WebUser
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£2.30

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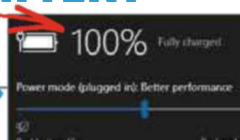

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Homepage

Why Chrome has lost its shine

It's always difficult to give up something you've become accustomed to over the years, whether it's eating red meat, watching *EastEnders* or wearing a spotted cravat, so your first reaction to this issue's cover may be "why should I?". After all, Chrome is a perfectly good browser, with thousands of useful extensions and smart syncing abilities, so why give it up for a new browser you're less familiar with?

Well, as we explain in our feature on page 40, Chrome is no longer the trailblazing browser that arrived to save the web from Internet Explorer in 2008, but a different beast altogether – and one that shows Google's increasing disdain for its users and third-party developers. We don't expect you to uninstall the browser forthwith, and we won't be scrapping the Chrome page of our Best New Browser Tools section, but we hope you'll evaluate our case against it, and consider our alternatives. And if you already ditched Chrome a while ago, then you're smarter than we are!

Robert Irvine, Editor
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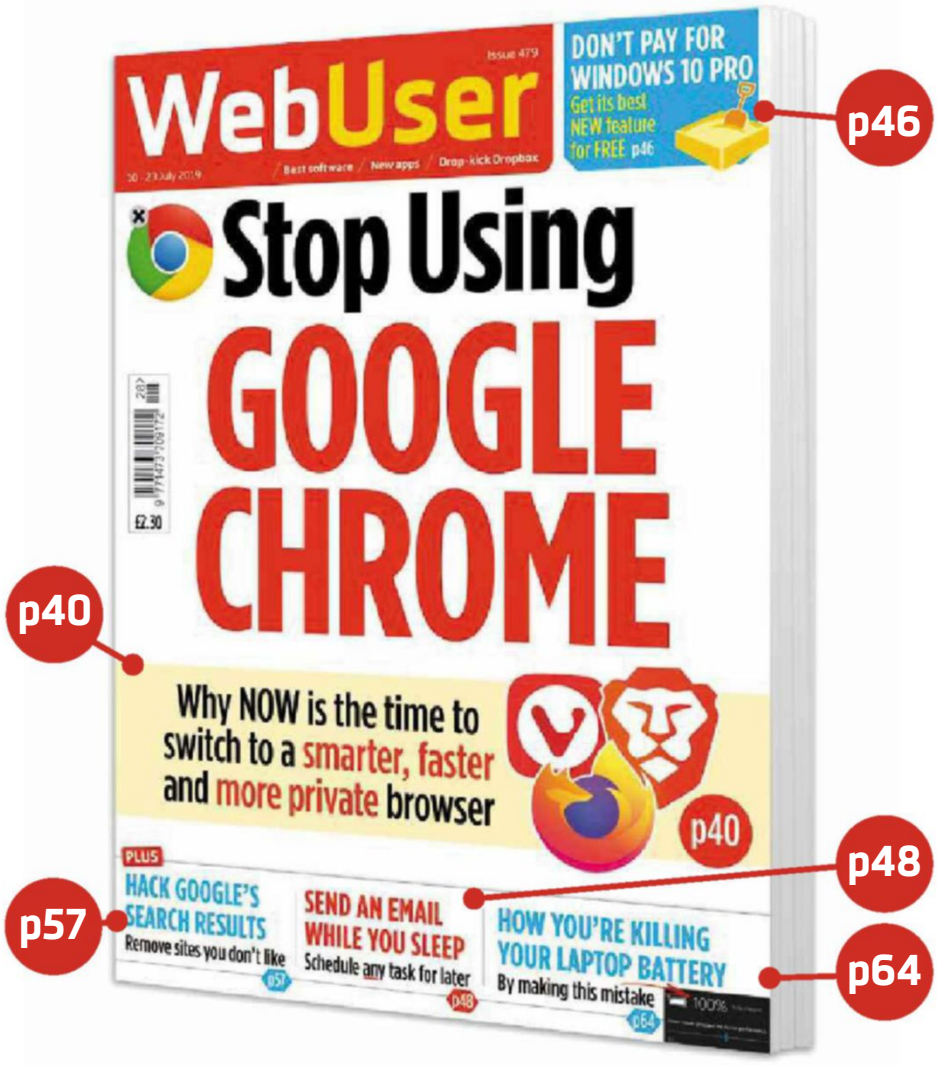
#webuser



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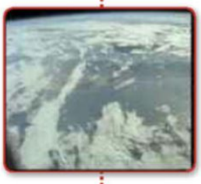

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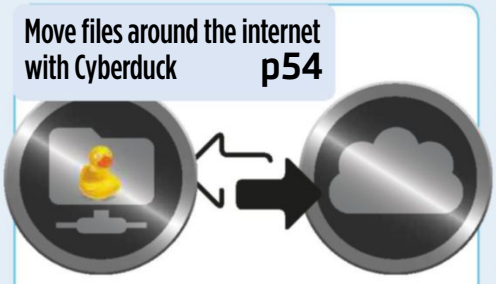

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What's New Online

Create stunningly realistic landscapes

Can't draw for toffee? GauGAN, a new artistic tool from Nvidia, can convert even the most rudimentary drawing into a stunning scenic masterpiece. Rather than selecting colours to paint with, you choose items from a list of environmental elements such as trees, rivers, rocks, plants, snow and sand. You then use the drawing tools to scribble on the left-hand canvas before pressing a button to see a realistic landscape appear before your eyes.

The results are impressive, given that you're armed with only a paintbrush and a filler tool. GauGAN lets you alter the brush size and uses two clever algorithms: one to make the conversion and the other to check how realistic it is (a system called a Generative Adversarial Network). GauGAN's neural network fills in details based on what it has learned from real images, to produce unique landscapes every time.

You can also upload segmentation maps, landscape images, style filters and paintings, but nothing beats the fun of playing with the tool manually.

Once you've finished creating your landscape, you can download both your original drawing and the rendered result. You can also click the various images and paintings below to see different AI-driven interpretations of your picture.

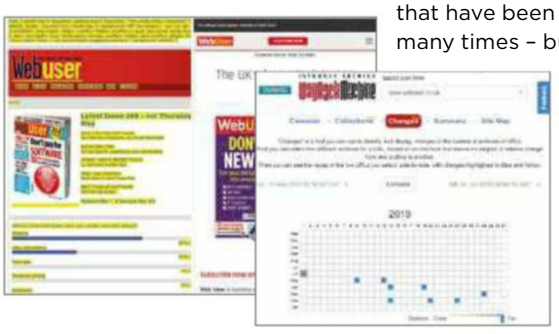
bit.ly/nvidia479

Compare how websites have changed over time

web.archive.org

The Internet Archive's Wayback Machine, which lets you see how websites looked in the past, has long been one of our favourite online tools, and now a new feature called Changes makes it even more interesting. Enter a URL as usual, then click Changes to view all available 'captures' of that site over the years on one page. Select two of these snapshots, then click Compare and the site shows you a side-by-side comparison of the contents and appearance of the site on those dates, with changes highlighted in yellow (indicating deletions) and blue (additions).

The Changes feature is currently in beta, and can be rather slow – especially when you're searching for sites that have been captured many times – but it's a fascinating idea, and really rams home how much and how quickly the web has evolved over the years.



See the sun rise over Stonehenge

www.stonehengeskyscape.co.uk

Stonehenge was built to align with the sun, and it attracts thousands of visitors each year. If you can't make the pilgrimage in person, this online tool lets you enjoy a live feed of the skies taken from nearby, so you can experience sunrise, sunset and the passage of the moon and stars from a unique perspective within the iconic stone circle.

The visuals are from various sources, but the sky's appearance is accurate to within five minutes. Select the coloured squares at the top of the screen to see the monument at any point over 24 hours. After dark, the image switches to a computer-generated depiction that plots the location of the stars and five visible planets.

Tour and skyscape buttons show the names of the stones and the solar range, and you can also see the sunrise and sunset times. English Heritage hopes the feed will make visitors feel closer to Neolithic people and their spiritual life.

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

Get guided tours of famous artworks

bit.ly/artworks479

Former Pulp frontman Jarvis Cocker, American singer-songwriter Maggie Rogers and Canadian musician Feist explore the artworks of Van Gogh, Monet and Bruegel in a series of videos from Google Arts & Culture called Art Zoom. The paintings have been captured with Art Camera, which lets you view them in ultra-high resolution.

Send photos via Google Duo

duo.google.com

Update Google Duo to version 56 on Android and you can use the video-calling app to send photos to your contacts. Once you've installed the update, open the Photos or Files app, choose an image and tap Share before selecting Duo. From there, you're presented with a selection of drawing and text tools that include different pens and colours. Once you've made your edits (or just skipped through), you can select up to five contacts and send them the image. Recipients will see a notification to view the picture, along with options to Call Now or Reply.

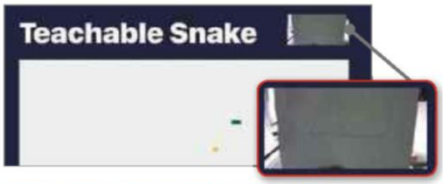
Play Snake on a piece of paper

teachable-snake.netlify.com

This new version of the classic Snake game made popular on Nokia phones really is something to call home about. Rather than bashing buttons to move the snake around, the game lets you draw a black arrow on a piece of white paper and use that as a controller.

Position the arrow in front of your webcam, and the game works out which way it's pointing and sends the snake that way. The aim is to collect yellow blocks to expand the length of the snake, but be warned: it's not easy.

Creator Vince MingPu Shao trained the game's neural network using Google's Teachable Machine 2 and React.js. You can find out more about it at Vince's website (bit.ly/vince479).



Learn more about yoga

bit.ly/yoga479

As well as a brief introduction to yoga, this packed cultural collection from Google Arts & Culture shows the discipline's five basic principles while taking you through 12 basic postures and exploring its different forms. Watch videos that delve into yoga's history, and discover what the practice can do for you before meeting gurus and seeing yoginis in ancient artworks.

NEW VOICE COMMANDS

Get instant translations

If you want to translate a word or phrase, say "Hey Google, be my [language] interpreter", and the Assistant will ask what you want to translate. It works with nearly 30 languages.

Search apps via voice

The iOS 13 beta is giving users a taste of what is to come with Siri on iPhones and iPads. The app will have a new microphone icon to the right of the search bar, allowing queries to be made by voice.

Listen to classic arcade sounds

Say, "Alexa, open Arcade Party," and treat your ears to the sounds of coin-operated gaming machines from 1981, 1983, 1986 and 1992.

View Roman inscriptions

bit.ly/roman479

There are thousands of Roman inscriptions across the UK, and this map lets you find many of them. Click markers to see drawings of each one, along with details of where and when they were found.

Check house market fluidity

bit.ly/house479

Wondering how long houses take to sell in your area? Enter a postcode into this tool and it uses data from Rightmove and the Land Registry to give you an estimate. It also shows the difference between asking prices and the eventual sale price.

Create a bee friendly garden

bit.ly/beekind479

The ecological importance of bees is well known, but populations have slumped. This tool lets you look up the flowers in your garden to see how bee-friendly your patch is, and discover which plants can help it become better for pollinators.

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

Need to Know

You can now switch mobile provider by text message

What happened?

Switching mobile providers is notoriously difficult, especially if you want to keep your phone number rather than be given a new one. Ofcom has introduced a new system that lets mobile users switch via a text message.

Before now there were two ways to switch. First, you simply cancelled your existing service and signed up for a new contract, but that meant losing your phone number. To address that, Ofcom came up with the Porting Authorisation Code (PAC) system. If you wanted to switch, you needed to get the PAC from your current provider and give it to your new one. Between them, they would coordinate shifting your phone number.

While the PAC system was an improvement on losing your phone number just to get a new contract, Ofcom noted that it could lead to delays, and some people ended up paying for two contracts at the same time for a month. Mobile operators didn't make it easy, either. Under the PAC system, you needed to call your existing provider to tell them you were leaving, which some companies used as an opportunity to hard-sell you a better deal to persuade you to stay. That made the process onerous and confusing.

Under the new switching process, mobile users can request their PAC simply by texting a designated number set up by Ofcom. The communications regulator's own research suggests that a third of people find it difficult to cancel their existing mobile service; 45% of those who want to switch but haven't said that the process takes too long, while 39% said that contacting multiple phone providers is too much hassle.

How will it affect you?

The Text-to-Switch system is now live for customers of Vodafone, O2, Three and EE. Smaller mobile providers are not yet required to take part in the system, but may well do so in the future.

To use the system, text the word PAC to 65075. Your provider will reply with the PAC code and any contract information, such as early termination charges, or your pay-as-you-go balance. The PAC is valid for 30 days.

Once you have your PAC, you can pass it on to your new provider. The switch will happen within one working day so customers won't have to pay for two contracts at the same time. If you have a family package with more than one number linked to a contract, you'll have to request your PAC through your online account with your provider – you should still receive it within a minute. If you're unhappy with your existing service and looking for a new provider, you can request your PAC before you start shopping around, so you have it to hand and can switch immediately, even in a high-street phone store.

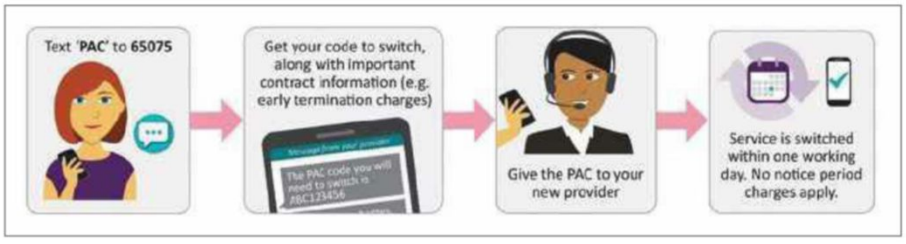
Using the PAC text-to-switch service means you get to keep your existing phone number. If you'd rather have a new phone number instead, you need a service termination authorisation code (STAC), which you can request by texting STAC to 75075.

Ofcom has also set up an information service, so you can find out contract details and potential costs of leaving your provider without having to call them and subject yourself to a sales pitch. For that, text INFO to 85075.

What do we think?

Well done, Ofcom. This clever, consumer-friendly system will save us a lot of frustration, cost and time. Calling a mobile network to get a PAC code or cancel a contract is all but guaranteed to lead to an irritating attempt to keep your custom by offering a better deal. Providers should try offering those before you're fed up, rather than when you've already put in the effort to find a better contract.

It's often worth switching, too. New contracts almost always offer the best deals, so shopping around when your contract comes up is a smart move. This service will make that easier, so more of us can take advantage of switching for a better service or cheaper offer. Mobile operators will have to keep customers by delivering a good service at a fair price, rather than placing hurdles in their path to stop them leaving.



Credit: Ofcom

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

Google Maps tells you how busy your bus is

What happened?

Google has added a new feature to its Maps app that predicts how busy your bus or train carriage will be. The data isn't live, but is based on information the company collected previously by asking bus passengers and train commuters if their ride was crowded and whether any seats were available. The aim is to give public transport users more information about what to expect on their journey.

Alongside the "crowdedness" predictions, Google is rolling out live transit updates to cities that don't already share such information with commuters, letting them know when their bus is running late.

Credit: Elena Rostunova / Shutterstock.com

How will it affect you?

The crowdedness predictions will be available in both the Apple iOS and Android versions of Google Maps, for 200 locations around the world. In the UK, 18 cities and towns will support the feature to start with: Birmingham, Brighton, Bristol, Cambridge, Cardiff, Coventry, Crawley, Edinburgh, Glasgow, Leeds, Liverpool, London, Newcastle, Nottingham, Oxford, Reading, Sheffield and Southampton. The crowdedness predictions will show up in Google Maps when you use the app to plan a journey on public transport.

What do we think?

If you have a Google product on your phone and haven't fiddled with the location-based services section of your privacy settings, there's a good chance that the tech giant is tracking your whereabouts. Most of the time, Google does this not to benefit users but to collect data for advertising purposes. In this case, however, the surveillance could actually prove useful and help us avoid bus and train crushes.

That said, most public transport users are well aware of when their journeys will be crowded – it's called rush hour for a reason, after all. This information would be more useful if it were live, and could tell us if a particular train was unexpectedly busy or if there was a seat on the next bus, making it worth the extra wait.

USB-C bug could slow down Windows 10

What happened?

Microsoft has confirmed its discovery of yet another bug in Windows 10. This one involves devices that connect to PCs and laptops, such as chargers and docks, through the USB-C port. The bug appeared in the Windows 10 October 2018 update, so anyone who still runs that version of the operating system is affected. It's a fairly niche bug, though: you'll only notice it if you connect a device to a USB-C port during shutdown or in sleep mode. If you do, Windows 10 will take longer to power off, delaying shutdown by up to a minute. Once the system wakes up, the connected device will still work as it should.

How will it affect you?

This flaw only affects Windows 10 PCs that use version 1809, the update released last October. If you've updated to the more recent version, 1903, it won't affect you, because Microsoft fixed the flaw – adding another reason to update your operating system if you haven't already. You can also avoid the bug easily by connecting any USB-C devices before you shut down. Even if you forget, the consequences aren't serious, because the only real issue is a delay of up to a minute. This flaw won't damage your PC, Microsoft says.

What do we think?

This is a small flaw with limited impact, but it's still annoying. Microsoft's Windows updates have been buggy of late, and this latest issue only adds to the pile of problems users face. Worse bugs than this have been discovered in the October update, but the fact that Microsoft is still spotting them will be frustrating to those who use the software. Updating to the latest version will help solve the problem, and the latest update issued in May appears to be less buggy than last year's version, so it's worth taking the time to download and install it. We only wish Microsoft took more time to hunt for bugs in the first place.

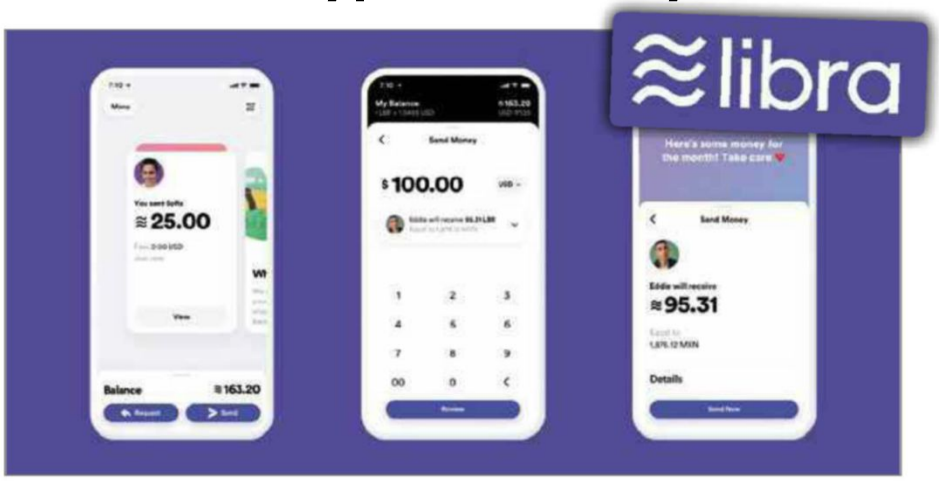
Facebook launches Libra cryptocurrency

What happened?

As we speculated in our What's the Rumour section in Issue 477, Facebook is unveiling its own cryptocurrency, Libra (libra.org). To be more precise, the blockchain-based currency is controlled by Facebook and other founding members of the Libra Association, which means the social network has a single vote on a board that also includes the likes of Visa and Uber.

According to Facebook's white paper (bit.ly/white479), the goal is to "enable a simple global currency and financial infrastructure that empowers billions of people". Globally, 31% of people have no access to banking facilities. Libra's backers are hoping to change that by offering quick and virtually free money transfers between friends, family, businesses and anyone else.

Don't be fooled into thinking that Libra is just another Bitcoin, however. While popular cryptocurrencies including Bitcoin are decentralised and free from interference, Facebook's crypto-experiment runs on a private ledger. This means members of the Libra Association are to Libra what the Bank of England is to the pound sterling: a central bank. At best, this may undermine the core appeal of the cryptocurrency for many. At worst, critics fear it could turn Facebook and its cohorts into an online nation state.



Bitcoin's own price shot up in response to the announcement. Investors clearly believe that Facebook's move could legitimise the concept of cryptocurrency, helping it to achieve mainstream acceptance.

How will it affect you?

Despite the advanced technology behind Libra, the user experience is expected to be similar to that of PayPal. Once the Facebook currency rolls out in June 2020, however, you can expect microtransactions to hit the site, too.

Aware of its reputation for misusing data, Facebook intends to keep Libra separate from its social-media operation. By using a subsidiary company called Calibra, the company will ensure transactions are locked away from social media activity, protecting your privacy and preventing Facebook using data on your spending habits to target you with adverts.

What do we think?

We've said it before, and we'll say it again: anything that stops Facebook making money from our data is fine by us. And if it helps raise the profile of cryptocurrencies, that's no bad thing either. However, we're not sure that the Libra Association's chosen route – turning itself into a central bank – is the right move, and may deter those crucial early adopters who are looking for a true Bitcoin alternative. That could cost Facebook – at least in the short term.

FIRST LOOK

Kano PC

bit.ly/kano479

Kano has earned a solid reputation in recent years for making products that teach kids how to build computers and write code. Now the company is moving away from its Linux-based Raspberry Pi devices to launch a laptop that runs Windows 10 S.

The chunky computer features a 11.6in touchscreen tablet and fold-out keyboard that will be familiar to anyone who's ever used an iPad keyboard case or two-in-one device, such as the Surface Go. The bold orange keys give it a child-friendly feel that's also attractive.

The device uses custom parts that – in some cases, at least – can be replaced easily if needed, which is sensible in a device for children. It's

certainly no powerhouse, though: as an entry-level DIY kit, the Kano PC runs on a quad-core Intel Atom x5-Z8350 processor, with 4GB of RAM. Most of its 64GB of internal storage will be taken up by the operating system, but this can be expanded by adding a microSD card.

The Kano PC is equipped with an HDMI socket, USB 2 and USB 3 ports, and a 3.5mm headphone jack (which isn't something you can take for granted these days).

The kit comes with everything you need to build your own Kano PC, including a Lego-style instruction book to help you put it together. There's even a magnifying glass, so kids can zero in on the finer parts of the machine.

Explaining the shift from its long-standing Kano OS to Windows, Kano's CEO and co-founder Alex Klein said, "People want a real computer. They want to have a device that can run Netflix, a device that can run Fortnite, a device that is comparable to the higher-priced ones, even if they are shopping at below 300 dollars".

The Kano PC goes on sale in October – just in time for Christmas – and is priced at £299.99.

WHAT'S THE RUMOUR

Will Microsoft's new tablet run Android apps?

There's still no sign of Microsoft's rumoured dual-screen device, but reports suggest that not only is it happening, but it may also run Android apps.

In an interview with Forbes, Jeff Lin, Associate Director at IHS Markit, claimed that the phantom Surface will feature "two 9in screens with a 4:3 aspect ratio" (bit.ly/surface479). According to his sources further along the supply chain, the foldable tablet runs a new version of Windows 10 known as Windows Core OS (WCOS), is built around an Intel Lakefield chip and has an always-on connection.

Most surprising, however, is his claim that it will be able to run "Android apps and iCloud service in Windows 10". It's thought that the new operating system will make this possible either by streaming the apps through the cloud or emulating Android on the device – like a built-in version of the popular emulation software BlueStacks (www.bluestacks.com).

If the rumours are true, it may seem odd that the company is embracing the platform of its most bitter rival, Google. However, under Satya Nadella's steady hand, Microsoft has already shown itself willing to embrace other platforms, supporting Linux and bringing its own suite of office apps to Android and iOS.

LIKELIHOOD RATING

✓✓✓✓✓

Given Microsoft's trajectory over the past few years, support for Android apps seems highly likely. Windows Mobile and its successor Windows Phone suffered from intense competition both from Android and iOS – and a core part of that failure was its desolate ecosystem. Its app store was a wasteland, with few developers interested in creating apps for the distant third-place platform.

Microsoft won't want to make the same mistake twice. Adding the option to run Android apps on a folding Surface device is a unique selling-point that could attract a lot of users.

What's new on Kickstarter

Our favourite new project on the crowdfunding site

Lumi

bit.ly/lumi479 | From £147

"I wish I'd learnt to play the piano," is a familiar refrain. Sadly, time, money and the considerable effort involved are all barriers – or they were until Lumi came along. This clever portable gadget helps you learn how to play, thanks to its illuminated, colour-coded keyboard and accompanying app. It's similar to popular rhythm games such as Guitar Hero, where you press colour-coded keys, one note at a time, as they light up on the app. The interactive lessons let you learn at your own pace until you can rival Beethoven. Pledges start at £147 for the base kit.

WEBOMETER

WE LIKE...

Edge adds built-in tracking protection

Microsoft is testing tracking-prevention features for the new Chromium-based version of its Edge browser. The new tools offer three custom levels of protection, and block malicious trackers and some third-party trackers by default.

Raspberry Pi 4 now available to buy

The Raspberry Pi Foundation has launched the fourth version of its miniature budget PC. The Raspberry Pi 4 comes with up to 4GB of RAM, a faster processor, dual-band Wi-Fi and much more. Look out for a full review in our next issue.

WE DON'T LIKE...

Vulnerability found in Microsoft Excel

A security flaw found in Microsoft Excel could allow hackers to launch malware and take over a user's system. The vulnerability affects Power Query, an Excel tool that enables users to integrate spreadsheets with other files.

Alexa verbally abuses Echo user

The owner of an Echo Dot smart speaker claims Alexa started to call him "s***thead" after he cancelled his Prime subscription. Amazon has offered the customer £255 in gift cards and a year of free Prime membership as compensation.

Stay Safe Online

News about the latest threats and advice from security experts

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

Chinese hackers spy on mobile phone users

Security researchers have uncovered a cyberspying campaign dating back to at least 2017, which involved the hacking of 10 mobile phone networks around the world and invisible tracking of their users for months on end.

In the report published by Cybereason (bit.ly/cyber479), researchers said hackers were able to extract all raw data transmitted to and received from a user's phone, allowing them to track a person's location and steal personally identifying information including login credentials, call records, billing information and more. Hackers in China are believed to be behind the years-long cyberattack, having gained entry to the mobile networks by exploiting a flaw in a web server product.

"We've concluded with a high level of certainty that the threat actor is affiliated with China and is likely state sponsored," said Cybereason's report. "This attack has widespread implications, not just for individuals, but also for organisations and countries alike. This is another form of cyber warfare being used to establish a foothold and gather information undercover until they are ready to strike." bit.ly/hackers479

300 million gamers exposed to security flaws

A chain of vulnerabilities has been discovered in a popular PC-gaming platform. Check Point Research and CyberInt uncovered security flaws in Electronic Arts' (EA's) gaming client Origin that could have allowed attackers to compromise a player's session and take over their account completely without having to obtain any login credentials.

Origin is one of the biggest PC-gaming platforms, with blockbuster titles such as FIFA, Madden, Battlefield, The Sims and Star Wars Battlefront on its roster. It has 300 million users worldwide, who could have been affected by the exploits.

Fortunately, the problems have now been patched, and there is no evidence that they were ever exploited by attackers. "EA's Origin platform is hugely popular, and if left unpatched, these flaws would have enabled hackers to hijack and exploit millions of users' accounts," said Check Point Research. "This shows how susceptible online applications are to attacks and breaches. These [gaming] platforms are increasingly being targeted by hackers because of the huge amounts of sensitive customer data they hold". bit.ly/eaorigin479

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT: David Emm, Principal Security Researcher at Kaspersky Lab (www.kaspersky.co.uk)

Q Are crypto-currencies, such as Facebook's new Libra (see news story on page 10) safe to use?
Dave Horgan, Facebook

A Many people are unsure about using cryptocurrencies – if they even know what a cryptocurrency is. In fact, only one in 10 of us fully understands how they work.

Everyone feels comfortable going into any branch of a bank, because we know they are regulated and underwritten. Most of us are happy to use the bank's online facilities, too, but I'd argue that this trust stems from the trust we have in them in the real world. I don't think we have the same level of confidence in online equivalents – whether it's a currency exchange that holds our digital money for us, or our own digital wallet. If cryptocurrencies are ever to rival real-world currencies, we all need to have the same level of trust in them.

> "Only one in 10 of us fully understands how cryptocurrencies work"

Consumers need to understand what they can do to stop cybercriminals stealing their digital assets. Here are some key recommendations on the safe use of cryptocurrencies from Kaspersky:

- Always verify a crypto wallet's address and don't follow links to an online bank or web wallet
- Double-check recipients' addresses, the amount being sent and the associated fee before you send a transaction
- Write down a mnemonic phrase that lets you recover a crypto wallet if you lose your password
- Install high-quality security software such as Kaspersky Internet Security to safeguard the devices you use to access crypto wallets and trade on crypto-exchanges.

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

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Best New Websites

Site of the Fortnight

SPACE

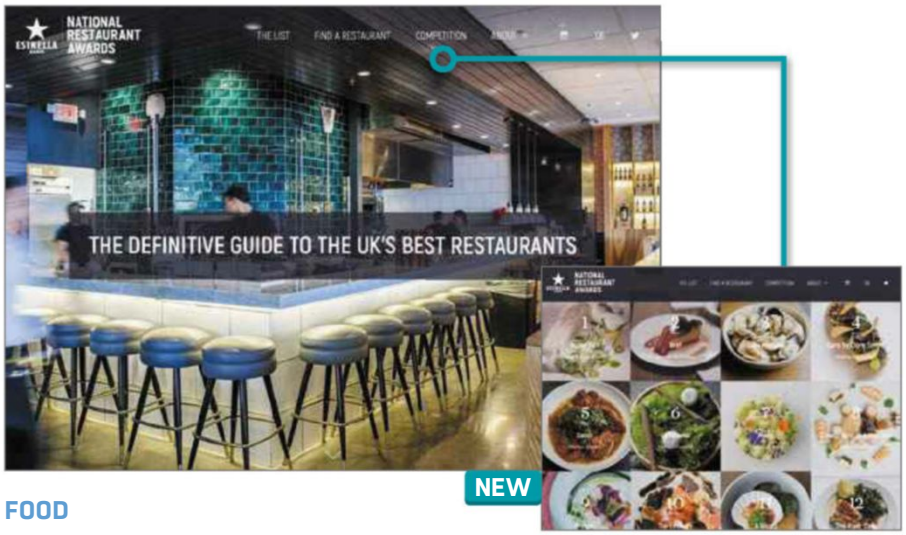
NEW

Apollo 11 Real-Time Mission Experience

apolloinrealtime.org

If landing on the moon was a "giant leap for mankind", what are we to make of this equally stunning feat: a website that combines hundreds of hours of film, 11,000 hours of audio and 2,000 photos from the Apollo 11 mission? Including all the footage from the recent *Apollo 11* documentary, the site lets you follow the mission from 20 hours before launch to splashdown eight days later. As you go, you can play samples and read a transcript, while navigating via an interface that's so packed with buttons you almost feel part of Mission Control.

Our rating ★★★★★



NEW

FOOD

National Restaurant Awards

www.nationalrestaurantawards.co.uk

Looking for a restaurant that's guaranteed to fill your stomach? You'll find plenty of recommendations on this website, but be warned: it may leave a gap in your wallet. The site lists the top 100 eateries across the UK, as voted for by chefs, food writers and restaurateurs. Drawing you in with appetising example dishes, it gives a good flavour of each restaurant while pinpointing its location and allowing you to check availability without leaving the site. You can view each restaurant on a map or filter by Michelin star. There's also a list of special awards highlighting venues and chefs that will surely satisfy the appetite of any dedicated foodie.

