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WebUser

Issue 490

11 - 26 December 2019

/ Best software

/ New apps

/ Disney season to be jolly

Block the trackers
that reveal who and
where you are **p64**

Give Up

Google

FOR 2020

Why you must switch to
better, more private alternatives **p40**



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PLUS

**HO HO HO
– OH NO!**

Watch out for Xmas scams **p51**



**THE BEST BROWSER TO
RUN FROM A USB STICK**

And no, it isn't Chrome **p46**

**WHAT'S SECRETLY
KILLING YOUR PC?**

Don't pay to fix problems –
do it yourself for free **p48**



PC Specialist recommends Windows  Windows 10



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De-Google your life in 2020

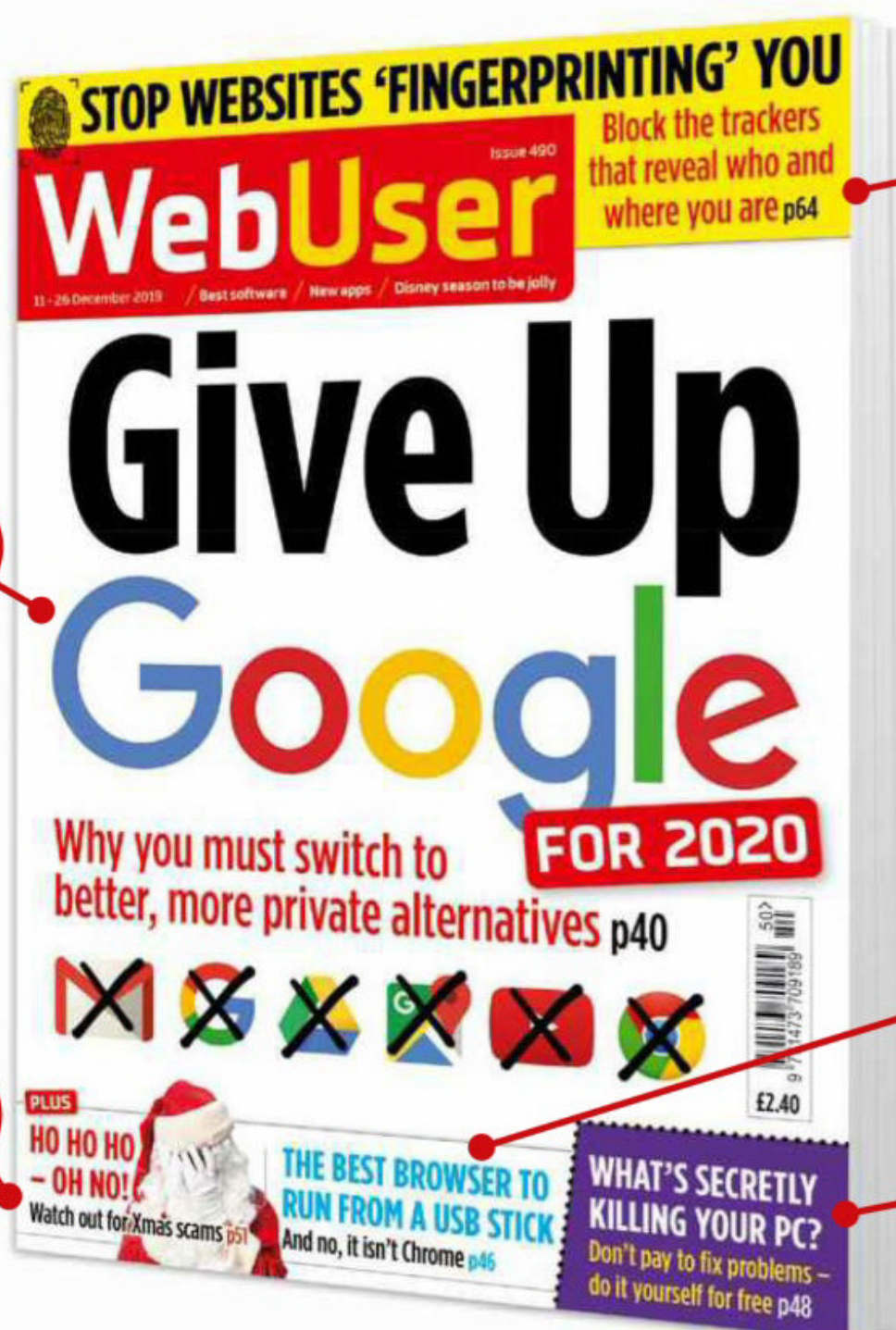
2019 was a busy year for Google and its merry-go-round of privacy scandals. In January, it was fined £44m for breaching GDPR (general protection data regulation) rules; in July, it admitted that it listens to private conversations via Google Assistant; and in November, it was accused of harvesting medical data – and that's just three of many examples. Google is like a dog that keeps getting scolded but can't help stealing food from the dinner table.

Rather than wait for Google to change its data-guzzling ways, why not start the new year by switching to different services for

your web needs? In this issue's cover feature, we recommend the best alternatives to Google tools including Search, Maps, Gmail, Chrome and YouTube – and not just the obvious Microsoft and Apple options. We also explain how to download your data from Google and permanently delete your Google account.

I hope you all have a wonderful Christmas, whether you decide to stick with Google or not!

Robert Irvine, Editor
editor@webuser.co.uk
[#webuser](https://twitter.com/webuser)



5 Things you'll learn this issue

1 How to track Father Christmas as he travels around the world delivering presents **page 6**



2 How to browse 45 years of Argos Christmas catalogues in your browser **page 14**

3 How to find out which updates installed successfully on your PC and which ones failed **page 30**

4 How to stream songs from Amazon Music on your phone without subscribing **page 35**

5 How to prevent websites from obstructing your view with annoying sticky notices **page 71**

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COVER
FEATURE

Give Up Google

Reclaim your
privacy in 2020
by switching to
services that DON'T
guzzle your data



p40



What's so special about Amazon's
latest smart speaker? p22



Find out what's wrong
with your PC p48



Don't let scammers ruin
your Christmas p51

IN DEPTH Articles on the latest tech topics

- 38 FAQ**
Disney Plus
- 40 COVER FEATURE**
GIVE UP GOOGLE FOR 2020
How to quit the Google habit this coming year
- 46 Portable browsers to run on USB sticks**
We review six pocketable programs
- 48 What's your PC's problem?**
Save money on repairs by finding the fixes
- 51 Don't fall for Christmas scams**
How to stay vigilant during the festive season

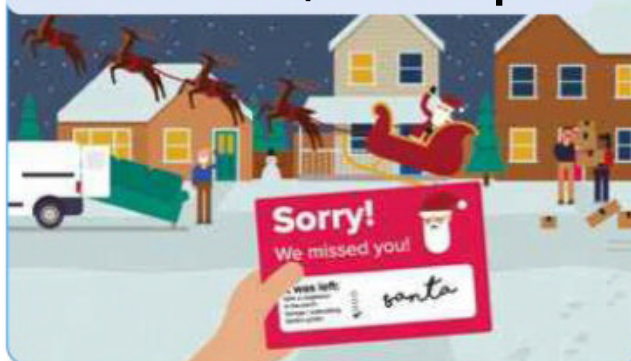
REVIEWS Apps, sites and products on test

- 14 Best New Websites**
Get nostalgic with Argos's Book of Dreams
- 22 Product Test**
 - Amazon Echo Studio
 - Cosmo Communicator
- 28 Best Free Software**
Research your ancestry with My Family Tree
- 32 Best New Browser Tools**
Banish cookies in Firefox
- 34 Best Free Apps**
Brave's super-secure mobile browser

FAVOURITES Must-read regulars

- 6 What's New Online**
Track Santa around the globe
- 8 Need to Know**
This fortnight's top tech news stories
- 12 Stay Safe Online**
Security advice for PC and mobile
- 13 Build a Better Site**
Expert tips, tools and practical help
- 18 What to Watch Online**
Films and TV shows you can't miss
- 26 Best Buys**
Our pick of the best new products
- 37 Take a Screen Break**
Guess the emoji Christmas films

'Tis the season for hapless couriers p74



- 60 Broadband Deals**
Find the best-value package for you
- 72 Inbox**
Tell us your views and opinions
- 74 Page 404**
Barry discusses delivery disasters



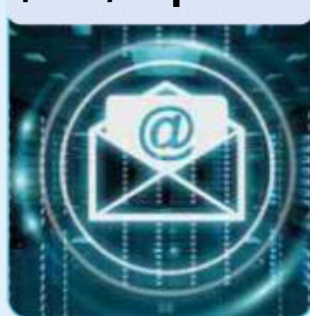
Practical WebUser

Workshops, tips, projects and problem solving

16 pages

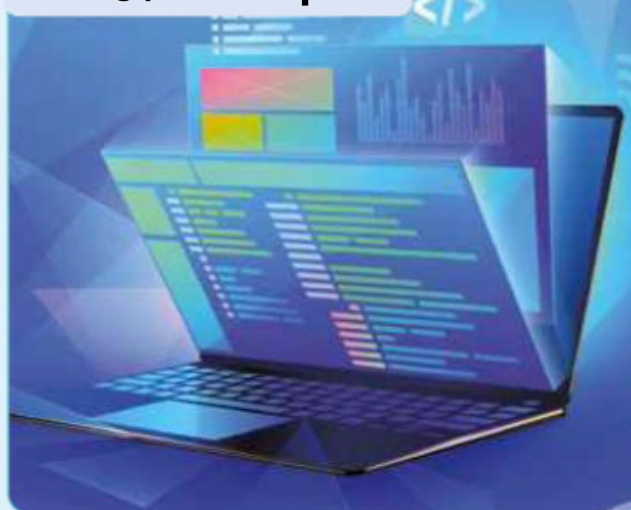
- 52 Workshop 1**
Protect your PC with Malwarebytes 4
- 54 Workshop 2**
Keep your email secure with ProtonMail 4
- 56 Workshop 3**
New PowerToy Rename
- 57 Workshop 4**
Turn your phone into a mic for PC
- 58 Weekend Project**
Set up and use a virtual machine
- 64 Web User Masterclass**
Block fingerprinting and tracking
- 66 Ask the Expert**
All your technical questions answered
- 69 Readers' Helpdesk**
Solve other readers' problems
- 70 Readers' Tips**
The best tips from our readers

Tighten your email privacy p54



Use a smartphone as a PC mic p57

Test new software without harming your PC p58



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What's New Online

Track Santa around the world

Father Christmas is on his way and it won't be long now until you're tearing open your presents, preparing a hearty feast and slumping in front of the telly with a tipple or two. Before then, however, Santa and his elves have a lot to do, and you can see how they're getting on by paying a visit to his busy North Pole village online.

As is now tradition, the North American Aerospace Defence Command (NORAD) and Google are letting you track Santa like an Amazon delivery driver, pinpointing his whereabouts from Christmas Eve. Prior to 24 December, however, you can also have some fun: Google is offering a colourful animated



as well as funny videos showing Santa taking off and visiting a museum.

NORAD is also offering mobile-friendly games, as well as music tracks from the US Air Force Academy Band, movies and information about holiday

recreation of Santa's home with games, coding activities and daily frolics

traditions across the world. There are links to other festive sites, including one where you can get a free video message from Santa and learn about Father Christmas, his magic sleigh and the NORAD mission itself.

www.noradsanta.org
santatracker.google.com

Sing along with Freddie Mercury

freddiemeter.withyoutube.com

Legendary Queen frontman Freddie Mercury's unparalleled singing voice covered a full three octaves and had a high and irregular vibrato, which cemented his place as one of the best

rock vocalists of all time. But could you match his pitch, melody and timbre?

Find out by using YouTube's new Freddie

Meter, which asks to access your microphone, then invites you to sing along to Don't Stop Me Now, We Are The Champions, Bohemian Rhapsody or Somebody To Love. The lyrics appear on screen and artificial intelligence will rate your voice. You can allow the experiment to access your camera if you want to be filmed, too, while the audio stays on your device rather than being uploaded to YouTube. Once you're done, see an analysis of your performance and post your score on social media. You can also learn more about The Mercury Phoenix Trust charity.

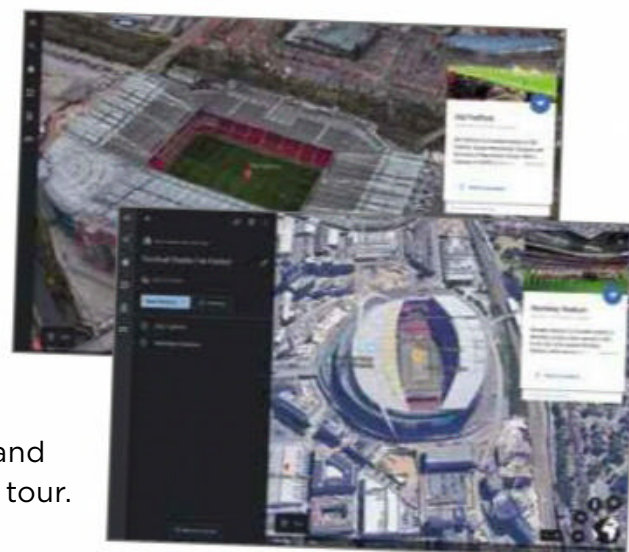
Create your own tours in Google Earth

earth.google.com/web

Google Earth has added a set of content-creation tools that let you make maps and stories relating to locations across the globe. Building on 2017's Voyager feature, it allows you to combine text with images and video, and use placemarks, shapes, lines and text to build an interactive tour.

You could, for instance, produce a presentation based on a cross-country trip, detail a multiple stadium tour or explore a particular style of local architecture. In all cases, you start by clicking the Projects button in the left-hand menu before selecting New Project and searching for places to add. You can then create titles, add media and use the 3D view by tilting the map and selecting Capture.

All the projects can be titled and described. They can also be previewed by clicking Present and shared with others. Projects are viewable via the iOS and Android app, and there are options for co-authoring and collaboration, too.

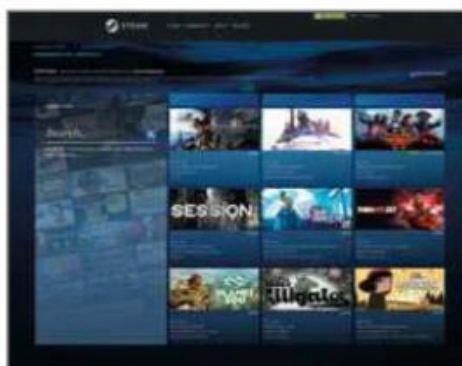


We pick the 10 best things you must do on the web this fortnight

Try Steam's latest experiments

store.steampowered.com/labs

With the new Deep Dive experiment for Steam, you can select a game and instantly see similar titles, organised according to their tags, popularity and rating. You can also check out Community Recommendations, which bases its suggestions on the most recent reviews. Both methods provide a handy way to discover new games to play.



See what your area really thinks

election.unherd.com

News website UnHerd has teamed up with a startup called Focaldata to show



how Britain's 632 political constituencies differ on issues including the Royal Family, gender, immigration, religion, free

speech and tax and spend. It uses a complex data-modelling technique called "multilevel regression with post-stratification" (MRP) and presents the overall results on a colour-coded map. Click the constituencies or type their names in the search bar for a breakdown of the figures. Alternatively, just check the overview of the national results, see which constituencies feel most strongly on both sides of the fence, and consider leaving a comment.

Pronounce place names abroad

google.co.uk/maps

When you're in a foreign country and you need to get your bearings, asking somebody for directions can be intimidating if you don't speak the lingo. In many cases, the problem is not knowing how to pronounce the name of the destination.

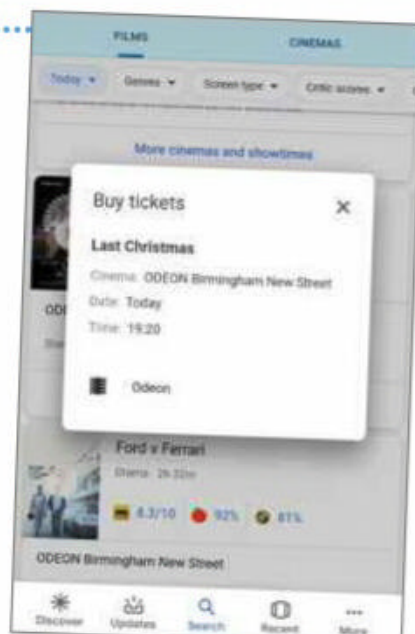
Google Maps has come to the rescue – when you tap a location in the iOS and Android app and view its card, you'll see a new speaker button next to the name or address. Tap it to hear how the name should be said. You can also go straight to the Google Translate app by selecting Translate More.



Book cinema tickets with Duplex

assistant.google.com

You can now buy cinema tickets for the Odeon chain by asking Google Assistant for showtimes or by performing a search in the Google app. On an Android phone, simply tap Buy Tickets and answer questions such as "How many tickets would you like?". Google's Duplex technology will enter your contact details and payment information, and have you enjoying the latest blockbuster in no time.



NEW VOICE COMMANDS



Read a bedtime story

Parents can record a tale and a message at mystorytime.com which their kids can then play back via Google Assistant by saying, "Hey Google, talk to My Storytime".



Split a bill

Work out who pays what for your Christmas do by saying "Hey Siri, split a [£200] bill [eight] ways". It will work out the amount each person owes, taking into accounts tips of 10, 15 and 20%.



Get Metro news stories

Rather than bombard you with headlines, the free newspaper *Metro* offers a single news snippet each day to inspire conversation. Just say, "Hey Alexa, what do I need to know today?".



Get tipsy most efficiently

www.pints.wtf

If you're strapped for cash and want to maximise your booze-to-cash ratio in a Wetherspoons, select your pub on this site and each drink will be ranked by value. You can pass on the tip via social media.

Find your next podcast

bit.ly/spotify490

Spotify now automatically suggests podcasts you may want to listen to in a new playlist called Your Daily Podcast. The recommendations are based on your history and the podcasts you follow, and are mixed with the shows you already listen to.

Check your favourite tracks

bit.ly/replay490

Apple Music is highlighting your most listened-to songs of 2019 and providing a curated playlist you can share with others. Just launch the beta website and click Get Your Replay Mix. It will continue to be updated until 31 December.

Hackers reactivate and steal cancelled Netflix accounts

What happened?

The last thing you want to worry about when you relax in front of your TV is hackers, but Netflix has raised concerns about how it stores details of closed accounts, while a new phishing scam has cropped up that uses the streaming service as bait.

On the first front, BBC Radio 4 discovered that even if you cancel your Netflix subscription, your account lives on – and hackers have figured out a way to reactivate those accounts, so they can steal former users' login details and other private data.

This is made possible because Netflix holds on to your user profile data, including billing details, for as long as 10 months. The idea is that if you decide you miss the streaming service, it's easy to rejoin because your details remain on the system. However, that means it's possible for hackers to crack open those dormant accounts to steal the data.

Clearly, if hackers can steal data from a closed account, they can also access an active one but, in this case, the criminals appear to be specifically targeting cancelled accounts, reactivating them and selling the details on the black market for much less than the cost of a real Netflix subscription.

Meanwhile, another phishing scam has been spotted misusing the Netflix brand to trick streaming viewers (bit.ly/netflixscam490). In this latest example, scam emails try to panic recipients by claiming their payments are overdue and their accounts suspended. While



the phishing emails are littered with spelling mistakes, it's easy to be fooled by the logo.

Victims who click the dodgy email's link to "restart" their Netflix service are taken to a page that looks like a Netflix login but is, in fact, run by criminals. Enter your username and password, and they now have all they need to steal your Netflix account. Continue by filling in your billing info and they'll have your card details, too. The best advice to avoid such scams is to always to head directly to Netflix, rather than clicking the link in the email: follow that rule and you won't be caught out by this trick.

How will it affect you?

If you've spotted odd activity on your Netflix account, always report it to the streaming service. And if you're deactivating your subscription, first delete any billing information from your account; Netflix says it will delete your whole account fully if requested to do so via email.

This incident highlights why it's wise to look over your bank or credit card statements regularly, so you can spot suspicious charges, such as a new Netflix subscription when you've quit the service. It also highlights why it's best not to use the same or similar login details across different sites. If one is breached, those details could be

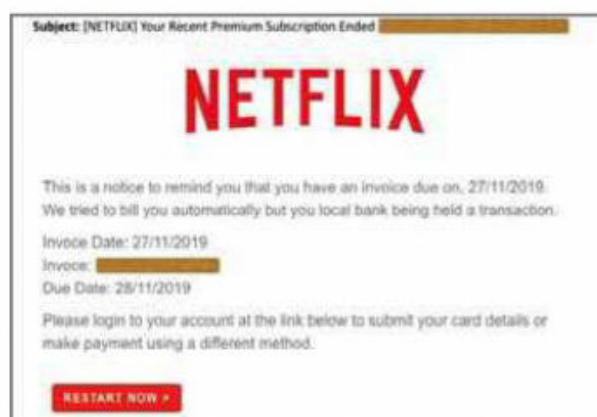
floating around the web for sale to hackers – and while you may be vigilant enough to regularly change login details for active accounts, you might easily overlook that Netflix account you deactivated months ago.

With regards to phishing, if a deal seems too good to be true, it is. And if you aren't sure, don't click a link in an email – instead, go directly to the source. That's good advice regardless of the brand – Netflix or otherwise – being misused by phishing criminals.

What do we think?

If a customer asks for an account to be deactivated, then it should be. There's no reason for a company of any kind to continue to hold our data after we've quit its services. If someone decides they miss the service enough, they'll happily retype their billing details to regain access. Netflix should have warned anyone leaving the service that it would be holding on to their data for 10 months unless specifically instructed otherwise.

Of course, Netflix is far from the only company to do this – just because you delete your profile or end a subscription, it doesn't mean the data collection stops. But it should, and we'd like to see companies being more honest about what happens to our personal information once we depart a service.



A new Netflix scam asks you to enter card details to reactivate your account

What we think of this fortnight's top tech news stories and rumours, and how they affect you

Tim Berners-Lee unveils plan to save the web

What happened?

The British creator of the web, Sir Tim Berners-Lee, has unveiled a global plan to target online problems including fake news, privacy invasion, political propaganda and more.

Dubbed the 'Contract for the Web', the plan was developed over the course of a year by more than 80 related organisations, and is backed by 150 in total so far. The aim is for the contract to be endorsed by companies, governments and web users, with each group given three principles to adhere to. Those who endorse the contract but fall short of following its guidelines will be publicly removed from the list. Amazon hasn't

signed it at the time of writing.

How will it affect you?

You can endorse the Contract for the Web at bit.ly/contract490. For individuals, that means abiding by three principles: use the web to create and collaborate; build strong communities that respect civil discourse and human dignity; and fight for the web, by creating awareness among your friends and family of the threats it faces and by supporting companies and politicians who are good web citizens.

The contract also calls for companies to respect and protect users' privacy and data, and to develop technologies that support

the best in humanity while challenging the worst. Governments are asked to ensure that everyone can connect to the internet, and that it's kept available at all times.

What do we think?

Sir Tim is an important voice on these issues, but he alone can't bring to heel tech giants such as Google or Facebook, let alone surveillance-obsessed governments like China – or, even, our own. His ideas are welcome and the principles in the contract are sound, but

these are companies that have already felt the weight of years of negative headlines and complaints from users – a slap on the wrist, such as being removed from Sir Tim's list of good web citizens, is hardly going to deter them. We need tougher regulation, not empty promises, no matter how well intentioned they are.



Twitter halts plans to delete inactive accounts

What happened?

Twitter announced plans to start deleting inactive accounts, so new users could take over profile names that are no longer – or have never been – used. The news sparked a backlash after it was realised that the proposed deletions included accounts set up by people who are now deceased, so loved ones would no longer be able to read their messages. Twitter said the move was to comply with GDPR, the EU's regulation for data privacy.

Now, Twitter has said it will come up with a way to memorialise accounts – something Facebook already does – before it



commences the account deletions.

How will it affect you?

If you haven't checked into your Twitter account for more than six months, you could risk losing it. Originally, the deadline to log back in and recover your account was 11 December, but that has been extended following the backlash.

If you want to memorialise an account, Twitter said it's working on a system to save messages posted by people who have passed away. The company hasn't said when this will be available, but it won't delete those accounts until that system is up and running.

The account removals will start in the EU, which Twitter pins on GDPR, though it isn't

clear under which aspect of the legislation.

What do we think?

Twitter apologised for not thinking this through but it's surprising no one at the company realised the impact of mass account deletions. You'd think any social-media company would only make such a decision after asking its users first. Did none of the engineers working on this problem consider that people like to go back and read messages from lost loved ones – not least when Facebook has long offered memorialised accounts? It just shows how out of touch some big tech companies are.

Uber loses licence to operate in London

What happened?

The 3.5million Londoners who rely on Uber to get around may not realise it, but the cut-price taxi company's position in the city has long been a precarious one. Uber originally lost its licence back in 2017 and, since then, it has only been able to stay on the streets thanks to two extensions. The most recent ran out on 25 November, after Transport for London (TFL) declared that Uber had not done enough to improve standards and therefore its licence would not be renewed.

TFL is mainly concerned about passenger safety, having found that unauthorised and unlicensed drivers continued to work for Uber by illicitly using other drivers' accounts. There may have been as many of 14,000 of these fraudulent trips since late 2018. And it gets worse: some of the fraudulent drivers were people who had previously had their licences revoked for misconduct.

How will it affect you?

This isn't the end of the road for Uber – if you're a Londoner who uses the app, you may already have received a phone notification letting you know that the service is still in operation. Unsurprisingly, the company has decided to appeal the decision – a process that can take several months,



Credit: Lutsenko_Oleksandr / Shutterstock.com

during which Uber will continue to operate throughout the capital.

But is it safe? That's really down to individual discretion – while the issues highlighted by TFL are worrying, they only affect a small minority of the services overall rides. And, of course, there is always the chance that a traditional black cab could be driven by an unlicensed driver. It's fair to say that Uber is likely to be safe most of the time but you need to be aware of the potential problems.

If you use the service outside London, this doesn't affect you. And if you're more interested in tasty treats than cheap journeys, there's no need to worry

– Uber Eats is regulated separately and isn't affected by this decision.

What do we think?

Nobody should get in a car with an uninsured driver, and it's Uber's responsibility to make sure this doesn't happen on their platform. That being said, we also believe that more consumer choice is a good thing, and the service offered by Uber's many legitimate drivers is unparalleled. Although the licence should be revoked if the service isn't safe, we hope that Uber will make the required improvements so customers can continue to enjoy the service.



FIRST LOOK

Honor Magic Watch 2 www.hihonor.com/uk

Beyond Apple Watch and Fitbit, the wearable market has been thin on products of late, so we're pleased to see Huawei-owned Honor step up with an updated version of its excellent, ultra-thin Magic Watch.

The Honor Magic Watch 2 offers both a 42mm and 46mm version – each featuring an always-on AMOLED display of 1.2in or 1.39in, depending on the model. Colours remain sharp, even outdoors, and it claims to let you add your own photos as a background, although we couldn't actually find a way to do this so the function may be planned for a future patch.

In every sense, this feels like a watch that's learnt from the mistakes of previous wearables. The only area

that needs work is the need to download MP3s via the Magic Watch 2 app – an antiquated process in this age of streaming media.

Size isn't the only difference between the two models. One of the core problems with most wearables is that, like your phone, they need to be charged every night, but Honor's 42mm model delivers an impressive week-long battery life, while the larger version claims to double that.

The 0.9mm-thick timepiece runs on Huawei's proprietary operating system and includes 4GB of storage, Bluetooth calling and impressively loud speakers. There are 15 different fitness modes to help you track, monitor and manage



different exercises, including the ability to log fitness records, so you can look back at past workouts. The built-in heart-rate monitor offers the nifty trick of buzzing an alert when your heart-rate fluctuates beyond normal levels.

There's also a sleep tracker that identifies six common sleeping disorders and provides remedies to improve your bedtime habits.

The Magic Watch 2 looks the business – especially when equipped with the replaceable leather strap – but it's primarily designed to keep you fit and healthy. It's released on 12 December, priced at £150 and £160.

Credit: Honor



WHAT'S THE RUMOUR

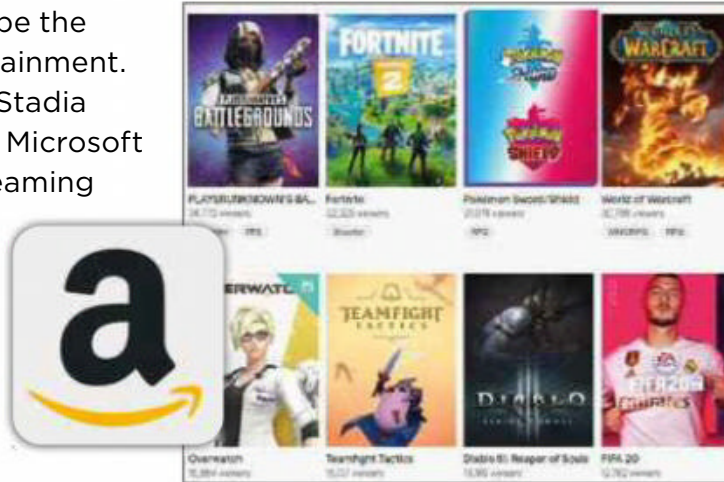
Is Amazon launching a game-streaming service?

Game streaming looks set to be the next big thing in online entertainment. Google recently launched its Stadia service to mixed reviews, and Microsoft and Sony have confirmed streaming services are on the way. Now, according to a new report, Amazon is primed to join them next year.

Rumours have long been circulating that the online shopping giant has its eye on game streaming. Those in the know suggest the company has quietly been recruiting people from the games industry to fill new roles within Amazon Web Services, which sources say is involved in developing game-streaming technology.

According to one job ad, Amazon says it wants to “drive innovative new use cases like machine vision and game streaming”. Another claimed: “We believe the evolution that began with arcade communities... growing to the live streams and e-sports of today, will continue to a future where everyone is a gamer and every gamer can create, compete, collaborate and connect with others at massive scales”.

It's believed that the service will be delivered through the Amazon-owned Twitch, where gamers broadcast gaming sessions to millions of viewers. Like Google and Microsoft, Amazon already has much of the infrastructure in place, with servers located around the globe.



The benefits of game-streaming are clear: no need to buy prohibitively expensive consoles or update games before you can play them – so long as you have a decent internet connection, of course.

LIKELIHOOD RATING



Amazon has already shown an interest in gaming by buying Twitch in 2014. This new service would be an extension of that platform, and help bolster Twitch's viewing figures.

We only hope that Amazon offers a Prime-style games subscription package, rather than demanding we pay full price for individual games we only own in a virtual sphere – a mistake Google continues to make.

WEBOMETER

WE LIKE...

Google Photos now lets you tag people

Google Photos is rolling out a feature that lets you tag people when it recognises faces in photos – just like its predecessor, Picasa. Swipe up on an image to access the new People option, then tap the edit icon to identify and tag the subjects.



NordVPN launches two new services

WebUser Gold Award-winner NordVPN has launched a password manager, NordPass, and an encrypted storage service, NordLocker, both with free and paid-for versions. We'll be taking a close look at the two tools in our next issue.



WE DON'T LIKE...

Facebook and Twitter users' data exposed

Facebook and Twitter said that the personal data of hundreds of Android users may have been improperly accessed when they used their social accounts to log into third-party apps from the Google Play store. The apps have since been blocked.



Amazon deemed worst for tax avoidance

Amazon has been named the worst tech firm for “aggressively avoiding” global tax over the past decade. Tax-transparency campaign group Fair Tax Mark said the retail giant paid just \$3.4bn (£2.6bn) on worldwide profits of \$26.8bn (£20.7bn).



What's new on Kickstarter

Our favourite new project on the crowdfunding site

See Sense AIR

bit.ly/seesense490 | From £74

Statistics suggest that a bicycle is stolen in Britain every six minutes, so it's worth investing in a tracking device. See Sense AIR uses smart sensors and the Narrowband Internet of Things network to help you locate your bike to the nearest couple of metres via its mobile app. It also has a self-defence setting that sounds an alarm and sends you a text message the moment someone moves your bike. The device is small, lightweight (80g) and fits unobtrusively to your bike, and has a battery life of three months. Funding closes on 15 December, so get in there fast!



Stay Safe Online

News about the latest threats and advice from security experts

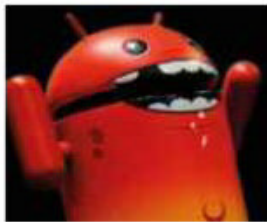
SECURITY ALERT! | What's been bothering us this fortnight

Security flaw found in Android camera

A vulnerability affecting Google and Samsung smartphones could allow hackers to remotely spy on users through their phone's camera and speakers, according to researchers at security firm Checkmarx.

The team uncovered a way for attackers to take photos and videos, record phone conversations, identify users' locations and more. All this could be done covertly, the researchers said, even when the phone was locked. The loophole, which stemmed from permission-bypass issues, could have left hundreds of thousands of Android users open to spying.

Checkmarx submitted its vulnerability report to Google's



Android security team on 4 July and, on 29 August, Samsung confirmed that the vulnerability also affected its devices. "We appreciate Checkmarx bringing this to our attention and working with Google and Android partners to coordinate disclosure," said a Google spokesperson. "The issue was addressed on impacted Google devices via a Play store update to the Google Camera application in July 2019. A patch has also been made available to all partners."

bit.ly/camera490

Disney Plus users targeted by hackers

Hackers reportedly hijacked thousands of Disney Plus accounts just hours after the service launched in the US on 12 November (see FAQ on page 38). An investigation by tech-news site ZDNet found login details for many of the hacked accounts available for sale



and for free on hacking forums.

Disney Plus attracted 10 million customers in its first 24 hours, with the volume of traffic leading to several technical problems. Amid the flood of complaints, some users reported a total loss of access to their accounts, describing attacks in which hackers logged them out on every device and changed their email addresses and passwords.

Some users had reused passwords for their Disney Plus accounts, meaning hackers could have used details harvested from other security breaches. Others, however, used unique passwords, suggesting credentials were obtained through data-stealing malware.

Rival streaming services have been exploited in the same way, with Amazon Prime, Netflix and Hulu accounts frequently traded on hacking forums.

bit.ly/disneyhack490

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT:
Vyacheslav Zakorzhevsky,
head of anti-malware
research at Kaspersky
(www.kaspersky.co.uk)



Q What are cybersecurity companies doing to tackle the rise of stalkerware [see FAQ, Issue 489]?

Katherine Jameson,
Facebook

A As well as the primary threat toward the

intended victims, stalkerware is a form of technological abuse and the security risks it brings – the malware can leak victims' data and breach device protection – should concern everyone.

At Kaspersky, we believe it's necessary for the cybersecurity industry to unite to protect users against stalkerware and to bring in the experience and expertise of non-profit organisations that help victims of domestic abuse every day, so we've founded the Coalition Against Stalkerware together with Avira, the Electronic Frontier



“ The security risks that stalkerware brings should concern everyone **”**

Foundation, the National Network to End Domestic Violence, G Data Cyber Defense, the European Network for the Work with Perpetrators of Domestic Violence, NortonLifeLock, Operation Safe Escape, Malwarebytes and Weisser Ring.

Our key objectives include raising awareness, improving detection and mitigation of stalkerware, and educating victims and advocacy organisations about technical

aspects. The Coalition has also launched a website (www.stopstalkerware.org) that provides advice on finding out if there's stalkerware on your device and what to do about it, and provides contacts for organisations that deal with domestic violence and can help prevent or mitigate the damage.

We also hope to change the formal legal status of stalkerware, making it illegal to spy on people without their consent.

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Learn the truth about SEO

SEO (Search Engine Optimisation) is all about improving how well your site ranks in search results but it's often seen as a dark art that professional sites will spend lots of money on. That means it's worth sitting up and taking notice when people with inside information talk about the inner workings of search engines. Kaspar Szymanski is an ex-Google employee who worked on the Search Quality team, which writes the algorithms that Google uses to ensure the best sites rise to the top. He's recently busted a series of SEO myths for the Search Engine Land website at bit.ly/myth490, which is well worth a read.

Let it snow!

In the run up to Christmas, what could be more fun than dropping



a cheesy snow effect onto your website to get your visitors in the festive spirit? Engage (bit.ly/snow490) has five snow effects you can add to your site by copying and pasting code into your HTML and CSS files. Just remember to make a backup of your site without the snow so it's easy to restore it in the new year.

Deal of the Fortnight

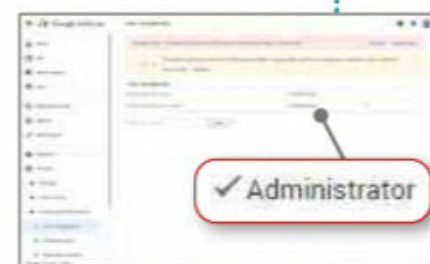
TsoHost (www.tsohost.com) has a sale on its WordPress web hosting, offering the first year of its Startup package for £14.40.

Web-building Helpdesk

Q Many years ago, I used an old email address to set up a Google AdSense account to put ads on my website. Can I now transfer this over to my newer Google account?

Eric Hanson, via email

A Yes. Go into your AdSense account using your old address and choose Account, 'Access and Authorisation', then 'User management'. Enter the address you want to use into the box and click the Invite button. It appears in the row above, with an empty tick box labelled Administrator. Tick this to have an email sent to the new address.



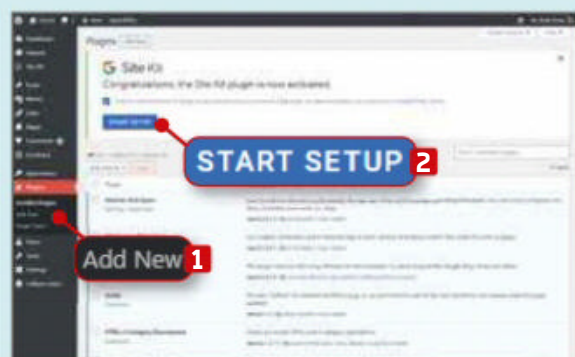
Open the message and click the verification link. You can then sign into the account with the new address. If you wish, you can then remove the old email address from the account so it can't be used to log in.

Andy Shaw, Technical & Reviews Editor

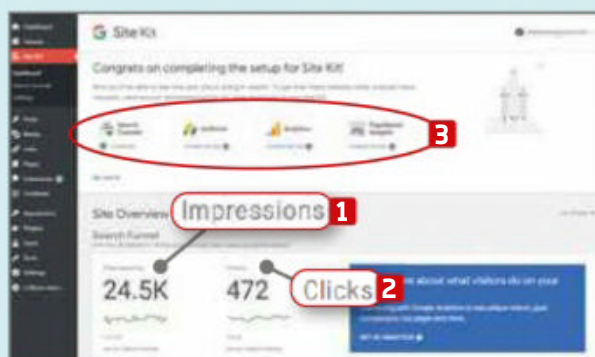


MINI WORKSHOP | View Google reports directly in your WordPress dashboard
Google Site Kit: bit.ly/sitekit490 |  10 mins | Google account and WordPress website

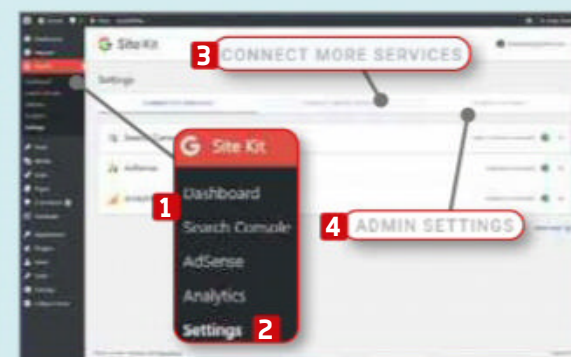
Site Kit is Google's new WordPress plugin, which brings invaluable information from services such as Analytics and Search Console straight into your WordPress dashboard



1 Install the plugin as usual by searching, installing and activating it from the Plugins, Add New option in your Dashboard. **1** Choose whether to share anonymous stats with Google and click Start Setup, **2** then 'Sign in with Google'. It will need permission to access your site and account details.



2 Your account's Search Console should be connected by default, so you can immediately see how visible your site is **1** and how many clicks you're getting in Google. **2** Scroll down for more data, including the top search terms that bring people to your site. Use the boxes **3** to connect more services – we recommend adding everything you use.



3 You can access the Site Kit Dashboard and each of the individual services from the menu. **1** Click Settings **2** if you want to disconnect services or add more later. **3** You can switch Google's anonymous tracking on or off from the Admin Settings. **4**

★ Best New Websites

Site of the Fortnight

SHOPPING

NEW

Argos Book of Dreams

argosbookofdreams.co.uk

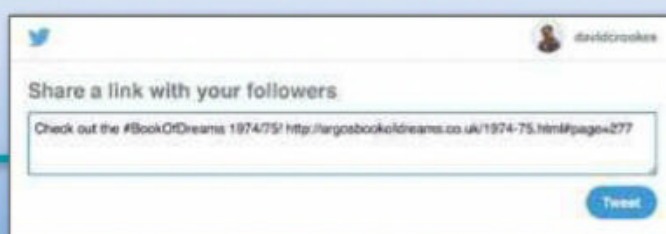
Remember grabbing hold of the bumper autumn-winter Argos catalogue on the day it came out and circling the toys you wanted for Christmas? Well, now you can reminisce about the goodies you received (and missed out on – oh, how we wanted a Mr Freeze!) by flicking through the scanned pages of Argos catalogues going back to the 1970s. Choose a decade and a cover, then click the arrows to go back and forth through the digital pages or use the thumbnails underneath. The site feels a little clumsy at times but the memories will come flooding back.

Our rating



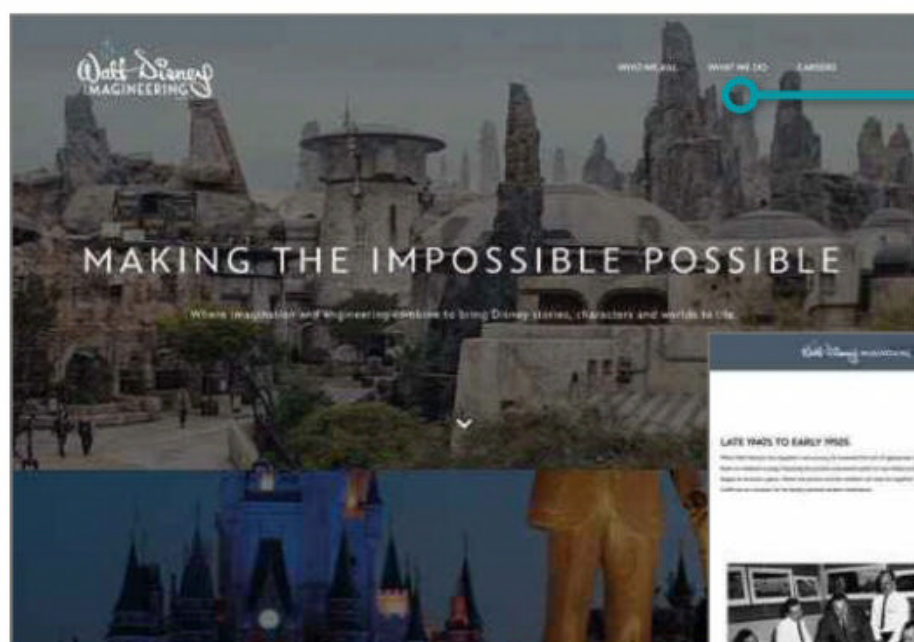
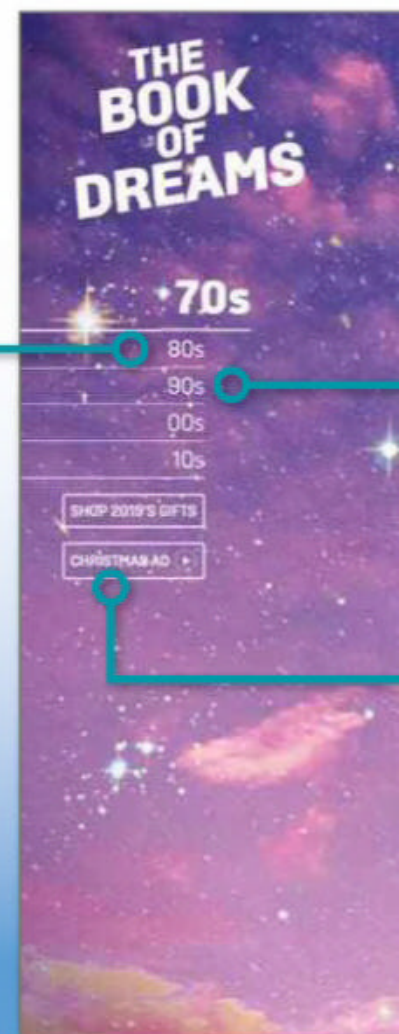
FLICK THROUGH

To browse a catalogue, click the arrows or thumbnails, or insert a page number in the URL



SHARE A LINK

Select the Facebook or Twitter icon to create a shareable link to a page



ENTERTAINMENT

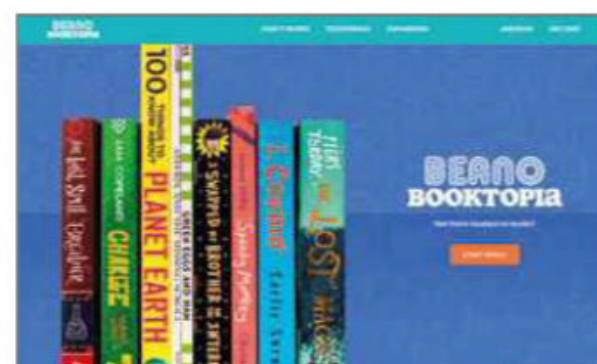
RELAUNCH

Walt Disney Imagineering

bit.ly/disney490

Walt Disney Imagineering is the research and development arm of the entertainment giant that's behind the creation of the company's theme parks and attractions. Aside from sporting the division's new logo, this revamped website takes a look back at its history, following a timeline from the late 1940s to the present day and peppering key events with lots of great archive photos. It also gives visitors a glimpse behind the scenes using a series of images, and lets you learn about the worldwide projects the company is involved with. It's a fun way to see how new Disney rides and fantasy lands are created by a very talented team, although it is a tad self-congratulatory.

Our rating



NEW

BOOKS

Beano Booktopia

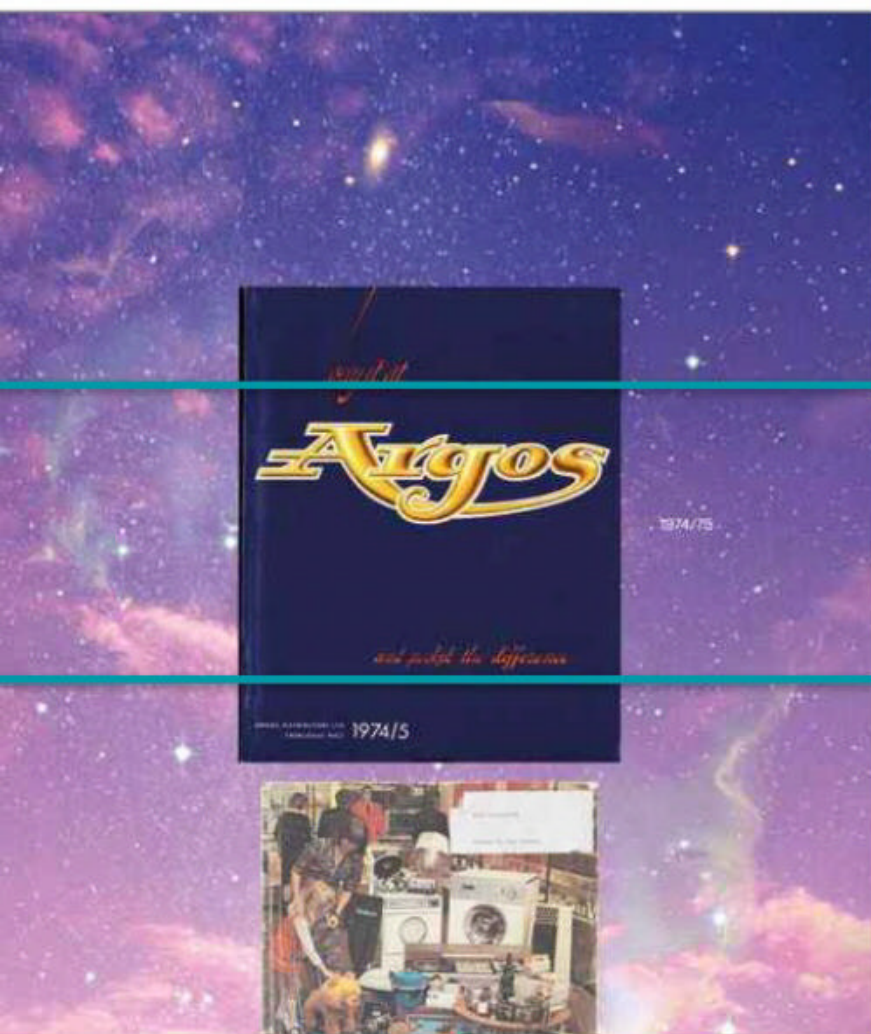
beanobooktopia.com

Not content with making kids laugh for more than 80 years, *The Beano* now wants to get children into reading books. It has launched a subscription-based club that sends a work of fiction or non-fiction to a child every four weeks and, while it doesn't use its many comic characters to promote the scheme, all is clearly explained on this colourfully designed site. New subscribers receive a welcome pack by email and/or post. The books are then based on the answers given by children in an online quiz. There are already several testimonials about the club and a comprehensive FAQ, too.

