

# BEAT RESTRICTIONS in...

▶  YouTube

▶  iPlayer

▶ **NETFLIX**

**Watch WHAT you want...**

**...HOW you want p40**

£2.20 9 771473 709165 14>

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**WHAT'S (secretly)  
KILLING YOUR WI-FI?**

Hidden causes around your home p50

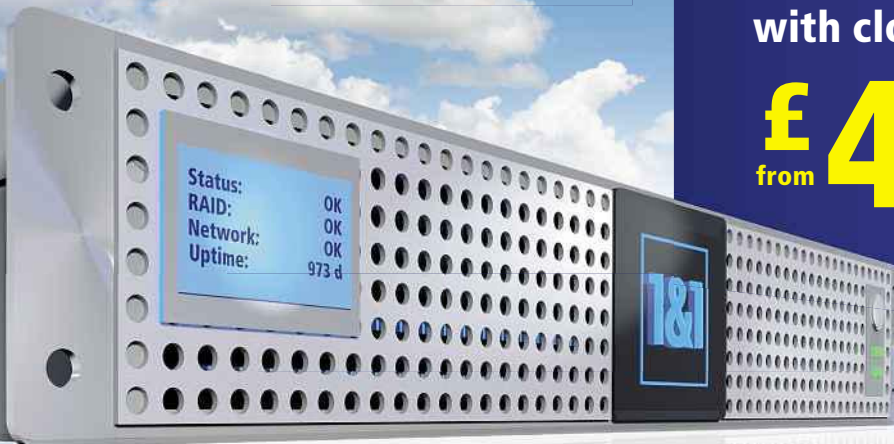
**WHAT YOU SHOULD REMOVE  
FROM WINDOWS** Old versions •

Update files • Disabled components & more

**p54**

**NEW**

# BARE METAL SERVER



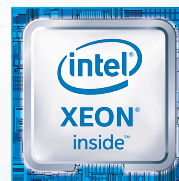
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## Beyond your wildest streams

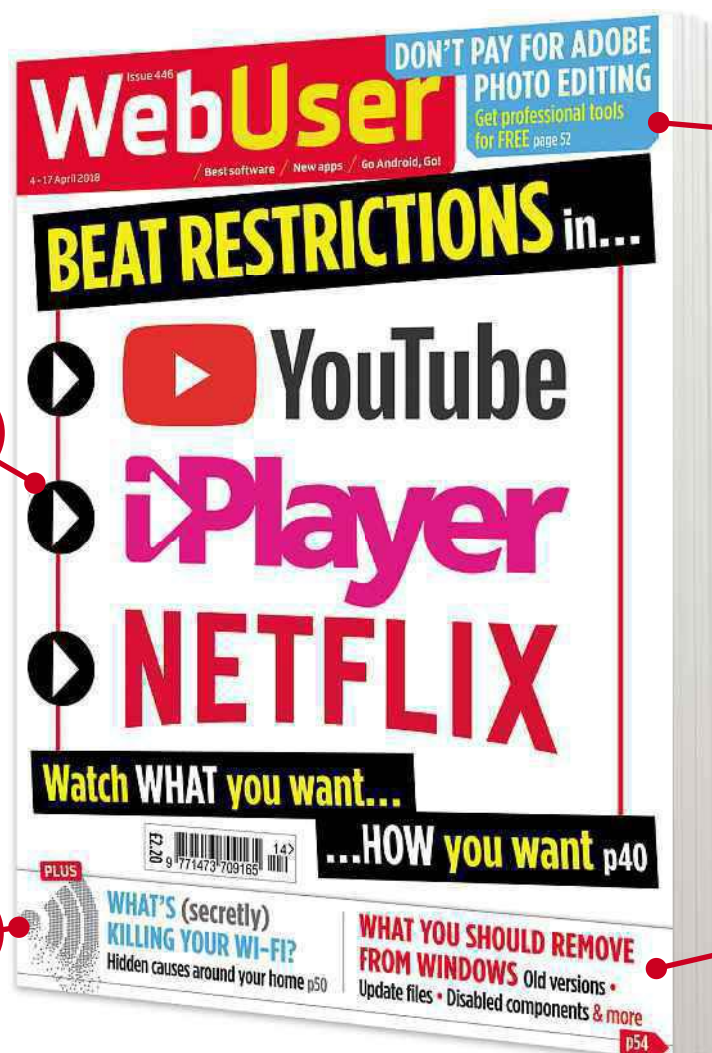
**P**op quiz: what do YouTube, iPlayer and Netflix have in common? Give yourself a point if you answered that they're all video-streaming services; two points for noticing they all have seven letters; and three points for agreeing that while they all offer lots of great stuff to watch, they can also be frustrating at times. No points for observing that they're all on this issue's cover, because we can see that a few inches below!

From YouTube clips that are "not available in your country" to the BBC blocking your access from abroad when you've just paid £150 for your TV licence, there are plenty of

unfair restrictions on your viewing, as well as annoyances such as Netflix's clunky interface. In our cover feature, we explain how to get around common streaming constraints (legally, of course) to watch what you want, however you want.

Also in this issue, we answer the age-old question: why does reheating a chicken curry slow your Wi-Fi? Find out on page 50.

**Robert Irvine, Editor**  
[robert\\_irvine@dennis.co.uk](mailto:robert_irvine@dennis.co.uk)  
[#webuser](#)



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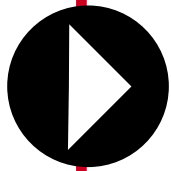
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COVER  
FEATURE

## BEAT RESTRICTIONS in...

 YouTube  iPlayer  NETFLIX



Watch what you want, how you want, on the major streaming sites

p40

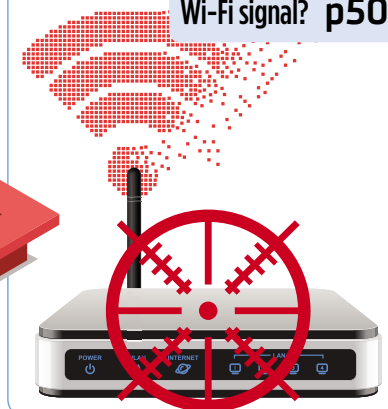
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## EDITORIAL

Group Editor Daniel Booth  
Editor Robert Irvine  
Technical & Reviews Editor Andy Shaw  
Art Editor Laurence Hallam  
Production Editor Miki Berenyi  
Editorial Tel: 0203 890 3890  
Visit [forum.webuser.co.uk](http://forum.webuser.co.uk)  
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## ADVERTISING

Tel: 0203 890 3846  
Advertising Director Charlotte Milligan  
Advertising Manager Alexa Dracos

## ADVERTISING PRODUCTION

Group Production Manager  
Stephen Catherall, 0203 890 4050  
Production Executive Lawrence Brookes, 0203 890 3794

## MARKETING

Marketing Manager Rachel Hare  
Marketing Production Manager Gemma Hills

## MANAGEMENT

Tel: 0203 890 3890  
Managing Director John Garewal  
MD of Advertising Julian Lloyd-Evans  
Commercial and Retail Director David Barker  
CFO/COO Brett Reynolds  
Chief Executive James Tye  
Company Founder Felix Dennis

## SYNDICATION AND USE OF LOGOS

Syndication Senior Manager Anj Dosaj-Halai  
Tel: +44 (0)203 890 3816  
Email: [anj\\_dosaj-halai@dennis.co.uk](mailto:anj_dosaj-halai@dennis.co.uk)

## INTERNATIONAL LICENSING

Web User is available for licensing overseas.  
Licensing & Syndication Assistant Nicole Adams  
Tel: +44 (0)203 890 3998  
Email: [nicole\\_adams@dennis.co.uk](mailto:nicole_adams@dennis.co.uk)

## SUBSCRIPTIONS

Tel: 0330 333 9493  
Email: [subscriptions@dennis.co.uk](mailto:subscriptions@dennis.co.uk)  
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# What's New Online

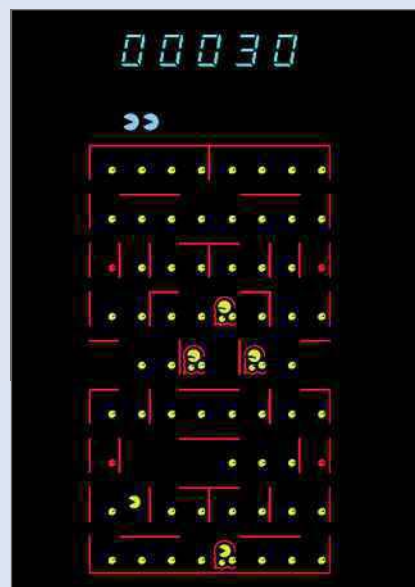
## Play 60 classic handheld games

**B**efore the Nintendo Game Boy dominated the handheld-games market, battery-operated LCD games were all the rage. Their graphics were basic and you couldn't change the game, but they were inexpensive, portable and provided lots of addictive fun while you were out and about.

To celebrate those games and ensure they're not lost to the ravages of time, the Internet Archive has made 60 of them available to play online. The selection includes digital versions of LCD, LED and Vacuum Fluorescent Display (VFD) machines, accompanied by historical backgrounds, instructions and scans of the original manuals. In some cases, the developers have torn apart the original devices to recreate the static backgrounds built into many of them. But it means the emulations are as faithful as possible.



Among the games on offer are some well-known gems, including *Altered Beast*, *Donkey Kong*, *Pac-Man* and *Double Dragon*. The games were originally created by developers such as Tiger Electronics, Coleco, Bandai and Konami, and while the gameplay is rather limited and repetitive, with only rudimentary difficulty levels, the games provide a great trip down memory lane. Just click to select the game you want,



wait for it to load in your browser and get stuck in.

[bit.ly/handheld446](http://bit.ly/handheld446)

## Suggest additions to Spotify's music info

[line-in.spotify.com](http://line-in.spotify.com)

Do you know your Blur from your Bruno Mars? Then you may be able to help Spotify tag and sort its tunes.

The streaming service has launched a new tool called Line-In that lets anyone suggest edits to the information it provides about music. All you have to do is launch Spotify, click the three-dot icon next to an artist, album or song that you feel needs your input and choose 'Suggest an Edit' from the menu.

This opens a page listing categories such as genre, mood, tags, artist roles, external URLs, languages, aliases and explicitness. From there, you can click Add, Edit or Delete within these sections, and any suggestions you make are queued for accuracy checks. To increase your chance of acceptance, you can complete surveys that test your musical knowledge – pass them with flying colours and your suggestions will carry greater weight.



## Explore SpaceX rocket launch site

[bit.ly/space446](http://bit.ly/space446)

This amazing 3D map lets you explore the launch site of Elon Musk's private space company, SpaceX, and even launch a model of the world's most powerful operational rocket, Falcon Heavy. Created using Mapbox, SketchUp, Blender and Photoshop, the map presents you with a 3D rendering of the site that you can zoom in and out of and rotate through 360-degrees.

When you're ready, turn on the sound and click Launch. You'll hear mission control count down from 10 before the engines ignite, sending the rocket skywards in a blast of fiery pixels. You can then watch Falcon Heavy make its way through space, and keep an eye on its speed and altitude. During the flight, you can hold the right mouse button to rotate the map, and zoom in and out using the scroll wheel. If you have a touchscreen device, use one finger to rotate and two to minimise and maximise the map.



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

## Try Android games before you install them

[bit.ly/play446](http://bit.ly/play446)

You can now try certain games on Google Play without installing them on your Android device, so you can avoid clogging it with titles you don't like. Its new Play Instant collection lets you play demos of Clash Royale, Words With Friends 2 and Mighty Battles, simply by tapping Try Now. If you like what you see, you can then install the full game.



## NEW VOICE COMMANDS

**Solve a murder**  
Whodunnit? That's for you to find out in this game for Google Assistant. Say, "Hey Google, talk to Grilled Murder Mystery" to start the mystery and question the suspects.

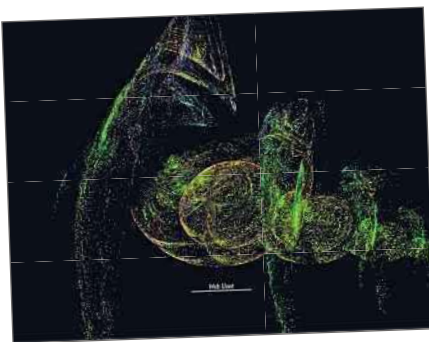
**Make bank transfers**  
First Direct bank customers can make payments to contacts and existing payees using Apple's voice assistant. Just say, "Siri, pay [David] £20 with First Direct" and confirm using TouchID or FaceID.

**Don't say "Alexa"**  
Tired of saying "Alexa" every time you want to perform a task? Switch on Follow-Up Mode for your device in the Alexa app's Settings, and Alexa will wait five seconds for another query after each response.

## Create audio by typing words

[bit.ly/flame446](http://bit.ly/flame446)

Type a word or phrase into the new Chrome experiment Flame and it rewards you with a pretty 3D fractal image that changes as you enter each letter. It also treats your ears to a unique piece of audio, although most of the time it sounds as if you're trying to tune an old analogue television (thankfully, you can turn it off). There's not much more to it, but you can zoom in and out, use a mouse or trackpad to view the flame at different angles and play around until you hit on something interesting.



## Learn to speak Klingon

[bit.ly/klingson446](http://bit.ly/klingson446)

*TlhIngan Hol Dajatlh'a*? You probably don't yet (speak Klingon, that is), but now you can master the alien tongue using Duolingo. The free language-learning service has added a full online course dedicated to Star Trek's fictional lingo, and with 170,000 Trekkies signed up before launch, it's set to be very popular. Developed by volunteers, the course joins Esperanto and High Valyrian (one of the languages used in *Game of Thrones*) and learning involves Duolingo's usual game-like elements. It's currently only available on the website, but is coming to the iOS and Android apps soon.



## Ask for a job referral

[www.linkedin.com](http://www.linkedin.com)

You can now increase your chance of landing your dream job through LinkedIn. If one of your connections works at a firm you're interested in, click 'Ask for a Referral' to send them a message in the hope that they can put in a good word for you.

## Shop on Instagram

[www.instagram.com](http://www.instagram.com)

Instagram now lets UK companies tag products in their posts, so you can tap an item to go straight to the website. So far, Marks & Spencer and Heidi Klein have produced 'shoppable' posts.

## Get a free audiobook from Alexa

[www.audible.co.uk](http://www.audible.co.uk)

If you've never had a free trial with Audible.co.uk before and you own an Alexa-controlled device such as the Amazon Echo, you can now listen to an entire audiobook of your choice for free. You don't even need to sign up to get it: just say "Alexa, read me..." followed by the title of the tome you want, and Alexa will instantly start reading.



## View accessible routes

[maps.google.co.uk](http://maps.google.co.uk)

Google Maps now lets you view the most wheelchair-friendly routes around London. Type your destination into Maps, tap Directions and select public transport. Tap Options and choose 'Wheelchair accessible'.



# Need to Know

## Facebook promises changes following huge data scandal

### What happened?

There have been plenty of data privacy scandals in recent years, but none quite like this: a pink-haired whistleblower, a Russian academic and claims of election fixing have made headlines across the world – and Facebook is at the centre of it all.

Cambridge Analytica is a campaign consultancy that specialises in using data to influence voters. Data science has legitimate applications in election campaigns, but Cambridge Analytica is accused of illegally harvesting data from Facebook users to target individuals with personalised political messages while hiding its allegiance, thus creating – as whistleblower and former CA staffer Chris Wiley put it – a “psychological warfare tool”.

Facebook was made aware of the ‘breach’ back in 2015, but reports suggest it merely sent a letter to Cambridge Analytica requiring nothing more than a ticked box as confirmation that the company had wiped the data. Even more worrying is how the data was obtained in the first place: Facebook not only allowed third-party app developers to access user data, but also permitted them to mine the profiles of users’ friends, meaning around 50 million people were affected by the breach.

In the most high-profile example, Facebook users were paid to install and complete a personality quiz created by Russian academic Aleksandr Kogan, which secretly collected data about their friends in the background. Kogan gave the data to Cambridge Analytica, breaking UK data-protection rules and Facebook’s own terms. Facebook CEO



Credit: dolphyn / Shutterstock.com

and founder Mark Zuckerberg took five days to apologise and promise that Facebook will limit the data third-party apps can access in future.

That may be too little, too late for many Facebook users, as a #DeleteFacebook campaign took off online. How effective it will prove remains to be seen, but investors have taken note, wiping tens of billions of dollars from Facebook’s market value.

### How will it affect you?

If Cambridge Analytica’s attempts to influence Facebook users have been as successful as it claims in its marketing material and in the hidden-camera videos obtained by the *Observer*, the company potentially put Donald Trump in The White House and influenced UK voters to opt for Brexit. However, this is nigh on impossible to prove, and Cambridge Analytica denies working on the EU referendum.

In response, one US academic has filed a request asking Cambridge Analytica whether his data was used.

But, more broadly, the rising pressure against Facebook means regulators on both sides of the Atlantic may finally take action.

If you’ve had enough of Facebook’s devious data dealings and want to jump on the #DeleteFacebook bandwagon, here’s how to do

it. First, download all your data, so you don’t lose all your precious photos and memories. To do this, go to Settings, General Account Settings, then ‘Download a copy of your Facebook data’. The download will take a while to prepare, so wait until you receive the notification, then download the data.

You can either ‘deactivate’ your account – which allows you to reactivate it later – or delete it completely. The setting to deactivate is under General Account Settings, while deletion has a dedicated page at [bit.ly/fbdelete446](https://bit.ly/fbdelete446). Once you have clicked that button, stay away from the site – if you revisit within a few months of deletion, your account will automatically be reactivated.

### What do we think?

Consider this a lesson learned: all those warnings from privacy campaigners about the dangers of social media are true. We can heed the call to delete Facebook, and learn to protect our own privacy better online, but it’s clear that the power in this relationship doesn’t fall on our side. For that reason, it’s high time regulators stepped in – but what can they do when selling our data is how Facebook makes its money?

Those of us who love the web still believe that it can help build a better world, but it’s only through participation and discussion – and learning from mistakes – that we can help to make this happen.



**If you've had enough of Facebook invading your privacy, download your data and delete your account**

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

## UK mobile networks start bidding for 5G



### What happened?

Communications regulator Ofcom has started auctioning the 5G spectrum in the UK – although we won't know which companies have won a slice for their next-generation networks for several weeks. The five bidders are EE, 3G, Telefonica, Vodafone and newcomer Airspace Spectrum Holdings.

Ofcom is selling 190MHz of spectrum in two bands, 150MHz of which is in the 3.4GHz band, which has been set aside for 5G services. The regulator has set an overall £70m reserve price, and while that's likely to climb with each bid, the regulator stresses that efficient use of spectrum is more important than the financial value of the auction. Whatever the auction raises, it won't come near the £22.5bn operators shelled out for 3G spectrum 20 years ago.

### How will it affect you?

The release of more spectrum for existing services will help ease congestion for mobile broadband, Ofcom says,

while the 3.4GHz band will let operators set up the first 5G services. That could mean anything from faster broadband on our smartphones to 'Internet of Things'-style networks that link sensors in everything from traffic lights to parking bays and more.

Operators don't need to buy spectrum in this auction to run 5G, however – plenty of them already own bands that can work for next-generation networks.

### What do we think?

More spectrum is always a good thing for consumers, because it means more bandwidth and faster internet speeds. The trick for Ofcom is to ensure the added capacity goes to the right operators. This is already a matter for dispute, as EE and Three are taking legal action over the regulator's limits on how much spectrum any one company can own. Providers unhappy with the results of this auction will have a second chance to expand their capacity in 2019, when the 700MHz band is auctioned.

## Google simplifies news-site paywalls

### What happened?

Google has unveiled its \$300m News Initiative to help publishers fight back against fake news, and to make it easier for them to manage their subscribers – hopefully encouraging a few more to sign up in the process.

'Subscribe with Google' is essentially a paywall managed by Google. When you visit a news site that uses Subscribe, it tells you how many free articles you have left. If you've used up your allowance, you can pay for access with your Google account rather than having to go through each individual publisher's registration and subscription system.

At launch, the service includes the *New York Times*, *Le Figaro*, the *Washington Post* and – here in the UK – the *Financial Times* and *Telegraph*.

