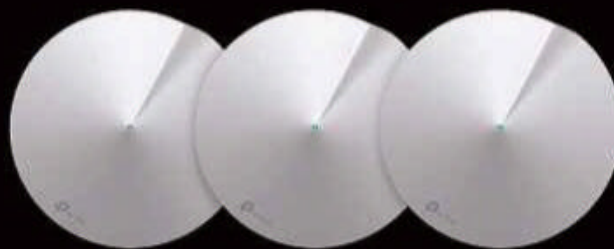


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What you must...

NEVER CLICK

ONLINE



Avoid the web scams that you won't spot yourself **p40**

- ☒ Identify fake download buttons
- ☒ Dodge malware-infected links
- ☒ Spot devious new phishing tricks
- ☒ Prevent spam emails and texts

...and much more!



PLUS

WHY YOUR PHONE IS SO SLOOOOOW

Find out and fix it NOW

p50

HACK-PROOF YOUR ONLINE ACCOUNTS

2FA security made simple

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DON'T BIN YOUR BROKEN USB STICKS

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Take your finger off the button

A few years ago in *Web User*, we recommended an interesting free tool called Mousotron (bit.ly/mousotron494), which counts how many times a day you click your left and right mouse buttons. Personally, I found it unnerving. Having your mouse clicks constantly tallied makes you self-conscious of them, so I tried not to click so much, which is no way to run an internet magazine.

In this issue's cover feature, we explain why you *should* be extra cautious about what you click online, and we're not just talking about 'Rickrolling'. The web is rife

with innocuous-looking links, buttons and boxes that steal your data, infect you with malware and bombard you with spam. We reveal how to spot and avoid the sneakiest tricks before you press your finger down on your mouse button.

One link you should click, however, is bit.ly/webuser2019, which takes you to our new 2019 Back Issues Disc, available to buy now!

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




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the web, and learn how to spot them



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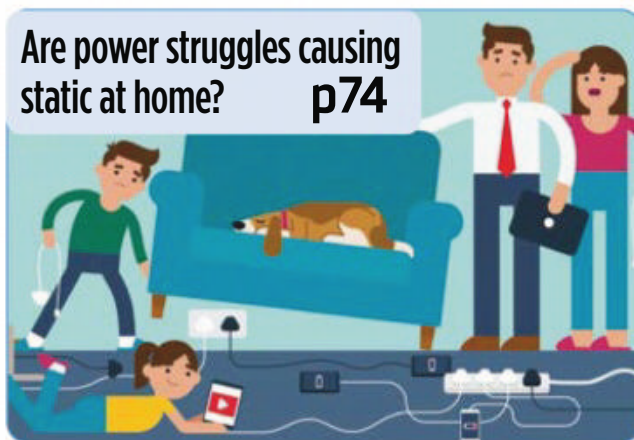
Curb excessive phone use with Google's help



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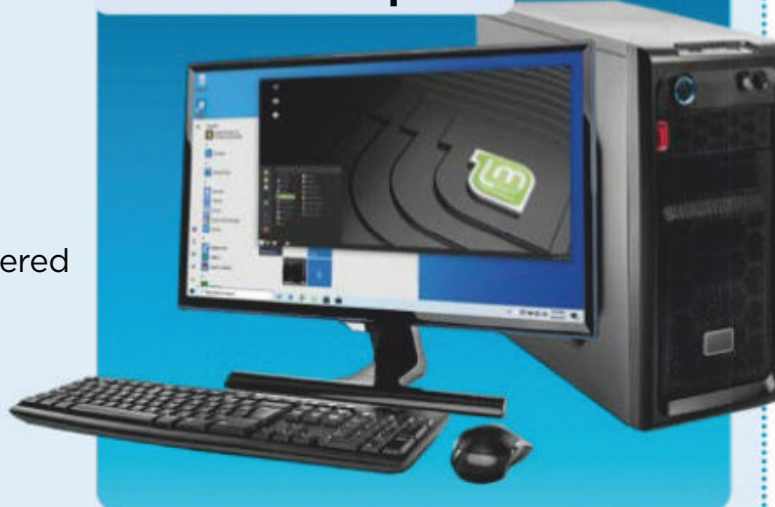
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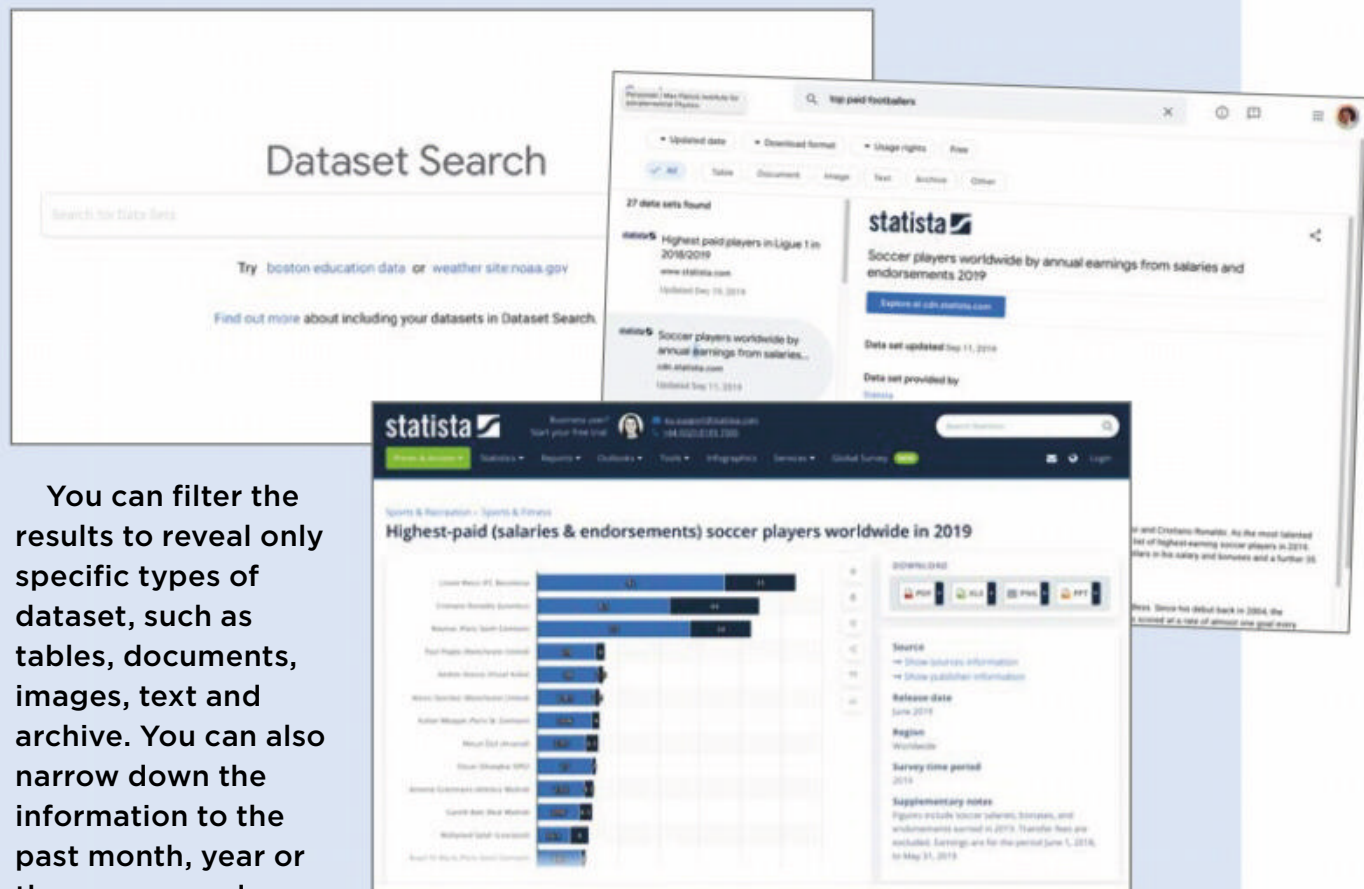


What's New Online

Browse 25 million datasets for free

The web is a great source of data from universities, governments and research organisations, but finding what you want using traditional search methods isn't always easy. That's why Google has been encouraging institutions to describe their datasets using metadata and submit them for inclusion in its new Dataset Search tool, which is now out of beta. Type a query such as "crime in London" or "top paid television presenters" and any available data appears in an instant, placing close to 25 million datasets at your fingertips.

The tool is aimed primarily at academic researchers, business analysts, students and data scientists, but we found an abundance of links to UK government and NHS-related data in our own searches, as well as lots of fun stats, including a dataset of international football results from 1872 to 2019.



You can filter the results to reveal only specific types of dataset, such as tables, documents, images, text and archive. You can also narrow down the information to the past month, year or three years and perform searches on mobile devices, so you'll never be short of statistical

backup for an argument.
datasetsearch.research.google.com

Search the web more privately

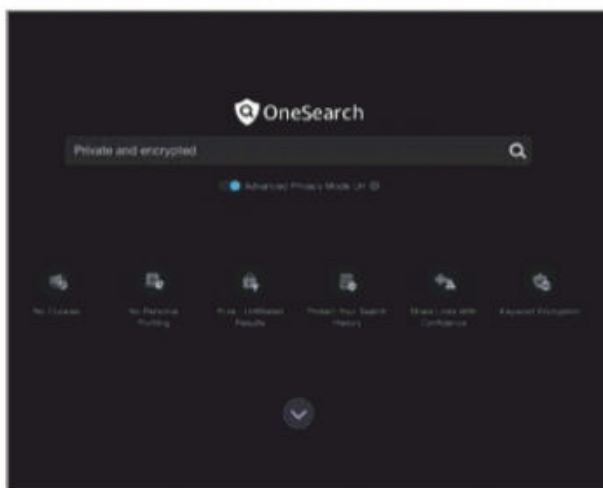
www.onesearch.com

We've long been fans of DuckDuckGo, the search engine that prides itself on not tracking you online. Now Verizon Media, the company that owns Yahoo, has launched a rival search engine called OneSearch, which also promises not to track and store your search history or share your personal or search data with advertisers. Not only does this allow

OneSearch to deliver unfiltered search results from Bing, it also means you'll see only contextual adverts based on your search terms rather than targeted ads based on your behaviour.

The engine's Advanced Privacy Mode encrypts your search terms, too, so the words you enter won't appear

in the URL of results. What's more, your search results URL expires within an hour for added security. Verizon promises to release mobile apps soon, as well as versions of OneSearch tailored to non-US countries.

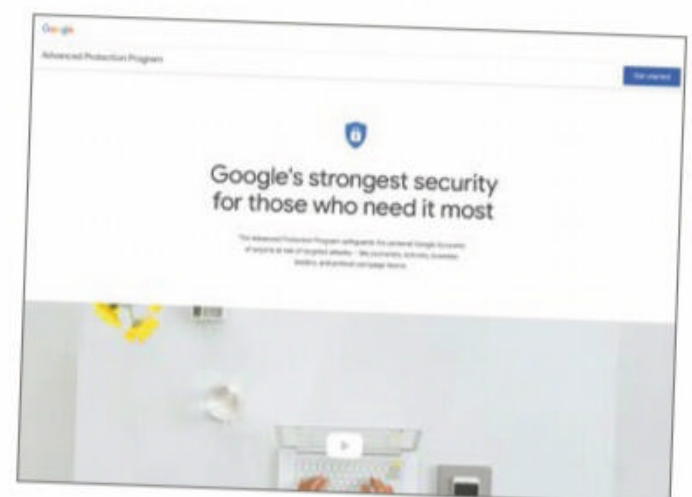


Better protect your Google account

bit.ly/protect494

Some Google accounts are more likely to be targeted by hackers than others, so now the technology giant has made it easier to protect them. Rather than insisting that users buy a physical security key, Google is allowing anyone who signs up for its Advanced Protection Program to use their iPhone or Android phone as a digital key.

Google says its Advanced Protection is aimed at high-risk users such as journalists, activists, political campaigners, executives and people who work in regulated industries. Even if you don't fit those categories, however, you can still sign up and relax in the knowledge that your data is more secure. The program does create limitations – for example, only Google apps and some third-party tools can access Gmail and Drive files – but it's a reasonable trade-off if you need the strongest protection against fraudulent access.



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

Make a Digital Family Pledge

bit.ly/pledge494

Do you think it's time you set some house rules for how your family uses technology? Then why not create a Digital Family Pledge using Vodafone's new online tool? This lets you select statements about screen time, being kind online, social media and gaming. You can also test your tech knowledge and read handy tips before downloading the pledge as a PDF and getting everyone to sign it.



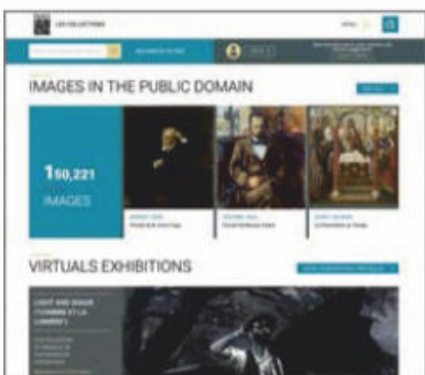
Download artworks from Paris museums

bit.ly/paris494

Paris Musées, an organisation that runs 14 Parisian museums, has released hi-res digital images of 150,221 artworks into the public domain. These include paintings from Monet, Picasso and Rembrandt, and although the site

is written in a mixture of English and French, you shouldn't have much trouble finding pictures you like. You can filter by museum, time period,

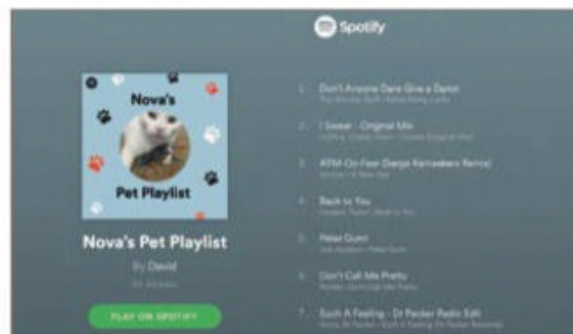
artist and even the dominant colour in the paintings. Once you've found an image you want, you're free to download, modify and distribute it. You can also learn about the artwork and view related content.



Create a playlist for your pets

pets.byspotify.com/uk

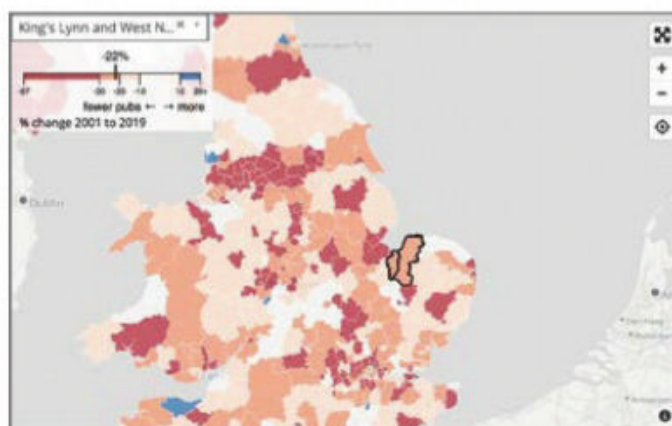
Whether you have a cat, dog, iguana, bird or hamster, this colourful new online tool from Spotify will help you create the purr-fect playlist for your pet. It starts by asking if your little animal friend is relaxed or energetic, shy or friendly and apathetic or curious before requesting his or her name and allowing you to upload a photo. Spotify then generates a list of songs, synchronised with your own musical tastes, that you can listen to with your pet or share on social media. A bit of Cat Stevens, maybe, or a few raps from Snoop Dogg?



Check the changing number of pubs

bit.ly/pubs494

It's a sobering thought, but there are far fewer pubs and bars in the UK today than there were in 2001. This colour-coded map from the Office for National Statistics shows which areas have been most and least affected. By selecting from a drop-down menu, you can also check the change in percentage for your own neck of the woods.



NEW VOICE COMMANDS



Start your day healthy

Kellogg's is offering health tips under its Special K brand. Say: "Hey Google, Ask Special K for Health Hacks". You can also access this advice using the Alexa skill.



Get Siri to beatbox

Ask Siri "Can you beatbox?" and it gives a crazy reply involving the words "cats" and "boots". Its efforts won't top any charts but it certainly raises a smile.



Meditate with Alexa

A new skill from consumer neurotechnology specialists Muse lets you pick from 14 free guided meditations by saying: "Alexa, launch Muse Meditation". If you have a Muse account, you can access more than 300 meditations.



Use emoji on Twitter

www.twitter.com

Too busy to write a reply to a direct message on Twitter? Then tap the heart icon next to it and choose from emoji including a thumbs up, laughing, shocked or sad face, and a fire to show appreciation for something "lit" (meaning exciting).

Calculate your meat footprint

bit.ly/meat494

Meat consumption affects land use, water and air pollution. If you want to see the impact of your meat eating, tell this tool how much poultry, beef, pork, lamb and fish you eat for a detailed breakdown.

Track the coronavirus spread

bit.ly/corona494

As we write, there have been more than 4,500 confirmed coronavirus cases worldwide, and over 100 deaths, with both figures growing at an alarming rate. This map uses data from official health sources to show where infections were recorded.

Police to roll out facial recognition despite concerns

What happened?

The Metropolitan Police has revealed plans to use live facial-recognition technology on London's streets, despite privacy concerns and criticism about the accuracy of such systems.

The police force said the new system, built by tech firm NEC, won't be used across all of London, but in specific locations where police expect wanted criminals to be. Rather than recording images of everyone who passes by, the system compares faces with a watchlist of people wanted for serious crimes.

If the system finds a match, it will "prompt" police that the individual may be a suspect. It's then up to the officers on site to decide what to do. In areas where facial-recognition is in use, people will be notified by signs and by officers handing out leaflets. Reports suggest the system works best in good light, and less well at night or in crowds.

"We all want to live and work in a city which is safe: the public rightly expect us to use widely available technology to stop criminals," said Assistant Commissioner Nick Ephgrave ([bit.ly/metpolice494](https://www.bit.ly/metpolice494)). "Equally I have to be sure that we have the right safeguards and transparency in place to ensure that we protect people's privacy and human rights. I believe our careful and considered deployment of live facial recognition strikes that balance."

The rollout of the technology follows a series of trials at sporting events and a much criticised test at the Notting Hill Carnival. Academics at the University of



Essex reviewed the Met's trials of the NEC technology, and found that only eight of its 42 matches were correct.

How will it affect you?

If you live in London, you may see a facial-recognition zone near you. The Met Police said it will warn the public when the technology is in use, but why a wanted criminal wouldn't just turn and walk away is less obvious.

The system doesn't store images – instead it takes a "faceprint" using points of data from your face. If your faceprint matches that of a wanted person on the system, you can expect a police officer to walk over for a chat. If your face doesn't match anyone on the list, the Met claims your collected data will be deleted within moments.

The Met says it will use the system only after consulting with the local community, but you can expect legal challenges from rights activists and privacy campaigners, who already have lawsuits in progress. Live trials of facial recognition are currently running in South Wales, but this is the first time it's been used "operationally" rather than as part of a test. When the South Wales trial was challenged in court, the judgement found in favour of the police, so it's not clear how successful activists would be in London.

Couldn't you just cover your face as you walk by? During a trial of the technology last year, one man did just that – and, after a kerfuffle with police, was fined for a public order offence.

What do we think?

It's easy to understand why the police want technology to help them on the streets. The Met has been hit by cuts amid terrorist attacks and a rise in knife-crime. If facial recognition could prevent a teenager losing their life to violence or stop a terror incident, we may be willing to trade some of our privacy, especially if the system doesn't store our so-called "faceprints".

But if the system is ineffective, it risks intruding on our privacy for no benefit. The Met claims the NEC system has a 70% accuracy rate, which isn't very high and suggests that plenty of innocent people may be stopped by police for no reason. Given that academics who studied this system said the accuracy rate is closer to 19%, it's bewildering to think that the Met believes it's good enough to be used for fighting crime.

MPs and the EU have called for a halt on public facial recognition until laws are in place to protect against bias and privacy intrusion. We're disappointed that the Met is rolling out a flawed system before we've had the debate.



The Metropolitan Police will soon start using live facial-recognition technology

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

Google ads and search results look the same

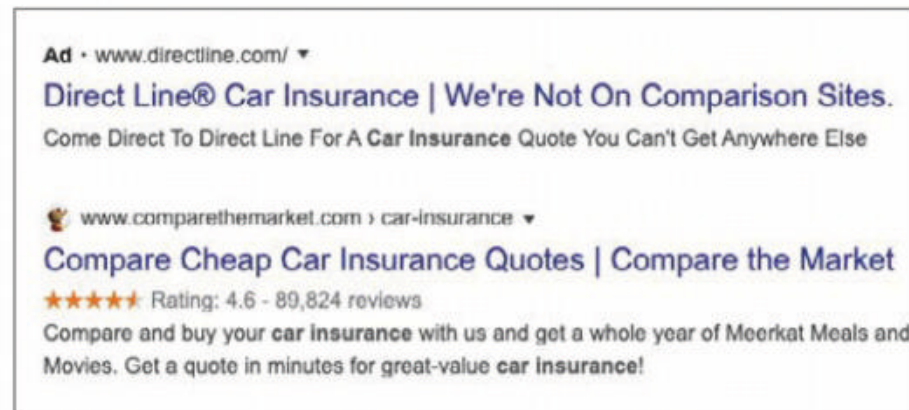
What happened?

Google has changed the way search results look in the desktop version of its search engine, and some critics argue that they now look a bit too much like the ads that appear at the top of the results page.

Previously, ads used a different-coloured background or text to separate them from the results below. Now the only difference is a label next to the paid-for link that marks it out as an ad. However, that "Ad" label is a similar shape and size to the icons that now appear next to genuine search results.

How will it affect you?

Advertisements are still clearly labelled as such, but



it's easy to see how a web user could fail to distinguish between them at a glance. According to reports from DigiDay, online marketers are already saying that clickthrough rates – the industry measurement for how effective a digital ad is – climbed by several percentage points in the immediate aftermath of the change, although this trend is unlikely to continue once

users become more familiar with the new format.

What do we think?

Never forget that Google is an advertising company – that's how it makes the bulk of its revenue, after all. Search ads have always been fairly innocuous, because they're text-based and reflect your search terms, rather than taking the form of irritating banner ads based

on invasive behavioural tracking. Google should be wary of making such ads blend in too successfully with legitimate search results, however, or search ads may become as hated as other types of online advertising on the web.

Provided they remain clearly labelled as ads and are easy enough to differentiate from genuine search results, we doubt this change will raise too many complaints. If you find the revamped results confusing, there are alternative search engines – although search-result advertising is how ethical rivals such as DuckDuckGo make their money, too, so you still need to be careful what you click.

Apple fights EU over Lightning connector

What happened?

European lawmakers want to reduce waste by forcing technology manufacturers to adopt a single method for charging devices, but Apple isn't keen on the idea. The European Commission is set to vote on whether to make companies use a common charging cable – which is likely to be USB-C. In 2009, the EC did the same with micro-USB cables, but Apple dodged the ruling by offering an adapter.

Apple argues that such rules make little sense, because they would force its users to switch to a different connector when they already have Lightning cables at home.

It also says that imposing a single standard limits innovation – we'd all be stuck with micro-USB if Apple had caved in 10 years ago.

How will it affect you?

Apple says the USB-C connector is too thick for its iPhones, although other manufacturers have made it work. If forced to switch to USB-C, Apple could try offering an adapter again, or shift to wireless charging, which it's likely to do anyway.

More generally, the EC rules would mean no more hunting for different charging cables – a situation that used to make life difficult in the days when all phones had proprietary power adapters. The EC's past efforts reduced



the options to USB-C and Apple's chargers, and if it gets its way, there could soon be one cable for everyone.

What do we think?

The EC's aim of enforcing a universal standard is laudable. Manufacturing various incompatible charging technologies is wasteful, while adopting a single standard makes

everything simpler. As well as reducing waste, it means you can borrow a charger more easily and makes replacements cheaper. The cheapest official Apple-branded Lightning cable costs £19, for example, but you can buy a USB-C cable for a few quid.

See Barry's column on page 74 for his views on this issue.

Sonos pulls the plug on old speakers

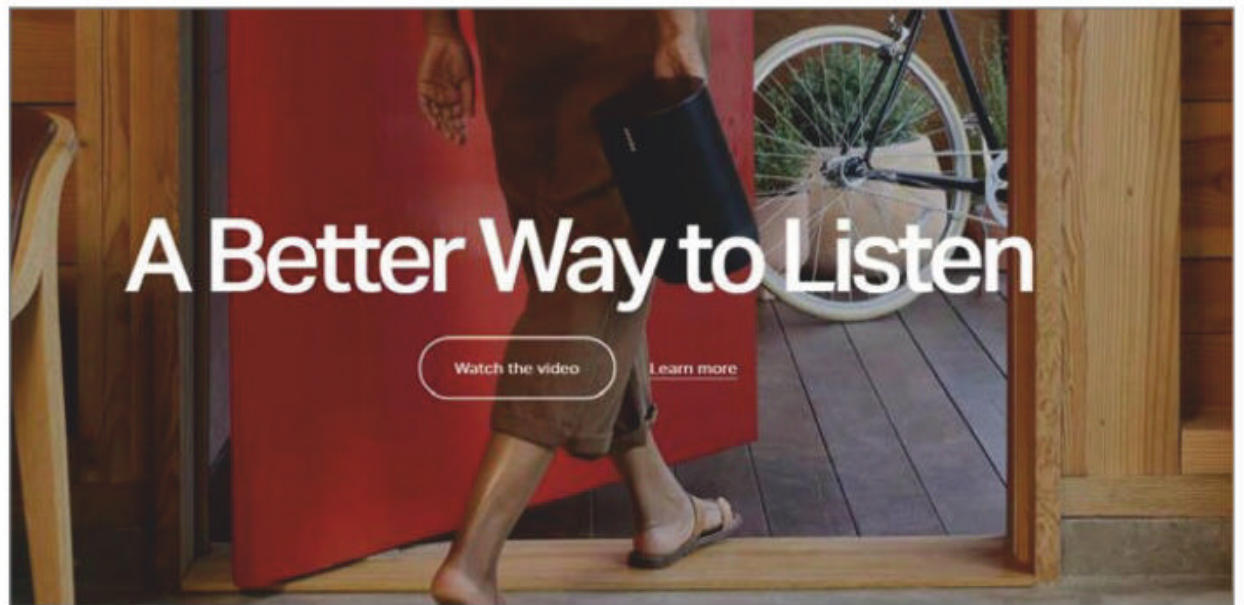
What happened?

Hardware manufacturer Sonos has provoked anger from its customers by announcing that it will end support for older models of its high-end speakers.

In an online announcement (bit.ly/sonos494), the company told users that certain products launched between 2006 and 2009 would no longer receive updates after May. However, anyone affected would receive a voucher entitling them to 30% off new (and fully supported) speakers.

Angry customers took to social media to express their frustration. Some claimed the company was letting down loyal users, while others said their speakers would essentially become doorstops. Many said they'd never buy a Sonos product again.

After the online outcry, which saw Sonos fans express disappointment in the typically restrained way you'd expect from Twitter users, the company adopted a more conciliatory approach. Just days after its announcement, Sonos admitted that: "We heard you. We did not get this right from the start," and went on to claim that, "come May, when we end new software updates for our legacy products, they will continue to work as they do today. We are not bricking them, we are not forcing them into obsolescence, and we are not taking anything away."



The retraction addressed one of the main concerns users had: that modern speakers connected to so-called 'legacy models' would not receive updates either. However, the company will still end software support for older models.

How will it affect you?

If you own a Sonos product, the first thing to do is check the company's original blog post at bit.ly/sonos494 to see if your speaker is included in the 'obsolete' range. If it is, it may be time to consider switching to a new model, taking advantage of the 30% discount, or moving away from Sonos entirely – although other businesses are likely to do the same at some point. If you are affected and don't fancy buying a new

speaker, Sonos has a single option for you: keep using your speakers without receiving updates.

What do we think?

We understand that older hardware can't always handle new software updates, and that it may not be cost-effective for companies to offer them. However, customers should be able to buy products with a reasonable expectation that they'll work properly for the duration of their lifetime – especially when spending a pretty penny on top-of-the-line speakers. Expect these sorts of software shenanigans to occur more often as new technology continues to outgrow older hardware (and businesses cash in).



FIRST LOOK

Motorola Razr 2020

bit.ly/razr494

The original Motorola Razr, released in 2004, was an era-defining mobile phone. Leading the trend for thin clamshell designs, it went on to become one of the most popular and recognisable handsets available.

Now Motorola hopes to repeat its success with the updated Motorola Razr 2020 – and this one comes with a significant difference. While it may look and feel like the older version when closed, crack open that nostalgic clamshell and you'll find an Android smartphone with a stunning 6.2in flexible OLED screen. There's also a small second screen on the front of the device that lets you see text, call and email previews when the case is closed.

Opening this case is a little tougher than it was on the original device. Motorola has packed an insane amount of tech inside, but there's no denying how pleasant it feels. The pin-sharp OLED screen also shows no sign of creasing when flipped open.

Mid-tier Motorola phones always tend to be well-received – and that's more or less what the new Razr is, with solid if unexceptional performance. It runs on a Snapdragon 710 processor with 6GB RAM and 128GB internal storage, which is par for the course for an everyday smartphone. Sadly, you won't be paying a mid-tier price for this phone. With that dual-screen design, its price is more in line with an iPhone than a Moto G7. Not only could that prove a deal-breaker for many, it may stymie Motorola's hopes



that its new Razr will be another best seller. For a little over a grand, you get a phone that has a single 16-megapixel camera, no slot for adding storage or extra SIM cards, and no headphone jack either.

So the Razr's desirability comes down to three factors: how much you value portability, how much you want a pioneering phone with a foldable screen and how nostalgic you feel for its clamshell design.



WHAT'S THE RUMOUR

Will the Bank of England switch to cryptocurrency?

Cryptocurrencies have so far been the preserve of technology enthusiasts, but they could soon hit the mainstream, if rumours are to be believed.

It's thought that the Bank of England will join the European Central Bank, the Bank of Canada, the Bank of Japan, the Sveriges Riksbank, the Swiss National Bank and the Bank for International Settlements in exploring the practicalities and pitfalls of using cryptocurrencies.

The move comes as Facebook prepares to launch its controversial digital currency, Libra. The Bank of England has been outspoken about the move, saying Libra will need to be regulated, which goes against the ethos of the currency. The statement led many backers to pull their support.

Now, it appears, the bank wants to pop its own finger in this particular pie. It may have taken some time – digital currencies have been knocking around for years – but central banks are finally taking notice, rather than simply opposing them as they initially did.

Frances Boait, executive director of Positive Money, a non-profit organisation devoted to monetary reform, said: "Central banks need to accelerate plans for a central bank digital currency, which would both ensure that people have the choice of a



safe public banking option and prevent our monetary system being completely surrendered to unaccountable private interests. This new group must serve as a vehicle for doing so."

LIKELIHOOD RATING



Cryptocurrency is money – and banks love money. It would be foolish not to believe that the Bank of England won't want to get in on the action at some point. However, expect the BoE and other central banks to want to have their cake and eat it. Banks will want all the convenience and benefits that cryptocurrencies offer, while regulating new currencies to within an inch of their life.

WEBOMETER

WE LIKE...

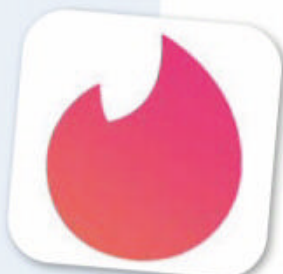
↑ ProtonVPN goes open-source

Swiss VPN service ProtonVPN has made its Windows, macOS, Android and iOS software open-source to build trust among its users. The company has also subjected itself to an independent security audit to address current concerns over VPNs.



↑ Tinder adds new safety features

Dating app Tinder is adding new safety features, including a panic button that lets users alert emergency services if they feel uncomfortable while on a date, and a photo-verification tool to stop people creating fake profiles on the service.



WE DON'T LIKE...

↓ Thousands of WordPress sites hacked

Over 2,000 WordPress sites were hacked as part of a criminal campaign redirecting visitors to scam sites offering fake surveys, notification subscriptions, bogus Flash downloads and 'free' giveaways. Site owners can check their sites at sitecheck.sucuri.net.



↓ Windows 7 desktops turn black

Microsoft's final Windows 7 update, released on 14 January, introduced a bug that replaced many users' desktop wallpaper with an empty black screen. Microsoft says it will make a patch available for all Windows 7 users to fix the problem.



What's new on Kickstarter

Our favourite new project on the crowdfunding site

BriCase

bit.ly/bricase494 | From £15

The BriCase takes the concept of Lego and applies it to phone cases. It's full of holes, which means it may not offer the greatest protection, but that does allow you to attach Lego-like accessories to the back, including a kickstand, card wallet and power bank. Alternatively, you can just attach standard Lego bricks, which fit perfectly. BriCase is designed for iPhones, Samsung, OnePlus and Huawei devices – so unless you own one of these popular models, you're out of luck. A £15 'early bird' pledge nets you a Starter kit, while for £50 you get the Ultimate kit, including an attachable wallet and power bank.



Stay Safe Online

News about the latest threats and advice from security experts

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

Internet Explorer hit by new security flaw

Microsoft has warned that millions of people still using its Internet Explorer browser could be at risk from a zero-day security flaw that is actively being exploited by hackers.

The flaw relates to a memory-corruption bug in the browser's scripting engine, which it uses to execute code. "An attacker who successfully exploited the vulnerability could gain the same user rights as the current user," Microsoft noted in its security guidance. "If the current user is logged on with administrative user rights, an attacker who successfully exploited the vulnerability could take control of an affected system."



That could let attackers install programs, including malware, as well as access and edit data, and create new user accounts, the company noted.

Microsoft said it was aware of "limited targeted attacks" using the flaw and confirmed that it was working on a fix. This is expected to be included in the next Patch Tuesday update, which is due out on 11 February.

bit.ly/ieflaw494

Google finds flaws in Apple's Safari browser

Google researchers have discovered several major security flaws in Apple's Safari browser that could have potentially allowed hackers to track users. The flaws were found in Safari's Intelligent Tracking Prevention feature,



which is designed to automatically block and delete cookies to prevent users from getting tracked on the web.

However, rather than protect users' privacy, the five vulnerabilities identified by Google's team may have resulted in third-party companies getting hold of sensitive and private browsing information, and provided a way for them to see what users were searching as well as track them around the web.

"You would not expect privacy-enhancing technologies to introduce privacy risks," independent security researcher Lukasz Olejnik told the *Financial Times*. "If exploited or used, [these flaws] would allow unsanctioned and uncontrollable user tracking."

Google informed Apple of the vulnerabilities in August 2019, and Apple quietly fixed them in December, while thanking Google for finding the flaws.

bit.ly/safariflaw494

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT:
Tom Chivers, Digital Privacy Advocate at ProPrivacy
(proprivacy.com)



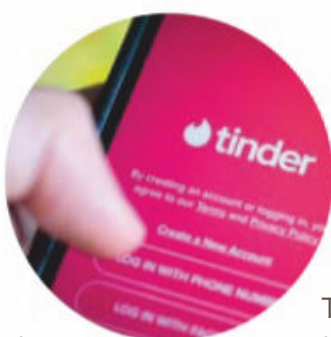
Q Following the **Tinder data breach** (bit.ly/tinder494), are dating apps unsafe to use?

Andrew Markham, Twitter

A The news that Tinder suffered a massive data breach that leaked more than 70,000 photos – all of

which belonged to female users – is hugely problematic for the dating giant. The fact that the hack, discovered by a researcher at cybersecurity firm WhiteOps, targeted only women suggests that this data dump could be used for the creation of fake profiles on other dating sites. This has worrying implications for the users affected, given they could now have their data used for 'catfishing' or fraudulent accounts they have nothing to do with.

If you aren't willing to provide photos of yourself, you aren't allowed on the



“ This breach does not bode well for the privacy and security of Tinder users **”**

app – this is how Tinder operates. The dating giant is therefore duty-bound to protect this data.

This breach is not without precedent, as Tinder photos have been misused plenty of times. Three years ago, 40,000 photos surfaced in an online forum – the purpose, reportedly, was to train facial-recognition algorithms.

While Tinder explicitly says in its terms and conditions that it prohibits the use of scraping tools, hackers have

found ways to collect data *en masse*. This does not bode well for the privacy and security of Tinder users, especially when targeted phishing campaigns can be leveraged against their most intimate data.

In the world of dating, safe spaces are essential. Tinder has to do better when it comes to securing the data of its users, both from hackers and the third parties it willingly shares your information with.

CTRL your web business and **SHIFT** projects from good to great. **DEL** time-intensive administration and access management. **ESC** from long working nights with cold pizza. Your **ALT**ernative: The **IONOS Partner Program** for agencies, developers and designers.

[**www.ionos.co.uk/partner-program**](http://www.ionos.co.uk/partner-program)



★ Best New Websites

Site of the Fortnight

MONEY

RELAUNCH

MoneyWeek moneyweek.com

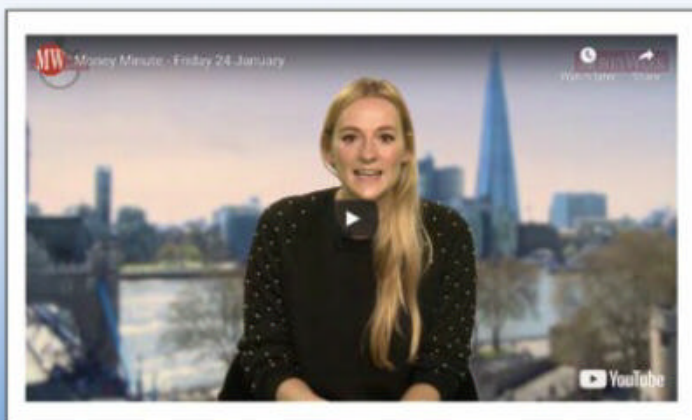
As well as helping readers amass more cash, the popular investment magazine *MoneyWeek* is now aiming to offer greater value online, too. By increasing the number of stories, videos and podcasts on its website, it's created a better accompaniment to the printed publication, while a redesign from the ground up makes content much easier to find. Not only does the website now display better on mobile devices, but there's a streamlined navigation bar, a faster search engine and improved highlighting of specific topics, as well as frequently updated news. Just don't forget us when you strike it rich.

Our rating



NEWSLETTER

You can sign up to the newsletter and daily investment email, and get a free report, too



MONEY MINUTES

There are now more videos including 60-second updates on key economic news



The (Unofficial) Apple Archive

Dedicated to the unsung studio designers, copywriters, producers, ADs, CDJs, and everyone else who creates wonderful things. Dedicated to those who stayed up late and got up early to get on the Family iMac to recreate event slides in Keynote. Thank you.

1970s/80s 1990s 2000s 2010s 2020s

NEW



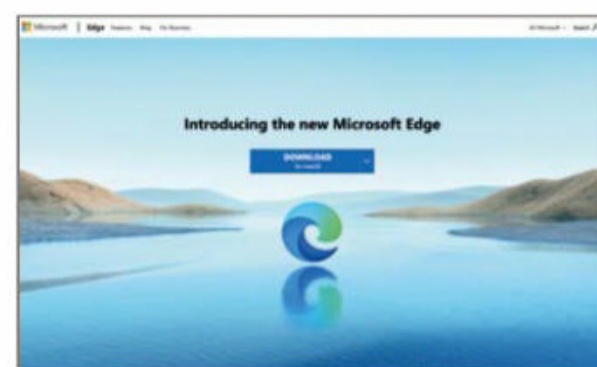
TECHNOLOGY

Apple Archive

www.applearchive.org

Shortly after this wonderful but unofficial collection of Apple-related media was unveiled, most of its videos were taken down on the orders of Apple's lawyers. Even so, there was still much to enjoy at the time of writing, with lots of interesting promotional material and vintage print adverts remaining – and with Apple enthusiast Sam Henri Gold vowing to keep playing a game of cat and mouse by adding more content. For that reason, it's still worth checking out the site in the hope of uncovering some gems. Sure, it lacks the polish of an Apple offering but it's a great way to see how the company has evolved, with the archive going back to 1977.

Our rating



RELAUNCH

COMPUTING

Microsoft Edge

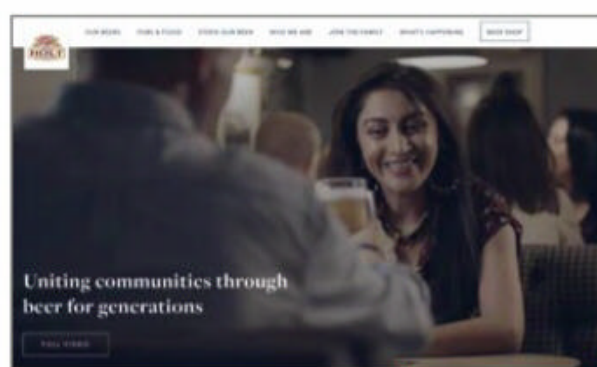
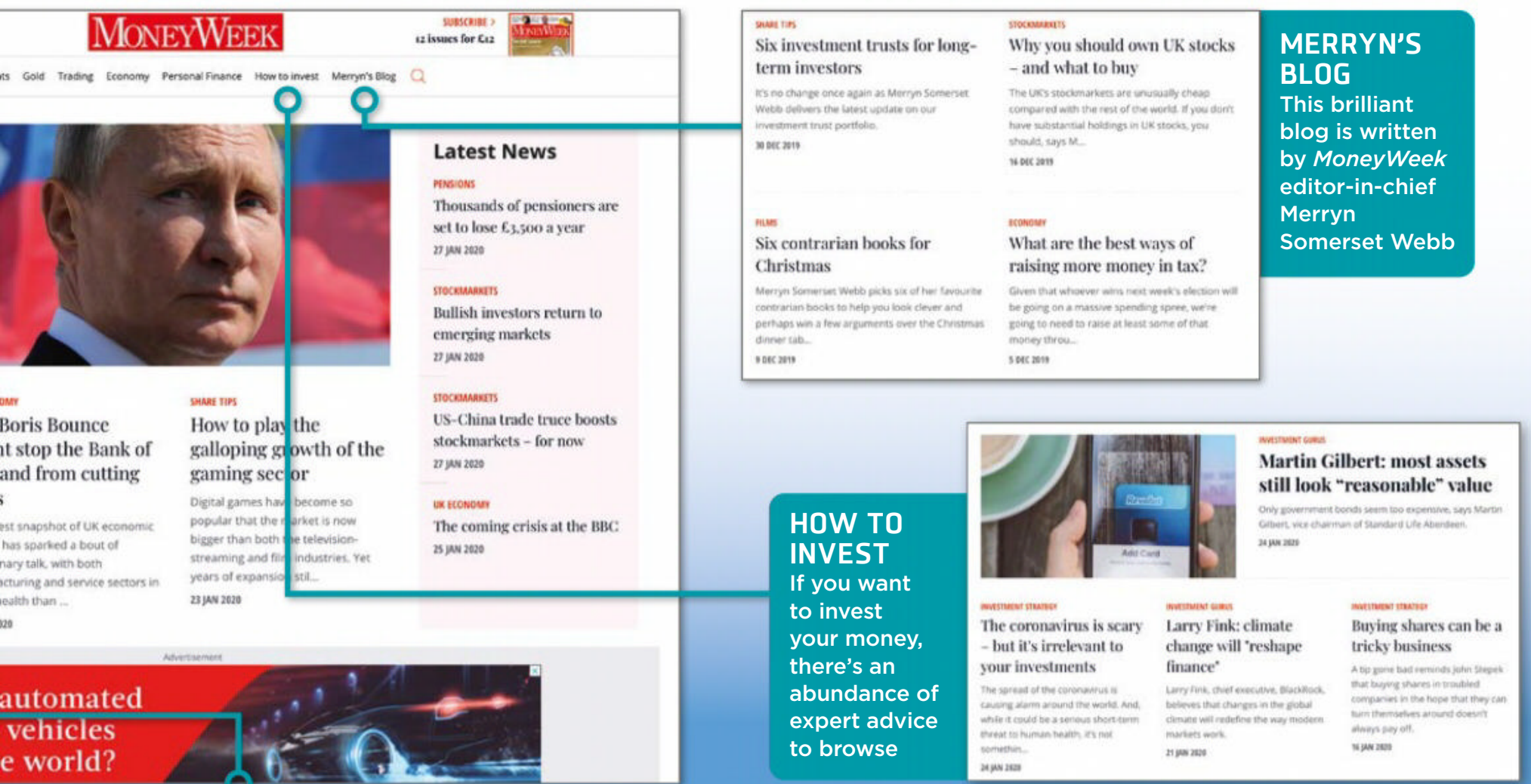
bit.ly/edge494

In Issue 492, we praised Microsoft's new Edge browser and now you can see for yourself why it's better than Chrome. Aside from letting you download the browser, Edge's revamped website explains its key features using bold, illustrative images. There's more about Edge's approach to privacy (see our workshop on page 57) and how it grants you more control over your data. You'll need to scroll around to find everything the website has to offer but there are useful links dotted about including a guide to installing extensions and info on the legacy version of Edge.

Our rating



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

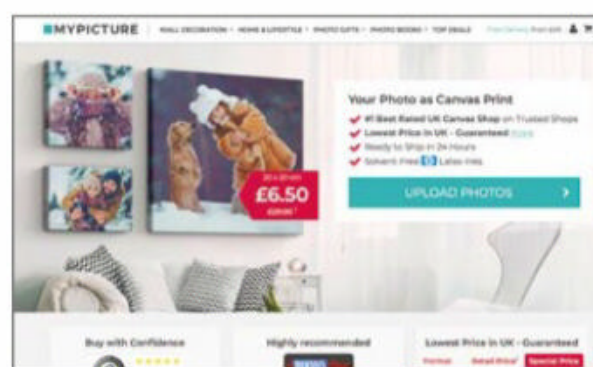

RELAUNCH
DRINK

Joseph Holt

www.joseph-holt.com

Joseph Holt is a familiar name in the North West of England, gracing dozens of pub fronts since 1849. Discover where they are by entering a town or postcode in this redesigned site, which also lets you search by pub name and filter results by the facilities they offer. Each pub has its own profile and photo, with details of the brewer's range of beers and lagers, which you can buy to drink at home. The information includes sweetness, bitterness, smell, colour, alcohol content and more. It's also worth browsing the exhaustive historic timeline and learning more about the brewing process.