Our rating



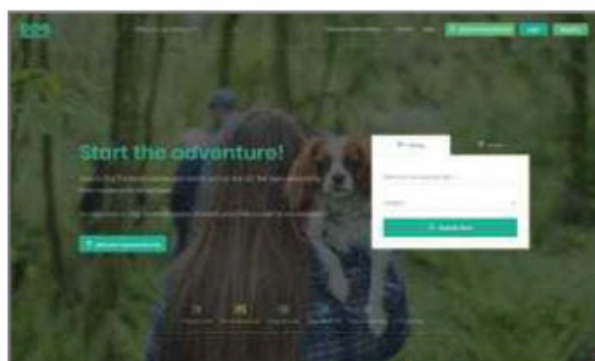
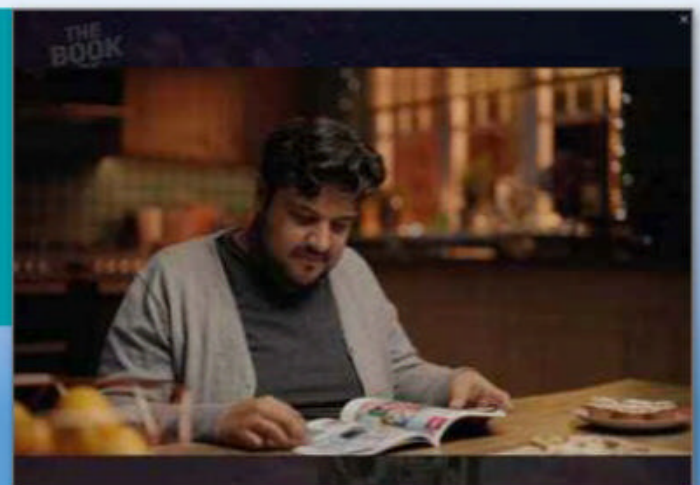
We review this fortnight's best new and relaunched websites and rate them for content, design and features



ZOOM IN
Zoom into pages using your mouse or touchpad. The site also works on mobile devices

WATCH THE CHRISTMAS AD

As well as browsing the store's current Christmas gifts, you can catch the latest Argos advert



RELAUNCH

PETS

Dog Furiendly

dogfuriendly.com

Many dog owners have to “paw-se” for thought before planning an adventure with their pet because not every pub, shop, restaurant or visitor attraction allows dogs. Enter a town or city in this relaunched website and indicate what you're hoping to do there to see a list of dog-friendly places and events, based on attributes such as their “furiendliness”, service, space and value. You can now explore entries via a map and there's a new search engine for events. The site is also social, allowing owners to create profiles, send messages, follow other users and dogs, and sign up for activities.

Our rating



NEW

FOOD

Yo!

yosushi.com

As many chefs will say, we eat with our eyes first, and restaurant chain Yo! is providing a veritable visual feast with its revamped website. Right from the start, a video showing food being prepared will arrest your peepers and, as you scroll down or peruse the menu, you'll see a host of delicious looking dishes. Each item is accompanied by its calorie count, nutritional and allergy information and a list of complementary food. A search engine lets you find the closest branch and you can learn about about Yo's sushi school and discover the latest money-saving deals to dine out on.

Our rating



RELAUNCH

ENERGY

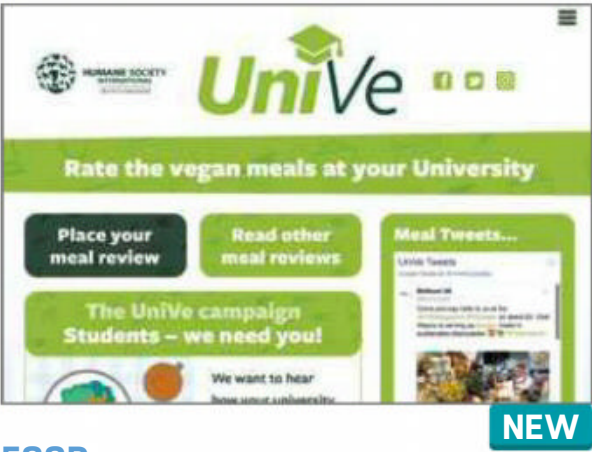
AvantiGas

www.avantigas.com

AvantiGas supplies LPG products for off-grid homes and businesses but it's previous website lacked energy. The cluttered homepage and clumsy navigation have been fixed and instead of the 'click here' prompts, you can now get a quote and learn more about the products. Potential customers can ask about specific services via the prominent search bar or just visit the accessible help and support page. We were disappointed that the second news story is from 2017 but, overall, it's a smarter offering that does a much better job of answering questions on what AvantiGas has to offer.

Our rating





NEW

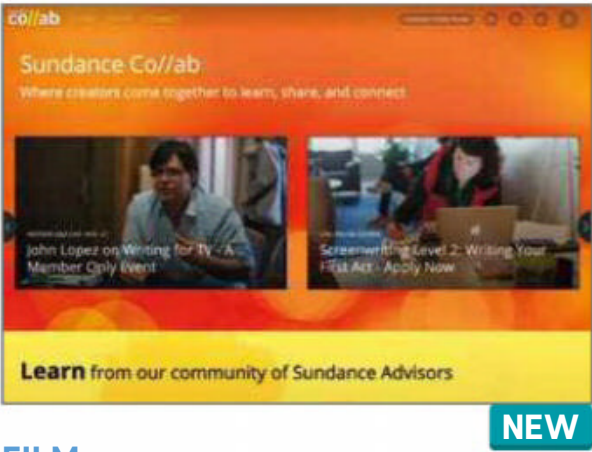
FOOD

UniVe

www.univegan.org

The growing appetite for plant-based food has led animal-rights organisation the Humane Society International UK to invite students to rate their university's vegan meals. This new site encourages visitors to give their scores out of five, leave comments and upload images, with the aim of discovering which universities need more vegan options. The top choices for vegans are listed, and curated tweets are featured in a simple layout that's pleasing on the eye and easy to navigate. It's still early days, however, with very few reviews to sink your teeth into. As more people hear about the site, we're sure that the content will build.

Our rating ★★★★★



NEW

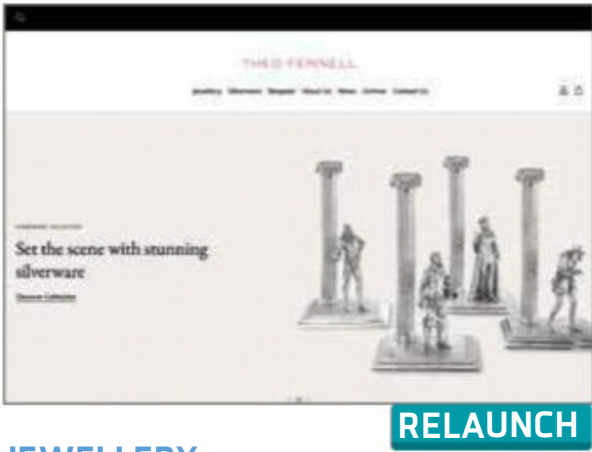
FILM

Sundance Co//ab

collab.sundance.org

If you're a budding filmmaker, then this fantastic set of resources is sure to reel you in. Created by the Sundance Institute, it offers practical, hands-on video tutorials on topics such as writing, documentaries and the casting process. You need to sign up to access the free video library, chat in the public forums and enter a monthly online challenge, while Master Classes and member-only programs are paid-for. But the quality is high, and the depth and breadth of the content is very impressive. Even the section that's packed to the rafters with links to insightful articles posted on other websites is worth a browse.

Our rating ★★★★★



RELAUNCH

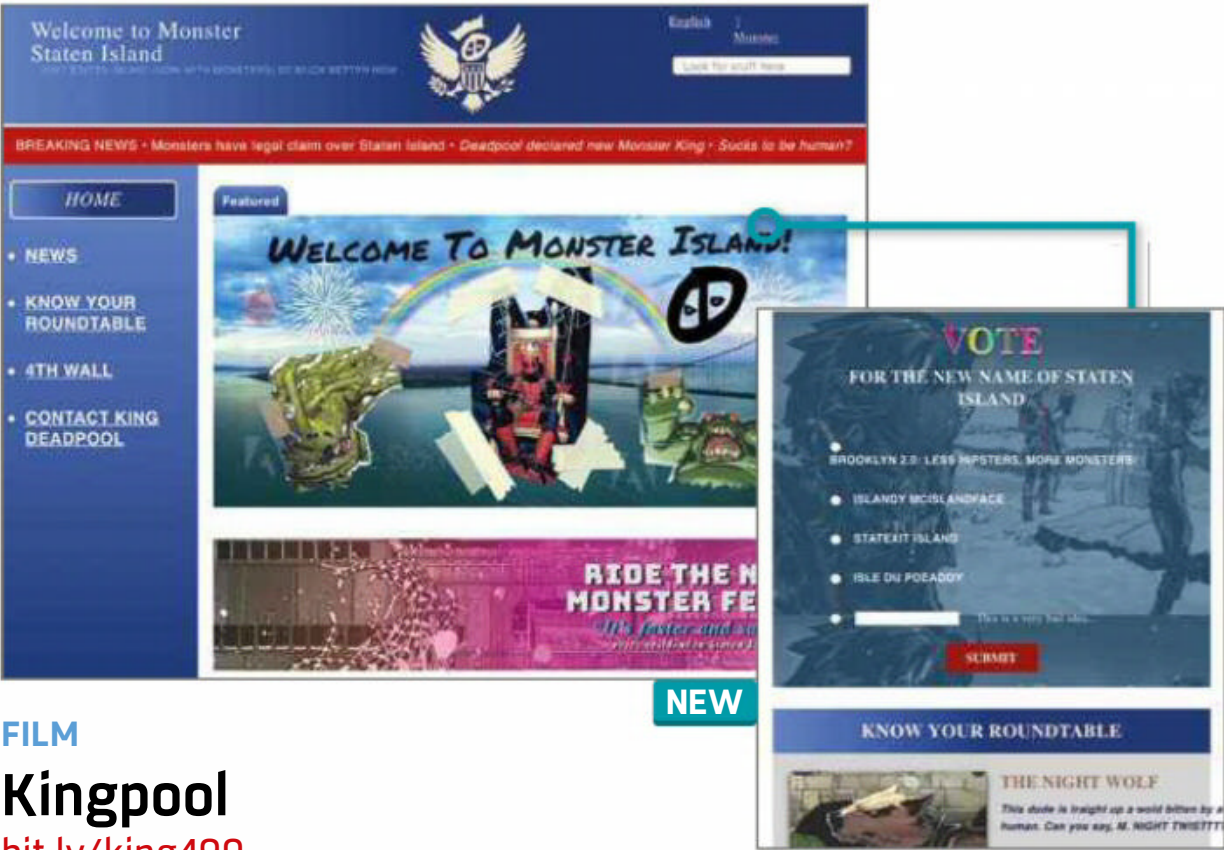
JEWELLERY

Theo Fennell

www.theofennell.com

British jewellery and silverware designer Theo Fennell has brought some sparkle to his company's website. Not only does it showcase his various collections, but you can also go behind the scenes, learn more about the company's history and meet the craftspeople behind the many items on sale. The Masterworks section picks out several unique (and expensive) pieces such as a King Henry VIII Brooch (£46,500), and we enjoyed looking at the more offbeat items, including a silver lid for a jar of Marmite (from £145). The news section is also worth checking, with its interesting mix of product news, insights and coverage of events.

Our rating ★★★★★



NEW

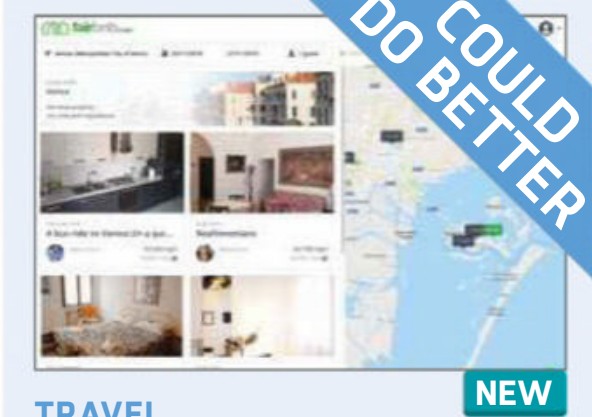
FILM

Kingpool

bit.ly/king490

Fans of Deadpool will love seeing the Marvel superhero lording it over monsters on Staten Island in a new comic-book interpretation. By visiting this site, you can delve a little deeper into this new world but – be warned – it is being run by a creature called Bellus, which is why there are some dead links, spelling mistakes and headlines that break out of their boxes (perhaps a nod to Deadpool's habit of breaking the fourth wall). Other delightful touches include a vote on the new name for Staten Island with an option to suggest your own (something the site admits is a “very bad idea”). There's a link to buy the comic book, too.

Our rating ★★★★★



NEW

TRAVEL

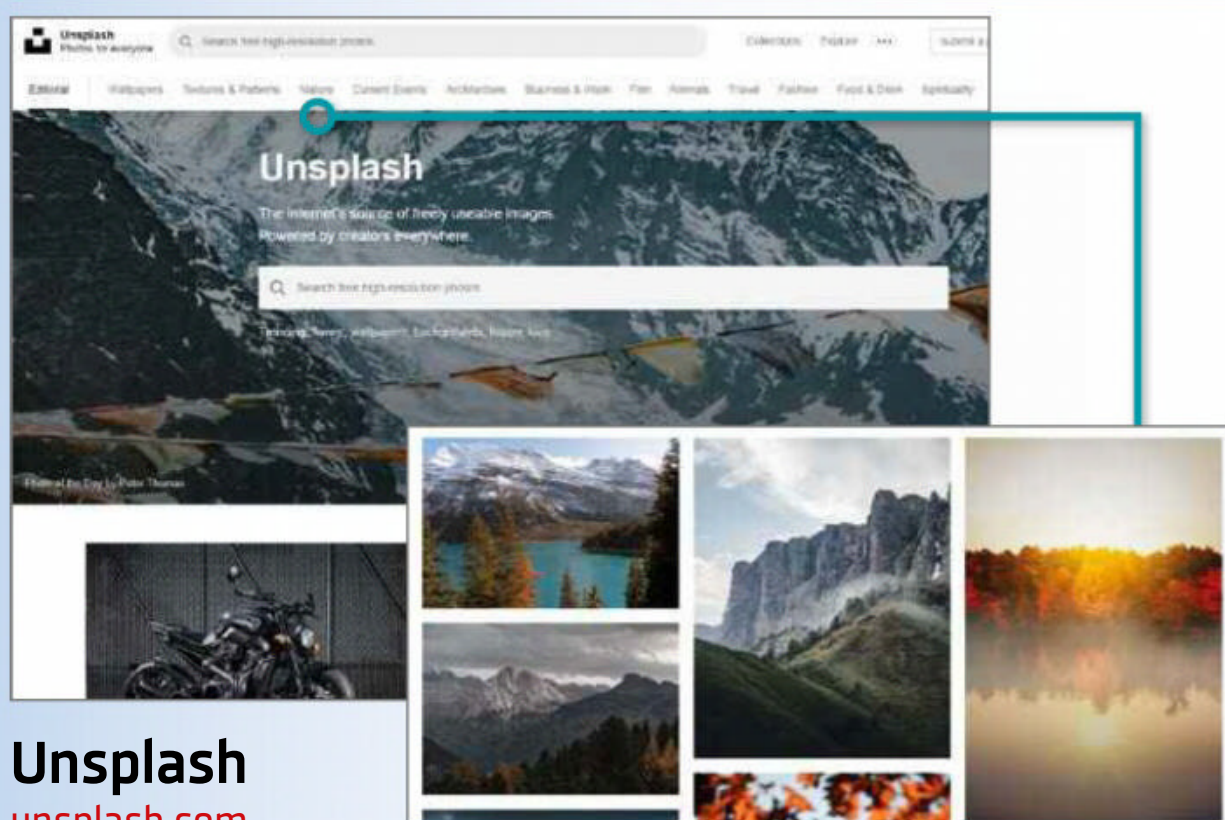
Fairbnb.coop

fairbnb.coop

Created as an antidote to Airbnb's negative impact on city neighbourhoods, Fairbnb.coop only lists apartments that support community projects. As such, it donates half its commission to local social schemes (which you choose when you book), although currently it only covers Valencia, Barcelona, Bologna, Venice and Amsterdam. So far, the site looks promising but you need to sign in to use it and initial user-friendliness is poor. However, it's a good idea and the listings are suitably descriptive. Requesting bookings is also easy.

Our rating ★★★★★

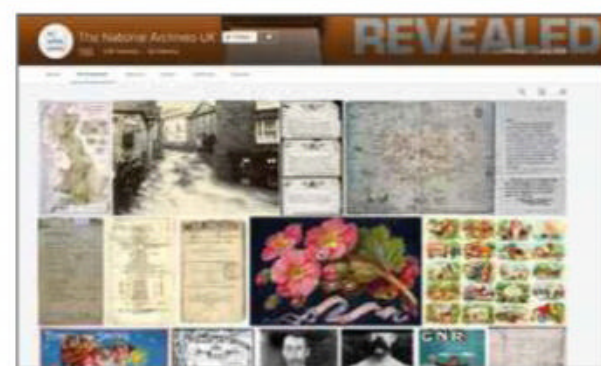
ESSENTIAL BOOKMARKS THIS ISSUE: Perfect photography sites



Unsplash

unsplash.com

Search engines such as Google Images are great for finding photos, but you may not be able to use them in your own projects if they are subject to copyright restrictions. Unsplash provides a solution by letting you download over a million high-resolution images for free – without breaching anyone’s copyright. Its content is provided by a community of more than 150,000 amateur and professional photographers, who let you reuse their work in any way you want (crediting the creator is encouraged but not essential). Browse categories including Wallpapers (for PC and phone), Nature, Travel, Animals, Food & Drink and People, and download the shots you want in one click, with no registration required. You can also submit your own photos to Unsplash.



The National Archives on Flickr

[bit.ly/archives490](https://www.flickr.com/photos/na-uk/)

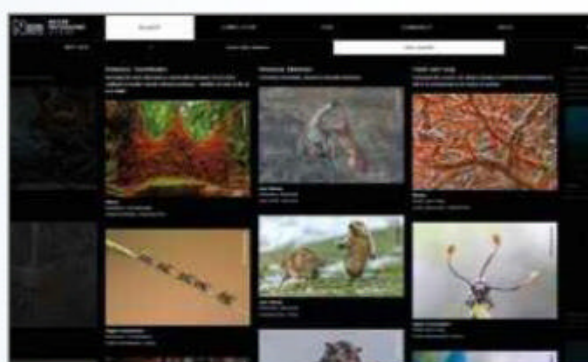
With more than 20,000 images spanning 1,000 years of British history, the National Archives’ Flickr site only provides a sample of the 11 million items in its collection, but it’s still a rich, illuminating resource. There are black-and-white photos depicting how we used to live, colour shots of Swinging London, vintage posters and postcards, wartime maps and news stills, and even an unconvincing ‘ghost’ captured on camera in 1899. You can either scroll through the seemingly endless content, use keyword tags to browse by topic or check out the themed albums and selection of ‘faves’. Many of the images are copyright-free and available to share and download.



New Old Stock

nos.twinsnd.co

This collection of vintage photos from the public archives not only provides a fascinating glimpse into the past but it also lets you download its gorgeous black-and-white images, which are “free of known copyright restrictions”, for your personal use. New Old Stock is built on Tumblr, which means it adopts a blog-style format that makes its presentation of photographs somewhat random with regard to when and where they were taken. Most appear to be from the early 20th Century, from all over the world, with a smattering of colour pictures and posters, too. There’s a search box tucked away in the top-left corner if you’re looking for a nostalgic photo of a specific location or subject.



Wildlife Photographer of the Year

[bit.ly/wildlife490](https://www.wildlife-photography.com/)

In October, the Natural History Museum announced the winner and runners-up of its annual Wildlife Photographer of the Year competition. If you can’t make it to the exhibition to view the top 100 entries, including the winning image of “a Tibetan fox pouncing on a startled marmot”, the good news is that you can enjoy them all in your browser. Visit the link above, choose either the Adult or Young awards links, then click Lightbox for a slideshow of gorgeous wildlife shots. Click a picture to read about where the photo was taken, who by and the camera they used, and to vote it as your favourite. Entries for next year’s competition must be submitted by 12 December, so get in there quick!



A beautiful blue sky

[bit.ly/colour490](https://www.colour490.com/)

This exhibit on Google’s sprawling Arts & Culture website offers a brief but fascinating overview of the emergence of colour photography, dating back to the 1840s. It explains and illustrates attempts by scientists, researchers and manufacturers to overcome the technical challenge of shooting in colour. View the first experiments, from photographing the solar spectrum to using heliochromy to overlay colour filters; learn about the hardware involved, such as the melanochromoscope; and meet the pioneers determined to take photography beyond black and white. There are lots more archive photos across the Arts & Culture site.



What To Watch Online

Pick of the fortnight

NETFLIX

Watch Henry Cavill as Geralt in *The Witcher*

From 20 December

When *Superman* actor Henry Cavill was cast as the titular Witcher in Netflix's book-turned-game-turned-TV adaptation, fans were rattled. Buff dreamboat as grizzled, grey-haired, antisocial Geralt? But Cavill, a fan of *The Witcher* who lobbied for the role, may surprise us.

Showrunner Lauren Schmidt Hissrich (who also created Netflix's *Power*) wanted to depict a younger, more conventionally sexy Geralt – less solitary than in Andrzej Sapowski's 1990s fantasy novels or the wildly successful RPG games. Other roles, such as charismatic knight Cahir and Geralt's love interest Yennefer, are given more prominence here than in the books or games. That aside, the show is broadly faithful to Sapowski's stories, particularly *The Last Wish* (summarised by the Witcher Wiki at bit.ly/lastwish490).

The Witcher's eight episodes come to Netflix on Friday 20 December at bit.ly/witcher490, where you can watch the teaser and trailer for free. Season 2 is already on its way, due in 2021.



Watch *The Grand Tour's* 4th season in 4K

From 13 December

Clarkson, May and Hammond only signed up for three seasons of *The Grand Tour* after leaving the BBC in 2015, but the show was so profitable that it seems Amazon has written the team a blank cheque.

Season 4 sees the trio at large in locations including Thailand, Laos, Myanmar, Malaysia and Singapore – all in ultra-high definition 4K. They start in Cambodia and Vietnam with the feature-length episode 'Seamen', whose innuendo-laden trailer you can watch at bit.ly/tourtrail490. Season 4 joins the



back catalogue on Amazon Prime from 13 December at bit.ly/grandtour490.



Watch darts, wrestling and Sports Personality

From 13 December

Get in the festive spirit by streaming three of the sporting world's more convivial events. First up is the World Darts Championship, live from London via Now TV, starting 13 December. Watch with a Sky Sports Pass, currently £20 per month (normally £34) via Sky's Darts page (bit.ly/darts490).

Then it's on to wrestling for WWE's annual TLC jamboree (that's 'Tables, Ladders & Chairs' – all allowed as props), live from the US on 16 December. It, too, is on Now TV, but only via pay-per-view Sky Sports Box Office – price is unconfirmed but could be up to £20 (bit.ly/boxoffice490). You can watch for free with a 30-day free trial from WWE Network (www.wwe.com/wwenetwork) but remember to cancel



before you're charged £9.99 per month.

The BBC Sports Personality of the Year is free to watch, of course, via the iPlayer on 15 December. Follow the interactive shindig at bit.ly/spoty490 and on Twitter at [@BBCSpoty](https://twitter.com/BBCSpoty).



Watch Hopkins and Pryce as *The Two Pops*

From 20 December

Anthony Hopkins and Jonathan Pryce are perfectly cast in this Netflix Original



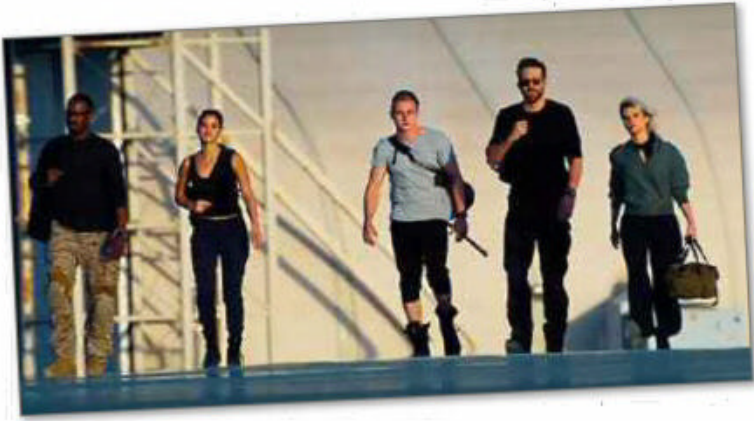
We reveal what's new on Netflix, BBC iPlayer, Amazon Prime Video and other streaming services

film about the friendship between the two most recent popes. These fine actors are dead ringers for the men they play: current Pope Benedict XVI (Hopkins) and predecessor Pope Francis (Pryce). *The Two Popes* arrives on Netflix on 20 December at bit.ly/pop490, where you can watch the trailer for free.

N Strap yourself in for *6 Underground*

From 13 December

Deadpool star Ryan Reynolds drops the witticisms to play a tech billionaire who fakes his death and recruits a team of vigilantes in this new blockbuster from Michael Bay. Judging by the trailer, free to watch at bit.ly/6under490, this is classic Bay: explosions, machine guns, cars, shouting. Let's hope the Friday 13th arrival date isn't bad luck for Netflix, which bankrolled the movie to the tune of \$150m.



Go deeper into space in *The Expanse*

From 13 December

Fans were horrified when Syfy cancelled this beautiful sci-fi series after three seasons. The show had gone from good to superb in Season 3, which ended with the discovery of portals to other

Four Weddings and a new StarzPlay app

StarzPlay has launched on Android and iOS, meaning UK users no longer have to pay two subscriptions to watch it. The StarzPlay app is free to download, then costs £4.99 per month after a 7-day trial (www.starz.com/gb/en).

Previously, StarzPlay was only available in the UK via subscription TV services (Virgin Media and Apple TV) and as an Amazon Channel, where it costs £4.99 plus £7.99 for Prime – a hefty £13 per month.

Hulu's new *Four Weddings and a Funeral* spin-off, arriving on 12 December, is the biggest date for your StarzPlay diary. Watch the trailer at bit.ly/4weddings490. StarzPlay has just added three other new shows: paranormal thriller *The Rook* (watch the trailer at bit.ly/rook490), psychological horror *Sanctuary* and Spanish drama *Instinto*. Find more at bit.ly/starzshows490.



habitable solar systems. Happily, Amazon saved the show and Season 4's 10 episodes now join Seasons 1-3 on Amazon Prime at bit.ly/exp490.

You can watch the trailer there for free, plus a 15-minute catch-up with the story so far. Season 5 is due next year.

N Watch new seasons of *You* and *Lost in Space*

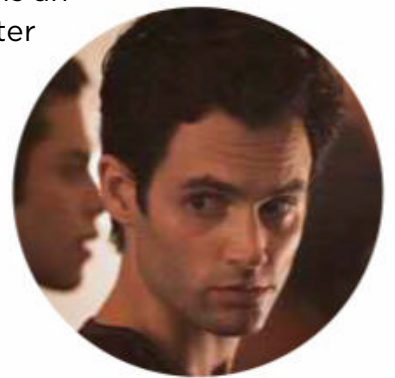
From 24/26 December

Netflix bookends Christmas Day with two returning shows. First comes sci-fi remake *Lost in Space*, which boasts Emmy-winning special effects and



a great cast, including Toby Stephens and Molly Parker. Season 2 arrives on 24 December at bit.ly/lost490, where you can watch the trailer for free.

Stalker thriller *You* is an unnerving rollercoaster that'll send you running for your privacy settings. Penn Badgley returns as bookseller Joe, now in LA. Watch Season 2 from 26 December at bit.ly/youflix490.



In case you missed it...

Glenda Jackson is back on screen after 25 years as a woman developing



dementia in *Elizabeth is Missing*. The feature-length drama, based on Emma

Healey's 2014 page-turner (bit.ly/eliz490), is available now via the BBC iPlayer.

Netflix's major new film is *Marriage Story*, which stars Scarlett Johansson and Adam Driver as a divorcing couple (bit.ly/marriage490). Also new to Netflix are true-crime documentary *Dream/Killer*, serial-killer miniseries

The Confession Killer (bit.ly/confess490) and vampire fantasy *V Wars* (bit.ly/vwars490).

Amazon Prime has Season 2 of medical drama *New Amsterdam* (bit.ly/newam490), while Now TV is on the sixth and final season of US political drama *Madam Secretary* (bit.ly/madsec490).

What to watch online... this Christmas

Watch the *Gavin & Stacey* Christmas reunion

25 December

"See you on Christmas Day," teased James Corden on Twitter, announcing a one-off Christmas comeback for the much-loved sitcom he wrote with Ruth Jones (bit.ly/corden490). Six months later, the Beeb finally released a trailer – and hid it deep in the iPlayer. Skip to the end of *Gavin & Stacey* Series 3, episode 6 (bit.ly/gavtrail490) and – hey presto – up pops 2019-era Rob Brydon as Uncle Bryn, failing at Christmas dinner while Stacey (Joanna Page) and Nessa (Jones) look on. Matthew Horne, Alison Steadman and Larry Lamb are also back for the special. If you need a catch-up, tuck into all 18 half-hour episodes at bit.ly/stacey490.



Watch Mackenzie Crook as *Worzel Gummidge*

From 21 December*

Mackenzie Crook writes, directs and steps into Jon Pertwee's straw-stuffed boots for this new two-part retelling of Barbara Euphan



Todd's *Worzel Gummidge* books (bit.ly/todd490). The cracking cast includes Vicki Pepperdine as Aunt Sally, plus Michael Palin, Zoe Wanamaker and Steve Pemberton. The two hour-long films are due to arrive on the iPlayer the weekend before Christmas. Meanwhile, treat yourself to these opening credits from 1979: bit.ly/worzel490.

Watch Guy Pearce as Scrooge in *A Christmas Carol*

From 22 December*

Guy Pearce is a haunting and haunted Ebenezer Scrooge in this three-part Dickens adaptation by *Peaky Blinders* writer Steven Knight. The trailer is captivating (bit.ly/carol490) and the impressive cast includes Andy Serkis, Stephen Graham and Jason Flemyng, who took over from the late Rutger Hauer.

If you prefer your Dickens with songs, *The Muppet Christmas Carol* is back on Now TV at bit.ly/muppet490.



too, will be available via the iPlayer. Other films from the same stable are on Amazon Prime Video, including *The Gruffalo* (bit.ly/gruffalo490) and *Stick Man* (bit.ly/stick490).

Channel 4 boasts Benedict Cumberbatch, David Walliams and Robbie Williams (singing the theme, anyway) for its one-off Judith Kerr adaptation, *The Tiger Who Came to Tea* (bit.ly/tiger490), due on All 4 at Christmas.

Watch Peter Capaldi in *Martin's Close*

24 December*

Mark Gatiss grew up watching the BBC's *A Ghost Story for Christmas* films in the 1970s and, in 2018, he revived the tradition with *The Dead Room* (now on YouTube at bit.ly/deadroom490). This year, he enlists his *Doctor Who* colleague Peter Capaldi to retell MR James's chilling *Martin's Close*, coming to the iPlayer late on Christmas Eve. For a real treat, check out the 1970s *Ghost Story* episodes at bit.ly/ghost490.

Gatiss's feature-length *Dracula* arrives over the new year – see next issue for details. Meanwhile creep out to the teaser at bit.ly/drac490.



Watch *The Snail and the Whale* and *The Tiger Who Came to Tea*

From 25 December*

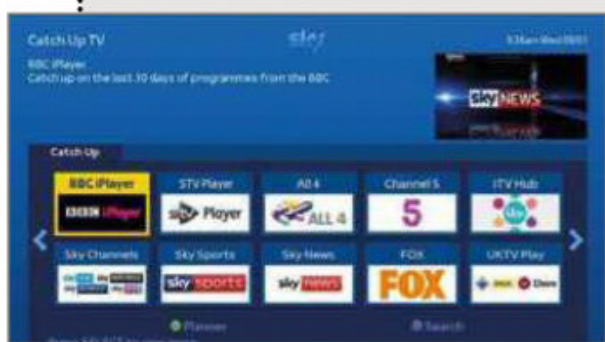
Diana Rigg, Sally Hawkins and Rob Brydon lend their voices to the Beeb's annual Julia

Donaldson adaptation, *The Snail and the Whale*. Last year's *Zog* gets a Christmas morning repeat, so it,

iPlayer comes to Sky - with trackers

Sky Q has integrated the iPlayer app and BBC red button service, following a new partnership between the BBC and Sky. The once-bitter rivals now say they're "exploring" adding the Beeb's radio and podcasts app BBC Sounds to Sky Q and Now TV.

In less welcome news, the BBC will take advantage of Sky's PromoSmart tracking technology to display targeted trailers based on your viewing habits, and possibly also on your age and location (bit.ly/bbcsky490).



* date to be confirmed at time of writing



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Product Test

We test and compare the latest products

Amazon Echo Studio

The Echo Studio smart speaker offers unique features and a powerful sound that belies its relatively small size

There's no doubting the usefulness of Amazon's existing range of smart speakers but, so far, they haven't been the best for listening to music. Compared to the Apple HomePod, for example, which focuses more on the speaker element than the smart artificial intelligence, the sound quality of Amazon's speakers has been disappointing.

The Echo Studio addresses this. It's nearly £100 cheaper than the £279 HomePod and, while it still can't match the superior audio, it delivers a bigger and more immersive sound than any Echo speaker to date, while offering many features that Apple's device is crying out for.

Build and functionality

As with any Echo speaker, the Studio is powered by Amazon's Alexa smart assistant and is controlled primarily by issuing voice commands. As well as using it to stream music from Spotify, Amazon Music and Apple Music, you can ask it to play audiobooks and radio, set timers and reminders, and call friends and family.

It's also aimed at people who might want to upgrade their TV audio. It connects wirelessly to both the Fire TV Stick 4K and Fire TV Cube,



and its 3.5mm jack doubles as a mini-optical connection, so you can hook it up to practically any TV. Failing that, you can connect it to anything else via Bluetooth.

As well as being compatible with a wide range of music formats, the Echo Studio can handle Dolby Atmos and Sony

360 Reality Audio for a kind of pseudo-surround sound. If you want even more volume and bass, it can be paired with a second Echo Studio and the Echo Sub.

The Echo Studio bears more than a slight resemblance to Apple's HomePod but it's considerably larger. Indeed,

at 206 x 175mm, the Echo speaker is around 20% taller and 25% wider.

As with other Echo speakers, you can control it using voice commands, but the device also has an array of buttons around the top that let you change the volume, mute the microphone and give commands without needing to say the "Alexa" wake word.

Surrounding these is a multi-colour LED ring that indicates when the speaker is responding to requests and alerts you about messages

“No other smart speaker can compete with the Echo Studio for its combination of sound quality, features and connectivity”



PRODUCT INFO

Amazon Echo Studio

Price: £189.99
Buy from Amazon: bit.ly/echstu490

SPECIFICATIONS

- 3 x 51mm midrange speakers, 1 x 25mm tweeter, 1 x 133mm woofer with bass aperture
- 3.5mm/mini-optical line in
- Supports Amazon Music (Standard and HD), Apple Music, Spotify, Deezer, TunesIn
- Automatic room adaptation
- Fire TV compatible
- Dual-band 802.11a/b/g/n/ac Wi-Fi
- 3.5kg
- 206 x 175mm

FOR

- ✓ Big, bold sound
- ✓ Very well priced
- ✓ Excellent connectivity options

AGAINST

- ✗ Sound is bass-heavy
- ✗ Lacks some detail in mid-range
- ✗ No remote for volume controls

BETTER SOUND

Apple HomePod, £279
bit.ly/hopo490



GOOGLE ALTERNATIVE

Sonos One, £199
bit.ly/sonone490



and notifications, among other things. On the rear of the device, flanking the power port, there's the 3.5mm jack.

Sound quality

One of the Echo Studio's key functions is that it can be used as a TV speaker as we've already mentioned, but it's worth pointing out that the device doesn't come with a remote control. This means that the only way to adjust the volume when it's connected via the optical input is to ask Alexa to do it, or walk up to it and use the physical controls. You can't even use the volume control in the Alexa app, although – oddly – this option is available for streaming music.

This becomes a serious drawback when you're engrossed in a movie because Alexa momentarily mutes the audio to listen to commands, so using voice control to turn the volume up or down will interrupt the audio.

Elsewhere, the Echo Studio works just like any other Echo speaker. Setup is quick and easy via the Alexa app and lets you manage connected Bluetooth devices, customise alarm sounds and set up speaker groups for multi-room audio.

Irrespective of what you're playing, however, the Echo Studio still falls short on sound quality. Music is a bit boomy compared to Apple's HomePod and, when stood next to a set of £160 Dali Zensor 1 bookshelf speakers, it sounds a little muffled and lacks crispness, even if you

boost the mids and treble using the Amazon Alexa mobile app.

Where the Echo Studio does emphatically deliver, however, is in the sheer scale of the sound that it generates. The sound from most smart speakers quickly degenerates if you crank up the volume but, if anything, Amazon's new speaker sounds more impressive when played loud. If you want a single smart speaker that can easily fill a larger living room, the Echo Studio is in a league of its own and, if you're a fan of boosting the bass, it is, without doubt, the best option available at this price.

As a TV speaker, it suffers from the same problems as when streaming music. Watching a BBC wildlife documentary, we found we had to crank up the mid-range frequencies as far as the Alexa app would let us to make the narration clear enough for our taste.

However, the scale of the sound was again impressive, and you get considerably more depth and presence than you would from most built-in TV speakers. On the other hand, if you're used to having your TV audio delivered via a soundbar across the bottom of your TV, a single Echo Studio may be a less attractive option because you'll have to get used to the sound coming from a single source on either the left or right of the screen.

It's also worth pointing out that although the Echo Studio pairs with the Amazon Fire TV Stick 4K and Fire TV Cube, this is only possible via Bluetooth and, when connected in this way, it only receives a stereo signal. Connecting the speaker to your TV via an optical cable is the only way to ensure 5.1 surround sound. Overall, it's a decent upgrade on your TV's speakers, but don't expect miracles.

OUR VERDICT



At £190, there's no other smart speaker on the market that can compete with the Echo Studio for its combination of sound quality, features and connectivity. As well as offering all the Alexa-smarts you normally get from an Echo device, it delivers a powerful sound and can double up as a TV speaker, which puts it in a category of its own.

FEATURES	★★★★☆
PERFORMANCE	★★★★☆
EASE OF USE	★★★★★
VALUE FOR MONEY	★★★★★

If you're after the best sound possible from a smart speaker, you're better off with Apple's HomePod, but the Echo Studio is a great option if you want a device that does it all in one affordable package.

Cosmo Communicator

A new Android phone that channels the spirit of the Psion Series 5 PDA

If you're still mourning the loss of the much loved Psion Series 5 PDA (personal digital assistant), which launched in the Nineties, the Cosmo Communicator may bring a tear of nostalgia to your eye. This folding screen and keyboard combo looks like something from a bygone era, but as anyone who had one will tell you, the Psion Series 5 was a British design classic that's worth revisiting.

PRODUCT INFO

Cosmo Communicator

Price: £799

Buy from

Planet Computers:

www.planetcom.co.uk

SPECIFICATIONS

- Octa-core Media Tek Helio P70 processor
- Mali-G72 graphics
- 6GB of memory
- 128GB of storage
- 6in 2,160 x 1,080 pixels IPS screen
- External 1.91in AMOLED touchscreen
- microSD slot
- 24-megapixels rear camera, 5-megapixels front camera
- 171 x 79 x 17.3mm
- 326g

FOR

- ✓ Great mechanical keyboard
- ✓ Ditch your laptop
- ✓ Unlike anything since the Psion Series 5

AGAINST

- ✗ Landscape orientation doesn't suit all Android apps
- ✗ Disappointing camera
- ✗ Features don't compete with similarly priced smartphones

The Psion 5 wasn't a phone, it was a mini computer, but the Communicator has brought phone functionality to its redesign. It lets you make calls when folded closed, displaying a small screen that's good enough to show the first few lines of an email. Like most premium phones, it has a fingerprint reader for unlocking the device and a 24-megapixel camera.

Unfolding the device unleashes its killer feature: the keyboard. If you're a whizz with an onscreen keyboard, you may turn your nose up at something as archaic as a physical keyboard, but this is a vastly superior device to type on. Designed with the help of Martin Riddiford, who designed the original Psion Series 5 keyboard, this gets close to recreating the brilliance of the original. You won't find yourself typing as quickly as you might on a full-sized computer keyboard, but it's not far off.

The device runs Android but has a few apps of its own, specifically designed to take advantage of the keyboard and the Communicator's landscape screen. Chief among these is Agenda, which emulates Psion's old calendar but updated to sync with Google Calendar. There are also notepads, email software and other tools. However, it's worth checking whether your favourite Android apps work well in landscape mode on your existing device before committing to the Communicator, because not all of them do.



“ This is a vastly superior device to type on compared to an onscreen keyboard ”

The screen is a 6in IPS display, with a resolution of 2,160 x 1,080 pixels. It's fine, but it doesn't rival the screens we've come to expect on similarly priced top-of-the-range smartphones. The same can be said of the external camera, which lags behind the quality of the best phone cameras. There are no fancy extras – no optical zoom or

video stabilisation – but it can use HDR (High Dynamic Range) to capture high-contrast shots.

Because this is a niche device, not really targeted at the regular phone consumer, it's expensive. However, if it stops you needing a laptop or Chromebook to go alongside a traditional smartphone, you could still be quids-in.

OUR VERDICT



The Cosmo Communicator is a mobile device that's all about the keyboard. Although there are plenty of phones, tablets and compatible Bluetooth keyboards around, there aren't many that are combined in a single device, with a physical keyboard as good as this, that can still fit into a pocket. It isn't perfect, and a phone operating system

FEATURES	★★★★★
PERFORMANCE	★★★★★
EASE OF USE	★★★★★
VALUE FOR MONEY	★★★★★

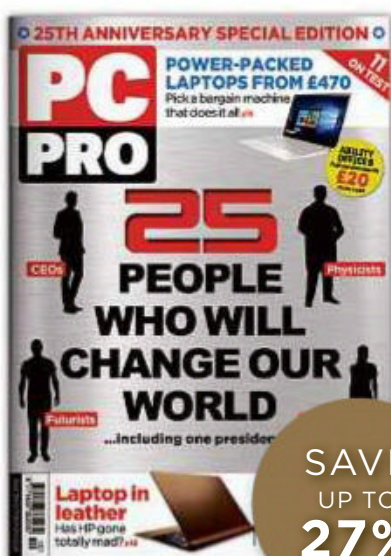
that favours being in portrait mode leaves a lot of apps difficult or impossible to use in landscape, but if you're nostalgic for the old Psion Series 5, then this is right up your street.

SEASON'S READINGS

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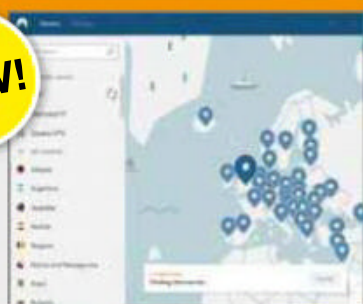
Tested: Issue 489

NordVPN strikes the perfect balance between usability, features and price. It's easy to set up a private connection and it has servers in dozens of countries across the globe.

KEY SPECS

Six simultaneous connections ■ Choice of 60 countries ■ 5,500+ servers ■ IKEv2, OpenVPN protocols ■ Double VPN security ■ Router support ■ 1,000+ BitTorrent servers ■ Static IP option ■ Windows, macOS, Linux, Android, iOS, Fire TV

NEW!



LAPTOP

HP Pavilion x360

£679 from bit.ly/hp487

Tested: Issue 487

Slim, attractive and powerful, and with a great keyboard, the HP Pavilion x360 gets more or less everything right, at a price that undercuts most of its rivals. The ability to flip the laptop's screen into tablet mode is a bonus.

KEY SPECS

Intel Core i5-8250U processor ■ 256GB SSD ■ 8GB memory ■ 14in screen ■ 1,920 x 1,080 pixels resolution ■ 2 x USB 3, 1 x USB-C ports ■ 802.11ac Wi-Fi ■ Windows 10 Home ■ 326 x 224 x 20mm ■ 1.61kg ■ One-year return-to-base warranty



CHROMEBOOK

Lenovo Chromebook 500e

£349.98 from bit.ly/leno483

Tested: Issue 483

This versatile and rugged convertible Chromebook has been designed for the classroom but would be just as useful at home and on the move. It's tough enough to survive a few knocks and you can use a stylus on its touchscreen.

KEY SPECS

Intel Celeron N3450 processor ■ 32GB storage ■ 4GB memory ■ 11.6in touchscreen ■ 1,366 x 768 pixels resolution ■ Intel UHD Graphics 500 card ■ 2 x USB-C, 2 x USB 3 ports ■ 290 x 204 x 20.4mm ■ 1.31kg ■ One-year collect-and-return



SECURITY CAMERA

Google Nest Cam IQ Outdoor

£279 from bit.ly/nest481

Tested: Issue 481

This is the best-quality external security camera we've tested, capable of capturing clear, sharp video footage. It takes a bit of setting up and is expensive, but it's worth paying for if you're serious about your home security.

KEY SPECS

Outdoor camera ■ 1080p video resolution ■ 130-degree lens ■ Motion and audio detection ■ Night vision ■ 802.11ac Wi-Fi ■ 128 x 93 x 93mm ■ Three hours of free cloud storage ■ One-year return-to-base warranty



INKJET PRINTER

Canon Pixma TS6250

£114.36 from bit.ly/cango479

Tested: Issue 479

This multifunction printer looks smart and is easy to use, whether you're printing from a PC, mobile device or its own touchscreen. With great results and acceptable running costs, it's easy to recommend.

KEY SPECS

4,800 x 1,200dpi print resolution ■ 2,400 x 1,200dpi scan resolution ■ 200-sheet A4 paper capacity ■ Double-sided printing ■ 7.5in colour touchscreen ■ 802.11n Wi-Fi ■ 372 x 315 x 139mm ■ 6.2kg ■ One-year return-to-base warranty



MINI PC

ASRock DeskMini 310

£668.70 from bit.ly/asro477

Tested: Issue 477

The performance of this diminutive PC comes remarkably close to a full-size system, once you've paid for and installed its components. It's compact, quiet and runs Windows well.

