process (you can also access this at www.snipca.com/39626) and follow the instructions.

You'll be asked to explain how the video violates your privacy, such as exposing your image, full name or home address, and when and where the offending content appears (including in the video description). Heed the warning displayed that submitting false privacy claims can result in your YouTube account being suspended.

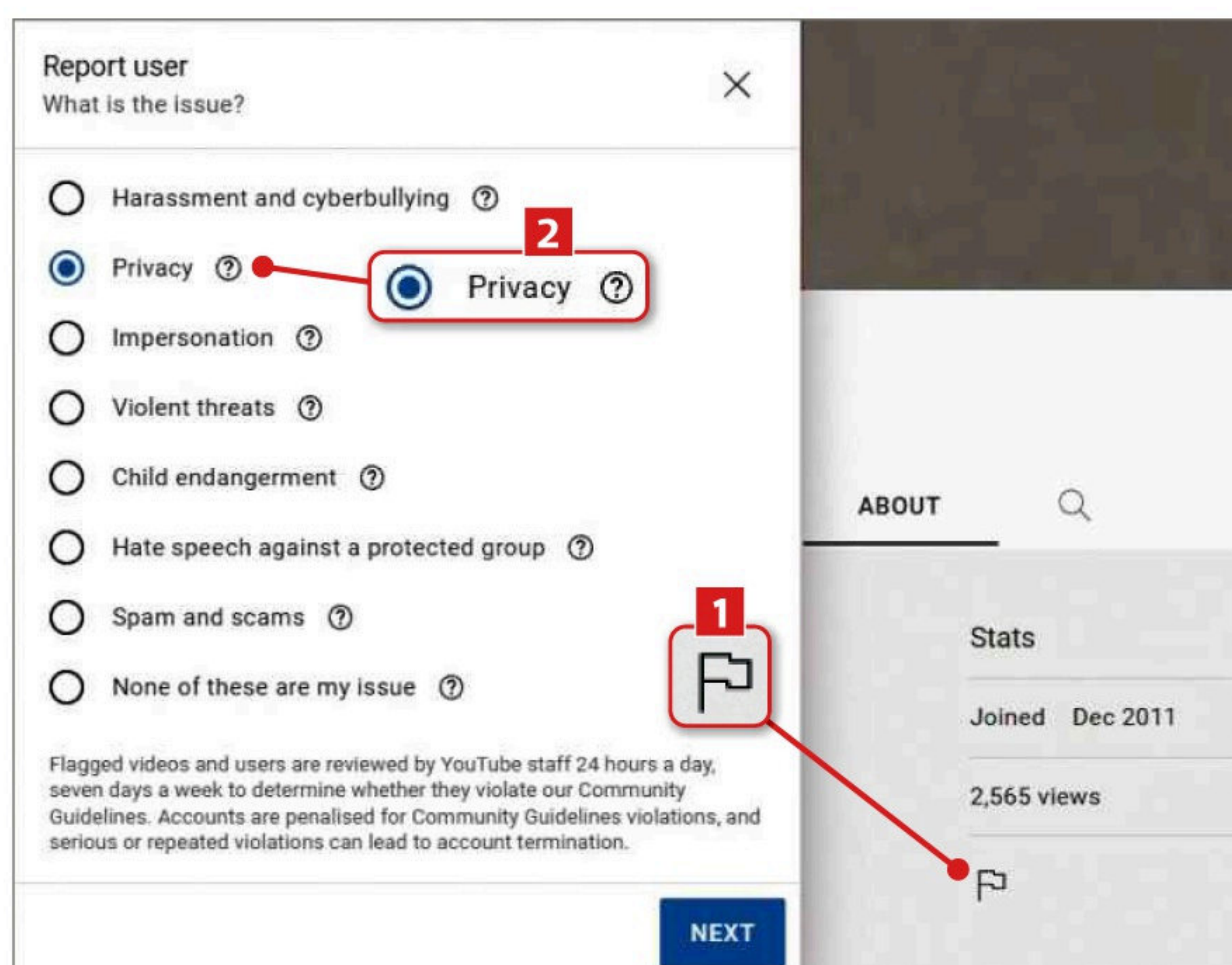
YouTube will then ask the uploader to remove or edit their video, without telling them your name or contact details. If they don't take action within 48 hours, then YouTube will delete the video.

Delete your location history from Google Maps

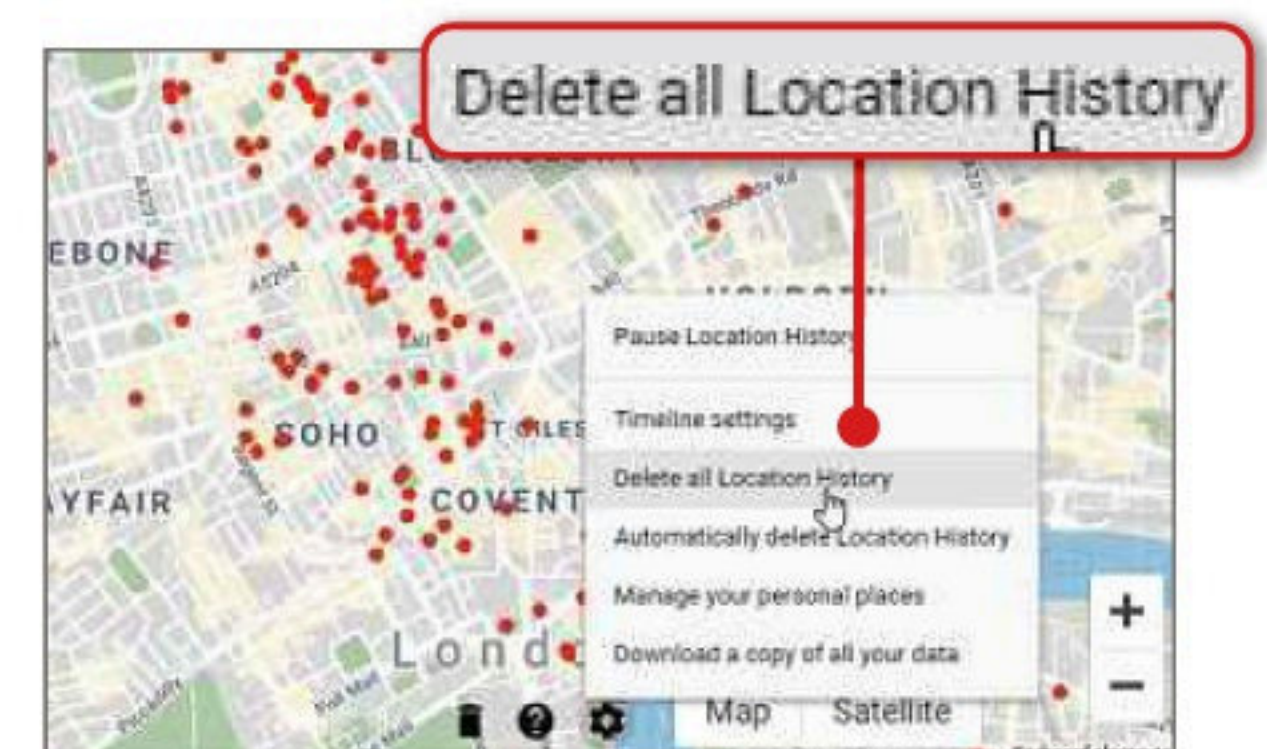
Google tracks everywhere you go even when you're not using one of its services, through a feature called Location History on your phone or tablet. To view this intrusive data, open Google Maps in your PC's browser (www.google.co.uk/maps), click the three-line menu button in the top-left corner and select 'Your timeline'. This shows a map of all the places you've been while Location History was enabled on your phone.

You can browse this information using the Timeline in the top-left corner of the map: just select a date to see – rather creepily – everywhere you went that day and the route you took. Click the number of places in the bottom-left corner to view all the locations you've visited and when you were first and last there.

If you're uncomfortable about Google stalking you, click the cog icon in the bottom-right corner of the map and select 'Delete all Location History' (see screenshot below). This will warn you that the information will be "deleted from your Google Account and neither you nor Google will be able to access it



Report a YouTube user if they refuse to remove a video that violates your privacy



Delete your Location History from Google and pause its collection of your data

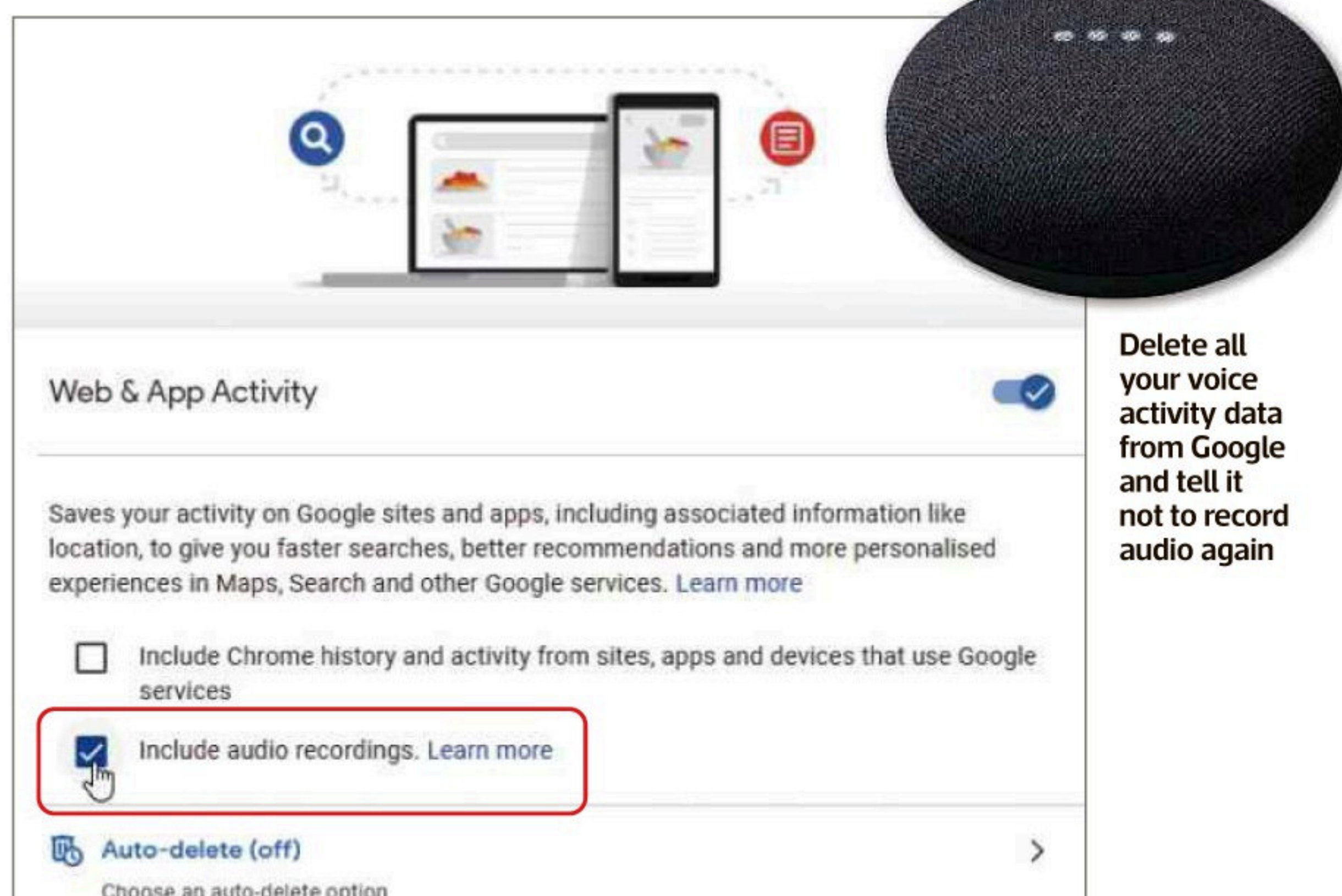
again”. Click to confirm you understand, then click ‘Delete Location History’. Alternatively, choose ‘Automatically delete Location History’ in the cog menu, and choose between three, 18 and 36 months.

To stop Google storing details of your whereabouts again, click the cog icon and choose ‘Pause Location History’. This will open the ‘Activity controls’ page we mentioned earlier, where you can ‘pause’ Location History.

Delete recordings of your voice from Google Assistant

Even if you don’t own a Google Home or Nest smart speaker (pictured above right), Google may have recorded your voice through Google Assistant on your phone or tablet. This is done to improve its audio-recognition technology, but it’s also unnerving because these voice recordings are listened to, transcribed and annotated by human staff, and are sometimes saved accidentally – even when you haven’t said “Hey Google” or “OK Google”.

Thankfully, it’s easy to delete your voice data through Google’s My Activity hub (<https://myactivity.google.com>), though you may first be curious to hear what’s been recorded. Click the ‘Filter by date & product’ button toward the top of the page, select both Assistant and ‘Voice and audio’, and click Apply. You can now browse your voice commands and listen



to Google’s recordings, by clicking Details, then ‘View recording’ and the play button. Creepy, isn’t it?

As with other activity data, you can either erase audio clips individually by clicking the ‘X’ next to each entry, wipe the whole lot by choosing Always in the Delete menu or set up automatic data deletion. To stop Google recording your voice in future, click ‘Web & app activity’ and deselect the option ‘Include audio recordings’ (see screenshot above). This won’t prevent Google Assistant on your

mobile device or smart speaker from responding to your voice commands.

Delete your saved passwords from Google

Chrome saves your passwords so you can log into websites more quickly, but these details are also stored in Google’s online Password Manager (<https://passwords.google.com>). When you sign into that tool using your Google account in *any* web browser, you’ll see all your passwords listed. This may be convenient but it also means that Google holds on to your login information even after you’ve switched from Chrome to another browser, or a dedicated password manager, and it’s therefore both a privacy and security risk.

You can delete individual passwords from the Password Manager by clicking the site name and choosing Delete (see screenshot below), but this will take a long time if you have a lot of them saved. An easier method is to visit your Chrome Sync page (www.snipca.com/39638) and click the Clear Data button. This will also delete your synced bookmarks and other data, so make sure you’ve imported anything you need to your new browser before you proceed.



