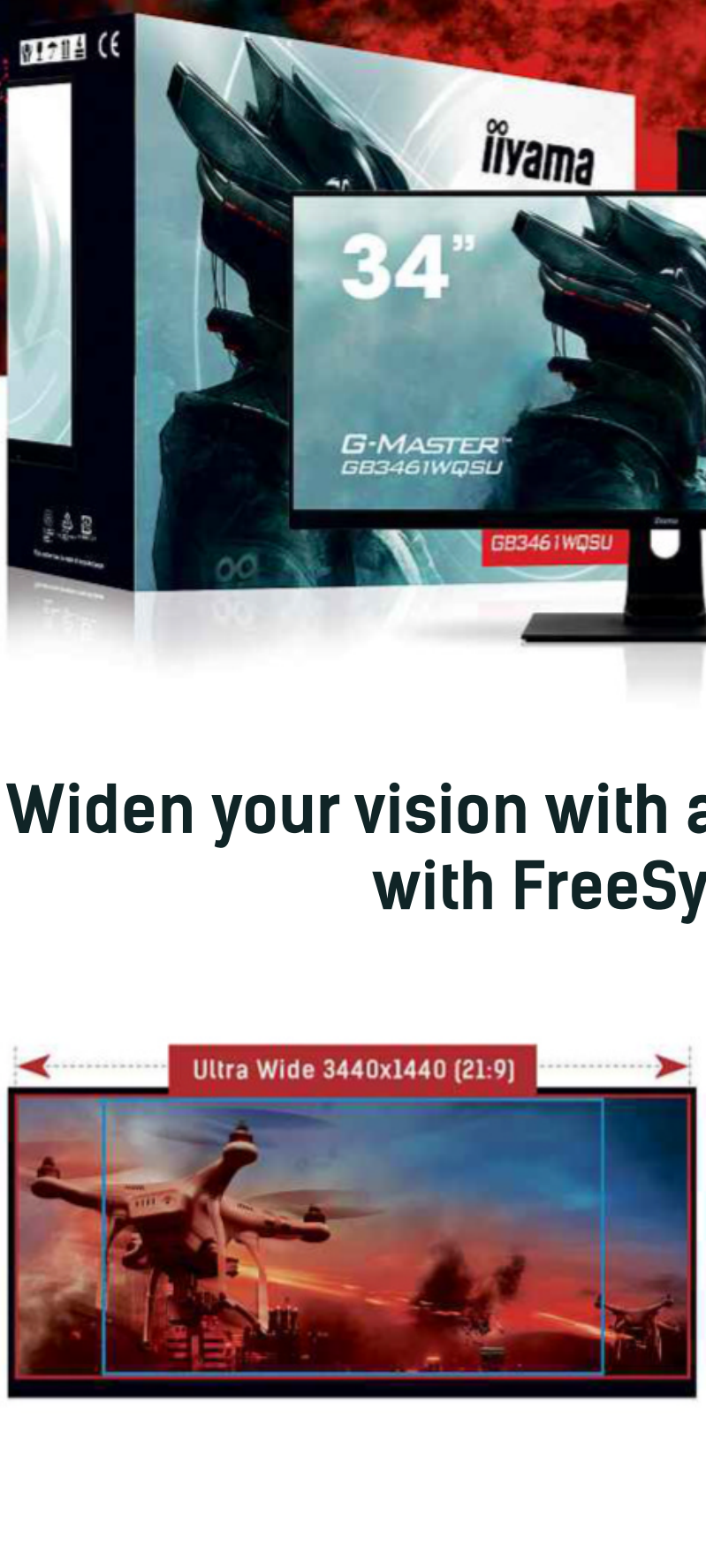
G-MASTER™
#MONITORS4GAMERS
by iiyama

RED EAGLE™

Widen your vision with a GB3461WQSU Red Eagle with FreeSync Premium



Unleash your full gaming potential and enjoy superb image quality with this 144Hz IPS panel offering 1ms MPRT and 3440x1440 resolution.

1ms 144Hz | 3440 x 1440 | IPS Panel Technology | HDMI | DISPLAY PORT | USB HUB

Find your match at gmaster.iiyama.com

Issue 507

WebUser

5 - 18 August 2020 / Best software / New apps / Go wired in the country!

CHAT ONLINE WITH DISCORD

The brilliant free tool that's not just for gamers p52

RECORD YOURSELF On Your Screen

Capture what you do on PC, laptop, phone & tablet

- ☑ Zoom, Skype & FaceTime chats
- ☑ Video podcasts & presentations
- ☑ Tutorials & game walkthroughs
- ☑ Phone calls & video messages

+ *Edit videos on your phone* p40

32
9 771473 709189
£2.40

PLUS

BEST ALTERNATIVES TO MICROSOFT MONEY

Free software you can bank on p46

SHARE YOUR ACCOUNTS WITH FRIENDS & FAMILY

Without giving up your privacy p48

RUN WINDOWS TASKS FROM THE COMMAND LINE

Unlock secret PC tools p64

PCSPECIALIST

PC Specialist recommends Windows Windows 10

CUSTOM GAMING DESKTOPS & LAPTOPS

ORDER ONLINE NOW AT

WWW.PCSPECIALIST.CO.UK

GET A FURTHER £15 OFF WITH THIS EXCLUSIVE VOUCHER CODE: **WEBU20**

0333 011 7000

Some features require Windows 10. Update available through Windows Store. Internet access required; fees may apply.
Microsoft, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

/PCSPECIALIST @PCSPECIALIST

Re-record, not fade away

Despite being the editor of an internet magazine, there are certain modern tech tricks that are beyond me. I don't know how to create a TikTok lip-sync challenge, I can't make my Google Home speaker play 'Electric Avenue' when I shout "Boy!" at it and I realised the other day that I had no idea how to record a WhatsApp video call. This later proved a problem when I couldn't remember when and where I'd arranged to meet the person I'd spoken to, and had no information to 'rewind' to.

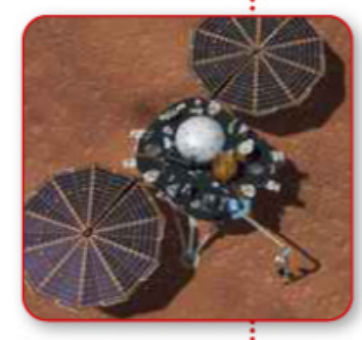
If only I'd had this issue's cover feature to hand, which explains how to record what's happening on the screen of your PC, laptop, phone and tablet. Whether you want to capture and keep a Zoom video chat, create a tutorial to show a friend how to fix a tech problem or start your own video podcast, we recommend the best free tools for recording (and re-recording) everything you do on any device. We also reveal how you can stop hackers using your camera and microphone to covertly record you.

Robert Irvine, Editor
editor@webuser.co.uk
#webuser

abc Average sales, Jan-Dec 2019, 24,266 copies per issue

5 Things you'll learn this issue

1 How to enjoy the view from other people's windows all over the world page 6



2 How to drive a NASA rover around Mars and take Red Planet selfies page 17

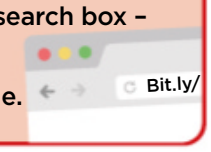
3 How to add trails to your mouse cursor to make it easier to see on-screen page 29

4 How to play a game of Rock, Paper, Scissors against artificial intelligence page 51

5 How to improve Microsoft's Edge browser by adding a download button page 70

How to use Bitly links

We use Bitly links to shorten web addresses that would otherwise be too long to print in the magazine. Type these into the address bar of your browser – not the search box – and you'll be redirected to the relevant web page.



Contents

SUBSCRIPTIONS
Turn to page 62 for special subs offers

ISSUE 507 5 - 18 AUGUST 2020

COVER FEATURE

RECORD YOURSELF On Your Screen

REC

Capture anything you do on your PC, phone and tablet

p40

What's being done to fix patchy countryside connections? p38

Easy-to-use software for organising your finances p46

Five of the latest tablets, tested and reviewed p22

IN DEPTH Articles on the latest tech topics

38 FAQ
Rural broadband

40 COVER FEATURE
RECORD YOURSELF ON YOUR SCREEN
Capture video of all your on-screen activities

46 Best free personal banking software
Six free tools for balancing your finances

48 Master your user profiles
Share your accounts without risking privacy

50 Best online AI experiments
Fun free tools you can run in your browser

REVIEWS Apps, sites and products on test

14 Best New Websites
Get facts and tips from Recycle your Electricals and explore our essential simulator sites

22 Group Test
Tablets

28 Best Free Software
Manage your email with Thunderbird

32 Best New Browser Tools
Password-protect your Google Docs

34 Best Free Apps
Run DontKillMyApp's benchmarking tools

WU www.webuser.co.uk www.facebook.com/webusermagazine www.twitter.com/webusermagazine

FAVOURITES Must-read regulars

6 What's New Online
See the view from another window

8 Need to Know
This fortnight's top tech news stories

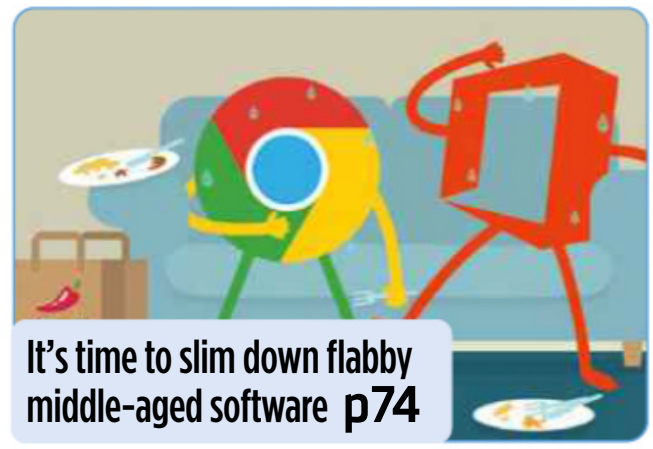
12 Stay Safe Online
Security advice for PC and mobile

19 Build a Better Site
Expert tips, tools and practical help

20 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 Bond films from the emoji



It's time to slim down flabby middle-aged software p74

60 Broadband Deals
Find the best-value package for you

72 Inbox
Tell us your views and opinions

74 Page 404
Barry bemoans bloated browsers

Practical WebUser

16 pages

Workshops, tips, projects and problem solving

52 Workshop 1
Chat online with Discord

54 Workshop 2
Explore OneDrive's new features

56 Workshop 3
KeePassXC password manager

57 Workshop 4
Create a screensaver

58 Weekend Project
Install Android on an old PC

64 Web User Masterclass
Get more from your PC by using secret command-line tools

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

Create multiple chat rooms p52

Keep passwords safe p56

Breathe new life into an old PC with a lightweight Android OS p58

EDITORIAL
Editor Robert Irvine
Technical & Reviews Editor Andy Shaw
Features Writer Steve Clark
Art Editor Laurence Hallam
Production Editor Miki Berenyi
Contributors Wayne Williams, Jane Hoskyn, Jonathan Parkyn, David Crookes, Roland Waddilove, Nicole Kobie, Barry Collins
Editorial email: editor@webuser.co.uk

ADVERTISING
Tel: 0203 890 3824
Group Advertising Director Andrea Mason
Deputy Advertising Manager Rebecca New
Senior Sales Executive Ashley Wood

ADVERTISING PRODUCTION
Group Production Manager
Stephen Catherall, 0203 890 4050
Production Manager
Mike Hills, michael_hills@dennis.co.uk

MARKETING
Marketing Manager Rachel Hare
Marketing Production Manager Gemma Hills

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

SYNDICATION AND LICENSING
Tel: 0203 890 4027
Endorsement Licensing Manager Ryan Chambers
Licensing Content Manager Nicole Creasey

SUBSCRIPTIONS
Tel: 0330 333 9493
Email: subscriptions@dennis.co.uk
You can manage your existing subscription through www.ManageMyMags.co.uk. This should be your first port of call if you have any queries about your subscription. A subscription to Web User for one year costs £47.99 for UK subscribers, £95 for Europe and £151 for the rest of the world. Call 0330 333 9493 to get the next issue, delivered free to your door.

PRINTING
Printed by Wyndeham Bicester, Oxon
Distributors Marketforce (UK) Ltd, 161 Marsh Wall, E14 9AP

Web User is produced by Robirv Limited and published fortnightly by Dennis Publishing Ltd, a company registered in England 1138891.

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

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

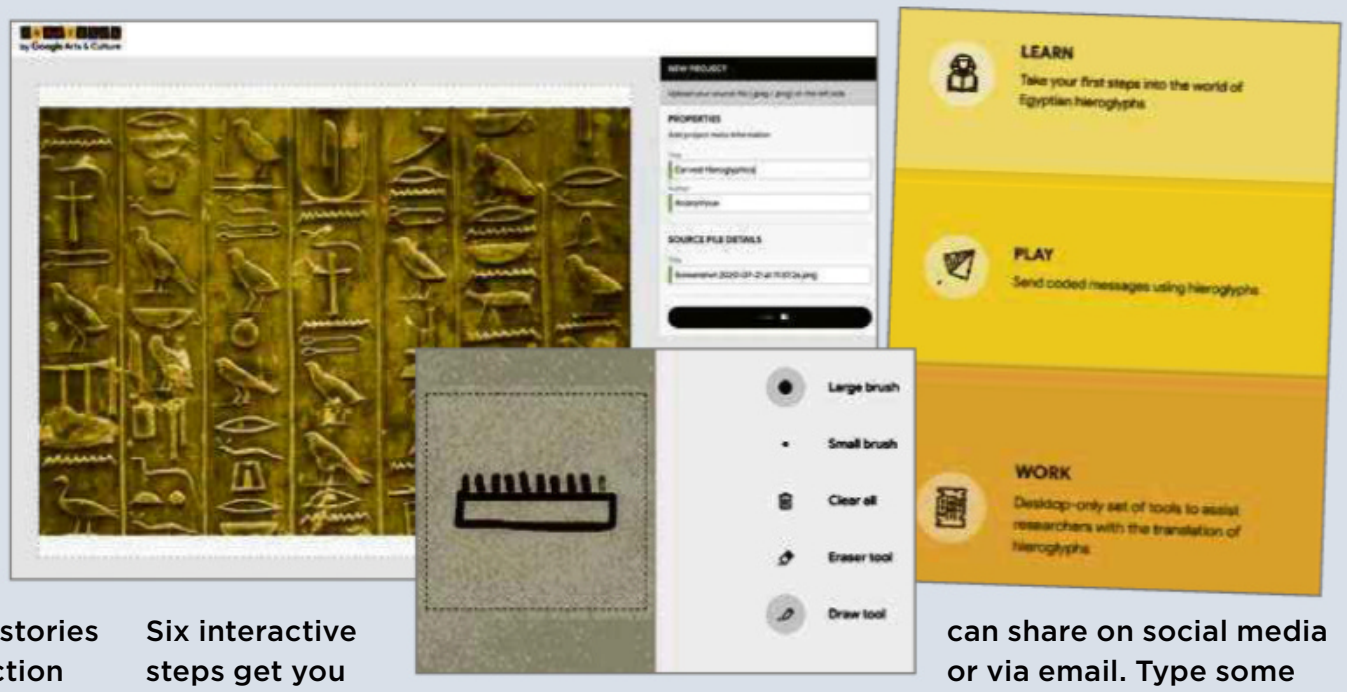
Copyright © Dennis Publishing Limited 2020. All rights reserved. Web User is a registered trade mark. Neither the whole of this publication nor any part of it may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the written permission of the publishers

A DENNIS PUBLICATION
Web User is published fortnightly by Dennis Publishing Ltd, 31-32 Alfred Place, WC1E 7DP. Company registered in England.
ISSN 1473-7094

WEB USER
PRINTED IN THE UK

What's New Online

Decipher ancient Egyptian symbols



With more than 1,000 distinct characters, the Egyptian hieroglyphic script was one of the earliest writing systems, dating back more than 4,000 years. Scribes would spend a large chunk of their lives learning this complex system, but now it's more accessible than ever thanks to a new Google Arts & Culture experiment called Fabricius.

Using machine learning, its primary aim is to allow experts to better translate the stories of ancient Egypt – there's a section called Work that lets researchers upload images for fast decoding.

Two other sections are accessible to everyone, however, with an emphasis on education and play. The first, Learn teaches you about hieroglyphics and how Google's AutoML system interprets them.

Six interactive steps get you to trace, copy, identify, reconstruct, read and translate hieroglyphs before AI assesses the accuracy of your drawings and inputs, and gives you an overall score.

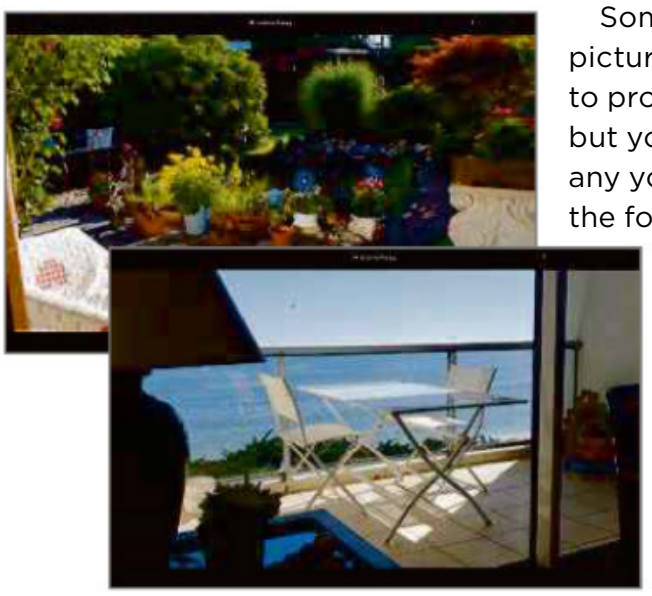
The next stage, Play, is even more entertaining, letting you create coded messages using hieroglyphs which you can share on social media or via email. Type some words and the nearest matches appear. Google says the translations won't be entirely accurate, but it's fun working with the emoji equivalents of the past.

See page 50 for more creative machine-learning experiments.
bit.ly/egypt507

Enjoy the view from someone else's window

window-swap.com

Tired of staring out of your own window after months of lockdown? Then perhaps it's time for a change of scenery. WindowSwap lets you view recorded videos captured from the windows of other users around the world, giving you a glimpse of how other people live. We watched 10-minute clips of scenes from Montpellier, France; caught a dog barking in Ivano-Frankivsk, Ukraine; and saw rain dripping down a high-rise window in downtown New York.



Some of the more picturesque videos are sure to provoke window envy, but you can quickly nip past any you don't like by clicking the forward arrow. You can also submit horizontal HD videos of your own via email, but be aware that the videos are posted with sound, so you'll have to be careful what you say while the camera is rolling.

Solve artistic puzzles with friends

bit.ly/puzzles507

When solving online jigsaw puzzles, you needn't worry about losing any pieces, but you do lose the fun of completing a jigsaw with friends and family. This set of puzzles brings back the group fun by allowing you collaborate with other people.

Choose one of three difficulty settings and take your pick from over 500 artworks, ranging from Andy Warhol's Grace Kelly to Kehinde Wiley's portrait of President Barack Obama. Just copy the link to invite other people to join, then start moving the pieces around the board and slot them into place.

You'll see a preview of the picture, but you can remove this if you're feeling confident. You can also darken the background to help the pieces stand out. After completing a puzzle, you'll be prompted to try another, and can also click to learn more about an artwork and the artist who created it.

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

Generate your own festival bill

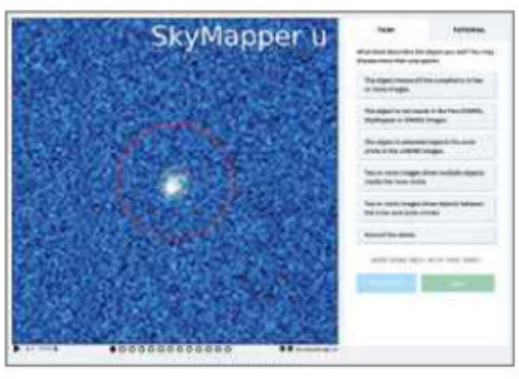
bit.ly/festival507

Music festivals may have been rocked by COVID-19 but this tool has us dancing with joy. It randomly creates a festival bill based on bands from the 1990s – click an artist's name and you can either watch a live set or browse YouTube for lots more video footage.

Help NASA spot galactic disks

bit.ly/nasa507

To better understand how long it takes planets to form, NASA is asking the public to help search for disks surrounding nearby stars. The space agency has relaunched its Disk Detective project using data from the WISE mission, and wants volunteers to examine potential disks to help determine whether planet-forming gas is present. A new dataset of 150,000 stars means there's plenty to get stuck into and you can start identifying disks as soon as you've read the instructions. Previous citizen scientists discovered a new class of disks in 2016, so who knows what you'll find?



Find new podcasts in Spotify

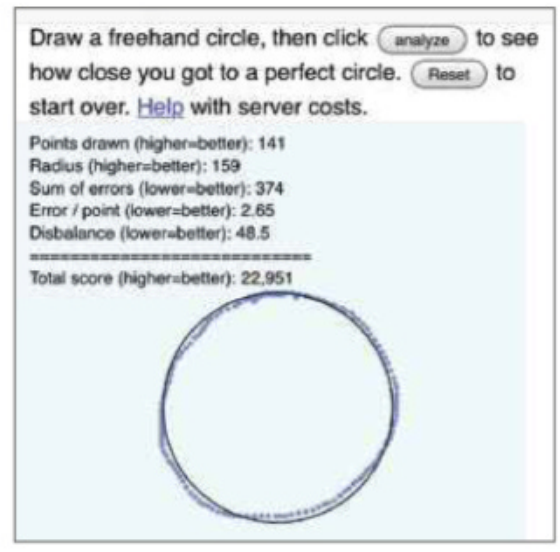
www.spotify.com/uk

Spotify has made it easier to discover podcasts by introducing two new charts: Top and Trending. Available within the iOS and Android apps, the former gives a rundown of the UK's 200 most popular podcasts, updated daily, while the latter highlights 50 new and emerging shows based on how fast-growing they currently are. You can also check out the most listened-to podcasts by category, delving into genres as diverse as the arts, business, comedy and fiction. To find these, just tap the Search tab in the Spotify app and select Podcasts, Podcast Charts.

Draw a perfect circle

bit.ly/circle507

Want to while away a huge chunk of your day? Try drawing a perfect circle using your finger on a touchscreen device (or, for a true challenge, a mouse on your computer) and see how well this game rates your efforts. Press or click Analyse and you'll be scored on the points drawn, the radius and balance of the shape. It's trickier than you think!



NEW VOICE COMMANDS

Play summer Spotify songs

With Spotify linked in the Google Home app, say: "Hey Google, play Your Summer Rewind playlist on Spotify" for a seasonal set of tunes drawn from your past listens.

Order a Big Mac

The McDonald's app now has Siri support. When you complete an order, select 'Add to Siri' to place your next order with your voice, without launching the app.

Activate Alexa hands-free

Tap the blue button in the updated Alexa app (iOS and Android) for a new hands-free option that lets you use the trigger word "Alexa" when your phone is unlocked and the app is open on the screen.

View bike-share info

www.google.co.uk/maps

Cycling directions in Google Maps will now include bike-share docks along the way, with live bike availability and walking directions to and from the docks. It only covers London at the moment, though.

See endless My Little Ponies

thisponydoesnotexist.net

This odd site uses AI to generate an infinite number of My Little Pony characters. Around 104,000 cartoon images were used to train a "generative adversarial network". Read the FAQ for a full explanation.

Explore an expedition ship

bit.ly/fram507

Norwegian explorer Roald Amundsen led the first expedition to the South Pole in 1911 and you can now explore the ship he used. This 3D virtual tour of the Fram even lets you take measurements for a sense of scale.

Tell us your favourite new things at twitter.com/webusermagazine

Need to Know

Google accused of spying on third-party Android apps

What happened?

Google is snooping on Android apps made by other developers and watching how we use them, to help make its own apps better and to decide which competing apps to create.

That's according to a report by tech-news website The Information (bit.ly/information507), which claims Google provides employees with a program known internally as Android Lockbox to monitor how often rival apps are opened and used on Android devices. The data is only made available to some – not all – Google employees, and has to be specifically requested, according to the report.

The Information said that Google used this data to develop its own version of TikTok – called Shorts – and to observe how people on Android devices use rival services such as Facebook. Google is able to access this info when users approve data sharing during the Android installation and setup – an option that is worded in such a way as to imply a more personalised experience.

In response, Google admitted that it does have the ability to access data about third-party apps, but stressed that any developer – including those not working at Google – can see the same information. "Since 2014, the Android App Usage Data API has been used by Google and Android developers who have been authorised by Android OEMs or users to access basic data about app usage – such as how often apps are opened – to analyse and improve services," a Google spokesperson said.

You can stop Google collecting data about how you use Android apps

How will it affect you?

The data being analysed by Google relates to how an app is used, how often it's opened and for how long – it isn't personalised or specific to you. This allows Google to decide whether it's worth developing a rival tool, and how it could improve on an existing version. For example, if an email app has a specific feature for clearing out old messages that seems popular with its users, Gmail may add a similar tool.

This data is known as 'telemetry', and it's often used by software developers to better understand how to improve their own products. For example, if Microsoft spots that people always have to search to find a specific setting, it may find a better way to present that option in the next Windows update.

If you find this data collection worrying, you can tweak your privacy settings in Android to limit how your data is shared. In your Android device's Settings app, select the Google entry, then tap the three-dot menu in the top-right corner of the screen and switch off 'Usage and diagnostics'.

What do we think?

Google is a data company, so it shouldn't surprise Android users that it collects and uses their data for its own benefit – that's its business model, after all. That said, the use of the data in this case could affect third-party developers. We're all for Google making its own apps that work perfectly with Android, but this shouldn't come at the sacrifice of a healthy, competitive app marketplace. Google should be encouraging more developers to make apps and support their success, rather than undermining third-party creatives by making or improving their own. If Google is accessing data that third-party developers can't see, it isn't being fair to those creating apps for its platform.

This behaviour isn't new: Twitter, for example, encouraged developers to create tools for its platform, then hampered those efforts with API changes and launched its own versions.

With more than 2.5 billion people using Android devices, there's room for multiple versions of an app idea. But Google's versions will be inherently more trusted than an unknown rival, making the job for third-party developers harder. Plus, as Google makes its money through advertising, it doesn't need to entice users with in-app payments, which often infuriate users.

Google is welcome to make its own apps, many of which are very good, but it should level the playing field if it wants the app market to remain innovative, varied and successful.

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

Fake Chrome update targets bank accounts

What happened?

Researchers at security firm Proofpoint have warned Chrome users that hackers are using a fake update page to target the browser.

The malicious web page suggests that your version of Chrome is out of date, hoping to trick you into clicking a link to download a new version. If you do, malware will take over your computer, giving hackers access to everything you do online, including accessing your bank accounts, email and more.

Proofpoint analysis of the malware (bit.ly/proof507) identified a banking Trojan called Chthonic, which is a variant of the notorious Zeus banking Trojan. It also installs the legitimate remote-control software NetSupport, which can be exploited to give hackers remote access to compromised systems.

How will it affect you?

Proofpoint said that thousands of Chrome users have seen the malicious page in the UK, Europe and US, but it doesn't necessarily follow that all those people have been infected.

It's worth remembering that Google never displays a web page to entice you to update the Chrome browser. Instead, it either updates automatically when you open the browser or allows you to manually check for a new version by clicking the three-dot menu button in the top-right corner, then choosing Help, About Chrome.

There is no need to visit a website to download a Chrome update.

What do we think?

Proofpoint's researchers noted that this attack takes advantage of people's valid belief that staying safe online means keeping their software updated.

The tactic may seem exceptionally sinister, but it's really no different to any malicious website that tries to convince you that it's the real deal. It's all too easy for hackers to mock up a convincing web page, so always double-check the URL. If you're not sure, go directly to the official website to see if an update is available. It's worth being cautious, even if it takes a few extra clicks.

Facebook lets you lock down Messenger

What happened?

Facebook has introduced a new privacy tool to help users lock down Messenger, the social-media platform's popular chat app. Rather than protect against hackers, App Lock adds a layer of security against anyone borrowing or picking up your iPhone – so far, the tool is only available for Apple devices and isn't yet supported on Android.

Once it's enabled, App Lock requires an extra verification measure for opening the Messenger app. This means that even if your phone is unlocked, you'll need to use Face ID or Touch ID to open that specific app, so you can hand your phone to a friend to look at something and know that your messages are safe from prying eyes.

How will it affect you?

At the moment, App Lock is only available on iPhones and iPads, though Facebook said it would be rolling the feature out to Android devices within the next few months.

To enable App Lock on an Apple device, open the Messenger app, head to Settings by tapping your profile photo, swipe down to Privacy and select App Lock. Choose either Require Face ID or Require Touch ID, and specify whether you want to lock Messenger immediately after you exit the chat tool, or after a set time of one minute, 15 minutes or an hour.

What do we think?

There are different types of security – some tools are designed to protect you from scammers and hackers, while others focus on less impersonal invasions of privacy – someone in your household, say, or an over-inquisitive friend. This new Facebook feature acknowledges the latter threat, tackling the possibility that you might be at risk of snooping by a person you know.

Even if you don't feel the need to use App Lock yourself, it could be helpful for a teenager in your household who may want to protect sensitive conversations from a nosy sibling, or someone in a dangerous situation who is desperate for extra privacy. In such situations, this new feature is a welcome addition.

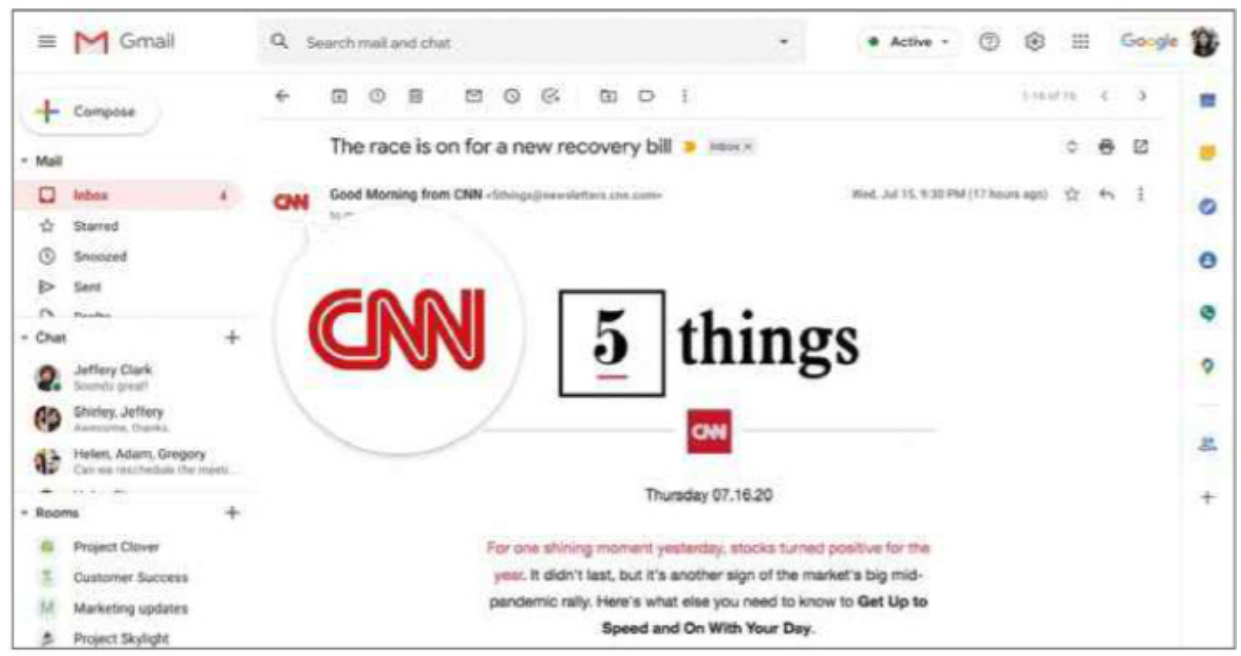
Gmail fights phishing using company logos

What happened?

Gmail will soon be getting a new way to combat phishing scams. In a blog post, which sees Google "recognise that email functions in a large, complex, interconnected ecosystem" (bit.ly/gmail507), it announced trials for a handful of security measures.

Chief among these is Brand Indicators for Message Identification (BIMI). The pilot scheme lets companies digitally validate their logos with Google. These images will then replace the current BIMI-free avatars seen in your inbox, so you can be sure that senders are who they say they are. The idea is to increase trust in brands, while keeping people safe from phishing scams, which cost innocent victims millions every year through fake emails designed to capture customer data.

It's all part of a drive from the BIMI Group – a behind-the-scenes outfit that includes Google, Verizon and LinkedIn – to standardise logo displays in emails. Already, many companies have their emails authenticated, using DMARC (Domain-based Message Authentication, Reporting & Conformance), which checks that the sender domain is legitimate. BIMI simply adds an additional step by authenticating the logo at the same time. Google hopes the scheme will be fully rolled-out in a matter of months. After that, it's up to brands to decide whether to adopt this new standard.



Along with authenticated avatars, Google is also introducing new Meet controls to keep unwanted guests out of your video calls, and phishing protections and new reporting measures in Chat.

How will it affect me?

Keep your eyes on your inbox for the newly validated brand logos – the BIMI pilot scheme begins rolling out in a couple of weeks. However, the trial will only be available to those companies already using DMARC to authenticate their emails, which means that even once BIMI gets a full launch, you'll continue to receive genuine emails with unverified avatars and will need to stay vigilant. While measures are no doubt in place, we wouldn't put it past scammers to figure out a way to fake or circumvent Google's security measure.

What do we think?

Any boost to email security is good news, and a digital signature is a simple answer to the long-standing problem of emails purporting to be legitimate companies. No business wants their brands associated with phishing scams, so we'd expect this solution to be agreed on and picked up by all involved, particularly given Google's rapid time-frame for launch.

FIRST LOOK

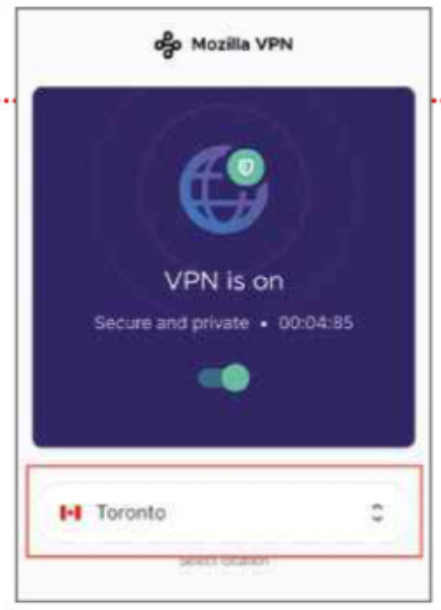
Mozilla VPN

vpn.mozilla.org

Over the years, Mozilla has built its reputation on security, privacy and reliability – just the things you need to create a VPN. Which is precisely what the company has done.

After testing a built-in VPN for its Firefox browser, the company has released its standalone Mozilla VPN app "from a trusted pioneer of internet privacy". Offering device-level encryption, the tool is available for Windows, Android and iOS (Mac and Linux users will have to wait, but it's on its way).

As you'd expect from these 'trusted pioneers', the app itself is fantastically made. The design is clean to the point of basic, which makes it easy to navigate and use, and the back-end is impressively secure. The VPN, which has servers in over 30 countries, including the US, UK and Japan, encrypts data and masks IP addresses using the advanced WireGuard protocol, which also delivers mostly decent speeds. Elsewhere, hardened VPN users will appreciate the range of custom connection options.



So, what's the catch? For starters, it's only available in selected countries at the moment. It also sets a five-device limit, so you can't use the tool on a sixth device without first deregistering an existing one. Most of the big-name VPNs get around this problem by limiting the number of simultaneous connections, which seems like a fairer way to restrict abuse with much less fuss for the user.

Although most people use VPNs to watch geographically locked content, if a movie isn't on Netflix UK, don't bother trying the US version because it won't work, as Netflix will detect and block the tool. In such cases, you may have more luck with other streaming services.

Since Mozilla VPN only just came out of beta testing, there's a distinct lack of 'optional extras'. However, for a reasonable $5 (£3.98) monthly subscription (and a no-catch 30-day money-back guarantee), it's a decent offer from one of the most trusted internet companies.

WHAT'S THE RUMOUR

Will the iPhone 12 be delayed?

Rumour has it that the upcoming iPhone 12 could be delayed due to the COVID-19 pandemic. For many years, Apple has revealed its latest handsets during its September keynote event, which gives the company the chance to show off its latest devices – and this year it's the turn of the much-anticipated iPhone 12.

However, Japanese blog Mac Otakara claims that multiple Chinese suppliers now expect the reveal to take place in mid-to-late October, with the base 4G model expected to be available shortly after. Disappointingly for Apple fans, the beefier and more modern 5G version could launch even later – suppliers are suggesting a November release date.

The report goes on to discuss the iPhone 12's potential processor upgrade. For a while now, we've heard rumours that Apple is switching from the A13

chipset found in the iPhone 11 to the A14. Mac Otakara's sources appear to confirm that a more powerful and efficient processor is on the way in the form of Apple's first 5-nanometre node. It's believed that the manufacturing of these chipsets has been ongoing since around April this year.

LIKELIHOOD RATING

✓✓✓✓✓

Rumours have been swirling about iPhone 12 delays for some time. Suppliers are often the first to hear about such delays, which gives the Mac Otakara report even more credibility.

The impact of the coronavirus on manufacturing has been particularly hard and unpredictable. Common sense alone tells us to expect knock-on effects like this as companies try to get back on track. Frankly, we're impressed that Apple is only delaying release by a month (or two months, for those wanting the 5G model).

Some insiders believe that the iPhone 12 won't appear until next year, but we're not convinced that Apple will want to wait that long: pencil an October launch in your diaries.

What's new on Kickstarter

Our favourite new project on the crowdfunding site

PhoneCave

bit.ly/phonecave507 | From £30

PhoneCave is a digital detox device. Lock away up to five phones, set the timer from between a minute to four days, and no amount of pleading will let you get it, even if you only want to 'just check emails' or 'send a quick text'. Well, almost no pleading. The PhoneCave features a built-in failsafe, so you can always get your phone in an emergency. Design is unspectacular with a basic screen and three-button layout, but part of this campaign is to fund a slicker, streamlined final model. A £30 pledge gets you a PhoneCave with a custom engraving.

WEBOMETER

WE LIKE...

Plex adds 80 free TV channels

Streaming service Plex has launched a feature called Live TV, which offers viewers more than 80 free channels spanning genres including news, music and travel. It's available through the Plex app on mobile, desktop and streaming devices.

Video-witnessed wills made legal

From next month, it will be legal to witness wills in England and Wales using video-chat services such as Zoom, in response to restrictions imposed by the coronavirus. The new legislation will remain in place until January 2022.

WE DON'T LIKE...

Garmin suffers ransomware attack

Smartwatch maker Garmin suffered a ransomware attack that left its fitness devices offline for several days. The company was forced to shut down services including its Garmin Connect website, mobile app and customer service centres.

Yet another Windows 10 update bug

Microsoft confirmed that its Windows 10 May 2020 update prevented certain apps from accessing the internet, even when users were connected, displaying a 'No Internet Access' error in the system tray. It has now issued a patch for the bug.

Stay Safe Online

News about the latest threats and advice from security experts

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

'No-log' VPNs leaked 20 million users' data

Seven VPN services that claim not to keep any logs of their users' online activities were found to have leaked 1.2 terabytes of user data, according to security researchers at website VpnMentor (www.vpnmentor.com). The data was found on a single server shared by the VPNs and included activity logs as well as personally identifiable information such as email addresses, clear-text passwords, IP addresses, home addresses, phone models, device IDs and other technical details.

VpnMentor named the services involved, which are all based in Hong Kong, as UFO VPN, Fast VPN, Free VPN, Super VPN, Flash VPN, Secure VPN and Rabbit VPN, and said they appear to be connected to the same app developer. The site believes that up to 20 million users may have had their data exposed by the "no-log" VPNs.

"This lack of basic security measures in an essential part of a cybersecurity product is not just shocking," said VpnMentor, "it also shows a total disregard for standard VPN practices that put [the services'] users at risk".

bit.ly/vpnmentor507

Twitter hackers accessed direct messages

Twitter has admitted that hackers accessed private direct messages from 36 high-profile accounts during a major attack against the social network last month. It has not revealed who these accounts belonged to, aside from one owned by an elected official in the Netherlands. This is believed to be the far-right politician Geert Wilders, whose Twitter profile image was replaced with a caricature of a black man, while his account's background image was changed to the Moroccan flag.

The security breach involved the accounts of 130 celebrities and politicians – including Barack Obama, Elon Musk and Jeff Bezos – being taken over and used to tweet a Bitcoin scam, which tricked their followers into paying the hackers around $120,000 (£93,600) in Bitcoin. Once notified, Twitter locked the affected accounts to prevent them from tweeting, but said: "We have no evidence that attackers accessed passwords".

The social network blamed the breach on a "coordinated social engineering attack by people who successfully targeted some of our employees with access to internal systems and tools".

bit.ly/twitter507

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT: Ray Walsh, Digital Privacy Expert at ProPrivacy (proprivacy.com)

Q What did the Russia Report (bit.ly/russia507) reveal about Russian cyberattacks?
Micheal Bannatyne, Twitter

A The Russia Report confirms what cybersecurity experts have warned for many years: that the Russian government and its state-employed hackers are engaging in active cyber warfare against the West. This includes phishing attempts against government agencies, cover efforts to steal top-secret information and activities intended to influence the democratic elections of other nations.

Perhaps most damningly for the British government, the report reveals that the UK has been aware of Russia's ongoing cyberwarfare for around four years. Back in 2016, the Intelligence and Security Committee recommended that the government gain support from the international community in finding ways to retaliate against Russian cyberattacks.

> "The UK has been aware of Russia's cyberwarfare for around four years"

The report indicates that the UK is a primary target for Russian cyberwarfare, and its release indicates a shift towards actively identifying and assigning blame to cyber warfare performed by Russia, a move that reveals the urgency of the problem and the immediate threat it poses to the UK's national security.

Cybersecurity firms have for many years detailed nefarious activities by Russian state-sponsored hackers such as Fancy Bear, APT28 and Pawn Storm, but this is the first time the UK government has formally acknowledged that those malicious actors have been targeting government agencies. It will be interesting to see how exactly the government proceeds and what it does to prevent future attacks.

+ Email us your security questions at webuser@webuser.co.uk

Switch to the AA for a different kind of breakdown service

- Unlimited callouts mean we're there when you need us
- Tap & track app lets you follow our mechanic to your side
- We'll usually fix you within 30 minutes of arrival
- Upgrade to Smart Breakdown to track engine faults in real time
- Join many other AA Members in saving at Hungry Horse, Vintage Inns, IMO and

Buy breakdown cover from

£39

a year

and get a

£20

Boots or M&S EST. 1884

gift card

Buy online at

theaa.com/deal

or call 0800 048 1138

and quote ref. A5740

AA Drive smart

Breakdown cover from £39: price is for Annual UK Roadside Vehicle Membership. Other levels of cover are also available. Offer is not available for existing Members or at renewal. Cover must be paid by continuous payment method. We'll use your payment details to renew your cover after 12 months. You'll receive a renewal invitation beforehand so you'll have plenty of time to change or cancel your cover. Offer not available in conjunction with any other offer online or in a breakdown situation. If you're buying online please use the website link specified, otherwise you will not receive the offer. **Gift card:** please allow 6 weeks from your policy start date for delivery and processing provided you haven't cancelled your policy. Card is redeemable online so you must have a valid e-mail address. Offer closing date: 31/08/20. **Unlimited call outs:** repeat call outs for the same fault within 28 days will not be covered. 30 minutes attendance: based on an average of all AA attended breakdowns 1 August 2018 – 31 July 2019. **Smart Breakdown and Tap and Track App:** subject to network coverage. **Member Benefits** saving value calculated based on the top 10% of Members by Member benefit redemptions between 01/03/2019 and 29/02/2020. For further information visit: theaa.com/member-benefits. All information correct at time of print June 2020.