KEY SPECS

Intel Core i5-8400 processor ■ 250GB SSD ■ 16GB memory ■ Intel UHD Graphics 630 card ■ 1 x USB Type-C, 2 x USB 3.1, 1 x USB 2 ports ■ 802.11ac Wi-Fi, Gigabit Ethernet ■ 158 x 155 x 80mm ■ 1.87kg ■ One-year return-to-base warranty



Gold Award winners

The best from our software tests

EMAIL SOFTWARE

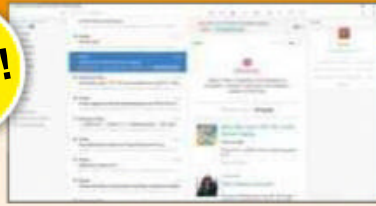
Mailspring

NEW!

Free from getmailspring.com

Tested: Issue 489

Mailspring is a modern, well-designed take on classic email software. Standard features sit alongside some quirky extras, but the focus remains firmly on sending and receiving emails.



OFFICE SUITE

Google Docs

Free from docs.google.com

Tested: Issue 488

Google's suite of cloud-based tools is the king of free office suites – online and off. It offers comprehensive collaboration, access from any device and unlimited file storage.



LINUX DISTRO

Lubuntu

Free from lubuntu.net

Tested: Issue 487

Lubuntu is as close to perfect as a lightweight operating system can get. Its interface is instantly appealing and is packed with all the tools you need.



CALCULATOR

Old Calculator for Windows 10

Free from bit.ly/oldcalc486

Tested: Issue 486

Old Calculator appears instantly when you call it, sits unassumingly in a corner of your screen when you're not using it and can perform all everyday calculations.



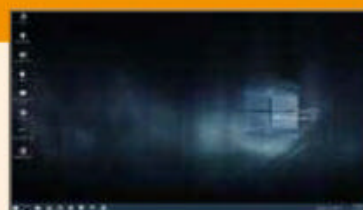
RECOVERY TOOL

Hiren's Boot CD

Free from www.hirensbootcd.org

Tested: Issue 485

Hiren's Boot CD isn't just the best bootable recovery disk, it's arguably the only one you'll ever need – packed with tools to fix just about every problem you're likely to run into.



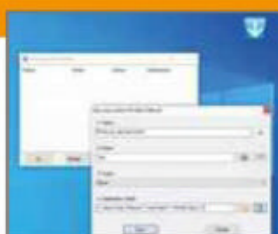
FILE ORGANISER

Droplr

Free from www.droplrproject.com

Tested: Issue 484

Droplr's great innovation is to place a floating arrow icon on your desktop. When you have a file that needs sorting, just drag it over to the icon and drop it.



WebUser

BACK ISSUES DISC 2018



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Best Free Software

FAMILY-TREE CREATOR

My Family Tree 9

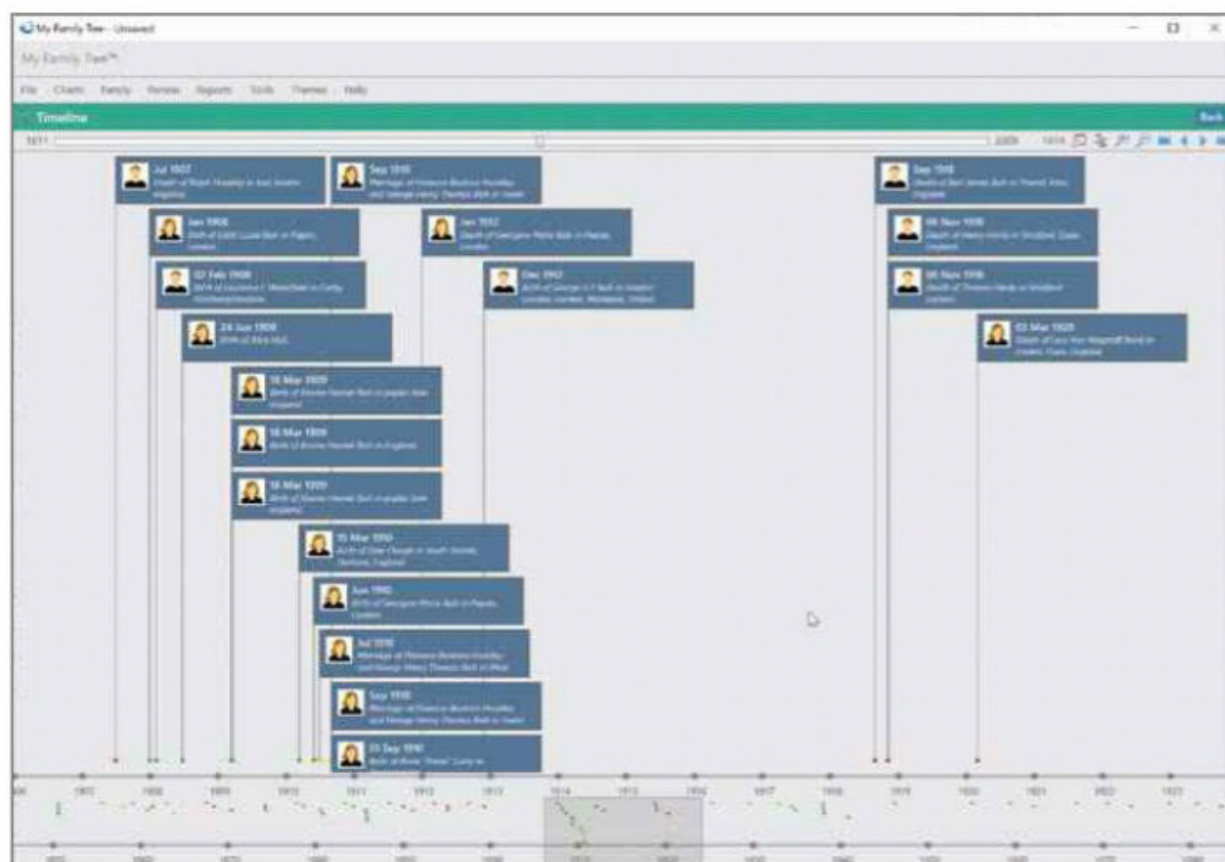
bit.ly/family490

Min requirements: Windows 7/8.1/10

File size: 6.8MB

Researching your family history is hugely rewarding, but the process can be very time consuming and it's easy to run into dead ends as you go further back in time. Genealogy services such as Ancestry.co.uk can help with the research and let you build a tree from scratch, but if you want a more powerful offline solution, then look no further than My Family Tree.

Although this free software doesn't have any tools for researching your history (you'll have to look elsewhere for that), you can use it to build your tree for free and flag up possible errors, such as having marriages occurring



after deaths.

You can attach notes and media (photos, videos and audio clips) to each of your ancestors, fill in details regarding genetics (such as blood group and eye colour), and much more. The program also provides tools that let you sort and browse family data, and explore graphs of details such as an ancestor's age, gender and living status.

Starting with this version, My Family Tree now requires Microsoft .NET 4.8,

so it will only run on Windows 7 (SP1) and newer. If you're running an older operating system, you'll have to stick with version 8.

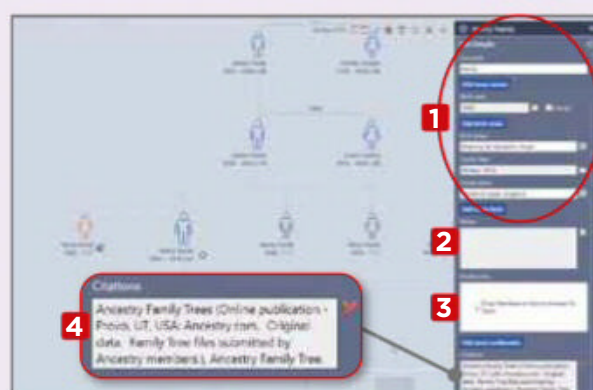
It's always been possible to import family tree data in GEDCOM format (making it easy to continue working on a tree created elsewhere) and this release gains support for new types of GEDCOM files, as well as additional extensions. There are improved validation rules for dates, too, and it's now easier to edit facts and sources.



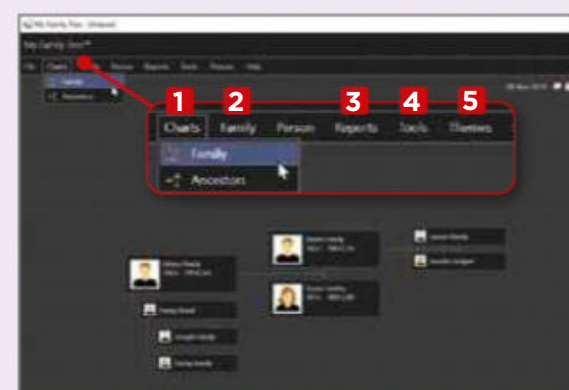
MINI WORKSHOP | Build a family tree with My Family Tree 9



1 Launch the software and you'll be given the option to create a new family tree, open an existing project or import one in GEDCOM format. To add new relatives to a tree, select a member of your family, **1** then use the drop-down menu to add a parent, partner, sibling or child. **2**

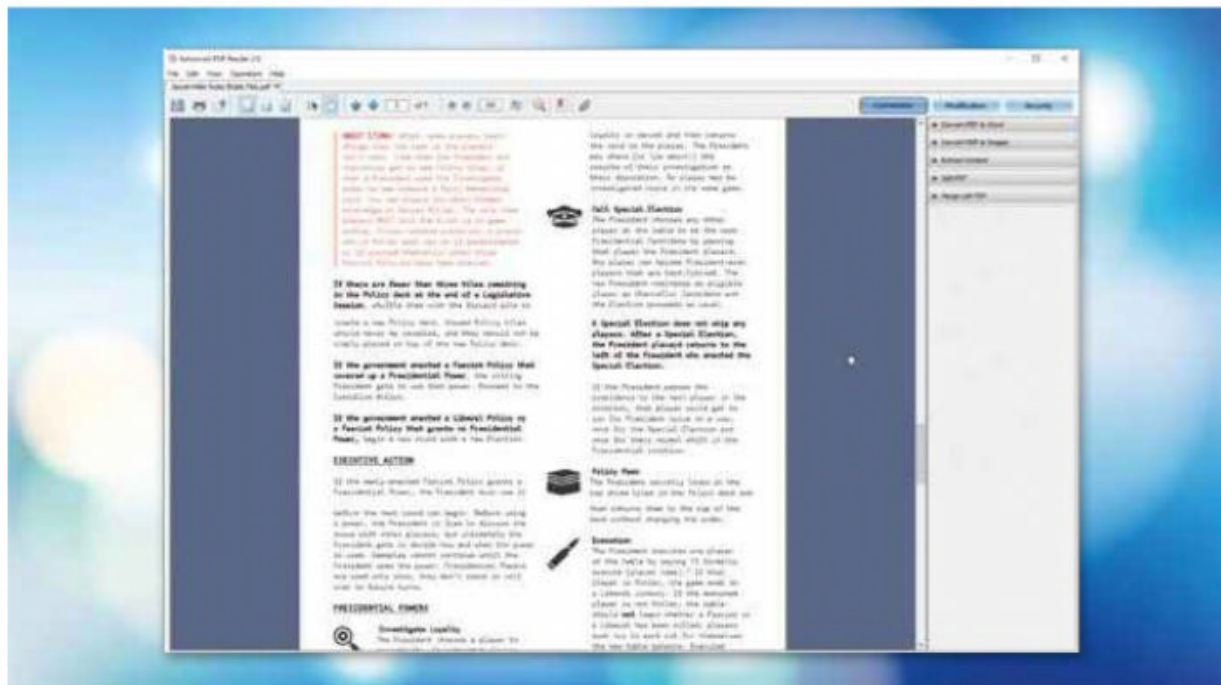


2 You can fill in details about a relative, such as their sex, name, birth date and place, and death date and place. **1** You can also add notes **2** and multimedia files. **3** Adding citations **4** lets you record where the information was found, which is useful when checking facts or considering conflicting information.



3 You can switch between Family and Ancestors under Charts. **1** Family **2** displays information about people in your tree, including citations and a timeline; Reports **3** lets you see information on each of your relatives; Tools **4** includes a date calculator, relationship calculator and spellchecker; and Themes **5** lets you customise the look of the program.

This fortnight's top new software downloads to help you make the most of your PC, and they're all FREE



PDF TOOL

Advanced PDF Reader 2

www.read-pdf.com

Min requirements: Windows 7/8.1/10 **File size:** 13MB

Most people now view PDF files in their browsers, which is fine if all you want to do is read the contents. Advanced PDF Reader displays PDF files, but it also does much more, including opening multiple files, letting you add annotations, splitting and merging documents, rotating and cropping pages, adding text and images, and exporting PDFs to Word, pictures and text. It also offers fast text search.

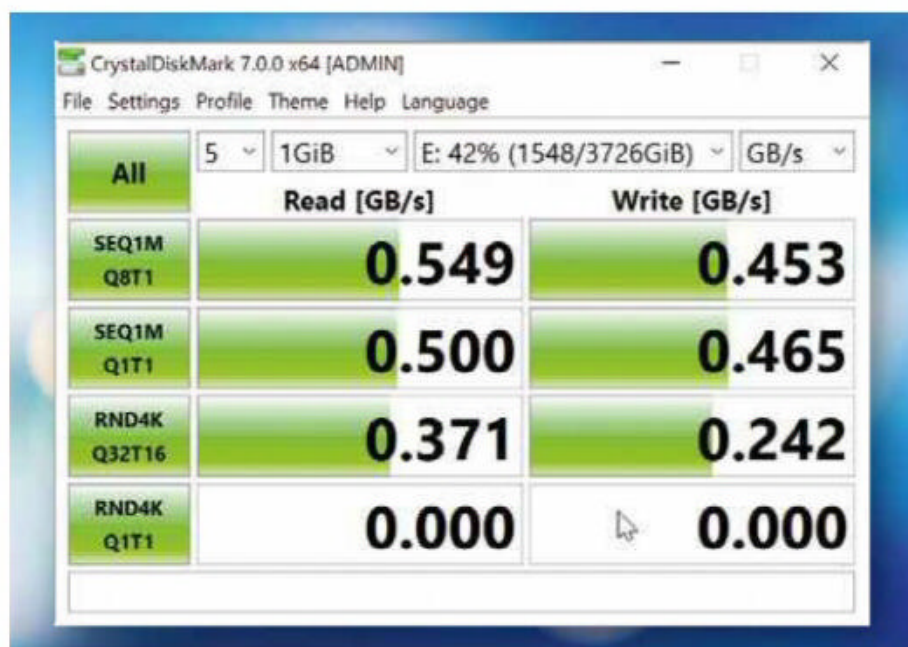
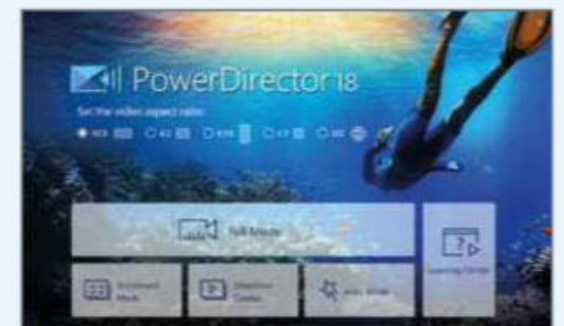
New Windows 10 App

CyberLink PowerDirector 18 Essential

bit.ly/pdirect490

File size: 1.43GB

PowerDirector 18 Essential is an excellent video editor that requires you to create an account to use it. It's a basic version of PowerDirector and comes with a 30-day trial of the paid-for edition. Once the trial is up, you'll lose some of the functionality, but the software will still work. However, the free version adds a watermark to your videos and there are fewer templates and effects. It costs £60 a year to upgrade.



BENCHMARKING TOOL

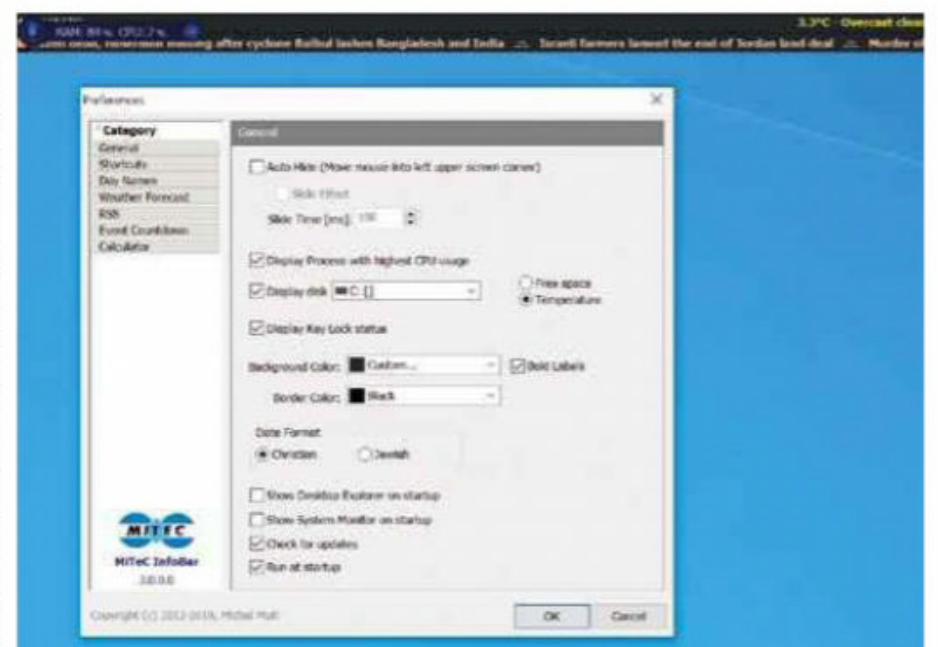
CrystalDiskMark 7

crystallmark.info

Min requirements: Windows 7/8.1/10

File size: 7.3MB

CrystalDiskMark is a useful tool for testing your hard drive's performance. It can measure sequential and random read/write speeds, and you can choose the number of tests to run (five by default). Choose the drive you want to test from the drop-down menu at the top to see how much space is being used on it. This new release has an updated interface, with new and improved tests.



SYSTEM TOOL

MiTeC InfoBar 3

bit.ly/infob490

Min requirements: Windows XP/Vista/7/8.1/10

File size: 1.9MB

This program displays a bar at the top of your screen containing useful information such as the news headlines, current weather conditions, date and time, CPU load, memory use, system uptime (how long it's been on for) and the status of the Num, Caps and Scroll Lock buttons. The update adds a new System Monitor module, updates the Process Monitor and Desktop Explorer and removes pop-up windows.

SYSTEM TOOL

Autorun Organizer 4

bit.ly/arun490

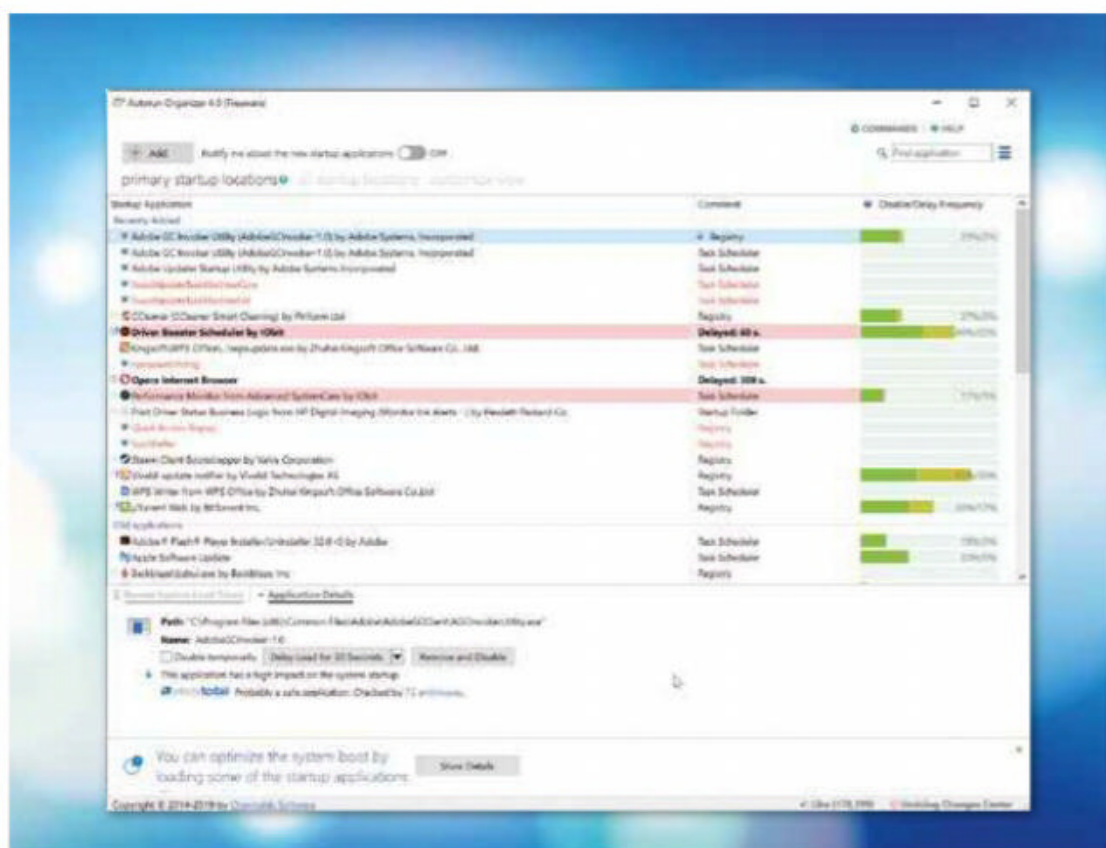
Min requirements: Windows 7/8.1/10

File size: 15.3MB

Lots of programs set themselves to start alongside Windows. With certain applications – such as antivirus software – that’s a good thing, but you don’t want all your software launching simultaneously and slowing down your system.

Autorun Organizer lets you manage Windows startup, so your PC boots faster. You can temporarily disable items, remove them or delay their startup for 30 seconds. The program also alerts you to any malicious items by checking them on VirusTotal.

This version switches from 32-bit to 64-bit architecture, which should make it much quicker. Be sure to decline the bundled junk during installation.



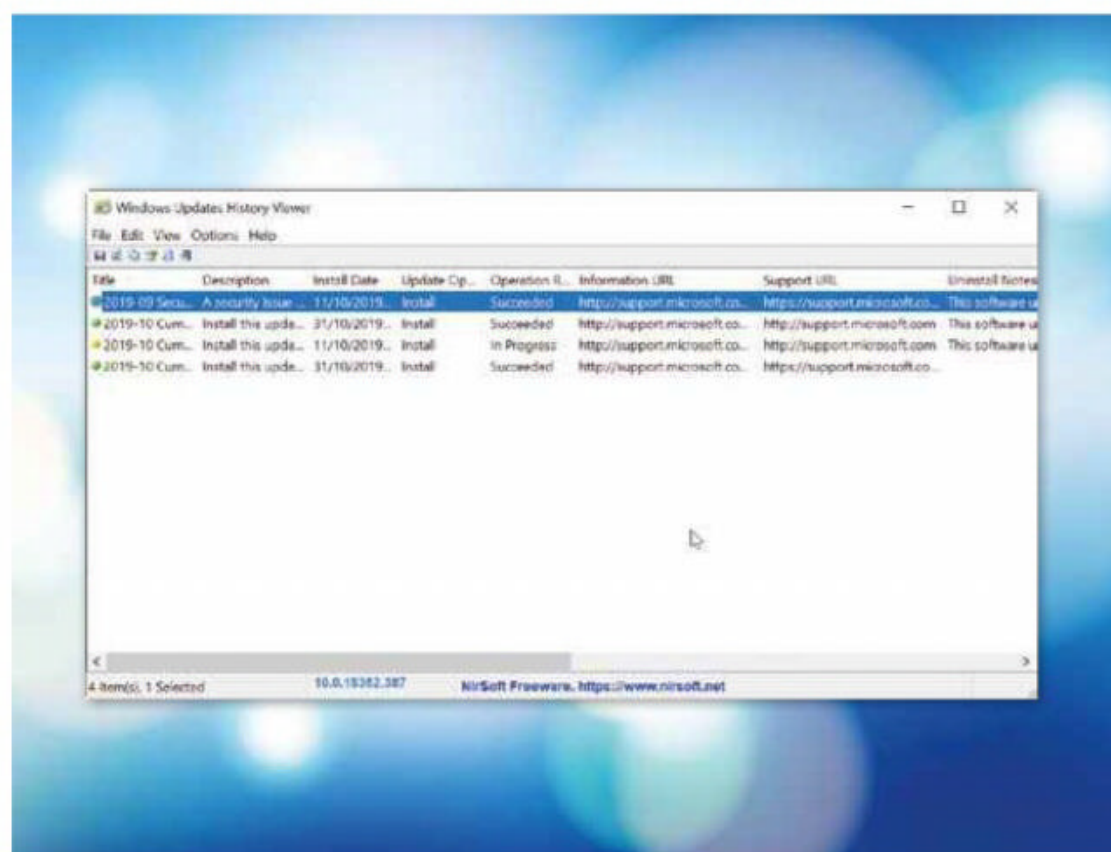
SYSTEM TOOL

Windows Updates History Viewer

www.nirsoft.net

Min requirements: Windows XP/Vista/7/8.1/10

File size: 85.1KB



Microsoft's operating system installs a lot of updates on your PC – most are useful but some cause unintended problems. This new portable program from software developer NirSoft shows you all the updates that have been installed on whatever device you run it on. It works with all versions of Windows, from XP onwards, and shows whether updates were successfully installed, failed or removed. You can view updates by title, description, install date and more. It's a useful tool for keeping track of which updates have been installed on your system, though it doesn't give you the option to remove any problematic ones.

ISO TOOL

ISO Workshop 9

www.glorylogic.com

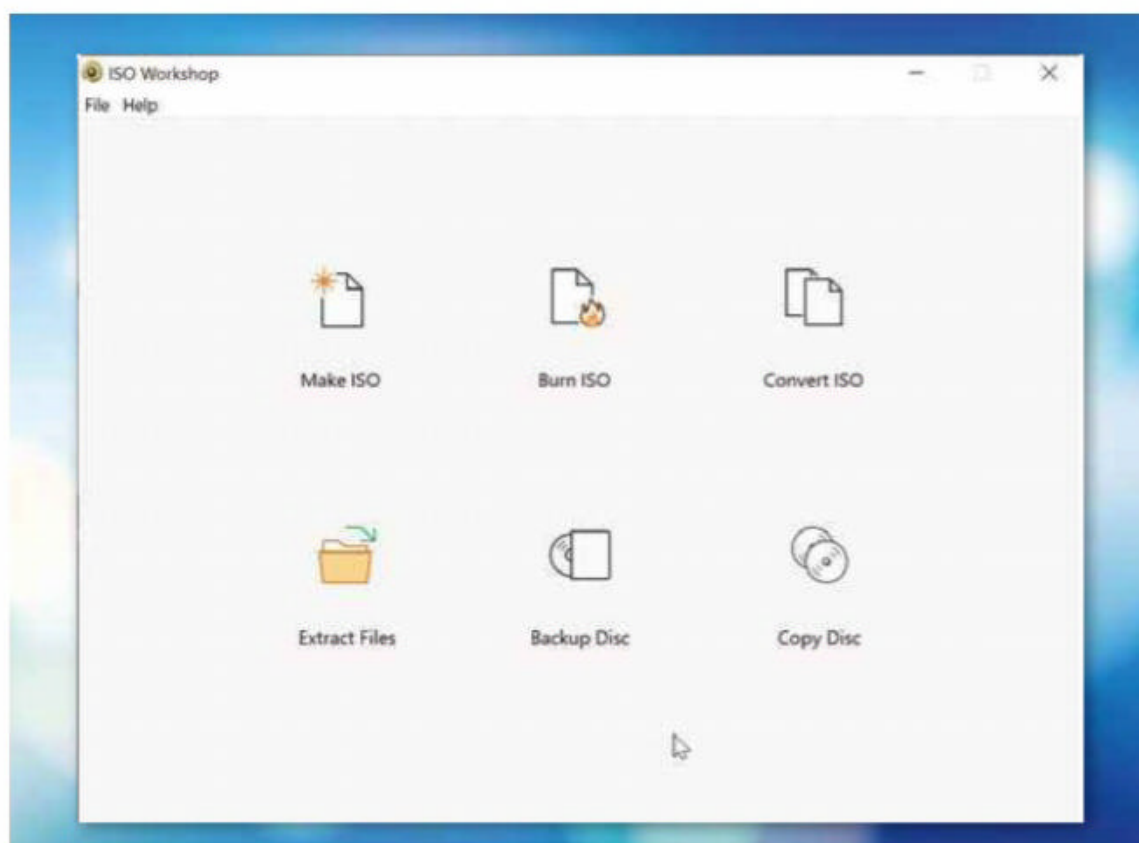
Min requirements: Windows 7/8.1/10

File size: 3.5MB

One of the best ways to back up software CDs, DVDs and Blu-rays is to save them as an image file. If you download an operating system from the web, it's likely to come packaged in this way.

ISO Workshop is a free program that lets you make ISO image files from your own content, as well as view and extract files, convert one image format to another (IMG to ISO for example), and more.

This latest version gives the interface a bit of a makeover, with redesigned icons, and adds support for virtual drives. Make sure you decline the bundled junk during installation.





GAME

Triggore

bit.ly/trigg490

Min requirements: Windows 7/8.1/10

File size: 9.8MB

Triggore is a shooting game, with point-and-click elements and retro graphics and sound. You start unarmed in a haunted house and must find items to defend yourself from the ghoulish creatures who are coming for you. Use the right mouse button to interact with items and the left button to shoot. One tip: use the mop to clean up after the carnage or you'll be sorry!

✓ Install this program...

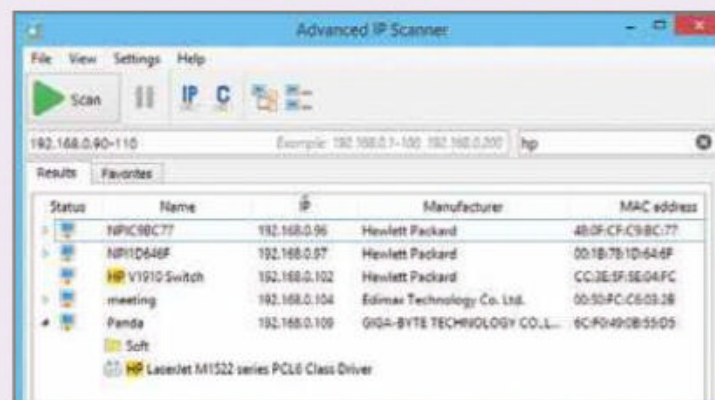
Advanced IP Scanner

www.advanced-ip-scanner.com

Min requirements: Windows 7/8.1/10

File size: 19.4MB

Billed as “the first choice for every network admin”, this easy-to-use tool should be your first choice if you want to know which devices are connected to your Wi-Fi. It's not bogged down with unnecessary options and simply focuses on scanning your network for all connected devices, so you can identify anything suspicious and stop intruders in their tracks. Advanced IP Scanner scans networks more quickly and thoroughly than rival Windows programs, and its interface is clear and simple, which makes it suitable both for beginners and advanced network administrators.



...Not this one ✗

Angry IP Scanner

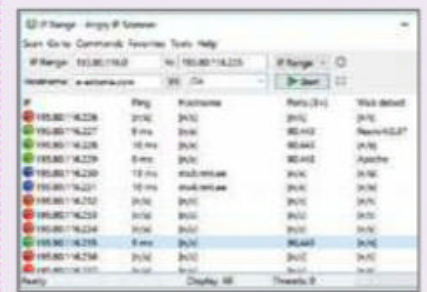
angryip.org

Min requirements:

Windows 7/8.1/10, macOS or Linux

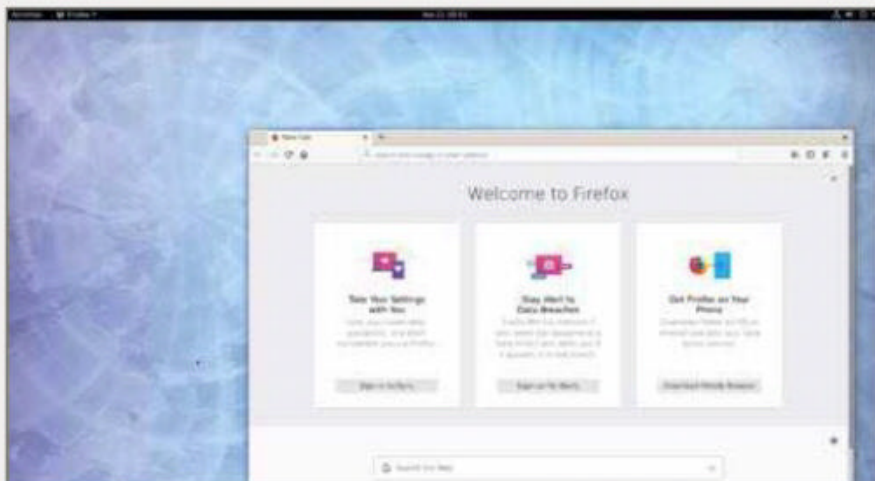
File size: 2.7MB

Scanning networks with Angry IP Scanner takes very little time and the results page is pleasingly clear – you're even told how many hosts are 'alive'. However, the other options are less than intuitive, which is fine for more advanced users, for whom we'd suggest the tool is really designed, but baffling for the rest of us.



OTHER OPERATING SYSTEMS

What's new for Linux and macOS



LINUX DISTRO

Fedora 31

bit.ly/fedora490

Min requirements: 8GB hard drive space, 64-bit processor

File size: 1.8GB

Fedora 31 – arguably the best Linux distro for advanced users – is out of beta and available to download. It's 64-bit only and comes with GNOME 3.34, Linux 5.3 kernel and Mesa 9.2, plus updated versions of many popular packages. Raspberry Pi owners can now enjoy the lightweight Xfce desktop environment. You can download the OS in ISO format, or – if you're a Windows or macOS owner – you can use the Fedora Media Writer to get started.



DRAWING APP

Crayon Maestro 5

bit.ly/cray490

Min requirements: macOS 10.14 or later, 64-bit processor

File size: 7.9MB

Crayon Maestro is described as a fully fledged wax-crayon simulator that you can use to create artworks. You can change the colours, zoom, pan and rotate, and use multiple layers. There's a photo-tracing feature and it also supports Dark Mode and the Mac's Touch Bar. This release introduces paper/canvas textures, a new drawing engine and an adjustable toolbar. You can now have multiple instances of the same tool with different settings and colours.

GET FREE SOFTWARE FIRST subscribe to Web User at subscribe.webuser.co.uk



Best New Browser Tools



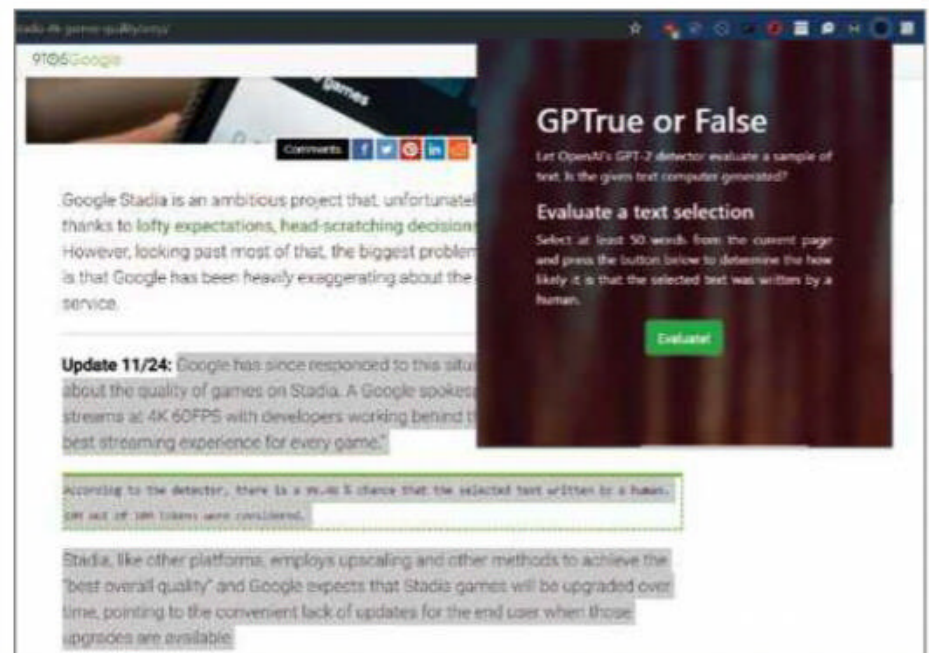
CHROME

Check if articles were written by robots

We live in an age increasingly dominated by artificial intelligence. But while ‘deepfake’ videos and photoshopped images get a lot of attention in the media, the proliferation of AI-generated articles doesn’t.

The new Chrome extension GPTrue or False (bit.ly/true490) helps you find out whether what you’re reading was created by a bot – or not. If you’re suspicious or curious about whether a human wrote what you’re reading, highlight at least 50 words of the article, activate the extension and click Evaluate. After a brief moment, results are displayed at the foot of your selected text detailing the percentage chance that the copy was created by a human or AI. You’ll also see how many factors (or ‘tokens’) were taken into consideration when assessing the article.

It’s a handy tool to have at a time when bot-farms are churning out fake news designed to confuse, confound and conspire.



Add search functions to bookmarked tweets

Despite being one of the most popular social-media sites in the world, Twitter has a number of frustrating issues, such as refreshing the page while you’re still scrolling through your timeline and the lack of a search box for your bookmarked tweets. Instead of scrolling through them all until you find the tweet you want, install Twitter Bookmarks Search.

With the extension added to Chrome (bit.ly/twitter490) or Firefox (bit.ly/twitfire490), head over to Twitter and into the Bookmarks tab. Now, lingering above all those bookmarked tweets is a search bar that will scour those tweets you swore you’d come back to at a later date. Results are returned quickly and accurately, though you can only search for single words, rather than phrases.



Turn on reader mode for any web page

Reader Mode (bit.ly/reader490) is a great new browser tool if you’re seeking a distraction-free browsing session. Because who wants adverts and design elements taking attention from the articles while you read?

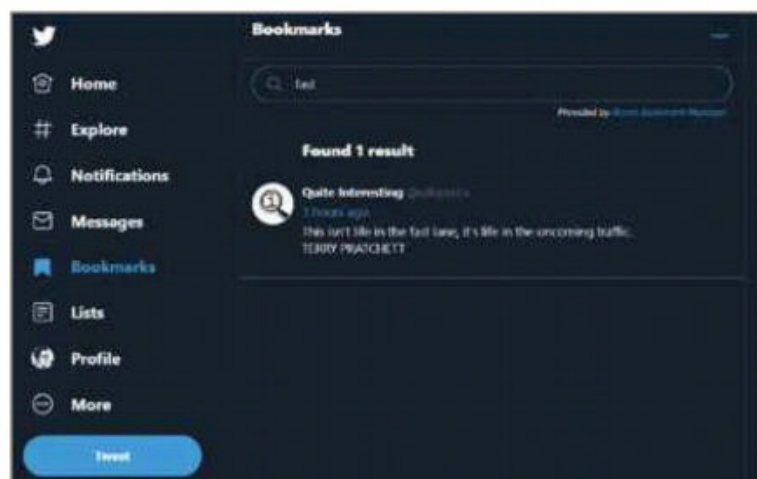
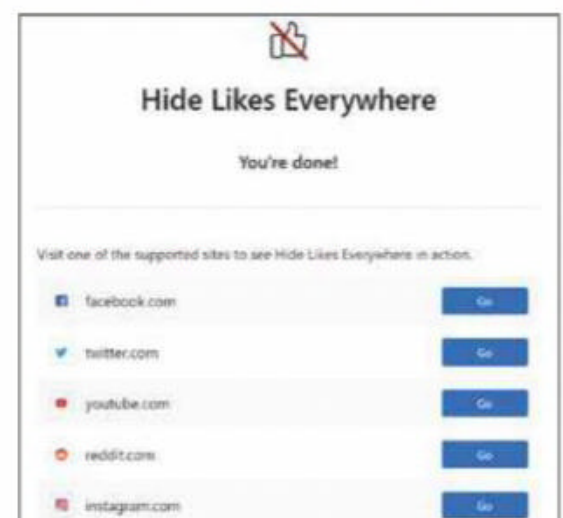
Most browsers feature some form of reading mode but they don’t work on every web page. Reader Mode solves this problem and also offers an

impressive array of customisation options, including changing the font type, colour and size; turning off images (for a truly book-like browse) and adding an estimated reading time to articles. You can also add your own custom CSS to the page, switch to text-to-speech and activate dyslexia ruler for even more accessibility.

Hide ‘likes’ across social media

Be honest, do you really care what people on Facebook and Twitter think? It sometimes feels like, for some people, social media is not so much an opportunity to share experiences but a competition to get more ‘likes’ than anyone else.

Hide Likes Everywhere (bit.ly/likes490) puts an end to that – at least for you. This browser tool does exactly what it claims: removes likes, dislikes and comment counts from your feeds. As a result, you can stop worrying about what everyone else thinks and their obsession with online validation, and concentrate on the content itself. The tool is compatible with Facebook, YouTube, Twitter, Reddit and Instagram.



This fortnight's most useful tips and add-ons to help you get the most from Chrome, Firefox, Opera and more



FIREFOX

Hide cookie notifications on websites

Cookie notifications have become one of the internet's biggest bugbears. While they may be required by EU law, we'd like to think most people already know about cookies and why sites collect them. Or, more likely, they blindly click Accept just to access a website.

Cookies Notification Hider (bit.ly/cookie490) does what it says on the tin by hiding those notifications for good. When you visit a page, the add-on quickly scours the site and, when the offending notification appears, intervenes and hides it just before the notice has a chance to demand you accept or click Got It.

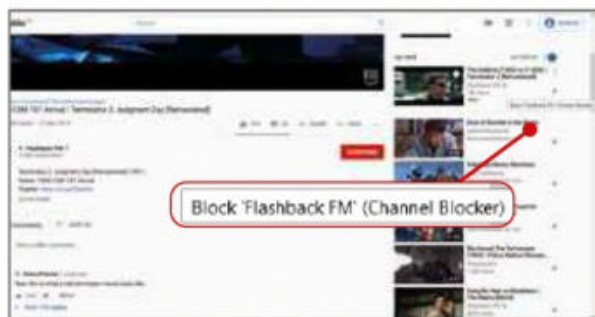
It won't work on every website, so you may still have to click Accept (and emit a deep sigh as you do so), but we found it usually did its job, getting to the content faster and saving a wasted click.



Block YouTube's recommended channels

YouTube has a nasty habit of throwing up recommended channels and suggested videos that superficially may be right up your alley, but frequently aren't. For example, watch just one video about that new laptop you're considering buying and, for the rest of time, YouTube will push for you to watch a hundred more reviews of the same device.

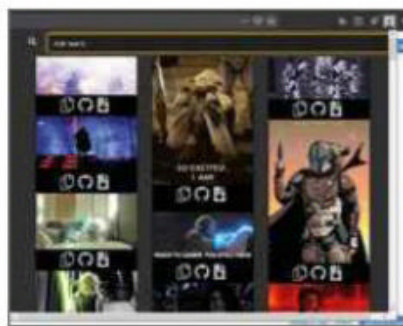
By adding 'X's alongside every video and channel, Channel Blocker (bit.ly/blocker490) makes it incredibly easy to block these suggestions for good. With one click, you'll banish them to the add-on's blocked list, where they'll never bother you again.



Additionally, you can head into Channel Blocker's configuration settings and manually add channels, video titles and comments. This requires a little extra know-how, though.

Access an entire library of GIFs

As society seemingly abandons text in favour of emoji, memes and GIFs, it can be useful to have these on hand. After all, who has time to search



for a specific visual representation that adequately expresses our deepest thoughts?

In such cases, Jiff GIF (bit.ly/gif490) is ideal. Click the add-on's toolbar button to search through thousands of GIFs. Select one and you'll be given three options: copy URL, copy GitHub markdown and save to disk. In most instances, copying the URL and pasting it will suffice, although saving to disk is ideal if you find yourself repeatedly deploying the same GIF on multiple social-media threads and emails.

The library is extensive, drawing on multiple GIF catalogues, so there's one for every moment. You can also toggle on Dark Mode when you first open the add-on.

OTHER BROWSERS

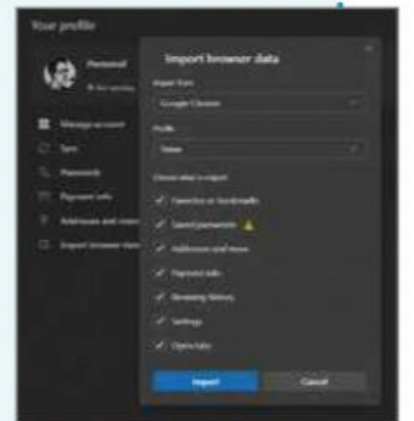


Import Chrome bookmarks into Edge

As the full release of Edge Chromium nears, Microsoft has been beaver away on arguably one of the most important tools: importing your data from Google Chrome.

There are two ways to access this option – either go to Settings, Profiles,

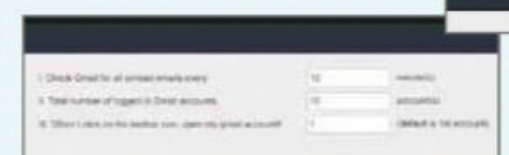
'Import browser data'; or jump straight to it via `edge://settings/importData`. Select Google Chrome from the drop-down menu, then choose your Chrome profile and which data you'd like to import. This doesn't just include the standard bookmarks and passwords – you can even bring over all your open tabs.



Monitor unread emails in Gmail

Badge Checker for Gmail

(bit.ly/badge490) is a useful tool when you need to keep an eye on your inbox but don't want to keep your Gmail open. To save you jumping between tabs or repeatedly logging in, this add-on puts an icon on your toolbar with a badge count of unread emails. Once you're logged in, you don't even need to keep Gmail open in a tab. Clicking the browser tool whisks you to your Gmail account, then right-clicking it and selecting Options lets you tweak how often the count is updated, how many Gmail accounts to track and your primary account.



Best Free Apps



App of the Fortnight

BROWSER

Brave

bit.ly/bravedroid490

bit.ly/braveios490

(varies) 12

If you're fed up with targeted adverts and data-grabbing trackers following you around the web, then one solution is to install an ad blocker. Or you could opt for the new mobile version of Brave, the privacy-focused web browser, which has its very own built-in ad blocker that's switched on by default.

Based on Chrome, Brave feels instantly familiar and offers all the features you need, including bookmarks and a basic password manager. Additional privacy options include HTTPS Everywhere and the ability to set DuckDuckGo as your default search engine.

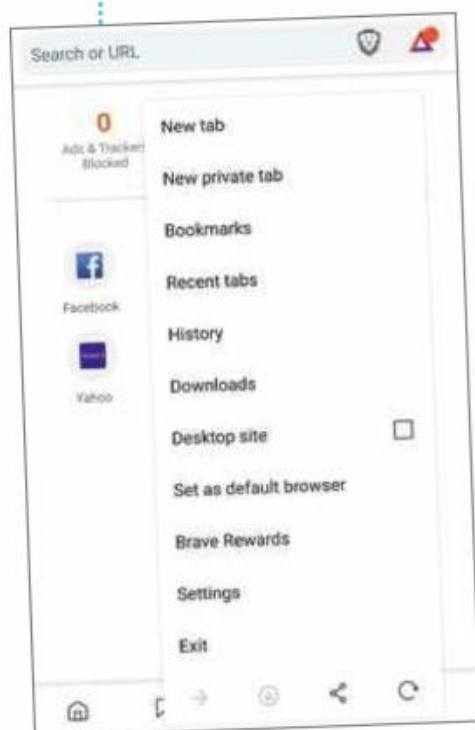
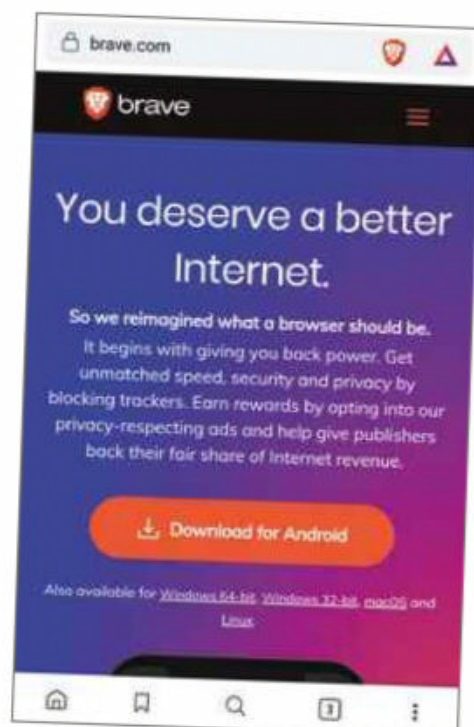
Brave is lightweight and thrifty in its use of resources – partly because it avoids loading a bunch of ads every time you visit a web page. The app's developers claim the browser consumes less data and less battery power than many of its rivals.