Our rating ★★★★☆

NEW

SOCIAL

Suffragette Aberdeen

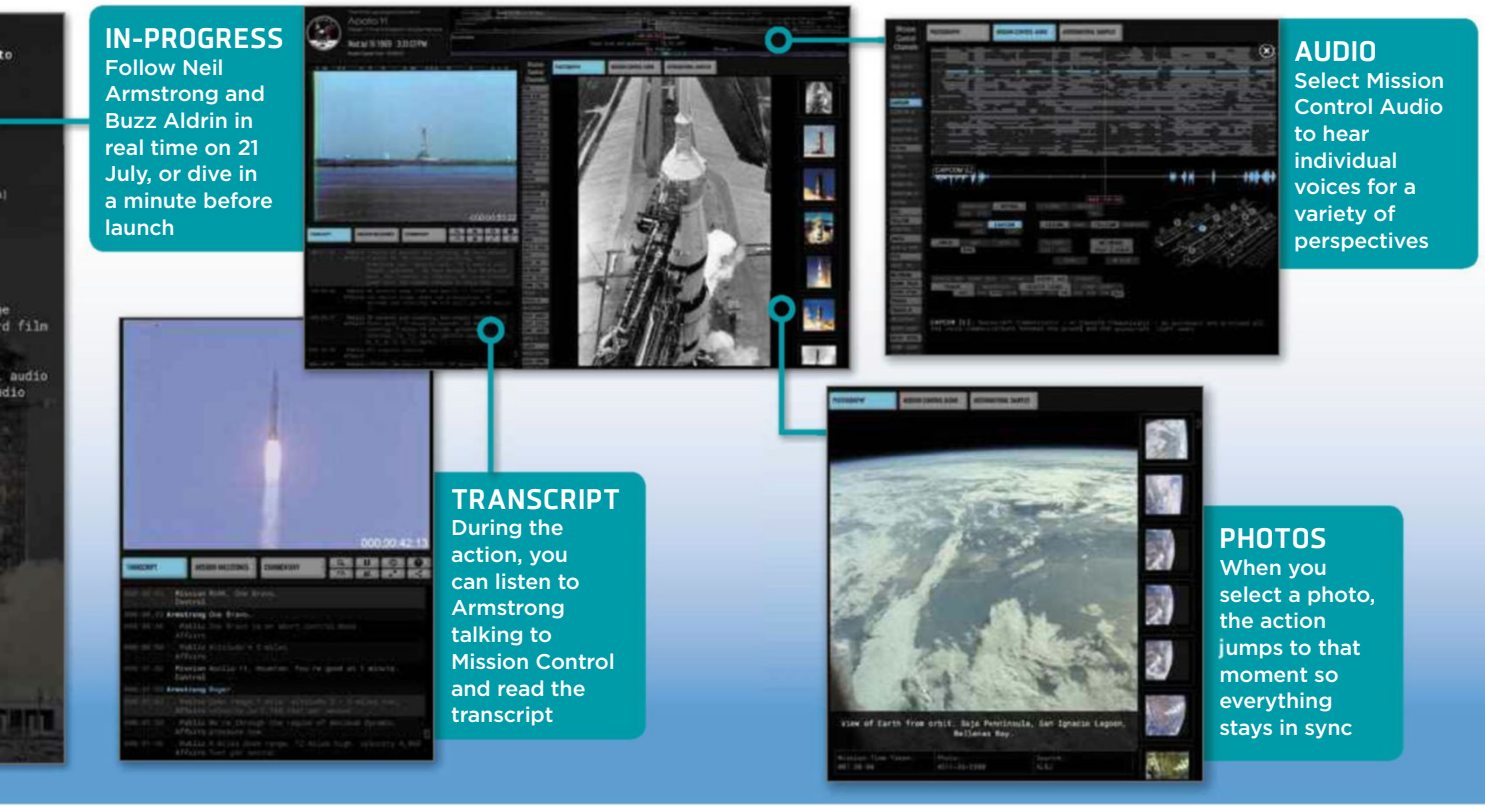
suffrageaberdeen.co.uk

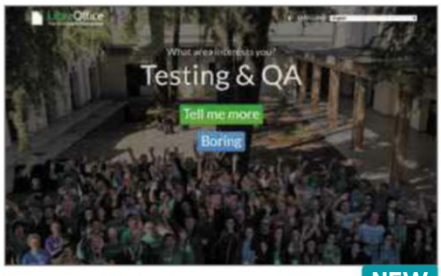
The history of the suffragettes is as important as it is interesting, so this interactive project is very welcome. A map pinpoints places associated with the movement in the north-east of Scotland and, as you click, you get a strong sense of story, especially in entries that contain well-chosen images. We'd like to see more pictures, as well as follow-up links that explain the references, and it would be nice if the project didn't rely so heavily on a fiddly map. Once the accompanying blog gets up and running, however, it's sure to be an invaluable resource.

Our rating ★★★☆☆

Reviews by David Crookes

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





NEW

PRODUCTIVITY

What Can I Do For LibreOffice?

whatcanidoforlibreoffice.org

LibreOffice is one of the most popular free office suites, but it relies on help and goodwill, so the non-profit organisation behind it has set up a website explaining how to get involved. It highlights specific areas of interest, from documentation and marketing to development and testing. You can dismiss each one to see the next or select Tell Me More to narrow down your expertise and view wiki resources to get you started. By drawing attention to the various disciplines, the organisation hopes something will catch your eye. It's certainly very effective.

Our rating ★★★★☆

NEW

VIDEO GAMES

Dr Mario World

drmario-world.com

Creating games for phones and tablets must have been a hard pill for Nintendo to swallow, given its history of making titles exclusively for its own hardware. Its mobile catalogue is about to get even healthier, however, with the launch of Dr Mario World for iOS and Android on 10 July. This site explains how to play the game, and lets you read related tweets, watch a trailer and enjoy regular 'virus videos' – short, fun animations that should make you smile. The colourful site is light on screenshots, and there are no goodies to download, but it includes links to the App Store and Google Play.

Our rating ★★★☆☆

NEW

SPEECH

Stamma

stamma.org

Stamma is an awareness campaign set up by the British Stammering Association to help people who stammer get the support they need. It also aims to give the public a better understanding of the causes of stammering. In some ways, it lacks immediacy: the carousel doesn't really hammer home the issue and the images are rather uninspiring. Delve deeper, though, and this well-designed and easily navigable site contains a wealth of information that tackles the subject from multiple angles while highlighting events and local groups and showcasing online support.

Our rating ★★★★☆

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

BACK ISSUES DISC 2018

NOW AVAILABLE!

Our **2018 Back Issues Disc** containing all 26 issues from last year is now on sale from Amazon

For more information, visit **bit.ly/wudisc18** or search for 'webuser disc' on Amazon

You can still buy our 2017 Back Issues Disc from bit.ly/wudisc17

RELAUNCH

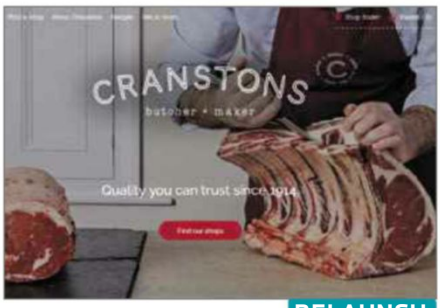
SHOPPING

Go Outdoors

www.gooutdoors.co.uk

It's annoying when you find that items you're buying online are not available for home delivery and have to be collected from a physical shop. This was the case with several items we tried to buy from Go Outdoors – free deliveries, it appears, don't always go where you want them to. If you can weather that storm, however, you'll find that this revamped website is a vast improvement over the old one. It's cleaner, with clearer navigation options, and brings the products to the fore. It also highlights once-peripheral sections: blogs, an outdoor cookbook, camping guides and videos now appear in their own excellent section called Go Explore.

Our rating ★★★★☆



RELAUNCH

FOOD

Cranstons

cranstons.net

Here's a meaty treat to get your teeth into, courtesy of traditional Cumbrian butcher Cranstons. With a new user-friendly design that's just as easy to browse on desktop and mobile, and a revamped online shop with an improved payment system, the site makes it easy to buy gift hampers, meat boxes and individual cuts while discovering where the meat comes from. You can also explore the company's local shops and food halls, and learn about the Cranstons' story, complete with photos that span the ages. Best of all is a selection of appetising recipes. There are six now, but more are promised soon.

Our rating ★★★★☆

NEW

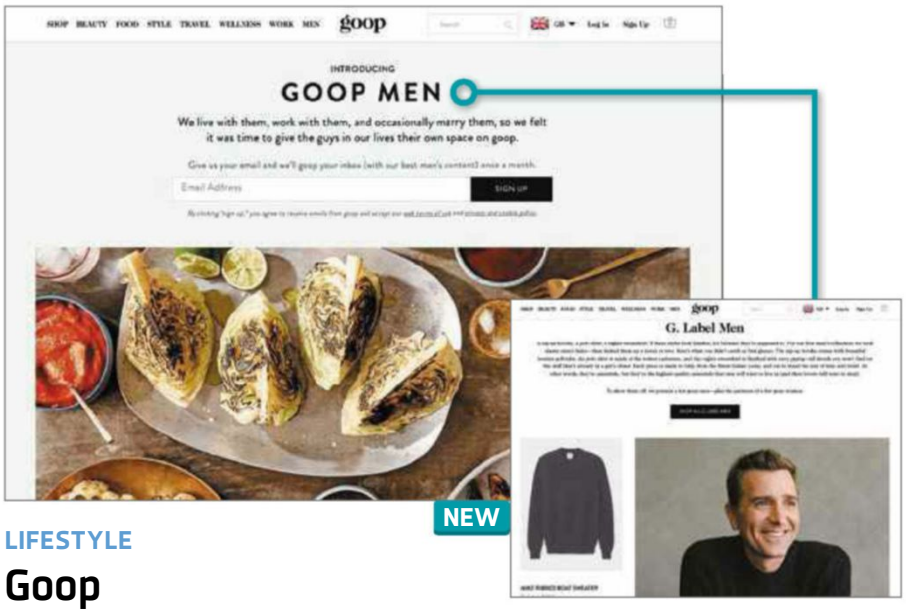
HEALTH

Sight Advice FAQ

www.sightadvicefaq.org.uk

Five charities that work with blind and partially sighted people have joined forces to create a new hub that answers questions about living with eye-related problems. Its vivid design uses a simple layout and bold fonts, while the lack of images reduces clutter. You can type questions into the search box or use the categories in the left-hand menu, and rate answers for their usefulness. The site covers as many bases as possible, so whether you're looking for information on a particular condition, researching any benefits you can claim or seeking assistance with independent living, you're sure to find it here.

Our rating ★★★★☆



NEW

LIFESTYLE

Goop

goop.com/mens

Actress Gwyneth Paltrow's natural health website, Goop, has added a new section for men in the hope of widening its promotion of mental and physical wellbeing. So far, it offers only a small selection of articles covering relationships, men's health issues, technology, food and science, along with videos and a podcast series called Goopfellas. There are lots of commercial promotions, too, including publicity for a new range of clothes called G Label Men, which perhaps shows where this is heading. Even so, it's an attractive site that offers a fresh perspective, and you can sign up for a monthly newsletter if you find yourself drawn in to the Goop way of living.

Our rating ★★★★☆

NEW

VIDEO GAMES

Atari VCS

atarivcs.com

The Atari VCS (later known as the 2600) popularised home video gaming in 1977, but the 1993 Jaguar was a flop, marking the end of Atari's involvement in consoles. With a new modern-day VCS due next year, this site discusses the console's specs while briefly looking at its games and the inspiration behind it. It generally scores well, with a good FAQ and developers' blog, but we could do with a better look at the retro-styled console, as well as information on Atari World OS and the games we can expect. Preorders are for US customers only, too.

Our rating ★★★☆☆

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Google dispels SEO myths

The Google Webmasters YouTube channel continues to be essential viewing, with a new series called SEO Mythbusters (bit.ly/seom479). In each episode, a Google employee invites a guest expert into the Google studio to discuss topics essential to building websites and helping people find them using Google's search engine. At the time of writing, there were four episodes: an introduction, a look at how Google ranks websites, an examination of structured data, and help with JavaScript. Further episodes will be released weekly.

Speed up WordPress search

The default search in WordPress can be slow, particularly when your website reaches a certain size, because it searches pages directly from your webhost's server. However, a new plugin dramatically reduces the time searches take, because it can return accurate results without having to communicate with your webhost. Unfortunately, it isn't available from the WordPress site yet, but you can download it from GitHub at bit.ly/search479. Upload it to your website's plugins directory and activate it from there. Full instructions are available in the readme file on the plugin's download page.

Deal of the Fortnight

Bluehost (www.bluehost.com) is offering its Shared hosting plan for £2.80 per month, down from £7.58, including a free domain for one year and secure hosting. You need to sign up for 36 months.

Web-building Helpdesk

Q I like Gutenberg, the new block-based editor in WordPress version 5, but while it seems easy to use, I'm not sure how to build a site around it. Can you help?

Marcus Finch, via email

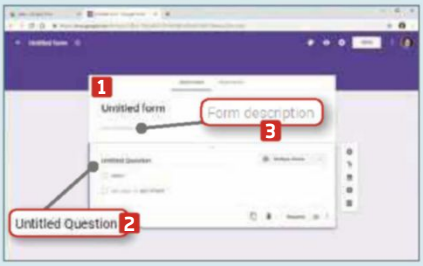
A There are lots of educational resources available on the web. If you already know your way around a WordPress website, the information at Bill Erickson's site (bit.ly/bill479) should get you up and running reasonably quickly. If you need a little more depth, consider downloading Heart Internet's free *Get Started With Gutenberg* ebook from bit.ly/gutbk479. You need to enter your contact details but the book is free. It has chapters written by various experts, including a senior developer at Automattic, the company that publishes WordPress.

Andy Shaw, Technical & Reviews Editor

MINI WORKSHOP | Get feedback from your visitors using a Google Form

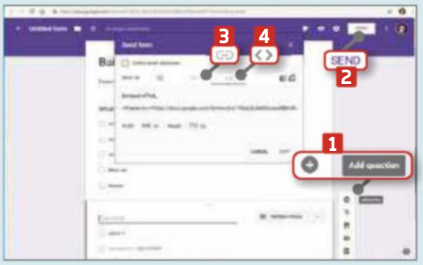
Google Forms: docs.google.com/forms | 10 mins | Any browser

It's difficult to establish what visitors want from your website when you never meet them, but you can ask them to fill in a form. Google Forms makes this process quick and easy, both for you and your visitors



1 In Google Drive, choose a folder in which to save your form. Right-click and select More, then Google Forms. Google sets up an 'Untitled form' 1 containing a single Untitled Question. 2 Click the title to add a new heading, then click 'Form description' 3 to give visitors some idea of what the form is about.

2 The default question type is 'Multiple choice'. 1 Click this option to see a list of alternatives and select the one you want. Write your question in the box at the top 2 and your answers, if required, below. 3 Click 'Add option' 4 to include more answers, and use the cross icons 5 to remove any you no longer want.



3 Click the 'Add question' button 1 to add as many questions as you need. When you're ready to share the form on your website, click Send. 2 To add a link to the form on your site, click the link icon. 3 Alternatively, embed the form using HTML code, which you can copy from the Embed HTML tab. 4

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What To Watch Online

Pick of the fortnight

Watch Amazon's digital dystopian drama *Dark/Web*

From 19 July

Near-future dystopias are very "now". The Beeb's brilliant *Years and Years* is streaming until late August at bit.ly/years479, while Netflix's *Black Mirror* has reached Season 5 at bit.ly/mirror479, and *The Handmaid's Tale* is halfway through Season 3 at bit.ly/handmaid479. Now Amazon's eight-part sci-fi thriller *Dark/Web* goes even darker, as it imagines a future where all our lives are online, connected and ultimately doomed.

Each episode explores a new digital danger – a bit like *Black Mirror* but with the same story and cast throughout. It starts with the disappearance of whizz-kid programmer Molly, who has uncovered secrets about impending tech armageddon. Where is she, and will her friends manage to decode her cryptic notes? *Dark/Web*'s trailer has no answers but it gives a sense of the show's high-tech low-light tension: bit.ly/darkweb479.

Supporting actors include Xander and Glory from *Buffy* and the opera-singing baddie from *The Goonies*. Writer Mario Miscione also has a cultish CV, including the thriller *Circle* (bit.ly/circle479).

Dark/Web arrives on Amazon on 19 July, and gets a special screening at San Diego's Comic-Con, along with a cast and crew panel. Find out more at www.facebook.com/darkwebshow.

Rip your bodice for Season 3 of *Harlots*

From 11 July

This bawdy romp through the brothels of 18th-century London has reached its third season, with new episodes arriving weekly on Amazon's StarzPlay channel just after they broadcast on Hulu in the US.

Brit actresses Lesley Manville and Samantha Morton lead the cast, joined by *Game of Thrones*' Alfie Allen, who plays an ambitious pimp. Get to know the characters on the Harlots Wiki (bit.ly/harlotswiki479), and watch the latest trailer at bit.ly/harlots479.

New episodes, as well as Seasons 1 and 2, are on StarzPlay at bit.ly/harlotsstarz479. StarzPlay costs £4.99 a month plus £7.99 for Prime, so we hope *Harlots* follows Hulu stablemates *The Handmaid's Tale* and *Brooklyn Nine-Nine* onto Channel 4's free All 4 website.

Join a school for assassins in *Deadly Class*

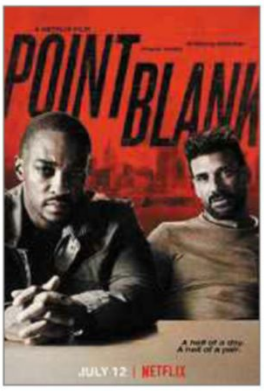
From 19 July

It's a busy fortnight for StarzPlay, which has grabbed the UK rights to this new comic-book adaptation set in a posh school for young assassins in the 1980s (what else?). The 10-episode first season, which stars Benedict Wong (*State of Play*) as the mini murderers' mentor, arrives as a boxset on 19 July.

Find out more about the comics at bit.ly/deadlycomic479, and watch the show's official trailer at bit.ly/deadly479.

Watch Netflix's new action film *Point Blank*

From 12 July



Netflix's latest film is a gripping action thriller starring Anthony Mackie (*The Hurt Locker*) as an A&E nurse whose wife is kidnapped, and whose only hope is help from a badly-injured criminal (Frank Grillo from *Prison Break*). See the trailer for free, and watch *Point Blank* in full with a Netflix subscription, at bit.ly/pointflix479.

If you'd rather stick with Lee Marvin's 1967 classic movie of the same name, you can watch it for free on YouTube, albeit with Portuguese subtitles: bit.ly/pointmarvin479.

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

Unravel the latest trailer at bit.ly/elemtrail479.

Suits has been going even longer. Former star Meghan Markle isn't in the regular cast of Season 9, which arrives on Netflix on 18 July (can't think why). Watch the latest trailer for free, and all 134 episodes with a Netflix subscription, at bit.ly/suits479.

Return to the Cotswolds with *Agatha Raisin*

From 12 July

London PR turned amateur Cotswolds sleuth Agatha Raisin (Ashley Jensen from *Extras*) returns for a second series of mystery and mischief, with her sidekick Roy (Matthew Horne from *Gavin & Stacey*).

The wry comedy, based on the books by MC Beaton (bit.ly/agathabooks479), appears weekly on Sky One, so you can catch up on-demand via Now TV with an Entertainment Pass (£7.99 a month, bit.ly/nowent479), or use Sky Go if you're a Sky subscriber. Season 1 is still available on Now TV at bit.ly/agathanow479, and the latest Season 2 trailer is on YouTube at bit.ly/agatha479.

Go back in time with *Outlander* on All4 — or fast forward with Prime

From 10 July

This time-travel tale follows married 1960s nurse Claire (Caitriona Balfe) and her 1700s beau Jamie (Sam Heughan) as they juggle life across the centuries. Amazon Prime has the first four seasons (bit.ly/outlanderam479), but Seasons 1-3 are now coming to All 4 so you can watch them completely free. Watch Seasons 1 and 2 in full, and Season 3 episodes each week after they air on More4, at bit.ly/outlander479. Watch the Season 3 trailer at bit.ly/outtrail479.

Say goodbye to Sherlock update *Elementary* and legal drama *Suits*

16-18 July

Two hit shows set in New York face their final curtain, as the last seasons of *Suits* and *Elementary* land on Netflix and Now TV in the next few days. If you fancy watching them both from beginning to end, clear your diary, because they rack up nearly 300 episodes between them.

Sherlock-in-NYC drama *Elementary* started in 2012 as another new spin on the Conan Doyle story, with Jonny Lee Miller (*Trainspotting*) as Holmes and Lucy Liu (*Kill Bill*) as Dr Joan Watson. Reviewers loved it and the show lasted seven seasons. The 13 new episodes will arrive weekly from 16 July on Now TV at bit/elementary479, where you can also watch Seasons 1-6 until November.

Get a boost from all-new *Queer Eye*

From 19 July

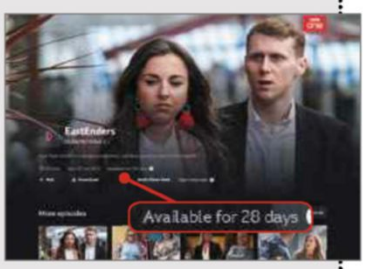
This fab show is the anti-*Jeremy Kyle*. It exists purely to make people feel better about themselves, using the expertise of its Fab Five to offer makeovers, home improvements and relationship advice. Now on its fourth Netflix season under its abridged name, the show welcomes a new Fab Five and goes global. Watch the latest trailer for free, and all four seasons with a Netflix subscription, at bit.ly/queereye479.

Ofcom: iPlayer may keep shows for a year

At last there's some good news for BBC lovers: broadcast watchdog Ofcom has provisionally approved the corporation's plans to extend its default iPlayer catch-up limit from 30 days to a year.

In a statement summing up the results of its competition assessment, Ofcom said: "With the UK broadcasting sector evolving, and audiences' expectations changing, the BBC needs to keep pace."

The verdict wasn't all positive, though. A one-year catch-up limit would be bad news for rival streaming services from other public broadcasters, such as Channel 4's All 4 and ITV Hub, the regulator said. Further consultations are to take place, while a final decision is due in August. Follow the progress at bit.ly/ofcom479.



A BBC spokesman insisted the changes were necessary. "Having programmes on iPlayer for 30 days no longer makes sense in a world where global streaming services can offer unlimited boxsets for as long as they want."

Group Test

We test and compare the latest products

Multifunction inkjet printers

We've tested seven all-in-one devices that combine printing, scanning and copying, to see which one is right for you

Everybody needs to send a formal letter now and then, and it's nice to be able to print some of the photos that would otherwise be confined to our phones. If you're investing money and desk space on a printer, though, it's worth considering a multifunction model. This gives you the added benefit of a scanner in a unit that's barely larger than a standard printer, so you can scan or photocopy documents and photos, too.

Here we've reviewed seven multifunction printers, with prices starting at £47.99.

HOW WE TESTED

We tested each multifunction device by printing a selection of photos and documents – both in colour and black and white – then comparing them for quality. We also measured the speed at which the printers produced their pages and how quickly their scanning functions worked.

Finally, we analysed each printer's costs, working out the price per page based on the cost and lifespan of its ink cartridges.

Canon Pixma TS6250 | £114.36 | Buy from Amazon: bit.ly/cango479

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

This three-in-one device (printer, scanner and copier) from Canon is aimed at creative home users. It can be operated wirelessly, so you can print from any device in your home. However, it doesn't have an SD card slot or USB port for getting photos from older devices that lack wireless connectivity, such as digital cameras. A 7.5cm colour touchscreen offers direct control of the printer, allowing you to scan and print directly to and from online services, including Facebook, Google Drive, OneDrive and Dropbox.

The device is made from smart black plastic and has two paper trays, each of which holds up to 100 sheets of plain paper. It uses Canon's five-ink system, which combines the usual cyan, magenta and yellow with two black cartridges to ensure you get the best results whether you're printing on plain or photographic paper. Cartridges are available in a range of capacities, but the best price per page (using XXL cartridges) is 8.6p for a mixed black and colour print, while a black text page costs 2.8p.

It wasn't the fastest printer in our test, but at 12.7 pages per minute (ppm) for black text and 3.9ppm in our colour test, it's quick enough. Prints look great, too. On plain paper, black text is crisp and dark, while graphics are bright and punchy. Crucially it can print on both sides of the paper automatically (duplex printing), although prints are lighter in this mode because the printer tries to reduce smudging when the paper is fed back through for the second print.

Canon's scanning interface has remained the same for a decade but we think it's the best of the bunch, so we're pleased to see that Canon hasn't changed it unnecessarily.

VERDICT ★★★★★

It's not the fastest device we tested, but the TS6250 is quick enough across all its functions. It's also smart to look at and easy to use, whether from a PC, mobile device or its own touchscreen. With great results and acceptable running costs, it's an easy home multifunction printer to recommend.

Epson EcoTank ET-2710 | £170.01 | Buy from Amazon: bit.ly/epseco479

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

WebUser SILVER AWARD

This printer's main selling point is its refillable tanks, but otherwise it's rather basic. It's wireless, which means it can print from a variety of devices, but with no built-in screen, you have to use buttons and lights to control its minimal functions. It has a single 100-page paper tray and will only print on both sides of the paper if you reload each sheet manually.

You might think filling ink tanks would be messy, but Epson has made the task simple, clean and difficult to screw up. The tanks are huge, with quoted capacities for 3,600 mono pages or 6,500 colour, so most homes probably won't need to refill them for a couple of years. A colour page costs around 0.5p.

It's a bit slow, at 2.9ppm in colour and 9.6ppm in black, although it reached 16.1ppm in draft mode. Prints generally look good, but text is slightly too faint on mixed pages.

VERDICT ★★★★☆

Refillable ink tanks make this multifunction device great value but, more importantly, it's a reasonable printer, too. Its photos aren't the best but if you're looking for an affordable home workhorse, it's a fantastic option.

HP OfficeJet Pro 6970 | £104.98 | Buy from Amazon: bit.ly/hpoj479

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

WebUser BRONZE AWARD

Despite offering an extra function that's probably superfluous for most people (the ability to send and receive faxes), this office-focused model is the cheapest of our three award-winners. It has a 225-sheet paper tray in the bottom and a 35-sheet document feeder in the top, which can scan both sides of multi-page documents automatically.

It's fast for such an affordable printer, reaching 4.7ppm in our colour test and 18.5ppm when printing black text. We found the scanner software frustrating to use, though, with limited options and a tendency to over-sharpen images.

If you use its highest-capacity supplies, a page of mixed text and graphics should cost around 6.8p to print – a couple of pence cheaper than is typical at this price. This helps make the Pro 6970 good value for a busy home office.

VERDICT ★★★★☆

With its built-in fax machine as well as the usual printer, scanner and copier, this device is aimed more at home office users than creative types. However, if you need decent, speedy prints at a reasonable price, it's a good choice.

Canon Pixma TS9550 | £198.85 Buy from Amazon: bit.ly/canpix479 | ★★★☆☆

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

If you often need to produce prints that are larger than A4, this A3 printer will come in handy. Its rear sheet feeder holds 50 A3 pages, while another at the bottom holds 100 A4 sheets. Despite all this, it's not too big.

Prints aren't particularly fast or cheap, and the device is aimed more at home offices than artistic uses, so photo prints weren't as strong as those from our Gold Award winner.

It's not as cheap to run or as good a printer as the Gold Award-winning Canon model, but if you need to print A3 pages, it comes into its own.

Epson Expression Home XP-452 | £47.99 Buy from Amazon: bit.ly/epsho479 | ★★★☆☆

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

If your budget is small, this Epson model may catch your eye. It costs less than £50 but comes with the usual printer, scanner and copier functions, and a colour screen. It's slow (at 2.4ppm in colour and 10.1ppm for text) but prints look good for the price. The drawback is that it costs 11.2p per printed page, so if you print a lot, you'll soon end up paying more than if you'd bought a pricier printer with better-value consumables.

It's a reasonable printer and very cheap, but it could be a false economy if you produce more than a handful of prints.

Epson Expression Premium XP-7100 | £129 Buy from Amazon: bit.ly/epspre479 | ★★★☆☆

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

This feature-packed printer lives up to its name, with a smart touchscreen controller and paper trays for both A4 and photo paper, so you don't have to keep swapping them. It also has a document feeder on the scanner, making it easy to copy multiple-page documents. It prints text at 14.7ppm and colour pages at 6ppm, which is impressively fast, but it doesn't do enough to justify the extra few pounds you pay above Canon's Gold Award winner.

With plenty of bells and whistles, it lives up to its Premium name, but our award winners offer better value.

Brother MFC-J491DW | £89.98 Buy from Amazon: bit.ly/brot479 | ★★☆☆☆

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

The biggest disappointment with this Brother device is its prints. Text printed well on plain paper, but colour prints looked washed out and lacked punch. This office-focused model also has a fax function, which is probably superfluous for most home users. It features some nice touches, though, including an automatic sheet feeder for the scanner that folds away when not in use.

Colour prints weren't as good as we'd hoped from a device at this price, and because it's aimed at small offices, you're probably paying for features you'll never use, such as faxing.

	Canon Pixma TS6250	Epson EcoTank ET-2710	HP OfficeJet Pro 6970	Canon Pixma TS9550	Epson Expression Home XP-452
WEBSITE	www.canon.co.uk	www.epson.co.uk	www.hp.com	www.canon.co.uk	www.epson.co.uk
PRICE	£114.36	£170.01	£104.98	£198.85	£47.99
BUY FROM AMAZON	bit.ly/cango479	bit.ly/epseco479	bit.ly/hpoj479	bit.ly/canpix479	bit.ly/epsho479
MAXIMUM PRINT RESOLUTION	4,800 x 1,200dpi	5,760 x 1,440dpi	1,200 x 600dpi	4,800 x 1,200dpi	5,760 x 1,440dpi
MAXIMUM SCAN RESOLUTION	2,400 x 1,200dpi	2,400 x 1,200dpi	1,200 x 1,200dpi	2,400 x 1,200dpi	2,400 x 1,200dpi
PAPER CAPACITY	200 sheets A4	100 sheets A4	225 sheets A4	200 sheets A4	100 sheets A4
DOUBLE-SIDED PRINTING	✓	✗	✓	✓	✗
DISPLAY	7.5cm colour touchscreen	✗	6.8cm colour touchscreen	10.8cm colour touchscreen	6.8cm colour touchscreen
INTERFACES	USB, 802.11n	USB, 802.11n	Ethernet, USB, 802.11n	SD Card, Ethernet, USB, 802.11n	SD Card, USB, 802.11n
DIMENSIONS	372 x 315 x 139mm	374 x 347 x 179mm	464 x 390 x 229mm	468 x 366 x 193mm	390 x 300 x 146mm
WEIGHT	6.2kg	3.9kg	8.1kg	9.7kg	4.3kg
WARRANTY	One-year return-to-base	Three-year return-to-base	One-year return-to-base	One-year return-to-base	One-year return-to-base

OUR VERDICT

Our favourite multifunction printer was the Canon Pixma TS6250, which duly won our Gold Award. It's a solid all-rounder that achieves the right balance of functions and the ability to churn out superb prints. It's easy to use, whether you connect from a PC or mobile device, and operates well as a standalone printer and scanner, too.

If running costs are important to you, consider our Silver Award winner, the Epson EcoTank ET-2710. Ink cartridges can be wasteful and expensive, but the EcoTank replaces these frustrating consumables with refillable ink tanks that are cheap to fill and last for ages.

Alternatively, if you need a more office-friendly device, the Bronze Award-winning HP OfficeJet Pro 6970 is ideal. It isn't too expensive, prints nicely and has a built-in fax machine, if you should need such a thing.

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KAREN

Purchased VW Golf
I was nervous about buying on the internet. Needn't have worried.
SIMON

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HARDWARE

INKJET PRINTER

Canon Pixma TS6250

£114.36 from bit.ly/cango479
Tested: Issue 479

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

KEY SPECS

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

MINI PC

ASRock DeskMini 310

£668.70 from bit.ly/asro477
Tested: Issue 477

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

KEY SPECS

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

GRAPHICS CARD

Asus ROG Strix RX 570 OC

£189.99 from bit.ly/asusbox475
Tested: Issue 475

Asus's twin-fan graphics card gets the balance perfectly right. It comfortably plays games that are designed to push a graphics-processing unit to the limit, and for the price it kicks cards with similar specifications right out of the game.

KEY SPECS

AMD Radeon RX 570 graphics processor ■ 2,048 GPU cores ■ 1,300MHz clock speed ■ 4GB memory ■ 1 x DisplayPort, 2 x DVI, 1 x HDMI outputs ■ 200W power ■ 240mm ■ Two-year repair-and-replace warranty

SMARTPHONE

Moto G7 Power

£179.99 from bit.ly/pow472
Tested: Issue 472

Battery life is at the heart of what we love and hate about our phones, and the Moto G7 Power lasted an incredible 26 hours and 22 minutes in our tests. Its specs and price are also great.

KEY SPECS

Octa-core 1.8GHz processor ■ 64GB storage ■ 4GB RAM ■ 6.2in, 720 x 1,570-pixel screen ■ 12-megapixel rear camera, 8-megapixel front camera ■ 5,000mAh battery ■ 159.4 x 76 x 9.3mm ■ 193g ■ One-year return-to-base warranty

WI-FI EXTENDER

Netgear Nighthawk X6S

£145.99 from bit.ly/ngx6s471
Tested: Issue 471

The Nighthawk X6S's unbeatable combination of high speed and top-end features makes it the best Wi-Fi extender available. It's big and boxy, but its performance gives mesh-router systems a run for their money.