Our rating

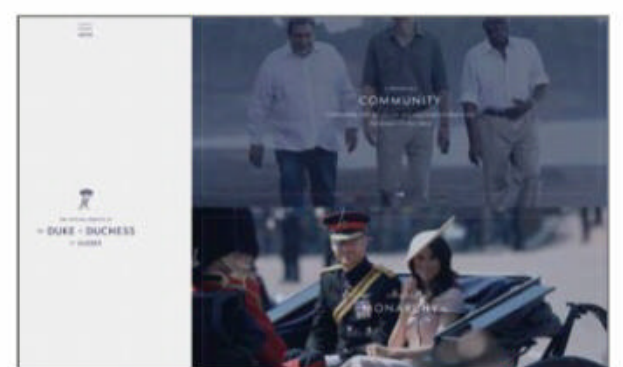

RELAUNCH
PHOTOS

My Picture

www.my-picture.co.uk

Having an amazing photo stuck on your phone or posted on social media doesn't do it justice. With printing service My Picture, you can commit your best shots to canvas, pop them in a photo book or use them to adorn a range of gifts. The relaunched site makes the task simple: just select a product, click Upload Photos and choose a snap from your hard drive or phone. From there, you can drag the photo to fit the print area or use the browser software to create a book. There are advanced options to hand, should you need them, while checkout is easy and prices are very reasonable.

Our rating


NEW
ROYALTY

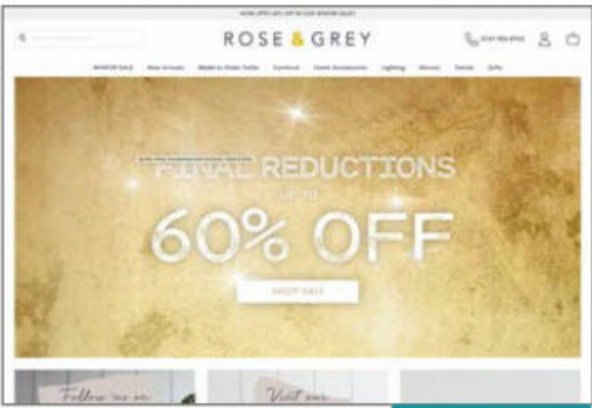
Sussex Royal

sussexroyal.com

The news that Harry and Meghan have stepped down as "senior" royals has dominated the news for weeks. The announcement was published on the couple's new website, which aims to highlight the roles they aim to play in the future. There are sections on how the couple will contribute to the monarchy, Commonwealth and global community, as well as an FAQ-style lowdown on how their work will be funded and their intended approach towards the dastardly media. Disappointingly, it reads like a series of dry, wordy statements and we feel it could be more engaging.

Our rating





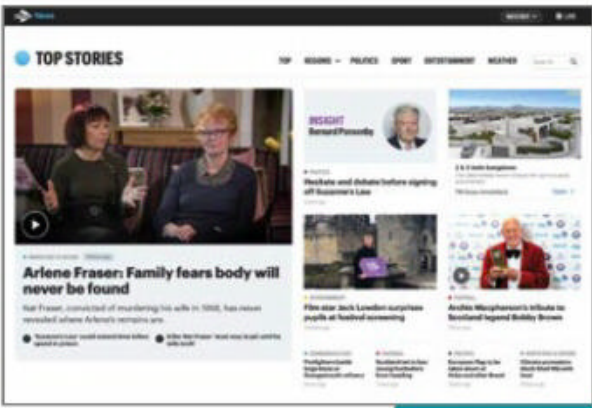
RELAUNCH

SHOPPING

Rose & Grey
www.roseandgrey.co.uk

Rose & Grey's classy-looking furniture and homeware retail site takes some obvious cues from Net-A-Porter. As well as experimenting with Pinterest, it uses the Instagram hashtag #myroseandgrey and handpicks customer images for its homepage gallery. It also has a useful Trends section that looks at must-haves for the season, grouping suitable products in a filterable list. There's a great – if infrequently updated – blog that, despite being rather hidden, has some inspiring tips and articles. What's more, the furniture descriptions are as comprehensive as they come, right down to printable dimension sheets.

Our rating ★★★★★



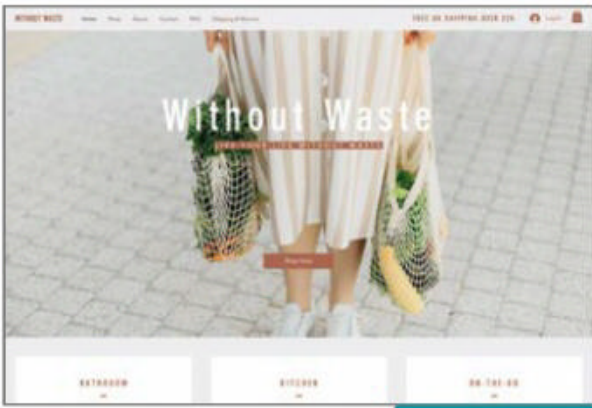
RELAUNCH

NEWS

STV News
news.stv.tv

By overhauling its digital output, television channel STV has created a news hub to rival the best the Scottish press can offer. The homepage includes lots more stories, all neatly sectioned and tagged to make navigation a breeze. Many of the articles are accompanied by videos and there are links to four specific regions for those looking for more local news. One standout feature is a live feed of the latest breaking stories in chronological order, complete with links to read more. You can also browse the most read articles of the day and week, check out the top-watched videos and follow the current trending stories.

Our rating ★★★★★



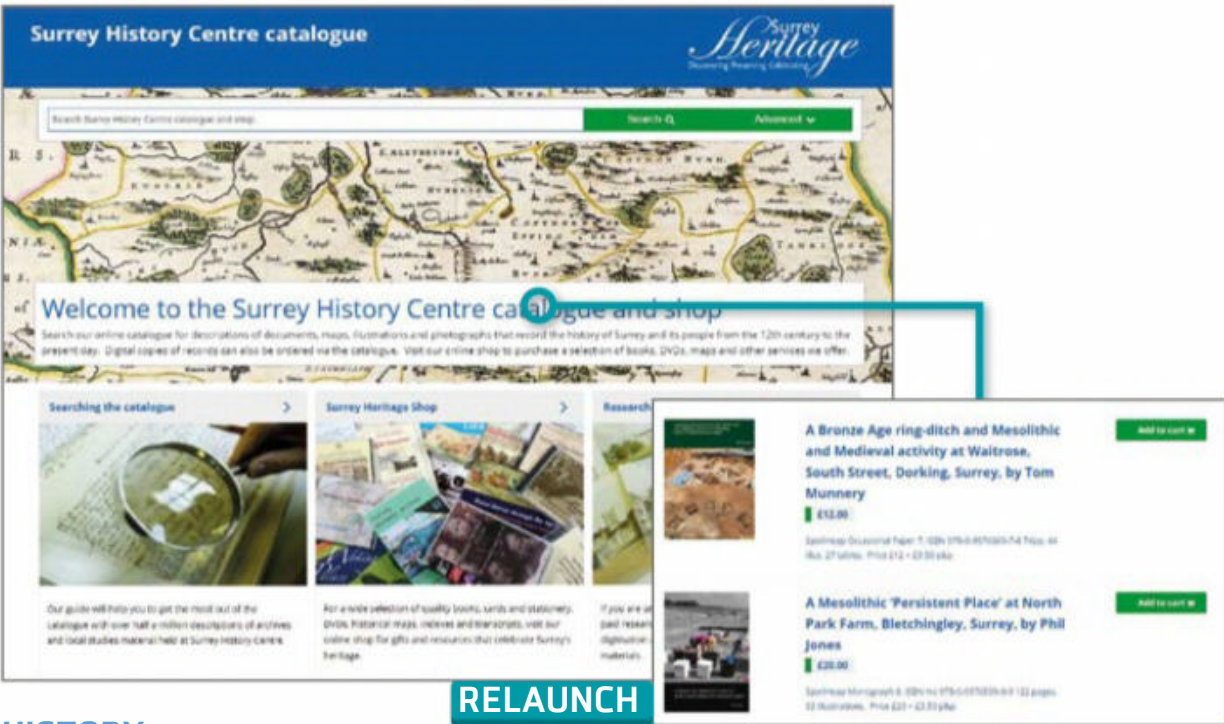
RELAUNCH

ENVIRONMENT

Without Waste
www.withoutwaste.co.uk

Every product available on Without Waste is plastic-free and designed to be reusable, so it's worth taking a look if you're worried about unsustainable landfill. There's plenty to buy, including household, personal, baby and travel goods, all professionally photographed and with their benefits to you and the environment clearly explained. Adding to your cart and checking out with PayPal is quick and simple, but the item categories would be better spread across the navigation bar rather than squirreled away in a drop-down Shop menu. Also, you have to resize the browser to be able to read the About Us homepage.

Our rating ★★★★★



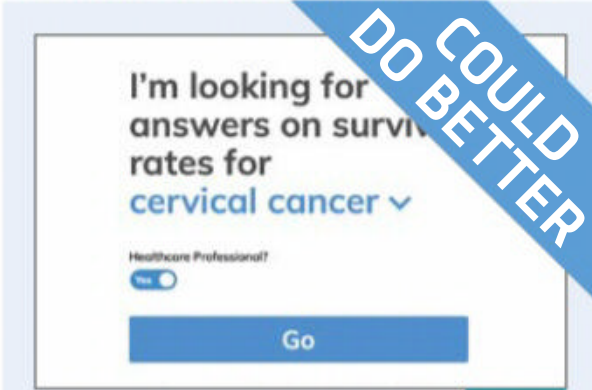
RELAUNCH

HISTORY

Surrey History Centre Catalogue
www.surreyarchives.org.uk

The Surrey History Centre has long been documenting the lives of the county's residents by collecting centuries-worth of archives and printed materials, including manuscripts, maps and photos. The redesigned website lets you search the catalogue as well as browse the online shop, which offers books, DVDs, transcripts, maps and more. Selecting Advanced lets you limit results to a date range or search within references, if you so wish. You can also discover the history of Surrey via a link to another website or scour close to 60 archives and guides ranging from the electoral registers to Poor Law records, which have been created to aid historical researchers.

Our rating ★★★★★



NEW

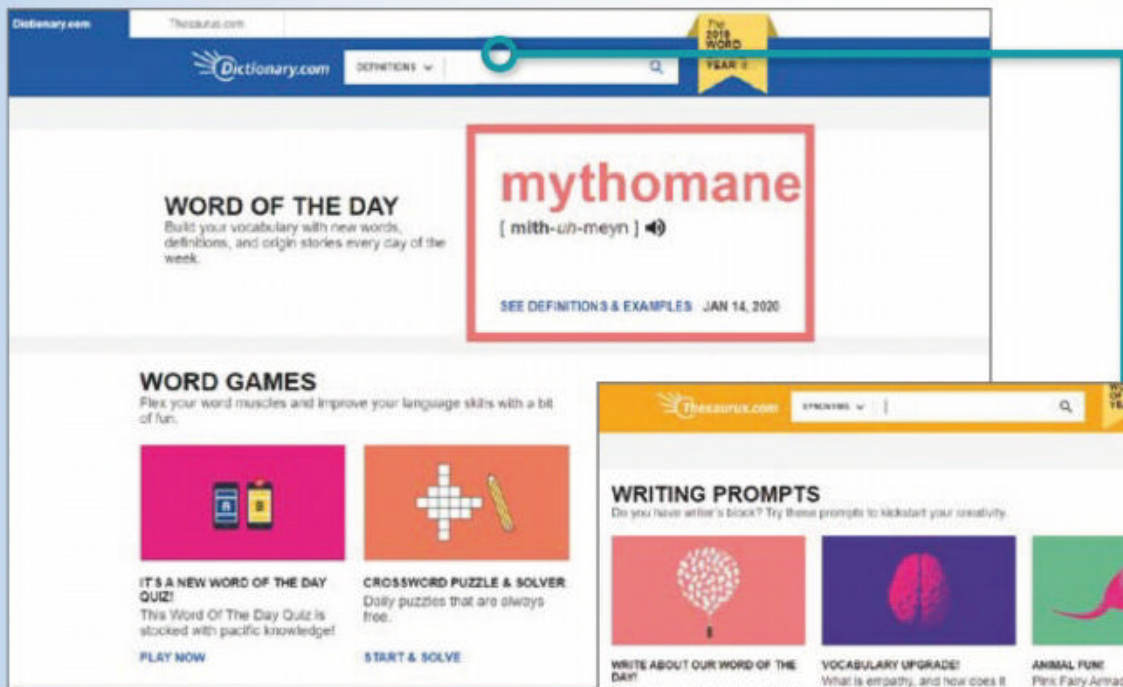
HEALTH

Cancer Survival Rates
cancersurvivalrates.com

We can see the point in Cancer Survival Rates, the US-based website that addresses the question: "How long have I got?". But while it makes cancer prognosis more accessible – enter your age, cancer stage, timing of diagnosis and histology – it's jarringly stark and matter-of-fact. Part of the problem is a lack of background information about each cancer, and the option to share the link on text, email and social sites feels a bit odd, too. But if all you want is unvarnished info, it's certainly a quick way to get a ballpark figure, albeit based on US data.

Our rating ★★★★★

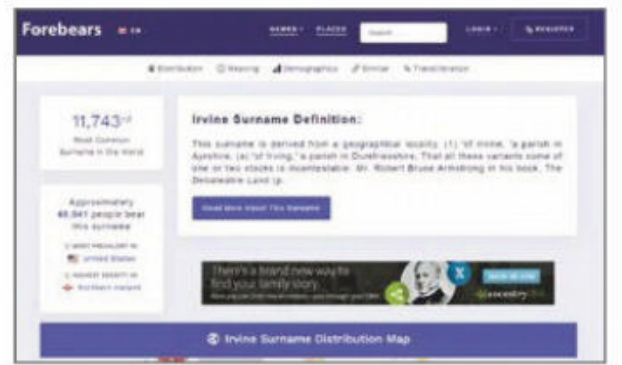
ESSENTIAL BOOKMARKS THIS ISSUE: Illuminating language sites



Dictionary.com

www.dictionary.com

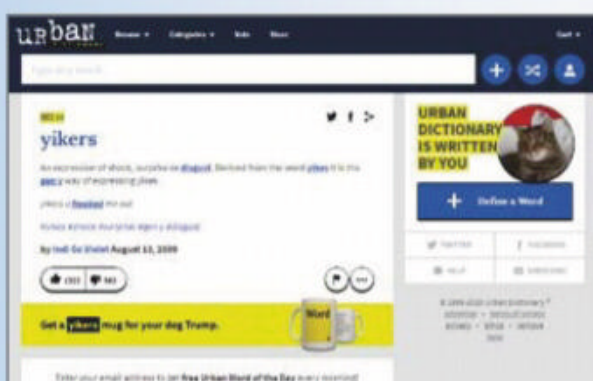
Useful though they are, dictionaries aren't generally regarded as fun, which is why Dictionary.com is such a revelation. As you'd expect, you can look up the definitions of millions of words, but it's the extra features that add value: expand your vocabulary with the 'word of the day', improve your language skills with free quizzes and puzzles, learn the origin of everyday words and phrases, check out words that are currently 'trending' and much more. The Slang Dictionary, which tracks the latest terms being used on the web, is especially handy, along with the Scrabble Word Finder and Dictionary.com's sister site, Thesaurus.com. Although it's a US site, it covers proper English spellings, and with free mobile apps, too, you'll never be lost for words again.



Forebears

forebears.io

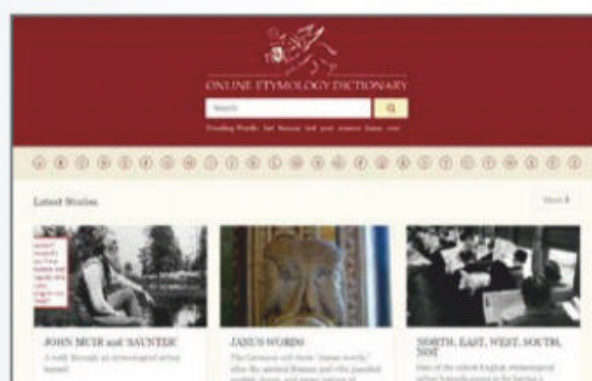
The origin of occupational surnames, such as Farmer or Baker, is easy to guess, but if you want more information about your last name, head to Forebears. This fascinating free site provides details of more than 27 million surnames, including their meaning, how common they are worldwide and the country they're most prevalent in. You can view a map showing the global distribution of each name, learn how its occurrence has changed over time, discover approximately how many people share it and even see their average salary. Forebears also provides a list of phonetically similar names and 'transliterations' of your moniker in other languages.



Urban Dictionary

www.urbandictionary.com

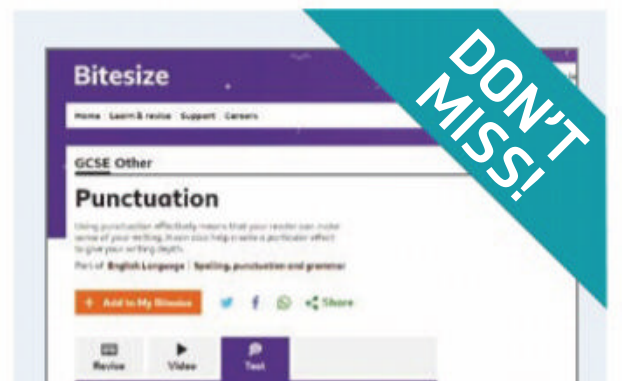
Although a significant proportion of the user-contributed content on Urban Dictionary is puerile and filthy (be warned!), it's also a useful resource when you encounter a baffling word, phrase or initialism online and want to find out what it means. A 'scomo', for example, is "a person in charge who leaves things to others when a difficult or emergency situation arises," while a 'clipped' situation is one that's "completely hopeless". You can vote on definitions and submit your own and, if you're particularly taken with a slang term, you can have it printed - along with its definition - on an Urban Dictionary mug, T-shirt or sweatshirt. Browsing the site by category will help you avoid the ruder entries.



Online Etymology Dictionary

www.etymonline.com

The English language is such an odd hybrid of Latin, French, Germanic and other foreign tongues that it's tricky to determine where and when a specific word originated. Fortunately, help is at hand from the Online Etymology Dictionary, which lets you search for words and phrases to discover their history, including the approximate year they were added to our lexicon. So if you've ever wondered, for example, where 'napkin' came from, the dictionary cites the late 14th Century from the Old French "nape", meaning tablecloth. With an aptly old-classic design, the site also offers a Chrome extension and mobile apps for etymological fun on the fly.



BBC Bitesize

bit.ly/bite494

Are you smarter than a GCSE student? Find out by taking the spelling, punctuation and grammar tests on the BBC's study-support site, which are aimed at teenagers but equally challenging for adults. Whereas other online spelling quizzes are as easy as choosing between 'business' and 'bussiness', the 10 questions in each of these tests ask you to, for instance, identify mnemonics, determine sentence structure and pick out abstract nouns. Although there is an 'always check your work' teacher-finger-wagging element, it's still a good way to measure your language skills. We got most of them right!

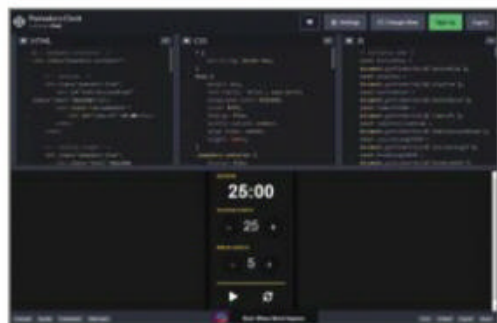
Build a Better Site

Specialist tips, top tools and practical help

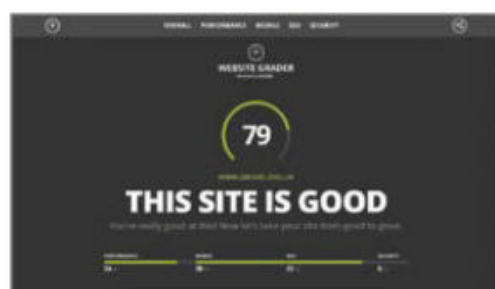
Top Tips of the Fortnight

Practise new coding techniques in CodePen

Learning how HTML, CSS and JavaScript work together can be complicated, because the code is usually saved in separate files. A good way to experiment is to use a code playground – a website that lets you edit all three files at once, and shows the effects of any changes you make as you



make them. CodePen (codepen.io) is one of the best. It breaks the code into three sections at the top, then shows you how the results will appear on your website in the panel below.



Get your website graded

Achieving a good search engine ranking can seem like a dark art but there are tools that can help. Website Grader (websitegrader.com) scans your site's code and tells you what's good and bad about it to help you improve it. Enter your web and email addresses to start the analysis.

Deal of the Fortnight

Namecheap (www.namecheap.com) is offering up to 50% off its hosting packages for the first year, bringing the great value Stellar plan down to £1.32 per month.

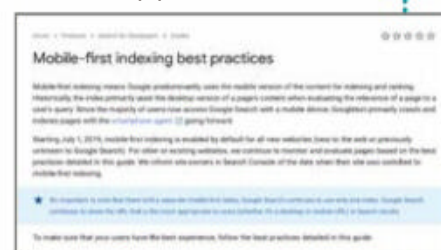
Web-building Helpdesk

Q I want my website to look great on mobile devices as well as large monitors. Should I design a different site for each type of screen?

Sid Granger, via email

A Google's advice is to design one site that adapts to both types of screen. The easiest way is to use a mobile-friendly template in a content management system such as WordPress (wordpress.org), which happily adapts to any size of screen. The reason for this advice is that Google now indexes sites based on their mobile version, so if you have two different sites, only the smaller one would appear in the index. If it's a reduced version of your main website, Google may never find out what's missing. Google offers further guidelines at bit.ly/mobfir494.

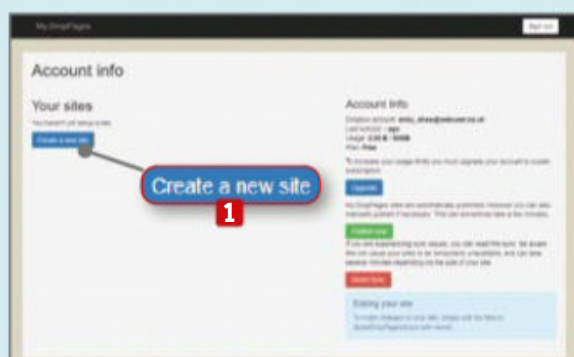
Andy Shaw, Technical & Reviews Editor



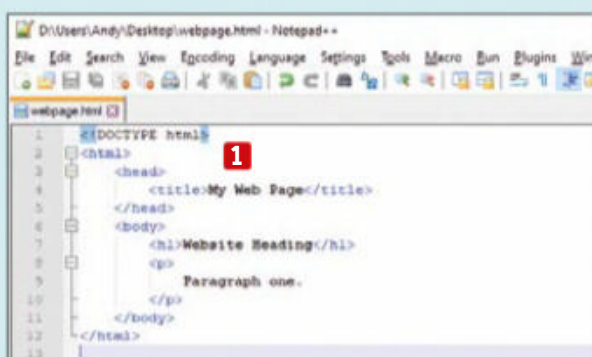
MINI WORKSHOP | Host a simple website on Dropbox

DropPages: droppages.com | 10 mins | Requires Dropbox account

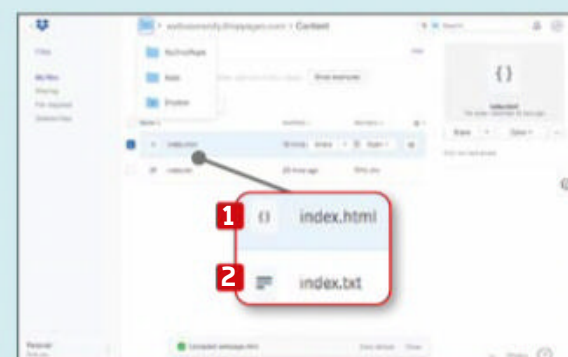
If your requirements are simple, you can build a straightforward HTML website and host it for free from a Dropbox account with DropPages. Any changes you make to the site will sync automatically.



1 If you don't already have a Dropbox account, sign up for one at www.dropbox.com and verify it by clicking the button in the email message you receive. Then visit droppages.com and sign in to your Dropbox account. Under 'Your sites', click the 'Create a new site' button. **1**



2 Enter a name for your site using the format `yourname.droppages.com`. This creates a folder inside your Apps folder in Dropbox. If you don't already have a website prepared, knock up a quick HTML document in Notepad or another text editor. **1** Save it as a '.html' file and call it 'index', so the browser knows it's the main page of your site.



3 Place the HTML file into the Dropbox folder at `apps/My DropPages/yourname.droppages.com/content`. **1** You'll see that there's already a text file there, **2** but you can delete that. Type your droppages.com address into a browser and your site should appear.

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' on Amazon

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





What To Watch Online

Pick of the fortnight

NETFLIX



Watch Netflix's comic-book horror *Locke & Key*

From 7 February

Netflix has pulled out all the stops ahead of the arrival of Disney+ (see opposite page) with *Locke & Key*, which ticks every Disney-busting box: haunted house, graphic-novel adaptation, worldly teens with supernatural powers and Stephen King – sort of. King's son, Joe Hill, wrote the stories this show is faithfully adapted from (bit.ly/landk494), and they're a perfect fit for Netflix.

Locke & Key's official trailer (bit.ly/locke494) sets the unsettling tone. The three Locke siblings return with their mother to their ancestral home, Keyhouse, following their dad's gruesome murder. The kids find themselves cohabiting with a magical presence that only they can see, and a collection of keys with a demonic life of their own.

All 10 episodes arrive on Netflix on Friday 7 February. You can also explore the books, characters and magical keys on the *Locke & Key* wiki at bit.ly/lkwiki494.

Watch Apple's gaming satire *Mythic Quest: Raven's Banquet*

From 7 February



"In a world of legendary heroes" grows the trailer's husky voiceover (bit.ly/mythic494) – an invitation to take Apple TV+'s *Mythic Quest: Raven's Banquet* with a pinch of satirical salt.

The nine-part video-game sitcom stars F Murray Abraham and shares a writing team with

It's Always Sunny in Philadelphia, whose 14th season is on Netflix at bit.ly/sunny494. Add it to your Up Next list on Apple TV+ – which costs £4.99 per month after seven days free – at bit.ly/mqapple494.

Watch Studio Ghibli's magical animated films

Available now

Even if you don't know the name Studio



Ghibli, you'll recognise the films. Hayao Miyazaki's legendary Japanese production house created *Spirited Away*, *Howl's Moving Castle* and dozens more animated classics, and 21 of them are coming to Netflix. In fact, seven have already arrived, including 1986's *Castle in the Sky* and 1988's *My Neighbour Totoro*. Seven more arrive on 1 March, including 1997's *Princess Mononoke* and 2001 Oscar-winner *Spirited Away*, followed on 1 April by 2004's *Howl's Moving Castle* and 2013's *The Wind Rises*. Clear your diary!

Watch Ben Kingsley get furious in *Perpetual Grace Ltd*

From 6 February

There's a Coen brothers feel to the trailer (bit.ly/grace494) for this new seven-part thriller, which features Ben Kingsley (in scary *Sexy Beast* mode) alongside Jimmi Simpson (*Westworld*) and Luis Guzmán (*Narcos*). All 10 episodes, which earned excellent reviews in the US, arrive on StarzPlay on 6 February.

A week later, Stephen King and JJ Abrams' *Castle Rock* returns for Season 2. Watch the trailer at bit.ly/castle494. StarzPlay costs £4.99 per month after seven days free (www.starz.com/gb/en) or via Amazon Prime, bit.ly/amstarz494).



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

Watch David Schwimmer's IT comedy *Intelligence*

From 18 February

David Schwimmer is a US intelligence agent and Nick Mohammed (*Stath Lets Flats*) is a British IT wonk, tasked with collaborating on a UK government cybercrimes



unit in this new Sky One sitcom. There's no trailer yet, just a Sky page (bit.ly/intelligence494), but it sounds promising. Watch six weekly episodes with a Now TV Entertainment Pass (£8.99 per month, bit.ly/nowent494).

Watch new seasons of *Van Helsing* and *Narcos: Mexico*

From 8/13 February

Playwright Neil LaBute's brilliant vampire drama *Van Helsing* is back for Season 4 on Netflix at bit.ly/helsing494. Watch the official trailer at bit.ly/vanhel494. Season 5 – already a hit on US network Syfy – is due later this year.

Then, a few days later, another Netflix hit – druglord spin-off *Narcos: Mexico* – continues with Season 2. Watch the latest trailer at bit.ly/narcos494.



In case you missed it...

This fortnight's free-TV must-watch is *Primal*, a new animation on All 4 at bit.ly/

[prim494](http://bit.ly/prim494). Created by Genndy Tartakovsky (*Samurai Jack*, *Star Wars: Clone Wars*), the stunning series imagines a caveman meeting a Tyrannosaurus Rex facing extinction. Five episodes are available now, and five more will follow later in 2020.

The iPlayer now has a second season of BBC

Three sitcom *Shrill*, from *Saturday Night Live*'s Aidy Bryant, at bit.ly/shrill494. *SNL* itself has just begun Season 45 on Sky Comedy, via Now TV.

New on BritBox are 2018 newspaper drama *Press* and Sheridan Smith's 2017 fact-based miniseries *The Moorside*.

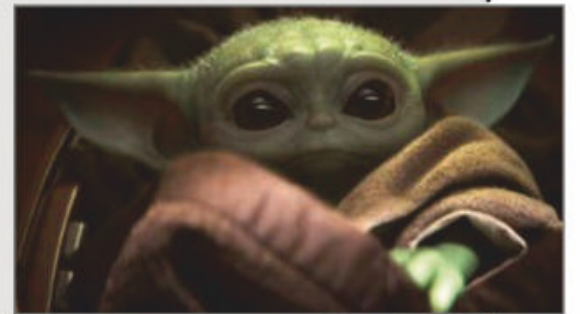


Disney+ to launch a week early

Disney has confirmed the UK launch of its Disney+ streaming service – and sweetened the news by bringing the date forward by a week to Tuesday 24 March.

Flagship Disney+ shows including *Star Wars* spin-off *The Mandalorian* – which has already made a meme sensation of Baby Yoda in the US – and the awkwardly-named *High School Musical: The Musical – The Series* will be available from launch day.

Disney has also confirmed the service's £5.99-per-month subscription price (£59.99 per year), in keeping with Netflix's basic level. Subscribers can access an extensive on-demand library of new and old TV shows and films from studios including Marvel, Pixar and National Geographic as well as Disney.



Stay up for the 92nd Oscars 9-10 February

Trust Hollywood to ruin our Mondays. La-la land's top gongfest takes place several time zones away in LA, starting around 1am UK time, so you'll need a flask of espresso as well as a Sky Cinema Pass.



You can watch ABC's red-carpet videos from 11.30pm on Twitter (@redcarpet), and highlights on YouTube at bit.ly/oscars494.

But to enjoy the full ceremony online in the UK, you need Now TV with a Sky Cinema Pass (£11.99 per month after a seven-day trial, bit.ly/skycin494). Sky won't confirm its schedule but it usually repeats the broadcast from 9am on Monday with a highlights show that same evening, so all is not lost if you fall asleep.

Praise John Goodman in *The Righteous Gemstones*

From 5 February

John Goodman plays a bling-swathed televangelist in this new HBO show, which went down a storm in the US and arrives in the UK courtesy of Sky Comedy. Watch the official trailer at bit.ly/gem494, then stream *The Righteous Gemstones* weekly from 5 February. Another HBO show, topical satire *Last Week with John Oliver*, arrives 17 February.

All Sky Comedy shows are included with a Now TV Entertainment Pass.



Product Test

We test and compare the latest products

Nvidia Shield TV Pro

Is this the most powerful media streamer you can buy?

Media streamers come in a variety of shapes and sizes, but none are as formidable as the chunky new Nvidia Shield TV Pro. Nvidia's updated Android TV box is a monster of a 4K media hub, with beefier internal components than previous models and added support for Dolby Vision. But with so many cheap and capable streamers out there, is the Nvidia Shield TV Pro worth paying for?

Hardware

According to Nvidia, the Pro's performance is "up to 25%" faster than any previous Shield TV device, thanks to an updated Nvidia Tegra X1+ processor and 3GB of memory. However, it only has 16GB of onboard storage, which is quite a drop from the 500GB available in the last version. Meanwhile, on the rear edge, there are two USB 3 ports, an HDMI 2 output and a Gigabit Ethernet jack.

As well as being a powerful media streamer, with 4K HDR10 and Dolby Vision support, the Shield TV Pro doubles as a Plex Media Server, so you can organise and access your personal media library and stream wherever you go. It's also a formidable gaming hub that can stream Triple-A games titles and run practically any retro emulator going.



“ This unit lets you stream 4K HDR content, manage your personal media library and play games in a multitude of ways ”

At a whopping £200, however, it's undeniably pricey. If that's beyond your budget, there's a cheaper Shield TV, also with an all-new design, for a more reasonable £150, but it only has 2GB of

memory, 8GB of internal storage (though you can expand this with microSD) and fewer ports.

Both the standard and Pro boxes come with a redesigned remote control shaped like a

Toblerone. We don't much care for it, though, because it doesn't feel particularly secure in the hand and it rolls off surfaces too easily. Beyond the usual controls, the remote has a dedicated Netflix key and a voice-search button that activates the Google Assistant-aided microphone.

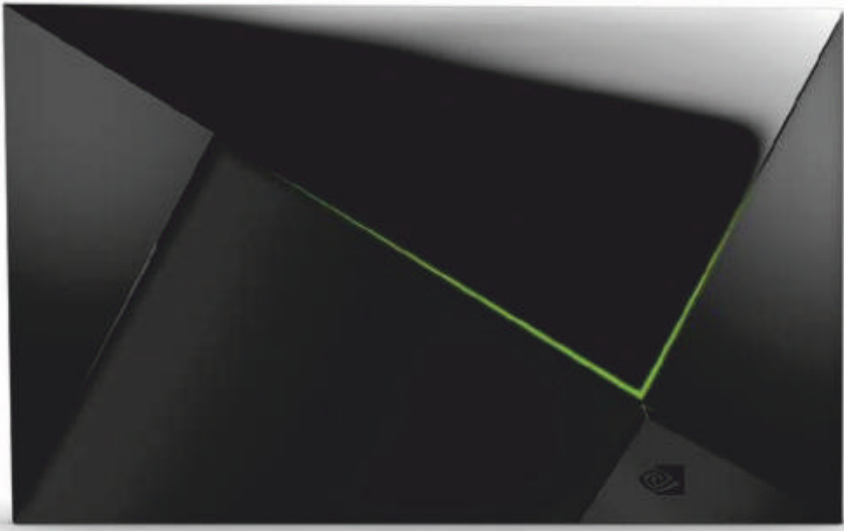
Pressing any button ignites a subtle white backlight that illuminates all the buttons – except, annoyingly, the navigation wheel – then fades after a moment or two. There's an app you can use from your phone instead, but it's not as refined as Roku's remote app.

Setup and channels

Initial setup is made simple by a phone app that guides you through the process. However, our installation stalled to download an update that took 10 minutes, which was unnecessarily frustrating.

Once installed, the home screen is split neatly into tabs (or 'channels') for Netflix, YouTube, Nvidia Games and plenty more besides. It's very easy to add and remove channels on the home screen, and to customise their order.

There's a wealth of content to explore. You can access most of the popular streaming services, including Netflix, Amazon Prime Video, BBC iPlayer, ITV Hub, Google Play Movies & TV, YouTube and more. Now TV is



“There are countless free games you can download, many of which can be played using the remote”



absent, however.

The Shield TV Pro's video capabilities are exceedingly good. 4K HDR content can be streamed at up to 60fps and it offers 4K-upscaling from 720p upwards at 30fps. Our test TV wasn't Dolby Vision-capable but we were able to enjoy Attenborough's *Seven Worlds, One Planet* and *Our Planet* in stunning 4K HDR on BBC iPlayer and Netflix, respectively.

Audio features are excellent, too, if you've got the surround-sound system to make use of them. The Shield TV Pro supports the full Dolby audio suite, including Dolby Atmos, plus DTS-X surround sound and high-res audio playback at up to 24-bit/192 kHz over HDMI.

There are numerous upscaling settings available but, to get the most out of the Nvidia's processing power, you should select "AI-Enhanced". There's a handy demo mode that lets you apply an upscaling slider across the screen during video playback and observe the difference between AI-upscaled and standard upscaled content simultaneously. The improved clarity and vibrancy of the AI-enhanced images is plain to

see. The only downside is that the upscaling works solely for video content and not games.

Versatile gaming

Gaming is surely this device's biggest draw. From the Android TV Play Store and the Nvidia Games channel, there are countless free games you can download, many of which can be played using the remote. However, you'll need a console controller for more complex games, so it's a shame that Nvidia doesn't provide one in the box, though the unit is compatible with Xbox One

and PS4 gamepads.

Using the preinstalled GeForce Now service (bit.ly/gefnw494), players can go far beyond the realms of standard Android TV gaming apps. GeForce Now is Nvidia's forthcoming live premium-subscription gaming service, similar to Google Stadia (stadia.google.com), though it's currently still in its free beta phase. Once launched, it will let players access PC games through the Shield TV Pro and stream them to a TV via the cloud, with detail settings and frame rates comparable to playing on a high-end desktop PC (as long as your internet connection is up to it). Unfortunately, we were unable to access the beta test so haven't tried it out first hand. PC gaming enthusiasts may still prefer to use SteamLink (bit.ly/steamlk494), which connects the Shield TV Pro to PCs on your network and streams games from there.

Finally, the Shield TV Pro serves as a robust platform on which to play countless classic games. Unlike a plug-and-play retro console such as the PlayStation Classic or SNES Mini, the Shield TV Pro runs emulators for a wide range of classic consoles, while front-end launchers such as the RetroArch and Dig apps (found in the Google Play store) let you organise and play all your games from one hub. You'll have to supply all the games yourself, of course.

OUR VERDICT



The Nvidia Shield TV Pro offers the full media-streaming package - it lets you stream 4K HDR content, manage your personal media library and play games in a multitude of ways. But unless you're after a media hub that can emulate consoles, stream the latest games and run your own Plex server, you may find the Shield TV Pro surplus to requirements.

If you own a previous

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

generation of Shield TV, there's not enough new here to recommend upgrading. In some ways - such as the reduction of storage and lack of game controller - it actually provides less value for money than before.

PRODUCT INFO

Nvidia Shield TV Pro

Price: £199

Buy from Nvidia: bit.ly/nvid494

SPECIFICATIONS

- Nvidia Tegra X1+ processor (quad-core, ARM Cortex A-53) with Maxwell-based 256-core GPU
- 3GB of memory
- 16GB of storage (expandable via USB memory drive or external hard drive)
- 4K HDR-ready, AI-enhanced upscaling
- Dolby Audio Support (Dolby Digital, Dolby Digital Plus, Dolby Atmos), DTS-X surround sound over HDMI
- Dual-band 802.11ac Wi-Fi
- Bluetooth 5
- 159 x 98 x 25.9mm
- 250g
- Google Assistant, Amazon Alexa
- Android 9.0 Pie operating system

FOR

- ✓ Now with Dolby Vision
- ✓ An excellent all-round gaming hub
- ✓ Impressive AI-Enhanced 4K upscaling

AGAINST

- ✗ Setup can be frustrating
- ✗ Only 16GB of internal storage
- ✗ No gamepad or HDMI cable included

MORE STORAGE

Apple TV 4K, £179
bit.ly/apple494



MORE AFFORDABLE

Roku Premiere, £39
bit.ly/roku494



Realme X2

An affordable Android smartphone with features beyond its price

Flagship phones from manufacturers such as Samsung and Apple carry price tags of over £1,000, so you might think an Android phone costing a quarter of that is bound to lack some key features. However, the Realme X2 boasts an impressive list of specifications, including a 64-megapixel main camera, 6.4in AMOLED screen, in-display fingerprint reader and large 4,000mAh battery.

Screen and performance

The phone's four rear cameras

sit slightly raised, which makes the phone a little unstable when placed on a flat surface, while round the front there's a small droplet-style notch to house the front-facing camera. The 6.4in AMOLED screen still covers 91.9% of the phone's front area, though, and when you tap the blank screen, a glowing fingerprint shows you where to place your finger when you want to wake it.

As with every AMOLED screen we've put through our suite of tests, the Realme X2's results were excellent. In our colour tests, it recreated 100% of the sRGB colour palette, and we recorded a maximum brightness of 431cd/m², which is much brighter than similarly priced rivals. This type of screen achieves perfect blackness, too, so its contrast is perfect.

It didn't set our performance tests alight in the same way, though its generous 8GB of memory (and 128GB of storage, further expandable with a microSD card) helped it outperform similarly priced models in our Geekbench 4 tests. If you're a games enthusiast, we'd recommend spending more on a phone with a faster processor but, for the price, the X2 beat its rivals here, too. Its GFXBench results of 40fps in the off-screen Manhattan 3 test are almost twice as good as the same test performed on phones from Huawei, Motorola and Samsung in the same price range.

Battery and cameras

The X2's 4,000mAh battery lasted for 21hrs 55mins in our standard battery rundown test, in which a video plays on



“The phone's screen quality is as good as screens get”

a fully charged phone with a screen brightness of 170cd/m² until the battery gives up. This, too, is a step above its rivals.

The phone's array of cameras consists of the aforementioned 64-megapixels model (though shots are taken at 16 megapixels as standard); an 8-megapixel 119-degree wide-angle lens,

a portrait camera for blurring backgrounds and a macro lens for close-ups. Outside, in bright light, the main camera manages to capture a lot of detail. However, to take advantage of the maximum 64-megapixel resolution, you have to enable it in the camera settings, or photos will be shot at 4,608 x 3,456 pixels.

PRODUCT INFO

Realme X2

Price: €299 (around £255)

Buy from Realme:
bit.ly/realme494

SPECIFICATIONS

- Octa-core 2.2GHz Qualcomm Snapdragon 730G processor
- 8GB of memory
- 128GB of storage
- 6.47in AMOLED screen
- 2,340 x 1,080 pixels resolution
- 64-megapixels rear camera
- 8-megapixels wide-angle camera
- Macro lens
- 3.5mm headphone jack
- USB Type-C port
- Android 9
- 158 x 74 x 8.6mm
- 182g

FOR

- ✓ Superb AMOLED screen
- ✓ 64-megapixels camera
- ✓ Surprising graphics performance

AGAINST

- ✗ Screen isn't flush with case
- ✗ Some changes to Android software

OUR VERDICT



The Realme X2 can't match the performance of a flagship Android phone, but it happily takes on all-comers in its own price bracket. The screen quality is as good as screens get and its processor is fast enough to keep it ahead of the current crop of similarly priced rivals. The camera is great for the price but you

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

need to keep an eye on its settings. For £250, though, you won't get smartphone perfection, but the X2 is excellent considering how little it costs.



CCL COMPUTERS



CCL Paladin Gaming PC

- AMD Ryzen 7 3700X 3.6GHz (4.4GHz Turbo Boost)
- 16GB 3200MHz DDR4 RGB RAM
- AMD Radeon RX 5700 XT 8GB
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- 2TB Seagate BarraCuda Hard Drive
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HARDWARE, SOFTWARE & SERVICES

MINI PC

Raspberry Pi 4 Model B

£34 from bit.ly/pi493

Tested: Issue 493



This latest Raspberry Pi effectively provides a full desktop computer with the footprint of a book of stamps. Its fast processor and quick networking make it snappier than older models, and it can be set up to use with dual monitors.

KEY SPECS

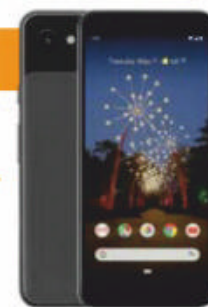
Quad-core 1.5GHz Broadcom BCM2711 processor ■ 1GB memory ■ Broadcom VC6 graphics ■ 2 x Micro HDMI ports ■ 2 x USB 2, 2 x USB 3 ports ■ Gigabit Ethernet, 802.11ac Wi-Fi ■ 86 x 57 x 19mm ■ One-year return-to-base warranty

SMARTPHONE

Google Pixel 3a

£399 from store.google.com

Tested: Issue 491



For a pure Android experience, the Google Pixel 3a can't be bettered for the price. It has a brilliant camera and an exceptional screen, plus the promise of access to future updates and security patches as soon as they're available.