Stop Google hanging on to your passwords by deleting them in its Password Manager

Stop Google knowing what you look like

Google Photos offers a feature called ‘Group similar faces’, which is intended to make it easier to find multiple pictures of the same person. However, by labelling yourself with your real name, you’ve told Google exactly what you look like. To disable the option and delete this information, tap your profile picture in the Google Photos app and choose ‘Photos settings’. Select ‘Group similar faces’ and switch off ‘Face grouping’.

Google will also know what you look like if you’ve ever used Face Unlock to secure your Android phone. To stop this facial recognition, go to Settings, Security, Face Unlock and choose ‘Delete face data’ (see screenshot).

Interestingly, Google has just introduced a feature called Google Illustrations, which lets users “protect their privacy” by choosing custom pictures instead of photos for their Google account profiles (www.snipca.com/39644). Illustrations



will eventually be available for most Google services, including Gmail, but you can currently only use it in Google Workspace (the business version of Google Drive) and the Android Contacts app. In the meantime, it’s best to leave your profile picture blank – it will then show the first letter of your name.

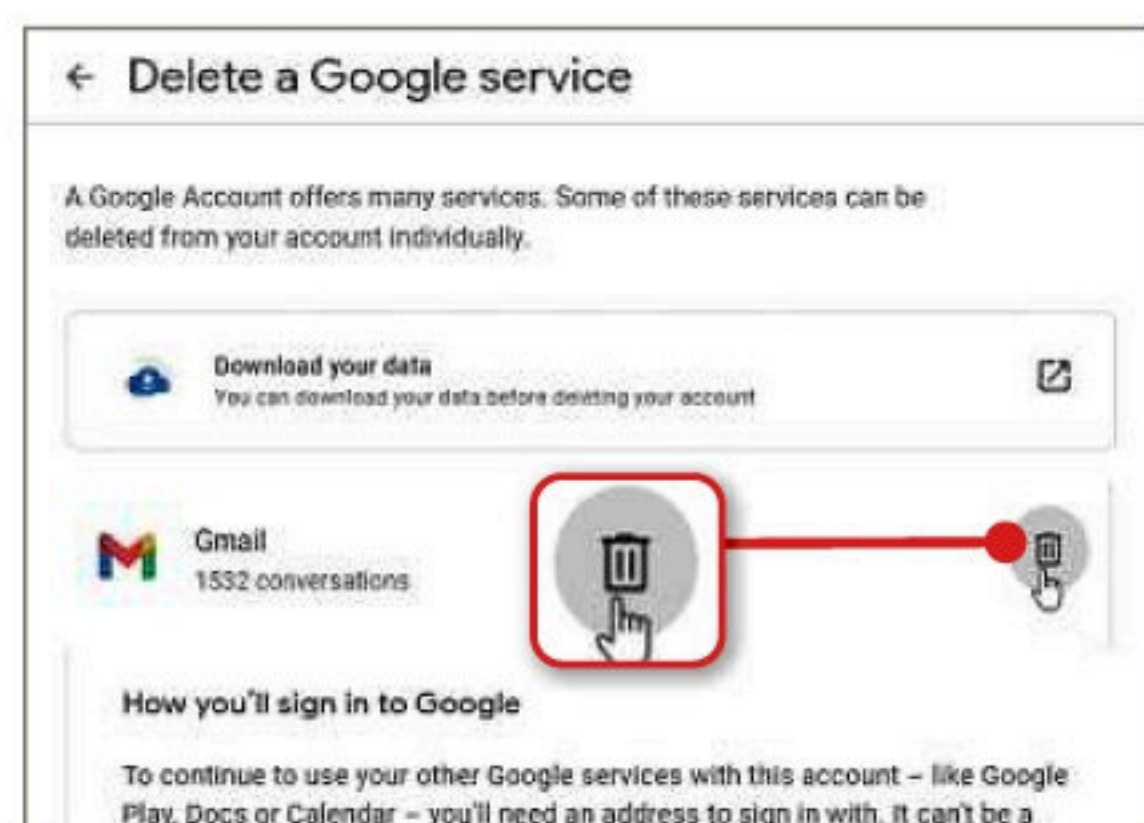
DELETE YOUR GOOGLE ACCOUNTS

Delete your Gmail account but keep using Google

It's a common misconception that you need a Gmail account to use Google's products and services, so it can spy on your emails as well as your other activities. While this is certainly Google's preference – "One free account gets you into everything Google", says Gmail's sign-up page – it's not mandatory, and it's possible to delete your Gmail account, and use an email address from a different provider instead.

Visit your Google Dashboard page (www.snipca.com/39631) and select 'Delete a service', then click 'Delete a service' again. Sign into your Google account with your current Gmail address, then click the bin icon next to Gmail (see screenshot below). You may want to download your emails and other Gmail data first (see box above right). Enter the email address you want to use instead, click 'Send verification email' and click the link in the message you receive. Gmail will then be deleted from your Google account.

Note that you won't be able to use some Google services without a Gmail account, such as the Google Play Store on your Android phone, so don't rush into deletion unless you're sure. Your 'Google' Dashboard also lets you delete a few other services from your Google account, including YouTube, Google Pay and Google Play Games.



Delete your Gmail account and use Google tools with another email address

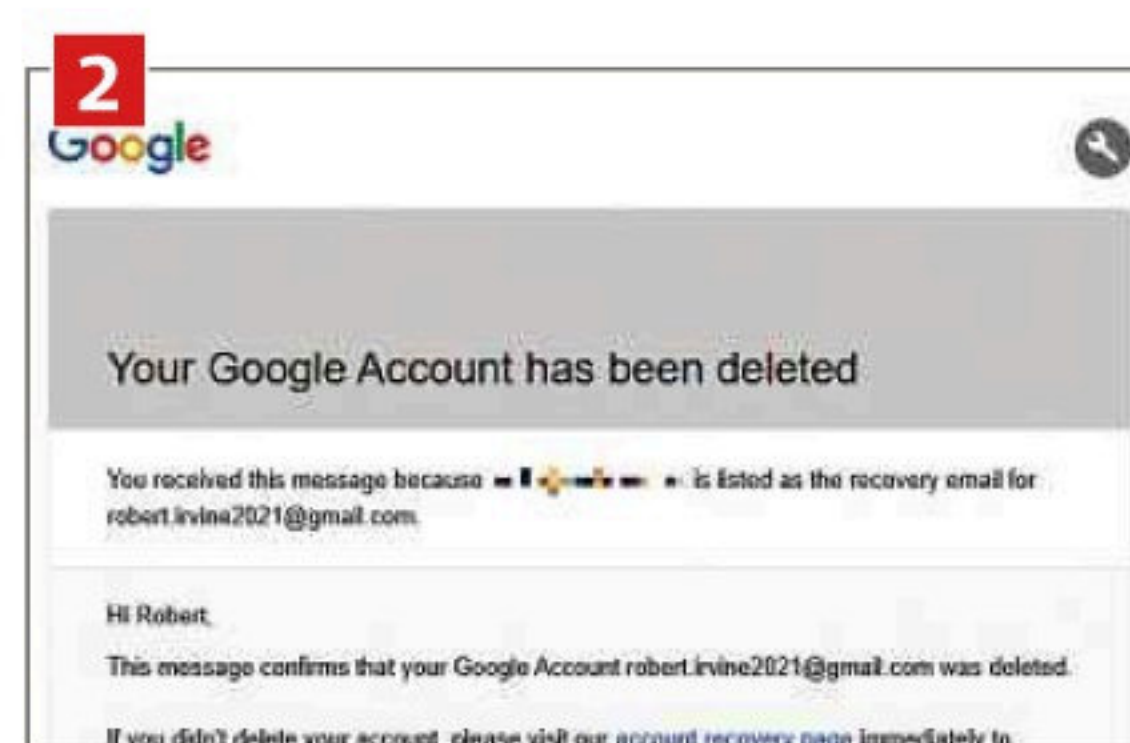
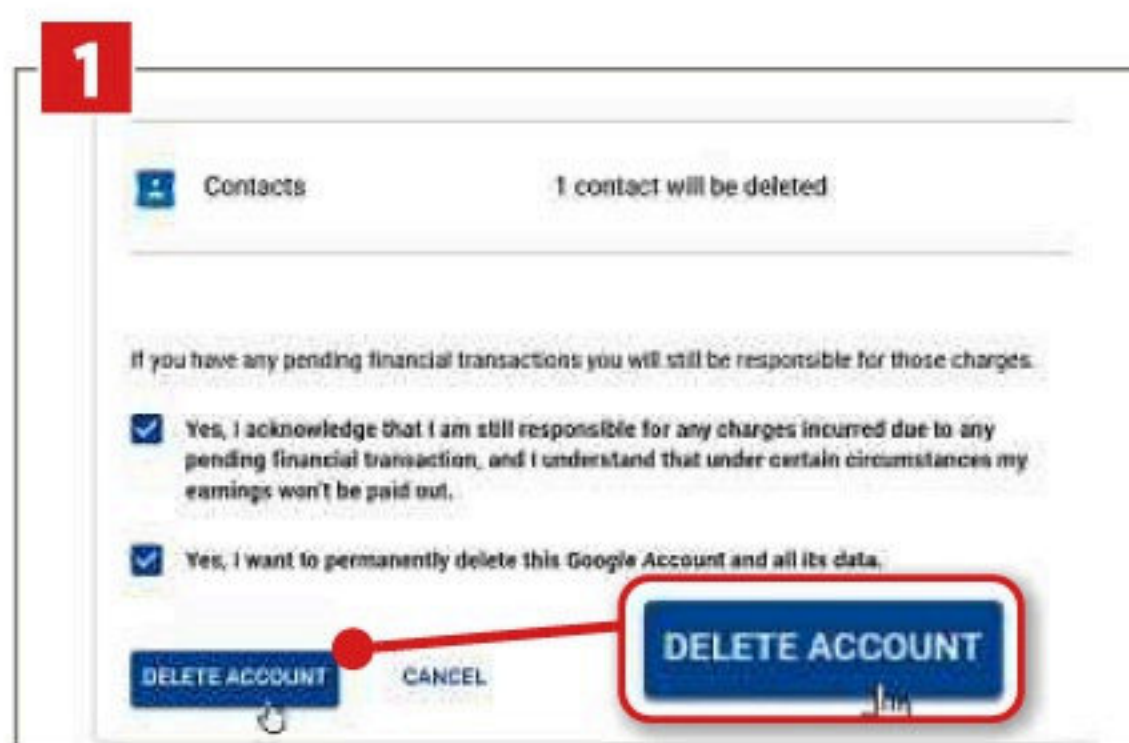
Download your Google data before deleting

Before you delete your Google account, you should download a copy of all your important data, both for reference and to import it into non-Google tools, where possible. Go to the Google Takeout page (<https://takeout.google.com>), click 'Deselect all' and choose which services you want to save content from – such as Chrome, Drive, Mail, Photos and Maps.

Some entries let you specify which data to include – for example, only Chrome bookmarks or your Inbox and Sent folders from Gmail. Scroll to the bottom of the page, and click the 'Next step' button. From here you can choose whether to

receive your data via a download link sent by email or have it added to Dropbox, OneDrive, Box or Drive (prior to deleting your Google account). Also select an archive format – this is ZIP by default – and whether to split the download file if it exceeds a certain size.

Click 'Create export' and Google will compile your backup. This can take hours or even days, depending on how much data you want to download. It used to be difficult to extract content from Takeout archives to use elsewhere, but Google now makes things easier by providing data in multiple formats.



Deleting your Google account is actually very easy but think carefully before doing so

Permanently delete your entire Google account

Deleting your whole Google account is the most effective way to free yourself from its clutches, but it's also a last resort. You may regain a significant amount of online privacy, but you'll also lose every file you've uploaded to Drive, all your synced Chrome data, images stored in Google Photos, Gmail messages, YouTube videos, saved contacts, Android apps and more. It's not a decision to be taken lightly and you should back up any content you want to keep beforehand (see box above).

If you're sure you want to ditch Google completely, head to your Google Dashboard (www.snipca.com/39631), click 'Delete a service' then choose 'Delete your account'

under 'Delete your Google account'. Sign into your account, review all the content that will be lost and tick the confirmation boxes at the bottom of the page. Finally, click 'Delete Account' (see screenshot 1) and say goodbye to Google 2.

GDPR rules mean that Google must delete your data within 30 days, but if you have a sudden change of heart you may be able to recover your account within that time frame. Visit Google's Account Recovery page (www.snipca.com/39636) and sign into the account you deleted. You may need to answer some security questions and enter an email address that was linked to your account. If you make it in time, your Google account will be restored. **ca**

NEXT ISSUE On sale Wednesday 3 November

WINDOWS 11
THE ULTIMATE REVIEW
Upgrade? Stick with Windows 10? Read our verdict



PLUS

- **Block all cookie pop-ups**
Banish the most annoying thing about the web!
- **Don't buy the wrong mouse**
Get the exact device your fingers need

ONSALE
Weds
3
Nov

Subscribe to Computeractive at www.getcomputeractive.co.uk

Don't Buy The Wrong Keyboard



A keyboard that's too small or lacks essential keys can cause you discomfort and inconvenience when typing. **Nik Rawlinson** explains how to choose the best keyboard for your needs

Forget fancy on-screen graphics: your keyboard is your computer's most important interface. It's your physical point of contact for every program, and the device through which each word flows, whether you're writing an email to your bank or the closing page of your magnum opus. That's why it's important to have the right tool for the job. If you're in the market for a new keyboard, here's what you need to consider to get the perfect device for your needs.

Which buttons should your keyboard have?

Check the physical layout of a keyboard carefully before you buy. Make sure it has a '£' sign on the '3' key, as well as Control (or Ctrl), Windows and Alt keys in the bottom-left corner. Keyboards with '#' (hashtag) on the 3 key are American, and if you see Control, Alt and Command in the bottom-left corner, the device is

designed for a Mac. **Dvorak keyboards** use an entirely different layout and adapting from standard QWERTY takes some practice.