One of the browser's quirkier features is Brave Rewards – a system that lets you earn frequent flier-like tokens for viewing privacy-respecting adverts from trusted sources. Currently, you can only use these tokens to support certain websites but the idea is that, eventually, you'll be able to redeem them in the form of content and gift vouchers. Read more about Brave Rewards at brave.com/brave-rewards.

The new desktop version of Brave (brave.com), which we'll be taking a closer look at next issue, offers some useful additional features, including a genuinely private browsing mode that lets you open a new tab that uses Tor to mask your location and hide your browsing activity. This feature isn't yet

available on the mobile version but Brave promises it's on its way – meaning this already brilliant browser could soon be even better.

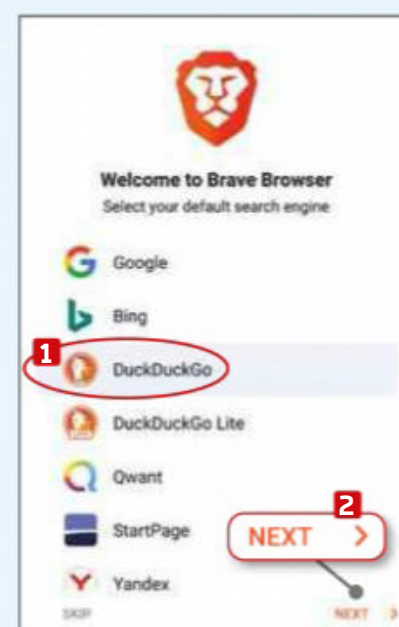
NEW



MINI WORKSHOP

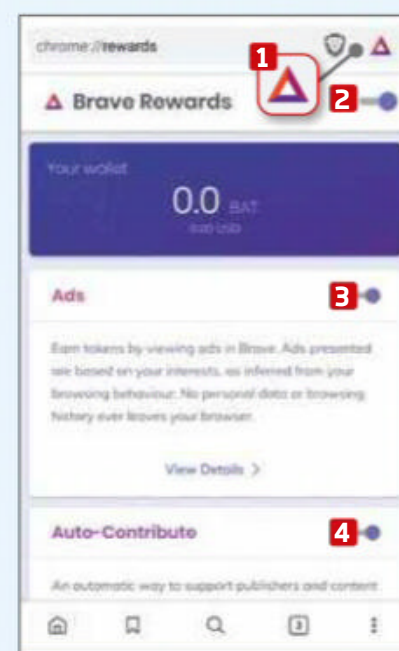
Set up Brave on your phone or tablet

1 Launch Brave and follow the simple setup steps. First, choose your default search engine. If privacy is your chief concern, we recommend selecting DuckDuckGo **1** because it harvests far less personal data than other search engines. Make your selection, then tap Next **2** and work your way through the remaining setup screens until you arrive at the browser's homepage.



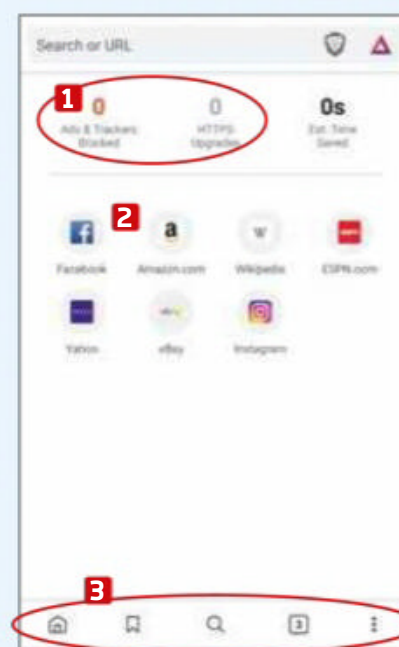
2 To enable or configure Brave Rewards, press the top-right triangle icon.

1 This displays a summary of your recent Brave Rewards activity. Choose Settings to view the options. Tap the switch at the top **2** to enable Brave Rewards, if you want to participate. Below, you can choose to switch on Ads **3** and Auto-contribute **4** if you want to earn and donate tokens to your favourite sites.



3 Brave's home screen displays the number of ads it has blocked and how many HTTPS Everywhere upgrades it has carried out for you automatically. **1** Below are shortcuts to recently visited sites, **2** while the main navigation buttons (Home, Bookmark, Search, Tabs and Menu) run along the bottom of the screen.

3 Press Menu, then Settings to customise the way Brave looks and works.



Our rating



This fortnight's top free and paid-for apps for Android and iOS phones and tablets

MUSIC

Amazon Music

bit.ly/amazondroid490

bit.ly/amazonios490

 (varies) 

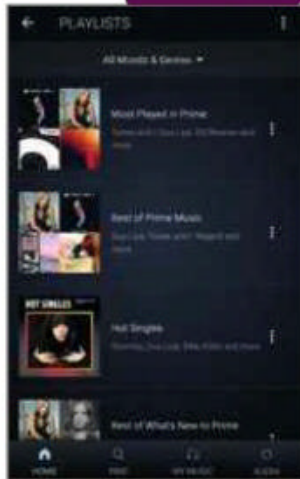
In a bid to compete with Spotify, Amazon updated its mobile Music app to let you stream songs for free. However, you don't get access to Amazon's full 50 million-song music catalogue, which costs £7.99 per month with Prime and £9.99 without – free listening is limited to a smaller two million-song selection. You also have to put up with the occasional advert. Previously, Amazon provided ad-supported free streaming to owners of its Echo devices, but this update means you can now stream for free on your iOS, Android and Fire TV devices, too.



Our rating



UPDATED



CAMERA

Firstlight

bit.ly/firstlight490

 13

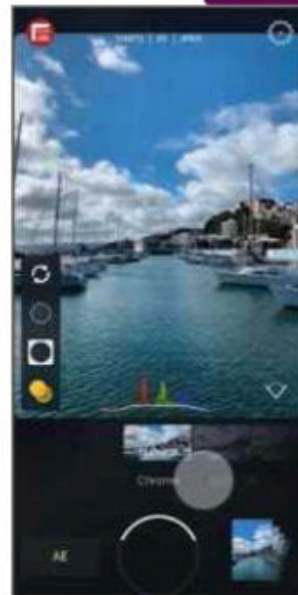
If your iPhone's stock camera app doesn't offer enough advanced controls, then try Firstlight – a new still-photography app from the makers of the Filmic Pro video camera app. Firstlight offers a similarly powerful selection of tools, including intuitive gesture-based ways to control the creative aspects of your shots – swiping vertically adjusts exposure, for example, while swiping horizontally adjusts focus. For £7.99 per year, Premium subscribers get even more controls, filters and effects, as well as support for uncompressed RAW images.



Our rating



NEW



MUSIC

Muviz Edge

bit.ly/muviz490

 (varies)

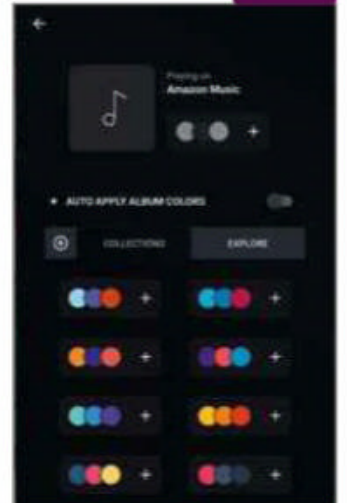
Want to turn your phone into a mobile disco, perhaps to take on DJ duties at your Christmas party? Then install this audio visualiser app, which creates a colourful light show around the edges of your device's screen as music plays. The effect is much more impressive on devices with curved-edge screens, though it still works on traditional flat screens, too. Muviz Edge supports all the major music apps and lets you customise the colours in numerous ways. Currently in early access, the app itself is free, but further visualisation styles require in-app purchases (from 69p to £1.29 per item).



Our rating



NEW



EMAIL

Spark

bit.ly/sparkdroid490

bit.ly/sparkios490

 7  11

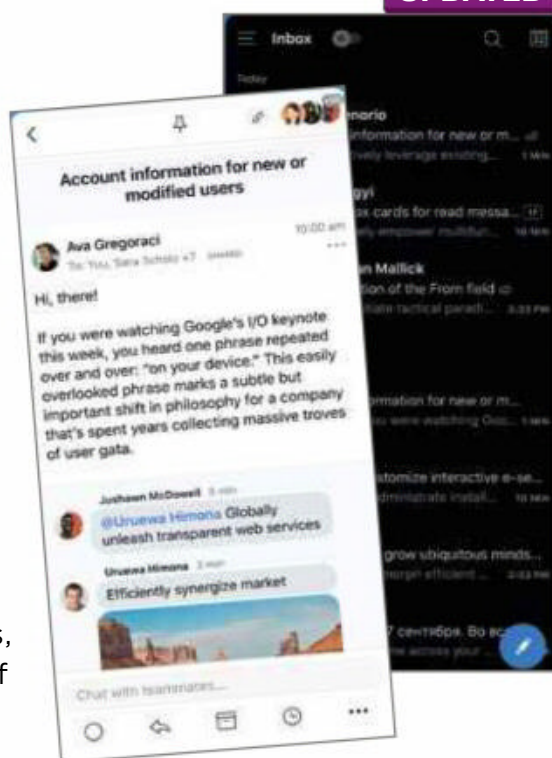
One of the best email apps around has just had a major overhaul. The latest version of Spark has effectively been redesigned from scratch, with a slick, clean look and the option to switch to dark mode. In addition to these aesthetic changes, Spark gains a number of additional features, including the ability to customise the action shortcuts shown at the bottom of messages and support for avatars. On iOS, you now also get improved contact syncing between devices and, if you own an iPad that runs iPadOS, you'll also get the added benefit of multiple window support.



Our rating



UPDATED



NEWS

Playpost

bit.ly/playdroid490

bit.ly/playios490

 4.1  11

Playpost is a great idea that's been updated to make it even better. The concept behind the app is to convert news articles, blog posts and pretty much any other text on the web into podcast-like spoken audio. Browse to an article you want to listen to, then 'share' it with Playpost to convert the text to speech. Free users are restricted to 30 minutes of listening per month. Subscribers (£4.90 per month) get access to more voices, higher-quality audio and more listening time. The latest version starts playing more quickly, improves punctuation accuracy and adds a new dark mode.



Our rating



UPDATED



4 NEW APPS WORTH PAYING FOR

GAMES

Google Stadia

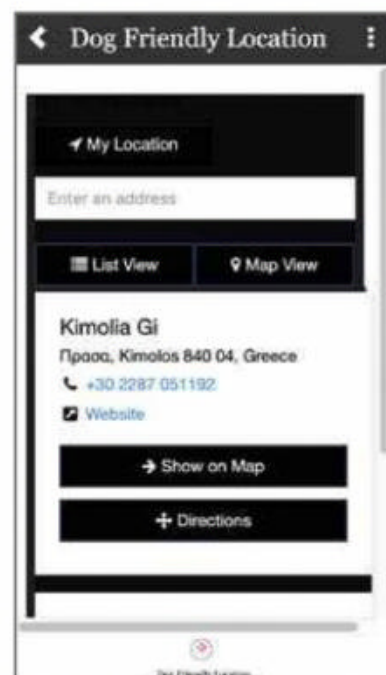
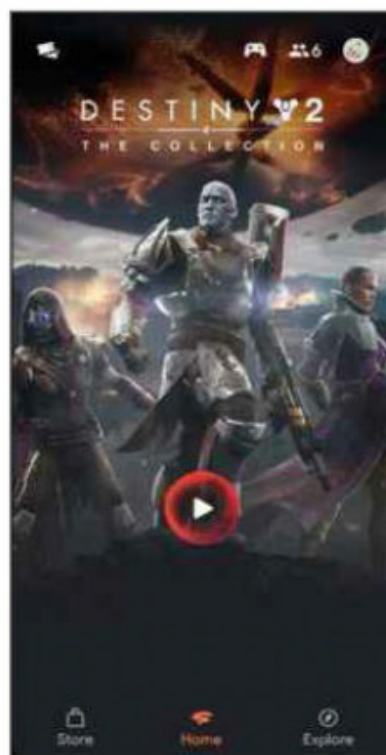
bit.ly/stadiadroid490

bit.ly/stadiaios490

Price: £120, plus £8.99 per month

 6  11

Google's new console-less gaming platform lets you stream games from a library of titles at up to 4K across all your devices. Unfortunately, Stadia's 19 November launch was a bit half baked. The service offers a limited pool of games (around 20 older titles) and is currently only available to those who own either the Founder's Edition preorder pack or the Premiere Edition (£120), which includes a Chromecast Ultra and a Stadia Controller. A subscription-free version is due for wider release next year but, until then, users have to pay £8.99 per month for Stadia Pro in addition to the cost of individual games.



cafés that are happy to accommodate their four-legged friends. It lets you search for and view nearby dog-friendly outlets on Google Maps.



FOOD & DRINK

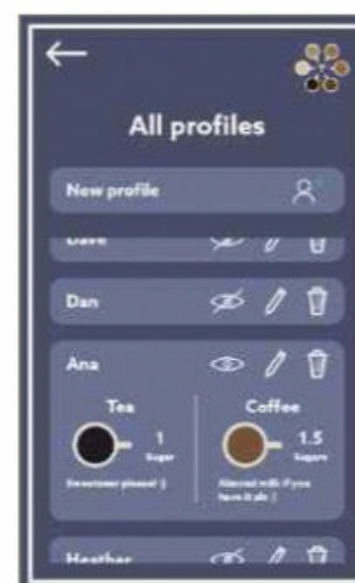
Who Wants a Brew?

bit.ly/brewdroid490

Price: 99p

 5

This handy app lets you store tea and coffee profiles for yourself, co-workers and family members, specifying the amount of milk, number of sugars and so on. You'll never make a disappointing cuppa again!



SPACE

Orbitrack

bit.ly/orbidroid490

bit.ly/orbiios490

Price: £4.69 (Android), £4.99 (iOS)

 4.4  10

Orbitrack is a brand-new, AR-fuelled satellite tracker and spaceflight simulator from the developers of Satellite Safari. It lets you use your device to locate and follow thousands of satellites and space-faring vehicles in orbit around the Earth.



NAVIGATION

Dog Friendly Location

bit.ly/dogdroid490

Price: £1.19

 4.4


This app is ideal for dog owners looking for restaurants, bars and

✓ Install this app...

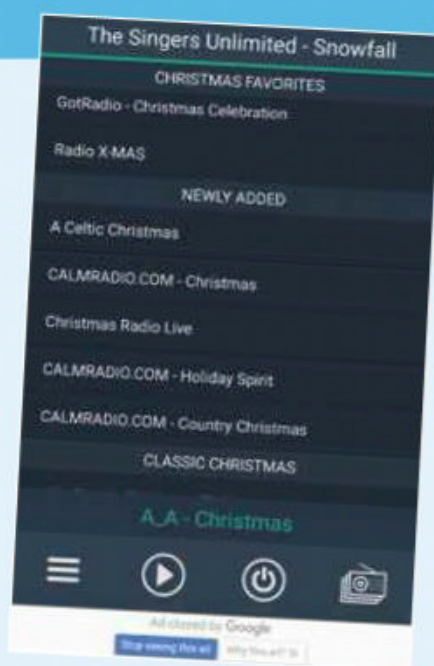
Christmas Radio

bit.ly/radiodroid490

bit.ly/radioios490

 4.1  8

If you're fed up with Noddy Holder bellowing "It's Chriiistmaaas!" or you never again want to hear Cliff Richard banging on about mistletoe and wine, then this could be the year you tune into the Christmas Radio app. It provides access to a diverse selection of festive radio stations from the UK and beyond, split into helpful categories such as Smooth Christmas and Country Christmas. All tastes are catered for, including jazz, Celtic and kids. Usefully, the app supports background audio, so you can listen to Christmas tunes while using other apps or while the screen is off.



...Not this one

Christmas Advent Calendar 2011

bit.ly/advent490

The idea behind this dubious looking app is that you get to unlock a free app every day in the run-up to Christmas. However, not only is it hopelessly out of date but it turns out not all the 'free' apps are actually free. Worse, this sneaky app also demands a ton of unnecessary permissions, including access to your phone status and identity, which is a surefire way to put a downer on your festivities.





Take a Screen Break

Take a rest from your browser with our fiendish fortnightly challenges. Can you solve our Christmas-film emoji and guess our Wikipedia article?

**WIN A
WEB USER
2018 BACK
ISSUES DISC!**

Email your answers to
editor@webuser.co.uk
- one correct entry
will win a disc



CAN YOU GUESS THE CHRISTMAS FILMS FROM THE EMOJI?

1



2



3



4



5



6



GUESS THE WIKIPEDIA ARTICLE

Can you work out which technology-related Wikipedia entry the following clues refer to?



WIKIPEDIA

1 "Its origins date back to the founding in 1846 of the Electric Telegraph Company, the world's first public telegraph company, which developed a nationwide communications network."

2 "Its telecommunications tower in London is notable for numerous reasons such as being the

tallest building in the UK from its construction in the 1960s until the early 1980s."

3 "In 2001, it discovered it owned a patent it believed gave it rights on the use of hyperlink technology on the web, and began a court case relating to its claims in a US federal court."



5 "In 2008, it was revealed that it had entered into a contract with the spyware company Phorm to intercept and analyse users' click-stream data and sell the anonymised information."

COMPETITIONS

WIN A...

Sonos One SL speaker

The Sonos One SL uses stereo pairing to ensure a rich sound that will fill any room. Its compact design means you can place it just about anywhere. Using AirPlay 2, you can stream audio directly from your iPhone or iPad. To enter, email your address to webusercomp@dennis.co.uk with 'Sonos' in the subject line. For more information, visit www.sonos.com and follow [@Sonos](https://twitter.com/Sonos) on Twitter.



**WORTH
£179**

WIN 1 OF 3

Pinnacle Studio 23 Ultimate

The latest version of Corel's Pinnacle Studio 23 Ultimate video software has powerful new editing tools, such as Video Masking, which lets you enhance or remove elements in your video. To enter, email your address to webusercomp@dennis.co.uk with 'Pinnacle Studio 23' in the subject line. For more info, visit www.pinnaclesys.com/en and 'like' www.facebook.com/PinnacleSys.

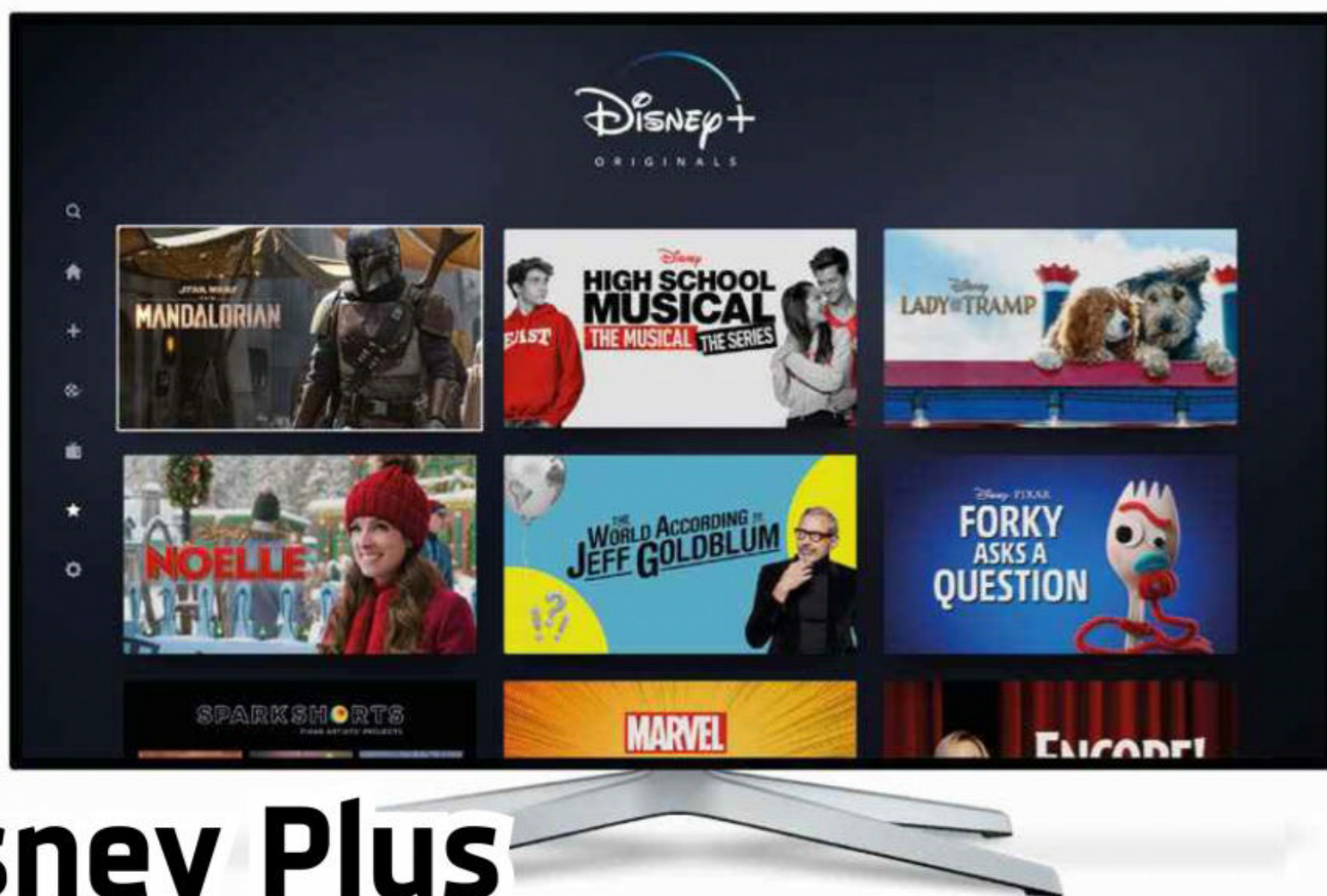


**WORTH
£114.95
EACH**



FAQ

Everything you need to know about the most interesting new technology trends and events



Disney Plus

There's another streaming service on its way, and it's more than just a Mickey Mouse offering. **David Crookes** explains all

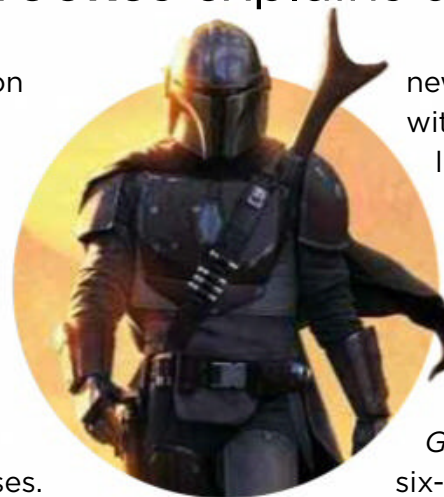
What is it?

Disney Plus, or Disney+ as it is styled (preview.disneyplus.com/uk), is a new TV and film streaming service launched by the 'House of Mouse'. It is set to be a major rival to Netflix, providing an exclusive mix of new and classic movies and shows from the many Disney-owned entertainment studios, which include Marvel, Fox, Pixar and LucasFilm.

So another subscription to pay?

Afraid so. If you're a fan of Disney's movies and television shows, then you're going to have little choice but to fork out. The company has been pulling its content from rival streaming services

such as Netflix and Amazon Prime Video to ensure Disney Plus becomes the only place you can see them. The *Marvel Originals* shows for Netflix have already been canned, for instance, and Disney hasn't allowed its rivals to show last year's film releases.



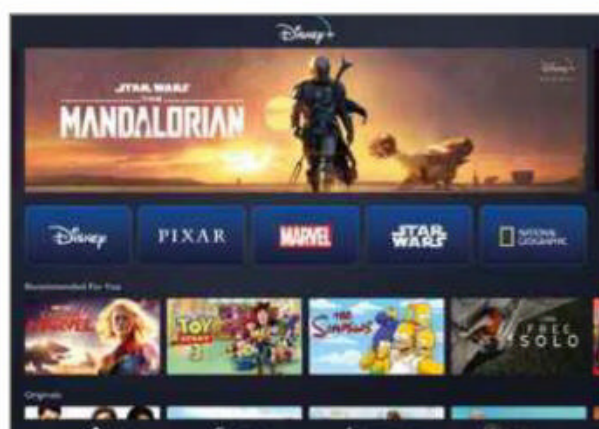
new home of Star Wars, with the franchise's first ever live-action series, *The Mandalorian*, already proving a primary attraction (bit.ly/mand490). Other launch shows include *High School Musical: The Musical* and *Gravity Falls*. There's also a six-episode documentary series about Disney theme parks called *The Imagineering Story*.

What are the main attractions?

The service has more than 620 series including, in the US, all 30 seasons of *The Simpsons*, which Disney acquired when it snapped up Fox. Disney Plus is also the

Are there some great films, too?

Yes, indeed. Disney Plus has about 500 films, including *Avatar* (which is making



Disney Plus features films and TV shows from all the big studios that Disney owns



The Mandalorian is a live-action Star Wars series and a big draw for Disney Plus



Revisit classic Disney titles such as its very first film Snow White and the Seven Dwarfs

its streaming debut), *The Lion King*, *Who Framed Roger Rabbit?*, *The Muppet Christmas Carol* and most of the Marvel Cinematic Universe films. All the Pixar movies and short films are on there, as is a new live action *Lady And The Tramp*. The first six Star Wars movies are available too, along with *The Force Awakens*. It is the first time the original trilogy has been made available in 4K HDR.

If you're more a fan of the classic Disney era, you can revisit all your favourites, including *Snow White and the Seven Dwarfs*, *Pinocchio*, *Bambi*, *Mary Poppins*, *The Jungle Book* and many more. See the full list at bit.ly/disneylist490.

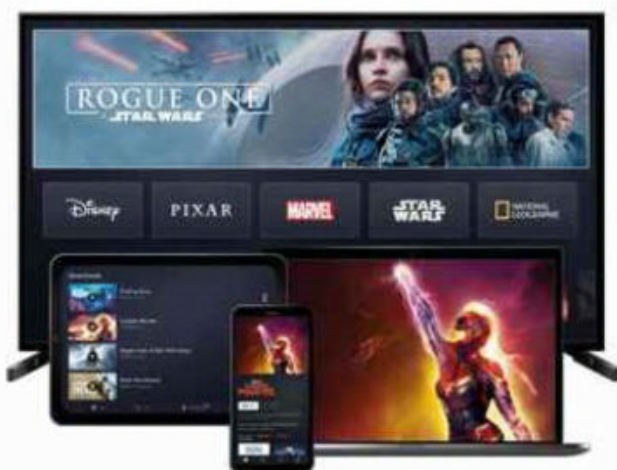
What TV shows are planned for the future?

Star Wars: The Clone Wars is making a move to the service with 12 new episodes, and there's a show about Obi-Wan Kenobi in the planning stages, together with a prequel to *Rogue One: A Star Wars Story* (are you sensing a theme?). New Marvel shows will also be unveiled and it is said fans will need to watch them if they want to keep in the loop about plotlines for forthcoming Marvel films. One of the shows will include the Marvel character Loki and debut in 2021.

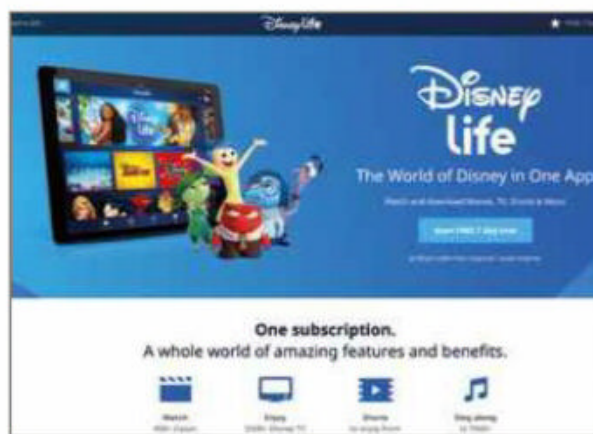
Disney also owns National Geographic so you can stream documentaries such as *Gordon Ramsey Uncharted*, *Life below Zero* and *Brain Games*, as well as brand new content including *The World According to Jeff Goldblum*.

So, how do I watch these shows?

Disney Plus is available as an app for Roku devices, Amazon Fire, Chromecast, PS4, Xbox One, iPhone, iPad, Apple TV, Android and Chromebooks, which means it can be watched on a television, laptop, tablet or phone. Shows and films can be streamed but you can also enjoy unlimited downloads if you want to watch content offline later when you don't have any internet access or can only get a poor signal.



You can watch Disney Plus on a variety of devices and stream to up to four at once



Disney fans in the UK will have to make do with DisneyLife until Disney Plus launches

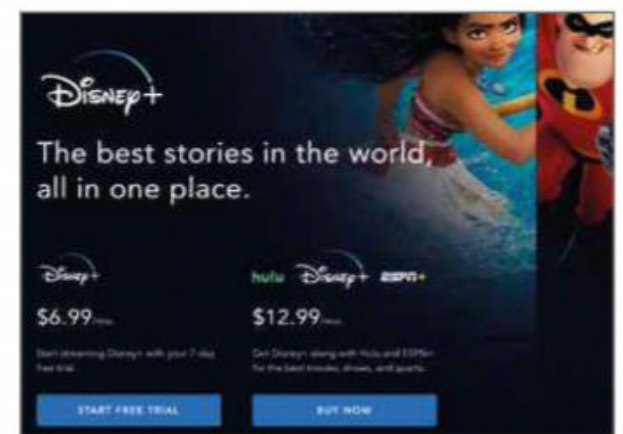
Sounds great. How do I sign up?

Sadly, you'll have to wait. Although the service has launched in the US, Canada, Netherlands, Australia and New Zealand (and attracted 10 million subscribers already), it's not going to hit the UK until 31 March. This is probably because of the current deals Disney has with UK services. Sky, for instance, has a contract with Disney for its films and television shows, and there is even a dedicated Sky Cinema Disney channel. This is likely to be scrapped when the contract runs out in 2020. Sky also has a deal for Fox movies and, again, this will be coming to an end.

If you need a Disney fix now, you can check out DisneyLife (disneylife.com/uk) for £4.99 per month, which has more than 450 movies and 5,000 box set episodes.

How much is Disney charging?

In the US, subscribers are being asked to pay just \$6.99 per month or \$69.99 per year, which is – deliberately, we assume – \$2 cheaper than the bottom-tier Netflix price. This ploy will likely be replicated in the UK so we'd expect it to cost no more than £6.99 here. Whether we'll get the exact same content as elsewhere is



Expect to pay around £6.99 a month when Disney Plus launches in the UK in March

unknown at this stage but we should at least get to see all the Disney Plus Originals.

The good news is that Disney Plus subscriptions let you stream on up to four devices at the same time. As a bonus, the service is not charging extra for 4K HDR (although not all shows will be available in this format) and it also supports Dolby Atmos and Dolby Vision, which is great for anyone with compatible equipment. It requires 5Mbps broadband for HD content and 25Mbps for 4K UHD.

What next for Netflix and Amazon Prime Video?

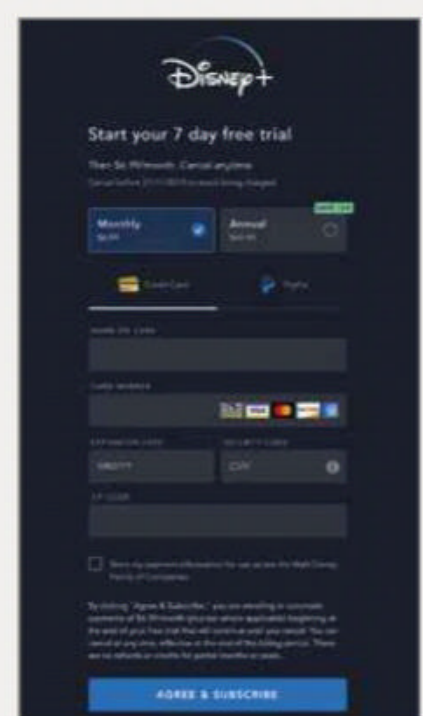
These streaming services are likely to rely more and more on original series. Netflix, for instance, is losing *Friends* to the new WarnerMedia streaming service HBO Max but homegrown series such as *Stranger Things* remain hugely popular. Licensed content makes up two-thirds of Netflix's offering, however, which will be of concern. Amazon Prime Video, meanwhile, is hoping for big returns on a new \$250m *Lord of the Rings* series and a Premier League deal that will see 20 football matches being broadcast live this month.

CAN I WATCH DISNEY PLUS USING A VPN?

Yes and no. Certainly, you can use a virtual private network to get a US, Canadian, Netherlands, Australian or New Zealand IP address that will let you watch shows. But you'll need more than a VPN alone.

Disney Plus won't accept a UK payment method or address, for example, so you'll need some other way of subscribing to the service. One way is to get a friend in a Disney Plus country to pay on your behalf or get a US debit card from TransferWise (transferwise.com).

Another option is to try using a US Apple ID with an American iTunes account and make the payment using a US App Store gift card to get your subscription up and running. But be warned that such methods breach Disney Plus's terms and conditions, so your efforts could ultimately be in vain.



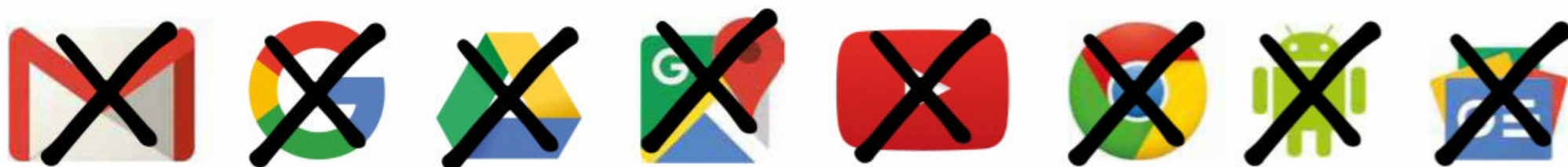
Give Up

Google

FOR 2020

**COVER
FEATURE**

Why not start 2020 by reclaiming your privacy and switching to web services that don't guzzle your data? **Wayne Williams** explains how to de-Google your life



Like alcohol, sugar and anything else we indulge in even though we know it's bad for us, Google is a hard habit to break. While it's true that most of its products and services are great quality, easy to use and free, we're also well aware of its dubious privacy policies, bullying business practices and voracious desire to control all of our data, all of the time.

So why not make a New Year's resolution to try something different?

The problem is how to give up Google when it's such an integral part of our lives. Sure, it's not going to be easy, but it *is* possible and, by doing so, you'll open up a whole new world of online freedom, where you're not constantly being tracked, monetised and tied into Google's ecosystem.

In this feature, we explain how you can de-Google your life and reclaim your privacy in 2020 without missing out on the best bits of the web. Rather than just pick obvious alternatives to Google's tools from other big tech companies such as Microsoft and Apple, we've recommended options that you may not be familiar with.

RECLAIM YOUR DATA FROM GOOGLE

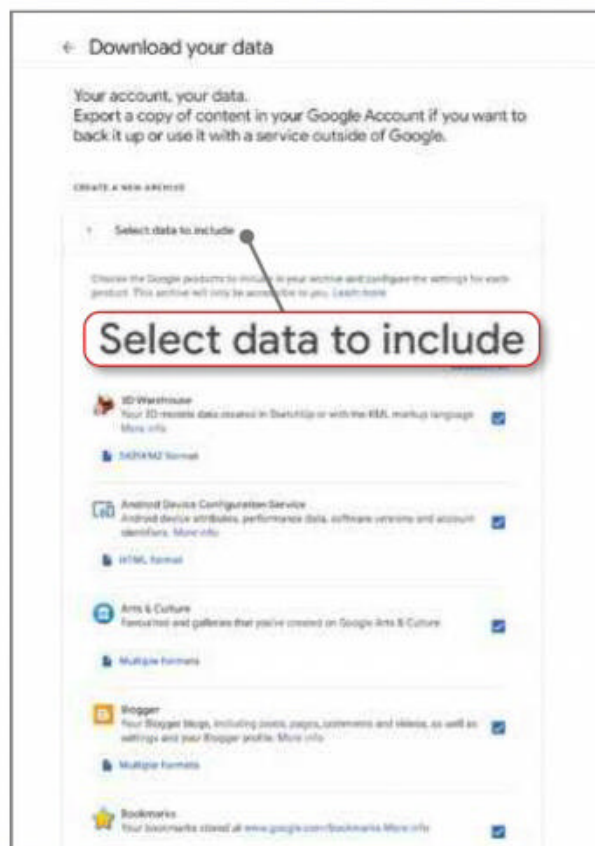
Before you make the switch from Google to less nosy alternatives, you should make sure you have a copy of all your data that is currently stored by Google, both for reference and also to import into other services, where possible.

Fortunately, Google makes it easy to export all the data it has gathered about you over the years, by using its Takeout service. Make sure you're logged into your Google account, then go to the Takeout page (takeout.google.com). By default, all the services offered by Google will be selected, but you probably won't want to download every

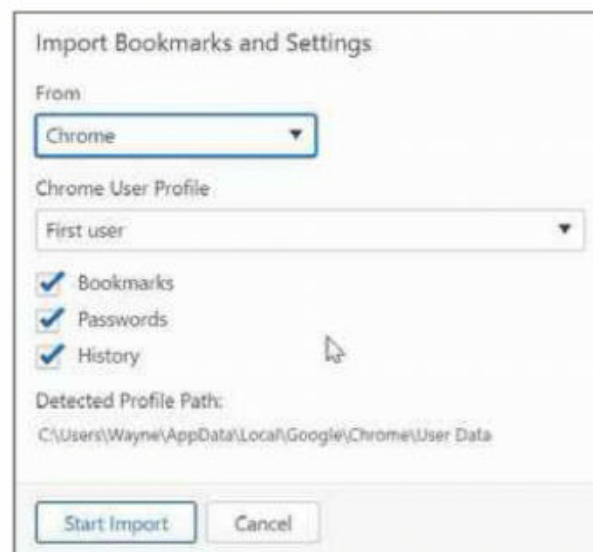
single piece of archived data, especially because that will include services you don't recall using – such as Crisis User Reports, Google Help Communities and Google Input Tools. So, with this in mind, click the 'Deselect all' link.

Next, scroll down the list and select all the important services that you've used at some point – such as Bookmarks, Calendar, Chrome, Contacts, Drive, Google Photos, Mail and Maps. Click the Format button under an item to change the type of format that the data should be saved in (if it offers a choice). For items such as Mail, you can also specify which data categories should be included if you don't want to bother with, say, your Archive folder.

Scroll to the bottom and click the 'Next step' button. From here, you can choose a data-delivery method (a link via email or adding it to Drive, Dropbox, OneDrive or Box) and the archive



Google's Takeout service lets you download all your data from the company



Most browsers let you import your bookmarks and other data from Chrome



You can delete all the Google data stores on you before moving elsewhere

format to save the data in. This is ZIP by default. Click 'Create archive' to export your content. Data downloaded in this way can be browsed, but not restored or imported into a new Google account.

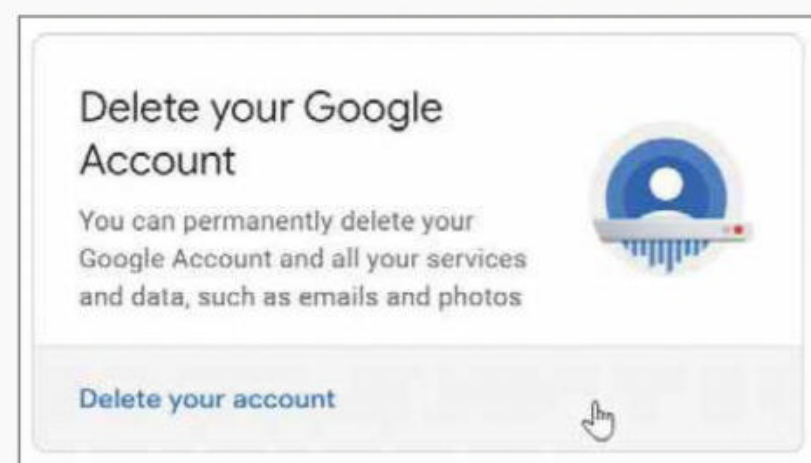
Alternative browsers to Chrome usually offer to import passwords and bookmarks when you first run them, and there should also be an option to do this somewhere in the browser. In Vivaldi, for example, click the V button, then go to File, Import Bookmarks and Settings. Select Chrome in the drop-down menu and you'll be able to import Bookmarks, Passwords and History. In Firefox, click the Library button on the toolbar, then click Bookmarks, 'Show all Bookmarks', 'Import and Backup' and choose 'Import Data from Another Browser'.

Finally, if you want to delete all the data Google has stored on you, go to your My Activity page at bit.ly/activity490 and choose what to scrub. Click the three dots to the right of the search box and select 'Delete activity by' to remove everything.

DELETE YOUR GOOGLE ACCOUNT

Quitting Google forever is a big step and not for the faint-hearted. Once you've deleted your account, there's no going back (although you can of course create a new account and start afresh). This is definitely not something you should jump into lightly – there's no reason why you can't keep your existing Google account but just not use it. You can also use Google services such as Search and YouTube without logging in, although certain features are restricted if you don't allow 'personalisation'.

If you're absolutely sure you're ready to ditch Google, and have backed up all your data and chosen



your alternative services, then deleting your account is actually very easy. Simply go to your account page (myaccount.google.com) and click 'Data & personalisation' in the left-hand panel, then scroll down to 'Download,

delete or make a plan for your data' and click 'Delete a service or your account'. Finally, click 'Delete your account' and say goodbye to Google.

If you change your mind within two days of deletion, there is a chance you can get back your Google

account by going to the 'Account recovery' page (bit.ly/recovery490). Enter the email address or phone number associated with the account that was deleted, then click 'Attempt to restore this account'.

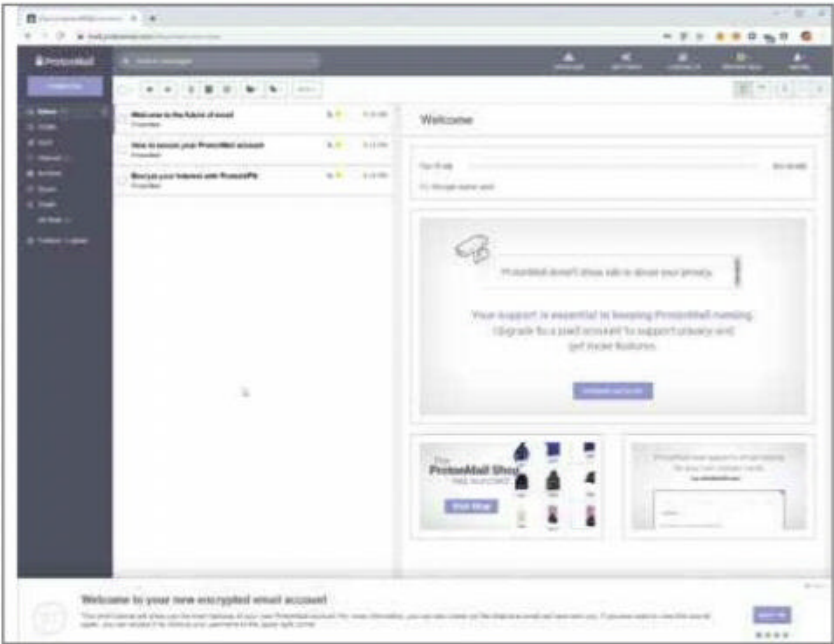
SWITCH TO ALTERNATIVE TOOLS



There are plenty of obvious replacements for Gmail, such as Outlook.com (outlook.com) and the recently redesigned Yahoo Mail (uk.mail.yahoo.com). If you'd prefer to avoid the bigger tech companies, then the open-source ProtonMail (protonmail.com) is the ideal solution. It looks not unlike Gmail – so you won't have to spend ages learning how to use it – and it's available for the web, Android and iOS.

ProtonMail is based in Switzerland, and its focus is very much on privacy. It offers end-to-end encryption and you don't need to provide any personal information to create an account. However, there are some limitations with the free version to be aware of, including a cap of 150 messages per day, a maximum of three folders/labels, and just 500MB of online storage. Upgrading to the Plus plan for €48 (£40.48) a year gives you 5GB of storage, 1,000 messages per day and 200 folders/labels. See our workshop on page 54 to find out how to use ProtonMail.

Tutanota (tutanota.com) is another open-source solution which also provides secure email, offering end-to-end encryption and two-factor authentication (2FA), so that nobody can read the content of your messages. The free version gives you 1GB of storage and upgrading to Pro for €60 (£50.60) a year increases this to 10GB and unlocks useful features



ProtonMail is an open-source alternative to Gmail that encrypts your emails

including 20 email aliases, and a custom logo and colours.



Google is the most popular search engine in the world (as of July 2019, it had an 88.61% market share) for a good reason: it does a fantastic job of finding the sites you're looking for. Rivals, such as Bing (4.98%) seem very poor in comparison and, anyway, Microsoft also tracks and collects your search data. However, it's possible to enjoy the quality of Google's results without going through its search site.

StartPage (www.startpage.com) sources its results from Google, but removes all trackers and logs, so your searches remain anonymous. System1/Privacy One Group recently made a significant investment in StartPage, but the company insists that nothing will be changing regarding user privacy (bit.ly/startp490) and it will remain headquartered in the Netherlands. There's also the brilliant DuckDuckGo

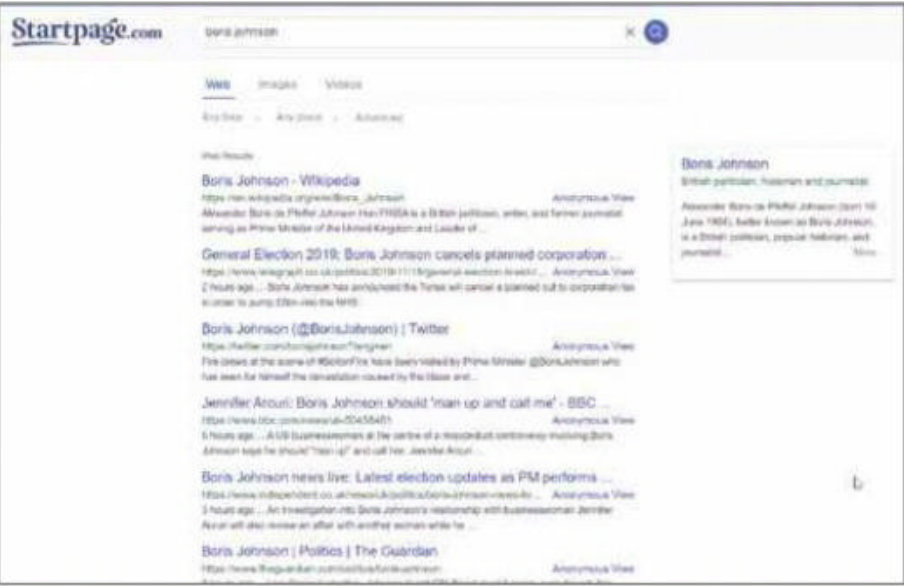
(duckduckgo.com), which doesn't track you, store your searches or share any of your personal information.

Another option is Qwant (qwant.com), an excellent European search engine with a focus on privacy and neutrality – it doesn't store cookies, for example, or your search history. Its results come from Bing, but are bolstered with ones sourced using its own web crawlers. Android and iOS users can download the Qwant mobile app (bit.ly/qwantmobile490), while younger web users (aged 6-14) can use Qwant Junior.