KEY SPECS

8-core Qualcomm Snapdragon 670 processor ■ 4GB RAM ■ 64GB storage ■ 5.6in, 2,220 x 1,080 pixels resolution screen ■ 12.2-megapixel rear camera, 8-megapixel front camera ■ Android 9 ■ 151 x 70 x 8.2mm ■ 167g ■ 1-year return-to-base

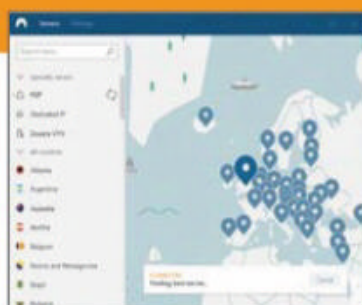
VPN

NordVPN

From £2.29 per month from

nordvpn.com

Tested: Issue 489



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

KEY SPECS

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

LAPTOP

HP Pavilion x360

£679 from bit.ly/hp487

Tested: Issue 487



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

KEY SPECS

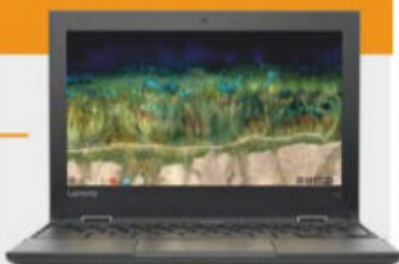
Intel Core i5-8250U processor ■ 256GB SSD ■ 8GB memory ■ 14in screen ■ 1,920 x 1,080 pixels resolution ■ 2 x USB 3, 1 x USB-C ports ■ 802.11ac Wi-Fi ■ Windows 10 Home ■ 326 x 224 x 20mm ■ 1.61kg ■ One-year return-to-base warranty

CHROMEBOOK

Lenovo Chromebook 500e

£349.98 from bit.ly/leno483

Tested: Issue 483



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

KEY SPECS

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

SECURITY CAMERA

Google Nest Cam IQ Outdoor

£279 from bit.ly/nest481

Tested: Issue 481



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

KEY SPECS

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



THE WEEK

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VIDEO MAKER

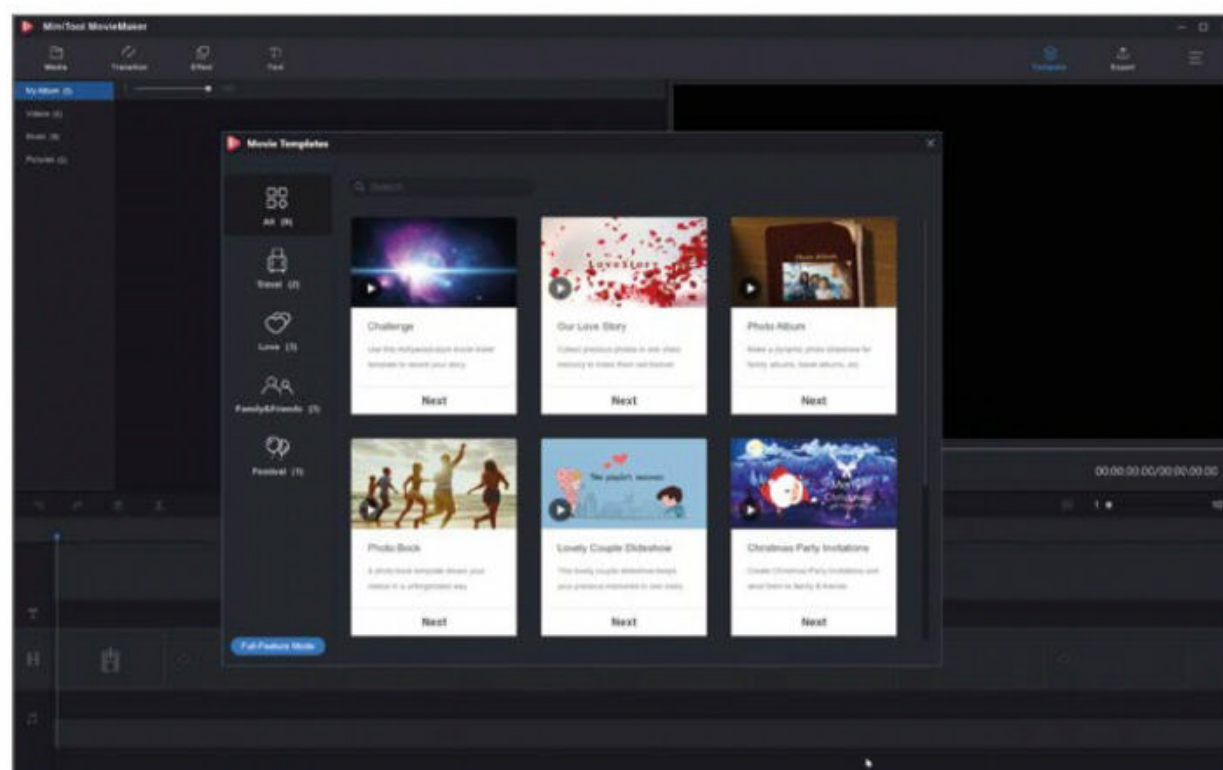
MiniTool MovieMaker Free 2

moviemaker.minitool.com

Min requirements: Windows 7/8/10

File size: 1.9MB (installer only)

MiniTool's free MovieMaker program lets you create movies and slideshows from your videos and photos. When you launch the software, you're prompted to pick a template. There are nine designs shown in total, sorted into categories, but currently only four are available – Challenge, Our Love Story, Photo Album and Photo Book. Select one, add some photos or videos (the number you can include depends on the template) and the program will build a movie for you. You can reorder the photos and videos (and replace them),



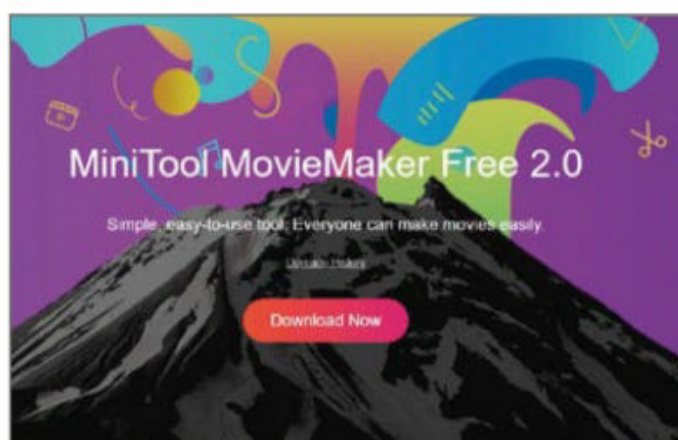
alter any text, change the music and then export the movie in a choice of resolutions and formats.

If you don't like any of the templates on offer, you can skip them and build something yourself from scratch. Add your media, then drag and drop each item to the timeline, split clips, apply some transitions and effects (there are lots to choose from), and add some text and music. You can preview your creation at any time before exporting your movie.

This new version of MovieMaker

improves performance, enhances waveforms and lets you include up to three text tracks. It supports replacing music and audio clips in templates, and offers new video quality options. Importing media and exporting the finished movie have also been made faster.

MovieMaker Free isn't the most powerful of video makers/editors, but it does let you put together shareable movies in a matter of minutes, and it will be even more useful once the missing movie templates arrive in a future update.



MINI WORKSHOP | Turn your photos and videos into movies using MovieMaker



1 Either select one of the available templates, then add some media; or click the Full-Featured Mode button to begin a project from scratch. We've selected the Challenge template, which generates a Hollywood-style movie trailer. Click the Play button **1** to view it. Reorder images by dragging and dropping them. **2**

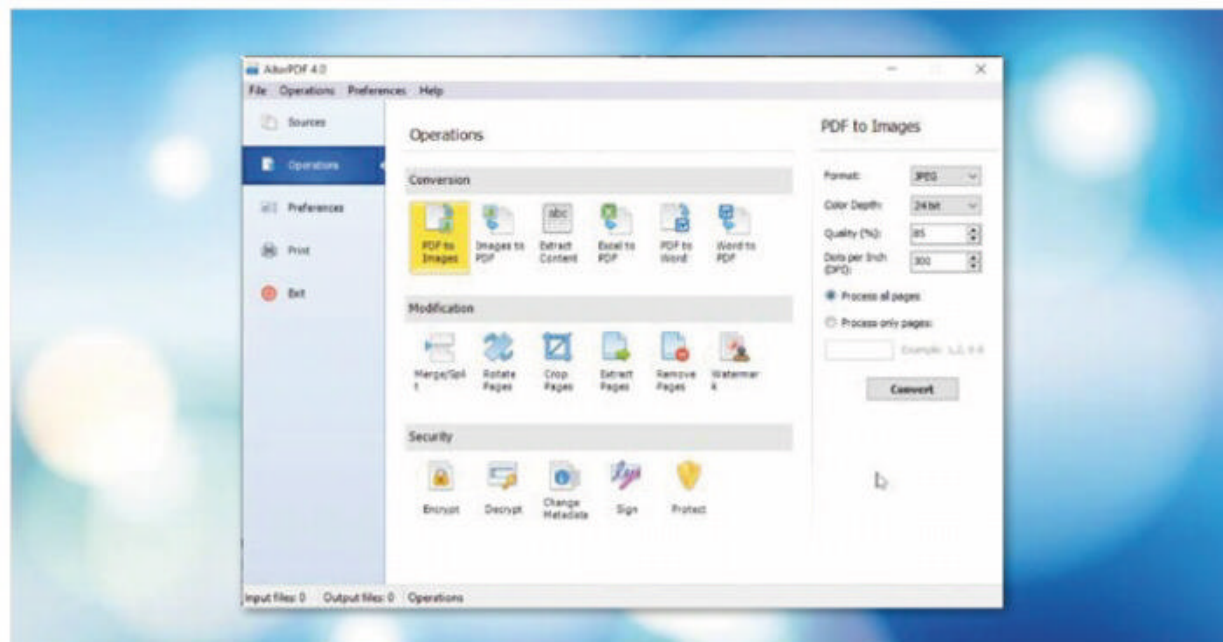


2 Hover over any thumbnail containing titles or captions and you'll have the option to edit the text by clicking the 'T' that appears. Select the text box you want to change, **1** then enter some new text for it below. **2** Use the handles around the text box to move or resize it, **3** then click OK. **4**



3 Once you've finished creating your movie, click the Export button. **1** In the window that pops up, name your creation, and pick a save format and location. **2** Click Settings **3** to change the image quality or specify a particular encoder, resolution and bitrate. **4** The size of the video is shown. **5** Click Export **6** to save it.

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



PDF EDITOR

AlterPDF 4

www.alterpdf.net

Min requirements: Windows 7/8/10 **File size:** 15.7MB

AlterPDF is a collection of free tools that let you convert a PDF to a JPEG (and vice versa), extract text and images, merge multiple PDF files into one document and split a single PDF into multiple files. You can also rotate, crop and remove content, encrypt, decrypt or sign a document, and change a PDF's metadata. AlterPDF 4 offers new conversion options, an improved PDF engine and a speedier crop-and-rotate feature.

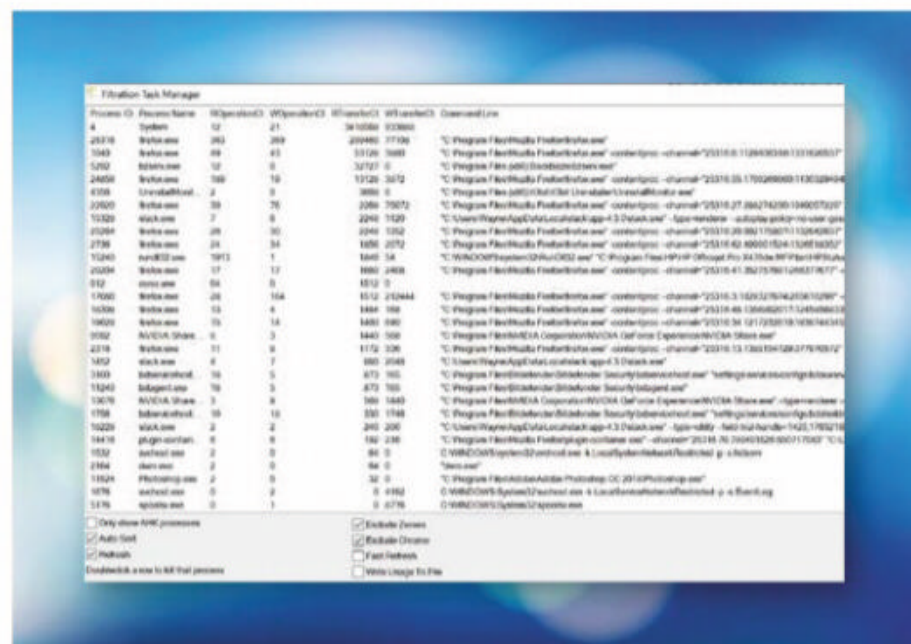
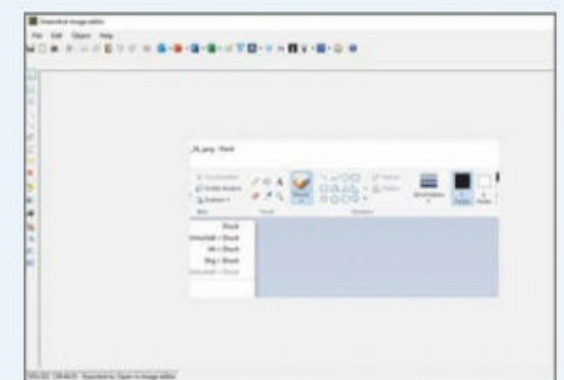
New Windows 10 App

Greenshot Screenshot

bit.ly/gshot494

File size: 4.64MB

Windows 10 comes with its own screenshot-capture tool – Snip & Sketch – but there are better third-party tools, such as Greenshot (getgreenshot.org). This application is an unofficial port of that tool and lets you quickly grab the full screen, a window or a region of your desktop. You can then annotate, highlight or hide parts of the image, and save, print, email or upload it to any supported site.



TASK MANAGER

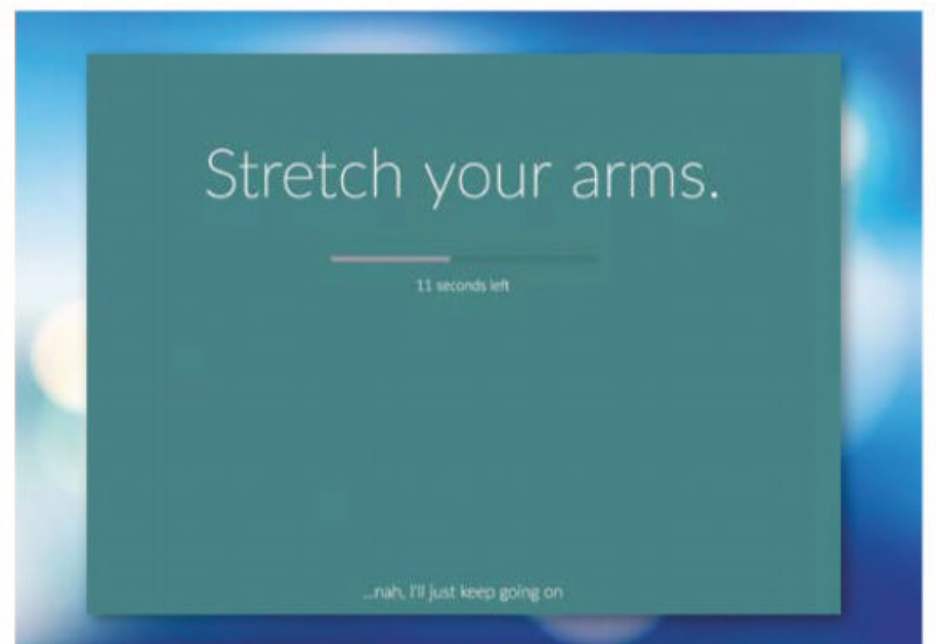
Filtration

bit.ly/filt494

Min requirements: Windows 7/8/10

File size: 622KB

If your computer starts slowing down or freezing, it's probably because a particular process is hogging resources. A task manager such as Filtration can help to identify the culprit, showing you which process is to blame and whether it's making lots of read/write operations or transferring large files. Filtration can filter out items that aren't currently reading or writing anything, and can exclude Google Chrome entirely.



BREAK-TIME REMINDER

Stretchly

bit.ly/stretch494

Min requirements: Windows 7/8/10, macOS or Linux

File size: 90.4MB

It's important to take regular breaks when working on your PC, but it's easy to forget. Stretchly alerts you to take a 20 second microbreak every ten minutes, and a full five minute break after 30 minutes, although you can customise this and skip breaks when needed. It offers several ideas for tasks to do during each pause. The latest release lets you set a volume for break sounds, and set a time after which breaks will pause.

DOWNLOAD MANAGER

BrowserDownloadsView

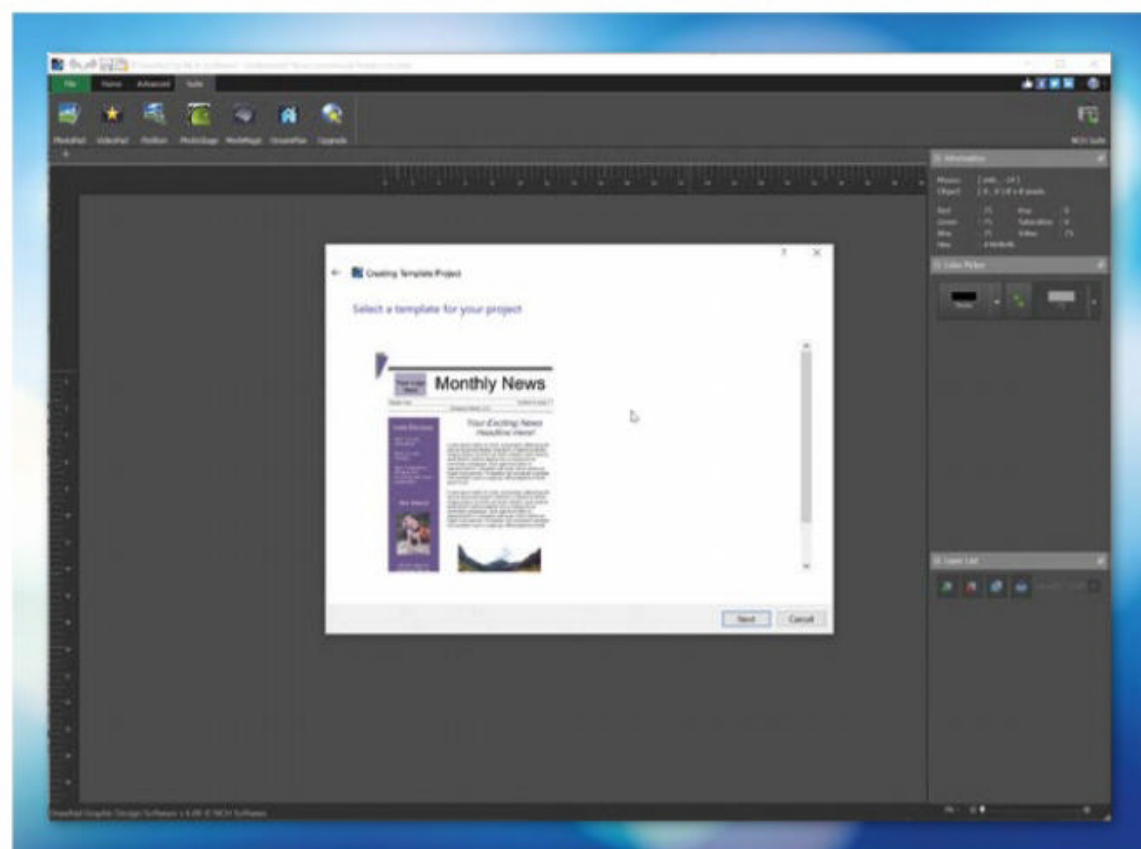
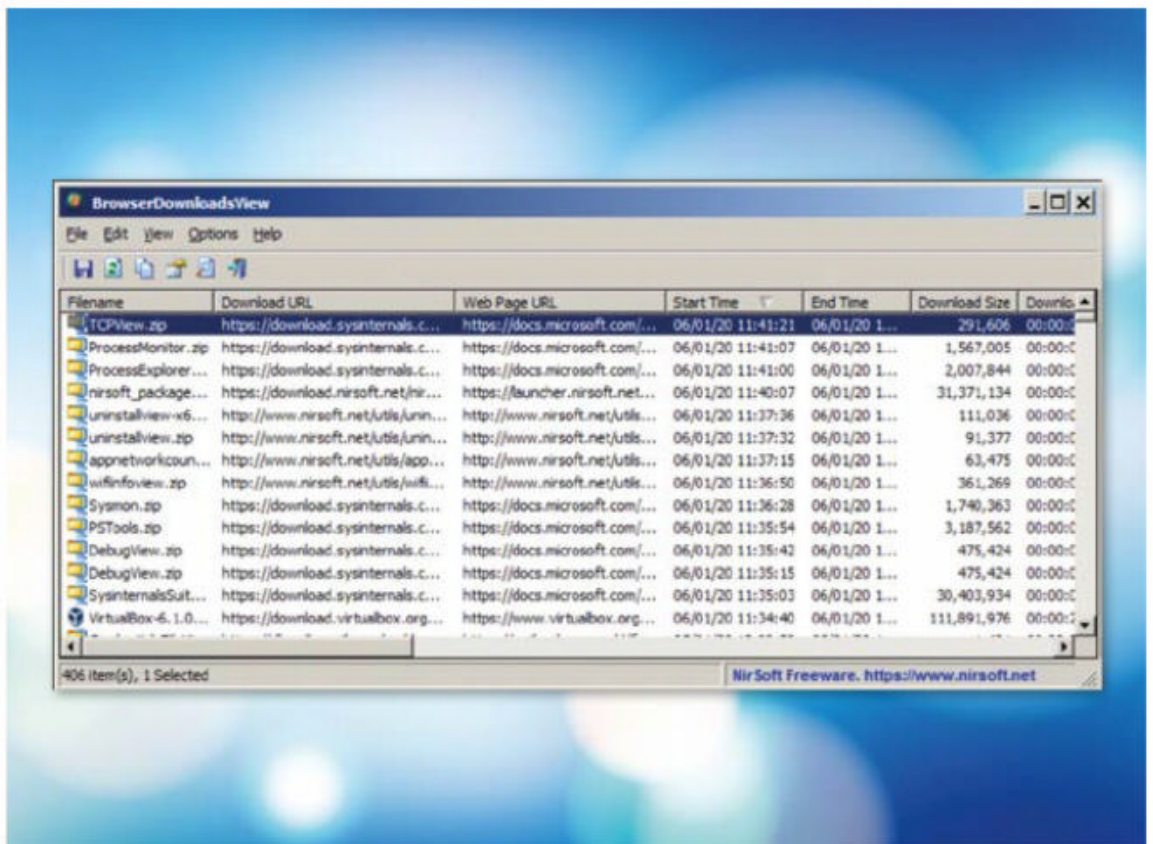
www.nirsoft.net

Min requirements: Windows 7/8/10

File size: 269KB

The latest free portable tool from the prolific software developer NirSoft lets you view and manage downloads across all your installed browsers. Run the software and it will display a list of everything you've downloaded, including the filename, download URL, web page URL, size, status and the browser used.

BrowserDownloadsView can generate a hash of the saved file, so you can compare this with the hash on the website (if available) to ensure the download is genuine. It can also check that the file is safe via Google's VirusTotal service, and move the file from one location to another. There are 32- and 64-bit versions available.



DRAWING PROGRAM

DrawPad 6

bit.ly/draw494

Min requirements: Windows 7/8/10

File size: 5.3MB

If you need to create professional-looking illustrative projects, such as cards and flyers, then DrawPad is a great solution. It can produce quality designs with vector graphics that scale perfectly, and it comes with a good selection of templates to get you started, so you don't need any great artistic ability to produce something that looks good. The program offers a number of advanced features, such as non-destructive and layer-based editing, and the latest version adds several new tools and improvements.

The link above takes you to the DrawPad website, but you can download the free version directly from bit.ly/drawfree494.

MUSIC PLAYER

Dopamine 2

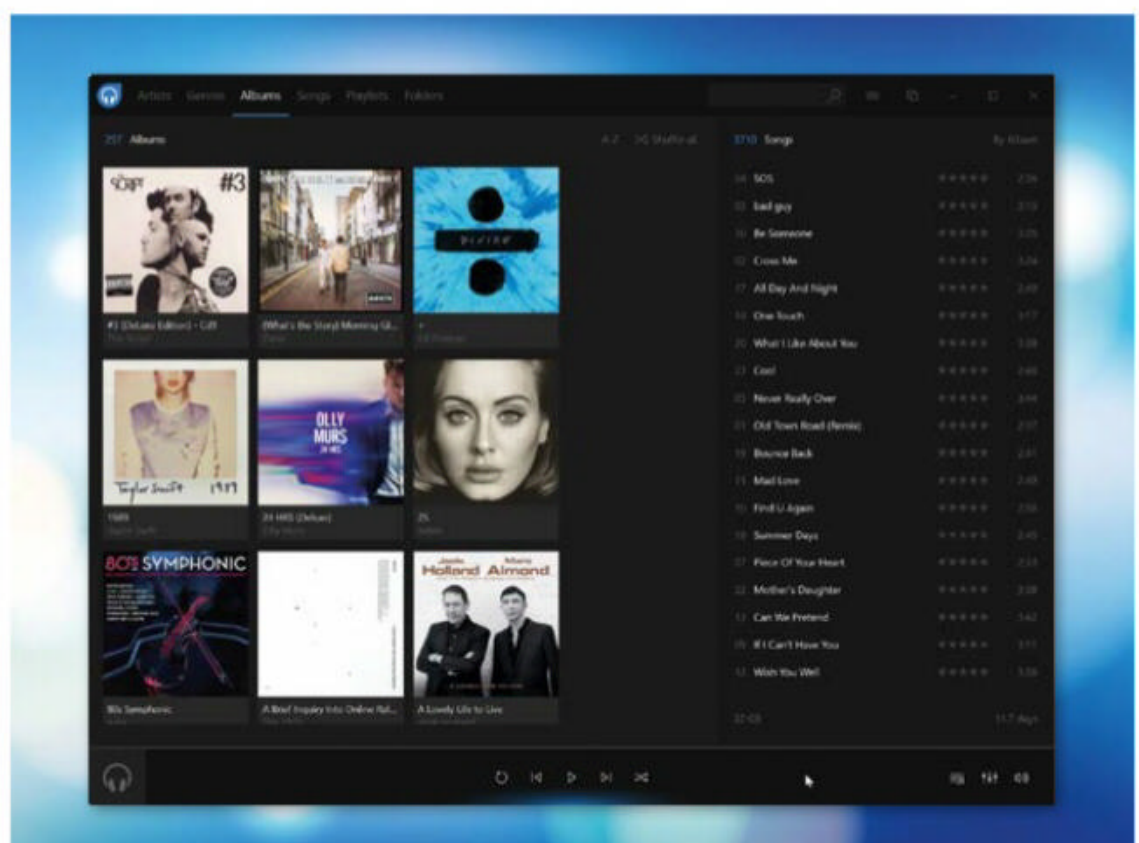
bit.ly/dopa494

Min requirements: Windows 7/8/10

File size: 4.4MB

If you still buy and rip CDs and download songs to keep, rather than streaming them, then a music organiser-cum-player such as Dopamine can come in handy. It looks stylish and can handle all the major audio formats, including MP3, Ogg Vorbis, FLAC, WMA, WAV and M4A/AAC. Getting started is very straightforward as the program guides you through the process of adding new content.

Dopamine 2 has been in development for over a year and a half, but is finally ready for release and gains a new design, smart playlists, folder view and more. Performance has been improved and the program uses fewer resources now, too.





GAME

Zak McKracken Goes Looking For Hot Coffee

bit.ly/zak494

Min requirements: Windows 7/8/10

File size: 965MB

This self-explanatorily titled game is a point-and-click adventure in the style of the much beloved LucasArts releases of the 1990s. It's an unofficial sequel to LucasArt's own Zak McKracken and the Alien Mindbenders, and has been some eight years in the making. If you get stuck, holding down the spacebar shows everything you can interact with.

✓ Install this program...

ChrisPC Free VPN Connection

bit.ly/chrisvpn494

Min requirements: Windows 7/8/10

File size: 1.7MB

If you want to avoid people spying on your web activities, or you need to access sites that are geographically blocked, then running a VPN is the obvious solution. This free tool from ChrisPC gives you access to more than 90 VPN servers in the UK, US, Germany, Canada, France, Russia, Singapore and the Netherlands. Select a country and pick a VPN server from the drop-down menu. The server-information box tells you which company the VPN server is powered by, and lists the benefits and any restrictions to be aware of.

Make sure you decline the bundled RelevantKnowledge junk on installation.



...Not this one ✗

Hola VPN

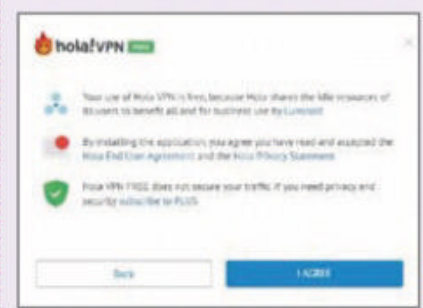
hola.org

Min requirements:

Windows 7/8/10 or macOS

File size: 629KB

As we warned in Issue 485, most 'free' VPNs are best avoided, although the one on the left is safe to use. The same can't be said for Hola. Its name may ring a reassuring bell but it requires you to share your bandwidth with other users, which leaves you at risk of all manner of security threats. It also keeps logs of your online activities.



OTHER OPERATING SYSTEMS What's new for Linux and macOS



LINUX DISTRO

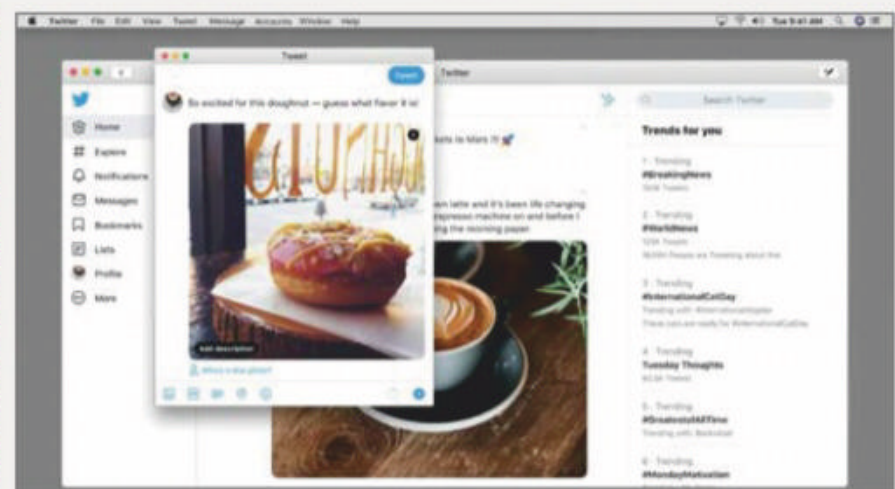
Linux Lite 4.8

www.linuxliteos.com

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

File size: 1.4GB

Now that Windows 7 support has ended, some users will be considering a move to Linux. The Ubuntu-based Linux Lite is a simple, fast and free alternative with a familiar looking desktop, taskbar and system tray, and comes with popular programs including LibreOffice, VLC and Firefox. This latest version comes with new wallpaper designed to welcome Windows 7 users, and removes VirtualBox support for reviewers and testers, to make it faster to boot.



TWITTER CLIENT

Twitter for Mac 8.5

bit.ly/twitter494

Min requirements: macOS 10.15 or later, 64-bit processor

File size: 32MB

Twitter discontinued its Mac app in 2018 but then, late last year, released a new version for users running the latest version of macOS – Catalina. Built using Apple's Catalyst framework, which allows developers to port over iPad apps, this new version of the app has just been updated to include Touch Bar and Sidecar support. It also solves problems with opening the Help Centre and fixes a memory leak that affected threaded chats. ■

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Best New Browser Tools



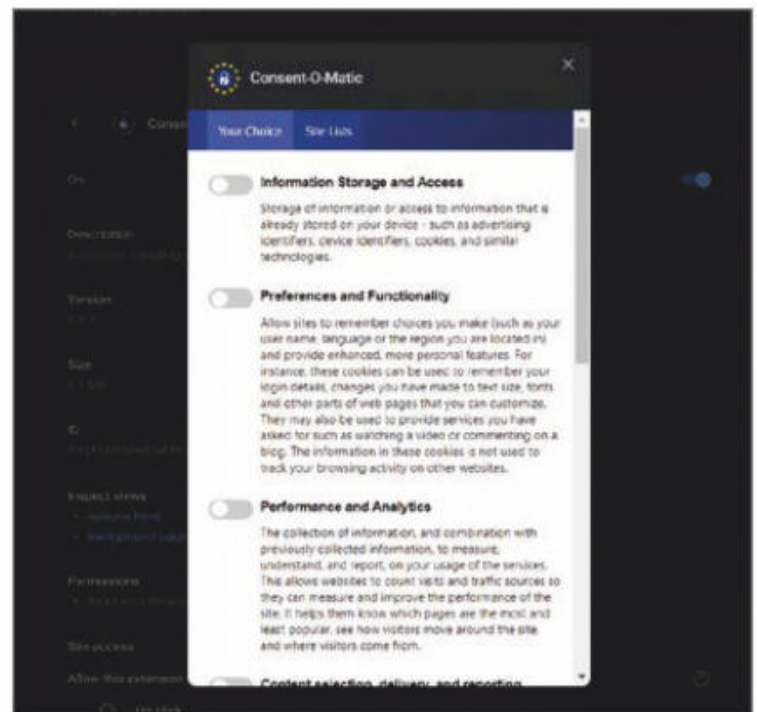
CHROME

Respond to cookie-consent forms automatically

For all the convenience it offers, the modern-day web is filled with annoyances such as cookie notices and pop-ups – and it's often up to extensions like Consent-O-Matic (bit.ly/consent494) to remedy these frustrations.

This handy add-on, which is also available for Firefox (bit.ly/consentfire494), is designed to automatically consent to – or withhold consent from – GDPR-enforced forms on websites. Set your privacy preferences once within the browser tool, and it will automatically apply them to any request for cookie and tracking consent.

Consent-O-Matic has an interesting history. Developed by students at Denmark's Aarhus University, the team studied nearly 700 types of pop-ups, looking at what types of data they typically request. These were then combined into five separate categories, which are the options you'll set in the extension's settings. Commendably, the developers state that: "Sometimes our categories don't perfectly match those on the website, so then we will choose the more privacy preserving option".

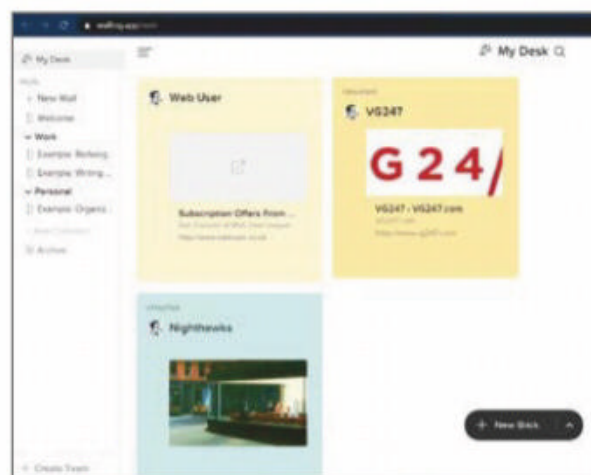
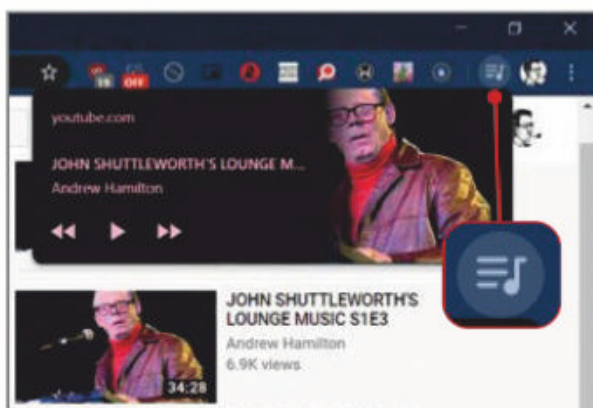


Control media playback in Chrome

We've all been there – scrabbling around, desperately trying to identify which of our 20 open tabs is playing music, or flipping back and forth to YouTube to pause or skip tracks and videos. Now, a new update to Chrome introduces built-in playback controls to the browser.

First, make sure you've got the latest version of Chrome by opening the three-dot menu and clicking Help, About Google Chrome. Once the update is installed, relaunch the browser and head to YouTube (or any other site that plays audio).

With your video or music playing, look in Chrome's top-right corner, next to your profile icon, and you'll see a musical note. No matter what other tab you're on, you can just click this button to open the integrated playback controls.



Create a wall of everything

Walling Web Clipper (bit.ly/walling494) lets you store notes, links and downloaded media as 'bricks' that fit into your 'wall' – by which it means tiles on your Walling Web Clipper home screen. For instance, If you're on a website you want to return to, click the browser tool, give this 'brick' a heading, add a note if required, then select 'Embed current tab'. Next, choose which 'wall' to add this to – you can have multiple walls for different categories, which makes it easier than trawling through your bookmarks folder. Finally, click Save. If you just want to make a note on the fly, follow the steps above but skip past embedding links.

Head to walling.app to view and add 'newbricks', modify

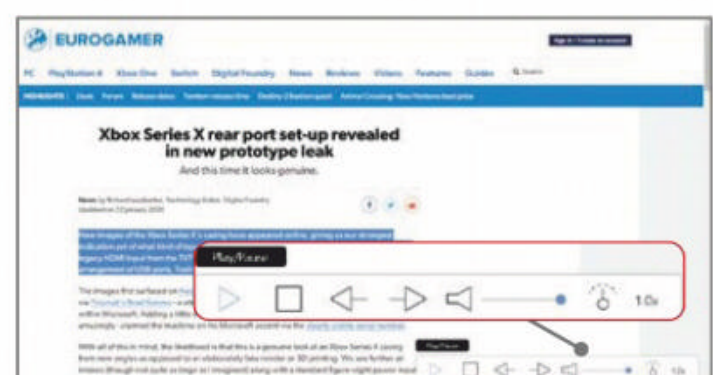
individual saves and switch between different walls.

Add text-to-speech in Chrome

Reedr (bit.ly/reedr494) delivers one of the most flawless, easy-to-use text-to-speech options we've seen yet, which is handy for those who struggle to read on-screen text or just want websites read aloud to them while they potter about.

To get started with the extension, visit any website with 'readable' text. Highlight the text you want Reedr to read, then press the extension's icon. This displays a playback control panel at the foot of the screen. Click Play and Reedr will then read your text aloud.

Controls are simple, and there's a speed setting at the far end of the toolbar – just click to speed up, then hit stop and restart playback for the new setting to take effect.



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



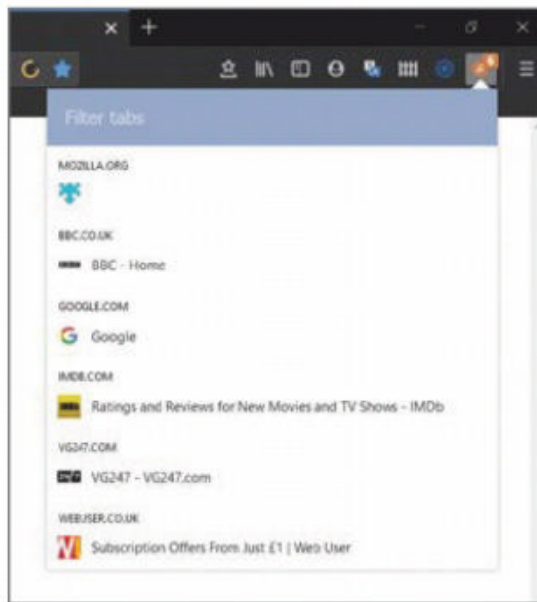
FIREFOX

Take control of your tabs

Here at *Web User*, we love a good tab management add-on, and Tab Bridge (bit.ly/tab494) is fully deserving of a place on Firefox's toolbar – especially if, like us, you're prone to opening every new link in a new tab until you're swamped with web pages and have no idea where to start (or where you'll end).

Tab Bridge is incredibly streamlined and user-friendly so, unlike other, similar add-ons, it doesn't force you to spend half your time managing the tab-management tool. With your many, many tabs open at once, click the browser tool to view all currently open tabs, with pinned tabs grouped together at the top. One click will whisk you to your chosen tab.

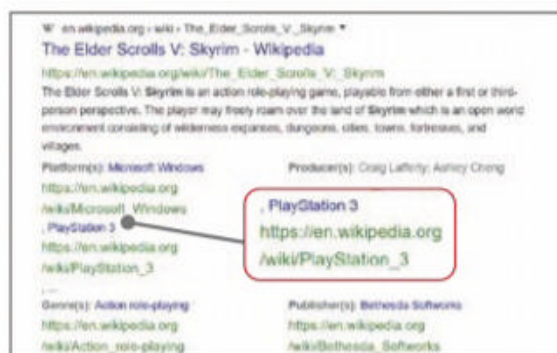
You can also search for specific pages using the Filter Tabs text field at the top of the pop-out box.



Spot and avoid sneaky ads

Adverts, in whatever devious form they take, are a bane on everyone's browsing experience but – thanks to Ad Reveal (bit.ly/reveal494) – they don't have to be. This clever add-on automatically identifies adverts and sponsored posts, and greys them out – marking them with a red and white candy-cane strip that lets you know you can safely ignore these particular posts. In our tests, the extension's ad detection was extremely accurate, automatically spotting and blotting out ads.

Ad Reveal works on Google, Facebook, eBay, Pinterest and Reddit, with more sites to be added in future updates. The developers are also working on a Chrome version.

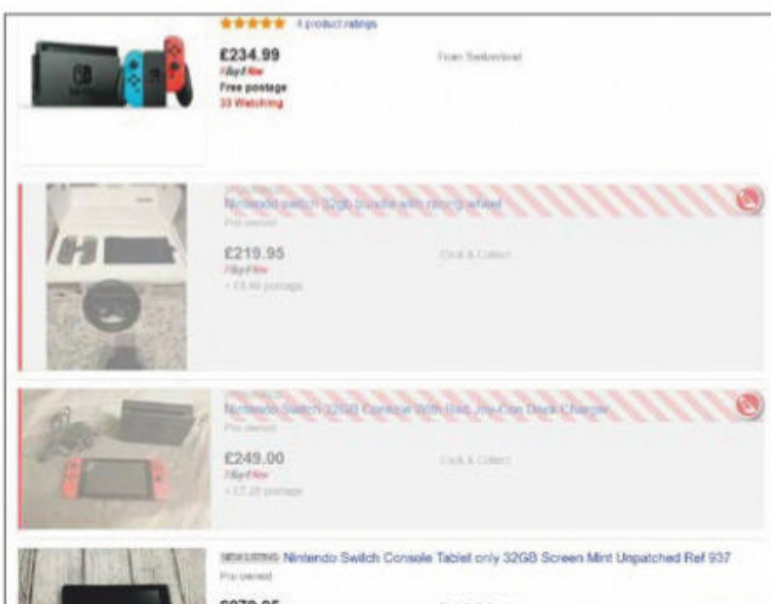


Force Google to show full URLs

Run a search on Google and you'll notice that while web pages are clear, the URLs are less so – particularly for subsidiary links associated with the main page. This can make navigating Google a little more tricky and a little less safe.

Show Me URLs (bit.ly/urls494) is a new Firefox add-on that forces all Google search results, whether they're main or additional links, to display the full URL. It makes the page layout look a little cluttered, but you'll know exactly where you're headed should you choose to click the link, or decide to avoid it entirely.

The add-on only seems to work on Google, as other search engines such as Bing tend to show you the full URL anyway.



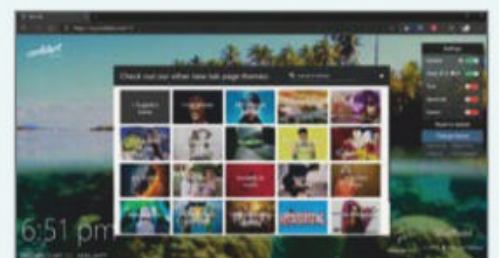
OTHER BROWSERS



Try Edge's new extensions

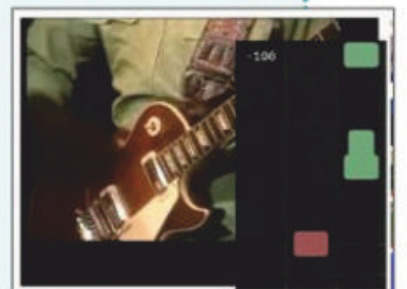
With the launch of Microsoft's new Chromium browser comes a host of new extensions for Edge 2.0 (bit.ly/edgetool494). Although the store layout isn't very good – blandly alphabetised on a single page – there are a handful of new browser tools worth trying. And, of course, you can now use the Chrome Web Store for other add-ons.

Keep Awake (bit.ly/awake494) is designed to let you override power-management settings without having to delve into your PC's menus. Click the toolbar button to determine whether to keep your screen or system awake, or revert back to the default. It's useful when you're watching videos or reading ebooks and don't want the screen to suddenly turn black.



Edge already features a customisable new tab page, but CoolStart's Custom Tab Page (bit.ly/cool494) gives you even more control over new tabs. Alongside hi-res background images that can be modified according to your chosen theme, you'll also find widgets for the weather, to-do lists, and even an Opera-style Speed Dial.

Finally, don't miss out on Live Hero (bit.ly/hero494). This is Guitar Hero for YouTube – choose your settings and difficulty by clicking its toolbar button, pop on your favourite track and try to hit the right keys in time with the music.





Best Free Apps



App of the Fortnight

TOOLS

Activity Bubbles, Screen Stopwatch and Envelope

bit.ly/wellbeing494



Last autumn, Google's experimental Creative Lab team released five apps designed to improve your digital wellbeing by helping you monitor and control your screen time and device usage in different ways. We were so impressed that we made all five of them our joint 'App of the Fortnight' in issue 488.

Far from resting on its laurels, the Creative Lab team seems determined to continue its run of success, and has released three new experimental digital-wellbeing tools: Activity Bubbles, Screen Stopwatch and Envelope. As a testament to their quality, we've made this trio joint 'App of the Fortnight', too!

Two of the three are traditional smartphone apps. Install Activity Bubbles (from bit.ly/activity494), for example, and it allows you to visualise your daily mobile phone (or tablet) usage as bubbles that appear on screen and start to fill your display the more you use your device.