Best New Websites

Site of the Fortnight

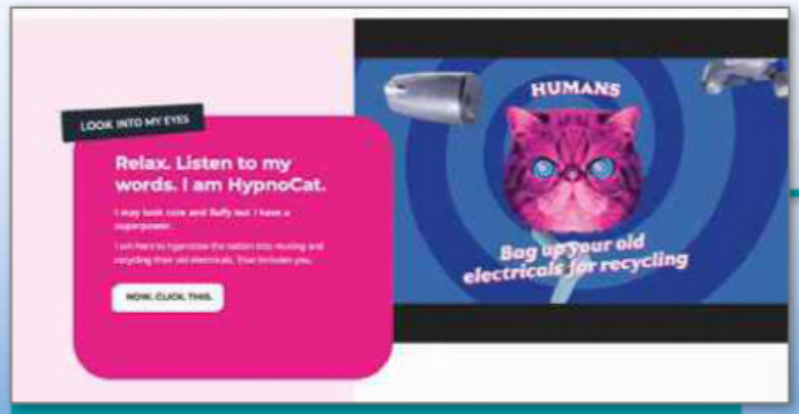
RECYCLING

NEW

Recycle your Electricals

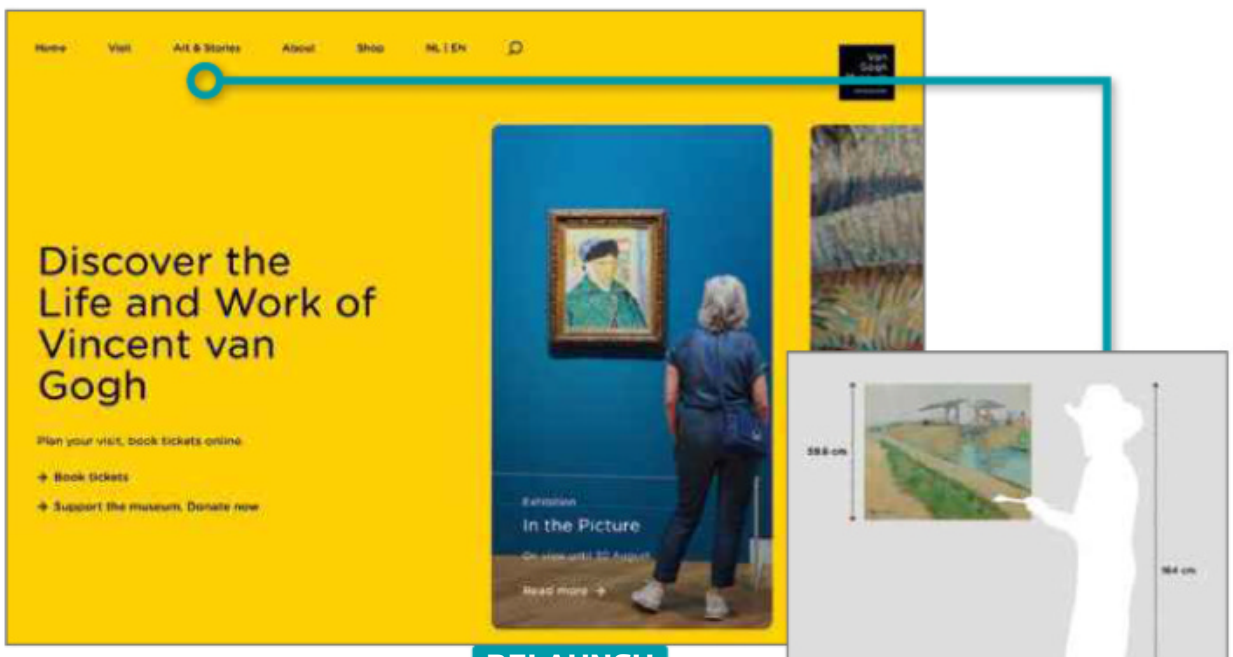
bit.ly/recycle507

RECYCLE ITEMS
Discover how various electrical items should be recycled and find your closest recycling point



BE HYPNOTISED
Look into the eyes of HypnoCat and you'll soon be bagging up your belongings for recycling

Our rating ★★★★★



RELAUNCH

CULTURE

Van Gogh Museum

www.vangoghmuseum.nl/en

If you can't manage a trip to the Van Gogh Museum in Amsterdam, you can still enjoy the Dutch post-impressionist painter's work and that of others by viewing the museum's collection on this bold and colourful website. Enter the name of an artwork or artist, then use the slider to enlarge the results to get a better view. Click a letter, painting or drawing and it'll be displayed on a background inspired by Van Gogh's use of colour, accompanied by a detailed description and downloadable image. You can even see how large a work is in relation to the painter's height! Instagram-style stories explain aspects of Van Gogh's life and there are fun activities for kids.

Our rating ★★★★★

RELAUNCH

GAMING

Arcade Mania

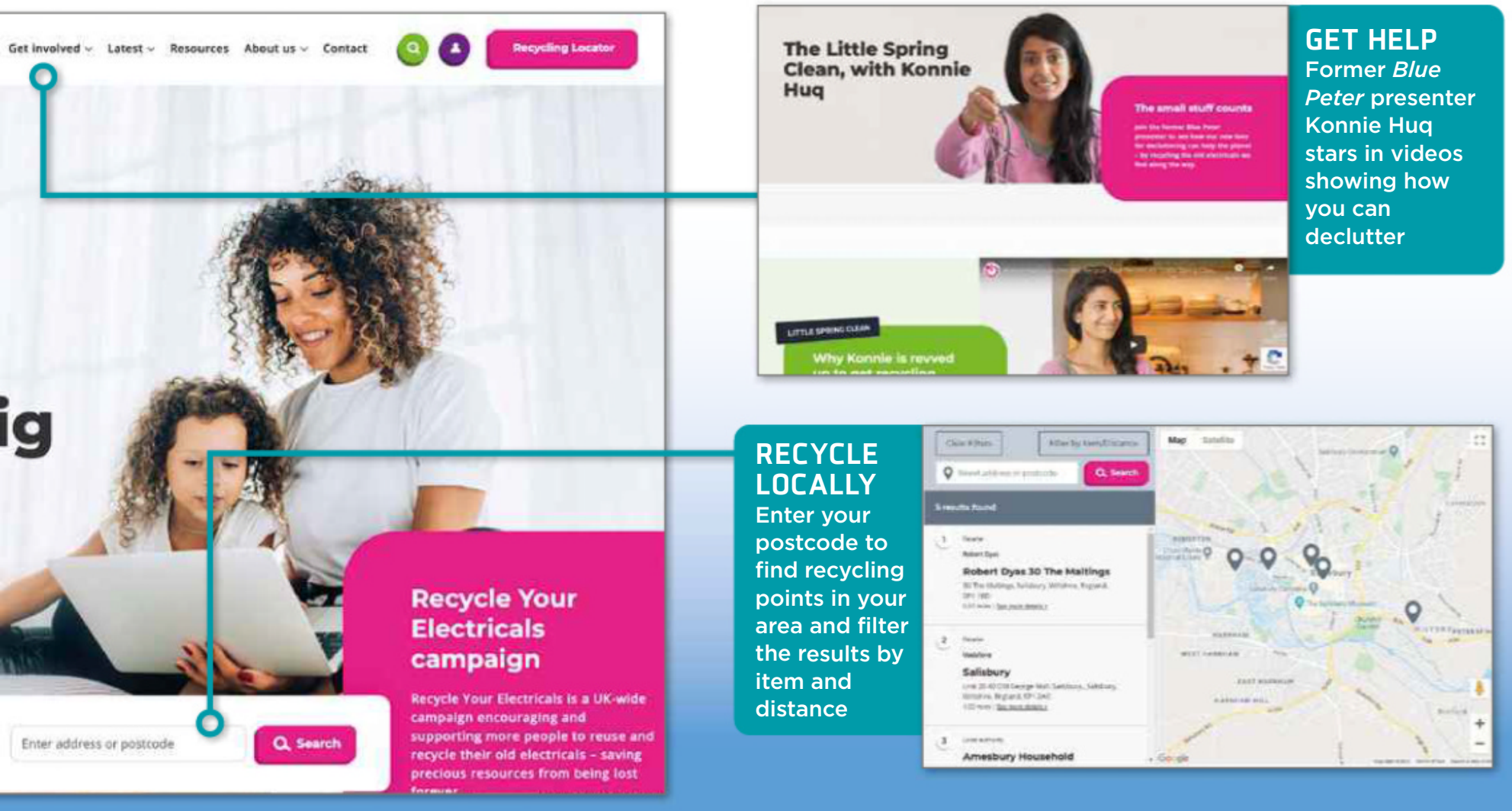
www.arcademania.co.uk

Instead of a boring old console, why not get a retro-style coin-op cabinet for your living-room entertainment? For a true arcade feel, this site offers a range of bartop machines and stands, as well as key parts and self-adhesive artworks. Aside from enjoying the fun and informative blog, we like how Arcade Mania's products can be customised online, letting you choose joysticks, buttons, trim colours and game packages. But the site's design needs a bit more thought – it's almost retro in itself – and the GIF-like images used to show various sides of a cabinet can be annoying.

Our rating ★★★★☆

Reviews by David Crookes

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



NEW

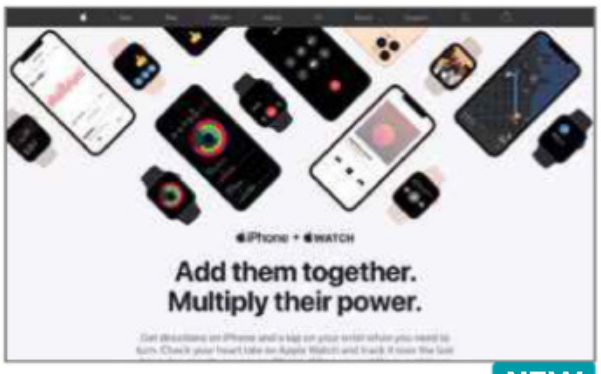
SHOPPING

What's Open Now

www.whatsopennow.co

Most shops and restaurants have now reopened, but there's no harm in checking to make sure using this new website. Choose a category, select an area, narrow the results using a map and click for more details – so long as you live in London or Dublin, anyway. The rest of the UK is lumped together and entries outside the two capitals are few and far between. What's just as bad is that entries only have basic information: some don't show the opening hours and descriptions are generally short. But it's a great idea and, when more content is added, it's a potential winner.

Our rating ★★★☆☆



NEW

TECHNOLOGY

iPhone + Apple Watch

bit.ly/apple507

Though some ties have been cut, Apple Watch still relies on being buddied up with the iPhone. To that end, Apple has created a sub-site exploring how the two work together, allowing you to continue scrolling to see each feature, one at a time. Animated images illustrate the many functions, which are described in just enough detail to convey the gist of what you can do. We'd have liked to see links to the online user guide (bit.ly/watchos507) to get more detail on each step in a process, but the shop links at the end show this effort is more about marketing than education.

Our rating ★★★☆☆

NEW

COOKING

Le Creuset

www.lecreuset.co.uk

Le Creuset, manufacturer of cast-iron pots and pans, is 95 years old, and it's cooked up a sumptuous modern site to showcase its range of stylish wares. It also teases your taste buds with close to 400 delicious-looking recipes, creating an appetising offering that also delves into the production of Le Creuset goods and looks back over its history, complete with archive images. Vivid images, comprehensive descriptions, the ability to select colour and size, and a clear checkout process make it easy to browse and buy items. There are also care guides, gift finders and a list of physical stores.

Our rating ★★★★★

Tell us about your website via webuser@webuser.co.uk

Best New Websites

RELAUNCH

ENTERTAINMENT

Alakazam Magic

www.alakazam.co.uk

Fancy becoming the next Dynamo (or Paul Daniels)? Then, hey presto, help could be at (sleight of) hand. As well as selling a huge number of tricks, Alakazam Magic has an online academy teaching different techniques. It also makes it clear whether tricks on its product pages are ideal for pros or beginners, and includes videos to give you an idea of how they can be performed. You earn loyalty points with each purchase and can keep updated about new tricks via the video blog. Should you devise a trick of your own, you can also submit it for appraisal – and potentially magic up some cash.

Our rating ★★★★☆

NEW

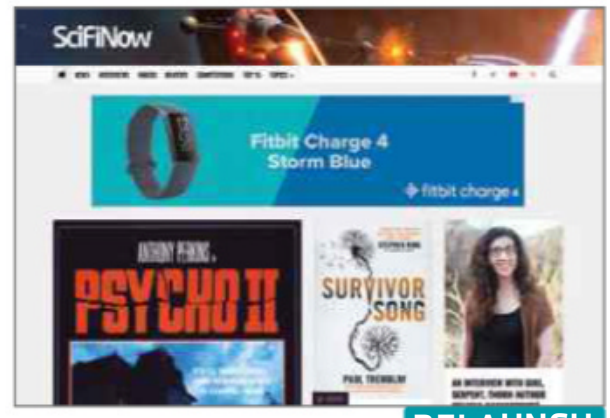
FILM

Cities of Film

citiesoffilm.org

Bradford was named the first UNESCO City of Film in 2009 and, since then, a further 17 cities – including Bristol in 2017 – have become part of this growing movie-based network. Click a location on this homepage map or choose from a grid of names to discover more about the projects, events and festivals taking place. You'll also find information about collaborations, each city's credentials and a list of recently shot films. Sadly, the latter has no images, videos or any way to get more details. As such, the site falls short of being blockbuster, but movie buffs will find the news of interest and there are links to the cities' official sites.

Our rating ★★★★☆



RELAUNCH

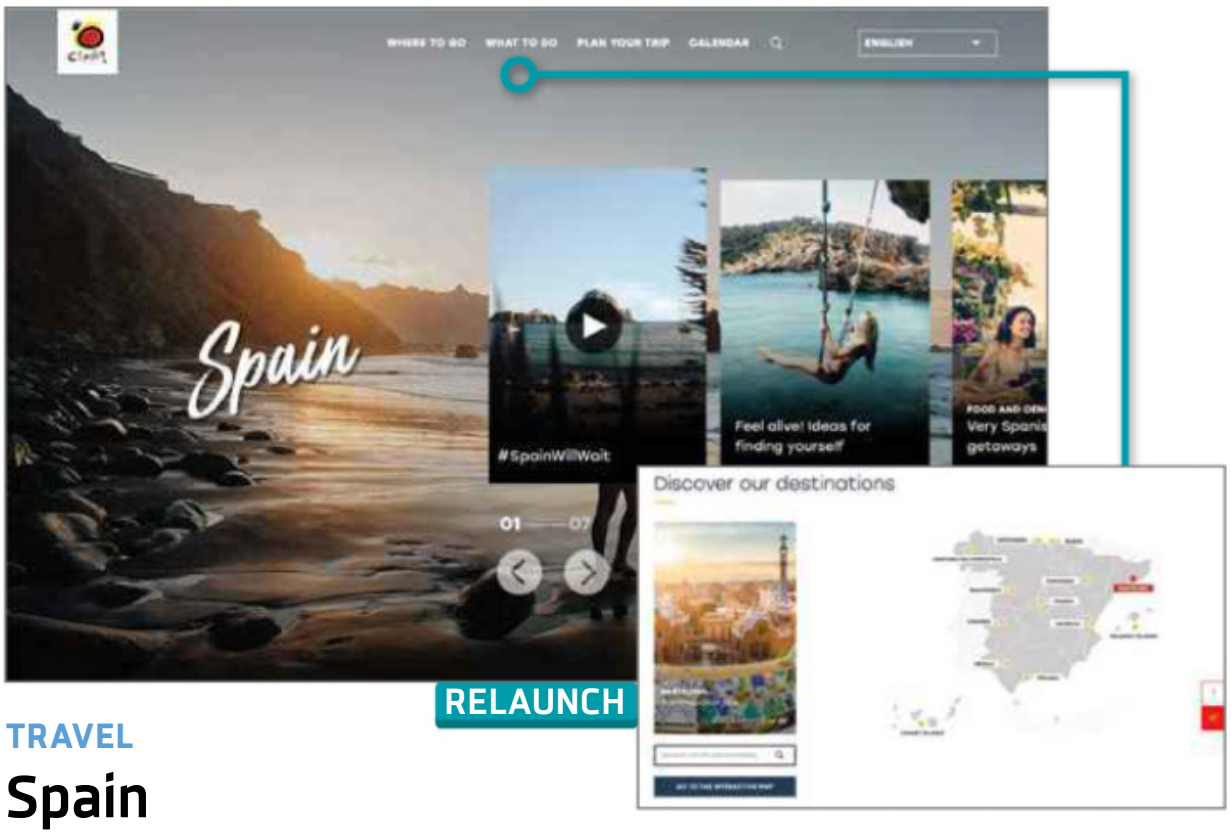
SCIENCE FICTION

SciFiNow

www.scifinow.co.uk

Science fiction magazine *SciFiNow* has ceased publication after 13 years, but fans can now get their sci-fi, horror and fantasy fix online instead. The site promises daily updates covering news, interviews, reviews and news, as well as competitions and Top 10 list articles, all of which are easy to find thanks to a simple navigation bar. A list of topics identifies different media, from books and films to TV and video games, but browsing the site is marred by a messy design that makes you work a little too hard. Even so, article pages are relatively tidy and the highlighted, related articles encourage further reading.

Our rating ★★★★☆



RELAUNCH

TRAVEL

Spain

www.spain.info

COVID-19 has hit tourism hard, but with travel restrictions now lifted, Spain has wasted no time unveiling its official tourism portal using videos, photos and trip ideas to persuade you to book a flight. Rather than concentrate on resorts, the site lets you browse a map to discover destinations. Clicking the Back button always – frustratingly – takes you to Barcelona, but you'll find lists of attractions, practical information and bookable excursions across all locations. Scroll down the homepage for downloadable brochures and social-media photos shared by others, then check out the weather tool (inevitably *scorchio*) and the calendar of events that lets you plan a trip by theme.

Our rating ★★★★☆

NEW

REVIEWS

Smart.Reviews

smart.reviews

Fake reviews fool us into thinking a product is better than it really is. Smart.Reviews seeks to address this, using AI to filter real reviews of items and businesses. However, Amazon.com and AO.com, according to the identical AI-generated reviews, use a "relitevely [sic] new" domain "which means that it could be a start-up business that does not yet have a huge amount of customers". In other cases, though, the site points to active social-media accounts and security features. You can also write reviews, if you can prove you've used the company or product.

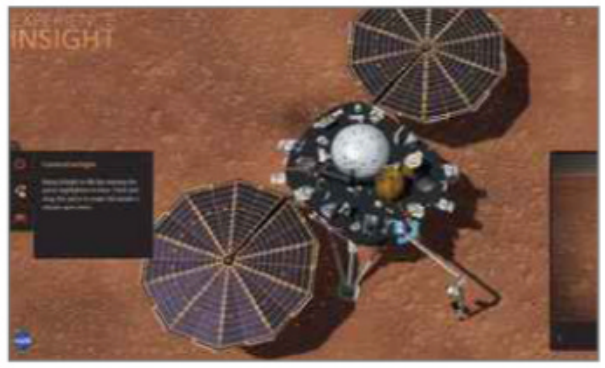
Our rating ★★★☆☆

ESSENTIAL BOOKMARKS THIS ISSUE: Stimulating simulator sites

GeoFS

www.geo-fs.com

Flight-simulator software lets you fly around the globe, controlling commercial airliners, military planes and even spaceships, while navigating real-time weather, air traffic and runways. Many such programs are huge but GeoFS works entirely in your browser – just click the blue Fly button, choose Autopilot and take to the virtual skies in one of 30 planes. The map is low-res unless you upgrade to GeoFS HD (10€/£9 per year after a free one-day trial, bit.ly/geohd507), which also ditches ads and includes cockpit views. Paid-up or not, you can configure controls, enter 'massive multiplayer' mode and launch a live map to see hundreds of players in action. Also check out the GeoFS wiki at bit.ly/geowiki507 and free mobile apps at bit.ly/geoapp507.



NASA's Eyes

eyes.nasa.gov

NASA's Eyes lets you man the controls of real NASA mission spacecraft to explore our solar system in glorious interactive 3D. The main simulator has to be installed on your PC or mobile device, but the NASA's Eyes website offers a couple of fun, browser-based simulators, too. Choose between Experience InSight (bit.ly/insight507), which lets you take the reins of NASA's InSight Mars landing craft, and Experience Curiosity (bit.ly/curiosity507), which lets you explore the red planet in a 4x4 rover. You can even take and download "selfies", though the images aren't actually of you (phew!), but instead show your virtual vehicle as you drive it across Mars.

SpaceX ISS Sim

bit.ly/spacex507

Elon Musk's Space Exploration Technologies Corp – or SpaceX, for short – invites you to dock its second passenger spaceship, Dragon 2, with the International Space Station (ISS) in this new web simulator. You get to use the same controls and interface that NASA astronauts use to manually pilot the vehicle, and you'll know you've docked successfully when all the green numbers are below 0.2. Movement is slow (you're in space, after all) but it's not easy, so you have to be patient and precise. The result is an almost meditative experience, less frantic and stressful than standard plane simulators, and it's very satisfying when you do eventually dock. Like most online simulators, the site takes a few seconds to load initially.

Solar System Scope

www.solarsystemscope.com

Explore our solar system and beyond, in real time, using this stunning 3D simulator. Zoom in and around to inspect planets, spacecraft and distant constellations, all displayed in their current positions using live satellite data. You can also enter a celestial object's name or catalogue number to visit it, and set any date and time – past or future – to explore a model of the planets and stars at that moment. By default, the simulation exaggerates relative planet sizes, but you can switch this off in settings. The desktop version of Solar System Scope costs $9.80 (£7.60), while the highly-rated free app (bit.ly/solar507) lets you fly through a live heavenly simulation when you point your device at the sky. Truly out of this world.

Google Earth Web

bit.ly/earthweb507

You may not think of Google Earth as a simulator but this incredible 3D tool is about as close as you can get to soaring over real-life streets, cities, mountains and oceans. If you're missing out on a holiday this year, why not explore your wish-list destinations in Google Earth instead, right down to the cafés and beaches? It's very easy to use – press Shift while dragging your mouse to tilt the globe, then zoom in with your mouse, clicking and dragging to swoop along like Superman. Place names are displayed, so you won't get lost, and everything is kept bang up to date through Google's mapping and Street View technology.

Tell us about your favourite simulator sites via webuser@webuser.co.uk

Computer active

READER OFFER!

ADD A DISC FOR £6.95!

Buy Windows 10 Home for just £29.99!

In this new Reader Offer, we're selling **Windows 10 Home** for just **£29.99** (1-PC, unlimited lifetime licence)! The normal price is a hefty £119.99, so our deal represents a whopping 75% discount.

To buy **Windows 10 Home**, visit **bit.ly/win10discount** and click the red Buy Now button on the right. If you have any questions about your purchase, please email **editor@computeractive.co.uk**.

Windows 10 Home NOW ONLY £29.99*

*Normally £119.99

Buy it on our Software Store at bit.ly/win10discount

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

See your site on more devices

In the past, we've pointed you to websites that let you view your own site as it looks on a mobile device. But sometimes it's better to use a dedicated program, so you don't have to search through bookmarks or struggle with a dodgy internet connection. Responsively (responsively.app) displays any website on a variety of screens, from older mobile phones through to the latest tablets and laptops.

Note that it's relatively new, so we found Windows Defender flagged up a few warnings. However, we ran the app through VirusTotal (virustotal.com), which gave it a clean bill of health.

Design compact gradients

You can save space and speed up your website using CSS graphics. These are created by your visitors' browsers, rather than being downloaded from your site. Gradient backgrounds are a great example, using a few lines of code to create great-looking designs. Try mycolor.space/gradient3, which creates beautiful three-colour gradients from a single line of CSS code.

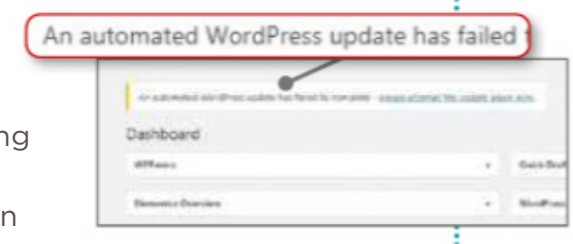
Deal of the Fortnight

123-reg (www.123-reg.co.uk) is offering its Website Builder Starter tool (bit.ly/websitebs507) free for the first month, then £1.20 per month thereafter.

Web-building Helpdesk

Q **My WordPress website recently failed to perform a plug-in update and the whole site crashed. I managed to recover it but the dashboard now always says "An automated WordPress update has failed to complete" with a link to try again. Clicking the link doesn't work.**

Gary Flower, via email



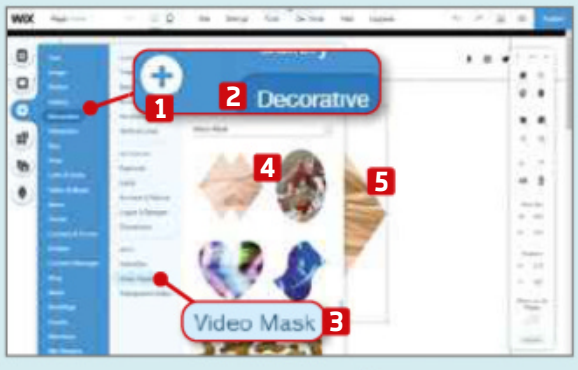
A This is very annoying but surprisingly easy to fix. Open your FTP program and use it to open the root folder of your website. If you don't have FTP software installed, we recommend FileZilla (www.filezilla-project.org). You'll find your FTP username and password on your host's configuration website. In the root folder of your website, look for a file called '.maintenance'. Delete this and the message will disappear from your dashboard.

Andy Shaw, Technical & Reviews Editor

MINI WORKSHOP | Add masked video to Wix website

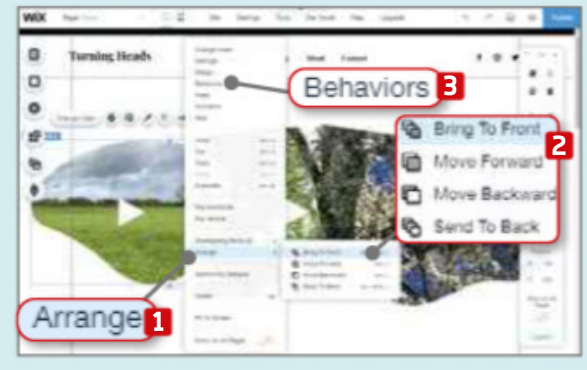
Wix: www.wix.com | 10 mins | Free or paid-for Wix website

Wix has a new way to make your videos more dynamic, called Video Mask. Adding a 'masked' video to your site means putting it in an unusual shape to make it look like it's been cut out.



1 Click the Add button 1 and select Decorative, 2 then Video Mask. 3 Choose a shape from the available options, 4 bearing in mind that there are more options available and you can change it later if you wish. The video appears on your site, in the main window. 5

2 Click the video box and choose Change Video. 1 You can choose one from lots of stock video options or, even better, upload your own. Click the Masked button 2 and choose the best shape for your video from the wider range of options available here. 3



3 Add as many video shapes as you like – you can even overlap them. To arrange the order, right-click and choose Arrange, 1 then choose where in the pile you want the video to sit. 2 You can also choose how the video plays – such as whether it starts automatically and loops – from the Behaviours option. 3

What To Watch Online

Pick of the fortnight

Watch HBO's gothic road trip *Lovecraft Country*

From 17 August

HBO's new mini-series takes America's murky racist past and adds malevolent ghouls created by legendary horror author HP Lovecraft. The result is a socially aware 1950s-set thriller that could be the biggest thing on TV this summer.

Lovecraft Country has serious credentials. It's adapted by *Sons of Anarchy* writer Misha Green from Matt Ruff's 2016 novel (bit.ly/lovebook507), with hot-shot producers JJ Abrams and Jordan Peele, and award-winning actors including Courtney B Vance (*The People Versus OJ Simpson*) and Michael K Williams (*The Wire)*.

The story follows young black man Atticus (Jonathan Majors), who sets out on a road trip to find his father, battling Lovecraftian spirits and Jim Crow-era horrors along the way. Watch eight episodes weekly via Now TV with an Entertainment Pass, whose £8.99 monthly subscription rises to £9.99 in September (bit.ly/nowent507). Catch HBO's official teaser at bit.ly/lovecraft507.

Lovecraft's own work (www.hplovecraft.com) has been adapted into several films, including 2013's *The Thing On The Doorstep* (bit.ly/doorstep507) and 2012's *The Color Out of Space* (bit.ly/space507), both on Amazon Prime Video.

Return to Cell Block H in *Wentworth Prison*

From 5 August

Prisoner Cell Block H reboot *Wentworth Prison* returns for its eighth season this month, picking up the pieces from last year's bloody siege. The Aussie drama has received acclaim for its reimagining of the 1980s soap, and has helped Channel 5's streaming service My5 to double its viewing figures in a year (bit.ly/five507). Stream 10 new episodes weekly via My5, after registering for free (www.my5.tv). Meanwhile, catch the Season 8 trailer at bit.ly/wentworth507.

The first six seasons are also included with Prime Video at bit.ly/wentprime507.

Watch *Dirty John: The Betty Broderick Story*

From 14 August

Christian Slater and Amanda Peet star in the second season of Netflix's true-crime drama *Dirty John* – but it's no longer about John. Instead, meet Betty Broderick (Peet), who shot and killed her celebrity lawyer husband Dan (Slater) and his second wife in 1989, after what Oprah Winfrey called "one of America's messiest divorces". It'll put you off romance for life. Eight new episodes come to Netflix on 14 August at bit.ly/dirty507, where you can watch the latest trailer for free.

Find out what happens when *The Rain* stops

From 6 August

Deadly virus dramas aren't quite the crazy fantastical fictions they once were, which may be why Danish show *The Rain* won't return Netflix after its third season, due on 6 August. The show, which you can watch from start to finish on Netflix at bit.ly/rain507, follows two surviving siblings after a rain-borne virus wipes out most of Scandinavia's population. Watch the latest trailer at bit.ly/raintrail507.

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

Watch Disney's biopic *Howard* and science show *Weird But True*

From 7/14 August

Disney's new documentary film *Howard* profiles the late Howard Ashman, who wrote song lyrics for Disney films such as *The Little Mermaid*, *Aladdin* and *Beauty and the Beast*, and created *Little Shop of Horrors*. *Howard* features exclusive archive footage, home movies and interviews with colleagues of Ashman, who died from AIDS in 1991. Watch Disney's trailer at bit.ly/howard507, then watch the film from 7 August on Disney Plus.

There's a lighter factual touch in National Geographic science show *Weird But True*, which moves to Disney Plus for its third season on 14 August. Also find dozens of *Weird But True* shorts on National Geographic's website at bit.ly/weird507.

Watch *Harlots* and *Mandy* on the BBC iPlayer

From August

The BBC has announced two new shows for August, but is keeping dates under wraps until the last minute. *Harlots* stars

Samantha Morton, Lesley Manville and Jessica Brown Findlay in a rip-roaring drama about rival brothel madams. The show has already been on StarzPlay but now comes to iPlayer, where you can watch it for free. The Beeb has a trailer at bit.ly/harlots507.

The other sort-of newcomer is a full series for *Mandy*, based on Diane Morgan's 2019 Comedy Shorts film, which you can watch at bit.ly/mandy507.

Netflix introduces Shuffle button

Netflix has come up with a way to help befuddled viewers choose something to watch from its vast library: a new Random Episode button – effectively a Shuffle function for TV shows.

The button has begun appearing on Samsung and Fire TVs, but it hasn't appeared on other devices yet. Chrome extension ShuffleFix (bit.ly/shuffle507) adds the button to Netflix in your browser. Some online reports suggest Random Episode will work with films too, but that hasn't yet been confirmed in the UK.

Random Episode was first tested at the same time as the 'Remove from row' button, which lets you get rid of unwanted items from your Continue Watching list. That feature is currently exclusive to Netflix mobile apps but will work on other platforms soon.

Watch *Joker* on Now TV

From 7 August

Joaquin Phoenix's Oscar-winning turn in *Joker* finally leaves pay-per-view limbo and comes to Now TV, where you can watch it with a Sky Cinema Pass from 7 August.

Other films coming to Now TV this fortnight include *The Assistant*, starring Julia Garner as assistant to a Harvey Weinstein-esque Hollywood tyrant (from 8 August); Afghanistan war drama *The Kill Team* (from 13 August); and British drama film *Ordinary Love*, with Liam Neeson and Lesley Manville as a couple coping with a cancer diagnosis (from 16 August).

In case you missed it...

Louis Theroux's new series *Life On The Edge* comes to BBC One soon, but the Beeb is being characteristically cagey about dates. Never mind, because there's more of Louis than ever to watch online. BritBox has just added more than 40 episodes of his shows *Dark States*, *Extreme Love*, *When Louis Met...* and *Weird Weekends*. The iPlayer has 42 of his films at bit.ly/louis507, plus *Louis Theroux: Docs That Made Me* (bit.ly/docs507).

Also new to the iPlayer are Jimmy McGovern's fact-based film *Anthony* (bit.ly/anthony507) and Vikram Seth adaptation *A Suitable Boy* (bit.ly/sboy507).

Gillian Anderson and Jamie Dornan's Belfast-set crime thriller *The Fall*, which debuted on the BBC in 2013, is now available on Netflix in its three-series glory at bit.ly/fallflix507.

Group Test

We test and compare the latest products

Tablets

It’s official: tablets are making a comeback. We review five of the latest devices to find out which is the best value for money

Tablets are the perfect middle ground when you want more than the tiny screen of a smartphone but don’t need the full computing power of a laptop or desktop PC. For a while it seemed that tablet manufacturers had given up, leaving Apple to dominate the market with its top-of-the-range expensive iPads – only Amazon seemed to be offering cheaper alternatives. However, now that Apple has split its tablets into regular and Pro models, the basic iPad has become more affordable than ever, and a slew of new releases from Samsung, Amazon and Huawei means more choice for anyone who wants to upgrade their current tablet.

HOW WE TESTED

To compare the performance of both Android and iPadOS devices, we tested all the tablets using the latest cross-platform benchmark Geekbench 5 (www.primatelabs.com).

We also ran a battery test, which loops a video at a screen brightness of 170cd/m² (candles per square metre) and measures how long it runs before the battery dies.

To test the screen quality, we used a colorimeter to measure the maximum brightness, contrast and number of visible colours.

Apple iPad 10.2in | £349 | Buy from Apple: bit.ly/ipad507

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

Apple’s range of tablets remains by far the best available. The iPad 10.2in is wonderfully slim and light, just 7.5mm thick and weighing 483g. The broad bezel may seem a bit old-fashioned compared to modern smartphones, but it provides enough room for a fingerprint reader and webcam. However, the 1.2-megapixels camera is no different to the previous version, and the rear camera, too, is still only 8-megapixels.

The display is a Retina class 2,160 x 1,620 pixels screen, which means you won’t be able to make out individual pixels when it’s held at a standard viewing distance. However, this is as good as it gets for the price, with brightness peaking at 492cd/m² and a contrast ratio of 1,060:1.

The tablet’s dual-core A10 Fusion processor was first seen in the 2016 iPhone 7, but its performance stands up remarkably well. Its 769 single-core result in the Geekbench 5 benchmark is excellent and beats the Samsung Galaxy Tab S6’s score, though its multicore test result of 1,412 is lower than the Samsung.

Even without considering the more expensive Pro series, the standard range of iPads has for some time provided decent 2-in-1 features to bring some laptop-style functions to the device. This latest version takes things even further with the addition of a Smart Connector socket on the side, which makes it compatible with the Pro series’ Smart Keyboard attachment.

The best thing about the iPad, however, is its iPadOS operating system. The latest version has a supercharged Files app, which lets you connect easily to external drives, including network and cloud drives. The latest version of Safari is also configured as a desktop browser rather than a mobile one, which provides much better service when using sophisticated websites.

VERDICT ★★★★★

The superb quality of the 10.2in iPad makes it easily the best tablet available for the price. While you can still pay a lot for the top-of-the-range Pro models, all Apple’s tablet know-how has now filtered down to its mid-priced tablet which, if your budget will stretch to it, is unbeatable for the money. Adding the Smart Keyboard costs another £159, but even this doesn’t feel extortionate if you use it as a replacement for a laptop.

Amazon Fire HD 8 (2020) | £99.99
Buy from Amazon: bit.ly/amazon507 (Without Special Offers)

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

Amazon has pushed the boat out with its latest Fire tablet, adding more memory, more storage and USB Type-C charging. It's the fastest sub-£100 tablet we've seen, with a quad-core 2GHz MediaTek processor that was 30% faster than the previous model in our test.

Swiping between applications still isn't perfectly smooth but it's a vast improvement on previous models. The Fire HD 8 is even capable of gaming, running the GFXBench Manhattan 3 onscreen test at 24fps (frames per second) compared to the previous model's 7fps. Battery life is good, too, lasting 15 hours 23 minutes in our rundown test. The range of apps in Amazon's store remains limited compared to the Google Play and Apple Apps stores, though most popular apps are available.

The 8in IPS screen is the same as before, with a resolution of 1,280 x 800 pixels, and colours are muted, only managing 70% of the sRGB standard.

VERDICT ★★★★★

Amazon has upgraded 2018's Fire HD 8 with better hardware performance and an improved battery life. The screen is the same, and the software restrictions haven't improved much, but it's the best tablet you can buy for the price.

Samsung Galaxy Tab S6 | £559 |
Buy from Amazon: bit.ly/galaxy507

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

If you prefer Android to Apple's iPadOS, the Galaxy Tab 6 is a stunningly designed, if expensive, choice. The wafer-thin 5.7mm case houses a 10.5in display that's more compact than the 10.2in iPad, thanks to its narrower bezels. You can expand the generous 128GB of storage via a microSD card slot, and its main 12-megapixel rear camera takes better photos than you would normally expect of a tablet. It also comes with a stylus included in the price.

Samsung uses an AMOLED panel, rather than an IPS screen, which makes watching videos a joy, with perfect contrast, vivid colours and a crisp resolution of 2,560 x 1,600 pixels.

The Galaxy Tab S6's performance is ultra-responsive, scoring 732 in the single-core Geekbench 5 test and 2,542 in the multi-core test, and the battery life (15 hours and 6 minutes in our test) is good, too.

VERDICT ★★★★★

Arguably the best Android tablet available, the Galaxy Tab S6 is a closer match to Apple's pricey 11in iPad Pro than the mid-range model that wins our Gold Award. The included stylus provides a significant cost saving, too.

Samsung Galaxy Tab S6 Lite | £299 |
Buy from Amazon: bit.ly/samsunglite507

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

If your budget won't stretch to the Galaxy Tab S6, but you still prefer Android over iPadOS, the smaller S6 Lite is a worthy contender. At £299, it's cheaper than the basic iPad, but with double the storage (64GB).

Like its pricier Bronze Award-winning sibling, it comes bundled with a stylus. Both cameras are less powerful – 5- and 8-megapixels – though you're unlikely to be buying a tablet primarily for its photographic prowess. The full S6's AMOLED screen has been downgraded to IPS, 10.4in across the diagonal. However, it's still a great screen, with a resolution of 2,000 x 1,200 pixels and rich, bold colours.

Where the S6 Lite lags behind is in its power. Scoring 343 and 1,335 in the Geekbench 5 tests, it's well behind its rivals. However, the battery life remains solid, lasting 14 hours and 56 minutes in our tests.

VERDICT ★★★★☆

The S6 Lite has a fantastic screen and a good battery life, and is worth considering if you can't afford Samsung's top-of-the-range Android tablet and stylus. The slower processor takes its toll on performance, though.

Huawei MatePad Pro | £449 |
Buy from Huawei: bit.ly/matepad507

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

The main drawback faced by all Huawei devices is that, in accordance with US trade sanctions, they can't access Google's Play store. Huawei's App Gallery goes some way to surmounting that obstacle, and you can copy apps across from an Android phone if you have one, but it's a clunky workaround whichever way you look at it.

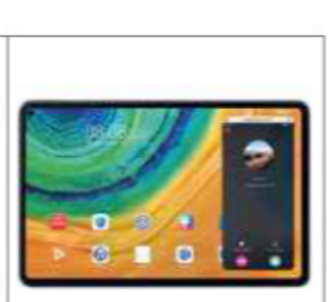
Another area where the MatePad Pro fails to rival its competitors is in the build quality. The glass-fibre back and lack of waterproofing feel a little sub-standard.

The MatePad has a 10.8in screen, which is slightly bigger than the standard iPad. It's an IPS model but is great quality. The tablet also managed impressive results in our performance tests, achieving 2,915 in Geekbench 5's multicore test – faster than the standard S6 and twice the score of the iPad. It's battery lasted for 12 hours and 21 minutes.

VERDICT ★★★★☆

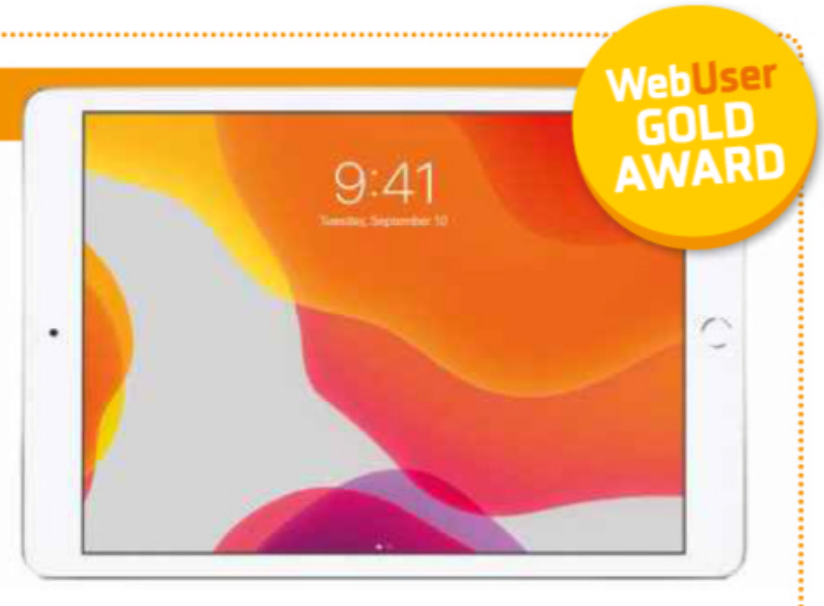
The Huawei MatePad Pro performed brilliantly in our tests. However, the Android OS is hamstrung without the Google app store and the build quality of the unit doesn't have the sophistication of its rivals.

Group Test Tablets



	Apple iPad 10.2in	Amazon Fire HD 8 (2020)	Samsung Galaxy Tab S6	Samsung Galaxy Tab S6 Lite	Huawei MatePad Pro
WEBSITE	www.apple.com/uk	www.amazon.co.uk	www.samsung.com/uk	www.samsung.com/uk	consumer.huawei.com/uk
PRICE	£349	£99.99 (Without Special Offers)	£559	£299	£449
BUY FROM	Apple: bit.ly/ipad507	Amazon: bit.ly/amazon507	Amazon: bit.ly/galaxy507	Amazon: bit.ly/samsunglite507	Huawei: bit.ly/matepad507
PROCESSOR	Quad-core 2.34GHz Apple A10 Fusion	Quad-core 2GHz MediaTek MT8168	Octa-core 2.84GHz Qualcomm Snapdragon 855	Octa-core 2.3GHz Samsung Exynos 9611	Octa-core 2.86GHz Huawei Kirin 990
MEMORY	3GB	2GB	6GB	4GB	6GB
SCREEN SIZE	10.2in	8in	10.5in	10.4in	10.8in
SCREEN RESOLUTION	2,160 x 1,620 pixels	1,280 x 800 pixels	2,560 x 1,600 pixels	2,000 x 1,200 pixels	2,560 x 1,600 pixels
SCREEN TYPE	IPS	IPS	AMOLED	IPS	IPS
FRONT CAMERA	1.2-megapixels	2-megapixels	8-megapixels	5-megapixels	8-megapixels
REAR CAMERA	8-megapixels	✗	15-megapixels	8-megapixels	13-megapixels
STORAGE	32GB	32GB	128GB	64GB	128GB
MEMORY-CARD SLOT	✗	microSD	microSD	microSD	Nano Memory
WI-FI	802.11ac	802.11ac	802.11ac	802.11ac	802.11ac
OPERATING SYSTEM	iPadOS	Fire OS 7	Android 9	Android 10	Android 10/EMUI 10
BATTERY SIZE	8,827mAh	4,850mAh	7,040mAh	7,040mAh	7,250mAh
DIMENSIONS	251 x 174 x 7.5mm	202 x 137 x 9.7mm	245 x 160 x 5.7mm	245 x 154 x 7mm	246 x 159 x 7.2mm
WEIGHT	484g	335g	420g	467g	460g
WARRANTY	One-year return-to-base	One-year return-to-base	One-year return-to-base	One-year return-to-base	One-year return-to-base

OUR VERDICT



Apple has accumulated years of tablet dominance and crammed its best features into its latest iPad models. You can spend a lot of money on its Pro range, but why pay a king's ransom when you can get a refined version of this design classic at a fraction of the price? The 10.2in model doesn't have the highest specification but with a long-running app store crammed with sophisticated software, the overall iPad experience remains the best, winning Apple our Gold Award.