Some keyboards, like the Keychron K8 (£104 from www.snipca.com/39602, pictured below left), come with alternative keycaps and a tool for pulling existing keys off the mechanical base of the button. This way, you can switch between layouts for different programs or operating systems, or even different languages, although you will probably be missing special foreign characters, like ß (the German letter 'eszett').

Integrated numeric keypads are great if you do a lot of spreadsheet or calculator work, but otherwise not essential. A keyboard without one is sometimes listed as TKL, or 'tenkeyless'.

However, we do recommend making sure you have dedicated media controls, including volume adjustment. Otherwise you may need to set up function keys,

such as F1, F5 and so on, to carry out these tasks. You then need to hold down the 'Fn' key to access these. Remembering whether a specific function key carries out a task you've set up or just its default action can be difficult, though, and getting this wrong might result in a closed window or lost document.

Microsoft's Wired Desktop 600 keyboard and mouse set (just £19 from www.snipca.com/39600) solves both of these problems. It has dedicated keys for play/pause, volume up and down, and mute, as well as an integrated numeric keypad.

How big should your keyboard be?

On most keyboards, the centres of two adjacent keys – a measurement known as the pitch – will be around 19mm apart. Any significant variation should be detailed in the product's online listing or the manufacturer's site and, unless you have a particular reason for needing more



The Keychron K8 keyboard has removable keycaps, so you can change the layout



Microsoft's Ergonomic Desktop keyboard helps to prevent wrist strain when typing for long periods

or less space, we'd recommend sticking with this – it will immediately feel familiar.

We'd make an exception if you're buying a keyboard to use with a streaming box or smart TV. In this scenario, a smaller keyboard may be more convenient, and you won't be using it to tap out more than the odd search term when looking for something to watch. However, to control our TV viewing we prefer something larger and more flexible, like Trust's Veza Wireless Touch Multimedia keyboard (£19 from www.snipca.com/39606), which has regular-sized keys, plus an integrated touchpad designed for use with smart TVs and games consoles, as well as PCs.

You may see a reference to 60, 65 or 75 per cent keyboards (and other variations). These don't have smaller keys, but may lack function and arrow keys, while rows of keys may be pressed together more tightly than normal. For example, the function key row may touch the top line of regular characters – or may even be integrated with the number row and accessed using a modifier key, like the 'Fn' key we mentioned above.

Ergonomic keyboards are usually larger than their standard counterparts, and have a raised centre with keys for the left and right hands sloping away on either side. They're designed to keep your wrists in a neutral position while you type, to reduce the risk of RSI (repetitive strain injury), but they can take some getting



Keyboards like this connect to your PC with a USB cable, but some only have a USB-C port

used to – particularly if you're not a touch typist. Microsoft's Ergonomic Desktop, which includes a keyboard and mouse (£72 from www.snipca.com/39612, pictured below left), is the latest in a long line of sturdy options from the company. Also worth checking out is Cherry's KC Ergonomic Keyboard (without a mouse – £40 from www.snipca.com/39611), or Microsoft's Sculpt Comfort Desktop (£54 from www.snipca.com/39613), if you need something that's less curvaceous.

How should your keyboard connect?

The simplest and cheapest option is to use a USB cable (pictured above). Be careful if your device only has a **USB-C** port – the majority of wired keyboards won't be compatible without a Type-C-to-USB adapter. These adapters aren't expensive

Logitech's K380 lets you set up keys for easy switching between a PC, tablet and phone



(£6.60 from www.snipca.com/39603) and will give you access to a wider range of keyboards. However, if you prefer a USB-C keyboard, the Perixx Periboard includes a numeric keyboard and slim design for less than £20 (www.snipca.com/39607).

Bluetooth keyboards are more flexible still because you can position them wherever is most comfortable without a trailing cable. Many can be set up to work with several devices, too, which you switch between using shortcuts.

Logitech's K380 (£32 at www.snipca.com/39609) is compact and attractive, and although the round keys look a bit strange at first, we quickly got used to them. From edge to edge, it's slightly shorter than a landscape sheet of A4, and it's powered by a pair of AAA batteries that can last up to two years.

The coloured buttons on the top row (pictured above) let you switch between any three paired devices, such as a PC, Android phone and iPad, without turning off the device you're using. If you want similar features with the added benefit of a numeric keypad and a handy ledge for propping up your mobile device, check out the Logitech K780 instead (£45 from www.snipca.com/39610).

If your PC doesn't support Bluetooth but you still want to cut the cord, you'll need a 'wireless' keyboard instead, which communicates with a bundled USB dongle that you plug in to your PC. Microsoft's 850 Wireless keyboard fits the bill for just under £20 (www.snipca.com/39617). **ca**

How should your keyboard feel?

Only you can answer that question, but understanding how different kinds of keyboards work can help you choose the right one.

Mechanical keyboards are often a more expensive option, but are extremely sturdy and built to last. Keys generally travel further vertically than other options, and make a clattering sound when they reach the keyboard base. This makes them very satisfying to type on, but may also irritate work colleagues or family members if you have a shared space. We've bought several Matias keyboards over the years, and its Quiet Pro devices (www.snipca.com/39618) are among the quietest mechanical keyboards you can buy.

If you need something thinner, a **scissor switch** keyboard like the Kensington AdvanceFit Slim keyboard (£25 from www.snipca.com/39615) is a great



choice. It has short keystrokes, a shallow slope and a low profile, sitting just 19mm from the desk at the highest point (as pictured).

Unfortunately, feel (and sound) are among the most important aspects of a keyboard, and they're very difficult to gauge if you can't get your fingers on a device to try it. When buying online, make sure you select a retailer that offers easy returns, and take care not to tear the box when it arrives.

Stop Using 2FA

Tired of waiting for verification codes to arrive, just so you can log into websites securely?

Robert Irvine explains four easier and safer ways to access your online accounts



Two-factor authentication (2FA) adds an extra layer of protection to online accounts beyond entering a username and password. But in practice this second layer of security can prove tiresome when you have to wait for a verification code to be sent to you by text message or email, then type it into the relevant website on your computer.

Thankfully, there are plenty of alternative authentication methods, which are just as secure – if not more so – and less fiddly. As we reported in our lead news story in Issue 616 (page 6), Microsoft is now encouraging Windows users to ditch their passwords and sign into their PCs using a faster method. Here, we explain the best ways to protect your accounts with the least amount of fuss.

Sign in instantly using push authentication

Push notification-based authentication (push authentication for short) offers a speedy and secure way to sign into websites and services. Rather than wait for a verification code, you simply tap a

button on your phone to confirm that you're trying to access your account. That might not sound particularly secure, but this method requires you to enable your device's screen-lock feature, which it's presumed only you can unlock. The notifications are time-limited and, unlike SMS codes, the communication between the website and your device is encrypted so it can't be intercepted.

To log into a website using push authentication, you'll first need to install its app on your phone and activate the option in your account's security settings, if it's available (many companies still don't offer it). You should then ensure push notifications are enabled for the app – on Android, go to Settings, 'Apps & notifications', choose the app, tap Notifications and make sure 'Allow notifications' is switched on. On iOS, go to Settings, Notifications, select the app and check there.

Google lets you use push notifications instead of entering passwords, which removes all the hassle of 2FA. On Android, this feature is built in, but on iOS you'll need the Google or Gmail app.

To set it up, log into your account at <https://myaccount.google.com>, click Security and scroll down to 'Signing in with Google'. Choose 'Use your phone to sign in', click 'Set up' and select the device you want to use (see screenshot below far left). You can test the feature before turning it on, by tapping 'Yes' or 'No' in the prompt on your phone (see screenshot below left).

If you'd prefer to use push authentication as a second layer of security, choose '2-Step Verification', click 'Get Started' and select the device to receive prompts on. You can specify a backup option, such as receiving a verification code, in case you lose or change your phone.

Log into sites using an authenticator app

Authenticator apps provide a more secure way to sign into online accounts than receiving a verification code by text message or email. Although they also use six-digit codes, these are generated directly in the app, rather than sent unencrypted over your mobile network, which means they work even when your phone is offline. What's more, the codes are updated every 30 seconds, and are never repeated, so if a hacker was able to intercept one, they'd have to act extremely fast to gain access to your account.

Our favourite authenticator app is the free Microsoft Authenticator (Android www.snipca.com/39661; iOS www.snipca.com/39662), which is central to Microsoft's new 'passwordless' sign-ins. It creates one-time passcodes (OTPs) for a wide range of online accounts – and not



Log into your Google account using a push notification instead of two-factor authentication



Add an online account such as Amazon to an authenticator app so you can generate one-time passcodes

just Microsoft services, but Amazon, Google, Facebook, Dropbox and many more.

To secure an account using Microsoft Authenticator, first find the two-factor authentication settings on its website. On Amazon, for example, go to Your Account (www.snipca.com/39666), click 'Login & security' and sign into your account. Click 'Edit' next to 'Two-Step Verification (2SV) Settings'.

If you already have text-message 2FA set up, click Disable, select 'Also clear my Two-Step Verification settings' then click Disable again. Click 'Get Started' and select Authenticator App. Next, open Microsoft Authenticator on your phone, tap 'Add account' and choose 'Other account'. Scan the QR code on the Amazon website, then enter the six-digit code that appears in the app and click 'Verify OTP and continue' (see screenshot above).

Your Amazon account will now be added to Microsoft Authenticator, so you can generate instant OTPs for logging in securely (you won't need to scan a QR code every time). Repeat this for all the accounts that you want to protect from hackers.

Lock your accounts with a USB security key

A USB security key offers an even faster method of logging into online accounts than using your phone, because you don't need to unlock a screen or enter any codes. Instead, you simply plug the key into a spare USB port on your computer, and press a button on the device to sign in securely to a website or service you've set it up with.

The most popular USB security keys include the Yubico range (www.yubico.com), with prices starting from £28.50 from Amazon for the Yubico Security Key NFC (www.snipca.com/39668, pictured above right), and Google's Titan Security Key, which costs £30 (www.snipca.com/39667).

Sign in using your finger or face

Biometric authentication lets you lock and unlock your accounts using your face or finger, and because those are unique to you it's a lot more secure than code or password-based logins. You can protect your PC by setting up Windows Hello to recognise your face or fingerprint, though you'll need an infrared camera or fingerprint scanner for this work.

If you have one of these, open Settings in Windows 10 and click Accounts, then 'Sign-in options'. Choose 'Windows Hello Face' or 'Windows Hello Fingerprint' and

Windows will search for a compatible device. If you don't have one, you can select 'Windows Hello PIN' instead and sign in using a four-digit PIN.

Android phones and iPhones can also be secured using your face or finger, along with any apps that support the feature, such as the NHS app (www.snipca.com/39670). However, as we explain in our Cover Feature (see page 56), you may not feel comfortable with Google (or Apple) knowing what you look like, though this data is encrypted on your device.

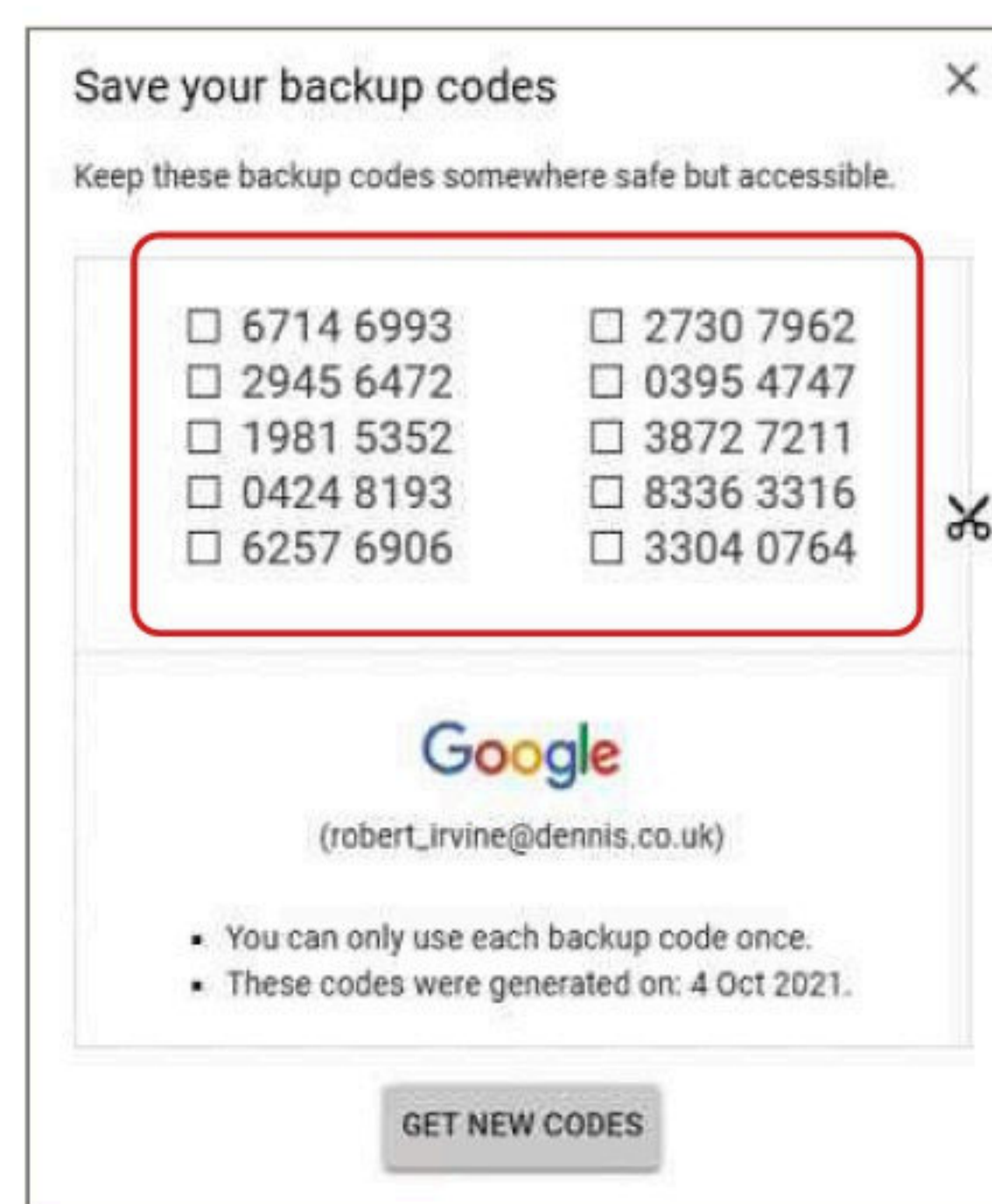


A USB security key, such as this Yubico model, lets you sign into websites securely without having to type anything

These work with a wide range of accounts, including Google, Microsoft, Facebook, Twitter and Gov.uk. They also don't need charging or any dedicated software installed, and are small enough to attach to a keyring or lanyard (the Yubico key pictured above measures just 45x18x3mm).