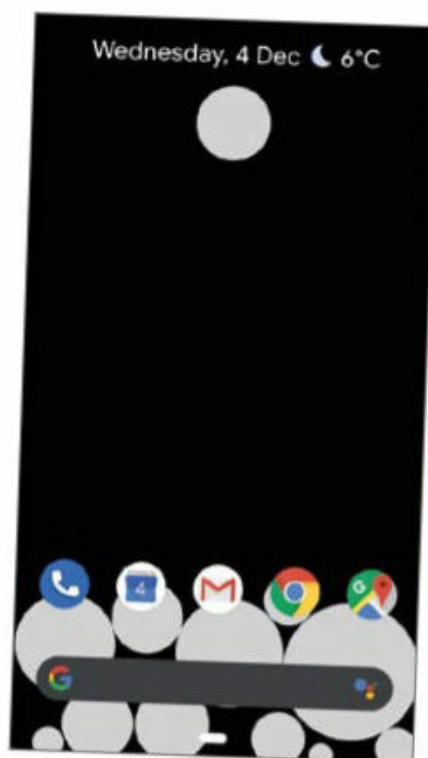
Screen Stopwatch (bit.ly/stopwatch494) offers a constant reminder of exactly how much time you've spent using your phone each day by presenting you with an on-screen stopwatch every time you unlock your phone.

Envelope takes a slightly more left-field approach. As well as installing the app (bit.ly/envelope494), you need to download and print a PDF, which you can then fold into an envelope shape. The envelope temporarily transforms your phone into a much simpler device that lets you make and receive phone calls only, allowing you to take a break from the digital world.

While Activity Bubbles and Screen Stopwatch are compatible with handsets running Android 8 and above, Envelope is currently limited to Pixel 3a devices. We look

forward to seeing more innovative work from Google's Creative Lab.

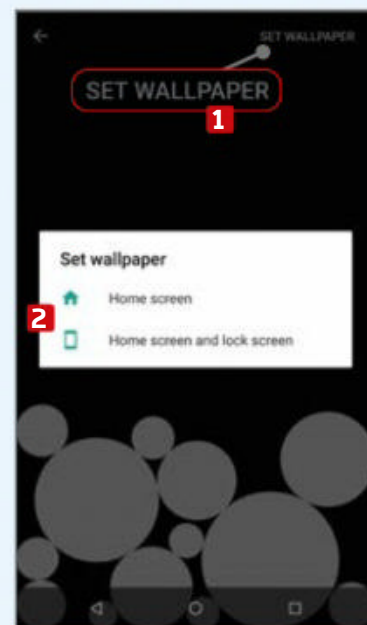
NEW



MINI WORKSHOP

Use Google's new digital-wellbeing tools

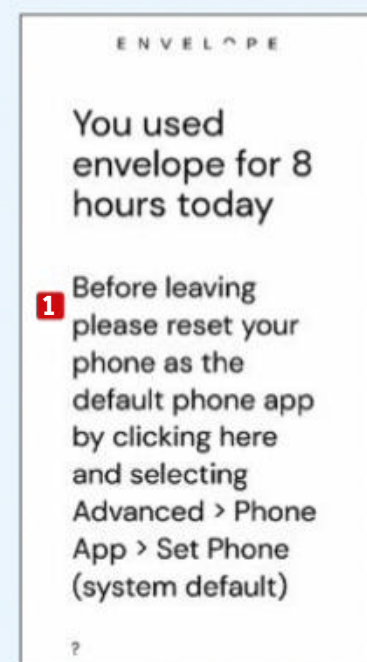
1 Activity Bubbles works like an animated Android wallpaper. Launch the app, then tap 'Set wallpaper'. On the next screen, you'll see a demo of the Activity Bubbles wallpaper. Tap Set Wallpaper **1** again, then choose 'Home screen and lock screen'. **2** Now, whenever you unlock your phone another bubble drops from the top of your screen – and the longer you use your phone, the bigger the bubble grows.



2 Screen Stopwatch is another app that works as an Android animated wallpaper. Download and launch the app, then tap 'Set wallpaper'. The next screen shows you what the stopwatch looks like – tap Set Wallpaper **1** again. Now every time you unlock your phone, the stopwatch starts running in the background as you use your device. It pauses when you lock your phone, and keeps a running tally throughout the day.



3 To try Envelope, read the information in the introduction screens, then go to bit.ly/envel494 in a browser and click the 'DIY Envelope pdf' link. Print the PDF, then follow the instructions to cut out and fold the envelope and seal your device inside. You can still make and receive calls while your phone is in the envelope, but that's all. When you've had enough of a digital break, take your phone out, then tap the screen **1** to reset your default phone app.





Our rating



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

LIFESTYLE

Co-Star

bit.ly/costardroid494
bit.ly/costarios494
 5  10.2

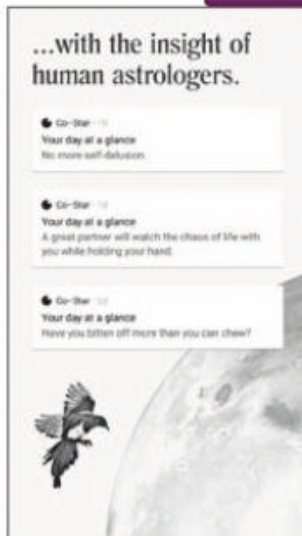
Describing itself as a “hyper-personalised” social astrology experience, Co-Star has won lots of fans since its iOS release (including singer Dua Lipa, who was quoted as saying the app is “banging”) and will no doubt gain even more now it’s available for Android, too. Its AI generates daily predictions based on an accurate map of the sky at your time of birth, coupled with live planetary data from NASA. Whatever you think of horoscopes, Co-Star’s pearls of wisdom are fun, occasionally provocative, and supremely sharable.



Our rating





NEW



CULTURE

The Mob Museum

bit.ly/mobdroid494
bit.ly/mobios494
 5.1  9

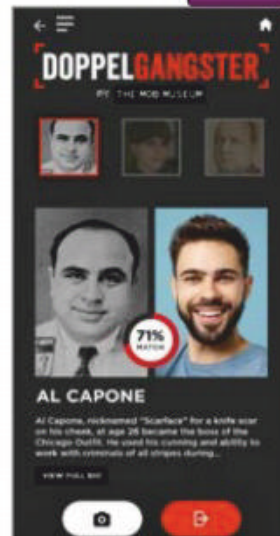
The Mob Museum – aka the National Museum of Organized Crime and Law Enforcement in Las Vegas – has released an app dedicated to providing information about the real-world museum and its exhibits. You can view floor maps, take a self-guided tour and browse upcoming programmes. For those who don’t intend to make the trip to Vegas in person, however, the app’s biggest attraction is likely to be its DoppelGangster tool, which scans your likeness and tells you which mobster from history you most resemble.



Our rating





NEW



GAME

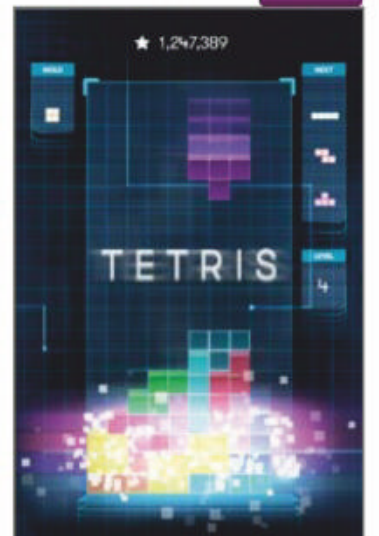
Tetris

bit.ly/tetrisdroid494
bit.ly/tetrisios494
 5.1  11

We’ve seen a number of great new takes on the Tetris formula recently, including an awesome VR version, Tetris Effect, on PS4 and the multiplayer mayhem of Tetris 99 on Nintendo Switch. For us, however, nothing beats the traditional Tetris, which is why we were gutted by EA’s recent announcement that it plans to discontinue its classic Tetris mobile app in April. Thankfully, new developer N3twork has stepped into the breach with this version. It’s basic, but still great fun even after all these years.



Our rating



COMPUTING

GitHub

github.com/mobile
 (varies)

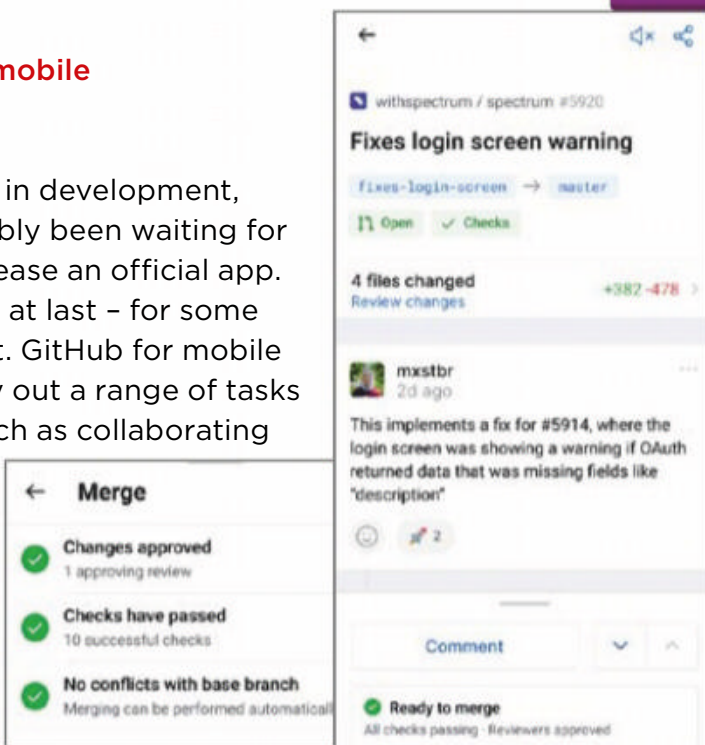
If you dabble in development, you’ve probably been waiting for GitHub to release an official app. Well, it’s here at last – for some users, at least. GitHub for mobile lets you carry out a range of tasks on the go, such as collaborating with others, sharing lines of code, providing feedback and more. There’s a catch, however – the app is still in beta testing, so you need to sign up to request access to either the iOS or Android beta. What’s more, the testing programme often reaches its user limit, which means you may not be able to play with the app until spaces become available.



Our rating



NEW



WEB BROWSER

Microsoft Edge

bit.ly/edgedroid494
bit.ly/edgeios494
 4.4  10

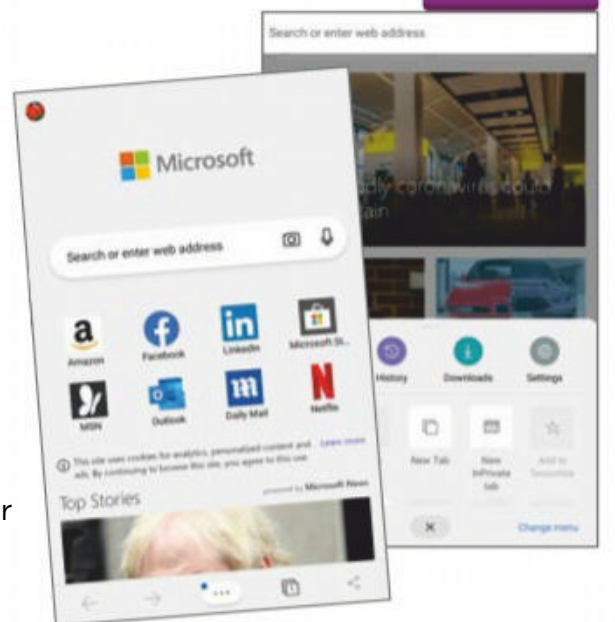
If you’ve been avoiding Microsoft’s Edge browser for years, now may be the time to reconsider your position. As we explained in our cover feature in Issue 492 (bit.ly/webuser492), Microsoft has rebuilt its browser from the ground up, replacing its homegrown tech with the same open-source Chromium engine Google uses for Chrome. Windows 10 users may have already been pleasantly surprised by the revamped desktop version, and the mobile edition is well worth trying, too. Our first impressions of Edge for Android and iOS are that it’s fast, clean and easy to use, and it includes some essential privacy-focused options, such as a built-in ad blocker.



Our rating



UPDATED



5 NEW APPS WORTH PAYING FOR

ENTERTAINMENT

Amazing Wheels Pro

bit.ly/wheels494

Price: £1.29



Some decisions are hard: where should you go for lunch? Cinema or Netflix? This app relieves you of the agony of choice by letting you create customisable wheels you can spin to make important decisions for you.



EDUCATION

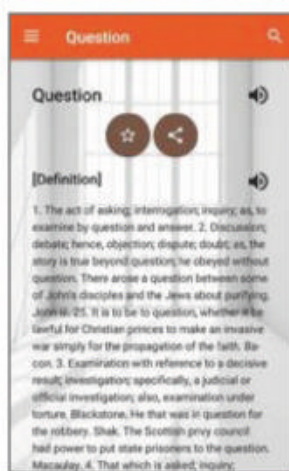
Superflual English Dictionary

bit.ly/flual494

Price: £2.79



Need offline access to dictionary definitions? This app – which uses Webster's English Dictionary as its source – contains more than 120,000 words and provides text-to-speech in British or American accents.



GAME

The White Door

bit.ly/whitedroid494

bit.ly/whiteios494

Price: £2.49 (Android)
£2.99 (iOS)



This largely monochromatic game is more of an absorbing interactive story than a button masher – a point-and-tap adventure about a man who wakes up in a mental health facility with no memory.

MUSIC

JustinGuitar Ear Trainer

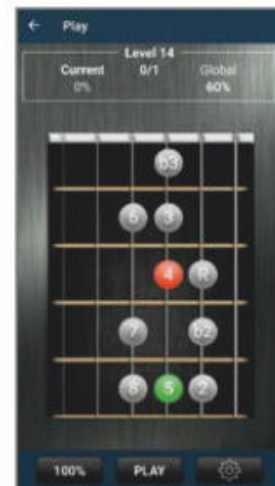
bit.ly/eardroid494

bit.ly/earios494

Price: £1.99



Budding musicians will be pleased to hear that this once iPhone-only app has now been released for Android. It's designed to train you to recognise the relationship between two notes.



ART

Tayasui Calligraphy

bit.ly/tay494

Price: £1.99



This minimalist art app lets you draw using simulated ink pens and brushes. It's available for iPhones and iPads, and offers support for Apple Pencil, so you can create even more detailed calligraphic flourishes.



Amazing Wheels Pro



Superflual English Dictionary



The White Door



JustinGuitar Ear Trainer



Tayasui Calligraphy



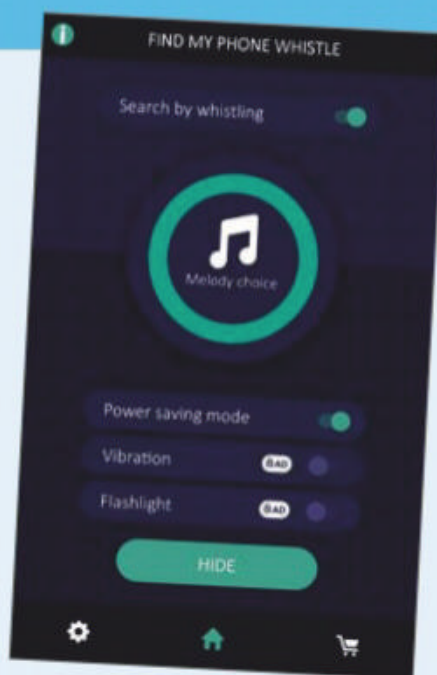
✓ Install this app...

Find My Phone Whistle

bit.ly/whistle494



Have you ever misplaced your mobile phone somewhere in your house and resorted to calling yourself from your landline to locate your lost device? Find My Phone Whistle offers a handy alternative solution to this perennial problem. Either whistle or clap, and your lost device emits a customisable chime to help you find it. A free version of Find My Phone Whistle is available, but if you like the app, you may prefer to make a one-off in-app payment of £4.49 for the VIP version, which banishes the annoying adverts that appear when you change certain settings.



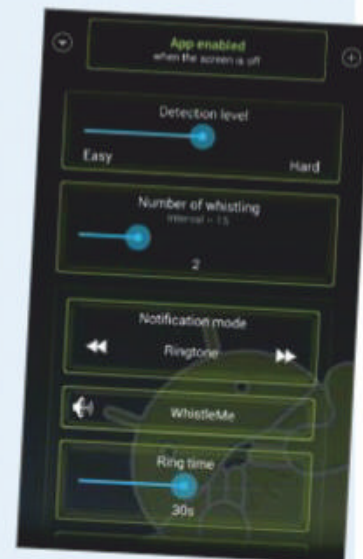
...Not this one



Whistle Me

bit.ly/dontwhistle494

There are lots of apps on Google Play that are similar to Find My Phone Whistle, but not all of them are as good – as Whistle Me demonstrates. It claims to help you find your phone by whistling but, according to many of the app's reviewers, it doesn't always work. This could be due to the fact that the app hasn't been updated for more than three years. Do *not* pay the £2.09 asking price for this one!





Take a Screen Break

Take a rest from your browser with our fiendish fortnightly challenges. Can you solve our 1970s-films emoji and guess our Wikipedia article?

**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 1970s FILMS FROM THE EMOJI?

1



2



3



4



5



6



GUESS THE WIKIPEDIA ARTICLE

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



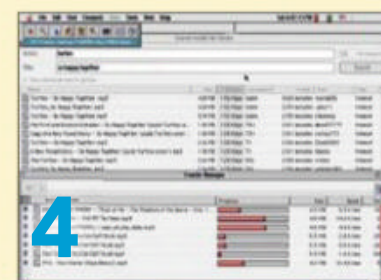
WIKIPEDIA

1 "It was founded as a pioneering peer-to-peer (P2P) file-sharing internet service that emphasised sharing digital audio files, typically audio songs, encoded in MP3 format."

2 "At its peak, it had about 80 million registered users. It made it relatively easy for music enthusiasts to download

copies of songs that were otherwise difficult to obtain, such as older songs."

3 "As it became popular, it ran into legal difficulties over copyright infringement. It ceased operations and was eventually acquired by Roxio. In its second incarnation, it became an online music store."



4

5 "In 2001, it agreed to pay music creators and copyright owners a \$26m settlement for past unauthorised uses of music, and \$10m as an advance against future licensing royalties."

Credit: Njahnke

COMPETITIONS

WIN 1 OF 8

Peli 0915 Memory Card Cases

Crush-proof and water-resistant, Peli's 0915 Memory Card Case can hold 12 SD cards, six miniSD cards and six microSD cards, and is small enough to easily fit into bags or pockets. To enter, email webusercomp@dennis.co.uk with 'peli' in the subject line. For more details, visit www.peliproducs.co.uk and follow [@Peli_Products](https://twitter.com/Peli_Products) on Twitter.



**WORTH
£32.99
EACH**

WIN 1 OF 6

D-Link Mini HD Wi-Fi Camera

D-Link's DCS-8000LH Mini Wi-Fi Camera protects your home with 720p high-definition clarity. This day and night camera lets you view your home around the clock, and sends alerts to your phone or tablet when sound and motion are detected. To enter, email your address to webusercomp@dennis.co.uk with 'D-Link Mini' in the subject line. For more information, visit eu.dlink.com and follow [@DLink_UK](https://twitter.com/DLink_UK) on Twitter.



**WORTH
£34.99
EACH**

FAQ

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

Best of CES 2020



David Crookes rounds up the most notable gadgets and innovations unveiled at last month's Consumer Electronics Show in Las Vegas

ALIENWARE CONCEPT UFO bit.ly/alien494

Why is it interesting?

Despite resembling a Nintendo Switch console, Alienware's foray into handheld gaming is, at heart, a portable Windows 10 PC with an 8in, 1,900 x 1,200 hi-res screen. Powered by a 10th-generation Intel Core processor, it allows gamers to enjoy Triple-A PC titles on the go.

The unit can be converted to function as a standard games console by detaching the controllers, then either propping up the screen on a flat surface or connecting the device to an external display. Wi-Fi and Bluetooth provide networking capabilities and you'll be able to hook up a mouse and a

keyboard. The Concept UFO also comes with Alienware's signature RGB lighting, which makes the unit as a whole look as cool and sophisticated as the games it's designed to play.

When is it out?

The UFO is still at the concept stage and there is as yet no indication of when it is likely to be on sale.

How much will it cost?

Again, Alienware hasn't revealed details but it's not likely to be cheap.

Do I really need it?

If you're an avid PC gamer, then you're likely to love the UFO. It will grant access to any PC games service such as Origin, Good Old Games, Epic Games Store and, of course, Steam, potentially putting many thousands of games in your hands.



FOLDABLE TECHNOLOGY bit.ly/fold494

Why is it interesting?

Foldable devices use flexible display technology, which can be used to make larger screens smaller and easier to carry. The most impressive trend is to have a bend in the screen, as with Lenovo's ThinkPad X1 Fold laptop (see last issue's First Look). This is also the design adopted by the Intel Horseshoe Bend, a device based on the forthcoming Tiger Lake mobile processor, which can switch between laptop and tablet.

Bendy tech is also used by Dell's Ori concept tablet, which runs Windows 10. However, it's interesting to note that the dual-screen Dell Duet laptop opts instead for a hinge connecting the two displays, as well as an optional keyboard.

Other eye-catching foldables at CES

included Royole's Mirage, which wraps around a curved Alexa-enabled speaker. Meanwhile, LG showcased a television that can convert from a flat OLED to a curved set at the press of a button.

When are they out?

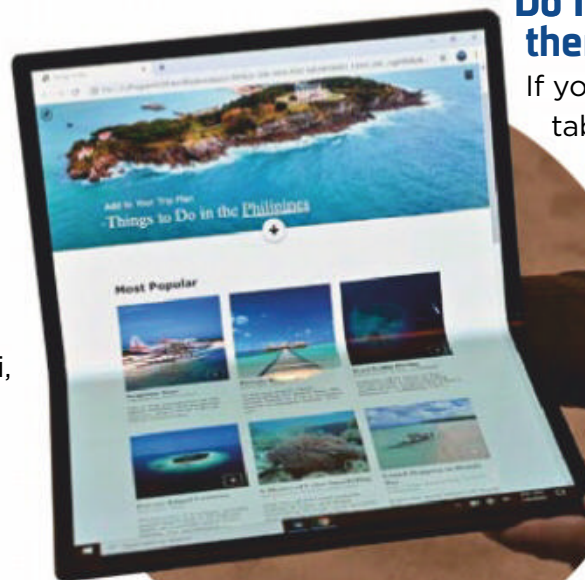
The ThinkPad X1 Fold is due later this year but the Horseshoe Bend, which opens from 12in into a 17.3in display, is a concept product – as are the Ori, Duet and the 4K LG television. The Mirage will be available in the spring of 2020.

How much will they cost?

Deep breath – you're looking at about £2,500 for the ThinkPad X1 Fold and about £799 for the Mirage.

Do I really need them?

If your current laptop or tablet feels too small or if you're desperate for a wraparound screen on your smartspeaker, then yes. But we'd advise waiting for the technology to find its feet and fall in price.



SEGWAY S-POD uk-en.segway.com**Why is it interesting?**

Resembling a cross between an upright Sinclair C5 and a Sixties egg chair, Segway's latest design for a personal transporter certainly looks more comfortable than the upright vehicles you tend to see trundling around the streets on holiday. Self-balancing, unable to tip and steered using a joystick on the armrest, the two-wheel S-Pod can reach speeds of 24mph by changing the pod's centre of gravity.

When's it out?

Segway is hoping to launch the S-Pod next year, although the project may have suffered a minor setback when a journalist crashed a concept model into a wall at CES.

How much will it cost?

There is no indication of price as yet.

**Do I really need one?**

One look at the S-Pod and you'll be dying to give it a go. But even if you don't want to buy one, the fact that it's being designed for use in enclosed areas such as shopping centres, theme parks and airports means you may still get the chance to take one for a spin.

NETGEAR NIGHTHAWK MESH bit.ly/nighthawk494**Why is it interesting?**

CES 2020 featured plenty of Wi-Fi 6 routers. These take advantage of a more efficient wireless standard that doesn't slow down, however many devices are being served. The affordability of the dual-band Nighthawk Mesh made it particularly eye-catching. It allows combined speeds of up to 1.8Gbps, backwards compatibility and coverage of up to 3,000ft², eliminating dead zones.

How much will it cost?

A two-pack to start your dual-band mesh system is priced at \$229.99 (£176).

**When's it out?**

It's already available in the US but

Netgear's UK site just says "coming soon".

Do I really need one?

Be aware that you'll need to upgrade to WiFi 6-compatible devices and be signed up to an ISP that offers a decent speed to take advantage of the benefits.

SAMSUNG BALLIE www.samsung.com/uk**Why is it interesting?**

Inspired by the BB-8 droid character from Star Wars, Samsung's spherical robot will not only follow users around their homes and respond to commands, but also carry out chores by connecting with other smart devices. Oh, and it makes cute robotic noises, too.

When's it out?

Samsung says the Ballie is not ready for a commercial release just yet.

How much will it cost?

Again, Samsung isn't playing ball with any pricing details.

Do I really need it?

We'd have to see a more rounded set of skills before we can really make a judgement.

**JUNO**
bit.ly/juno494
Why is it interesting?

Dubbed a "reverse microwave", Juno is a kitchen-counter gadget that can chill any beverage within a matter of minutes. Simply pop in a bottle or a can, and either press the presets for red and white wine or select another level of chilling. Thermoelectric technology gets to work absorbing the heat, leaving wine as cold as 9°C in just five minutes.

When's it out?

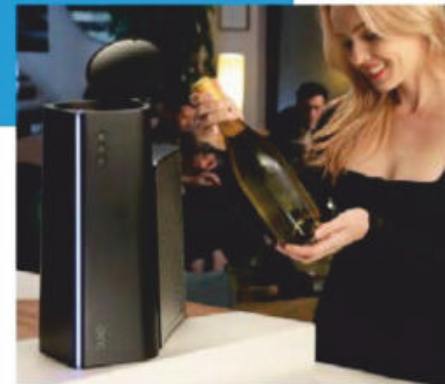
Juno's maker, Matrix, is raising funds on Indiegogo so you can pre-order one now for a potential August release.

How much will it cost?

Juno has a recommended retail price of \$399 (£308), although pre-orders are available at half that price.

Do I really need one?

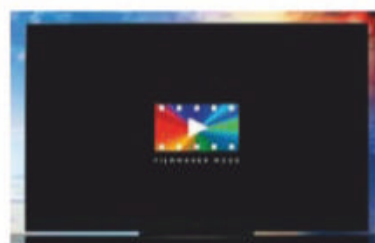
If you like your drinks chilled, then this device is sure to quench your thirst.



Credit: Michael Neveux/Matrix

DOLBY VISION IQ www.dolby.com**Why is it interesting?**

Dolby Vision IQ optimises the picture quality of a compatible television by adapting to a room's lighting. It uses ambient light sensors inside a TV to automatically adjust the screen's brightness so that shows and films look their best. It also reads Dolby Vision dynamic metadata to tell the TV what is actually being watched, so it can optimise the settings scene by scene.

**When's it out?**

The first two televisions to use Dolby Vision IQ are the Panasonic HZ2000 OLED (pictured, left) and the LG Gallery Series OLED

(pictured, right). Both are due to go on sale later this year.

How much will it cost?

Prices have not yet been announced for either set.

**Do I really need one?**

Although 4K HDR does an excellent job of showing off your television programmes and films, the picture sometimes looks too dark, particularly in well-lit rooms. Dolby Vision IQ builds on the standard Dolby Vision by providing increased clarity to whatever you're viewing on services such as Netflix and Amazon Prime Video.

What you must...

NEVER CLICK

ONLINE



**COVER
FEATURE**

Don't get caught and scammed by the web's latest mouse traps. **Wayne Williams** reveals all the things you should avoid clicking and tapping on the web, and explains how to spot them

The way that the worldwide web was conceived and is structured means you won't get far without clicking on anything (or tapping, if you're using a touchscreen). Unfortunately, for all the wonderful websites you can access with your mouse (or finger), there are lots of things you should keep your cursor well away from, unless you want to infect your PC with malware, hand over personal data to scammers, flood your inbox with spam or even end up in prison.

Sadly, such 'mouse traps' are becoming increasingly widespread, and the tricks they use to lure you into compromising your privacy and security grow ever more devious.

In this feature, we highlight the dangers, risks and traps that lurk on the web, hidden behind innocuous-looking links, buttons, tick boxes and more, and explain how to spot them and avoid clicking yourself into trouble. We also explain how 'dark patterns' can sneakily influence the actions you take on the web.

SECURITY RISKS

Fake download buttons

Some download sites – and many online file hosts – display adverts that are sneakily designed to look like download buttons. These are usually big, bright and eye catching, and if you're not paying proper attention, there's a good chance you'll click one of them instead of the real download link.

What's the risk?

Instead of downloading the file you want, you'll be taken to another site where you may be tricked into downloading malicious software or entering personal details to "unlock access" to your file.

How to avoid them

Take your time to ensure you find the genuine download option – it may be a small, unobtrusive link nestled between large 'download' buttons. Also, hover your mouse over the download button or link (but don't click it) and look at the URL that appears at the bottom of your browser to see where clicking it will take you. If it's another location on the current site, you can assume that it's probably the legitimate download button. If it doesn't look right (perhaps containing a reference to "adservices"), then look elsewhere.

Ad blockers such as uBlock Origin (bit.ly/ublock494) and Ghostery (www.ghostery.com) remove many of these buttons, but that's not always the case, and some sites require you to disable your ad blocker before they will work.

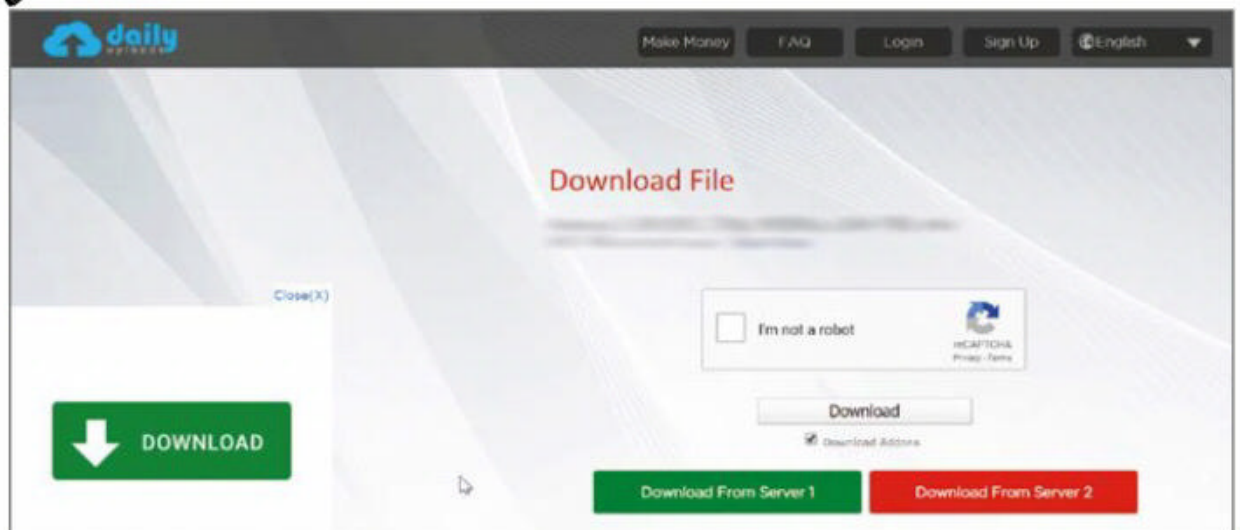
Shortened links

In the early days of the web, magazines like ours had to print the full address of a web page, which could run to several lines in a column. URL shorteners such as Bitly, Is.gd and TinyURL do a great job of transforming long, unwieldy web addresses into something that's much easier to type and share.

What's the risk?

While a shortened URL is much easier to share or type, you often won't have a clue where it leads until you click it. For example, where does bit.ly/2tYfNbt point to? Or bit.ly/microsoft999 for that matter? It could be to a malicious site.

As an aside, if you're sharing personal links (perhaps to a private YouTube video that can only be accessed by someone with the URL), shrinking the address makes it much easier for



Fake download buttons can be very convincing, so hover over them before you click

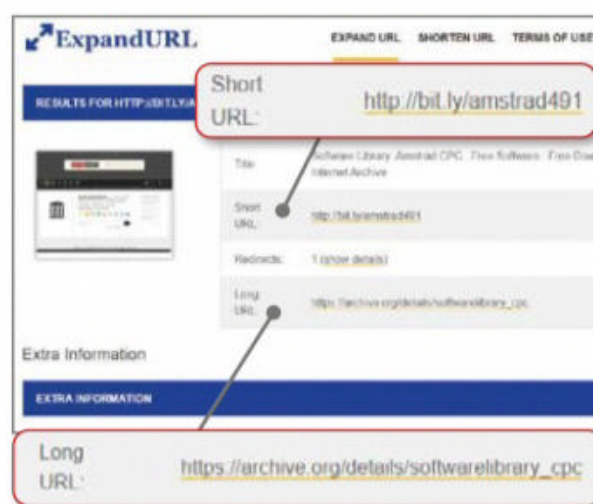
unauthorised people to find. You can test this by typing bitly.com/ into your address bar, followed by a random word or two, and seeing where you end up.

How to avoid them

There are ways to find out where a shortened link leads without actually clicking it. You can view the details on the Bitly site, including the unmasked URL, creation date, number of clicks to date, and referrers and locations, simply

by adding a plus symbol to the end of the URL. For example, bit.ly/wu494 takes you to our website, but bit.ly/wu494+ takes you to the Bitly page about the link. Add a minus symbol to the end of an is.gd link to see where it goes, and add 'preview' before the tinyurl.com part of a link created using that service.

Alternatively, you can copy the shortened link to an online tool such as ExpandURL (www.expandurl.net), which will show you the full web address that the link takes you to.



ExpandURL shows you the destination of shortened links before you click them

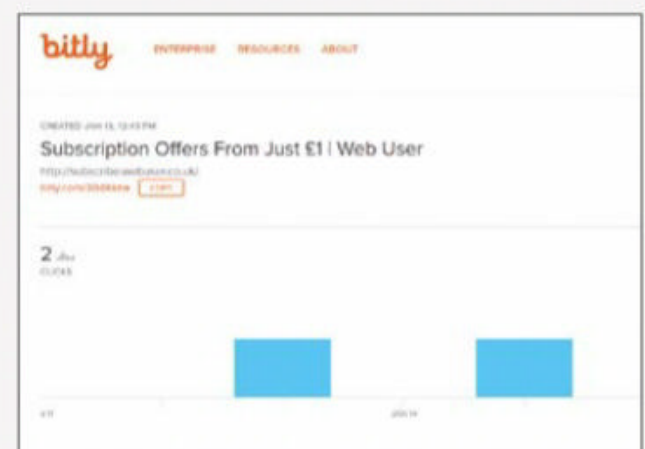
Mysterious attachments

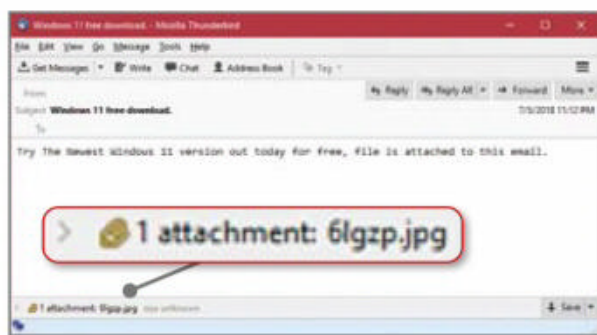
Unless you're entirely new to email, you should know by now never to click a message attachment unless you know exactly what it is and where it came from. The trouble is that scammers have become very adept at fooling the unwary into clicking what seems like a very important attachment – for example, an invoice for a hotel stay the recipient never booked, a delivery

IS IT SAFE TO CLICK BITLY LINKS?

As mentioned above, shortened URLs such as those created using Bitly can potentially be dangerous. All the Bitly links featured in *Web User* are, of course, completely safe, but it pays to be vigilant when clicking links from untrusted or unknown sources.

Bitly does its best to safeguard users and, as it explains on its support pages (bit.ly/bitly494), the company encrypts all links using HTTPS, and monitors and blocks abuse and spam where it can. You can report any suspicious links to abuse@bitly.com. Remember that you can check where a Bitly link goes by adding a plus sign to the end of the shortened URL.





Never open an email attachment from an unknown sender, even if it looks harmless

notice supposedly from a courier company or a fine that needs paying immediately.

What's the risk?

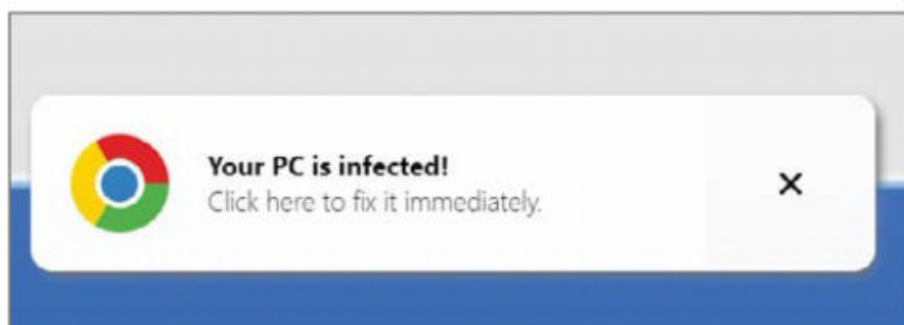
The level of risk depends on what the malicious attachment is designed to do once it's clicked. It could infect your system with malware, install ransomware or launch an attack on a third-party site. Either way, it's unlikely to be something harmless, so you should never click the file.

How to avoid it

Malicious email attachments used to be easy to spot because they came in the form of easily identifiable executables (with an '.exe' suffix). Now, however, they can be made to look like documents, PDFs, photos, voicemails and more. The trick is to simply avoid clicking any attachments from unknown senders, and don't open any from people you know unless you're sure they are safe. A good antivirus program will protect you from most threats, but it's wise to delete the email rather than leave the threat sitting in your inbox.

Fake security alerts

Provided your antivirus software is reliable and up to date, it should automatically deal with any threat it finds on your computer and inform you of whatever action it has taken to disarm the problem. Fake security alerts tend to be more demanding and in your face – using pop-ups and containing links to a program (either malicious, paid-for or both) that you 'must' download, or displaying a phone number that you supposedly need to call to resolve the issue.

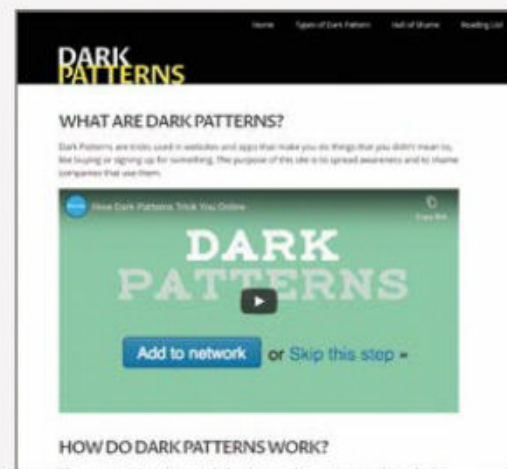


Don't be tricked into clicking fake security alerts that pop up on your computer

WATCH OUT FOR 'DARK PATTERNS'

Web developers often use deceptive design practices – so-called 'dark patterns' – to manipulate us into performing certain actions on the web, such as buying insurance or signing up for recurring payments. Examples of dark patterns include hidden costs that you only find out about at the last step of the checkout process, disguised ads, trick questions and misdirection. The Dark Patterns website (www.darkpatterns.org) explains more, and its Twitter feed at twitter.com/darkpatterns acts as a hall of shame.

Last year, researchers at Princeton and the University of Chicago conducted a large-scale study, analysing more than 53,000 product pages from 11,000 shopping websites, and found over 1,800 instances of dark patterns across those sites. You can find out more at bit.ly/dpatterns494 to avoid getting manipulated yourself.



What's the risk?

If you heed the warning and install the recommended "antivirus" software, you could infect your perfectly clean PC with malware. Call the "helpline" and you may be asked to give the scammer remote access to your PC (see 'Remote-access scams', below) or be duped into sharing personal information and handing over your credit card details to fix a non-existent problem.

How to avoid them

Once the message appears, you need to work out where it's coming from. If it's just an advert on a web page, close the tab for that site or – if you're unable to – close your browser altogether. If it's coming from a program you recently installed, uninstall it, then use a security tool such as Malwarebytes (www.malwarebytes.com) to scan your system. Whatever you do, if there's a phone number in the message, *do not call it*, because it could cost you dearly.

Remote-access scams

When a virus attacks your PC, or some other technical problem arises, a tech-support person from Microsoft will phone or email you and offer to fix

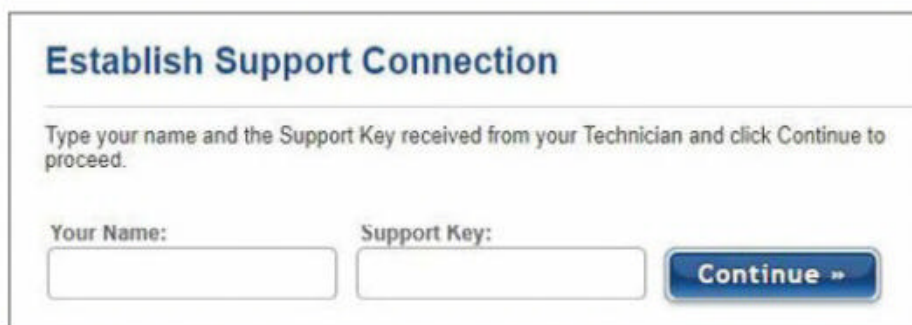
it – right? Of course not. This is what's known as a remote-access scam.

What's the risk?

The scammer will call or email you, explain the "problem" and offer to find and fix it. To do this, they will need remote access to your computer, which they get by sending you a message containing a link you have to click. They may even give you an official-sounding support code to enter. If you click the link to grant them access, they will be able to infect your PC with malware or ransomware, change your settings, access your personal files or make it look as if they've found something, then charge you for the software you supposedly need to remove it.

How to avoid them

If you receive a call, email or text message out of the blue from someone claiming that your PC is infected and offering to fix it, simply hang up on them or delete the message, no matter how polite and plausible they sound. Never give anyone you don't know remote access to your computer, and report the scammer to Action Fraud (www.actionfraud.police.uk) or Microsoft (bit.ly/scam494).



Never give tech support remote access to your PC – unless you contact them first

PRIVACY THREATS



Cookie 'accept' buttons

When you visit a website from Europe for the first time, you should see a message regarding its use of cookies for data tracking, and be given the chance to opt out of installing them. This is part of the GDPR (General Data Protection Regulation) and ePrivacy Directive (ePR) rules introduced in 2018. However, rejecting tracking isn't always as easy as it should be.

What's the risk?

While most of us simply click the 'Accept' button when faced with a cookie/tracking warning – especially if there's no clear opt-out button – it's worth taking the time to read the notice because it will tell you exactly what cookies a website is going to be leaving on your computer and how they might track you, which may have a significant impact on your privacy.

How to avoid them

A recent study of 10,000 websites in the UK found that just 11.8% met the minimal requirements set by European law (bit.ly/cookie494). The rest of the sites used 'dark patterns' (see opposite page) to make it much harder to opt out of tracking, using tricks such as making the Accept All button clearly visible, while the opt-out option is hidden several clicks away. It might be a pain, but the law was introduced to protect your privacy, so always make the effort to find the option to control which cookies are allowed, and don't just blindly accept them all. If you're not happy with the cookie policy, then choose Reject.



Clicking to accept all cookies saves time but could compromise your privacy

Friend requests from strangers

Getting a friend request from someone on social media is usually a good thing, unless it's a person you don't like, but the lure of appearing popular and accepting a request from someone you

don't know can come at a price.

Occasionally, you might even receive a friend request from someone you're already friends with, which isn't just confusing but can also be risky.

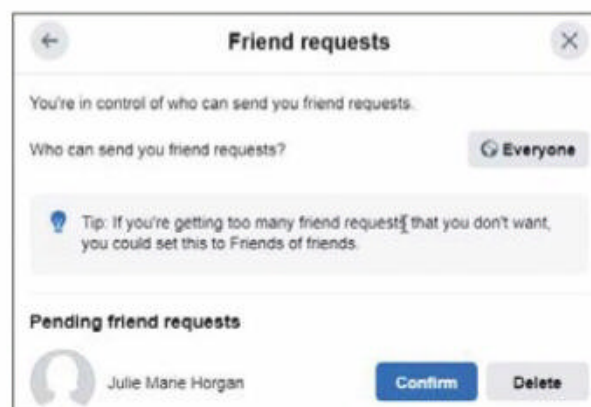
What's the risk?

Accepting a friend request on Facebook is equivalent to telling the social network that you trust that person, and gives them access to everything you share, including photos, friends' lists, and contact information. Just as you probably wouldn't invite a stranger into your home and leave them alone to rummage through your possessions, so you shouldn't give just anyone free rein to your Facebook page. Scammers often set up fake Facebook accounts with attractive profile photos as a means of stealing private data from other users and spreading malware.

How to avoid them

The beauty of Facebook is that you can control who you let into your inner circle. If you're not friends with a person who sends you a request, don't accept it. Also, make sure your privacy settings are tightly locked down – see last issue's What's New Online for details of Facebook's improved Privacy Checkup tool, which lets you control who can send you friend requests. To access it, click the question-mark icon in the top-right corner of any Facebook page and choose Privacy Checkup.

Cloned friends are another problem you may occasionally encounter. This is when you receive a fake friend request (complete with the same name and profile picture) for someone you're already friends with. The real person is probably unaware that a scammer is using their identity – they may even have fallen prey to a fake request themselves. Before accepting a request like this, check to see if the person is still on your friends list (if they are, then ignore the new request) and message



Facebook's Privacy Checkup tool lets you limit who can send you friend requests

them for confirmation. If in doubt, delete the request and, if you've already accepted, 'unfriend' them!