KEY SPECS

Works with 2.4GHz and 5GHz networks ■ 4 x Gigabit Ethernet ports ■ Access control ■ Wi-Fi schedule ■ WPS button ■ 277 x 170 x 93mm ■ Two-year warranty

SECURITY CAMERA

Blink XT

£149.99 from bit.ly/blink470
Tested: Issue 470

The Blink XT can be positioned anywhere in your home, indoors or out, and includes a lifetime subscription to its cloud-storage service. You get a couple of years' use out of the camera before you need to replace the batteries.

KEY SPECS

HD video ■ Motion and temperature sensors ■ Built-in microphone ■ Camera mount included ■ Weatherproof ■ Infrared night vision ■ Wi-Fi connectivity ■ Instant alerts to your phone ■ Two years of battery life

All prices correct at time of review

SOFTWARE & SERVICES

BACKUP SOFTWARE

Acronis True Image 2019

£35 from
bit.ly/acro473
Tested: Issue 473

Acronis True Image is a versatile backup tool that can do everything from cloud storage to disaster recovery. It isn't cheap compared with rival software, but it's flexible and simple to control, reasonably fast and should cover all your backing-up needs.

KEY FEATURES
Windows, macOS, Android, iOS ■ Local backup ■ Disc-image backup ■ Restore from the web ■ Create disaster recovery ■ AES-256 encryption ■ Continuous, daily, weekly or monthly backups ■ Multiple backup sets

PHOTO-EDITING SOFTWARE

DxO PhotoLab

£99 from
bit.ly/dxo455
Tested: Issue 455

If you're put off by Adobe's subscription costs, DxO PhotoLab is the best alternative for managing and editing your photos. Its interface is streamlined and elegant, and the editing and image quality are exceptional. It's also very simple to use and comes with lots of sophisticated tools.

KEY FEATURES
RAW conversion ■ High quality noise reduction ■ Optical corrections ■ Red-eye correction ■ Advanced light and colour ■ Batch processing ■ Selective tone ■ Full-screen mode ■ Spot-weighted mode

Web User Gold Award winners

WEB-DESIGN TOOL

Basic WebPage Builder

Free from bit.ly/bwpb478
Tested: Issue 478
Basic WebPage Builder is ideal for budding but inexperienced web designers. Its impressive range of elements will fulfil most basic needs, with no HTML knowledge required.

PDF EDITOR

Apowersoft Online PDF Editor

Free from bit.ly/apow477
Tested: Issue 477
We were gobsmacked by how much PDF content we were able to edit using this excellent free tool. It offers several advanced features that genuinely impressed us.

CLIPBOARD MANAGER

CopyQ

Free from bit.ly/copyq476
Tested: Issue 476
Intuitively designed and undemanding, CopyQ delivers everything you need from a clipboard manager. It has no trouble with text, images or anything else you throw at it.

TO-DO LIST TOOL

Todoist

Free from www.todoist.com
Tested: Issue 475
Todoist has the tools you need for managing your daily tasks, and works well across phones, computers and other devices.

URL SHORTENER

Kutt.it

Free from kutt.it
Tested: Issue 474
Free and open-source, Kutt.it offers all you need from a URL-shortening service with none of the clutter of its rivals.

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SYSTEM TOOL

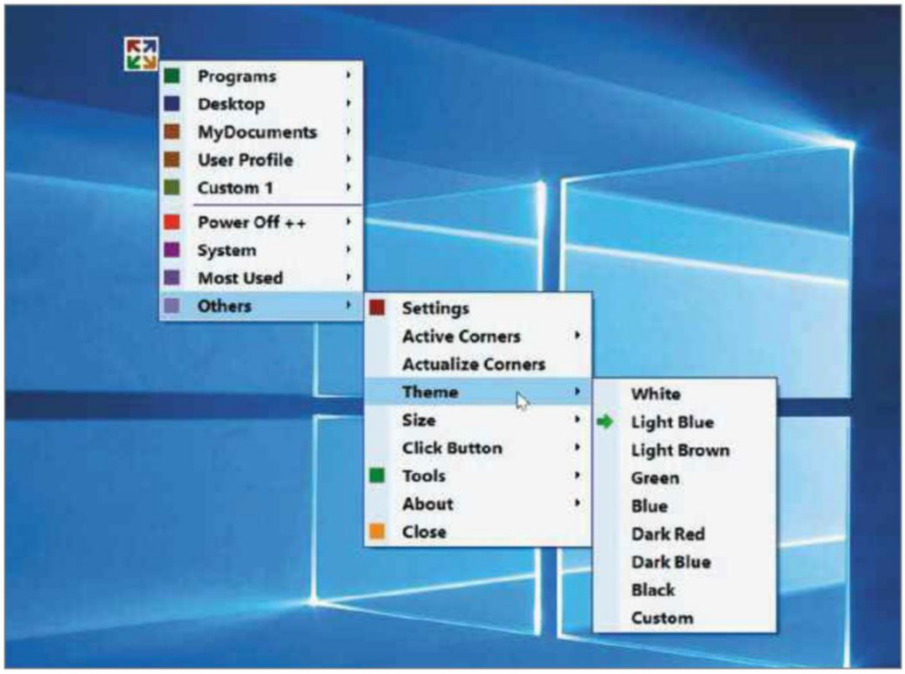
Start Everywhere

bit.ly/start479

Min requirements: Windows 7/8.1/10
File size: 355KB

When you want to launch a program on your PC, you have a number of options. You can search for the application you want, go through the Start menu, click a pinned icon on the taskbar or double-click a desktop shortcut. Start Everywhere gives you another option – a customisable Start menu that, as you can probably guess from the name, can be summoned from anywhere on your desktop.

To open the menu, either click the system tray icon (using your left or right mouse button) or the floating target button that sits permanently on top of all your open windows. You can drag this button anywhere on your screen, resize it and hide it when it's not required.



Start Everywhere's menu gives you access to all your programs, either grouped alphabetically or as a long list of folders. You can also explore the contents of your desktop and the My Documents and User profile folders, as well as any custom locations.

The Power Off ++ section offers a convenient way to shut down your computer, restart it, send it to sleep and so on. The System section gives you access to additional Windows tools including Control Panel and Task Manager, and there's a Most Used area for items you use frequently.

Finally, Start Everywhere has a section called Others, where you'll find settings for customising the program, changing its theme and adjusting the size of the menu. There are links to download other free tools from the same developer here, too.

MINI WORKSHOP | Configure and use Start Everywhere

1 When you run the program, a Start Everywhere button appears in the system tray, as well as a floating 'click button' on your desktop. 1 You can drag the floating button anywhere you like. Click it to open the Start Everywhere menu 2 and move the mouse towards an arrow on the right to open another menu. 3

2 Find a program you want to launch either by browsing the folders 1 or looking for it in the A-Z menu. 2 You can also explore your desktop 3 and My Documents folder from here. 4 The Power Off ++ menu lets you shut down or restart your PC, 5 while System 6 provides access to useful tools.

3 If you'd like to customise the software, go to Others. Select Settings, and a panel opens that lets you change the menu's appearance, 1 alter the colours 2 and fonts 3 and choose which locations the program includes in the menu. 4 You can assign a useful hotkey for the program under Advanced. 5

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

ANTIVIRUS TOOL

Winja 7

www.phrozen.io

Min requirements: Windows 7/8.1/10 **File size:** 27.7MB

Winja (short for "Windows Ninja") is a handy interface for Google's online VirusTotal scanner that simplifies the process of checking your files and downloads for malware. The latest version introduces a new File Monitor tool that provides a real-time view of files as they're updated or created to help you spot malware. You'll find this under Additional Tools. Winja also adds an option to File Explorer's context menu, so you can scan files and folders by right-clicking.

New Windows 10 App

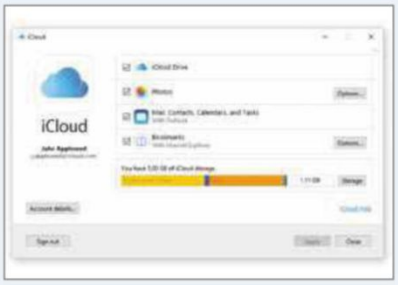
iCloud

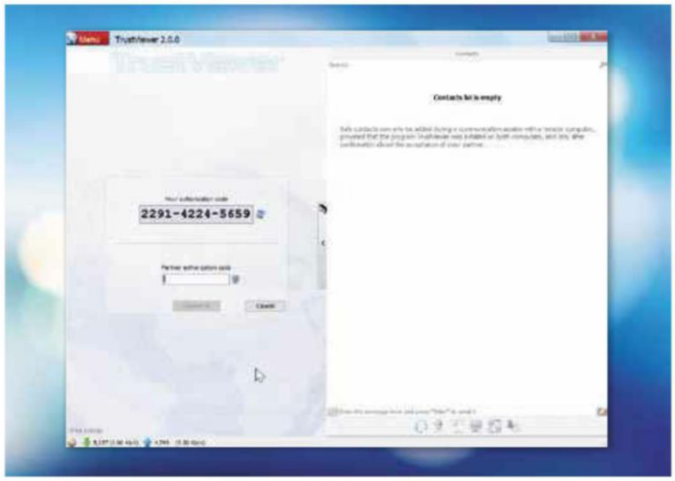
bit.ly/icloud479

Min requirements: Windows 10

File size: 253MB

Rivals Apple and Microsoft have collaborated to create this new app, which lets you access any photos, videos, mail, calendar entries and other files stored in iCloud directly through File Explorer on your Windows 10 PC. It works in a similar way to Microsoft OneDrive, which means you can save copies of files to your computer for offline access.





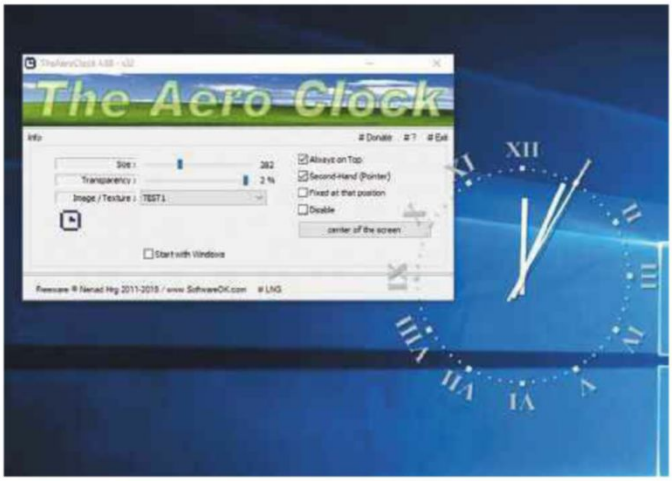
REMOTE-ACCESS TOOL

TrustViewer 2

trustviewer.com/en

Min requirements: Windows 7/8.1/10 **File size:** 2MB

TrustViewer lets you take control of a remote PC (with the user's permission, of course), make changes to it, fix problems, chat and share files. It's very secure and, like similar tools, uses a PIN-based authorisation system to connect to the remote computer. The new version has had a major overhaul, although the interface still looks a little dated. TrustViewer is completely free for home use, as well as for businesses that need remote access to four devices or fewer.



DESKTOP CLOCK

TheAeroClock 5

bit.ly/aclock479

Min requirements: Windows 7/8.1/10 **File size:** 1.7MB

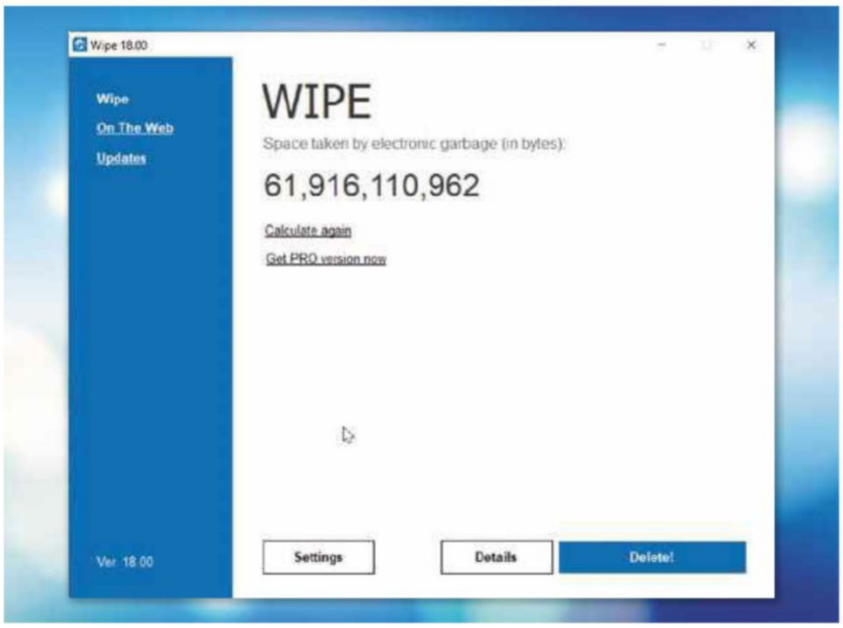
TheAeroClock is a floating timepiece that sits on top of all the windows on your desktop. You can move it by clicking and dragging, and adjust its size, transparency and texture, as well as the appearance of the clock face. Special themes are available for events such as Easter and Halloween. You can enable or disable the second hand, lock the clock in its current position and choose whether or not it should always remain on top of your other windows.

SYSTEM CLEANER

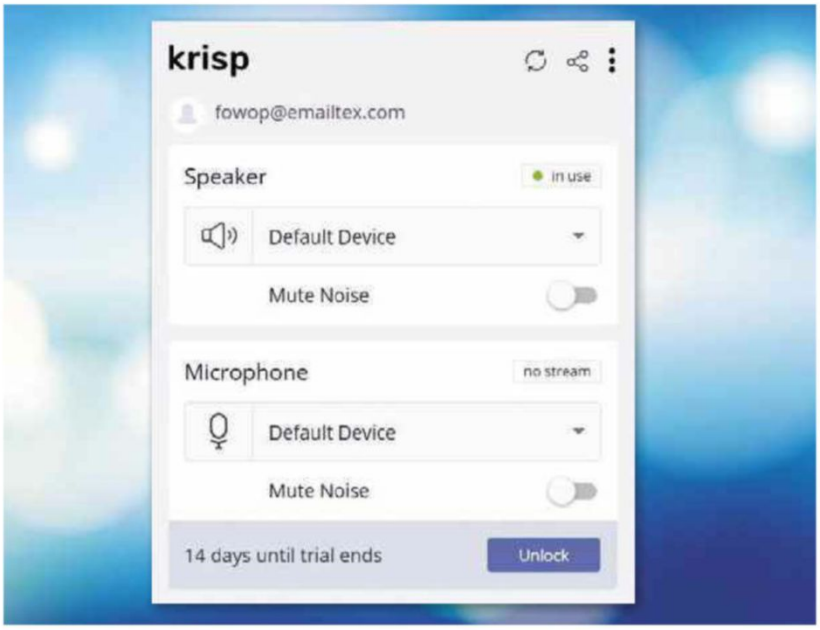
Wipe 18

bit.ly/wipe479

Min requirements: Windows 7/8.1/10
File size: 540KB (installer only)



Over time your PC gets clogged up with temporary files, cached data and other junk that wastes space on your hard drive and slows down your system. Wipe 18 scans your PC and shows you how much space it could free up. You can then view the details and deselect any items you don't want the tool to erase, or click Delete to remove all the junk. The Settings page lets you configure the software, delete files securely, manage system performance and set Wipe to close annoying programs automatically. This version has a new customisable interface and improved support for cleaning up after newer programs.



CALL HELPER

Krisp

krisp.ai

Min requirements: Windows 7/8.1/10 or macOS
File size: 69MB

If you often make voice calls on your computer while you're out of the house or office, background noise can sometimes be an issue, making it hard for both or either of you to hear what the other is saying. Even if you're somewhere quiet, the person on the other end of the line might not be. Krisp aims to solve this problem by muting or masking background noise during calls. You have to create an account and sign in to use the software (which is a bit of a nuisance), and then select Krisp as your device's speaker and microphone.

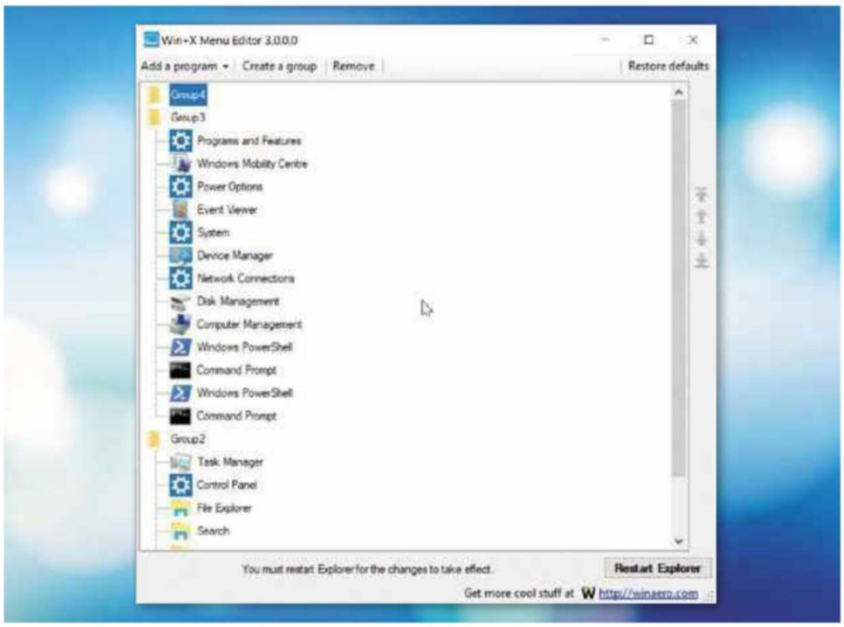
The program was originally designed for macOS but is now available for Windows too.

SYSTEM TOOL

Win-X Menu Editor 3

bit.ly/winx479

Min requirements: Windows 8.1/10
File size: 239KB



When you right-click the Start button in Windows 8.1 or Windows 10, a basic menu opens, giving you quick access to a number of built-in tools, including Power Options, Windows PowerShell and Task Manager. Win-X Menu Editor lets you customise this menu by moving items up and down the list, renaming them or removing them. You can add programs and presets, including items from Control Panel and Administrative Tools, and create groups. You need to restart Explorer for any changes to take effect.

The latest version replaces the separate builds for x86 and x64 systems, and works with newer versions of Windows 10.

GAME

Dystopicon

bit.ly/dysto479

Min requirements: Windows 7/8.1/10, macOS or Linux **File size:** 199MB

This game, which was inspired by three classic sci-fi novels, takes place in a dystopian society in which you have just been promoted to the rank of second-class citizen. You earn money to pay for basic services by watching TV, while the government sends you regular bulletins (called 'The Truth') and a story slowly unfolds.

✓ Install this program...

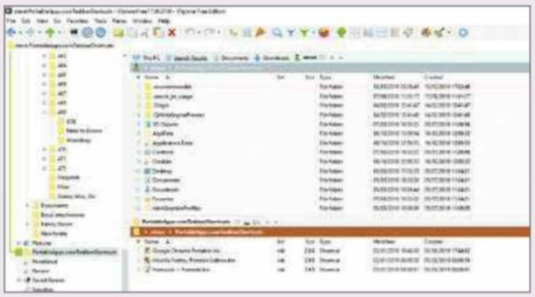
XYplorer

bit.ly/xypl472

Min requirements: Windows 7/8.1/10

File size: 3.4MB

Anyone who's frustrated with Windows File Explorer's clunky approach to navigation will appreciate XYplorer, which offers a much quicker way to flit between locations. Handy tools in the main ribbon menu let you jump straight to recent locations or view folder sizes. You can search for files by name, date and size or use keywords and phrases within a document. However, the real bonus is the ability to find and remove duplicate files that are clogging up your PC. Sadly, the free version of XYplorer hasn't been updated since 2016, but it's still an excellent tool that works perfectly in Windows 10.



...Not this one ✗

Double Commander

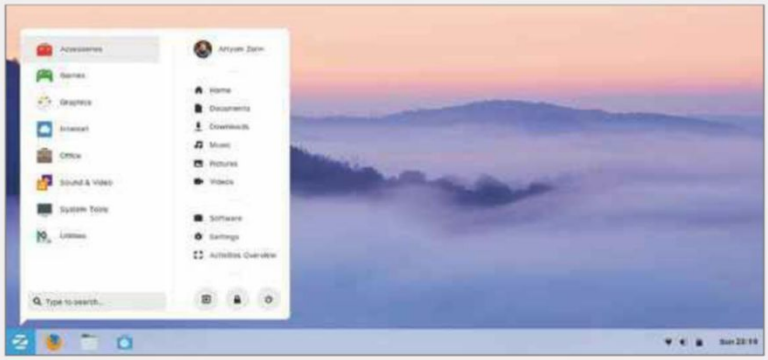
doublecmd.sourceforge.io

Min requirements: Windows 8/8.1/10

File size: 7.2MB

Double Commander offers a tabs-based interface and plenty of useful tools for advanced users, but it lacks some of XYplorer's more universal settings, such as a duplicate file finder. Searches can be slow and the results poorly displayed, while the interface looks as if it was designed 20 years ago. It's also frustrating to use.

OTHER OPERATING SYSTEMS What's new for Linux and macOS



LINUX DISTRO

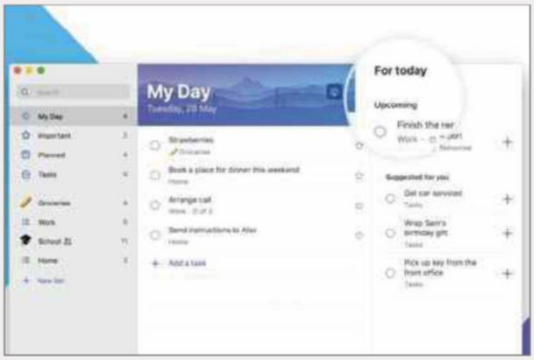
Zorin OS 15

zorinos.com

Min requirements: 2GB RAM, 10GB storage

File size: 2.1GB

Based on Ubuntu (as many Linux distributions are), Zorin OS doesn't look too dissimilar to Windows, making it a good choice for anyone who's thinking of switching from Microsoft's operating system. This update improves the interface's appearance, with a more welcoming desktop theme, new animations and Light and Dark modes. There's a touch interface, too, and you can even link your Android device to your PC. Zorin OS 15 uses Linux kernel 4.18 and GNOME 3.30. Several versions are available, but the free Core edition is the one you want.



TO-DO LIST

Microsoft To-Do

bit.ly/todo479

Min requirements: macOS 10.13 or newer

File size: 13.6MB

Based on Wunderlist, which Microsoft acquired in 2015, Microsoft To-Do is a simple to-do list and note-taking app that helps you plan your day. The app has been available for Windows 10, iOS and Android for a while, and now Mac owners can use it too. You can create lists, tasks and to-do items, and share lists with other users – although you need a Microsoft account to use it.

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

Best New Browser Tools

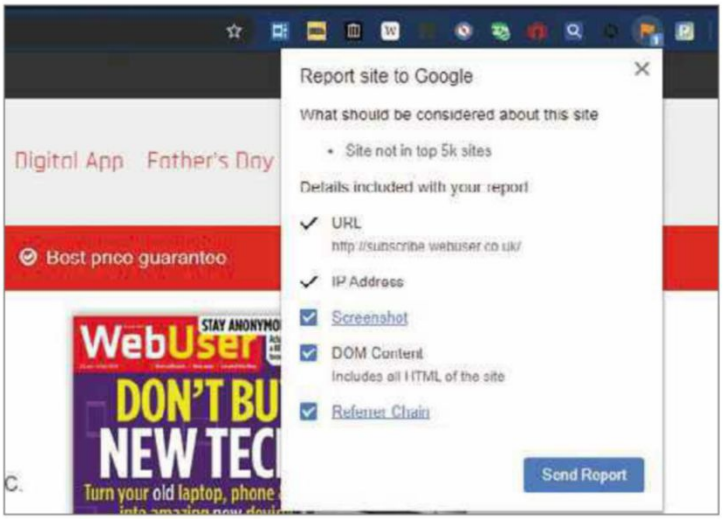
CHROME

Report suspicious websites to Google

Have you ever stumbled across a website that didn't look or feel right? Before Google released its Suspicious Site Reporter extension (bit.ly/ssreport479), your only options were to back away or continue and risk a malware infection, or worse.

Now whenever you find yourself on a suspicious site, you can get Google on the case straight away. The new tool links to Google's Safe Browsing service (safebrowsing.google.com), which warns you when a site contains potential phishing scams or malware.

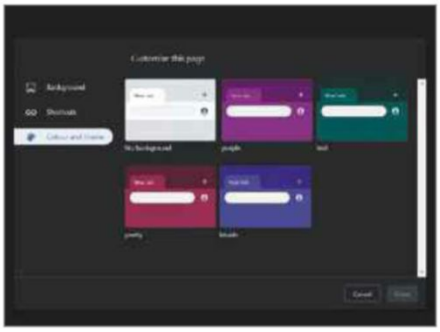
Click the extension's toolbar button and the reporter automatically fills in details of the site you're on, such as its URL and IP address, and takes a screenshot (if you allow it). You can include the referrer chain – if you clicked a link from another site to arrive at this one, for example. Google's tool is even smart enough to recognise suspicious activity on the referrer's page and report that too.



Customise Chrome's appearance

Chrome isn't the most exciting browser to look at, which is why we so often recommend extensions that give its new tabs a facelift. Thankfully, Google recently updated Chrome's developer-focused Canary version with a couple of flags that let you add a bit of colour to your new tabs. You can also tweak the browser's overall theme.

To brighten up Chrome, visit `chrome://flags/#chrome-colors` and set the flag to Enabled. Next enable `chrome://flags/#ntp-customization-menu-v2`. Restart Chrome, then open a new tab and you'll see the Customise option in the bottom-right corner. With these flags enabled, it's a lot easier to select an attractive new background that suits your tastes.



Stop YouTube checking up on you

Although we understand *why* streaming services such as YouTube and Netflix display a 'continue watching' prompt after a period of inactivity, it's still annoying and can break your immersion in the video you're viewing.

The creator of YouTube Uninterrupted (bit.ly/yt479) knows exactly how you feel. As the name suggests, this extension, which can also be found on GitHub (bit.ly/ytg479), performs a single task: it stops YouTube pausing videos after a set period of time and blocks that infuriating 'continue watching?' pop-up.

The developer suggests this extension really comes into its own when you're listening to music playlists, and we're inclined to agree, but it also makes binge-watching a series of YouTube videos a more immersive experience.

Compare prices across websites

Shopping Helper (bit.ly/shop479) is an extension that claims to be "bringing fun back into online shopping". That may be a bit of an exaggeration – in our experience, a browser tool won't change whether you love or hate shopping – but it does at least help you look after the pennies, and saves you having to switch between dozens of open tabs when searching for the best deal.

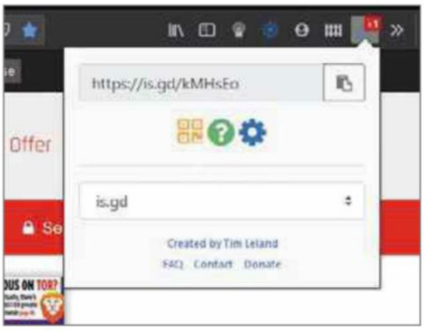
You can think of Shopping Helper as the extension equivalent of Google Shopping. Click the browser's toolbar button and search for a specific item. When you find what you want, click to check the prices at various online stores.

We'd like to see the tool integrate with the product pages on websites, but if it helps us save money, we're not complaining.

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

FIREFOX

Shorten the URL of any page



Could you imagine trying to read *Web User* without Bit.ly links? Having to type every 'https', string of letters and forward-slash would make visiting the featured websites infuriating.

Link Shortener (bit.ly/short479) gives web users a savvy way to copy and share links. When you first use the extension, it's a good idea to head into the settings, where you can set a default shortener and add optional extras.

Now you no longer need to interrupt your browsing to access your usual link-shortening service. When you're on a page you wish to 'shorten', click the extension and select your preferred service, whether it's TinyURL, Cutt.ly or, our favourite, Bit.ly. Link Shortener generates a link (which unfortunately you can't edit), and provides a copy button and QR code generator. This makes the process of sharing links a lot easier, and you'll never have to mess around with ungainly URLs again.

Add Opera's Speed Dial to Firefox

If you've ever thought "I like Firefox, but I wish it looked a bit more like Opera", then we've got the perfect extension for you. Yet Another Speed Dial (bit.ly/dial479) mimics Opera's classic speed dial set-up in a new Firefox tab.

Opera's slick speed dial feature lets you jump quickly to your top sites. It's one of many understated features in the browser, and we're excited to see that some enterprising developer has ported it across to Firefox.

That's not the only reason to install Yet Another Speed Dial, though. According to the developer, this extension won't track your browsing activities and it syncs with your existing bookmarks.

You can even customise the speed dial tab to make Firefox look and feel even more like Opera.

Convert currencies while shopping online

Trying to buy goods from overseas websites is confusing enough without having to search for the exchange rate before deciding whether or not to buy. That's where the Universal Automatic Currency Converter (bit.ly/convert479) comes in.

This extension addresses several of our biggest shopping bugbears. Once you've set it up to display your home currency, simply visit an online shop in another country, and the currency conversion happens right before your eyes. It even includes shipping costs, and you can get rid of all those annoying prices ending with 99p by opting to round them up (or down).

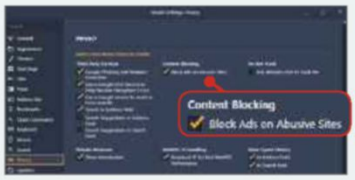
Clicking the extension on any page opens a mini-converter that you can use for on-the-fly conversions. With support for 170 currencies, Universal Automatic Currency Converter makes online shopping more bearable.

OTHER BROWSERS

Block ads on abusive sites

Ad blockers remain an essential part of the modern browsing experience, despite Google's recent efforts (see our cover feature on page 40). Now Vivaldi has introduced its own ad-blocking feature (although it's not a full ad blocker) for 'abusive sites'. You'll find the option under Settings, Privacy – it's switched on by default.

Google defines an abusive site as one that features misleading links and adverts, auto redirects, browser history manipulation, fake messages, or unwanted software installation (bit.ly/abuse479). Vivaldi's new tool uses Google's own list of abusive sites to block ads on these pages.



See more with Reading View

Reading View has long been a popular feature in Microsoft Edge, so we're delighted that it's making a comeback in the new Edge Chromium browser. Get rid of the glare and clutter by clicking the book icon in the address bar. This gives your page a more book-like appearance, dimming the light and moderating the white of the page, while clearing away unwanted elements such as adverts. Look out for 'Grammar tools', too: with one click, you can get help with pronunciation or use the 'Parts of speech' option to colour-code nouns, verbs and adjectives.

Tell us your favourite add-ons at www.facebook.com/webusermagazine

Best Free Apps

App of the Fortnight

OFFICE

iWork

UPDATED

bit.ly/iwork479

11

Apple has invested a lot of time in improving its core iOS productivity apps recently. Last issue, we reviewed the updated iMovie app. Now Apple has released major updates for its iWork apps – Pages, Numbers and Keynote – all of which receive lots of useful new features. Rather than single one of them out, we've made the whole suite App(s) of the Fortnight.

Pages, the suite's word processor, gains dozens of tools, including new text styles, customisable bullet points, improved chart-making tools and the ability to copy and paste entire pages between documents.

Numbers, the spreadsheet app, has an all-new 128-bit calculation engine for improved accuracy. The update also adds new chart-editing capabilities that let you change the style of individual elements, adjust spacing between columns, add trendlines and more.

The latest version of Keynote, Apple's presentation tool, offers enhanced support for collaboration, so you can now edit master slides while working on your presentation with others.

All three apps benefit from improved support for Apple Pencil. If you have an iPad, you can use Pencil as a drawing tool or for selecting text and scrolling – a quick double-tap toggles between the two options.

A new Learn Spelling feature lets you add words to the spelling dictionary across all three apps, while an interesting face detection feature helps you place photos in documents, spreadsheets or presentations, positioning them automatically so that people's faces can be seen clearly.

To complement the revamp, the macOS versions of all three iWork apps have been updated, too.