To secure a website with a USB security key, look for the 2FA options in its security settings. On Facebook, for example, click the down arrow in the top-right corner and choose 'Settings & privacy', then Settings and click 'Security and login' on the left. Click the Edit button next to 'Use two-factor authentication' and select 'Use security key'. Sign into your Facebook account, then insert your USB security key and choose Register Security Key. Click OK when Windows asks if you want to use the key to sign into your account.

If you lose your USB security key, you should still be able to access your account using a backup login method such as an authenticator app, but it's wise to double-check when setting it up.



Print backup codes for your Google account to sign in without your phone

Print backup codes for your accounts

One drawback to using your phone for 2FA is that if you lose or change it, you won't be able to log into certain accounts. To avoid this problem, it's worth keeping a printed backup of verification codes if the site or service provides one. For your Google account, for example, visit the 2-Step Verification page (www.snipca.com/39669) and click 'Set up' below 'Backup codes'. This will give you a set of 10 backup codes (see screenshot above) that you can download and print, letting you sign into your Google account securely when you don't have your phone to hand. Each code can only be used once.

Microsoft Authenticator solves the no-phone dilemma by letting you back up your account credentials to online storage so you can access them on another device. Go to Settings in the app, select Backup and choose either 'iCloud backup' (on an iPhone or iPad) or 'Cloud backup' (on Android) to turn on the feature. **ca**

Problems Solved

Our experts solve all your tech problems

PROBLEM OF THE FORTNIGHT

Can I copy my MiniDiscs to my PC?

Q For many years I was singing in a duo around the pubs and clubs of Liverpool using backing tracks on Sony MiniDiscs. I'm planning to get on the road again and I'd like to copy all my backing tracks to a laptop. Is there a way to 'burn' a MiniDisc to a computer, as one can with a CD?

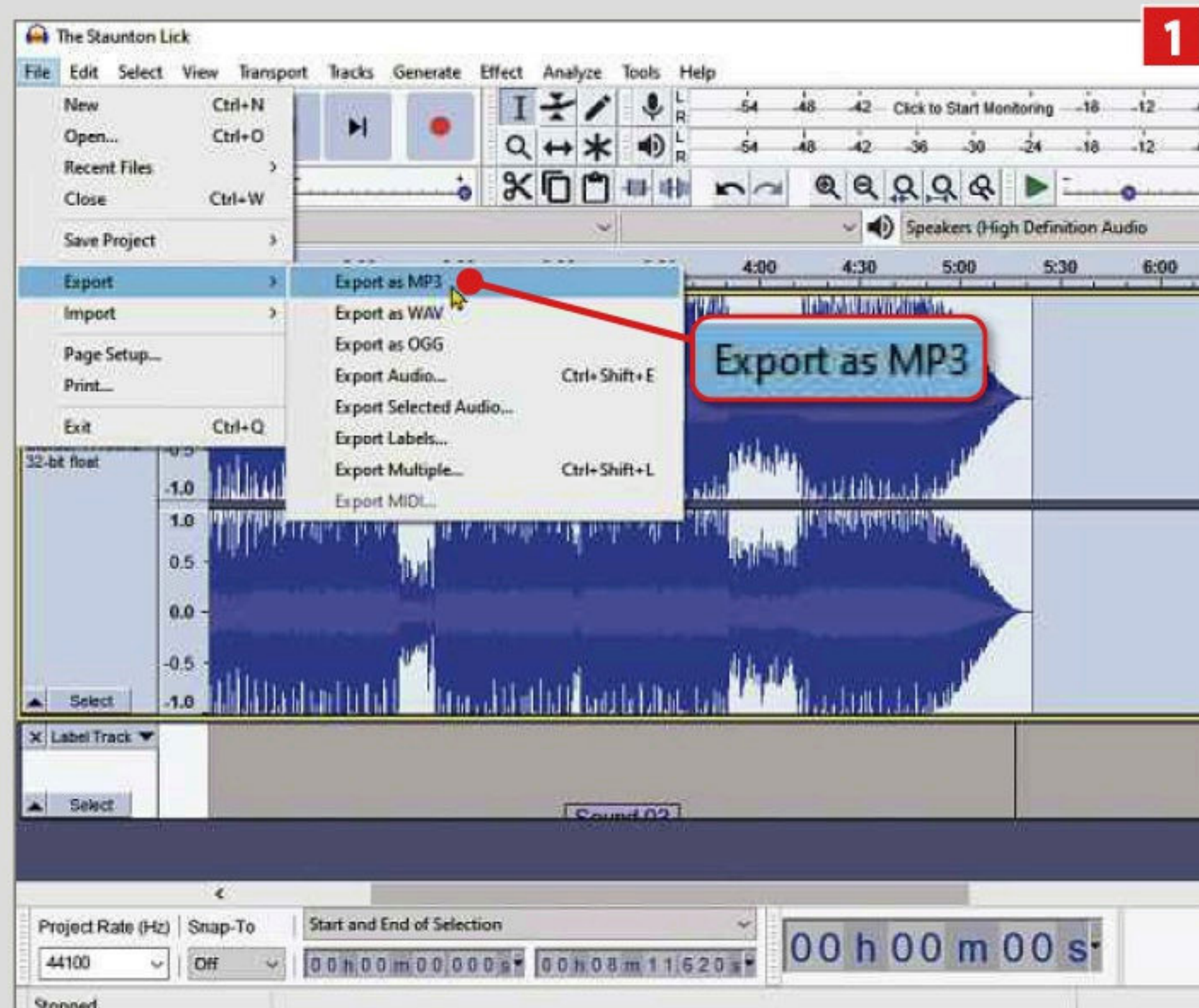
Kevin Hudson

A Yes, but it can be a faff. First, we should say that during the demise of MiniDisc Sony did make a free tool to convert its **ATRAC** files to the popular MP3 format. This is still available, at www.snipca.com/39444, but it requires additional components to work – some of which won't operate well (if at all) with a modern Windows 10 PC.

That brings us to the manual method. Basically, you'll need to connect your MiniDisc player to your computer by a cable and then use software to capture the audio as it's played. Depending on your player, you'll need either a phono-to-3.5mm or 3.5mm-to-3.5mm jack cable – with the 3.5mm end going into the line-in port on your PC's **sound card**. On desktop computers, this is usually coloured light blue. Many laptops have a single 'combo' port that will act as both audio-out for headphone/speakers or line-in for recording.

To capture the playback you can use Audacity, which is a free download from www.audacityteam.org. Though the program itself looks complicated (and in some respects it is), there's nothing particularly difficult about using it to achieve what you want.

With your MiniDisc player duly connected, you'll need to click the red Record button in Audacity shortly



Export the MiniDisc recording to MP3 format, which will play back on most modern devices

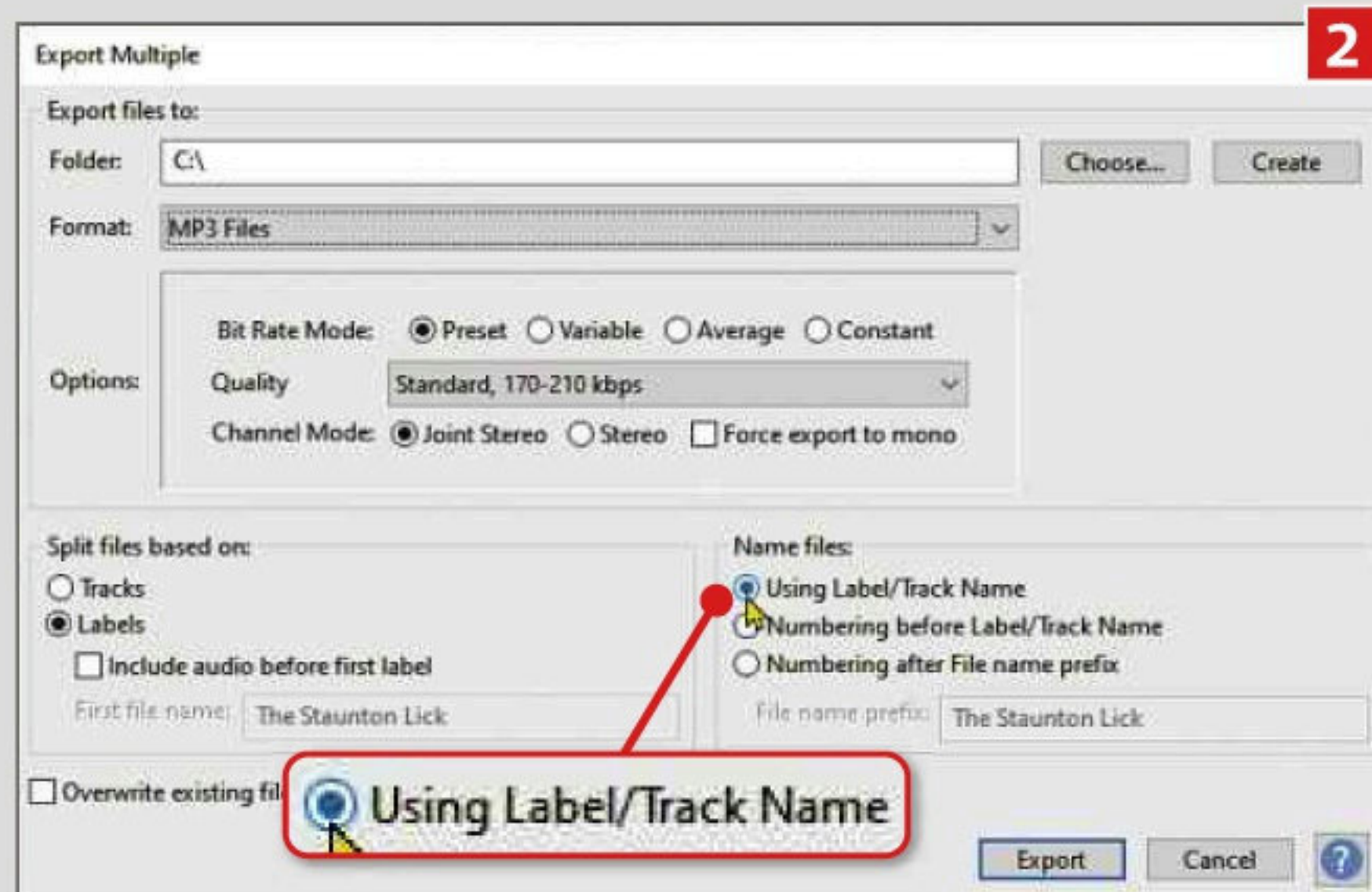
before pressing the Play button on your player. Next, you'll just need to wait for as long as it takes for the MiniDisc to play through. When that's done, saving the entire recording to MP3 format – which is really the best bet for playing back on your PC, or pretty much any other modern device – is as simple as clicking the File menu, pointing to Export and then clicking 'Export to MP3' (see screenshot **1**). Finally, type a name for the recording and click Save.

However, that will save the whole recording as a single track. That might do for you but, if your MiniDiscs contain multiple tracks – as is likely – then you might want to split the captured recording accordingly. So, prepare for a bit more faff!

First, click to open the Select menu and then choose All. Now, from the Analyze menu, choose Label Sounds. The dialogue box lets you set parameters to search for the breaks

between tracks, based on silence level and duration. You might need to play with these settings to get things just right. Type some text for the break labels and then click OK.

Next, click File followed by Export and then Export Multiple. Finally, use this dialogue box to refine the export, choosing MP3 from the Format menu and how the split files should be named (using the labels as track names, for example **2**), then just click OK.



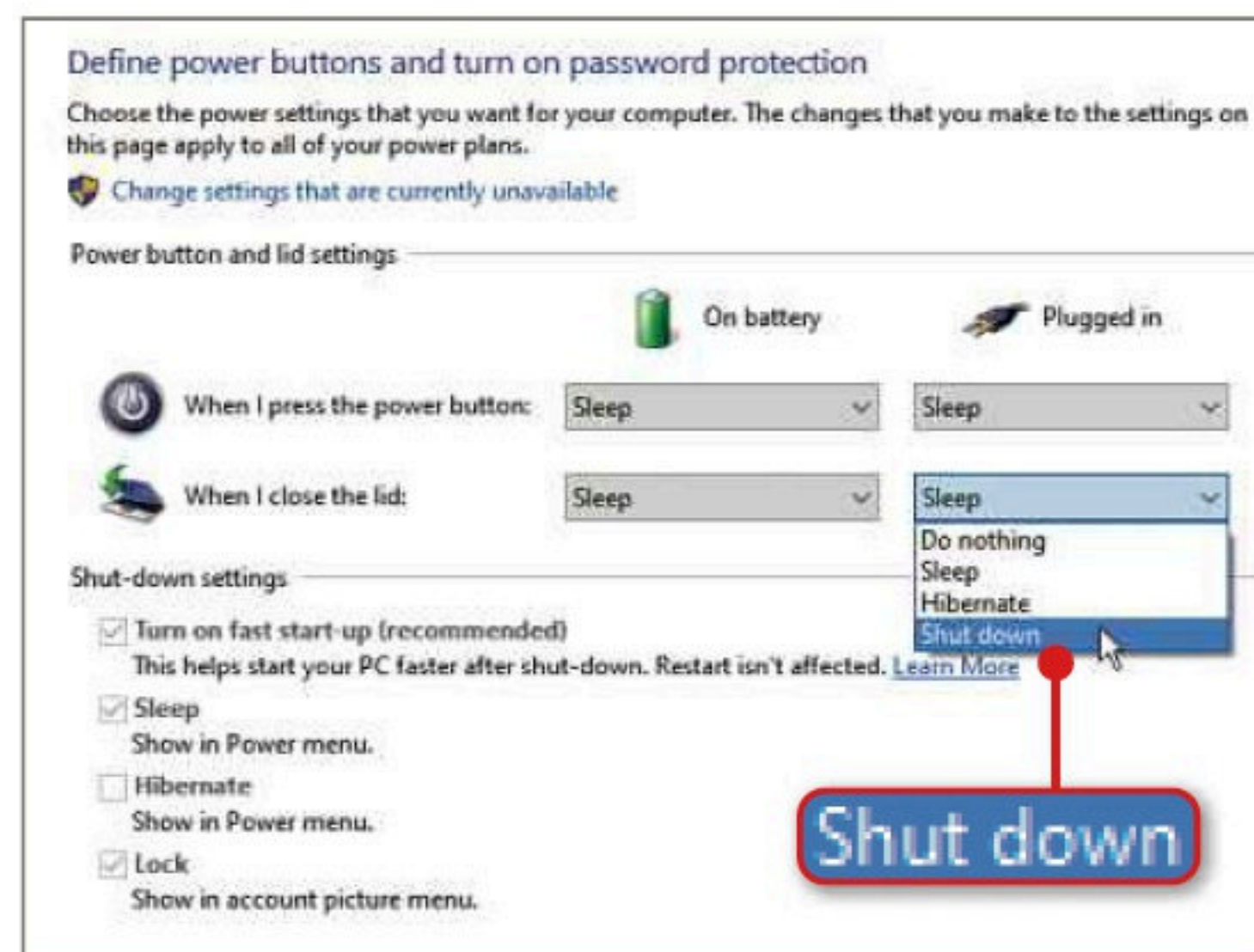
Select 'Using Label/Track Name' to split the MiniDisc transfer into individual tracks on MP3

Why does my laptop's power button remain lit?