### How will it affect you?

The subscription system should make it easier to sign up for news sites without needing separate login details for each one, although you'll have to hand over your card details to Google to pay for content. Each publisher sets its own prices.

Because Subscribe is

tied to your Google account, it will work wherever you're signed in to Chrome or Android. When you search for a news story, the first results you see are from publications you subscribe to. These appear in a dedicated box, so you don't keep clicking on paywalled stories you're not allowed to read. If you already have a subscription to a particular publication, you'll need to link it to your Google account for it to work with the site.

### What do we think?

This is a good idea, and we hope it goes further. Perhaps Google could offer micro-subscriptions that allow you to pay a small amount to read a few more stories without buying a full subscription, or make one-off donations to thank journalists for particularly interesting or compelling work. Hopefully, this is just the beginning of a revolution in the way we pay for online news, which will benefit both readers and those creating the content.

**You're out of article views**

You can subscribe to the Miami Herald with your Google Account.

Monthly Subscription	Annual Subscription
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Unlimited access to the Miami Herald. Anytime. Anywhere. On any...	Unlimited access to the Miami Herald. Anytime. Anywhere. On any...
1 month trial from \$1.99/month	

# Microsoft forces Edge on Windows Mail users

## What happened?

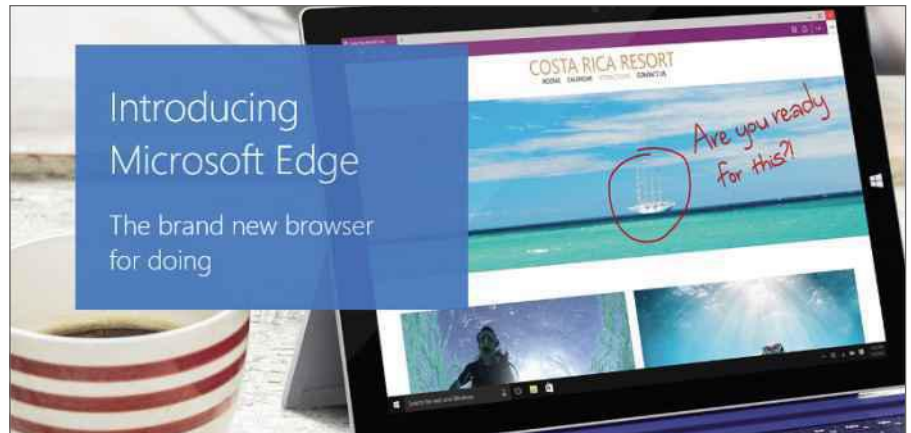
Microsoft has been caught foisting its Edge browser on Windows 10 users, even if they have another option set as their default browser.

As part of a new feature in the latest Windows 10 Insider Preview build for users in the Skip Ahead ring, any link clicked within the Windows Mail app – which is the default email client that comes preinstalled in Windows 10 – will automatically open in Microsoft Edge, regardless of whether or not it's the system default.

Microsoft announced the change in a blog post ([bit.ly/edge446](http://bit.ly/edge446)), claiming that Edge “provides the best, most secure and consistent experience on Windows 10 and across your devices,” adding: “As always, we look forward to feedback from our WIP (Windows Insider Programme) community”.

This is not the first time that the company has engaged in aggressive promotional tactics to increase the adoption of its browser. When users type the term ‘Chrome download’ or similar into Edge’s search bar (which uses Bing as the default search engine), they are greeted with a large banner at the top of their search results extolling the virtues of Edge and reminding them that it’s already installed on their PC.

Users trying to switch their PC’s default browser from Edge to an



alternative via the settings menu are greeted with a similar message.

## How will it affect you?

Windows Insiders are already using Microsoft’s Feedback Hub to complain vociferously about the change, accusing the company of limiting their freedom of choice and locking them into its own apps. Hopefully, this means that by the time the offending update is released to the public, Microsoft will have listened to the negative feedback and dropped this unwelcome and unreasonable restriction, allowing users to open emails in their preferred browser.

That said, Windows Mail is reported to have less than a 1% share of the email-client market, so it’s possible

you won’t notice the change even if it is enforced.

## What do we think?

Not again, Microsoft! We still remember the hot water the company got into almost a decade ago for forcing Windows users to browse with Internet Explorer. That led to Microsoft being investigated for anti-competitive practices and abusing its monopoly over the PC industry, but it seems that the company hasn’t learned its lesson.

Although this example of aggressive promotion isn’t as serious, Microsoft should acknowledge that not everybody wants to use Edge as their default browser, and give users a choice rather than making it for them.



## FIRST LOOK

### Raspberry Pi 3 Model B+ [www.raspberrypi.org](http://www.raspberrypi.org)

The latest hardware refresh of everyone’s favourite micro-computer isn’t a drastic overhaul: as the (increasingly unwieldy) name implies, it’s instead an updated version of the Raspberry Pi 3 Model B, originally released in February 2016.

The changes are all for the better, though. The processor is faster than ever before, and the Wi-Fi controller now supports dual-band 802.11ac, which is a big step up from the 2.4GHz-only 802.11n provision of its predecessor. The Ethernet port gets a boost, too, to 300Mbps.

To say that the new B+ isn’t much to look at would be an understatement. As usual, it comes as a bare board and retains the same basic layout as every

Pi since 2014’s original Model B+, with a full-sized HDMI connector, four USB 2 ports and a micro-USB power socket.

The Raspberry Pi was never intended to be a powerhouse, but over the generations it’s become quite a capable little thing. The user-friendly Raspbian Linux distro has come to feel – if not exactly nippy – very usable, and the Model B+ gives it an extra kick with a clock speed that’s 17% faster than the



old Model B.

The B+ isn’t a game-changing step up from its predecessor – if you’ve never seen the appeal of a Raspberry Pi, this incremental evolution isn’t going to change your mind. However, in the words of creator Eben Upton, the upgraded internals do give it a “substantially better feel” than any previous revision. The Pi is quietly becoming something that you really could use as a lightweight desktop PC while at the same time retaining all the charm and versatility that’s made the platform so beloved of hobbyists and tinkerers.

Perhaps most impressive is that the updated device retains the ultra-low price point of just £36. So if you do fancy the idea of buying a computer just to mess around with, the Pi is now more tempting than ever.





## WHAT'S THE RUMOUR

# Will Google Play start showing video ads?

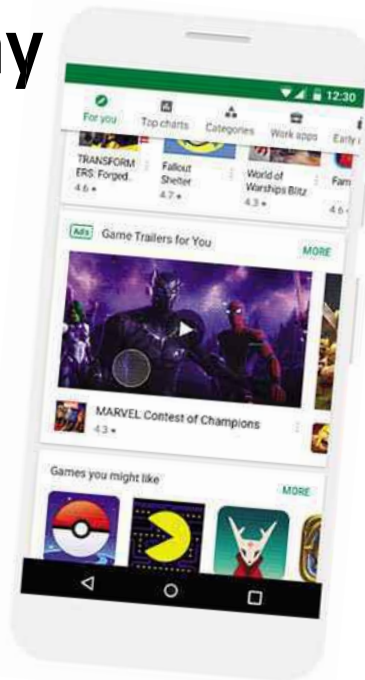
No sooner has Google introduced a built-in ad blocker in Chrome – albeit not a very effective one – than reports suggest that it plans to start showing video adverts for games on its Play store. Google says it will roll out a beta for these ads “over the next few months”, so it may be a while before you actually see any of them appear – and even then they may not be a permanent addition.

Fortunately for Android users who can't stand autoplaying ads (which we imagine covers most people), the videos will be ‘click-to-play’ and hopefully won't obstruct your view when you're browsing the Play store on your computer or mobile device. The adverts will also be clearly marked as such, and featured in the ‘Game Trailers for You’ section of your Google Play storefront so you don't click or tap them accidentally.

Google believes that video adverts are now the best way for game developers to promote their work, because they

provide “a new way to reach players on Google Play with sight, sound and motion”, not to mention increasing their potential earnings.

“Video ads are more than just a canvas for showcasing your games. They can help turn your apps into a revenue-driving machine,” said Google on its Inside AdWords blog ([bit.ly/adwords446](http://bit.ly/adwords446)).



### LIKELIHOOD RATING ✓✓✓✓✓

It sounds like Google has already made up its mind about showing video adverts on the Play store, although initially only as part of a beta test for select users – and not for a few months yet. Whether it will be possible to disable or block them remains to be seen. It's also worth noting that Apple displays video previews of games on its App Store, which are more annoying than Google's proposed ads because they autoplay.



## What's new on Kickstarter

Our favourite new project on the crowdfunding site

### XClear Nano-Suction Mount [bit.ly/xclear446](http://bit.ly/xclear446) | From £18

“Sticky without being sticky”, the XClear Nano-Suction Mount provides an easy, sturdy and flexible way to attach your GoPro camera to any smooth surface so you can capture perfect shots wherever you go. The mount uses tiny suction cups to create a super-strong vacuum that defies gravity without damaging walls, paintwork, furniture or whatever else you stick it to. It's reusable and doesn't collect dirt, and is compatible with all GoPro cameras. The XClear team hopes to raise £6,000 by 14 April, and has already attracted 100 backers.



## WEBOMETER



### WE LIKE...



#### Vivaldi teams up with DuckDuckGo

Vivaldi has become the first web browser to offer DuckDuckGo as the default search engine in its private mode. This means users can now search the web privately without anyone storing or sharing details of their queries.



#### Chrome stops noisy autoplay videos

Chrome will soon block autoplaying videos by default unless the sound is muted or the content is silent. However, you will still hear audio if you revisit a site on which you've previously played a video with sound.



### WE DON'T LIKE...



#### Twitter a ‘toxic place for women’

Amnesty International UK has deemed Twitter a “toxic place for women” after a survey found that only 9% of British females believed the social network was doing enough to stop abuse.



#### Self-driving Uber car causes fatality

A self-driving Uber car struck and killed a woman crossing the street in Tempe, Arizona, in what's believed to be the first fatal accident involving an autonomous vehicle. Uber has now suspended tests of self-driving cars in the US.



# Stay Safe Online

News about the latest threats and advice from security experts

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

### National Lottery suffers 'low-level' hack

Millions of National Lottery players have been urged to change their passwords after a 'low-level' cyber-attack affected 150 customer accounts. Hackers gained access to the accounts by using login details gleaned from a list circulated on the internet, said a spokeswoman from Camelot, owner of the National Lottery.

Camelot said no bank details or money have been stolen from the hacked player accounts. Privacy watchdog the Information Commissioner has been informed of the attack, along with the police and the National Cyber Security Centre.

"As part of our regular security monitoring, we have seen some suspicious activity on a very small number of players' accounts," said



Camelot in an email to customers. "We have directly contacted those players whose accounts have been affected. If you have a password you use across multiple sites then you should change it".

Players can normally transfer money from their debit cards into their National Lottery accounts, then use those funds to buy online lottery tickets or scratch cards. The 150 hacked accounts have now been suspended, Camelot said.

[bit.ly/lottery446](http://bit.ly/lottery446)

### Hackers build massive Android botnet

Security researchers have found malware they believe is assembling a botnet army of five million compromised Android devices. Researchers from cybersecurity firm Check Point said the RottenSys malware targets Android users via an app disguised as a Wi-Fi service.

RottenSys, active since September 2016, had amassed nearly 5 million devices by March this year from



manufacturers including Honor and Huawei. Evidence showed that a new module in the malware is trying to create a botnet and researchers said that hackers have been testing new malware that can turn the victim device into a 'slave' in a larger botnet.

The malware may have entered the users' devices before purchase, with half of the infected phones bought through a Chinese distributor. Check Point said users can uninstall RottenSys if they know the exact package name to remove. At present, researchers could not say how the hackers might try to use the botnet.

[bit.ly/rotennsys446](http://bit.ly/rotennsys446)

## Security Helpdesk | Your questions answered by security specialists

**THIS ISSUE'S EXPERT:**  
**David Emm, principal security researcher at Kaspersky Lab** ([www.kaspersky.co.uk](http://www.kaspersky.co.uk))



**Q** How can I make sure my children stay safe when they go online?  
Karen Greaves, Facebook

**A** The recent news that social-media sites are harming pupils' mental health ([bit.ly/social446](http://bit.ly/social446)) comes as a warning to parents who don't regularly check and

monitor their children's online activity. From a young age, children are exposed to technology that lets them easily swipe and click to access entertainment or information. We want to ensure that this freedom to explore the online world can continue without sacrificing their emotional safety.

However, a huge 87% of parents don't restrict the amount of time their young children spend online - and only 13% of parents install online security. Having parental controls in place and reviewing the default settings for each app are two very small steps that we, as parents, can take.

Your child's internet use should be supervised, and you should encourage them to stick to familiar websites. If you have any concerns, take a look at their browsing history. Be aware of any password-protected sites that they may be accessing and ask them to share their login details with you.

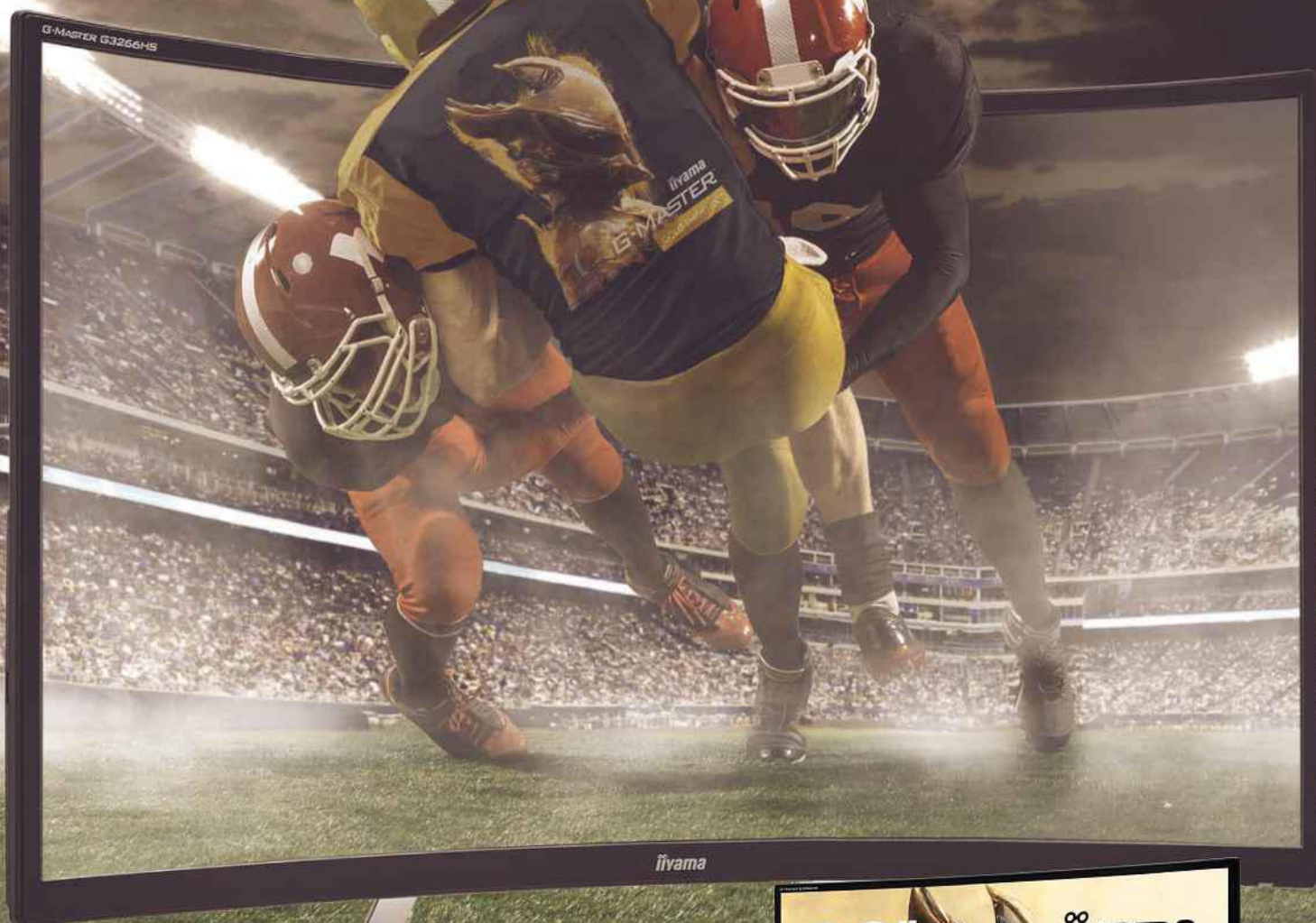
It's also important to

encourage your child to be open about what they do online and who they socialise with. Promote a culture of safety and awareness within the home and talk about the possible dangers that exist.

As part of your online security regime, you should use parental controls to block access to sites you don't want your child looking at - it's an easy way to avoid disaster. Review the default settings on each app that your child uses to ensure that the camera or microphone, for example, aren't needlessly turned on, because these can pose a threat.







# IMMERSE YOURSELF IN THE GAME

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Imagine yourself sitting in front of a 32-inch curved panel. The screen size and the curved design make it easy to perceive all the action happening on the screen. Nothing disturbs your attention so you can fully enjoy the feeling of being pulled in by your favourite game.



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**G-MASTER™**  
MONITORS **FOR** GAMERS



# ★ Best New Websites

## Site of the Fortnight

MONEY

NEW

### IsMyBillFair

[www.ismybillfair.com](http://www.ismybillfair.com)

Nobody likes getting ripped off but the price you pay for utilities and services can often be much higher than your neighbours are paying. If you suspect that's the case, then enter your details in this new website. It compares what you fork out on bills with other people across the UK, letting you see in an instant if your outgoings are higher, lower or just average. You're then given the choice of getting the site's staff to haggle on your behalf or seeing what other providers are offering. We love the simplicity and speed of the service, from the ease of filling in your details to the clearly presented results. It could become a game changer.

Our rating



## Frequently Asked Questions

### Filter Questions

I have a question about:

Showing all

Tell me about ismybillfair

How does ismybillfair work?

How long will it take?

Is this really a free service?

## FAQ

Is My Bill Fair clearly explains its premise and aims in its comprehensive FAQ

Choose one of your deals

Pay less for similar	Pay less for similar	Pay similar for more
<p><b>now</b> £18.83 per month</p> <ul style="list-style-type: none"> <li>✓ Broadband, Home Phone</li> <li>✓ Broadband Speed: 11Mbps</li> <li>✓ Unlimited usage</li> <li>✓ Pay as you use calls</li> <li>✓ Free Activation</li> <li>✓ 12 month contract</li> </ul> <p>Go to site &gt;</p>	<p><b>plusnet</b> £18.99 per month</p> <ul style="list-style-type: none"> <li>✓ Broadband, Home Phone</li> <li>✓ Broadband Speed: 11Mbps</li> <li>✓ UK-based customer support</li> <li>✓ Unlimited broadband usage</li> <li>✓ Free Activation</li> <li>✓ Free hardware</li> <li>✓ 12 month contract</li> <li>✓ Speed help &amp; advice</li> <li>✓ Call for £100 bonus</li> </ul> <p>Go to site &gt;</p>	<p><b>sse</b> £54.00 per month</p> <ul style="list-style-type: none"> <li>✓ Broadband, Home Phone</li> <li>✓ Broadband Speed: 20Mbps</li> <li>✓ 1Mbps Free for 12 months</li> <li>✓ Free easy set-up &amp; easy transfer</li> <li>✓ Free hardware</li> <li>✓ 1 month broadband</li> <li>✓ Speed help &amp; advice</li> <li>✓ Call for £100 bonus</li> </ul> <p>Go to site &gt;</p>

## COMPARISONS

The site helpfully shows how much you would pay if you switched provider

Families

You want to do what for your family. So

iPhone, iPad, Mac, Apple Watch, and Apple TV. They're so much more than just tools ever made for learning, exploring, and staying in touch. Kids love them. And we're continually designing new features to make them even better.

The App Store. A safe place for kids.

Choose which apps they can use.

Manage in-app purchases.