However, not everyone can or wants to spend that much money on a tablet, in which case we'd recommend Amazon's Silver Award-winning Fire HD 8. The latest model is phenomenally good value at under £100.

If you prefer to stick with Android, the Bronze Award-winning Samsung Galaxy Tab S6 is a stunning option. It has a superb screen and super-fast processor, along with vast memory and the best cameras in this group, as well as a bundled stylus and access to the full Android experience. In all respects, the S6 is a marvel – just be sure that you're happy to spend more on it than you would on Apple's iPad.

BIKE IS BEST

Two-thirds of all journeys are less than five miles.
You don't need to ride far or fast to make a difference.
Half an hour of cycling is enough to improve your
health, reduce your risk of illness, ease your stress
levels and benefit your mental well-being.

THERE HAS NEVER BEEN A BETTER TIME TO RIDE A BIKE!

MAKE YOUR PLEDGE AT BIKEISBEST.COM

#BIKEISBEST

Web User's Best Buys

Web User and its sister titles test over 2,500 products every year

HARDWARE, SOFTWARE & SERVICES

TABLET

Apple iPad 10.2in

£349 from bit.ly/ipad507
Tested: Issue 507

The superb quality of the 10.2in iPad makes it easily the best tablet available for the price. It's wonderfully slim and light, has an excellent screen and easily connects to external drives and (for another £159) Apple's Smart Keyboard.

KEY SPECS

Quad-core 2.34GHz Apple A10 Fusion processor ■ 10.2in IPS screen, 2,160 x 1,620-pixels resolution ■ 1.2-megapixels front camera, 8-megapixels rear ■ 802.11ac Wi-Fi ■ 32GB storage ■ 3GB RAM ■ 251 x 174 x 7.5mm ■ 484g ■ 1-year return-to-base

INKJET PRINTER

Canon Pixma TS8350

£162 from bit.ly/canonts505
Tested: Issue 505

The Canon Pixma TS8350 is hard to beat for all-round print, scan and copy quality, producing rich, crisp text and precise photo prints. The generous touchscreen makes it easy to use and it performs well as a standalone device.

KEY SPECS

Thermal inkjet printer ■ 4,800 x 1,200dpi print resolution ■ 2,400 x 4,800dpi scan resolution ■ 10.8cm colour touchscreen ■ Double-sided printing ■ 200-sheet input ■ 373 x 319 x 141mm ■ 6.6kg ■ One-year return-to-base warranty

MESH WI-FI SYSTEM

Netgear Orbi RBK50

£299.99 from bit.ly/orbi503
Tested: Issue 503

The Orbi Is a brilliant mesh Wi-Fi package. It's powerful, the units look good and it has a well-designed interface. It's pricey, particularly with the add-ons, but we think it's worth it.

KEY SPECS

Two nodes ■ Tri-band 802.11ac Wi-Fi ■ 2 x 2 MIMO system ■ 4 Ethernet ports ■ Router mode ■ WPS ■ Guest network ■ Parental controls ■ Alexa and Google Assistant voice control ■ 203 x 162 x 79mm ■ One-year return-to-base warranty

EXTERNAL SSD

SanDisk Extreme Pro 500GB

£131.99 from bit.ly/sandisk501
Tested: Issue 501

Robust, fast and reliable, the SanDisk Extreme Pro 500GB outperformed every other SSD in our tests. You pay a bit more per GB but, if you can afford the best, then why settle for less?

KEY SPECS

465GB formatted capacity ■ 28p per usable gigabyte ■ Also available in 1TB and 2TB capacities ■ USB Type-C connection ■ 96 x 50 x 9mm ■ 78g ■ Three-years return-to-base warranty ■ Sturdy and attractive design

FITNESS WATCH

Xiaomi Mi Smart Band 4

£25.98 from bit.ly/xiaomi499
Tested: Issue 499

The Xiaomi Mi Smart Band 4's colourful screen and excellent battery life mean you won't need to charge it more than a couple of times a month. For the low price, it's extraordinarily good value for money.

KEY SPECS

Pedometer ■ Heart-rate monitor ■ Sleep tracking ■ GPS from phone (Android or iOS) ■ Waterproof to depth of 50m ■ 240 x 120 pixels resolution ■ 0.95in AMOLED display ■ 20-days battery life ■ 22.1g ■ One-year return-to-base warranty

INTERNET SECURITY SUITE

Bitdefender Internet Security 2020

£14.99 (1 year, 3 devices) from bit.ly/bitdef497
Tested: Issue 497

This superb security suite's one-stop all-round package can't be beaten. It's lightweight, easy to use, loaded with features and scored 100% for malware protection in our tests.

KEY SPECS

Malicious-website detection ■ Secure browser ■ Browser extension ■ Anti-ransomware ■ Parental controls ■ Firewall ■ Password manager ■ Home-network scanner ■ Secure file deletion ■ File encryption ■ VPN – 200MB of data per day

All prices correct at time of review

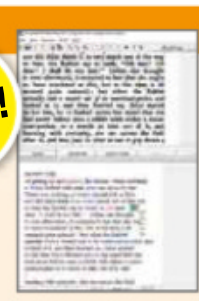
Gold Award winners

The best from our software tests

OCR SOFTWARE

SimpleOCR

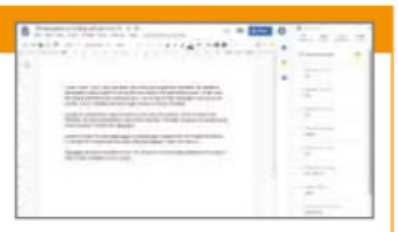
NEW!



Free from www.simpleocr.com
Tested: Issue 506
SimpleOCR does a brilliant job of extracting text from scanned documents and imported photos. Its spellcheck function is the stand-out feature.

GRAMMAR CHECKER

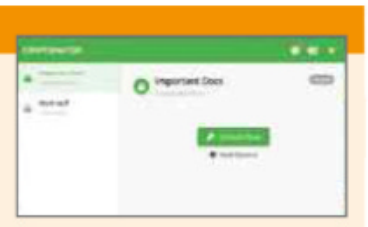
Grammarly



Free from www.grammarly.com
Tested: Issue 505
Grammarly is a thorough, effective way to check and correct your writing for spelling and grammatical errors. It's a capable and sophisticated language-analysis tool.

ENCRYPTION TOOL

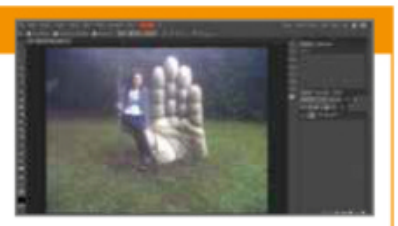
Cryptomator



Free from cryptomator.org
Tested: Issue 504
Cryptomator's clean, modern interface and cross-platform support makes file encryption incredibly easy. Its security extends to cloud services and it has no hidden costs.

ONLINE IMAGE EDITOR

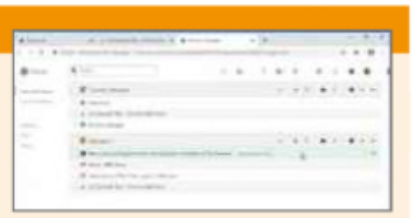
Photopea



Free from www.photopea.com
Tested: Issue 503
Photopea is a stunning photo-editing suite that has all the tools of Photoshop with none of the cost. It's worth taking the time to learn its ways to reap its many rewards.

CHROME TAB MANAGER

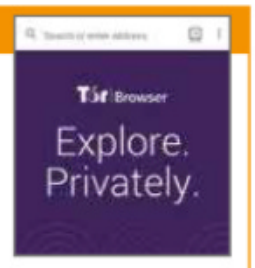
Cluster



Free from bit.ly/cluster502
Tested: Issue 502
Cluster pulls all your Chrome tabs together in one place and offers lots of useful features, such as saving your browsing sessions for later and pausing inactive tabs to save memory.

PRIVATE ANDROID BROWSER

Tor



Free from bit.ly/tor501
Tested: Issue 501
Browsers don't come more secure and private than Tor. It's loaded with useful features and works in the background, automatically encrypting your data.

WebUser

BACK ISSUES DISC 2019

Our **2019 Back Issues Disc** containing all 26 issues from last year is now on sale from Amazon

For more information, visit
bit.ly/webuser2019
or search for 'webuser disc'

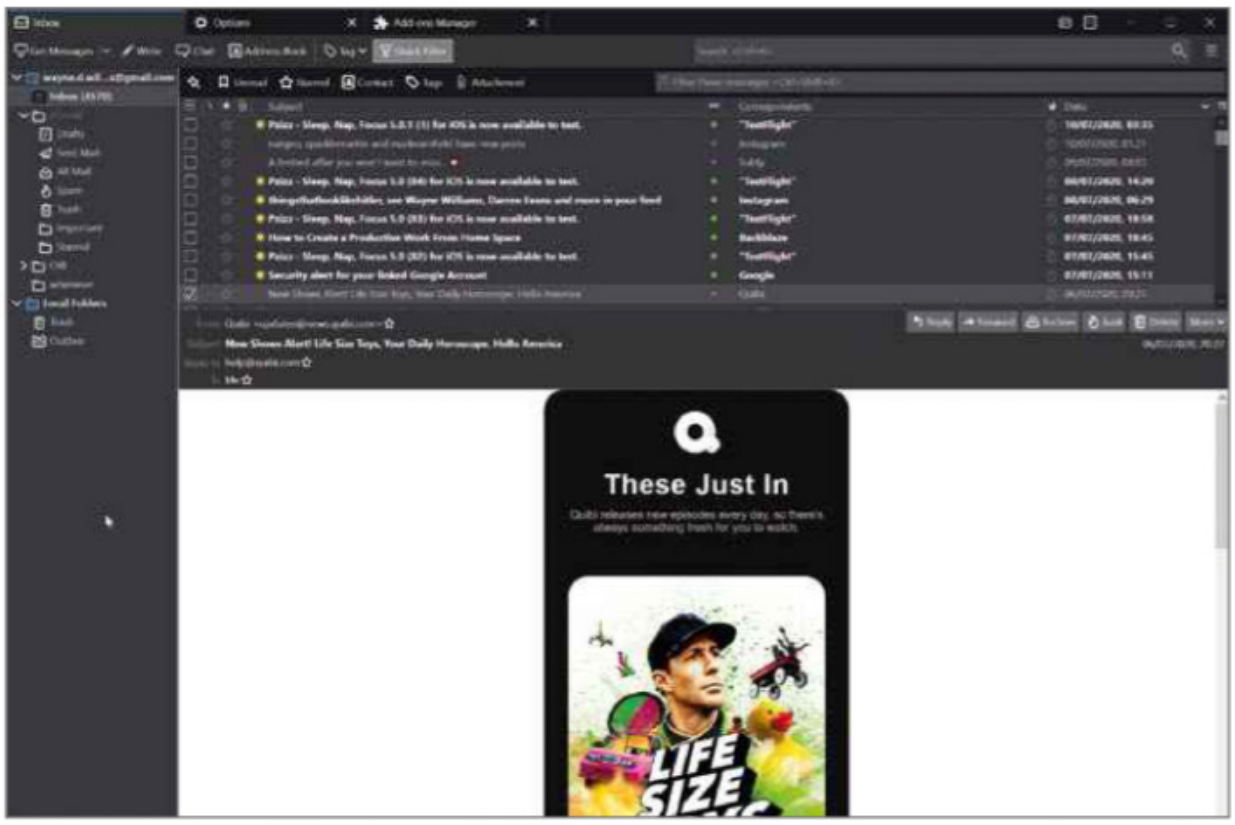
You can still buy our 2014-2018 Back Issues Discs Search for 'webuser disc' on Amazon

Best Free Software

EMAIL CLIENT

Thunderbird 78

www.thunderbird.net
Min requirements: Windows 7/8.1/10, macOS or Linux
File size: 47.2MB



Although webmail services such as Gmail and Outlook.com are packed with features and let you access your email from anywhere, there are still plenty of benefits to using a desktop email client such as Thunderbird, including the ability to read messages and open attachments when offline.

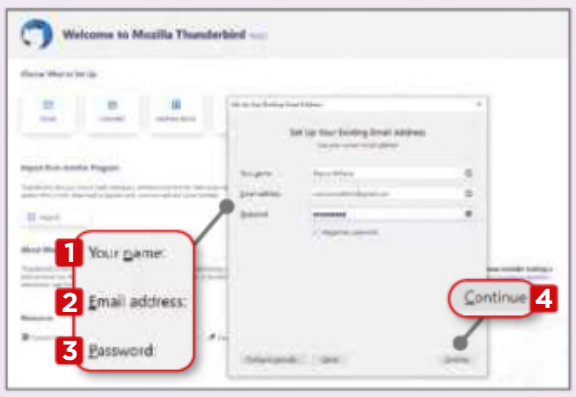
Thunderbird also makes it easy to add multiple accounts from different providers, including non-webmail services, and comes with an integrated calendar, one-click address book and support for themes. One of its best features is tabbed email, which lets you open messages in separate tabs, making it easy to jump between different messages. Thunderbird remembers which tabs you have open, so they can be reloaded when you close and later restart the program, and it offers a number of tools that make finding messages much easier.

Thunderbird 78 is the first major update to the program in nearly a year, and offers a number of new features and improvements, including tweaks to the interface and a new Account Hub which acts as a central portal for setting up email accounts.

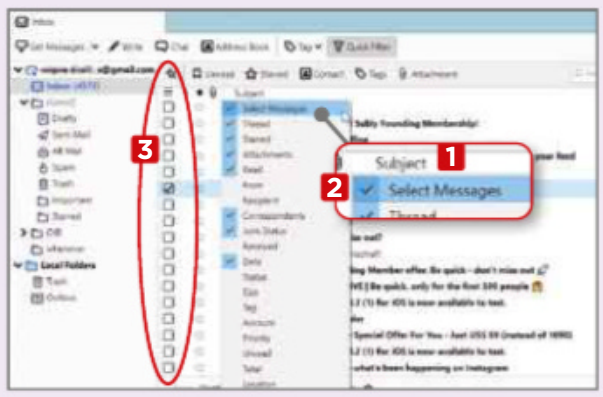
The recipient address fields (To, Cc, Bcc) have been redesigned, the method for selecting messages has changed, the Options/Preferences dialogue has been overhauled and different Thunderbird themes can now be previewed in the Add-ons Manager. One negative change is the software now only supports MailExtension add-ons, so other extensions you've used in the past may no longer work.

Note that Thunderbird 78 is only available as a direct download, not as an upgrade from Thunderbird 68 (or earlier).

MINI WORKSHOP | Manage your email accounts in Thunderbird



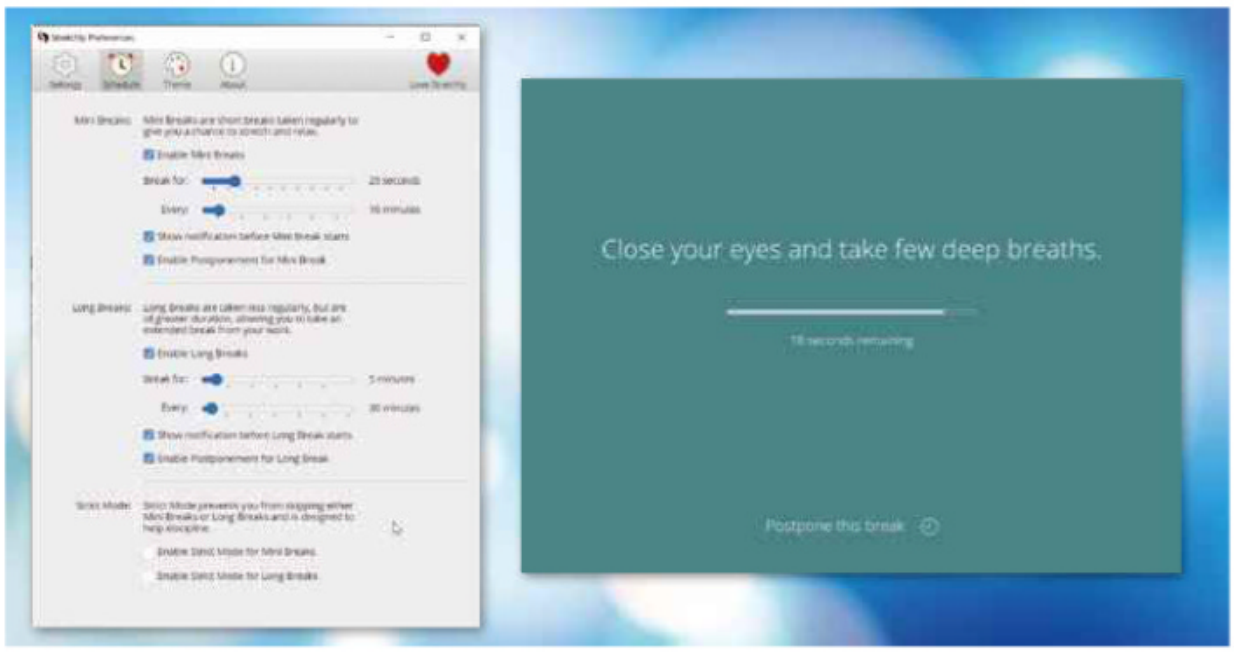
1 Adding a new email account to Thunderbird couldn't be easier. Enter your name, 1 email address 2 and password 3 into the new Account Hub box, then click Continue. 4 Thunderbird will attempt to configure everything automatically. If the details are correct, click Done. Otherwise you can set up the account manually.



2 Thunderbird will now import all your email messages. This can take a while, depending on the size of your inbox. The new version makes it easier to select multiple messages, but this is hidden by default. Right-click the Subject heading 1 and choose Select Messages. 2 This will add the new tick-box column. 3

3 The Options menu has been completely redesigned and now appears in a new tab. From here, you can change the Start page 1 and adjust the language and appearance. 2 You can customise new message creation under Composition, 3 and manage your Privacy & Security. 4 New features can be added under Extensions & Themes. 5

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



BREAK-TIME REMINDER

Stretchly

hovancik.net/stretchly

Min requirements: Windows 7/8.1/10, macOS or Linux **File size:** 95.7MB

It's important to take regular breaks when working on your PC, but it's easy to forget to do so. Stretchly alerts you to take a 20-second microbreak every 10 minutes, and a full five-minute break after 30 minutes, although you can customise this and skip breaks when needed. It offers a selection of ideas for tasks to do during each pause. After four years in development, Stretchly has finally hit the 1.0 milestone and gains a new interface, new icons and a dark mode.

New Windows 10 App

NightCorer

bit.ly/nightc507

File size: 60.14MB

NightCorer is a music player with a twist – it lets you adjust the pitch shift and tempo (speed) of songs, then save the modified version so you can listen to it using any other media player. The app supports all of the major audio formats, including MP3, WMA, WAV and OGG. It's well designed, with a simple, intuitive interface.

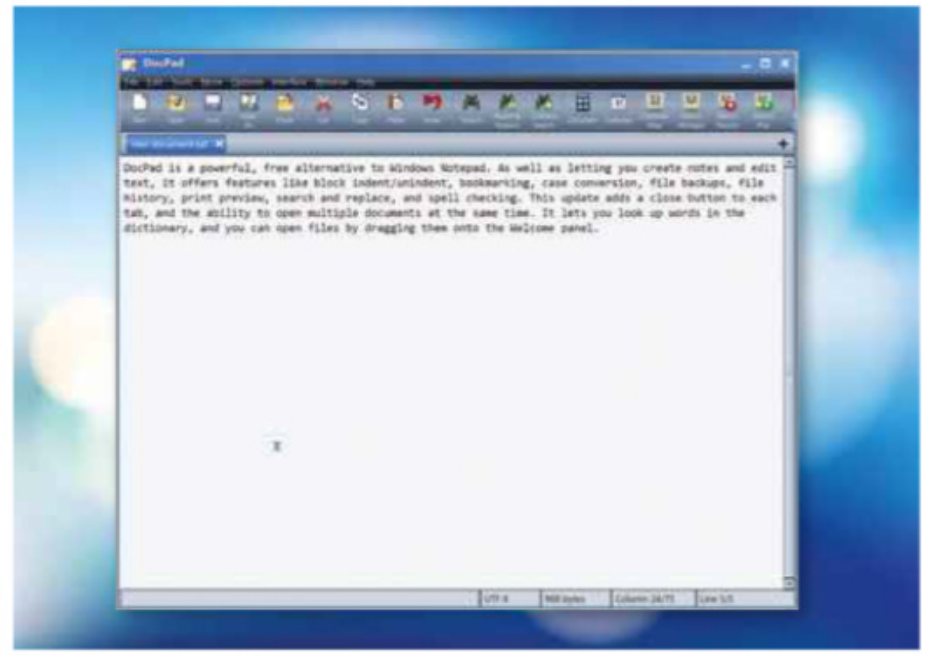
SYSTEM TOOL

MagicMouseTrails 2

bit.ly/mmtrails507

Min requirements: Windows 7/8.1/10 **File size:** 199KB

If you struggle to follow your mouse cursor on screen, then MagicMouseTrails can help. This free program adds trails that follow the pointer around to make it easier to see at all times, and also offers fun themed trails, such as hearts, stars, snowflakes and footballs. You can adjust the length of the track, size, speed, transparency and intensity, and add optional rotation. There are installer and portable versions available. Trails can be disabled via the system tray.



TEXT EDITOR

DocPad 26

bit.ly/docpad507

Min requirements: Windows 7/8.1/10 **File size:** 11MB

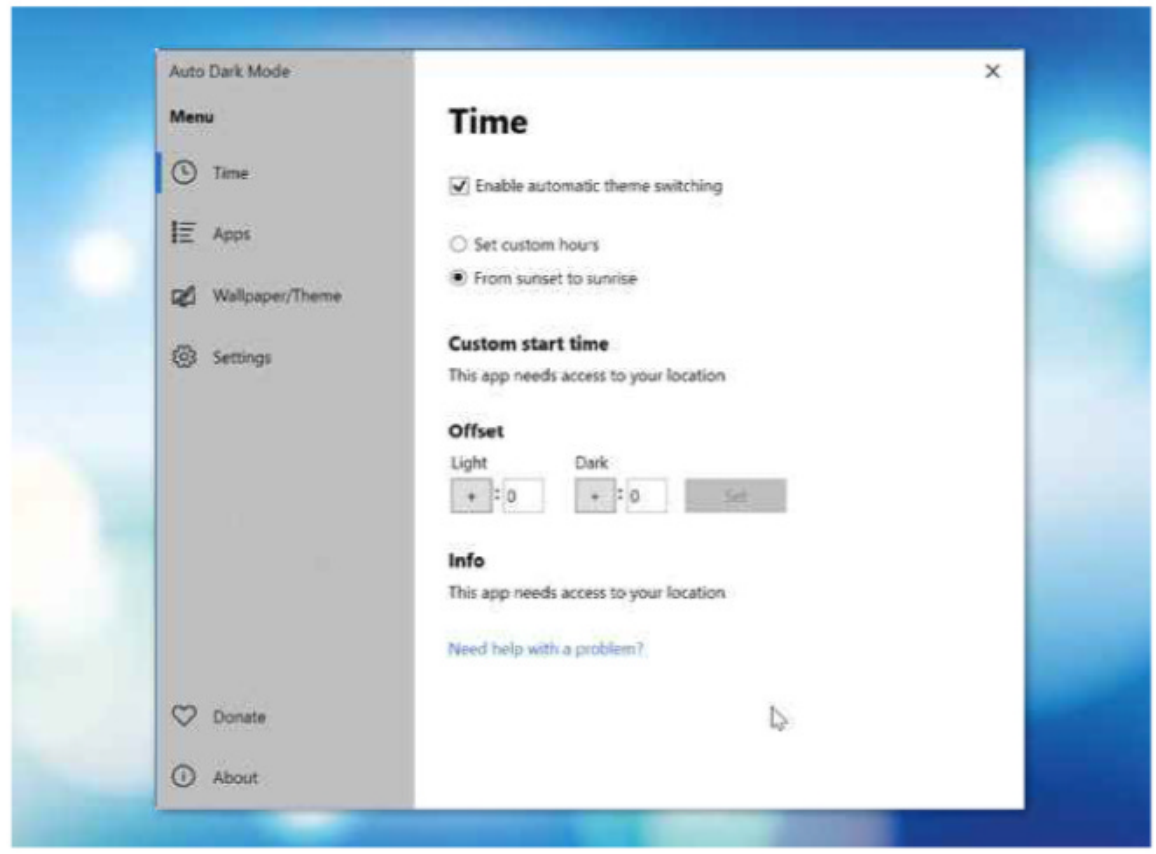
DocPad is a powerful free alternative to Windows Notepad. As well as letting you create notes and edit text, it offers features such as block indent/unindent, bookmarking, case conversion, file backups, file history, print preview, search and replace, and spell checking. This update adds a close button to each tab and now lets you open multiple documents at the same time. You can look up words in the dictionary and open files simply by dragging them to the Welcome panel.

SYSTEM TOOL

Windows 10 Auto Dark Mode 3

bit.ly/autodark507

Min requirements: Windows 10
File size: 1.5MB



Windows 10 offers both Light and Dark modes that you can manually enable as and when required. The tiny free tool Auto Dark Mode makes these modes more useful by automatically switching between them, based on the time of day. You can specify the start time for each theme, or have it switch at sunset/sunrise, based on your current location. You can also quickly switch between modes via the Start menu.

The latest version of the program comes with an improved interface and introduces wallpaper and theme switching, multi-user support and the ability to delay switching when using location-based times.

MEDIA EDITOR

Shutter Encoder 14

www.shutterencoder.com

Min requirements: Windows 7/8.1/10, macOS or Linux **File size:** 123MB

Shutter Encoder is a useful toolkit for media creators that you can use to edit and convert images, videos and audio files, add watermarks, display useful information, create subtitles, download web videos, share media, bulk rename files, and much more. The program makes use of a number of open-source tools, such as 7-Zip, VLC and Youtube-dl.

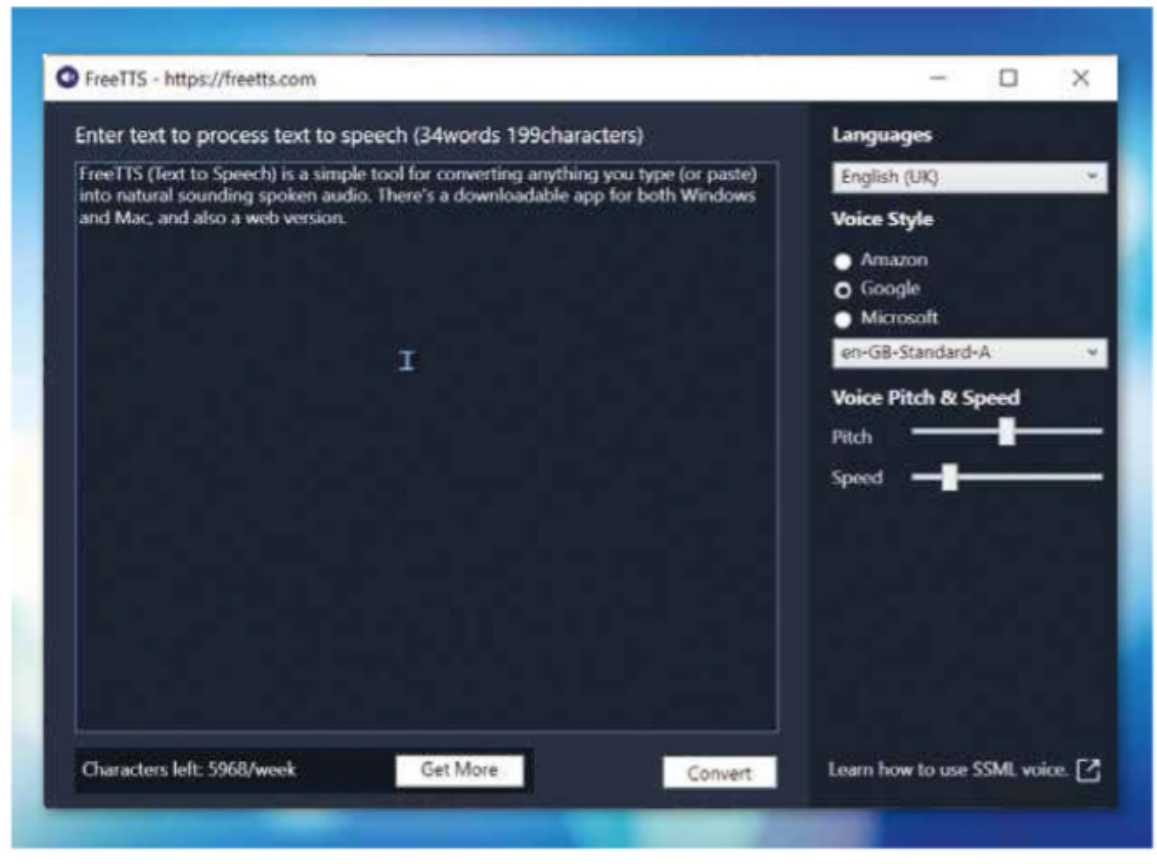
This new release of Shutter Encoder gains an Extract function, a Transitions section and the ability to adjust the bitrate for burning Blu-rays. It also fixes various problems and makes a number of small improvements throughout. There are installer and portable versions available.

TEXT CONVERTER

FreeTTS

freetts.com

Min requirements: Windows 7/8.1/10 or macOS **File size:** 2.7MB



FreeTTS is a simple tool for converting anything you type (or paste) into natural-sounding spoken audio. There's a downloadable app available for both Windows and Mac, and also a web version.

Launch the software and enter your text into the main window. Use the drop-down menu on the right to select the required language and voice style – Amazon, Google or Microsoft (each has a choice of speakers on offer). You can also adjust the pitch and speed of the speech. When you're ready, click Convert and FreeTTS will save the audio in MP3 format. You are limited to converting 6,000 characters per week for free.

GAME

The Inner Workings of Tetris

bit.ly/iwotetris507

Min requirements: Windows 7/8.1/10
File size: 19.8MB

This clever game, developed in just 48 hours, places you behind the scenes of Tetris. There are three (computer-controlled) players and it's up to you to choose which pieces they receive by dragging a shape to one of the fields. The aim is to help each one achieve the best possible score. The game is over when any of the players loses.

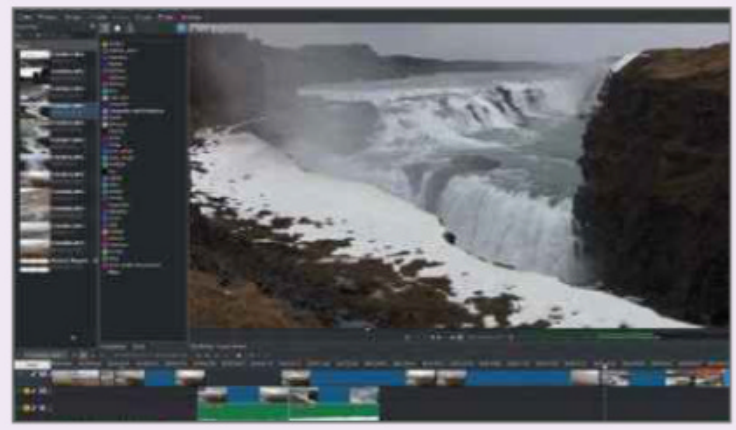
✓ Install this program...

Kdenlive

kdenlive.org

Min requirements: Windows 7/8+/10 or Linux
File size: 113MB

If your video-editing needs have moved beyond basic free software, then Kdenlive will help you take things to the next level. Designed to be used full-screen, a panel on the left of its interface stores your library of footage, while the window on the right previews your movie as you work. Drag and drop clips to the timeline below and use your mouse to shrink, trim and rearrange them, add transitions and effects, and edit or remove audio. Kdenlive takes a while to master, but offers all the features you're likely to need and supports all major video and audio formats.



...Not this one ✗

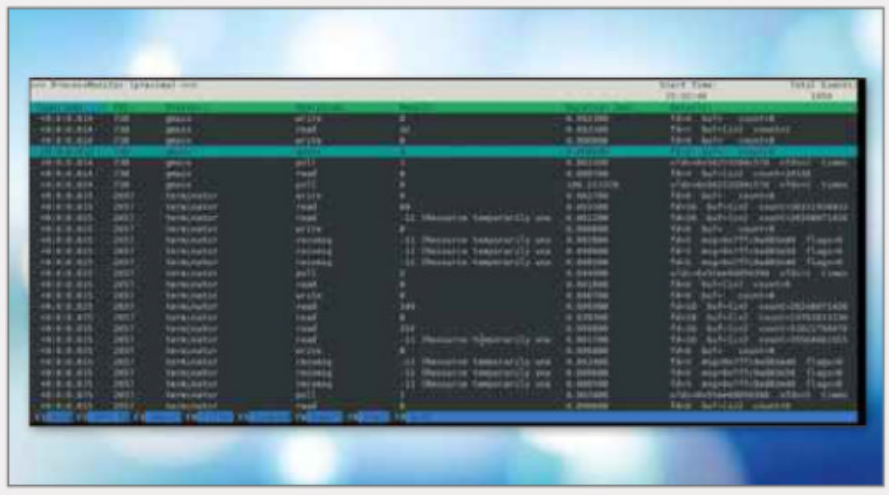
Piranha

ifxsoftware.com

Min requirements: Windows 7/8.1/10, macOS or Linux **File size:** 43.6MB

Piranha is an advanced video editor with lots of useful tools, but it hasn't been updated for seven years (and its official website has gone offline), so it pales in comparison to the latest software. More importantly, Piranha's full version is priced at $995 (£783), which is sure to take a bite out of your finances.

OTHER OPERATING SYSTEMS What's new for Linux and macOS



LINUX TOOL

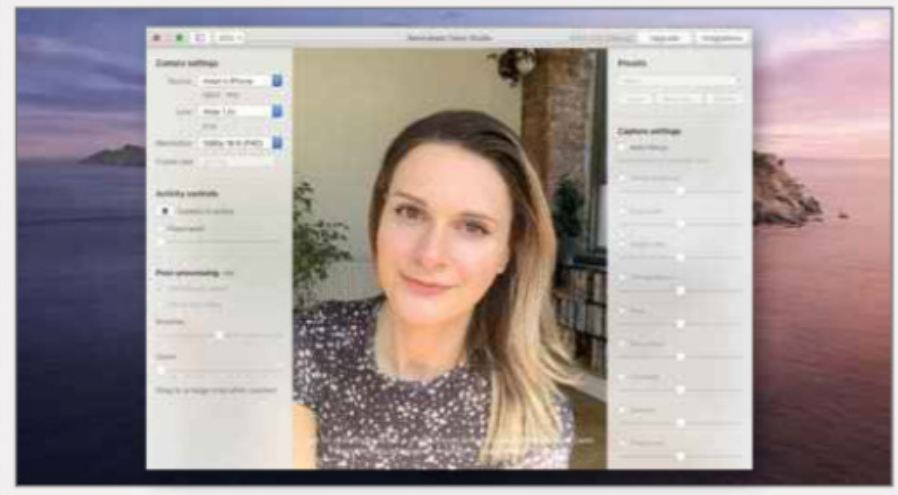
Process Monitor for Linux (Procmon)

bit.ly/procmon507

Min requirements: Ubuntu 18.04 LTS **File size:** 21.3MB

Process Monitor (bit.ly/winprocmon507), from the Microsoft-owned Sysinternals, is an advanced monitoring tool for Windows that displays real-time file system, Registry and process activity. Procmon is an official, open-source reimagining of that tool but for Linux systems. The software is still in the early stages of development but it already looks very promising.

You'll find instructions for how to install it on Ubuntu at bit.ly/pminstall507.



CAMERA APP

Camo

reincubate.com/camo

Min requirements: macOS 10.13 and newer **File size:** 9.9MB

If you're not happy with the quality of your Mac's camera when making video calls, then Camo offers a solution, provided you have an iPhone or iPad. The app lets you use your mobile device as a higher-res webcam for your computer and works with all the popular video apps, including Zoom, Skype and Microsoft Teams. You need to install the free mobile app on your iPhone or iPad but everything is controlled through your Mac. The paid-for full version – Camo Pro – is available for £34.99 a year.

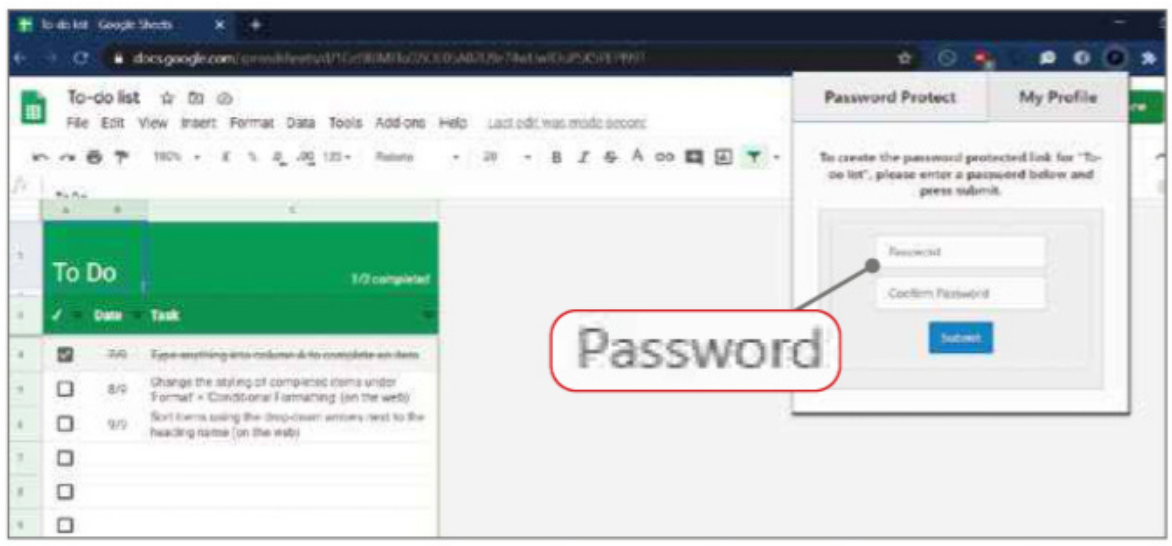
GET FREE SOFTWARE FIRST subscribe to Web User at subscribe.webuser.co.uk

Best New Browser Tools

CHROME

Protect your Google Docs with a password

Passify (www.passify.io) brings password protection to Google Docs, Slides and Sheets. Because, believe it or not, despite its millions of users, there's still no built-in way to password-protect your Google Docs – a function Microsoft has offered since Word 95. While this extension won't let you add passwords to documents stored in your Drive – only Google can do that – it does secure files that are shared with others.

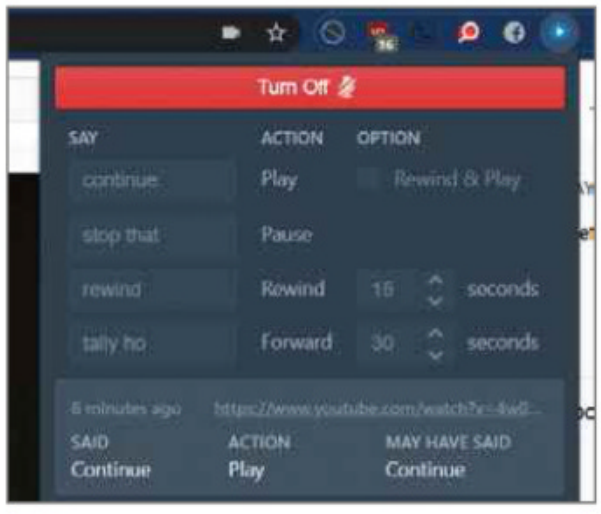


Visit Docs, Sheets or Slides, open a document, then click the add-on's toolbar button. After a quick setup for first-time users, Passify lets you create a unique password for the item. Next, click the 'Open [file]' button (or, optionally, change the password), which generates a private link to the document that can only be accessed with your password. Just make sure the file's permissions are set to let anyone with a link open it.

Free users can create three document links at a time, while the £8 premium version offers unlimited usage.

Control videos using your voice

Say Play (bit.ly/sayplay507) is specifically designed for controlling online videos, so you only get a few commands – Play, Pause, Forward and Rewind. Each one is customisable – the default voice commands are listed in text fields, where you can type your own replacements. Default commands are polysyllabic, and we suggest making your customised commands similarly so – to prevent 'hey' being misheard for 'play', for example. You can keep an eye on what Say Play hears using the action feed at the bottom.



Channel-surf on Netflix using Felix

Love streaming video, but want the flexibility of mindlessly hopping through

channels until you find something worth watching? That's what NetFelix (bit.ly/felix507) is for – yes, possibly to reflect a sense of playful adventurousness, it's named after the cartoon cat. NetFelix can be programmed to switch to random points in random TV shows and movies on Netflix.

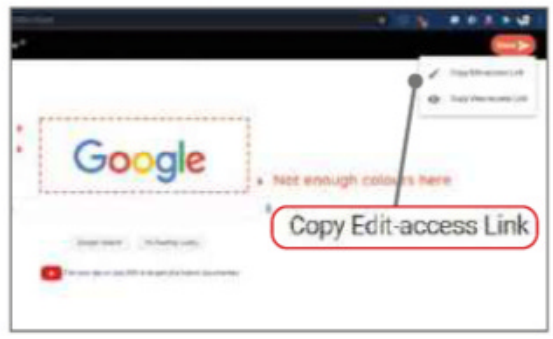
The first time you use NetFelix, set your region and age restrictions if you don't want anything gory or fruity to pop up. Use the slider to determine how quickly Felix will 'change the channel'. Turning off auto-surf lets you manually switch to a new show, for a more authentic channel-surfing session.

Capture and share screenshots Google-style

Snippyly (snippyly.com) is "an external version of Google's most used internal productivity tool, built by an ex-Googler". The extension lets you capture, annotate and collaborate on screenshots in real-time.

Clicking the add-on's toolbar button takes a screenshot, while right-clicking the page adds a new option to your context menu for taking shots with a 3-second delay.

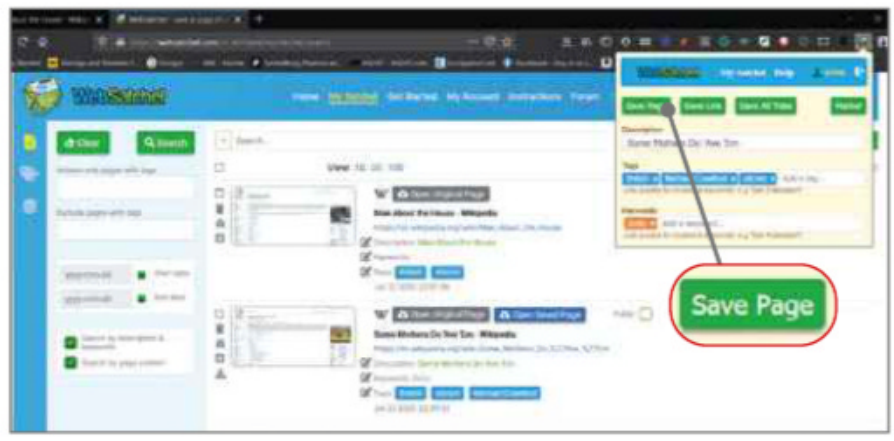
Either way, Snippyly opens your screenshot in a new tab with a ribbon of commands. You can add text and draw rectangles and arrows to highlight specific elements. The cleverest feature, though, is the option to visit the source link. When you're ready, click Share – as with Google Docs, other users can edit or view the screenshot, depending on the permissions you grant.



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

FIREFOX

Bookmark sites to revisit forever



WebSatchel (bit.ly/satchel507) could be the future of bookmarking your favourite websites. One of the biggest problems with bookmarks is that sites sometimes disappear, but this extension lets you "create a highly accurate copy of any web page and view it forever, even if the original is modified or deleted", without needing to resort to the Internet Archive's Wayback Machine. Save a page, including any details, tags and keywords, and it's stored in your personal WebSatchel library. Here, you can either view the original or a copied and cloud-saved page, and search for specific bookmarks.

As well as saving – or copying – the page, you can save collections of tabs or save a link, which essentially bookmarks URLs in your 'satchel'. WebSatchel is also available for Chrome, Edge, Opera and Firefox for Android.