Q I have two very annoying problems with my laptop. The first is that the light on the start key does not switch off when I shut down. So, before I can start up again I have to hold it down for 10 seconds. Second, my keyboard suddenly stops working, so I have to use an on-screen keyboard. Any ideas what could be causing these strange problems? I'm using Windows 10 with the latest updates.

Jack Blignaut

A You didn't tell us your laptop make or model, but by 'start key' we're fairly confident that you mean the power button. We say this because it's not uncommon for laptop power buttons to remain illuminated, or to otherwise glow when the machine is placed into standby or hibernate mode. This indicates that the machine isn't fully powered down. Usually, opening the lid is enough to wake the machine, though sometimes a quick tap of the button is required. If the machine is in 'hibernate' mode, then it could take several seconds to come back to life.



You can set your laptop to 'Shut down' when the lid is closed

That, when it's finished, should see the laptop fully shut down – with the power-button light extinguished also.

To manage what happens when you simply shut the lid, click Start followed by the Settings cog and then System.

Now, on the left, click 'Power & sleep' followed by, on the right, 'Additional power settings'. Then, on the left, click 'Choose what closing the lid does' and then use the various dropdown menus to set things up how you want ('Shut down' in the screenshot above).

As for the keyboard, you didn't give us many clues. If Windows 10 is fully up to date then it's unlikely to be **driver**-related. That really just leaves an intermittent hardware fault, and for help with that we'd suggest contacting the manufacturer – but feel free to get back to us with more details.

By holding down the power button you are, in fact, most likely triggering a reset that basically tells the laptop to start again. It works, but it's not best practice.

So the question is, how are you shutting down your laptop? If you're just shutting the lid then what we say above is likely to be the case.

These settings can be changed, but if you want to shut down the laptop properly you should click the Windows 10 Start button and then click the power icon there before clicking 'Shut down'.

Is old Microsoft keyboard useless?

Q I was given a Microsoft Wireless Multimedia Keyboard 1.1, but the USB dongle to connect it to a PC was missing. I think it was originally part of a keyboard-and-mouse combination. I hate to dispose of a perfectly good keyboard that I could use, so do you have any suggestions how I might be able to use it? I wouldn't mind attaching it via cable, if necessary. I love the magazine and have found it helpful during the pandemic.

Neil Muller

A You're right that this was part of a set, originally released the best part of 15 years ago. It actually used a puck-shaped, soap-on-a-rope-style transceiver.



The Microsoft Wireless Multimedia Keyboard 1.1 and its original mouse



Unlike today's fingertip-sized modern dongles – which are often 'coded' to work with specific devices – this one paired to compatible Microsoft devices using a coordinated button press on each device.

So, in theory, if you could get hold of said dongle, you'd probably be able to get this to work. However, Microsoft doesn't make these sets any more, so there's no prospect of buying a dongle from the company. They do crop up on eBay, but generally not on their own – so you'd end

up having to buy the whole set, or at least the keyboard with the dongle or mouse with the dongle.

For example, we found a complete set, used, on eBay with a Buy It Now price of around £23 (www.snipca.com/39512).

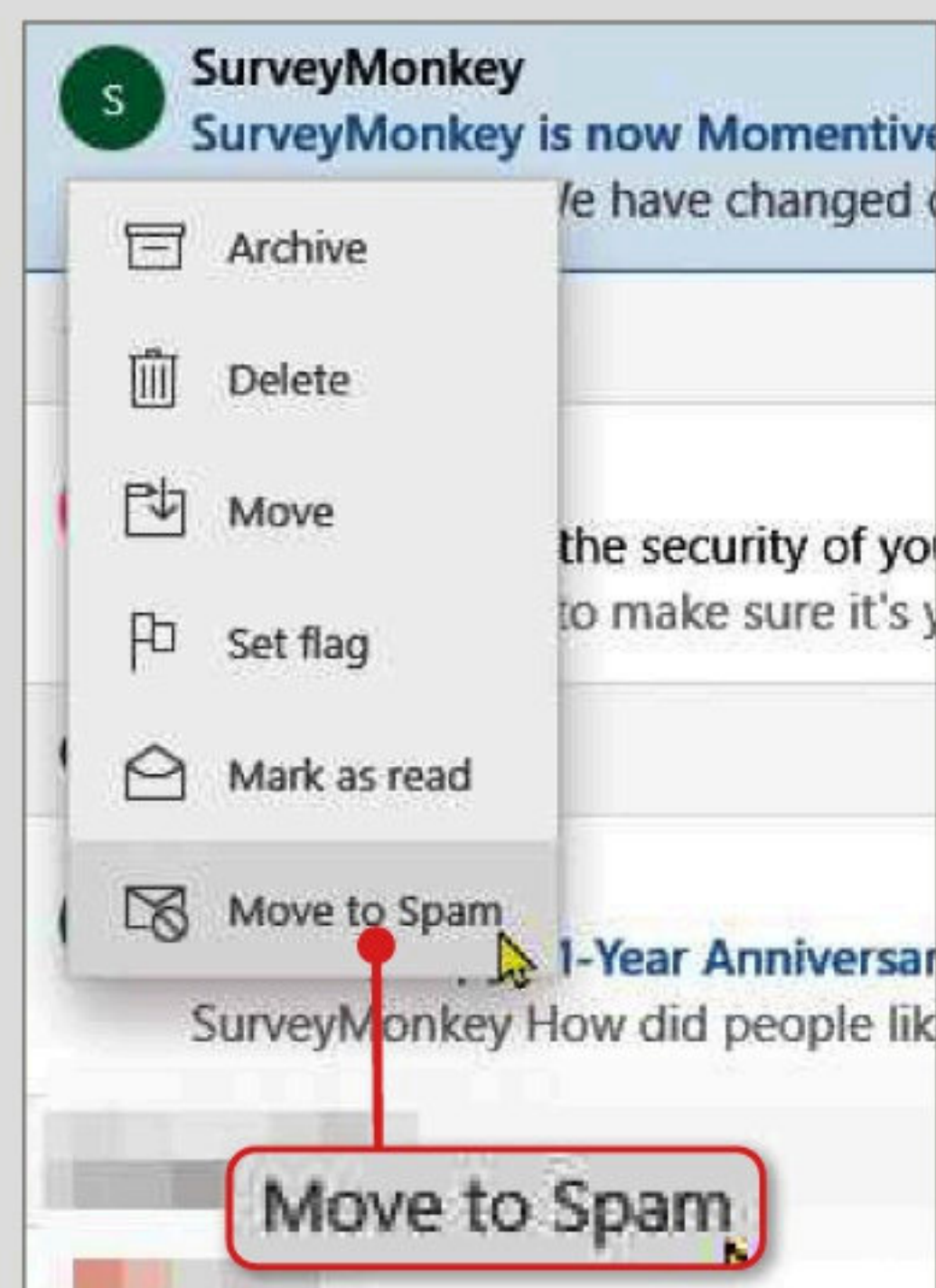
Why do I get unwanted emails?

Q I'm having a problem with unwanted emails from Screwfix, sent by a variety of persons who I do not know (or want to know). I get similar from other companies. I have not replied to any of them. I do have an account with Screwfix, but only to buy products from the company. I have been in touch with them, but they say they are not from them – end of conversation! I have Bullguard security on full time and Bullguard VPN for my internet banking. Can you help?

Steve Valentine

A We're afraid this is just good old-fashioned **phishing**-style spam. There's nothing at all that Screwfix, or any other companies, can do about it – because they're not the ones sending out these unwanted messages.

You're right not to reply. The best thing to do about such messages is to mark them as spam and then forget about them. In Windows 10 Mail, for example, right-click an offending message and then choose 'Move to Spam' (see screenshot below).



Right-click phishing messages and select 'Move to Spam'

Should I install an unsigned driver?

Q My Velleman PCSGU250 USB-PC oscilloscope has not worked since upgrading to Windows 10, due to **driver** incompatibility. A web search suggests the Windows 7 driver will work, but one must first disable driver-signature-verification. Is this safe? If so, can this step be reversed after installing the Windows 7 driver without it retrospectively disabling the PCSGU250 driver?



John B Clarke

John's Velleman USB-PC PCSGU250 oscilloscope has not worked since he upgraded to Windows 10

new driver for Windows 10. The old driver might well work with Windows 10, as other users of the product have found, but obviously we can offer no guarantees.

To do this, first click Start followed by the Settings cog, then 'Update & Security' followed by Recovery. Then, under 'Advanced start-up', click 'Restart now' followed by Troubleshoot. Now just click 'Advanced options', then 'Start-up Settings' followed by Restart.

Your PC will restart and then display a Startup Settings screen. Here, choose '7) Disable driver signature enforcement' (see screenshot below) by pressing 7 on your keyboard. When Windows 10 restarts, install the old Windows 7 driver. Finally, just restart Windows 10. This will prevent future unsigned drivers from being installed.

A Almost by definition, an unsigned driver cannot be said to be safe – because only drivers verified by Microsoft as legitimate are issued with a **digital signature**.

However, in this case we think it's likely to be fine. The manufacturer of your product is legitimate, as is the original driver. It's just that the product is old, and the manufacturer hasn't made a

Startup Settings

Press a number to choose from the options below:

Use number keys or functions keys F1-F9.

- 1) Enable debugging
- 2) Enable boot logging
- 3) Enable low-resolution video
- 4) Enable Safe Mode
- 5) Enable Safe Mode with Networking
- 6) Enable Safe Mode with Command Prompt
- 7) Disable driver signature enforcement
- 8) Disable early launch anti-malware protection
- 9) Disable automatic restart after failure

In Startup Settings, select '7) Disable driver signature enforcement'

Q: Why did my wife see adverts for items I searched for?

A: Issue 594, page 67 – find it on our 2020 Back Issue CD

Buy it from
www.snipca.com/38164



How do I play in-car audio without an auxiliary port?

Q My new car has only USB sockets to connect my audio player. I can't get it to connect via Bluetooth, despite numerous efforts. So, I'm wondering if I can use a cable with a 3.5mm jack at one end and USB on the other to connect? I can find lots of cables that are 'USB to 3.5mm', but none that are '3.5mm to USB'. Does data flow in both directions on any cables that are available?

Mike Seagrave

A You didn't tell us the make or model of either your car or audio player, so we can talk only in general terms.

First, are you sure your car doesn't have a 3.5mm auxiliary (aux) port hidden away somewhere? These days, they're often secreted in the glovebox or under a little flap somewhere. If you're certain, then don't go buying random cables, even if you can find one because it is exceedingly unlikely that your car would know what to do with an analogue 3.5mm input coming into

You can connect the Belkin TuneCast FM transmitter to an audio player via a 3.5mm jack



its USB socket.

We're not sure why your player won't connect to your car's stereo via Bluetooth. Does it connect to other devices? If not, it might be faulty. Either way, an alternative method would be to buy an FM transmitter, like the pictured Belkin TuneCast (around £22,

www.snipca.com/39513). This connects to your player via a 3.5mm jack, plugs into your car's 12V (cigarette lighter) socket for its own power and will then transmit your player's output as an FM radio channel. So, you'd just need to tune your car's stereo into that frequency to hear the audio.