TECHNOLOGY

### Apple Families

[www.apple.com/families](http://www.apple.com/families)

Most parents worry about the dangers their children face online but they may not realise that phones, tablets and computers come with controls that can restrict how they are used. This new site from Apple explains how to unlock these settings to create app-related restrictions and activate Find My Friends and Family Sharing. It then goes further by exploring health-related issues, such as setting up a Medical ID and an Emergency SOS, and stresses the importance of turning on Do Not Disturb when driving. The explanations are clear and concise but, with no navigation menu, there's a lot of scrolling. However, that's a small price to pay for greater peace of mind.

Our rating



Home

Speeches

Diary

Biographies

Press

Relaunch

to the home of the Prince of Wales and the Duchess of Cornwall

ROYALTY

### The Prince of Wales and the Duchess of Cornwall

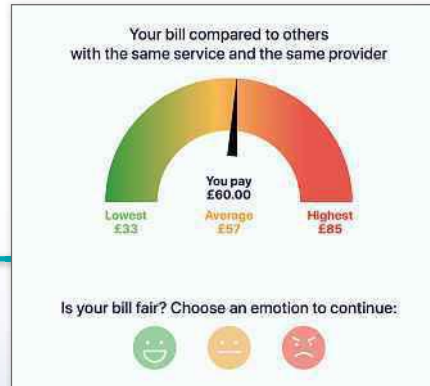
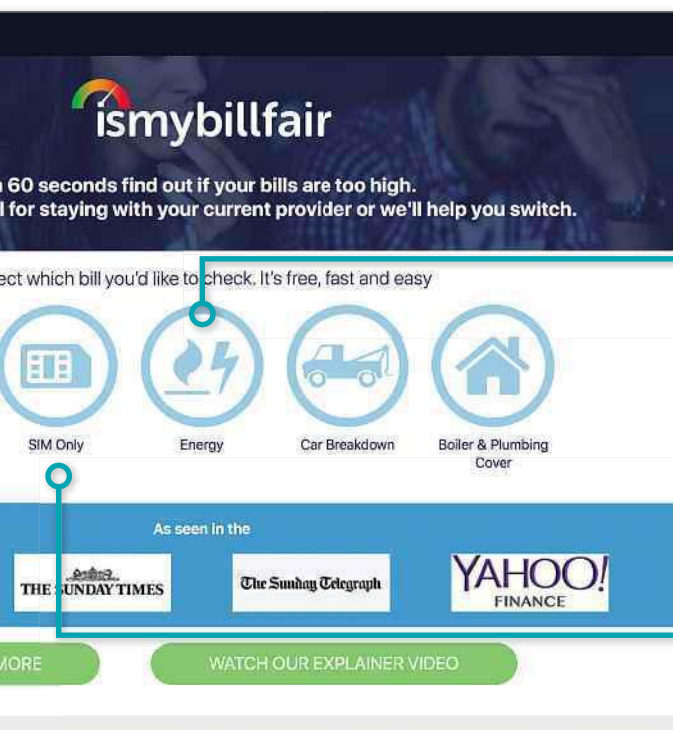
[www.princeofwales.gov.uk](http://www.princeofwales.gov.uk)

Eagle-eyed news reporters skipped past the clean interface and streamlined navigation of this revamped site for the Prince of Wales and homed in on the FAQ's references to Camilla being named Princess Consort. These have now been removed and controversy over whether she may one day be Queen aside, there's much to admire here, including a more prominent news section, royal diary and lots of speeches. There are also enhanced biographies of both Charles and Camilla.

Our rating



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



**RESULTS**  
See how your bill compares to others and indicate your joy or displeasure

**SIMPLE FORMS**  
Filling in the details of your current deal is easy using the step-by-step forms



**RELAUNCH**

## TRAVEL

### Bikecation

[www.bikecation.co.uk](http://www.bikecation.co.uk)

Bikecation offers a one-stop solution for booking a cycling holiday. As well as letting you read up on various destinations, iconic climbs and different types of cycling trips – including charity fundraisers and group trips for nine or more – it lets you choose when and where to go from a list of bike-friendly locations. After selecting from the available flights and accommodation, you can either choose to hire a bike or take your own. You'll then receive recommended bike routes in your inbox. It's all very smoothly presented, although it could do with a bit more streamlining.

Our rating



**RELAUNCH**

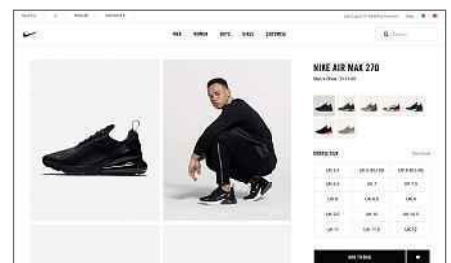
## MOTORING

### Leisure World

[www.leisureworldgroup.com](http://www.leisureworldgroup.com)

Leisure World Group has moved on from the clutter of its old site to make it easier for users to find new and used caravans and motorhomes. Its search facility is now upfront and lets you filter by type, manufacturer, model and price, though the page content is a bit oversized and requires some scrolling. Each listing contains the vital statistics of the vehicles and you can compare, print and share those you like. The many photos and occasional 360-degree video allow you to have a thorough nose around before using the handy financial calculator to view available payment plans.

Our rating



**RELAUNCH**

## FASHION

### Nike

[www.nike.com](http://www.nike.com)

Nike has revamped its product pages for a slicker shopping experience. Instead of a carousel, it now uses large images, sometimes accompanying them with an autoplaying video of a model wearing the trainers. It also shows the various colours on offer and displays all available sizes, rather than making you click a menu to see if your preference is in stock, while the Customise section lets you design your own colour combinations. Reviews have been demoted to the bottom of the page and there's a new Share Your Look section – use the tag #Nike on Instagram for the chance to feature.

Our rating





# BACK ISSUES DISC 2017



Our **2017 Back Issues Disc** containing all 26 issues from last year is now on sale from Amazon

For more information, visit [bit.ly/wudisc17](http://bit.ly/wudisc17) or search for 'webuser disc' on Amazon

You can still buy our **2016 Back Issues Disc** from [bit.ly/wudisc16](http://bit.ly/wudisc16)







## TECHNOLOGY

### Radio Enthusiast

[www.radioenthusiast.co.uk](http://www.radioenthusiast.co.uk)

Created as an accompaniment to the magazines *Practical Wireless* and *Radio User* (no relation), this site provides a handful of infrequently updated news articles and features about radio-related topics that, we assume (and hope), will become more regular as time goes on. As it is, the site acts more as a shop front for potential subscribers, but the bookstore usefully includes specialist tomes that are difficult to find on Amazon. You can also enter a competition to win a joint subscription to both magazines and sign up for a newsletter and updates. More work is needed, however, to attract return visitors.

Our rating



## TRANSPORT

### 26 to 30 Railcard

[www.26-30railcard.co.uk](http://www.26-30railcard.co.uk)

When 10,000 of the new millennial railcards went on sale via this website last month, it buckled under the high demand and promptly crashed. Those responsible have promised to get back on track when the cards are sold again in the future but the mishap understandably led to many frustrated customers. Perhaps such lack of preparation is to be expected from National Rail but at least the site – which feels a little thrown together but looks smart enough – makes a good job of explaining who the card is for, what it does and how much it costs. It also lists all associated offers and rewards.

Our rating



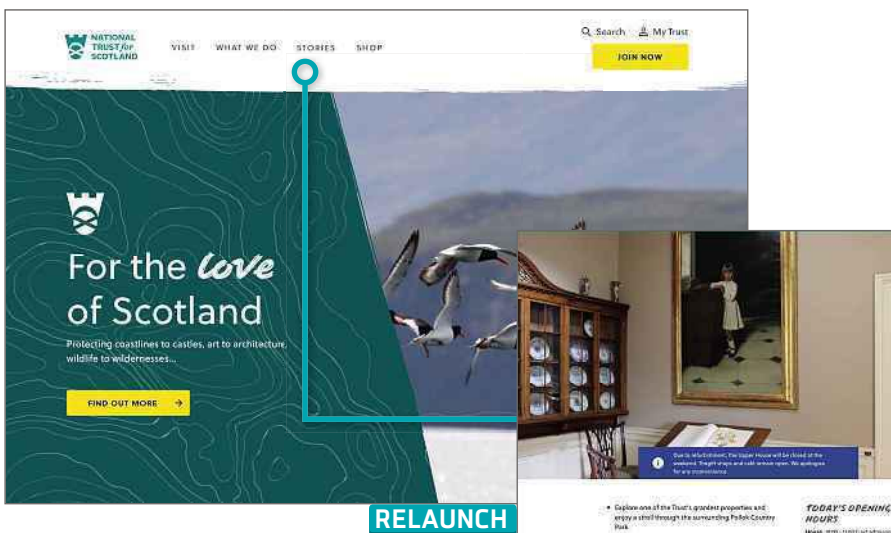
## FOOD

### Silver Spoon

[www.silverspoon.co.uk](http://www.silverspoon.co.uk)

It's hard to put a positive spin on sugar in these health-conscious times but Silver Spoon's sweet site makes a good attempt. It lets you filter its products according to whether they're suitable for drinks, baking, decorating, preserving and drizzling, and uses colourful cartoon graphics to explain the process of getting sugar from the field to the supermarket. The site also serves up lots of mouth-watering recipes, including a fruity Victoria sponge, baked churros and a sausage casserole, and showcases sugar alternatives with a helpful table that lets you compare their benefits, format, calorie content and uses.

Our rating



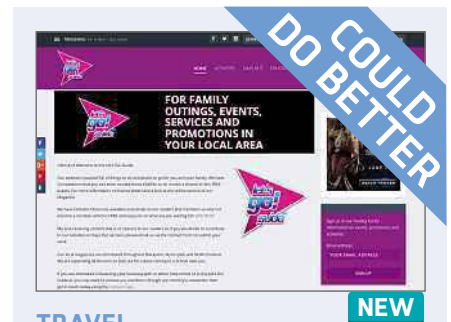
## WILDLIFE

### National Trust for Scotland

[www.nts.org.uk](http://www.nts.org.uk)

The NTS, Scotland's equivalent of the National Trust (which covers the rest of the UK), owns and manages around 130 properties and 180,000 acres of land north of the border. This magnificently comprehensive and eye-catching site makes them all searchable by name or location, providing an overview of every attraction along with things to do and events taking place. As well as displaying opening hours and entry prices, there are planning tips, maps and directions; stunning photos and illustrations; helpful recommendations; and so many interesting articles that it's difficult to know where to start. You can also browse the store, which has plenty of appealing gifts.

Our rating



## TRAVEL

### Let's Go Guide

[letsgoguide.co.uk](http://letsgoguide.co.uk)

Blackpool is gloriously bold and brash, but this site fails to match the seaside town's confidence. Based on a 'what's on' brochure distributed in primary schools, it's broken down into activities, days out, education, health and local services. However – and without meaning to put down the organisations listed here – we wouldn't put Wyre Hypnotherapy at the top of things to do in Blackpool. Such a prominent inclusion suggests entries are based on advertising rather than merit, and the site's dull design and lack of focus make it difficult to recommend.

Our rating



# Build a Better Site

Specialist tips, top tools and practical help

## Top Tips of the Fortnight



### Google updates its Web Designer tool

Google has launched a new beta version of its Web Designer software, which you can download for free from [bit.ly/gowd446](http://bit.ly/gowd446). Now on version 3.0, the software lets you create blocks of interactive, animated HTML5 to add interesting visual effects to your website. There's a selection of new tools available (see [bit.ly/gwdup446](http://bit.ly/gwdup446)), including 3D object manipulation, along with various improvements to performance. However, some of the tools will be rolling out to users slowly during the software's beta phase.

### Let AdSense choose your ad positioning

Google's AdSense program is a great way to make a bit of money from your site but

choosing the number of ads and their positioning can be tricky. If you'd rather leave the work to AdSense, it has a new tool called Auto Ads ([bit.ly/adse446](http://bit.ly/adse446)), which automatically places ads in locations where they'll perform best, using machine learning to test new positions.

### Deal of the Fortnight

EUKhost ([www.eukhost.com](http://www.eukhost.com)) is offering a great deal on its affordable Basic package. For £3.33 per month, you get a free domain name, 2GB storage, unlimited bandwidth and 10 databases.

## Web-building Helpdesk

THIS ISSUE'S EXPERT:

Kieran Rowlinson,  
Digital Media Specialist,  
Planet Hippo ([www.planethippo.co.uk](http://www.planethippo.co.uk))



### Q What's best – hosting videos on my own site or embedding them from a YouTube link?

Harry Reed, via email

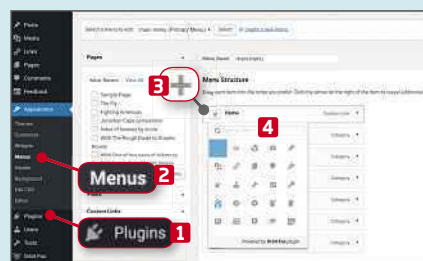
**A** If you have sufficient storage space with your hosting account, it's often better to upload and host your own videos to get greater control over the content. You can decide the playback size, the player used and what controls are available. You can also stop visitors downloading or linking directly to the videos.

On the other hand, YouTube provides unlimited storage and makes it easy to embed your videos. The downside is that while you can set videos as private, they can be viewed without having to visit your website. It's also very easy for anyone to download or link to the content.



## MINI WORKSHOP | Get lots of WordPress tools in one add-on Orbit Fox: [bit.ly/orbf446](http://bit.ly/orbf446) | 10 mins | Self-hosted WordPress website

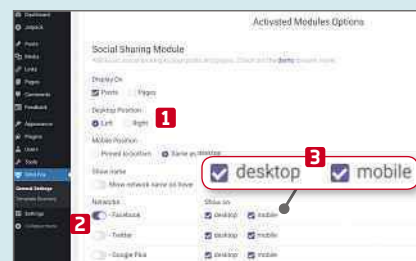
Orbitfox is an add-on from WordPress theme manufacturer Themelsle that provides new themes (including many free ones), integrates Google Analytics, alerts you if your site goes offline and has some great templates



**1** Install the plugin by searching for it from Plugins, **1** Add New. The theme and stock photo directory come pre-installed, as does the menu-icon tool. To add the latter to your existing menus, click Appearance, Menus. **2** Click the plus icon next to your existing menu options **3** to choose an icon from the pop-up list. **4**



**2** To activate the other options, go to Orbit Fox, General Settings **1** and flick the switches to activate the tools you want. **2** You can also deactivate the default tools if you wish. The Uptime Monitor needs your email address if you want it to send alerts and Analytics needs you to sign in with a Google account.

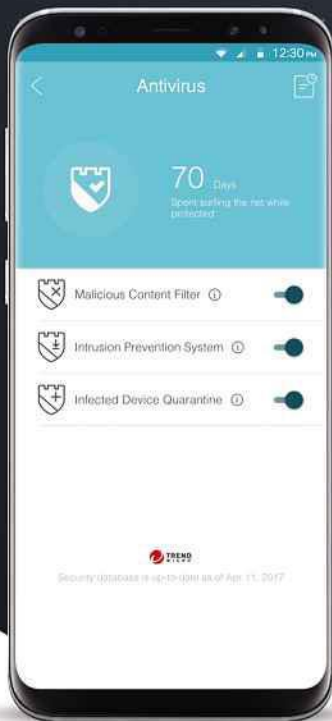


**3** As you activate modules, the settings for them appear below. For example, the Social Sharing Module lets you decide where and how the links to social networks are presented, **1** which services should be included **2** and whether they should be restricted to desktop or mobile users. **3**



# SEAMLESS, SECURE WHOLE-HOME WI-FI

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Powered by Trend Micro™



## Deco M5 Whole Home Wi-Fi System



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Protects every connected device from viruses and malware - even the devices that visitors use at your home.



### Parental Controls

Restrict content, schedule Wi-Fi access by user or device, view activity reports or pause the internet.



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Quality of Service (QoS) assigns bandwidth to the devices you use the most or prioritises your favourite activities.

# deco™



Compatible with the **Deco App**  
(available from the Apple App Store  
or Google Play)



facebook.com/TPLINKUK

uk.tp-link.com

twitter.com/TPLINKUK







# What To Watch Online

## Pick of the fortnight

**NETFLIX**



### Check out the remake of *Lost in Space*

From 13 April

Netflix's reimagining of the iconic 1960s sci-fi adventure TV show centres (as it did originally) around the Robinson Family, whose spaceship veers off course and leaves them stranded on an alien world, light years from their intended destination. The show has been updated for a modern audience, though it retains the essence of the plot – with some artistic licence. The “Class B-9-M-3 General Utility Non-Theorizing Environmental Control Robot” (Robot for short), which was a popular aspect of the show, has changed significantly in Netflix's version, as has enemy agent/reluctant stowaway Dr Smith, who this time around is a woman, played by Parker Posey (*Superman Returns*). The cast also includes Toby Stephens (*Die Another Day*, *Black Sails*) as expedition commander and head of the family John Robinson. Season one is made up of 10 hour-long episodes, which will all be available to stream from 13 April, and you can watch the official HD trailer for the show at [bit.ly/lost446](http://bit.ly/lost446). There's also a featurette on the Robinsons' journey to watch at [bit.ly/inspace446](http://bit.ly/inspace446).

Whether you remember the original or not (or the awful 1990s movie starring *Friends* actor Matt Le Blanc), this promises to be a quality slice of sci-fi.



### Sing along to *American Idol* Season 16

Available now

The American singing show that discovered big artists including Kelly Clarkson, Carrie Underwood, Jennifer Hudson and Adam Lambert, returns

after a short hiatus and, in the US, switches from the Fox network to ABC. For UK viewers, it's now

on Amazon Prime Video rather than ITV2 or Channel 5. All the aired shows are available to watch now, with new episodes arriving on Tuesdays, following their broadcast in the US.

The show is still presented by Ryan Seacrest, but the judging panel now consists of Katy Perry, Lionel Richie and country star Luke Bryan.



### **N** Watch *The Boss Baby: Back In Business*

From 6 April

*The Boss Baby* movie, released last year, starred Alec Baldwin as a suit-clad, briefcase-carrying baby. It wasn't, let's be honest, the greatest of films, but it earned an unexpected Best Animated Feature nomination at the Oscars (losing out to Pixar's infinitely superior *Coco*) and it's now a Netflix original animated series. Its creation is part of a deal between Netflix and DreamWorks Animation Television, which also includes *DreamWorks Trolls: The Beat Goes On!*, *Dragons: Race to the Edge*



and *Home: Adventures with Tip & Oh*. The new show doesn't star Alec Baldwin, but the setup is largely the same as the movie.

### **N** Take a harrowing journey with *6 Balloons*

From 6 April

This independent Netflix Original drama stars Dave Franco (*Bad Neighbors*, *Now You See Me*) as a heroin addict being driven across Los Angeles by his sister (*Broad City*'s Abbi Jacobson) in search of a detox centre. To add to the drama – as if it needed adding to – his two-year-old daughter is in the back of the car as well. As you might expect, given the subject matter, this is a gruelling watch at times, but it's very well acted and the story will keep you gripped throughout its very short 74-minute running time.

Watch the trailer at [bit.ly/6balloons446](http://bit.ly/6balloons446).



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



### **N** Catch *The Magic School Bus Rides Again*

Anyone not brought up in America may not be familiar with *The Magic School Bus*, but it was a popular animated kids' show in the 1990s. Netflix's modern revival updates the show slightly, but the premise remains the same – a class of young school children go on a series of science-based adventures with eccentric school teacher Ms Frizzle, aboard a high-tech school bus. In the original show, Ms Frizzle was voiced by Lily Tomlin (9 to 5), and she resurfaces here, although the bus keys have been passed

to her younger sister this time around.

The show does a good job of explaining science topics to young children, and you can watch the trailer for it at [bit.ly/mbus446](http://bit.ly/mbus446).

### **Stream the Commonwealth Games online**

**From 4 April**

It's been a good year for sport so far, with the Winter Olympics and Winter Paralympics, and now, if you're ready for warmer climes, here come the XXI Commonwealth Games, which are being staged in the Gold Coast, Australia. The BBC will be broadcasting more than 200 hours of coverage from Gold Coast 2018 (GC2018), across BBC One, BBC Two and Red Button, with further coverage on BBC Four and a highlights show on BBC Two. Additionally, you'll be able to stream the coverage and on-demand clips via the BBC Sport website and app, and iPlayer. If you like round-the-clock action, the BBC Red Button will be delivering a 24h-hour

schedule of live and catch-up programming.