Control YouTube from your phone

YouTube Connect (bit.ly/connect507) introduces a new icon to the YouTube playback bar, which generates a QR code and 8-word mnemonic when clicked. Point your phone or tablet at the QR code and you'll almost immediately open playback controls on your device.

The Remote Application option, meanwhile, lets you enter the mnemonic to gain access without using a camera. The developer admits that the add-on is "a side project and is not perfect," but it worked well in our tests. Each tap of the button and swish of the slider worked as instantly as if we were using the desktop controls.

To round out your YouTube extensions collection, check out Old YouTube (bit.ly/oldyt507). It won't work with YouTube Connect, but it'll bring peace to those who think the site's recent redesign is overwhelmingly busy.

Say no to GDPR consent prompts

Accept this, deny that – we occasionally wonder how much time has been lost to the unceasing bombardment of cookie and GDPR prompts.

Like a *Grange Hill* schoolkid, the Never Consent extension (bit.ly/consent507) just says no. Working unseen in the background, every time a website sends a GDPR consent prompt, the browser tool steps in to deny the request.

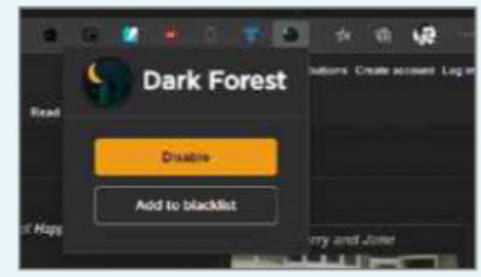
Provided the website uses a supported consent platform – and there are plenty on offer, with more updates on the way – you'll never again have to set eyes on a prompt because Never Consent will block it.

We'd like to see cookies denied consent at the same time but, for now, you'll need a separate browser tool for that. The open-source Never Consent can also be installed in Chromium browsers. Get it from bit.ly/chromeconsent507.

OTHER BROWSERS

Turn on dark mode everywhere

Dark Forest (bit.ly/forest507) is one of the simplest dark-mode extensions yet, and it works on almost any website. By default, dark mode is switched on. Click the add-on's toolbar button to instantly disable the theme, or add the current page to your blacklist, which disables dark mode when you revisit. Right-clicking the page also lets you add and remove blacklisted sites. Given that it works on websites that aren't designed for dark themes, we found the results were pretty good, letting you read *almost* every word and see *nearly* every link.



Discard tabs automatically

Having too many tabs open saps your computer's memory, grinding it to a juddering halt. Auto Tab Discard (bit.ly/discard507) monitors open tabs for inactivity and, after a set time limit, reduces a tab's memory and processor usage. You can manually discard tabs, with options to suspend one tab, all tabs or even those in another window. Websites can be added to your whitelist, either for a single session or forever. Check out the Options menu, too, to customise the rules for how, when or if tabs are discarded.

Best Free Apps

App of the Fortnight

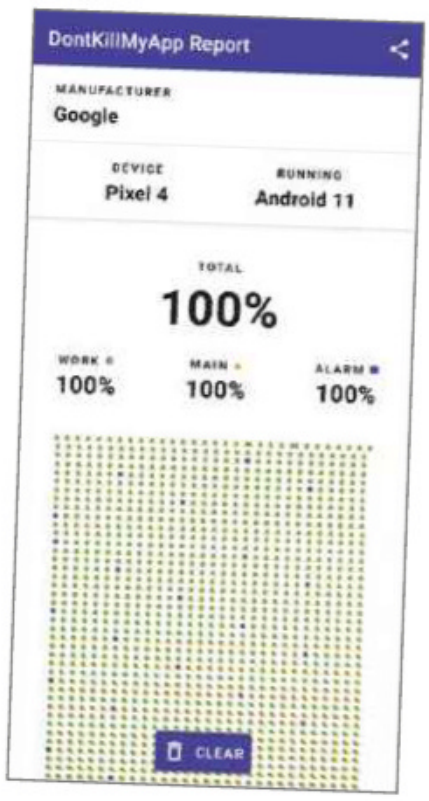
TOOLS

DontKillMyApp

bit.ly/dontkill507

4.1

NEW



As our smartphones become ever more powerful, they also get more power-hungry. But rather than include higher-capacity batteries with their products, certain manufacturers have started relying on some rather dodgy tactics to keep their handsets running for longer – by killing off apps that are running in the background without telling you.

This can result in a number of unwanted side effects. Alarm clocks, health trackers or any number of other apps that rely on running background processes to monitor or notify you of something important may just stop working without warning, effectively breaking key functionality. Not only that, but killing background apps has also been proven to have little or no positive impact on battery life.

Luckily, the people behind DontKillMyApp (dontkillmyapp.com) are on a mission to name and shame manufacturers who employ such underhand battery-saving techniques. You can visit the site to see how the manufacturer of your device rates – and now you can also download this app, which allows you to benchmark your phone to measure how aggressively it is killing background apps. Find out how to benchmark your phone in our Mini Workshop, right.

Once the benchmark has finished running, the app provides you with a report, along with some potential solutions to try. DontKillMyApp's benchmarks won't offer any profound insight into your device's processing power or memory-management abilities, but they will help you diagnose problems with background apps that terminate unexpectedly. The benchmarks are particularly useful for owners of handsets from manufacturers including OnePlus, Huawei and Samsung, which rate among DontKillMyApp's worst offenders. The app is just out of Early Access and is completely free to use, with no ads or in-app purchases.

Our rating ★★★★★

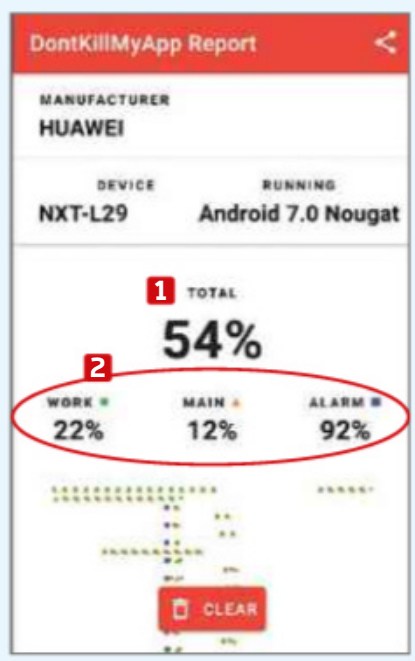
MINI WORKSHOP

Benchmark your phone with DontKillMyApp

1 The opening screen of DontKillMyApp displays info about your device, including its manufacturer 1 and the manufacturer's rating, according to the dontkillmyapp.com website. 2 The more thumbs-down icons you see, the worse the rating (five being the worst). Ignore the other info on this screen for now. When you're ready, tap the Start Benchmark button in the bottom-right corner. 3

2 On the next screen, you're presented with a series of test durations, ranging from one hour to eight hours 1 – the longer the duration, the more thorough the benchmark. Select a duration, then tap OK on the warning on the next screen. Now leave your device while the test runs. The benchmark will run in the background. Try not to use your device, and don't plug it into its charger.

3 When it's done, the results will show an overall Total score 1 and individual scores for the three tests carried out: Work, Main and Alarm. 2 Don't worry too much about the technicalities, but bear in mind that lower percentages could be a sign that there's a problem. Return to DontKillMyApp's initial screen to read any solutions that apply to your device. Try them, then run the benchmark again.



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

PERSONALISATION

UPDATED

Microsoft Launcher

bit.ly/mslaunch507

4.2

Having given up on its own mobile OS, Microsoft has turned its attention to producing apps for other mobile platforms, including this alternative Android launcher, which has just been treated to a major update. Version 6 of Microsoft Launcher introduces some excellent new features, including support for landscape mode, customisable icons, daily wallpapers from Bing, and a personalised news feed. The app itself gets a new icon, along with an overall performance boost and, of course, the obligatory dark theme.

Our rating ★★★★★

WEATHER

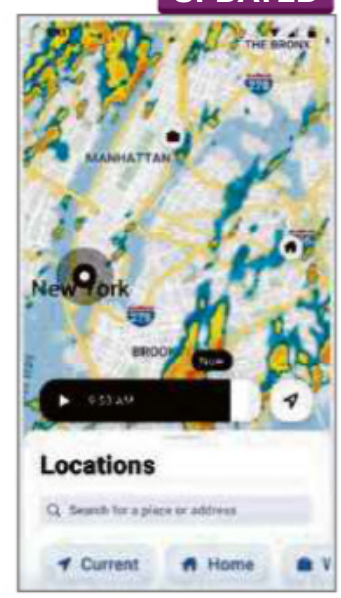
UPDATED

RainViewer

bit.ly/raindroid507

bit.ly/rainios507

5 12



Rain is a bit of an obsession for us Brits, making this app something of a must-have. The recently updated RainViewer provides an accurate rain forecast and weather radar in one app. You can track storms on the live radar map, view a precipitation chart, get 14-day weather forecasts and more. Whether you use the free version or pay £2.99 per month to unlock premium features – such as ad-free use and more frequent weather updates – RainViewer is the perfect companion for staycationers this summer.

Our rating ★★★★☆

PARENTING

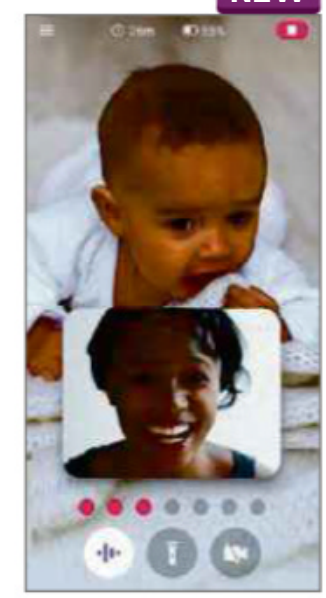
NEW

Bibino

bit.ly/bibdroid507

bit.ly/bibios507

5 10



Bibino cuts down on baby-related clutter and expense by allowing you to repurpose existing devices and combine the functions of several separate baby gadgets in one app. It uses two devices – a tablet and a smartphone, for example – as a baby monitor or nanny cam system, with extra features such as built-in lullabies to help your little one drift off, a night light and smart alerts. It's a great idea, but you need to pay for Bibino Premium (£3.99 per month) for full access to all features once the initial trial period expires.

Our rating ★★★☆☆

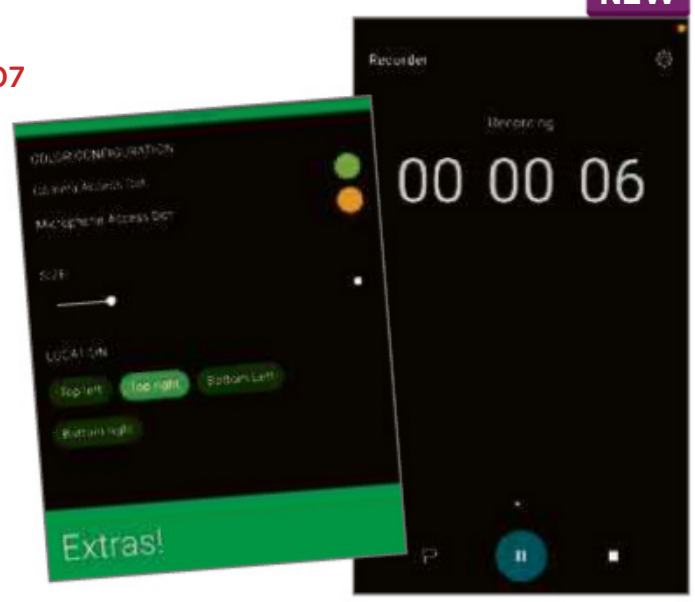
TOOLS

NEW

Access Dots

bit.ly/access507

7



When you grant a mobile app permission to access your camera or microphone, it can, in theory, use them secretly in the background. Apple has introduced a new privacy feature in iOS 14 that shows an indicator whenever the camera or microphone is accessed. Access Dots adds a similar feature to any Android device – you'll see small dots in the top-right corner of your screen when a third-party app uses the camera or mic. The concept is good but there are drawbacks – the dots currently don't show on screens with rounded corners, for example, and the tool doesn't tell you which apps are to blame.

Our rating ★★★☆☆

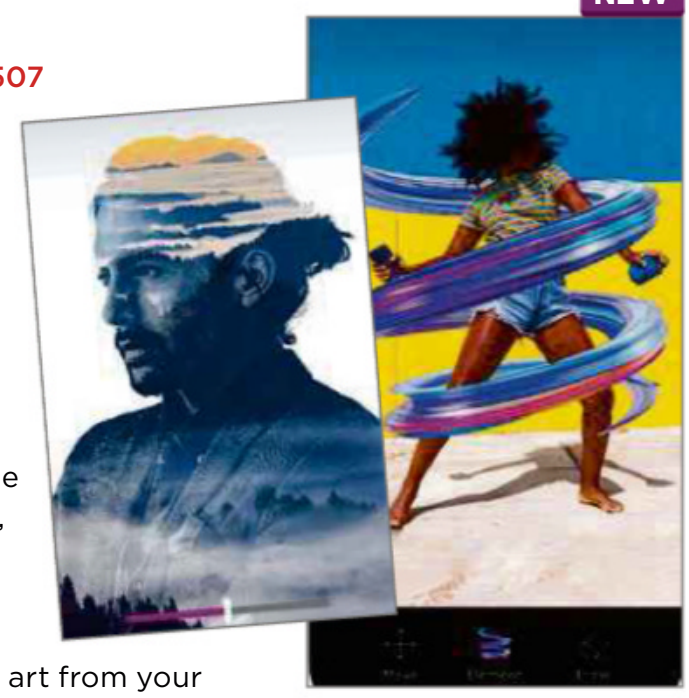
PHOTOS

NEW

Quickart

bit.ly/quickart507

13



Quickart is a new iOS app from the team behind popular apps such as Facetune and Enlight Photofox. As the name suggests, the idea is to make it quick and easy to produce stylish art from your photos. You can create double exposures, apply cool styles, make collages, add abstract backgrounds and more. Subscribing (£5.99 per month) provides unlimited access to all the app's filters and effects, but there are plenty to play with in the free version and new effects are delivered via updates, including the recent addition of face masks and a new Halftone comic-book style.

Our rating ★★★★☆

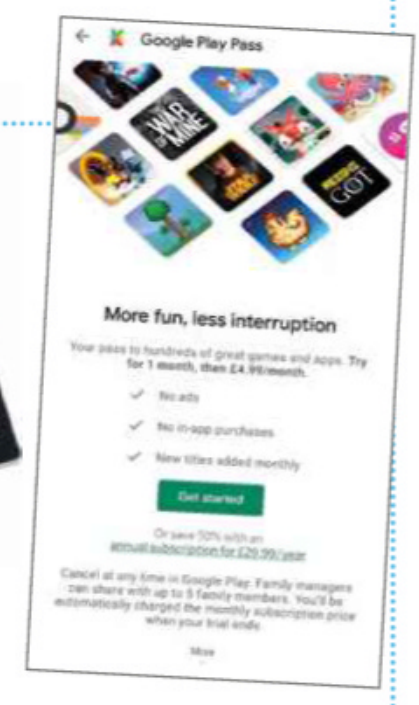
NEW GAMES WORTH PAYING FOR

Google Play Pass

bit.ly/playpass507

Price: £4.99 per month

(varies)



Google has launched its own game subscription service in the UK. £4.99 a month gives Android users unlimited, ad-free access to hundreds of games that you'd normally buy individually. Unlike Apple Arcade, which we looked at in our last issue, Play Pass offers fewer exclusives, focusing more on classic games, such as Sonic the Hedgehog, and newer releases. Subscribers can share access with up to five family members and a 30-day free trial is available. Here are three of the best games to play.

The Gardens Between

bit.ly/garden507

7

One of the newer titles in Google Play Pass, The Gardens Between is a canny, charming adventure where you manipulate time to solve puzzles across a series of islands in a mysterious realm.

Star Wars: KOTOR

bit.ly/kotor507

4.1

Arguably the greatest Star Wars game ever, BioWare's epic RPG is set hundreds of years before the events covered in the films. Released in 2003, KOTOR occasionally shows its age, but it's still a deeply satisfying experience.

Limbo

bit.ly/limbo507

4.4

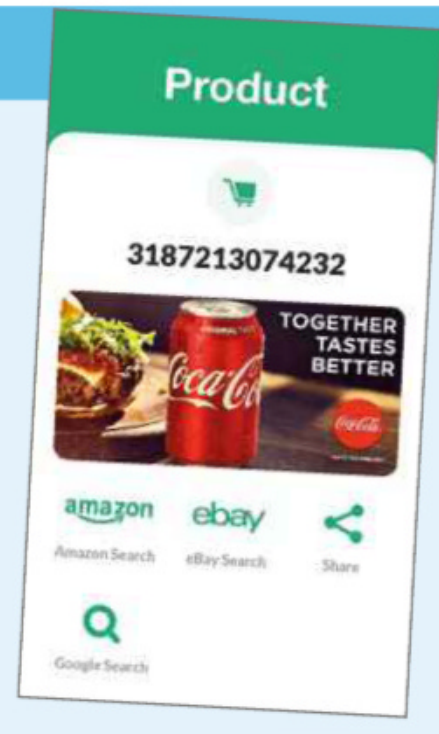
A modern classic, Limbo is a platform and puzzler with a thoroughly absorbing atmosphere. Its side-scrolling, monochrome aesthetic has been aped by many games, but Limbo is the original sinister masterpiece.

✓ Install this app...

Free QR Scanner

bit.ly/freeqr507

4.4

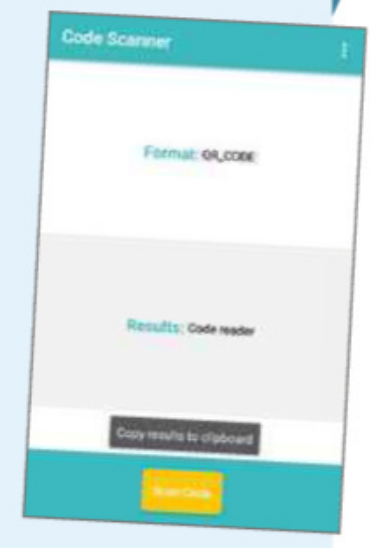


Most modern Android devices provide some kind of basic, built-in support for reading QR codes. But if you want more features, then this scanner has everything you could possibly want. It's lightweight, supports scanning all QR, dot-matrix and barcode formats, doesn't require an internet connection to work and keeps its permissions to a minimum – it only needs to access your camera. Useful extras include an auto-zoom function that helps you scan codes from a distance; and a history tool, which saves all your previous scans for future reference. Ads are non-invasive in the free version, but £2.79 will get rid of them altogether.

...Not this one ✗

Code Scanner

bit.ly/code507



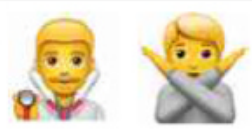
At best, we'd describe this free QR scanner as a bit of a bare-bones affair – it promises to read codes but doesn't offer any other features beyond that. Many unhappy Google Play reviewers are even less generous, however, preferring to use terms like "defective" or complaining that it "doesn't work at all". The app requires an internet connection, but even then it struggles to detect codes and, in some cases, just hangs when you attempt to scan.

Take a Screen Break

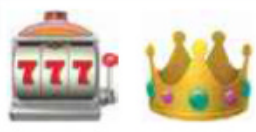
Take a rest from your browser with our fiendish fortnightly challenges. Can you guess our Bond-film emoji and Wayback Machine year?

WIN A WEB USER 2019 BACK ISSUES DISC!
Email your answers to editor@webuser.co.uk – one correct entry will win a disc

CAN YOU GUESS THE BOND FILMS FROM THE EMOJI?

1 

2

3 

4

5

6

GUESS THE WAYBACK MACHINE YEAR

Can you work out which year the Internet Archive's Wayback Machine captured the following websites?

COMPETITIONS

WORTH £74.95 EACH

WIN 1 OF 3
T5 Ultra Connect wireless earphones

Rockjaw's T5 Ultra Connect has HD audio, an excellent range and provides more than 11 hours of battery life. Each earphone has a magnetic strip to connect them when they're not in use, so you don't lose them when they're hung around your neck. To enter, email your address to webusercomp@dennis.co.uk with 'T5 Ultra Connect' in the subject line. For more info, visit rockjawaudio.com and follow @rockjawaudio on Twitter.

WORTH £169.99 EACH

WIN 1 OF 3
Devolo Magic 2 WiFi Starter Kit

Experience the new no-border world of surfing with devolo Mesh WiFi. Magic 2 WiFi streams incredibly stable, ultra-fast internet through your home at up to 2400 Mbps via your power lines. The kit features adapters with passthrough sockets and ethernet ports to deliver internet, anywhere. To enter, email your address to webusercomp@dennis.co.uk with 'Magic 2' in the subject line. For more information, visit www.devolo.co.uk and follow @devoloag on Twitter.

FAQ

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

Rural broadband

Many parts of the UK still suffer from slow broadband. **David Crookes** looks at what's being done to tackle patchy countryside connections

What about it?

Rural broadband, as we're sure you know, is a term used to describe the internet infrastructure connecting homes and businesses in remote areas. It has long been a cause for concern among people living in the countryside, primarily because speeds are generally much slower than in towns and cities, and coverage is often patchy. The coronavirus pandemic has highlighted such problems, but numerous schemes are hoping to bridge the gap.

How slow exactly?

According to a report by Ofcom in May (bit.ly/ofcom507), the overall average speed for rural areas of the UK is 39Mbps as opposed to 76Mbps in towns, cities and their environs. This may not sound too bad – there are urban households that fail to reach the rural average. But this only tells part of the story.

A good number of rural areas are severely lagging behind: residents in Pandy, Wrexham, in the Ceiriog Valley, typically get broadband speeds of less than 1Mbps, for instance, and that's not an entirely isolated case. A broadband speed test by *Which* last year found that speeds in Argyll and Bute, Moray and Ceredigion averaged about 7Mbps, while the average speed in Orkney was just 3Mbps. Ofcom says that 11% of rural premises have connections of less than 10Mbps, while the National Farmers Union found that only 17% of farmers had access to broadband of 24Mbps or more.

Residents of Pandy in Wrexham get debilitatingly slow broadband speeds of less than 1Mbps

Why is there a problem?

It's all down to infrastructure – in particular, the rollout of fibre-optic cable, which has been slower in rural areas than in urban ones. With standard, copper-cable broadband, data travels from an ISP to a nearby telecom cabinet before making its way to your home. The closer your house is to a cabinet, the faster your broadband will be, because copper cables are not very efficient and the speed at which data is transported deteriorates the further it has to travel.

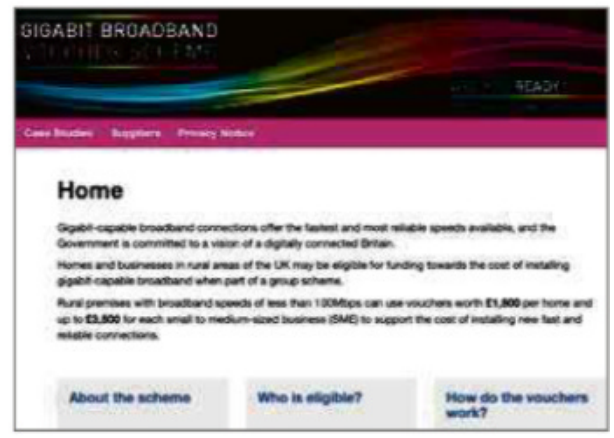
Many rural properties still rely on copper cables, and are situated far from cabinets and telephone exchanges. Even when fibre-optic cables are laid to those points, data still has to get down vast distances of copper on the last leg of its journey, unless that part too is replaced (which is called "full-fibre").

So what's being done?

Well, the government's Universal Service Obligation for broadband (bit.ly/uso507) provides a legal right to request a decent connection – 'decent' being viewed as a 10Mbps download and 1Mbps upload speed. BT is responsible for fulfilling these requests (unless you're in Hull, where it's down to KCOM), but if the cost of building or connecting your home exceeds £3,400, then you'll need to stump up the difference – and it may take as long as 24 months to get you sorted.

Last year, the government announced that it would roll out fibre broadband to rural public-sector and community buildings at a two-year cost of £200m. Named Rural Gigabit Connectivity, the scheme is being delivered by Building Digital UK (BDUK, bit.ly/bduk507), filling a hole that's unlikely to be tackled by commercial broadband providers any time before 2033.

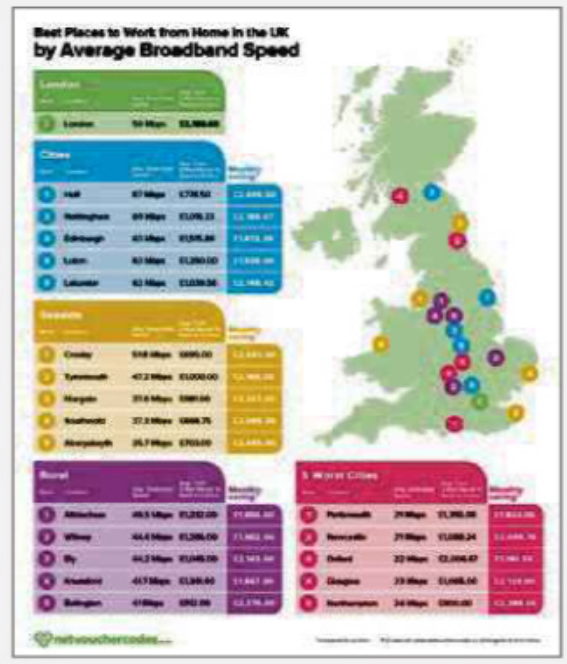
Rural properties can also benefit from the Gigabit Broadband Voucher Scheme



The Gigabit Broadband Voucher Scheme offers help with tackling slow broadband

CAN I MOVE AND IMPROVE?

Since many employers are becoming accustomed to their staff working from home on a permanent basis, some employees – freed from the constraints of a daily commute – may be considering moving to coastal or more rural locations. According to a survey by NetVoucherCodes.co.uk, there are decent broadband speeds in the seaside towns of Crosby, Tynemouth, Margate, Southwold and Aberystwyth, all boasting a minimum of 35.7Mbps. Good connections are also available in Altrincham, Witney, Ely, Knutsford and Bollington, though whether we'd class them as truly rural is another question.



(gigabitvoucher.culture.gov.uk), which offers money to help businesses and residents fund the installation of fast broadband.

How does that work?

If rural premises group together, they may be eligible for £1,500 per home and up to £3,500 for each small to medium-size business. The money is applied for by a supplier and is used to fund (and incentivise) the installation of a full-fibre network offering speeds of up to 1Gbps. The Welsh government announced in June that it would top up these grants, because installation in Wales has proven trickier and more expensive due to the country's topography.

Which suppliers are involved?

Dozens of suppliers have provided connections, including Openreach, Virgin Media and the BT Group. Openreach said in January that it was widening its build programme to include 250,000 homes and businesses in more than 200 market towns and villages, following trials in 13 rural communities. The company has been experimenting with specialised equipment to increase efficiency, stretching fibre across rivers and valleys, using ground-penetrating radar to guide diggers and employing "diamond cutter" rotating-blade machines to cut into roads and pavements, which have reduced installation times by months.

Openreach uses sophisticated equipment to install fibre broadband more quickly

Are local people fully on board?

Definitely, and among the suppliers are many locally set-up groups including the non-profit community-benefit society Broadband for the Rural North (B4RN) (b4rn.org.uk), which is run with the support of landowners and volunteers. B4RN has so far connected 7,235 customers with a fibre-to-the-home network in many rural north-west villages, providing residents with 1Gbps download speeds.

What makes B4RN particularly interesting is that local people reduced the cost by helping secure permissions to use land, digging huge lengths of trenches to far-flung properties and laying the plastic ducting for the cable. They had to tackle obstacles as varied as rivers, stone walls, roads and railway lines, while also drawing expertise from computer engineers at the University of Lancaster. B4RN is now run by 56 permanent staff members, and its success has led to similar schemes being set up in Devon, Somerset and Norfolk.

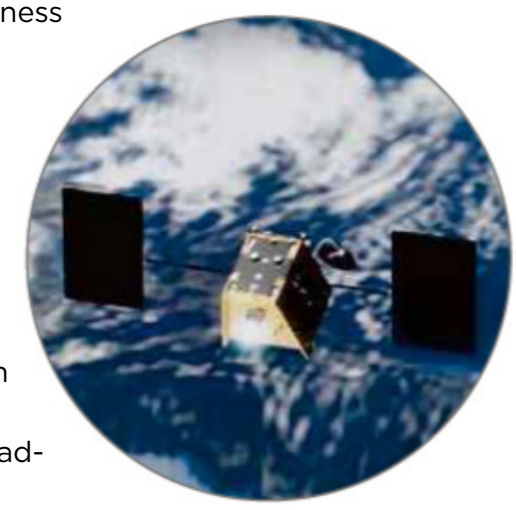
The B4RN group has taken fixing problems with slow broadband into its own hands

Has the coronavirus had an impact?

Yes. On the one hand, the increased reliance on the internet for shopping, services and entertainment has demonstrated the importance of a good broadband connection. On the other, it has slowed the implementation of new networks. In the case of B4RN – which now has an in-house civil engineering team and wants to connect 40,000 homes by 31 March 2022 – they've struggled to get the last bit of cable installed into homes. But volunteers were able to identify those most at need, so they could work on getting these homes connected as quickly as possible.

Are there alternatives to wired connections?

Satellite broadband is one alternative since it only requires a dish, but installation isn't cheap, streaming can be laggy and there are restrictions on data. That said, the government has taken a 45%, £400m stake in the satellite broadband business OneWeb (www.oneweb.world), which intends to put 650 satellites into low orbit, paving the way for rural broadband from space. In doing so, it's going head-to-head with SpaceX's Starlink (starlink.com), an initiative with pretty much the same aim.



OneWeb aims to put 650 satellites into orbit to deliver high-speed rural broadband from space

Another alternative is mobile broadband using 4G and 5G networks, but signals are often patchy and 5G has been set back by the government's ban of Huawei.

Will certain areas benefit more than others?

There are schemes rolling out everywhere. Openreach, for example, announced in July that it was adding 94 rural villages and towns to its 1Gbps fibre-to-the-premises programme in Northern Ireland. Around the same time, Northumberland County Council announced a deal with BT to deliver gigabit fibre connection to public buildings in the county, with councillors claiming it will provide better connectivity in rural areas than in many city centres.

RECORD YOURSELF On Your Screen

COVER FEATURE

Whether you want to save your family video calls or demonstrate how to fix a tech problem, **Wayne Williams** reveals the best ways to capture anything you do on your PC, phone and tablet

Video streaming soared during the coronavirus lockdown, with millions of people across the UK taking part in video calls, business meetings and even consultations with their doctors. But the ephemeral nature of live video often means you can't revisit content to enjoy or analyse later, in the way that you can with text-based conversations.

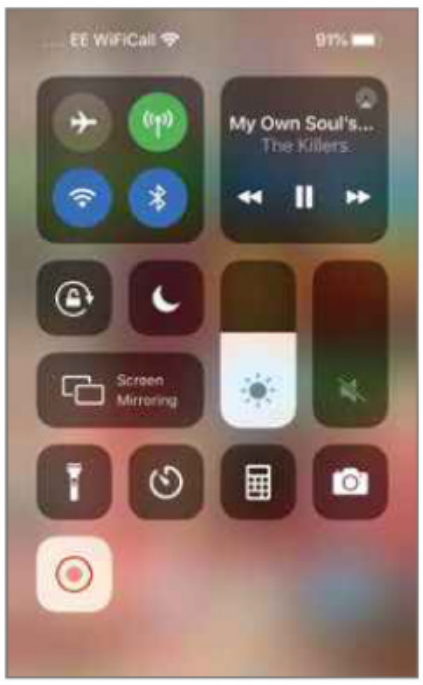
Fortunately, it's easy to record what you do on your PC or phone, to give you a permanent copy that can be edited and shared in whatever way you want. In this feature, we reveal the best free ways to capture the contents of your screen to keep forever.

As well as recording your video chats with other people, we explain how to capture high-quality videos of yourself to post online (rather than just using your device's basic tools); create video tutorials to, for example, demonstrate how to solve tech problems; and record gameplay videos to show off your skills.

RECORD YOUR VIDEO CHATS

Record FaceTime chats on your iPhone or iPad

If you want to record FaceTime video chats on Apple devices, you can do so using the built-in screen recorder on your iPhone or iPad. Open the Control Centre on your device (the method varies depending on the model), and tap the recording icon. You'll see a three-second countdown, then a red bar will appear at the top of the screen to indicate that it is being recorded.



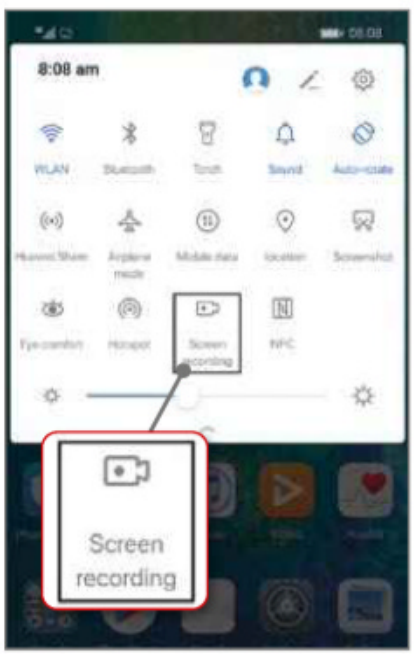
It's easy to record FaceTime chats using your iPhone's built-in recorder

Start your FaceTime call as normal and, when you've finished chatting, open the Control Centre again and tap the button to end the recording. Your video will be saved to the Photos app on your device.

Record WhatsApp video calls

You can't record video calls directly through WhatsApp but, if you have an iPhone or iPad, you can use the same trick for recording FaceTime, as described above.

Android doesn't (currently) offer built-in screen recording, though some manufacturers include an option for this. Huawei, for example, includes a Screen Recorder in its phones that you can access by swiping down from the status bar to open the navigation panel, then swiping down again to reveal a shortcut for the feature. If it's not there – or you just want a quicker way to start recording – press the volume up and power buttons. Recordings are saved to your Gallery.



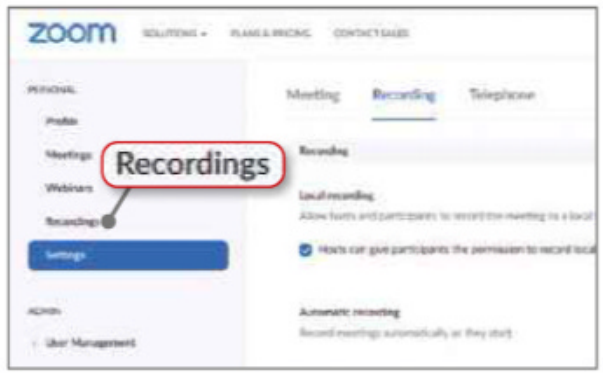
Huawei phones offer a handy Screen Recorder for capturing your chats

If your Android phone doesn't offer built-in recording, then you'll need to install an app from the Google Play store that will handle the task. MNML Screen Recorder (bit.ly/mnml507) is one of the simplest free options, though it's still at the 'early access' stage.

Record your Zoom video chats

Video chatting took off massively during the coronavirus lockdown, and Zoom was the service that benefited most from this boom, thanks to its ease of use and flexibility. Zoom lets you record chats directly within its desktop app, and the feature is available to both free users and paid-for subscribers, although it isn't supported on Android or iOS.

To use Zoom's recording feature, you first need to sign into the web portal as an administrator. Go to My Account, Settings and click the Recording tab. Navigate to Local Recording and make sure the option is enabled. Only the host of a Zoom chat can record a video, though they can grant permission to a participant. All you have to do is click the Record button, then select 'Record on this Computer'. Paid-for Zoom subscribers can also record video to the cloud.

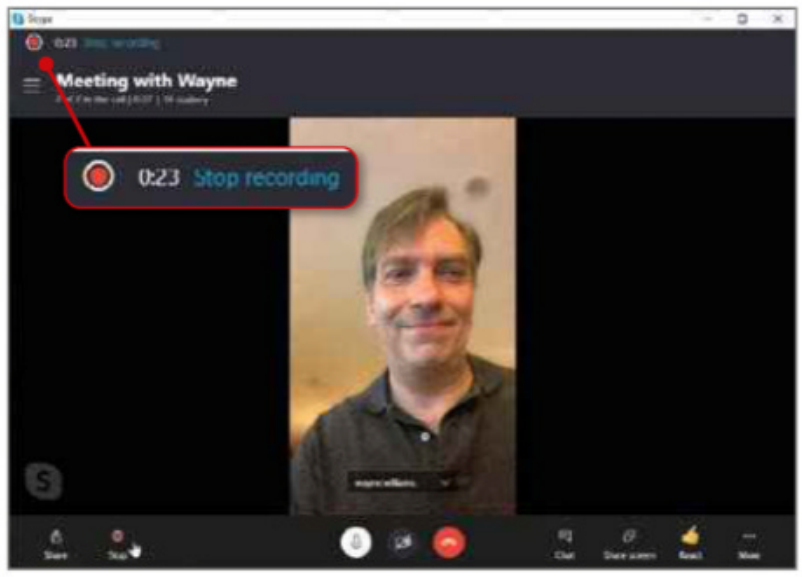


Recording your Zoom video chats for posterity is free and very straightforward

Record your Skype video calls

Skype may have been eclipsed somewhat by Zoom during the lockdown, but Microsoft's chat service remains hugely popular and the good news is that it also allows you to record calls through its apps. Recording is cloud-based and available for Skype-to-Skype calls.

To record a call on desktop or mobile, start or join a meeting and click the Record button. A banner will appear to let everyone participating in the call know that it's being recorded. When the call completes, the recording will be posted to your chat and you'll be able to and save or share it at any time within the next 30 days.



Skype lets you record your video chats on your desktop and mobile device

IS IT LEGAL TO RECORD VIDEO CONVERSATIONS?

In the UK, it is perfectly legal to record a video chat and, while it's always polite to inform the people you're talking to that you will be recording them, there's no legal requirement for you to do so. Provided, that is, the recording is for personal use only. If you make it public, or share it without the consent of the participants, you could be hit with a civil claim for breach of privacy. The law is much stricter when it comes to businesses recording conversations and they must abide by the Telecommunications Regulations 2000 act (bit.ly/telecom507).

CAPTURE YOUR SCREEN'S CONTENTS

Record your screen in Windows 10

There are various apps you can use to record what's on your PC screen in Windows 10, but the operating system also comes with its own tool for the job. The Xbox Game Bar, which you can open by pressing the Windows key+G, is primarily designed for recording games, so you can show off your gaming prowess, demonstrate how to achieve high scores or help fellow gamers get past a particularly tricky part – but it's not limited to that purpose. However, it does have one major restriction, which is that it only records what's happening in the active window – be it Chrome, Zoom or VLC Media Player – not the entire screen.

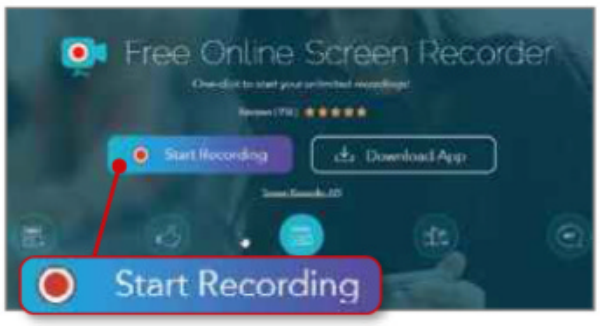
Windows 10's Game Bar lets you record videos and games

If pressing Win+G doesn't open the Game Bar, check it's enabled by going to Start, Settings, Gaming, Game Bar. You can change the keyboard shortcuts that the Game Bar uses here, too. The feature can record a combination of on-screen sounds, browser audio and narration. Recordings are saved to the Captures folder (in PC, Videos).

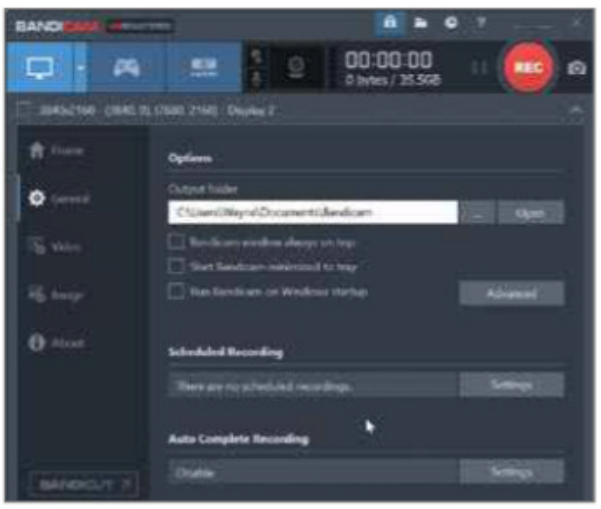
Record your PC screen

The best way to record your PC screen – and then edit the video afterwards – is to use a third-party capture tool. Many of the better ones cost money, although there may be a feature-limited free version available. Bandicam (www.bandicam.com) is one such example. The free edition limits you 10 minutes of recording time per file and includes a watermark. The full version removes these limitations for $40 (£31).

If you want a free, unlimited tool, we recommend the brilliant open-source program OBS Studio (obsproject.com). This is available for Windows, macOS and Linux, and lets you record, edit and share all onscreen activity or stream it live. Like the built-in Xbox Game Bar on Windows 10, OBS Studio is primarily aimed at gamers – the popular gameplay streaming service Twitch is one of the software's main sponsors – but you can use it for any task.



Free Online Screen Recorder saves you downloading recording software



Bandicam's free version places some restrictions on the video you record

See our Mini Workshop opposite to find out how to use OBS Studio to record your screen.

If you don't want to download or install anything major, you can use Apowersoft's Free Online Screen Recorder (bit.ly/apower507). Click the Start Recording button and save and run the small launcher file. It can record full screen or a specified region, system sounds and your webcam. There is a desktop version of the tool, too.

Mirror and record your phone's screen

One way to record what's happening on your phone or tablet is to mirror its screen on your PC. You can do this using Vysor for Android (bit.ly/vysor507). Install the app on your phone, then install Vysor on your computer (www.vysor.io). It works with Windows, macOS and Linux. Windows users also need to install the ADB drivers from adb.clockworkmod.com.

Connect your Android device to your

RECORD YOUR PHONE CALLS

We've explained how you can record video calls on your phone, but what about audio conversations? This can be really useful if you want to refer back to what someone said at a later date – though, as with video calls, any recordings you make should be for personal use only.

You could record the audio using the same method as detailed with video calls, but a better option is to use an app such as TapeACall (www.tapeacall.com) for iPhone, which can record incoming and outgoing calls, including calls you're already on. It isn't free, however – you need to sign up for a paid-for monthly subscription (from £3.49) and it requires your network to support three-way calling (which not all do).

For Android, there's ACR (Another Call Recorder – bit.ly/acrecord507), which lets you capture conversations on your phone for free. We found it worked well for us in the past but users report that it is currently having problems, especially with newer versions of Android.

Google is reportedly working on a recording feature for its Android Phone app that lets you record conversations by pressing a button on the call screen. You need at least Android 9, but we don't yet know when – and in which countries – it will be made available.

DON'T LET HACKERS RECORD *YOU*

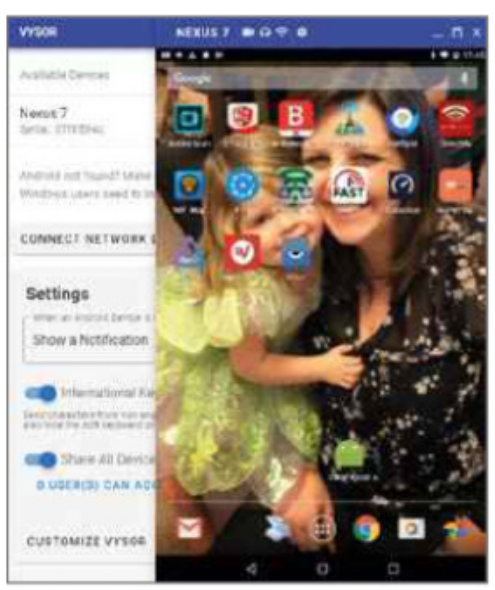
You may have read news stories about hackers gaining remote access to the cameras and microphones built into computers and phones. The problem is relatively rare, but you shouldn't be complacent, and there are some simple steps you can take to ensure it doesn't happen to you. First, avoid using dedicated apps from the likes of Skype and Zoom, and stick with the web versions instead. This will give hackers fewer ways to compromise your camera and microphone. If you do have to use an app, make sure you're running the latest version.