Our rating ★★★★★

MINI WORKSHOP

Use the new text tools in iWork Pages

1 To use Pages' new 'gradient fill' text styles, open a document and select some text, then press the Format (paint brush) icon. 1 In the box that appears, scroll down and tap Text Colour, followed by the Gradient heading. 2 Set your gradient by selecting a Start Colour and End Colour. 3 You can also flip the colours 4 and alter the angle of the gradient. 5

2 To add a new word to Pages' built-in dictionary, type it into a document, ignoring any suggested spelling corrections that appear in the predictive text bar below. If your word isn't in the dictionary, it will be underlined in red. Tap the word to reveal the Learn Spelling option, 1 then press this to add the word to your dictionary. The red line will disappear.

3 To use Pages' new bullet point tools, type a list of items into a document, then tap the Format (paint brush) icon. 1 Scroll down and select Bullets & Lists. Here you can choose a preset bullet style. 2 You can also tap the 'i' icon next to any of the bullets 3 to customise its size, colour, alignment and more. Tap Edit, 4 then + to add your own custom bullet style to the bullet list.

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

LAUNCHER

NEW

Shade Launcher

bit.ly/shade479

5

Shade is a brand-new Android launcher from the developer behind the excellent Pixel-inspired Rootless Launcher (bit.ly/rootless479). It does pretty much everything its forerunner does, and adds a few welcome ideas of its own. There's greater scope for customisation, with a choice of themes and the useful ability to categorise or hide apps in the app drawer. A Smart Unread widget on your home screen highlights your most important notifications, while the app's support for plugins enables other developers to design add-ons.

Our rating ★★★★☆

MEDIA PLAYER

UPDATED

MX Player

bit.ly/mxplayer479

(varies)

MX Player has always been an excellent alternative to Android's stock movie player, so we're pleased to see that the developers are continuing to nurture it. Its advantages include hardware acceleration and multi-core decoding for smooth playback. The app recently gained support for Chromecast, and the latest update adds a picture-in-picture mode. If you enable it from the Quick Options button during playback, you can watch videos in a floating window as you send texts, check emails and so on.

Our rating ★★★★★

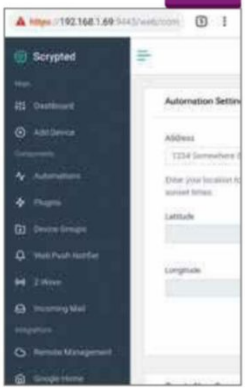
TOOLS

NEW

Scrypted

bit.ly/scrypted479

5



Home automation is incredibly handy, but you can easily find yourself in a situation where you have different devices that require different apps and hubs. Scrypted is an entire home automation platform aimed at enthusiasts and developers. Once installed, the app turns your Android device into a cross-platform home hub. Enter the IP address provided into your browser for access to a powerful control panel that lets you set up schedules, write simple scripts and more. Scrypted integrates with Amazon Alexa, Google Home and Apple HomeKit.

Our rating ★★★★☆

GAME

NEW

Harry Potter: Wizards Unite

bit.ly/wizardsdroid479

bit.ly/wizardsios479

5 10

Potterheads rejoice! A brand-new Harry Potter mobile game has arrived – although if you've ever played Pokémon Go, you'll find that there isn't an awful lot that's 'brand-new' about Wizards Unite. It's basically the same 'gotta catch them all' formula, reskinned with characters and monsters from JK Rowling's Wizarding World. The basic premise is that 'foundables' – magical artefacts, creatures and people from the Potterverse – have started cropping up in the world around you, and it's up to you to find and capture them using spells. It's fun, but it can be annoying, too, unless you pay to avoid the limitations of the free-to-play version.

Our rating ★★★☆☆

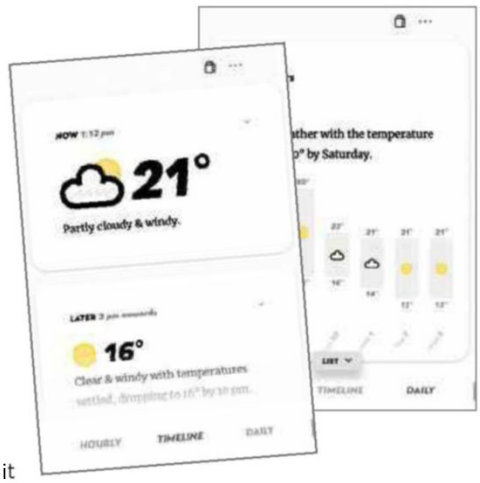
WEATHER

NEW

Appy Weather

bit.ly/appy479

8



One of the (few) well-loved apps for Microsoft's now defunct Windows Phone platform, Appy Weather makes a belated leap to Android. The app gathers highly accurate weather data from Dark Sky and presents it in a friendlier format – specifically a detailed hour-by-hour forecast for the current day, a timeline with cards for significant weather changes, and a forecast summary for the next seven days. The only catch is that the free version allows just 10 weather requests per day. Paying £3.99 for Appy Weather+ not only removes this limit but gets rid of ads and unlocks useful widgets and notifications, too.

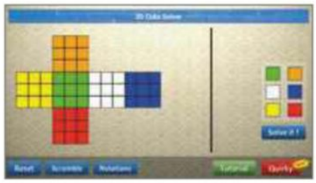
Our rating ★★★★☆

5 NEW APPS WORTH PAYING FOR

AR
DoodleLens
bit.ly/doodlelens479
Price: £1.89
7
With its novel approach to homemade augmented reality, this app lets you capture drawings you make on paper and paste them into reality. It's a neat trick and very easy to use.

RINGTONES
Lord of the Ringtones
bit.ly/lotr479
Price: 89p
5
This useful multipurpose app lets you set custom ringtones for individual callers, create ringtones from sound recordings, screen spam calls and, of course, download new ringtones.

PUZZLE
DisSolve Pro 3D
bit.ly/dissolve479
Price: 99p
4
A recent revival has introduced Rubik's fiendish cuboid puzzle to a new generation. But if you're stumped, never fear – this app can help you solve the cube once and for all!



NOTES
Magpie
bit.ly/magpie479
Price: £7.99
11
If you've ever taken a photo to remind you of something, only to forget what it was, this app is a must. It lets you take 'photo notes', which combine your pictures with times, location details and other useful information.

GAME
Thinkrolls Space
bit.ly/thinkrolls479
Price: £3.99
8
This latest app in the educational Thinkrolls series offers child-friendly logic and physics puzzles for kids aged 5-8 years, set in a variety of colourful alien locations and featuring a cast of unusual monsters and robots.

DoodleLens | Lord of the Ringtones | DisSolve Pro 3D | Magpie | Thinkrolls Space

✓ Install this app...

Google Podcasts
bit.ly/podcasts479
4.1

Choosing a podcast provider is a surprisingly tricky task these days, and the situation is only made worse by the fact that there are so many podcast-related apps available. To help you out, we're going to recommend our current favourite. Originally, we were going to point you in the direction of our long-term podcast app of choice, Castbox's Podcast Player, but recent updates seem to have broken the app, with many users reporting strange playback issues. So instead we're going to recommend Google Podcasts. It's free, easy to use, works well and syncs your listening across all your devices.

...Not this one ✗

PodcastOne
bit.ly/podcastone479

While there are lots of great podcast apps to choose from, there are plenty that are not so great, too. PodcastOne falls firmly into the latter category, with many users complaining that the app crashes constantly, won't load podcasts and has an interface that's verging on unusable. The developers claim this is a temporary situation and that a new version is on its way, but for the time being, it's one to avoid.

Take a Screen Break

Give your eyes a rest from your browser by taking our fiendish fortnightly challenges. Can you guess our US TV show emoji and our Wikipedia article?

WIN A WEB USER 2018 BACK ISSUES DISC!
Email your answers to editor@webuser.co.uk – one correct entry will win a disc

CAN YOU GUESS THE US TV SHOWS 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?

1 "In its early years, the company introduced many innovative online interactive titles and games. It was promoted as the online service for people unfamiliar with computers."

2 "At one point, half of the CDs manufactured worldwide had its logo on them. The marketing tactic was criticised for its environmental cost, and called the most annoying tech product."

3 "In 2004, it made available the option of personalised greetings, which would enable the user to hear his or her name while accessing basic functions, or while logging in or out."

5 "It has faced a number of lawsuits over claims that it has been slow to stop billing customers after their accounts have been cancelled, either by the company or the user."

COMPETITIONS

WORTH £169.99 EACH

WIN 1 OF 2
Ambeo Smart Headset

Sennheiser's Ambeo Smart Headset has two omnidirectional microphones for producing immersive videos with 3D-like sound recordings on your iPhone. The listener feels as if they are really there, making it ideal for vloggers and other content creators. To enter, email your address to webusercomp@dennis.co.uk with 'ambeo' in the subject line. For more details, visit en-uk.sennheiser.com and follow @Sennheiser_UK on Twitter.

WORTH £359.99

WIN...
Painter 2020

The latest version of Corel's Painter 2020 has a wealth of superb new tools to improve your digital art. There's a new Brush Accelerator, which takes advantage of your processors to make sure Painter works as fast as possible, and six new Colour Harmonies to save as sets. To enter, email your address to webusercomp@dennis.co.uk with 'Painter 2020' in the subject line. For more details, visit www.painterartist.com and follow @CorelPainter on Twitter.

FAQ

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

Google Stadia

Will Google's new "Netflix-for-games" streaming service prove to be a console killer or a colossal flop? **David Crookes** takes a look

What is it?

Google Stadia (www.stadia.com) is a cloud-based game-streaming service that will allow you to play some of the most cutting-edge titles available without a console or a high-spec computer. Instead, you simply select a game and start playing instantly without downloading or installing anything.

How does it work?

In the same way Netflix holds its library of films and TV shows on its own servers, Stadia's games are stored in Google's global network of data centres. When players choose a game, a server runs it remotely, streaming the visual and audio output to the player's device. As long as there's a fast, reliable connection, the player can interact with the game as if it were running locally. Press a button on a controller to jump, for instance, and that information is sent to the server, which then performs the action. Players will see the result on their device within a split second.

Will I need special hardware?

You won't need a dedicated device to run Stadia: you can access its library in a Chrome tab on your desktop PC, laptop or Android tablet, or use a Google Chromecast Ultra plugged into your television. It will also be available through an app on a Pixel 3 or 3a phone, and other Android and iOS devices are likely to support it in the future. What's more, Stadia should run perfectly well on low-spec computers. Google doesn't state a minimum specification on its Stadia website, so it'll be interesting to see how low it can go.

Is my connection fast enough?

Stadia will display video at up to 60 frames per second (fps) in 4K resolution with HDR support and 5.1 surround sound, so if you want the very best gaming experience, you'll need a broadband speed of at least 35Mbps. That said, you can still use Stadia if your speed is less. At 20Mbps, for instance, Stadia offers 1080p HDR video in surround sound, while at 10Mbps, you'll be down to 720p, which is still pretty good. You can test your connection speed at bit.ly/speedtest479.

How do I play the games?

A keyboard and mouse are all you'll need to play most games, although you may prefer to splash out on a controller. If you're playing Stadia games on a computer or mobile device, you can connect any HID-compatible controller, including a PlayStation DualShock 4 or Xbox One pad, using a USB cable. If you'd like to go wireless or want to play games on your television, however, you'll need the official Stadia Controller, which

You'll be able to play Stadia games on a variety of devices

You can use a PlayStation DualShock 4 controller to play Stadia games

connects directly to the game server over Wi-Fi. This is likely to be the best way to control games on the platform.

Does the controller do anything else?

Yes. On the face of it, the controller is a nicely designed but otherwise ordinary-looking game pad, with a D-pad to the left, two thumbsticks, shoulder pads on top, four function buttons and a 3.5mm headset jack. However, it also has five other buttons that provide access to Stadia's more innovative features. These include a Google Assistant button that triggers the built-in microphone, so you can ask for guidance to help you through a tricky section of a game, for example. There's also a Share button that lets you snap images or stream your play to YouTube.

A Chromecast Ultra streaming device is included with the Stadia Founder's Edition

Are the games any good?

Oh yes! As Google revealed at this year's Games Developers Conference in San Francisco, Stadia is offering titles that would be perfectly at home on the major consoles and top-range PC gaming rigs (see box below). This is no surprise given how capable the system is. If Stadia were a console, it would be more powerful than a PlayStation 4 and Xbox One combined. That's because, at its heart, it has a custom, server-class 2.7GHz hyper-threaded x86 processor, with 16GB of RAM and 56 compute units capable of 10.7 'teraflops' (a unit of computing speed equal to one million million floating-point operations per second). Compare that with the PS4's 4.2 teraflops and the Xbox One X's six, and you get a good idea of the power. Stadia also uses SSD cloud storage, so if you lose your connection, you'll have a few minutes to get going again.

Games Developers Conference attendees were excited about Stadia's teraflops

Will it really shake up gaming?

It already has. Last October, Google conducted a technical test called Project Stream that ran Assassin's Creed Odyssey Fierce and sent jaws dropping. More recently, console rivals Microsoft and Sony announced they were exploring the possibility of using Microsoft's cloud computing service Azure for their own game- and content-streaming services. Nintendo is also seeking Microsoft's help.

When is it due?

Stadia is pencilled in for a November release but you can preorder a Founder's Edition kit (bit.ly/stadia479). This costs £119 and gets you a limited-edition Night Blue Stadia controller, a Chromecast Ultra streaming device, three months of Stadia Pro (plus three months for a friend) and a Founder's Stadia name. Buying Stadia Pro on its own will set you back £8.99 per month for 4K streaming, surround sound and access to a library of free games that's updated regularly. You'll also receive discounts on any games you buy. If you can't commit to a monthly fee, you can sign up for the Base tier, which offers 1080p streaming and stereo sound and asks you to pay for games individually. Controllers cost £59.

Are Sony, Microsoft and Nintendo setting up rivals?

Sony already has a streaming service called PlayStation Now (bit.ly/psnow479) and Microsoft is working on its Project xCloud service (bit.ly/xcloud479), but they are far from being the only players in this field. Ubisoft recently announced its own game streaming service Uplay+ (uplay.ubisoft.com/en-GB), while a new service called Antstream (www.antstream.com) has finally started offering streams of retro games to its Kickstarter backers. Game streaming is clearly the future.

Antstream lets you play 400 retro games on demand for a monthly subscription fee

But what happens if one of these services closes down?

We don't know what would happen if, say, Google Stadia didn't work out and you'd invested lots of money in it. Would you still be able to play the games you'd bought? That seems unlikely.

Some people have raised concerns over the data companies will be able to gather about players, too. What insight will they gain into players' behaviour from their in-game decisions and the types of genres they enjoy, for instance? For now, though, the focus is on the technology – and on that front, Google appears to be stealing a march.

WHAT CAN I PLAY ON GOOGLE STADIA?

The list of games available on Stadia is likely to have grown by the time you read this, but Google had confirmed 31 titles at the time of writing. These include big names such as Assassin's Creed Odyssey, Borderlands 3, Baldur's Gate 3, Destiny 2, Doom, Doom Eternal, Dragon Ball Xenoverse, The Elder Scrolls Online, Final Fantasy 15, Football Manager, Just Dance, Metro Exodus, Mortal Kombat 11, Power Rangers: Battle for the Grid, Rage 2, Rise of the Tomb Raider, Samurai Showdown, Shadow of the Tomb Raider, Tom Clancy's Ghost Recon Breakpoint and Wolfenstein: Youngblood.

Stop Using GOOGLE CHROME

COVER FEATURE

Chrome may be the most popular browser, but it's far from perfect – and it's about to get worse. **Robert Irvine** explains why you should switch to a faster, smarter and more private alternative

With more than two billion users worldwide, and a 69% share of the desktop browser market (bit.ly/share479), Chrome is by far the most popular means of accessing the web. It's fast, easy to use, offers thousands of extensions and syncs your bookmarks, passwords and other important browsing data across all your devices. What's not to like?

The answer is "quite a lot, actually", because Google has gradually transformed Chrome from the savvy Internet Explorer alternative into a data-guzzling, web-controlling, anticompetitive beast, much like the Microsoft browser it superseded. Recent 'under the bonnet' changes announced by the search giant threaten both users and developers, yet on the surface Chrome has failed to offer anything new.

It's not all bad news, however, because other browsers are available that offer a more stable, innovative and privacy-respecting online experience. In this feature, we explain why it's time to ditch Chrome, what you should use instead and how you can make the switch simple and painless.

WHY YOU SHOULD STOP USING CHROME

Chrome may seem like a pretty good browser, but some of its flaws are more serious than others. Here we present the case against Chrome, and explain why the changes Google is currently proposing are proving so controversial

Chrome may stop your ad blocker working

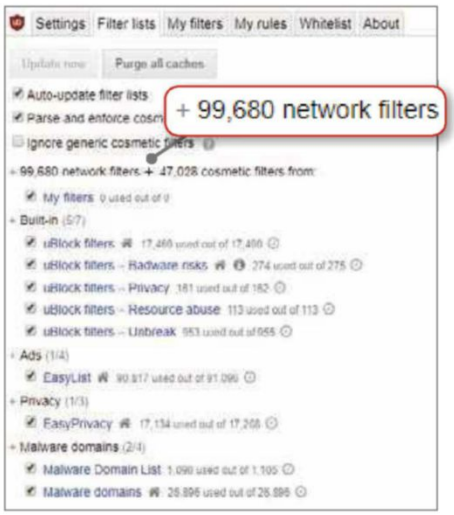
The latest and arguably biggest concern for Chrome users is that popular ad-blocking tools such as uBlock Origin, Adblock and Ghostery will soon stop working properly. This is because of an upcoming update to the browser called Manifest V3, which will change the permission system for Chrome extensions and significantly limit their ability to block online content.

Currently, most ad blockers use an application programming interface (API) called WebRequest to filter certain content on web pages. Google plans to phase out, or "deprecate", this in Chrome in favour of a new API, known as DeclarativeNetRequest (bit.ly/declarative479). Google says this will fix a number of alleged security and performance problems caused by WebRequest, but developers believe it will cripple the ad-blocking capabilities of their add-ons.

Planned changes to Chrome have alarmed privacy-tool developers such as Ghostery

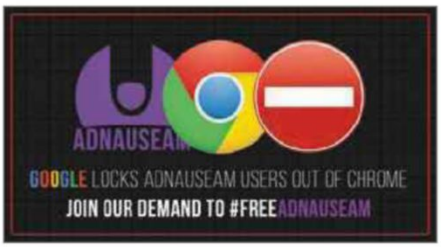
Initial fears stemmed from the news that DeclarativeNetRequest would support a maximum of 30,000 ad-blocking rules – far short of the 91,000 rules required by EasyList, the filter list that most content blockers use. Google has since relented and raised the new API's limit to 150,000 rules, stating that the changes in Manifest V3 were never designed to "prevent or weaken ad blockers" (bit.ly/google479). However, developers will still need to rewrite the code of their extensions for them to work effectively, and some believe that even 150,000 filtering rules may eventually prove too limited (uBlock Origin uses nearly 147,000).

Last year Chrome introduced its own ad blocker, but this basic tool filters only adverts that don't meet its "standards", such as those that use pop-ups,



Chrome will limit ad blockers to 150,000 rules, which isn't enough for some tools

auto-playing videos with sound and overlays that count down before the page content loads. Could the introduction of DeclarativeNetRequest give Google even greater control over online advertising? After all, in 2018 the search giant received the bulk of its $116



Google banned AdNauseam from Chrome for undermining its business model

billion revenue from ads – around 85% – so the fewer tools that can block them, the better. Google has banned many ad blockers from the Chrome Web Store and Google Play Store in the past, most notably AdNauseam (adnauseam.io), which not only filters ads but fake-clicks them to stop advertising networks tracking its users. The extension is still available for Firefox and Opera, and you can install it in Chrome via its GitHub page (bit.ly/adnauseam479).

There are other reasons for suspecting that Google's motivation for implementing Manifest V3 is business-related rather than for the benefit of

HOW TO SWITCH FROM CHROME

One thing that might put you off moving from Chrome to another browser is the prospect of losing your bookmarks, passwords and autofill data, and having to start all over again. Fortunately, there are a few simple steps you can take to avoid this hassle and make the transition as smooth as possible.

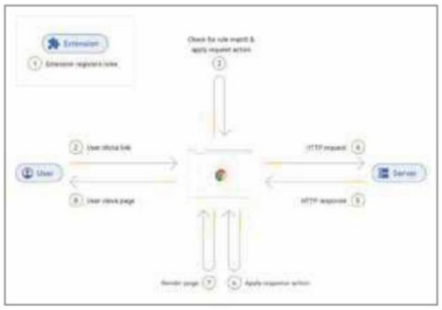
To migrate your data from Chrome to Firefox, open Mozilla's browser, click the Library icon in the top-right corner (which looks like four books on a shelf with one at an angle), and select Bookmarks, Show All Bookmarks. When the Library window opens, click the 'Import and Backup' button and choose 'Import Data from Another Browser'. Select Chrome, click Next and choose the items you want to import, such as cookies, browsing history, saved passwords and bookmarks. Click Next again and Firefox will perform the migration. Once it's done, click Finish to return to the browser.

The process is similar when moving from Chrome to other Chromium-based browsers. In Vivaldi, click the main menu and go to File, 'Import Bookmarks and Settings'. In Brave, you'll find the same option under Bookmarks, while in the new Edge, you should go to Favorites, Import.

Annoyingly, you can't import all your extensions from Chrome to a new browser, even a Chromium one, so you'll need to open the Chrome Web Store (chrome.google.com/webstore) or the Firefox Add-ons site (addons.mozilla.org) and install them manually.

Chrome users. The WebRequest API will still be available in the Enterprise edition of the browser, which businesses pay Google to use, raising doubt over why it has to be deprecated in the free version.

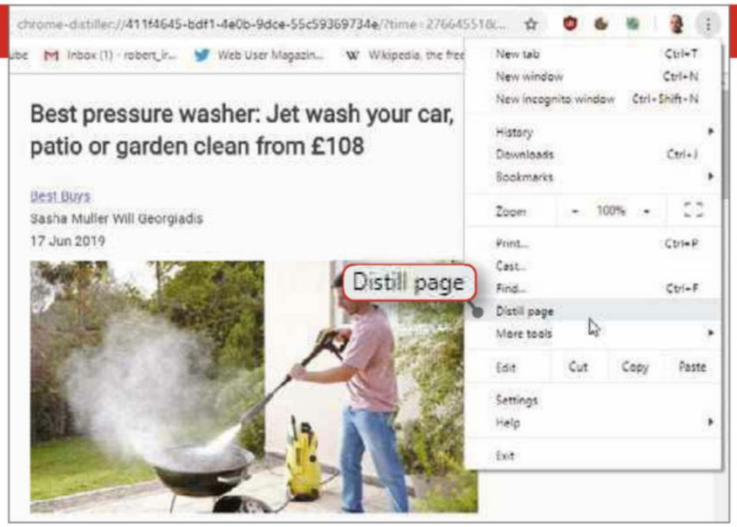
If Google's main reason for implementing Manifest V3 is to safeguard (and increase) ad revenue by making ad blockers less effective, the company seems to be conveniently ignoring the fact that most ad-blocking tools do much more than merely strip adverts from web pages. They also intercept, modify and redirect network requests, blocking harmful and dubious connections, and protect your privacy by refusing unnecessary third-party cookies. They even disable dodgy JavaScript and social-media buttons, and much more. By limiting these extensions, Google's heavy-handed tactics could transfer control of online content from you to Chrome, potentially making the web a much more annoying and dangerous place in the process.



Credit: blog.chromium.org

Google dismissed concerns over its API DeclarativeNetRequest, illustrated here

Naturally, many website owners will welcome the news that their visitors will be unable to block all ads, but the increased threat to privacy and security, coupled with Chrome's removal of choice, may simply leave users looking for a safer, more flexible browser that isn't affected by the changes. In fairness to Google, the company says DeclarativeNetRequest and Manifest V3 are still in development, and that it's listening to community feedback, but it only issued these mild reassurances in response to a backlash from developers.



Chrome has finally added a simplified 'reader mode' but has tucked this useful option away in its Experiments page

Chrome is no longer innovative

When was the last time Google added a feature to Chrome that you hadn't already seen in another browser? For example, Chrome 70 introduced Picture in Picture mode for watching videos in a floating window – two years after Opera and Safari offered that option. Chrome 74 added support for Windows 10's 'Dark mode', previously seen in Firefox and Edge, while the latest version, Chrome 75, adds a 'reader mode' for simplifying web pages – just like every other browser. You'll need to find it first, though, because Google has hidden this handy feature on Chrome's Experiments page (chrome://flags). To use it once it's enabled, click the main 'Customise...' menu and choose 'Distill page'.

The sad truth is that Chrome stopped innovating a long time ago, and any improvements it has introduced recently have either been copied from other browsers or hidden 'under the bonnet'.

Chromium, the Google-owned open-source project on which Chrome is based, is undoubtedly cutting-edge in the technology it uses to deliver a fast and reliable browsing experience.

WHY YOU SHOULD STICK WITH CHROME

Before you ditch Chrome for a better browser, it's worth considering what problems you might experience by doing so. Here are some of the main ones

■ SOME WEBSITES MAY NOT WORK

Most websites load perfectly no matter which browser you use, but some – especially those from Google itself – only work in Chrome. For example, you can't view the online version of Google Earth (earth.google.com/web) in Firefox or Edge, while in Vivaldi and Brave it just hangs on the welcome page. On the other hand, we've found that most Chrome Experiments (bit.ly/chrome479) work perfectly well in other browsers!

■ YOU'LL LOSE MOBILE SYNCING

If you switch to a different desktop browser but continue to use Chrome on your mobile device, you won't be able to sync data between the two. The obvious answer is to install your new browser's app on your phone or tablet, but in some cases – such as Vivaldi, which doesn't have one yet – this isn't possible.

■ SLOWER SECURITY UPDATES

Google is usually quick to issue patches for reported vulnerabilities in Chrome, which the browser then installs automatically. However, Chromium doesn't have its own built-in auto-update mechanism, so other browsers that are based on it won't necessarily receive security fixes as soon as Google releases them. Responsible developers will update their browsers as quickly as they can, but it's still essential that you make sure you're running the latest version at all times.

Chrome's automatic spell checking is useful but hardly innovative

However, whereas other Chromium-based browsers, such as Vivaldi and Brave, build on its underlying technology to offer their own privacy, security and customisation features, Chrome remains comparatively 'vanilla'.

Fans of the browser say this is all part of its appeal: Chrome is easy to use, isn't cluttered with unnecessary tools and performs everyday tasks such as spell-checking, managing passwords and entering form information automatically. But as Mozilla proved with the release of Firefox Quantum in 2017, it's possible to make a browser feel fresh and modern without reinventing the wheel. Chrome is now approaching its 76th version, and it's definitely showing its age.

Chrome shares your data with Google

We're sure we don't need to remind you that Google harvests your data, but you may not realise how much information Chrome secretly shares with its parent company. Even if you don't use the browser's Sync mode, which saves data including your bookmarks, browsing history, passwords and open tabs to your account on Google's servers, Chrome sends lots of other information in the background – unless you change specific privacy settings.

You need to tweak a lot of privacy settings to stop Chrome sharing data with Google

You can find some of these by going to Settings, 'Sync and Google services', 'Other Google services'. The options you should disable include 'Show suggestions for similar pages when a page can't be found', which sends the web address you're trying to reach to Google, and 'Make searches and browsing better', which shares details of *all* the pages you visit. 'Help improve Chrome's features and performance' automatically sends Google statistical data about how you use the browser.

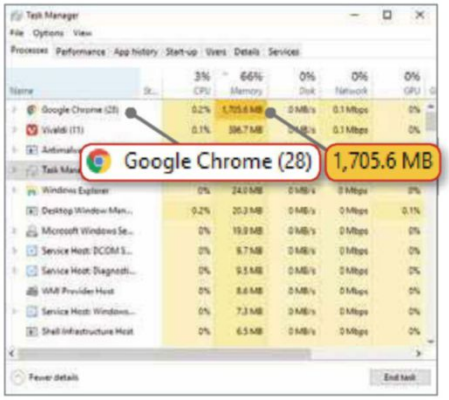
Also go to 'Privacy and security' and switch off 'Allow Chrome sign-in'. This controversial feature, which Google added to the browser last year, automatically signs you into Chrome when you use Google services such as Gmail, Maps or YouTube – thereby gathering all your data in one place.

Additionally, bear in mind that while Chrome's incognito mode stops the browser storing details of the things you search for and the sites you visit, this data is still visible to Google. If changing all these settings sounds like hard work, switch to a more private browser!

Chrome is a notorious memory hog

It's no secret that Chrome uses a lot of memory. Open Windows Task Manager and you'll inevitably see Chrome at the top of the usage list – on our PC, it's currently consuming nearly a quarter of the available RAM and 28 separate processes. That's because Chrome uses a separate 'sandboxed' background process for every tab, plugin and extension, which is handy if one crashes, because it won't affect the others, but adds up to a big strain on your system.

Other browsers (such as Firefox) can also be memory hogs, and those based on Chromium suffer similar problems unless they dump a lot of Google's baggage, but we're surprised that Chrome hasn't fixed this issue after 11 years. Instead, it seems that the more RAM our PCs have, the more it guzzles.



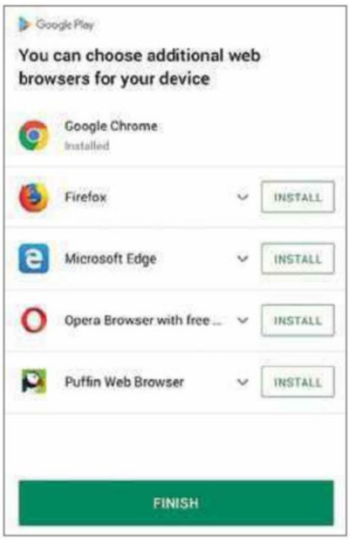
Chrome tends to guzzle more memory than any other program on your computer

Google forced Chrome on Android users

According to recent figures from StatCounter (bit.ly/market479), Chrome has a 59.4% share of the mobile-browser market, while its closest rival, Safari, lags far behind on 20.8%. On Android phones, Chrome's dominance rises to more than 80%, not because it's the best choice but thanks to Google's bullying business tactics.

Last July, the European Commission (EC) fined the company a record €4.34 billion for violating antitrust laws and "illegally tying" Chrome and its search app to the Android operating system. This meant that handset manufacturers were forced to install those tools if they wanted to offer the Play store on their devices, which meant that many users never thought to use alternative browsers and search engines. Microsoft faced similar antitrust allegations 15 years ago for bundling its Internet Explorer browser with Windows, so it's telling that Google has followed in the monopolistic footsteps of its arch-rival.

In 2009, the EC ordered Microsoft to offer users a 'browser ballot' in the form of a screen that let them choose their default web browser. This undoubtedly helped boost Chrome's popularity, so it's ironic that Google is now appeasing the EC by offering a similar ballot screen on Android devices, inviting users to choose a different browser and search app. It's a step in the right direction, and Google says it will "support choice and competition in Europe", but the company should never have promoted Chrome so aggressively in the first place.



Google must now offer Android users a choice of browsers besides Chrome

WHAT YOU SHOULD USE INSTEAD

Here we recommend three brilliant alternatives to Chrome and explain their benefits. We've also tested how well they handle the latest web technologies using the benchmarking tool Basemark 3.0 (web.basemark.com) and its 20 'rendering' tests

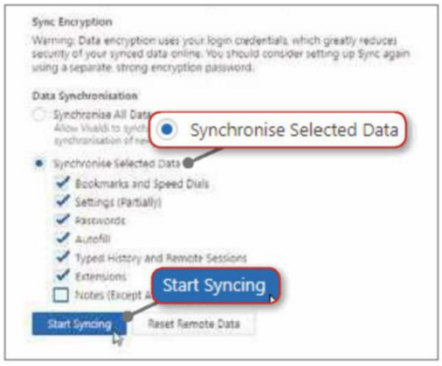
VIVALDI
www.vivaldi.com

Why use it?

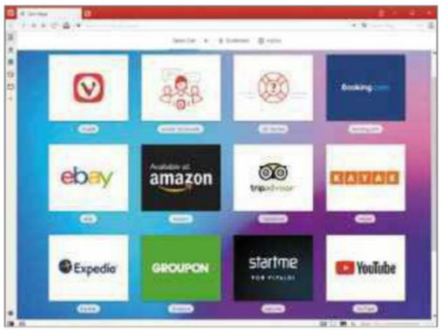
After the news emerged that Manifest V3 might stop ad blockers working in Chrome, the team behind the Chromium-based Vivaldi published a blog post addressing users' concerns (bit.ly/vivaldiblog479). While acknowledging the importance of free, ad-supported content on the web – which is why the browser doesn't offer its own full ad blocker – the post emphasised that Vivaldi is "all about giving you choice" and promised to find a workaround for the proposed changes to Chromium. "The good news is that whatever restrictions Google adds, at the end we can remove them," said the company. Now that's music to our ears.