The games run from 4 to 15 April and feature more than 6,600 athletes and team officials from 70 Commonwealth nations and territories competing across 18 sports and seven para-sports, including athletics, cycling, boxing, diving, gymnastics, rugby and beach volleyball.



### **N** Feast on *Chef's Table: Pastry*

**From 13 April**

The success of *The Great British Bake Off* shows just how captivated we are with cakes and sweet treats. This one-off series of *Chef's Table* focuses on pastries – eye-popping confections, to be more precise – and takes us to Sicily, Spain and New York City. There are certainly plenty of amazing looking creations being showcased if the trailer for the show is anything to go by. You can watch it, and get a taste for the new series, at [bit.ly/chef446](http://bit.ly/chef446).



## Amazon Prime Video's viewing figures revealed

Reuters recently published internal documents from Amazon – covering late 2014 to early 2017 – that show how much money many of its original Prime Video shows cost to produce, their viewing figures and the cost per first stream (first streams are the ones believed to have directly persuaded a customer to sign up for Prime).

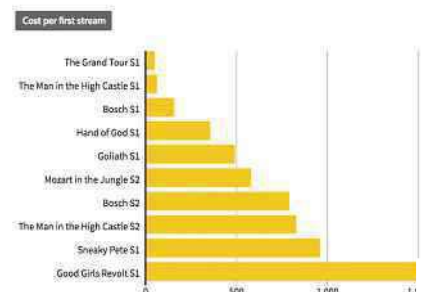
*The Man in the High Castle* apparently cost \$72m (£51.4m) to produce, and by the start of 2017, it had eight million US viewers, and generated 1.15 million first streams.

*The Grand Tour*, the much-hyped motoring show for ex-*TopGear* trio Clarkson, Hammond and May, had more than 1.5 million first streams, at a cost of \$49 (£35) per subscriber, making it a huge hit in Amazon's eyes. In contrast, *Good Girls Revolt* cost \$81m (£59m) to make, but generated just 52,000 first streams, and a much higher per-new customer cost of around \$1,500 (£1,071). Unsurprisingly, it was cancelled after one series.

You can read more about this story at [bit.ly/reuters446](http://bit.ly/reuters446).

### How Amazon rates TV shows

Internal company documents reveal Amazon evaluates TV shows by their "cost per first stream" effectively, the price to hook a customer on Prime; Amazon divides a show's production and expenses by the number of people who stream that program first after signing up; the lower



Credit: Reuters



# Product Test

We test and compare the latest products

## Honor 7X

The Honor 7X has the looks of a top-of-the-range phone but costs a great deal less.

**Alan Martin** checks out how much of a bargain it is

**T**he price of smartphones has gone through the roof in the last couple of years. Not so long ago, a flagship handset would seem pricey at £600 but these days the likes of Samsung and Apple seem to think that's the very least you should pay for their lowest-cost entry-level model.

Chinese manufacturer Honor – a subsidiary of Huawei – has its own idea about prices and appears to be reining in the madness. Its latest phone has a 6in 18:9 display, decent performance, high-quality looks and costs less than £270.

### Screen

In less than a year, we've seen the 18:9 aspect-ratio display become an essential element in top-end smartphones, and the Honor 7X is by far the cheapest to have one. While its resolution isn't the highest – a stretched 1080p display with a 1,080 x 2,160 resolution – that isn't a big problem because the only time you need more than 1080p on a screen this size is if you plan to strap it to your face to delve into virtual reality.

Colour presentation isn't the strongest, but it's not a deal breaker. Our colorimeter registered an overall coverage

of Microsoft's sRGB standard at 85.3%, which is close to the Moto G5S and a touch shy of the 89.2% achieved by the Honor 7X's predecessor, the 6X. More importantly for most users, the contrast is ridiculously good for an IPS screen, with a ratio of 2,109:1. With a peak brightness measured at 499cd/m<sup>2</sup> (candles per square metre), you're unlikely to have any trouble reading it in sunny daylight.

### Design, build and battery life

The rest of the phone is beautifully built, too, and looks like it should cost a lot more than it does. However, there are a few design quirks that aren't to everyone's taste.

First of all, the fingerprint reader is on the back, because the 18:9 screen leaves no room for it on the front. Second, it doesn't have built-in NFC (Near Field Communication), so you can't use Android Pay at contactless payment terminals. Third, the Honor 7X hangs on heroically to the Micro-USB format, which means slower data transfer rates, though it will at least be compatible with the pile of USB cables you'll have kicking around from previous



**“** You'll be surprised by what the Honor 7X offers for the money, and its 6in 18:9 ratio screen is undoubtedly an asset **”**

gadgets. Thankfully, it also has a 3.5mm headphone jack.

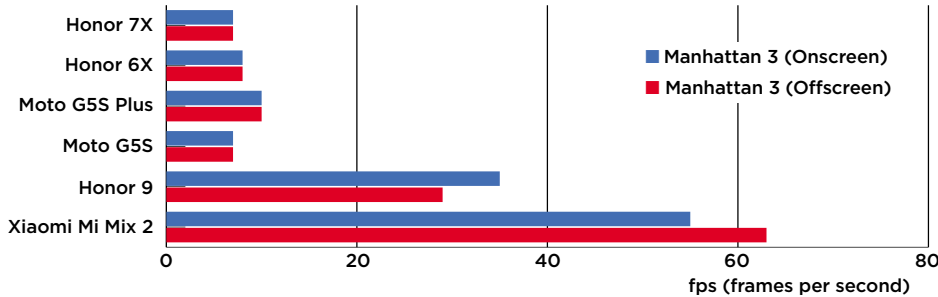
Inside the phone is Honor's own 2.36GHz octa-core HiSilicon Kirin 659 processor and, for the price, it's no slouch. It's not going to match the Samsung Galaxy S8 or iPhone X, but the Honor 7X performs admirably, as shown in our chart, right.

Historically, the Achilles'

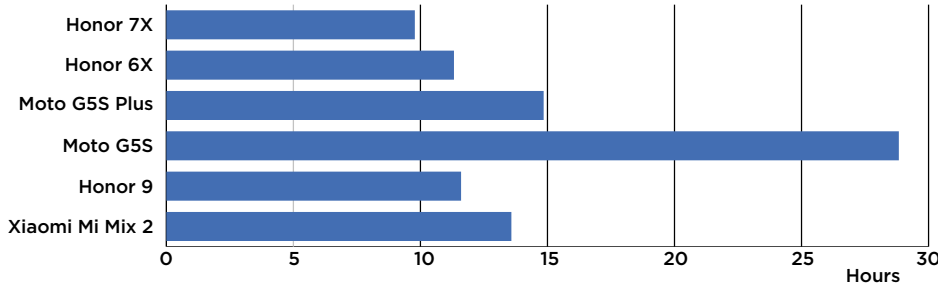
heel of Kirin processors has been their 3D-graphical performance and, unfortunately, the same remains true here. It's worth mentioning that GFXBench's Manhattan 3 test is demanding and a low score doesn't mean you won't be able to do any 3D gaming of any sort, just that you won't be powering through games



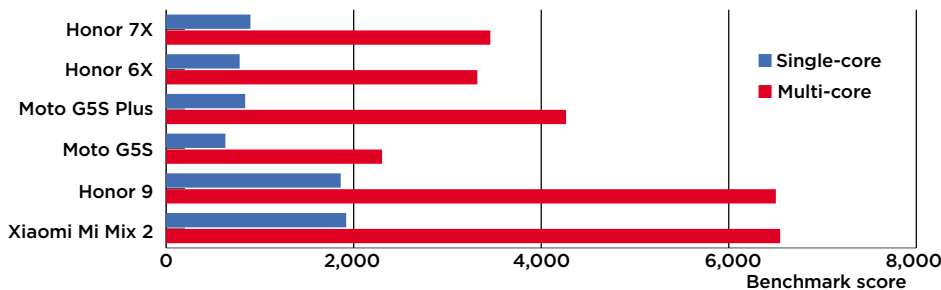
### Graphics Performance, GFXBench GL



### Battery Life



### CPU Performance, Geekbench 4



that demand the most from their hardware.

You may not want to hit the gaming too hard anyway, because the Honor 7X's biggest weakness is its battery life. In our standard battery test – a looped video played back in airplane mode with the handset locked to 170cd/m<sup>2</sup> brightness – the handset lasted just 9hrs 47mins. The bigger screen on the Honor 7X means that, despite having the same 3,340mAh battery inside, last year's Honor 6X lasts a good 90 minutes longer than the 7X when performing the same test.

### Camera

You're not going to find a camera to match the Google Pixel 2's performance on a smartphone that costs half the price, but the Honor 7X puts up a decent challenge

and we think it's the best camera available on a phone in this price range.

Its main 16-megapixel rear camera is supplemented by a second 2-megapixel one used exclusively for adding depth to portrait images, and the phase detect autofocus (PDAF) is great for quick point-and-shoot shots.

The camera produces good results in well-lit conditions but it doesn't manage as well in low light: the sensor ends up picking up a lot of image noise and the flash gives photos a rather off-putting yellow tint. However, the front-facing 8-megapixel camera captures plenty of detail and light.

### OUR VERDICT



You're not going to find perfection in a phone that costs less than £265 when top-of-the-range models cost twice as much, but we think you'll be surprised by what the Honor 7X offers for the money, and its 6in 18:9 ratio screen is undoubtedly an asset.

Most disappointing is its battery, which will need

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

charging more often than many of its rivals. You'll also find plenty of faster handsets with better cameras, if you're willing to pay a bit more.

### PRODUCT INFO

#### Honor 7X

Price: £261.37

Buy from Amazon: [bit.ly/hono446](http://bit.ly/hono446)

### SPECIFICATIONS

- 5.93in, 1,080 x 2,160 pixels resolution IPS screen
- 2.36GHz octa-core HiSilicon Kirin 659 processor
- 4GB of RAM
- 64GB of storage
- microSD slot supports cards up to 256GB
- Dual 16MP/2MP rear camera
- 8MP front camera
- 2.4GHz Wi-Fi 802.11n
- Bluetooth 4.1
- 3.5mm headphone jack
- Micro-USB port
- Android 7.0 (Nougat)

### FOR

- 18:9 display
- Stunning design and build quality
- Good dual-lens camera

### AGAINST

- Below-par battery life
- Micro-USB port
- No NFC

### NEXT STEP UP

Honor 9,  
£341.72  
[bit.ly/hn446](http://bit.ly/hn446)



### TOP OF THE RANGE

Samsung Galaxy S8,  
£479  
[bit.ly/sg446](http://bit.ly/sg446)



# Canon Pixma TS3150

Simon Handby tests a cheap and cheerful printer that also scans and copies

It's hard to believe you can get any major piece of tech hardware for under £40, let alone something as useful as the Canon Pixma TS3150. This multifunction inkjet printer/scanner/copier lacks the sophisticated features you'd find on a pricier model – there's no duplex option to automatically print on both sides of the paper, for example – but it does support wireless networking, so you can connect it to your Wi-Fi and share it between all your home PCs and mobile devices. It's a small, light and innocuous-looking printer, available in black (the TS3150) or white (the TS3151).

The back of the printer houses a simple paper tray

that holds 60 sheets, while at the front there's a similarly utilitarian output tray, which managed to keep everything impressively tidy during printing. When not in use, the rear tray flips shut to act as a lid. There are several buttons on the top of its casing, including two Start buttons (one for colour copies, the other for black and white) and Cancel, along with a couple to help operate a small, mono LCD display, which shows basic status messages.

Canon's setup program makes short work of the installation process and can usually detect the printer wirelessly without any configuration on the user's part. If that doesn't work, there's a temporary USB connection to set up wireless access.

## Setup, cartridges and performance

Unlike the more expensive Pixma models, the TS3150 uses just two ink cartridges: one for black and the other containing cyan, magenta and yellow. It's more wasteful than having separate cartridges for each colour, because you have to replace the entire cartridge when you run out of just one colour, which makes print costs higher than average. Using the XL cartridge sizes, we calculated the colour component of an A4 page at a reasonable 5.4p, but the black component was very pricey at 4.3p.

We don't expect brilliant across-the-board performance from such a cheap device, and the TS3150's weakness is its print speed, which peaked at 7.4ppm (pages per minute)



“Canon's setup program makes short work of the installation process”

for black text, and dipped as low as 1.6ppm for colour – the slowest we've recorded in some time. You need to wait an agonising 2.5 minutes to print a colour photo at best quality and you won't be able to do it on A4: the driver lets you create and send the job, but the printer refuses to print on A4 photo paper.

At 26 seconds for black and

57 seconds for colour, copies weren't fast either, but scan speeds compared well to mid-range devices – over USB, it took us just 37 seconds to capture a 6 x 4in photo at 1,200dpi (dots per inch).

Prints and copies looked great, with bold colours and crisp, dark text. Scans were similarly impressive for such a cheap device.

## PRODUCT INFO

### Canon Pixma TS3150

**Price: £39.99**

**Buy from Amazon:**  
[bit.ly/can446](http://bit.ly/can446)

## SPECIFICATIONS

- Two-cartridge system
- 60-sheet paper tray
- 3.8cm LCD display
- 4,800 x 1,200dpi print resolution
- 600 x 1,200dpi scan resolution (RGB 16-bit)
- USB
- 802.11b/g/n Wi-Fi
- 435 x 316 x 145mm
- 3.9kg

## FOR

- ✓ High quality, crisp prints
- ✓ Easy to install

## AGAINST

- ✗ High print costs
- ✗ Slow to print

## OUR VERDICT



The Pixma TS3150 isn't ideal if you regularly print a lot of pages, because it's slow and comparatively expensive to run, particularly when printing text. But if you just want a basic, competent multifunction printer for

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

light, home use, it's a great choice, easy to set up and has a very low initial outlay.



# BEND YOUR REALITY

AG352UCG

AG352QCX

QHD

nVIDIA  
G-SYNC

200Hz

Adaptive  
Sync

35"

**AOC**  
GAMING

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**SCAN**

**OVERCLOCKERS UK**

**amazon.co.uk**





# Web User's Best Buys

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

## HARDWARE

### MONITOR

#### BenQ GL2580HM

£109.99 from [bit.ly/benq445](http://bit.ly/benq445)

Tested: Issue 445



This BenQ monitor's stylish slim bezel and attractive design are matched by its solid performance and good-quality colour display. However, it's not suited to serious gamers.

#### KEY SPECS

24.5in screen ■ 1,920 x 1,080-pixel resolution ■ 16:9 aspect ratio ■ 16.7 million colours ■ 50-76Hz refresh rate ■ 1,000:1 native contrast ■ 2ms response time ■ HDMI, DVI and VGA ports ■ two 1W speakers ■ 42.6 x 55.7 x 17.5cm ■ 4.4kg

### PC

#### Palicomp AMD Gravity RYZ1

£799.99 from [www.palicomp.co.uk](http://www.palicomp.co.uk)

Tested: Issue 443



This is the best PC we could find for under £800. It's powerful, well built and well balanced, so long as you're happy to use an overclocked processor.

#### KEY SPECS

AMD Ryzen 5 1600 processor ■ Asus Prime B350M-A motherboard ■ 8GB DDR4 memory ■ GeForce GTX 1060 graphics card ■ 240GB SSD ■ 1TB hard drive ■ 475 x 468 x 230mm tower case ■ Windows 10 Home 64-bit

### SMARTPHONE

#### Samsung Galaxy S8

£506.99 from [bit.ly/sams442](http://bit.ly/sams442)

Tested: Issue 442



The Samsung Galaxy S8 is a terrific all-rounder. It's fast, looks wonderful, has a superb camera and boasts one of the best screens we've ever seen on a phone.

#### KEY SPECS

Octa-core 2.3GHz Exynos 8895 processor ■ 12-megapixel rear camera, 8-megapixel front camera ■ 4GB RAM ■ 64GB storage ■ 5.8in 1,440 x 2,560-pixel screen ■ Android 7 ■ 68.1 x 148.9 x 8mm ■ 155g ■ One-year return-to-base warranty

### MINI PC

#### Asus VivoMini

£672.99 from [bit.ly/asus440](http://bit.ly/asus440)

Tested: Issue 440



With capable performance, generous storage and extensive connectivity, the Asus VivoMini is an impressively versatile mini PC. It's great for use in a home office and usefully offers both a main SSD and a back-up hard drive.

#### KEY SPECS

Dual-core 2.5GHz Intel Core i5-7200U processor ■ 8GB memory ■ 128GB SSD, 1TB hard drive ■ 6 x USB ports ■ 802.11ac Wi-Fi, Gigabit Ethernet connectivity ■ 190 x 190 x 52mm ■ Three-years return-to-base warranty

### KEYBOARD

#### BakkerElkhuizen UltraBoard 940

£79 from [bit.ly/bakk438](http://bit.ly/bakk438)

Tested: Issue 438



The Ultraboard 940 is designed for all your computing needs – desktop, laptop and mobile. It's very comfortable and has a much better build quality than most portable keyboards.

#### KEY SPECS

Compact form ■ Scissor-switch technology ■ Multimedia function keys ■ 2 x USB 2 ports ■ Wireless ■ Height adjustment ■ Windows, MacOS, Android, iOS ■ 285 x 147 x 19mm ■ Two-years return-to-base warranty

### VOICE ASSISTANT

#### Amazon Echo

£89.99 from [bit.ly/echo437](http://bit.ly/echo437)

Tested: Issue 437



With its sophisticated speech recognition, Amazon's second-generation Echo proves that smart digital assistants have a bright future, and it keeps getting better and better.

#### KEY SPECS

Compatible with Fire OS, Android and iOS devices ■ 802.11a/b/g/n Wi-Fi ■ Line-out with 3.5mm cable or Bluetooth ■ 2.5in woofer, 0.6in tweeter ■ 148 x 88 x 88mm ■ 821g ■ One-year return-to-base warranty

## SOFTWARE & SERVICES

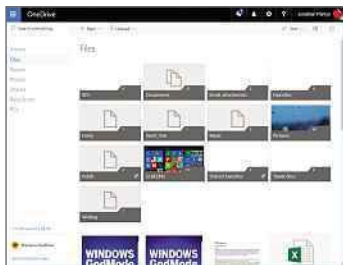
### CLOUD-STORAGE SERVICE

#### Microsoft OneDrive

From free from  
[onedrive.live.com](https://onedrive.live.com)

Tested: Issue 438

If you use Windows 10 or Microsoft Office, then OneDrive is a no-brainer. It's simple to use and already integrated into your PC. Recent improvements have added some excellent new features though we wish Microsoft would increase its free storage allowance. OneDrive also integrates well with both Android and iOS.



#### KEY FEATURES

5GB free storage ■ Web-based Office Web Apps including Word and Excel ■ 10GB maximum file size ■ Android, iOS and Windows 10 apps ■ Up to 50GB extra storage for £1.99 per month; Office 365 and 1TB of storage from £5.99 per month ■ Files expire after one year of inactivity

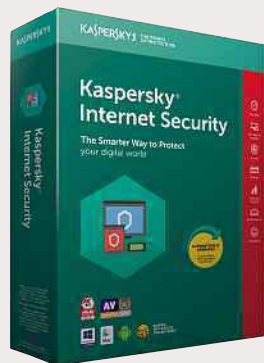
### INTERNET SECURITY

#### Kaspersky Internet Security 2018

£19.99 from [bit.ly/kaspersky1pc](https://bit.ly/kaspersky1pc)

Tested: Computeractive  
Issue 493

Kaspersky is rock solid at protecting your PC from the worst of the web, and has come top in nine of our most recent tests, blocking all malware with its robust defences. Use the URL above to save over £15 on the software (normal price £34.99).



#### KEY FEATURES

Antivirus and firewall tools ■ Protects online shopping and banking ■ Identity and privacy tools ■ Dangerous-website alerts ■ New software updater ■ Secure-connection VPN ■ Advanced ad-blocking system ■ Multi-device version ■ Compatible with Windows 10

### Web User Gold Award winners

#### BROADBAND MONITOR

##### GlassWire

NEW!