Next, check which apps have permission for video and microphone access. On a Windows 10 PC, go to Settings, Privacy, Camera. You can 'Turn off Camera access' altogether, or select which apps are allowed to access it. Android users can check and revoke permissions by going to Settings, Apps (or Apps & Notifications), Advanced, 'App permissions', Camera (there's also an App permissions page for the microphone). Finally, iPhone users can manage permissions under Settings, Privacy, Camera, and Settings, Privacy, Microphone.

Another simple option is to cover the camera when it's not in use with electrical tape or a piece of cardboard, or disable your webcam temporarily using the free tool Webcam On-Off (bit.ly/webcam507).

PC via USB, and enable USB debugging. The Vysor app will guide you through the process. You need to pair your phone or tablet with your computer. Once that's done, the device screen will appear mirrored on your PC and you can begin recording it using a program such as OBS Studio.

Although you can mirror and control Android video for free, the quality of the image won't be fantastic. For higher quality mirroring, plus built-in screen recording and other features, you need to upgrade to Vysor Pro for $10 (£8) a year or $40 (£31) for a lifetime licence.

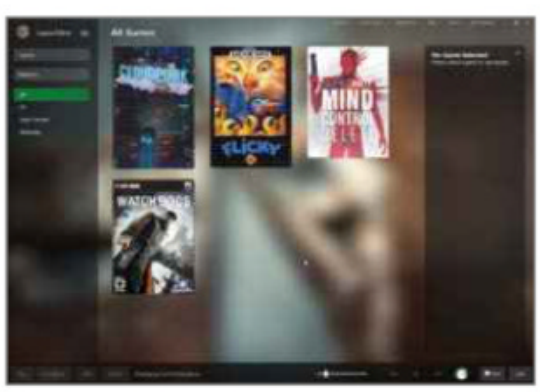


Vysor lets you mirror your Android device on your PC to capture its screen

Use LaunchBox to record any game

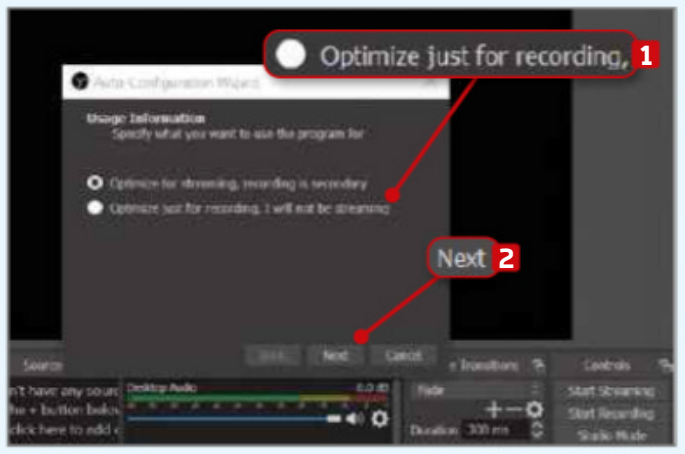
LaunchBox (launchbox-app.com) is a games manager that was originally designed to make it easier to run DOS games in Windows, but can now handle everything from modern titles to older non-PC releases using emulators. The program was recently updated to version 11 (we featured it in last issue's Best Free Software) and introduces optional OBS Studio integration. This lets you record gameplay videos and associate multiple recordings (and screenshots) with each game.

YouTube has many examples of this type of video, so if you're really good at a particular game, why not show off your skills to the world?

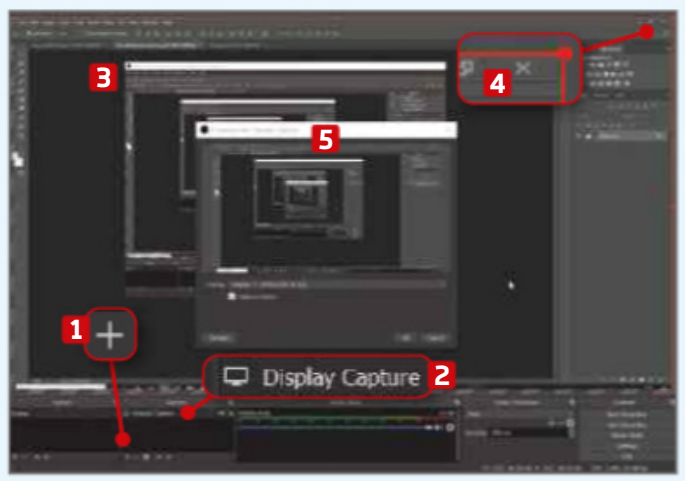


LaunchBox now features OBS Studio Integration for recording gameplay

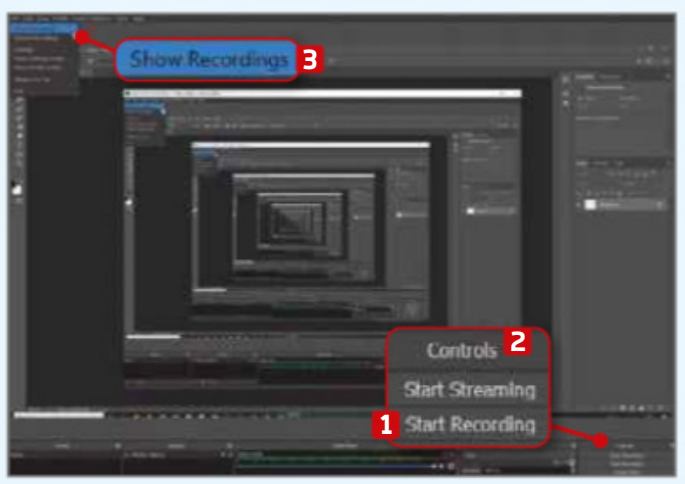
MINI WORKSHOP
Record video from your desktop using OBS Studio



1 When you first run OBS Studio, you have the option to run the Auto-Configuration Wizard. Select 'Optimise just for recording', 1 click Next 2 and select your preferred resolution and frames per second (FPS). The default choices should be fine. Click Apply Settings and you're ready to begin.



2 Click the plus sign at the bottom of the window 1 and select Display Capture. 2 A preview of your screen appears in the background. 3 Resize this using the red handles. 4 The Properties box 5 lets you select a screen to record (if you have multiple) and toggle cursor capture. Click OK to continue.



3 Configure any other settings you require, including adding more sources such as images or a webcam. Click the Start Recording button. 1 You can pause and resume at any time. 2 Minimise OBS, and carry out the actions you want to record on your screen. When done, stop the recording, and go to File, Show Recordings 3 to view it.

CREATE VIDEOS TO SHARE ONLINE

Perfect your videos before sharing

Creating viral videos for YouTube, TikTok and other services isn't as easy as it might appear. Simply uploading a video as it was shot on your phone may attract views – depending on the topic and the heading – but it's more likely to vanish in a sea of similar content. There are various ways to make your video creations stand out, whether they're simple chats to camera or more sophisticated podcasts and presentations.

Invest in a clamp lamp to ensure that videos you capture are properly lit

While most decent smartphones will produce HD or 4K video, you might want to invest in a better microphone and a tripod (or selfie stick) to hold your phone/camera steady. If you're going to be shooting indoors, then you'll definitely need some quality lighting. Clamp lamps are perfect, versatile and affordable, and can be mounted in various ways.

Video-editing software can trim out boring bits and apply cuts, effects, filters and transitions. A lot of people watch videos on their phones without the sound on. To make sure you don't lose them, you need to add overlaid text or closed captions so viewers can understand what they are seeing without sound. You can add these as part of the editing process – or, if uploading to Facebook, use the social network's auto-captioning feature.

Finally, take some time to watch videos that have successfully found an audience to see if they are using any tricks that you can borrow and employ in your own videos.

Record yourself on your webcam

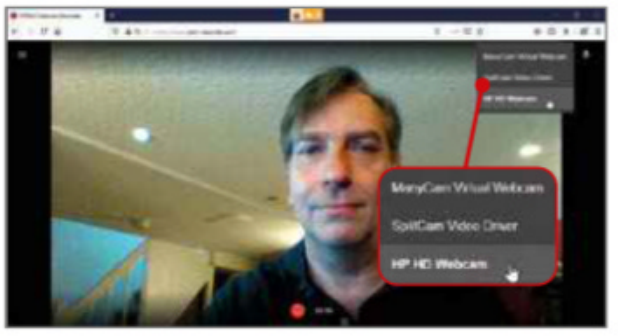
If your laptop (or desktop) has a good-quality webcam, you can use this to record yourself. Windows 10 comes with a built-in app for this purpose called Camera. Type `camera` into the Windows search box and press Enter to open it. It should find and launch your webcam automatically. Get yourself ready and make any available adjustments to the video quality, then click the video button to start recording. Your finished video will be saved to your PC's camera roll (unless you've changed this in Settings).

The Windows Camera app makes it easy to record yourself using your webcam

Even if Camera is too basic, you don't need to install anything to record your webcam because there are browser-based tools for the job. Cam Recorder (www.cam-recorder.com) is one of the best choices – unlike some alternatives, it doesn't require you to pay to remove annoying limitations, and is entirely free.

Grant the app permission to access your camera, click the red Record button to begin, then click Stop when you're done. Your video is only ever stored locally – not in the cloud – which is good news if you're worried about privacy. You can save it for offline editing or upload it to YouTube for editing and/or sharing there. Icons at the top right let you switch to a different camera or microphone if you have more than one to choose from.

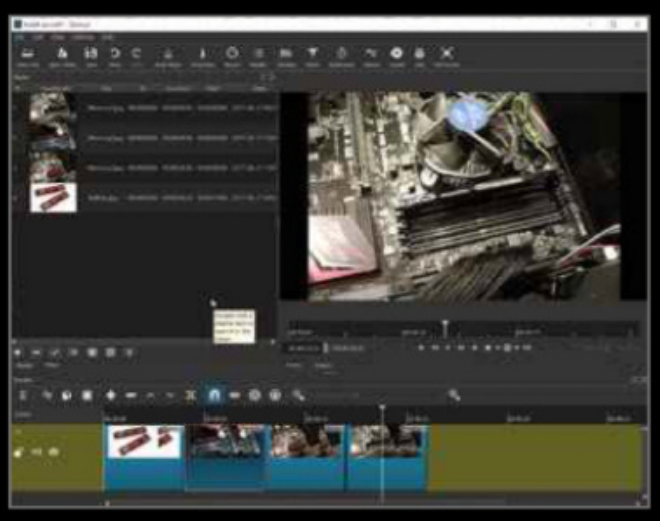
If your webcam isn't top quality but you have a good digital camera, you may be able to use that instead. Earlier in lockdown, Canon released its EOS Webcam Utility for Windows 10 (bit.ly/canon507), which converts compatible EOS and PowerShot cameras into webcams via a USB connection. Nikon has a similar tool (bit.ly/nikon507).



Alternatively, you can capture videos of yourself using online tool Cam Recorder

CREATE YOUR OWN VIDEO TUTORIALS

During lockdown, many people turned to online videos on sites such as YouTube and Facebook to learn how to perform DIY tasks, cut their own hair or master cooking skills. If you are particularly good at something, and want to share your knowledge and ability with others, there's nothing to stop you creating your own tutorials. As we've discussed elsewhere on this page, you'll need some good-quality equipment – a microphone, some way of keeping your camera or phone steady and decent lighting. Captions and text overlays are essential here, too.



Shotcut is a superb free tool for creating and editing video tutorials and podcasts

If you intend to record on-screen activity for your tutorial, then the aforementioned OBS Studio is ideal, but if you're going to be filming a video and then editing it, we'd recommend the free, open-source program Shotcut (shotcut.org). It's available for Windows, macOS and Linux, can handle all the main media formats and even supports 4K video. You can import content directly from a webcam, and capture audio separately as well. All the editing is done on a multi-track timeline and there are loads of effects, filters and transitions on offer.

Capture short looping videos

If you spend a lot of time on Instagram (or Facebook), you've no doubt encountered those short looping clips in the social network's Stories section, where the video plays forwards and backwards over and over again. Creating them is easier than you might imagine because all you need is Boomerang. There are separate apps for Android (bit.ly/boomand507) and iOS (bit.ly/boomios507) and it's also an option in Instagram's camera.

Create short looping features using Instagram's built-in Boomerang feature

The way Boomerang works is very straightforward – find something interesting that's moving, press the camera button and Boomerang will record a burst of 10 images and animate them. You can use the front or back camera on your device, and the app was recently updated with new features and three effects – Slowmo, Echo (adds a motion blur) and Duo (adds a glitchy fast-rewind effect). Creating Boomerang videos is great fun and more than a little addictive!

Turn your pictures into videos

There are lots of free tools you can use – on your computer, phone or tablet – to turn photos into videos, complete with audio, transitions and effects. Animoto (animoto.com) is one of the best online choices. All you have to do is pick a template or start from scratch, upload some images and select some music to go with your video – Animoto does the rest. If you're not happy with the results, you can remix them or start again.

Turn your photos into videos with music using the excellent online tool Animoto

YouTube's Video Builder (bit.ly/vidbuild502) is a good choice for PC or Mac owners, particularly if you're a business user and want to advertise your company. It offers a small selection of free, customisable layouts.

If you have an iPhone or iPad, then MuseWorks' VidLab (bit.ly/vidlab507) is an excellent multi-track, multi-clip video editor that can put together professional-looking creations from videos, photos, art, music and voiceovers.

Edit videos on your phone

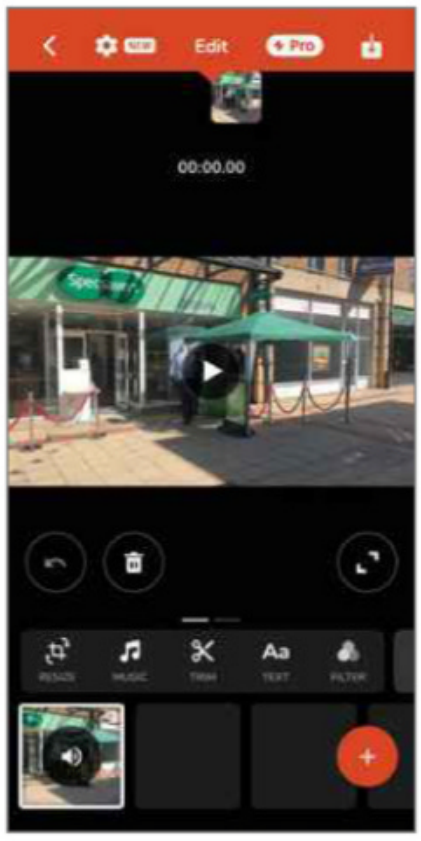
If you're shooting videos on your phone, it makes sense to edit them there, too. Your device will offer some basic editing tools, to adjust the colours, apply filters, straighten a wonky clip, rotate a video, and so on. But for proper editing, you'll need a more advanced app. If you have an iPhone, you can use Apple's iMovie app, which lets you make Hollywood-style trailers or movies with matching titles, transitions and music. There are better choices available, however.

The ad-supported Videoshop, for iPhone, iPad and Android (videoshop.net) lets you trim unwanted parts, merge clips, add sound effects and music (iOS users can import tracks from Apple Music), adjust the video speed, introduce subtitles and share the finished result with friends.

The free version of Videoshop adds a small watermark to the top-right corner, but you can remove this annoyance for £2.99. There's also a more advanced ad-free Pro version available for £3.49 a month (or a one-off payment of £84.99).

Adobe Premiere Rush (bit.ly/rush507) is an excellent video editor for both Android and iOS, but the free trial limits you three exports and 2GB of cloud storage. If you want the full thing – with unlimited exports, 100GB of cloud storage, and all features unlocked – you'll need to pay £9.98 a month or £119.21 a year.

Remember that a large video will take longer to upload, so you may want to reduce its quality. ■



Edit videos you capture on your phone using Videoshop

NEXT ISSUE on sale Wednesday 19 August 2020

FAKE YOURSELF ON THE WEB

The giveaway details you must disguise to avoid being hacked and scammed

PLUS...

CHANGE YOUR DEFAULTS
Use your optimum software and settings on any device

RETRO-GAMING WEBSITES
Where to play classic games for free in your browser

STOP TECH OVERHEATING
Keep your devices cool and healthy while it's hot outside

SUBSCRIBE TO WEB USER AT SUBSCRIBE.WEBUSER.CO.UK

Best free personal banking software

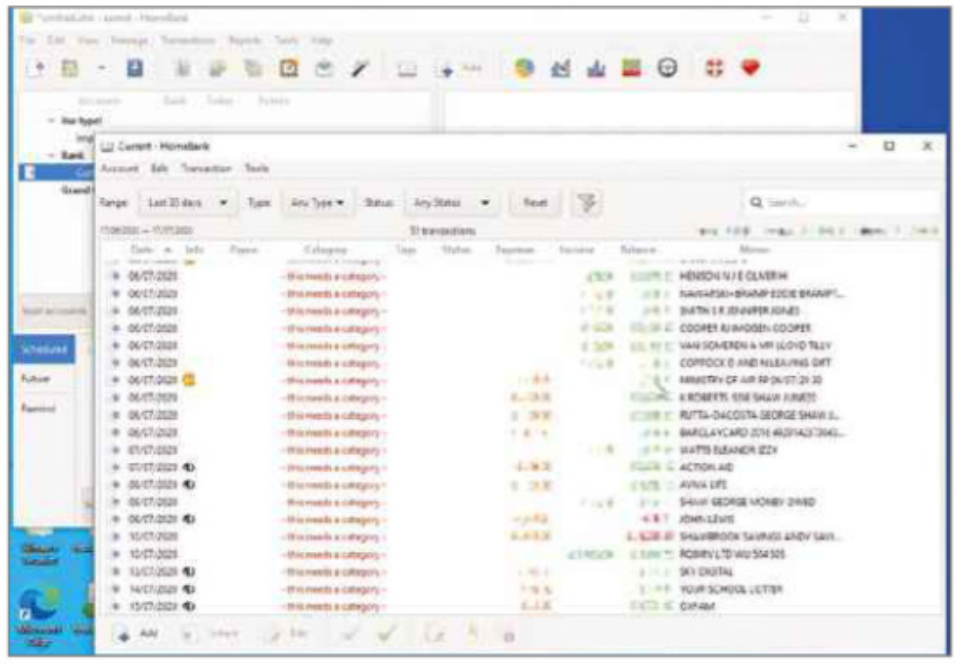
Whether your finances are in disarray or you just like to keep track of every penny, personal banking software has many benefits. **Andy Shaw** tests six free tools to help you balance the books

HomeBank | homebank.free.fr | ★★★★★

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

WebUser GOLD AWARD

What we liked: If you're running a business (small or otherwise), there are plenty of programs that help you manage your finances like a professional accountant. Thankfully, HomeBank is not one of them. You don't need to wade into accounting terminology and double-entry bookkeeping to keep an eye on your personal accounts, and HomeBank is more than enough to balance budgets, avoid unpleasant surprises and help save up for necessary expenditure.



HomeBank breaks you in gently. You set up a single account – probably your current account – and either fill in some transactions manually or download them from your bank. Of all the programs we tested, HomeBank made this process the most straightforward, smoothly allowing us to import a file from a current account and intelligently draw information from it. It recognised codes for items such as Direct Debits and uses icons to highlight them.

It also knew the difference between income and expense without needing it spelled out. That might sound like an obvious requirement, but not all the software we reviewed managed it.

Once you've got your first account under control, you can add more, making connections between them to help you manage how money flows into your savings and investments.

The software provides a very basic reconciliation tool for checking that your statements line up with expectations. Dig a little deeper, however, and you'll find tools for managing a budget, seeing where your money goes and generally keeping an eye on your cash.

How it can be improved: HomeBank exposes its open-source roots with its interface, which has a decidedly Linux feel to it, particularly when it comes to loading and saving files. This can be a bit off-putting if you're expecting a more familiar Windows look.

We also wish the reconciliation tool was a bit more sophisticated because we couldn't find a way to enter a balance that we could reconcile our accounts with.

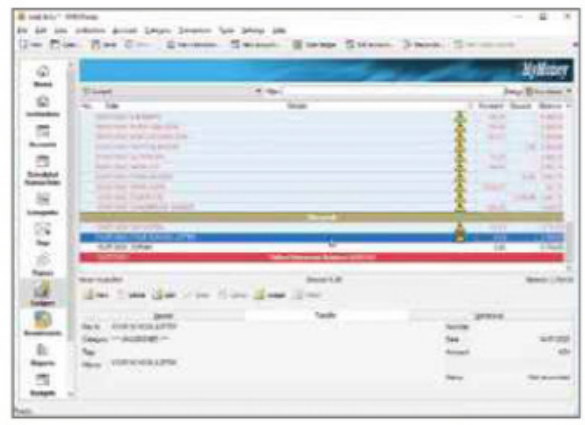
OUR VERDICT

HomeBank gets the balance of personal banking just right. It has handy tools for making the most of your money but doesn't needlessly mire you in the murky world of small-business accounting. It's easy to import information about your accounts to get you started, and its clear, useful tools can help you manage and balance your budgets.

KMyMoney | kmymoney.org | ★★★★☆

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

What we liked:



KMyMoney has a reasonably intuitive interface, with a wizard to help get your accounts set up and an import tool that accepted our bank's OPX file without too many problems.

The main screen looks rather like a web-page home screen, with a summary of your wealth (or otherwise), and account names you can click to view more detail. Scroll down to get forecasts, charts, summaries of cash flow and a host of further information. The language is a bit too close to accountant-speak for our liking ("liquid assets" and "cash flow") but it's certainly thorough.

The left-hand column contains a menu of icons that take you to a range of reports and payees. Behind all this, the software is thorough and consistent. We liked, for example, that you can give a payee a category so that any future transactions are automatically assigned to it.

How it can be improved:

Before you go through and categorise your transactions, your accounts are highlighted with warning triangles and red writing, which makes your bank account look in worse shape than it probably is.

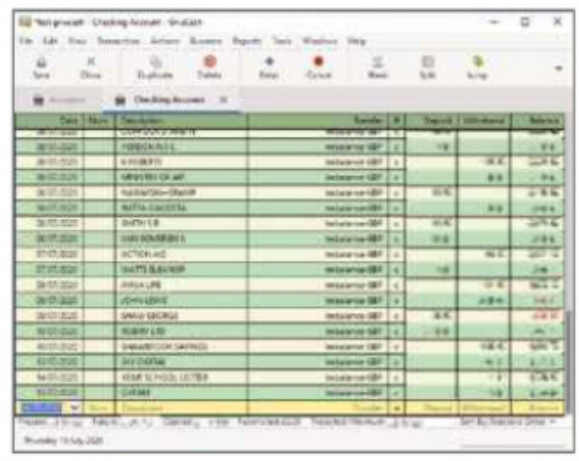
OUR VERDICT

There's some solid accounting software running behind KMyMoney's facade but the interface is initially unfriendly and has far more upfront detail than most people need. If you want to delve deeper into your accounts, however, and aren't afraid of a bit of financial jargon, it's worth a look.

GnuCash | gnucash.org | ★★★☆☆

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

What we liked:



GnuCash starts by giving you the option of creating a new set of accounts manually or importing QIF files from your bank. This is a little misleading because the Import option in the File menu lets you import files in a variety of formats, not just QIFs, which may not be the format your bank uses.

Once you've set up an account in the system, you get a statement-like view that keeps a tally of how much money you have and where it's come from. You can create as many accounts as you like and, of course, if you make real life transfers from one to another, you can reflect the changes in the accounts using the software.

GnuCash's software is geared towards much more than basic home accounts. To that end, it provides advanced tools, including a database for keeping essential information on customers, and can help you create invoices.

How it can be improved:

If your only requirement from a banking program is to balance your accounts and budget to save up for a new car, for example, GnuCash's advanced tools are overkill and may only end up confusing you.

OUR VERDICT

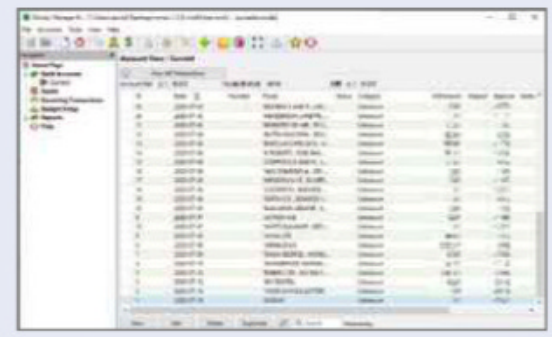
GnuCash is a capable tool for home banking, but its broader remit is to manage the accounts of a small business, which it does very well. However, it's a bit too busy for the basic task of controlling the family purse strings.

BEST OF THE REST

Money Manager EX

www.moneymanagerex.org

Setting up Money Manager EX is a bit more complicated than its rivals. The tools for importing data are sophisticated and it has a powerful option for bringing in CSV files, which should make it open to files from any bank. However, the program takes a bit of configuring and we couldn't get it to recognise the difference between money coming in and going out, which is a significant problem when you're trying to balance the books.



Firefly III

www.firefly-iii.org

Firefly is a self-hosted online service, so if you've got somewhere to host it, it can provide you with access to your accounts wherever you are. The downside is that, if Firefly knows where to find this data, someone else could access it, too. It also needs hosting know-how to install, so it's an interesting idea but a bit too complicated compared to its simpler, PC-based rivals.

Microsoft Money Plus Sunset Deluxe

bit.ly/msmoney507

Microsoft Money was the go-to personal-finance manager until it was discontinued in 2008. Even this last hurrah – designed to help you access files that would otherwise be locked by the original software – hasn't been updated since 2010.

A decade later, it's definitely time to move on.

MASTER YOUR USER PROFILES

Want to share your accounts with loved ones, without compromising your privacy? **Jane Hoskyn** reveals how to spread the cost legally and safely by setting up user profiles

Give family members their own Prime Video watchlist

It's an open secret that many of us share our Amazon Prime accounts with friends and family to help spread the cost. It's a great idea, but not without its downsides because your account sharers can mess up your Prime Video watchlist, change settings such as subtitles and – worse – move your viewing position so you can't pick up where you left off.

So we're delighted that Amazon has finally introduced user profiles to Prime Video to avoid these hassles. You can now split one account into up to six 'profiles', each with its own separate viewing progress, settings and lists. The profiles are effectively free additional accounts.

To get set up, go to Prime Video in your browser and click 'Who's Watching?' (this appears under My Stuff in the app, bit.ly/prime507). You'll appear by default as the account holder. Click 'Add new' to create a separate new profile for, say, your spouse. You can then switch between profiles with one click in the same menu. The 'Kid's profile' option limits content to shows and films suitable for under-12s and doesn't allow purchases, so it's useful for when the grandchildren are over. Find out more at bit.ly/profiles507.

Give friends and family their own personal space in your Prime Video account

Lock down your Netflix profile with a PIN

Netflix, which introduced profiles seven years ago, says that the feature has actually helped boost subscriber numbers (bit.ly/numbers507) rather than diluting profits by allowing too many people to divvy up their subscriptions. Perhaps that's why Amazon finally added profiles, too.

But Netflix has kept ahead by adding a new PIN protection feature, which lets you lock down your profile and prevent other account users peeking at what you've been watching. Set it up via your Account page (www.netflix.com/YourAccount). Click the dropdown arrow for your profile, select Change next to Profile Lock, enter the account password, tick 'Require a PIN', then choose your four numbers.

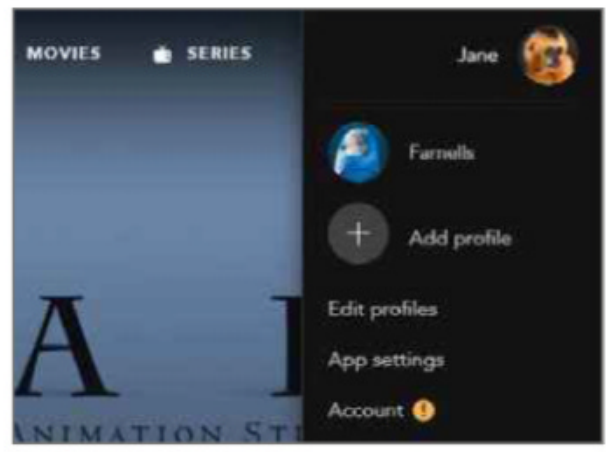
It's also worth knowing that you can switch off autoplay via the Manage Profiles page (bit.ly/manage507). Untick the two boxes to banish Netflix's irritating habit of pressing Play at every opportunity.

Add a PIN to stop your fellow Netflix account users watching what you watch

Share one Disney Plus account with six friends

Disney's streaming service (www.disneyplus.com) has ditched its free trial, but at least it lets you share that £5.99 monthly subscription with up to six other people, on four different devices. So you and six friends could buy a single subscription and all watch *Hamilton* and *The Mandalorian* at your own pace, with separate watchlists, autoplay settings and viewing histories.

A particular joy of adding and editing Disney Plus profiles is the oodles of custom avatars you can use, from National Geographic monkeys to classic Disney cartoon villains. Hover over the default avatar to see the menu.

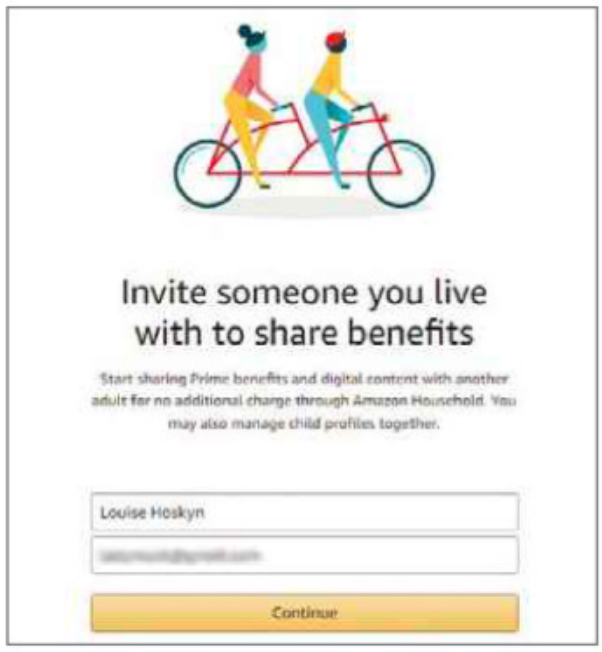


Magically turn one Disney Plus account into seven by adding up to six profiles

Share your Amazon Prime shopping perks

Amazon's new profiles feature is just for Prime Video, but you can create a similar setup for your Prime shopping using the little-known Amazon Household tool (bit.ly/house507).

Household lets you choose one other adult – who doesn't have to be at the



Invite one other person to share your Amazon Prime shopping benefits

same address – to be your Prime account partner. You only pay for one account, but you both get Prime's free delivery, Prime Video and other perks such as unlimited photo storage.

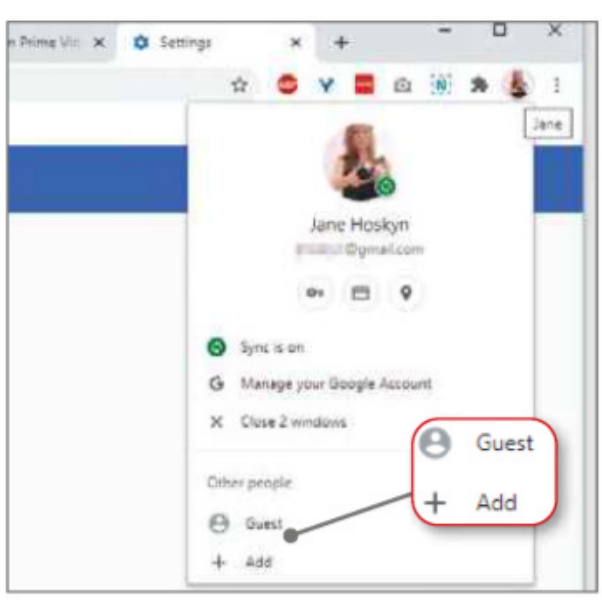
However, you don't share a payment method or see each other's purchases, because you each log into Amazon via your own separate accounts. So it's perfect for you and your wife or husband, if you don't want them seeing pressies you've bought for them (or for yourself)!

Divide Chrome into multiple personal browsers

If you live with anyone else, it's inevitable that you'll both use the same computer at least some of the time, so make sure to divide your browser using profiles. Each profile is effectively a separate browser, with its own passwords, history, bookmarks and preferences, and you can switch between them with a quick click of your Google profile picture in Chrome.

Separate profiles can also have separate extensions, but if you both (or all) use several similar extensions, you'll find them much easier to manage using the free Chrome add-on 'Extension Manager with Profiles' (bit.ly/exman507).

Chromebooks can be split into profiles, too. On the sign-in screen, click 'Add person', enter their Google Account credentials, then follow the steps. Chrome and Chromebooks also have a Guest option – 'Guest' users can't change settings or add bookmarks, and their history isn't saved. It's a handy way to let a friend use your computer without having to sign into their Google account.



Share Chrome without giving others access to your history and bookmarks

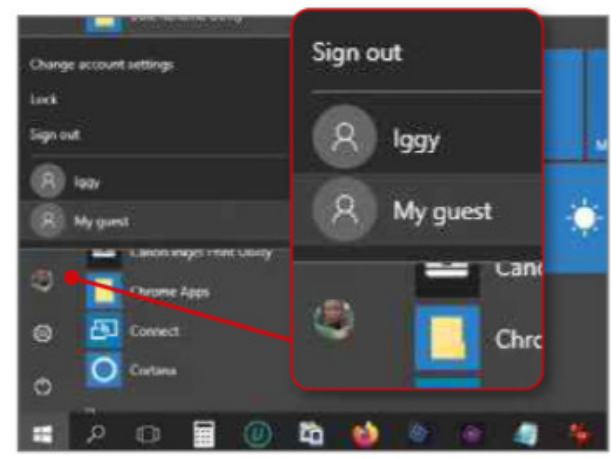
Discover Firefox's hidden Profiles Manager

Firefox lets you create profiles – not just for different people, but for different versions of the browser. For example you could have one profile for you, one for your sister and one for the beta version Firefox Nightly. To open the Create Profile Wizard, type `about:profiles` in the Firefox address bar, then click 'Create a New Profile'. Alternatively, launch the even-more-hidden Profiles Manager by pressing the Windows key, typing `firefox.exe -p` then pressing Enter. The Profiles Manager lets you disable Firefox's annoying habit of prompting you to choose a profile every time you open the browser.

Firefox's hidden setting lets you switch between user profiles and browser builds

Set up a private 'guest room' on your PC

Creating a guest space in Windows 10 lets someone else share your PC without giving them access to your files or settings. Go to Settings, Accounts, 'Family & other people', then 'Add someone else to this PC', and enter their Microsoft account info. Or, to avoid the Microsoft sign-in, click 'I don't have this person's sign-in information', then 'Add a user without a Microsoft account'. Give the new account a name (such as 'My guest') and password, which your guest will need to log in. To switch between accounts, click your profile picture in the Start menu, then select the account you want to switch to. ■



Switch securely between each computer user's own private space in Windows 10

SET UP PROFILES ON YOUR PHONE

If your Android tablet or phone supports profiles, you'll see a person icon at the bottom-right of the Quick Settings panel (swipe down twice). Tap it to see Guest and 'Add new' options.

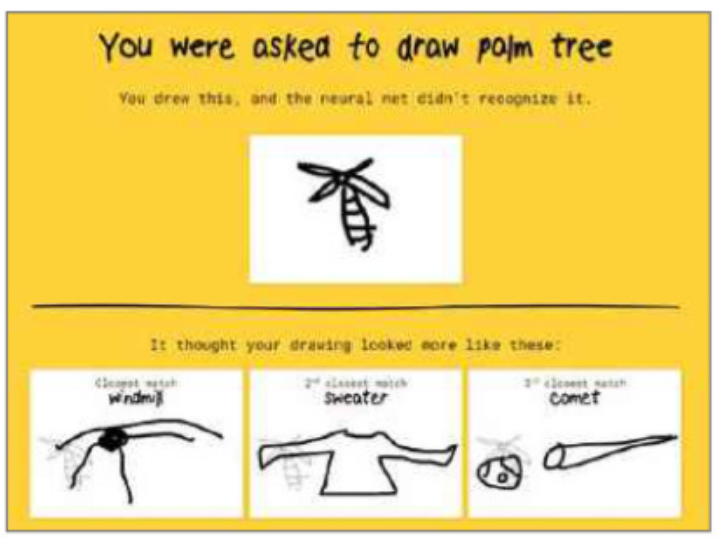
Apple iPhones and iPads don't support profiles at all (unless you're a school: bit.ly/shared507), but you can share your device's calendar, photo albums, App Store purchases and iTunes library with loved ones – without having to give them your Apple ID – by setting up Family Sharing, which you'll find under iCloud in Settings. Just be aware that all purchases under Family Sharing are billed to the person who set it up!

AI experiments you can try online

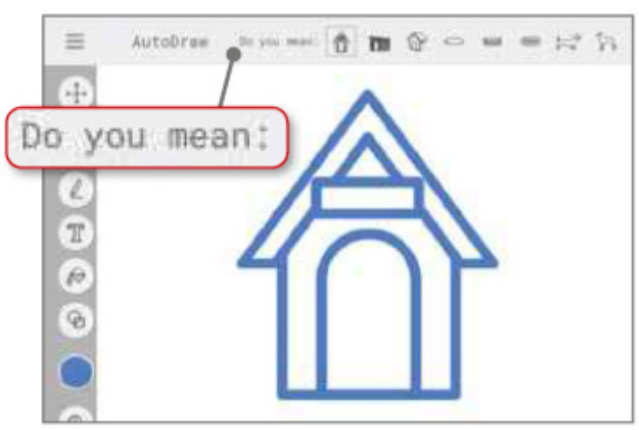
Machine learning and neural networks may sound techy and dull, but they can actually prove lots of fun. We round up the best free examples that can be run in your browser

Get AI to guess your doodles

Quick, Draw (quickdraw.withgoogle.com) was one of Google's first public AI experiments and, even after three years, we still love playing this neural-network-powered game. It gives you 20 seconds to doodle different things using your mouse, then tries to identify them. There are six rounds in each game, and challenges include drawing a crocodile, palm tree and pizza, with the site guessing as you scribble. Doodles are added to Google's dataset of more than 50 million, to improve the accuracy of the AI, and you can view other people's attempts at drawing the same items.



Similar but more flexible is AutoDraw (autodraw.com), which guesses what you're sketching with your mouse (or your finger on a touchscreen), then replaces your amateur doodles with professional-looking alternatives. Just choose the one that best matches your squiggles from the selection above the drawing pad.

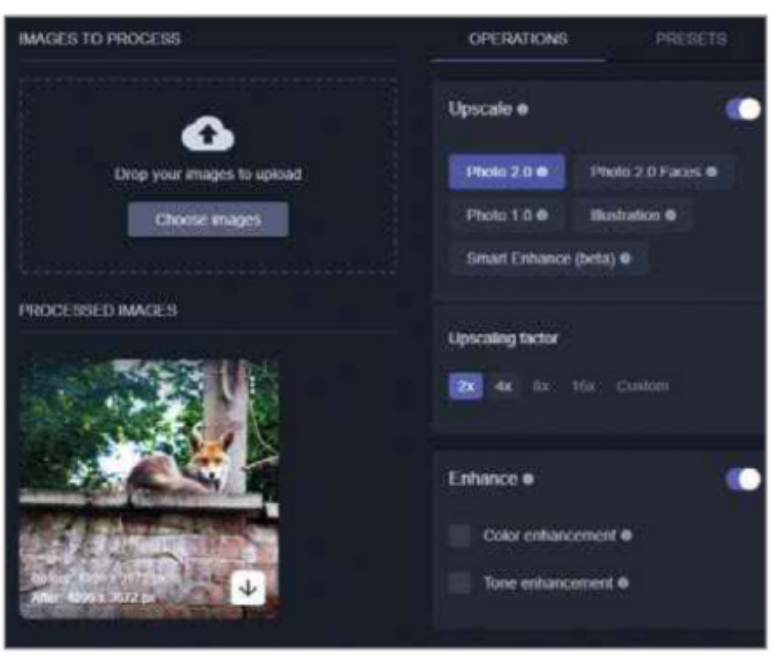


For further artistic fun, Magic Sketchpad (bit.ly/sketch507) asks you to draw an animal or object from its category list, then uses its AI wizardy to complete your virtual pen strokes and create a collaborative picture.

Edit and enhance photos using AI

Why bother using an image editor to improve the quality of your photos, when artificial intelligence can do the hard work for you? Let's Enhance (letsenhance.io) uses neural networks to 'upscale' the resolution of your pictures by four times, producing results that are noticeably sharper, and fixes problems with colour and tone. It offers separate options for photos of faces and those of architecture, nature and crowds, as well as presets for optimising print quality. There's also a new Smart Enhance tool that removes blur and blemishes, and restores natural skin and hair texture.

You need to sign up for an account to use Let's Enhance, which lets you upload, improve and save five photos for free. Paid-for plans cost from $9 (£7.20) a month. Note that images can take a few minutes to process.

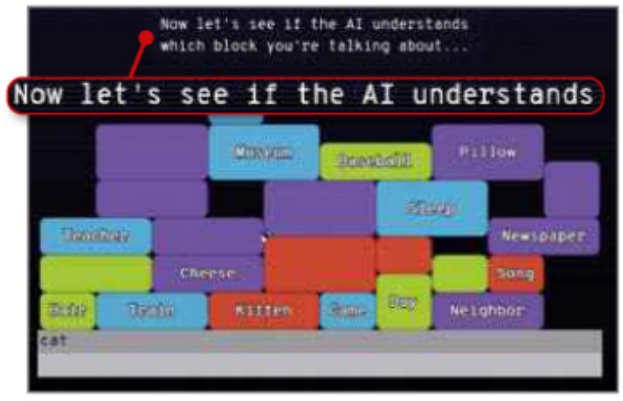


Equally impressive is Remove.bg (remove.bg), which uses AI to automatically identify the subject of a photo and strip away everything else, so you can place it against a different background. You can download one high-quality image and 50 previews (of up to 0.25 megapixels) per month, or purchase credits from 18p each.

Play text-based online games against AI

Classic text-based adventure games such as Zork relied on a limited range of commands and scenarios, but AI Dungeon (play.aidungeon.io) promises "a world of endless possibilities, where you can do absolutely anything you can imagine". Choose from settings including fantasy, mystery and apocalyptic, and characters such as noble, wizard or rogue, to generate a story, then type what you want to do at each prompt. The machine-learning technology effectively makes things up as it goes along, creating a unique, absorbing experience that reacts to virtually anything you suggest. AI Dungeon is free to play and you can register with the site to save your progress.

If you fancy something livelier, Sematris (bit.ly/semantris507) is an addictive AI-powered word-association game. In its Arcade version, you're challenged to move words to the bottom of a list by typing other words related



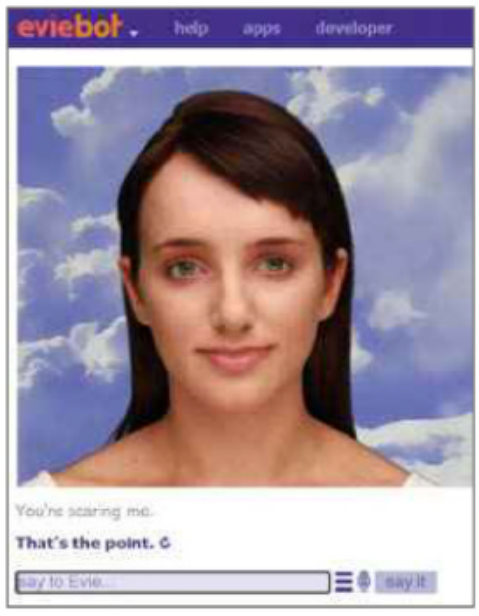
to them, while the Tetris-style Blocks option involves suggesting 'clues' to words in coloured blocks, to try and clear complete lines.

WHAT IS TENSORFLOW?

Most of the experiments and games in this feature are based on TensorFlow, a Google-developed technology that makes creating machine-learning tools for desktop, mobile and the web relatively straightforward. TensorFlow uses the programming language Python to let developers construct data-flow graphs of mathematical operations. These models, called neural networks, are composed of layers containing neurons, which can be trained to recognise patterns and abstract representations of data, and classify that data in a way that's understandable to humans. See the official TensorFlow website (tensorflow.org) for more information.