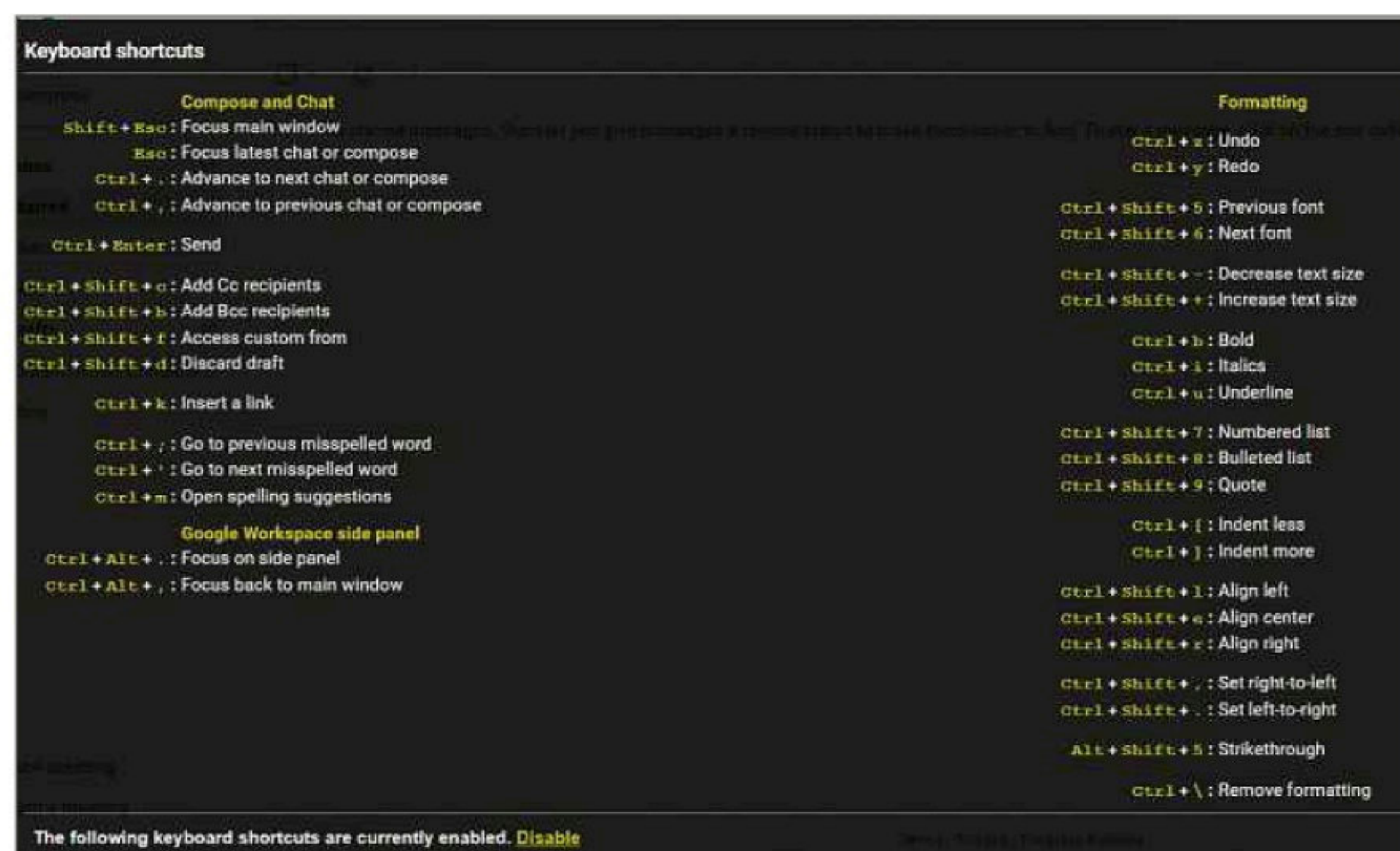
How do I find Gmail shortcuts?

Q In Issue 615 (page 66) you answered William Murton's question about his accidental muting of a message in Gmail. You explained it was because his cup must have hit the M button, which is the shortcut for the Mute feature. This got me wondering – how do you know all these shortcuts? How are mere mortals like us supposed to discover these tricks, if not by the trial and error of dropping mugs on to our own keyboards?

Patrick Easterling

A Well, that would be one way of discovering some of Gmail's hidden keyboard shortcuts – but we're not sure it's the best technique.

To answer your first question, then, we know some of these time-savers simply because we've been using them for many years. Equally, we can guarantee you that there are lesser-known Gmail shortcuts that we rarely or have never used, and



In Gmail type the question-mark symbol to see the full range of keyboard shortcuts

therefore would not instantly know what needed to be pressed.

Fortunately, there is one Gmail keyboard shortcut that, when learned, reveals how to access all the others. That is to type the question mark symbol on your keyboard (typically by pressing the Shift+right-slash buttons). This summons

an overlay panel that you can scroll through to explore the available options. Just type a question mark again to remove it, or press Escape (Esc).

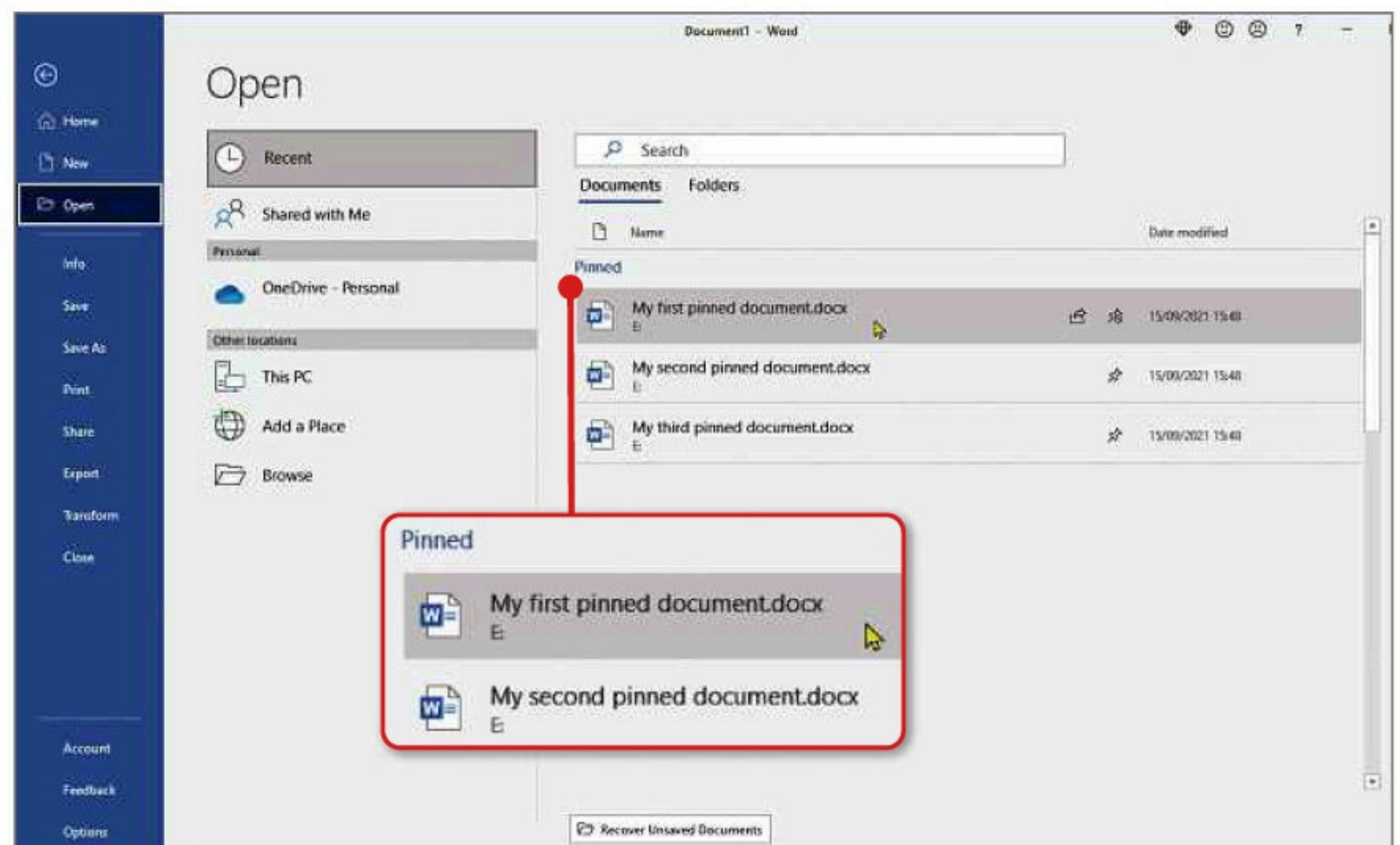
Finally, note that the company also maintains a web version of this shortcuts crib sheet, which you'll find at www.snipca.com/39514.

Problems Solved

Can I pin Pinned?

Q I've been using Office 2019 for a few months and am generally pleased with it. However there's an irritating feature. When opening a file in Excel or Word, the File screen lists the most recently used files to aid the file search. This page has two tabs, headed Recent and Pinned. I usually wish to open a file in the Pinned list, but as the page defaults to the Recent list I have an extra click to make to choose Pinned. I want to make this page default to the Pinned tab, but cannot find a way to do so. Can you help?

Ian Grady



A We don't believe this is possible, though we share your frustration: it seems obvious that pinned files should be the ones that are the easiest to access. However, in Word's Home screen – which is what we think you mean by 'File screen', because it opens using the Alt+F keyboard shortcut

By summoning the Open screen, you will have files in your Pinned list displayed at the top

that traditionally opened the File menu – the Recents tab is the default.

However, there is a workaround to save you that extra click. If you use the keyboard shortcut Control (Ctrl)+O then you'll summon the Open screen instead

of Home. Because files in your Pinned list are displayed right at the top of this screen, under the Pinned heading (see screenshot above), they're precisely where you want them – above everything else.

What are these unwanted icons?

Q Could you explain why I'm getting some nasty little icons on the bottom left of all my pictures (see screenshot right)? And, better still, how I can get rid of them?

Colin Pickering

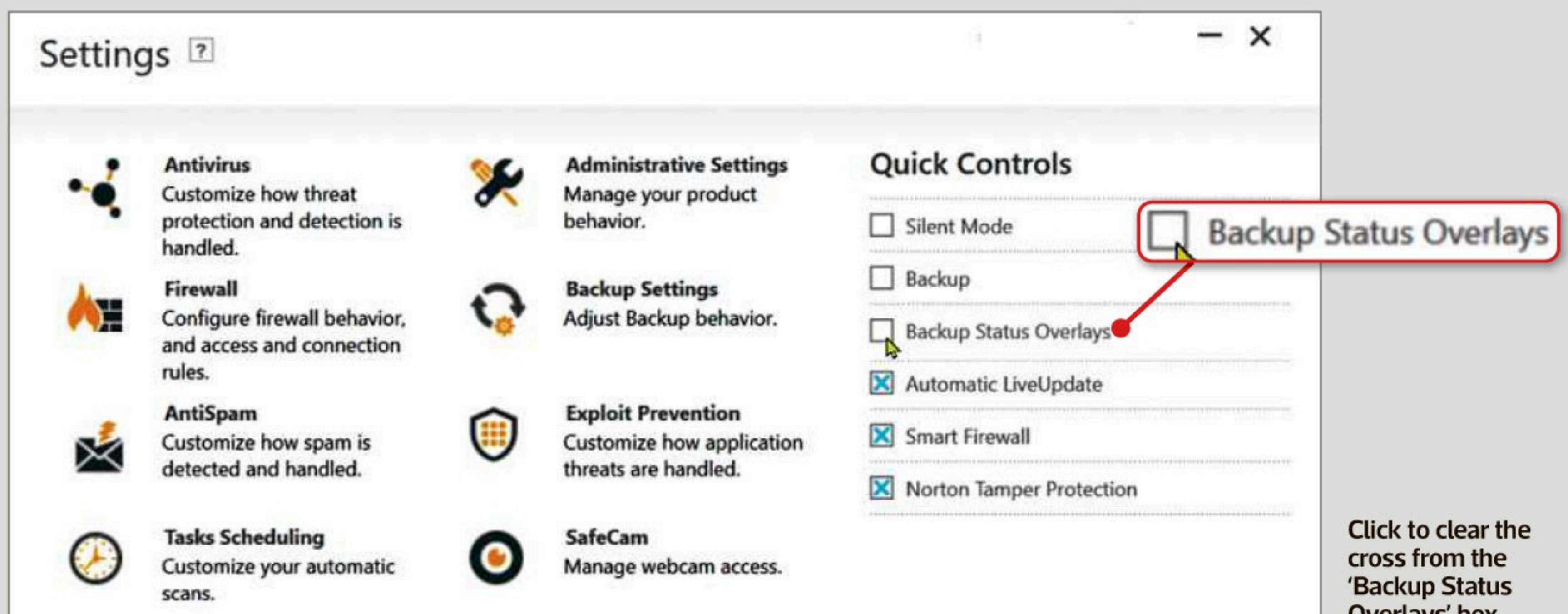


A It's hard to say for sure from the little image that you sent us, but those marks look suspiciously like indicators for an

online-backup service. They resemble the Backup Status Overlays icons applied by some Norton security tools, such as Norton 360 and LifeLock.

The unwanted icons could be applied by Norton security tools

So, if you use one of these, that would be our prime suspect. The location of the relevant setting to disable them depends on the program and version but, in the Settings page, look for a box or switch labelled Backup Status Overlays, and then click to clear the box or flip the switch to its Off position (see screenshot below).





WHAT'S THE DIFFERENCE BETWEEN...

RAID and NAS?

Q

I see lots of mentions of NAS drives and RAID devices, but I don't understand the difference. If I want to add storage to my computer which one should I choose?

Nathan Foster

A

First, let's take a step back. If you want to add storage to your computer you might not need either of these technologies. Instead, a straightforward hard disk drive will do the job – either fitted internally or attached externally. We don't know which computer you have, but these days pretty much any PC or laptop can connect via USB to almost any external hard drive, so that's definitely the easiest (and cheapest) way to add storage.

Now back to NAS and RAID. These are distinct technologies, but ones that do overlap. NAS stands for network-attached storage, and at its simplest, it means a single, high-capacity hard drive that connects via Ethernet to your router. In this way, it can be made available to any other compatible and



The Synology DS218j NAS has two drives that can be set up in a RAID configuration

technology that allows a number of drives to operate together, in various different ways.

This might be for redundancy. Two drives might precisely mirror each other's contents, so that if one drive fails the data remains available.

That's known as RAID 1.

The other key RAID 'level' is

0 (zero), where the storage of two or more drives is pooled to create a single, larger 'logical' drive.

So, where's the overlap? Well, a NAS drive can be a single drive, but some, such as the pictured Synology DS218j (£189 from Amazon, www.snipca.com/39515), can contain two or more – and these can be set up to work in a RAID configuration.

Want to know the difference between technical terms? Email noproblem@computeractive.co.uk

authorised device on your network.

We should say that in theory the same could be done with an external hard drive connected via USB, but that would require the host computer to remain permanently on, which is rarely ideal.