Vivaldi is a much more innovative, customisable and versatile browser than Chrome, constantly refining its interface and adding useful new features, while allowing you to install all your favourite extensions from the Chrome Web Store. Last October, it added Sync, which lets you synchronise your bookmarks, passwords, extensions and history securely across devices using Vivaldi's own end-to-end encryption system rather than Google's sync server. You can also delete your private-browsing data for the past hour, day, week or longer, with a single click.

Vivaldi looks more like Opera than Chrome, so it may take a little getting used to, but its tidy menus, handy side panels and comprehensive help pages (help.vivaldi.com) make its impressive array of tools easy to master. These include options to stack and tile open tabs for ease of use, the ability to control the browser using mouse gestures and keyboard shortcuts, a built-in screen-capture tool, thumbnail previews of tab contents, a choice of colourful themes and much more.



Vivaldi lets you sync your data across computers without using Google's servers



Vivaldi's colourful interface is packed with tools you won't find in other browsers

In our Basemark 3.0 performance test, Vivaldi scored 561.27, comfortably beating Chrome's score of 465.66. If Vivaldi ever starts using too much memory, you can set tabs to 'hibernate' until you need them.

Why not?

Vivaldi comes with several bookmarks and Start Page tiles preinstalled, for companies including Amazon, eBay and Booking.com, which you need to remove manually if you don't want them. This is presumably how the browser earns the money to fund its development, so don't judge it too harshly. It's also one of the few major browsers not to offer a mobile version, although the Vivaldi team say an Android app is on its way soon.

BRAVE
www.brave.com

Why use it?

Brave switched to using Chromium code last year, boosting its speed by up to 22% and allowing you to install extensions from the Chrome Web Store (before the switch, it offered only nine approved tools). This may seem an odd decision for a privacy-focused browser

WHAT ABOUT THE NEW EDGE?

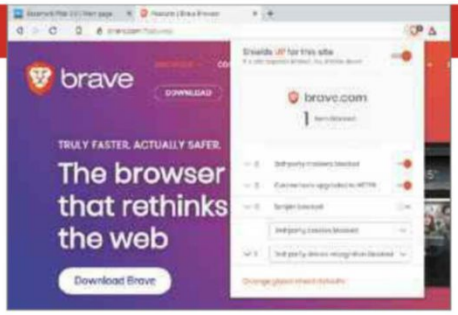
Microsoft surprised everyone at the end of last year when it announced plans to rebuild its Edge browser from scratch using Chromium, the open-source project owned by its nemesis, Google. The software giant cited the need to "create better web compatibility" for its customers and reduce fragmentation for developers.

The new Chromium-based Edge is fast and works with Chrome extensions

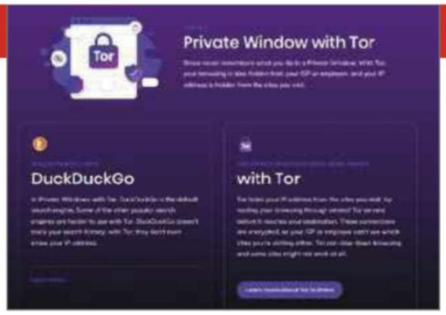
Although Microsoft hasn't yet announced a release date for its new Chromium-based browser, preview versions have been available for Windows 10 since April and, as of last month, for Windows 7 and 8.1, too – the first time the browser has been available for those platforms. You can try it for yourself by downloading the Microsoft Edge Dev Channel from www.microsoftedgeinsider.com.

The redesigned browser is much more customisable than Chrome and retains the best features of the old Edge, including reading view, read aloud, Android sync and media casting, while adding new ones. Notably, you can now install extensions from the Chrome Web Store as well as the Microsoft Store, which offers add-ons that Google forbids, such as YouTube downloaders. Microsoft has also disabled or replaced other Google services.

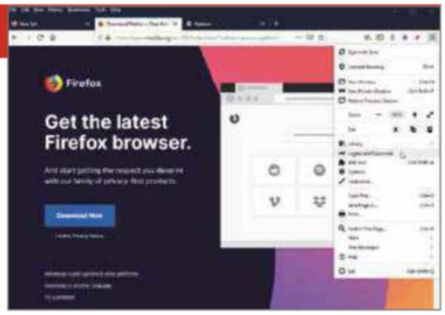
Most importantly, the new Edge is considerably faster and less bloated than both its previous incarnation and Chrome (Edge squeaked past Chrome in our performance benchmark with a score of 471.65). As Chromium Edge is still at the development stage, we wouldn't recommend using it as your main browser just yet, but we reckon Microsoft has finally got it right.



Brave is an impressively quick browser that offers powerful built-in privacy options



Brave's private mode goes further than Chrome by letting you browse using Tor



Firefox won't be affected by the changes Google is planning to make to Chromium

but, unlike Chrome, Brave doesn't connect to Google in the background or use it for search suggestions, and has disabled Chromium features that track your data. It also uses its own Sync system, which works across Windows, Linux, macOS and its apps for Android and iOS, although it's currently limited to syncing bookmarks.

Brave keeps features to a minimum, but no other browser comes close for built-in privacy and security options, which protect you from the moment you run it and save you weighing it down with third-party tools. The browser's 'shields' block ads (and will continue to do so regardless of Manifest V3), tracking cookies, social-media buttons, harmful scripts and fingerprinting (which lets websites identify you), and automatically redirect you to the secure HTTPS versions of sites. Best of all, you can browse the web anonymously by opening sites in Tor, encrypting your connection so nobody can see what you're doing – a far superior option to standard private-browsing modes.

With an incredible score of 606.33, Brave beat every other browser in our Basemark 3.0 tests, although we had to disable its shields to perform the tests.

Why not?

Although you can install Chrome add-ons in Brave, most display a security warning saying that "Brave hasn't reviewed this extension yet – it might be malicious". This is a commendably cautious approach (and you can ignore the warning if you wish), but we wonder when Brave will get round to reviewing such popular tools as OneTab, Awesome Screenshot and uBlock Origin.

Also, the browser isn't averse to ads: its optional Rewards scheme lets you earn tokens by viewing "privacy-respecting ads" from its partners.

FIREFOX

www.getfirefox.com

Why use it?

The Firefox versus Chrome debate has raged since the latter launched 11 years ago, but we think Mozilla's browser is now a better option. For a start, it's built using a Mozilla-developed engine called Gecko rather than Chromium. This means it isn't affected by Manifest V3, so all ad-blocking extensions will continue to work perfectly – and more are available for Firefox than Chrome.

We're also impressed by the many improvements Mozilla has made to the browser over the past year, such as blocking autoplay content, enhanced tracking protection to block third-party cookies, a beefed-up password manager (previously one of its weakest tools), protection against cryptomining and a revamped add-ons manager.

As Mozilla is a non-profit organisation, it doesn't use Firefox to harvest your data as Google does with Chrome, and its privacy controls are enabled by default. It's a bit of a memory hog, even after its Quantum revamp, but we find it less resource-intensive than Chrome.

Why not?

Firefox's Add-ons store is packed with useful tools, but it's had a bit of trouble recently. In May, reports emerged that malicious extensions with names similar to genuine ones had infiltrated the site, while a few weeks earlier a bug disabled many users' add-ons for not being "verified". Mozilla fixed both problems quickly (and Chrome has also suffered its share of dodgy extensions), but two incidents in a month is disconcerting.

Firefox protects your privacy by blocking all third-party tracking cookies by default

Also, in our Basemark 3.0 test, Firefox's score of 338.02 fell way behind those of Chrome and Vivaldi. ■

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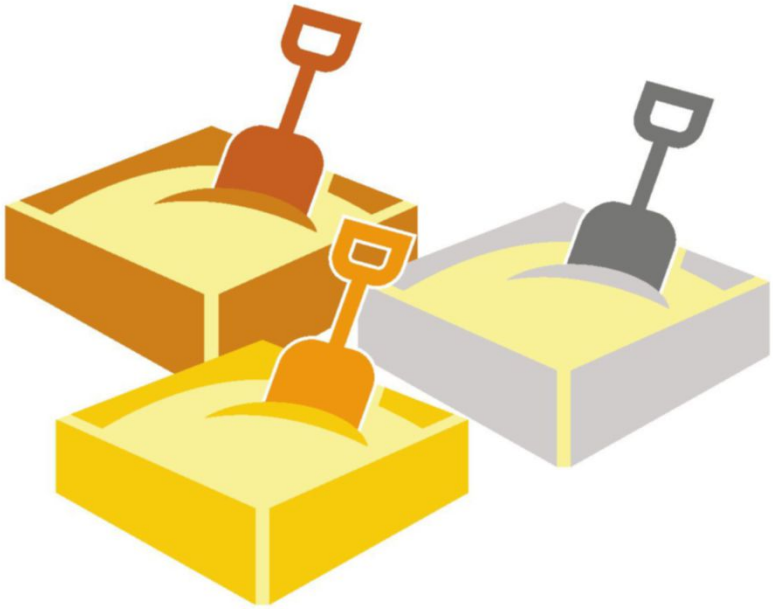
Best free sandbox software

Microsoft included a handy sandboxing tool in the latest Windows 10 update, but inexplicably left it out of the Home edition that most of us use. Don't worry, Home users, because **Andy Shaw** has tested six of the best alternatives that even Windows 10 Pro and Enterprise users may prefer



Sandboxie | www.sandboxie.com | ★★★★☆

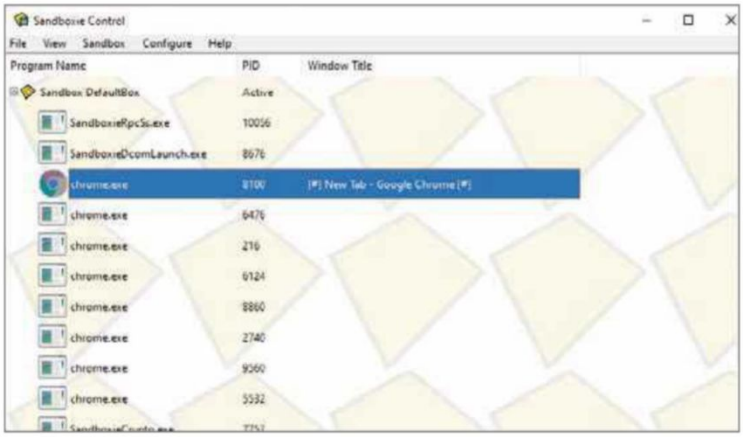
FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★☆

What we liked:

If you're a regular *Web User* reader, you could be forgiven for rolling your eyes at the fact that we've recommended Sandboxie again – as we have in every round-up of sandbox software since the program was released in 2004. However, the fact is that there's still nothing out there that can rival it. Our Silver and Bronze Award winners have their merits but they can't hold a candle to Sandboxie.

So what makes it so good? For starters, Sandboxie is a proper sandbox tool. Once you've launched it and chosen which program to run in it, anything that program does is safely contained in the sandbox where it can't affect the rest of your PC. You can use Sandboxie to test software you're not sure about, and take your browser to dodgy corners of the web without having to worry that something nasty will infect your PC. There are a few preconfigured options that you can launch quickly, such as one that opens a browser within Sandboxie, but the software is easy to use, with a tool that lets you explore your Start menu items or your entire PC for things you can run within its confines. Anything goes.

When you download Sandboxie, you may get the impression that there isn't a free version. The single home user licence costs $20.95 (around £16.53) per year, and while we love Sandboxie, that's a lot of money for something you may use only occasionally. However, the 30-day trial version continues to work beyond the 30 days, with just a few limitations and a nag screen, which is fine if you don't use it often enough to justify paying for it.



How it can be improved:

Sandboxie's interface hasn't changed much in all the years we've been using it. From its Windows 95 menus to its tiled wallpaper, it hides its quality and usefulness behind a façade of old-fashioned design. Also, the icon in the notification area that you use to control it launches with Windows, so you may find its constant presence annoying if you don't use the tool very often.

OUR VERDICT

Even if you use Windows 10 Pro or Enterprise and have Microsoft's built-in sandbox tool, Sandboxie is worth considering. It's the most thorough software for running programs in a fenced-off environment where they can't harm the rest of your PC. However, it isn't perfect: its interface looks dated and you may feel guilty about stretching out the trial version.

Shade Sandbox | www.shadesandbox.com | ★★★★☆

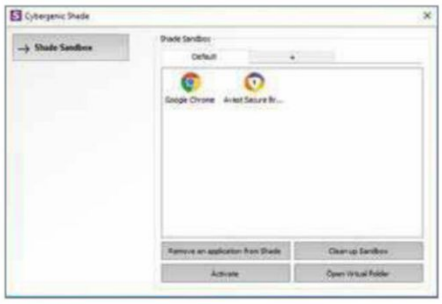
FEATURES ★★★★☆ PERFORMANCE ★★★★☆ EASE OF USE ★★★★☆

What we liked:

Shade Sandbox's blank, featureless interface looks a little intimidating at first. However, once you realise you're supposed to drag application icons into the empty box to run them in an isolated environment, everything slots into place.

There are no obvious signs that Shade Sandbox is protecting a program until you hover over its title bar, when it surrounds the window with a bright blue glow. You can run a browser or any other program in the sandbox, and nothing can escape from it without your permission. However, if you want to save any downloads you've made in your sandboxed browser, for example, you'll find them in an isolated folder that you can access from Windows File Explorer.

Once you've placed an application in Shade, it stays there even if you restart your PC. To let it run normally again, you have to remove it from the box.



How it could be improved:

Dragging and dropping icons into Shade Sandbox seems logical, but it isn't always obvious where your program files are if, for example, you want to add a program that you usually access from the Start menu.

OUR VERDICT

Shade Sandbox came a solid second in this group, but that's partly because its rivals don't quite fit the sandbox description. Shade can run any software in its isolated zone but not as well as Sandboxie does it.

R&S Browser in the Box | bit.ly/bitx479 | ★★★☆☆

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

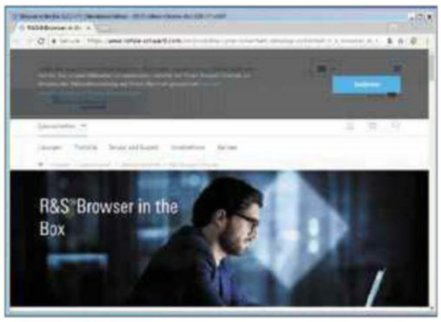
What we liked:

If all you want to do is run a browser in a safe environment, Browser in the Box can handle it. The tool takes a fairly extreme approach, though, because it installs a version of Chrome or Firefox (depending on the version you download) and runs it within a virtual operating system (a cut-down version of Linux, by the look of it). This made the download bulky and the software slow to launch and run.

When we tested the Personal Edition for Chrome, we found that it's possible to download files to our PC. They ended up in our standard Windows Downloads folder, although the software did at least ask us to confirm that we wanted to download the file and told us where it was going. Malicious attacks should be easily thwarted as long as you pay attention to incoming messages.

How it can be improved:

We were slightly disturbed to find that the tool uses version 66 of Chrome – nine versions behind version 75, which



you'd get if you downloaded Chrome today. This doesn't really matter, since your PC is protected from everything that goes on in the browser, but it looks old-fashioned with its angular tabs.

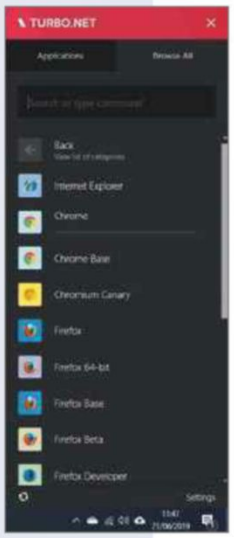
OUR VERDICT

Since most of the things we do on our computers involve the web, and most threats come from the internet, running a protected browser seems like a sensible choice. However, while this is a neater concept than running a browser in a standard sandbox, it's a clunky way of going about it.

BEST OF THE REST

Turbo.net

turbo.net



Turbo.net is a different and rather brilliant way of doing sandboxing. It provides access to programs that are hosted safely on a server somewhere else, so running them has no impact on your PC. The problem is that the free version provides only four minutes of access to each program before it shuts down, so you have to be quick or pay an eye-watering $99 (around £77.93) per month for five users.

VirtualBox

www.virtualbox.org

Rather than sandboxing your programs, VirtualBox lets you run an entire virtual operating system, from Windows to Linux. This is a good option if your PC can handle it, because anything you do is truly contained but you can still install and run any program you like. However, you need a powerful PC with a fast processor and plenty of memory to run one operating system on top of another.

ToolWiz Time Freeze

bit.ly/twtf479

ToolWiz Time Freeze is a sandbox masquerading as a backup tool. In effect, it freezes time on your PC so that nothing you do has a lasting effect. When you've finished using it, any changes made to your system are rolled back, as if they'd never happened. It's good, but it could expose your PC to malicious software, even if it's only temporary.

Schedule everything for later

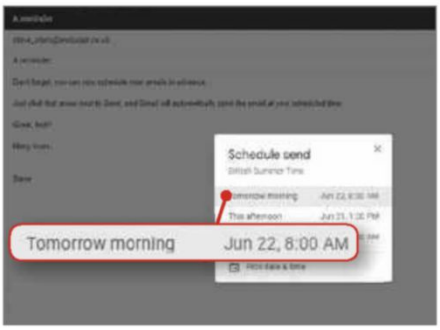
Our time is precious, so why waste it on tasks that could be performed automatically? **Steve Clark** explains how to schedule things for while you're away – or asleep

SEND EMAILS LATER

Scheduling an email used to mean typing it out and saving it to your Drafts folder, then finding it and pressing Send when you were ready. Then came tools such as Email Studio (emailstudio.pro), which automated the process – for a price. Finally, Gmail heard our pleas and made it easy to schedule emails for free.

Open Gmail and click Compose. Write your email as usual, add the recipient(s), then click the arrow to the right of the Send button. This reveals the option to 'Schedule send'. Choose a date and time from the preset options, or click 'Select date and time' to set your own. You can also access this feature in the Gmail app on your phone by pressing the three dots on the Compose screen.

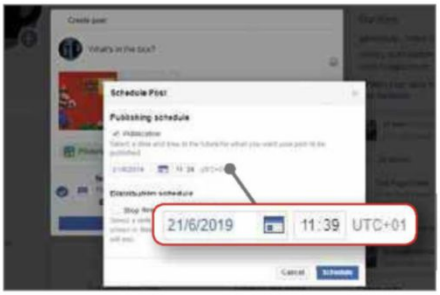
Scheduling an email from a Microsoft account is trickier because you can't use Outlook.com or the Windows Mail app. Instead, prepare your email using the Outlook 2010-2019 mail client. Go to Options, select Delay Delivery, then check the box marked 'Do not deliver before' and set a date and time.



Compose your email now and send it automatically when you're ready

POST ON FACEBOOK

Despite being the world's most popular social network, Facebook doesn't let you schedule posts on your personal account. However, you can automate posts on pages if you're an administrator. This is great if you run a company because it allows you to interact with your followers even outside business hours (no, companies aren't paying someone to come in on 25 December and write those 'Merry Christmas' posts).

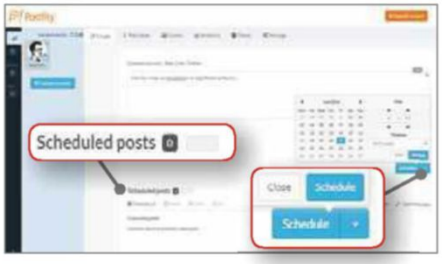


Schedule Facebook posts so they reach the biggest audience at the right time

Write your post as usual, adding any photos or media you like, then click the three dots below the text field. Press the arrow next to 'Share now' to choose when you want followers to see your post. You can also select 'Stop News Feed Distribution', which sets a cut-off date after which your post is no longer visible in news feeds.

Interestingly, you can also backdate your post, which may be useful if you want to pretend you're psychic.

POST ON SOCIAL MEDIA



Postfity is handy for scheduling and managing posts across social channels

Just because Facebook won't let you schedule personal posts, it doesn't mean it's impossible. Postfity (postfity.com) lets you connect up to five social media accounts for free – including Facebook, Twitter, Instagram and LinkedIn. It also comes as a Chrome extension (bit.ly/post479).

Start by connecting your social-media profiles, then compose your post under the Create tab. An image editor is available here too, but don't expect Photoshop-level options – it's strictly for making basic tweaks to photos. If you're suffering from writer's block and need some inspiration, click the Post Ideas tab to see recent successful posts from different websites.

When you've finished your post, press the arrow beside the Schedule button and pick a date and time. The post is moved to the 'Scheduled posts' section.

DOWNLOAD FILES AND SOFTWARE

A particularly annoying aspect of modern computing is when your PC starts downloading files and software at an inconvenient moment. Maybe you're in the middle of something important or you're running on limited bandwidth.

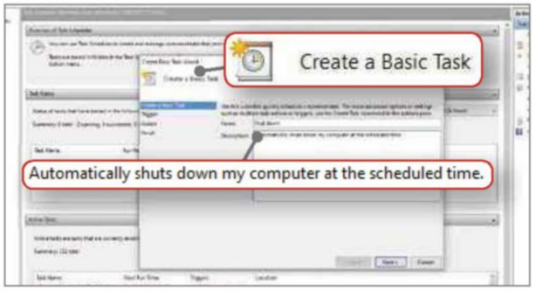
EagleGet (www.eagleget.com) is a free program that automatically adds an extension to your browser and steps in whenever you download a file. It works with Chrome, Opera, Vivaldi and Firefox. On the surface, it's a simple download manager, but you can edit the settings to prevent automatic downloads or set them to continue when you restart your computer.

Seize control of your downloads by installing EagleGet in your browser

Open Settings, Monitoring and you'll see a section labelled 'Automatically start downloading the following file types'. Delete every file extension and click Done. You can also switch on file categorisation, which creates new folders based on the type of file you're downloading for easier management.

SHUT DOWN YOUR PC

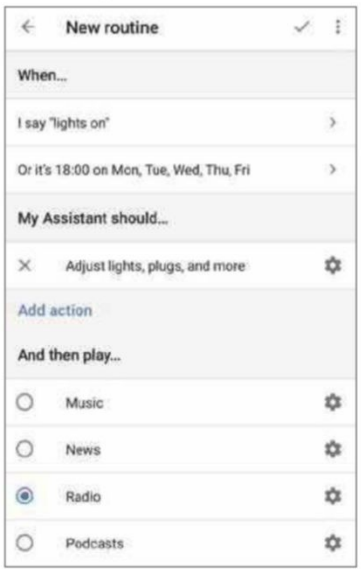
There are two ways to shut down your computer without having to click shutdown manually. The first uses the Windows Task Scheduler. Search for it using the Start box and, once it's loaded, select Create Basic Task, which opens a separate window. Give the task a name ('Shut down', for example) and a description ('Shut down my PC'). Click Next to specify how often the task should be triggered, then set the date and time. On the Action screen, check the box next to 'Start a program'. On the following screen, browse the System32 folder for the shutdown application, and add `-s` in the 'Add arguments' field. Click Next once more to review the command before activating it.



Windows' Task Scheduler lets you automate many actions on your PC, including shutting it down

The second method requires your timing to be a little more precise and is best reserved for one-off occasions. Open the Run app and type `shutdown -s -t` into the text field. Then enter the number of seconds Windows should wait before shutting down your computer. This may have you scurrying for a calculator, but if you wanted to shut down in an hour, say, your command would read `shutdown -s -t 3600`. Click OK to start the timer ticking.

TURN YOUR LIGHTS ON AND OFF



Google and Amazon's Routines are as smart as their AI assistants

The voice assistants in devices from Google and Amazon can do so much more than wake you up with an alarm or play a Spotify playlist.

If you use Google Home, open the Home app and go to Profile, Settings, then tab across to Assistant. Choose the Routines option and press + to create a new routine. 'Add commands' lets you enter a voice command that activates your routine (for example, 'Goodnight'). Next, use 'Add action' to tell Google what to do. This can be a single action, such as turning off the lights, or a string of actions, such as telling you tomorrow's weather forecast, then turning off the lights and playing some relaxing sounds to help you get to sleep. Select 'Choose popular actions' to browse through a range of common routines for inspiration.

To operate your lights with an Amazon device, open the Alexa app on your phone, press the Menu button and select Routines. Tap +, followed by 'When this happens'. Choose Schedule to specify a date and time, or Voice to set a phrase. Then, under 'Add action', go into Smart Home and select your smart lights. Finally, tap Save.

SCHEDULE A FAKE PHONE CALL

Have you ever been somewhere you wish you weren't, such as a boring meeting or a bad date? One tried and tested way of bailing out is to get a friend to phone with a supposed emergency – and now you can do it automatically.

Fake Call on Android (bit.ly/fake479) and iTunes' Fake Call Plus (bit.ly/fakecall479) let you schedule a bogus call to help you out of a sticky situation. You can make it look as if it's from a real person, complete with profile picture and voice. Just remember to make your side of the conversation sound convincing!

You can also schedule text messages using Textra for Android (bit.ly/textra479). It won't help you get out of a bad date, but it might save you some time.

When you need an excuse to leave, fake a phone call

18+

WHAT IS AVAXHOME?

AVAXHOME-

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

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

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

Discover the history of your home online

Who used to live in your house? What stories could its four walls tell? **Jane Hoskyn** reveals the best web tools for digging up your property's past

Find out when your house was built

The first stop in your quest to uncover your home's history is the decidedly unromantic Land Registry (bit.ly/landreg479). Enter your address, then cough up £3 for a PDF of your home's title register. This legal document lists all your home's sale dates, the names of previous owners and details of major changes such as conversion from a shop to a dwelling. The first registered date gives you the best indication of its age.

A more creative way to date your home is to look up its architectural features on www.howoldismyhouse.com, which offers an enjoyable overview of British home styles.

Track the value of your home

A property's title register provides details of its sale prices since April 2000, and market-tracking sites such as www.onthemarket.com/sold-prices let you track the price of any UK property since 1995.

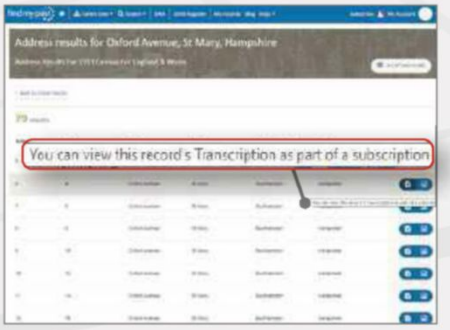
There's no data before 1995, but you can console yourself by studying the fascinating Land Registry 'price paid dataset' tool (bit.ly/land479). Enter a street name and house type to compare the value of your home with those of your neighbours over the past 24 years, then use the tags under 'Search results' to narrow or broaden the comparison. You can then download the data as a CSV spreadsheet file for free.

Export a 24-year history of your home's value from the Land Registry

Find out who lived in your house

Get to know your home's previous occupants through census records and the electoral register. Historical records of both are available online, but you have to pay to dig into the detail.

You can find names for free at FreeCen (www.freecen.org.uk), which covers UK Census records from 1841 to 1891. You can also do a basic free search of the National Archives' UK Census collection (bit.ly/census479), which covers 1841 to 1911. The England and Wales electoral registers 1832-1932 are available at bit.ly/elecreg479, while London's electoral records 1832-1965 can be found at bit.ly/londonreg479.



You have to pay to see detailed records of your address in UK Census reports

You'll need to stump up some cash to view the digitised details, however, including census reports of your predecessors' occupations and scans of household inventories. Findmypast (www.findmypast.co.uk) hosts the

BEST FREE APPS FOR HOUSE DETECTIVES

Find A Grave bit.ly/grave479
Who's buried near your home? Find out with this free app from Ancestry.co.uk.

Old Maps bit.ly/mapsdroid479, bit.ly/mapsios479
Get a bird's eye view of your street through the centuries.

Nearby Wiki bit.ly/nearby479
Discover the history and geography of your current location.

Hidden History bit.ly/hiddendroid479, bit.ly/hiddenios479
Get a guided tour of London's bomb sites and plague pits as you walk the streets.

Blue Plaques of London bit.ly/bluedroid479, bit.ly/blueios479
A great new app from English Heritage that reveals famous former residents as you walk.

Fossil Explorer bit.ly/fossil479
Go back even further in time and discover the fossils that lurk beneath your kitchen.

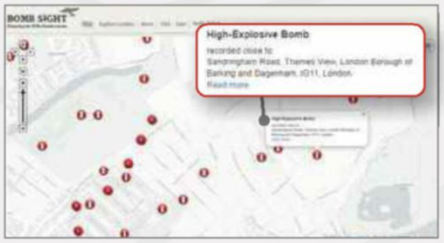
1901 and 1911 census data and charges £7.95 per month, while Ancestry.co.uk adds census data from 1891 and earlier, plus electoral registers, and charges £10.99 per month.

Discover your home's wartime history

Findmypast's 1939 Register (bit.ly/39reg479) reveals who was living in your house on the eve of World War II. You can also begin your search at www.findmypast.co.uk/maps. The site gives you the owner's name and year of birth for free, but you'll need a FindMyPast subscription to 'unlock' census details, as well as local maps and the area's wartime demographic statistics.

Very little data was collected about homes and people during the war itself, but bombing raids were recorded in detail. If your family or home were in the Greater London area during the Blitz of 1940-41, we urge you to visit the superb interactive map at Bomb Sight (bombsight.org). Meanwhile, the National Archives keeps written WW2 records at its public offices – find out more at bit.ly/bombs479.

Perhaps the best way to learn about the war is to hear people's experiences. The British Library's Listening Project (bit.ly/listening479) is an archive of conversations recorded by the BBC, including first-hand wartime testimony, all available for free. Also try the Sound and Moving Image Catalogue (bit.ly/sound479)– click 'Advanced search' then choose 'Oral history' from the 'collection' drop-down menu.



Bomb Sight's heartbreaking map reveals the scale of destruction during the Blitz

See how your street evolved

Enter your postcode into Old-Maps (www.old-maps.co.uk), then use the thumbnails to switch between Ordnance Survey maps going back around 150 years to see how your street has evolved over the decades. It's free to use, and you can zoom in far enough to see that your local supermarket used to be a workhouse, although the site charges £9.99 per month for finer detail and map downloads.

There's a free (if less comprehensive) collection at Old Maps Online (www.oldmapsonline.org). And if you're in the heart of central London, check the Medieval Murder Map (bit.ly/murder479) to see the grisly events that happened down your street.

The Gazetteer (www.gazetteer.co.uk) offers a range of old maps, too, but where it excels is in explaining the origins of UK place names. This fabulous site also tracks the history of county boundaries and 'police areas'. Most of the information is available to view for free, but you can pay £15 to download an entire database of place names.

Wikishire (wikishire.co.uk) reveals the origins of your county, with free articles and local links. There's also a 'Data lookup' page with postcode lists, population stats and map coordinates, all of which you can export for spreadsheets and databases.

See your home's vintage paperwork

The 1862 Act Registers (bit.ly/actreg479) is a free, searchable record of land and property paperwork (some on wax parchment!) collected in 1862 and now free to download in JPEG format. Annoyingly, you have to fill in every search field to get a result, which means you'll need to know your home's title number (from the title register), parish (town) and 1862 resident's name.

There are no such limitations in the Internet Archive (archive.org). Search for mentions of your town or browse

Was your corner shop previously a workhouse? Find out from Old Maps

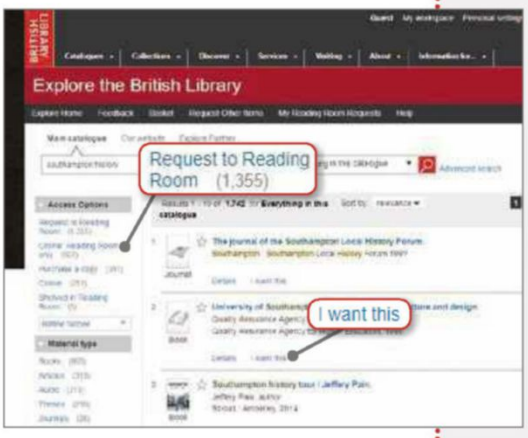
collections such as the National Library of Scotland (bit.ly/scotarchive479), where you can read the Edinburgh & Leith 1909 Post Office Directory, and British Non-Parliamentary Publications (bit.ly/britnon479), which includes such gems as a town planners' draft for expanding Ipswich and a 1968 conservation study of York. Scottish local historians should visit the Scottish Archive Network (www.scan.org.uk), a small but fascinating collection of scanned property documents that date back to 1500.