Clickbait

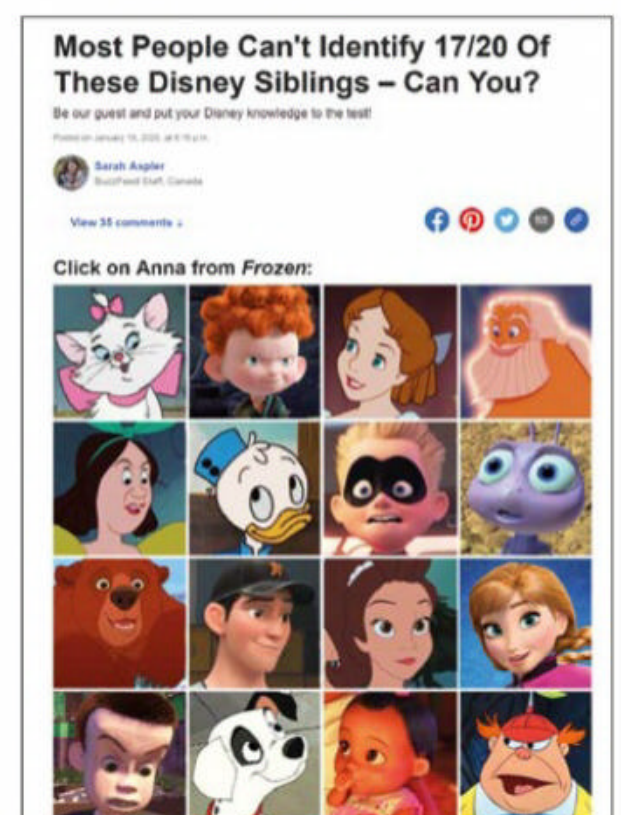
Clickbait is frequently found on social media, sponsored adverts and websites such as BuzzFeed, usually in the form of stories with an intriguing headline that's designed to draw you in.

What's the risk?

In most cases, the only risk is that you waste time reading something that you don't care about, usually having to click through multiple pages, each festooned with adverts. In some cases – such as clickbait quizzes “where only a genius can get all of the questions right” – you might be prompted to provide personal information or share your 'success' with your friends, thereby further spreading the quiz's reach.

How to avoid it

Clickbait stories sometimes come in the form of numbered lists, with one singled out as being shocking or unbelievable. If our cover feature was presented as clickbait, we'd change the headline to '14 things you MUST never click (number 7 will blow your mind!)'. If you see a story that reveals nothing in the headline but promises a massive pay-off later (“you won't believe what happened next!”), it's probably clickbait. Don't be fooled – you're unlikely to be missing anything, but giving it a wide berth will safeguard your privacy.



Clickbait articles may seem harmless but they may also try to harvest your data



MONEY SCAMS



Money hashtags

Late last year, Santander revealed that social-media hashtags were being used to lure (mostly young) people into becoming money mules. This is where a person lets criminals use their bank account to transfer money associated with illegal activity, usually in exchange for a cut (bit.ly/hashtag494).

What's the risk?

The appeal of easy money isn't difficult to understand. Santander's research found almost a quarter (23%) of adults would be tempted to click on a money-mule recruitment post. Unfortunately, going ahead with a transaction could result in a criminal record and even a prison sentence of up to 14 years.

How to avoid them

These are the top 10 'money mule' hashtags identified by Santander, which you should never click:

#Moneyflipsuk #Mflipssss
#Deetsandflips #Deetsandflipping
#legitmoneysflips #flipsanddeets
#PayPalFlip #RealMoneyTransfers
#UkFlips #EasyMoney



Clicking a money hashtag won't earn you cash but could land you in prison

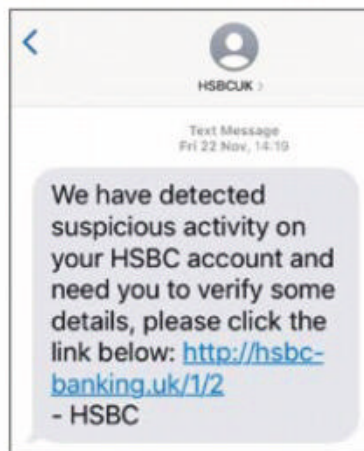
those above to the site you saw them on.

Phishing URLs

Spoof emails are designed to look like they come from a legitimate service, such as your bank, PayPal or any other site where you might have an account, like Amazon or eBay. They use the same logos and typically come bearing bad news – suggesting you need to change your password as the result of a breach, or log into your account to check something or verify your identity.

What's the risk?

When you click a phishing link inside a spoof email or other type of message



Never click or tap a link in an email or text message, even if the source looks official

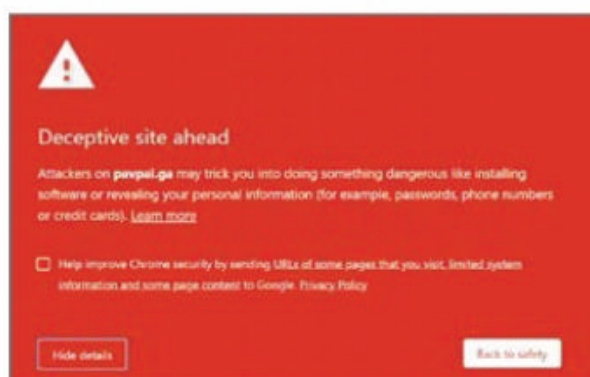
(such as an SMS), you will be taken to a fake but often convincing version of the site where you will be prompted to log in, thereby handing over your username, password and other requested details to the scammers.

How to avoid them

Watch out for emails that aren't addressed personally to you – official messages will contain your name, not just "dear sir" or "valued customer". Even if the email does include your name and personal details, it doesn't mean it's trustworthy, as scammers are increasingly resorting to targeted attacks known as 'spear phishing'.

Watch out for spelling or grammar mistakes – that's usually a big red flag. Also, never visit a site via a link in an email or text message – always type what you know to be the proper address into your web browser and use the HTTPS address.

Most decent anti-malware software includes phishing protection, as do browsers including Chrome, Firefox and the new Edge, but don't rely on these tools and services exclusively to keep yourself safe. If you receive a suspicious text on your phone that purports to be from your bank, contact them directly via the company website or Twitter account and ask for verification that the message is real. Don't click any links or call any numbers in the text itself until you are sure it's genuine. You can report phishing emails to Action Fraud via its dedicated web page at bit.ly/fraud494.



Most browsers now offer built-in phishing protection but don't rely on that alone

Unwanted subscriptions

Subscription services such as Apple Music, Audible and Amazon Prime are becoming increasingly popular, often luring you in with a free trial and the promise of other benefits.

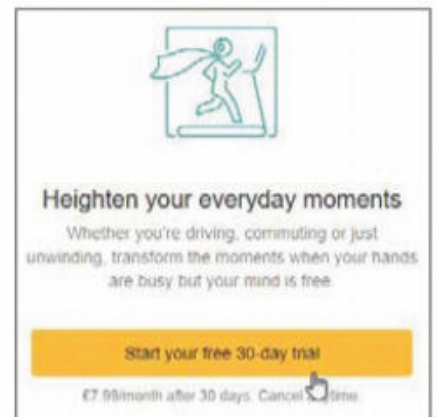
What's the risk?

It's easy to forget to cancel a free trial before it ends and find yourself being charged for the service, and it's often harder to end a subscription than it is to begin it. Continuous payment authority (CPA) gives the subscription company permission to take money from you whenever they feel it is owed. They can change the amount being charged, too, and don't have to tell you when they will be taking a payment. Be careful what you click to sign up for, especially if the site already has your card details (such as an Amazon-owned service).

How to avoid them

When you sign up for a subscription, check the terms and conditions, and find out

whether other people have had problems cancelling. Set a calendar alert on your phone or PC the day you start the trial, so you have plenty of time to cancel before you're charged. To quit Amazon Prime, go to Your Account, Manage Prime Membership and select 'Do not continue' or 'End membership'. If you've already paid, you may be entitled to a refund.



Take care when subscribing to a service that already has your payment details

Fake pet adverts

If you're looking for a pet, you should always choose to adopt rather than shop for one, but if you're committed to buying an animal online, beware of fake posts advertising non-existent pets and pet accessories.

What's the risk?

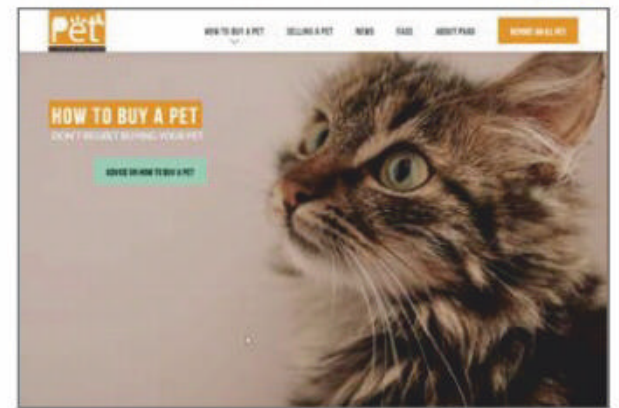
The National Fraud & Cyber Crime Reporting Centre (www.actionfraud.police.uk) says that between March 2012 and April 2018, it received 5,066 reports of people who had been duped into paying money for non-existent

animals, but the real number is likely to be much, much higher. Fraudsters use online marketplaces such as Gumtree to advertise pets, and will request a deposit – or even payment in full – to reserve the animal you require, usually implying rival interest to persuade you to hand over your money quickly. There will be excuses for why you can't come and see the pet (it's too young or too far away), and they may also try to talk you into additional funds to cover extras,

such as vet's fees and travel cages. Once they have your cash, all communication with you will stop.

How to avoid them

Don't be rushed into sending money for a pet. Make sure you see it several times in its home and, if that's not possible for genuine reasons, ask for photos or videos that prove its existence. How to Buy a Pet (howtobuyapet.co.uk) provides a wealth of dos and don'ts.



Avoid fake adverts for pets by checking the advice provided by How to Buy a Pet

ANNOYANCES



Unsubscribe links

When you receive an unsolicited email, you may be tempted to click the 'unsubscribe' link at the bottom of the message. After all, unsubscribing will stop you receiving such unwanted emails in future, right? Wrong.

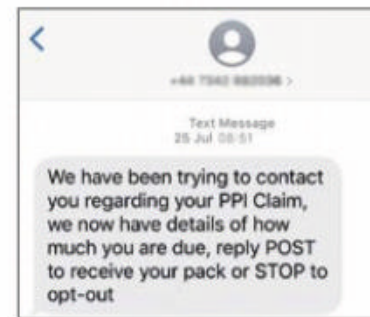
What's the risk?

Clicking the unsubscribe link on a solicited email – such as one from a mailing list you signed up to – will, hopefully, remove you from that list and stop future emails arriving from the same sender. However, doing this with an unsolicited (spam) email won't have the same effect because what you'll actually be doing is confirming to the sender that the email address the

that you've read their email (in order to see the unsubscribe link). This instantly makes you more attractive to spammers and will no doubt lead to more – rather than fewer – emails from them and other junk-mail senders. Worse still, the link could take you to a malicious site where you could be hit with malware or scammed in some other way.

How to avoid them

If you didn't subscribe to a mailing list in the first place, there's no point in trying to unsubscribe from it. It's possible someone may have signed you up without your knowledge and clicking the unsubscribe link will actually have a positive effect, but it's not worth taking the risk. The best action is to not open the message (Gmail lets you preview the opening line, which may be enough to identify spam) and then mark it as junk.



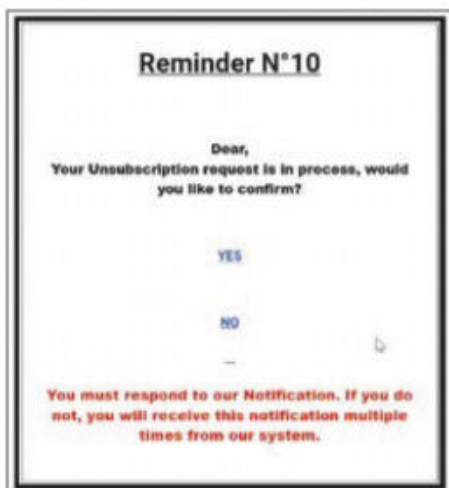
Don't tap to reply to spam texts – block the sender and report them as spam

What's the risk?

As with unsolicited emails, responding to a junk SMS – including sending "stop" as directed in some mobile spam – will only lead to you receiving more messages, and possibly cost you money.

How to avoid them

Type the number into Who Called Me (who-called.co.uk) to find out if it's legitimate and see if other people have been bothered by the same company. Try blocking the numbers to stop receiving future messages – on Android, select the message, tap the Block icon in the top-right corner of the Messages app and choose 'Report as spam'. However, this might not work because spammers often use randomly generated numbers. Another option is to forward the message to 7726 (spells SPAM on your phone keypad), to send a report to your network provider. ■



message was sent to is not only active, but

Clicking the unsubscribe link in unsolicited emails can have the opposite effect

Unsolicited text messages

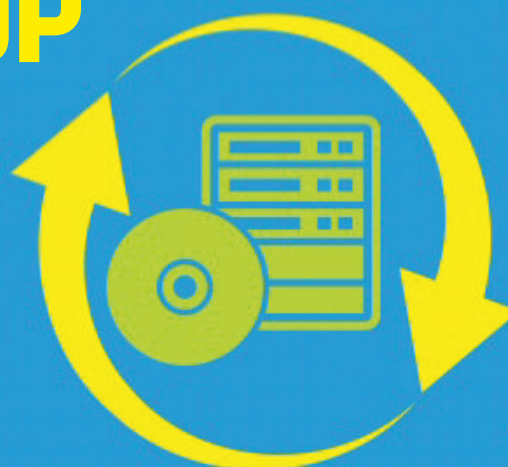
Spam texts are a common annoyance and there are a number of different types, ranging from legitimate (but no less unwanted) marketing messages to junk from "ambulance chasers" and PPI firms.

NEXT ISSUE

on sale Wednesday 19 February 2020

DON'T MUCK UP YOUR BACKUP

We reveal the best free tools for protecting your data against loss, theft and other disasters



PLUS...

REINSTALL CLASSIC WINDOWS SOFTWARE

Abandoned programs you can still use safely today

DITCH MICROSOFT PHOTOS

Switch to a superior free image viewer

CREATE AN INTERCOM

Broadcast your voice to everyone in your home

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

Best two-factor authentication apps

Passwords are a notoriously poor way to protect your precious online accounts. **Andy Shaw** tests six apps that provide an extra layer of security using your phone



Duo Mobile | bit.ly/duomob494 bit.ly/duoapp494 | ★★★★★
FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

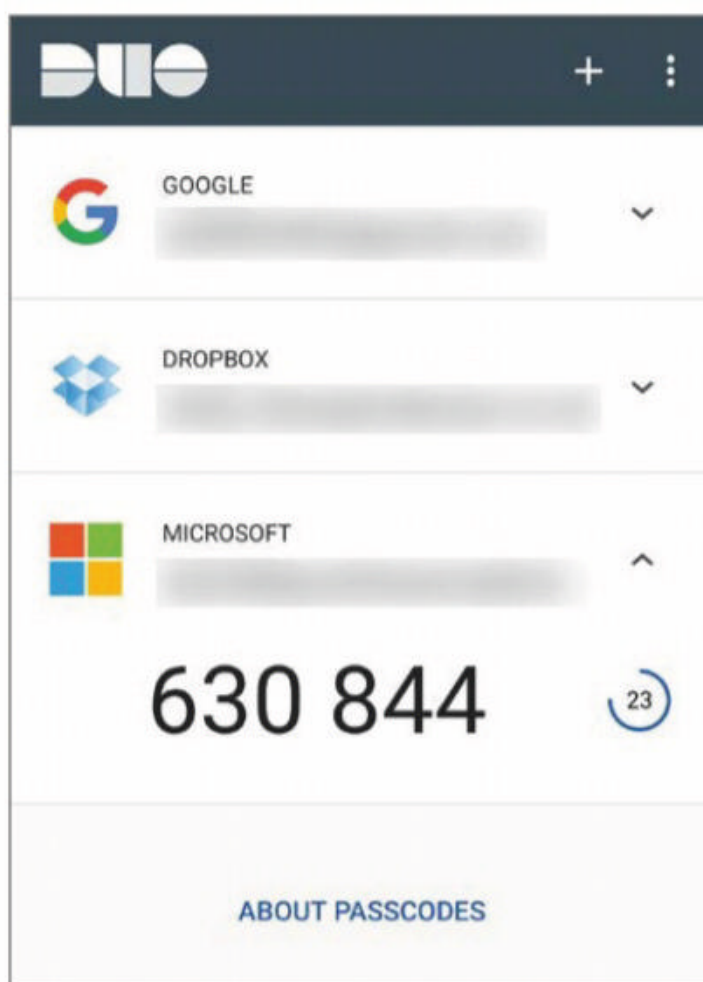
WebUser
GOLD
AWARD

What we liked:

Duo Security creates its own two-factor authentication (2FA) software that companies can buy to add secure login services to their websites. As a by-product, Duo Security has a free app called Duo Mobile, which its clients can give to their users to help them sign in. It's to our benefit that this free app doesn't just work with Duo Security's tools, but with any 2FA service that complies with the basic standards.

This is great news because it means that we get a professionally developed app, with all the bells and whistles, at no cost. Duo Mobile is easily the most attractive and best designed of all the apps we've reviewed here. Setting up a new passcode is as simple as tapping the plus icon at the top, then taking a photo of the code that your chosen service displays.

When it comes to organising services, you can arrange them how you like. Icons are used to help with at-a-glance



selection, and you can choose whether to have passcodes on display for convenience, or tucked away to be accessed with a tap as they're needed.

You can use the Duo Mobile service on more than one device and it can be set to create a backup on Google Drive to make it easier to transfer accounts

from one device to another.

Duo promises push notifications, so some services don't even require you to enter the security code – you can just tap a message to accept an 'is this you' notification that pops up on your device. We didn't see this on any of the services we signed up to, however, so it may only be available on websites that use Duo's software to create their login tools.

How it can be improved:

Duo Security is owned by Cisco, and is transparent about the fact that it gathers data on how its users are interacting with its tools. You can switch this off in the settings but it's worth having a look at the privacy policy at bit.ly/duopriv494 for more information.

OUR VERDICT

Duo is a slick, simple-to-use app that irons out most of the hassles that surround 2FA. Most sites still make you put in a passcode rather than sending you a notification, but that's what makes the system so secure. Managing and organising your accounts is as easy as it gets, and you can customise the layout to suit your needs.

FreeOTP | freeotp.github.io | ★★★★★☆
FEATURES ★★★★★☆ PERFORMANCE ★★★★★☆ EASE OF USE ★★★★★☆

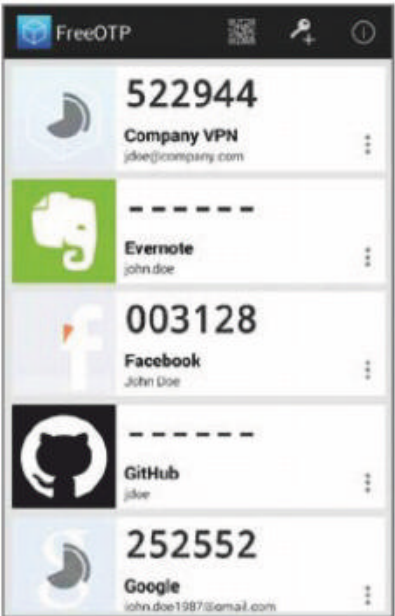


What we liked:
Not everyone wants to hand over their security

data to mega-companies such as Cisco, Microsoft and Google, particularly as there's no telling how that information could be used in the future. If you don't trust the big guns, you'll be delighted with FreeOTP, which is a free, open-source alternative.

It works in much the same way as Duo – tap the QR code icon to add a new service to the app, or tap the key icon to add it manually. It's not as slick in its presentation but it does the job. Security codes are hidden behind dashes by default – you just tap the service you're using to reveal the code below.

The best thing about FreeOTP is its privacy policy. Although it needs to access your camera for codes and the



like, it claims not to collect any data.

How it can be improved:
Most phone screens will only fit a handful of services on the FreeOTP home screen before you have to scroll down to find the ones at the bottom, and there's no way to rearrange them (new services are added to the top). All our services looked the same, too, using the same 3D box icon (not as shown in our screenshot).

OUR VERDICT
FreeOTP doesn't have the pizzazz of our Gold Award winner but, like most open-source alternatives, it does the job with a minimum of fuss. Most importantly, you aren't sharing any data with the organisation behind the software.

Microsoft Authenticator | bit.ly/msauth494 | ★★★★★☆
FEATURES ★★★★★☆ PERFORMANCE ★★★★★☆ EASE OF USE ★★★★★☆

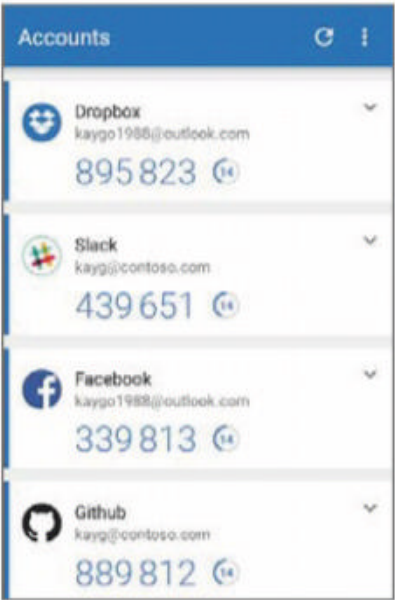


What we liked:
There isn't much difference between Microsoft

Authenticator and Google Authenticator – both apps are perfectly functional and your preference will come down to which company's services you use the most: if you're a Gmail user, opt for Google's; if you use Microsoft's online tools, use this one.

That said, Microsoft Authenticator works a little harder in its presentation, with icons next to the lists of account names and numbers, which Google doesn't bother with. The Microsoft app also lets you choose whether to display the security numbers at all times or hide them away, so you can see a longer list of services.

The huge benefit that both Google and Microsoft have over the other authenticators is that they use push



notifications to let you accept logins to their own services. If you use these accounts to register for other tools, too, you could save yourself a lot of time.

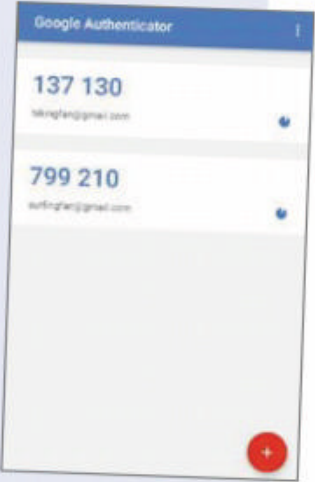
How it can be improved:
Microsoft has put a little more design into its app than Google but there's plenty that vexed us. We particularly disliked the fact that it takes two taps to collapse or expand each account to show or hide the security code. That's definitely one tap too many.

OUR VERDICT
Which websites do you spend most time on? If the answer is Microsoft's, then it makes sense to use it's own-brand Authenticator. However, it falls well short of Duo in its design and doesn't respect your privacy as much as FreeOTP.

BEST OF THE REST

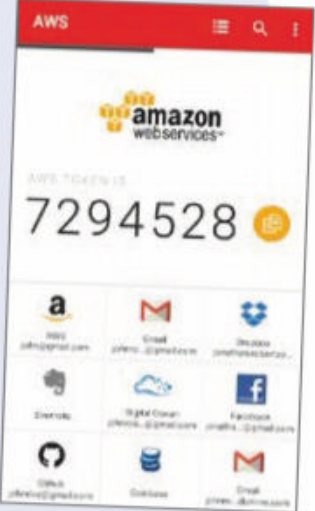
Google Authenticator
bit.ly/googauth494

As we mentioned in the Microsoft Authenticator review, Google Authenticator's advantage is the ease with which it logs you into Google accounts. If you use Google as a catch-all login for other services, its Authenticator app is going to save you a lot of time. It's just a shame that the app has had so little effort put into its presentation. On looks and usability, Microsoft's app is better.



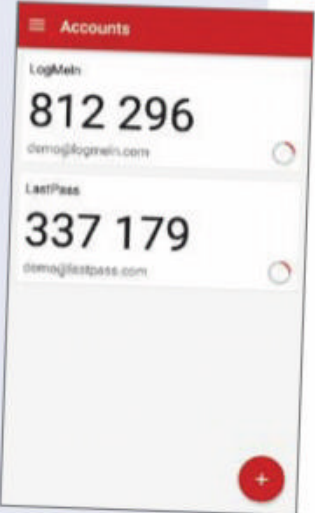
Authy
bit.ly/autand494
bit.ly/autapp494

Authy locks itself to your phone and you need to enter a phone number to get it working. If you're prone to changing phone numbers every time you get a new phone, that may not be ideal, but if you've had the same number for most of your life, it's a sensible option. The app works well and has an optional 'grid' layout that's a bit different to the usual list format, but we still prefer Duo Mobile.



LastPass Authenticator
lastpass.com/auth

If you already use LastPass to manage your passwords, then letting it control your 2FA is a no-brainer. The app does a good job of controlling accounts and issuing passcodes, but it doesn't rival Duo on presentation. However, if you're not already tied into LastPass, you're unlikely to be won over by this app.



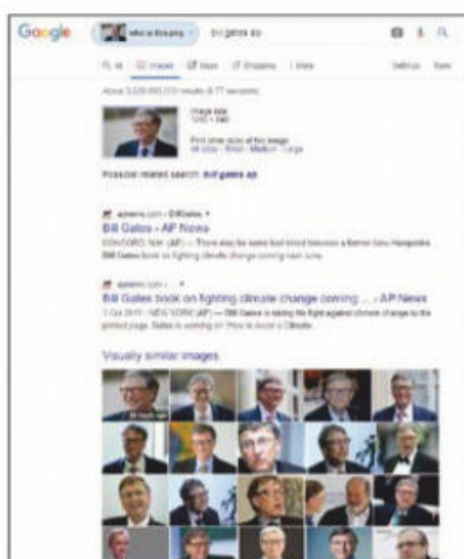
Reverse-search the web using photos

Uncover fake pictures, identify faces and catch photo thieves with a reverse image search. **Jane Hoskyn** reveals the best ways to search the web without words

Find out what (and who) is in a photo

Google Images (images.google.co.uk) includes a 'reverse' tool that lets you search the web using pictures rather than words. Click the camera icon, then drag or upload an image file (or enter its public URL, such as bit.ly/map494) to get related Google results.

The more details Google can recognise in the photo, the better the results will be. Famous faces, landmarks, animals and works of art should all yield plentiful, accurate results. Google also offers 'Visually similar images' (useful for researching



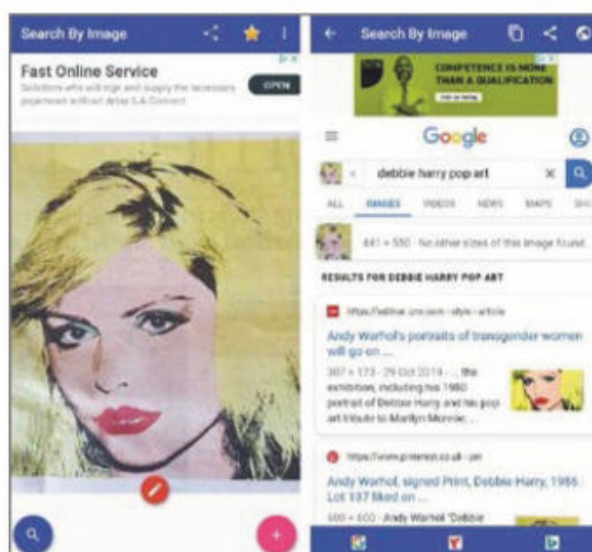
Drag an image to Google to identify who's in it and get related search results

who's in a photo), and automatically finds the largest available version.

Reverse-search a mobile photo

Google's reverse-search tool doesn't work in mobile browsers, but you can use the third-party site Labnol.org (www.labnol.org/reverse) to run photos through Google for you. Alternatively, open a picture in Google Photos (Android and iOS, bit.ly/gphotos494) then tap the Lens icon.

For a more comprehensive search,



Deduce the 'who?' and 'what?' of a pic by using Search By Image for Android

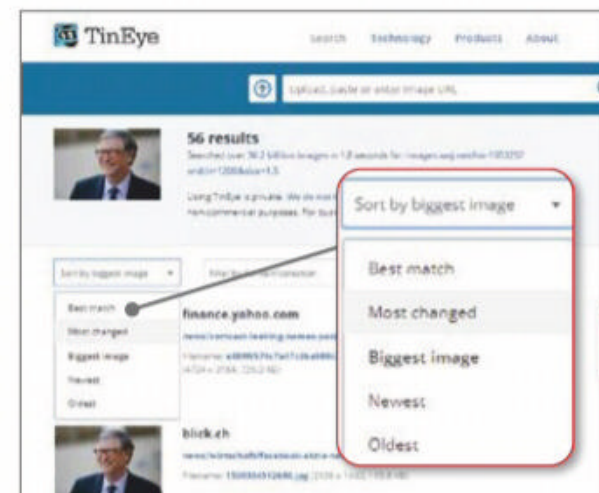
use Reverse Image Search for iOS (bit.ly/revios494). Select a photo from your iPhone or iPad gallery, camera or clipboard, then crop and edit it before running it through Google and Bing at the same time.

The nearest equivalent for Android is Search By Image (bit.ly/searchby494), which uses Russian search site Yandex as well as Google and Bing. Yandex is impressively powerful but has been

criticised for its privacy-bucking facial-recognition tactics (bit.ly/yandex494), so you might want to limit Search By Image to Google or Bing in the app's settings.

Retrace a photo's online steps

Reverse-search tool TinEye (tineye.com) reveals every place a photo has appeared online. It's handy for tracing the original source of a poster, album cover or meme - and invaluable for

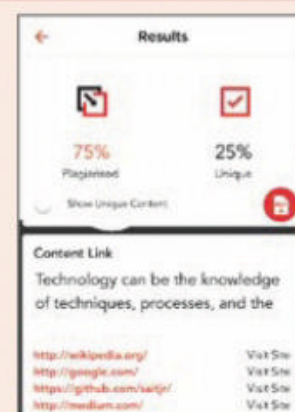


TinEye spots many versions of an image, whether cropped, resized or edited

WHO'S STEALING YOUR BLOG POSTS?

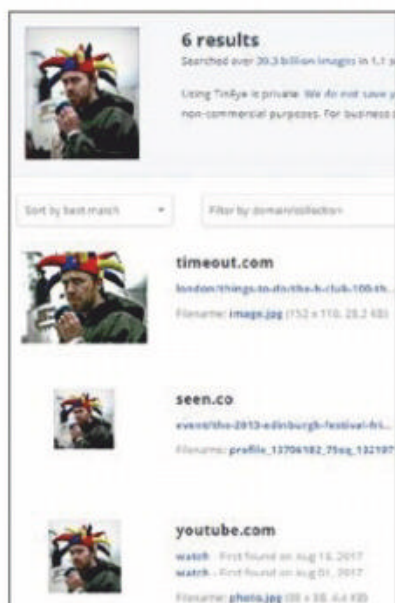
Copyscape (www.copyscape.com) is a reverse-search tool for chunks of text. Enter the URL of a page whose text you want to check - such as a blog post or Amazon review you've written, which you're suspicious someone may have ripped off - and Copyscape quickly scans the web for duplicates.

Free app Plagiarism Checker (Android bit.ly/plag494, iOS bit.ly/plagios494) can even reverse-search the text in photos of documents, by converting it to plain text using built-in OCR.



catching photo thieves.

TinEye's browser extension (tineye.com/extensions) adds a 'Search Image on TinEye' option to your right-click menu. TinEye creates a unique digital signature for the photo, then displays a list of links to every place the photo has ever appeared.



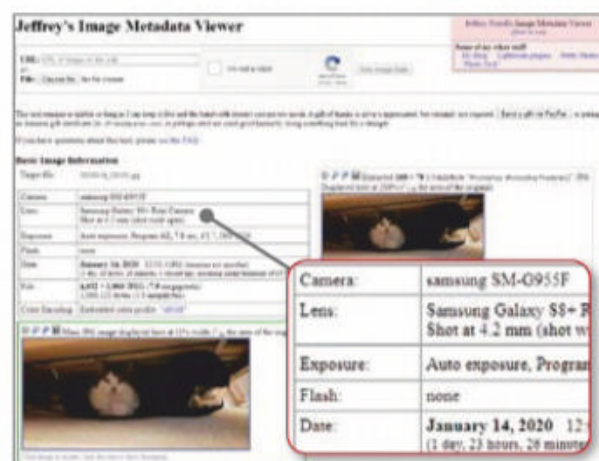
TinEye spots that my photo has been used without permission

The results list includes cropped, edited and resized copies, so thieves can't cheat the system using Photoshop. You can filter results to show which copies have been changed most, and to specify online locations such as anti-scammer database www.romancescam.com.

Discover where and when a photo was taken

Jeffrey's Image Metadata Viewer (bit.ly/jeff494) is even more forensic. It ignores a picture's contents and instead lifts the lid on its specs – also known as EXIF data. Upload even the most mundane mobile photo and you'll be stunned by the wealth of information: everything from time taken and camera used, to exact steps in editing software. You may also discover the location and photographer, depending on the metadata enabled when shooting.

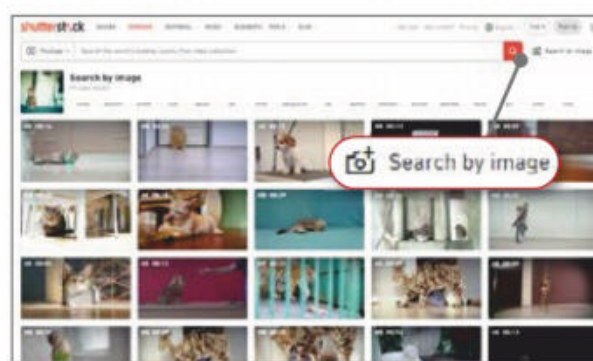
The most powerful EXIF-deducing iOS app is Fluntro's EXIF Viewer (£2.99, bit.ly/fluntro494). For Android, use the free app Photo Exif Editor (bit.ly/exifed494).



Lift the lid on a photo's EXIF stats with Jeffrey's Image Metadata Viewer

Find a photo's musical match

Accompanying a creative project with copyright-free music will add to its impact. Shutterstock's new 'Reverse Image Search for Video' tool (bit.ly/shutterstock494) lets you search using your photos. The tool's basic job is to find



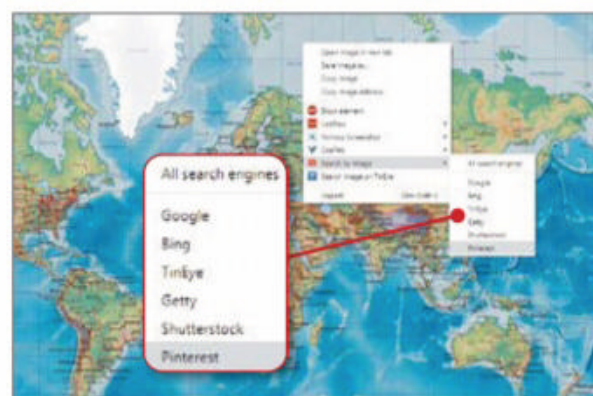
Find music or footage that suits your favourite photo using Shutterstock's tool

images that are similar to yours, but it's recently added the option to find all sorts of "matching" content, including video, music and even chunks of text. Not all of this third-party content is free to download and use, but the tool itself costs nothing.

Reverse-search a pic with a right-click

The browser extension Search by Image (Chrome, Firefox, Opera, bit.ly/sbimage494 – no relation to the similarly-named Android app) lets you run any online photo through dozens of reverse-search engines in one go.

To set the search engines you want it to consult, click the extension's toolbar



Find Pinterest images similar to any online photo using Search By Image

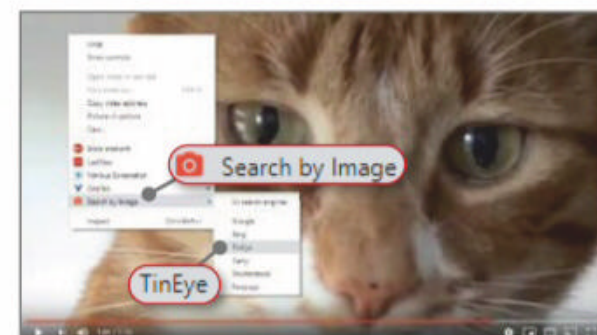
button, then Options, and add or remove tools to the right-click 'All search engines' menu. You can stick to photo-identifying tools such as Google, TinEye and Bing, or use specialist photo sources including Shutterstock and Pinterest.

Reverse-search a video using screenshots

Berify (berify.com) claims to "find stolen videos" by reverse-searching individual frames, but we couldn't get it to work with a free account. Pro accounts cost from around £4 per month.

Here's a free and easy workaround: take a screenshot of your video, then run *that* through a search. Screenshots can also help you research a photo that you can't download or right-click, as well as identify a small part of a photo, such as a face in a crowd.

Search by Image (bit.ly/sbimage494) is the best tool for this job. Install the extension and go to Options, 'Search mode', then choose Select. Now, when you right-click an online image, including a paused video, the 'Search by Image' menu prompts you to select a portion of the image to search, then run the cropped screenshot through your chosen tools. ■

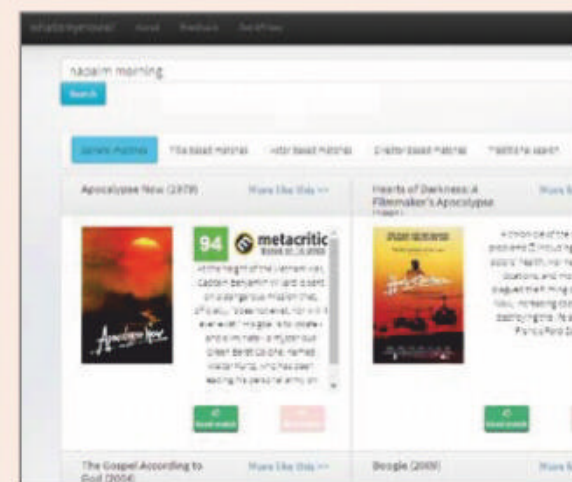


Search by Images' screenshot tool lets you reverse-search video frames

SEARCH USING THE PICTURES IN YOUR HEAD

- What Is My Movie? (www.whatismymovie.com) can effectively reverse-search what's on the tip of your tongue, by matching your natural language queries with metadata to identify the films and TV shows you can't quite remember.
- TuneFind (www.tunefind.com) helps you identify mystery songs but, unlike Shazam, it doesn't require you to actually play the song. Instead, search for the film or game you heard the tune in, or a snatch of its lyrics, and the crowd-sourced database will offer links to Spotify and elsewhere.
- Reddit is the ultimate crowd-sourced reverse-search tool. Its HelpMeFind (reddit.com/r/HelpMeFind) community is brilliant at finding similar items (to your beloved

childhood toy, for example), while TipOfMyTongue (reddit.com/r/tipofmytongue) is full of vague memories seeking enlightenment such as 'Russian or maybe European song that went something like bam bam bam'.



Why your phone is so **SLOW**

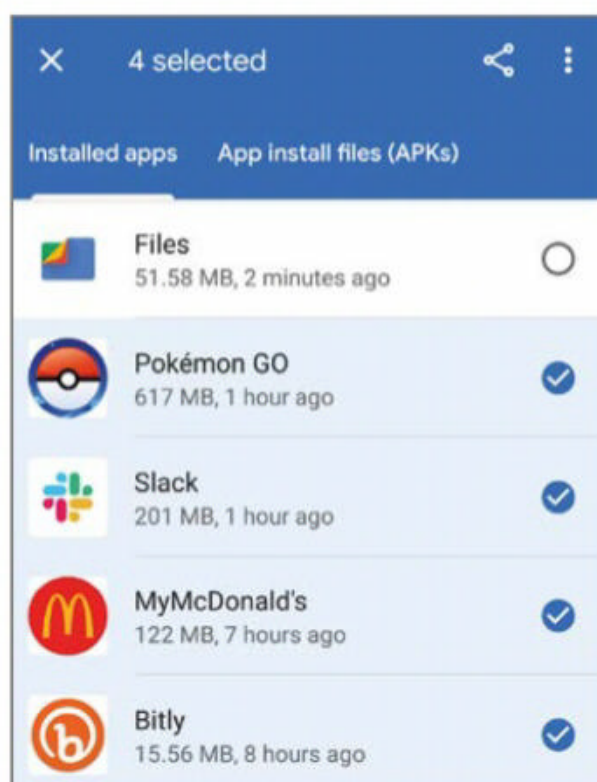


Don't let a sluggish smartphone drive you to despair. **Robert Irvine** reveals the most common causes of poor phone performance and suggests the simplest solutions

SPACE-HOGGING APPS

You've probably installed lots of apps that you tried once then forgot about, and which are now consuming valuable storage space and slowing down your phone. A quick app-cleanup can yield a significant speed-up, so it's worth regularly reviewing what you have installed and removing anything you don't need.

On an Android phone, you can uninstall space-hogging apps individually by pressing down on their icons and dragging them to the Uninstall option at the top of the screen. However, a much quicker method is to use the brilliant free Files by Google (bit.ly/files494) to remove multiple apps at once. Tap Browse at the bottom of the screen, choose Apps and press to select all the apps you want to get rid of. Tap the three-dot menu in the top-right corner and choose Uninstall. In future, Files by Google will tell you



Files by Google lets you uninstall multiple space-hogging apps in one go

which unused apps are wasting space.

Similarly, on an iPhone running iOS 13, you can uninstall individual apps by pressing their icons and choosing Delete App. To remove multiple apps in one go, keep pressing an app icon until an 'X' appears in the top-left corner of every app on screen. Tap the 'X's for all the items you want to delete.

BACKGROUND PROCESSES

Even when you don't have any apps open, there are lots of things going on in the background on your phone that drain its battery and make it less responsive. These include apps checking for updates, your email client(s) syncing with the mail server, Bluetooth and Wi-Fi services, and - most commonly - hidden bloatware installed by the manufacturer.

On an Android device, there's a secret way to view and 'kill' background processes. Go to Settings, System,



Android's developer options let you see what's running in the background

'About phone' and tap 'Build number' seven times to unlock developer options. Now go back to the System screen and choose Advanced, 'Developer options', then Processes or 'Running services'. Select a background process and tap Stop to terminate its services. If an unwanted process keeps restarting, consider uninstalling the tool altogether.

You can also limit the number of processes that can run in the background on your phone, although Android is supposed to do this automatically. On the 'Developer options' screen, tap 'Background process limit' and make your choice.

Background process limit

- ☐ Standard limit
- ☐ No background processes
- ☐ At most, 1 process
- ☐ At most, 2 processes
- ☒ At most, 3 processes
- ☐ At most, 4 processes

You can limit how many background process your Android phone can run

On an iPhone, iOS stops most apps running in the background when you're not using them, so they don't guzzle battery life and processing power - indeed, some developers have complained that iOS 13.3 is too aggressive at closing them. However, a feature called Background App Refresh allows apps to check for updates, such as new emails, so it may be worth disabling if your iPhone is very slow. Go to Settings, General, Background App



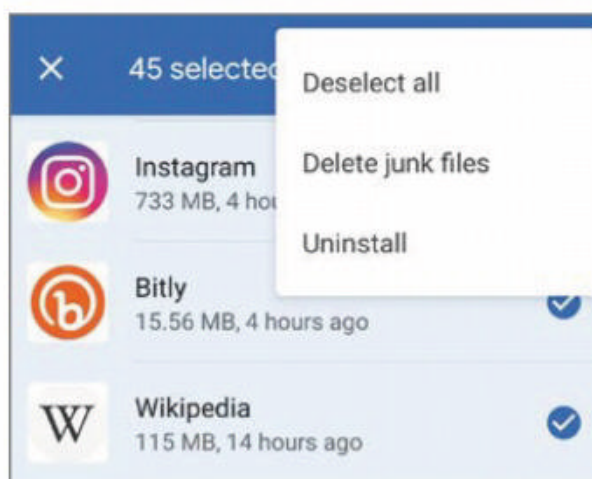
Refresh and either turn off the feature completely or just for specific apps.

CACHED DATA

Just as your desktop browser stores temporary files downloaded from websites, the apps on your phone cache data, which helps them to load frequently used apps faster. Over time, all that cached data eats into your storage and can lead to your phone becoming slower.

You can clear the cache for individual Android apps by going to Settings, Apps, selecting an app, then choosing Storage and tapping Clear Cache. Alternatively, open Files by Google, select Browse and choose Apps. Tap the three-dot menu in the top-right corner, choose 'Select all', then tap the menu again and select 'Delete junk files'.

While you're at it, you can also select the Clean option in Files by Google to delete duplicate files, space-hogging photos, old downloads and other junk.



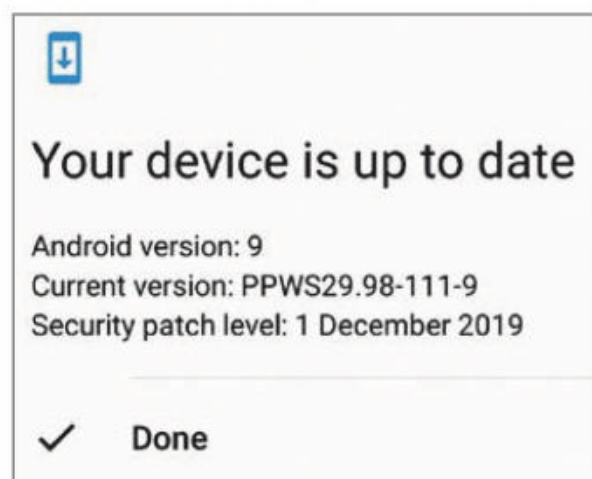
Delete the junk files that have been cached by apps on your phone

On an iPhone, you can clear cached data from apps by going to Settings, General, iPhone Storage. Here, you'll see a list of apps, with the ones consuming the most space at the top. Select one and enable the 'Reset cached content' option. You can also choose Offload App to free up storage by removing the app, without losing important data. To purge all your junk files in one go, you'll need to install a third-party cleanup app, such as Phone Cleaner (bit.ly/cleaner494), which costs £1.99.