Talk to AI bots in your browser

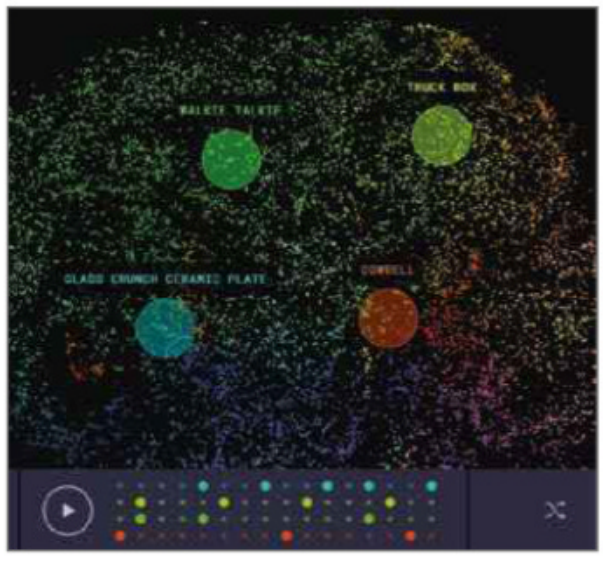
Lots of companies now use chatbots to reply to common customer queries, but if you'd prefer a more freeform and informal conversation, you can talk to a bot online. One of the most popular is Cleverbot (cleverbot.com), which uses complex coding to hold text-based chinwags with humans, responding instantly to anything you type. If the chat becomes stilted, you can use the 'think about it' and 'think for me' buttons to move things along. Cleverbot also has a 'human' face in the form of Eviebot (eviebot.com), which uses the same AI technology but lets you interact with an animated (and rather creepy) female avatar.



Among other notable examples are Elbot (elbot.com), whose chats involve "sarcasm and wit, along with a healthy dose of irony," and the impressively fluent Mitsuku (bit.ly/mitsuku507), who claims to have answers to nearly every question. There are also hundreds of bots for Facebook Messenger, including one launched in April by the World Health Organisation to answer coronavirus-related questions (bit.ly/whobot507).

Make amazing machine music

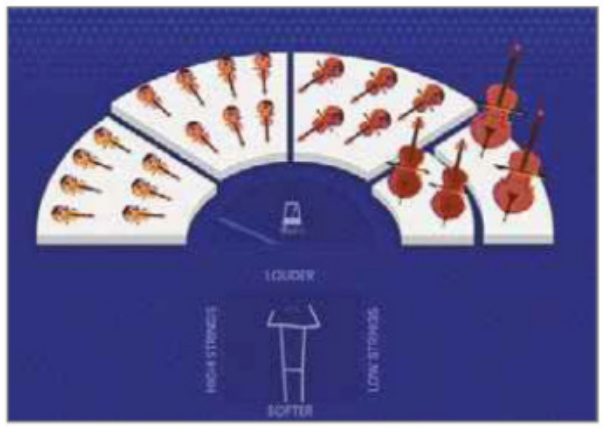
There are several clever online tools that let you create your own music by collaborating with a machine. For example, Google experiment The Infinite Drum Machine (bit.ly/drum507) offers thousands of everyday sounds that you can combine into a unique



rhythm track by dragging the four circles over the coloured dots. Click the play button to hear the result, or the intertwined arrows for a random selection.

For budding pianists, there's AI Duet (bit.ly/duet507), which invites you to play a tune by clicking the on-screen keyboard or pressing keys on your physical one, then responds to your melody with a suitable musical response. Hit another few notes and it will respond again – and, because its neural network has been trained to recognise notes, rhythm and timing, the resulting duet will stay remarkably in tune.

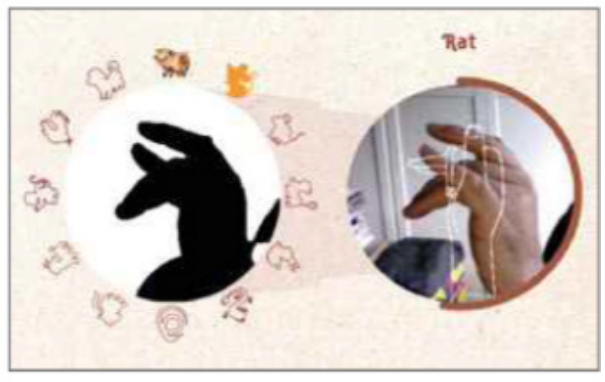
If you're feeling more adventurous, Semi-Conductor (semiconductor.withgoogle.com) lets you conduct an AI orchestra by waving your arms in front of your webcam to control the tempo, volume and instrumentation of a piece. Then there's the highly amusing Giorgio Cam (bit.ly/giorgio507), which generates song lyrics about pictures you capture with your PC's camera.



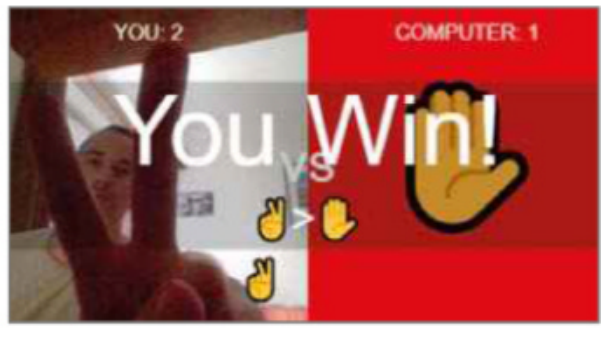
We looked at AI-generated music in our FAQ in Issue 502 (bit.ly/webuser502).

Play webcam games with your hands

Actions can speak louder than words with AI tools, and allow for ingenious new takes on traditional pastimes. Shadow Art (shadowart.withgoogle.com), for example, challenges you to make shadow puppets of the 12 signs of the Chinese Zodiac, by replicating the on-screen illustrations in front of your webcam. Once it detects that your hands have created the puppet correctly, you move on to the next animal, but you need to be quick to complete them all!



Much simpler is TensorFire's webcam version of the classic game Rock Paper Scissors (bit.ly/rock507), which you play against the machine by forming one of the titular shapes with your hand. The neural network makes its own choice simultaneously and recognises whether you've blunted, wrapped or cut it, or vice versa. If you'd rather not grant permission to your webcam, an entirely browser-based AI version of the game is available at bit.ly/paper507. ■



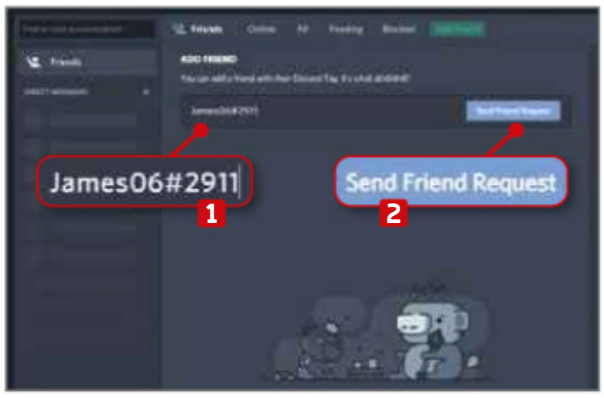
Chat to friends & family using Discord

Discord lets you create multiple chat rooms and make voice and video calls. Here's how to use it

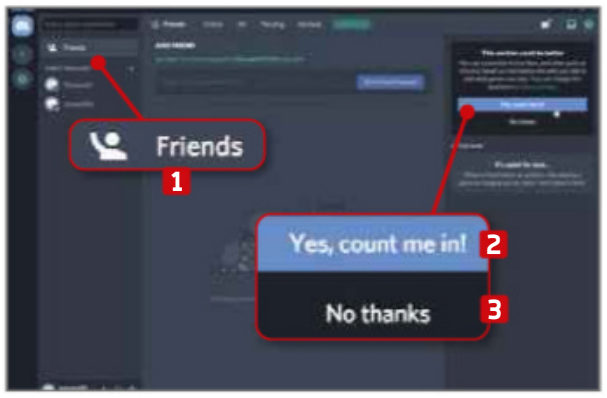
Discord: discord.com | 20 mins |
Windows 7,8,10 Android macOS, iOS, iPadOS Linux

Lockdown has led people to embrace new tools for communicating with friends and family online. While Zoom and Microsoft Teams lead the pack, the chat tool of choice for many in the gaming world is Discord. It's a brilliant communication platform – whether you're a gamer or not – and comes packed with useful features, including the ability to set up private rooms for different groups, and support for bots.

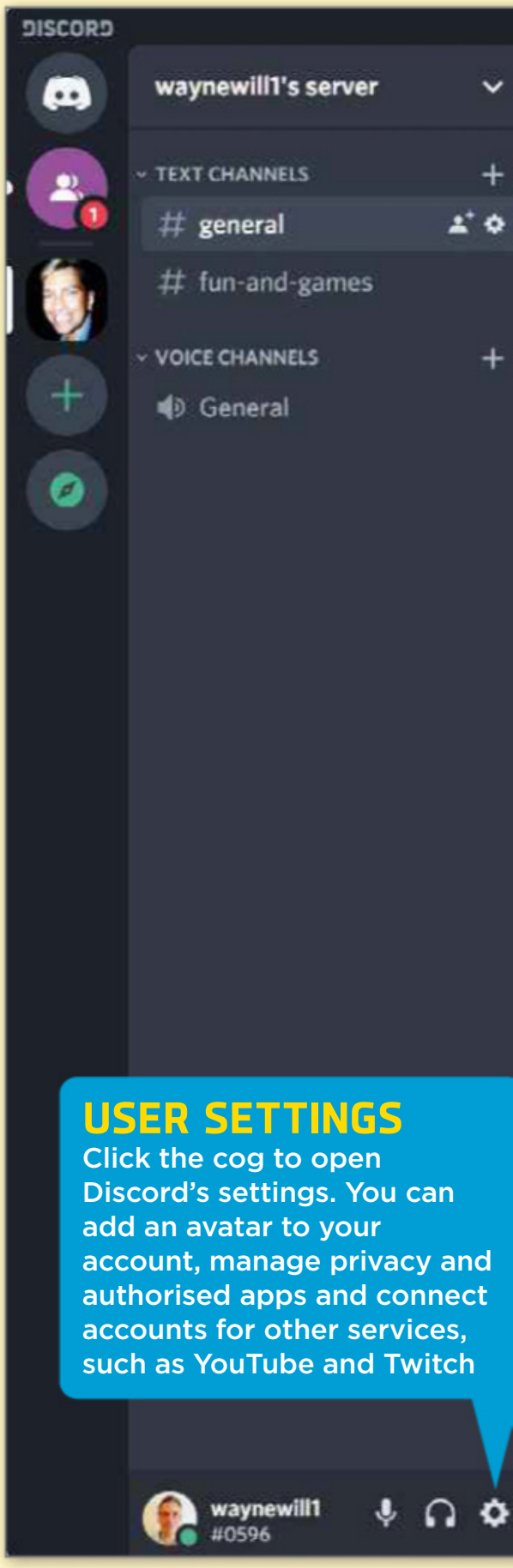
There are paid-for Nitro and Nitro Classic versions, which add more features and improved quality, for $9.99 (around £7.79) and $4.99 (£3.89) a month respectively. However, the free version is perfectly adequate for most users.



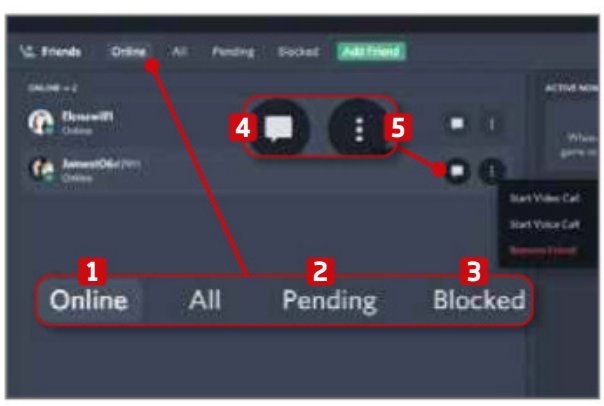
1 Start by creating a Discord account and logging in (you may be asked to verify your email address). The next step is to add some contacts. If a person you know already uses Discord, you can add them with their tag. 1 Enter this and click Send Friend Request. 2 They need to accept your request.



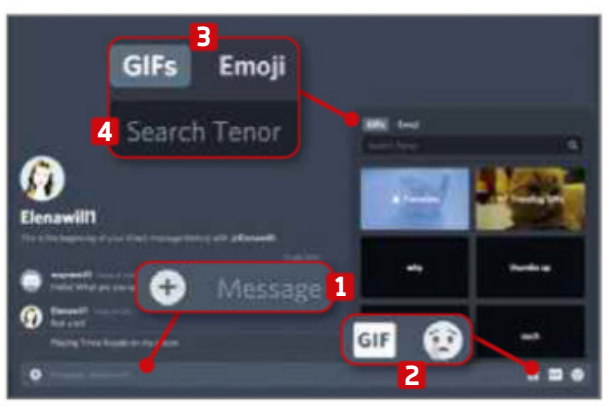
2 Friends you add are shown on the left. 1 Repeat the process to add more. The Active Now section on the right alerts you when a contact performs an action, such as voice chatting. Discord can customise this and other elements – if you want it to do this, click the Yes box, 2 otherwise click No. 3



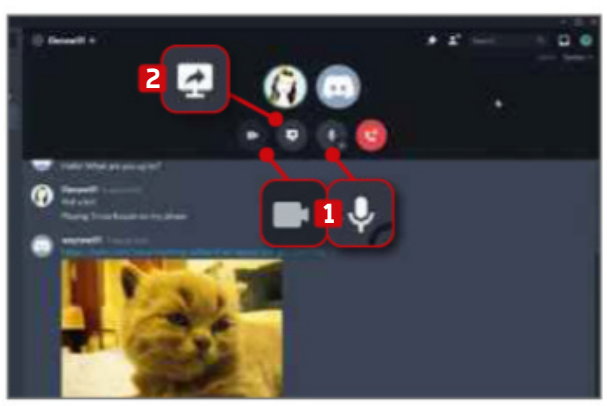
USER SETTINGS
Click the cog to open Discord's settings. You can add an avatar to your account, manage privacy and authorised apps and connect accounts for other services, such as YouTube and Twitch



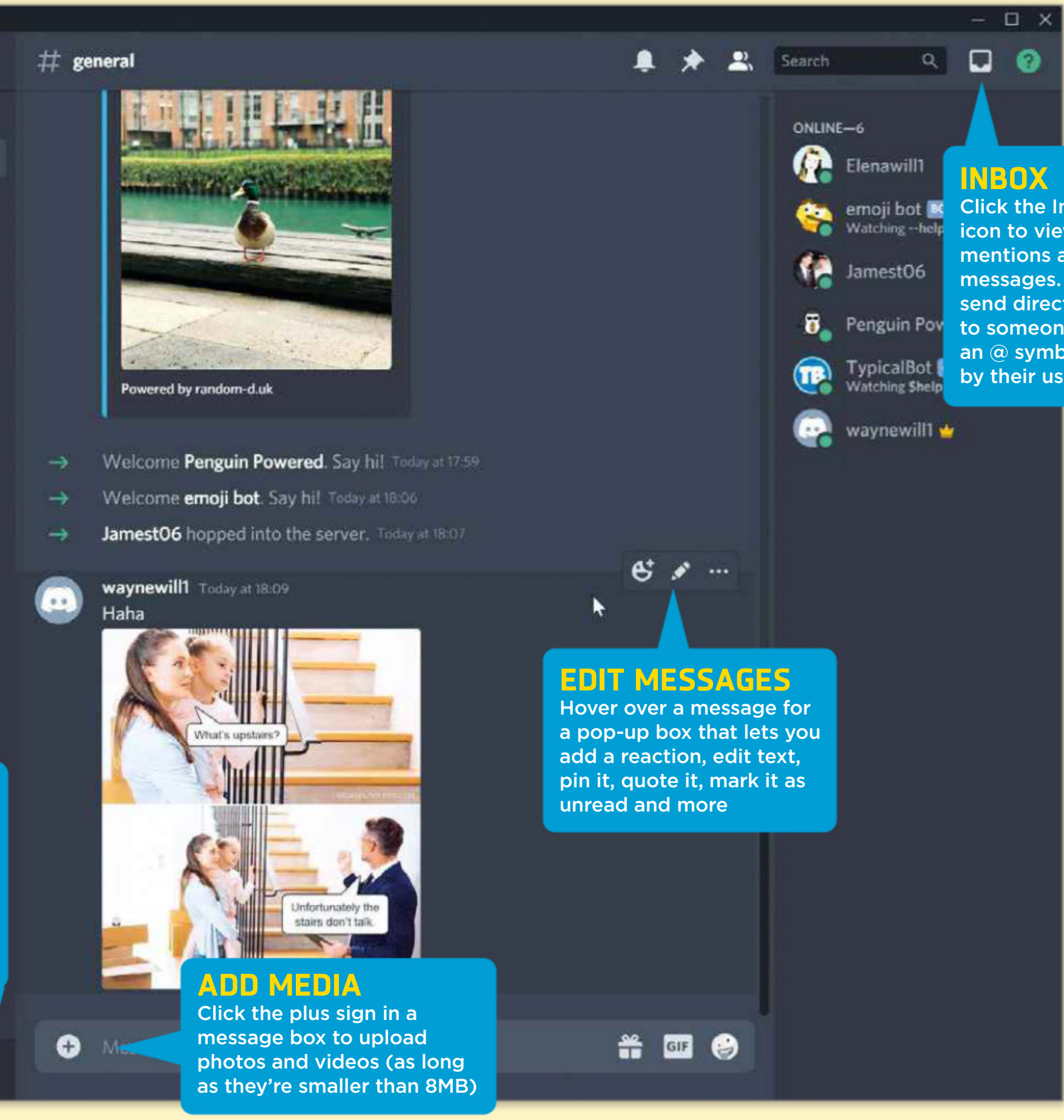
3 Use the tabs at the top to filter your list of friends to see who is currently online, 1 view any pending requests 2 and see anyone you've blocked. 3 Hover over someone's name to see their full tag. Click the speech bubble 4 to send them a message, or the three-dot button 5 to start a call.

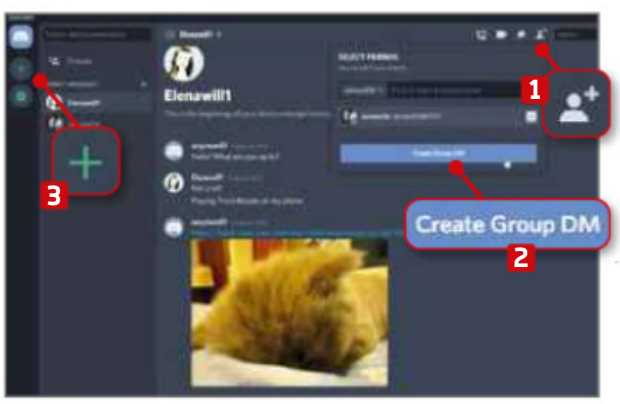


4 To begin a chat, just start typing. Messages scroll up from the bottom. 1 You can send images by clicking the GIF or Emoji buttons 2 and browsing through the available options. Use the buttons to switch between available GIFs and emoji. 3 Use the search box 4 to find the image you need.

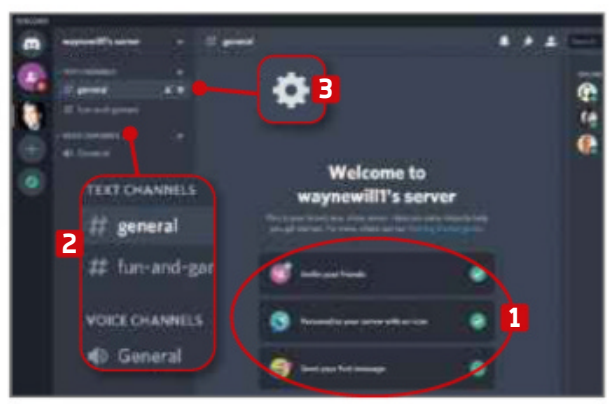


5 You can start a voice or video call at any time by choosing the option from the menu button. Once connected, you can switch between audio and video 1 and turn on Screen Share. 2 You can choose what part of the screen to share, adjust the quality and pick a frame rate.

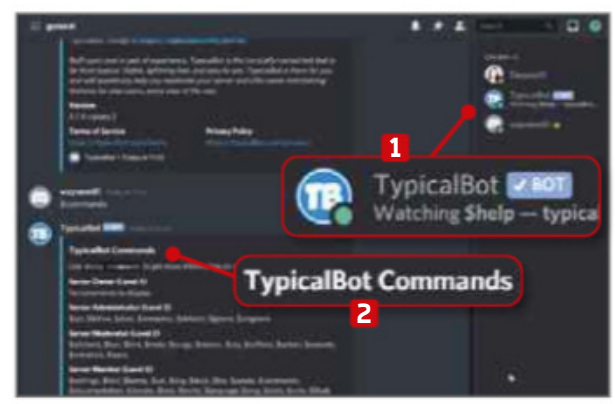




6 Start a group chat by clicking the icon, 1 selecting some contacts and clicking Create Group DM. 2 Discord also supports servers – these are home to topic-based channels. Click the 'Add a Server' button, 3 then click 'Create a server'. Name it, click Create and invite some friends.



7 Once you've created a server, you can invite people to join, personalise it with an icon and send your first message. 1 From here, you can create separate text and voice channels. 2 Clicking the cog button next to a channel 3 lets you edit it, change its name, fill in a topic and set permissions and roles for people.



8 If you have lots of people on your server, managing and moderating conversations can get messy. Discord lets you use bots to handle this and perform other tasks. Find a bot you like at top.gg, 'Invite' it and add it to your server, so it appears in the list. 1 Type `$commands` to see the commands it recognises. 2

Explore OneDrive's latest features

OneDrive: onedrive.live.com | 20 mins | Any browser

Microsoft has, over the last few weeks, introduced a number of welcome changes to its OneDrive cloud-storage platform. These are designed to make it even easier to share and collaborate on files.

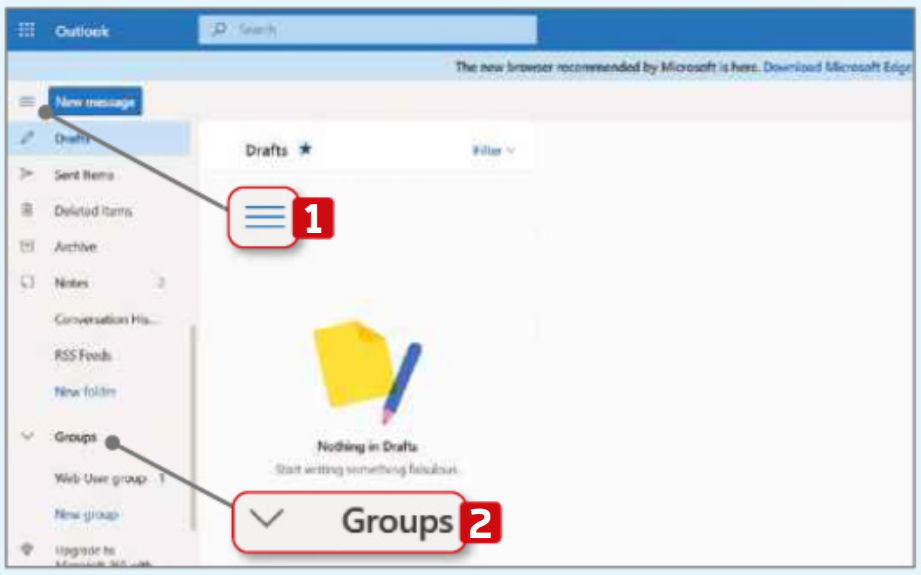
Many of the latest features are aimed at those with work or school accounts, such as Teams sharing integration, synced metadata support and streamlined admin controls. These updates are also available to home users, along with an increase in the file upload limit, from 15GB to 100GB.

The update is still rolling out, so if you don't have all the options available yet, don't worry – they're on their way. Microsoft said that most of the new features should have arrived by the end of July, with the promise of more to come.

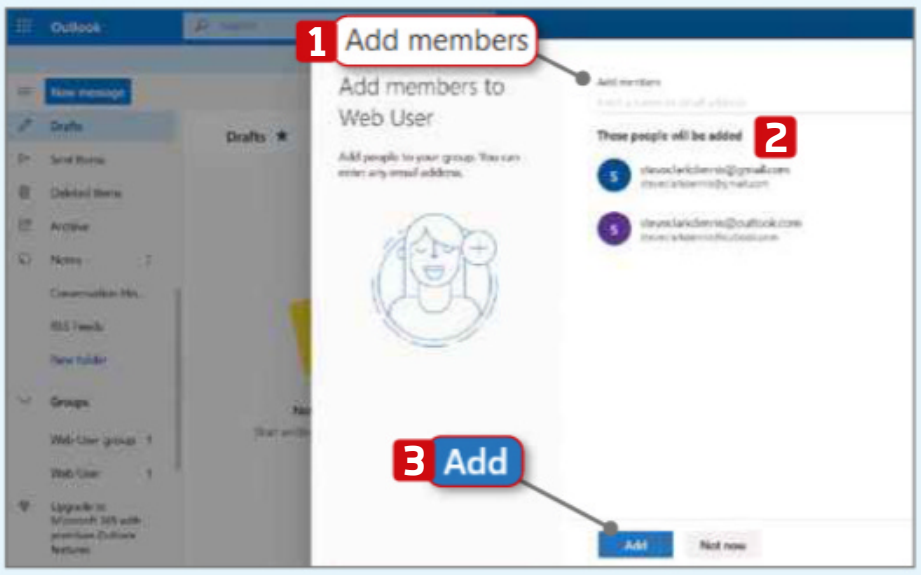
EXPERT TIP

Steve Clark says

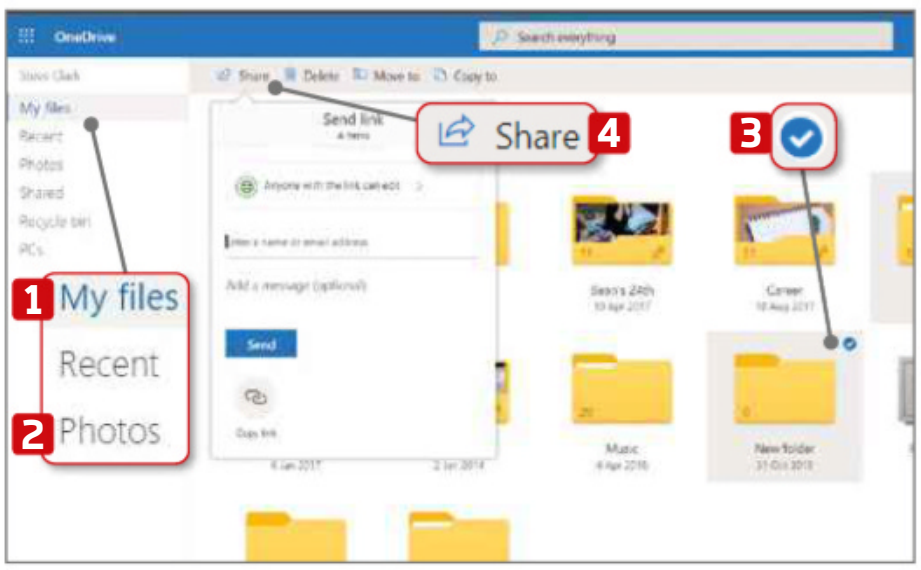
Fetch Files was a useful OneDrive tool that let you share files between multiple computers linked to a single account. Sadly, it's no longer available in this latest update – you need to use device syncing and PC folder backup instead. Make sure you're set up for this by opening settings on the OneDrive desktop app. Under Account, choose the folders you want to sync across devices and, under 'Back up', select 'Manage back up'.



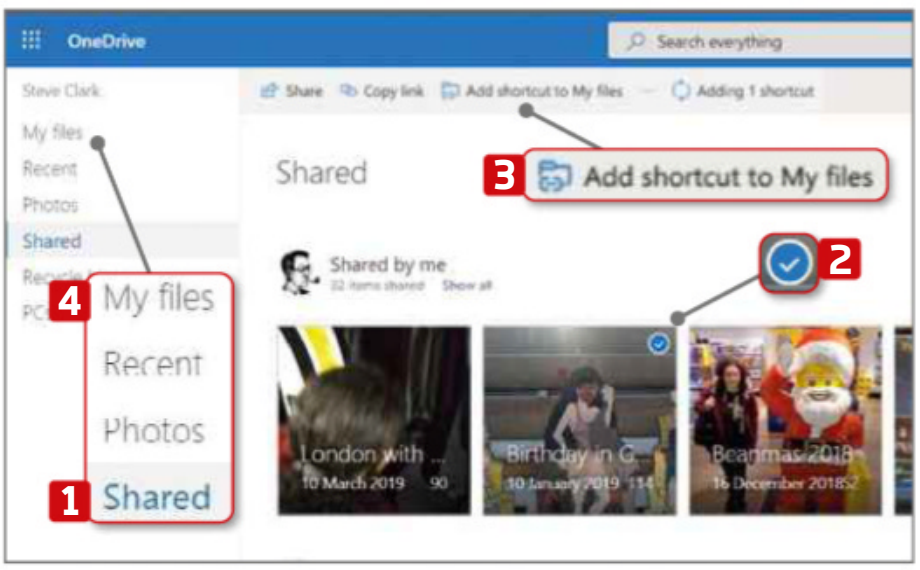
1 One of OneDrive's best new features is its ability to share files and folders with your Microsoft family and other groups. Before you can do this, you need to set them up. To set up a family, go to family.microsoft.com; for groups, head to outlook.com. Expand the left-hand pane by clicking the three-line icon 1 and scroll down to Groups. 2



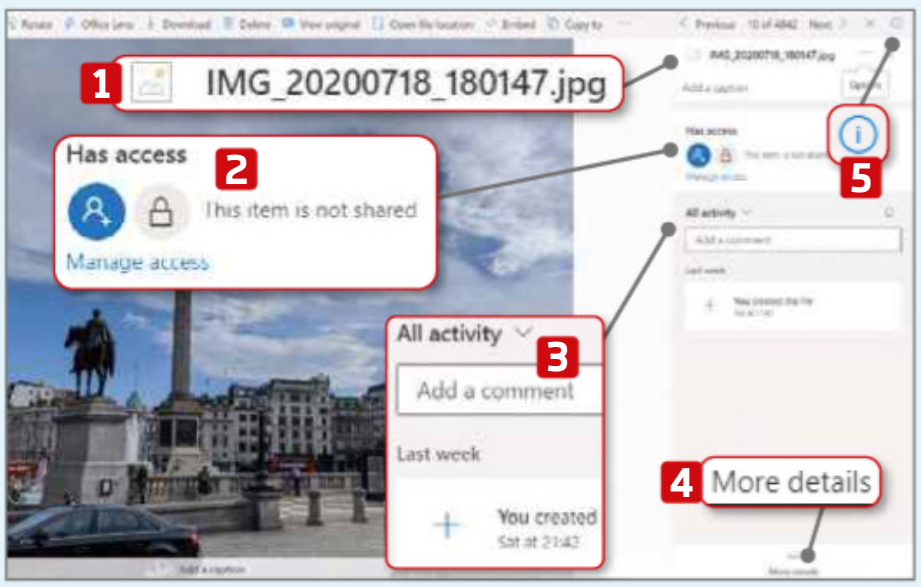
2 Click 'New group', give the group a name and description, then click Create. Place the cursor in the 'Add members' field 1 and either start typing the name or email, or use the drop-down menu. Members are displayed below. 2 Click Add 3 once you've selected all members. They need to accept your invitation before you can share with them.



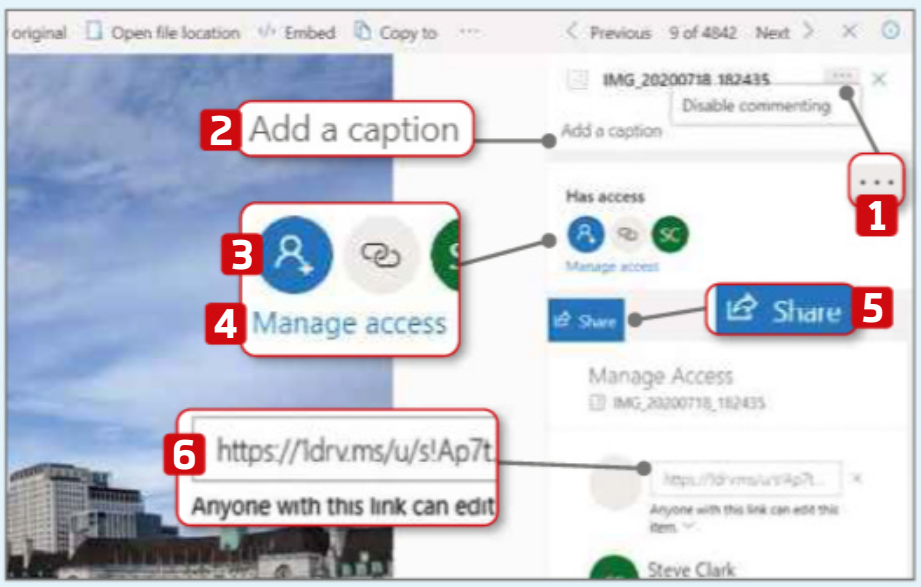
3 Go to onedrive.live.com. In the left-hand pane, choose My Files 1 or Photos, 2 then select the files or folders you want to share. 3 Click Share, 4 then start typing the name of the group or family. Choose it when it appears, then click Send. Every member of the group is notified.



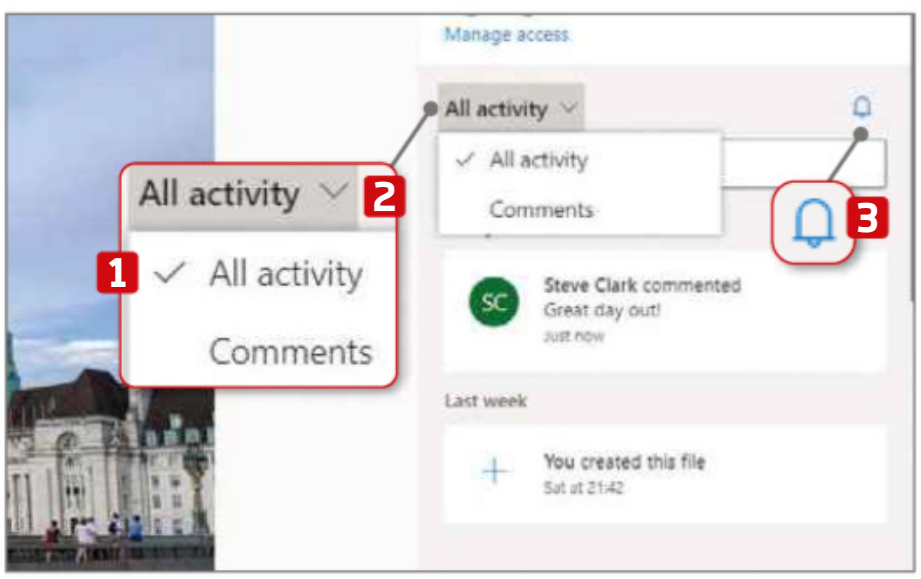
4 There's a new 'Add to OneDrive' shortcut – although, for now, it's only available for Work and School accounts. Click the Shared tab 1 and select a file or folder. 2 This presents a new option: 'Add shortcut to My Files', 3 which does precisely that in the My Files tab. 4 To undo, select the file or folder again and click 'Remove shortcut from My Files'.



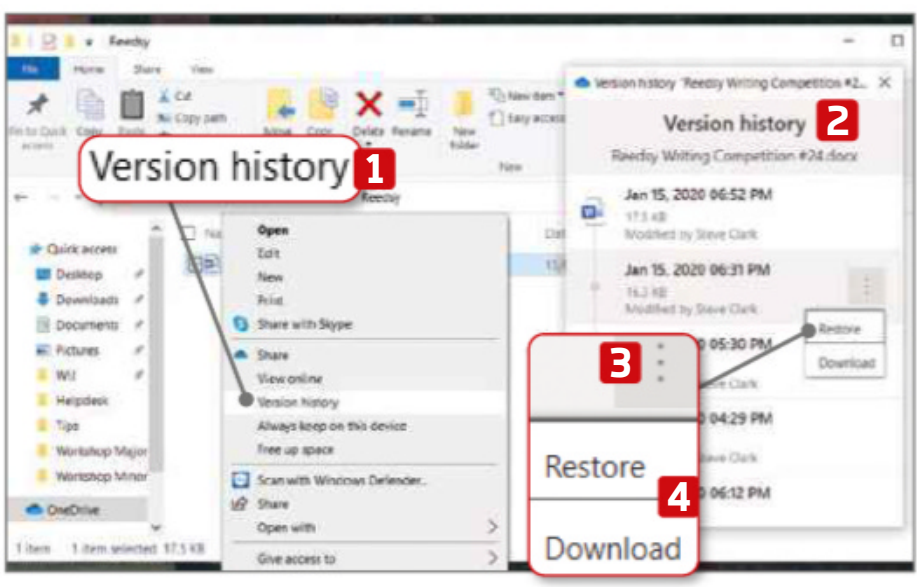
5 Introduced at the end of May, File Detail Pane lets you quickly see more information about your files. This includes a preview of the file or photo, 1 shared access status 2 and details of any activity. 3 Clicking the 'More details' button 4 displays the file's metadata. To open the File Detail Pane, open any file and click the 'i' button. 5



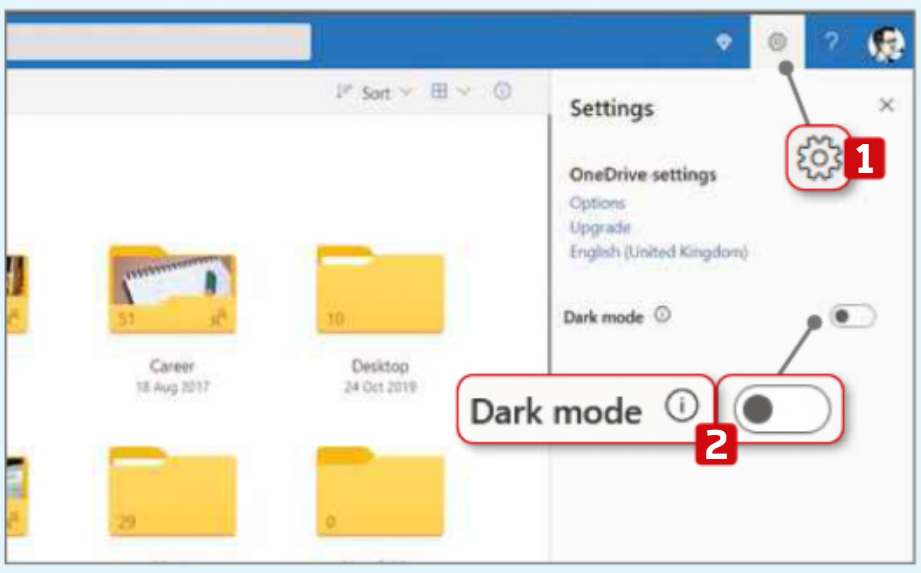
6 Clicking the three dots beside the filename 1 lets you switch off user comments. The text field beneath this is where captions can be added. 2 The 'Has access' section shows who can see the file, while clicking the blank profile photo 3 lets you add people. The 'Manage access' link 4 lets you share to more people 5 and change access type. 6



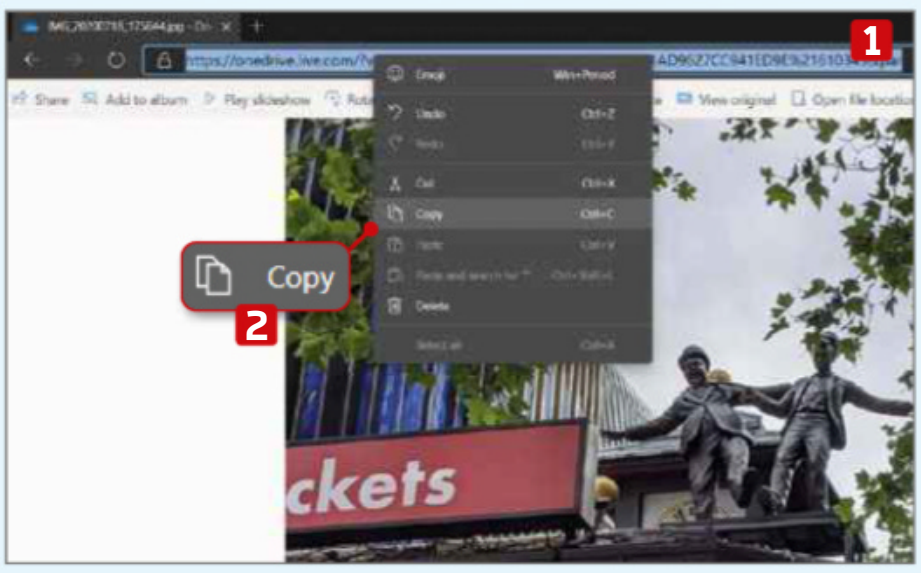
7 File Activity, a new part of the File Detail Pane, displays everything from the first file upload onwards. By default, it shows 'All activity' 1 but you can click the arrow 2 to switch to only comments, which gives files a more social media-style emphasis. Comment notifications, if active, are turned on or off via the bell icon. 3



8 The OneDrive desktop app has also received an added extra – you can now view the version history of any file. Open OneDrive in File Explorer, right-click a file and choose 'Version history'. 1 This presents a timeline displaying all changes to the document. 2 Click the three-dot button 3 to open the latest version, or restore or download 4 older versions.



9 Months after its introduction in the Android and iOS apps, OneDrive on the web is also set to get dark mode which, Microsoft says, "reduces eye strain and improves your device's battery life." It will sit in the Settings menu, as it does in Outlook.com – just click the cog icon, 1 then use the toggle switch to make the change. 2



10 Address-bar sharing, once available, will make it quicker to share. You can still open a file and share it the old-fashioned way – via an attachment or shareable link – but it's quicker and easier to place your cursor in the address bar, 1 highlight the URL and copy it. 2 This link can then be pasted to a recipient.

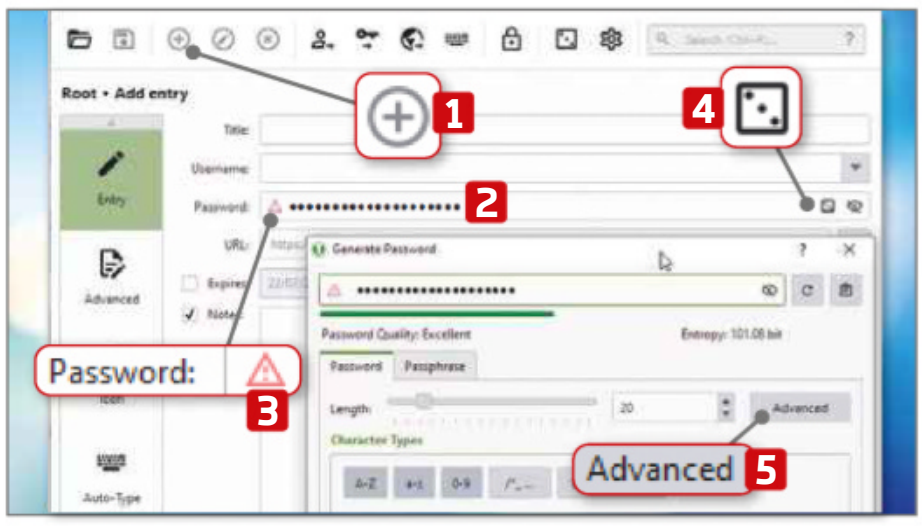
Keep passwords even safer with KeePassXC

The original KeePass software (keepass.info) spawned a number of offshoots, where developers used the code to create other software. KeePassXC is a great example. It started off as a way of making KeePass available on more platforms, but has blossomed into a brilliant password manager that takes KeePass's core tools to a new level, with a smarter interface and additional security features.