Look for your house in Edinburgh's 1909 Post Office book on the Internet Archive

RUMMAGE THROUGH RECORDS IN PERSON

The British Library and National Archives have done sterling work in digitising their collections of newspapers, books, letters, journals and more. But when you search their databases – the National Archives' Discovery site (bit.ly/discovery479), and British Library's Explore page (bit.ly/explore479) – you quickly realise that most of the best stuff is still locked away in buildings, and in some cases you have to apply to view them. The web can at least show you how to do this.

- **To view material at the British Library, apply online for a Reader Pass at bit.ly/reader479**
- **To browse National Archives material locally, enter your postcode at bit.ly/archives479 and search bit.ly/archive479**
- **To see electoral registers and property documents, find your local records office in the list at bit.ly/offices479**
- **To search the digitised and physical collections of more than 300 UK universities, visit archiveshub.jisc.ac.uk**

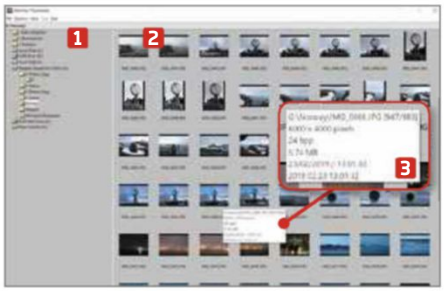


Manage and edit your photos using IrfanView's new tools

The popular image browser, converter and editor has recently been updated with a number of new tools and effects. Here's how to use it

IrfanView: www.irfanview.com | 20 mins | Windows 7, 8, 10

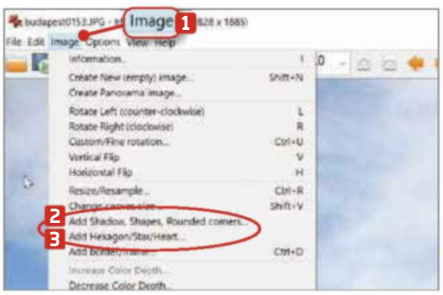
IrfanView is one of *Web User*'s favourite image editors. It's tiny but it's surprisingly powerful and packed with features. As well as browsing thumbnails of images in folders and viewing full-screen photos, you can use it to set pictures as wallpaper, create panoramas and slideshows, and add effects, borders and frames. It even plays videos and animated GIFs, and because it supports plugins, you can expand its capabilities further. IrfanView recently received its first feature update of 2019, adding new image and border effects, along with new options in the Capture and Advanced Batch dialogue windows.



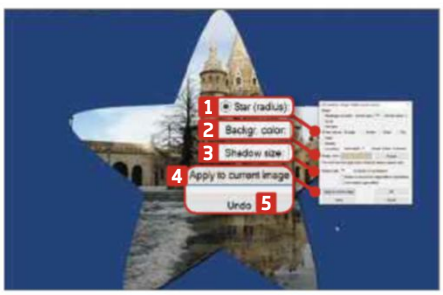
1 There are two parts to the program – IrfanView and IrfanView Thumbnails – both of which you can launch through the Windows Start menu. Thumbnails is the photo manager. When you select a folder, 1 the images it contains appear as thumbnails. 2 Hover your mouse over one to view its details. 3

2 To open a photo in IrfanView, either drag it to the viewer or click the Open button. 1 You can flick back and forth between images in the same folder by clicking the arrow buttons. 2 The Edit menu 3 contains tools for adding text, overlays and watermarks to your image.

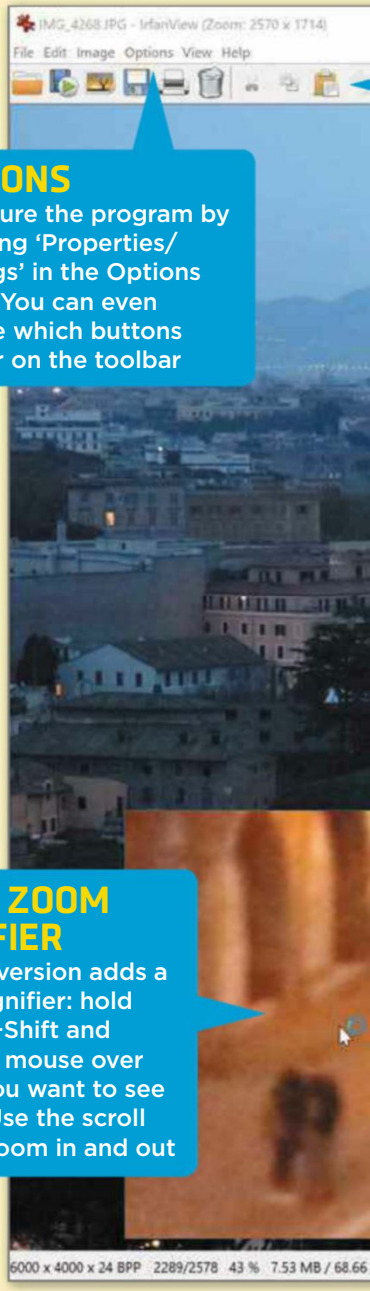
3 IrfanView also has a Paint palette you can open for quick access to its image-editing tools. To open it, go to Edit, 'Show Paint dialog'. From here you can paint on your picture, 1 erase or clone part of it, 2 replace colours and add text, 3 draw shapes, 4 fill selected areas and match colours. 5



4 From the Image menu 1 you can create a panorama, rotate and flip your image, resize it, add frames, adjust colours automatically and more. The latest version lets you add shadows, shapes and rounded corners to the outside of your images, 2 as well as hexagons, stars and hearts. 3

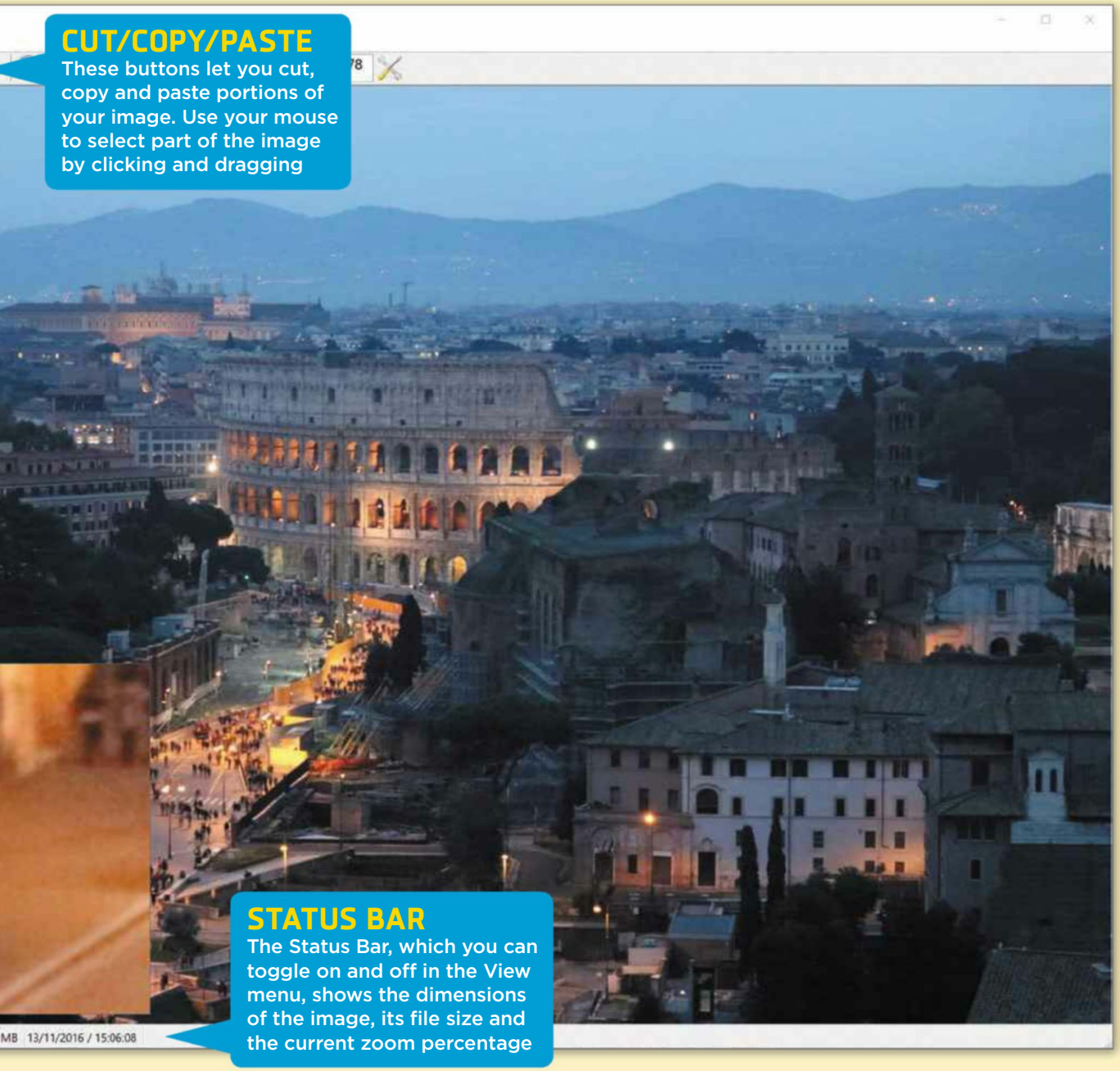


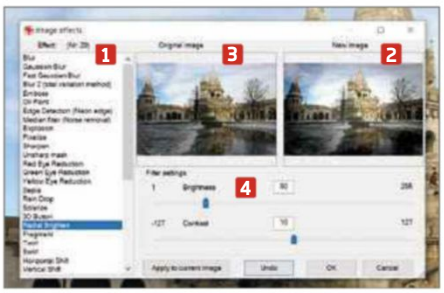
5 To add shapes or shadows, click the relevant option and a new window opens. Select the shape you require, such as a star. 1 You can change the background colour 2 and adjust the shadow size. 3 Click 'Apply to current image' 4 to preview the effect, and Undo 5 to remove it.



OPTIONS
Configure the program by selecting 'Properties/ Settings' in the Options menu. You can even choose which buttons appear on the toolbar

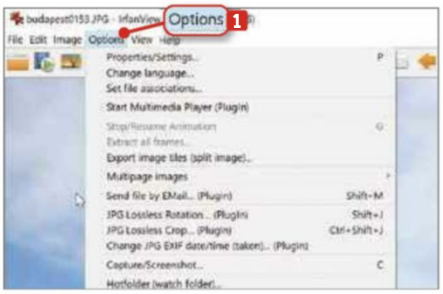
MOUSE ZOOM MAGNIFIER
The latest version adds a handy magnifier: hold down Ctrl+Shift and move your mouse over the area you want to see up close. Use the scroll wheel to zoom in and out





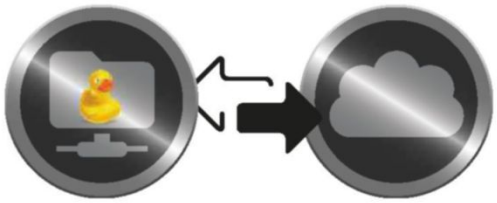
6 Click Effects in the Image menu to open the 'Image effects' window. This reveals all of the available effects. 1 Select one, and you'll see a preview in the thumbnail on the right, 2 next to the original image. 3 Some tools, such as the new Radial Brighten, have filter settings that you can adjust. 4

7 Another new effect is Insert Speech Bubbles, which you'll find in Image, Effects. You can adjust the bubble's shape, 1 size and background, and the size and colour of its border. 2 You can also customise the bubble's tail. 3 Click Preview 4 to see what it looks like and, if you're happy with it, click OK. 5



8 The Options menu 1 contains tools for manipulating JPEG images losslessly and changing your Windows wallpaper. There's also an optical character recognition (OCR) plugin that finds text in images. If a plugin won't load, download it from bit.ly/iv32479 (32-bit) or bit.ly/iv64479 (64-bit).

Control online storage with Cyberduck FTP software



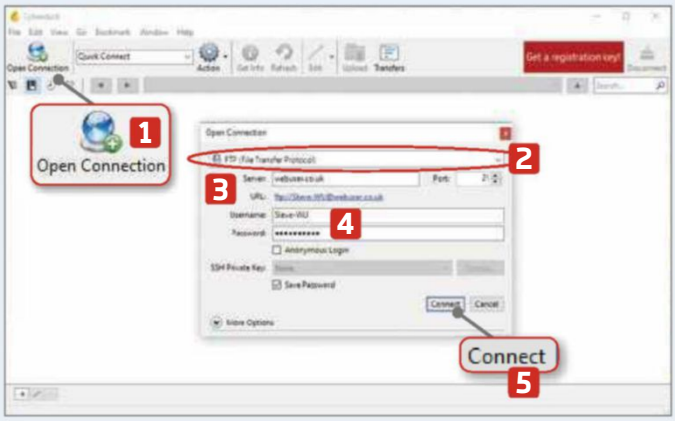
Cyberduck: cyberduck.io | 20 mins | 7, 8, 10 macOS 10.7+

Cyberduck is a File Transfer Protocol (FTP) tool of the type web designers use to move files to and from their web host's servers. Don't let that put you off, though, because even if you're not a web designer, this multifaceted software has plenty to offer, thanks to excellent support for cloud storage services such as OneDrive and Google Drive. Perhaps its most useful feature is the ability to transfer files and folders directly from one online storage service to another without downloading them first. What's more, after a recent major update, you can create temporary sharing links when saving to Dropbox, Google Drive and OneDrive. Cyberduck is free, too, although you can support the developers by donating or buying its app from the Windows Store.

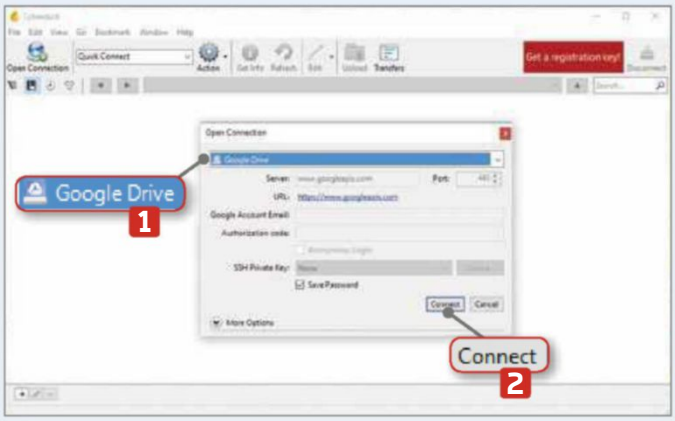
EXPERT TIP

Steve Clark says

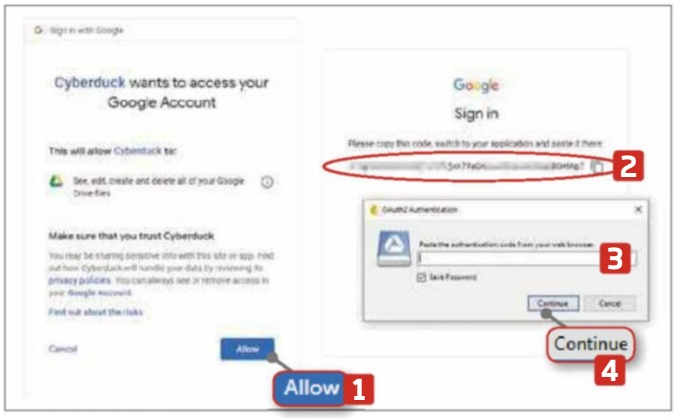
As well the standard Cyberduck tool with graphical interface, there's a command-line version for those who prefer using Command Prompt. You'll find details of how to download it for Windows, macOS and Linux at duck.sh. The standard version also has a File Explorer-like navigation system under the ribbon that lets you see your Bookmarks and History, and provides an address bar and arrows to help you move easily between folders.



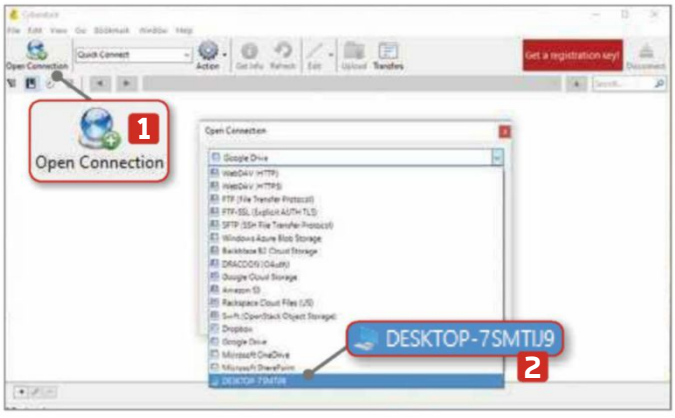
1 Before you can use Cyberduck, you need to configure it. Click Open Connection 1 and choose a connection type from the drop-down menu. 2 If you're uploading files to your own website, select FTP. Type your domain into the Server field, 3 then add your Username and Password. 4 You shouldn't need to change the Port number. Click Connect. 5



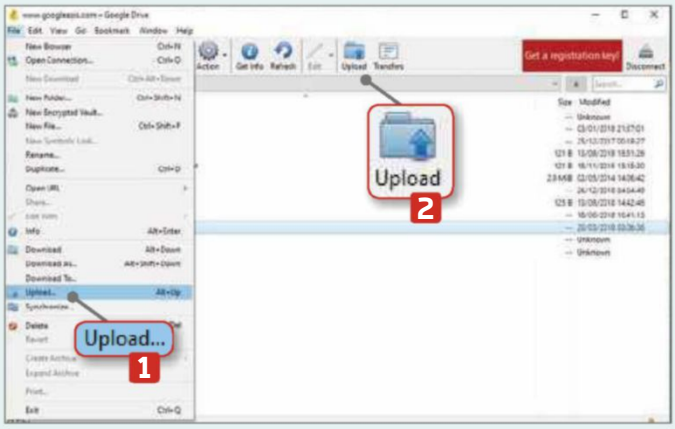
2 Most readers will find Cyberduck's cloud storage connection more useful, however. This supports many of the big names, including Google Drive, OneDrive and Dropbox. Choose one from the drop-down menu 1 and click Connect, 2 which opens a new window. We're using Google Drive here, but the steps are similar for other cloud services.



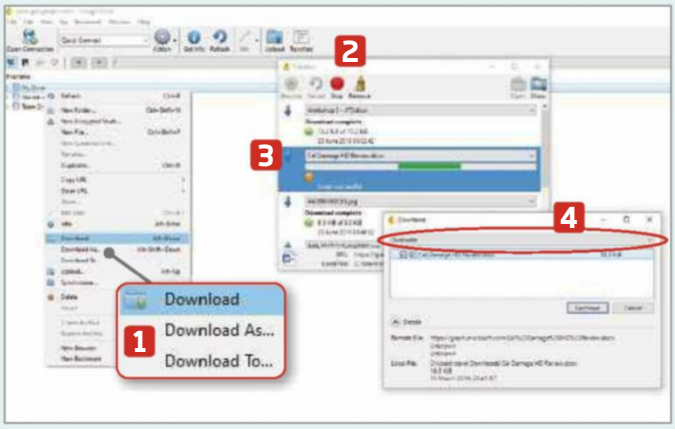
3 Select your account and click Allow 1 to give Cyberduck access to it. Google generates a code, 2 which you then copy and paste into Cyberduck's authentication box. 3 Press Continue 4 to connect. Once connected, you can right-click any file and select Share to generate a share link. Copy this and send it to anyone who needs access to the file.



4 You can also use Cyberduck as a local File Explorer, which you may find useful if you're thinking of setting up FTP on your home network or you want to share the files on your computer easily. In this instance, click Open Connection 1 and select your computer from the list. It's the last option in the drop-down menu. 2

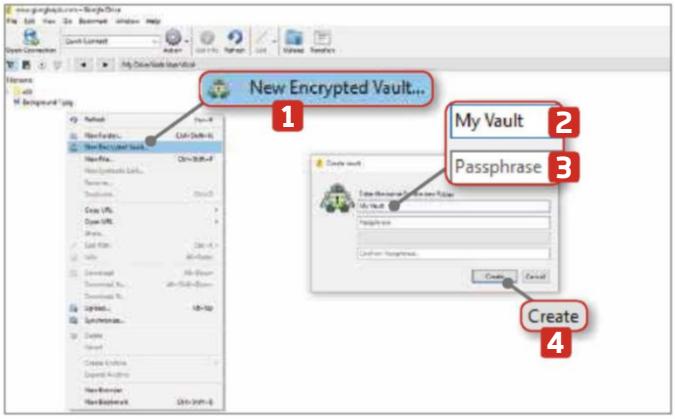


5 Adding files to Cyberduck is incredibly easy. When you're ready to upload some files, you can click File, Upload 1 or use the dedicated Upload button. 2 However, an even easier method is simply to open the folder you want to add the files to, then drag and drop them directly from File Explorer.

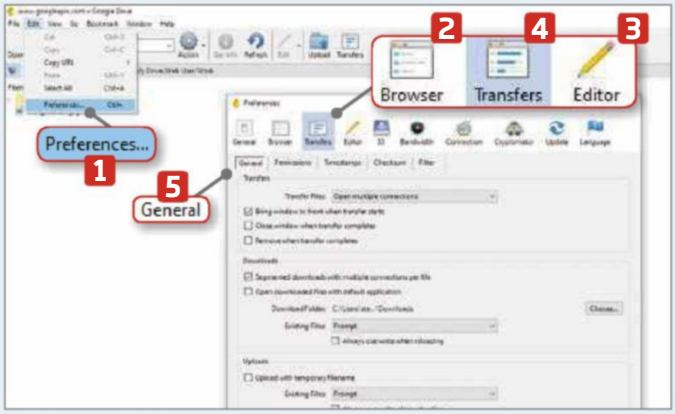


6 Downloading files is just as easy. Right-click the file and select either Download, Download As or Download To 1 from the context menu. Alternatively, double-click the file to open the Transfers window, 2 where you can manage your download. 3 Double-clicking a downloaded file lets you edit it: select overwrite, resume, rename and so on from the menu. 4

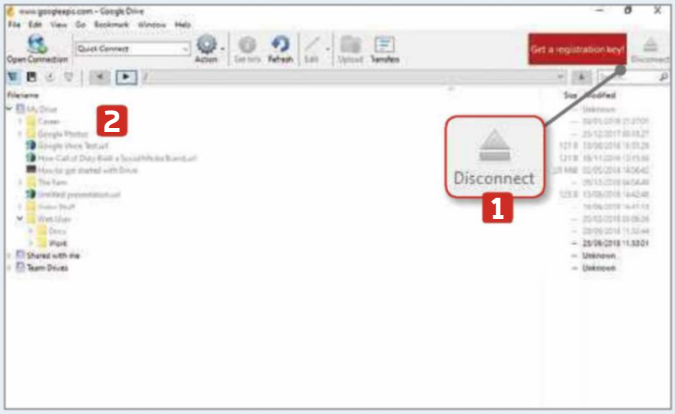
7 One of Cyberduck's best features is its ability to move files directly from one cloud storage platform to another. When connected to Google Drive, for example, click File, New Browser. 1 Follow Steps 2 and 3 to sign into another cloud storage service, then simply drag and drop files between the two. Progress is displayed in the Transfers window. 2



8 Another excellent feature is the Encrypted Vault. To activate it, find a folder you want to install the vault in, then right-click and choose New Encrypted Vault. 1 Name your vault, 2 then choose and confirm a passphrase 3 and click Create. 4 When first logging into your vault, untick Save Password or your passphrase will be redundant.



9 Clicking Edit, Preferences, 1 lets you access a host of options, so we recommend exploring them. In the Browser tab, 2 for example, 'Show hidden files' is unticked by default but is well worth ticking. Editor 3 lets you choose a default text editor. Finally, click Transfers, 4 then the General tab 5 to redirect downloads to a specific location.

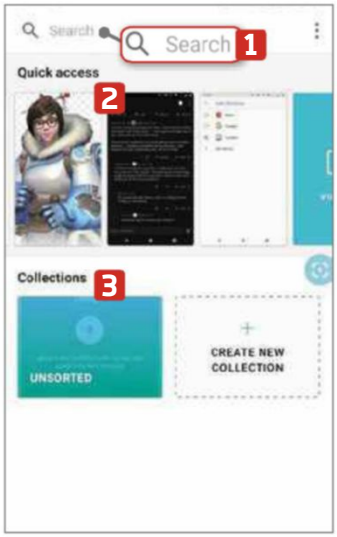


10 No matter which type of connection you make, when you've finished managing your files, it's important that you disconnect from the server or cloud storage. To do this and save your changes, click Disconnect. 1 Folders and files are then greyed out one by one. 2 When it has finished, you can safely close your Cyberduck window.

Identify and search for text in Android screenshots

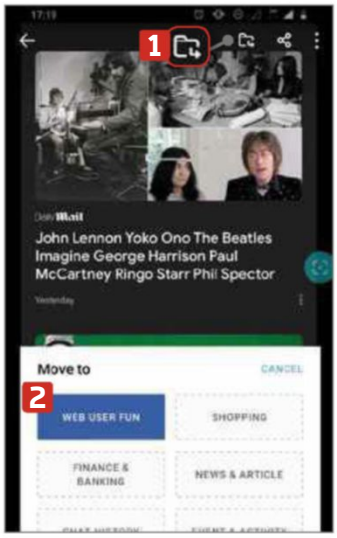
Mozilla's Firefox ScreenshotGo app is a smart free tool that locates text in images at the touch of a button. This means you can photograph reminders or take screen grabs of text messages, then find them later by searching for their contents. The app also helps you manage your screenshots by organising them into collections for easy retrieval. Just be aware that, while the app ran well for us, it is still in beta.

Firefox ScreenshotGo: bit.ly/screenshot479 | **10 mins** | **Android 5+**

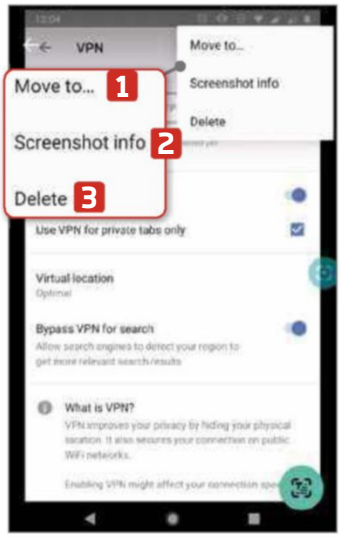


1 First give ScreenshotGo access to your photos by tapping Allow. The app then whisks you to the homepage. This has a search bar at the top, 1 where you can enter any text you want to find in your screenshots. Below this is a list of recent screenshots, 2 and at the bottom are your ScreenshotGo collections. 3

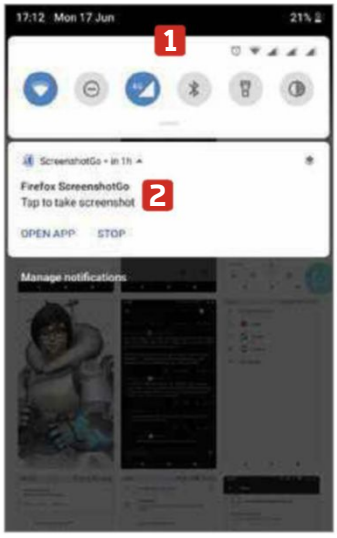
2 Select a screenshot, then tap the T button 1 to activate text recognition. The app highlights any text it finds in the screenshot. 2 Tap a piece of text to display it at the foot of the screen, 3 where you can press and hold to copy, share or search online for it. 4



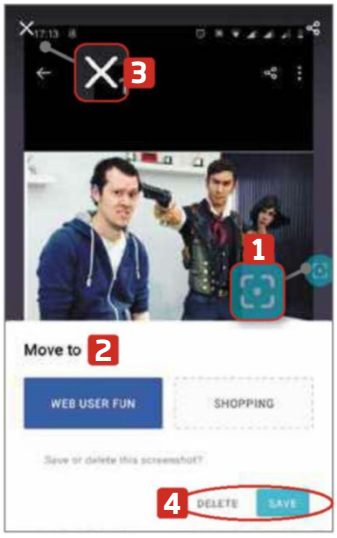
3 There are two ways to organise screenshots into collections, whether you use the preset options or make your own. The first is to open the app and select an existing collection from the homepage, or choose Create New Collection, then select a screenshot and press the folder icon. 1 Tap the appropriate folder to save the screenshot there. 2



4 Alternatively, if you're viewing a screenshot in Quick Access, press the three dots and select 'Move to', 1 then follow Step 3 to add your screenshot to a collection. The three-dots menu also lets you view screenshot info 2 or delete the image. 3 Next to the three-dots menu is a Share icon that you can use to distribute your screenshots far and wide.



5 The easiest way to capture the contents of your screen is to pull down the notification area, 1 where you'll find a permanent ScreenshotGo notification. 2 Tapping this immediately takes a screenshot, even if the app isn't open.

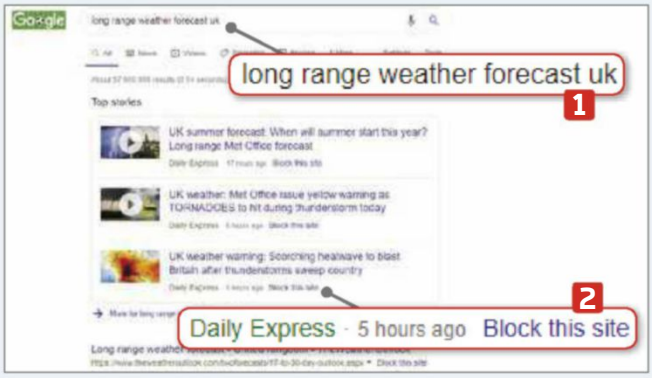


6 The second method is to open the app and use the Lens icon that hovers permanently on the right of the screen. 1 Press and hold to drag it into position, then tap to take a screenshot. This opens the 'Move to' tool, 2 so you can quickly add the screenshot to a collection or click the X 3 to Delete or Save it. 4

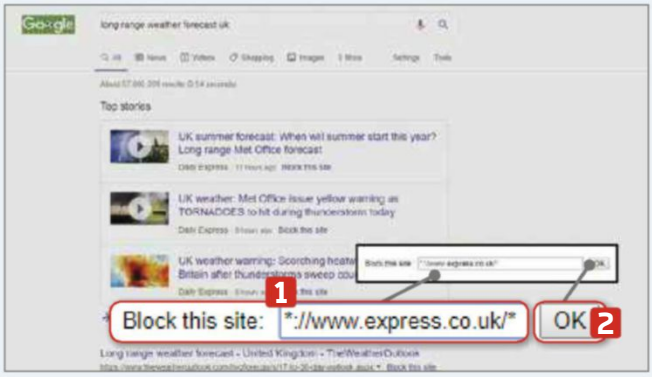
Remove sites you don't like from search results

Google's powerful search engine is pretty good at filtering out trashy websites. However, it still delivers results we may not want to see, such as sites that put up paywalls or don't have the best reputation for reliable or unbiased information. Thankfully, you can block these annoyances from your searches by installing the uBlacklist extension for Chrome and other Chromium browsers.

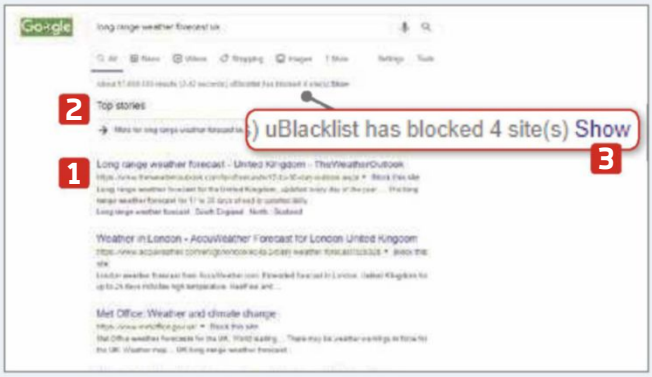
uBlacklist: bit.ly/ubl479 | **10 mins** | **Chrome**



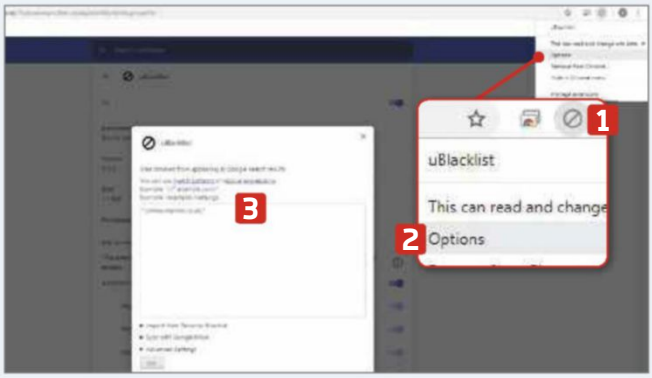
1 The easiest way to block sites is to do it as you go. Install the extension, then search for something in Google. 1 When the results appear, you'll see a 'Block this site' link 2 next to each URL. Click it to open a dialog box. In our example, we're blocking a result from the Daily Express.