OUTDATED SOFTWARE

Updates to the Android operating system and the manufacturer software on your phone aren't just about new features and security fixes, but often address performance issues, too. So rather than ignoring the prompts to install updates, because of the time it takes, it's worth grabbing them as soon as you can, and regularly checking if a system update is available.

On your Android phone, go to Settings, System, 'System updates' to manually check for updates. On an iPhone, go to Settings, General,

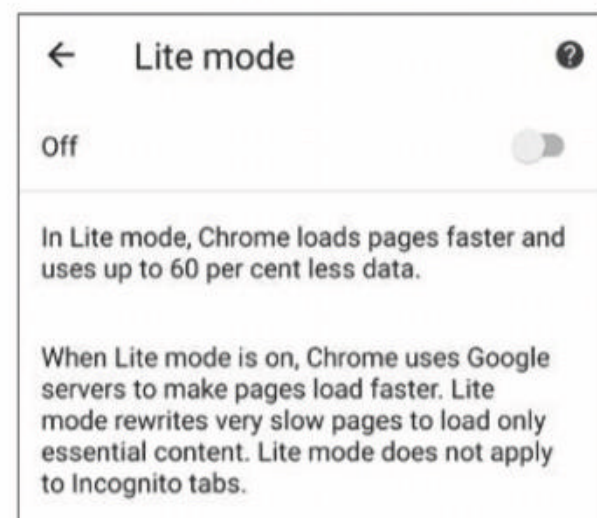


Ensure your phone is up-to-date to keep it running smoothly

Software Update. Enable Automatic Updates to ensure you're always running the latest version of iOS.

BLOATED BROWSER

It's when browsing the web on your phone that you're most likely to notice slow speeds, with pages taking ages to load whether you're on Wi-Fi or mobile data. Assuming you use Chrome on your Android device, as nearly 90% of users do, there is a quick fix you can try. Tap the three-dot menu in the top-right corner of Chrome and choose Settings, then scroll down to and tap 'Lite mode'. Switch the slider to On and Chrome will now use Google's servers to rewrite slow web pages so that they only load essential content. Google claims this will use up to 60% less data and make pages load significantly faster. The 'Lite mode' screen shows you how much data you're saving.



Speed up your mobile browsing by switching to Chrome's Lite mode

Lite mode isn't available in the iOS version of Chrome, and Safari doesn't offer an equivalent option, but you may get a speed boost from Apple's browser by clearing its cache. Go to Settings, Safari and, in the Privacy & History section, select 'Clear Web History and Website Data', then tap to confirm. Some users have also found that temporarily disabling JavaScript in Safari's Advanced settings decreases page-load time. ■

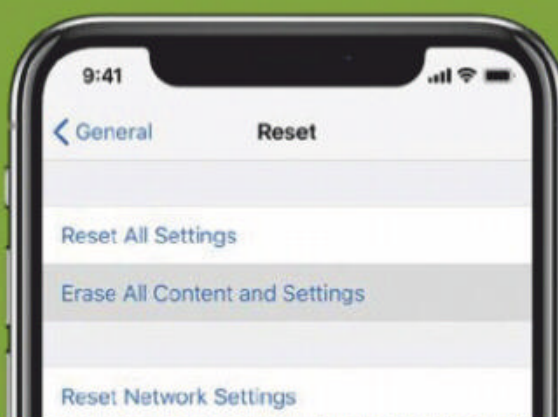
PERFORM A FACTORY RESET

If none of our advice improves your phone's performance, and restarting it doesn't help either, you may need to take the drastic step of performing a factory reset. This will wipe all data from the device so you can start afresh and, hopefully, faster. Your synced data and previously installed apps are easy to restore afterwards.

On an Android phone, open the Settings app and tap System, Advanced, 'Reset options'. Select 'Erase all data (factory reset)' and you'll be told exactly what you'll lose by resetting. Press Reset Phone to continue.

On an iPhone, go to Settings,

General, Reset, 'Erase All Content and Settings'. Confirm that you want to reset your device, and enter your Apple ID or passcode. You can also reset via iTunes by connecting your iPhone to your computer and choosing Restore [device].





Add a second line of defence against malware – for free

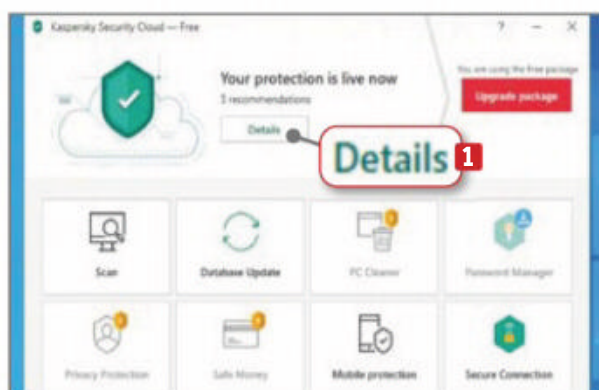
Security Cloud Free is Kaspersky's latest antivirus tool. Here's what you need to know

Kaspersky Security Cloud Free: bit.ly/kasper494 | ⌚ 20 mins | 🇬🇧 7, 8, 10

Provided you're careful on the internet and don't click anything you shouldn't (see this issue's cover feature for details), then Windows Defender, the operating system's own built-in security tool, should be enough to keep you safe. But if you want to bolster your defences and enjoy the peace of mind that a visible virus scan

provides, Kaspersky's new cloud-based antivirus product is the perfect solution.

On installation, you'll be alerted to any incompatible security software on your system – such as Malwarebytes – and will be prompted to remove it. You don't have to follow its recommendations but ignoring them may lead to problems down the line, such as system slow-downs.



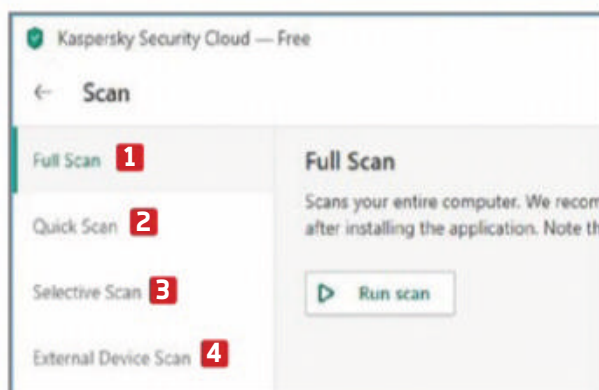
1 Install the software and choose which tools to use. You're then prompted to log in with a Kaspersky account, which lets you manage your devices remotely. If you don't currently have an account, you can create one. Once you're logged in, the dashboard opens. Click the Details button. **1**



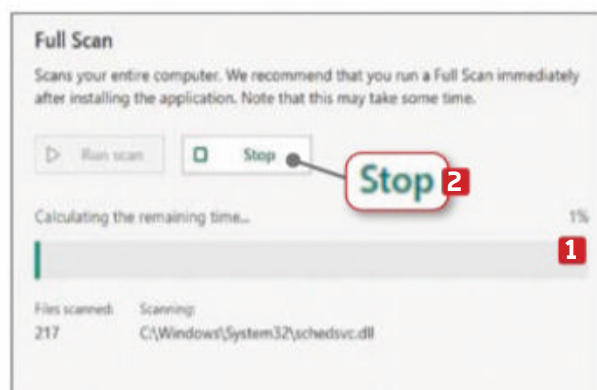
2 Before you run a scan, check that the software is up to date by clicking the 'Run update' button. **1** Click the arrow to the right of the button **2** to configure the update or view a report. **3** You can also install additional Kaspersky software from here, **4** but it's not essential.

DATABASE UPDATE

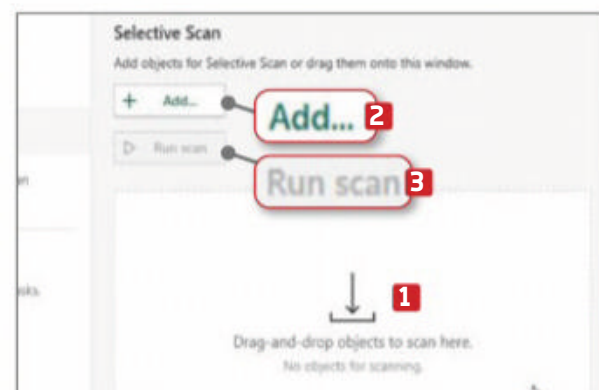
Kaspersky Security Cloud Free regularly checks for updates and automatically downloads them, but you can run a manual check at any time



3 Once the database and application modules have been updated, you can run the first scan. Return to the homepage and click Scan. You can run a Full, **1** Quick **2** or Selective Scan. **3** You can also scan any external devices connected to your PC. **4**



4 If it's your first time using the software, it's recommended you run a Full Scan. It takes a while to complete but you can view the progress **1** and stop it at any time. **2** When the scan completes, you can see what – if anything – was found, and view a detailed report in a separate window.

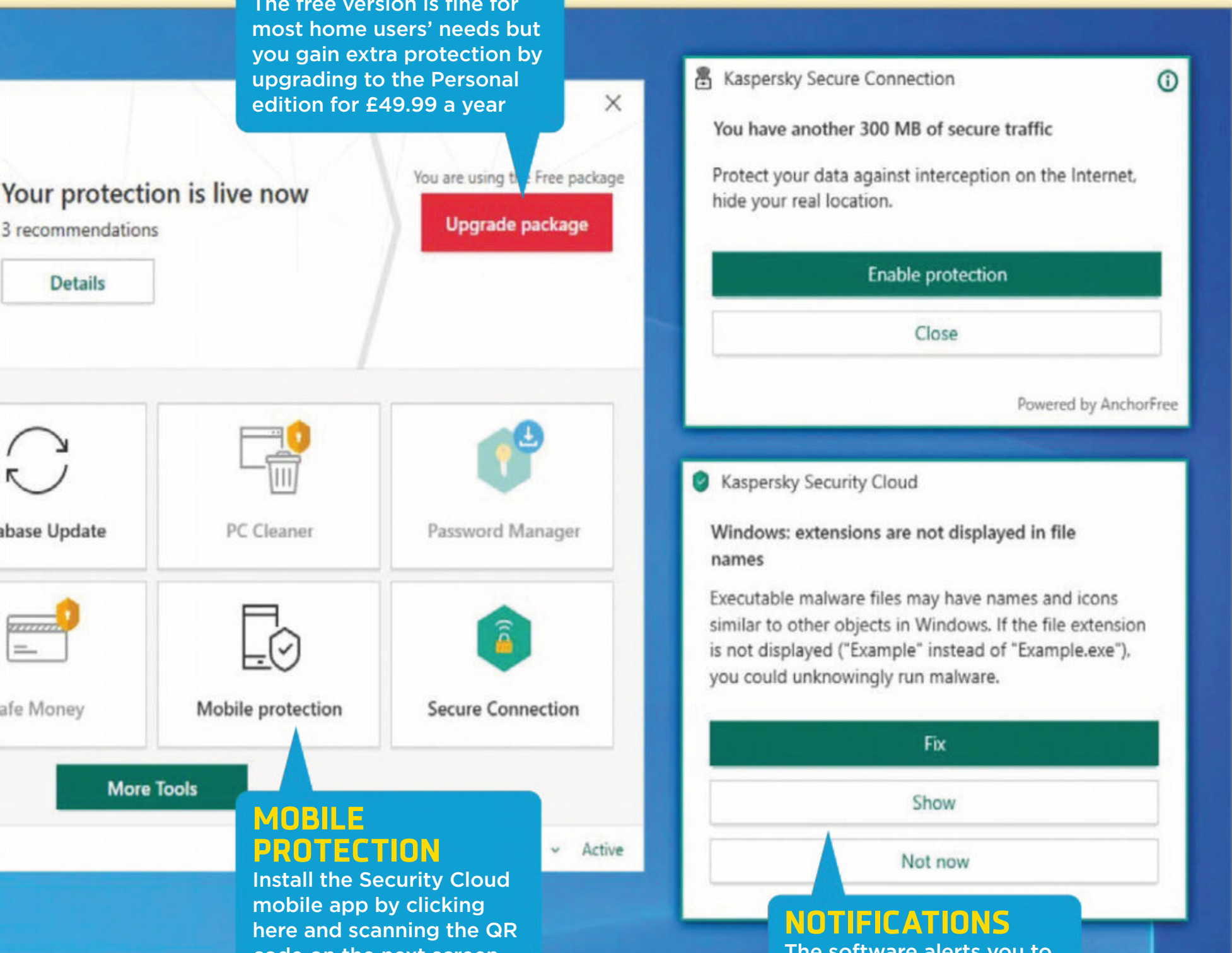


5 A Selective Scan lets you scan individual files and folders. Just drag a suspicious item to the window **1** or click the Add button **2** and navigate to it from there. Click the 'Run scan' button **3** and the software gets to work. You can also scan items by right-clicking them in Explorer.



UPGRADE PACKAGE

The free version is fine for most home users' needs but you gain extra protection by upgrading to the Personal edition for £49.99 a year

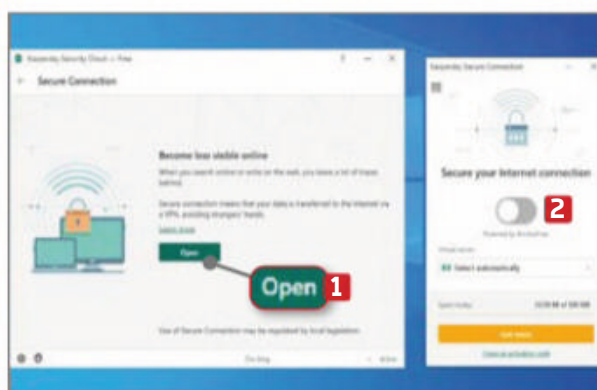


MOBILE PROTECTION

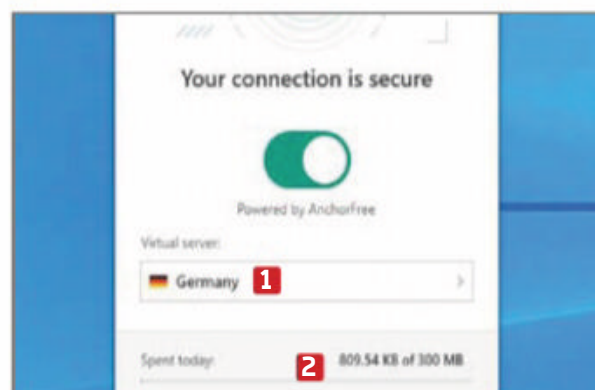
Install the Security Cloud mobile app by clicking here and scanning the QR code on the next screen

NOTIFICATIONS

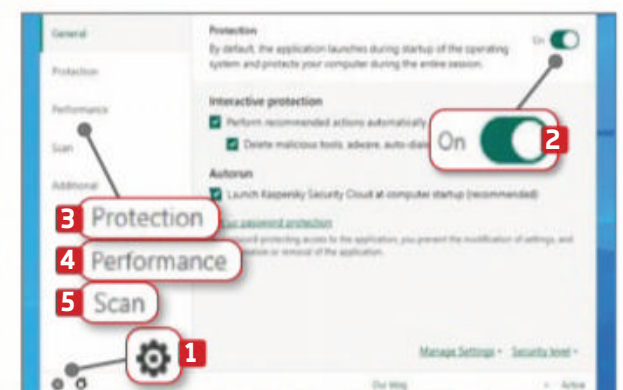
The software alerts you to items such as VPN details and system problems, which it offers to fix



6 Security Cloud offers a VPN powered by AnchorFree (the company behind Hotspot Shield). Click Secure Connection from the home screen, then Open **1** on the next screen. You're asked if you want to connect to My Kaspersky. Click Connect, then use the toggle to enable the VPN. **2**



7 Secure Connection isn't as secure as some VPNs but, if you just want to get around annoying geographic blocks, it works fine. Locations **1** are chosen automatically in the free version (you can't change this) and you're limited to 300MB of traffic a day. The software lets you monitor your usage. **2**



8 Click the Settings cog in the bottom-left corner of the homepage. **1** You can turn Protection on and off, **2** and manage its settings. The Protection tab **3** lets you toggle various features, while Performance **4** helps free up resources and speed up your PC. Choose a security level under Scan. **5**



Fix a broken USB memory stick

MiniTool Partition Wizard: bit.ly/partition494 | 20 mins | XP, Vista, 7, 8, 10



EXPERT TIP

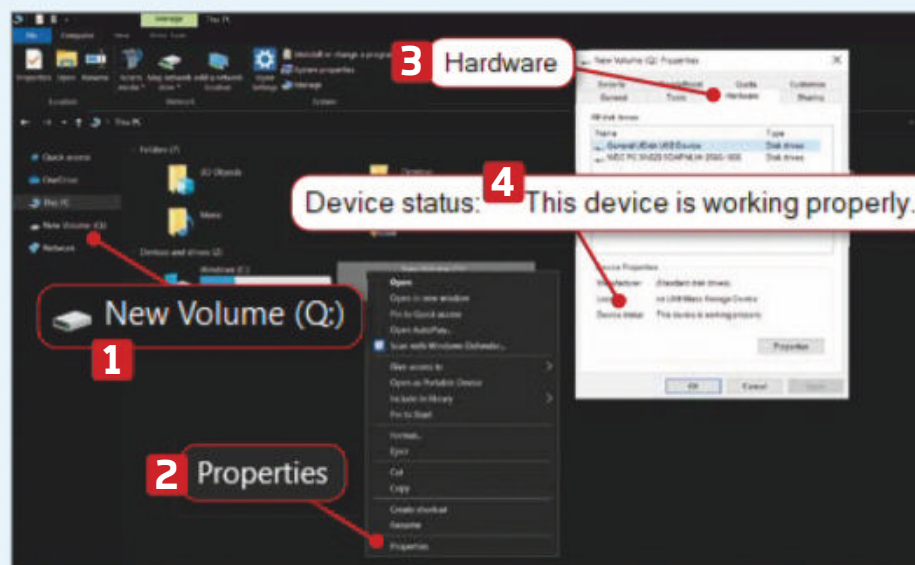
Steve Clark says

MiniTool's Partition Wizard contains a range of tools for managing partitions on your PC, including resizing, formatting and cloning. It's worth exploring the various options the software has to offer – particularly if you're looking for a more user-friendly version than Windows' built-in Disk Management. The software also has a data-recovery option, so if its built-in wizard can't claw back lost partitions, you won't lose your data.

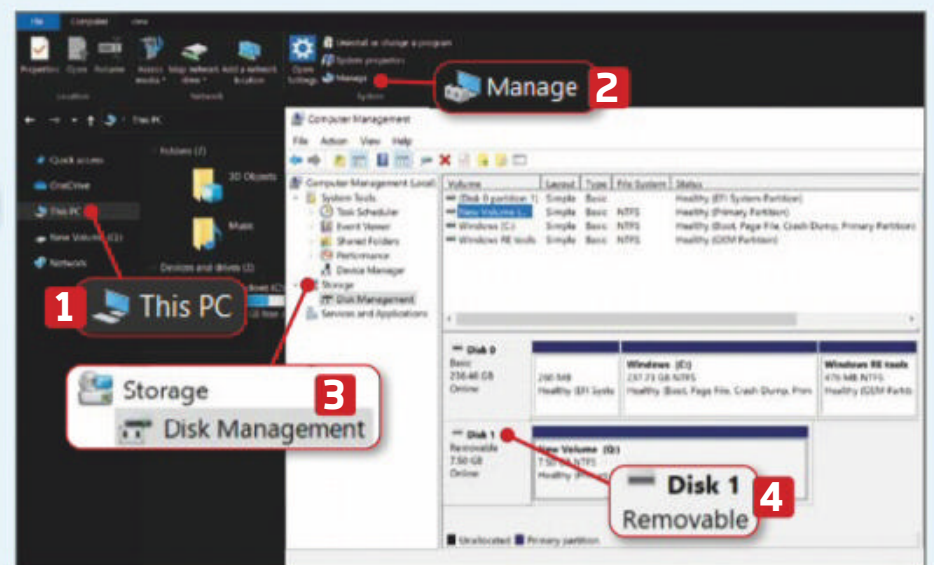
A USB memory stick is such a versatile piece of hardware that it lets you do everything from storing files to running an entire operating system. But if it becomes unusable, unformatable or corrupted, don't immediately throw it in the bin – help is at hand.

Windows offers a couple of ways to solve your USB-drive woes, and it's possible to bring your memory stick back online, and even recover data you thought you'd lost. You'll also find the freemium MiniTool Partition Wizard useful for scanning and wiping USB sticks with ease.

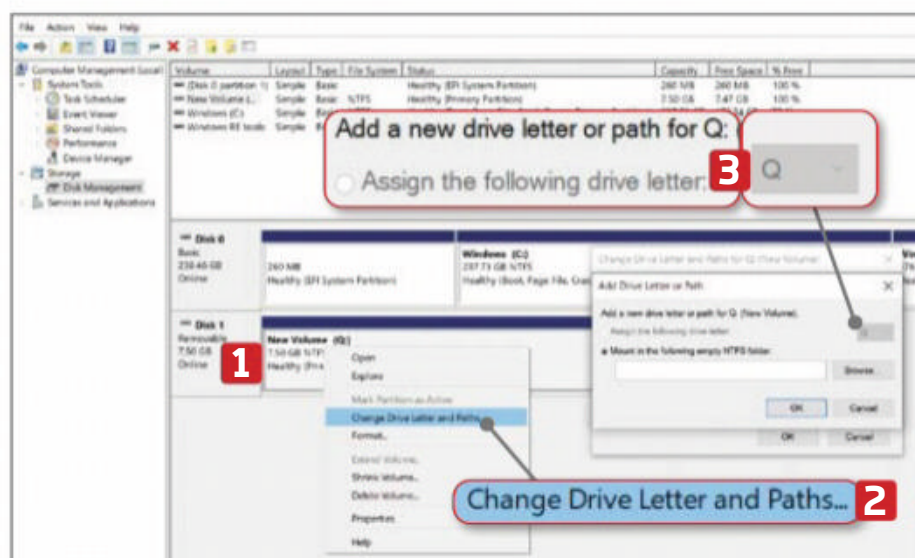
On a general note, you should always back up your data, relying on a combination of external devices and the cloud.



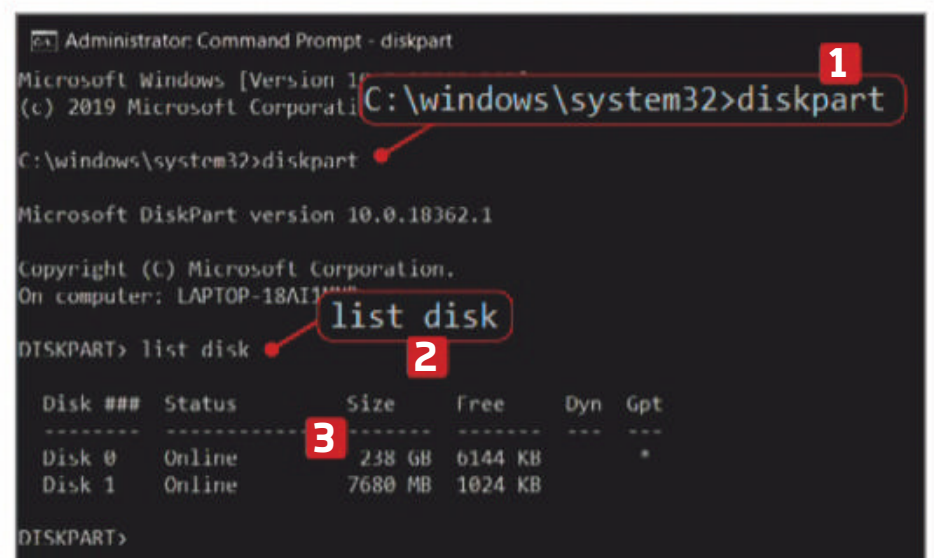
1 If you're having trouble with your USB stick, first check whether it's corrupted. With the stick inserted into your computer, open File Explorer, then navigate to the drive. 1 Right-click the USB folder, select Properties 2 and, in the next box, select the Hardware tab. 3 You can see if the USB stick is working properly by checking its 'Device status'. 4



2 Most memory-stick problems occur because Windows fails to assign a drive letter. To solve this, open File Explorer, then This PC. 1 Click Manage in the ribbon menu along the top. 2 On the following screen, go to Storage, Disk Management. 3 If your USB stick works, it's displayed here, 4 even if it isn't showing in Explorer.



3 Right-click the USB stick in the lower half of the screen, 1 select 'Change Drive Letter and Paths' 2 and click Add. In this box, you can assign any drive letter that isn't currently in use. 3 Doing so forces the USB drive to display in File Explorer. You should only have to do this once because the computer remembers this new drive letter.



4 If your USB stick still appears unusable, it's time to launch Windows' Command Prompt. Make sure you run it as an administrator, and that your USB stick is already inserted. In Command Prompt, type diskpart, 1 followed by list disk. 2 All your drives are shown. Make sure you know which numbered drive is the USB (it's easily identifiable by its size). 3



```
DISKPART> list disk

Disk ###  Status       Size       Free       Dyn  Gpt
-----  -
Disk 0    Online       238 GB     6144 KB
Disk 1    Online       7680 MB    1024 KB

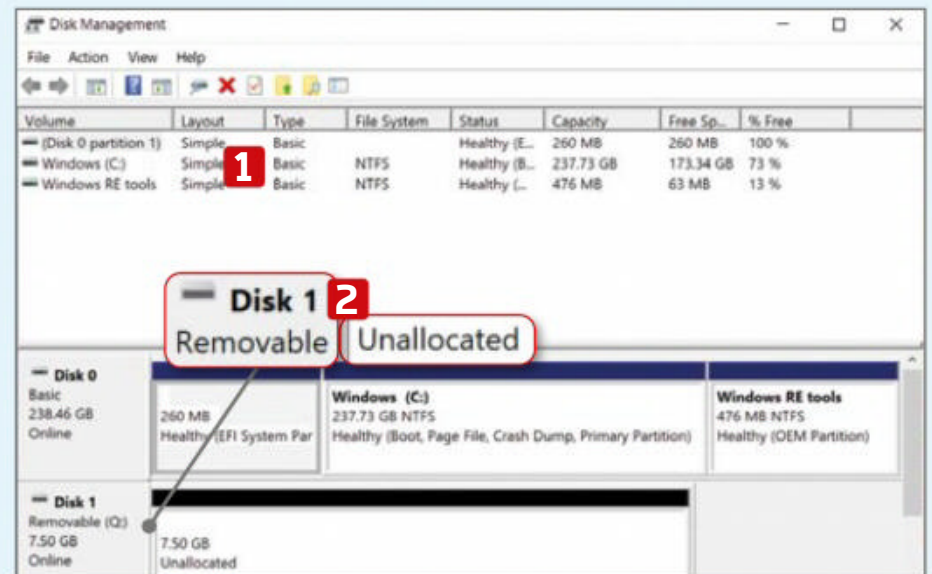
DISKPART> select disk 1
Disk 1 is now the selected disk.

DISKPART> clean

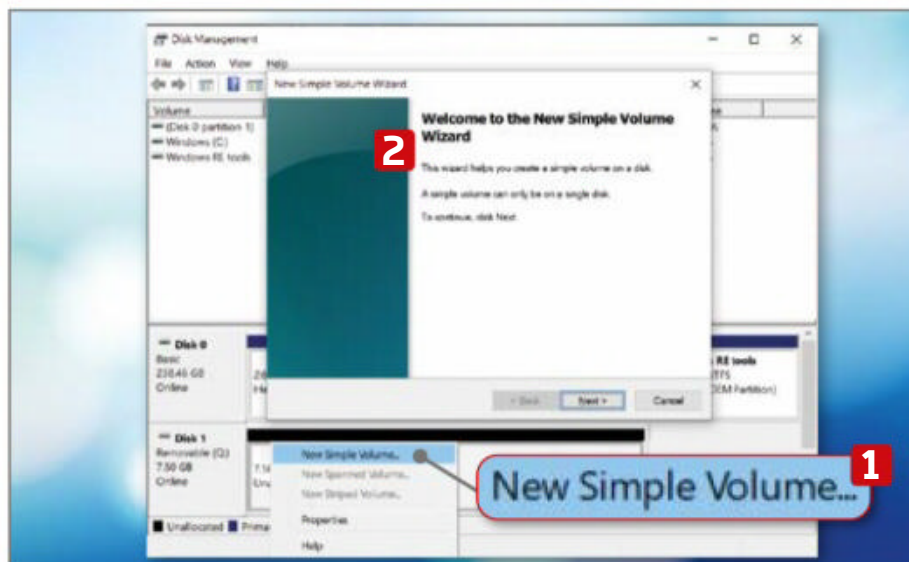
DiskPart succeeded in cleaning the disk.

DISKPART>
```

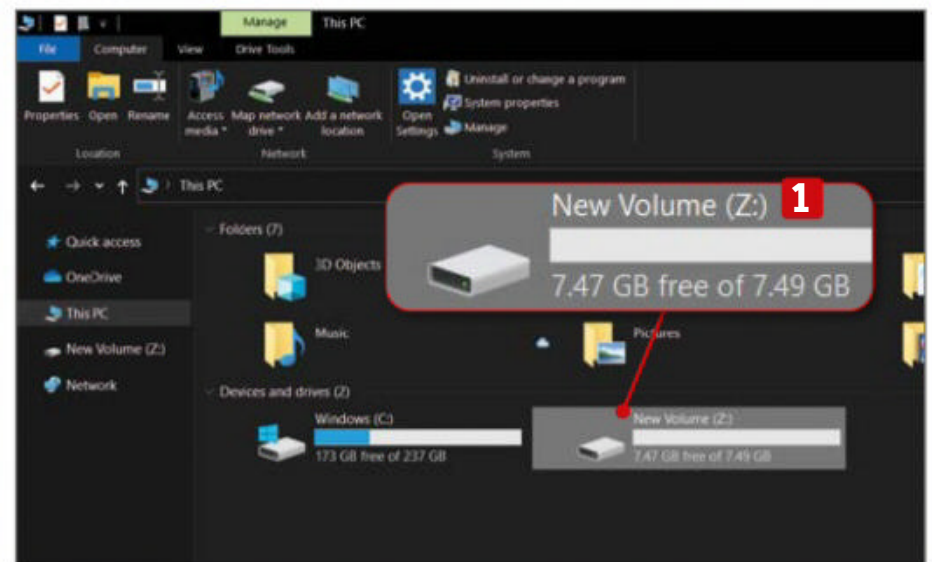
5 Now, type `select disk 1` followed by the 'Disk ###' number displayed in Command Prompt. Do not select your hard drive because this will set up a full disk wipe. When you see 'Disk [number] is now the selected disk', type `clean`. The computer now cleans the USB drive entirely, and you get the message 'DiskPart succeeded in cleaning the disk'.



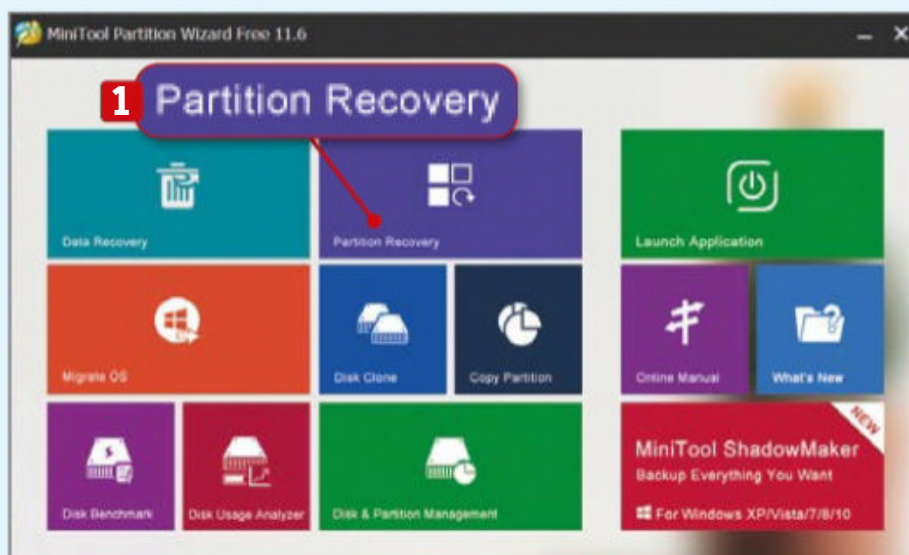
6 After cleaning, you need to make sure your computer can 'see' your memory stick. Try following steps 2 and 3 or, alternatively, search Windows for Disk Management - which displays in the results as 'Create and format hard disk partitions'. The USB won't appear in the upper list but is shown in the bottom half of the screen as Unallocated.



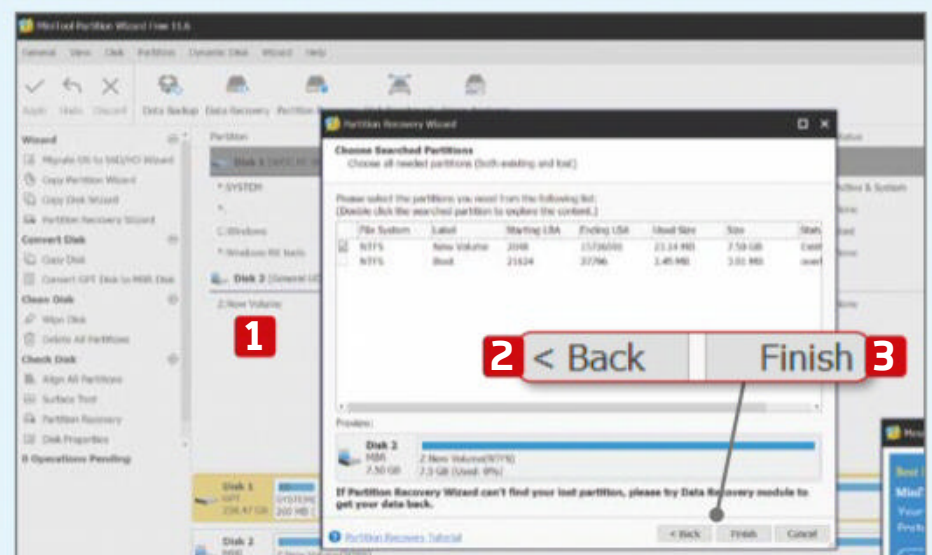
7 Right-click the USB drive and choose New Simple Volume to begin the Wizard walkthrough. Determine the disk's size (in MB) and click Next. Click 'Assign the following drive letter' and, in the drop-down menu, select a drive letter not used by any other drive on your computer. On the next screen, choose to format the partition. Click Next, then Finish.



8 Your USB stick is now visible in File Explorer - it should be named New Volume and feature the drive letter you assigned to it. To keep the device ship-shape, download MiniTool's Partition Wizard Free (bit.ly/partition494). This free tool lets you scan and manage your USB stick, returning it to its original condition.



9 On the tool's main screen, select Partition Recovery. On the following screen, click Next to begin the step-by-step process. Highlight your USB stick - it's typically beneath your hard drive - then press Next again. Under Scanning Range, select Full Disk, then click Next. For Scanning Methods, choose Full Scan. Leave the tool to scan the device.



10 Once the scan is complete, you're free to double-click your device to view any data stored on it. Clicking Back lets you rescan the device. If you're satisfied with the results, click Finish. If partitioning doesn't work, press Data Recovery. In the ribbon menu, select your USB stick in the list of drives, then click Scan.



Boost your laptop's battery life

Laptop battery life has certainly improved over the years, but you're still unlikely to get anywhere near the length of time promised by the manufacturer. Battery Optimizer is a handy free tool that scans your laptop for unnecessary features

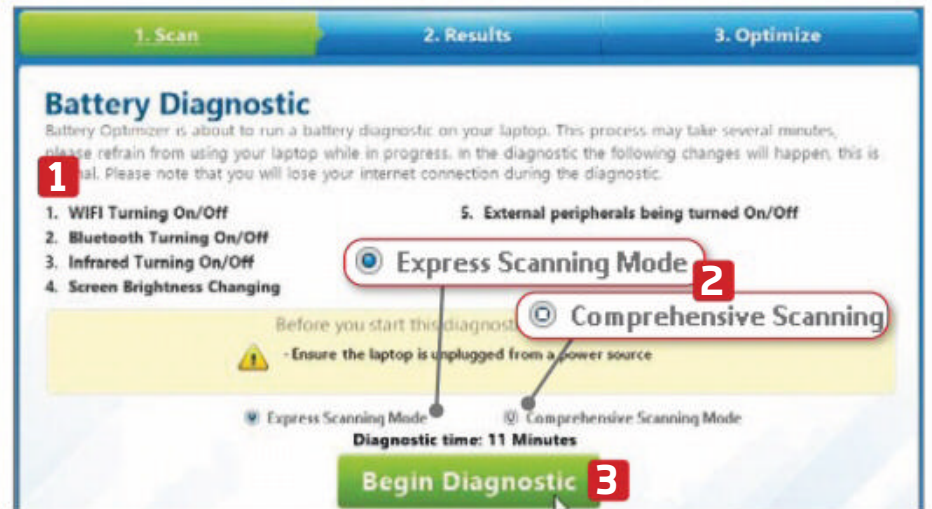
that may be wasting power, and suggests ways to eke out extra battery life. You can save these changes as a power profile to use when you're out and about.



Battery Optimizer: bit.ly/battery494 | ⌚ 10 mins | 🪟 Windows 7/8/10



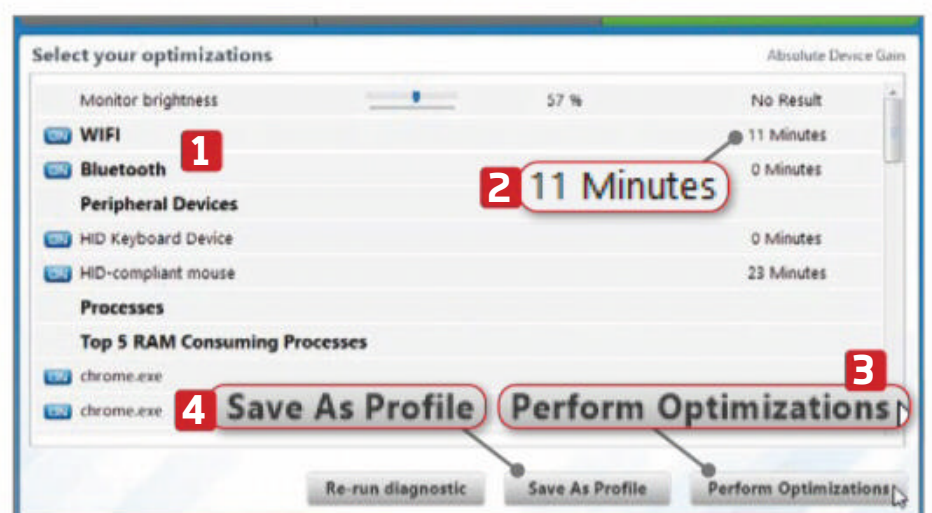
1 When you launch Battery Optimizer, its home screen will provide a summary of your laptop's current battery status, **1** the usage time you have left on the current charge **2** and the battery's general health. **3** Click the Run Diagnostic button **4** to discover if and how you can improve these results.



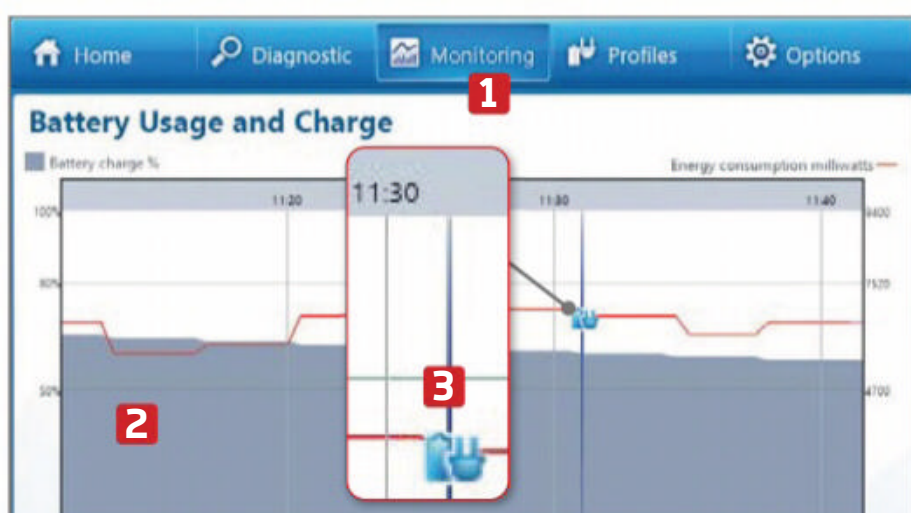
2 Your laptop needs to be unplugged for the diagnostic test to work correctly. You can read the details of changes that will happen during the test, such as your Wi-Fi being temporarily turned off. **1** Choose between an Express and Comprehensive scan, **2** then click Begin Diagnostic. **3**



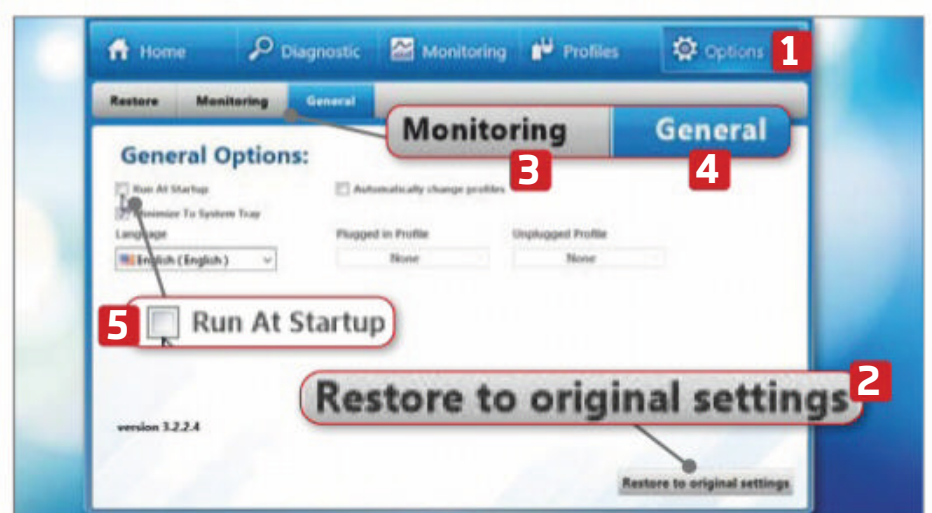
3 Once the scan is complete (this can take a while the first time you run it, so be patient), Battery Optimizer will present you with its results and tell you how much battery life you can potentially gain by applying its "maximum optimizations". **1** Click Optimize Battery Life **2** to continue.



4 You can now decide which power-intensive features to switch off to prolong your battery life, such as Bluetooth and RAM-guzzling processes, **1** and see how much time you'll gain. **2** Click Perform Optimizations **3** to apply the changes, and Save As Profile **4** to preserve them for future use.



5 Click the Monitoring tab **1** to view a graph of your laptop's battery life since you started using Battery Optimizer. The grey area shows your battery charge over time, **2** while the red line indicates your energy consumption in milliwatts and lets you see when your changes took effect. **3**



6 Click the Options tab **1** to restore backups saved before you optimised your battery. **2** Click Monitoring **3** to set up alerts when your battery life drops below a specific number of minutes. To stop Battery Optimizer running on Windows startup, click General **4** and deselect that option. **5**

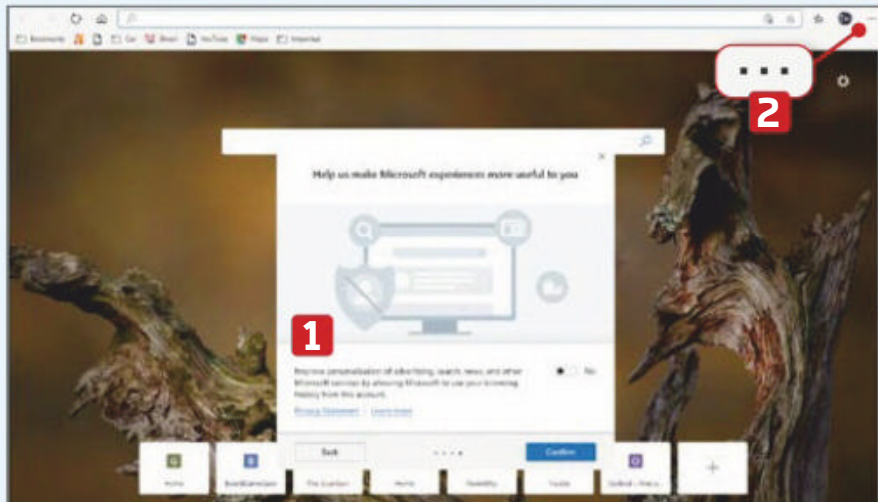


Set your privacy options in the new Edge

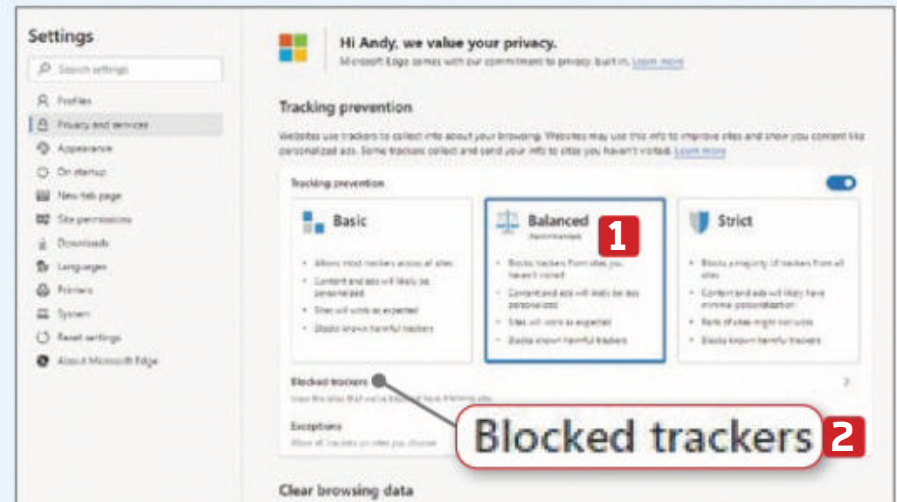
As you'll know by now, Microsoft has ditched the old version of its Edge browser and launched a completely new one that's based on Google's Chromium code. While Chrome users will recognise many of the tools and

Microsoft Edge: bit.ly/edge494 | 10 mins | **Windows 10**

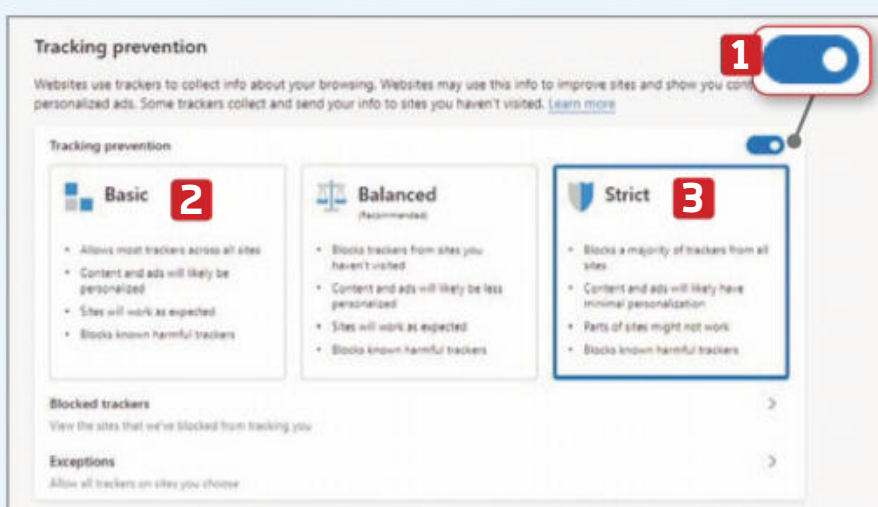
settings, Microsoft has added its own selection of new privacy tools. In this workshop, we show you where to find them and how to set them up.