Swapping Google's cloud-storage service Drive for an alternative isn't difficult because there are plenty of options to choose from, such as Dropbox and Box. However, those don't come with the online office components found in Docs. NextCloud (nextcloud.com) is a better alternative – a free, open-source service that lets you store photos, videos, documents, calendar, contacts and more via either one of the recommended providers or on a server at home. You can add online office components such as Collabora Online (nextcloud.com/collaboraonline), a LibreOffice-based suite with collaborative editing, and Onlyoffice (nextcloud.com/onlyoffice), which offers full support for Microsoft Office formats such as DOCX and PPTX.

Another option is CryptPad (cryptpad.fr), which has its own office applications – including a rich text editor, spreadsheet and presentation creator – alongside encrypted storage. You can use the service for free as an anonymous user, which gives you access to all the main applications and limited access to CryptDrive storage.



StartPage delivers Google search results without compromising your privacy



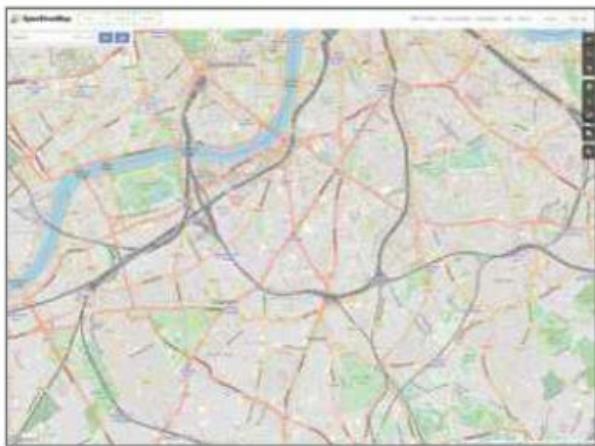
CryptPad is a good option for keeping your online files completely private

Sign up for free and you'll get 50MB of permanent storage, along with complete CryptDrive functionality.



MAPS Google Maps is unquestionably a fantastic service – you can discover what an area looks like in real life, thanks to Street View; get turn-by-turn directions when you're out and about; and see alternative routes when roads are closed or traffic gets too heavy. If you've ever wondered how Google knows what the traffic situation is where you are, the answer is it records the location and speed of all users of its app (even if they aren't actively using it). And yes, that includes you.

For that reason alone, it's worth switching to an alternative service such as Open Street Map (www.openstreetmap.org). This is created and updated by ordinary would-be cartographers – and lets you make your own contributions if you want – and provides directions from one place to another by car, bicycle or on foot. OpenStreetMap is open data, which means you can use it in any way you like, provided you credit OpenStreetMap. You can also download a number of third-party apps that use its information.



OpenStreetMap helps you find your way around without being spied on

For example, OsmAnd (osmand.net) includes data from both OpenStreetMap and Wikipedia, and is available for Android and iOS. It works totally offline, and includes turn-by-turn voice guidance. If you want additional features, such as frequent map updates and unlimited downloads, you can pay for a subscription, which costs €7.99 (£6.74) a year and helps support the project.

Another option is WeGo Here (wego.here.com), which lets you browse maps on the web, get directions and view traffic information, and provides free



WeGo Here lets you download maps of more than 100 countries to browse offline

apps for Android and iOS. It has offline maps of the UK, US, Germany, France, Spain, Italy, Canada, Australia and more than 100 other countries, and public transit information for more than 1,300 cities including London, New York, Sydney, Paris, Berlin, Rome and Toronto.



PHOTOS Google Photos lets you store your images in the cloud for easy access from anywhere and offers lots of useful tools, but it's hard to shake the creepy feeling that Google is analysing your pictures. On an iPhone or iPad, you can use iCloud instead, but there are other third-party solutions available, such as the open-source Piwigo (piwigo.org). With this service, you can store photos on your own web host for free or pay for Piwigo's own cloud storage, which costs from €39 (£32.87) a year. You get unlimited storage for your images, access to hundreds of plugins that add extra features and you can create a personalised photo library and share it with the world. There is a mobile app available, too, but it's iOS only (there are third-party clients available for Android, though).



Store your photos with Piwigo for unlimited storage and hundreds of plugins

Recall (app.recall.photos) is another open-source alternative to Google Photos. To use it, you need to create a

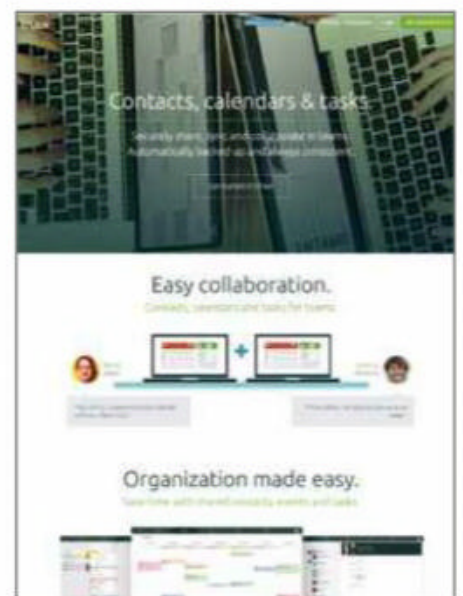
free account with Blockstack (blockstack.org) and can store your photos there, or choose a different storage provider. There's also an iOS app.

31 CALENDAR

Google Calendar makes it easy to keep track of even the busiest of lives, but Apple provides iPhone users with a calendar of their own, and there are alternative services such as Fruux (fruux.com) and Cozi (www.cozi.com) that are both very good. Fruux is

available for all major platforms, including Windows, macOS, Linux, Android, iOS and the web. As well as calendars with multiple views, Fruux includes contacts and tasks tools, and its free version is available to use on up to two devices.

Cozi is described as a simple family organiser for Android, iOS and the web. It includes to-do and shopping lists, and a family calendar that lets you set reminders, organise events and send agenda emails. There's a place to store recipes and plan meals, along with a family journal. Cozi is ad-supported, but you can remove the ads and gain access to additional features, such as contacts and birthdays, by subscribing to Cozi Gold for \$29.99 (£22.84) a year. There's a 14-day free trial available.



Fruux is an alternative to Google Calendar with lots of handy features



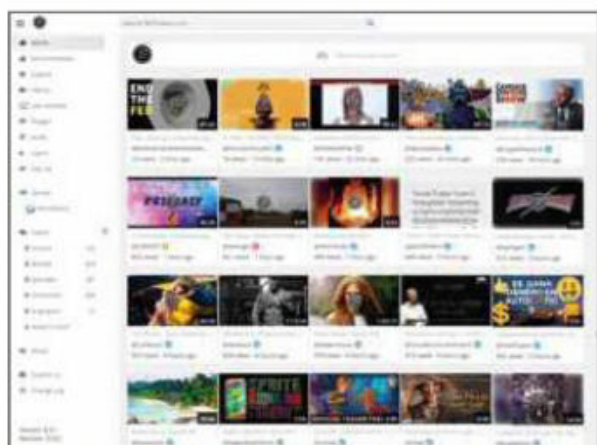
Organise your life from your phone using Cozi's Android or iOS app



ALTERNATIVE TOOLS continued

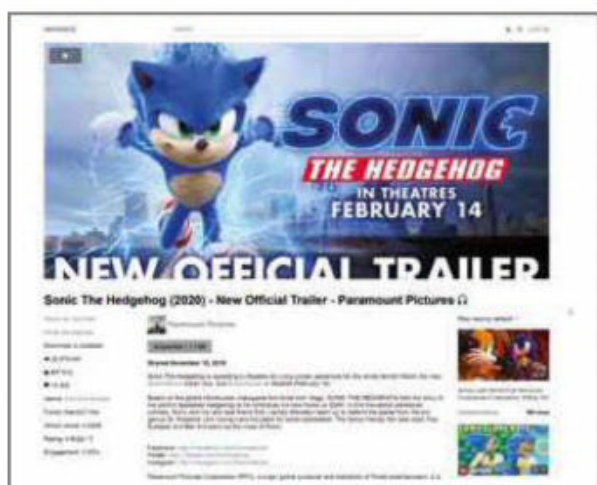
YOUTUBE

YouTube is undoubtedly one of the hardest Google services to quit, because most of the videos you encounter on the web will be hosted there. Vimeo (vimeo.com) and Dailymotion (dailymotion.com) are the closest alternatives, but there are other lesser known services that are worth taking a look at. First up is BitTubers (bittubers.com), which is a new-ish social network aimed at content creators and streamers. It borrows a little from YouTube's design, and offers videos, live streams, images and audio categories. It works well, but it's lacking in content at the moment, and some of its top videos have less than a thousand views.



BitTubers is a promising new video-sharing service but it's short on content

Invidious (invidio.us) is another option, and lack of content isn't an issue here because it serves as an alternative front-end for YouTube. In many ways, it's better than Google's own service because there are no ads to spoil your enjoyment of videos, comments are from Reddit rather than YouTube and it comes with a dark mode, the ability to adjust the speed of playback and an audio-only option. While you can browse the site and watch content from the likes of PewDiePie, h3h3Productions and *Last Week Tonight with John Oliver*, Invidious lets you watch everything



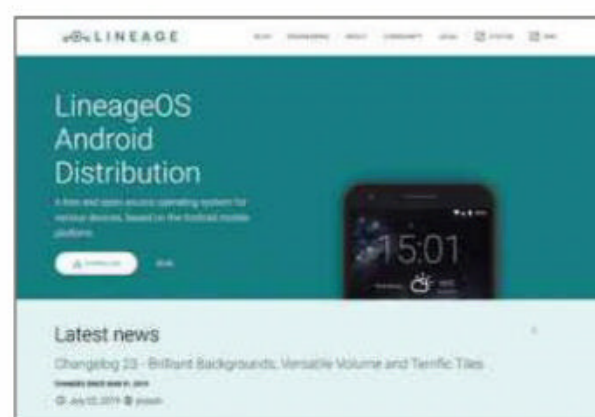
Invidious is an alternative, ad-free way to watch YouTube videos

found on YouTube. All you have to do is swap the 'youtube.com' part of a video's address with 'invidio.us'. For example, to watch the new Sonic the Hedgehog trailer, instead of going to <https://youtube.com/watch?v=szby7ZHLnkA>, you enter <https://invidio.us/watch?v=szby7ZHLnkA>. Invidious usefully provides a link to the same video on YouTube, so you can switch to watching it on the source site, should you need to.

ANDROID

The obvious alternative to Google's Android operating system is Apple's iOS but, if you can't justify the cost of an iPhone, there are some other options available.

LineageOS (lineageos.org) is a free,



LineageOS lets you remove your phone from Google's snooping ecosystem

open-source operating system that's based on Android and is essentially a continuation of CyanogenMod, which shut down in 2016. It's available for a number of devices, from companies including Google, HTC, Huawei, Motorola, OnePlus, Samsung and Sony. When you click the download button, you'll be able to browse for your particular make and model to find the relevant option. Installation instructions are provided.

Another benefit of LineageOS – beyond removing your phone from Google's snooping ecosystem – is that it works on many older handsets. The OS is highly customisable, comes with open-source apps and provides tools to safeguard your privacy. As an alternative, there's /e/ (e.foundation), which is a fork of LineageOS with even more focus on privacy.

There are other, lesser-known operating systems to consider, such as Resurrection Remix OS (www.resurrectionremix.com), which has just released a version based on Android Pie, and the privacy-focused Replicant (replicant.us).

MIUI (en.miui.com) is an Android-based OS with an always-on display and its own apps. It's fast, looks amazing and comes packed with features, but the one big downside is that it's only

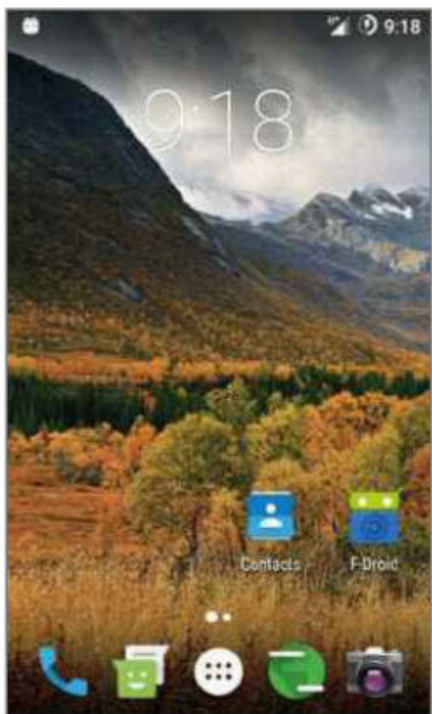
STOP GOOGLE CONTROLLING THE WEB

AMP – or Accelerated Mobile Pages, to give it its full name – is an open-source Google project (amp.dev) that aims to speed up the web on mobile devices by reducing the amount of code used. The benefit to Google is that these pages are easier to crawl and index, and it also hosts the pages through its Google AMP Cache (bit.ly/ampc490), which is a clear privacy concern. To encourage websites to get on board, Google rates AMP pages higher in its search results, so few sites can afford to ignore it, and some people see this as further evidence of Google trying to control the web.

One way you can avoid viewing AMP pages and see the original HTML versions instead is by using the Redirect AMP to HTML add-on for Firefox (bit.ly/ffamp490) and Chrome (bit.ly/gcamp490). When someone shares an AMP page with you from their mobile phone, this add-on will ensure you don't open that version on your computer.

To avoid visiting the AMP version of a page on your mobile phone, tap its URL in your browser's address bar and delete 'amp' from the address.





Replicant is an Android variant that emphasises privacy and security

available for Mi and Redmi phones produced by Chinese electronics firm Xiaomi. Don't dismiss the OS entirely, however, because you can buy many of these devices from eBay and Amazon for between £100-£200, depending on the model. Make sure you buy the Global version, though, unless you can read Chinese.

Owners of Huawei and

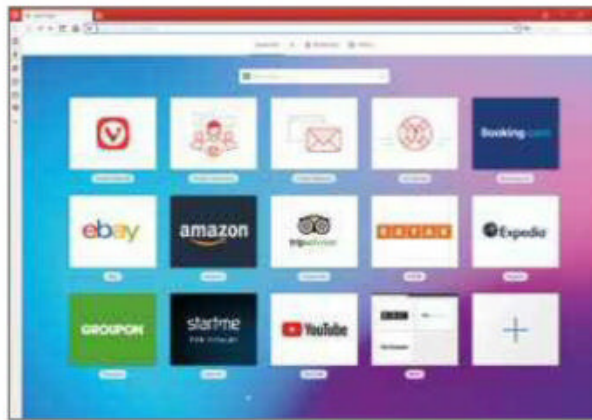
Honor phones have their own Android-based operating system called EMUI (bit.ly/emui490). Huawei is currently working on a new Android alternative called Harmony OS, but it may be some time before phones running it are available.

Finally, Google maintains the Android Open Source Project (AOSP) (source.android.com), which allows anyone to create custom variants of Android, if they have the skills.



CHROME

Other than the obvious alternative of Firefox, there are lots of great non-Chrome browsers you can use, although a number of them – such as the new Microsoft Edge (www.microsoftedgeinsider.com), Vivaldi (vivaldi.com) and Brave (brave.com) –



Vivaldi is our favourite Chrome alternative and offers lots of great features

are based on the Google-owned Chromium, which is the same open-source browser that Chrome is built on. If you don't mind running a Chromium browser (most of them ditch the Google features that make Chrome so invasive), then we'd definitely recommend Vivaldi, which is a new-ish creation from the former CEO of Opera. It offers a wealth of useful features not found in other browsers, such as floating web panels, customisation options and privacy tools, and recently launched an Android app.

If you'd prefer to completely move away from Google, then a browser based on Mozilla Firefox would be your best bet. Waterfox (www.waterfox.net) is a 64-bit version of Firefox, which is pretty much identical, but with some

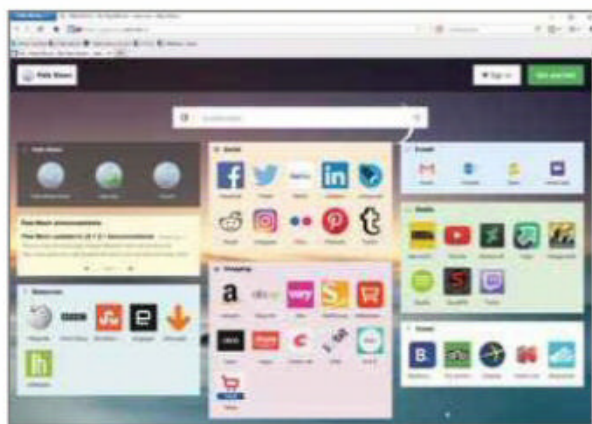
welcome changes including limited data collection, no telemetry and support for plugins that are no longer allowed in Mozilla's browser. Pale Moon (www.palemoon.org) is also a good choice – the open-source browser was forked off Firefox years ago and has been developed independently ever since.



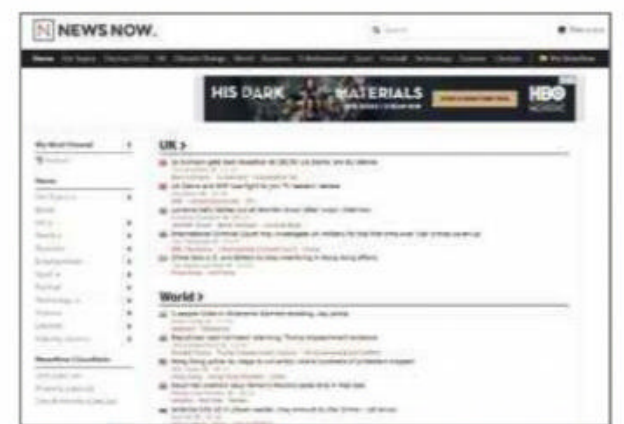
GOOGLE NEWS

You can get your daily news fix directly from sites such as BBC News (news.bbc.co.uk) but, if you prefer multiple perspectives, then give NewsNow (www.newsnw.co.uk) a try. It pulls its content from numerous respected sources, and you can browse stories by categories including UK, Entertainment, Sport and Technology. Clicking a link takes you to the originating site. The layout is quite bland compared to Google News, but free of distractions (other than a few ads).

Another service is Newstral (newstral.com/en/uk), which pulls the top three stories from sources including the likes of the BBC, The Guardian, The Sun, Daily Mail and The Independent. You can explore the stories in a list down the centre or use the links at the top to filter by region, people or topic. ■



Unlike many browsers, Pale Moon isn't based on Google's Chromium code



Read the latest headlines on NewsNow rather than heading to Google News

NEXT ISSUE

on sale Friday 27 December 2019

AWFUL APPS YOU MUST AVOID IN 2020

We name and shame the tools that threaten your phone's security and performance



PLUS...

GOODBYE WINDOWS 7

What to do when Microsoft ends support for the OS

HANDS OFF YOUR PC!

How to control your computer without touching it

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Best portable browsers for USB sticks

Whether you want to improve your privacy, keep your settings when using a different computer or just try different versions of popular browsers, running a portable edition is a great idea. **Andy Shaw** tests six pocketable programs



Opera | www.opera.com | ★★★★★
FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

**WebUser
GOLD
AWARD**

What we liked:

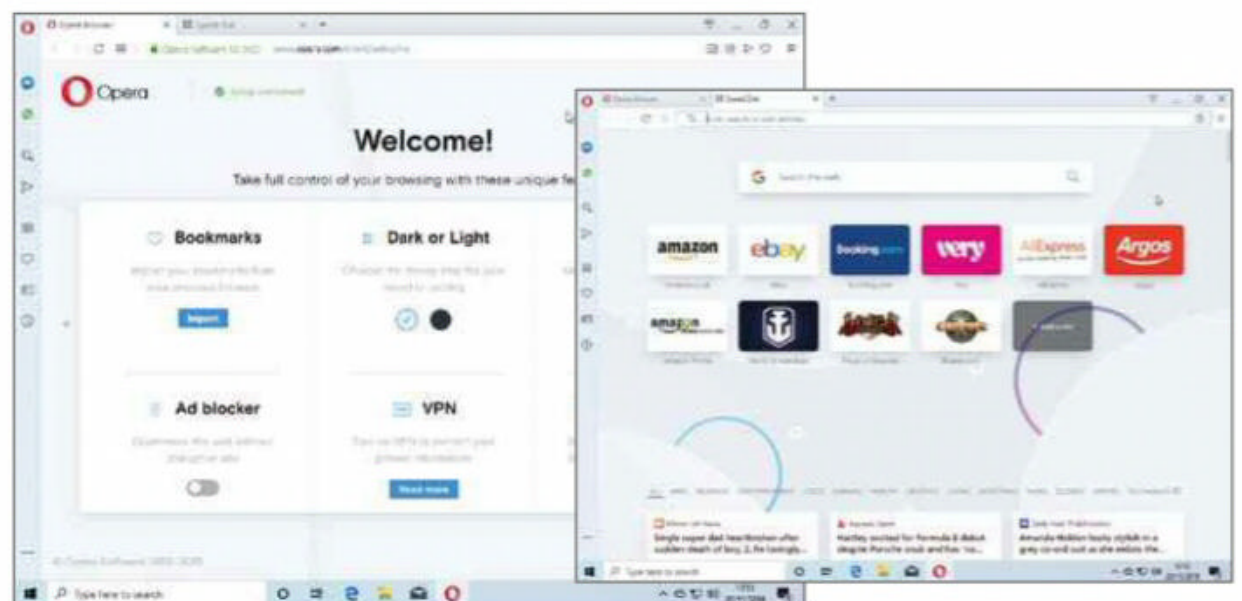
The portable version of Opera is hidden among the browser's standard installation settings.

Download the software as normal and, on the installation screen, click the

drop-down menu next to 'Install for' and choose 'Stand-alone installation (USB)'. From here, you choose the folder or USB memory stick that you want to install it to. This portable version includes all the same tools and options as the desktop browser, but without hooking itself to your operating system.

Opera is perfectly suited to portability and its minimalist interface tucks away a wealth of features behind icons and panels. Take a look at the unobtrusive sidebar, narrowed to a single row of icons. Each icon, when clicked, reveals options that slide out over the page you're looking at, so you can choose your bookmark or item from the history, then hide everything away again. We particularly love the Instant Search option, which overlays a Google search box on the current page, expands to include the search results, then expands into a new tab, if you wish.

The browser is topped off with a selection of easily accessible privacy



features. You can remove ads and trackers from pages at the flick of a switch, and even switch on Opera's free VPN, though it's worth remembering that this doesn't claim to be as secure as paid-for VPNs. All these tools and more are available from the brilliant 'Easy setup' sidebar, which all browsers could learn a thing or two from.

How it can be improved:

Our main complaint about Opera is its insistence on placing Facebook Messenger and WhatsApp icons at the top of the sidebar. You can remove them yourself by simply right-clicking and deselecting them, but it's disappointing

that they're still there, invisibly lurking in the background and using up valuable portable space.

OUR VERDICT

Opera feels like the perfect portable browser. Its interface is clean and focused on the content, but also rich in features – it simply chooses not to push too many options in your face. It also has elegant, built-in privacy tools to help you browse the web more carefully. Try it – with this portable version, you have nothing to lose.

Vivaldi | vivaldi.com | ★★★★★☆

FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

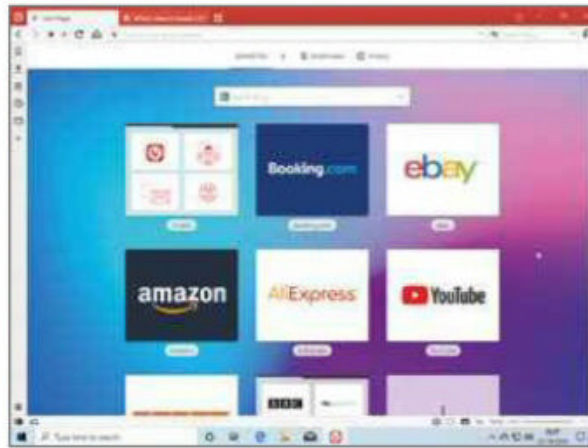
WebUser
SILVER
AWARD

What we liked:

To set up Vivaldi to be portable, rather than installed on your PC, just download the software as normal, run the installer and, on the first page of the installation window, click Advanced. From the 'Installation type' menu, choose 'Install standalone', which is the portable version.

If you're after a lightweight and fast portable browser, this isn't it. Rather, Vivaldi is a connoisseur's browser, resplendent with luxurious features. While spun off from Opera and still reminiscent of it, Vivaldi's 2.9 versions have moved in interesting and innovative directions. The familiar feature-packed sidebar muscles its way on screen, presuming that its users are equipped with generous wide screens and want their browsing sessions accessorised with all the trimmings.

The portable version, then, is ideal for giving Vivaldi a serious trial run but, if you're seriously into your web browsing, you're better off installing the full browser on your computer of choice.



How it can be improved:

We love Vivaldi but it could never be described as a pocket browser and isn't best suited to being carried around and run on any device.

OUR VERDICT

Vivaldi's portable edition keeps the rich array of options you get in the installable version. It's a great way to try out the browser but isn't ideal for carrying around because it may not be very well suited to some of the screens and devices you end up using it on.

SRWare Iron | srware.net/iron | ★★★★★☆

FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

WebUser
BRONZE
AWARD

What we liked:

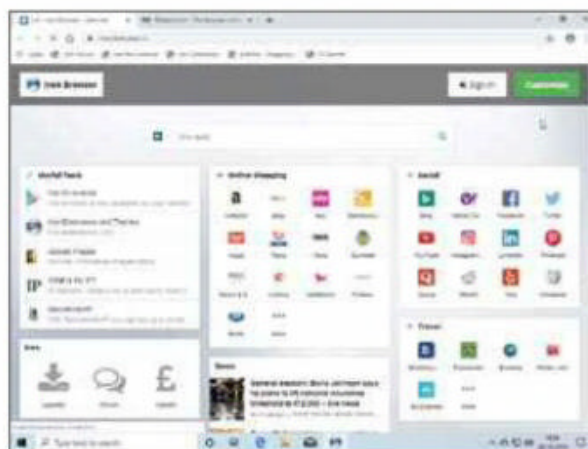
Iron is built on Chromium but it promises more privacy than Chrome. The portable version is available directly from the Iron website, so you don't

need to fiddle about with installers. In fact, you don't even have to install it, just move the files from the downloaded folder to wherever you want to keep the browser.

The interface is identical to Chrome but differs in that it has removed many of the privacy-compromising features that Google adds or leaves in its browser. It's a good balance between the speed and website-compatibility of Chrome, and the privacy options you get by moving away from Google.

How it can be improved:

On close inspection, the version of Iron we downloaded was one version behind regular Chrome. Also, it doesn't update automatically, so you have to keep an eye on the Twitter feed (twitter.com/srware) and follow the instructions in a



text file to perform an update. You can't necessarily expect a smaller developer to keep up with Google's changes but being a step or more behind the latest updates left us feeling a bit uneasy.

OUR VERDICT

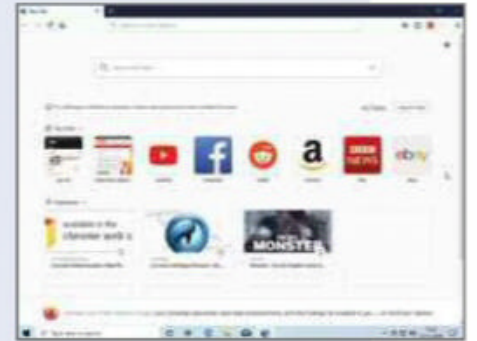
You could get a portable version of Chrome through the PortableApps system (see right) but why bother, when this version is more private? The downside is that you need to stay on top of updates so you don't end up with a compromised browser.

BEST OF THE REST

Comodo IceDragon

icedragon.comodo.com

Comodo IceDragon is based on Firefox but installed via the main download – there's a portable box you can tick during the installation. However, now that Mozilla has added a slew of privacy settings to the official version of Firefox, this Comodo version is less relevant. IceDragon has a site inspector to scan a page for malware and the option to link to Comodo's alternate DNS server – but that's about it.



Maxthon

www.maxthon.com

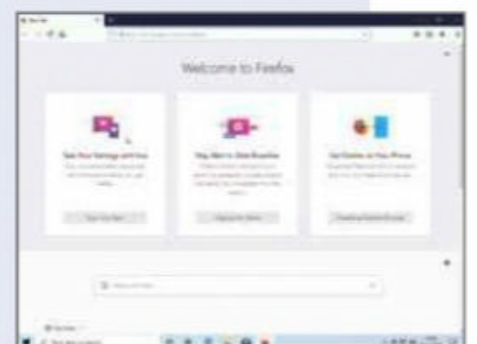
Maxthon is a favourite of some *Web User* readers but we didn't get on with the portable version. For a start, it's archived in the 7-Zip format, which means you may need to download another program just to open it. At first, we couldn't work out how to run the browser, until we eventually found the application file in a folder called Bin. It could hardly be less user-friendly.



PortableApps (Chrome/Firefox)

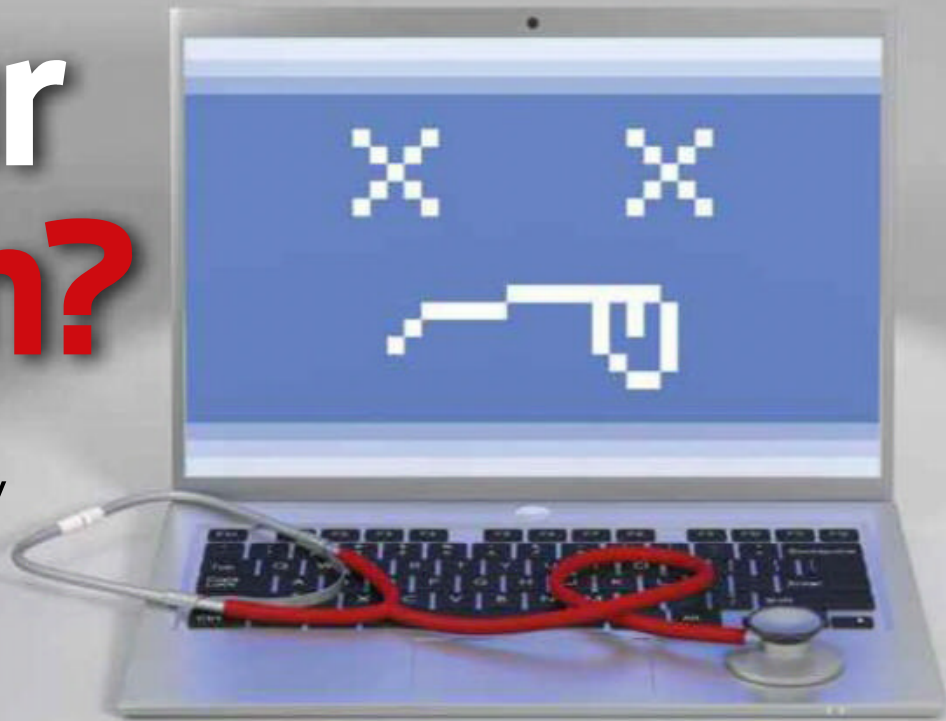
portableapps.com

PortableApps used to require that you run a launcher containing your portable apps but, thankfully, that's no longer the case. Now, using Chrome or Firefox through the service is as simple as downloading the browser and running it from the folder you save it to. If you're happy to stick with your current favourite browser, then go for it, but we think if you're going to go portable, it's more fun to choose something different.



What's your PC's **problem?**

Save money on computer repairs by diagnosing your PC's problems yourself. **Nik Rawlinson** reveals the questions you should ask to get the answers you need – before it's too late



Is your hard drive **SMART?**

The data on your hard drive is worth more than the drive itself. If you suspect your hard drive is failing, make a full backup of its contents and either swap it for a new one or, at the very least, check its SMART status right away.

SMART stands for Self-Monitoring, Analysis and Reporting Technology. It's been knocking around in various forms since the mid-1990s, so it's almost certain that your hard drive or SSD is supported. At its most basic level, SMART tells you whether your drive is working properly or failing. However, as there's no agreed way of reporting what's happening under the hood, individual manufacturers interpret the results – and their severity – differently. If there's even a hint that things are going awry, we would recommend implementing a backup-and-replace operation sooner rather than later.

All drives degrade over time and yours will fail eventually. If you're using a traditional hard drive, its firmware will

actively shuffle its contents around as sectors start to corrupt. Those sectors will be marked as out of bounds to prevent them from being used in the future. This reduces your drive's available capacity and, as the errors build up, slows it down.

On an SSD, spare capacity blocks are brought into play as the primary blocks fail. The drive has what's known as 'over-provisioning' – more memory cells than its capacity suggests – so you shouldn't notice any loss of capacity for a while and, because access on an SSD is almost instantaneous, you shouldn't detect any slowdown, either.

The question is: if failure can happen without any warning, how do you check your drive's SMART status? Our favourite diagnostic tool is CrystalDiskInfo (free to download from bit.ly/crystal490). Unzip it and launch DiskInfo64.exe. Everything you need to know is detailed on its opening screen including, most importantly, the hard drive's Health Status. If all is well, this should read Good. If not, you may need

to replace your drive.

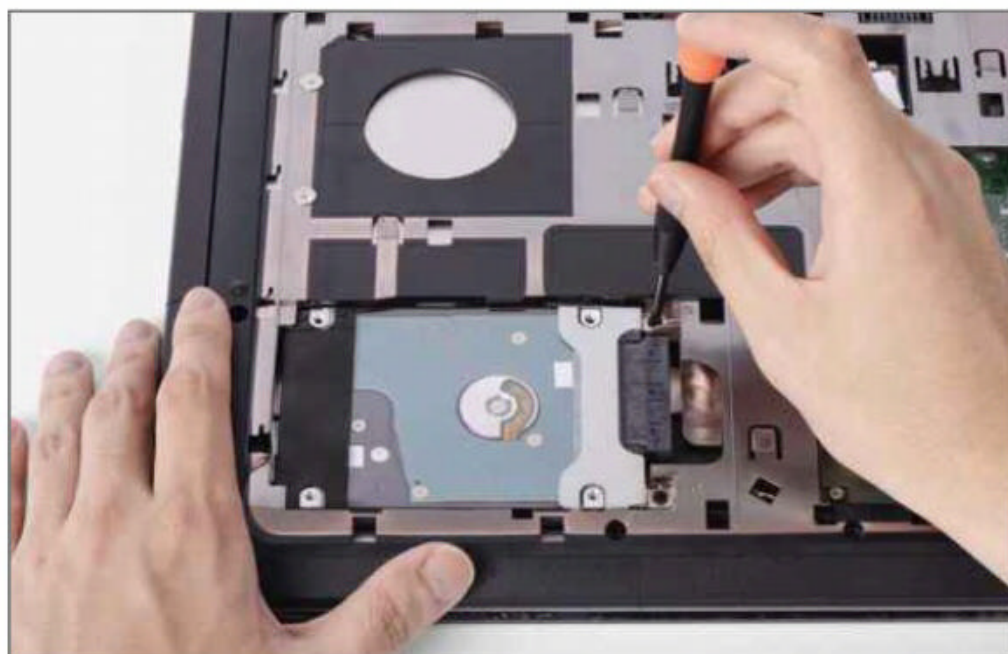
You'll find the drive's temperature directly beneath the Health Status. If it shows a blue background, it's not too hot, but yellow or red are cause for concern. If the drive is overheating, make sure the fans in your PC's case are spinning, large enough and free of dust. If they aren't turning, check their connections and, if there's no problem there, investigate a fix or a replacement.

The temperature measurement is a bit abstract until you know your hard drive's optimal operating parameters. Make a note of the drive's model number – the long line of larger characters near the top of the window – and use it to search for the manufacturer's specification sheet. From this, we can see our drive should be between zero and 60°C, so its current temperature is just fine.

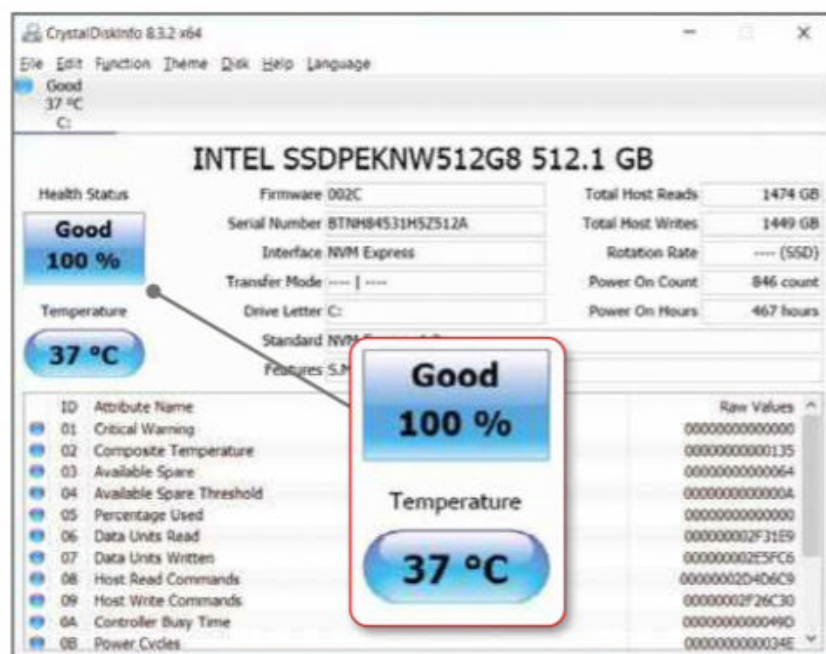


Has your battery taken a **battering?**

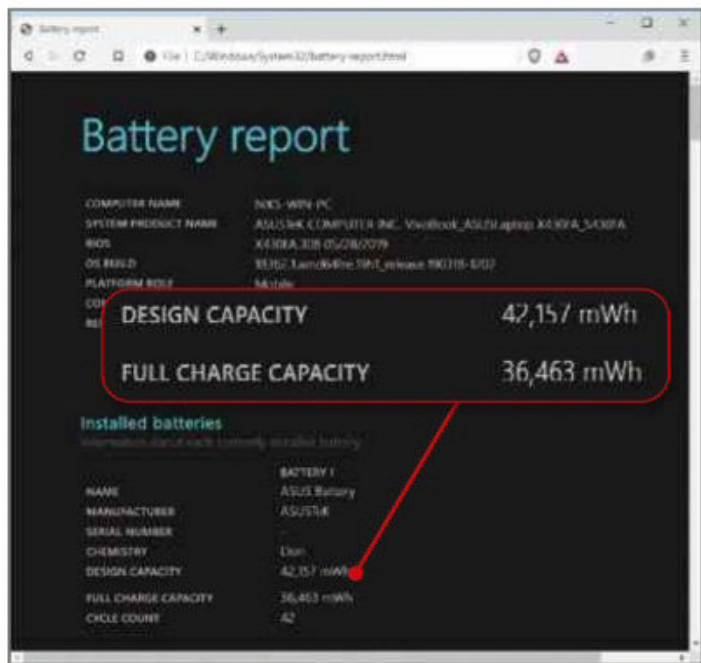
Laptops, like people, feel the effects of age: when they're young they have boundless energy but, as they get



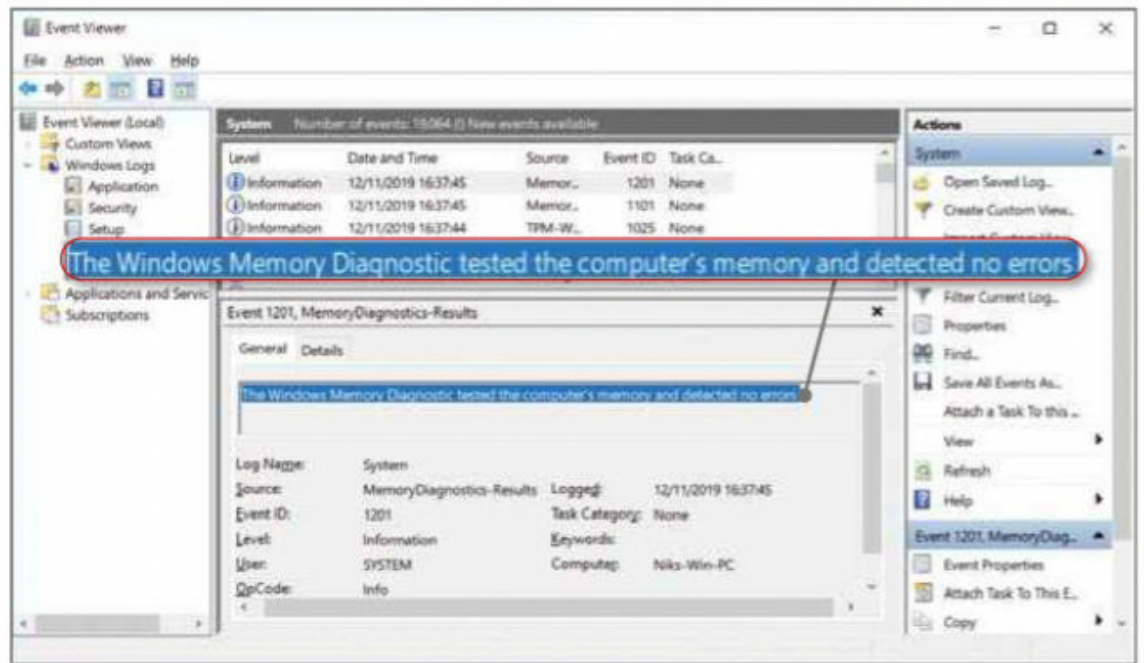
If the hard drive in your PC or laptop is failing, you probably need to swap it for a new one



CrystalDiskInfo checks your hard drive to retrieve its SMART status. Ours is currently in good condition



Windows' built-in tool shows you how much your battery's maximum capacity has degraded



Windows Memory Diagnostic reboots your PC into text mode to check that your RAM is performing as expected

older, they become slower and less responsive. If you find your laptop spends more time plugged into the mains than operating freely, your battery is probably on the way out. You can tell by comparing its current capacity with the capacity it had when it left the production line.

Click Start and type `cmd`, then right-click Command Prompt in the list of results and choose 'Run as administrator'. At the prompt, type `powercfg /batteryreport`. This command analyses your battery and, as its name suggests, writes a report. To open the result, launch your web browser, press Ctrl+O to open a local file and navigate to `C:\Windows\system32\battery-report.html`.

Scroll down to the 'Installed batteries' section and compare the 'Design capacity' and 'Full charge capacity' results. The second will be less than the first, but if they're within 25% of each other, we'd be inclined to wait a while longer before sourcing a replacement.

If you do need to buy a new battery, be aware that you need to be sure not only that the battery fits, but that its capacity is appropriate for your laptop. If possible, employ the services of a professional to help you choose and install one.

The once-standard advice to fully discharge your battery before topping it up is now out of date and can, in fact, shorten the battery's lifespan. Ideally, plug in your laptop before the battery drops too far below 20% and disconnect as you pass 80%. Avoid spending long periods with your laptop fully charged but still running on mains power.

If you're buying a second-hand laptop, ask the seller to generate a battery report and send you the results so you can see the condition of the battery before you hand over your cash.



Is your memory failing?

We've already explained that SSDs fail over time so it should be no surprise, given the similar technological roots, that the same is true of memory – or RAM. Fortunately, this is one of the easiest components to test.

Click Start, type `Windows Memory Diagnostic` and click the top result. All the memory diagnostic software we've come across runs outside Windows and, despite its name, Windows Memory Diagnostic is no different.

Click 'Restart now and check for problems' to launch the test. Your PC will reboot into a white-on-blue text mode. The test itself is completely automated and your PC will restart

again – this time into Windows – once it's finished. Click Start again, type `Event Viewer` and click the top result. Click the arrow beside Windows Logs in the left-hand sidebar, then click the System header this displays.

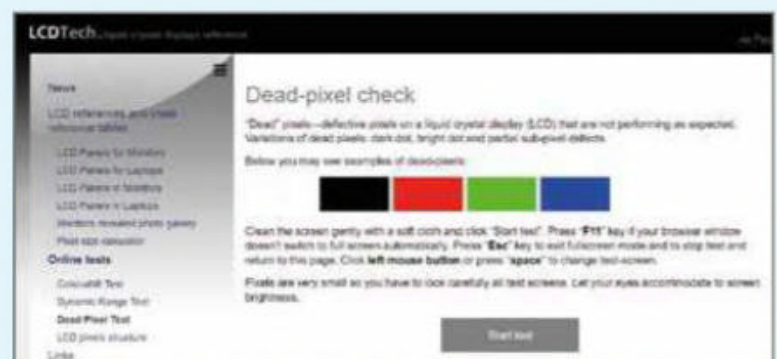
Click Find in the Actions panel on the right and type `MemoryDiagnostic` into the Find box (make sure there is no space between the two words and both the M and D are capitalised, with everything else lowercase). Click Find Next, then read the result of the report on the lower part of the main window.

If the report says anything other than "The Windows Memory Diagnostic tested the computer's memory and detected no errors", there's a problem with your memory. Book in with a repair shop to investigate further.

ARE YOUR PIXELS GETTING STICKY?

Even the best displays suffer from sticky pixels – isolated dots on the screen that don't change colour. The result could be a red dot in the middle of your document, a blue blob on a photo or a tiny patch of green that shouldn't be seen. A small number of these is to be expected, but they'll multiply over time. They're difficult to spot, so they're unlikely to interfere in regular screen use, but inspecting your monitor every couple of months and noting where they appear will help you track its slow, inevitable decline.

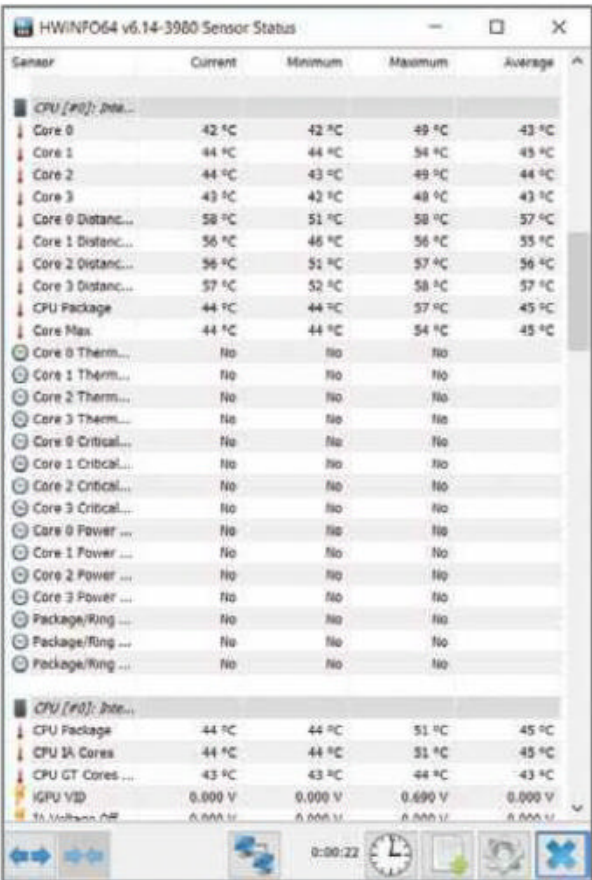
You can only do this easily when you get rid of screen clutter, so clean your display to remove any spots of



Dead pixels are hard to spot but if they're multiplying rapidly, your display may be showing its age

physical debris, then visit the LCDTech dead pixels site at bit.ly/pixels490. Click 'Start test' and the screen will go completely white. Check over its surface for any pixels that don't conform, then press the spacebar to switch to black and check a second time. Repeat this test three times, pressing the spacebar to switch to red, green and blue.