Free from [bit.ly/glasswire445](https://bit.ly/glasswire445)

Tested: Issue 445

GlassWire provides lots of helpful tools for monitoring bandwidth usage on your PC or mobile device, in a well-designed and easy-to-use interface.



#### IMAGE EDITOR

##### Paint.net

Free from [www.getpaint.net](https://www.getpaint.net)

Tested: Issue 444

Paint.net sets the bar as the best free image editor around. It has no ads or premium features, just all the tools you need to make your photos look great.



#### WI-FI SCANNER

##### Acrylic Wi-Fi Home

Free from [bit.ly/acry443](https://bit.ly/acry443)

Tested: Issue 443

Acrylic Wi-Fi Home is the free version of a professional tool, but it doesn't feel like a cut-down program and offers virtually all the features a home user will ever need.



#### EMAIL CLIENT

##### eM Client

Free from [www.emclient.com](https://www.emclient.com)

Tested: Issue 442

eM Client is simple, versatile and familiar, making it an easy replacement for older tools, such as Windows Live Mail.



#### RADIO APP

##### Radioplayer

Free from [bit.ly/radioplayer441](https://bit.ly/radioplayer441)

Tested: Issue 441

Radioplayer is limited to UK broadcasts and its interface needs updating, but it works well and has lots of features.



# WEB USER BACK ISSUES DISCS

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EVERY ISSUE FROM  
2014 TO 2017



# Best Free Software



## ENCRYPTION SOFTWARE

### Kryptelite 8

[bit.ly/kryptel446](http://bit.ly/kryptel446)

**Min requirements:** Windows XP/  
Vista/7/8+/10

**File size:** 9.9MB

If you worry about privacy, you can stop unauthorised access to your personal files or folders by encrypting them. Kryptelite is a marvellous free program that lets you do this in a few mouse clicks, and verifies your files afterwards to ensure they aren't corrupted.

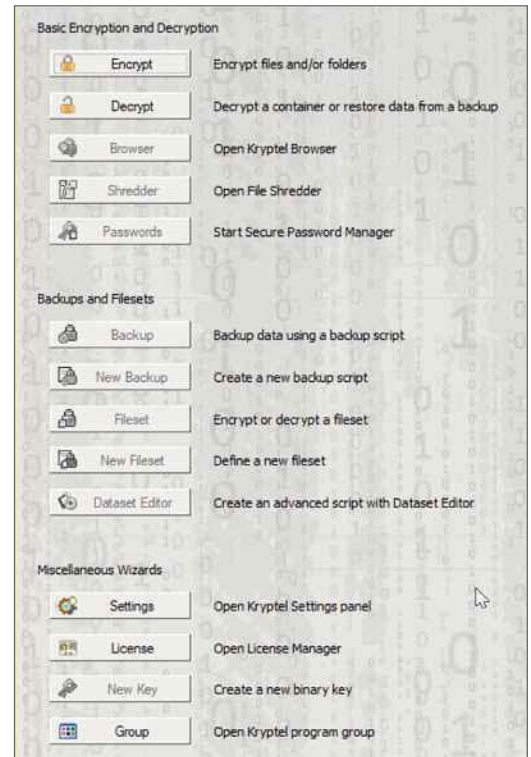
Kryptelite is a cut-down free version of Inv Softworks' commercial software Kryptel, and it can encrypt and decrypt any number of files and folders in a single operation and without size

restrictions. It secures your content using super-strong 256-bit AES cipher encryption and can also compress ZIP archives and shred files, in case you want to delete your sensitive data for good. At its most basic, the program can encrypt and decrypt files directly from Windows' right-click context menu, but there's also a wizard interface you can use to perform the same tasks.

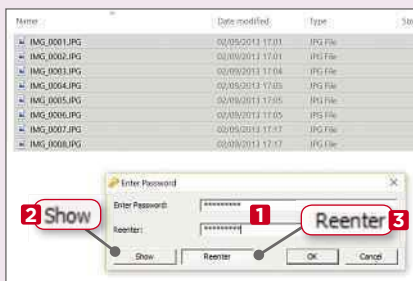
Because Kryptelite is a cut-down version, it lacks many of the features found in the personal and corporate editions, but it is very configurable. You can choose which commands to include in the context menu, change the icons used to denote encrypted content and files in the process of being shredded,

manage encryption behaviour, and more. It can even be set to clean the Temp directory on system startup.

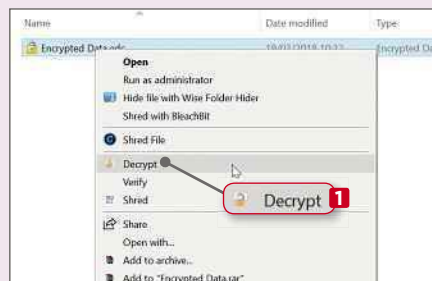
If you decide you need some additional features – such as a portable version, password manager, a browser for inspecting and modifying encrypted files and a multi-pass shredder – you can upgrade to the Standard Edition of Kryptel for \$29.95 (£21.29).



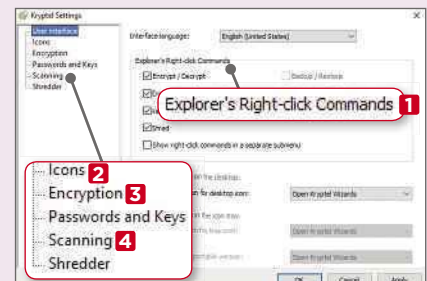
## MINI WORKSHOP | Secure your files using Kryptelite 8



**1** Encrypting files or folders with Kryptelite is just a matter of right-clicking them and selecting Encrypt from the context menu. You'll then be asked to enter a name for the container file that stores all the encrypted files. Enter a password. **1** You can show or hide this, **2** and optionally re-enter it. **3**



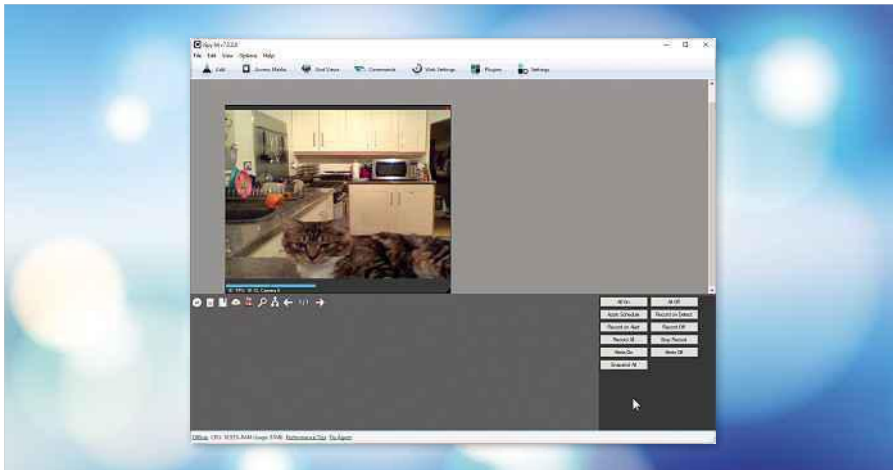
**2** Click OK and the item(s) will be encrypted. Your original files are deleted. If you don't want them to be erased, you can change Kryptelite's behaviour in the Settings menu (under Encryption). To unlock your files, right-click the container and select Decrypt. **1** Enter your password and your files will be restored.



**3** The Settings menu lets you choose what commands to include in the right-click context menu. **1** You can customise the icons **2** and the encryption behaviour. **3** Kryptelite can recognise its own containers by file extension or contents. You can change the settings for this under Scanning. **4**



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



## VIDEO-SURVEILLANCE SOFTWARE

### iSpy

[www.ispyconnect.com](http://www.ispyconnect.com)

**Min requirements:** Windows 7/8+/10 **File size:** 23.6MB

iSpy is an open-source video-surveillance tool that works with an unlimited number of cameras. It offers motion detection, scheduling and more. While the software itself is free, iSpy charges a monthly or annual fee – from \$7.95 (£5.66) a month – for cloud uploading, remote access and real-time alerts via email, SMS and Twitter. You can add extra functionality, such as facial recognition, by installing plugins. This latest version fixes a number of bugs.



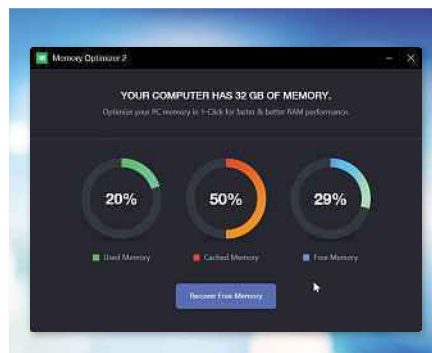
## SYSTEM INFO

### GrecTech SysInfo 2

[bit.ly/grec446](http://bit.ly/grec446)

**Min requirements:** Windows XP/Vista/7/8+/10 **File size:** 822KB

This lightweight tool provides in-depth information about your PC's operating system and hardware. There are buttons for Computer, CPU, BIOS, Hard Drives, Network Adapters and more – just click one to display detailed information. There are a few spelling mistakes ('System Tipe', for example) and SysInfo doesn't explain what each item in a category is, so you may need carry out a little research.



## MEMORY MANAGER

### Memory Optimizer 2

[bit.ly/mem446](http://bit.ly/mem446)

**Min requirements:** Windows XP/Vista/7/8+/10 **File size:** 7.3MB

Memory Optimizer is a free memory-optimisation tool that shows you at a glance how much RAM you have in total, how much is in use, the amount that's cached and the available remainder. You can free up additional memory at any time by clicking the Recover Free Memory button. When installing Memory Optimizer, make sure you untick the 'Saver's Fund' option and click 'Skip and ignore saving others'.

## New Windows Apps



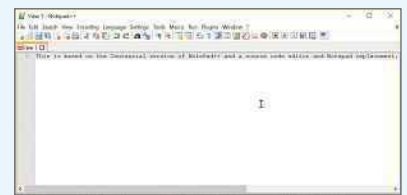
### NotePad PlusPlus

[bit.ly/npp446](http://bit.ly/npp446)

**Min requirements:** Windows 10

**File size:** 18.3MB

Based on the Centennial version of Notepad++, this source-code editor and Notepad replacement supports plugins, macros and other advanced features.



### 9Zen Lo-Fi Music

[bit.ly/9Zen446](http://bit.ly/9Zen446)

**Min requirements:** Windows 10

**File size:** 54.3MB

This app offers a curated collection of 33 relaxing soundscapes via an attractive interface. Music can play in the background and there's a night mode and timer.



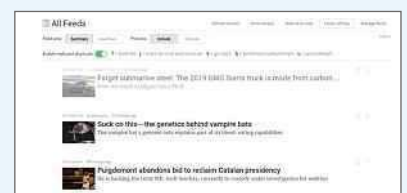
### GentleReader

[bit.ly/gentle446](http://bit.ly/gentle446)

**Min requirements:** Windows 10

**File size:** 63.8MB

Gentle Reader is a news-reader app for Windows 10. It displays updates from your favourite websites and Twitter accounts in an easy-to-read format with zero clutter and no ads.



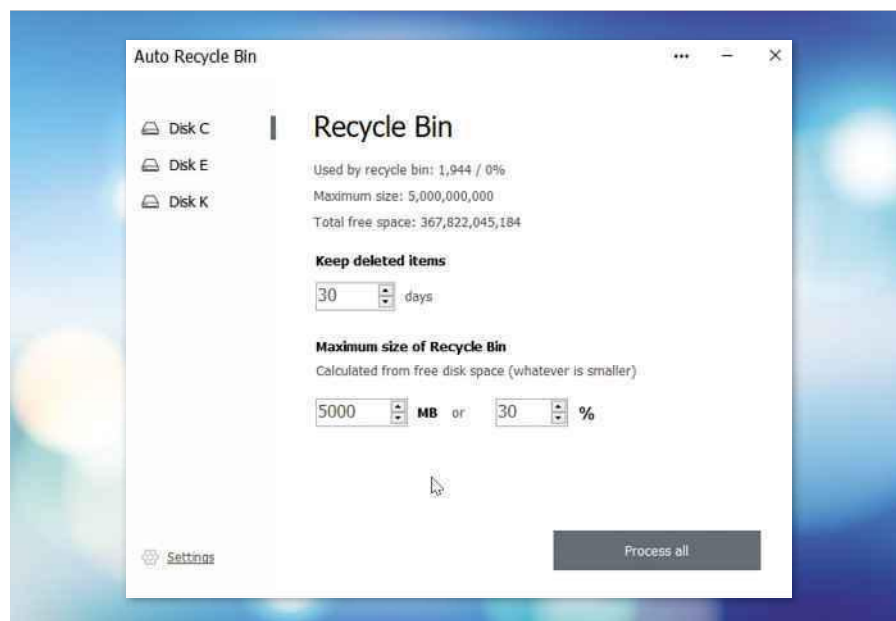
## SYSTEM TOOL

### Auto Recycle Bin

[bit.ly/arb446](http://bit.ly/arb446)

**Min requirements:** Windows XP/Vista/7/8+/10 **File size:** 1.5MB

Everything you delete in Windows goes directly to the Recycle Bin, and this can easily become full if you forget to empty it on a regular basis. Auto Recycle Bin automates the process of emptying the bin based on rules you set. It can delete content after a designated time; or remove larger items first, then smaller items later on. The program can also adjust the size of the bin based on how much free space you have on your hard drive. You can choose when to process content in the bin – manually, on Windows startup or periodically in the background.



## DISK TOOL

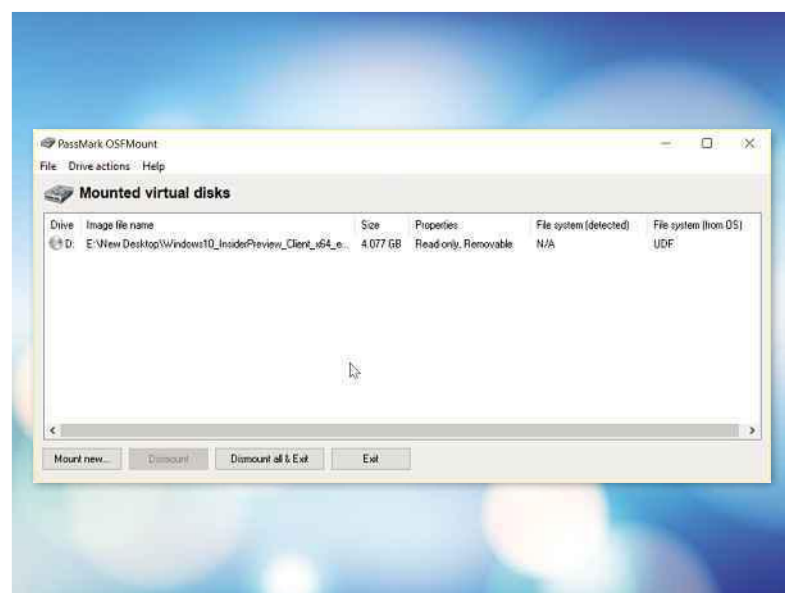
### OSFMount 2

[bit.ly/osfm446](http://bit.ly/osfm446)

**Min requirements:** Windows 7/8+/10 **File size:** 3MB

OSFMount lets you 'mount' image files of local drives – that is, make them accessible, so you can read and write data. Each mounted image is assigned a drive letter so you access it just as you would any regular drive. The program also supports the creation of RAM disks – drives mounted in RAM – which offers both security and speed benefits. It can handle all the major image file formats, such as IMG, ISO and BIN.

This new version of OSFMount includes significantly improved performance on RAM disks and an updated Expert Witness Compression Format (EWF) library. It now requires Windows 7 and upwards to run.



## WEB BROWSER

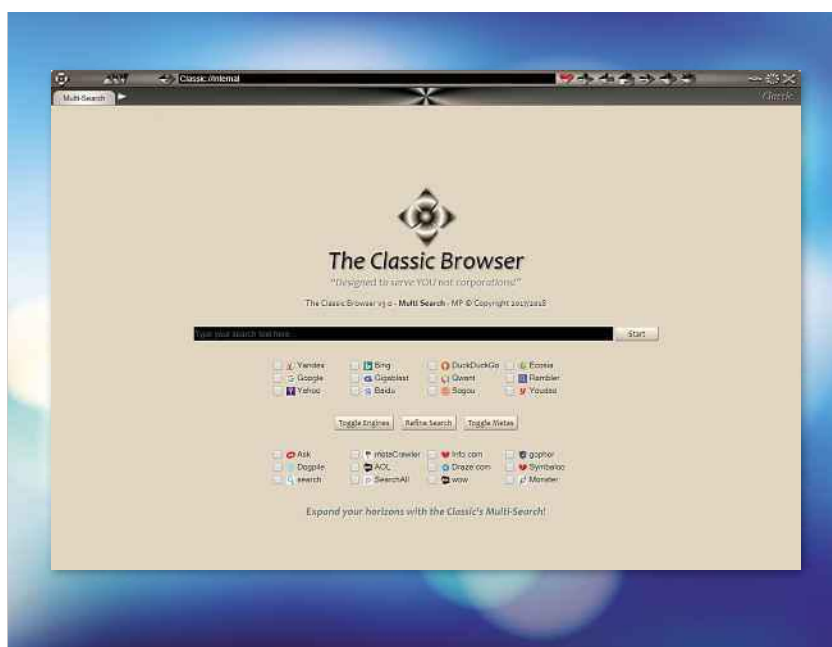
### The Classic Browser

[theclasictools.com](http://theclasictools.com)

**Min requirements:** Windows XP/Vista/7/8+/10 **File size:** 62.1MB

Do you miss the days when web pages were basic, ugly, filled with flashing banner ads and took forever to load? No, us neither. But the chances are you'll experience something of a flashback the first time you use The Classic Browser, which has a distinctly retro feel about it, even if the pages it loads (rendered using Chromium) don't.

The browser's aesthetic harks back to AOL or Netscape's glory days, displaying a choice of 24 search engines under the search bar, including several you may not have thought of in years – Yahoo, Ask and DogPile, for example. Google and DuckDuckGo are also included, if you'd rather not travel quite so far down memory lane.





## GAME

### The Adventures of Nick & Willikins

[bit.ly/nick446](http://bit.ly/nick446)

**Min requirements:** Windows XP/Vista/7/8+/10 or MacOS

**File size:** 390MB

This humorous, fully voiced point-and-click adventure is a murder mystery that focuses on Nick, the young master of the house, and his long-suffering manservant, Willikins. It's set in an England as imagined by two non-British writers, so it's deliberately inaccurate (as pointed out in the intro) but very entertaining nonetheless.

## Don't install...

### Icecream Screen Recorder

[icecreamapps.com](http://icecreamapps.com)

**Min requirements:**

Windows Vista/7/8+/10 or MacOS **File size:** 53.3MB

We used to rate this easy-to-use screen recorder highly, but over time its limitations have become apparent. Unless you pay £19.95 for the Pro version, you're restricted to capturing up to five minutes of video and can only save the result in WEBM format. There's also an annoying countdown before recording starts.



## ...Install this instead

### OBS Studio

[obsproject.com](http://obsproject.com)

**Min requirements:** Windows 7/8+/10, MacOS or Linux **File size:** 99.8MB

This powerful program lets you record a video of whatever is on your screen. It's also a quick and easy way to convert your own videos: just play them and record the playback in a new format. OBS Studio is very easy to master: choose Display Capture under Sources, set the area you want to record, then click to start and click again to stop. The finished video is saved automatically in a format of your choice, and there are no time limits, watermarks or hidden costs. OBS also offers advanced features, such as adding narration and capturing streams from YouTube.



## UPDATED | New tweaks and fixes for your favourite free programs



## SYSTEM CLEANER

### CCleaner 5.41

[www.piriform.com](http://www.piriform.com)

**Min requirements:**

Windows XP/Vista/7/8+/10

**File size:** 14.6MB

The popular Avast-owned system-cleaning tool gets updated on a monthly basis and this latest version gains a new Cleaning Summary screen, which aims to deliver cleaning results in a more meaningful way to less technical users. There are some new help tips, too.