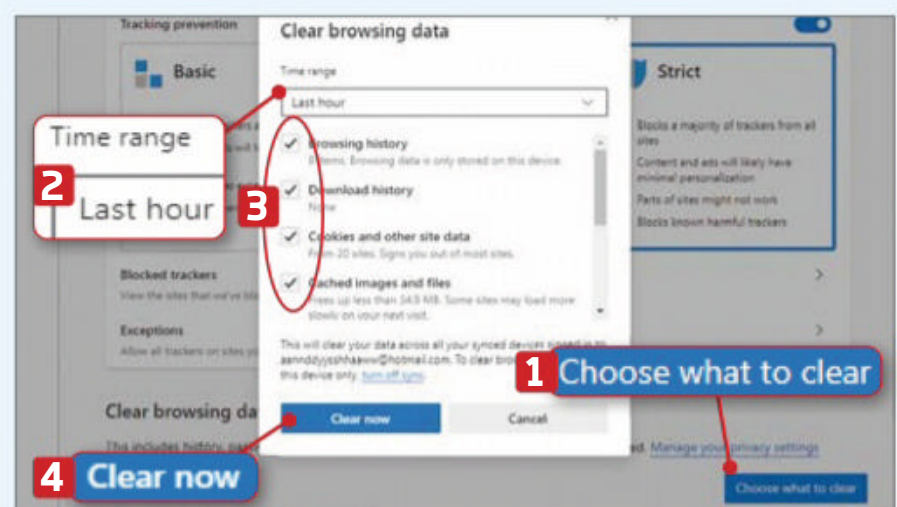
1 During installation, read through the setup options, which let you opt out of key privacy features. **1** You can switch these off later if you miss any. Once installed, click the menu button, **2** choose Settings, then Privacy or enter `edge://settings/privacy` in the address bar.



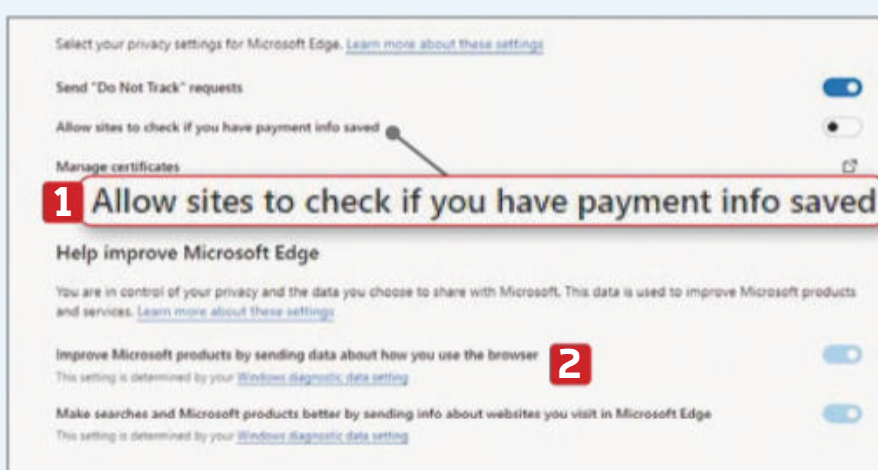
2 Tracking protection is on by default and set to Balanced. **1** This should block most websites from following you around the web, but won't prevent sites from working by disabling shopping carts and other essentials. To see the sites Edge has blocked so far, click 'Blocked trackers'. **2**



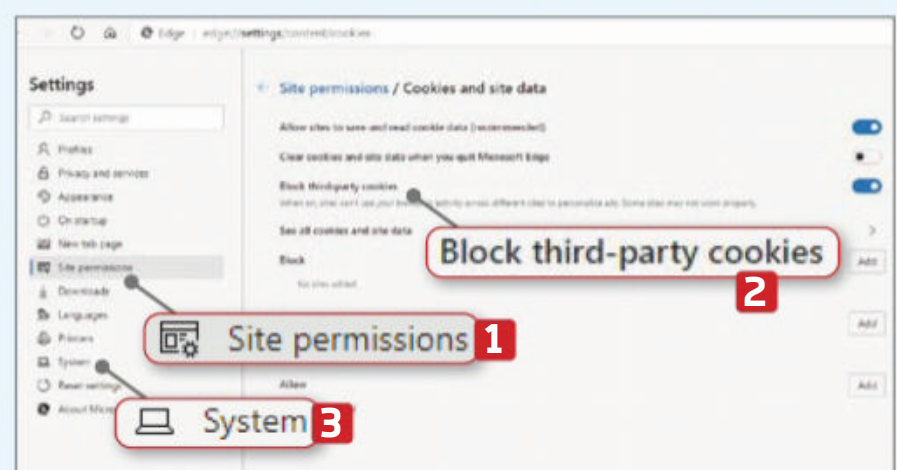
3 You can choose another option if you prefer – just click it or use the switch to turn off 'Tracking prevention'. **1** If you find a site that isn't working properly, use the Basic setting **2** before you try switching it off completely. The Strict setting **3** stops some websites from working.



4 Under 'Clear browsing data', you can click 'Choose what to clear' **1** to perform a sweep of your history. As with Chrome, this only applies to recent history working back from now, **2** though you can erase everything if you like. Tick the boxes **3** and click 'Clear now'. **4**



5 Click 'Choose what to clear every time you close the browser' to select from a similar list, except this data is deleted every time you shut the browser. Back in Settings, scroll down to keep payment info private **1** and choose whether you're prepared to send info to Microsoft. **2**



6 Check the options to block third-party cookies. Click 'Site permissions', **1** then 'Cookies and site data'. Switch on the option to 'Block third-party cookies'. **2** In the System section, **3** you can switch off 'Continue running background apps when Microsoft Edge is closed'.

Weekend Project

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



How to...

Dual-boot Linux Mint with Windows 10

Dual-booting gives you the ability to use Linux at its best without removing Windows. **Wayne Williams** shows you how

Windows is by far the most popular desktop operating system – according to NetMarketShare (netmarketshare.com), the various versions of Microsoft's OS currently account for over 87%. Linux, in comparison, has under 2%, but don't let that put you off. There are some excellent and very user friendly Linux operating systems available to download and use for free. If you fancy trying one, you could run it from a Live CD, install it on a second PC or set it up inside a virtualised environment using Oracle VM VirtualBox (www.virtualbox.org). However, in this Weekend Project, we show you how to install Linux Mint, which looks similar to Windows 7, alongside Windows 10, so you can choose which OS to run when you start your PC.



What you need

We're going to assume that your PC already has Windows on it. It doesn't matter too much which version of Windows you're running but, as Microsoft no longer supports Windows 7, we'll set up the dual-boot using Windows 10.

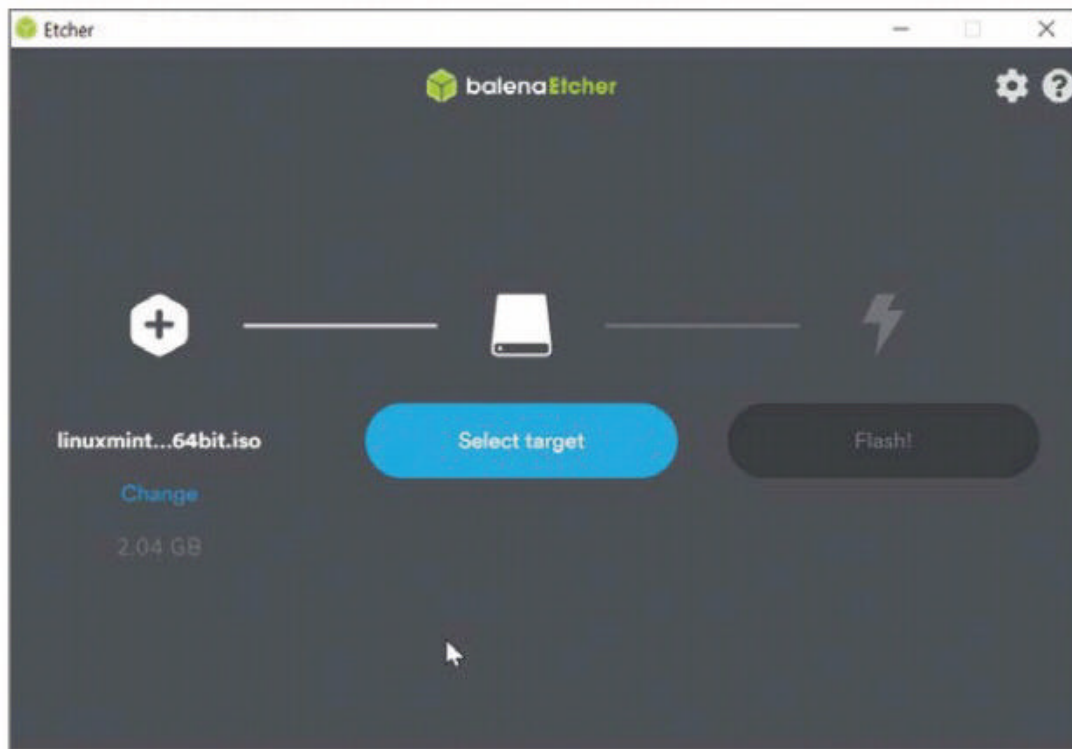
You also need a Linux operating system. There are lots of these to choose from – they're referred to as 'distros', which is short for distributions – and each

one is different and usually built around another OS. For example, Linux Mint (linuxmint.com) is based on Ubuntu (ubuntu.com) and Ubuntu, in turn, is based on Debian (www.debian.org).

To make life a little more confusing, the various operating systems typically come in a choice of desktop environments (DEs). Which Linux OS you use is entirely up to you, but we'll go with Mint because it's very good and easy to learn, which

makes it perfect for anyone not too familiar with Linux.

Mint is available in choice of DEs – Cinnamon, MATE and Xfce. If your hardware is relatively recent, we'd recommend Cinnamon because it's the most modern and the best all-round choice. MATE is a fast and more stable option, while Xfce is the most lightweight. There are 32- and 64-bit versions of the OS available. It's likely



Use Etcher to write the Linux Mint ISO file to a USB memory stick



Linux Mint is available in a choice of desktop environments – download the one you want for your PC

that you'll need the latter, unless your PC is very old.

Download Mint from bit.ly/mintdl494 and transfer the file to either a DVD or a USB memory stick. For speed and ease, we'd recommend the latter option. The easiest way to do this in Windows is by using Etcher (www.balena.io/etcher).

The process of setting up a dual-boot system is very straightforward but you should take the time to back up all the important personal data on your hard drive before proceeding. You're unlikely to lose any files following this guide but it's always better to be safe than sorry.

Dual-booting explained

Dual-booting makes it possible to have two different operating systems installed in separate partitions (like compartments) on a single hard drive.

It allows you run Mint whenever you want, but still use Windows for everyday tasks. We show you how to create a partition in our Mini Workshop, below, and how to install it alongside Windows in our Mini Workshop on page 68.

Although we're explaining how to have Mint running alongside Windows 10 in this Weekend Project, you are free to install whichever operating system configurations you like – Windows 7 alongside Mint, Windows 7 alongside Windows 10, Windows 10 alongside Ubuntu, and so on. All you need is an installable copy of each operating system.

You aren't limited to just two operating systems, either – if you want to set up three or more (Windows 7 with Windows 10 and Mint, for example) then you can. However, this is a much trickier process because each OS will need its own

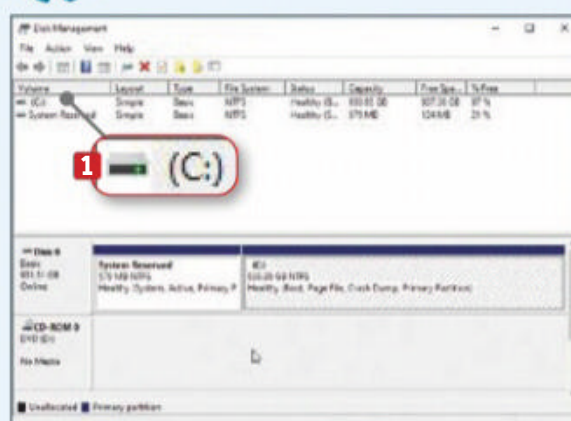
partition and they must be installed in a specific order or you'll have to tinker with the Windows bootloaders afterwards, which can get messy.

Disable secure boot

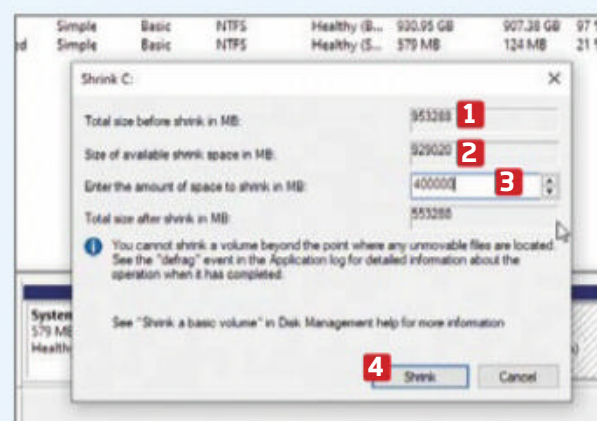
Secure boot is a feature that was introduced with Windows 8 to help protect against rootkits and other forms of malware. It's found in UEFI (Unified Extensible Firmware Interface), the newer replacement for the traditional BIOS.

Previously, you had to turn this feature off to install Ubuntu or Mint on your PC, but that's no longer the case. If, however, you run into an installation problem, you can initiate disabling the feature by turning your PC off and back on again, then pressing a key to be taken to Settings (which might be F2, F8, Del or something else) before Windows loads.

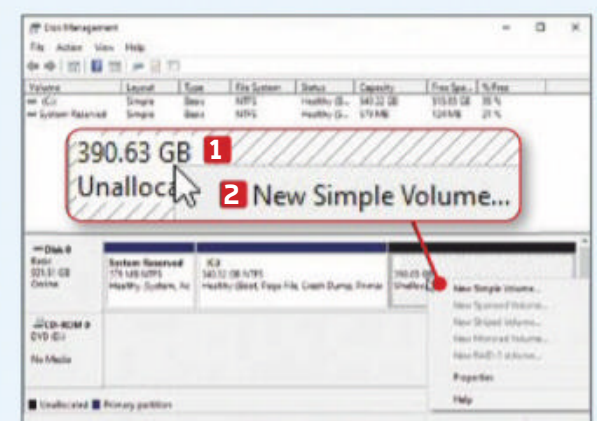
MINI WORKSHOP | Partition your hard drive



1 If your hard drive isn't already partitioned into sections, you'll need to resize the current Windows partition to make room for the new OS. Windows 10 comes with its own partitioning tool. Enter partition into the Windows search box. The Disk Management window opens. In our example, we're partitioning drive C:. **1**







2 Right-click the drive and select **Shrink Volume** from the context menu. The total amount of space is shown, **1** along with the available shrink space. **2** Enter the amount of space you want to shrink the partition by **3** – in our case, it's about half. Click the **Shrink** button **4** and Windows creates an unallocated space.



3 Right-click this new partition **1** and select **New Simple Volume**. **2** A wizard opens. Click **Next** and specify the volume size, which is the maximum amount already entered. Click **Next**, choose a drive letter or keep the suggested one, choose to format the partition with the default settings, then click **Finish**.

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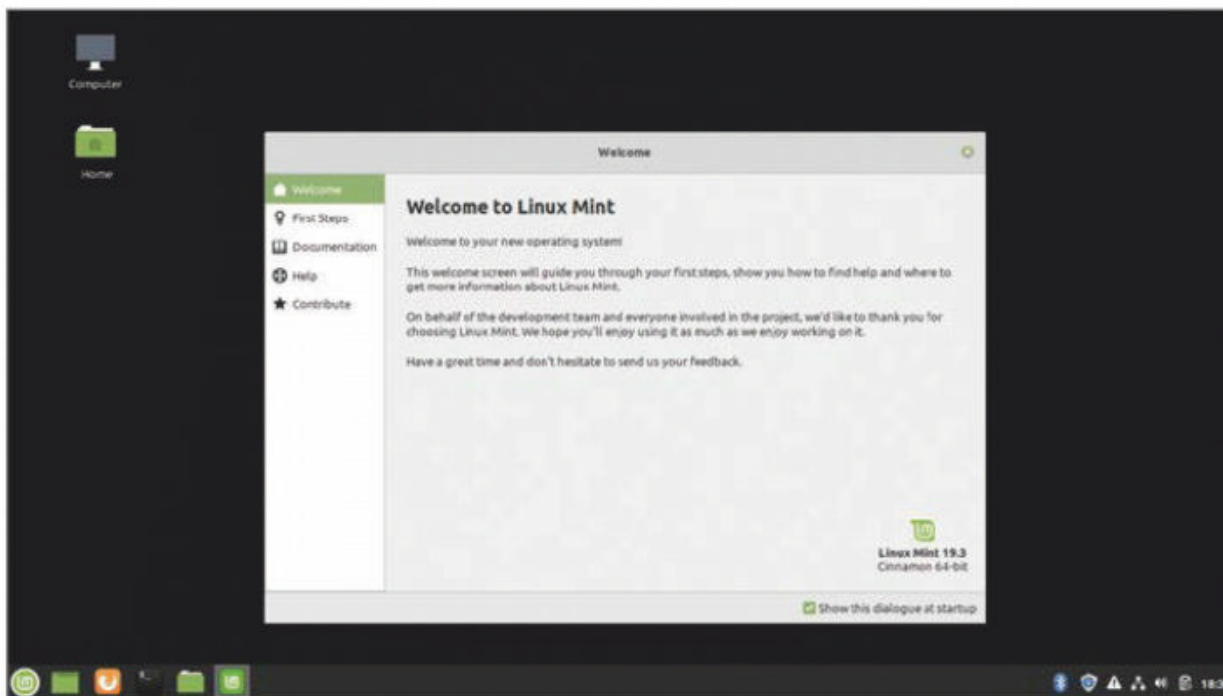
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Linux Mint is an attractive-looking operating system that's not dissimilar to Windows 7

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 restart.

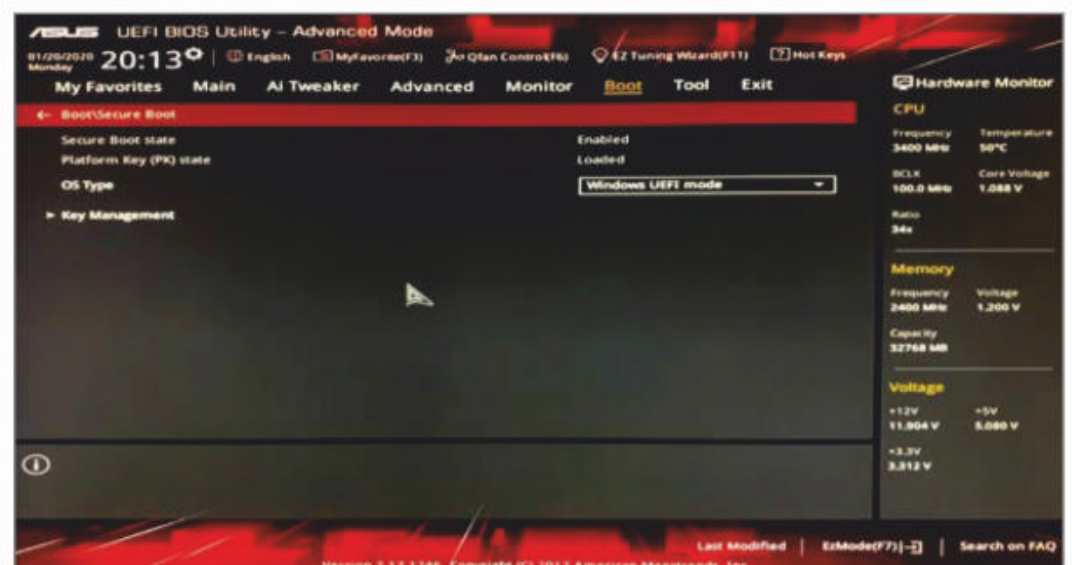
Control the boot order

You may think that creating a dual-boot system (or multi-boot for that matter) is simply a case of creating one or more partitions, installing the operating systems in them and choosing the one you want to boot from every time you turn on your PC. And it is – except that there's a specific order to the process.

When installing Windows operating systems, you'll want to install them in order of age – for example, you should

install Windows 7 before Windows 10. If you do things in a different order – installing Windows 7 after Windows 10 – the earlier version of Windows won't

You shouldn't need to disable secure boot to install Mint, but it's worth trying if you run into problems

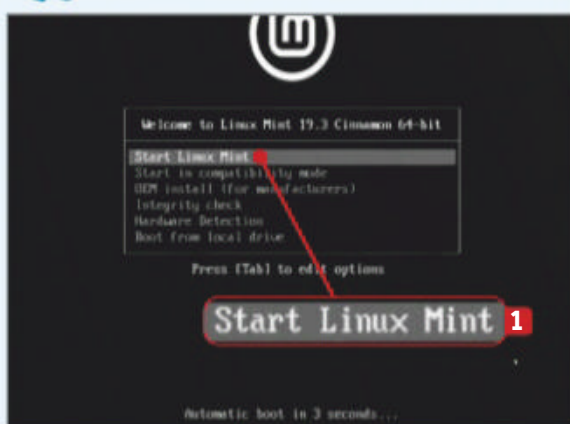


recognise the start-up files used in the later ones, and will probably overwrite them, preventing the newer OS from booting. Also (and this is particularly a concern in multi-boot systems), if you resize partitions, you might confuse the Windows bootloader, preventing it from being able to read the partition table properly, which will cause even bigger problems.

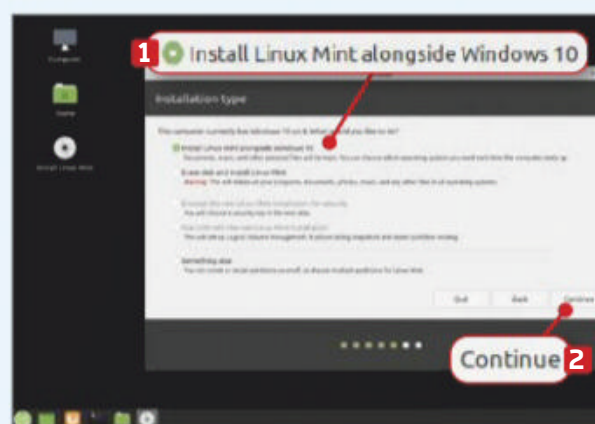
If you want to run a Linux operating system alongside Windows – be it Mint, Ubuntu or something else – it's advisable to install Windows first, followed by the Linux OS, because the Windows bootloader is quite fussy and could cause you all sorts of problems. This does mean you'll need to choose the operating system you require from the Linux boot menu rather than the Windows one. Linux will be the default option as a result, but you'll soon get used to loading Windows from the menu. ■



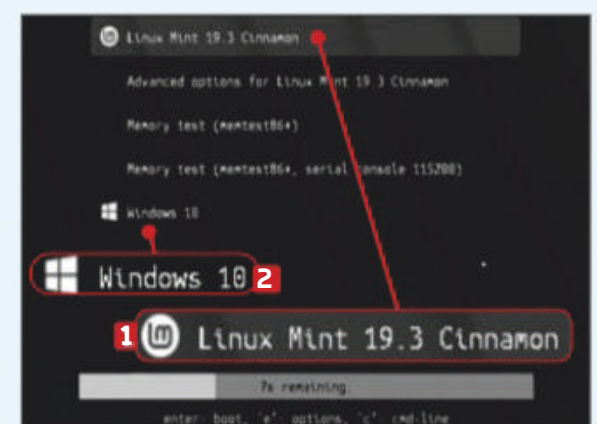
MINI WORKSHOP | Set Mint to dual-boot alongside Windows 10



1 Install Windows 10 (if it isn't already installed), then insert and boot from the Mint DVD or USB memory stick. The Welcome screen gives you the option to Start Linux Mint **1** without making any changes to your computer. Select that option and Mint loads. When you're ready, double-click the Install Linux Mint icon on the desktop.



2 The install screen appears. Choose your language and keyboard layout, then tick the box to install third-party software for graphics, Wi-Fi and more. Mint should spot that Windows 10 is installed. Select 'Install Linux Mint alongside Windows 10' **1** and click Continue. **2** Adjust the partition sizes if required, then click Install Now.



3 The installation process continues. Tell Mint where in the world you are, enter a username and password, and wait while the final files are copied over. When the process is complete, shut down your PC and reboot. The Linux Mint boot menu loads and you can choose whether to boot Mint **1** or Windows 10. **2**

NEXT ISSUE

How To... Create a home intercom system

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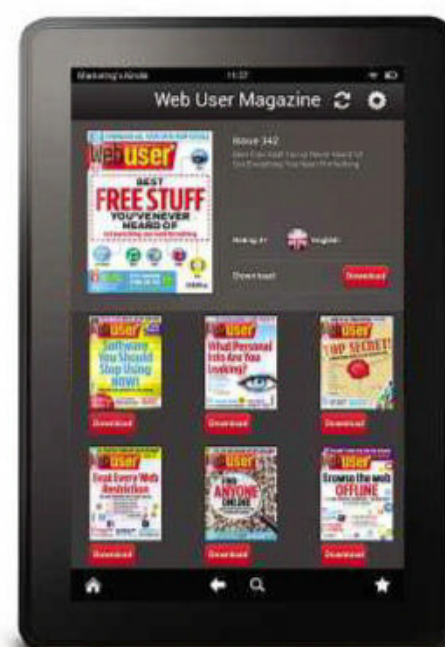
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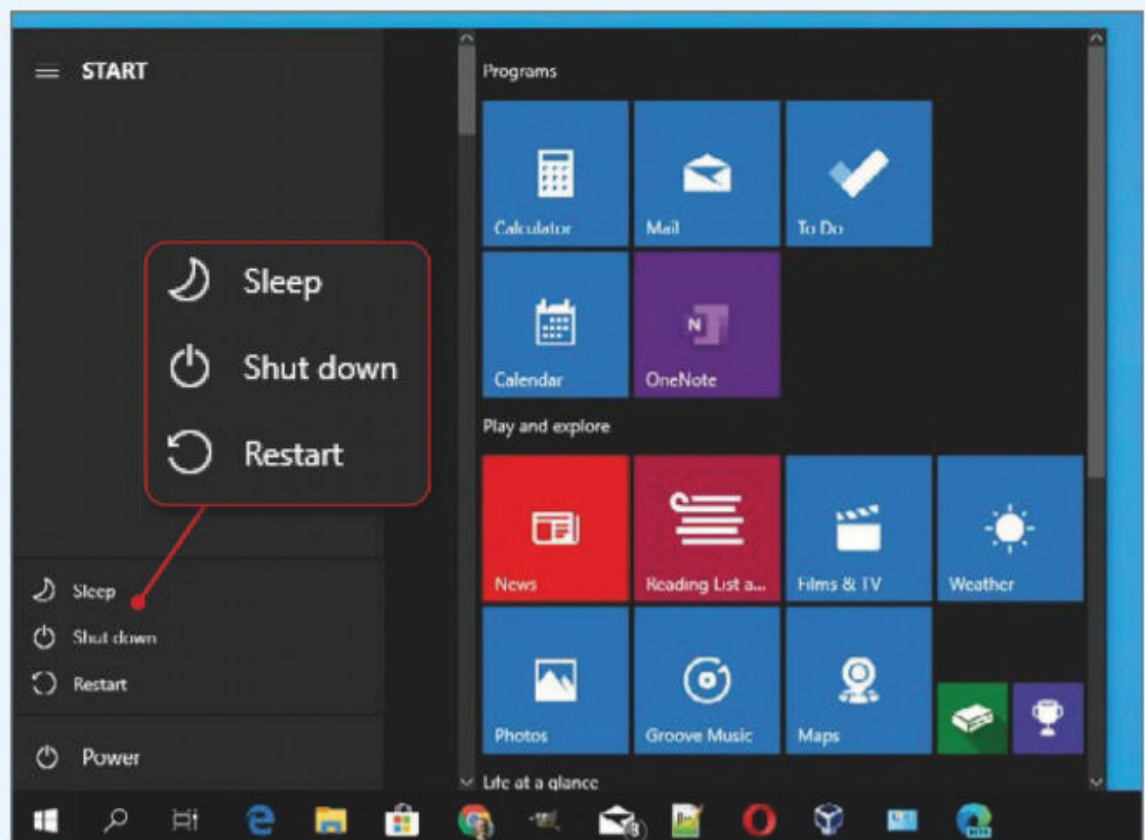
Take control of your PC's boot process and start Windows the way you want

Choose between a clean or 'dirty' Windows boot

How Windows 10 boots up depends on how it was shut down. If you click Start, Power, then 'Shut down', Windows logs you out of your account and hibernates, which saves all the drivers and services it has loaded. The next time you boot up, Windows quickly wakes itself from hibernation so you can log in.

However, if you click Start, Power, then hold down Shift and click 'Shut down', every program, driver and service quits and the PC powers off. When you come to boot it up again, everything reloads. This is slower but cleaner, because every driver, app and program is started afresh.

So, you have a choice between a fast and 'dirty' boot (click 'Shut down') or a slow and clean boot (Shift+'Shut down'). Clean booting is a better way to restart if you're having problems with your PC, because it flushes out software problems that may be causing malfunctions.



Choose between 'Shut down' options with the Shift key

Recover from catastrophic Windows failure

We're so used to switching on our PCs and leaving Windows to launch and carry out its startup process unaided that it's easy to assume that it will never fail. Hopefully, it never will, but there's always a small possibility that your PC won't boot up the next time you want to use it.

Backup software not only lets you create a backup of your PC's hard drive, but it can also provide tools for creating a bootable drive from a CD or USB memory stick. Paragon Backup & Recovery Community Edition (bit.ly/para494), MiniTool ShadowMaker Free

(bit.ly/mini494) and Macrium Reflect Free (bit.ly/macri494) are all excellent free backup programs that include this option.

Each backup program will use a slightly different method for this – just scour the menus for a rescue or emergency media creator, then use it to make a rescue tool from a writable CD, DVD or memory stick. If disaster strikes and you can't reboot your PC normally, insert the rescue tool and turn on the PC. Most PCs automatically detect inserted drives and flash up a message asking if you want to boot from it.

If you don't see options to boot from the rescue media, tap a function key several times as your PC starts. It may be F2, F8, F12 or even Ctrl+F8. If you're not sure, watch out for the instructions for your PC, which usually flash up on-screen as your PC starts.

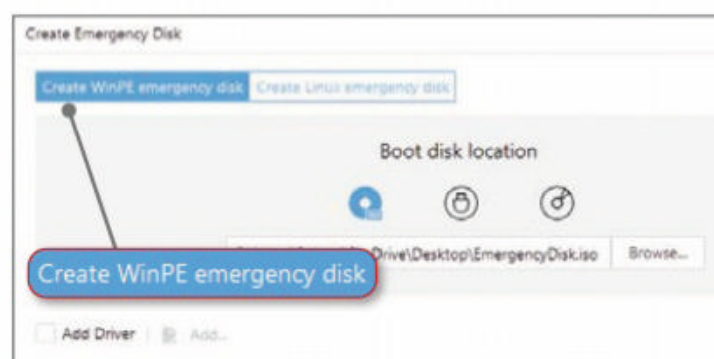
Booting the rescue media lets you access the backup tool, so you can restore your PC to how it was before your problems started.

Slow down your boot-up

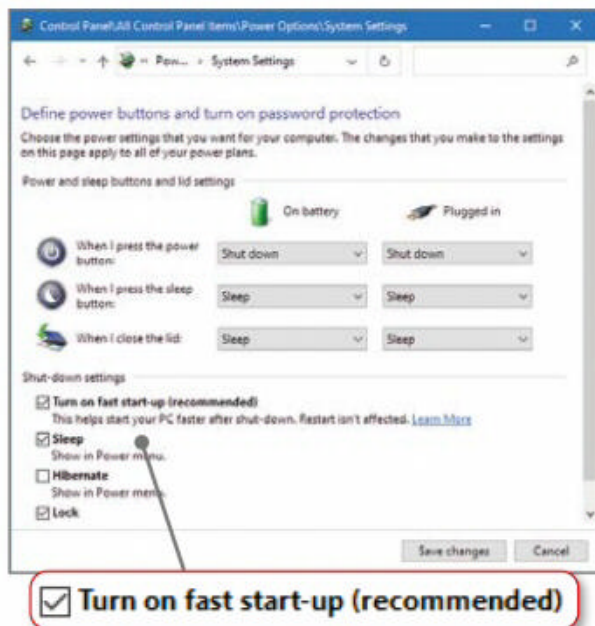
Newer Windows PCs boot up a lot faster than older models because

many startup processes are either skipped or streamlined to reduce the time it takes to process them. However, it's now harder to select startup options, such as whether to boot from the hard drive, USB or CD, and to access the BIOS setup utility or other things your PC may offer. When you need to access these, switching to a slow startup

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.



Create recovery media to start your PC when Windows won't boot



Enable fast start-up for speedy booting or disable it to access the startup options

gives you more time to select the options you want.

Open the Control Panel, then click Power Options and select 'Choose what the power buttons do' on the left. In the 'Shutdown settings' section, untick 'Turn on fast start-up'. The next time you power on your PC, it will pause for a couple of seconds before booting to give you time to press keys for boot options, BIOS setup and so on.

If Windows is failing to boot and it's set to fast start-up, it can be difficult to access your boot options. If you have a troublesome PC or frequently use boot options, you may want to clear the fast start-up option permanently.

If you can't change fast start-up, click the link 'Change settings that are currently unavailable' at the top.

Choose what loads with Windows

There are several ways to start Windows and you can choose what's loaded as it boots. Most of the time, you'll want everything to load, but if you're having problems – whether it's with Windows, hardware or your PC's security – a minimal boot can sometimes help solve the problem.

Press Windows+R and enter `msconfig`. Select the General tab to see three startup options, one of which has three sub-items. 'Normal startup' is the one to use when the PC is running fine, but you can also use 'Selective startup' with the first two sub-items ticked.

If you're trying to solve a problem with your PC, such as removing malware or fixing an attached device, use 'Selective startup' with all the sub-items cleared to prevent troublesome programs, services and drivers from loading. 'Diagnostic startup' is a more extreme version.

After solving whatever problem you are having – or if the settings do not help – return the startup settings to their original state.

TAKE IT TO THE NEXT LEVEL

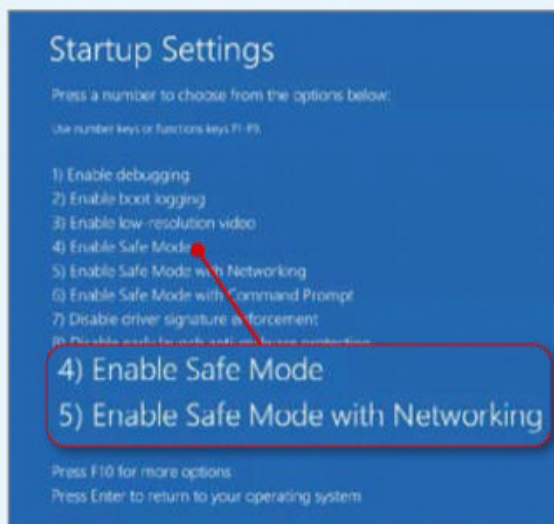
More advanced tips for when you're feeling brave

Choose advanced boot options

Safe Mode is a diagnostic and repair mode for Windows. It boots to the desktop with the minimum of drivers, services and programs, which makes solving certain problems easier. To boot in Safe Mode, open the Windows 10 Settings app and go to 'Update & Security', then Recovery. Click the 'Restart now' button under 'Advanced startup'; or click Start, Power, then hold down Shift and click Restart.

The PC shuts down and reboots but, instead of the normal boot process, a menu appears with options to boot from another device or to troubleshoot. Select Troubleshoot with the cursor keys and press Enter.

Select 'Advanced options' on the next screen, then 'Startup settings' on the one after that. Select Restart (it's the only option) to reboot the PC to a new menu showing nine different boot options. Safe Mode, either on its own or with networking (for internet access), is the most useful. Press the number key that represents the startup option you want.



Shift+Restart in the Start menu brings up the advanced startup options

Shut down or hibernate

The shutdown command is available at the command prompt. As mentioned previously, the way in which Windows is shut down affects how it boots next time. Press Windows+R, type `cmd` and press Enter to open a Command Prompt window. Type `shutdown` and scroll back up to look at the options – `shutdown /s` shuts down the PC normally; `shutdown /s /hybrid` prepares the PC for a fast restart and `shutdown /h` puts it into hibernation.

When a computer hibernates,

it saves the current Windows state, programs, services and windows to the hard drive, then turns the power off. When it next restarts, it continues exactly where it left off. This is a very fast boot that restores all your open programs and windows.

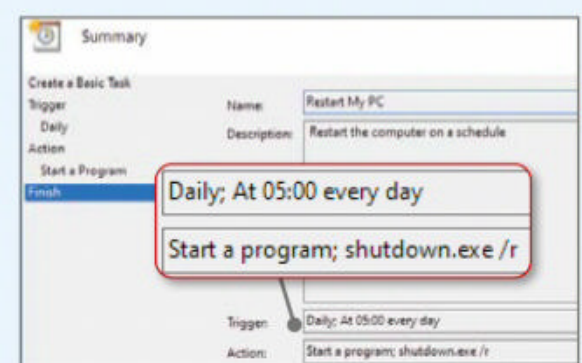
It's a bit tedious having to open a Command Prompt window and type the shutdown command and parameters, so it's worth creating desktop shortcuts for those you want to run regularly.

Right-click the desktop and select New, then Shortcut. When it asks you to type the location of the item, enter the shutdown command you want, such as `shutdown /h`. Click Next and type a name for the shortcut, such as `Hibernate`, then click Finish. Now you can double-click the Hibernate shortcut on the desktop to shut down. The next time you boot up, you'll continue exactly where you left off.

Automatically reboot and refresh

Restarting a computer always performs a clean boot, which is why we are often told to restart a PC and not switch it off and on again, which would only force a fast or hybrid boot. A restart is like a refresh, so if you never switch off your computer, you might want to schedule a restart to clean boot and refresh the system every now and then.

Click Start, type `schedule` and open Task Scheduler. Click Action, then 'Create basic task'. Enter a name for the task, such as `Restart My PC`, and click Next. Select Daily for the trigger and click Next. You can then choose the first date and time it should occur, such as 5am tomorrow morning. Click Next, select 'Start a program' and click Next. Enter `shutdown.exe` for the program and `/r` for the arguments. Click Finish.



Reboot your PC on a schedule to regularly clear out your system

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



HARDWARE

Recover files from a failing hard drive

Q Some time ago, I bought a Seagate Personal Cloud and installed it at home. I went through the process of adding all my old backups, so they would all be in one place, and connected all my devices.

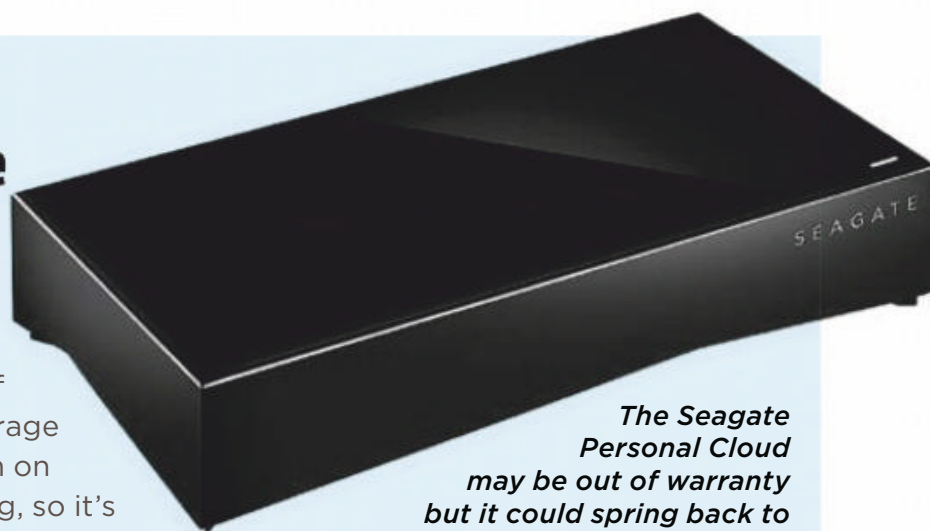
I found the cloud element, which lets you access your files from any device, to be a great idea. However, I recently went on holiday and couldn't access my files because the cloud option was off. Now I'm back home again, it appears that there's an error with the unit, which is showing a red light and is failing to start.

I have contacted Seagate but the warranty on my device has expired. Is there a way to restore my files? I kept everything on it, including family photos, documents, books and more.

Joanna Dziedzic, via email

A It's too late now, but the golden rule for keeping data safe is to never have only one copy of your files. If the drive or storage system you're keeping them on fails, you can lose everything, so it's essential to keep backups or copies of files elsewhere.

It depends on the nature of the problem with your Seagate Personal Cloud, but it may be possible to repair it by resetting the device. Turn off its power by using the button at the back of the device, then insert a straightened paperclip or something similar in the hole at the back and use it to press the Reset button. Keep it held down with the paperclip and turn on the device with the power button. Keep holding the Reset button down for at



The Seagate Personal Cloud may be out of warranty but it could spring back to life with a factory reset

least 20 seconds, then release it.

This performs a factory reset and the red light should flash while it does this. Don't turn off the device – wait until the light becomes a steady white, then set up the Personal Cloud as if it was new. Any files that were on the drive prior to the reset are moved to a folder called Recovery within Public Share. Check this after setup is complete and, fingers crossed, your files should be there.

VIDEO

Adjust VLC setting to stop videos looking dark

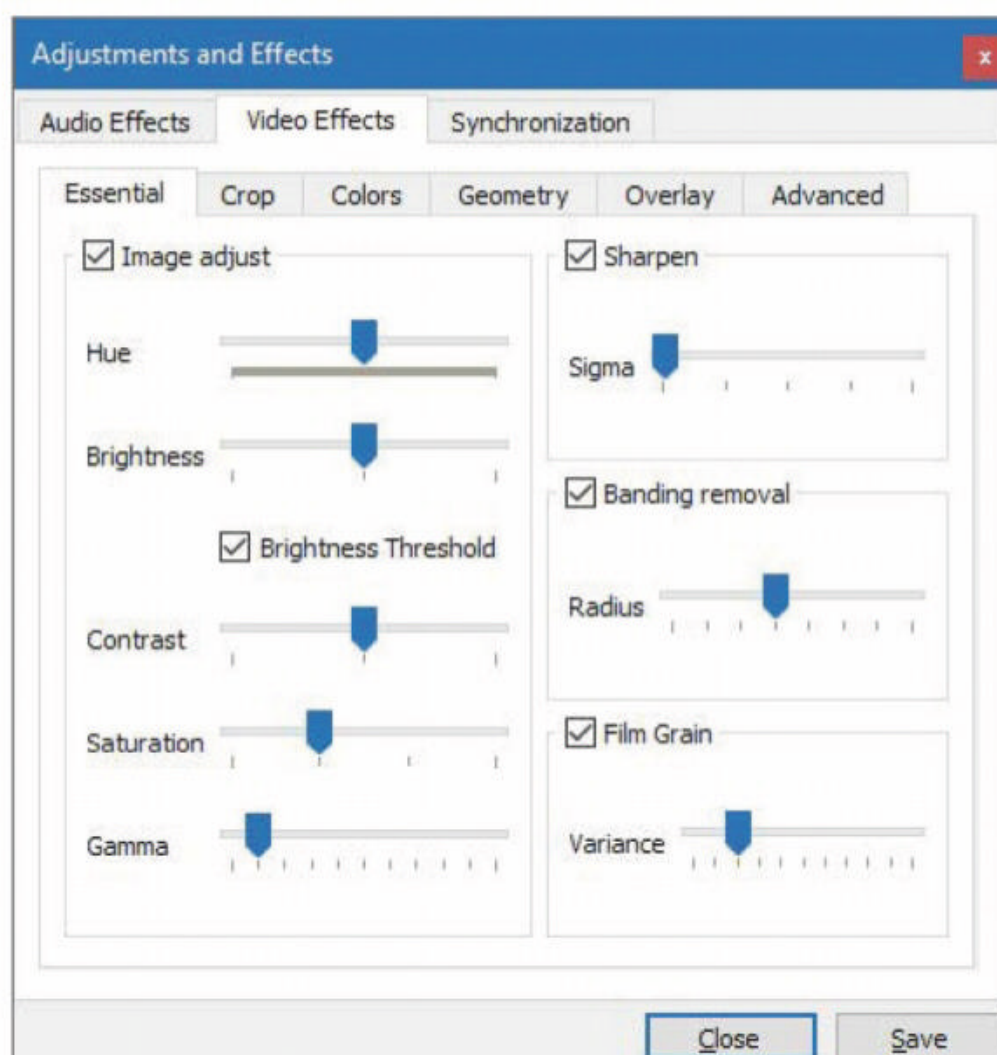
Q Following your illuminating article about VLC (www.videolan.org) in Issue 469 and the kind response I received to my request for alternatives, I have persevered with VLC and am also using PotPlayer (potplayer.daum.net) and Splash (bit.ly/splash494).