Diagnose your PC's problems



Sensor	Current	Minimum	Maximum	Average
CPU (x86): Intel...				
Core 0	42 °C	42 °C	49 °C	43 °C
Core 1	44 °C	44 °C	54 °C	45 °C
Core 2	44 °C	43 °C	49 °C	44 °C
Core 3	43 °C	42 °C	48 °C	43 °C
Core 0 Distanc...	58 °C	51 °C	58 °C	57 °C
Core 1 Distanc...	56 °C	46 °C	56 °C	53 °C
Core 2 Distanc...	56 °C	51 °C	57 °C	56 °C
Core 3 Distanc...	57 °C	52 °C	58 °C	57 °C
CPU Package	44 °C	44 °C	57 °C	45 °C
Core Max	44 °C	44 °C	54 °C	45 °C
Core 0 Therm...	No	No	No	
Core 1 Therm...	No	No	No	
Core 2 Therm...	No	No	No	
Core 3 Therm...	No	No	No	
Core 0 Critical...	No	No	No	
Core 1 Critical...	No	No	No	
Core 2 Critical...	No	No	No	
Core 3 Critical...	No	No	No	
Core 0 Power ...	No	No	No	
Core 1 Power ...	No	No	No	
Core 2 Power ...	No	No	No	
Core 3 Power ...	No	No	No	
Package/Ring ...	No	No	No	
Package/Ring ...	No	No	No	
Package/Ring ...	No	No	No	
CPU (x86): Intel...				
CPU Package	44 °C	44 °C	51 °C	45 °C
CPU 3A Cores	44 °C	44 °C	51 °C	45 °C
CPU GT Cores	43 °C	43 °C	44 °C	43 °C
IGPU VSD	0.600 V	0.600 V	0.600 V	0.600 V
1A Voltage Off	0.600 V	0.600 V	0.600 V	0.600 V

HWinfo presents a huge amount of diagnostic information about your PC



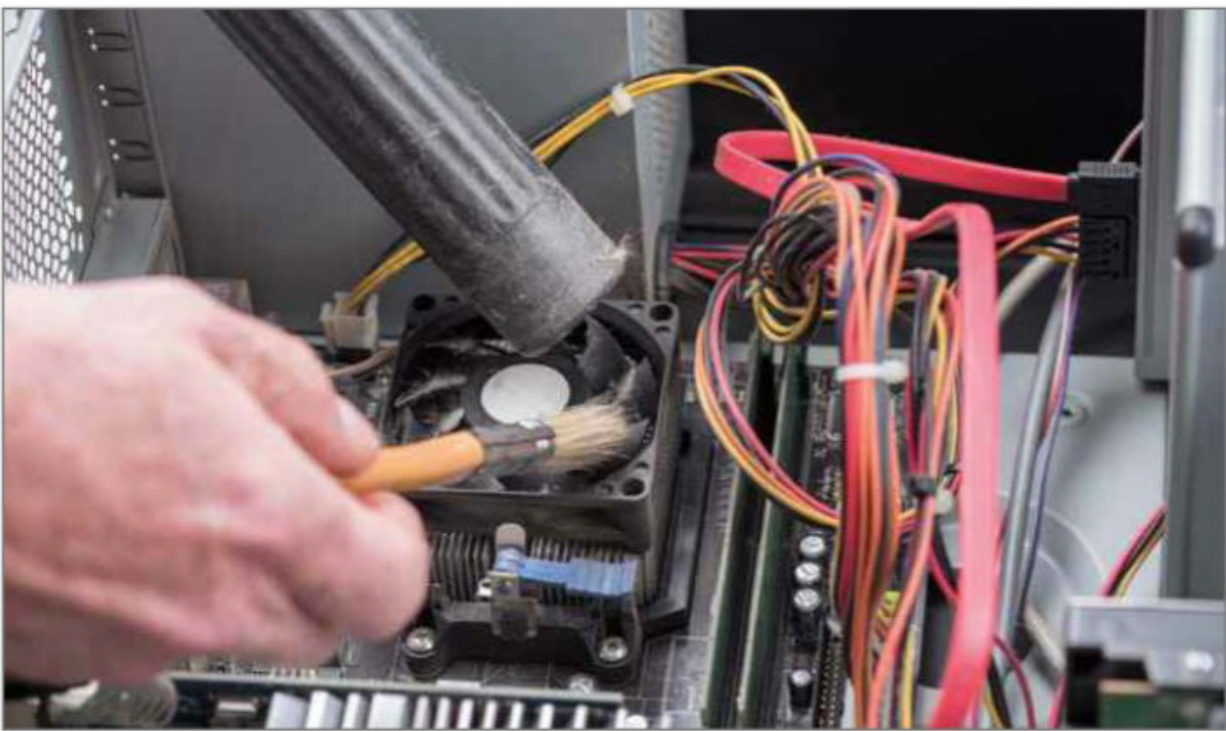
Is your PC too hot inside?

Computer components are designed to work within specific tolerances, with limits on humidity, altitude, pressure and temperature. If your PC gets too hot, it will sometimes throttle the speed of the processor. Adequate cooling is therefore vital to the smooth functioning of any PC and, ideally, you want to keep your processor at around 80°C or lower. You can check how hot yours is running with HWinfo, which is free to download from www.hwinfo.com.

Click Sensors on the toolbar and, in the window that opens, scroll down to the processor temperatures, which show the heat level within each core. If they are running hot, power down your computer and, if you're using a PC with a removable case, carefully unlatch the cover and use the nozzle of a vacuum cleaner running on low power to suck away dust from the case vents, fans and accessible parts of the motherboard. Avoid placing the nozzle directly onto any components and resist the urge to blow stubborn fluff balls or dislodge them using a pen, pencil or finger – a soft brush is acceptable.

If you're using a laptop, accessing internal components is more difficult, but you can still vacuum external vents to improve airflow. Also consider vacuuming your laptop's keyboard to unclog any debris, because the gaps between the keys can help heat escape.

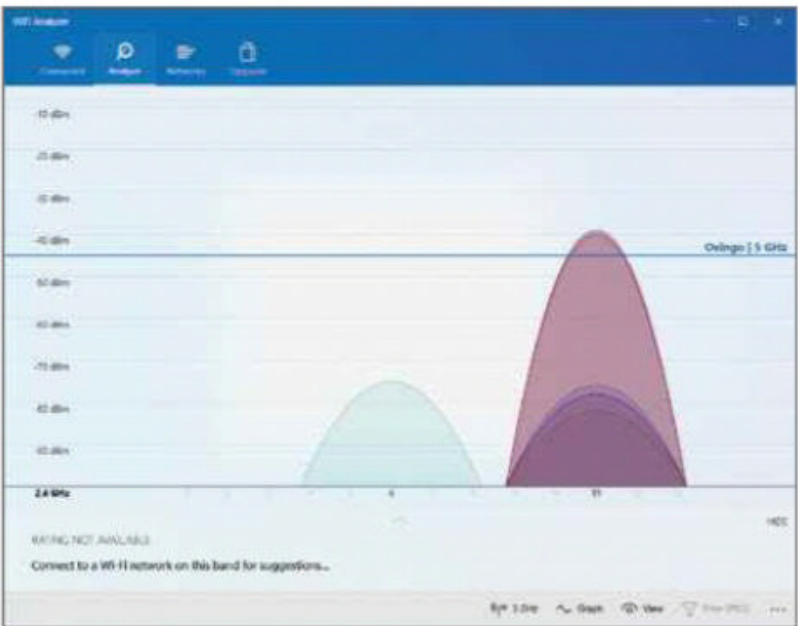
Once you've reassembled and rebooted your PC (don't run it with the cover off because this can impact directional airflow), check in with



Cleaning the dust from inside your PC helps reduce its temperature but be careful not to damage any components

HWinfo again. If the processor temperature is still high, consider replacing the thermal paste between your processor and its dedicated heatsink. The process involves unclipping the processor's dedicated fan from the motherboard or heatsink (a finned metal radiator), then removing the heatsink from the processor itself. This should be done very carefully because the heatsink and processor will be attached to one another by the existing thermal paste. Keep the processor in its socket if possible and, if it does come free, take care not to damage any of its pins.

Once you've separated the heatsink and processor, use rubbing alcohol to remove the existing thermal paste from both components, then apply a fresh layer of paste. There are several types available – Arctic Silver and Thermal Grizzly frequently get favourable reports in online reviews. It's important to use neither too little nor too much paste to avoid either burn out or leakage when the two components are sandwiched back together.



If your neighbour's Wi-Fi network is running on the same channel as yours, it may slow one or both of you down



Does your network not work?

Is your network running slow or dropping out? It might not be your PC that's at fault – or even your router. It could be interference from your neighbours.

Download and launch Wi-Fi Analyzer (free from the Microsoft Store at bit.ly/wifi490). This free app plots each of the networks within your PC's reach and shows which channels they're using. Think of Wi-Fi channels as similar to FM radio frequencies – when two stations broadcast on frequencies that are too close together, they interfere with each other. The same happens when two wireless networks use neighbouring channels.

If Wi-Fi Analyzer shows that your network is overlapping with a neighbour's, log into your router's settings and switch it to a less populated channel. The process for doing this varies from router to router, but begin by clicking Start and typing CMD. Click Command Prompt, type `ipconfig` and press Enter. Check the

results this delivers for 'Default gateway' and type the four sets of numbers beside this into a browser to access your router's settings.

You'll need to use an admin password to log in, which you should find on a label attached to the back or bottom of your router. Navigate to its wireless, LAN or Wi-Fi settings and use the options there to set your preferred channel to the one that Wi-Fi Analyzer indicates is the least populated. ■

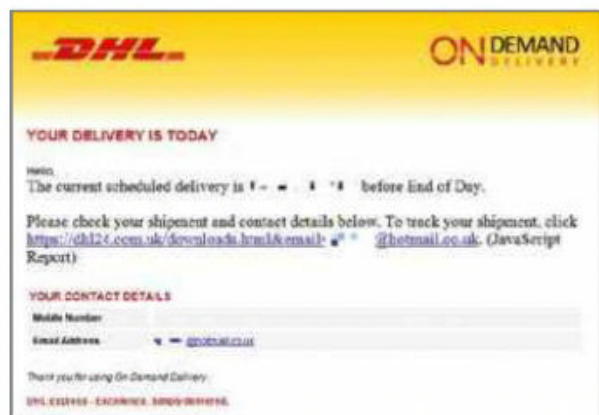
Don't fall for Xmas scams



'Tis the season to be vigilant online, as fraudsters try to cash in on Christmas. Robert Irvine unwraps five tricks to watch out for

Delivery-status emails

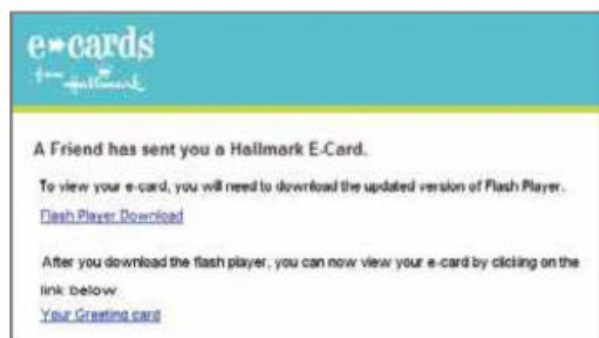
The two weeks before Christmas invariably involve a rush of online shopping, which makes it hard to keep track of what you've bought, where from and when it's due to arrive. Fraudsters exploit this hectic time by sending emails supposedly about your order, either alerting you to a 'problem' that needs to be resolved or inviting you to track your package online, then directing you to log into a phishing site that steals your details. Always check the sender's email address and never click a link in these messages – go directly to the online store or delivery company's website and sign in there instead.



Mystery e-cards and gift cards

When you receive an anonymous email that reads "A friend has sent you a Christmas e-card/gift card", it's natural to wonder who is behind the lovely surprise. Sadly, the answer is often a scammer, who wants you to click the link to open your card so they can infect you with malware or harvest your data.

Similarly, you may receive a 'receipt' for a gift card that you don't remember

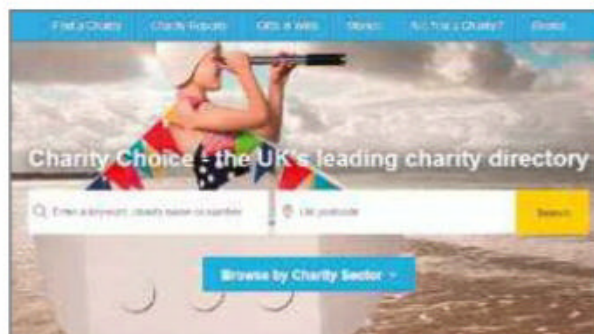


buying, which either prompts you to open an infected attachment or cancel the fake purchase by providing your credit card details.

In either case, you should ignore and delete the message, and not click anything in or attached to the email.

Fake online charities

As Christmas is a time of giving, we're more likely to help those less fortunate than ourselves through charitable donations. Fraudsters are keen to cash in on this festive generosity and may set up web pages for fake charities, create social-media campaigns to raise money for non-existent causes or even use a real charity's name to funnel donations into their own accounts, and then flee. You can search a database of UK-registered charities at Charity Choice (www.charitychoice.co.uk), but otherwise use your common sense to verify who you're giving money to. Don't respond to requests to donate through a money-transfer company such as Western Union or MoneyGram, and visit a charity's website directly rather than by clicking a link.



Social-media scams

People tend to share more on social media over the festive period, from amusing Christmas videos and animations to bargains found while shopping online and even pleas for financial help, which can make it harder to identify scams. By gaining access to someone's social account, hackers can post and send messages as that person,



and fool their friends into opening or sharing malicious links, entering personal data and spreading spam from *their* accounts. You should therefore be extra cautious about what you click or tap on Facebook, Twitter and other social networks and messaging apps over Christmas. If a message from a friend seems unusual or a giveaway looks too good to be true, don't touch it – and, if you do get fooled, change your account password immediately.

Malicious mobile apps

What better way to get in the Christmas mood than seasonal music, games, wallpapers, dancing elves and other festive fun? There's certainly no shortage of such apps available for Android and iOS but, sadly, some are designed to spread malware rather than goodwill, and are more "no no no" than "ho ho ho". A few years ago, for example, a hacking group called Santa-APT used Christmas-themed apps to steal data from phones and capture victims' surroundings using their cameras and microphones. As ever, you should only install apps from official app stores. Even on Google Play (which has suffered several security scares recently), check the reviews, developer details and permissions before downloading.



Credit: CloudSek



Practical WebUser

16 pages of workshops, tips, projects and problem solving

Protect your PC with Malwarebytes 4

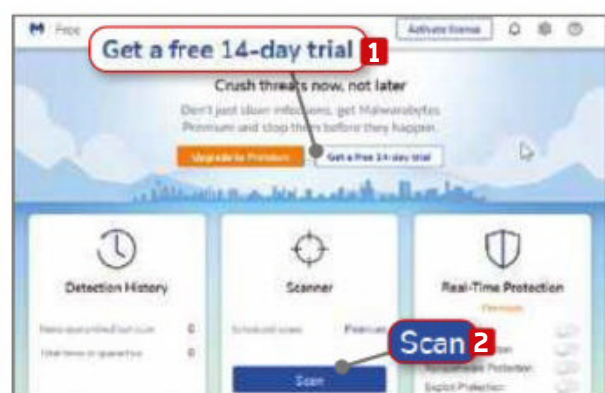
Find threats faster with the new version of Malwarebytes. Here's how to use it

Malwarebytes: www.malwarebytes.com | ⌚ 20 mins | 🇬🇧 7, 8, 10

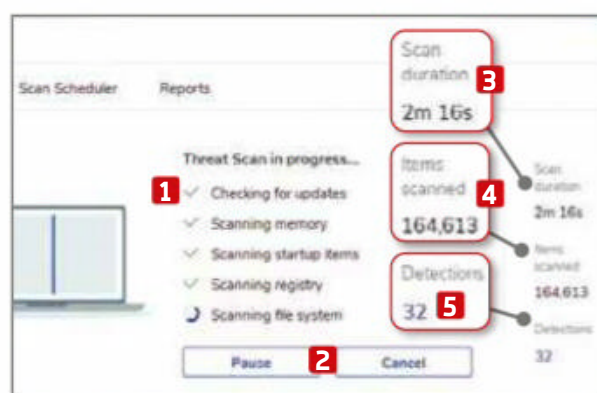
One of the best tools around for removing malicious software, Malwarebytes is fast and very thorough. While the Premium edition (from £29.99 a year) offers real-time and scheduled protection to shield PCs and programs from hackers, and prevent ransomware attacks, the free option focuses solely on finding and removing

threats that have already invaded your computer. It won't clash with any installed security software and is a very useful second line of defence for mopping up any malware that gets missed by your primary anti-virus tool.

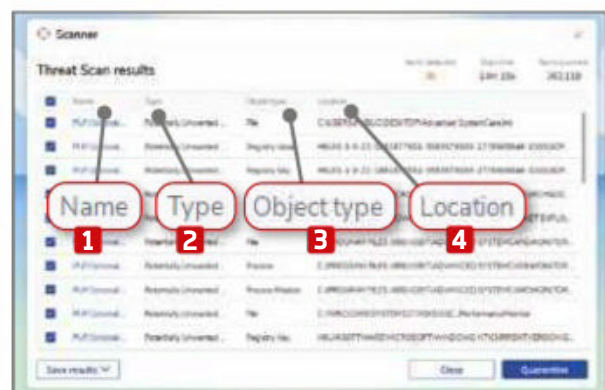
The new version has an improved detection engine and is lighter on system resources, so it won't slow down your PC.



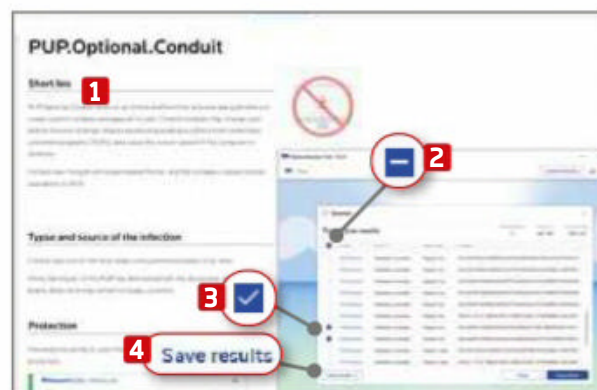
1 The new interface is much simpler and more intuitive than before, though the free version pushes the Premium update heavily, giving you multiple options to upgrade and try a 14-day free trial. **1** If you'd prefer to stick with the free version, simply click the Scan button **2** to check your PC for malware.



2 The software starts by downloading any updates, then scans the memory, start-up items, Registry and file system in sequence. **1** You can pause or cancel **2** this scan at any time. The software shows you how long the scan is taking, **3** the number of items scanned **4** and a tally of the threats found so far. **5**



3 Once the process has completed, you get a list of results. You can sort the threats by Name, **1** Type, **2** 'Object type' **3** or Location. **4** Threats are classed as malware, PUPs (potentially unwanted programs) and PUMs (potentially unwanted modifications). Object types include files, processes and Registry keys.



4 Malwarebytes may identify perfectly safe items as 'threats'. Clicking a name tells you about that threat **1** on the Malwarebytes Labs website. Deselect all the items, **2** then manually select each one you want to remove. **3** You can save the results (copy to clipboard or as a text file) for later. **4**



5 If you have nothing to remove, just click the Close button to go back to the main screen. **1** To remove selected threats, click the Quarantine button. **2** If you've chosen to ignore any found files, a message appears asking if you want to ignore them this one time or always ignore them. **3**

DETECTION HISTORY

Click the tile to view, restore or delete quarantined items. You can also add safe items to an Allow List



NOTIFICATIONS
If the program has something to tell you, you'll be able to view the messages by clicking the bell icon

HELP
Click the question mark to access Malwarebytes Support, read the manual, view Labs posts, and find and fix problems with the software

REAL-TIME PROTECTION
Although this is a premium feature, clicking the tile still displays the number of threats (malicious sites, malware, ransomware and exploits) that Malwarebytes has blocked globally in the past 30 days

Crush threats now, not later
Don't just clean infections, get Malwarebytes Premium and stop them before they happen.

Upgrade to Premium Get a free 14-day trial

Scan History

Scanner

Scheduled scans Premium

Scan

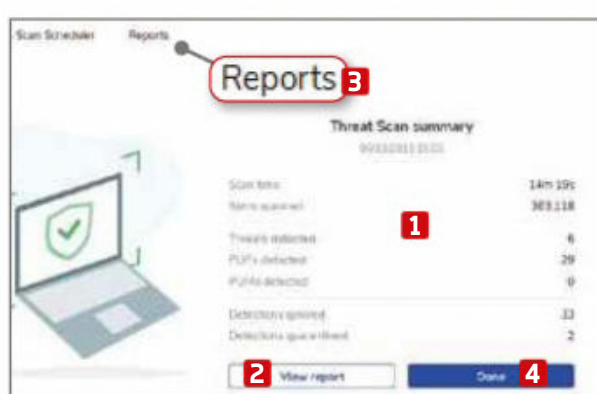
Real-Time Protection Premium

Web Protection

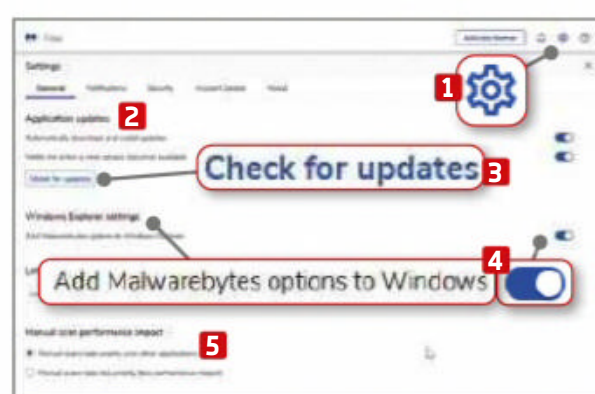
Malware Protection

Ransomware Protection

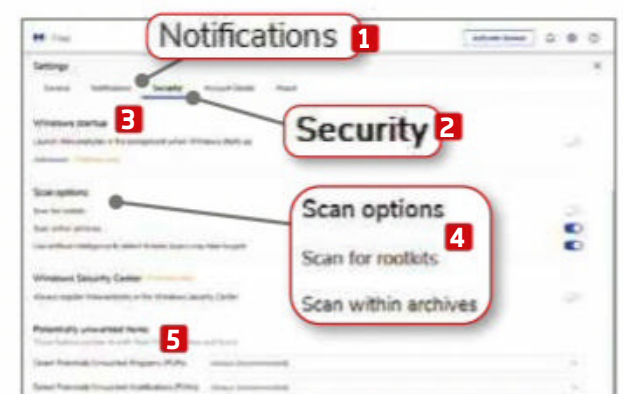
Exploit Protection



6 A summary screen shows you the outcome of your scan, including threats detected and actions taken. **1** You can view the full report by clicking the button. **2** Past results can be accessed under Reports. **3** Clicking Done **4** returns you to the home screen.



7 Click the cog in the top-right corner **1** to open the program's Settings. From here, you can manage automatic updates **2** and run a manual update check. **3** You can also add or remove the Malwarebytes entry from the right-click context menu **4** and set whether scans should have priority over other applications. **5**



8 The Notifications tab **1** lets you choose whether you want to see alerts in Windows. Click the Security tab **2** to specify if the program should start up alongside the operating system. **3** You can also customise what scans look for **4** and whether this includes PUPs and PUMs. **5**



Keep your email secure with ProtonMail 4

ProtonMail: beta.protonmail.com | ⌚ 20 mins | Any browser



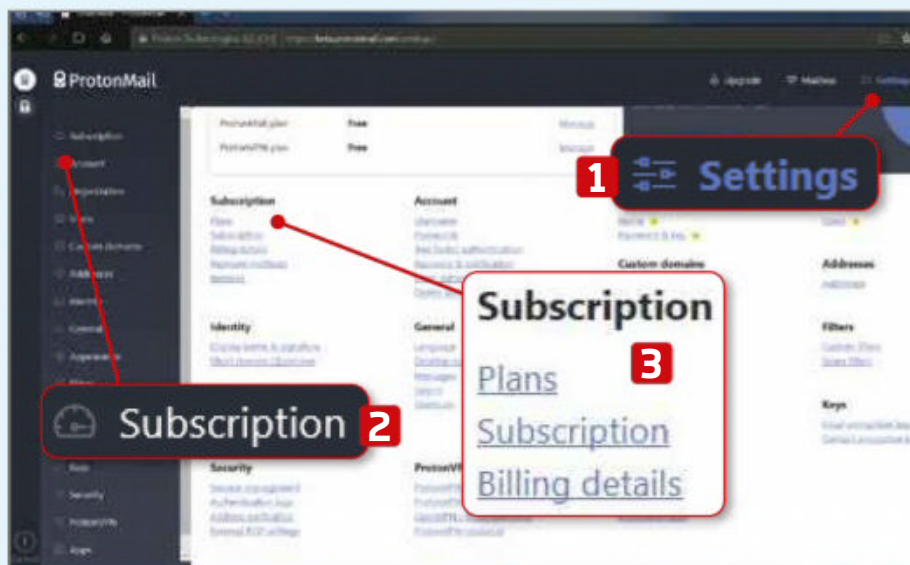
EXPERT TIP

Steve Clark says

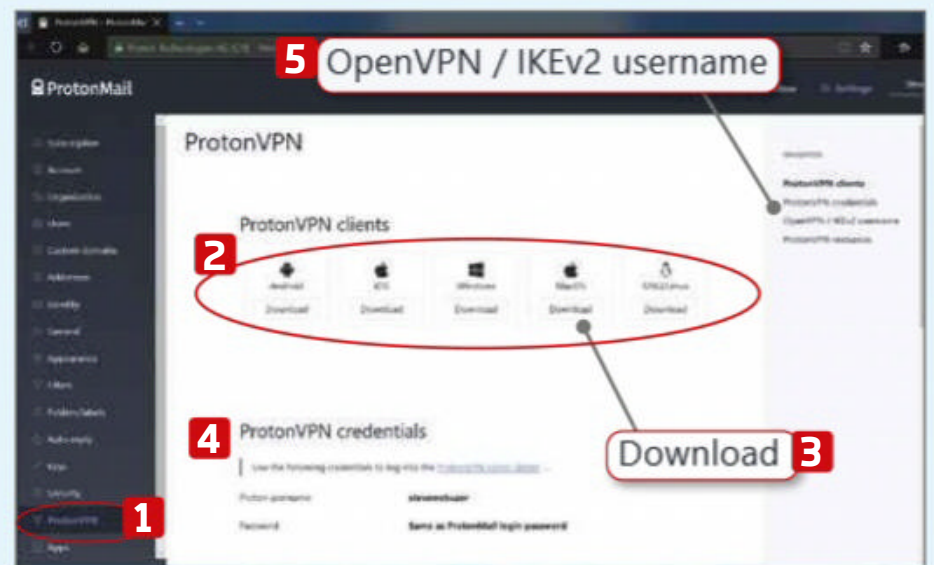
The basic ProtonMail account is totally free to use. As with the free ProtonVPN, it won't compromise your security but there are limitations. For instance, you can only send up to 150 messages a day and create three folders or labels, while storage capacity is capped at 0.5GB. If you want the full Proton experience, consider upgrading to a ProtonMail Plus or Professional subscription for between £5 and £8 a month.

Keeping your data private isn't always easy online. Even if your computer is armed with top security add-ons, you can still leak information without knowing it – especially via email, which despite its popularity is woefully unsecure. When standard email providers can't be trusted, it could be time to switch to ProtonMail.

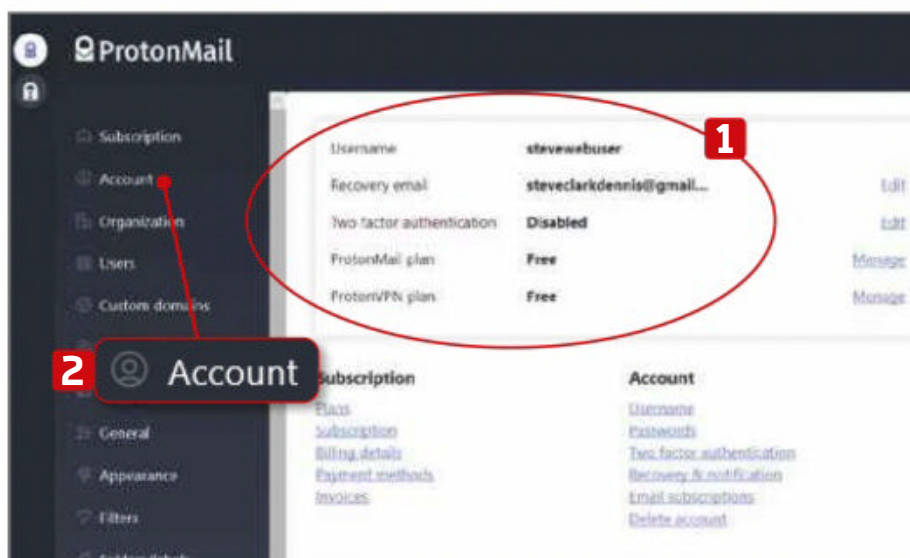
We explored this fully encrypted email provider back in Issue 444 (bit.ly/webuser444), and it's now had a major update adding more privacy-focused extras to your inbox. Version 4 gives the developers more control over rolling out additional features so this beta is part of an ongoing process. In this Workshop, we examine the new features you can try right now, and those coming down the pipeline.



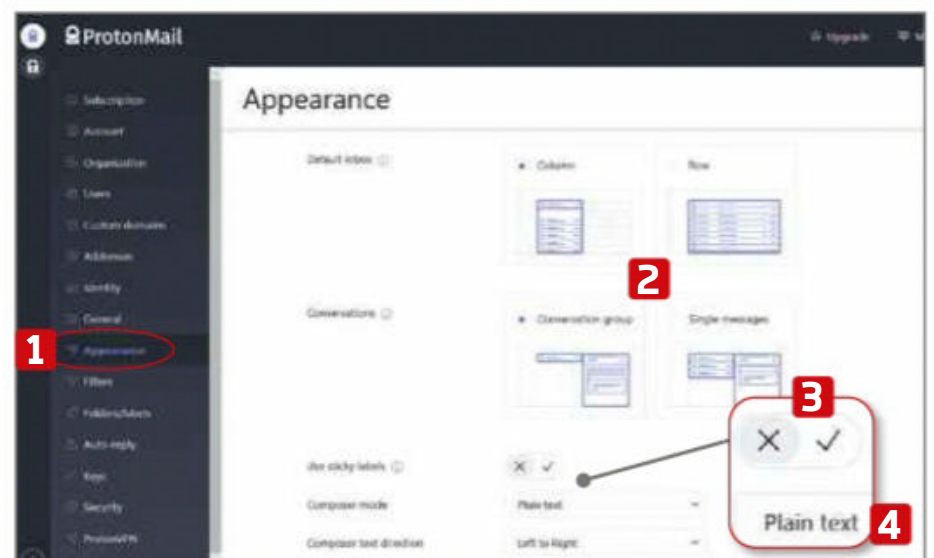
1 The first major change in ProtonMail 4 is a redesigned Settings menu. It's cleaner, more intuitive and should be faster to use than the old version. Click the icon in the bar along the top **1** to display a handy sidebar of categories. **2** The same settings are also displayed on the main page, **3** so you don't need to hunt around for the options.



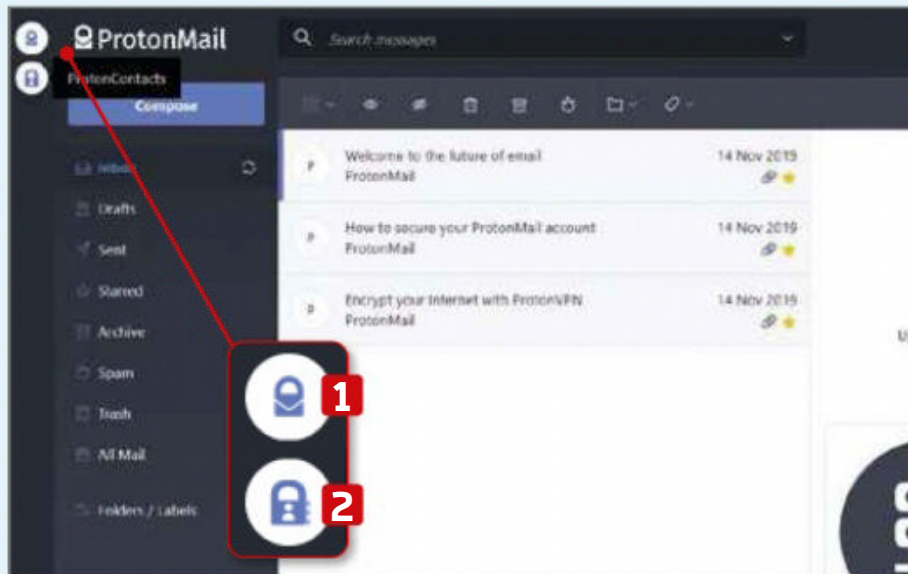
2 You can link ProtonMail with ProtonVPN. In Settings, click the ProtonVPN category. **1** If you don't have the VPN installed, select your OS **2** and download it, **3** then use the onscreen credentials **4** to sign in, linking the accounts. If you're connecting to ProtonVPN with a different client, the details you need are in the OpenVPN/IKEv2 section. **5**



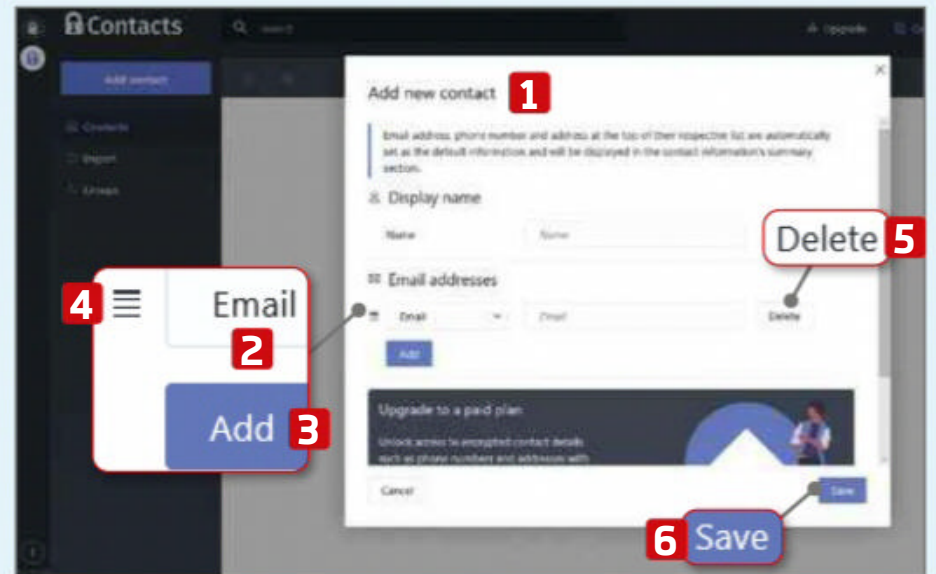
3 The settings now include an Account Overview. This appears at the top of the home screen and contains details of your username, recovery email, two-factor authentication and Proton product management. **1** Alternatively, go to Account **2** and use the toggle switches to easily control and manage your account.



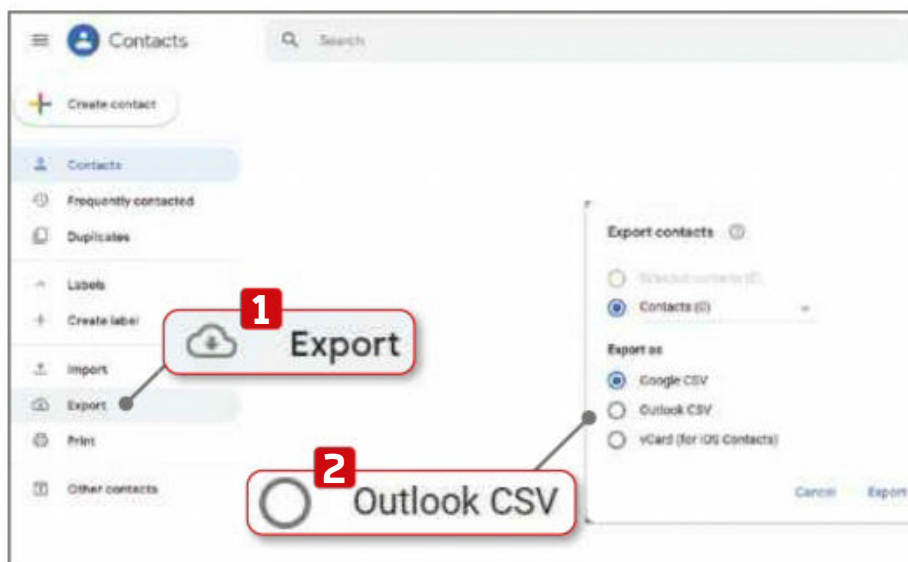
4 Another new feature due to launch soon is the ability to customise ProtonMail's appearance. For now, to give your inbox a new look, go to Settings, Appearance. **1** Here, you can switch the layout, **2** turn on Sticky Labels **3** and select HTML or plain text in Composer Mode. **4** At the foot of the page is the option to customise your own theme using CSS.



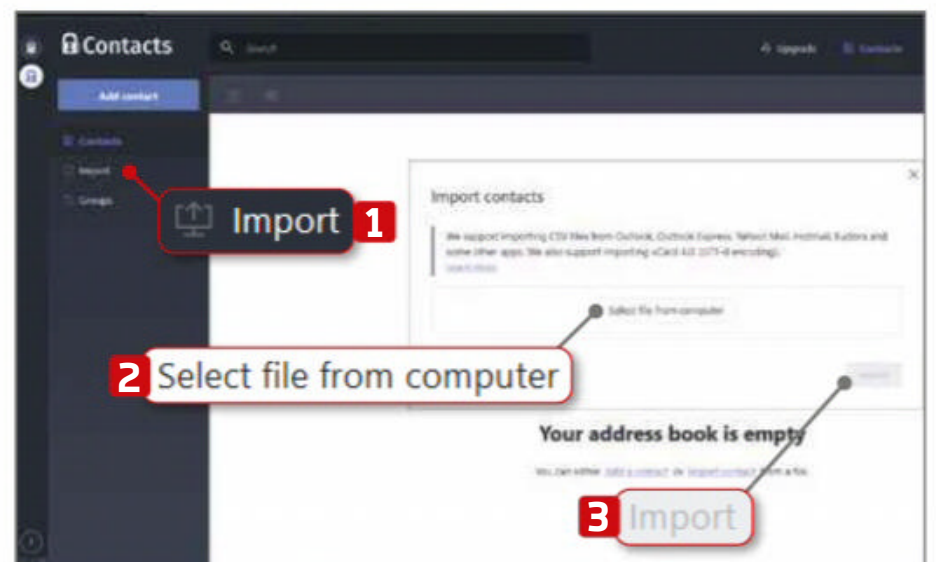
5 The Proton apps icons in the top-left corner are now jump buttons. Currently, the two icons let you quickly switch between your inbox **1** and Contacts, **2** bringing the button away from the top bar and closer to hand. In future, this area will also offer easy access to ProtonVPN and the updated Proton Calendar.



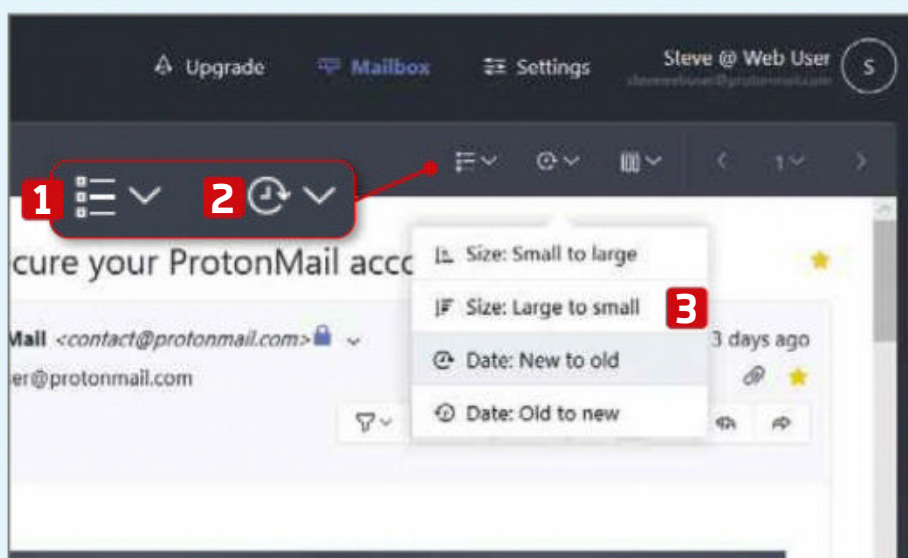
6 Select Contacts to view, add or import people. Clicking 'Add a contact' reveals a new page with Name and 'Email addresses' fields. **1** Click Email **2** to categorise the address as Personal, Work or Other. Click Add **3** to include more email addresses, switch their order by clicking and holding the Lines icon **4** or delete. **5** Finally, click Save. **6**



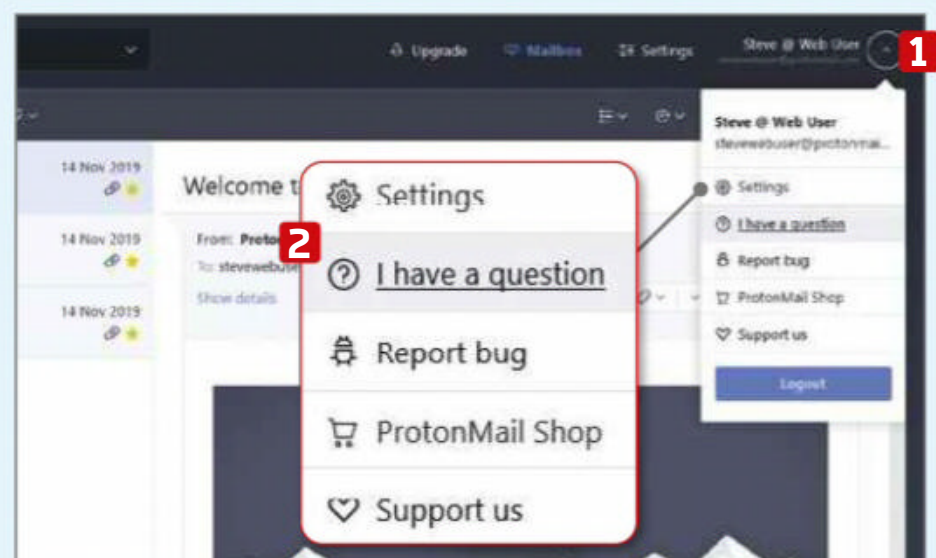
7 To import existing contacts from Outlook, visit outlook.live.com/people, click Manage and choose 'Export contacts'. For Gmail, go to contacts.google.com and click Export. **1** Next, choose 'Outlook CSV', **2** to ensure it's compatible with ProtonMail. However you do it, and whichever provider you're importing from, make sure the file you save is a CSV file.



8 Back in ProtonMail, select Contacts, then Import. **1** Although Gmail isn't listed as a supported provider, it should work as long as you choose to import it as an Outlook CSV file. Click 'Select file from computer' **2** and upload the CSV file via File Explorer. Press Import **3** to start the process.



9 Where once you could only change layout or skip between emails using the arrows keys above the email preview pane, you can now press 'Advanced options' **1** to 'Show all', 'Show unread' or 'Show read' emails; and 'use Sort view messages/conversations' **2** to tweak the inbox order based on size or date. **3**



10 It's now much easier to get help, ask questions and submit feedback to Proton. Click your account icon **1** next to your email address to access 'Report bug' and 'I have a question', along with new options for Settings, ProtonMail Shop and the opportunity to support the development team. **2**

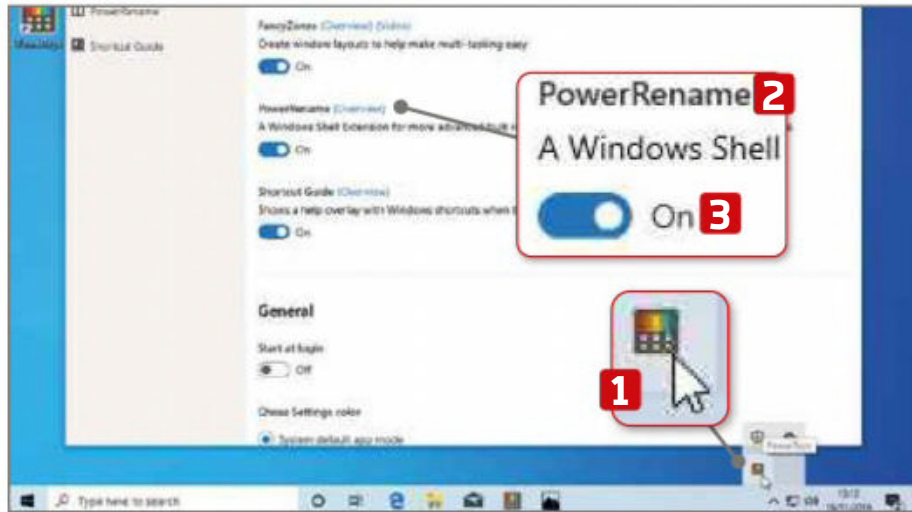


Rename files faster with a new PowerToy

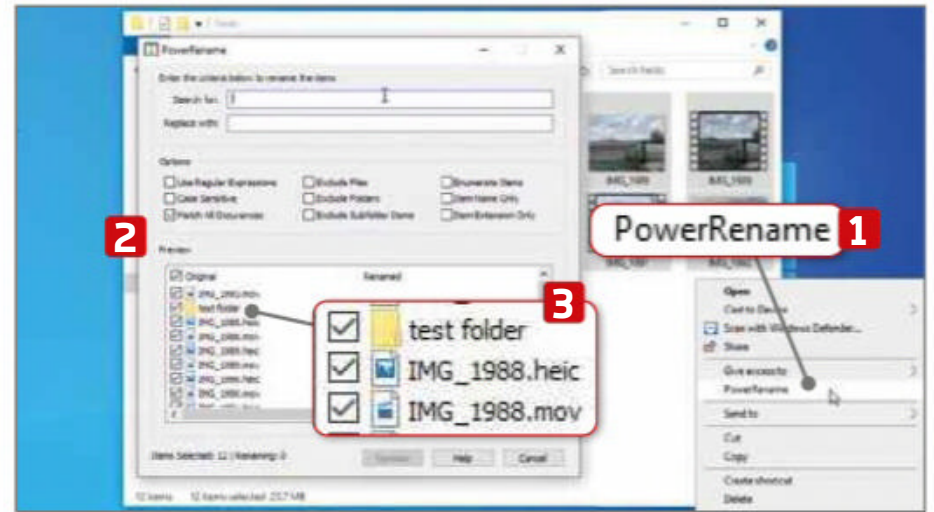
Back in Issue 485 (bit.ly/webuser485), we looked at the first of Microsoft's new PowerToys, the brilliant experimental tools for advanced users inspired by the original Windows 95 PowerToys. Microsoft has just added

PowerToys: bit.ly/powtoy490 | 10 mins | Windows 10

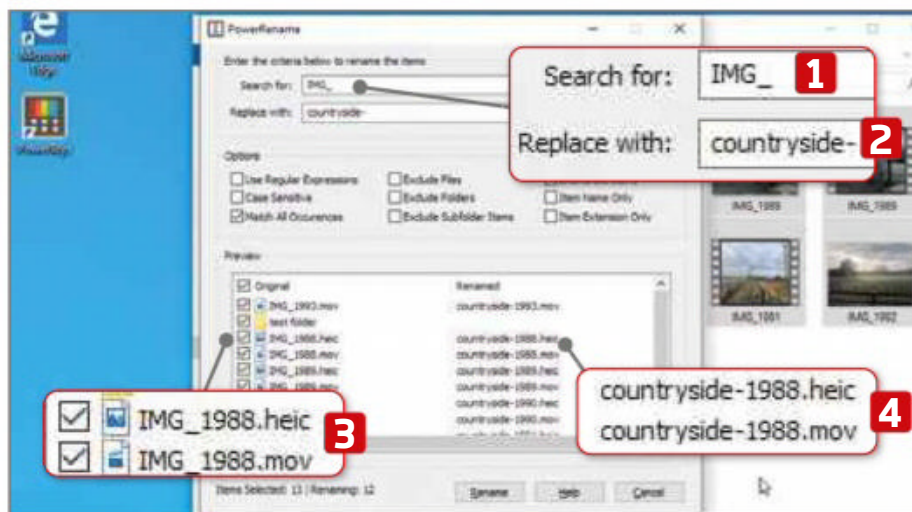
another handy utility to the set, called PowerRename, which you can use to quickly and efficiently rename batches of files in one go.