RAID stands for a redundant array of independent drives and it is often used to describe storage. We've explained RAID plenty of times, but, to recap, it's a

Where did my desktop icons go?

Q

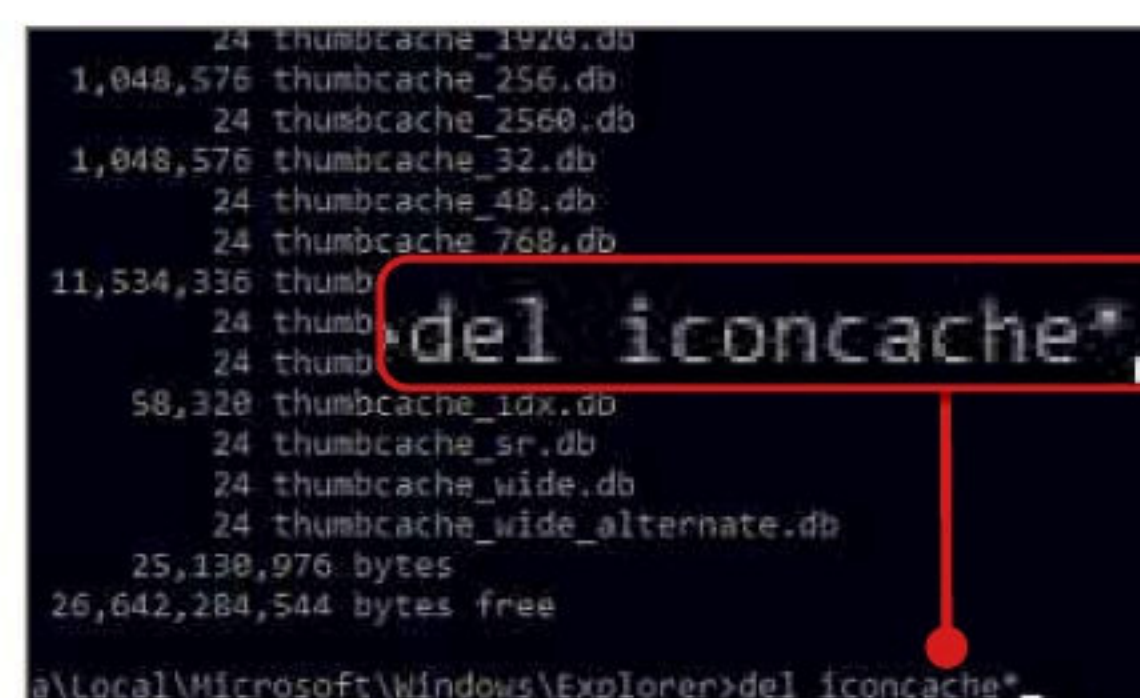
I have been using computers for a long time, but have not come across this before. Recently, when I turned on the PC, my Windows desktop appeared but the icons were missing. I restarted the computer and everything was back to normal. I don't normally see many icons there, so perhaps having such a clutter is the cause of this happening? The computer has been fine since.

Angela Thorne

A

We suspect this was the result of a long-standing bug that affects the **cache** file that Windows uses to display desktop icons. Deleting the cache is the usual fix, because this forces Windows 10 to rebuild it next time it launches. With your computer, this seems to have already happened, so there's nothing more to worry about.

Still, if it happens again and doesn't fix



If your desktop icons vanish, type **del iconcache*** to delete your cache

itself, here's what to do. First, close all running applications. Next, click the Start button, type **cmd**, then right-click Command Prompt and choose 'Run as administrator'. This will open a Command Prompt window. There, type **cd C:\Users\YourUserName\AppData\Local\Microsoft\Windows\Explorer** (copy and paste this from www.snipca.com/39583). Then press Enter, replacing YourUserName with your Windows user

name (Angela, say). Next, type **dir** and press Enter to see a list of files in this folder. If Command Prompt is pointed at the right place you'll see some files that include 'iconcache' in their name.

Type **del iconcache*** – including the asterisk, see screenshot – and press Enter. Then just restart Windows.

Next Issue

ONSALE
Weds
3Nov

- What is this rogue device?
- What's pro about Windows 10 Pro?
- Do I need to replace my motherboard for Windows 11? ...And many more

Subscribe to Computeractive at www.getcomputeractive.co.uk



Reader Support

Having a problem with our recommended software or expert tips? Email editor@computeractive.co.uk and we'll do our best to help

Am I also being paranoid about my web connection?

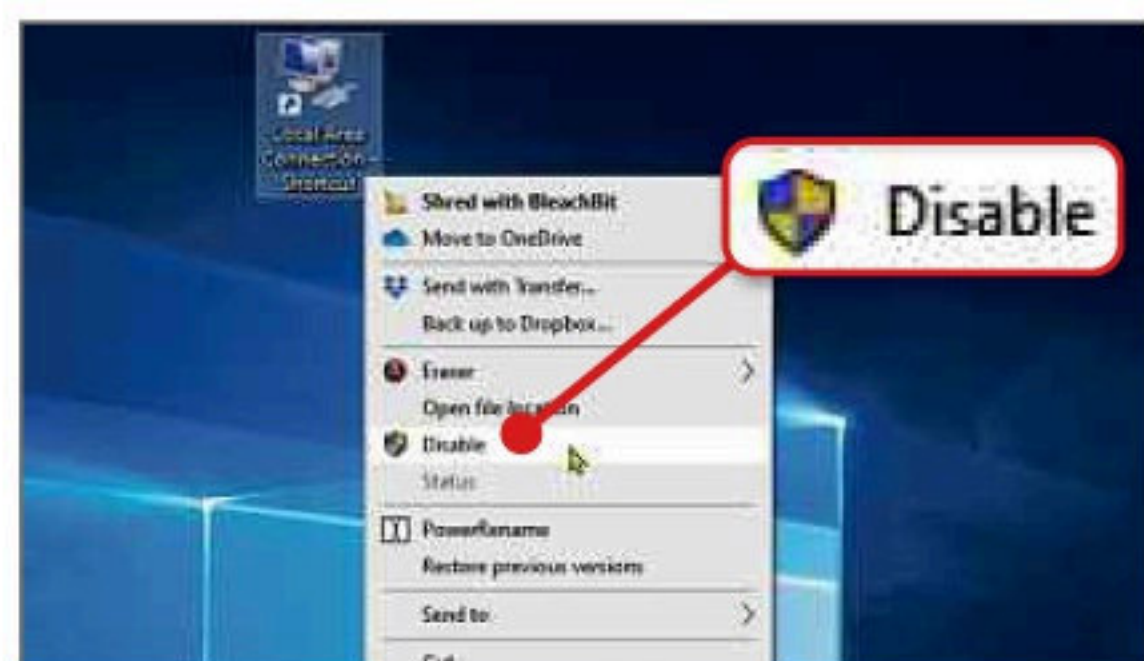
Q Like Mike Whitehead, in Issue 614's Problems Solved (page 65), I have concerns that you may see as paranoia – meaning I connect my PC to the web via Ethernet only when I want to use it. In Windows 10 there's a way to disconnect more easily. First, right-click the networking icon in the taskbar, choose 'Open Network & Internet settings', then click 'Change adapter options'. Next, use a right-click to drag and drop the relevant Ethernet icon on to your Windows desktop, then choose 'Create shortcut here'.

To deactivate the Ethernet connection simply right-click the shortcut and choose Disable (see screenshot below). To reactivate, right-click the shortcut, then click 'Open file location'. Next, right-click the Ethernet connection and choose Enable. Your internet connection is unavailable when the network icon in the taskbar changes to globe.

Dave Reffin

A We don't consider you or Mike paranoid. Rather, we said that with good security software merely being connected to the web isn't a huge risk: it's actually doing stuff online that leads to security risks.

That aside, your tip is great. Whipping out the Ethernet cable from the side of a laptop is quick but not always practical, so we're happy to publish your suggestion. Also see our 'How To' on creating a 'kill switch' – Issue 615, page 35.



Right-click your Ethernet icon, then select Disable to block your internet connection

How do I scan the Royal Mail QR code?

Q In Issue 614's 'Ditch your printer' feature (page 60) Nik Rawlinson says we can use our smartphones to scan a QR code that the Royal Mail has emailed to us. How exactly might one do that? I've only recently got a smartphone and I've never before scanned a QR code!

Marianne Taylor

A There are really two questions here. Or rather, two answers. First, scanning a QR code with a smartphone is no more complicated than launching the camera app then pointing the lens at the code. On recent Android or iOS (Apple) phones, this will prompt a link you can tap that'll take you to the QR code's destination web address.

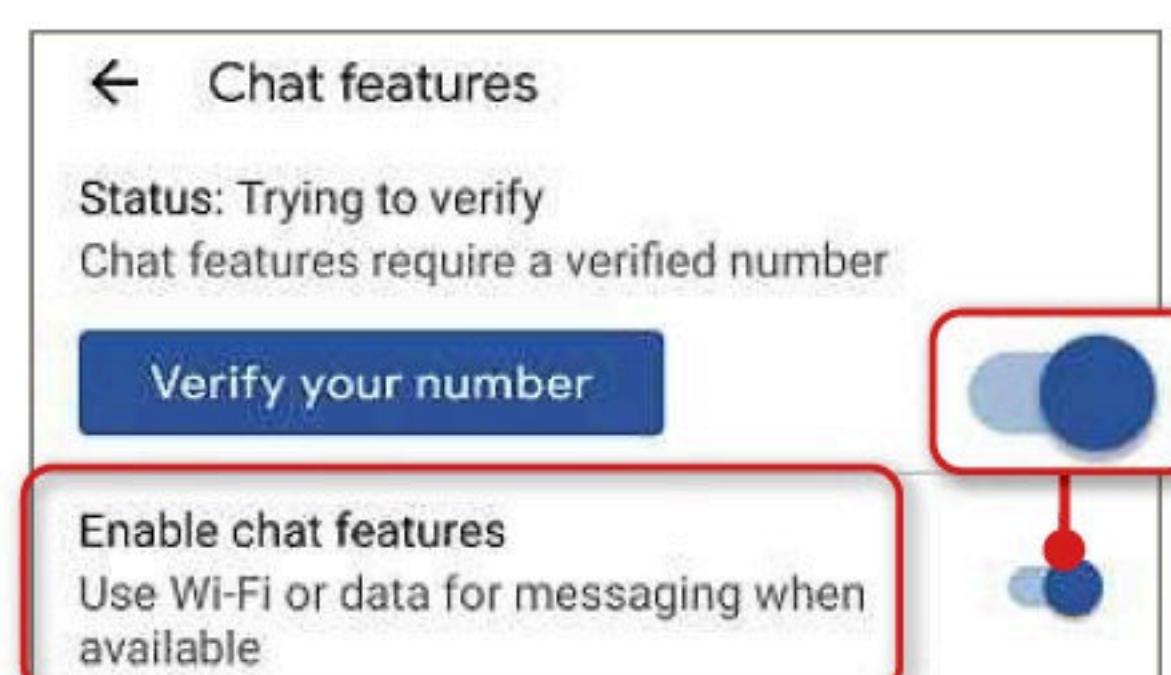
However, that's not actually what Nik meant here. Instead, the idea is that you can use the scanner provided at any Royal Mail Customer Service Point to scan the QR code that was emailed to you – directly from the screen of your smartphone.

Where's my Google Chat Details option?

Q In the Readers' Tips section of Issue 611 I was concerned to read Tom Fry explain that, due to system changes, Android texts don't always get sent. However, on my Android 7.0 phone, there are only three options in the menu – Delete, Share or 'Place on Home Screen'. The Details option that Tom describes is not present. If I understand him correctly, messages won't be sent if the phone is not near a data connection.

Cliff Watts

A The underlying situation is complicated, but it all boils down to Google Chat, which is a feature of Google Messages. Chat is actually just Google's branding for a feature called Rich Communication Services (or RCS) which is intended as a modern version of SMS. With Google Chat enabled, messages



Ensure your messages are sent by switching on the 'Enable chat features' option in Android

travel over a data connection (like Wi-Fi or 4G) rather than SMS, which works even on 2G networks.

The availability of the option depends on several factors, including whether RCS is supported by your network. Not all do. It could also be that you've not enabled Google Chat: in Messages, tap the More menu (three dots) followed by Settings then 'Chat features'. Here, tap to turn the 'Enable chat features' on or off (see screenshot above).

Regardless, it's not accurate to think that messages won't get through without a data connection. RCS is designed to 'fall back' to SMS, so messages that fail to send via RCS – for whatever reason – should eventually make it through via SMS.

Why won't your ZIP trick work for me?

Q I tried following your advice to Gary Martin in Issue 614's Problems Solved (page 68) to add passwords to my ZIP files. However, the 'Encrypt contents to secure data' option is greyed out, so I can't tick it. What am I doing wrong?

Tony Forth

A Nothing, but you may have missed something in our answer to Gary. The key instructions were in the first paragraph but we later stated this feature was unavailable in Windows 10 Home. So, that's probably the problem. Return to that page to read the rest of our reply for an alternative method, using the free 7-Zip tool (www.7zip.org).

Jargon Buster

1080p Screen quality of 1920x1080 pixels.

2K A screen with 2048x1080 pixels.

3G/4G/5G Technologies that deliver faster mobile broadband.

4K Video with a resolution of at least 3840x2160 pixels.

720p/1080p/1440p Common types of high-definition video of 1280x720, 1920x1080 and 2560x1440 pixels respectively

Administrator Someone who can make changes to a computer that will affect others who also use it.

AI Artificial Intelligence. A computer program that mimics the behaviour of humans or animals.

APK Android Package Kit. The file format Android uses to install apps.

ATRAC Adaptive Transform Acoustic Coding. A type of music file used by older Sony players.

Bandwidth A measure of how much data can be transferred through a connection at one time.

Benchmarking Comparing software and products with an accepted standard.

Beta A version of software that's being tested. Beta versions are often released so problems can be ironed out.

Biometric Using measurable personal characteristics, such as fingerprints, for identification.

BIOS Basic Input-Output System. Software built into every PC that connects the vital components. It's visible for a few seconds when the PC starts.

Bit rate A measure of data transfer speed, or of the quality of digital video or audio files.