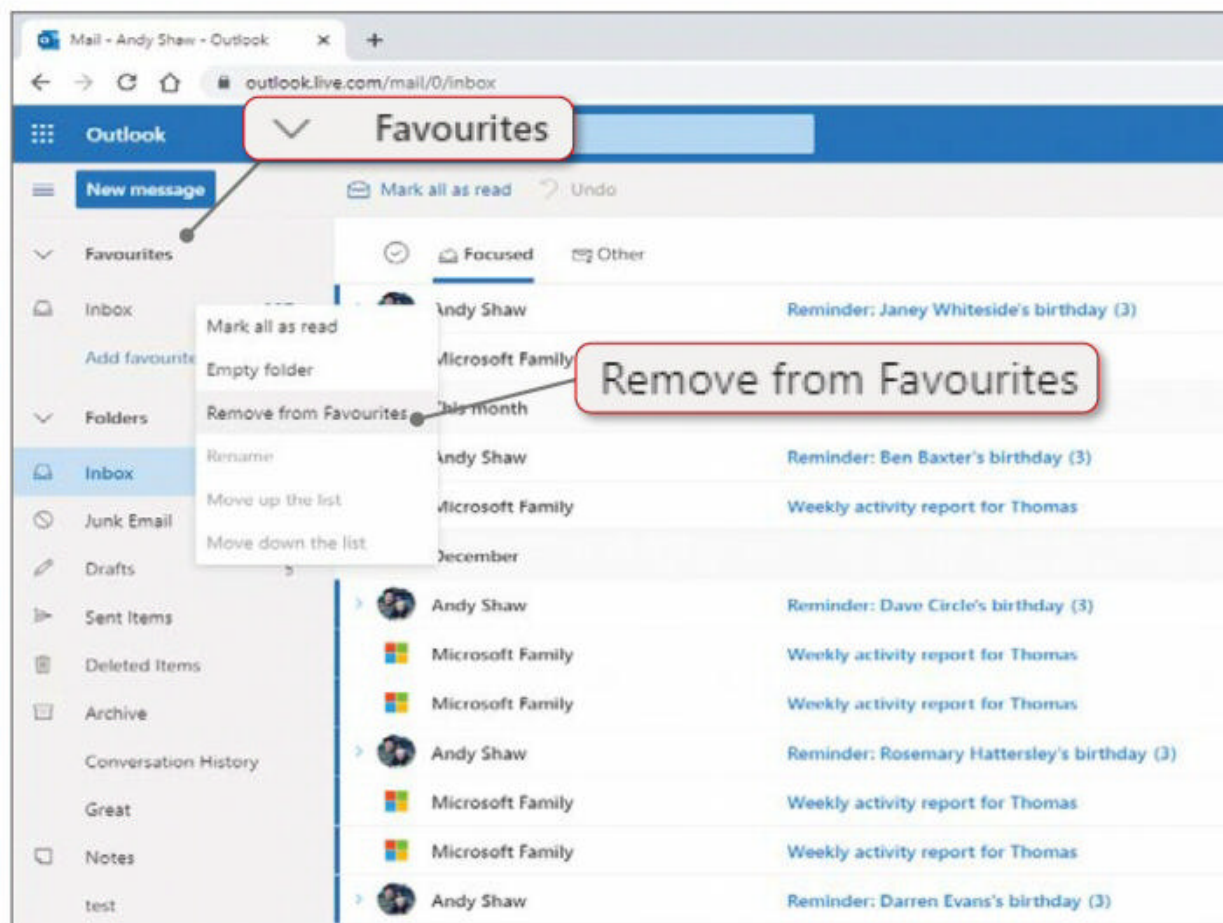
When I use VLC to play my videos, they look dark, and lack contrast and brilliance. This can be temporarily resolved by using video effects and filters to correct the levels. However, using this method prevents me from recording or taking screen captures.

I've spent some time investigating the extensive settings and menus in VLC but I'm unable to find any controls that allow me to permanently alter the basic display settings. My videos, files and DVDs display perfectly in PotPlayer and Splash, as well as on my TV, so I don't think they are the cause of the problem.

Keith Warwick, via email

Press Ctrl+E in VLC to access the video effects. Disable any that are causing a problem





Outlook.com folders can be duplicated in the Favourites – right-click to remove them

A The first thing you should do is make sure you have the latest version of VLC. Open VLC and select Help, then 'Check for Updates'. There shouldn't be any difference between the installed version and the portable one, but it is worth trying. Go to the VLC downloads page (bit.ly/vlcdl494), click the down arrow next to the Download button and select the 'Zip package'. Copy VLC out of the zip file and run it from the Downloads folder.

Video effects settings can affect the video quality and should be reset. Start the video, press Ctrl+E to open 'Adjustments and Effects', then select the Video Effects tab. Go to each sub-tab and clear all the options.

There could be a compatibility problem with the graphics card driver, so check for updates. Right-click the Start button and select Device Manager. Expand 'Display adaptors', then right-click each item listed and click 'Update driver'. Select the option to 'Search automatically for drivers'.

EMAIL

Duplicate inboxes in Outlook

Q When I go to the Outlook website (www.outlook.com) to check my email, some items in the sidebar are duplicated. For example, I have two Inboxes, two Sent items, two Drafts and so on. Why is this and how do I get rid of the duplicates?

Ray Stevens, via email

A There are several sections in the Outlook website's left-hand sidebar. At the top, you'll find the Favourites section, then below that is

the section named Folders.

All your email messages are contained in the Folders section, sorted into subfolders such as Inbox, Drafts and Sent. The Favourites section at the top of the sidebar contains shortcuts to your most used folders. This is why Inbox, for example, may appear twice – once as a shortcut in the Favourites section and then the real folder in the

Folders section below.

To remove a folder from the Favourites section, right-click it and choose 'Remove from Favourites'. Nothing is deleted, only the shortcut link is removed.

If you don't want to go to the trouble of removing the Favourites shortcuts, you can simply hide them by collapsing the Favourites folder. Click the down arrow to change it to a rightward-pointing arrow. Just click it again if you want to reveal the list of folders again.

PRIVACY

Delete old browsing history

Q As you browse the web, everything you do is stored in your history and all the websites you visit are remembered. This is useful because you can begin typing a URL and a website suggestion appears, which you can click to save you having to type the rest of the address. However, I would prefer to remove my browsing history after a certain date, such as 30 days – for privacy and security reasons.

My thinking is that if I haven't visited a website for 30 days, I am probably not interested in it and won't mind if the URL and cached content are deleted. I have looked in the browser settings but I can't find anything to help me remove old and outdated history items.

Matt Dennis, via email

GENERAL PC

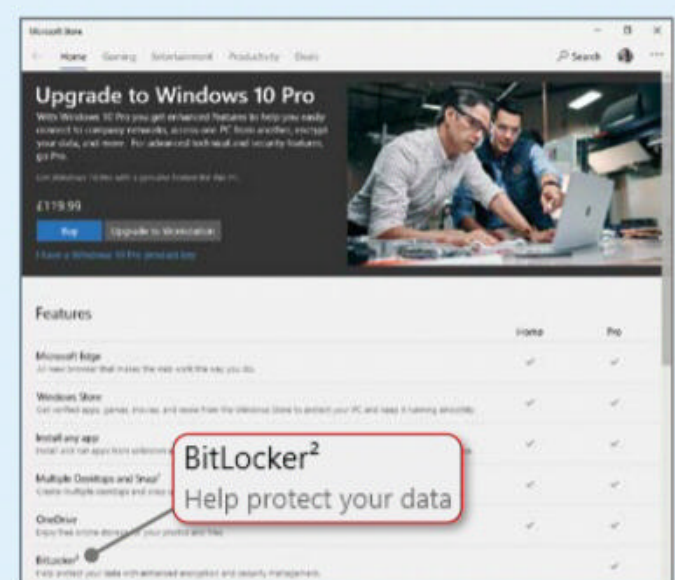
Upgrade to Windows 10 Pro

Q I decided to scrap my rather old desktop computer running Windows 7 Pro and have replaced it with a very nice new laptop which already has Windows 10 Home installed. Is it possible to upgrade Windows 10 Home to Windows 10 Pro using my Windows 7 Pro serial number?

Paul Horbury, via email

A No, this won't work. To see your upgrade options, open the Settings app and click System, then select About on the left. On the right, you'll see a section called 'Upgrade your edition of Windows'. Click 'Go to the Microsoft Store' to see the Pro upgrade listed.

There is a useful Home vs Pro comparison table that shows the various features available in each version. The only thing of value to



The upgrade to Windows Pro doesn't have much to offer home users

home users is BitLocker, which provides an extra level of security by encrypting your hard drive. However, Windows 10 Pro costs £120, which is a lot of money to pay for disk encryption.

VeraCrypt is a free open-source alternative (www.veracrypt.fr) that lets you create encrypted containers. These work like virtual hard drives and any files stored on them are secure.





GENERAL PC

See which files are backed up in OneDrive

Q I recently bought a new Windows 10 laptop to replace my old Windows 7 one. If I place a shortcut on the desktop, it has the familiar Windows 7 curved arrow. However, placing a file on the desktop shows a white tick in a green circle. What does this mean?

L Harris, via email

A While setting up your new computer, you must have also set up OneDrive. This backs up and syncs certain system folders, such as Desktop, Documents and Pictures. The green tick means that the file on



OneDrive can backup Desktop, Documents and Pictures to online storage

the desktop is synced to OneDrive and stored online. These synced files can be viewed at the OneDrive website in a browser, which could be useful if you need to access them from another computer or device.

time. There is a Clear button next to each item but no way to select 'All items older than...'.
You can perform a similar action in Chrome. Click your profile picture, go to your account and view your web activity in the 'Data & personalisation' section. In both cases, however, deleting items one at a time would take forever.

One browser does have what you are looking for – Safari on macOS. Open Preferences, choose General and you'll get the option to clear history older than a day, week, month or year.

VIDEO

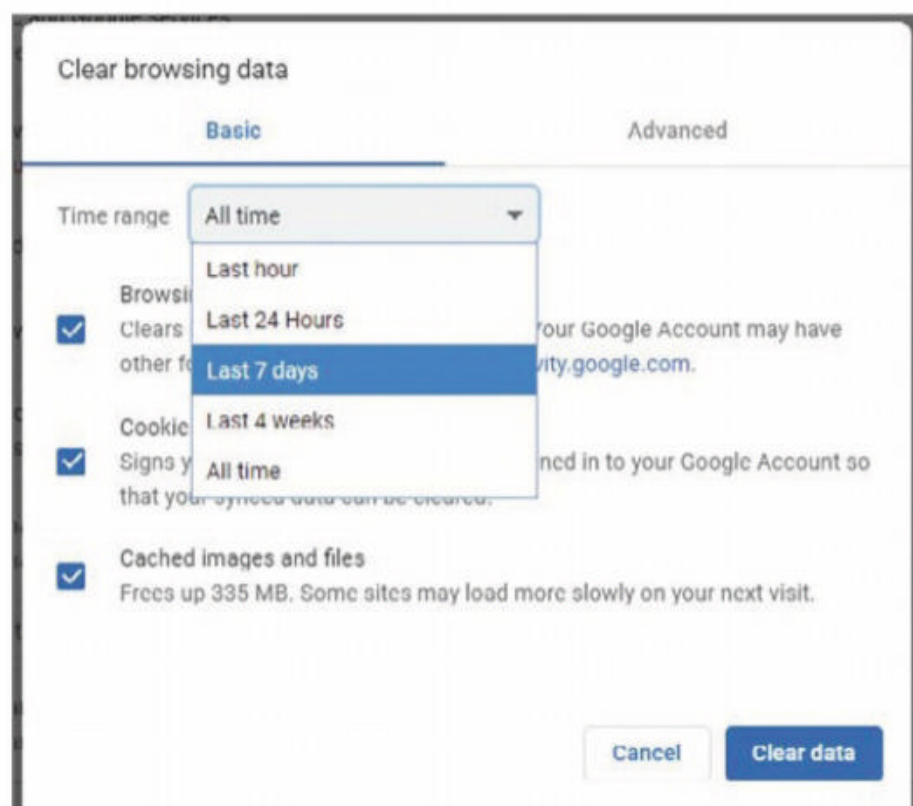
Don't buy a teleprompter

Q I'd like to make some YouTube videos but I'm not very good at memorising my scripts. Is there a website or app I can download to my iPad that will enlarge the text and scroll it as I speak, so I can read to camera like they do on the television news?

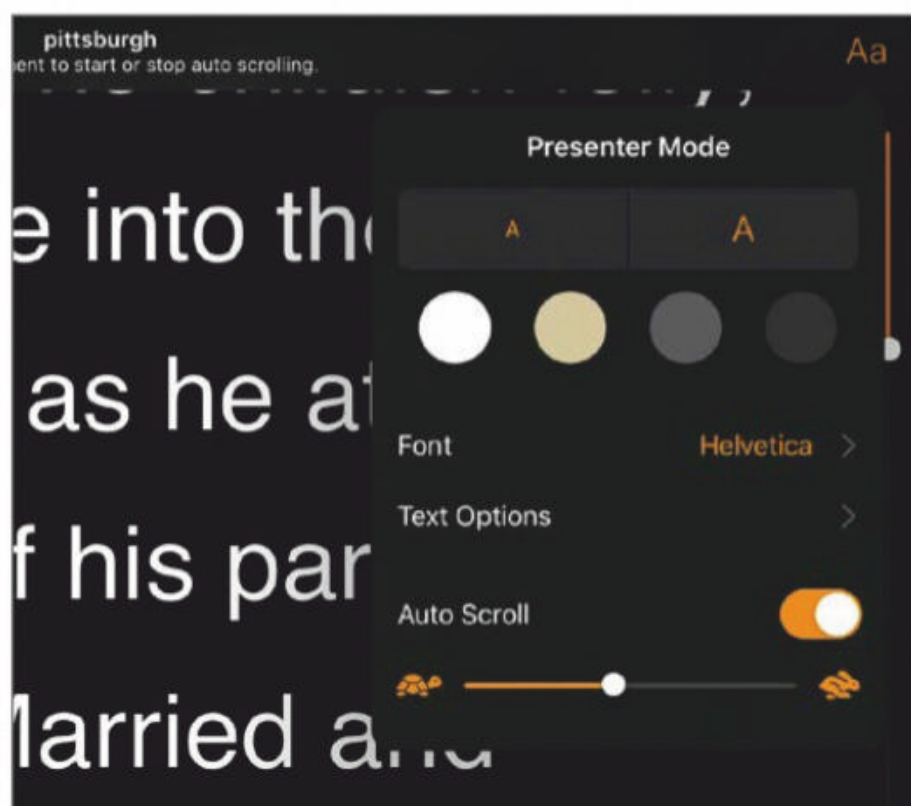
Ray Green, via email

A If you've got an iPad, you don't need to download anything or even go online because this 'autocue' functionality is built into the preinstalled Pages app. Open the app and import your text into a new file (assuming you wrote it somewhere else). Tap the menu button (three dots in a circle, top-right) and choose Presenter Mode. This enlarges the text of the document and inverts it to white text on a black background. Tap the screen to start it scrolling.

To tweak the settings, such as the scroll speed, tap the 'Aa' button.



Chrome only lets you clear recent history or all history



Apple's Pages app can turn your iPad into a teleprompter



This fortnight, Roland has been playing with all the gadgets he picked up in the January sales



Readers' Helpdesk

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

BROWSERS

Show bookmarks in Firefox's address bar

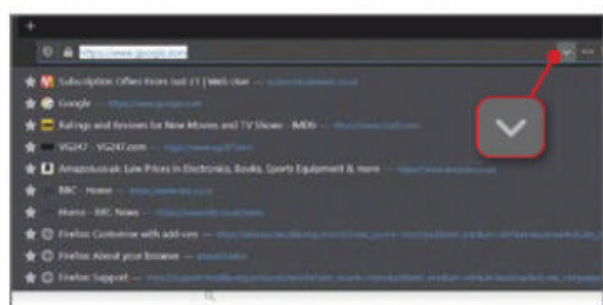
Q I have discovered, completely by chance, that if you hover your mouse pointer over the right-hand end of the Firefox address bar, a down-arrow appears. Clicking this arrow produces a display of several of your current bookmarks in a drop-down list, immediately below the address bar. However, I can see no rhyme or reason for the particular bookmarks that are featured.

Sometimes a new bookmark appears in the list, at the expense of one that was previously featured. When you delete a bookmark from the sidebar, it also disappears from the list, to be replaced by another. You can change the order of the bookmarks in the sidebar by dragging them up or down, but doing so doesn't affect the display. It would be useful if you could choose which bookmarks appear in this list, but I can't find any way of doing so.

Alan Beasley, via email

A Well done for spotting this, Alan – we're sure many readers will be eager to try it. These bookmarks are ordered by those last opened, and there doesn't seem to be any way of rearranging them – bookmarks can only be managed by going to the Bookmarks Library.

However, there is one change you can make. Visit **about:preferences** and search for **search suggestions**. At the foot of this section, there is an option to 'Change preferences for browsing history, bookmarks, and tab suggestions'. Click this and you're able to allow not



Firefox has a new way to access bookmarks

READERS RESPOND

INTERNET

Force devices to switch Wi-Fi signals

A I believe there may be another explanation for Phil Baker's problem (Ask the Expert, Issue 491, bit.ly/webuser491). My son's house in the USA has two Wi-Fi signals – 5GHz and 2.4GHz. The faster signal is unreliable and, when it fails, our Android tablets switch to the other. However, my HP laptop fails to find any connection. Perhaps the café signal is also on a frequency not recognised by Mr Baker's laptop? I deal with the problem by using an external USB Wi-Fi dongle.

Guy V Barker, via email

Back Issues disc winner



Upgrade a computer to dual-band with a USB Wi-Fi dongle

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.

STREAMING

Q I believe you can play Audible books on an Echo device, since both are owned by Amazon. Does anyone know a way to play them on my Google Home smart speaker?

Ken Bernard, via email

EMAIL

Q However many times I delete draft Outlook emails on my laptop and phone, they come back. Sometimes the badge states that there are drafts in the empty folder. How do I stop this?

Gavin Holt, via email

only bookmarks to appear when clicking the down-arrow, but also your browsing history and open tabs.

Steve Clark, Features Writer, Web User

HARDWARE

Quieten a noisy external hard drive

Q My Windows 10 laptop has an SSD and a 1TB Western Digital back-up drive. This external drive has nothing on it but it's recently become very noisy, as if it's constantly being used. I've changed the drive letter from the default D: drive and it still continues to randomly spin and click. How can I quieten it down?

Wendy Chapman, via Facebook

A External hard drives may make some sounds, including whirring and spinning, typically when starting up, but

a lot of spinning and clicking noises indicate that the heads inside the drive are trying (and failing) to locate data, which is often a sign that the hard drive is on its way out. You can test whether it's in working order by trying to transfer data to and from the drive. You may also wish to swap out the data cables, to see if that makes a difference. If you're not getting any joy, the best option is to replace it because storage can be bought relatively cheaply.

Steve Clark, Features Writer, Web User



When your old external hard drive starts to play up, it's time to get a new one

Your Top Tips

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



TOP TIP

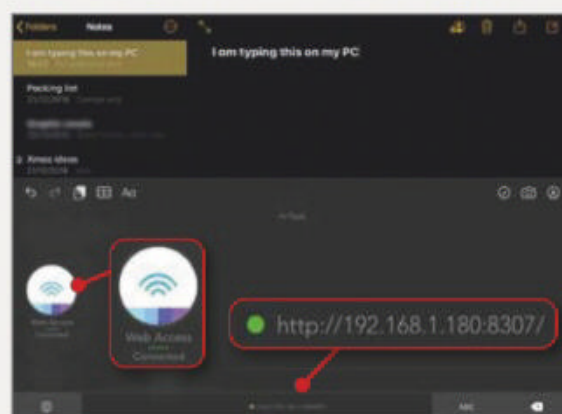
MOBILE

Use a PC keyboard on iPhone and iPad

Did you know that you can type on iPads and newer iPhones using your Windows 10 computer? I didn't, until I accidentally stumbled on the AirType app (bit.ly/airtype494), which connects your computer to your mobile device. It only works if they are both running on the same Wi-Fi network.

To get it working, open Settings and tap General on your mobile device, then go to Keyboards. Add AirType as the keyboard option, then open your text messages, email, WhatsApp or any other app that lets you type, and switch from your default keyboard to AirType. You'll see an IP address – type it into the browser on your computer.

A text box appears, and whatever



AirType lets you use your PC keyboard to send text to an iPad or iPhone app

you type in it will show up on your iPhone or iPad. I find this makes composing text messages much easier than using the touchscreen.

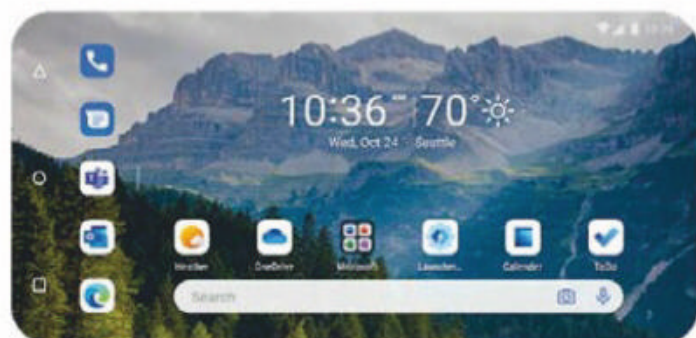
Jim Carew, via email

MOBILE

Try Microsoft's new Android launcher

I'm a big fan of Microsoft Launcher – it's quick, has all the features I need and, best of all, it's free to install and use, and doesn't show any adverts. Microsoft has just launched a new preview version, available for download at bit.ly/mslauncher494. This is a ground-up reworking of the Android launcher, so you'll need to download it separately to the existing version. Among other things, it now has a new dark mode and a clever landscape mode (see below).

Naturally, because it is still in beta, there's a chance of instability but, so far,



Microsoft's new Android launcher has lots of new features, such as landscape mode

I haven't run into any problems.

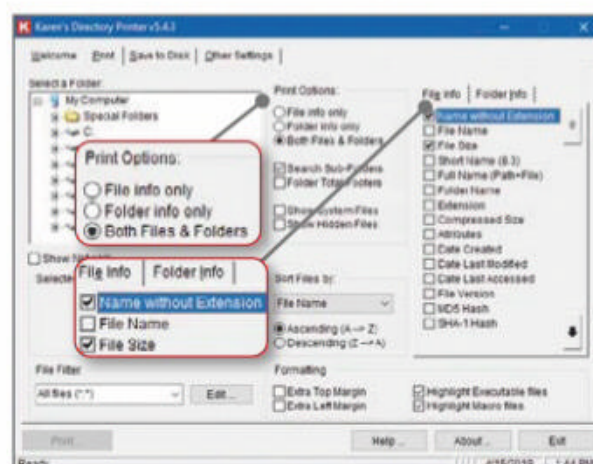
Jim Glazier, via email

SOFTWARE

Print folder contents

Issue 492's Ask the Expert (bit.ly/webuser492) includes advice on how to 'Print a list of files'. For many years, I've been using a free tool called Karen's Directory Printer, from Karen's Power Tools, which readers may find easier to use. This, and many other useful tools, can be found at bit.ly/karen494.

Mike Smith, via email



Print the contents of folders – download Karen's Directory Printer for free

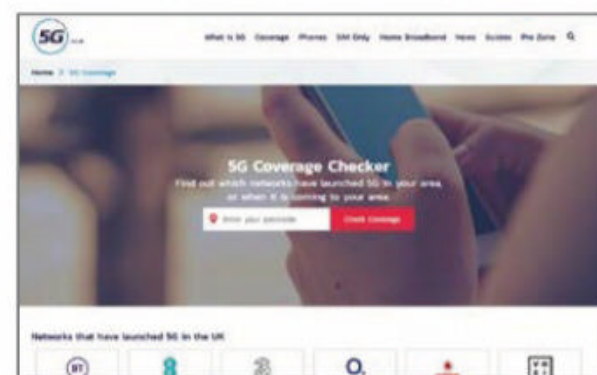
MOBILE

Check when you'll get 5G

I've been very excited about the prospect of 5G since it was first announced and have been fervently checking when my area, in far-flung Lancaster, will receive it.

Type your postcode into the website 5g.co.uk/coverage to see the current status of 5G, and which networks are rolling it out. Not long now!

Marcus Philbin, via email



Find out when your area is due to get 5G coverage

SECURITY

Recover deleted passwords

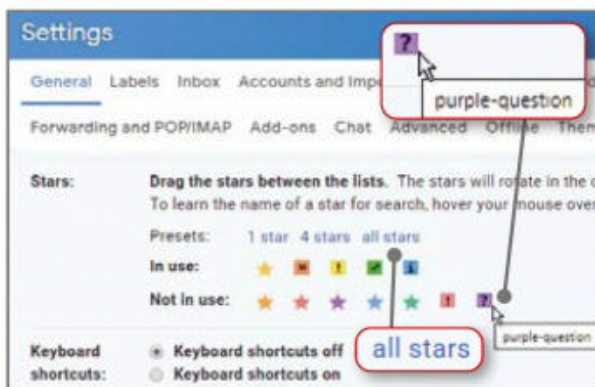
If you've ever regretted deleting a password in LastPass (www.lastpass.com), don't worry – it can be recovered. Click the LastPass icon in Chrome and go to Open My Vault (or visit the website). Click More Options in the bottom-left corner of the page and open Deleted Items. Here, you can select a password and, using the Actions menu, reinstate it or completely delete it.

Mark Walsh, via email

EMAIL

Search for Gmail stars

Every message you receive in Gmail has a tick box on the left for selecting it. Next to that is a star-shaped outline that turns yellow when clicked, to mark the email as important. Keep clicking the star and it cycles through a variety of colours, ticks and symbols. If you don't see this, click the top-right cog icon and select Settings. On the page that loads, under



Organise your emails using stars by enabling the feature in Gmail's settings

the General tab, scroll down to the Stars section. Next to Presets, click 'all stars', then click Save at the bottom.

You can use these stars and symbols to group together specific types of email, and make them searchable. Let's say you add an orange star to emails from family members, you can then search for them by typing `has:orange-star` in Gmail's search box. If you add the green tick to a particular group of emails, search for `has:green-check`. To show all emails with the yellow exclamation symbol, search for `has:yellow-bang`.

If you're not sure which search terms to use, hover your mouse over a symbol in the Stars section of Settings, General to see its name.

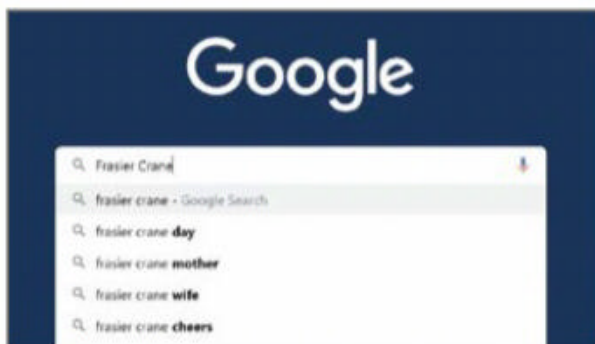
Erika Carter, via email

BROWSERS

Add a real search bar to Chrome's New Tab page

When you open a new tab in Chrome, a search bar appears in the centre of the page. However, as soon as you start typing in it, you are redirected to the address bar at the top. This always annoys me, so I've changed it into a properly functioning search bar by going to `chrome://flags/#ntp-realbox` and switching it to Enabled. This, in Google's own words, changes the search bar from a "fakebox" to a "realbox". Restart your browser and you're all set.

Marie Donovan, via email



Transform your Chrome "fakebox" into a "realbox"

BROWSERS

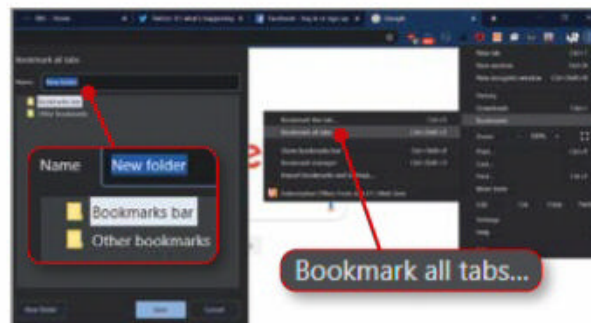
Bookmark open tabs in Chrome

I love that I can set tabs to automatically open when I launch Chrome, but this can sometimes make the browser sluggish.

To get around this problem, I save all my current tabs in a bookmarks folder, so they can be launched in my own time.

Open all the tabs you want to save, click the three-dot menu button and hover over Bookmarks, then select 'Bookmark all tabs'. Name your tab collection and save it. You can then retrieve these tabs by clicking the folder under the address bar or by revisiting Bookmarks in the browser settings.

Jon J McReady, via email



Chrome lets you save your open tabs to come back to later

GENERAL PC

Rotate the screen

I've found an interesting Windows feature but it may only work depending on the type of graphics card you have installed. Right-click an empty part of the desktop and select Graphics Options, Hotkeys, then Enable. Now hold down Ctrl+Alt+D with one hand (it's a bit tricky) and use the other hand to press the up, down, left or right arrows. The screen display will, in response, flip upside down, and to the left or right. Ctrl+Alt+D+Up puts it back the

right way up again.

I think this trick is for setting up a monitor or TV in portrait mode rather than landscape, or maybe it's for pranking people at work so when they come back from a break, they find their screen is upside down!

Luke Parkinson, via email

BROWSERS

Send a web page to another device

I've found a new feature in Chrome. Go to any website and click in the address box. At the right-hand side, you'll see a small icon that looks like a laptop and phone. Click it to see a list of your other devices



Send a web page to another device

that have Chrome installed. Select one and the address of the website you're on is sent to that device as a notification. You can then click or tap it to open the website in a new Chrome tab.

If you're using Chrome on an Android phone, tap the three-dot menu and select Share. Tap 'Send to your devices' to see a list of computers and devices, then select one to send the web page to it.

Oliver Rooke, via email

BLUNDER OF THE FORTNIGHT

WINDOWS

Switch back to Windows 7

I made the leap and decided to upgrade from Windows 7 to Windows 10. Everything went smoothly at first but, for some reason, Windows 10 didn't load properly and just displayed a white screen. After spending some time trying to resolve the problem, which included using a memory stick with the upgrade on it, I still had no joy.

Despite the partial upgrade, I managed to log in via Windows Safe Mode. After hunting through the Advanced settings and accessing the System Reset, I noticed an offer at the bottom of the box to revert back to Windows 7. This option is only available for 10 days after upgrading to Windows 10.



You can roll back a Windows 7 to 10 upgrade, if things go horribly wrong

My laptop has now reverted to the old OS, although there is some small text saying that it is not genuine Windows 7. Still, at least I have my laptop back and can use it.

Peter Morffew, via email

Have you managed to fix a PC-related disaster?

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



Star Email

Technology should carry an expiry date

As Windows 7 is apparently no longer safe to use, and Microsoft is urging us all to switch to Windows 10, I wonder how long it will be before we're next warned about a looming expiry date that we weren't previously aware of. Perhaps in 2023, Microsoft will have changed its mind about Windows 10 being the "last version of Windows", and we'll be told that we need to upgrade to Windows 11 or risk infecting our PCs with malware and leaving them open to hackers.

When I buy food from the supermarket, I'm always careful not to purchase items that are due to go out of date the next day and always



check the 'Best before' and 'Use by' information. This is especially true with perishables such as milk, fish and eggs, which can quickly turn nasty after their expiration dates and make you quite ill if you consume them without checking.

Perhaps technology companies should also start being more transparent about

when their products are due to expire, so that we don't waste our time and money on things that aren't going to last. Windows 7 PCs were still on sale five years ago, so people who bought one then must be miffed that they're now being told to ditch them.

Likewise, I've yet to own an Android phone or tablet that didn't give up the ghost after two years (conveniently, once the warranty had run out), yet I don't remember seeing any warnings about their limited life. If I'm paying a lot of money for technology, I expect it to have a decent innings, but it's too much to expect these companies to be honest with us.

George Shepard, via email

Back Issues disc winner



Upgrading Windows was a win-win situation

In Issue 491 (bit.ly/webuser491), you published an article explaining how to upgrade Windows 7 (or Windows 8) to Windows 10, despite Microsoft 'pulling' this free update some time ago. With the deadline of 14 January fast approaching, when support for Windows 7 was due to cease, there suddenly became an urgent need for me to upgrade.

Having to upgrade two of the Windows 7 laptops in my family, I dunked both feet into the water, followed your advice and successfully upgraded one laptop to Windows 10 Pro and the other to Windows 10 Home. Your article potentially saved me several hundreds of pounds – so, many thanks. Incidentally, activating the update to Windows 10 using my current Windows 7 licences was done automatically.

Web User has lots of useful tips, tricks and up-to-date news and information. I have been contemplating buying a subscription for many months now, to save more money compared to the

newsstand price. So with such a windfall saving on upgrading my laptops to Windows 10, I have taken the plunge and signed up to a *Web User* subscription. A win-win-Windows situation.

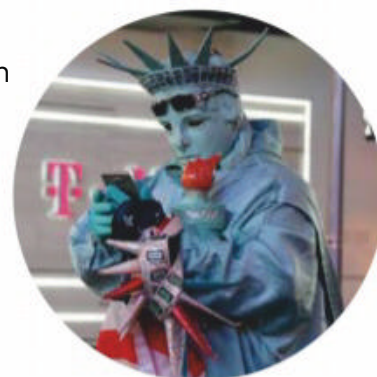
Neville Haneef, via email

Confused by mobile calls in the US

I regularly visit the US and can never seem to get a clear answer about using my iPhone there. Many years ago, I would buy dual-band mobile phones and simply switch bands upon arrival, but this

is now out of date.

My main problem is dialling from my iPhone to my sister's iPhone when she is also in the US. In the past, it appeared easiest to actually purchase two cheap mobiles while in the US and two pay-as-you-go SIMs, one for calling inside the country and the other for calling the UK. However, this was very time-consuming



Credit: Viktor Voroshilov / Shutterstock.com



Quiz Answers: Issue 493

- The Four Seasons**
- Water Music**
- A Night on the Bare Mountain**
- The Magic Flute**
- Carmen Suite**
- Moonlight Sonata**

WINNER!

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



WIKIPEDIA ARTICLE

TripAdvisor



and required several trips to the shops and long telephone calls. Additionally, I'd have to buy and set up new SIMs on each trip because they expired unless topped up regularly.

I have a tariff on my iPhone that 'rolls over' and I almost never use my whole data allowance. I know that prior to going away I could get some extra data, but I'm not sure if that would cover me for expensive calls in the US.

I would like to suggest an article explaining how to use mobile phones outside the UK. Maybe there are other readers out there who would benefit, too, or who could offer some advice?

Patricia Christmas, via email

Problem with link for Dr WiFi app

I was keen to try the Dr WiFi app, as featured in your workshop on page 56 of Issue 492, but the Bitly link was not recognised and led to a Google Play error message saying: "We're sorry, the requested URL was not found on this server".

Searching the Play store for 'dr wifi' did not find any app with the logo you show in the magazine, and the screenshots for the app at the top of the Play Store list did not look like the screenshots shown in your article.

Tony Whitmarsh, via email

Web User says: Unfortunately, it appears that Trend Micro's Dr WiFi app was removed from the Google Play store after we went to press with the issue, hence the 'not found' error when you used the Bitly link provided in the

magazine. As you discovered, the other Dr WiFi app in the store is a different app from another developer.

We're not sure why the app was removed, but it can still be 'sideloaded'

to your Android phone if you download the APK file from Softpedia at bit.ly/drwifi494. To allow this, you'll first need to go to Settings, 'Apps & notifications', Advanced, 'Special app access' and choose 'Install unknown apps'. Tap your default browser and switch on 'Allow from this source'. Please accept our apologies for the inconvenience caused.



What you say...

ARE YOU STILL RUNNING WINDOWS 7 AFTER MICROSOFT ENDED SUPPORT?

I'm still running it fine on my two PCs. I'll explore Windows 10 if I buy a new PC but the hassle of changing now is just too much bother.

Iain Kenworthy-Neale

No, I move with the times. When a new operating system is released, I tend to upgrade, because it's more secure and stable.

Brian Brown

I refuse to be panicked into upgrading to Windows 10. My antivirus software and browser are up to date, and I'm careful about what I download.

Colin Broughton

I have one laptop running Windows 7 and another running Windows 10. I prefer 7, but I am old and more used to it than 10.

Kathy Mims

SHOULD TWITTER ALLOW USERS TO EDIT THEIR TWEETS (bit.ly/tweets494)?

Yes, but with a footnote under the tweet to show that it's been edited.

Ady Colclough @AdyC76

Absolutely, it's a right pain having to delete and redo a tweet to correct a typo. People have been requesting the ability to edit tweets for ages.

Russell Cox @RussWWFC

I'd rather see bots banned and Twitter users having to use their real names!

Roger Whitcomb @milairpix

Definitely – for spelling errors, at least.

Henley on Thames Blogger @on_blogger

Yes. Maybe a function to delay sending the tweet for 20 seconds – long enough to spot a typo or think again about saying something?

Caroline Chapman @cantstopthesgnl

Yes, because autocorrect often changes an alien word to something random. You should have 30 seconds to edit your tweet after posting.

Goldmaster @imthegoldmaster

WILL YOU SUBSCRIBE TO DISNEY+ WHEN IT LAUNCHES NEXT MONTH (bit.ly/disney494)?

No, I have to draw the line somewhere as the cost of all these services soon becomes prohibitive. With more streaming companies popping up all the time, I fully expect pirated content to make a resurgence because people won't pay for so many services when they probably only want one or two programmes from many of them.

Rich Grove

No! There are too many streaming services jumping on the bandwagon now, with BritBox being another. There should be ad-supported versions like Spotify for those who only use the services occasionally.

David P-Smith @david_p_s

It's getting awkward with so many services to subscribe to. The thing is that I do want to watch all the Marvel shows when they come out. So I will probably subscribe for a while and then cancel once I've watched them.

Sam Higgins

No, because I'm already struggling to find the time to watch Netflix, BBC iPlayer and Amazon Prime Video.

Chris Armstrong

No. There are too many channels to watch on Freeview already without paying for more.

John Hewett

Keeping the kids quiet is worth the subscription fee.

Dan Hannon @Daniel_Hannon

! Page 404



Barry Collins is tired of waking up to rows over unplugged devices

Charge of the fight brigade

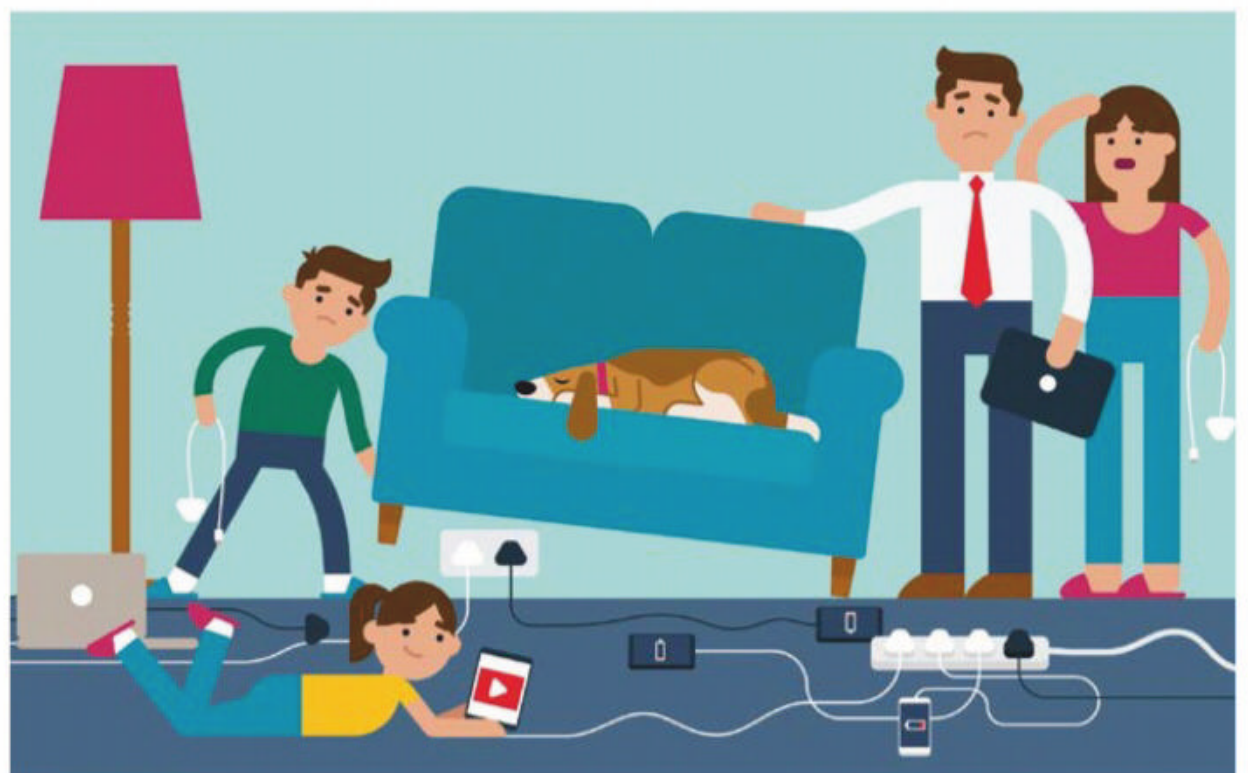
The peace in our house is broken at around 7am every morning. That's the time someone gets up to discover the phone/tablet/headphones/Kindle/other battery-powered device they left to charge overnight was gazumped by somebody else. And hell hath no fury like a teenager forced to go to school with a flat iPhone.

The lack of power sockets in our house has reached crisis level. I keep expecting Bob Geldof to turn up and launch a charity single, because it's an absolute power famine. We've got so many multi-plug adapters, I'm surprised we've not been grassed up to the National Grid, yet there's still a bunfight for spare sockets every evening.

The so-called smart home is to blame. Not only do we have to accommodate the TV, Sky box, fish tank and all the regular stuff that's been plugged in for the past God-knows-how-many-years, but we've now got smartphones, smart speakers, smart lights, smart thermostats, smart meters and a dozen other devices that demand to be chained to the mains 24 hours a day. I've

lost count of the amount of times I've come home to find the heating off or the lights not working because the youngest "needed" to charge her tablet. I now have a recurring nightmare of being left to die because one of my sprogs unplugged my life-support machine so they could stream *Strictly* on their smartphone.

The electronics firms got wise to this phenomenon a while back. If you go into stores such as Wickes or B&Q, you'll be



hard pressed to buy a three-point plug socket that doesn't come with at least a couple of accompanying USB ports. But even those are under threat now, as those oblong-shaped USB-A ports are gradually being phased out for the slimline USB-C. Sure, you can still buy converter cables, but it's going to get awkward before long.

What the world needs now – more than a new nuclear deal with Iran or a massive sprinkler system in Australia – is a

universal standard for power sockets (in fact, the EU is now discussing one: see news, page 9). Make it USB-C if you like, but make a firm commitment that for the next 20 or 30 years, every low-powered smart device will adopt the same charging standard so that we can buy wall sockets, adapters and cables, safe in the knowledge that

they're not going to be obsolete before the milk in the fridge goes off.

This, of course, will require co-operation between all the big electronics firms. Apple has famously snubbed any attempt to standardise chargers in the past, preferring to go its own way with a host of proprietary ports and sockets that have shown all the longevity of an *X-Factor* winner. But even stubborn old, can-we-charge-you-thirty-quid-for-a-new-iPhone-charger Apple has settled on USB-C for its last couple of generations of devices. Let's nail them down now, before they change their mind and invent the Unicorn Cable.

What's that, you ask? Whatever happened to wireless charging? Well, yes. That would be nice. But until they find a way to do it without boiling the cat, we're going to need cables. Is it too much to ask for the electronics firms to work together on one standard? If it saves me from another 7am teenage meltdown, I'll lock them in the room together myself.

“ I have a recurring nightmare of being left to die because one of my sprogs unplugged my life-support to stream *Strictly* on their smartphone ”

WebUser

**SUBSCRIPTION
OFFER**
FOR MORE INFO SEE PAGE 62

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 February (8pm)***, you'll receive it through your letterbox before it's available in the shops!

What's inside the next issue:

COVER FEATURE: DON'T MUCK UP YOUR BACKUP

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AND...

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