2 The box contains a web address with 'wildcards' (the asterisks) to account for variations, such as whether it's 'http' or 'https'. 1 Click OK 2 to block results from this site. If you click a link but then decide you want to block the site, click the extension's toolbar icon to open the same box.

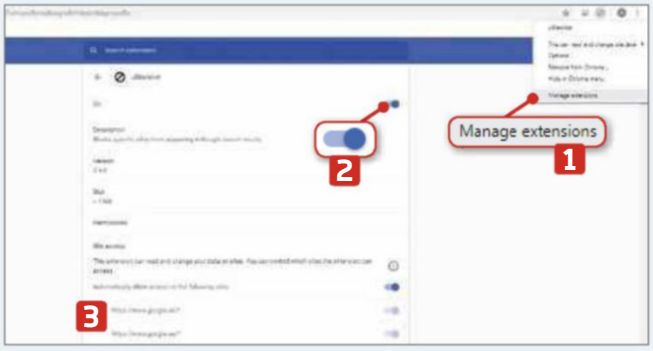


3 The next time you perform the same search, you'll see that uBlacklist has hidden the results from the site you've blocked. 1 It also removes the site from any 'Top stories'. 2 If you want to see which sites the extension has removed, click the Show link. 3



4 To configure the extension, right-click its toolbar icon 1 and choose Options. 2 A window appears containing a list of all the sites you've blocked so far. 3 This list is editable, so you can modify it by clicking and typing. Highlight an entry and press the Delete key to remove it.

5 If you sync your list using Google Drive, you can use it on multiple devices. Click 'Sync with Google Drive', 1 then click Permit 2 and sign in. Tick the box next to 'Enable sync'. 3 You can also click the Advanced Settings option to hide the "Block this site" links, if you wish.



6 For more options, right-click the uBlacklist icon and choose 'Manage extensions'. 1 Here you can switch the extension on or off 2 and limit which of Google's regional search engines it can access. 3 Scroll to the very bottom of this page if you want to uninstall uBlacklist.

Weekend Project

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

How to...

Create and manage a digital music collection

Spotify isn't for everyone, especially if you have a huge CD collection. **Wayne Williams** explains how to organise and play your music

Spotify, Apple Music and other streaming services may have declared themselves to be the future of music, but there are still plenty of people who prefer to own their music rather than stream it.

At its recent Worldwide Developer Conference, Apple announced that it intends to kill off iTunes on macOS, replacing it with three new apps: Apple Music, Apple TV and Apple Podcasts. The technology giant hasn't pulled the plug on the Windows version of its software just yet, but it's surely only a matter of time. With that in mind, we've devoted this Weekend Project to guiding you through the best tools you can use to rip, organise and play your music collection on your PC.

THE BEST iTUNES ALTERNATIVES

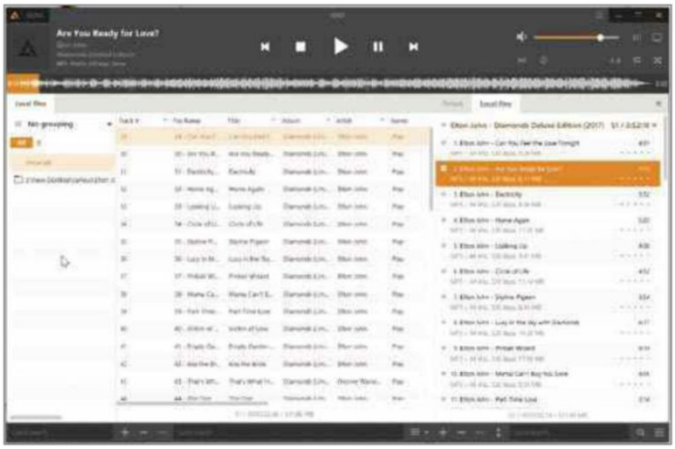
Apple's iTunes has attracted its share of criticism over the years – particularly the PC version, which is often viewed as slow, bloated and hard to use. However, it's actually a very powerful piece of software that's packed with features, even if you don't need them all. Having said that, there are a number of excellent alternatives you can use instead. Here are a few of our favourites, along with some tips on how to use them.

MusicBee

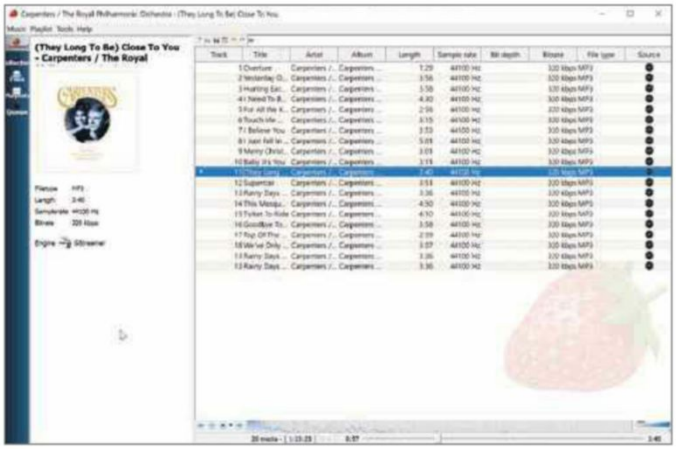
getmusicbee.com

MusicBee helps you find, organise and play songs on your computer, and can import tracks directly from iTunes or a music folder of your choice. You can also set it to watch folders so that any new tracks you add are imported to your library automatically.

You can use the program to rip and burn CDs, manage duplicates, convert tracks from one format to another, create party playlists, stream songs from popular web-radio stations and tag your tracks automatically to help you organise your music library (although manual tagging is also available).



AIMP is an excellent music player that can handle any audio format, and can even shut your PC down when a playlist ends



Strawberry is a music player and organiser based around the now-discontinued Clementine software

Excellent plugin support means you can add to MusicBee's extensive list of features, and there's a portable version that you can install on a USB flash drive when you want to take your music with you. If you use Windows 10 and download MusicBee from the Microsoft Store (bit.ly/mbee479), you'll also benefit from automatic updates.

We explain how to use MusicBee to manage your music collection in our Mini Workshop below.

AIMP

www.aimp.ru

Available for Windows and Android, AIMP is an audio player that supports all the main music formats, including AAC, APE, FLAC, MIDI, MP3, OGG, WAV and WMA. You can use it to convert tracks from one format to another, rip CDs and auto-fill or edit track information. To add files and folders, simply drag and drop them on to the interface. If you have a large music library, you can hold down the Ctrl key to scroll through it faster.

AIMP includes a useful timer that can shut down your PC when the music finishes (or at a given time). It also works as an alarm clock to wake you up in the morning. Set the time and choose the music you want to wake up to.

The software supports plugins, too, and comes with a handful preinstalled.

Strawberry

www.strawbs.org

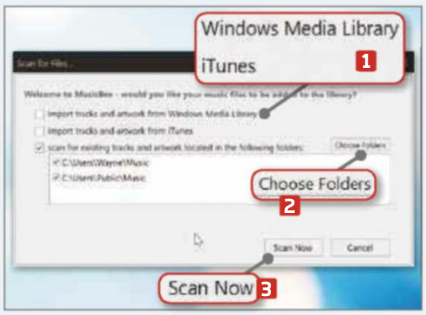
Clementine (www.clementine-player.org) is an excellent iTunes alternative that's based on AmaroK, a music organiser for Linux. Although you can still download and install Clementine, the software has been discontinued, and hasn't been updated for three years. Strawberry is a fork of Clementine that was first released in 2018 and has been updated regularly ever since. It's available for Windows, Linux and macOS, and can play and organise music, edit tags, transfer your music to iPhone or other USB music players, stream Tidal and scrobble tracks to Last.fm. It can also fetch tags from MusicBrainz, lyrics from AudD and ChartLyrics, and album art from Last.fm, Musicbrainz, Discogs, Tidal and Deezer.

Groove Music

bit.ly/groove479

Originally bundled with Windows 10 as Microsoft's answer to Spotify, Groove Music is now optional and no longer offers a streaming service or apps for iOS and Android. You can still use it to manage and play music saved on your PC or stored in OneDrive, Microsoft's cloud storage service, however. It sorts your music by Song, Artist, Album and date added, and you can view recently played content and build playlists. There's also an equalizer that you can use to customize the sound depending on the type of music you're listening to,

MINI WORKSHOP | Manage your music collection with MusicBee



1 When you first open MusicBee, it gives you the option to import your music and artwork. You can add content from Windows Media Library or iTunes, 1 or point the program in the direction of your music collection. Click Choose Folders 2 to add more locations. Click the Scan Now button 3 to import your music.

2 MusicBee adds your tracks to its database. Use the menu bar at the top 1 to switch between Music, Now Playing, Playlists, Music Explorer and Podcasts. Click the plus button 2 to create a new tab – Radio, Audiobooks or History, for example. Click a track to play it. Track information and artwork appear in their own panel. 3

3 You can fix any missing or incorrect tags by clicking the MusicBee arrow and selecting Tools, then Tagging Tools. Try either 'Auto-Tag by Album' or 'Auto-Tag by Track'. To use the former, fill in any missing details, then click the Find button, 1 select a result 2 and click Apply Tags. 3

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3	sky	Sky: Broadband Essential	£20.00 (£25 after 18 months)	18 months	11Mbps avg. speed	∞ unlimited *	£240.00
4	Virgin media	Virgin Media: Big Bundle + Fibre Broadband + Weekend Calls	£29.00 (£59 after 12 months)	12 months	108Mbps avg. speed	∞ unlimited	£348.00

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* Fair-usage or restriction policy applies.

Data supplied by www.broadbandgenie.co.uk. Correct as of 24 June 2019.

Ofcom

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

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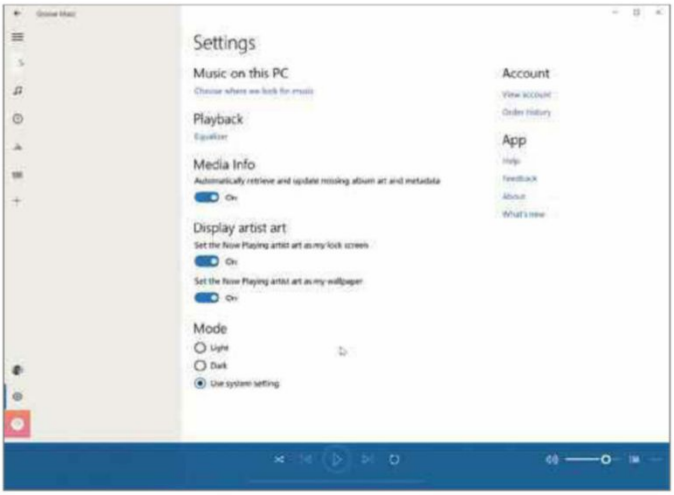
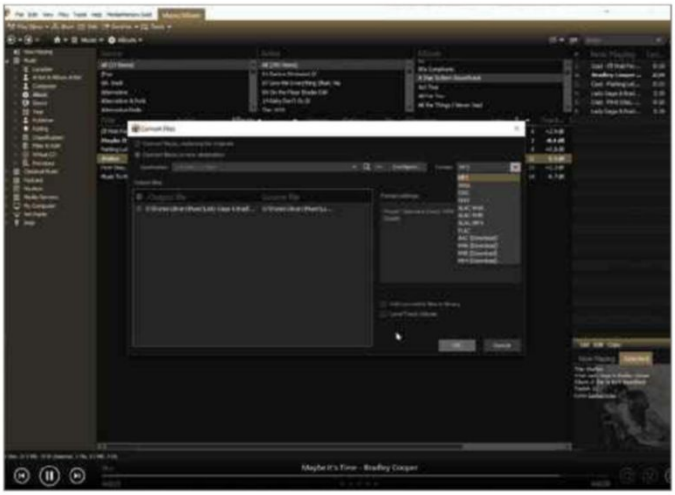


Groove Music can display artist artwork as wallpaper on your Windows desktop and lock screen



MediaMonkey makes it easy to convert your audio files from one format to another

and a mini-player that can stay on top of your open windows.

Our favourite Groove Music feature is the ability to display artist artwork on the Windows 10 desktop and lock screen, changing it automatically with the song. To enable it, click the settings gear and switch on 'Display artist art' on the lock screen or desktop (or both).

MediaMonkey

www.mediamonkey.com

MediaMonkey is probably the best known of the iTunes alternatives. It allows you to organise and play your digital music collection, create and export playlists, convert tracks from one format to another, rip and burn CDs, automatically add tags, album art and other missing information, and synchronise with iOS and Android devices. The developers say it can handle libraries of over 100,000 songs without slowing down.

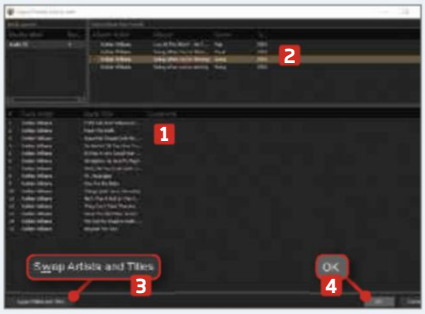
There's even an Auto-DJ and Party Mode, which finds and plays additional tracks when the current playlist ends. While the free version should be good enough for most users, a Gold edition is also available. This has extra features including bit-perfect audio rips and on-the-fly conversions. It costs £26 for the current version or £52 for a lifetime licence that includes all future updates.

We explain how to use MediaMonkey to rip and burn audio CDs in our Mini Workshop, below.

Convert tracks in MediaMonkey

MediaMonkey is great for converting audio tracks from one format to another. Select a song, then go to Tools, Convert Format and choose whether to replace the original files or save the new ones to a different location. Select the new format you require from the drop-down menu – options include MP3, WMA, OGG, WAV, ALAC, FLAC, and AAC. You can change the naming style, as well as the bitrate, variable bitrate (which aims to maintain sound quality while removing data that shouldn't matter too much), and mode (stereo, mono and so on). You can also normalise the track to reduce extreme changes in volume, and add your converted tracks to your library.

MINI WORKSHOP | Rip and burn CDs in MediaMonkey



1 To rip tracks from an audio CD, first insert the disc into your drive. A new window should open with a list of the songs on it. 1 Select the correct album (sourced from Freedb) at the top. 2 You can swap the artist and title information if they're the wrong way round. 3 Click OK, 4 and the software will add your album to its database.

2 Now you can listen to any of the tracks in the player. To rip the songs to your hard drive, click Rip Audio CD. 1 You can change the destination 2 and choose which format to save your tracks in. 3 Tick Level Track Volume 4 if you want to keep the audio level consistent across your tracks, then click OK. 5

3 To write audio files to disc, select the tracks you want and click Burn. 1 This opens the Disc Burning Wizard. Choose the audio CD option, then step through the wizard until you reach the authoring screen. Insert a blank disk, making sure your drive is selected, 2 and tweak any final options. Click Burn 3 to create your audio CD.

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STEP 2 Chose your subscription term from the drop down menu on the popup that appears

STEP 3 Tap 'Subscribe'

available on kindle fire

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STEP 2 Tap the 'Subscribe' button

STEP 3 Choose whether to create an optional Zinio account

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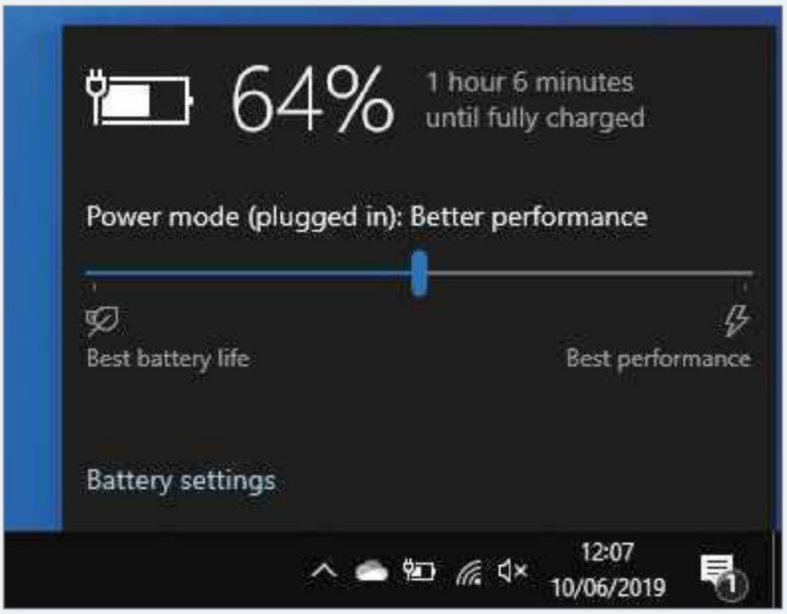
Prepare your devices' batteries for long breaks

If you won't be taking your tech devices with you on holiday, make sure you prepare them for your absence. The worst state for a battery to be left in is either fully charged or completely empty: both 0% and 100% charge put your battery under stress and shorten its life, while a charge of around 50% causes the minimum stress. With this in mind, make sure you charge any devices you're leaving behind to around 50-60%. If the device doesn't have an indicator to show the percentage charge, plug it in until the battery is full, then use it for a while so the battery isn't at 100%. Finally, power off the device – don't just leave it in Sleep mode.



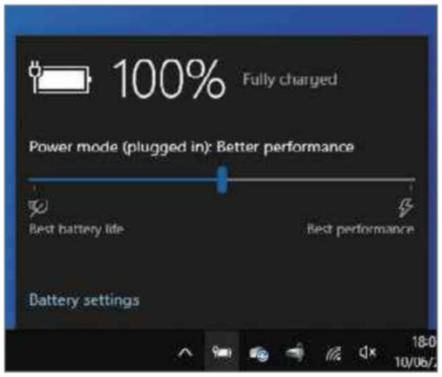
Don't charge devices to 100% if you're leaving them behind while you go on holiday. Leave them closer to 50%

Charge and use

The batteries in laptops, phones, tablets and other devices deteriorate over time and, as pointed out in the tip above, it's best to avoid the two extremes of 0% and 100% charge. It's therefore important that you charge your device, then unplug and use it to allow the battery to run down. This is especially important for laptops, which shouldn't be permanently plugged into the mains power with the battery at 100% for weeks or months. Make sure you regularly unplug your laptop and run it off the battery to keep it healthy.

Phone batteries get progressively worse at holding a charge, which means their capacity decreases over time. It's best to unplug a phone as soon as it has charged and use it straight away.

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.



Don't keep your laptop permanently plugged in at 100% – unplug it and use it

Don't charge overnight

Many of us plug in our phones at bedtime to charge overnight so the battery is at 100% when we wake up. The problem is that a phone quickly reaches 100%, so it remains at maximum power for the rest of the night.

There is talk of modifying phone chargers so they're limited to an 80% charge at night – you can then just top it up to 100% after you wake up. This may become an automatic feature in the next generation of phones, but for now you'll have to carry out the task manually. Charge the phone to 80% in the evening, then unplug it at bedtime. When you wake up in morning, plug it in and top it up to 100% before you leave home.

Avoid complete rundown

As well as leaving a device charged at 100% for long periods, you should also avoid runing down the battery completely and then leaving it discharged. When the battery level drops below 20%, recharge it.

If you leave any battery-powered devices at home when you go on holiday, make sure they're not in Sleep mode – as happens when you close the lid of a laptop – because the device will continue to draw power and eventually reach 0%. If you won't be back from your holiday for another week, leaving the battery discharged could diminish its lifespan.

Keep your battery cool

Batteries generate heat while charging – especially when fast charging – but overheating damages them. Remove a phone's case or cover while charging, and avoid putting a laptop under the sofa or bed, or on a carpet. Don't place devices on top of each other, either, and make sure air can circulate so any heat can escape.

A laptop cooling pad is usually unnecessary, but it may be beneficial if you have an old laptop that overheats. There may be a lot of dust inside, too, which you can remove by blowing air into the vents or sucking the dust out.

Turn down the brightness

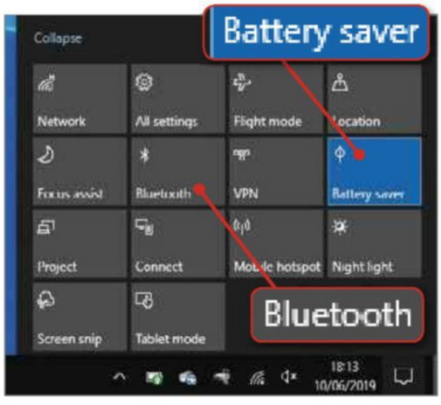
Modern screens use a lot of power. Simply turning down the brightness reduces the power requirement, which helps the battery last longer. Laptops, phones and tablets all have brightness controls, so make the screen as dim as possible while still being readable.

Switch to silence

Wi-Fi, Bluetooth, mobile connections and Near Field Communication (NFC) all use power, so a device's battery will last longer if you switch these off. Putting your phone, laptop or tablet in flight mode turns off all radio functions. You can't make calls or access the internet while in flight mode, but at least you can preserve the last remnants of charge for when you really need it.

One of the quickest ways to drain a phone's battery is to go to an area with poor mobile coverage, because your phone searches for a signal constantly. If you're in the countryside, up a mountain or anywhere else where there's no signal, enable flight mode.

If flight mode is too restrictive, just disable the connections you're not using, such as Wi-Fi, Bluetooth or NFC, to get more from the battery. Windows 10's flight mode and the Bluetooth controls are in Action Centre. Click the icon to the right of the notification area.



Turn Bluetooth off and 'Battery saver' on to save power while you're out and about

TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave

Stop background apps

Batteries last longer when devices have less work to do. If you see any programs you're not using when you look in the pop-up panel at the right side of the taskbar, right-click them and quit. Postpone any virus scans and backups, avoid syncing OneDrive, Google Drive or Dropbox, close unused tabs in browsers and so on.

Some phones can stop apps running in the background. Android phones vary, but you may have an Always Sleeping Apps function that puts apps to sleep when not in use. On some phones, for example, you go to Settings, Device Maintenance, Battery, Always Sleeping Apps.

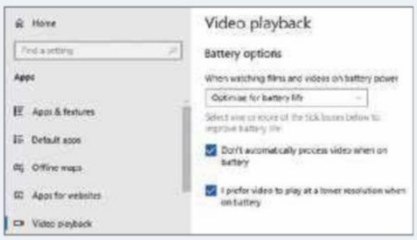
In iOS, go to Settings, General, Background App Refresh and use the switches to stop unimportant apps updating in the background when not in use.

Hibernate, don't sleep

Click Start, Power and you may see options to Sleep, Hibernate and Shut down your device. Although some laptops and tablets can sleep for weeks, this option slowly drains the battery, so it's best avoided. If you want be able to resume quickly, select Hibernate instead. This is like Sleep but doesn't use any battery power.

Optimise video playback

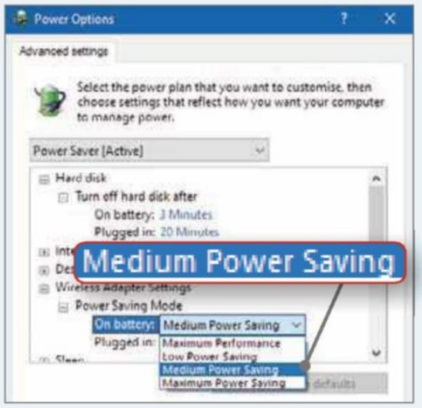
In Windows 10, open Settings and click Apps, then 'Video playback'. Halfway down you'll see options to 'Optimise for battery life', disable video processing and use a lower resolution. Each of these extends battery life when watching videos.



The video playback options in Windows 10's Settings can reduce battery drain

Configure the power plans

In Windows 10, you can click the battery button on the taskbar and drag the slider to the left to reduce power and increase battery life. It's a simple process, but how effective is it? All versions of Windows have



Configure the power plan in the Control Panel for battery savings

Power Options in the Control Panel that provide many more choices.

If there is a Power Saver plan, select it. If not, click 'Create a power plan' to make one, then select it. This extends battery running time, but even greater power savings may be possible.

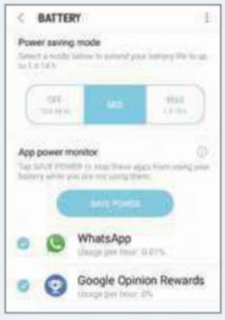
Click 'Change plan settings' next to the Power Saver plan, then 'Change advanced power settings'. The next window lists various PC components, such as the hard drive, Wi-Fi adapter, USB ports and so on. Expand each section to see an 'On battery setting'. Check that the maximum power savings are selected for each one.

Don't use the Power Saver plan all the time because it reduces your laptop's performance. Just enable it when you need the battery to last as long as possible.

Use battery saving mode

Many devices have a battery saving mode that you can turn on manually or set to kick in when the charge falls below a certain value. In Windows 10, click the icon to the right of the notification area, then 'Battery saver' to enable it. Click Expand if the button isn't visible.

Android phones vary, but you may find a power-saver button if you pull down from the top of the screen or look in Settings. Go to Device Maintenance, Battery on some phones, for example.



Enable power saving on your phone and put apps to sleep

Ask the Expert

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

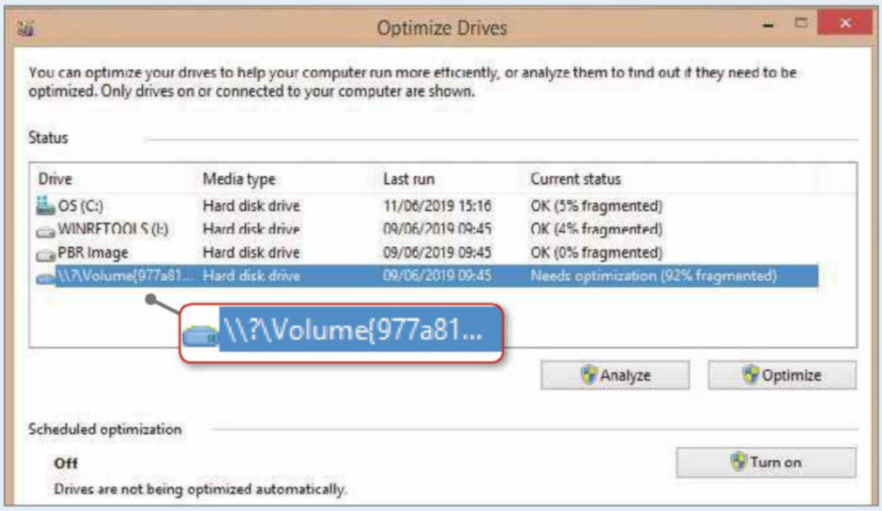
GENERAL PC

Should you defrag mystery partitions?

Q I've read conflicting views on defragging in *Web User* and elsewhere. Some say you should avoid defragging unnecessarily, but how do you know when that necessary point is reached?

As you can see from the screenshot (right), most of the drives on my PC are only 5% fragmented or less (marked OK). However, the last drive is 92% fragmented, which means it must need to be defragged urgently, but I don't know what this drive contains or what it does, so I'm not sure whether to proceed or not.

Alan S, via email



It's safe to ignore any oddly named drives listed in the Optimize Drives tool

A If automatic defragmentation is enabled, Windows should be left to manage itself so you don't have to defrag manually. The default setting is for it to run once a week when the computer is idle.

There isn't a fixed fragmentation percentage where defragging becomes necessary because it depends on different factors. For example, if a large file such as a 4GB video is in 10 fragments, then the time taken to find the fragments is insignificant compared to the time taken to read the whole file. In fact, when fragments are over 50MB, Windows may not even bother to defrag them.

As small files become more fragmented, the PC slows down. However, this is less noticeable with modern drives because they are faster than they used to be. A drive needs defragging when you notice your computer becoming slower.

In the screenshot you attached (see above), the C: drive containing Windows and your files is only 5% fragmented. This is fine and shows that Windows is keeping the drive optimised, but if you'd like even less fragmentation, select the drive, click 'Change settings', enable 'Run on a schedule' and set the frequency to Daily.

The oddly named '\\?\Volume (977a81' drive in your screenshot is not a regular drive that is used for Windows or your files, so its 92% fragmentation is not important. It is most likely a hidden recovery partition created by Windows or backup software that exists in case of disaster. Just leave it alone.

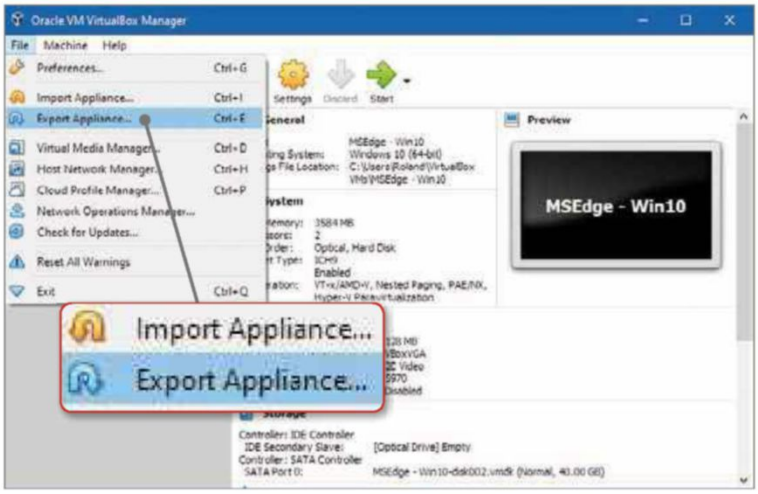
SOFTWARE

Move VirtualBox to a new PC

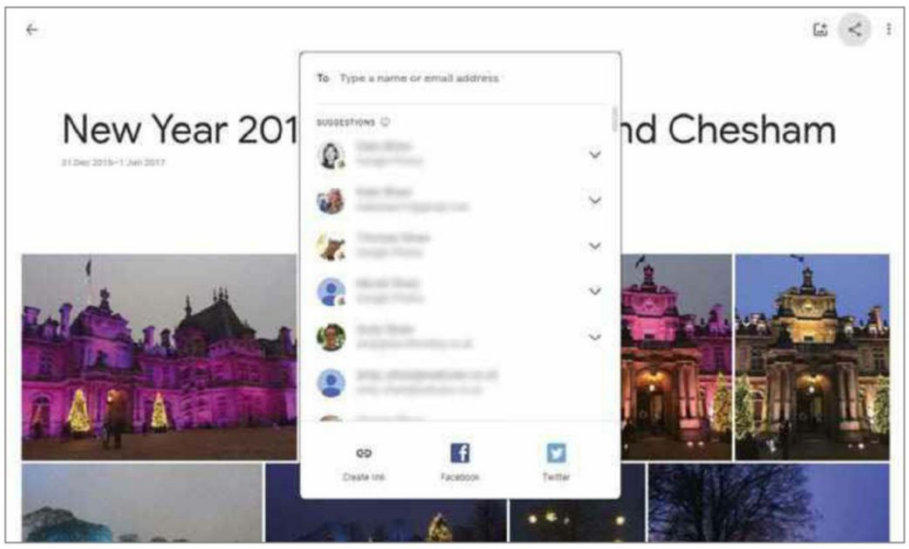
Q I recently upgraded from an old and very slow PC to a faster laptop, and transferred all my data including my VirtualBox operating systems. However, while I can run Linux systems without any problems, Windows 10 Professional refuses to boot. Is this something to do with the hardware change?

Sirus Laia, via email

A There may be some licensing problems, but this still wouldn't stop Windows booting up: it would start and say the licence is invalid, then prompt you for a new code. There are many



Use Export and Import Appliance to move virtual machines with VirtualBox



The easiest way to share photos is to use a hosted photo-sharing service, such as Google Photos

kinds of Windows licences and those bought directly from Microsoft are the most flexible and should easily transfer to a new computer; OEM (Original Equipment Manufacturer) licences that come preinstalled on a PC do not. But the boot problem is something different.