## EBOOK MANAGER

### Calibre 3.19

[calibre-ebook.com](http://calibre-ebook.com)

**Min requirements:** Windows XP/Vista/7/8+/10, MacOS or Linux

**File size:** 69.9MB

The latest version of the popular ebook manager and viewer allows the Virtual Library button to be added to any toolbar/menu via Preferences, 'Toolbars & menus'. There's a driver for the new PocketBook 740 e-ink reader, too, and a number of bug fixes.



## SYSTEM TOOL

### WinUtilities Free 15.2

[www.pcclean.io](http://www.pcclean.io)

**Min requirements:** Windows XP/Vista/7/8+/10

**File size:** 6.3MB

WinUtilities is a comprehensive system-cleaning and optimisation suite that can do everything from delete junk files to fix broken shortcuts. The latest version gains 10 new plugins for the History Cleaner, improves the 1-Click maintenance module and boosts performance.



## PAINTING TOOL

### Artweaver Free 6.0.8

[www.artweaver.de/en](http://www.artweaver.de/en)

**Min requirements:**

Windows 7/8+/10

**File size:** 11.9MB

Artweaver Free is a painting program that can be used to create works of art from scratch, or edit and improve your photos. It offers all the usual tools, including magic wand and clone stamp. This update to the program reduces overall memory usage and fixes a number of bugs.

GET FREE SOFTWARE FIRST subscribe to Web User at [subscribe.webuser.co.uk](http://subscribe.webuser.co.uk)





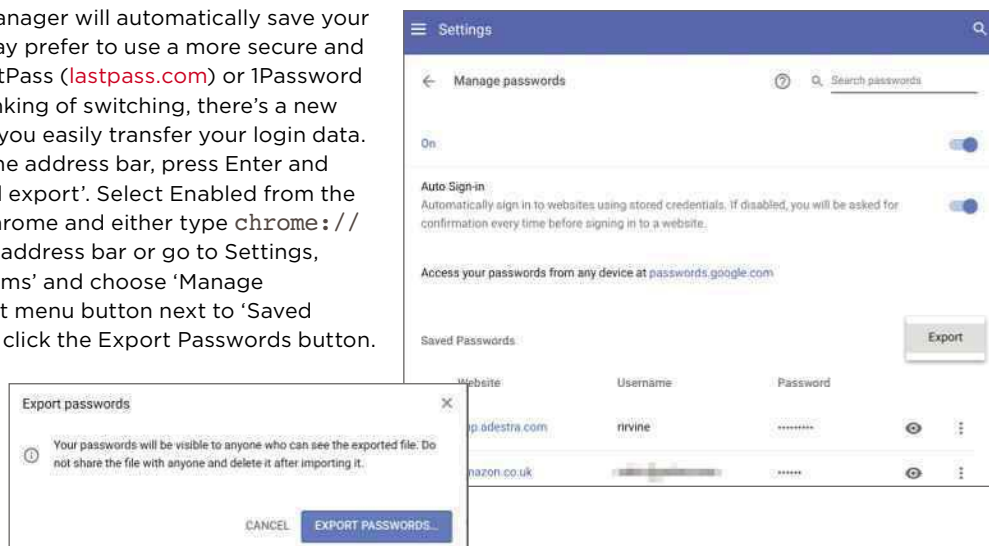
# Best New Browser Tools



## CHROME

### Export your Chrome passwords more easily

Chrome's built-in password manager will automatically save your passwords for you, but you may prefer to use a more secure and sophisticated tool such as LastPass ([lastpass.com](https://lastpass.com)) or 1Password ([1password.com](https://1password.com)). If you're thinking of switching, there's a new option in Chrome 64 that lets you easily transfer your login data. Type `chrome://flags` into the address bar, press Enter and search for the entry 'Password export'. Select Enabled from the drop-down menu, relaunch Chrome and either type `chrome://settings/passwords` in the address bar or go to Settings, Advanced, 'Passwords and forms' and choose 'Manage passwords'. Click the three-dot menu button next to 'Saved passwords', select Export and click the Export Passwords button. You can now save your website logins as a plain-text CSV file that can be printed or imported to a more secure password manager (make sure nobody else sees it, though!).



### Install Chrome extensions from your phone

One of the biggest limitations to the Chrome app for Android and iOS is that you can't install your favourite extensions in the browser - in fact, you can't install any at all, as you can in the Firefox mobile app. However, if you stumble across an interesting add-on while browsing the web on your phone or tablet, there is a handy hidden option that lets you send it directly to Chrome on your computer, so you can try it later.

Log into Chrome on your mobile device with the same Google account you use on your desktop, open the Chrome Web Store page for the extension

and tap the blue 'Add to Desktop' button, followed by the green button of the same name. The add-on will then be installed on all computers on which you're signed into Chrome.

You can also tap the Share option

next to the 'Add to Desktop' button to share details of the extension via email.

### Restore the eight-tile layout on your New Tab page

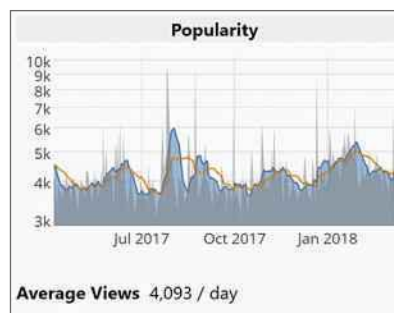
Chrome's New Tab page traditionally features eight thumbnail 'tiles' that provide one-click access to your most visited websites. However, version 64 of the browser makes these thumbnail images larger and uses the size of your browser window to determine the number of tiles displayed, so you may only see four, particularly if you use a small or low-resolution monitor.

If you want to restore the full set of eight New Tab thumbnails, try maximising your browser window to see if the extra space brings back the missing tiles, or hold down the Ctrl key on your keyboard and scroll your mouse wheel to zoom out from the page until eight tiles are displayed.

Alternatively, install the Chrome extension New Tab Reloaded ([bit.ly/reloaded446](https://bit.ly/reloaded446)), which restores the page to its 'classic' eight-tile appearance.

### Check the popularity of Wikipedia articles

Wikipedia has articles on so many niche topics that you may assume you're the first person in years to be reading about



empathy in chickens, the British Rail flying saucer or the Tanganyika laughter epidemic of 1962.

A new Chrome extension called WikiPopularity ([bit.ly/wiki446](https://bit.ly/wiki446)) tells you exactly how many people viewed the current page over the last year, in the form of a graph that appears in the top-right corner of the article. The data includes the total number of views each day and the average number, so you can pinpoint dates when that topic proved particularly interesting to Wikipedia users. WikiPopularity also shows you the 1,000 most popular articles from the last 24 hours when you click the Trending Articles link on the left-hand side of the page. When we visited, this list was topped by 'David Bowie discography', which attracted 1,066,417 views.

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



## FIREFOX

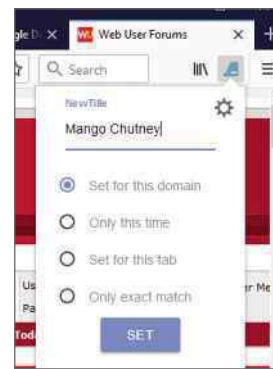
### Edit screenshots in Firefox

Mozilla introduced a handy screen-capture tool in Firefox 56 but it wasn't particularly sophisticated. Version 59 of the browser significantly improves the Screenshots feature by letting you edit the images you capture. Take a screenshot in the usual way, by clicking the three-dot menu icon in the address bar and choosing 'Take a screenshot', then click Save to open it on the Firefox Screenshots site ([screenshots.firefox.com](https://screenshots.firefox.com)). Click the new Edit button to access various options including crop, pen (for writing and drawing on the grab) and highlighter, along with a choice of nine colours. There's also an Undo button if you make a mistake. Click Save when you're done and you can share or download your edited screenshot, or fiddle around it with some more before the grab 'expires' and is deleted.



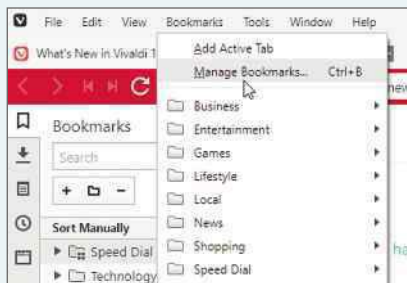
### Change the titles of your tabs

It's useful to see which web pages are displayed in your open tabs, but you may sometimes prefer to keep this information private from the people around you. A new Firefox extension called Tab ReTitle ([bit.ly/retitle446](https://bit.ly/retitle446)) lets you change the name of your tabs to something less embarrassing or incriminating. Simply click its toolbar button when viewing a page, enter an



alternative title for the tab and click Set. You can choose to rename all pages from the current domain or to only retitle the tab temporarily. All your chosen titles are saved within the add-on, so they can be easily accessed and deleted.

## OTHER BROWSERS



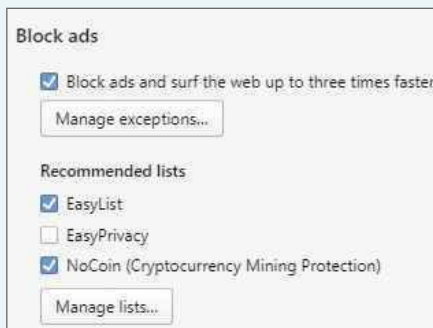
### Access bookmarks more easily

One of the things we most like about Vivaldi, which won our Gold Award in Issue 440, is the way its developers listen and respond to feedback from the browser's ever-expanding fanbase. For example, many users have long wondered why Vivaldi's bookmarks could only be opened via the Bookmarks side panel rather than being instantly accessible from the main toolbar. This concern has been addressed in the latest version of the browser (1.15.1111.3), which lets you open your bookmarks directly from the main menu. You can also press Ctrl+B to open the Bookmark manager.



### Block adverts more quickly in Opera

Opera was the first major browser to offer a built-in ad blocker, to which it has recently added useful protection against cryptojacking attacks (see this section in Issue 441). The latest version of the browser, Opera 51, makes the feature even more impressive by boosting its ad-blocking speed. This is apparently down to an "improvement in the string-matching algorithm", and tests have found that the updated browser performs 16% faster than Opera 51 and 44% faster than Chrome 64 with its new ad blocker. To turn on the feature, go to Settings, 'Privacy & security' and select 'Block ads...'



### Stay safe using McAfee WebAdvisor

There was a time when McAfee SiteAdvisor was an essential browser tool, but then it got bloated and slow, and relaunched as the not-much-better WebAdvisor. This hasn't stopped McAfee launching the extension for Microsoft Edge, where it could prove useful to safety-conscious Windows 10 users. Features include colour-coding your search results to show you whether they're safe or dangerous to click, automatically blocking bad sites before they can do any harm and providing detailed site reports that highlight security concerns.

Install the Edge add-on from [bit.ly/webadvisor446](https://bit.ly/webadvisor446).

# Best Free Apps

## App of the Fortnight

### KEYBOARD

#### SwiftKey

[bit.ly/swiftdroid446](http://bit.ly/swiftdroid446)

[bit.ly/swiftios446](http://bit.ly/swiftios446)

 (varies)  9.3

UPDATED

Your smartphone or tablet has a perfectly usable on-screen keyboard and there's no urgent need to consider installing an alternative. But you're missing out on some very useful features – especially where the latest version of SwiftKey is concerned.

The newly released SwiftKey 7 is the first major update to the tool since Microsoft scooped up the company behind it for a cool £180m in 2016.

The biggest addition in both the Android and iOS versions is a handy new pop-up Toolbar that contains a number of useful shortcuts.

The Toolbar can be enabled or disabled whenever you need it and appears in a strip above the keys, providing quick access to emoji or GIFs, as well as letting you view the clipboard or select alternative themes for SwiftKey itself.

The Android version comes with a number of extra items on the Toolbar, including SwiftKey 7's other significant new feature, stickers – currently an Android exclusive. These can be added to messages or personalised and saved to your favourites, so you can get to them again quickly.

Some of SwiftKey 7's other new features – namely location and calendar sharing – aren't currently available in the UK version of the app. According to Microsoft, these are "coming soon".

One of SwiftKey's ongoing benefits is that it's better at predictive text and autocorrect than many of its rivals. It does this by monitoring what you type and learning about your habits.

Obviously, this raises some privacy concerns, but it's possible to opt out of some of its data-collection features. Also, SwiftKey is now covered by Microsoft's privacy policy ([bit.ly/privacy446](http://bit.ly/privacy446)) – the same one that covers Windows 10.

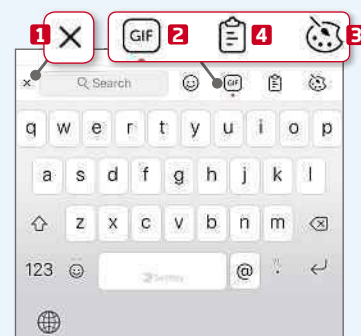


### MINI WORKSHOP Try the new features in SwiftKey

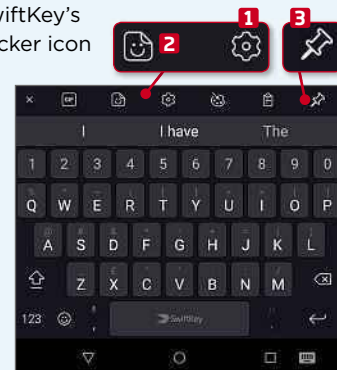
**1** If you're worried about privacy, you can minimise the amount of data SwiftKey collects. During setup, you'll be asked to sign in with a Google, Microsoft or Facebook account. This is optional, so tap 'Not now' **1** to prevent SwiftKey from storing your data online. You still need to allow the app permission to transmit anonymously anything you type, so you can use all SwiftKey's features.



**2** To access the new Toolbar, tap the plus (+) sign in the top-left corner, above the keys themselves. The Toolbar will appear and the + sign will turn into an X **1** – tap this to close the Toolbar. Tap the GIF icon **2** to insert a GIF into your message. Tap the palette icon **3** to select a new keyboard theme, and tap the clipboard icon **4** to view and manage any text you've copied.



**3** Android users get a few more shortcuts in their Toolbar. Tap the cog icon **1** to access SwiftKey's settings. Tapping the sticker icon **2** lets you select and download sticker packs – fun images that you can add to messages. When you use a sticker, you can save it to your favourites by pressing the pin icon. Tapping the pin icon on the Toolbar **3** lets you access your favourites.



Our rating





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

## GAME



### PUBG Mobile

[bit.ly/PUBGdroid446](http://bit.ly/PUBGdroid446)

[bit.ly/PUBGios446](http://bit.ly/PUBGios446)

 5.1.1  9

PUBG (PlayerUnknown's Battlegrounds) is a 'battle royale'-style shooter that has made the transition to mobile relatively unscathed, offering more or less the complete experience of the original in the palm of your hand, with only minor graphical compromises. The only downsides are that it's a pretty big download (about 900MB) and you'll need a relatively powerful device to run it smoothly.



Our rating



## HEALTH

### PK Fitness

[bit.ly/PKdroid446](http://bit.ly/PKdroid446)

[bit.ly/PKios446](http://bit.ly/PKios446)

 6  10

New to Android – and recently updated on iOS – PK Fitness is an activity tracker that combines the usual fitness data-gathering features with a social element that lets you follow your friends or family members. As with other fitness apps, you can view your workout log, review analytics and set goals, but you can also compare achievements with other users. PK Fitness is well designed and easy to use. The app also supports Bluetooth fitness tracking devices, including many with built-in heart rate monitors.



Our rating



## PASSWORD MANAGER

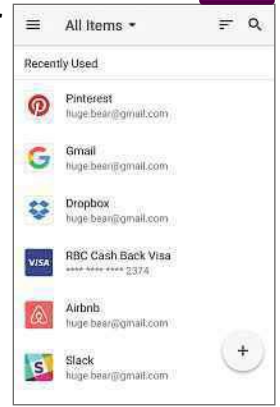
### RememBear

[bit.ly/beardroid446](http://bit.ly/beardroid446)

[bit.ly/bearios446](http://bit.ly/bearios446)

 5  9

From the developers of free VPN TunnelBear comes this similarly bear-themed password manager for both iOS and Android, which keeps all your logins safe in an encrypted vault, protected by a master password (or your fingerprint on supported devices). Now out of beta, it's simple to use, quick to set up and has some useful features, such as the ability to add other devices using a camera scan or QR code. RememBear can also auto-fill logins and payment info in apps and web pages.



Our rating



## EDUCATION

### Treasure Hunters

[bit.ly/treasuredroid446](http://bit.ly/treasuredroid446)

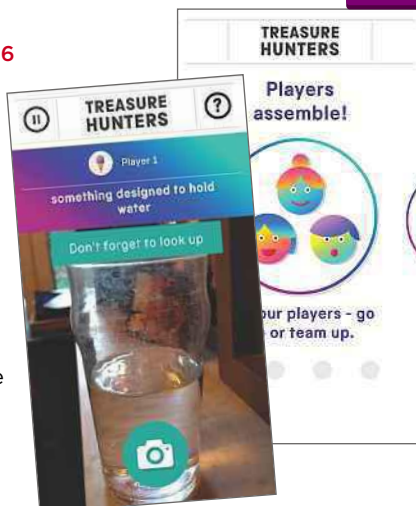
[bit.ly/treasureios446](http://bit.ly/treasureios446)

 4.3  8

Developed by the Science Museum in conjunction with Aardman – creators of Wallace and Gromit – Treasure Hunters is a free app that's designed to encourage visitors to any Science Museum Group venue to explore the exhibits and view them from a fresh perspective.

It 'gamifies' your museum experience by setting various challenges, such as getting you to hunt for specific exhibits and awarding badges for various achievements.

Treasure Hunters can be played solo or with up to four players. You can play it at the London, Bradford, Manchester, Shildon or York museums, or just play at home.



Our rating



## LAUNCHER

### Lean Launcher

[bit.ly/lean446](http://bit.ly/lean446)

 5

One of the great benefits of Android is that you can change the entire look and feel of your device in an instant by installing a launcher. The two common drawbacks, however, are that many launchers claiming to be free often require in-app purchases to unlock the best features, and some launchers are so bloated they can make your device feel sluggish. Lean Launcher addresses both of these problems. It's open source – so 'free' genuinely means free – and, as its name suggests, it's a lightweight install. It provides a smart, sophisticated, customisable, stock Android-like interface with notification dots, Google Now and dynamic shortcuts on support devices.



Our rating



# 5 NEW APPS WORTH PAYING FOR

## GAME

### Florence

[bit.ly/flordroid446](http://bit.ly/flordroid446)

[bit.ly/floios446](http://bit.ly/floios446)

Price: £2.99

 5  10

From the developer of Monument Valley, this beautiful app's love story plays out over a series of interactive scenes and mini-games. It's a short, powerful narrative-driven experience.



a ton of new levels, puzzles and blocks, this app helps toddlers (2-5 years) learn about shapes, colours, counting and more. There's a free version to try, too.

## PHOTOS

### Collections - Photo Bookmarks

[bit.ly/collections446](http://bit.ly/collections446)

Price: £2.99

 11

Collections is a simple tool that lets you organise photos by theme – clothes you want to buy, restaurant's you love to eat at, pets, gigs and anything else – making them easy to find.



## NOTES

### Noted

[bit.ly/noted446](http://bit.ly/noted446)

Price: 79p per month

 10.3

There are lots of audio note-taking apps, but Noted is easily one of the best looking. It's also free, although taking up a subscription unlocks several additional audio-recording options, including background-noise reduction.



## PUZZLE

### Projekt

[bit.ly/projektdroid446](http://bit.ly/projektdroid446)

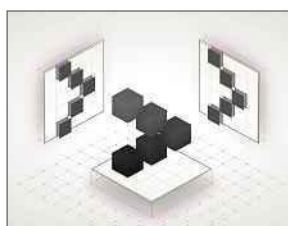
[bit.ly/projektios446](http://bit.ly/projektios446)

Price: £1.59 (Android), £1.99

(iOS)

 4.1  8

If you love puzzles and brain teasers, check out Projekt. You have to create shapes in three planes at once – a 3D shape in the middle flanked by its two 2D silhouettes.