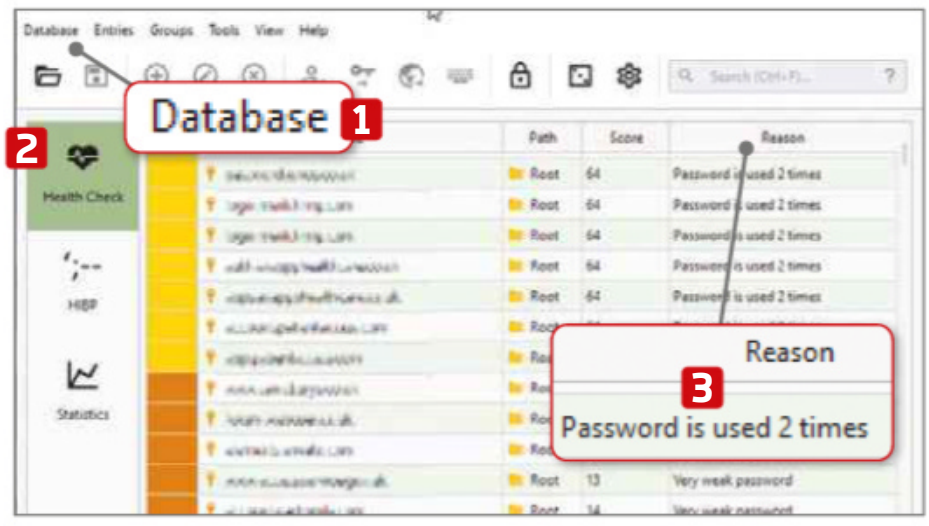
KeePassXC: keepassxc.org | **10 mins** | **7, 8, 10** **macOS 10.12+**

1 If you haven't used the KeePassXC software before, you can click 'Create new database' 1 or import your password files from elsewhere. 2 The CSV option 3 should work with anything, including a collection of passwords downloaded from a browser.

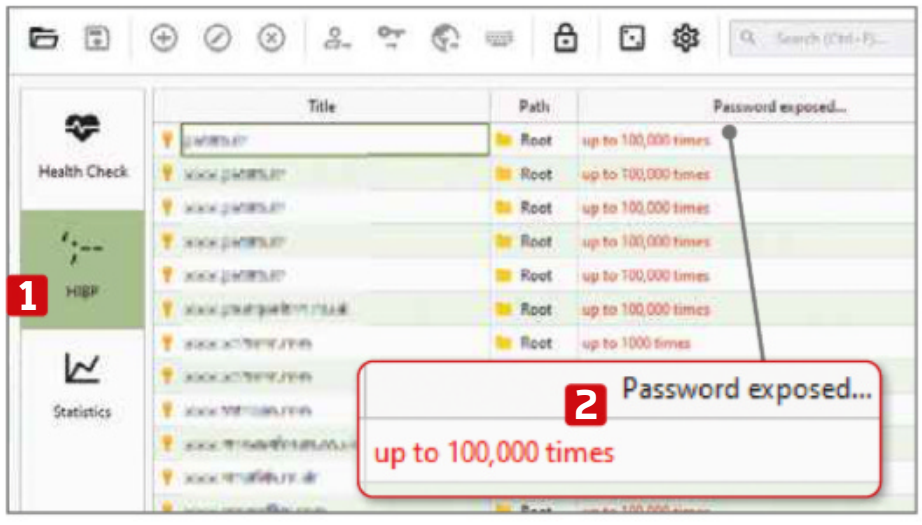
2 You can tweak the encryption settings if you wish, 1 but the defaults are fine for most people. You also need to give your password database a password of its own. Make sure it's a good one. KeePassXC lets you add additional security, such as a key file or YubiKey protection, if you wish.



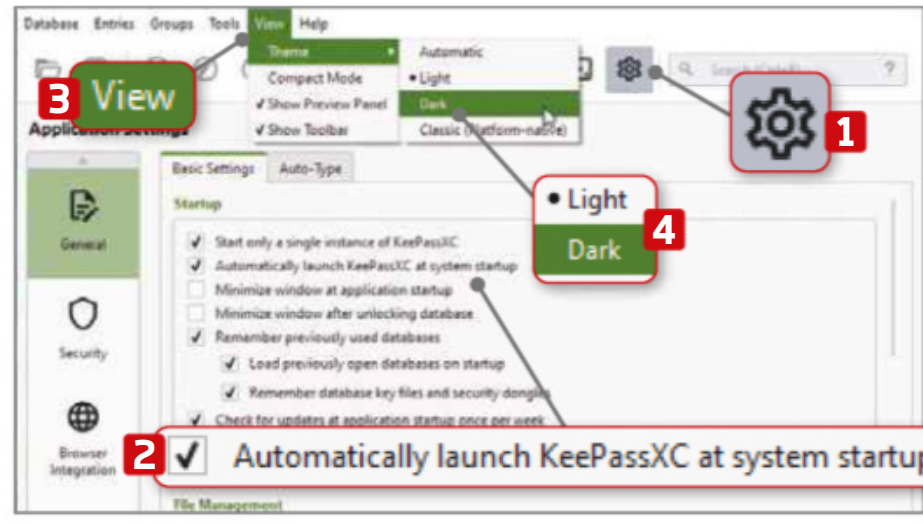
3 Enter passwords manually with the plus button. 1 Fill in the details and type your password in the box. 2 You're warned if Caps Lock is on. 3 To generate a password, click the dice. 4 To include specific letters and symbols, click Advanced 5 and add them to 'Also choose from'.



4 Open the Database menu 1 and choose Database Reports. Health Check 2 gives each of your passwords a score based on complexity and checks if they've been used before. Hover over the entry in the Reason column 3 for more info about why a particular password has been flagged.



5 Click the HIBP tab 1 to check your passwords against the Have I Been Pwned database (haveibeenpwned.com). This is done safely and using encryption, so your passwords aren't put at risk. The 'Password exposed' column 2 tells you how many times your passwords may have been compromised.



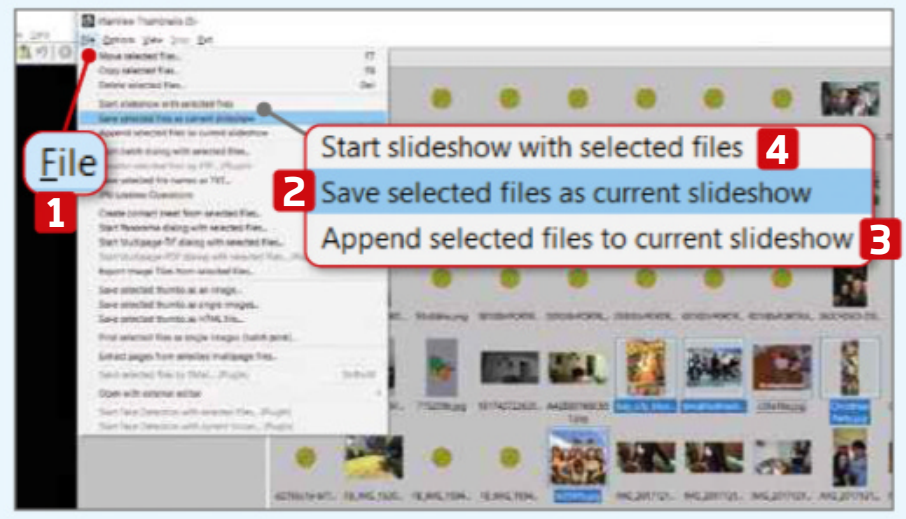
6 There is a selection of new tools in the settings, 1 including the option to run the software as soon as Windows starts. 2 To change the look of KeePassXC, click the View menu. 3 Under Theme, choose between Light and Dark. 4

Create slideshows and screensavers

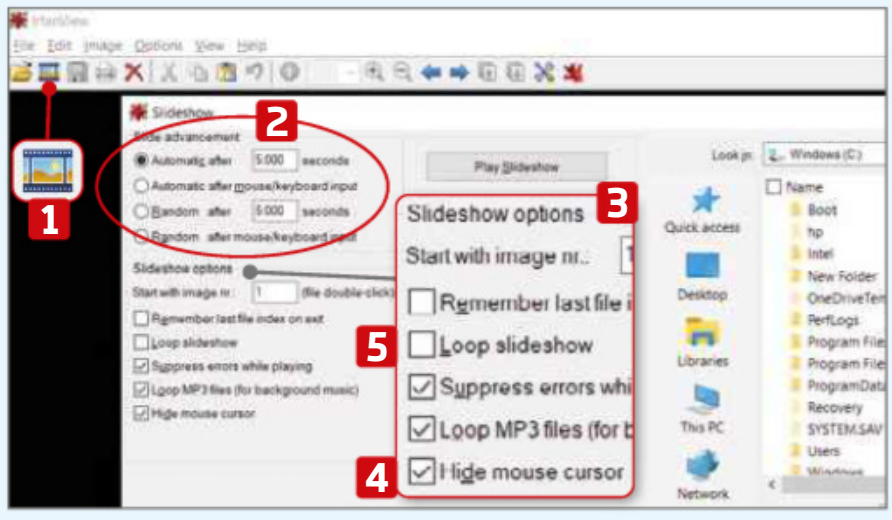
IrfanView is one of the best free image viewers available – simple enough for novices but with powerful tools for pros. It's a firm favourite of both the *Web User* team and our readers, and the software can do a lot more than simply open your photos. Here, we show you how to use one of its tools to build a slideshow in seconds, which you can then turn into a personalised screensaver.

IrfanView: www.irfanview.com | 10 mins | 7, 8, 10

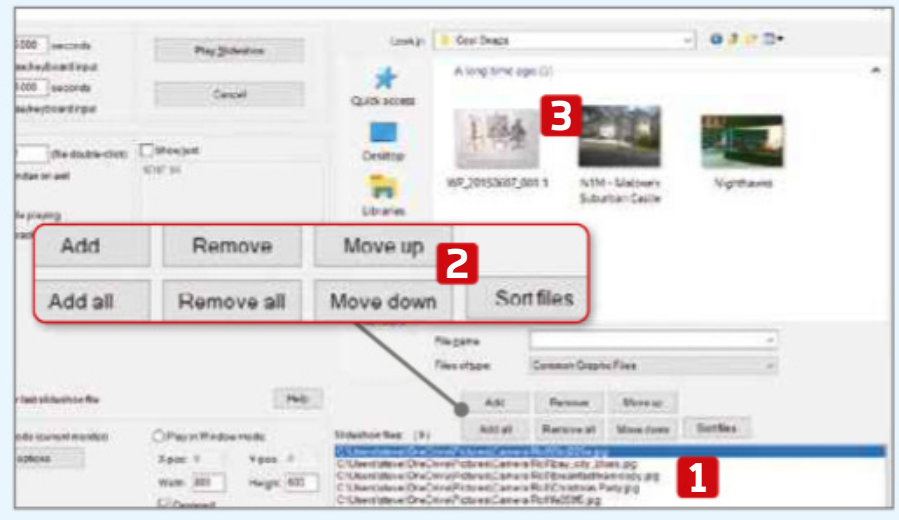
1 To create a screensaver with IrfanView, you first need to make a slideshow. Click File, 1 then Thumbnails (or press T) to open a File Explorer-type window with a directory on the left 2 and previews on the right. 3 Select multiple images by holding down Ctrl and clicking the ones you want.



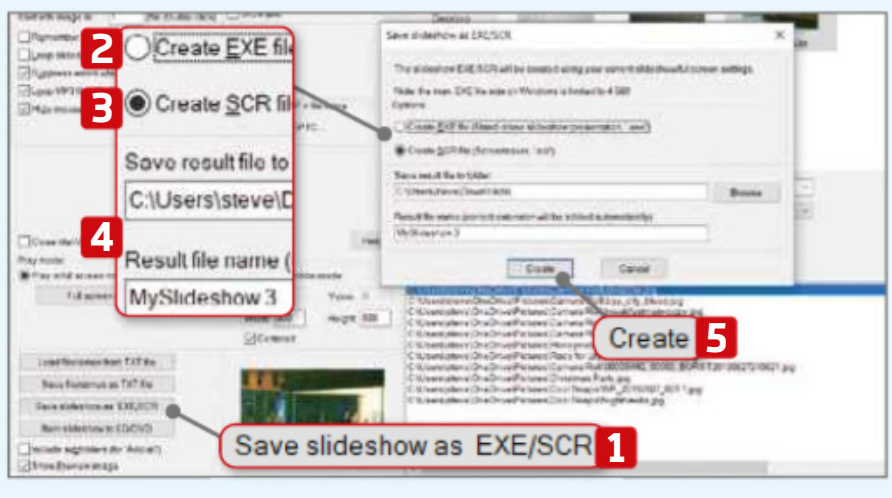
2 Click File 1 in the Thumbnails window, then choose 'Save selected files as current slideshow'. 2 'Append selected files to current slideshow' 3 lets you add more images, and 'Start slideshow with selected files' 4 lets you preview the carousel of images (press Esc to end).



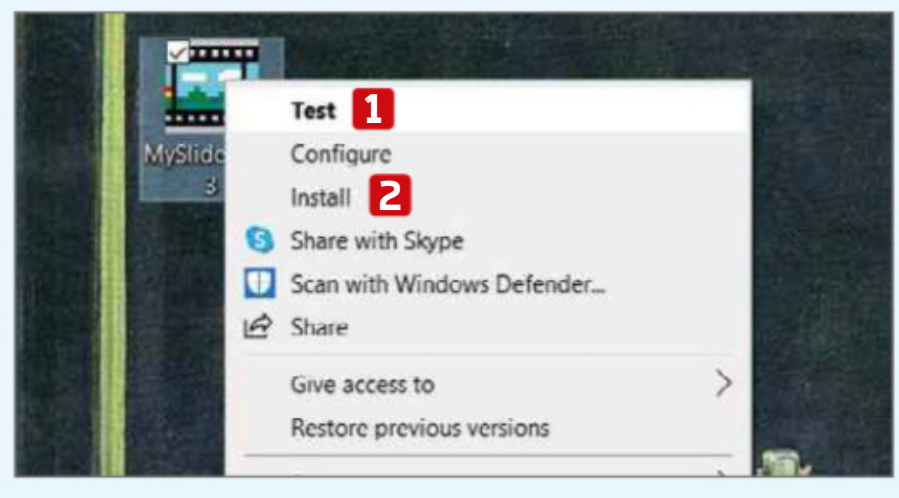
3 Back in the main window, click the Slideshow button 1 to open its settings. The 'Slide advancement' section 2 lets you set the image-cycle speed and randomise the order. Under 'Slideshow options', 3 tick 'Hide mouse cursor' 4 and untick 'Show text'. You can also 'Loop slideshow'. 5



4 The lower half of the right-hand panel displays currently selected images. 1 Use the Add, Remove and re-order buttons to organise them. 2 The top half is a File Explorer window 3 that you can use to navigate to other images and double-click to add them to your slideshow.



5 Once you've created your slideshow, save it by clicking 'Save slideshow as EXE/SCR'. 1 If you only want the slideshow, choose 'Create EXE file'; 2 to turn it into a screensaver, opt for an SCR file. 3 Choose a save location and give it a title, 4 then click Create. 5



6 Locate and right-click your saved SCR file. In the menu, Test 1 lets you preview your work, while Install 2 makes it the default screensaver for the current Windows theme. If you change your theme (search Start for Theme), you must set it again.

Weekend Project

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

How to...

Bring an old PC back to life using Android

Wayne Williams shows you how to breathe life into an old PC by installing a lightweight Android operating system on it

If you have an old PC that's sitting around gathering dust, there are a couple of ways you can put it to use. The obvious choice is to replace Windows with an alternative operating system that's leaner and faster. This usually means a version of Linux, such as Puppy Linux (puppylinux.com), Lunbuntu (lubuntu.net) or Linux Lite (www.linuxliteos.com), or a Chromium OS such as CloudReady (www.neverware.com).

However, there's another option that's becoming increasingly popular – Android. Yes, that's right, you can bring an old PC back to life using the same operating system that's found on mobile phones and tablets, and install apps on it directly from the Google Play Store.

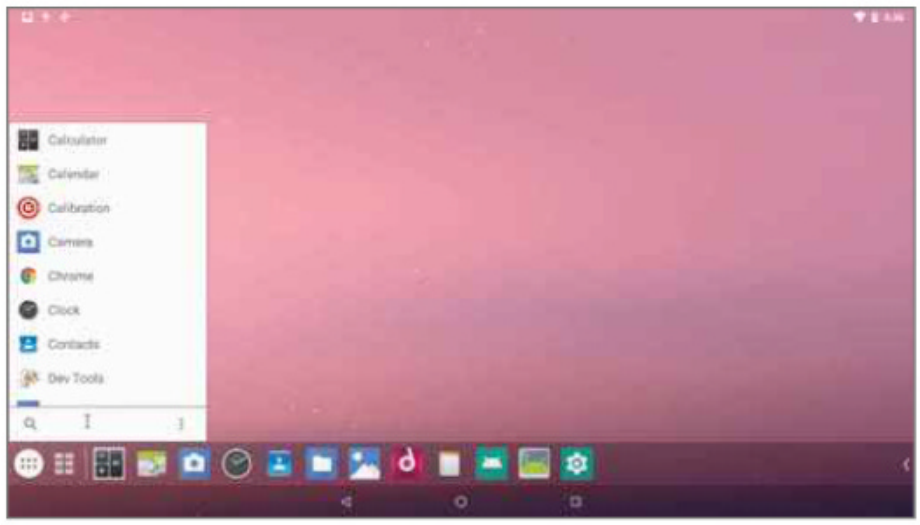
What you need

Besides an old PC, you'll need an Android operating system to install on your computer, and there are a growing number to choose from. While they all essentially do the same thing – install and run Android on compatible AMD/Intel processors – they each have pros and cons to be aware of.

Android-x86 (www.android-x86.org) is probably the best known, with various releases available for different versions of Android, including Nougat (7.1), Oreo (8.1) and Pie (9). It's basic, but offers a desktop menu and taskbar – so you can use it without a touchscreen – and lets you access the Google Play Store. It doesn't come bundled with junk, either, which is a welcome bonus.

Bliss OS (www.blissos.org) is another popular choice that you can customise to suit the size of your screen, and switch between desktop or tablet mode, depending on whether you want to use it with a touchscreen or a keyboard and mouse. The current stable build is based on Android Pie (9).

We're big fans of PrimeOS (primeos.in) because it looks good and offers a desktop experience similar to Windows and macOS, with a Start menu and taskbar. It's powered by Android-x86 and the pre-installed DecaPro Gaming Centre



Android-x86 comes with a taskbar and Start menu for mouse users

Phoenix OS is promising but its Chinese apps might put you off

makes it easy to tweak games so they run better with a keyboard and mouse.

Finally, another operating system to consider is Phoenix OS (www.phoenixos.com/phoenixos). Its options are based on the older Android 7.1 and 5.1, and it offers a very solid desktop experience. Unfortunately, it also includes advertising, and its Chinese origins aren't hard to spot. Some of the website is in Chinese, and it comes with Chinese apps, too. You can remove the ads by following some of the sneakier free methods found on the web. The ISO file is available to download from Google Drive or Mega, but the Google Drive option often isn't available due to high demand.

For this Weekend Project, we'll focus on using PrimeOS because installation is easy and should be problem-free.

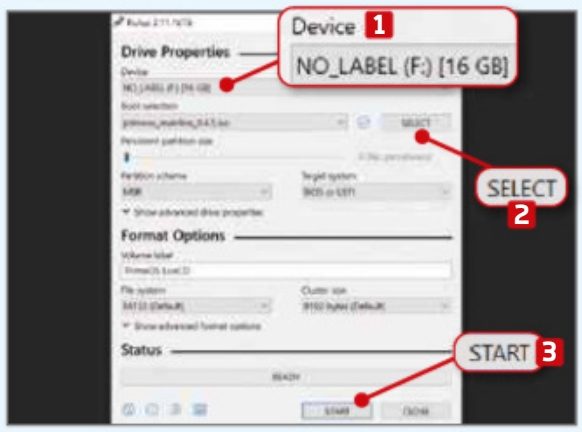
Download the right PrimeOS

There are currently three versions of PrimeOS available to choose from – Classic, Standard and Mainline. Classic is for older (pre-2011) 32-bit PCs, Standard is for newer (post-2011) 64-bit

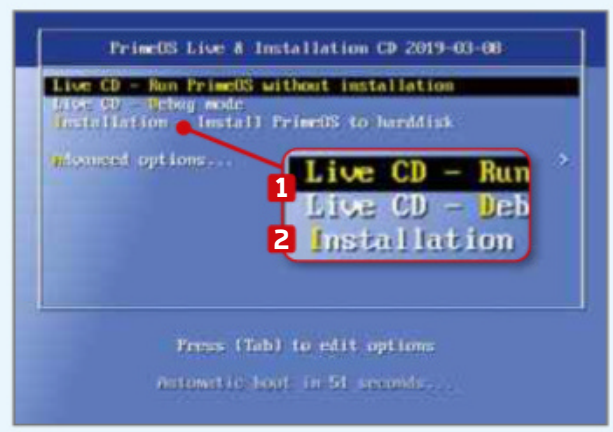
Bliss OS is another good choice, which has a good desktop mode for using with a keyboard and mouse

PrimeOS is available in three versions, so you can even run it on ancient hardware

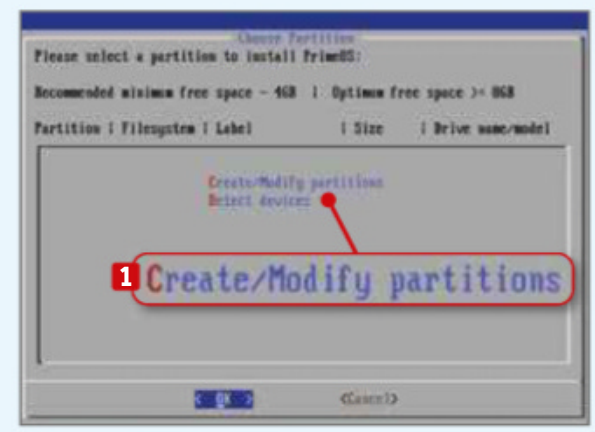
MINI WORKSHOP | Install PrimeOS on an old PC



1 Download the PrimeOS ISO from the website and grab a copy of Rufus (rufus.akeo.ie). You need a spare USB flash drive (8GB minimum). Run Rufus, insert the USB drive and select it under Device. 1 Click the Select button 2 and navigate to the saved ISO. Click the Start button 3 and choose to write in ISO image mode.



2 When the OS has been written, restart your PC and make sure the secure boot feature is disabled (see the instructions in the boxout on page 61). Boot from the USB drive you created with Rufus. The PrimeOS menu loads and, from here, you can choose to test it by running it as a Live CD 1 or install it. 2



3 If you opt to install PrimeOS, you can create or modify partitions before proceeding. 1 Ideally, you need at least 8GB of free space. The process is straightforward – just follow the on-screen prompts to choose the partition size and create it. PrimeOS will install on the partition and you can run it from there.

Broadband Deals

Call FREE on 0800 083 2357 to switch your broadband

	Provider	Package name	Monthly price	Contract length	Broadband speed	Allowance	First-year cost*
1	Shell Energy	Shell Energy: Fast Broadband	£19.99 (£21.99 after 18 months)	18 months	11Mbps avg. speed	∞ unlimited	CHEAPEST £239.88
2	sse	SSE: Unlimited Fibre + Line Rental Only	£23.00	18 months	35Mbps avg. speed	∞ unlimited	£276.00
3	sky	Sky: Superfast Talk and Line Rental	£27.00	18 months	59Mbps avg. speed	∞ unlimited *	£324.00
4	Virgin media	Virgin Media: Big Bundle + Fibre Broadband + Weekend Calls	£33.00 (£59 after 12 months)	12 months	54Mbps avg. speed	∞ unlimited	£396.00

Terms & Conditions apply - see ISP sites for details
* Fair-usage or restriction policy applies.

Ofcom

Data supplied by www.broadbandgenie.co.uk. Correct as of 20 July 2020.

Broadband Genie's helpline is powered by Simplify Digital, the Ofcom-accredited switching service

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

SNEAK PREVIEW!

Computer active

- **TURN YOUR TABLET INTO A LAPTOP** What to buy and how to set it up
- **GET FASTER WI-FI IN EVERY ROOM** Make your signal stronger from basement to loft
- **DON'T BUY THE WRONG USB CABLE** Avoid the mistake we've all made

PLUS: DISCOVER WINDOWS 10's HIDDEN START MENU - And add your favourite tools to it

Subscribe at www.getcomputeractive.co.uk

On sale Weds 12 Aug

The Windows Installer partitions the drive and installs PrimeOS

PCs, and Mainline is for 64-bit devices from 2014 onwards. For our workshops, we'll be using Mainline, but the process is much the same regardless of which edition you opt for.

When downloading, you can choose from a Windows Installer or an ISO image: the former is for installing PrimeOS alongside Windows; the latter is more flexible, and ideal if you want to install it as your main operating system or test it in a virtual environment using VirtualBox (www.virtualbox.org).

We show you how to install PrimeOS on an old PC in our Mini Workshop on page 59. We also show you how to get started with the OS, below.

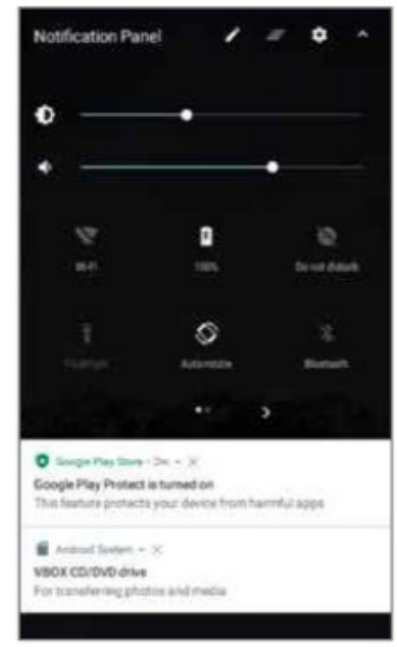
Use the Windows installer

If you prefer to use the Windows installer, to install PrimeOS alongside your existing Microsoft operating system, download that instead. It's a large 1.1GB file.

Once it's downloaded, run it from within Windows. You'll need to have disabled Secure Boot – see the boxout, below, for details – or else the installation won't be able to proceed.

The installer uses a simple wizard interface. Read the welcome screen, then click Next to open the Install Options screen. From here, you can select the size you want for your Android partition. The OS itself has very modest requirements – a minimum of 6GB. However, you'll probably want to install a decent number of apps, so it's better to set a larger figure, such as 20GB, if your hard drive has enough room.

Enter the size for the partition in the left-hand box, then choose the drive to partition in the right-hand box. Click Next and check the information is correct on the following screen. Click the Start button to begin the installation process.



PrimeOS's notification panel lets you access and customise some of the Android settings (but good luck using the flashlight!)

Your computer will reboot several times while this is going on, and Windows will load once the process has completed successfully. You can then choose between Windows and PrimeOS at bootup.

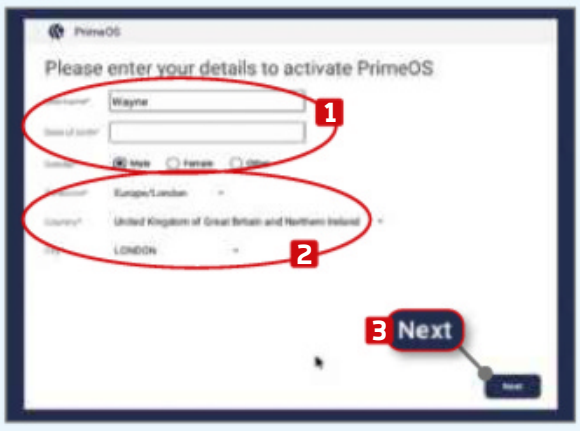
HOW TO DISABLE SECURE BOOT

Secure Boot is a feature that was introduced with Windows 8 to help protect against rootkits and other forms of malware. It's found in UEFI (Unified Extensible Firmware Interface), the newer replacement for the traditional BIOS.

Some non-Windows operating systems, such as PrimeOS, require you to disable this feature before they can be installed. To do this, turn your PC off and back on again, and press the key to be taken to Settings (this might be F2 or Del) before Windows loads.

When the UEFI screen appears, look for the Secure Boot setting – it will probably be under the Boot or Security tab. Select it and use + or – to disable it. Press F10 to save the changes and exit. Your PC will reboot.

MINI WORKSHOP | Get started with PrimeOS



1 Enter a username, date of birth (make something up if you don't want to share this information) and gender, 1 and select your time zone, country and city. 2 Click Next. 3 Read and accept the licence terms, then wait while the desktop loads. This should happen very quickly.

2 PrimeOS looks a lot like Windows. There's a desktop with icons for the Play Store and Chrome, 1 and a taskbar at the bottom with a start button. 2 Click this to open the start menu 4 for access to the apps you would typically find in an Android installation. You can also change the wallpaper from here. 5

3 Clicking an app opens it and adds its icon to the taskbar. 1 Click the three-line icon 2 to close all the open windows. To install new software, open the Play Store and sign in with a Google Account. Find an app and click Install 3 to add it to the start menu and desktop.

NEXT ISSUE **How To...** Stop your devices overheating

On sale Wednesday 19 August

Subscribe Now!

Subscribe to WebUser today and save on the single issue price.

Each issue of *Web User* will be delivered directly to your device each fortnight.

SEE NEXT PAGE FOR SET-UP INSTRUCTIONS

HOW TO SUBSCRIBE...

...on an iPad or iPhone

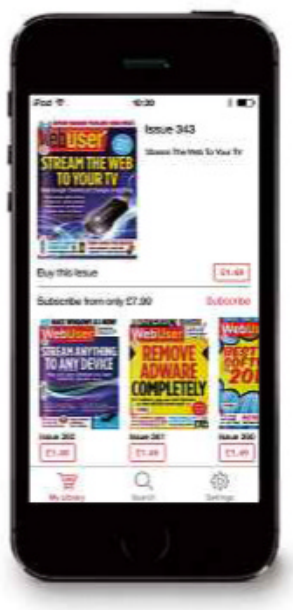
STEP 1 Return to the *Web User* library

STEP 2 Choose your subscription term and tap twice on the 'price' box

STEP 3 Choose whether to create an optional PixelMags account

STEP 4 Enter your Apple ID password to confirm

Download on the App Store



...on a Kindle Fire

Kindle Fire subscriptions come with a FREE one month trial.

STEP 1 Tap 'Free Trial Subscription' in the *Web User* library

STEP 2 Chose your subscription term from the drop-down menu on the pop-up that appears

STEP 3 Tap 'Subscribe'

available on kindle fire

...via the Zinio app

STEP 1 Search for **Web User** via the search box in the Shop tab

STEP 2 Tap the 'Subscribe' button

STEP 3 Choose whether to create an optional Zinio account

STEP 4 Enter your Apple ID password to confirm

Subscribe to *Web User* today and save on the single issue price

Web User Masterclass

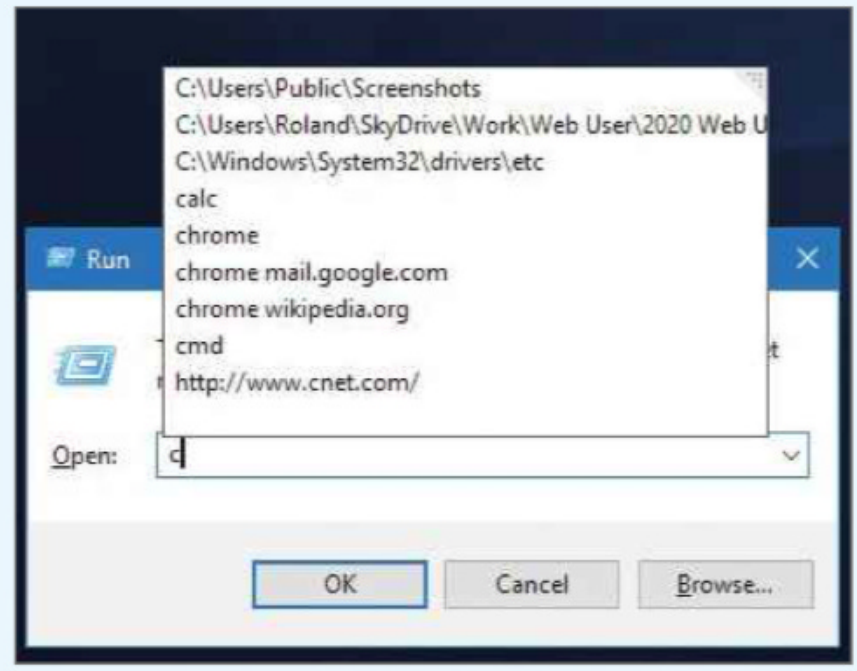
Use secret command-line tools to get more from your PC

Start programs by typing commands

To type a command into Windows, you normally have to open the command prompt, which we'll show you in our other tips below. However, Windows also has a command shortcut you can type into, called the Run box. To open it, press Windows+R, type a command and press Enter. Here are some programs you can launch by entering the relevant command:

- Notepad: `notepad`
- Paint: `mspaint`
- WordPad: `write`
- Chrome: `chrome`
- Edge: `msedge`
- VLC media player: `vlc`
- Open a browser and go to this address: type the URL
- Control Panel's 'Programs and features': `appwiz.cpl`
- Device Manager: `hdwwiz.cpl`

Commands you've typed previously are remembered and suggestions are made as you type. So, when you see the command you want, press the up and down arrow keys and use Enter to run an app or go to a website again.



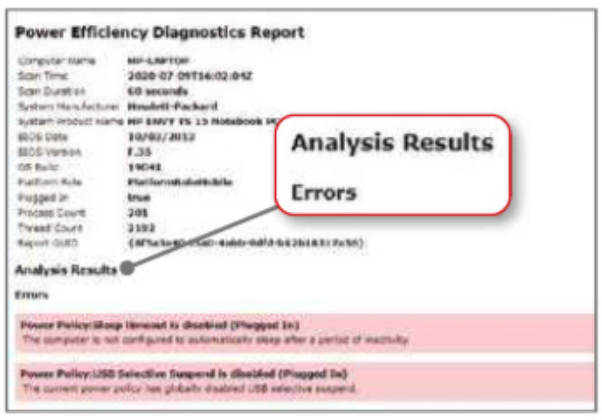
Start typing a command and, if you see a suggestion, click it or select it with the keyboard

Get a power report

If you're worried that your computer isn't using power efficiently or your laptop's battery is draining too quickly, a power report may help. It's quite technical and contains more information than most novices will understand, but if you want to have a look, right-click the Start button, enter `cmd` and click 'Run as administrator'. Enter:

```
cd \users\yourname\downloads
powercfg -energy
```

Replace `yourname` with the name of your current user profile. This goes to the Downloads folder and runs the 'powercfg' tool. The PC's energy requirements are monitored for the next minute, so carry out activities such as web browsing, playing music, reading your email and so on. Once the minute is up, open Downloads in Explorer and double-click 'energy-report.html'.



Create a power report to see potential problems with power settings and usage

Print files and folders

Sometimes you want a printed listing of all the files in a folder or subfolder – for example, to get a list of all the photos or music on your PC. Explorer can't do that, but the `dir` command can.

Press Windows+R and enter `cmd`, then type `cd` followed by a space. Drag any folder from Explorer and drop it on the command line, then press Enter. You are now in that folder and can use the `dir` command to create a list of files. Here are three examples:

```
dir *.* >Files.txt
dir *.jpg >Files.txt
dir *.jpg /b /s >Files.txt
```

The first creates a list of all the files in a folder and saves it in a text file called Files.txt. The second saves a list of all JPG files. The third adds `/b`, which stands for bare filenames, and `/s` to include all subfolders. Run that last one in the Pictures folder to create a list of all photos in a text file called Files.txt. Load it into Notepad to print it.

Use the same command in the Music folder with `.jpg` changed to `.mp3` or `.m4a` to create a list of music files that can be printed.

Use secret VLC commands

Instead of using static photos for your Windows desktop, you can use video wallpaper. Press Windows+R to open the Run box and enter:

```
vlc --qt-start-minimized
--video-wallpaper --no-video-
title-show --repeat
```

Add a space to the end, then drag a video from Explorer and drop it on the Run box. Press Enter and the video plays full screen on your desktop. Press the Windows key to show the Start menu and taskbar to

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.

open programs in the usual way.

If you have a favourite scene in a video or movie, you can jump straight to it. Press Windows+R, type `vlc` followed by a space, then drag a video from Explorer and drop it on the Run box. Put the cursor at the end, type a space then:

```
--start-time 30 --stop-time 45
```

The numbers tell VLC when (in seconds) to start and stop playing. Add `--repeat` to the end to loop it.

To play background radio with VLC, go to www.radiofeeds.co.uk/mp3.asp, find a station and click the red/yellow button on the right to save a file. Press Windows+R and type `vlc` followed by a space. Drag the file from Explorer and drop it on the Run box, place the cursor at the end, type a space and then type: `--qt-start-minimized`.

Press Enter and the radio station plays in the background without loading VLC. Right-click the taskbar, select Task Manager, find VLC, right-click it and select 'End task' to stop it.

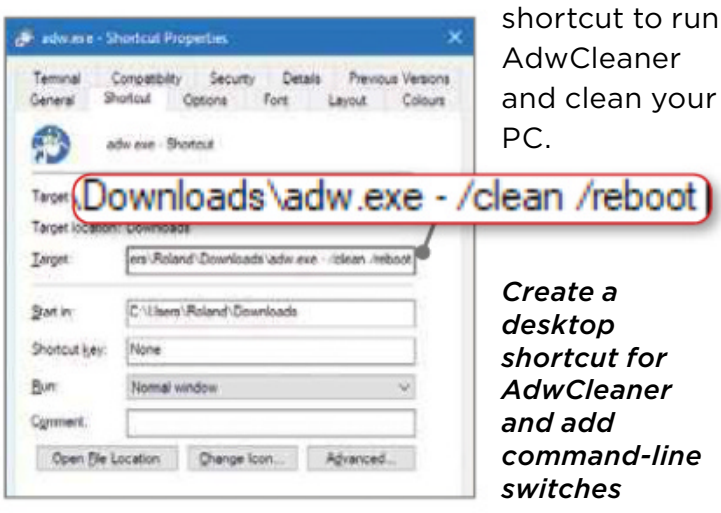
Clean up malware

Go to www.malwarebytes.com/adwcleaner and download AdwCleaner. This is a useful tool for cleaning unwanted programs, junk, adware and so on. Run it once and, from then on, you can run it either by clicking it in Explorer or from the command prompt. Press Windows+R and type `cmd`. At the command prompt, enter:

```
cd \users\yourname\downloads
adw /clean
```

Replace `yourname` with your current user profile. The first command changes to the Downloads folder and the second runs `adw` to clean your PC (we renamed 'adwcleaner_8.0.6.exe' to 'adw.exe' to save typing). To only check for malware, use `/scan` instead of `/clean`. To prevent rebooting after cleaning, add `/noreboot` to the command.

Right-click AdwCleaner and select 'Send to', then 'Desktop (create shortcut)'. Right-click the desktop shortcut and select Properties. Add a space to the end of the Target box text and type `/clean /noreboot`, then click OK. You can now click the desktop shortcut to run AdwCleaner and clean your PC.



Create a desktop shortcut for AdwCleaner and add command-line switches

TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave

Recover lost files

Microsoft has released a brilliant command-line file-recovery tool that finds and recovers deleted files on your hard drive. You can install Windows File Recovery from the Microsoft Store (bit.ly/wfr507). This adds an item to the Start menu which, when clicked, opens a command-prompt window in admin mode, showing the Help info. The simplest way to use it is to type: `winfr` followed by the source drive and destination folder. For example:

```
winfr c: e:\
```

This instructs winfr (that is, Windows File Recovery) to scan the C: drive and save any deleted files it finds to the E: drive. It creates a folder called Recovery to put them in.

This next command limits recovery to a specific file type:

```
winfr c: e:\  /n *.jpg
```

The next command specifically recovers '.jpg' files in the Pictures folder. As above, the `/n` acts as a filter for recovered files:

```
winfr c: e:\  /n \users\yourname\pictures\*.jpg
```

Replace `yourname` with the name your current user profile. There are limitations and you need two drives – one to recover deleted files from and another to save them to. USB drives and flash drives are fine if formatted with NTFS. More help is available at bit.ly/restore507.

Hide and protect files

Files have several attributes that control what you can see and what you can do with them. For example, the Read-only attribute (R) protects a file by preventing it from being deleted or changed. The Hidden attribute (H) determines whether a file can be seen in Explorer windows.

To use these settings for a file, right-click them in Explorer and select Properties from the menu. The attributes are at the bottom of the window. This is useful for single files, but what about multiple files, files in subfolders and so on?

There are many more file attributes that can't be seen or set in Explorer, the most important of which are Archive (A) and System (S). Archive is used to show whether a file is ready to be backed up and System is for system files.

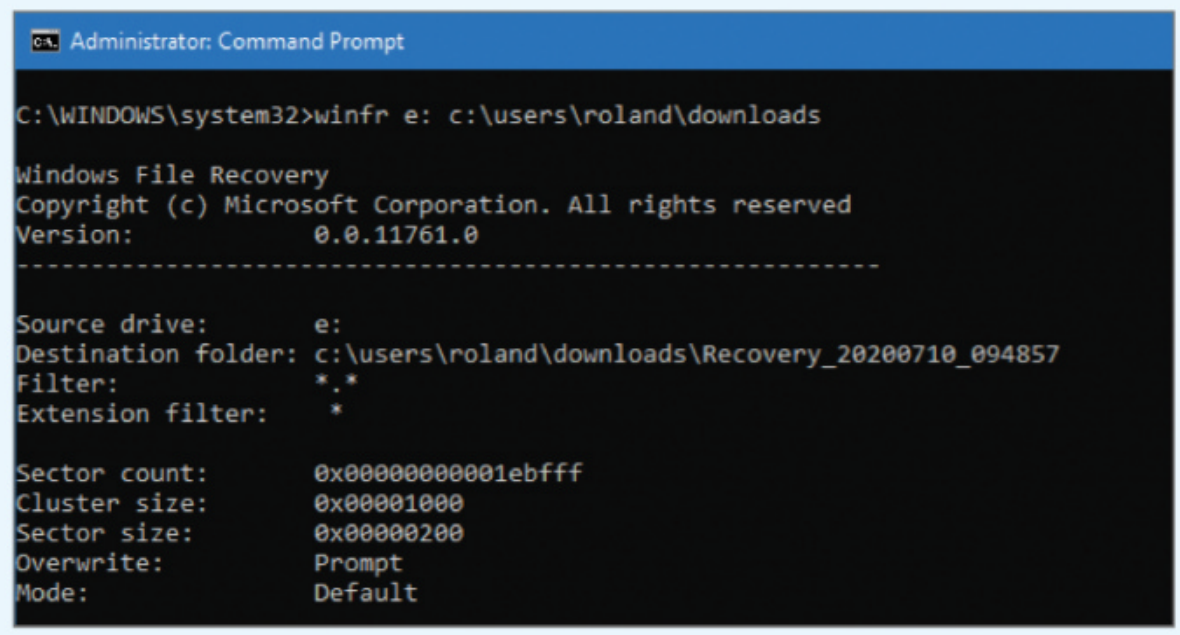
Press Windows+R to open the Run box and enter `cmd`. Type `cd` followed by a space, then drag a folder from Explorer and drop it on the command line. Press Enter to go to that folder. You can now use the `attrib` command to set the attributes of files, for example:

```
attrib +R MyDocument.docx
```

The `+R` sets the Read-only attribute of the MyDocument.docx file, to stop it being changed or deleted. Using `-R` removes the read-only attribute to make it editable and deletable again. Here are a couple more commands:

```
attrib +R *.*
attrib +R *.* /s
```

The first sets the read-only attribute of all files in the current folder (`*.*` is everything, `*.jpg` would be just JPG files). The second adds `/s`, which applies `+R` to all files in all subfolders. You can remove Read-only with `-R`, make all files hidden with `+H`, and make the files read-only and hidden with `+R` and `+H`. Type `attrib /?` to see a helpful guide.



Use the new Windows File Recovery tool to find lost and deleted files

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

WINDOWS

Use partitions to organise your files

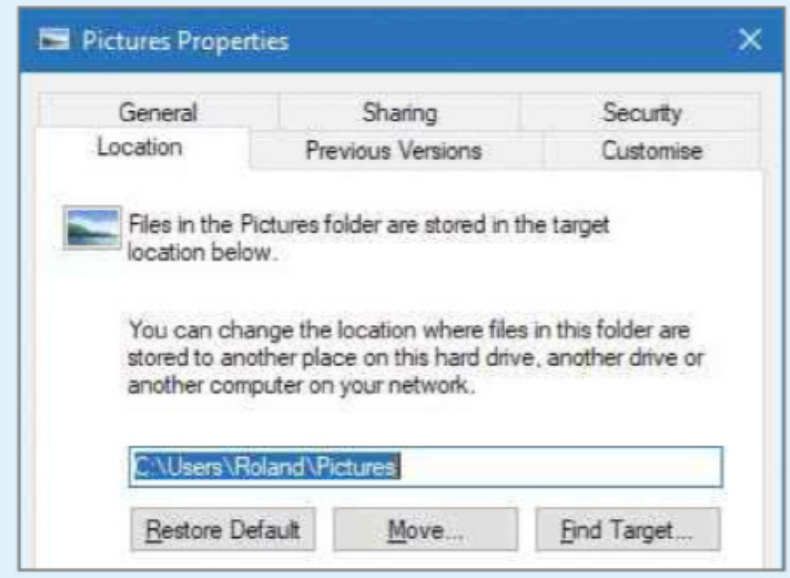
Q After reading your excellent "Partition your PC" feature in issue 498 (bit.ly/webuser498), I have now created some lovely partitions on my 500GB hard drive. However, I don't know how to populate them. How do I separate my operating system, documents and photos? How will Windows know where everything is?