How did you transfer the virtual machine? Copying the folders from one computer to the other may not be sufficient. The best way to do it is to select the virtual machine in VirtualBox and use File, then Export Appliance on the old computer. On the new one, use Import Appliance. This transfers all the settings used by the virtual machine.

PHOTOS

Share your photos

Q I have transferred a lot of photos from my digital camera to my computer. How do I copy the photos to send to someone?

John Eaves, via email

A There are lots of ways to do this. If you have a Google account, go to photos.google.com and click the Upload link to store them online. Click Albums, 'Create album' and add the photos to it. Open the album and click Share on the left. You can invite people by using their email address or generate a link that you can then send to them. This will provide access for them to view the photos online.

If you use Outlook or Gmail in a browser, click 'New message' then drag photos from an Explorer window and drop them on the email. Alternatively, use the Attach button or click the 'Insert pictures inline' button.

Digital camera photos can be large, so you may not be able to send more than a few at a time unless you've shrunk them in a photo editor first. Sharing them in an online album is better because the size of the photos won't be a concern.

SECURITY

Protect stolen files

Q My laptop has been stolen. Can the thief access my files and passwords?

Jane Berry, via email

A It depends. The hard drive in a PC can be accessed by utility software and booting up with a Linux disc or USB drive will do it. This is handy for recovering files on a PC that won't boot but it means thieves can also access your files.

If the drive is encrypted – with BitLocker, for example – there is no way to access it. However, this isn't available in Windows 10 Home, only in the Pro and Enterprise editions. While it's too late for you to use this, other readers can find out if they have BitLocker by opening Settings and clicking Update & Security, then 'Device encryption'. If you don't have BitLocker, one alternative is to create an encrypted

GENERAL PC

Find a missing file

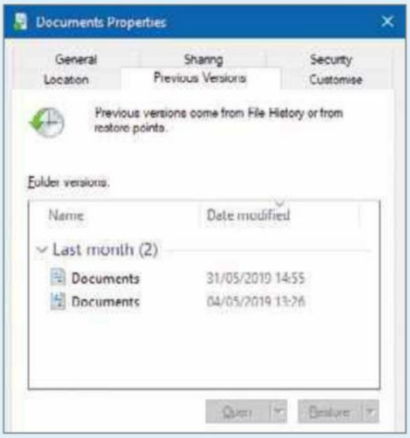
Q I was writing a book of sorts in Microsoft Word on my Windows 10 computer. I would write few pages then save it in a folder, which had the title of the book as its name. The next day, I would write again and save it in the same folder. This went on for several days.

One day, by accident, I rested my elbow on the keyboard and the screen turned white with a small 'v' at the top. I may have panicked, and possibly deleted or saved – I can't remember exactly what happened. The upshot is that my folder has disappeared. I have tried to recover it using third-party software from the internet, but it didn't work. Is there a way I can retrieve it?

Shantanu Ghosh, via email

A There are several ways to recover lost files, but it's impossible to predict whether they will work. Open the Recycle Bin, select the View tab and click Details. Click the Date Deleted or Name column header to sort the contents. If the file is there, you can right-click it and select Restore.

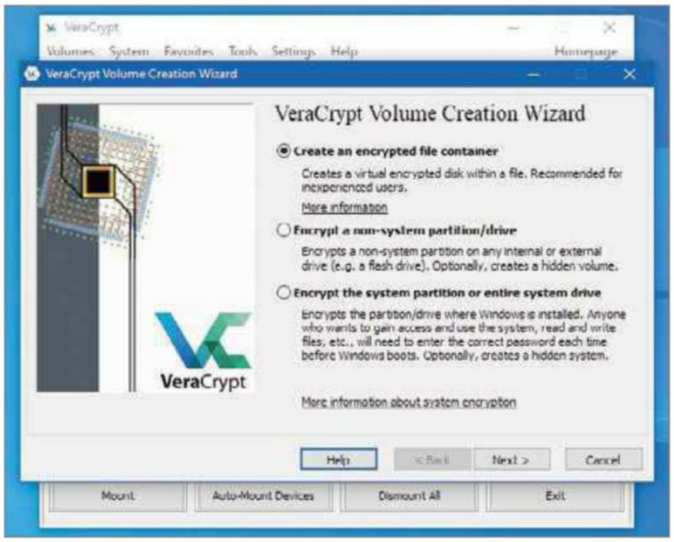
Windows makes automatic backups of certain folders, such as the Documents folder and any subfolders within. It's possible the file is in a backup. Open Explorer and find the parent folder of the item that was lost. For example, if the file was in Documents\Book\MyBook.docx, right-click Book; but if Book is missing, right-click Documents. Select 'Restore previous versions' from the menu to see backups of the folder listed. You can restore it by selecting one from before the file or folder went missing.



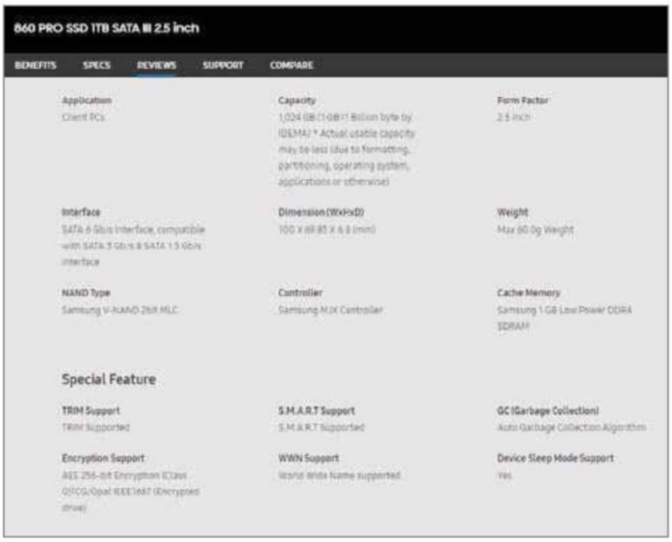
Right-click a folder and select 'Restore previous versions' to find lost files

It's possible to sync the Desktop and Documents folders with OneDrive, and if the missing file or folder was in a synced folder, they may be in the OneDrive Recycle Bin. Go to onedrive.live.com in a browser and sign in. Click 'Recycle bin' on the left, and see if the lost file is there.

If nothing has worked, install the free version of Recuva (bit.ly/recu479) and scan the hard drive. It lists every file ever deleted, so finding the one you want can be like looking for a needle in a haystack, but you may get lucky so it's worth trying.



VeraCrypt creates secure containers. It can even encrypt whole drives, but run a backup first



Your SSD may support encryption for added security – check the specifications on the manufacturer's website

store for valuable files and data using encryption software such as VeraCrypt (www.veracrypt.fr).

Most PCs run Windows Home without encryption, so if someone has access to your PC, they can read your files. Passwords aren't stored as plain text on the hard drive and will be encrypted, even if the drive isn't – however, you should still change the passwords on all your sites and services as a precaution.

SECURITY

Secure an SSD drive

Q I recently had my computer's hard drive upgraded to a solid-state drive (SSD) and the increase in speed is remarkable. It's like owning a completely a new computer!

I previously used a file shredder to securely overwrite files when deleting them. Will this still work on an SSD?

T Hicks, via email

A SSDs don't last as long as hard drives and they spread the wear across the whole drive by avoiding writing the same part over and over. New information is written to a new part of the drive, which is a problem if you try overwriting a file to erase it. Don't use file shredders on SSDs, encrypt them instead. In fact, the drive might have encryption built in, so check the specifications.

GENERAL PC

Prevent your PC from freezing

Q After an apparently random period of time, my PC freezes and nothing works – not even the mouse or keyboard. I can't even press Ctrl+Alt+Del, and I have to hold the power button down to turn off. I can then restart it, but eventually it freezes again. Any suggestions for solving this would be appreciated.

William Doyle, via email

A Drivers can sometimes cause problems like this and it may be a bug or an incompatibility. Updating an old driver to a newer version might fix it but, equally, the solution may be to roll back a new driver to its previous version. To make matters even more complicated, there are often no clues as to which driver is causing the problem and you just have to work through the most likely suspects. Our advice is to start with the video driver.

Open the Device Manager by typing it into the search box, then click it when it appears. Expand 'Display adaptors', then right-click the adaptor and select 'Update driver'. If no newer versions are found, right-click it and select Properties. Select the Driver tab and, if the Roll Back Driver button is enabled, use it. This reinstalls the previous driver from a backup Windows has automatically made, but not all drivers can be rolled back.

Repeat this with other common devices, such as Bluetooth, Human Interface Devices, 'Mice and other pointing devices', Keyboards and 'Network adapters'. Tools such as DriverMax (www.drivermax.com) and Driver Booster Free (bit.ly/drbo479) can find and update many more drivers.

Software doesn't usually make the whole computer freeze but it's certainly possible. If it happens when you're using a particular program, try updating or uninstalling it. Random freezing when different programs are being used could be down to something running in the background.

Right-click the taskbar and select Task Manager. Look at the items listed on the Startup tab and disable anything that isn't essential. Right-click the icons at the right side of the taskbar, including those in the pop-up area, and close anything that's not essential. If you're using security software, try disabling it or uninstalling it and using Windows Defender if you have Windows 10.

Some drivers can be rolled back to their previous versions using Device Manager

This fortnight Roland has been freeing up space on his cloud storage services, which are perilously close to being full

Readers' Helpdesk

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

READERS RESPOND

Back Issues disc winner

HARDWARE

How to reset a hacked router

A I had a similar problem to Patrick Francis (see Issue 477) when my router was hacked last year. I suggest disconnecting it from the internet and, if it has Wi-Fi, disabling that too. Then unplug any devices that are attached to the router and reset it using the factory reset button. Next, connect a malware-free PC to the router so you can access its settings. Change the username from 'admin' to something else and set a secure password that uses upper and lowercase letters and numbers. Before you connect any other devices to the router, check that they are free from malware. You can also block the hacker's IP and MAC addresses in the router's settings.

Reset your router and change its password to recover from a hack attack

JE, via email

CAN YOU HELP?

webuser@webuser.co.uk

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

HARDWARE

Q Virtual reality seems to have come a long way since the Eighties and Nineties. I'm intrigued and would like to try it out, but it's very expensive. Do any readers know the best way to try VR without spending a fortune?

Christopher Andrew, via email

GOOGLE

Q I've been receiving constant notifications recently telling me that Google Play can't log me in. Has this been happening to anyone else? The notifications are driving me to distraction!

Gillian Fields, via email

SOFTWARE

Talk to people using speech-to-text software

Q My 90-year-old aunt is profoundly deaf. She can talk, but now we have to communicate with her using a whiteboard and pen. In a world of Alexas and Siris, you'd think the technology would exist to provide her with a real-time speech-to-text unit. However, all the options use online services and are either slow and limiting or work on a smartphone with tiny writing. Worse, some of the tools need you to upload a file to a website, which isn't exactly real-time. Is there a way to turn a tablet into a hardwired speech-to-text unit?

Tim Roberts, via email

A We covered speech-to-text tools way back in Issue 457 (bit.ly/webuser457), and we've yet to see a service that can outperform Google Docs. Depending on the device you're using, download the app or head to docs.google.com. Click the microphone icon and speak. All speech-to-text converters can be hit and miss, but Google's is by far the best.

Smart devices can translate your words into text

Alternatively, download and install SwiftKey (bit.ly/swke479) or Gboard (bit.ly/gband479). Press the microphone icon and speak. Both apps are available for tablets as well as smartphones.

Steve Clark, Features Writer, Web User

SEARCH

Search for photos online

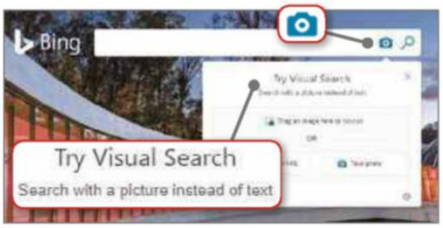
Q Is it possible to search the internet using an image rather than typing words? I've found out how to search my PC using a photo but not the web.

John AC Beattie, via email

A There are a couple of services that let you perform a visual search online – first, go to Google Images (images.google.com and click the Images link, which is in the top-right corner. Once you're there, click the Camera button and either paste a link to a photo or upload an image from your computer. If you're using your phone, you'll have to enure you're using the desktop version of the site. Head to google.com, then click the three dots and select the 'Desktop site' option before following the steps above.

Bing (www.bing.com) also offers a good visual search feature. When you click the camera icon in the search bar, it gives you three options: you can drag and drop an image saved on your PC, paste an image or URL, or take a photo. When you perform a visual search, the site displays similar images, or you can click elements of your photo to specify a particular part of it.

Steve Clark, Features Writer, Web User



Bing's Visual Search feature lets you upload an image to find out more about it

Your Top Tips

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

TOP TIP

Back Issues disc winner

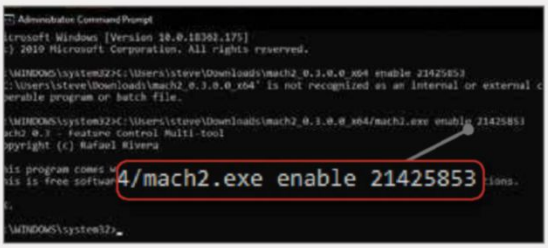
GENERAL PC

Limit the size of Windows 10 updates

If you have limited internet bandwidth and you're worried about how much of it Windows 10 updates are using, there's a nifty way to limit their size. Download and extract the Mach2 Zip file from bit.ly/mach479. Run Command Prompt as an administrator, then paste in the location of the .exe file. It should look something like this:

C:\Users\username\Downloads\mach2_0.3.0.0_x64/mach2.exe

Press space, type `enable`, then press space again and type `21425853`. Press Enter and restart your PC. Finally, open Settings, Update & Security, then Delivery Optimisation. Click 'Advanced options', and you can limit bandwidth usage under 'Absolute bandwidth'.



Don't let Windows Updates use up your bandwidth

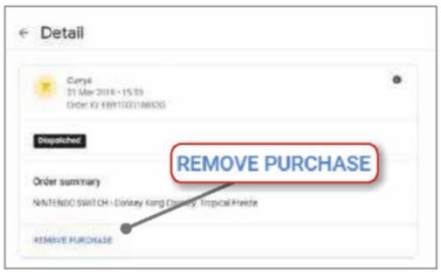
Brodie Macmillan, via email

PRIVACY

Delete recent purchases from Google's tracking tool

Google tracks everything you buy online, and then uses this information to advertise 'relevant' products to you when you're next browsing the web. However, you can delete this information from your profile by visiting myaccount.google.com/purchases, clicking any purchase and selecting Remove Purchase. Simple.

Martha Mortis, via email



Remove details of items you've purchased from Google's database

SECURITY

Update and scan with security software

If you use Windows Defender for security in Windows 10, it's easy to leave it running in the background without paying it much attention. However, if left alone it only performs quick scans of the places malware is most likely to lurk, so it's worth updating the virus signatures manually and performing a thorough scan every now and then.

Right-click the Windows Defender icon in the taskbar and select 'View security dashboard'. Click 'Virus & threat protection', then check for updates by clicking the link near the bottom. Click 'Scan options' and choose a 'Full scan', followed by 'Scan now'.

You shouldn't need to update Windows Defender's virus definitions manually, but if you do, you can download them from bit.ly/wddef479.

Even if you use other security tools, it's still worth doing a thorough manual scan once in a while.

Chris Mahon, via email

BROWSERS

Print selected text

In the past, when I wanted to print something from a web page, I'd print the entire page. Sometimes it came out on more than one sheet, which was a waste of ink and paper. However, I recently discovered that you can choose how much of a web page you want to print.

If you open a web page in Chrome, then right-click and select Print, Chrome prints the whole page. However, if you click and drag to select part of a page, then right-click and choose Print, Chrome prints only the selected part. This works whether you select text, images or both, and prevents waste.

Bill Tate, via email

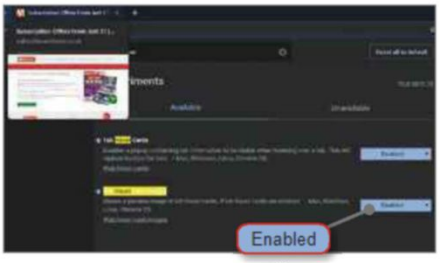
BROWSERS

Enable Hover Cards to preview Chrome tabs

As you know, hovering your mouse pointer over a tab in Chrome reveals the name of the page, but I've discovered an even better way of checking what a tab contains without opening it. You'll need Chrome Beta (www.google.com/chrome/beta) for this because the feature isn't available in the standard version yet.

Open `chrome://flags/#tab-hover-cards` and select Enabled from the drop-down menu. Next, go to `chrome://flags/#tab-hover-card-images` and Enable that too. Once you've relaunched the browser, you'll find that hovering over a tab reveals a card containing an image of what's on the page. It's ridiculously useful.

Paul Sterling, via email

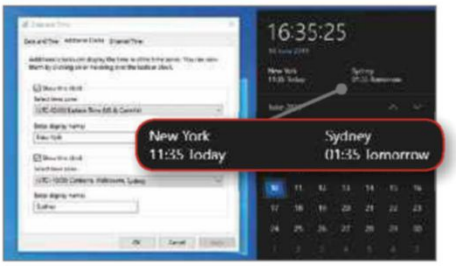


Hover Cards lets you view the contents of unselected tabs in Chrome

GENERAL PC

Add more time zones

Did you know that you can add two more clocks to the clock in the taskbar so you can see what time it is in different parts of the world? This could be handy for



Add extra clocks to the taskbar clock for places around the world

people who have friends living abroad, or to check the start time of international sporting events.

Open the Control Panel and click 'Date and Time'. On the Additional Clocks tab you'll see two drop-down time zone menus, one for each clock. These offer a long list of places, including Sydney, the East and West coasts of the US, various European cities and Hawaii. Tick the appropriate boxes to show both clocks and choose a time zone for each one, then click OK. Click the clock on the taskbar to see the time in your chosen cities – the additional clocks appear at the top, above the calendar.

Peter Sullivan, via email

EMAIL

View Gmail attachments

It's possible to view email attachments in Gmail without opening the message itself, which is useful if you receive a lot of attachments. Open Gmail in a browser and click the gear menu, then 'Display density'. In the window that appears, select Default and click OK.

Your email attachments appear as buttons beneath messages in your inbox. Click a button to open the attachment in your browser. You can use this method to view images, PDFs and even ZIP files. It's a quick way to find a file when you can't remember which email it was attached to.

Jon Perez, via email

MOBILE

Add depth blur to your Android photos

Create the 'miniature illusion' with your phone's photos

I was interested to read your article about free photo-editing software, especially Tiltshift Maker (tiltshiftmaker.com), which recreates the famous 'bokeh' effect. Did you know that you can achieve the same effect on Android using an app called DepthBlur (bit.ly/blur479). This adds a blur around the subject, which you can adjust using the scroll wheel. I find this method easier to use than Tiltshift Maker when sharing photos online from my phone.

Jack Upton, via email

GENERAL PC

Manage your windows better

I hope other *Web User* readers find this tip useful. I've just downloaded WindowGrid (windowgrid.net), which is designed to help you manage the way open windows are arranged on your screen. It can seem a little finicky at first, so be warned.

Run the program, then as you move a window by clicking and holding down the left mouse button, press the right mouse button too. This reveals a grid that maximises the screen space for each window without covering any of them up. Release the right mouse button and you can begin to 'fill' the grid by arranging your windows.

James Pike, via email

WindowGrid makes resizing and repositioning your windows a lot easier

Use the BookmarkSheet extension to create a bookmarks file in Google Sheets

BROWSERS

Save your bookmarks to Google Sheets

I've found an interesting browser extension for Chrome called BookmarkSheet (bit.ly/bookmark479), which lets you save details of your favourite web pages in Google's online spreadsheet tool, Google Sheets. This is great for me, because I absolutely hate managing my bookmarks in Chrome – it's just so clunky and annoying.

BookmarkSheet can't import your bookmarks from Chrome, so you'll need to visit your favourite websites again and press the extension button. You can choose which info to save into Google Sheets and where to save it. I like the fact that the extension saves bookmarks in a useful format that I can share – which will be handy if I ever switch to another browser but don't want to import old bookmarks.

Colin Mortiarty, via email

BLUNDER OF THE FORTNIGHT

SOFTWARE

Keep any window on top

When I'm working on my laptop, I tend to have lots of browser windows open. It's not ideal, but needs must. However, I end up spending almost as much time switching between my main window and all my other programs as I do working. It used to annoy me that I couldn't just set my main browser window to 'Always on top', as you can with other software. Luckily, before I lost my marbles and my valuable time, I found Pennywise. Yes, for some reason it's named after the clown from Stephen King's *It*, but it's also a ridiculously useful tool. Download it from bit.ly/pennywise479, open the application and enter the URL of the page you want to 'float' – which is the app's way of saying 'Always on top'. Now, no matter what else you do, the Pennywise browser window remains on-screen and within sight, even if you're working in other windows. As long as you don't mind a creepy-looking clown staring at you from the taskbar, it's ideal.

Keep your most important websites in plain sight with Pennywise

Elton Kassam, via email

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

Inbox

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

Star Email

Back Issues disc winner

Spotify is a musical revelation

I was pleased to see an article about Spotify in your recent issue, because I've just started using it myself and now I can't believe it took me so long. I've even signed up for the Premium version, which at £9.99 a month is no more expensive than buying the occasional CD.

I've spent the past 10 years building up a large MP3 collection that includes songs I've ripped from my own CDs and tracks I've bought from iTunes. I didn't see the need to use a streaming service too, but Spotify has proved to be a revelation.

Virtually every artist and song I've looked for, aside from a few obscure remixes and live versions, has been there, and I've quickly been able to reconstruct my iTunes playlists. Best of all, I've connected Spotify to my Google Home speaker, which means I can now play music simply by saying "Hey Google, play Elton John", without having to fiddle around searching for songs. It's made Google Home my *de facto* music system, and the sound quality is excellent.

The only thing that bothers me is that you have to 'like' songs rather than 'save' them to your music library – this is apparently a recent change to the Spotify app. It just seems very Facebooky to me, although I suppose Spotify uses your 'likes' to build a profile of your musical tastes, so it can recommend tracks and create playlists for you. At least the app isn't doing this to target you with adverts – or not in the Premium version, anyway.

I'd recommend anyone who has resisted Spotify because it's 'trendy' or 'not the same as owning your music' to give it a go. You won't regret it.

Brian Daniels, via email

We mustn't take Huawei risk lying down

In your Star Email in Issue 477, James Quinn states "I believe that Huawei is innocent of espionage until it can be proven guilty" and that "the technology industry should be ashamed of its knee-jerk response".

Although I agree that we shouldn't react in a knee-jerk manner, we also have to be wary of possible infiltration by third parties who don't have our interests at heart. China's National Intelligence Law from 2017 requires organisations and citizens to "support, assist and cooperate with the state intelligence work," which is clearly a concern. Vodafone has previously identified hidden backdoors that could have given Huawei or the Chinese government unauthorised access to Vodafone's Italian fixed-line network.

In 2011, Vodafone reportedly asked Huawei to remove backdoors from its home internet routers. Huawei offered assurances to Vodafone that it would comply and said it had fixed the issues, but when Vodafone analysed the software, it found that the vulnerabilities remained.

What's more, Vodafone discovered hidden backdoors in its optical service nodes, which transport internet traffic

Credit: B.Zhou / Shutterstock.com

over fibre cables, and in its broadband network gateways, which handle subscriber authentication and access to the internet.

It may be wrong to have knee-jerk reactions, but it's equally wrong to be so blasé about this sort of problem. To think no government would carry out such things is the height of naivety.

Mark, via email

Suspicious about Apple's hidden iPhone costs

With reference to Barry Collins' column in Issue 476 regarding shenanigans over Apple's products and services ('Apple needs a dose of nan's medicine'), I'd like to add one more thing that many Apple customers may not know about.

Quiz Answers: Issue 478

1 William Shakespeare

2 Mary Shelley

3 Oscar Wilde

4 Anton Chekhov

5 CS Lewis

6 Barbara Cartland

WINNER!
Well done to **Kim Willing** who wins a Web User Back Issues Disc

WIKIPEDIA ARTICLE
Computer mouse

Since the introduction of iOS 9, the default toggle switch enabling 'Wi-Fi-only' downloads and uploads was switched off on many iPhones. This meant users were breaching their mobile data allowances, generating lots of extra money for participating mobile networks.

It's no secret that Apple has a very cosy relationship with many of these companies. Just look at the amount of joint media advertising that appears when a new iPhone is released. No wonder the cost of owning Apple's products has passed the £1,000 mark recently. Could it be that these companies have so much influence with Apple that to increase profits they can insist on their own settings? Once again, it appears that regulators have just let this happen.

As a footnote, please tell Barry that the word 'gotten' doesn't exist in the English vocabulary, and as a UK-based professional journalist he should know better. American slang words may be acceptable in some parts of the globe, but not here!

Roger T, via email

Try my new online budgeting app

I would like to let you know about my new website, Money-Go-Round (moneygoround.info). It's an online budgeting app that lets you enter details of your income and outgoings, and outputs a running total, with a savings calculator and cash-flow forecasts.

The running total report also works out a piggy bank total, the amount you need to put aside to pay for expenses and your disposable income. The savings calculator was born out of a habit of putting any money left over at the end of the month into a savings account. The report calculates how much you could potentially save.

I coded Money-Go-Round myself using open-source software. The presentation could be better (something for the future), but it's functional and free, with no adverts. The site is currently at the alpha stage and available for user testing and feedback.

Gareth Osler, via email

What you say...

GOOGLE HAS STOPPED MAKING TABLETS (bit.ly/tablets479). HOW LONG HAVE YOU HAD YOUR CURRENT TABLET?

I still use a Galaxy Tab S 8.4 (2014), which Samsung eventually stopped updating. There was nothing on the market of a similar size that I fancied, so I rooted it, installed Lineage OS and now it's faster than ever. I also replaced the battery, so I have a speedy tablet that's as good as new.

Gary Olsen

I've bought a number of tablets over the years from Tesco (a Hudl), Ideal World (an Apple iPad Mini) and QVC (a Lenovo device). I've discovered from reading *Web User* that there are lots of uses for an old tablet, such as a second PC monitor, a photo display and even a security camera.

Lee Morris

I've had my BlackBerry Playbook for a good eight years. It's a bit limited now in what it can do, but it still plays movies and I completed Angry Birds on it. Maybe it's time for a change.

Colin Leonard

Less than 12 months. I am never an early adopter.

Dave Spinks

WHAT DO YOU THINK IS MICROSOFT'S BIGGEST MISTAKE (bit.ly/mistake479)?

In 2004-05, I was part of a team of users testing Microsoft's MSN Music service, which was designed to compete with iTunes. I urged them to drop their digital-rights management and move to an open system. They delayed and missed the boat.

Chris Armstrong

The worst investment Microsoft ever made was buying and destroying the Nokia brand.

Brian Brown

The Zune MP3 player. I had a tiny one that could hold 250 tracks. It was never going to compete with the iPod.

Caroline Chapman *@cantstopthesgnl*

Windows ME.

Anthony Higham

Clearly the answer is Clippy the office assistant.

Rich Grove

WILL YOU DITCH CHROME IF IT DISABLES YOUR AD BLOCKER (see page 40)?

Yes, although it won't come as a blow because I mainly use Firefox. I only use Chrome occasionally as a backup.

Lynn Sharpe

Yes. Fortunately there are many other options available. I use a multitude of different ad blockers for a reason.

Gavin Green

Very likely, but I'd still use Chrome for paying bills and using Google Drive.

Martin Phillp

I stopped using Chrome ages ago. It never seems especially stable.

Lee Dodgson

I don't use Chrome. It's too nosy. I use Vivaldi instead.

Jason 'Boz' Bowyer

I don't use Chrome, but do use Vivaldi – and yes, I would.

Mike Collum

I binned Chrome off ages ago. It's like Big Brother is watching you.

Geoffrey Boow

I already have.

Jayme Carne

I like Edge but I hear it's changing to be more like Chrome. Why bother?

Simon Batt

Page 404

Barry Collins fears he's being strong-armed into paying for a Dropbox subscription

Is it time to drop Dropbox?

Like the 20-goal-a-season striker who turns up in the manager's office asking for a new contract, Dropbox is good – and it knows it. That's why it's turning the screw on free users, enforcing significant price rises on subscribers and doing its level best to turn the red ink on its profit-and-loss sheet to black.

The warning signs literally started appearing in March, when free users suddenly received alerts that they couldn't install Dropbox on new devices because the company had imposed a strict three-device limit. Any devices you had linked to Dropbox prior to March would remain so, but if you subsequently tried to add a new one, you couldn't just swap one of the old devices out – you had to reduce the number of devices on your account to two and then add the new one.

Want the freedom to install Dropbox on as many devices as you like again? Well, step right over here and take out one of Dropbox's subscription plans, from the bargain price of £5.99 per month. Except that price didn't last long. Last month, Dropbox imposed 20% price rises across the board, meaning the cheapest subscription plan now costs just shy of £100 a year, or £7.99 per month. If you don't want to pay a year's subscription in advance, that's hiked up to £9.99 per month or £120 a year.

> "Almost any app you can think of integrates with Dropbox – no other service offers the same carefree file syncing"

To be fair to Dropbox, it has increased the amount of storage available to paid-for subscribers. Plus users have seen their storage quota double from 1TB to 2TB, and the service has rolled out several new features, including the ability to "rewind" your entire Dropbox should ransomware encrypt all your files and demand you immediately shuttle £500 to Sergei in Moscow to get them back.

That Dropbox is brilliant is not in question. I've used it for personal and business files for years and I can count on the fingers of one hand the number of times it's let me down. And because I've managed to harvest chunks of extra storage by recommending Dropbox to friends and buying certain devices over the years, I've not had to pay for it.

But now I feel like I'm being boxed in by Dropbox. The three-device limit will eventually bite me (I currently have it installed on no fewer than 21 devices, although a good chunk of them are sitting unused in my kit cupboard) and Dropbox is so firmly integrated into my work and personal life that I'd struggle to get by without it. Almost any app or productivity software you can think of integrates with Dropbox – no other service offers the same carefree file syncing.

So at some point soon I'm going to be faced with a choice. Do I pay up and tether myself to Dropbox and its price rises for the foreseeable future? Or jump ship before I'm in too deep? You might reasonably argue that I've had a good run on a free service, and I should be prepared to pay for something that's so valuable to my business. But there's something about being strong-armed into subscribing that leaves a bad taste. It's nowhere near as malicious as the ransomware it guards against, but it's not entirely dissimilar, either: it's got my data, now it wants my money.

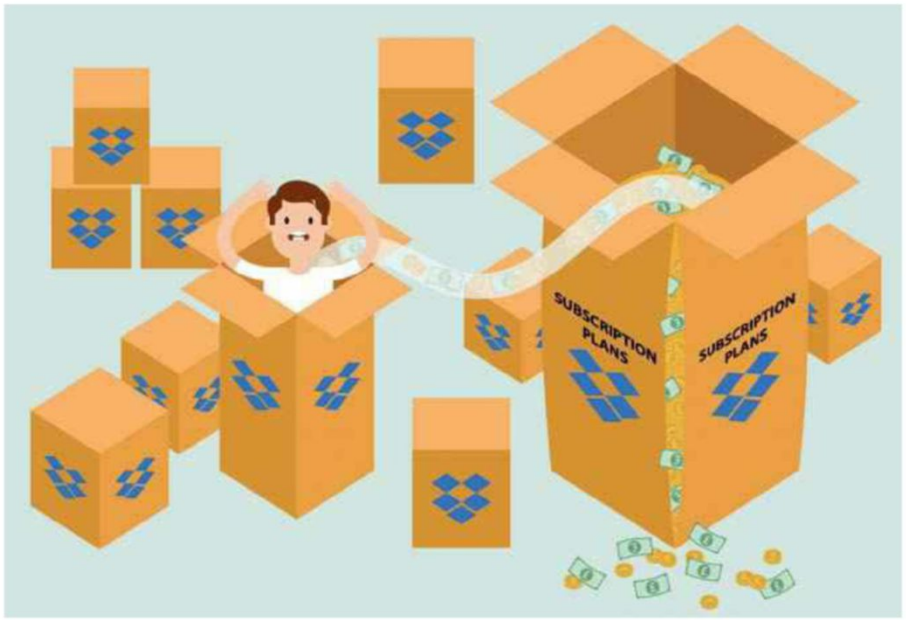


Illustration: Andrew Torrens

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

WebUser

SUBSCRIPTION OFFER
FOR MORE INFO SEE PAGE 62

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

What's inside the next issue:

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- Uninstall Windows apps you don't want
- Turn an old phone into a car dashcam

AND...

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