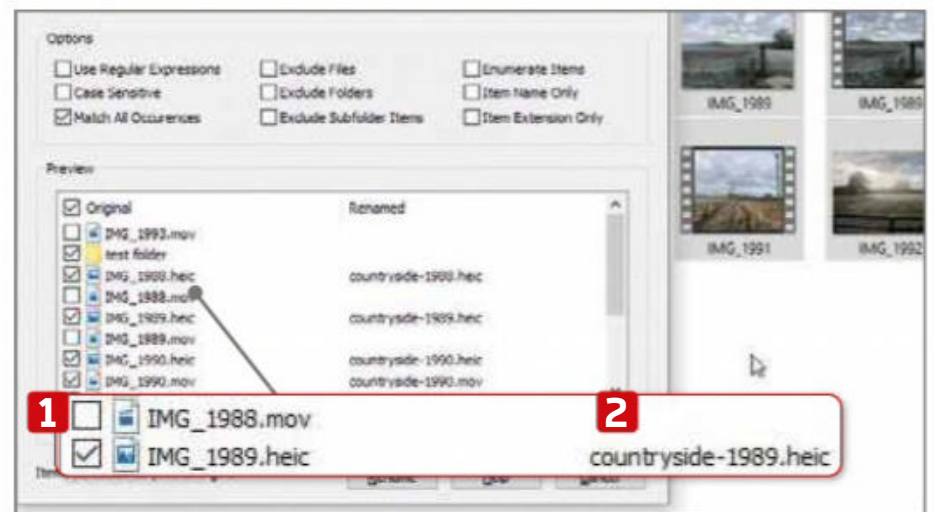
1 Click the PowerToys icon in the notification area **1** to open the General Settings. The PowerRename PowerToy **2** should be listed along with FancyZones and Shortcut Guide. Make sure it's switched on. **3** If it's not there, scroll down to the bottom of the page and click 'Check for updates'.



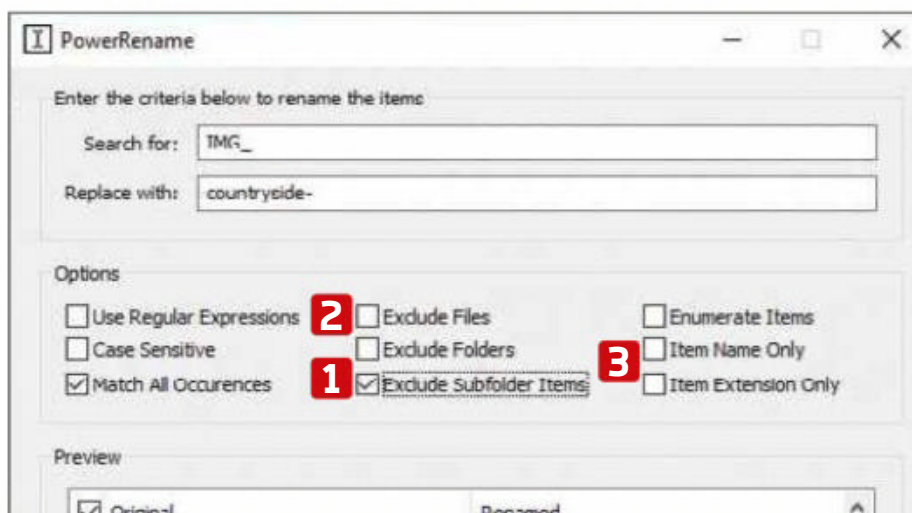
2 In File Explorer, select the files and folders you want to rename. Right-click and choose PowerRename. **1** The PowerRename box appears, populated with the items you've selected. **2** This list includes folders **3** and the contents of any folders and subfolders that were selected.



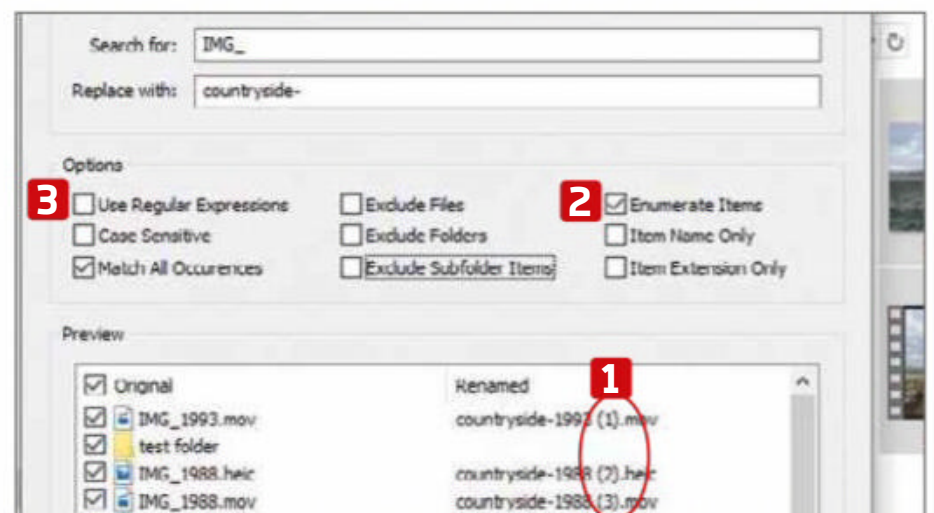
3 To rename your files, type the part of their name you want to remove in the 'Search for' box, **1** then type the words you want to replace it with in the 'Replace with' box. **2** The Preview box shows you the current filenames **3** and what they'll look like when you click the Rename button. **4**



4 By default, all the files will be selected and run through the renaming filter if they match the criteria. If there are any individual files you don't want to rename, untick the boxes next to them in the Preview window. **1** Files that aren't selected won't appear in the Renamed column. **2**



5 If there are too many files to select manually, use the Options to whittle down the list instead. For instance, you could exclude files in subfolders, **1** exclude all files or all folders, **2** or have the search term only appear in the name or extension of a file. **3**



6 To add consecutive numbers to each filename, **1** tick the box to Enumerate Items. **2** To use regular expressions in the search box – for wildcards, logical operators and more – tick Use Regular Expressions. **3** There's a handy list of supported commands and shortcuts at bit.ly/regex490.



Use your phone as a PC microphone

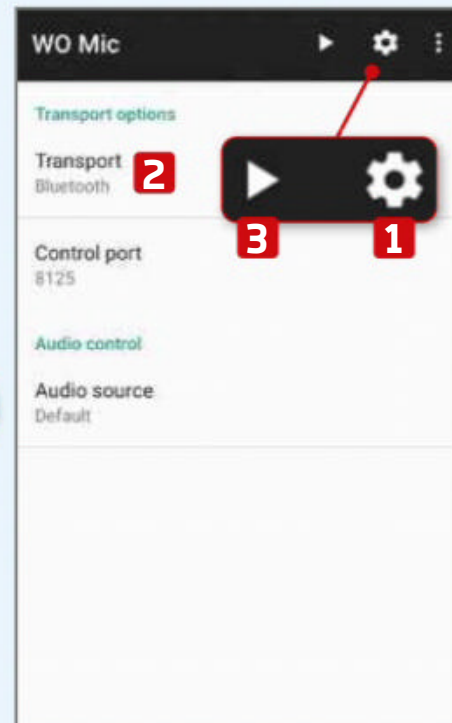
Built-in computer microphones are notoriously poor – you need to speak at the right volume, sit at the optimum distance and, if the stars align, it might pick up your voice. Rather than paying for an external mic,

download the free WO Mic kit and use your phone's undoubtedly superior mic instead. You can even control the volume or mute the mic from the app's home screen.

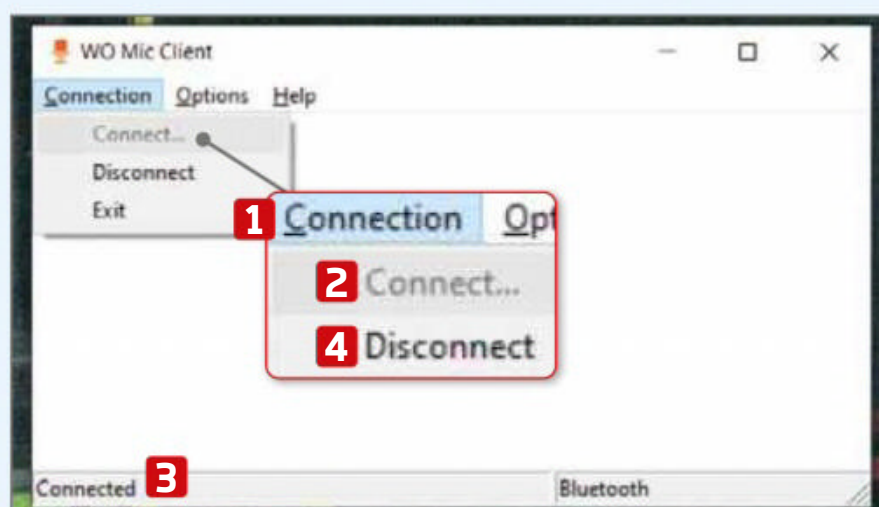
WO Mic: wolicheng.com/womic | 10 mins | Windows, Linux, Android, iOS



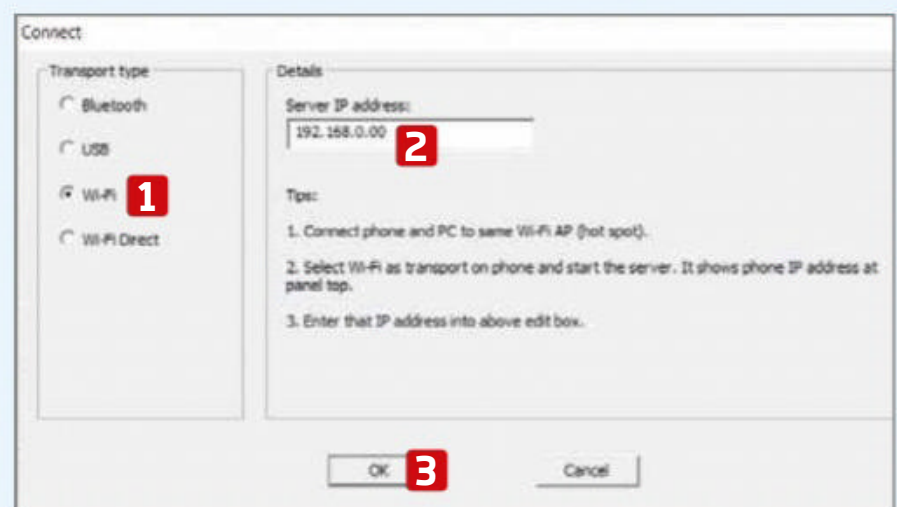
1 To get started with WO Mic, you need the WO Mic app from the Play Store (bit.ly/wodroid490) or App Store (bit.ly/woapple490), **1** the Windows Client **2** and the virtual device driver. **3** Click Run when prompted, install the PC software, then open both Client and app.



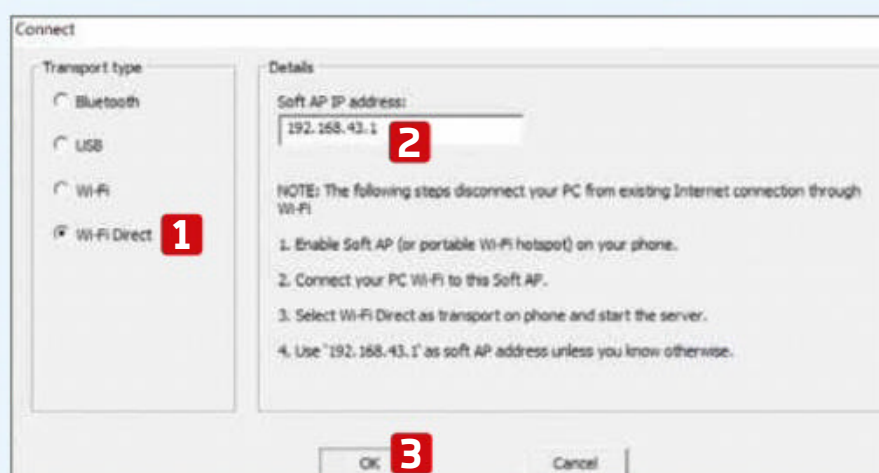
2 To connect via Bluetooth, turn it on for both your computer and phone, then pair the two devices. Now open the WO Mic app. Tap the Settings cog **1** and choose Transport. **2** In the following screen, tap Bluetooth. Go back to the main screen and press the Play icon. **3**



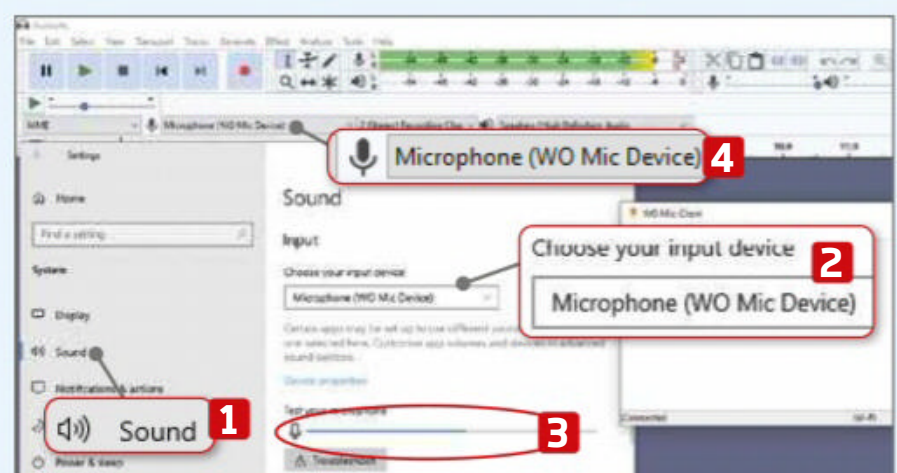
3 In WO Mic Client, click Connection, **1** then Connect. **2** Select your phone in the 'Target Bluetooth device' menu, then click OK. The connection status displays in the bottom-left corner of the Client. **3** To end, click Connection, Disconnect **4** and, in the app, tap the Stop button.



4 If you'd rather use Wi-Fi, follow Step 1 but, when entering the Transport settings in Step 2, choose Wi-Fi. Tap the Play button to reveal an IP address. In the Client, click Wi-Fi under 'Transport type.' **1** Copy the app's IP address in the 'Server IP address' field' **2** and click OK. **3**



5 If there's no Wi-Fi network, turn on Mobile Hotspot on your phone and connect your PC to it. Go back to the app and switch the Transport to Wi-Fi Direct. Back in the Client, change 'Transport type' to Wi-Fi Direct. **1** Check both devices share the same Soft AP address **2** and click OK. **3**



6 Go to System, Sound **1** in the Settings app and select 'Microphone (WO Mic Device)'. **2** When you speak into the phone, the bar under 'Test your microphone' should move. **3** Windows software, such as Audacity, should be able to hear the mic when you select it from the options. **4**

Weekend Project

Get to grips with some serious tech tinkering to boost your computer and other devices



How to...

Try software safely using a virtual machine

Wayne Williams explains how to set up a safe environment to test new software without harming your PC

Every issue, we recommend lots of great programs in our Best Free Software section. If you try something and decide it's not for you, then you can uninstall it afterwards. The problem is that removing software often leaves behind files, folders, Registry entries and other detritus, which over time can clog up and even slow down your PC.

One trick that we use to avoid this is to install and run the software on a virtual machine. Not only does this let us keep our copy of Windows clean, but it also avoids the problem of software making unwanted changes to the operating system and bundled junk getting installed in the background.

In this Weekend Project, we show you how to set up a virtual environment for testing software.



What you need

There are several programs you can use to create a virtual environment in which to run your software, but Oracle VM VirtualBox (www.virtualbox.org) is arguably the best. It's entirely free, very easy to use and can handle every version of Windows – from 3.1 to 10 – provided you have a copy of the operating system. You're not limited to running Windows because it can also handle Linux

operating systems and macOS. Install as many operating systems as you want and then choose which one to run from the VirtualBox Manager.

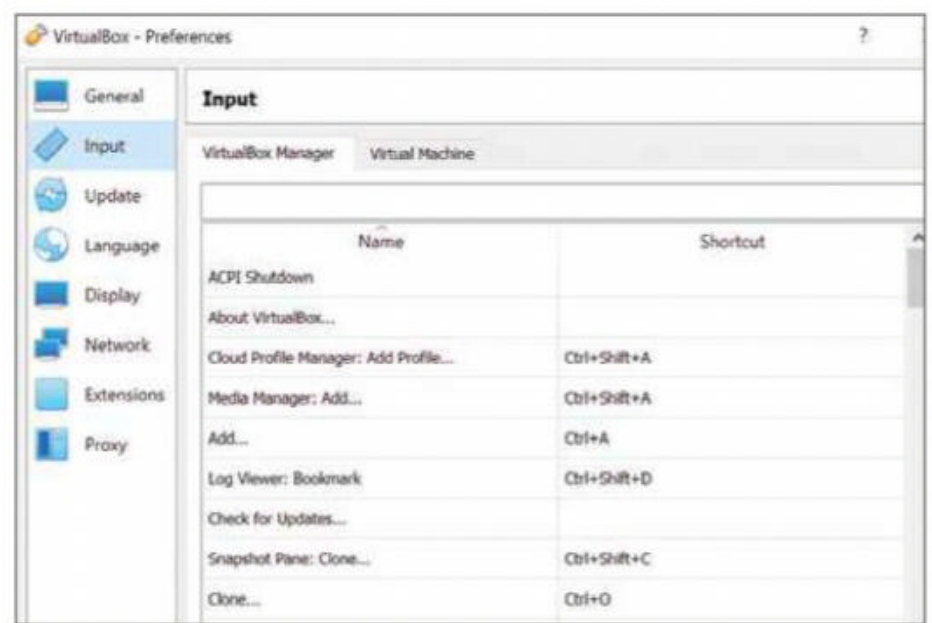
Essentially, VirtualBox sets the new operating system to run within your current one. It operates entirely separately from your current OS, though you can enable features such as shared storage and shared clipboard, should you need to. There's an additional VirtualBox

Extension Pack (also free) that you can install to provide even more features.

You can resize the operating system window, running it scaled or full screen, which can come in useful depending on the sort of programs you intend to try on it. When you've finished, you can save the current state of the OS before exiting (so you can quickly pick up where you left off) or shut it down fully (freeing up system resources).



Microsoft's Media Creation Tool can save a copy of Windows 10 in ISO format for use in VirtualBox



Go to File, Preferences, Input to view all the available keyboard shortcuts in both the Manager and Virtual Machine

In addition to VirtualBox, you need an ISO file of Windows. You can download a fresh copy of Windows 10 using Microsoft's Media Creation Tool (bit.ly/mmct490). Run the program and wait while it prepares everything, then accept the licence terms and wait a little longer.

When it's ready, select the option to create installation media for another PC. Click Next and the tool fills in all the details to match your current installation. If you want to change this, untick the 'Use the recommended options for this PC' box and select the language, edition and architecture (32-bit, 64-bit or both). It's worth noting that the edition needs to match your Windows licence if you plan to license the virtual machine. However, since we will only be using the OS in VirtualBox to install and run software, we don't need to bother licensing it. An unlicensed copy of Windows shows a watermark in the bottom-right corner and some settings will be disabled,

but this is nothing to worry about.

Click Next in the Media Creation Tool and select ISO file as the installation media, then click Next again to download the file. This is several gigabytes in size, so it will take a while to download, depending on the speed of your internet connection.

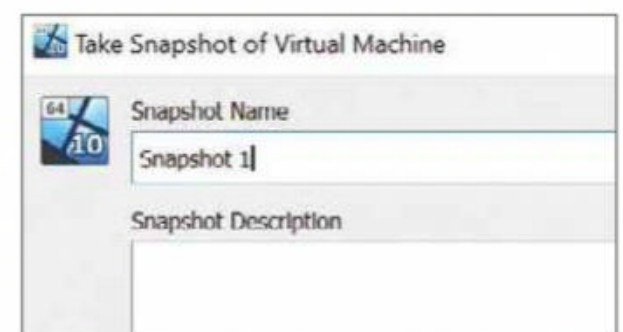
Once you've created your installation media, you can install it in VirtualBox. We show you how in our Mini Workshop, below. We'll then look at setting it up in our Mini Workshop on page 61.

Save Snapshots

VirtualBox can create snapshots that record a virtual machine's current state, so you can revert back at any time. It's similar to saving the machine state when you click the X in the program window, except that you can carry on working. For example, you might create a snapshot prior to installing a piece of software, and then revert back to that

snapshot once you've finished using the new program – so you can avoid the bother of uninstalling it. You should create a snapshot when you first install Windows in VirtualBox so you can instantly jump back to a clean install at any time. This is worth redoing when Windows updates, so your clean install has all the latest Windows updates.

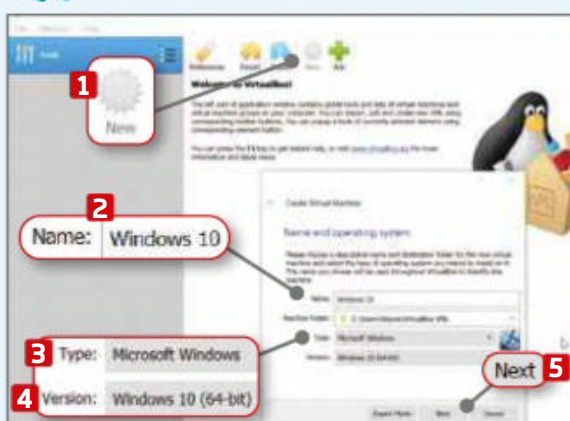
To create a snapshot, go into Machine in the VirtualBox menu and select Take Snapshot. Alternatively, you can press Host+T to do this (by default, the Host



Save a snapshot when you install Windows to load a fresh copy when you need it



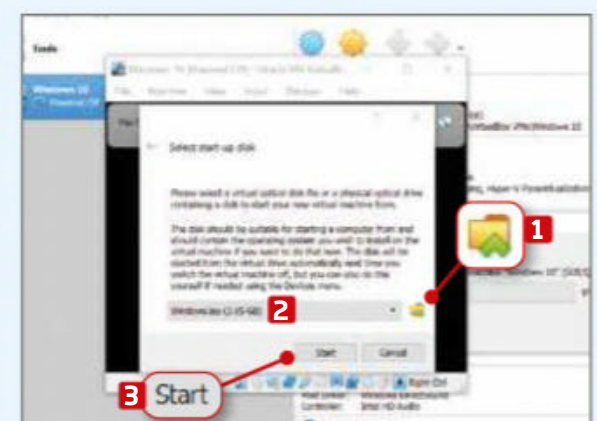
MINI WORKSHOP | Install Windows 10 in VirtualBox



1 Run VirtualBox and click the New button in the Manager. **1** In the Create Virtual Machine window that opens, enter **Windows 10** **2** as the name of the operating system. The Type (Microsoft Windows) **3** and Version (Windows 10 (64-bit)) **4** should be filled automatically. Click Next **5** to start the creation process.







2 Accept the default Memory Size, click Next, choose to 'Create a virtual hard disk now' and click the Create button. Accept VDI (VirtualBox Disk Image) as the drive type, create a dynamically allocated disk and select the default size. Click Create. When done, select the entry in the Manager **1** and click the Start button. **2**



3 In the new window, click the folder icon **1** and navigate to the saved Windows 10 ISO. It appears in the drop-down menu. **2** Click Start **3** and the operating system installs. You can skip the product key. Select the version of Windows you require, accept the terms and choose to Install Windows Only.

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3	 sky	Sky: Broadband Essential	£20.00 (£25 after 18 months)	18 months	11Mbps avg. speed	∞ unlimited *	£240.00
4	 Virgin media	Virgin Media: Big Bundle + Fibre Broadband + Weekend Calls	£33.00 (£54 after 12 months)	12 months	54Mbps avg. speed	∞ unlimited	£396.00

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Data supplied by www.broadbandgenie.co.uk. Correct as of 26 November 2019.

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In the next issue of our sister title Computeractive...

**SNEAK
PREVIEW!**

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- **MASTER WINDOWS 10 IN 2020**

The most powerful new tools made easy

- **DOWNLOAD YOUR EMAILS** Best ways to keep them for future reference

- **KNOW YOUR CABLES** Work out what they do

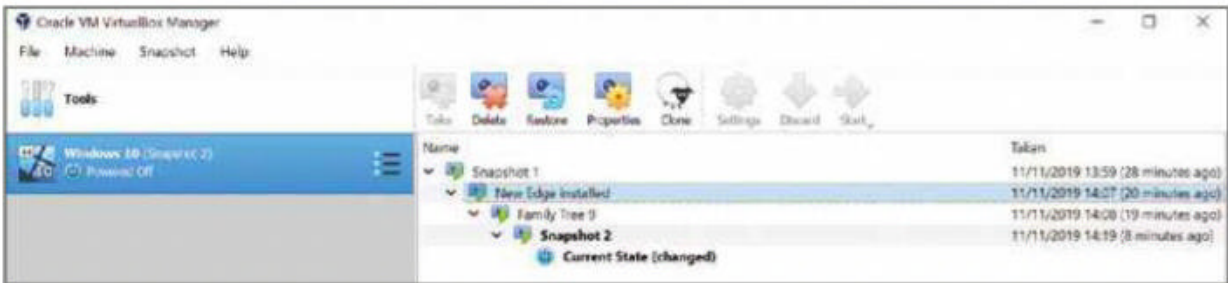
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You can save multiple snapshots and load any of them directly from the Snapshot menu

key is the Ctrl key to the right of the spacebar). In the window that opens, give your snapshot a name and an optional description, then click OK. The machine state will be saved at that point. The next time you want to power off the OS, you'll have the option of restoring your last snapshot.

To load a snapshot in the future, click the menu button to the right of the operating system in the VirtualBox

Manager, then click Snapshots. You're shown a list of available choices (in the order they were taken) and can restore one from there. You'll need to make sure the OS isn't currently running. You can also take a new snapshot and delete any unwanted ones.

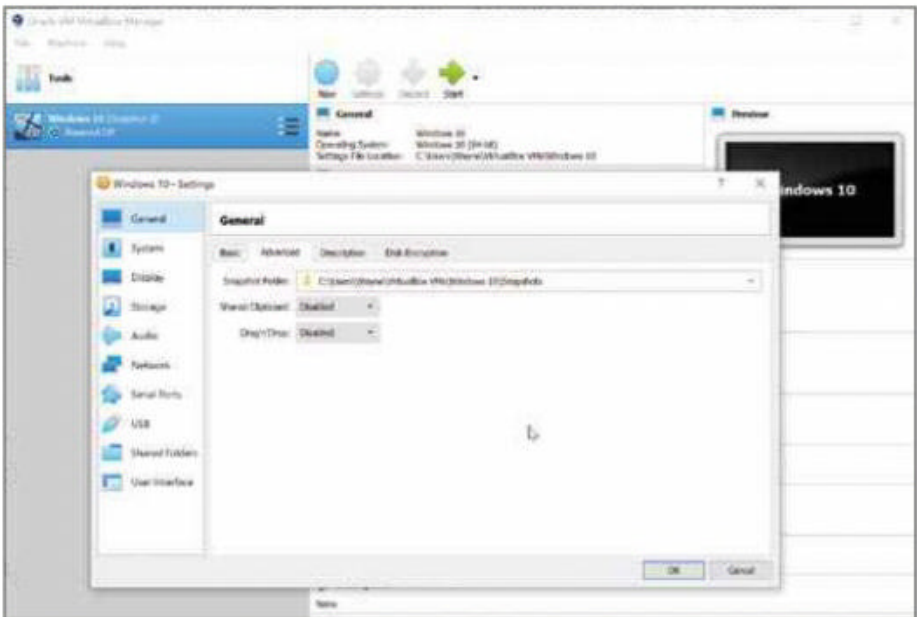
Adjust the settings

To configure VirtualBox, select an OS in the Manager (but don't run it) and click

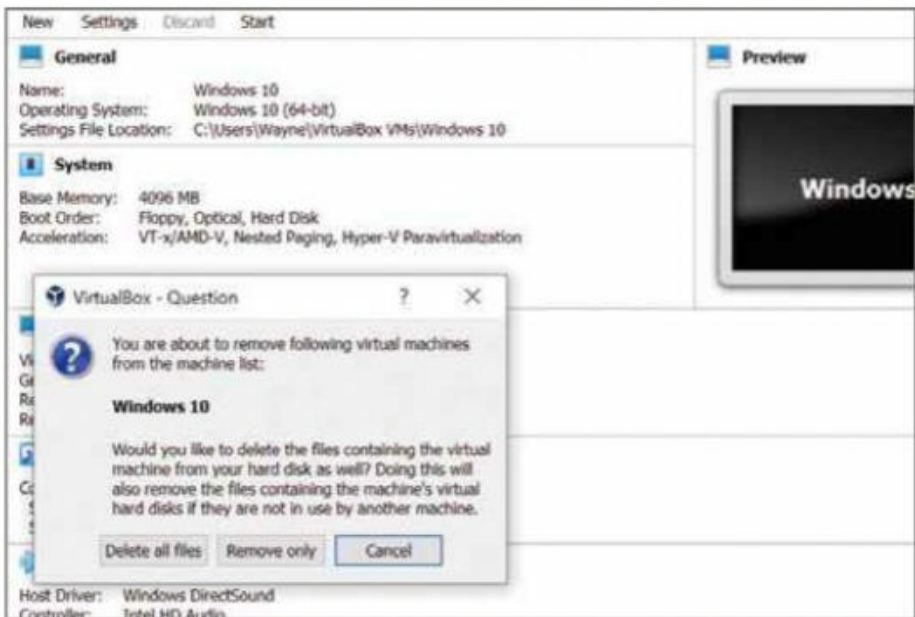
the Settings cog. You can change the name of the virtual machine and enable features such as Shared Clipboard and Drag 'n' Drop through the General, Advanced section. You can adjust the settings for System, Display, Storage, Audio, Network, USB, Shared Folders and User Interface from the Settings sidebar.

Remove an operating system

As mentioned previously, you can install multiple operating systems in VirtualBox - Windows 7, 10, the latest Insider Preview, Ubuntu, Linux Mint and so on. If you no longer need an OS, you can remove it to free up disk space. Right-click the name in the Manager and select Remove. You can choose to delete all files, to wipe the OS entirely, or just remove it, which leaves the files intact. ■



Tweak the virtual machine's configuration through Settings



Use VirtualBox Manager to remove an OS you no longer need

MINI WORKSHOP | Configure and use VirtualBox to run an operating system

1 Once your OS is installed, run it and it will load in a separate window. To resize it, click View **1** in VirtualBox and select Full-screen **2** or Scaled Mode. **3** You can drag the corner of the scaled window to resize it. **4** Right Ctrl+C toggles Scaled Mode on or off.

2 If your cursor gets trapped inside the virtual machine, pressing the Host key (which, by default, is the right Ctrl key on your keyboard) will free it. When in Scaled or Full-screen mode, the menu bar at the top vanishes. Pressing Host+Home displays a pop-up menu **1** with all the commands you need.

3 To change the resolution, right-click the new OS desktop and select Display Settings. Change the resolution to the highest on offer. To shut down Windows 10, click the X in top-right corner of VirtualBox **1** and select either 'Save the machine state' **2** or 'Power off the machine'. **3**

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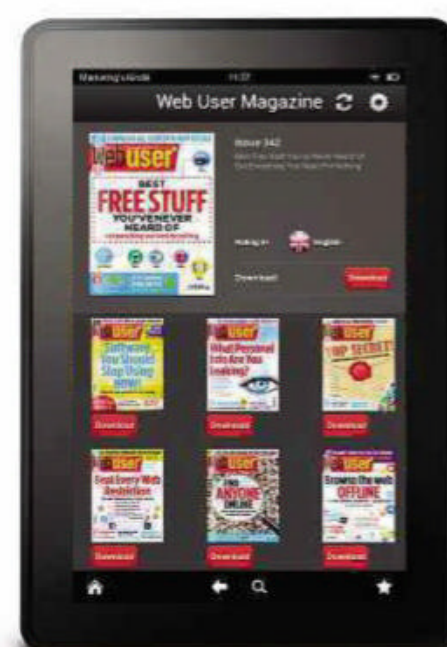
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Web User Masterclass

Boost web privacy by blocking fingerprinting and tracking

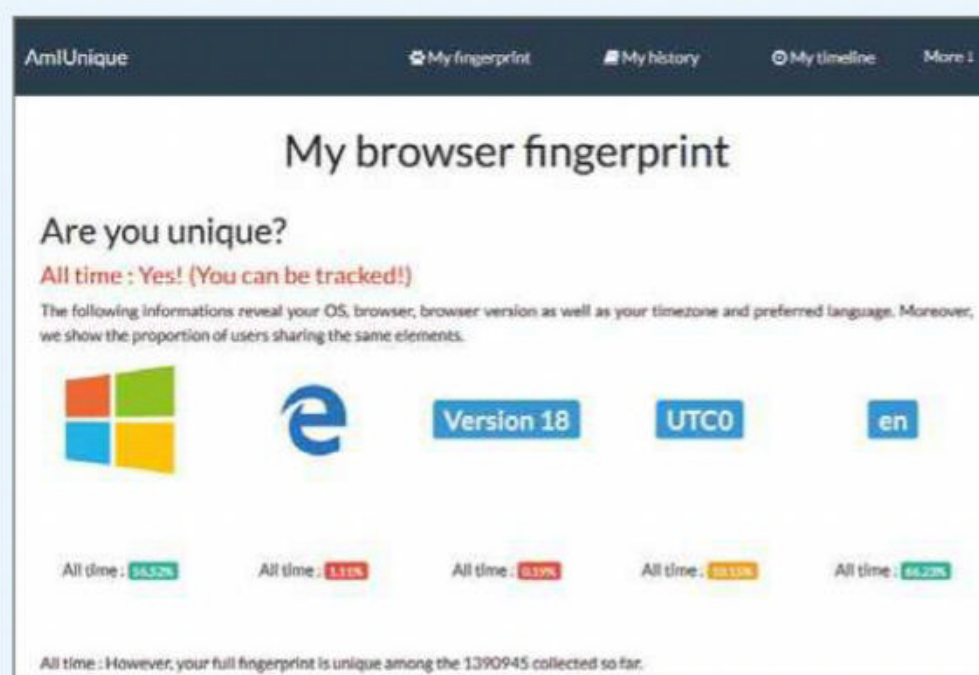
Check your browser's fingerprint

Are you worried that your browser is leaking information that lets websites track you? Fearful that web services are 'fingerprinting' your computer or mobile device to work out who you are? Well, you should be!

To find out for sure, open a browser and go to the Electronic Frontier Foundation's website at panopticklick.eff.org and run the test. To make it harder, open an incognito or private browser window.

The standard tracking results are shown first but, to get the full alarming picture, click 'Show full results for fingerprinting' below the table to see what the site can tell about you. You can be tracked if it says "Your browser fingerprint appears to be unique".

Below this, you'll see the system settings that make up your fingerprint, such as fonts, screen resolution, extensions and so on. A good alternative test can be found at AmlUnique (amiunique.org).



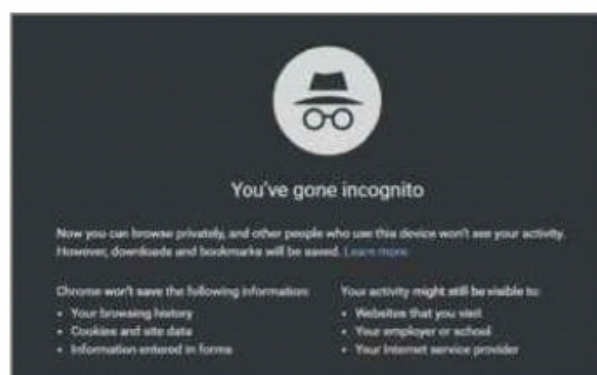
See if your web browser's fingerprint is unique and can be tracked

Use basic privacy tools

The quickest and easiest way to increase your privacy is to browse the web using an incognito or private window. This won't make you invisible or prevent you from being tracked, but it hides some specific information and effectively acts as if you'd cleared your browser of caches, history and cookies.

You can see this demonstrated when you visit a website you need to log into, such as OneDrive or Netflix. You're asked to log in before any website content is displayed – the site won't know you until you enter your details.

Websites that use fingerprinting will still be able to identify you, but incognito or private browsing is still more private than standard browsing.



For basic hassle-free privacy, use incognito or private browsing modes

Hide your browser in the crowd

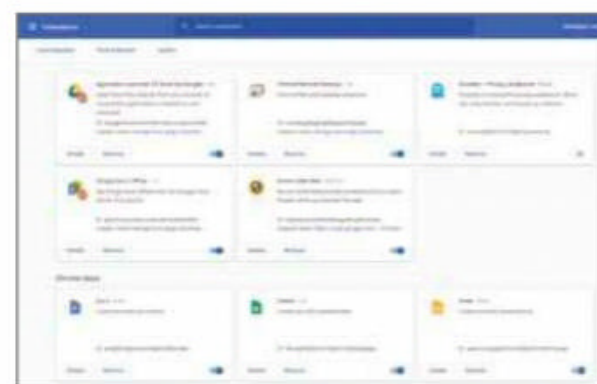
Fingerprinting, which is used to identify and track you, relies on your computer and browser being unique in some way (like your fingerprint). To foil the system, try to be more like everyone else so you can hide in the crowd.

For example, there are probably a billion Chrome users, but few people use SlimBrowser, Maxthon, Torch and others. An unusual browser won't uniquely identify you but, when combined with other factors, it certainly makes the job a lot easier.

Browsers need to know which fonts are installed on your computer so they can display web pages, and an unusual font collection makes you easier to spot. Limiting yourself to the Windows default fonts, or at least restricting any extras to commonly used alternatives, makes you less conspicuous.

Browsing the web on a super-sharp 4K monitor undoubtedly enhances your enjoyment of websites, but an unusual screen resolution sets you apart from other people. A common resolution, such as 1,920 x 1,080 pixels, does a much better job of hiding your identity.

Browser extensions also make you



Fingerprinting uses all sorts of items to identify you, including your extensions

stand out and a site may look at which ones you have installed. Using a small number of popular extensions and avoiding those with few users makes you less visible. Ironically, a browser's Do Not Track setting and whether cookies are allowed or blocked also add to the picture built by trackers to uniquely identify you.

If you see words that look like they've been typed in a typewriter, follow the instructions and type them exactly as they appear, paying close attention to spaces and punctuation.



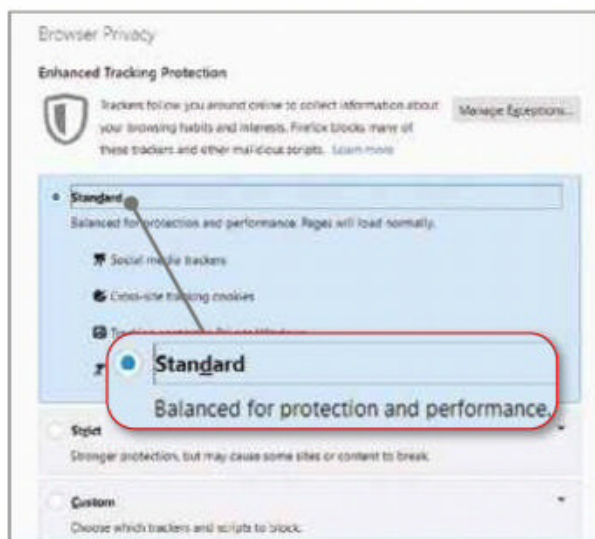
None of these features taken on their own will identify you but you may have a unique combination. For example, you may be the only person that uses browser X at screen resolution Y with extensions A, B and C and a handful of specific fonts, with Do Not Track set and cookies disabled.

Block trackers with Firefox

Chrome's rise has dented the popularity of Firefox (www.mozilla.org) but it's trying to win back users with its privacy tools and claims to block over 2,000 trackers, keeping a weekly tally of how many it's blocking. Click the menu button in the top-right corner and select Privacy Protections to see the number. It can run into thousands.

On the Privacy Protections page, click the cog icon to see the Privacy & Security settings tab. Choose between Standard, Strict and Custom enhanced tracking protection. Where other browsers require an extension in order to block trackers, Firefox has its tools built-in. It's the browser's best feature.

There are many other privacy and security settings that make Firefox worth considering, such as permissions for the camera, microphone, location, notifications, add-ons, auto-play sound and video, deceptive content on web pages and more.



Firefox has built-in tools to stop trackers monitoring you online

Block trackers with Opera

Opera is based on the same engine as Chrome but its interface and range of features are very different. Click the top-right 'Easy setup' button and, halfway down, you'll see switches to block trackers and adverts. Turn them both on to increase your online privacy.

Click the menu button, select Settings and go to Privacy Protection in the Basic section. Enable 'Block trackers' and click the two items below to enter any exceptions, such as websites where you're happy to disable tracking and ad blocking, and to manage any individual block lists.

TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave

Block trackers with extensions

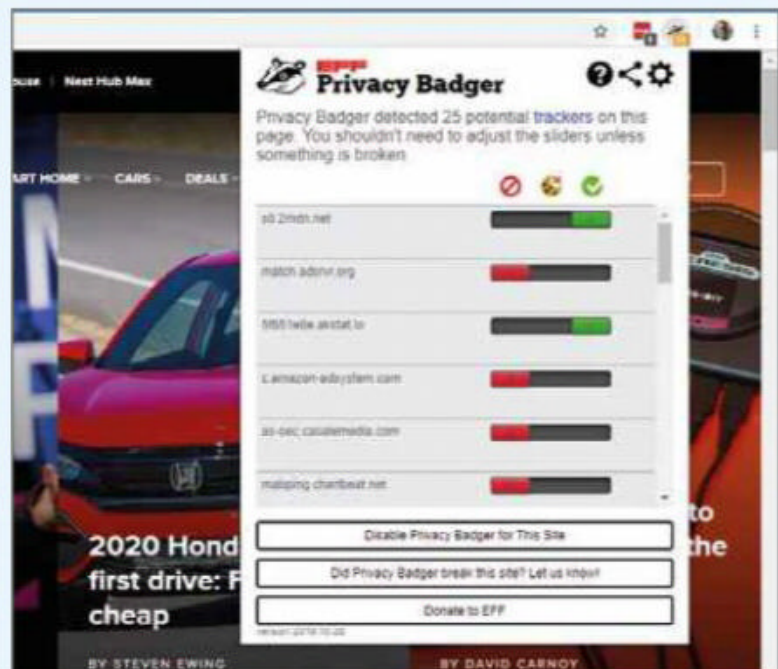
There are some great browser extensions that increase your privacy and prevent information leaks. A popular choice is Privacy Badger for Chrome (bit.ly/pribad490) and Firefox (bit.ly/pbff490). Once installed, it works instantly without the need for configuration.

Browse the web and Privacy Badger increases your privacy by blocking the worst of the trackers. Go to a website you suspect of using trackers and click the toolbar icon. A panel is displayed that lists the trackers, with a switch next to each one. Most trackers are blocked, but a few are allowed. However, you can use the switches to block all trackers or use the option to disable Privacy Badger for this site and allow all trackers.

If you want to customise Privacy Badger, click the toolbar button, then click the cog icon in the top-right corner. A new tab opens with settings spread across five sub-tabs. The most useful is Disabled Sites. Privacy Badger is compatible with many websites, but a few may break when it is enabled. If you still want to access those sites, enter them into the Disabled Sites list.

uBlock Origin is another Chrome (bit.ly/ubl490) and Firefox (bit.ly/ublf490) extension for blocking trackers. Many people use it for its ad-blocking capabilities, but that's only half the story. It works well without any tinkering but there are configuration options for advanced users. If you click the toolbar icon in Chrome, you'll see a large Off switch that disables blocking for the current site. Click the sliders icon to open a settings tab where you'll find sub-tabs for settings, filter lists, whitelists of allowed sites and more.

Ghostery for Chrome (bit.ly/gho490) and Firefox (bit.ly/ghoff490) is a useful extension for blocking undesirable items on websites, which stops lots of trackers from monitoring your activities. When it's installed, a Ghostery tab opens to let you customise the settings or take a



Use Privacy Badger for Chrome and Firefox to stop websites tracking you

tutorial explaining the main features.

Select Customize Setup in the sidebar and you can choose which categories of items to block, including advertising, website analytics and social media. Click the toolbar icon when browsing a website to see a handy control panel that shows trackers that are allowed or blocked. There are buttons to block or allow everything, too.

Block fingerprints

Your browser uses many different system attributes to create a digital fingerprint of your computer so trackers can identify you. Blocking some of those attributes can reduce or prevent fingerprinting.

In Chrome, consider Canvas Defender (bit.ly/candef490), Canvas Fingerprint Defender (bit.ly/cafdef490), WebGL Fingerprint Defender (bit.ly/wgdef490) and Font Fingerprint Defender (bit.ly/ffdef490). These extensions all produce fake values when trackers try to read your PC's configuration.

Disable JavaScript and Flash

JavaScript is the code that powers the web and it's essential for many websites. However, it can also be used to fingerprint your browser for tracking purposes. In Chrome, go to Settings, Advanced, 'Privacy and security', 'Site settings', then JavaScript. Turning it off increases privacy but it can break a lot of websites so don't be surprised if you have to turn it back on. Flash is rarely used these days and can be disabled.

Ask the Expert

Roland Waddilove, computer programmer and PC journalist since 1981, answers all your technical questions. Email us for help at webuser@webuser.co.uk



GENERAL PC

Fix a System Restore error

Q For the past month, I've been unable to make a system restore point. All my previous points have disappeared, too. When I try running System Restore, it shows Searching for ages, then 'Can't revert to previous system restore point, System Restore encountered an error 0x81000203'.

A search for this error recommended I download TuneUp Utilities from AVG (bit.ly/avgtu490), which I did, but I still get the same error message.

Kevin O'Brien, via email

A Some people with this System Restore error found that TuneUp Utilities was actually the cause rather than the solution, but it may not be the only tool that does this, so uninstall it and any similar tune-up software you may have on your PC, then see if the problem goes away.

The error can also be caused by disabling a Windows service, which TuneUp Utilities or other software may have done for some unknown reason. Press Windows+R and enter

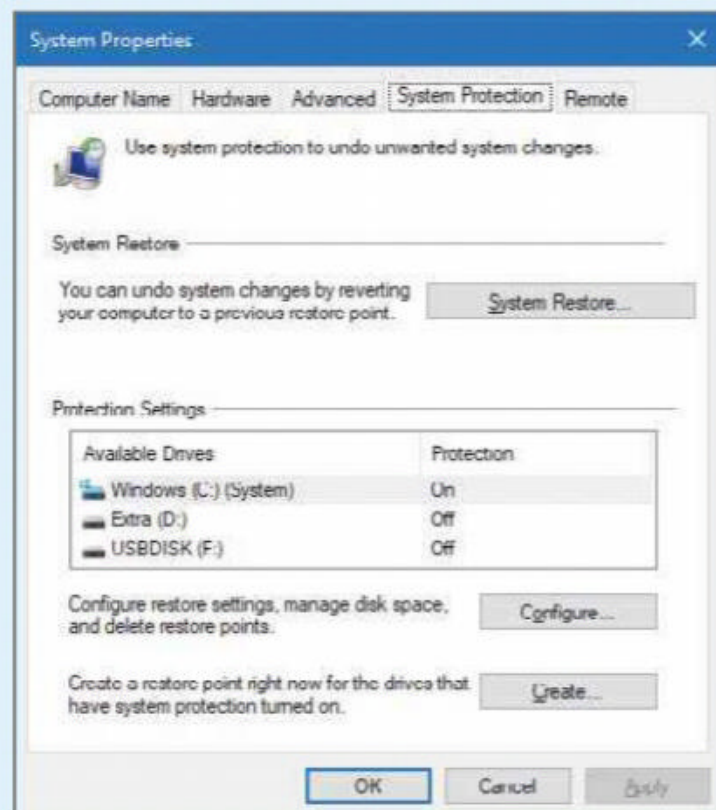
`services.msc` to open the configuration tool. Double-click the Microsoft Software Shadow Copy Provider and set the 'Startup type' to Automatic.