John Perkins, via email

A You have lots of choices. You could, for example, use a partition for any new software you install. When you install a program, you're asked where you want it stored – usually, the 'C:\Program Files' folder is suggested. But you can change this to a partition, such as 'D:\My Programs'.

If you download a lot of big files, you could create a new Downloads folder for them on a partition. In Chrome, open the menu, Settings, then expand Advanced and find Downloads. In the Location section, click the Change button and select the new folder.

To create a new Photos folder, open the Photos app, click the three-dot button, select Settings from the menu and, in the Sources section, click 'Add a folder'. Select the partition – or the folder on a partition – where you want your photos stored.



Move personal folders such as Documents, Pictures, Music and Videos to another partition

To go a step further, open File Explorer and right-click Pictures in the sidebar. Select Properties, then open the Location tab and use the Move button to select a folder on a partition. Any files saved to your Pictures folder will be stored in the new folder on the partition.

Partitions are particularly useful for this type of file organisation and you could even have a separate partition for each type of media – simply repeat the previous step with your Videos, Music and Documents folders, to store them on a different partition to Windows so you always know exactly where your files are located.

If you use partitions in this way, remember to include them in backups. Don't just back up drive C: as this won't include the files you're now keeping in the new partitions.

STORAGE

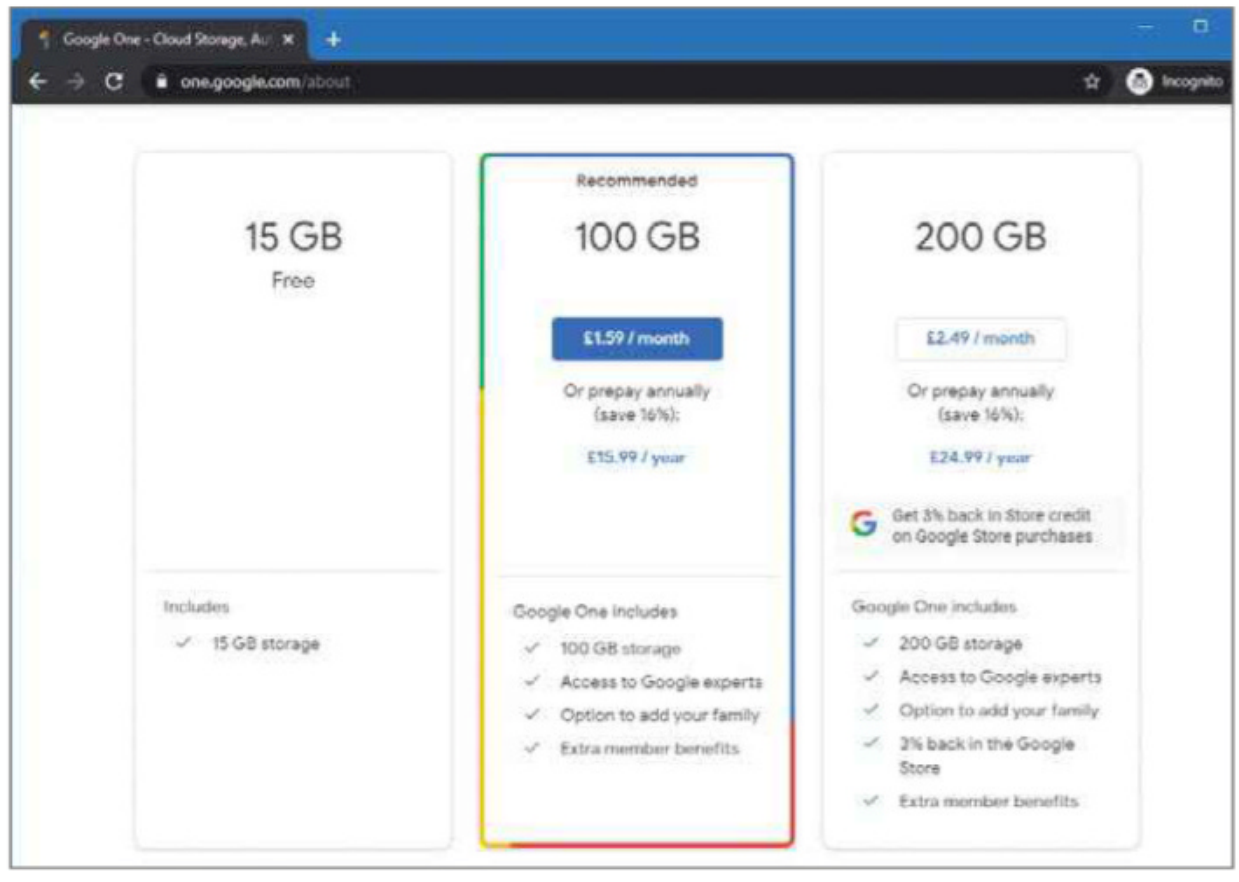
Choose the right cloud storage

Q I have just bought a new laptop from PC World and it came with Cloud. I spent several hours on the telephone, mainly on hold, because I couldn't set up an account to activate the program. It kept refusing my credit card, which doesn't expire until 2023. The cloud service would have been for five years, but no one could help me get over this problem. After a lot of back and forth, PC World has given me my money back.

My question is: how do I go online and get cloud storage set up on this new laptop? I notice I have OneDrive already set up. Is this the same, or do I need Cloud storage, too?

Allan Carre, via email

A I'm afraid we can't help with credit or debit card payment problems.



If you aren't sure whether you need cloud storage, try a free service first – Google provides a generous 15GB

If updates fail, the Windows Media Creation Tool might manage the job

If a card is not accepted when buying goods or services online, you need to talk to the relevant card company.

Upselling is common in many stores and you can end up with extras you don't need. To be fair, PC World cloud storage is cheaper than many popular rivals, particularly if you commit to five years. But do you really need it? It sounds like you aren't sure, so the glitch you experienced trying to buy it may be a blessing in disguise. Try a free cloud-storage service to see whether you actually need it before handing over any more money.

OneDrive is built into Windows and provides 5GB of cloud storage for free. We find it useful because files saved to the OneDrive folder on your computer are also stored online, and synced to every other computer and device you own that has OneDrive installed. This means you can access those files anywhere, on any device. If you need more space, 100GB of storage only costs £1.99 a month.

Alternatively, sign up for a free Google account (one.google.com) if you don't already have one, which provides 15GB of cloud storage for free. Download and install 'Google Backup and Sync' from drive.google.com to create a folder on your PC that is automatically synced with your online storage. Increasing storage to 100GB costs just £15.99 a year, and even 2TB is a reasonable £79.99 a year.

The main benefit with both options is that you can try them before you buy.

WINDOWS

Restore a laptop disabled by an update

Q In April, I had to stop using my HP Envy 17 because it was disabled by a Windows update. Back on my trusty HP Pavilion G6, with Windows 8.1 Pro, I'm very careful never to update in case I'm lumbered with Windows 10.

The Envy 17 started opening Windows 10 but, after about 15 seconds, the screen went blank and nothing further happened. I even left it running for two hours in the hope of it coming to life. Taking your advice, I waited for the next update to rectify the problem, but I realised after a month that if it can't open Windows, it can't receive updates.

I got the laptop into Safe mode by rapidly switching it off and on three times and went through the Troubleshoot process on the blue screens without success. I tried a Reset, but that failed halfway through and the computer went through the process of undoing changes.

On another HP laptop with an identical version of Windows 10, I created a recovery disc, but that didn't work on the Envy either. I am now at a loss as to what to do next. I have the original installation disc for Windows 8.1 and wondered if I could replace Windows 10 with that?

Richard Godfrey, via email

A Returning to Windows 8.1 with the original installation disc would probably work, but there is one last

EMAIL

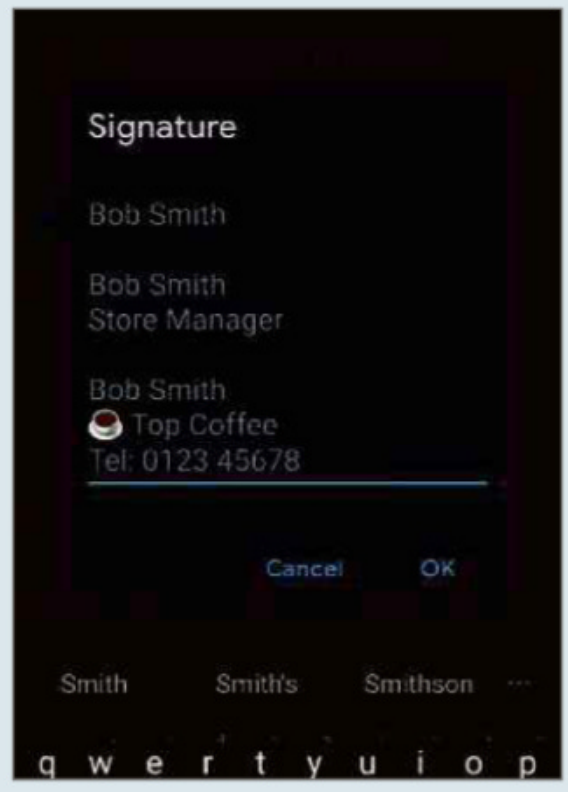
Get Gmail signatures on mobile devices

Q I recently set up a number of different Gmail signatures with pre-set responses. Unfortunately, these don't carry across to Gmail's mobile app, which only offers a single, mobile-specific signature.

I have found a workaround but it only works for the main account. When I try to switch to the account that uses the signatures in the mobile app, it doesn't work. I've tried logging into Google with the signature account first, but without success.

The workaround is to open the web version of Gmail, not the app, then click the menu button in the top-left corner. At the very bottom is a desktop link that takes me to the main web version of Gmail where the signatures work. However, when I then switch to the account I want to use the signatures with, it just stays on the main account.

Dawn Sharples, via email



Create a single signature with lots of options and delete any you don't want

A Gmail on a computer is more powerful and has more features than Gmail on a phone. At the moment, you can't create multiple signatures in the mobile app, though we've heard that this will become possible in a future update.

The mobile app doesn't read the signatures created on a computer using Gmail in a browser. Instead, it uses its own signature. Our workaround is to open the Gmail menu, press Settings, tap your account and tap Mobile Signature. Now type as many signatures as you require.

When you create a new email or reply to one, all your signatures are entered. You can then simply delete the ones you don't want.

thing you can try. Download the Media Creation Tool from the Microsoft website (bit.ly/winmed507) and create a Windows 10 installation disc or USB memory stick.

These are bootable and are used to start the computer and install Windows. During installation, you're asked to select one of three options: keep your personal files and apps, only keep your files or keep nothing. Try them in that order. One of them should work.

If something isn't working afterwards, such as the audio, go to the HP website and download the drivers for your computer model.

Some larger churches have webcams installed for streaming services online

NETWORKING

Install Wi-Fi in a church

Q My church, in light of the coronavirus pandemic, is looking to set up a Wi-Fi network so we can regularly stream live services to people who are unable to attend services, weddings, baptisms and so on. It would also be used to provide Wi-Fi access to the various community groups that use the premises. The system would need to cover the church's ground floor and the crypt.

Apart from getting a reliable provider, the biggest issue is getting a strong Wi-Fi network throughout the church, which is a large stone Victorian building. What would be the best option for the Wi-Fi network? A mesh system or powerline plugs with Wi-Fi transmitters? Is there a better option for a large building?

The setup would also require parental controls, guest access, VPN and a robust security system to block malicious sites.

Bernard Rice, via email

A It's obviously cheaper if you set everything up yourself, but public Wi-Fi isn't the same as home Wi-Fi and, as you say, there is a need for content control, guest access and so on. There may also be legal issues that mean a regular home-internet service isn't the best way to go.

For example, there are wireless routers for public Wi-Fi that force people to agree to terms and conditions before they can connect to the network. They may also require user registration. This is common for public hotspots in cafés and the like, and is very different to home Wi-Fi.

There could be 100 people in a church and everyone has a mobile phone that will connect to Wi-Fi, so you need an internet service that can cope with large numbers. You also need to restrict access to adult content and other undesirable websites.

Performance Networks (www.performancenetworks.co.uk) is one example of a company that provides public Wi-Fi hotspots, and a Google search will produce many more. There are some useful blog posts on the site that examine some of the problems you're likely to face.

If you choose the DIY route, which we wouldn't recommend, then get a wireless router and see what coverage is like where you need it. The stone walls of a church could be very thick and Wi-Fi may not reach very far. Powerline plugs with Wi-Fi would be the best way through those walls.

If all you want to do is stream services, then an affordable option might be to simply set up a mobile phone on a tripod in the church and livestream it to a private Facebook group over 4G. You would need everyone's permission, though.

A better option might be to get a security camera installed, that can stream to the internet and be hosted on a professional network, such as Church Services TV (www.churchservices.tv).

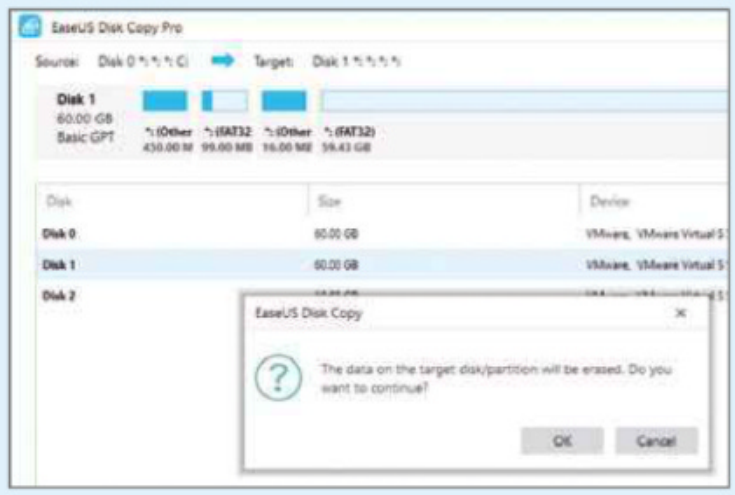
HARDWARE

Upgrade a hard drive to a smaller SSD

Q I'm about to upgrade my old laptop's hard drive to an SSD, but I'm not sure about the required capacity of the new SSD. I have an Acer with a 750GB hard drive, but only about 70GB of it is used.

Does this mean I could use a smaller 250GB SSD? I'm looking at a Samsung 860 EVO. Would there be any problems with this?

Roger Keene, via email



The Disk Copy drive-cloning tool lets you replace a larger hard drive with a smaller SSD

A Some programs for cloning a drive, such as when replacing a hard drive with another hard drive or an SSD, perform a sector-by-sector copy. For this to work, the destination drive must be equal to or greater in size than the source drive.

However, some cloning tools are able to use a different method, which means that the destination drive can be smaller than the source and the only requirement is that there's sufficient space for all the files. An example of this is EaseUS Disk Copy (bit.ly/easeus507) but there are others, if you want to shop around.

This fortnight, Roland has been exploring alternative social networks, including Parler and MeWe

Readers' Helpdesk

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

READERS RESPOND

Back Issues disc winner

SHOPPING

Fix problems entering credit-card details

Q I was recently unable to place orders with some retailers because of a problem entering the expiry date of my debit card. The expiry date on my Visa card is 02/22. When entering this date, I click '02' in the drop-down list, but only the '0' appears in the relevant field, and I can't find any way to change it.

In one case, I was able to get around the problem by resorting to PayPal, but not all retailers accept PayPal.

Alan Beasley, via email

A The most likely cause is poor web development – the site's drop-down menus have been badly coded, so either the second digit is missing or hidden from view. Using PayPal is an excellent alternative for most major e-shops.

Try switching browsers and double-check the drop-down menus in Chrome, Edge, Firefox and so on. If this doesn't help, try a different device – mobile phones tend to use OS-specific systems for numeric entries, so what fails to work on one may be fine on another.

This will give you some idea of whether the problem lies with the website itself or the e-commerce platform the shop is using. It's worth letting the websites in question know about the fault.

Steve Clark, Features Writer

If you can't enter your credit-card details on a website, try using a different browser

VIDEO CHAT

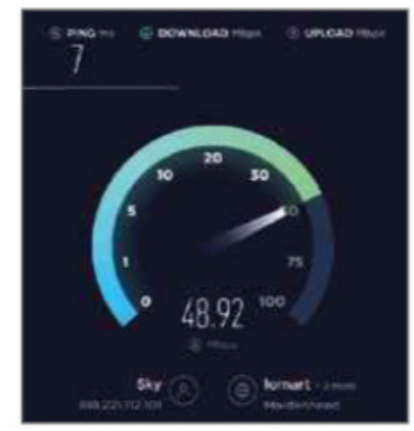
Stop Zoom camera shutdown

Q I have a problem when using Zoom conference calls (zoom.us). Access is fine, but after a period varying between 30 to 50 minutes, I lose visuals. I can hear the meeting, and the other parties can see and hear me, but I can't see them. Sometimes the video returns, but it then flickers on and off.

Clive Shephard, via email

A Pinpointing precisely why Zoom is dropping video is tricky. Since your calls begin with video, we can rule out camera permissions. We also thought, briefly, that it may be tied to basic membership, which automatically times out free users after 40 minutes. However, this should end the meeting altogether, unless the host is a paid-up subscriber – quite unlike the scenario you describe.

Your first step should be to uninstall and reinstall Zoom, then update your camera drivers from the manufacturer's website. However, we fear the most likely offender in this scenario is a halting internet connection. One of Zoom's biggest failings is it isn't as good as other rivals at adjusting for poor connections. Test your connection at speedtest.net to make sure you're hitting the speeds Zoom recommends.



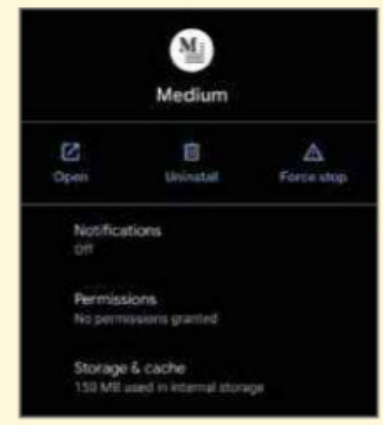
If your video is dropping during calls, check your download speed is fast enough

Steve Clark, Features Writer

MOBILE

Free up space on your phone

A In Issue 504 (bit.ly/webuser504), Dennis Spargo asked why his phone was saving files to the device, not his SD card. To move applications from internal phone memory to your external memory card, tap and hold the App icon, then select 'App info' from the menu to see details of where the app is stored. Enter this menu by long-pressing it or opening 'Storage & cache', then choose to move it to your external card. While you are there, make sure that photos, audio books, documents, maps and so on are kept on your external card by looking at the options within each app.



App storage options are saved in the 'Storage & cache' section of 'App info'

Dave Walsh, 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.

GENERAL PC

Q My computer tells me that Superfetch isn't running. When I try to fix it, I'm told that it can't be found. Where could it have gone? Is it even necessary?

Mik Sarna, via email

MOBILE

Q My Google Play purchases used to be sent my network, which added them to my phone bill. After switching from O2 to Virgin, this option is no longer available. How do I reinstate it?

Keith Lloyd, via email

Your Top Tips

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

TOP TIP

Back Issues disc winner

MOBILE

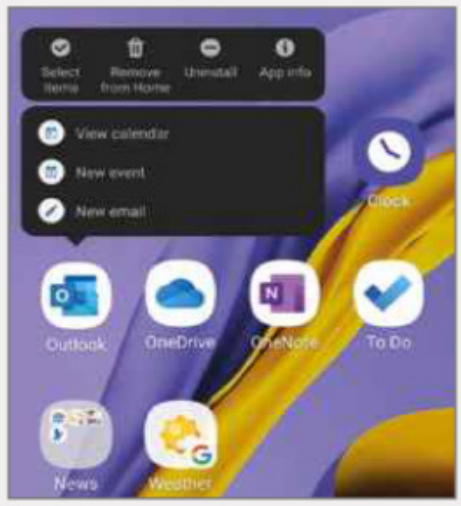
View the Outlook calendar

Microsoft's online Outlook tool (outlook.com) offers a calendar as well as email. In Windows 10, you can separate the two, using the Mail app for email and the Calendar app for the calendar. However, the Outlook app for phones has them combined – to see your calendar, you have to open Outlook email, then press the calendar icon at the bottom.

There are a couple of shortcuts that can make this process less cumbersome. If you have a recent version of Android on your phone, tap and hold the Outlook icon until a menu appears, then press View Calendar – or 'New event' to add something to the calendar. This works on an iPhone, too.

On an Android phone, you can also create a Calendar shortcut. Tap and hold the screen, then tap Widgets. Swipe through to Outlook and tap it, then press and drag the Calendar shortcut icon to the home screen. You now have an Outlook icon and a Calendar icon, each of which takes you to the separate functions.

Oliver Bailey, via email

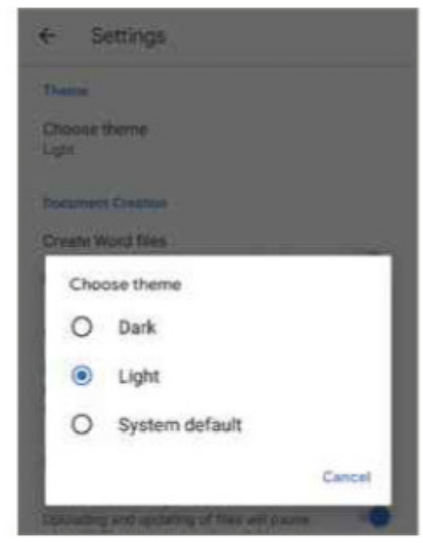


Tap and hold Outlook to access the calendar or add a shortcut with a widget

MOBILE

Add dark mode to Google apps

Dark mode is incredibly popular, so readers might like to know about a recent update that lets you switch it on across Google Docs, Sheets and Slides. This is especially good if you're using older Android versions. Just open any of these apps, tap the menu button and go to Settings, Theme, then Dark. Now, you can pick Light, Dark or System Default.



Google's latest update introduces an optional dark mode

If you're using Android 10, you may not want to do this because the apps automatically 'copy' the system theme. However, you can still use this method to turn dark mode on or off for each individual app.

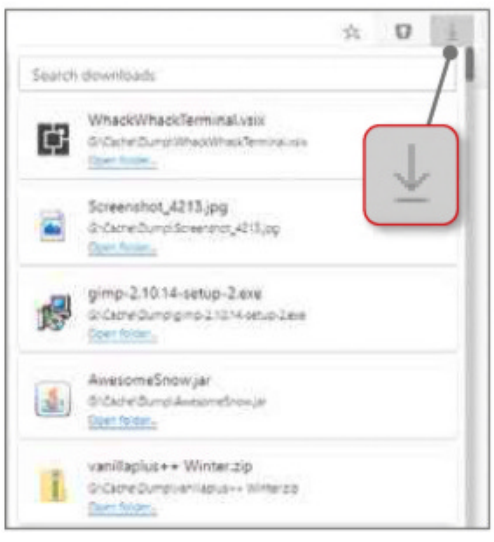
R Stein, via email

BROWSERS

Add a download menu to Edge

I understand that Microsoft Edge is still in its infancy, but I'm surprised by some of the features it's missing – particularly the lack of a download menu, like the one in Firefox. To remedy this, I recommend downloading TMDM – The Missing Download Menu (bit.ly/download507), which can manage and open anything you download online. As with other browsers, you can see and sort through downloads by clicking the icon on the address bar.

Thomas O'Connor, via email



Give the new Edge browser the download button it's sorely missing

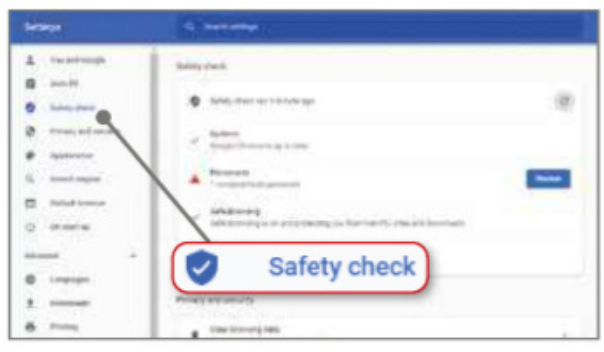
BROWSERS

Use Chrome's safety check

A 'Safety check' feature has appeared in Chrome's Settings, which you might not have seen yet. Open the menu button and click Settings, 'Safety check', then the 'Check now' button. It searches for updates, checks whether your passwords have been compromised in hacks, ensures Safe Browsing is on and scans for potentially harmful extensions.

It seems like a good idea to run this at least once a week, to make sure everything is okay.

Emma Hall, via email

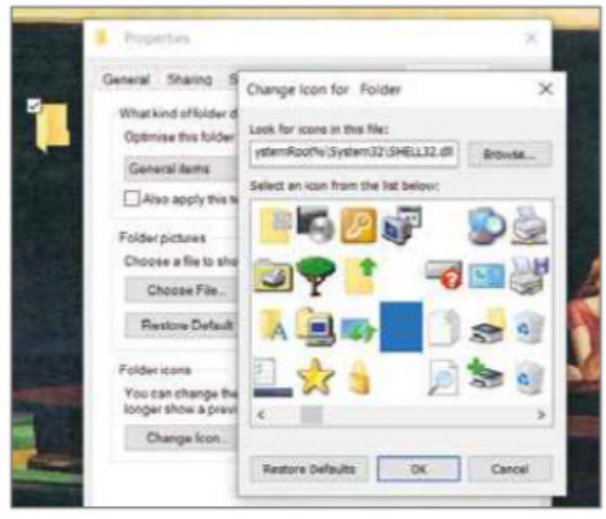


Check that everything is safe and secure in Chrome with its built-in safety check

WINDOWS

Create invisible folders

Want to keep prying eyes away from your files without using extra security tools?



Set up an invisible folder to hide your secret files

I did this by creating 'invisible' folders. Start by creating a new folder as normal (right-click to open the menu, choose New, then Folder). Right-click the new folder and choose Rename. This is the important bit. Press and hold Alt, and use the numeric keypad to type 255. This hides the folder name.

To hide the folder itself, right-click the icon again, select Properties, and click Customise. Choose Change Icon and select one that's 'invisible' (where there's a blank space rather than a picture of an icon) and press OK. You now have a folder only you know is there. You may run into a few issues doing this, but I find restarting my computer or repeating the steps tends to iron out the kinks.

Joseph Christie, via email

MOBILE

Secure Google Drive with your face

To add an extra layer of security to Google Drive on iOS, open the app on either an iPhone or iPad, then tap the menu button to open Settings. Select Privacy Screen and toggle the switch to On. Confirm the selection in the pop-up and you'll now need to use either Face ID or Touch ID (depending on your device) to access the app.

John Holliday, via email

SOFTWARE

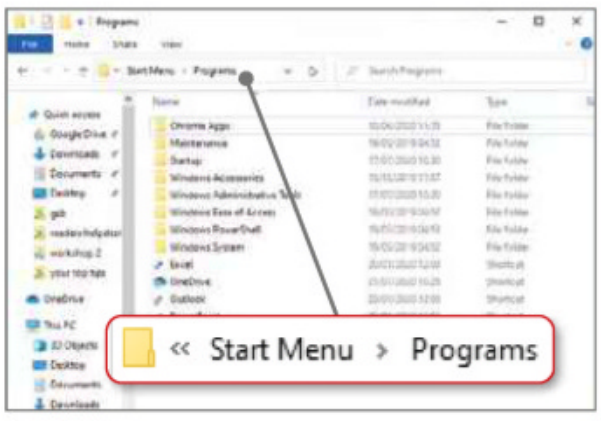
Add portable programs to the Start menu

I love portable apps but it annoys me that they don't appear on my Start menu. To add them, you need to create a shortcut to the program. Find the main EXE file in the portable program's folder, then right-click it and hover over the 'Send to' option. In the menu that pops up, select 'Desktop (create shortcut)' and the shortcut should appear on your desktop. Open Explorer and navigate to:

C:\Users\<NAME>\AppData\Roaming\Microsoft\Windows\Start Menu\Programs

Replace <NAME> with the user account name you're currently using. Drag the desktop shortcut to this folder, and change its name if you need to.

George Miller, via email



Drop a shortcut to a portable program in here to add it to your Start menu

WINDOWS

Block ads in Explorer

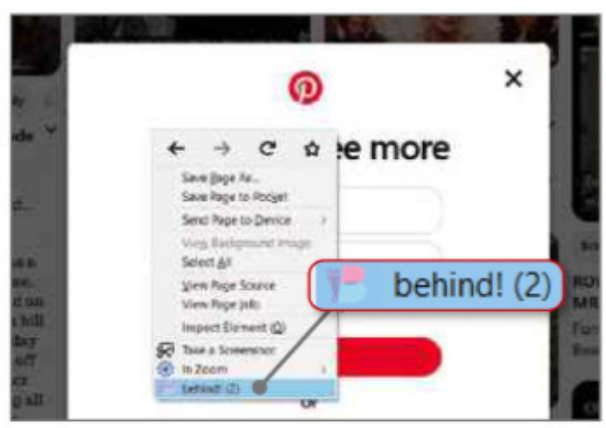
I haven't actually seen any adverts in Windows Explorer but I came across this tip to stop them if you do. Apparently, you might see them if you don't use OneDrive or Office 365. In Explorer, click View, then the Options button. Click the View tab, then clear the tickbox next to 'Show sync provider notifications'.

Brandon Davies, via email

BROWSERS

Download any image under your cursor

As a collector of photos, I often come across fantastic images online, only to find them stuck behind pop-ups or other annoyances that usually want me to sign up for one thing or another. To get around this, I've started using Behind (bit.ly/behind507). As long as your cursor is hovering over an image, even those behind pop-up windows, you can right-click the picture and choose the 'behind' option to open the image in a new window. Now it can be saved without any problems.



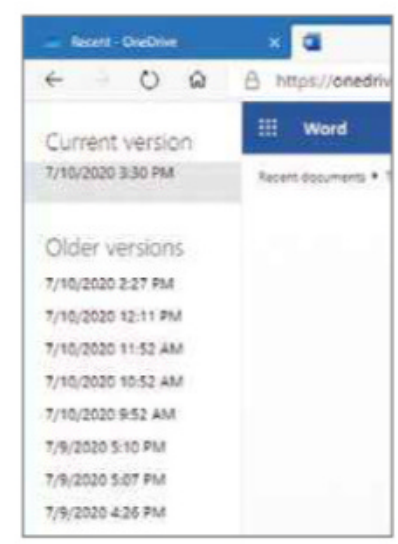
Save images even when websites try to stop you

Hannah Noyes, via email

OFFICE

Restore previous document versions

I don't bother with an Office subscription because I find the browser version is more than enough for my needs. Here is a useful tip I've discovered. If you're writing something in the Word app, click the down arrow next to the filename in the top-left corner and click Previous Versions. This lists every time that Word has auto-saved your document. If you went wrong somewhere in a long document or your ebook story is heading in the wrong direction, you can click a previous version to return to it. This isn't something I use a lot but it has proved useful every now and again.



Access the previous versions of an online Word document

Dan Watson, via email

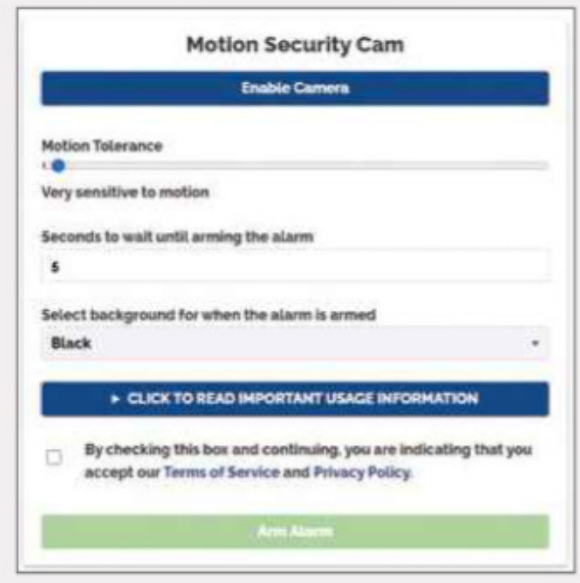
BLUNDER OF THE FORTNIGHT

SECURITY

Create your own motion security cam

The other week, I was researching security cameras for my sister who lives alone. It seems the choices are limited to spending a lot of money or a vast amount of money! I wasn't sure whether to risk buying an unfamiliar import that may not work or stumping up the cash for an Amazon-branded smart doorbell. But just minutes after shelling out for the basic Ring camera, I found a free alternative (yes, I was able to cancel my order. Phew!).

The Motion Security Cam website (motionsecurity.cam) lets you set up and create a motion-detecting security camera using any device with a camera and an internet connection – perfect if you have an old laptop or phone you're not using. Enable the camera, adjust the settings, then arm the alarm. The tool even records a five-second snippet when it's activated.



Use your old devices to keep an eye out for intruders

Wayne Gregg, via email

Have you managed to fix a PC-related disaster?
If so, please send your story to webuser@webuser.co.uk

Inbox

You can let us know your views via:
editor@webuser.co.uk, www.facebook.com/webusermagazine
and www.twitter.com/webusermagazine

Star Email

Back Issues disc winner

My experience with 4G routers

I first got a 4G router about four years ago when we were living in a caravan and couldn't get a landline. We were then with EE and signal coverage was not great in the area – downloading was slow and we couldn't stream anything, so it was only good for basic computing, such as emails and browsing.

After putting up with this for months, we heard that Three was offering a 4G router with unlimited data for only £22 a month. Before getting it, I asked a friend whose phone was on the Three network to come to my caravan so I could get an idea of what the signal strength would be like (a good tip for anyone thinking of taking on a 4G contract). The signal wasn't perfect, but it was better than we were getting from EE, so we took the plunge and got 4G with Three. After setting it up, we found we could stream what we wanted and that downloads were faster, too.

A year ago, we moved from the caravan to a flat in a different area. We brought the 4G router with us as we were still under contract. To our delight, the signal was much better. We now get around 30 to 35Mbps, so it is literally like having proper broadband. We do not have the added expense of paying for a landline, so have a fast, reliable connection for £22 per month.

However, I would like to point out some downsides to only having 4G. We find at "peak times" between 4pm and 7pm, when lots of people are probably using the 4G network from our local transmitter, we see a big drop in speed to between 7 and 9Mbps.

Steve Pope, via email

OneDrive wiped out my internet connection

My place of work is small and we only have one desktop PC. I needed to make sure its contents were safely backed up outside of the building, so I signed up for Microsoft OneDrive. After literally weeks of slowly uploading the contents of the computer, it completed the backup.

I forgot about it and simply left OneDrive to back up whenever it needed to.

My work involves creating a number of business adverts, using Photoshop to touch up photos – images that are generally large. It seemed that all of a sudden the office internet kept dropping and the computer reported DNS error connections.

Our ISP suggested that sometimes routers drop connections and came to investigate potential Wi-Fi interference issues, including commercial microwaves and Christmas lights. They measured my office for potential electrical noise, and suggested moving the router to a neighbouring room, so a longer Ethernet cable was fitted. We also replaced the telephone master socket.

It seemed to work for a while but then things got sporadic again, even after the ISP sent a new router. Sometime later, it finally dawned on me that every time I made a new advert or edited a photo, it uploaded to OneDrive and wiped out my internet connection. Once I stopped OneDrive uploading, the internet was very reliable again.

I thought I would try Google Drive instead, but the issue is just the same, albeit for 50p less a month. Every "cloud", eh?

Delme Jones, via email

Stop putting clickable links in emails

Considering the importance of email security and of not clicking links in messages, I am amazed at the number of legitimate organisations that insist on sending out emails with clickable links.

My latest was from Aegon (my pension provider), which requested that I follow the embedded link to update my password. As I am fairly web-savvy, I followed my usual bookmark to Aegon's site, where I found that the email wasn't the expected hoax, but a genuine missive.

How do these companies expect people to watch out for email scams and hoaxes when they encourage exactly the behaviour they want people to be wary of? This is especially true of an

Quiz Answers: Issue 506

1. Kind Hearts and Coronets
2. Whisky Galore!
3. Billy Liar
4. Carry On Doctor
5. Clockwise
6. Four Weddings and a Funeral

WINNER!
Well done to **Bob Chance** who wins a Web User Back Issues Disc

WAYBACK MACHINE
2001

organisation that must have a greater proportion of its customer base in the older, less informed generation. I'm not being ageist, as I am retired myself.

While I am sure that most *Web User* readers are better informed than the general populace, there are still many people who are not. Such behaviour by legitimate companies does little to educate.

Paul Moles, via email

Photopea or not to pea?

I was pleased to see that the online image editor Photopea (www.photopea.com) won a *Web User* Gold Award in Issue 503. However, it dawned on me that Photopea isn't pronounced the way I thought it was. It's not about taking pictures of green vegetables growing in pods; its name is probably pronounced more like "Utopia". And then I realised that I rarely hear the name of any software spoken out loud, I only ever read the names in print and on the web.

I wonder what other software pronunciation gaffes are out there waiting for me?

Dennis Ellis, via email

More problems with Windows updates

The latest Windows update (KB4559309) has installed the new Chromium-based Edge browser on my three laptops, which were already running the new Edge. Do they think I need one copy for each eye? I already suffer from double vision!

Also, when I updated my machines to Windows 10 version 2004, the update removed all Bluetooth drivers and information, leaving just the Bluetooth emblem on one of my machines.

It seems there are excessive problems with this build. Have the developers left their brains back in the year 2004?

Tony Leach, via email

What you say...

WILL YOU SUBSCRIBE TO MOZILLA'S NEW VPN FOR £3.95 PER MONTH (see page 10)?

I will stick with the VPN I have. It seems like everyone is launching their own VPN at the moment, so I'd be amazed if Mozilla's gains any traction.

Jack Gold

No, as I only occasionally need a VPN. Opera's built-in one and the free allowance from Windscribe more than cover my needs.

Rich Grove

I would try it if Mozilla was offering a free trial of the service, as other VPNs do. But a money-back guarantee means handing over your card details, which I'm uncomfortable with.

Paul Giddings

I'll stick to a tried and tested VPN such as NordVPN or Private Internet Access, until I know more about Mozilla's one.

David P-Smith *@david_p_s*

If Firefox had a built-in VPN, like Opera does, then Mozilla wouldn't need to charge users for a separate one. I thought it was supposed to be a non-profit organisation, anyway.

Sam Charlton

WHAT ARE THE BEST WEBSITES TO BUY FACE MASKS FROM?

You can buy single-use, three-ply surgical masks from eBay for around £50 for 50, and from Boots for around £35 for 50, which is quite expensive. I bought mine from a discount shop in Leicester (before the local lockdown) at a cost of £12.50 for 50.

Kevin Gadget Man Benton

I bought some cloth masks from eBay but I'm not going out until I feel the virus is more under control.

Nat Grove

I won't be buying any. Look at the evidence, they don't work. How can a piece of cloth keep out a virus that is 1,000 times smaller than the thickness of a human hair? Like many others I know, I shall just avoid going into shops and stick to online purchases, rather than be 'muzzled'. Shops are struggling as it is, and compulsory face coverings will just make matters worse for small retailers.

John Hewett

Honestly, the number of posts all over social media with people insisting they will not wear a mask! It's not just about protecting yourself but protecting others from the possibility of you spreading it. During World War Two, we suffered lockdowns and blackouts for nigh-on five years – gas masks were worn with no complaints. People were confined to bunkers for stretches at a time and stood together through what were far tougher times than COVID-19!

Gary Olsen

WOULD YOU PAY TO KEEP USING YOUR EMAIL ADDRESS AFTER SWITCHING ISP (bit.ly/btemail507)?

Why would anyone moan that their old provider is refusing to provide their email account for free? What incentive is there for the supplier? I'd never use one with an internet provider for this very reason. Just get a Gmail or Outlook webmail account.

Caroline Chapman

Provided you download all your messages before you switch ISP and let people know your new email address, I don't see the point in paying to retain your old account. Move on!

Chris Henshaw

I just use Gmail. I never use my ISP email address.

Phil Graham

Page 404

Bloatware is a problem software developers need to deal with, says **Barry Collins**

Let's stick to the software diet

Let he who is without a chicken biryani's worth of extra body flubber cast the first stone, but there's an awful lot of flabby middle-aged software out there.

I've been in this game long enough to remember when Google Chrome was the nimble upstart, making established browsers such as Internet Explorer and Firefox look positively leaden. Nowadays, it's Chrome that's more likely to be binge-eating your computer's memory, while new browsers such as Microsoft's revamped Edge (ironically built on the same code base as Chrome) make it look like a wheezing old boiler.

Google repeatedly makes promises to make Chrome more lightweight, less memory-hungry and less prone to chug your laptop's battery like a shot of vodka, but I've read more of those press releases than I've had hot biryanis. Chrome can't shift its mid-life baggage.

The same criticism has been levelled at other popular software packages. Microsoft Office is positively pensionable in software terms, with every version adding more and more features to the code base, like barnacles on the back of a whale.

Hence we arrive in 2020, when Microsoft Word – a program that for 90% of the people 90% of the time does little more than slap words and the odd picture on a page – takes up more than 2GB of storage on my Mac.

> "Chrome is binge-eating your computer's memory and Edge makes it look like a wheezing old boiler"

Little wonder that a trend for minimalist, lightweight word processors has erupted in recent years. Apps such as iA Writer (ia.net/writer) do almost nothing more than position black words on a white background, yet still command a £30 price tag that people will willingly pay. It's a 14.8MB download on the Mac. Word is about 200 times its size.

You might argue – and with some justification – that none of this matters very much. Computers get more and more powerful with every generation, generally with more memory and more storage thrown in, so what does it matter if Chrome or Word or Photoshop or whatever uses more resources? There's plenty to go around.

Well, yes, but the reason we have to keep buying more powerful hardware is because the continued software bloat makes your old computer feel less and less responsive with every passing day. And with software now on the auto-update, subscription treadmill, you have little choice but to take the latest version. It's not like the good old days where you could stick with Office 95 until you decided to buy Office 97: Microsoft just stuffs the latest version down the pipe and your computer has to deal with it.

Legacy is the problem here. Software grows fatter and fatter because instead of taking the tough decision to start again from scratch, the developers keep adding to what's already there. Someone at Google and Microsoft needs to take the big decisions (as Microsoft has already done with Edge) to start with a clean slate and build browsers and word processors that do what people need them to do in 2020. Not what they did 10 or 20 years ago.

The big software developers must be braver more often. People get upset by change, it's true, but when they get the memory and storage back on their computers, that will soon be forgiven.

Illustration: Andrew Torrens

Do you agree? Let us know at webuser@webuser.co.uk

SUBSCRIPTION OFFER
FOR MORE INFO SEE PAGE 62

WebUser

ENJOYED THIS ISSUE?

GET THE NEXT ONE EARLY!

Thank you for reading this issue of *Web User* – we hope you found the tips and advice useful. The good news is that you don't have to wait too long for the next issue. If you subscribe to *Web User* by Monday 10 August (8pm)*, you'll receive it through your letterbox before it's available in the shops!

What's inside the next issue:

COVER FEATURE: FAKE YOURSELF ON THE WEB

PLUS:

- Change default settings on any device
- Prevent your tech from overheating
- Best free sites for playing retro games

AND...

Sync your files without using the cloud

**Don't worry if you miss this deadline – you can subscribe to* Web User *at any time!*

Subscribe to *Web User* today and you'll pay just £22.49* for the next 13 issues – that's a 27% saving on the shop price! As an added bonus you'll also receive a free gift – a 15-piece Screwdriver Set

Subscribe online at

subscribe.webuser.co.uk

or call now on **0330 333 9493**

(calls to 03 numbers will be charged at your standard local rate)

**Includes FREE DELIVERY*

Quote offer code: **P2016**