## KIDS

### Puzzle Shapes

[bit.ly/puzzle446](http://bit.ly/puzzle446)

Price: £4.99

 9.1

Recently updated with



Florence



.projekt



Puzzle Shapes



Collections -  
Photo Bookmarks



Noted



## Don't install...

### Simple Web Browser

[bit.ly/simple446](http://bit.ly/simple446)

There are plenty of bad mobile web browsers on Google Play and the Apple App Store, but few are quite as awful as Simple Web Browser. With intrusive adverts that float over web pages and get in the way of links, limited navigation options (Back, Forward, Search, History, Reload) and no address bar at all, this app certainly lives up to its name – simple to the point of being absurd.



## ...Install this instead

### Chrome

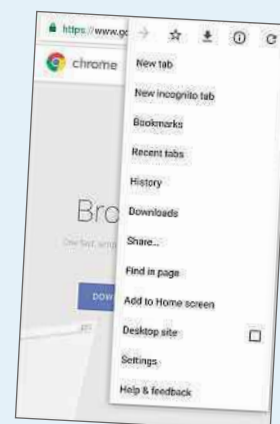
[bit.ly/chromedroid446](http://bit.ly/chromedroid446)

[bit.ly/chromeios446](http://bit.ly/chromeios446)

 (Varies with device)  10

The good news is that there's no shortage of great mobile browsers to choose from – so many, in fact, that it's not easy to pick one. If privacy is your priority, you might consider DuckDuckGo's recently released Privacy Browser ([bit.ly/duckdroid446](http://bit.ly/duckdroid446) for Android, [bit.ly/duckios446](http://bit.ly/duckios446) for iOS). Or how about Opera Mini ([bit.ly/operadroid446](http://bit.ly/operadroid446) for Android, [bit.ly/operaios446](http://bit.ly/operaios446) for iOS) if you're after speed and built-in ad blocking?

But whether or not your device came with it installed, we still reckon Chrome is king of the browsers. It's fast, adaptable, supports offline viewing, allows voice searching and syncs well with the desktop version. ■





# Take a Screen Break

Give your eyes a rest from your browser by taking our fiendish fortnightly challenges. Can you guess our country-name emoji and work out our web year?

**WIN A  
WEB USER  
2017 BACK  
ISSUES DISC!**

Email your answers to [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)  
- one correct entry  
will win a disc



## CAN YOU GUESS THE COUNTRIES FROM THE EMOJI?

1



2



3



4



5



6



## GUESS THE TECHNOLOGY YEAR

Can you work out which year the following tech news stories occurred in? No cheating!

**1** Microsoft's hotly anticipated new operating system, Windows Vista, is released in January. Sadly, it proves disappointing.



**2** June sees the US launch of Apple's first smartphone, the iPhone. It quickly sells out and goes on sale in the UK five months later.



**3** Google unveils its open-source mobile operating system, Android, although the first Android device won't appear until the following year.



**4** Radiohead takes the revolutionary step of releasing their new album *In Rainbows* as a pay-what-you-want download.

**5** At the end of the year, AOL announces that it is cancelling development of the pioneering Netscape Navigator web browser.



## COMPETITIONS

### WIN 1 OF 5 USB 3.0 Card Reader/Writer

This USB 3 card reader/writer from StarTech.com lets you quickly access or back up photos and video from your CFast 2.0 memory cards to your USB-C enabled tablet, laptop or computer. To enter, email your address to [webusercomp@dennis.co.uk](mailto:webusercomp@dennis.co.uk) with 'startech' in the subject line. For more information, visit [www.startech.com/uk](http://www.startech.com/uk) and follow @STARTECHdotCOM on Twitter.



**WORTH  
£67  
EACH**

### WIN 1 OF 5 Kinetic Wireless Neckband Headphones

KitSound's new Kinetic wireless headphones have a neckband that supports the earpieces, so they won't drop to the floor as you exercise. To recharge, just connect them to the magnetic clip and they'll be ready for use in two hours. To enter, email your address to [webusercomp@dennis.co.uk](mailto:webusercomp@dennis.co.uk) with 'kinetic' in the subject line. For more info, visit [www.kitsound.co.uk](http://www.kitsound.co.uk) and follow @KitSoundUK on Twitter.



**WORTH  
£50  
EACH**



# ? FAQ

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

## Android Go

Google's latest mobile operating system offers less than previous versions of Android. **David Crookes** looks at the pros and cons of Android Go

### What is it?

Android Go ([bit.ly/androidgo446](http://bit.ly/androidgo446)) – or, to give it its full name, Android Oreo (Go edition) – is a slimline operating system developed for entry-level smartphones. It's based on Android 8, which was released last August, and is designed to make Google's operating system run better on handsets with 1GB of memory or less. As such, it doesn't have a full array of features, but it does have plenty of tricks up its sleeve.

### What does it look like?

Android Go looks like any other version of the operating system. There's a row

of favourite apps at the bottom of the screen, as well as Back, Home and Recent Item buttons. A Google search bar sits at the top, and there's a microphone button that lets you speak your search terms. The main difference, however, is that Android Go takes up much less space than other versions and

limits the apps you can install. There's also an emphasis on managing your storage and data use.

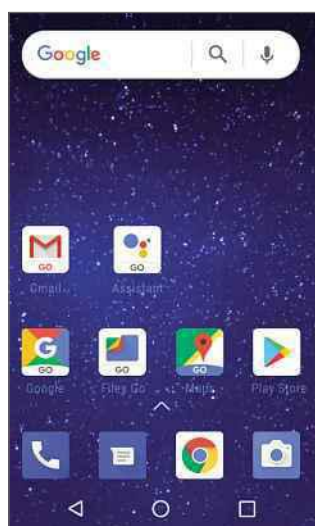
### How much space does it take up?

According to Google, Android Go takes up just over 3GB of storage when

installed – that's half as much as Oreo's predecessor, Android Nougat. It achieves this by including fewer preinstalled apps, and ensuring that the apps it does include are stripped-down versions that take up around half the space of their full-size counterparts. These cut-down versions have been optimised to run just as smoothly, despite having less storage space at their disposal.

### So which apps can I use?

One of the most important apps for the new operating system is Google Go, which has been designed with inexperienced users in mind. It grants you quick access to a host of useful functions by providing buttons for specific features such as translation, image search, weather and voice control. This saves you a lot of typing and makes



*Android Go looks much like any other version of the mobile OS*



*Google Go puts Google's most useful tools all in one place*

opening websites and apps easier. Google has also made its voice assistant available on low-end smartphones for the first time (Google Assistant Go), and its built-in Gboard keyboard provides voice typing, translations, autocorrect and instant access to GIFs and emoji.

### Can I use Google Maps and Gmail?

Indeed you can. The Android Go versions – Gmail Go and Google Maps Go – offer all the main features you're likely to need, from

checking and sending email to receiving real-time traffic updates, directions and public-transport information. Each app is designed to work smoothly, even if you have an unreliable network connection. Naturally, you can also use Chrome on Android Go to browse the web. This comes with its own data

saver, which limits background data use and saves up to 60% of mobile data.

## Can I play videos, too?

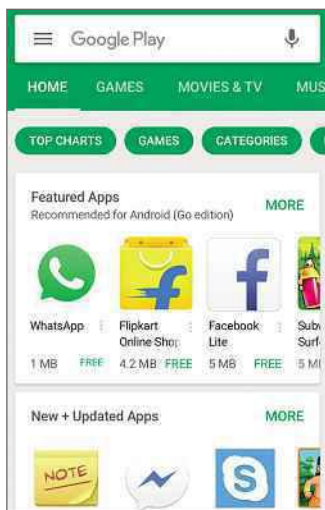
Absolutely. Android Go comes with YouTube Go, which has been around since 2016 and is optimised for slow connections and limited data plans, as well as phones with minimal storage. Users can preview frames of a video and decide on the level of streaming (basic, standard and high). It also tells you how much data each video will use and lets you download content over Wi-Fi to watch offline later.

As with other Go apps, YouTube Go is small, taking up just 9.4MB of space. You can also share videos with nearby friends and family at super-fast speeds without consuming data.

## But can I install other apps?

Yes. Android Go provides easy access to the Google Play app store, but rather than fling open the doors to all 3.5 million Android apps created so far, it points you

to a special storefront that highlights apps that have been optimised to run on entry-level phones. By concentrating on apps that are less than 10MB, you're less likely to install a resource-hungry and potentially unusable app that will ruin your enjoyment of the phone.



*You can install apps that have been optimised to run on Android Go*

## How do I manage the amount of data I use?

Android Go's notifications panel lets you monitor your data usage, while Google's new storage-management app, Files Go ([bit.ly/fg440](http://bit.ly/fg440)), helps you maximise the amount of space available on your phone. As well as finding files in double-quick time, this lets you see how much room you have left on your handset and SD card, transferring files off the phone if necessary. It also makes light work of deleting duplicate files, images and unused apps, and lets you clear your cache. Files Go works on devices running Android 5 or later, too – see our Workshop in Issue 440 for more details.

## And is it secure?

Well, Google says it is. The company promises that entry-level smartphones running Android Go will have the same key security features as Android Oreo phones. Find My Device is built in, and each installation is scanned for potential problems.

## So how do I get Android Go?

Android Go is being preinstalled on new budget smartphones. Six handsets have been announced so far, including the Alcatel 1X ([bit.ly/alcatel446](http://bit.ly/alcatel446)), the Nokia 1 ([bit.ly/nokia446](http://bit.ly/nokia446), see last issue's First Look) and the ZTE Tempo Go ([bit.ly/tempo446](http://bit.ly/tempo446)), each of which has 1GB of RAM and a quad-core processor. The others are Lava's Z50, Micromax's Bharat Go and General Mobile's GM 8 Go. All these phones have low specifications: the Nokia 1 comes with just 8GB of storage (which you can expand to 128GB using an SD card) and a 5-megapixel rear camera (2-megapixel front-facing). The prices are low, too, ranging from \$80 (£58) to \$100 (£72), which indicates the section of the market Google and the manufacturers are aiming for.



*The Nokia 1 is among the first smartphones to come with Android Go built in*

## Is Android Go worth having?

Only if you're not fussy about power. Ultimately, Android Go has been created for use in developing nations where phone users suffer slow and intermittent connectivity, use less powerful devices and have few opportunities to recharge the batteries during the day. But Go phones will be available everywhere, so if you want just a basic handset or you're after an entry-level device for a smartphone newbie, Android Go will ensure it works smoothly.

It's hoped that over time more developers will follow Google's Building for Billions guidelines ([bit.ly/billions446](http://bit.ly/billions446)) and create slimline apps that work well on this type of phone. If you own a top-of-the-range Samsung Galaxy, however, we wouldn't recommend installing Android Go on it.

## WHAT HAPPENED TO ANDROID ONE?



Android Go isn't Google's first attempt at creating a streamlined mobile operating system for low-cost, low-performance phones aimed at emerging markets. In 2014, Sundar Pichai, now Google's CEO, launched Android One ([www.android.com/one](http://www.android.com/one)), a close-to-stock version of the OS that was free of bloatware and worked to a strictly defined

hardware standard.

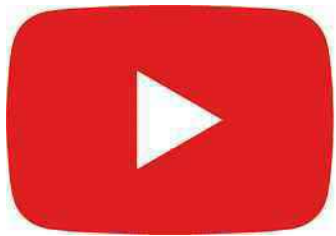
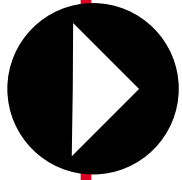
The OS was considered to be Android in its purest form, and allowed Google to push its own software updates to ensure users could stay up to date with new apps and services. It guaranteed access to the Google Play Store and emphasised speed while paving the way for the "next billion" users in the world.

The focus changed over time, however, and today, Android One is available on high-end handsets from manufacturers including Nokia, HTC and Motorola. The goal is simply to give users a pure Android experience

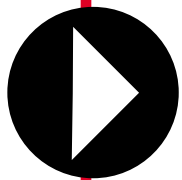


sanctioned by Google without any interference in the hardware design process. As Google says, it's "everything you want" (meaning a phone that provides Google's key services) and "nothing you don't".

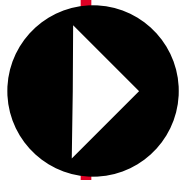
# BEAT RESTRICTIONS in...



## YouTube



## iPlayer



## NETFLIX

COVER  
FEATURE

Watch the way you want to, on the three most popular video-streaming services. **Robert Irvine** explains how to unlock useful tools, fix annoyances and take control of your viewing

**T**he days when 24 million of us sat down at the same time to watch *EastEnders* or *Only Fools and Horses* are long gone. Video-on-demand services now allow us to watch what we want, when we want and where we want, whether it's a slick US drama, a classic British comedy or cute clips of cats falling down the stairs. The variety, quality and flexibility offered by the streaming giants means we're living in a golden age of visual entertainment, but these new ways of watching also impose their own rules.

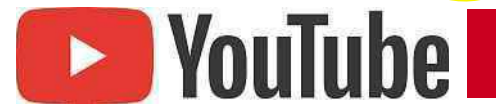
Geographical restrictions are the most notable example – YouTube videos that can't be played

in the UK and iPlayer programmes that can't be streamed outside it, for example – but there are many other limits on your viewing. In this feature, we explain how to get around these annoyances and fix common problems, from poor-quality playback and unwelcome interruptions to fiddly interfaces and restrictive features.

We've focused on the big three streaming services – YouTube, BBC iPlayer and Netflix – because we're sure most *Web User* readers use at least one and probably two of these – with some bonus advice on page 46 for Amazon Prime Video viewers.



## BEAT YOUTUBE RESTRICTIONS



### Always stream videos at HD quality

YouTube adjusts the streaming quality of videos from standard definition (such as 240p or 360p) to high definition (720p or 1080p), based on the speed of your internet connection. Although you can change this manually by clicking the cog icon below a video and selecting an option from the Quality menu, you may prefer to *always* stream at the highest quality. There are lots of browser extensions that let you override YouTube's settings to stream in HD, 4K or even 8K (where available), of which our favourites are HD for YouTube for Chrome ([bit.ly/hdyoutube446](http://bit.ly/hdyoutube446)) and YouTube High Definition for Firefox ([bit.ly/youtubehigh446](http://bit.ly/youtubehigh446)). Just choose your preferred quality in the add-on's options and it will automatically play videos at that resolution. The Firefox tool also increases the size of the video player for a better HD experience.



**Force YouTube to always stream videos at the highest quality possible**

### Download videos at maximum resolution

YouTube doesn't officially allow viewers to download videos to their computers, although the feature is available on smartphones in many countries, either via a YouTube Red subscription ([www.youtube.com/red](http://www.youtube.com/red)) or through the YouTube app. Google recently announced plans to launch YouTube Red in "a hundred" more countries later

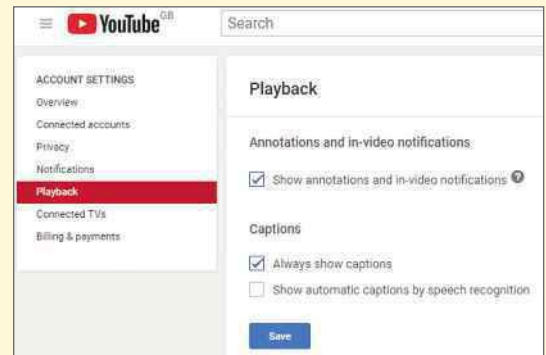


**YouTube Red lets you download videos to watch offline on your phone**

### Turn off video annotations and notifications

Many YouTube videos are blighted by irritating annotations that promote the creator's website or channel, or bombard you with useless titbits of information in the form of speech bubbles and pop-ups. Thankfully, YouTube scrapped annotations last year, because they didn't work on mobile devices, encouraging creators to use interstitial 'Cards' and 'End Screens' instead, but there are still millions of videos that feature this annoyance. To disable annotations permanently, click your profile picture and go to Settings, Playback. Untick the option 'Show annotations and in-video notifications' and click Save. You can also turn off captions on this page.

Sadly, Card notifications and End Screens can prove equally obstructive, and there's no official option to turn them off. The most effective fix is to create a new filter in your ad blocker and enter `youtube.com##.ytp-ce-element`, which we've found to work like a dream!

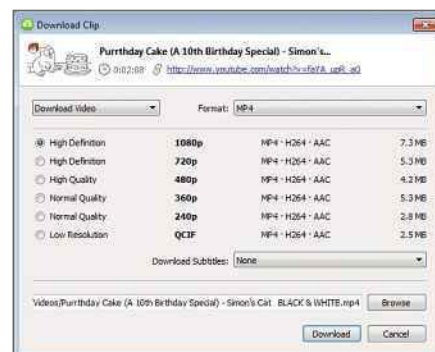


**Permanently turn off the annoying annotations that interrupt your viewing**

this year, so fingers crossed that the UK will (finally) be one of them.

In the meantime, as we're sure you're aware, there are plenty of free tools that let you download videos from YouTube, although this contravenes the site's terms of service, which state: "you agree not to access content through any technology or means other than the video playback pages of the website itself" ([bit.ly/youtubeterms446](http://bit.ly/youtubeterms446)).

If you're willing to take the risk and to only keep downloaded videos for personal use, the best option is 4K Video Downloader ([bit.ly/4kdownload446](http://bit.ly/4kdownload446)), which is available for Windows, MacOS and Linux, and is packed with useful features, including support for 3D and 360-degree videos, as well as playlists and channels. Unlike similar tools, it lets you download videos at the highest quality possible – up to 8K



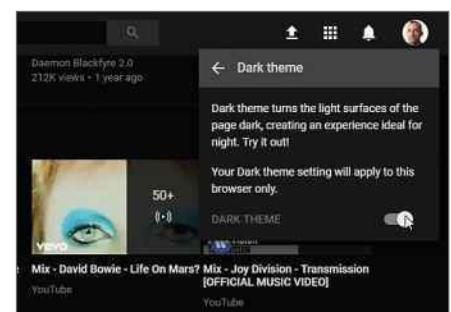
**4K Video Downloader lets you grab videos at the maximum resolution**

where available – and use its Smart Mode feature to download multiple videos at your preferred settings in one click. To use the program, just copy and paste a URL, choose a quality and format, and click Download.

### Unlock YouTube's new dark mode

When you're watching YouTube at night, the glare of its white background can take a toll on your eyes and distract you from the video you're viewing. To make things easier on your peepers and create a more cinema-like experience, you can transform all that white glare into black by applying YouTube's new dark theme. On the website, click your profile image in the top-right corner, select 'Dark theme' and set the slider to 'on'. The change will take effect immediately.

Google has also added the dark theme to its iOS app – just tap your profile photo and select it from the menu. It's coming to Android very soon.



**Avoid straining your eyes at night by turning on YouTube's new dark theme**

## Print storyboards and transcripts of videos

Rather than downloading a favourite video to keep for posterity, why not print a paper copy of its content? That's the concept behind an ingenious 'bookmarklet' called Print YouTube Video, which converts videos into a storyboard of thumbnail images that you can print or save.

To get started, visit [bit.ly/print446](http://bit.ly/print446) and drag the Print YouTube Video bookmarklet to your bookmarks bar. Open a video on YouTube, click the bookmarklet and it should instantly generate a storyboard that visually summarises the content. The bookmarklet converts any length of video, but note that the individual



Turn your favourite YouTube videos into a printable photo storyboard

images it captures are pretty small and you'll need to enable JavaScript in your browser for it to work.

Alternatively, you can print a transcript of all the spoken text in a video, which is generated from YouTube's automatic subtitles. Click the three-dot button below a video and choose 'Open transcript' to display the text on the right of the player. Highlight and drag the words with your mouse, then copy and paste them into a document so you can print the transcript – you can remove the timestamps via the settings menu in the top-right corner. Just don't expect the subtitles to be 100% accurate!



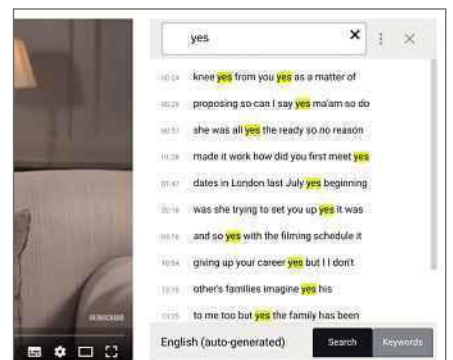
YouTube generates transcripts of videos that you can copy elsewhere

## Search for specific words in videos

Rather than skimming or sitting through a long YouTube video just to get to the 'best bit' or glean a specific snippet of information, install the Chrome extension Invideo for YouTube ([bit.ly/invideo446](http://bit.ly/invideo446)). This brilliant tool adds text-search capabilities to videos so you can quickly find individual words, phrases and names spoken in them.