Now open the Control Panel, choose System and click 'System protection' to open the System Properties window. Select the C: drive and click Configure, then turn on System Protection and drag the slider to give System Restore at least a couple of gigabytes of hard-drive space. Click OK to close the windows.

Finally, press Windows+R and enter `regedit` to open the Registry Editor and go to:

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows NT

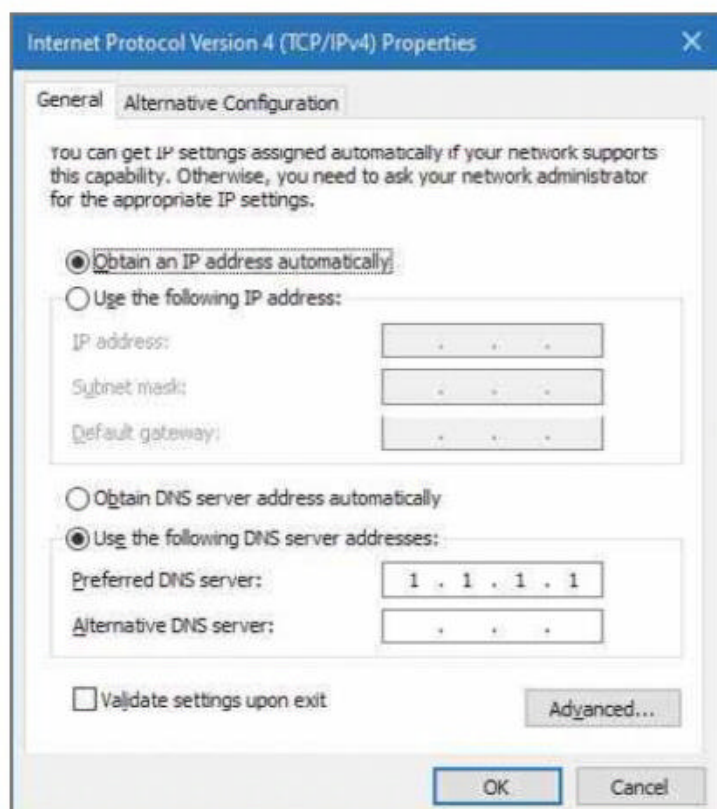
Expand it and check if there is a sub-key called SystemRestore. If there is, select it and see if it contains a value named DisableConfig. Double-click this and set the value to 0. You can actually



Make sure System Restore is switched on for the C: drive – your other drives don't need it

delete the whole SystemRestore key because it isn't normally needed.

Close the Registry Editor, restart Windows, return to Control Panel, System, 'System protection' and click the Create button. It should now create a restore point.



INTERNET

Solve an internet connection problem

Q My Dell desktop PC has started repeatedly displaying the message "HTTP Error 400. The request is badly formed" and it's driving me crazy. It happens when I simply try to view websites, regardless of which browser I'm using, and when I use links in emails.

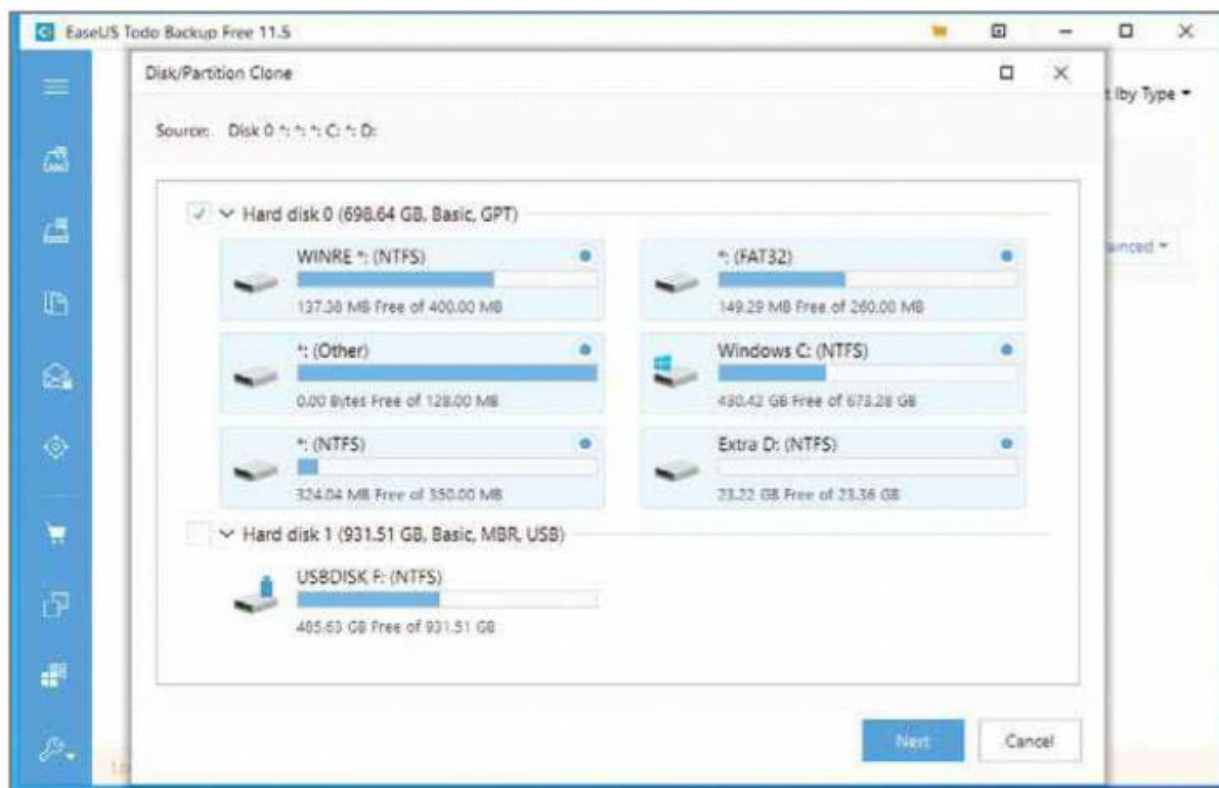
I followed advice from the internet to clear the browser cache and DNS, but it didn't make any difference. I'm not

Alternative DNS server addresses like 1.1.1.1 or 8.8.8.8 may solve internet problems

aware of any software added just before this started a few weeks ago, but I have upgraded my Norton software to Norton 360 (uk.norton.com). I welcome any ideas on where to look or some way of testing the PC to find the cause – I'm sure that it is a problem with my PC rather than the internet.

Terry Pinchin, via email

A The first thing to do when an error like this occurs is to try a different web browser, but you've already tried that and it made no difference. This implies it is not a browser problem. You also cleared the DNS cache, which is the second thing we would suggest because this converts domain names into IP addresses. For anyone who doesn't know how to do this, press Windows+R



Cloning a drive creates a good backup but uses more space than a traditional incremental backup

and enter **cmd** to open a Command Prompt window. Enter **ipconfig /flushdns** to clear the cache.

Since Norton is your only recent upgrade, try uninstalling it – or at least disable everything in it to see if that’s the cause of the error. Do the same with any other security software you have, including firewalls. Now restart Windows and try using the internet. Restore the security software afterwards if it makes no difference.

Next, try switching DNS servers. They don’t cause HTTP error 400, but problems can sometimes be reported as HTTP error 400 by mistake. Open the Control Panel, then open ‘Network and Sharing Centre’. Click the internet connection link, click Properties in the next window, then double-click Internet Protocol Version 4 in the following window. Select ‘Use the following DNS server addresses’ and enter 8.8.8.8 and 8.8.4.4 into the boxes below. Click OK to close the windows and restart the PC.

That’s just about all you can do on the computer. If the problem persists, it could be external, such as a router fault. To check this, turn off your router, wait 10 seconds and turn it back on.

If you have a laptop, try using it in a different location, such as a café or a friend’s house. If the internet works fine elsewhere, you probably need to talk to your ISP and possibly reset or replace the router. There may be a reset button on the back.

GENERAL PC

Set up a good backup strategy

Q The biggest problem when Drive C fails is reinstalling all the programs and trying to remember which apps you

have. Could you please give me your thoughts on my backup strategy?

My Windows OS and apps are kept on the C: drive and I use the D: drive to store data. I installed a third drive and, using AOMEI Backupper, I cloned the C: drive to the new drive E. I then ran

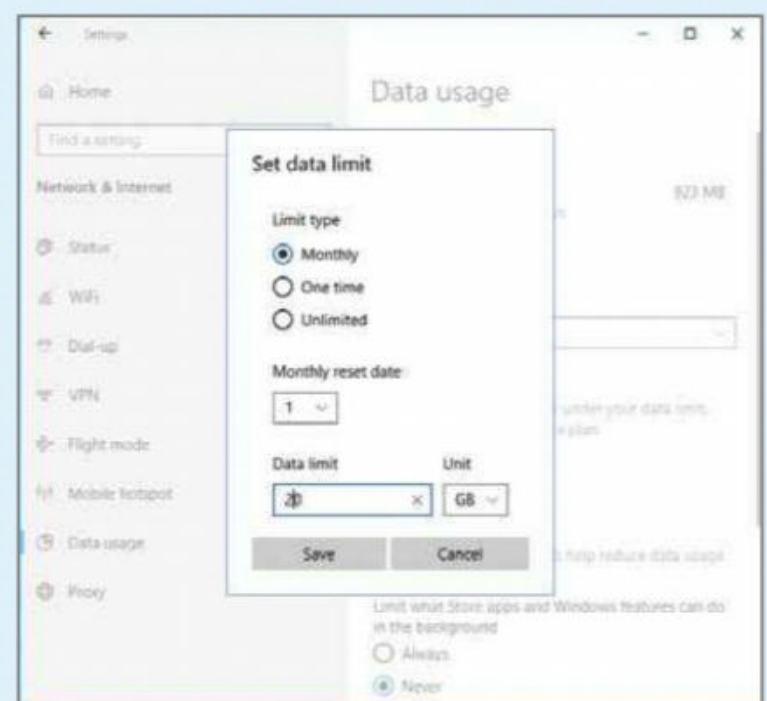
GENERAL PC

Stop updates overloading data allowance

Q I use the internet on my mobile data allowance and have my phone set up as a Wi-Fi hotspot. It works fine, but even though I have 20GB of data on my phone contract, Windows updates are using far too much. Twice a year there is a huge download and, if one fails and has to download again, then I have very little data left for the rest of the month. Once, I went over my allowance. Do you have any suggestions?

Jim Mitchell, via email

A Do you have a laptop or a desktop computer? If you have a laptop, you could go to a public Wi-Fi hotspot, such as a café, and use that when you need to download any major Windows updates. Some public Wi-Fi is quite fast, especially when there are few people around, so buy a coffee, pretend to be working and grab the update.



Limit the internet data Windows can use if you’re using a mobile hotspot or aren’t on an unlimited plan

Winmerge to check the source and destination were the same.

Then, to test if Windows will boot from drive E, I disconnected all the SATA cables from the C: and D: drives, then rebooted from Drive E. If this works, then I’ll have a spare hard drive, which can replace the C: drive, should it ever break.

Are there likely to be any Windows licensing issues? Do you see any problems with this?

Grant Wilson, via email

A You have been very thorough with this and, if anything, you have done more than you need to. Cloning a drive is a type of backup, but it’s a lot of work and is usually only necessary when swapping an old drive for a new one – for example, if it’s broken or you’re upgrading from a hard drive to an SSD.

Stick with this method if it’s working for you, but you may find it easier to plug in an external USB drive and back up the whole drive to it using a tool such as AOMEI Backupper (www.aomeitech.com), Todo Backup Free (www.easeus.com) or MiniTool ShadowMaker Free (www.minitool.com).

These utilities can be set to run on

To stop Windows downloading the update at home over your mobile connection, open Settings, ‘Network & Internet’ and select Wi-Fi on the left. Click the Wi-Fi connection, scroll down and turn on the switch ‘Set as metered connection’. Click the link to ‘Set a data limit to help control data usage on this network’. Click ‘Set limit’ and enter a value, such as 15GB.



Ask the Expert

a schedule and, after the first total backup, will only save the changes you make, so they are quick and easy to use.

This method uses less space than cloning and any spare space on the backup drive can be used for other purposes. Create a boot CD or USB memory drive and, if there is ever a problem with your C: drive, you can boot from it and restore the C: drive.

Windows licensing problems may occur if you often switch between the clone drive and the normal drive, so only use it when the C: drive fails. You can replace a drive but it's not possible to use Windows on two separate drives.

EMAIL

Unsubscribe from unwanted emails

Q I receive a lot of unwanted emails and, although many are automatically moved to the Junk Email folder, several still make it through to my inbox. It's annoying having to delete them every day.

My question is about the Unsubscribe link at the bottom of an email. Should I click it? I asked someone about this and they said: "No, it just confirms your email address to the spammer and they

will then send you even more spam".

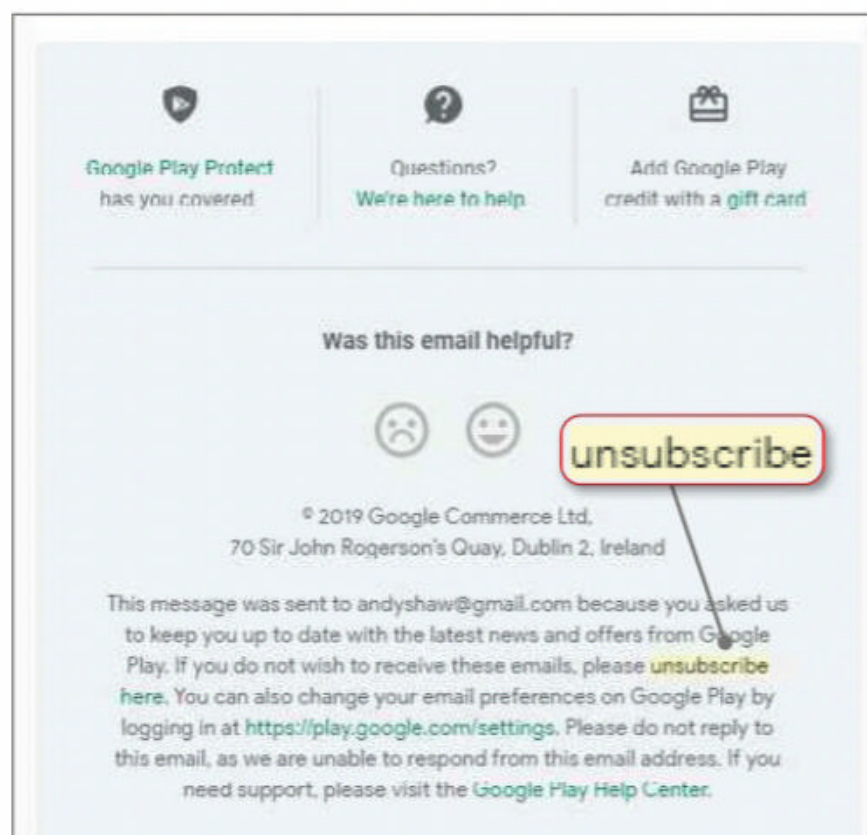
D Hayes, via email

A Some unsubscribe links in emails are genuine and clicking them removes you from the sender's list, so you no longer receive emails from them.

Unfortunately, some other unsubscribe links either don't work or could send you to a dodgy website.

It's difficult to determine whether an unsubscribe link is genuine or not. Have a look at the email and make a judgment as to whether it's from a reliable and responsible sender.

The sender's name or company name should be at the bottom of the email, where there should be an unsubscribe link and a postal address, although this is often just a PO box. There might also be a reason provided



If you're fed up with marketing emails and the message looks legit, click the unsubscribe link

for why you are receiving the email.

If any of these elements are missing, the email is likely to be spam, so don't click the unsubscribe link. If the email contains all the correct information but you're just not interested in its contents, then click the unsubscribe link.

INTERNET

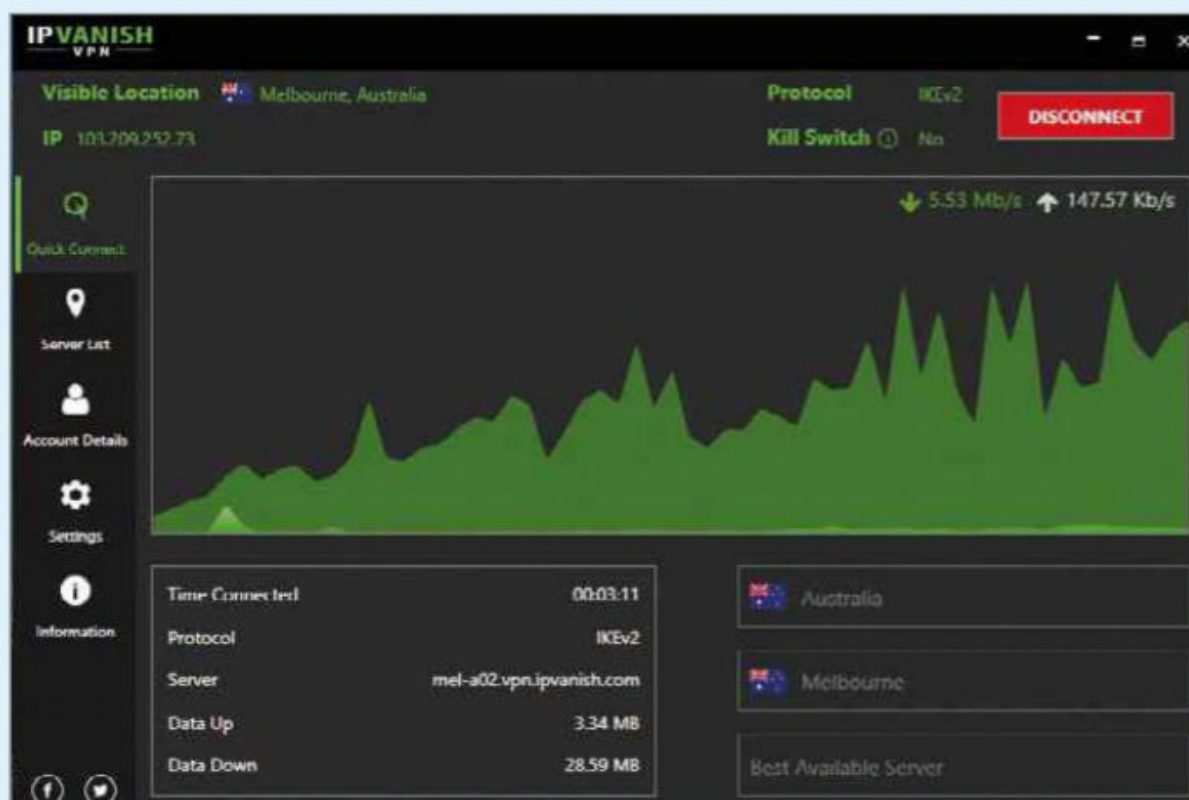
Speed up a VPN

Q My super-fast internet is rated at over 100Mbps but, when I use a VPN, I can't get more than 50Mbps. My first thought was that the problem is down to the VPN company, so I tried a different one, then another, but none of them managed any better than 50Mbps. Is Windows at fault or am I just using poor VPNs? It doesn't seem to matter which one I use, so I am guessing Windows is the problem.

Steve Cox, via email

A Outdated Wi-Fi hardware in either your computer or router may be using an old Wi-Fi standard that's limiting your connection speed. A 10-year-old router or computer will not be as fast as a new one.

However, it's more likely to be the VPN and one factor affecting the speed is the server load, which is the number of people sharing it. Try using VPN software that shows the server load, so you can choose the lowest. The distance to a VPN server also affects the speed, so connecting to



Even the best VPN will be slower than your existing connection because of the increased distances and stronger encryption

a US server can be slower than a local connection.

VPNs are encrypted, which makes them slower, and there are different VPN protocols, such as TCP and UDP – the latter is faster. The level of security is another factor that affects speed and some VPNs route traffic through two

servers before it gets to the internet. Being doubly protected is slower than routing through just one VPN, which is in turn slower than no VPN.

With all that's going on, a VPN will never be as fast as a normal connection. You have to trade some speed for security and privacy.



This fortnight, Roland has resorted to jogging on the spot to reach his 10,000-step goal as it's cold and wet outside



Readers' Helpdesk

Can you help your fellow readers with their computer problems? Send your questions and answers to webuser@webuser.co.uk

MOBILE

Fix Android's text-to-speech engine

Q A white square in a grey circle has appeared on my Moto G4 phone screen with a message that the text-to-speech engine is not ready. This lasts around a second. I must have had some trouble with the Settings app for this to appear, but now I can't get rid of it.

Colin Power, via email

A This isn't uncommon but it dates back a few years and the problem still hasn't been solved, so don't expect Google to sort it out any time soon.

There may be a few reasons why you're seeing this symbol and message, but the most likely is a conflict between the text-to-speech engine and an app that's trying to access it. If you've downloaded any apps that use the speakers and microphone, try uninstalling them to see if the problem persists. You can't, unfortunately, disable text-to-speech, but you could try going to the Accessibility area of Settings, double-checking your current settings and turning off the screen readers.

Steve Clark, Features Writer, Web User

BROWSERS

Stop Chrome auto-filling your address bar

Q How do I stop predictive text appearing in the Chrome omnibox when I type something in the address bar? I believe earlier versions of Chrome had an option in the Privacy settings to stop predictive text but version 78 doesn't include this, so I'm guessing there must be another way to do it.

I've seen other people posting similar

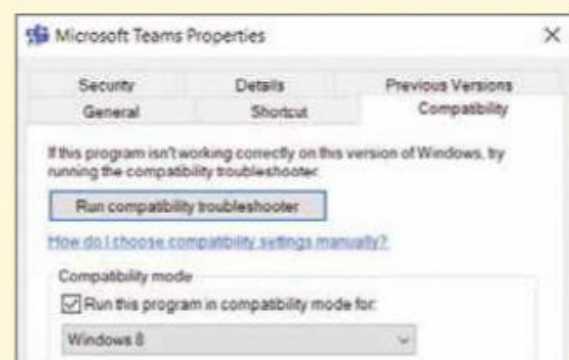
READERS RESPOND

GENERAL PC

Use compatibility mode in Windows 10

A In response to Scott Darby's Issue 487 query, 'Can I trick an old PC game into running on Windows 10?' (bit.ly/webuser487) – you can indeed make Windows 10 'emulate' older versions of the OS. Find the game or program you want and right-click Properties. If this option isn't in the context menu, use the Search bar, right-click the app in the search results and click 'Open file location'. Right-click the shortcut that File Explorer highlights and select Properties.

Go to the Compatibility tab and tick 'Run this program in compatibility mode for:' and choose Windows 8, 7,



Compatibility Mode lets you run old games and programs in Windows 10

Vista SP1, Vista SP2 or Vista. Sadly, it doesn't go back any further. These steps work on Windows 7 and 8, too.

Flynn Farrow, via email

CAN YOU HELP?

webuser@webuser.co.uk

You can seek help or suggest solutions to other readers' problems by emailing webuser@webuser.co.uk or via www.facebook.com/webusermagazine or twitter.com/webusermagazine.

EBOOKS

Q Does anyone know if it's possible to share Audible books with another user? I added my wife to my Amazon 'family' but she can't access my audiobook library.

Sean Gosden, via email

GENERAL PC

Q Is there a quick way to move old programs and apps to a new laptop? Upgrading a phone brings old apps over to the new device. Does Windows 10 have something similar?

HK Lord, via email

problems on the web, and some say they've switched to other browsers, such as Opera and Firefox, which let you disable predictive text. I'd rather not do this because I like using Chrome for most of my computer work.

John W Jones, via email

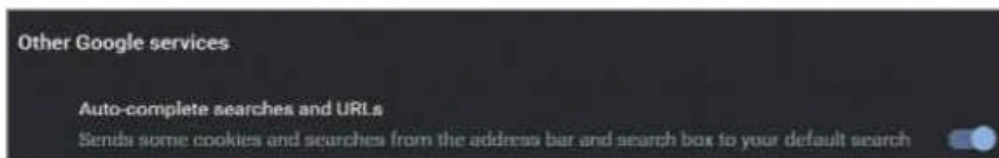
A For some reason, it appears Google doesn't want you to stop using its predictions. We'd wager that data and ad sales are two reasons why the option has been removed.

You still have

some control, though. Search Chrome settings for **auto-complete**.

Alternatively, you can delete individual 'auto-completes' from the omnibox. Start typing a web address and, when it or any other 'suggested search' appears in the drop-down box, use the arrow keys to highlight it. Hold the Shift key and press Delete (not Backspace) to permanently remove the suggestion from the list.

Steve Clark, Features Writer, Web User



You can control some but not all of Chrome's Auto-complete settings

Your Top Tips

Our pick of the best advice from our readers. Please send questions and answers to webuser@webuser.co.uk



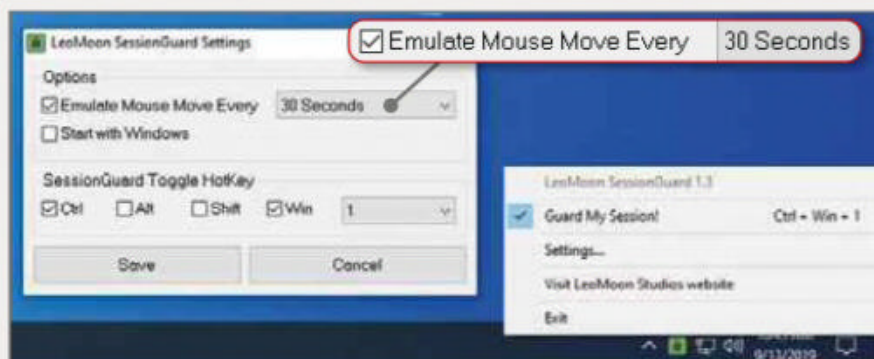
TOP TIP

GENERAL PC

Prevent your PC from powering down

It's such a pain when you set your PC to download a massive file, go off to have a brew and then come back to find that your computer is sleeping on the job.

I found a really useful program called LeoMoon SessionGuard (bit.ly/leomoon490) that's designed to tackle this problem. It won't change any of your Windows settings but it's all but guaranteed to stop your computer from sleeping or resetting while you're away. It's also really simple to use – just download the software from the website and run it.



Trick your PC into staying switched on

Essentially, SessionGuard works by emulating mouse movement, tricking your computer into thinking that it's in use. There are a couple of settings to play with – you can choose your own time interval for how often the mouse should move (I chose 50 seconds) and set a keyboard hotkey if you want one.

Roger Mitchell, via email

GENERAL PC

Stop wasting hard-drive space

My last PC had a really big hard drive and my new one has a solid-state drive that's much faster but also much smaller. Is this progress? Either way, wasting space is not an option. To find out how much space Windows is taking up on the C:

drive, open the Settings app, click System and select Storage. Looking at 'Temporary files' shows the hard-drive space being wasted by items you don't need and can live without. However, you should ignore this because the figure is wrong. If you click 'Temporary files', you'll see exactly how much space is really being

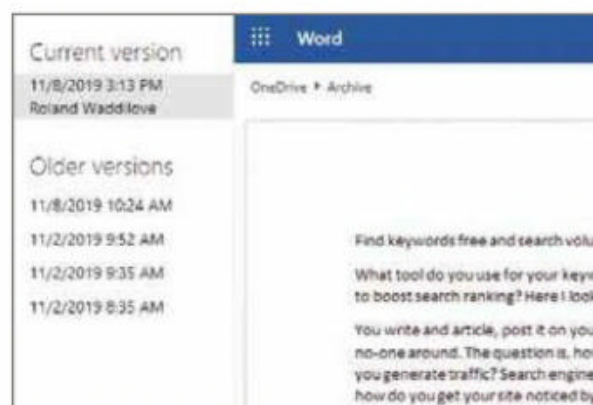
used. It's twice as much on my PC, mostly because of the 6.34GB used by recent Windows Updates. Tick all the boxes and then click the Remove Files button to free up space.

Sam Bellamy, via email

OFFICE SOFTWARE

Restore previous Word docs

When you're working on a big project in Microsoft Word, such as a long and complicated document or ebook, it's easy to make changes that you later regret. Perhaps your text was



Restore a previous version of a document in the Word web app

better before you edited it.

Word lets you revert to a previous version so you can recover any changes you made. If you use the Word web app in a browser (word.office.com), click File, Info, then Previous Versions. This displays the current version and, in a list on the left, shows the dates and times that older versions were saved. You can open any of these and make it the current version.

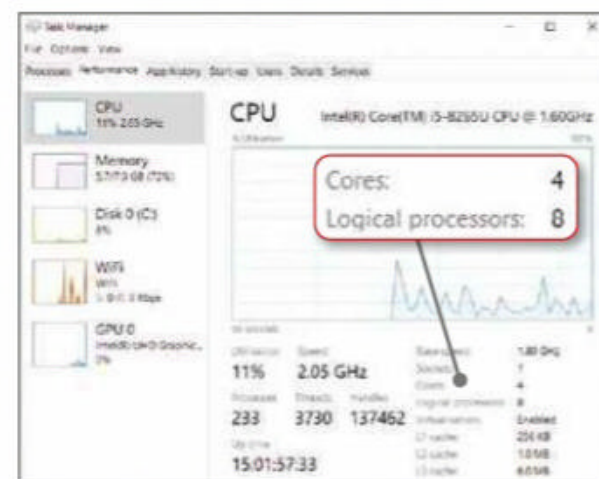
Dave Roberts, via email

HARDWARE

Count processor cores

Have you ever wanted to know how many cores there are in your PC's processor? You can easily find out by right-clicking the taskbar, then clicking Task Manager. Go to the Performance tab and select CPU. The information listed below the chart shows the number of cores. It also displays the number of logical processors, because one CPU core can simulate two, which makes it look like your PC has more cores than it really does.

Liz Ford, via email



Check the performance of your PC

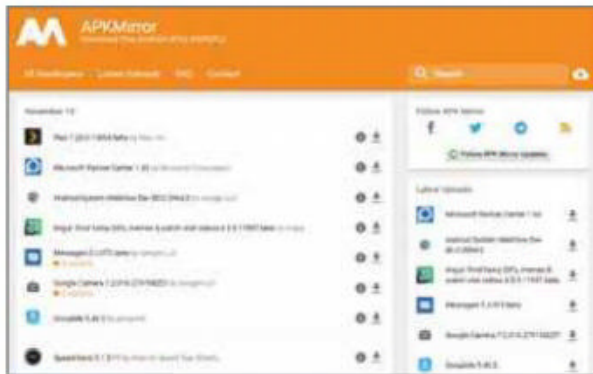
MOBILE

Revert to old Android app versions

If you've ever regretted updating an Android app because the new features don't work on your device, take a look at www.apkmirror.com. It's a website that



Check to see if temporary files are taking up space on your hard drive



If you ever want to get an old app back, head to APKMirror.com

provides downloads for different versions of a huge range of Android apps. Some people use it to get new versions of apps that haven't yet rolled out to their device but I find it handier for reverting back to older apps when new ones don't work on my devices.

Thomas Wood, via email

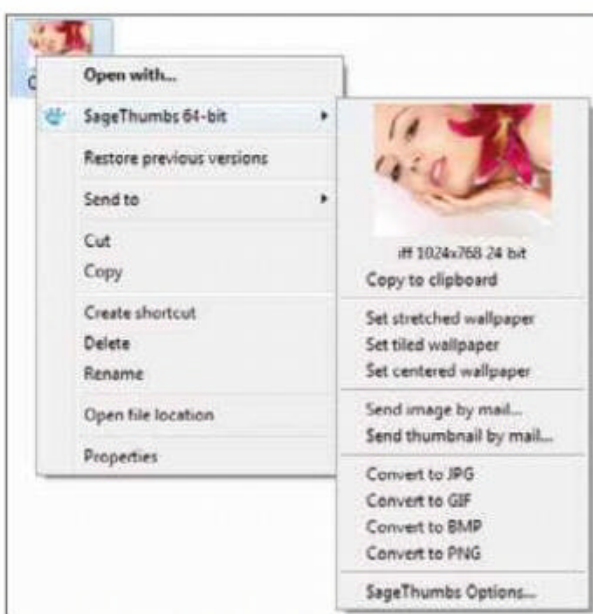
PHOTOS

View photos in File Explorer

I am a designer and I find it very frustrating when I can't preview images directly within File Explorer. The basic image formats are fine, and can be previewed automatically, but as soon as you come across some of the more unusual file types, you start to lose the functionality. In an ideal world, Windows would implement this themselves, but since they haven't, I've turned to SageThumbs (bit.ly/sage490).

Once you've installed and set up the program, go into File Explorer, right-click the file you're interested in and a preview thumbnail should appear right away. It's also useful for quickly converting files into PNG and JPG formats.

Lottie Simpson, via email



SageThumbs lets you quickly preview your images

WEBSITES

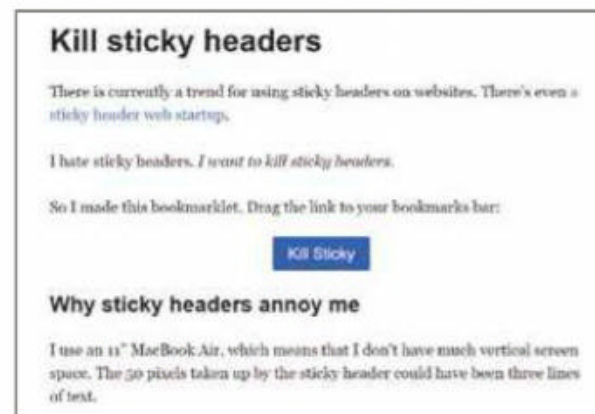
Remove sticky notices from websites

Does anyone else remember the good old days when you could actually go to a website and see the content you were looking for? Now all I see is constant

notices giving me information I don't need about cookies and newsletter sign-ups. It's maddening!

I've been using a bookmarklet called Kill Sticky Headers (bit.ly/sticky490). You add it to your bookmarks bar and click it anytime you find yourself dealing with an annoying sticky header. It doesn't interact with any other elements on the page but, if you find it's inadvertently got rid of something important, you can refresh the page to get it back.

Pawel Ionescu, via email



Say goodbye to annoying sticky headers

EMAIL

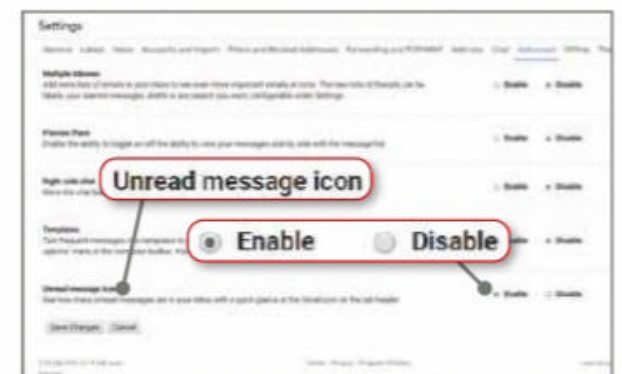
Show unread email count

I'm a bit of a tab monster and always

have a dozen or more browser tabs open at any one time. I usually keep Gmail on one tab and have activated a useful setting to show the number of unread emails on the tab icon.

Open Gmail's cog menu and click Settings, then select the Advanced tab. Look for the section headed 'Unread message icon', then select Enable and click the Save Changes button at the bottom. The tab text says something like 'Inbox (5)', but when I have a lot of tabs open, there isn't room to display the text and only the Gmail icon is visible. However, the number of unread emails is now overlaid on top of the icon.

Jamie Edwards, via email



Keep an eye on your inbox, whatever tab you're on

BLUNDER OF THE FORTNIGHT

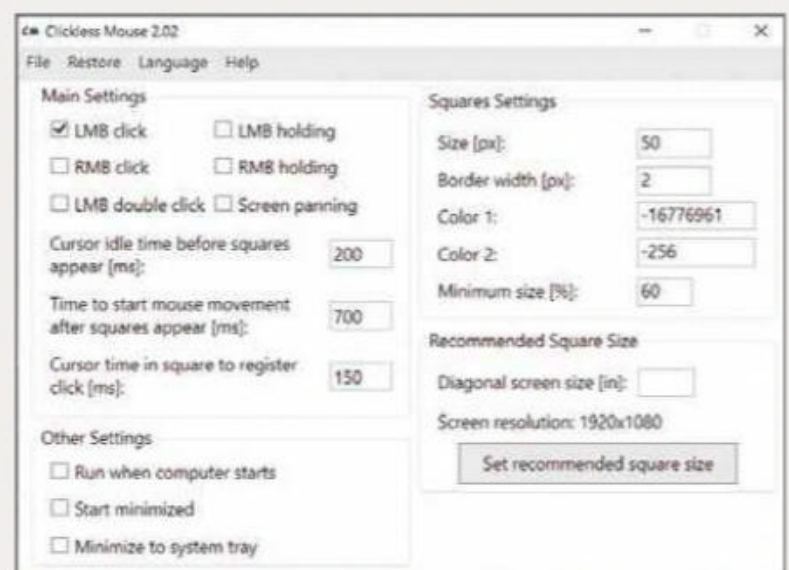
GENERAL PC

Beat RSI by banishing clicks

After a long career spent behind a desk, my body is well and truly feeling the strain. Many of my aches and pains can probably be put down to the repetitive actions of PC work. My hands have had the worst of it, and barely a day goes by without me suffering from aching fingers.

Luckily, people are becoming more aware of the dangers. I recently had a desk assessment at work, and now I've found a great tool on GitHub called Clickless Mouse (bit.ly/click490), which puts less strain on your fingers when using a mouse.

Whenever you hover your mouse pointer over something onscreen, a set of small coloured boxes appears. You perform different types of click by moving your mouse over the corresponding box, whether that's



Give your fingers a rest with Clickless Mouse

a simple left click or a right-click-and-hold. It takes a little getting used to but it soon becomes second nature.

After you install Clickless Mouse, you can configure a range of different settings. It's definitely worth taking the time to play around with it at this early stage, so you can get used to the functionality more quickly.

Justin Parker, via email

Have you managed to fix a PC-related disaster?

If so, please send your story to webuser@webuser.co.uk



Star Email

Our delivery services need fixing

There is nothing more annoying than taking time off work to take delivery of a parcel that then doesn't arrive. I ordered a small item in a padded bag from the US. The retailer and USPS (United States Postal Service) managed to get it to the UK in a day and a half. UK Parcelforce then took more than two weeks to deliver it. I emailed the retailer and USPS, then I rang Customs and UK Parcelforce and got nowhere.

Now to my point. I paid for the item, the delivery, £20 in custom charges and £12 extra for a Saturday delivery (which never happened), but every time I phoned or emailed for an update, I was told Parcelforce UK can only supply information to the sender,



so I should contact them.

Surely, the person who is paying for everything is entitled to know what's happening to their parcel? I for one will never pay extra for a faster delivery again, as the standard excuse seems to

be "We tried to deliver but you were not in" or "It was on the van but the driver ran out of time". Then the parcel gets delivered the following week as normal. I have on occasion even had a photo attached to the email of the delivery man's foot on some tarmac to prove they tried to deliver – but I live in the country and there is no tarmac near my property!

This is why *all* delivery services are broken. They badly need an overhaul and more training. The moral of the story is: don't ever pay extra for faster delivery and do complain like hell until the system is fixed.

I wonder what bad service other readers have experienced?

Welsh Legend, via email

Back Issues disc winner



Snail mail is more secure than email

Regarding Barry Collins' Page 404 column in Issue 488, 'Let's stamp out snail mail in 2020'. I opened my inbox this morning to see I had received an email because I had looked at a flight price. I had 20 notifications, because I had been on eBay, and three scam messages – two from Nigeria and one from Venezuela.

My grandmother is 93 and she contacts me regularly to check on some email scam or other. I have to monitor emails received by my other family members in their advancing years to ensure they are not cheated out of thousands of pounds, because we are all being driven to use technology.

Barry is wrong – snail mail is essential. Tried and trusted snail mail provides more security than any electronic system. It allows more mature people time to consider and act on the communications they receive. It also allows less technically savvy folk to have a more simple life where you have evidence of getting something and keep it as proof.

Perhaps Barry's column should have been 'Let's relieve people of the perpetual pressure of having to respond

immediately'. Why must people respond with "sorry for the delay"? Bring back more reliance on snail mail, I say.

Russell Taylor, via email

Snail mail has its uses

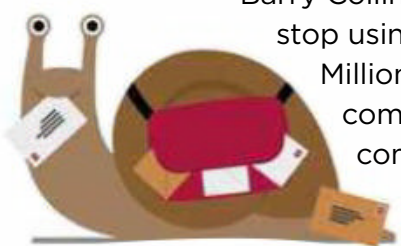
Barry Collins' column suggesting that we stop using 'snail mail' is shortsighted.

Millions of older people don't have computers and are unable to comprehend new technology.

A friend of mine, a retired teacher, puts it into

perspective when he says: "You can't teach old dogs new tricks". Plus, how is Barry going to send parcels electronically? I'm intrigued to know!

David Austin, Sheffield



Keep scammers hanging on the phone

As a follow-up to your question 'Have you ever been targeted by a Microsoft tech support scam' (Inbox, Issue 488), I would add that it is useful when you recognise a scam to keep the caller

Quiz Answers: Issue 489

1 **Ice Ice Baby**



2 **Sleeping Satellite**



3 **Earth Song**



4 **Three Lions**



5 **Candle in the Wind**



6 **Genie in a Bottle**



WINNER!

Well done to **Trevor Corbitt** who wins a Web User Back Issues Disc



WIKIPEDIA ARTICLE

Email



talking on the telephone (if you have time, of course). This prevents the scammer from talking to other, perhaps more vulnerable souls.

My current record is about 20 minutes – saying things like “waiting for the computer to boot up, it has got very slow, you know”, while trying various options: press this key, press that one, and so on. Eventually, I ask them: “Are you sure this works on Linux?” – at which point, they tend to give up.

I have similar fun with the “about your recent accident” callers and, as they are usually UK call centres, an additional benefit is that someone is earning a living by talking to me.

Paul Moles, via email

Correction about tennis streaming

I notice that in your What to Watch Online section in Issue 488, you say that readers can stream the ATP tennis finals on Now TV with a Sky Sports Pass. Sorry, but this is incorrect. Since the start of



2019, the ATP tour rights in the UK are held by Amazon Prime, not Sky.

Therefore, the tournament can only be streamed

on Amazon Prime, except for the afternoon sessions and the final, which are also shown on BBC. In fact, Sky no longer shows any tennis and, as from next year, I believe Amazon will also have the UK rights to the WTA tour.

Michael Owen, via email

Whistling for your keys

I had to laugh when reading your FAQ in Issue 488 about Tile trackers, because it

reminded me of those fobs you got in the 1980s that helped you find your keys by whistling for them. They'd respond with a beeping sound so you could dig them out from under a cushion or wherever.

Oh, the fun we used to have winding up our Dad by whistling to make his keys beep at inconvenient times! I'm willing to bet Tile trackers aren't half as much fun.

Nathan Woodward, via email



What you say...

DO YOU AGREE WITH GOOGLE'S PLAN TO NAME AND SHAME SLOW WEBSITES (bit.ly/slow490)?

I seriously doubt the impact of this. Being “shamed” is unlikely to make any site owner recode a website they have, presumably, had for years. From the user's side, if a person really wants to go to a specific site, they will be aware that it loads slowly and have already accepted this. If it's their first visit, they will accept it is slow or find an alternative site without the need for a badge from Google.

Rich Grove

With the speeds we get these days, there shouldn't be an issue with slow-loading pages. I agree that these sites should be named.

Darren Phillips

It won't have any impact on me because the slow sites will only be shamed in Google Chrome and I'm a Firefox user.

Brian Brown

Yet another example of Google acting like it owns the web and has the right to tell website owners what to do. It should sort out the mess in its own backyard first.

Steve Tanner

HAVE YOU INSTALLED THE WINDOWS 10 NOVEMBER 2019 UPDATE YET?

Yes, I installed it today on two laptops. No problems that I'm aware of at the moment.

Stuart Pegg

I don't know why Microsoft has bothered releasing this update because there isn't much new or

interesting in it. Still, at least it installed without messing anything up.

Graham Dyer

After the problems I had after updating to version 1903 (the May Update), I am going to hold off for as long as possible.

Fred Smith

Yes, but it doesn't appear to do a lot different from the last version.

Martin Ireland

Yes I did install it, but it gave me a blank black screen and I could not do anything with it. After some effort, I have now managed to roll it back to the previous build and I am in no rush to install it again.

Kevin Gadget Man Benton

MICROSOFT IS KILLING OFF ITS CORTANA MOBILE APP (bit.ly/cortana490). DO YOU USE A VOICE ASSISTANT ON YOUR PHONE?

I tried using Siri many years ago, when I had an iPhone, and I've tried “Hey Google”, too. I find that having to make repeated efforts to speak slowly and clearly saves absolutely no time and I might as well just get on and do whatever I wanted myself!

Nat Grove

I never have. I've always disabled Siri on every iPhone I've had, too. However, I've got an Echo Show at home and I use Alexa on that all the time.

Mark Chatham

I sit at a PC with a lovely keyboard, typing away. When I'm not at my PC, I type or talk to Google on my phone, but I've never uttered a single word to Siri.

Chris Armstrong

I didn't even know you could get Cortana for Android. I only use Alexa.

Phil Graham

Nope.

Glenn Faulkner

! Page 404

Barry Collins reveals the results of his extensive research into couriers



Signed, sealed and delivered (if you're lucky)

It's Chriiiiiiiiiiiiiisstmas! The most wonderful time of the year, the season when the streets are lined with the beautiful twinkling of... courier van hazard lights.

Yes, nothing says Christmas more than a harassed-looking driver at your doorstep, asking if you'd mind taking in the three-piece suite for the couple at number 27, who won't be back until January.

January 2021, that is.

I've become something of an expert in the ways of the courier for two reasons. First, I work from home, which means I'm the top of the list when local couriers are trying to leave a parcel for my neighbours. Couriers such as the woman who delivers for Debenhams, who is surely only days away from beating the Guinness World Record for the number of parcels you can fit into the back of a Renault Espace.

"I knew you'd be in," she says, seemingly oblivious to my irritation at being disturbed for the eighth time this morning, just so I can look after a pashmina for Carol at number 12 and save the courier from a potentially fatal game of parcel Jenga if she tries to put it back in her boot.

The second reason is that I have a Ring doorbell on my front door, which captures video every time someone as much as sets foot on my property. Based on two years of video evidence and the kind of big data crunching that would make Bill Gates jealous, I can now reveal the following findings about courier deliveries:

“ 92% of couriers suffer from a rare form of dyslexia that prevents them from reading the word FRAGILE ”



- The average time between the courier pressing the doorbell and flinging a “sorry we missed you” card through the door is 0.8 seconds (0.3 seconds in December)

- The three most likely places you'll find that parcel emblazoned with an expensive, luxury brand and “left in a secure place” will be: in plain sight on your front doorstep; on social media in a “look what I found today!” post; or in the dustbin that's due to be collected within the next hour

- 92% of couriers suffer from a rare form of dyslexia that prevents them from reading the word FRAGILE on packages – that figure rises to 98% for parcels containing laptops
- The delivery company Yodel earned

its name from the strange, screaming noises customers make whenever they try to navigate the company's complaints hotline

- The average distance to your “local collection point” that your undelivered parcel has been dropped at is 2.3 hemispheres. The average waiting time once you get there will be between three hours and three days
- The size of the box Amazon uses to deliver a single memory card for a digital camera meets animal welfare standards for the transit of a rhinoceros
- 73% of divorces in January are caused by couriers failing to deliver spouses' Christmas presents, which were ordered after 4pm on Christmas Eve.

Hopefully Santa will prove more reliable at delivering your presents. Merry Christmas, everyone!

Illustration: Andrew Torrens

WebUser

**SUBSCRIPTION
OFFER**
FOR MORE INFO SEE PAGE 62

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What's inside the next issue:

COVER FEATURE: AWFUL APPS TO AVOID IN 2020

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