Cache A temporary space for storing information. Can be memory used on a computer processor, or space on a hard drive used by a web browser.

Clean install An operating system installation that overwrites all other content on the hard drive.

Command Prompt A black window into which you can type computer instructions. To see it, click Start, Run, type `cmd` and press Enter.

Cookie A small text file stored on your computer by a website. Used to store browsing preferences, website log-in details and so on.

Core Units on a processor that carry out program instructions.

Cryptocurrency A digital currency not backed by any country. The most popular is Bitcoin.

Dark mode Showing white text on a black background.

DeX Samsung technology that allows some of its tablets and phones to be used as computers by adding a mouse, keyboard and monitor.

Digital signature A block of scrambled data that can be used to verify the sender of an email.

DisplayPort A new socket for connecting monitors.

Dolby Atmos 360 New surround-sound technology that adds 'height' to the audio through speakers built into the top of devices.

Driver A file that tells Windows how to work with an external device.

Dual boot To set up a PC with two operating systems, so that one must be chosen each time it starts.

DVI Digital Visual Interface. A common type of display connector that can carry a digital signal.

Dvorak keyboard An alternative to the QWERTY keyboard that aims to require fewer finger movements. Created by August Dvorak in 1936.

Emulator A program that makes one computer act like another, allowing it to run that computer's software.

Firmware Basic software stored on hardware, such as a processor, to control its operation.

Flash storage A data-storage device that includes flash memory with an integrated USB interface.

Frame rate The number of still images, or frames, shown per second to create a moving image. Higher frame rates make games appear smoother and more realistic.

Gesture Finger movements on a screen that perform an action, such as pinching to zoom.

GHz Gigahertz. A measure of how many instructions a chip can process per second. 1GHz is equal to 1,000MHz

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.

HDR10+ High-dynamic range 10. Current industry standard for TVs.

Heat sink A block of metal used to help dissipate the heat from a computer chip.

HTML Hypertext Markup Language. The language used to write most web pages.

HTTPS Hyper Text Transfer Protocol Secure. The secure version of HTTP, the technology that sends data between your browser and the web.

IMEI Integrated Mobile Equipment Identity. A unique number used to identify each mobile phone.

IP address Internet Protocol address. A unique set of numbers used to identify computers and websites on the internet.

IPS A screen technology. Monitors that use it have wider viewing angles and better, more accurate-looking colours than monitors that do not use this technology.

JPEG Joint Photograph Experts Group. A common type of image file created by most digital cameras. Some image quality is lost with each save.

Keylogger A piece of malicious software that records all the letters and numbers typed on a PC in an effort to find passwords or other valuable information.

Kiosk mode A computing mode that lets just one program run.

LAN Local-area network. A computer network in one place, such as a home or office.

LCD Liquid-crystal display. The technology used to create almost all flatscreen monitors.

LTPS Low-temperature polycrystalline silicon. Screen technology that lets electrons flow faster, making resolutions sharper.

M.2 A standard specification for internal PC expansion cards and connectors.

Machine learning The science of teaching computers how to learn by themselves, without further human input.

Mesh Wi-Fi Wireless network system that uses multiple connected routers to stretch Wi-Fi further than a traditional router.

Metadata A set of data that gives information about a file.

MicroSD card A small type of memory card. Can be converted to SD size using an adapter.

NAS Network-attached storage. A hard drive attached to a network that can be shared with other PCs.

Noindex meta tag A piece of code that tells a search engine not to 'index' a site, and therefore not to show it in its search results.

NVMe Non-Volatile Memory Express. An interface that lets solid-state drives work faster.

Open source Software that can be modified by anyone, rather than just by the employees of the company that created it.

P3 A colour space that has a wider spectrum than sRGB. Used by US film industry.

Phishing A form of internet fraud that tries to trick you into revealing personal details.

QR code Quick Response code. A barcode that can be read using smartphones and dedicated QR-reading devices.

Quantum dot Screen technology that uses a layer of nanoparticles between the panel and the LED backlight for increased colour range and brightness.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on. Its capacity is measured in megabytes (MB): the more memory your computer has, the more things it can process simultaneously and the faster it will seem. Any information in RAM will be lost when the power is switched off.

Refresh rate Measured in Hertz (Hz), the number of times per second that the image on your monitor is redrawn. Slight changes in the image each time it is updated combine to give the illusion of movement.

Registry key The Windows registry equivalent of a folder.

Scissor switch Keys that have two plastic pieces that interlock in a scissor-like fashion.

SEO Search engine optimisation. Improving where your site appears in search results to encourage more people to visit.

SMS Short Message Service. More commonly called text messaging.

Sound card An expansion card that lets a PC create game sound effects, music, and so on. Almost all PCs have a sound card built in as standard but more powerful sound cards can be bought and fitted.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts. Faster but more expensive than conventional hard drives.

Super AMOLED Samsung's marketing term for a screen that has the layer that detects touch built in, rather than on top of it. Samsung claims it reflects one-fifth as much sunlight as the first-generation AMOLED.

System restore point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

Tor browser A web browser designed for anonymous surfing.

Transcoding To convert files between formats.

Two-factor authentication A system that uses two different means to identify the user. For example, a code sent to your phone in addition to a password.

USB 2.0/3.0/3.1/3.2/4.0 Faster successors to USB.

USB security key A USB device that lets you sign into and lock a PC.

USB-C A new connector that's reversible, letting you plug it in upside down.

White balance Adjusts the balance of colours in the image to produce natural-looking photos.

Whitelist A list of allowed websites, email addresses and applications used by security software to ensure you only visit safe websites and download safe programs.





Wi-Fi 6 Wi-Fi standard with speeds up to 10 times faster than 802.11ac. Also called 802.11ax.

Widget A small program such as a calendar that runs on the Windows desktop.

ZIP file A file that contains compressed documents or files.

Broadband Deals

Call **FREE** on 0800 542 4709 to switch your broadband today

	Provider	Package Name	Monthly Price	Contract Length	Broadband Speed	Allowance	First-year Cost*
1		Shell Energy: Fast Broadband	£16.99	18 months	11Mbps avg. speed	∞ unlimited	CHEAPEST £203.88
2		SSE: Unlimited Fibre + Line Rental Only	£23.00	18 months	35Mbps avg. speed	∞ unlimited	£276.00
3		Sky: Superfast Talk + Line Rental	£28.00	18 months	59Mbps avg. speed	∞ unlimited	£336.00
4		Virgin Media: Big Bundle + Fibre Broadband + Weekend Calls	£33.00 (£56 after 18 months)	18 months	108Mbps avg. speed	∞ unlimited	£396.00

Terms & Conditions apply - see ISP sites for details

* Fair-usage or restriction policy applies.

Computeractive may receive a commission for purchases made through these listings.

Data supplied by www.broadbandgenie.co.uk. Correct as of 4/10/2021

**Broadband
& GENIE**

Broadband Genie's helpline is powered by Dixons Carphone, the Ofcom-accredited switching service

Easy when you **Know How**



Eager to look classy and professional in video calls, **Robert Irvine** brushes his hair and tries to...

Turn his phone into a webcam

One of my favourite things about working from home is that I don't have to worry about my appearance. No need to shave, brush my hair or iron my clothes (former office colleagues may say I never did those things anyway) – I can sit at my computer looking like Grizzly Adams after a heavy weekend at Glastonbury.

The only time I need to smarten up is when I'm scheduled to have a video call, as I don't want my bosses to suspect that they've hired a lazy slob who can't look after himself. So out come the hairbrush, the razor and the iron and I'm transformed, *Pygmalion*-style, into a respectable human being. It's just a shame that the shoddy camera on my laptop makes me look like I'm broadcasting from a nuclear bunker.

“

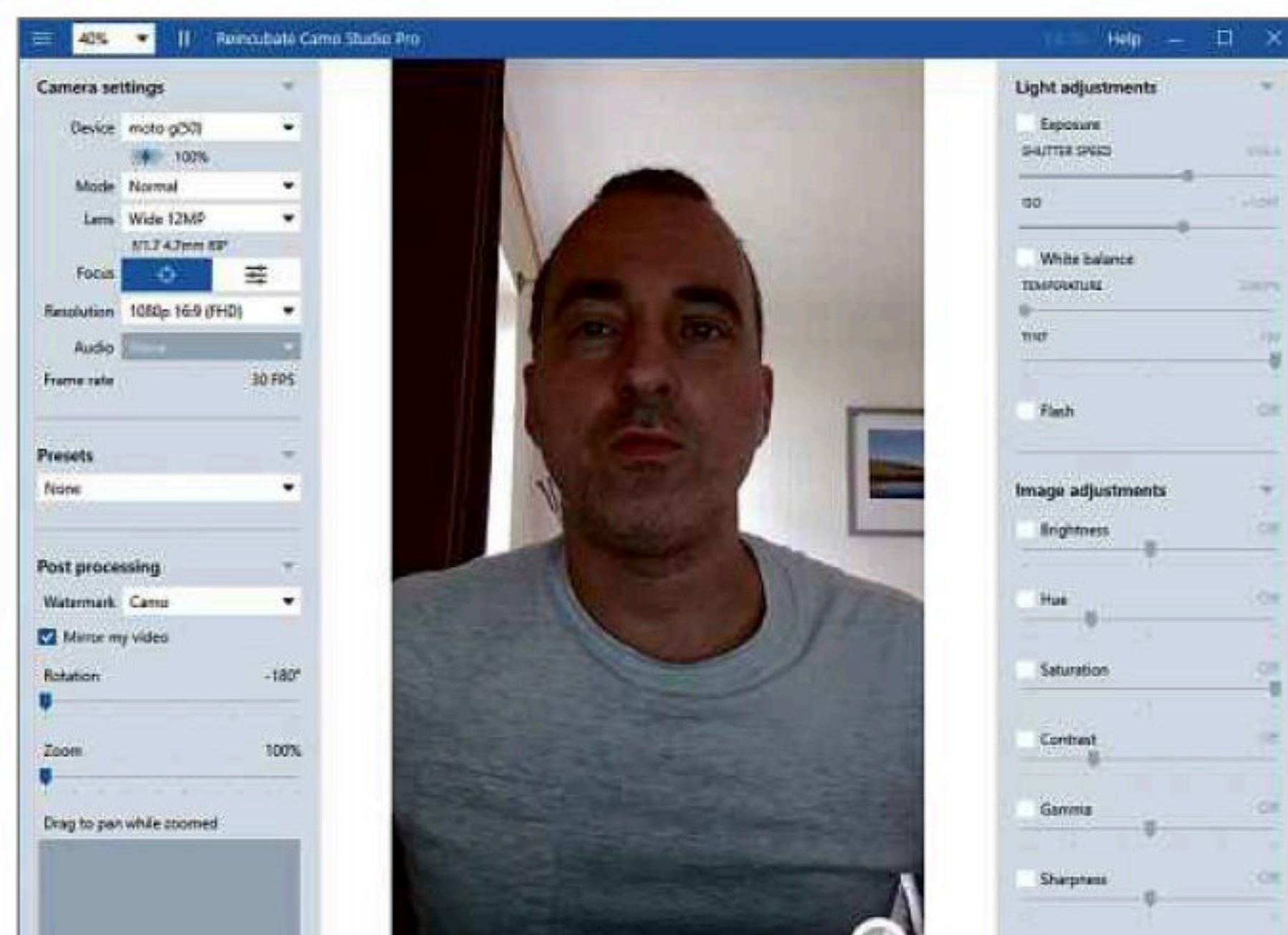
The camera on my laptop makes me look like I'm broadcasting from a nuclear bunker

”

I was therefore intrigued to read about a new app called Camo (www.snipca.com/39562), which claims to turn your phone into a high-resolution webcam that makes you “look amazing on video calls”. Camo exploits the fact that the cameras on smartphones are far superior to those on laptops. Because it doesn't require extra hardware and – most importantly – it's free, I decided to give it a go.

I installed the Camo app on my Android phone (from www.snipca.com/39565 – it's also available for iOS from www.snipca.com/39566).

Camo turned Robert's phone into a high-quality webcam – but there's no audio on Android



[snipca.com/39492](http://www.snipca.com/39492)), noting that it was still in **beta** so “may be unstable”. I gave it permission to access my camera, which seemed pretty important, then discovered that I also needed to install its free desktop program, Camo Studio (www.snipca.com/39566). Typically, the download triggered a Windows SmartScreen warning, but I chose to run it anyway and was greeted by a slightly confusing interface that told me that Camo needed to install an “additional component from Apple” (even though I wasn't using any Apple devices). I installed it anyway, then connected my phone to my laptop with a USB cable.

An on-screen message told me I needed to enable ‘USB debugging’ on my Android device, so I followed the instructions to do this (set-up is apparently much easier on an iPhone). Once done, I opened the Camo app on my phone, tapped Get Started and my camera sprang to life, with the picture duplicated in Camo Studio on my PC (pictured above right). I'd been expecting the app to use my phone's front camera, as happens with mobile video calls, but presumably because the rear camera is better quality it used that instead. I later realised that you can switch cameras using the program's Lens menu.

I propped up my phone so its back was

facing me, and was impressed by how sharp the video looked on my monitor, capturing me literally warts and all. Camo Studio let me play around with different resolutions, rotate my phone's screen, adjust the **white balance**, brightness and contrast, and even zoom right into my face for fine detail (strongly not advised). There were also fun filters to try in the Presets menu, including a green-tinged one called ‘Synthwave 1980s’, which applies a spooky night-vision effect.

Excited to share my classy, hi-res appearance in a video call, I started a new meeting in Zoom and chose ‘Reincubate Camo’ as my default camera. Zoom dutifully switched to my phone's camera, which looked fantastic and oh-so-professional. But I then realised Camo's main flaw: it doesn't yet support audio on Android devices, which means you'll need a separate microphone to the one on your phone (sound is available on iPhone).

This was disappointing, because it's all very well looking amazing in video calls, but if nobody can hear you they'll just keep shouting: “You're on Mute!”. Camo definitely seems like a promising tool, but I'll wait until it adds audio to Android before I start video-conferencing in style.

 Need help with video-conferencing? Let us know: noproblem@computeractive.co.uk