To use it, click the Open InVideo button below the bottom-right corner of the video player and a panel will open on the right that lets you search for a term that's spoken in the content. Click a result to jump straight to the relevant moment. You need only enter part of a search term to find matching results.

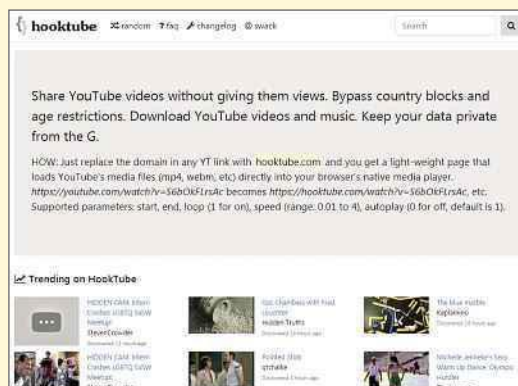
Invideo works by using YouTube's auto-subtitling transcripts (see previous tip), so in some cases (particularly with music videos), you may get a "cannot transcribe this video" message.



Jump to the best bits in YouTube videos by using InVideo to find words

## Unblock videos unavailable in the UK

Most YouTube users will have encountered at least one video that the site forbids access to, displaying the message: "This content is not available in this country". The block can be due to licensing, political or legal reasons; because the uploader has chosen to limit it to a specific region; or because you're not logged into YouTube and there are age restrictions on the clip. The best-known way to beat this restriction is to use a VPN (see our cover feature in Issue 443) or proxy tool such as Tor to disguise your IP address, but there is an easier method that doesn't require any software. Hooktube ([hooktube.com](http://hooktube.com)), which launched last year, lets you bypass regional blocks and age restrictions on YouTube using a simple URL tweak. Just change the youtube in the web address of the blocked video to hooktube, press Enter and you'll be taken to Hooktube where you can watch the content unhindered, and even download it.



Hooktube offers an easy way to access videos that YouTube has blocked

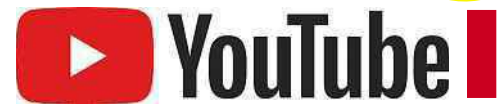
## Skip adverts without cheating creators

Adverts that play before YouTube videos are a necessary evil because without them, many creators wouldn't be able to offer their content for free. But if you're tired of sitting through the same loud, annoying ads while waiting for the Skip button to finally appear, there is a solution called YouTube Ad Auto-



Skip adverts automatically rather than manually





skipper ([bit.ly/adskipper446](http://bit.ly/adskipper446)).

This extension for Chrome and Firefox skips ads automatically, as soon as the option appears, which means that creators can earn ad revenue without trying your patience. If that doesn't sound tough enough and you want to banish any and all ads from view, then you're better off blocking all YouTube ads using a less ethical tool such as Adblock Plus or uBlock Origin.

### Skip spoken intros to music videos

Many music videos on YouTube are preceded by waffly spoken introductions that delay your listening pleasure. You can fix this audio annoyance using a Chrome extension called Skipper ([bit.ly/skipper446](http://bit.ly/skipper446)), which jumps past the talking at the beginning of a music video to take you straight to the song. The add-on works automatically, but you can also manually set the start and end points for playback and disable it when you want to hear the intro for a video. Usefully, Skipper keeps track of how many seconds of blather you've skipped, and you can also skip any talking in the middle and at the end of videos.

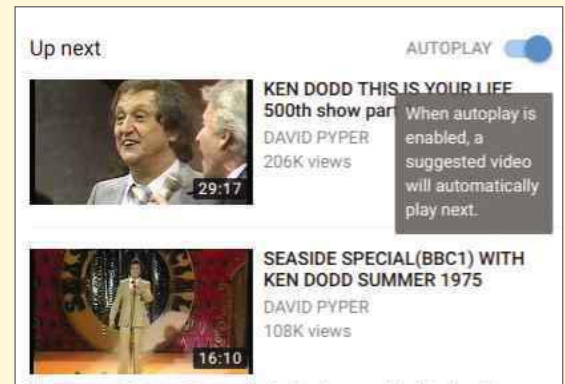
### Watch videos in a pop-out player

One of Opera's most useful features is the ability to watch videos from YouTube and other video sites in a detachable, floating panel that's both movable and resizable. This means you

### Stop YouTube playing videos automatically

There are occasions when you only have the time or desire to watch one video on YouTube, but its annoying autoplay feature tempts you to stay indefinitely, with a never-ending stream of 'suggested' clips that its algorithm thinks you'll like. Fortunately, it's easy to stop YouTube playing videos automatically – just slide the Autoplay option above the 'Up next' list to the off position. In the YouTube mobile app, go to Settings, General and switch off Autoplay there.

YouTube recently started testing another type of autoplay video, which appears when you browse the Home screen of its Android app. Although these clips are silent, they use subtitles to get your attention and are enabled by default, so they can prove pretty irritating. To stop them, go to Settings, General and turn off 'Play as you browse'.



Switch off Autoplay to stop YouTube trapping you with suggested videos

can keep watching, even when you leave the site or minimise your browser to use other programs. You can get the same flexibility in Chrome by installing Popout for YouTube ([bit.ly/popyou446](http://bit.ly/popyou446)), which adds a pop-out arrow icon to the top-right corner of videos. Click this to open the player in a new window that you can drag wherever you like and resize as required. For Firefox, try the similar YouTube Popout Player ([bit.ly/firepop446](http://bit.ly/firepop446)).



Watch YouTube videos in a movable and resizable pop-out player

## WIPE YOUR YOUTUBE HISTORY

Click the History link in YouTube's left-hand menu and you may be surprised by the sheer volume and variety of videos you've watched and searched for over the last few weeks, months and years.

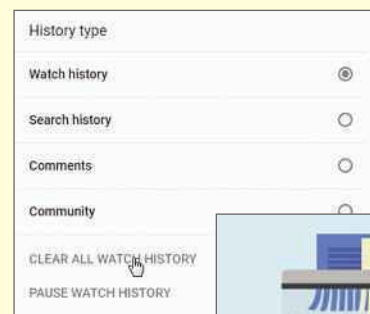
The chances are that some entries may also be embarrassing or baffling – silly or controversial clips that you played after a few drinks or abandoned after a few seconds – and you may not want Google to retain this information and use it to target you with related ads.

To wipe the slate clean, click the 'Clear all watch history' button and confirm you're sure you want to do so (it can't be

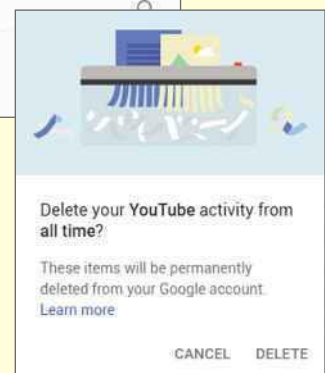
undone). Alternatively, you can delete unwanted entries individually or search for a specific video to remove it. You can also prevent YouTube from storing what you watch in future by clicking 'Pause watch history'.

To delete your searches, select 'Search history' under 'History type' and click 'Clear all search history'. You can also review and delete every comment you've ever posted on YouTube.

For a final scrub, go to your Google activity page ([myactivity.google.com](http://myactivity.google.com)) and choose 'Delete activity by'. Select YouTube from the drop-down menu, then 'All time' (or a shorter period if you prefer) and click Delete.



Clear your YouTube watch and search history to protect your privacy





## BEAT BBC iPLAYER RESTRICTIONS

### Watch iPlayer when you're outside the UK

It used to be relatively easy for British expats and holidaymakers to stream iPlayer programmes abroad by using a VPN, but the Beeb now blocks many tools with the message: "BBC iPlayer TV programmes are available to play in the UK only". This is partly to stop non-licence-fee payers enjoying BBC content for free and partly because the BBC co-owns the paid-for streaming service Britbox ([www.britbox.com](http://www.britbox.com)), which entertains our American and Canadian cousins with *EastEnders*, *Holby City* and the like.

However, there are still a few VPNs that allow you to access the iPlayer from outside the UK, with the proviso that you'll need to pay for a monthly subscription. If you only want to stream for a day or two, consider NordVPN, which offers a three-day free trial ([free.nordvpn.com](http://free.nordvpn.com)), doesn't require you to



**Get three days of iPlayer access from abroad using NordVPN's free trial**

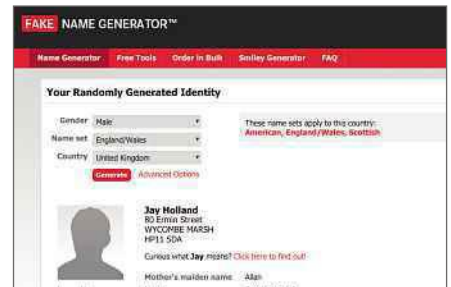
enter your card details and is available on Windows, MacOS, Android and iOS. It has 30 servers in the UK, to increase your chances of unlocking iPlayer from overseas, and costs from \$3.29 (£2.36) per month once your trial has finished.

Alternatively, there's ExpressVPN ([www.expressvpn.com](http://www.expressvpn.com)), which costs from \$8.32 (£5.97) per month, but offers a 30-day money-back guarantee, "no questions asked". Bear in mind that streaming iPlayer in this manner breaches the service's terms and conditions and could lead to your account being suspended.

### Use BBC iPlayer without signing in

As of June last year, the BBC has required all iPlayer viewers (and listeners) to create and sign into an account with the streaming service. This doesn't take long and keeps you signed in indefinitely on the current device, but you may still feel uneasy about handing over your personal info to the Beeb.

One way around this is to register using a false name, email address, postcode and date of birth provided by Fake Name Generator ([www.fakenamegenerator.com](http://www.fakenamegenerator.com)). This offers its own disposable email system, Fake Mail Generator, so you can confirm your bogus address. If you've already registered your real details with the BBC (as most iPlayer users will have), consider deleting your account and



**Delete your current BBC account and re-register for iPlayer with a fake one**

starting afresh – go to 'Your account', Settings and click 'I want to delete my account'. You will of course lose access to any downloads, favourites and other BBC preferences you have saved, and will need to remember your fake details when signing in on other devices.

### Try new features before everyone else

The BBC is constantly experimenting with new features and technology for iPlayer, to fix problems and enhance



**Become a beta tester to jump the queue for new features and fixes**

## BEAT RESTRICTIONS ON NETFLIX

### Control Netflix using your voice

Tired of having to pick up your phone, tablet or remote every time you want to play, pause or search Netflix? Then sit back and use your voice instead with the help of Google Assistant, which works in tandem with your Chromecast to respond to spoken commands such as "Ok Google, play *The Crown* from Netflix on my TV".

To set up voice control, open the Google Home app on your mobile device, press the Menu button and, under Google Assistant, tap 'More settings'. Select 'Videos and Photos', locate Netflix and tap LINK to link your Google account to the Netflix app. You can also choose Manage Profile to turn on Voice Match, so that Google will always access your Netflix account rather than other users'.

Amazon's latest Fire TV devices come with Alexa-powered voice remotes to find and play content on Netflix, or you can use your Amazon Echo to control the streaming box or stick. The Netflix app for Windows 10 ([bit.ly/netflixapp446](http://bit.ly/netflixapp446)) lets you stream TV shows and films hands-free to your PC, using Cortana.



**Stream and search Netflix using your voice instead of a remote**

### Boost playback speed and quality

If you're desperate to binge-watch the latest Netflix series but are pressed for time, why not whiz through episodes at four times the usual speed? That's just one of the handy hacks offered by Chrome extension Super Netflix ([bit.ly/super446](http://bit.ly/super446)), which lets you watch the streaming service exactly how you want.



**Get through shows on Netflix faster by speeding them up using Super Netflix**

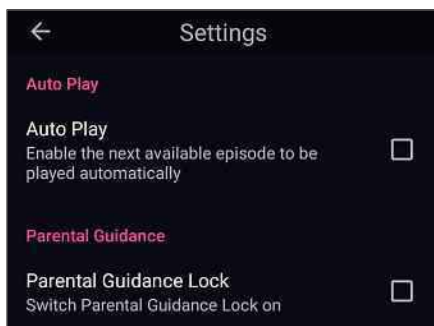
## iPlayer

your streaming experience. You can get ahead of the crowd and try these improvements before everyone else by signing up for the iPlayer beta programme, which is available on Android ([bit.ly/betadroid446](http://bit.ly/betadroid446)) and iOS ([bit.ly/betaios446](http://bit.ly/betaios446)), and for smart TVs and games consoles ([bit.ly/betaconnect446](http://bit.ly/betaconnect446)).

Notable features introduced through the iPlayer beta include offline viewing on mobile devices, programme recommendations and the Live Restart option for rewinding live broadcasts, while the current iOS beta fixes problems with failing downloads and glitches that caused the app to crash.

### Stop iPlayer autoplaying shows

The iPlayer automatically streams the next episode of a series once you reach the end of the current one. More annoying is when it autoplays



**Turn off autoplay to prevent iPlayer from streaming the next episode**

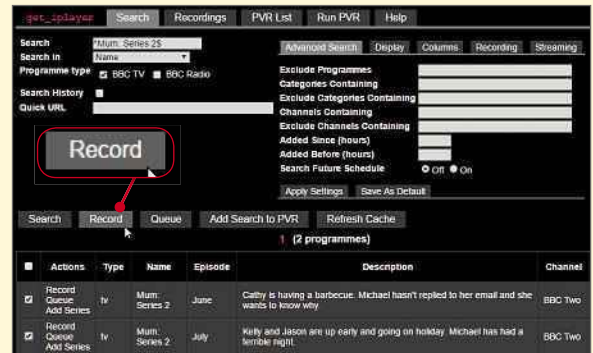
a programme it thinks you'll like, based on its recommendation system. Although you have 15 seconds to stop this happening when the episode's end credits roll, you may prefer to disable autoplay altogether.

### Keep downloads for more than 30 days

Regular readers will no doubt see the title of this tip and think "I bet they're going to recommend Get\_iPlayer ([bit.ly/getiplayer446](http://bit.ly/getiplayer446)) again". Well, yes we are, because there's never been another tool like it for downloading BBC shows to keep for as long as you want. It's certainly better than the Beeb's own iPlayer Downloads app, which not only limits your offline viewing to 30 days, but is slow and clunky to use. Get\_iPlayer's survival is remarkable in itself, considering the number of developers it's passed between, but it still works perfectly as an unofficial PVR for recording iPlayer content, and is frequently updated to beat the latest restrictions.

Some people are put off Get\_iPlayer by its confusing, command-line interface. For a friendlier view, launch the Web PVR Manager from the Start menu (or from the Setup Wizard), then either search for a programme to download or paste its web address from the iPlayer website. Click Record and the show will be saved in DRM-free MP4 format that you can watch in any media player.

You'll find full instructions for using Get\_iPlayer at [bit.ly/getinstruct446](http://bit.ly/getinstruct446). We'd recommend downloading the latest EXE version of the program directly from [bit.ly/getdirect446](http://bit.ly/getdirect446). Note that it no longer works in Windows XP or Vista.



**Get\_iPlayer's web version makes it easier to download BBC shows**

## NETFLIX

As well as speeding up and slowing down playback of TV shows and films, you can change the video bitrate to improve picture quality; adjust the brightness, saturation, and contrast to suit your visual needs; blur thumbnail images and episode descriptions to conceal spoilers when browsing Netflix; and control the volume using your mouse wheel.

Super Netflix even lets you skip programme intros automatically, to save you from repeatedly sitting through the opening credits.

### Search the global Netflix library

Netflix is now available in every country in the world except China, North Korea, Crimea and Syria, and the selection of TV shows and films offered by different 'territories' varies considerably. You can



**Find out which films and TV shows are on Netflix in 21 different countries**

discover which regions have specific titles available by using the unofficial Netflix online Global Search Tool (uNoGs for short, [unogs.com](http://unogs.com)). This lets you search for a movie, series, actor or director, or browse by genre, to view matching content from 21 Netflix services around the world, including

Australia, France, Japan, the Netherlands and the US. Click a result for more information and, if you can stream it in the UK, choose Watch Now to open it on Netflix. If not, uNoGs suggests paid-for VPNs, including Web User favourite NordVPN, that may unlock the content for users in the UK. It's worth checking this useful tool if you're about to go on holiday and want to know what to expect from the 'local' version of Netflix. Your account will adjust automatically to show your current country's choice.

### Save downloads to your SD card

One of Netflix's best features is the ability to download TV shows and films to watch offline via its Android, iOS or Windows 10 apps. The main disadvantage to downloading rather





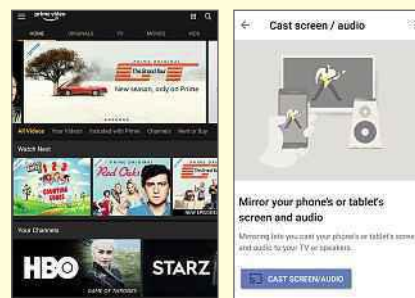
## STREAM AMAZON PRIME VIDEO TO YOUR CHROMECAST

Amazon's Prime Video service offers great films and TV shows, including original series such as *The Man in the High Castle*, *Sneaky Pete* and *The Grand Tour*. You can watch on your computer, smart TV, games console, mobile device and Amazon's own Fire TV box and stick – but you can't stream content via a Chromecast because Prime Video's app doesn't support Google's rival device.

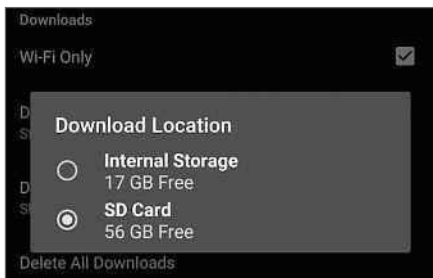
Happily, you can get around this restriction using Chromecast's screen-mirroring option. On your desktop, open the Prime Video website, then either right-click the page or click the three-dot menu button and choose Cast. Select your Chromecast from the 'Cast to' menu to stream the current tab – including any videos you play – to your TV. Make the player full-screen for the best viewing experience.

On your Android phone or tablet, install the Google Home app ([bit.ly/home446](http://bit.ly/home446)), then open it and choose

'Cast screen/audio' from the menu on the left. Select your Chromecast and your device's screen will be mirrored on your telly. You can now open the Prime Video app and start streaming/casting – the orientation of your screen should automatically switch to horizontal. If casting fails, go to Settings, Apps, Google Play Services, choose Permissions and ensure Microphone is set to 'on'.



Stream Amazon Prime Video to your Chromecast using a Google Home app



Save space on your phone by downloading Netflix content to an SD card

than streaming is that video files take up a lot of internal storage, which is a problem on low-end phones and tablets. Happily, you can save space on your Android device by downloading Netflix content to an SD memory card instead. To set this method as your default on your mobile device, open the Netflix app's main menu, choose App Settings, then Download Location and switch from Internal Storage to SD Card.

## Turn off foreign subtitles on Netflix

If you use a VPN to watch TV shows and films on other countries' versions of Netflix, many of which offer a better choice (see earlier tip), you may find your view obscured by subtitles that can't be turned off in the usual way. This often happens in regions where English isn't the first language, and means you're forced to watch content with distracting foreign text on the screen. The Chrome extension Unsubtitle for Netflix ([bit.ly/unsubtitle446](http://bit.ly/unsubtitle446)) lets you turn off the unwanted 'closed captions' simply by clicking its toolbar button. Naturally, it won't work when the subtitles are part of the actual show or movie.

## Make Netflix easier to browse

Netflix's layout is notoriously cumbersome to navigate, but you can bypass its frustrating layout by heading instead to New On Netflix UK



New on Netflix UK is a better-organised way to browse the Netflix catalogue

([uk.newonnetflix.info](http://uk.newonnetflix.info)). This excellent site lets you browse the entire UK Netflix catalogue, offering options to sort films

and TV shows alphabetically; search for content by title, actor or director; and filter results by genre and rating. Usefully, it also lists all the latest additions to the streaming service, as well as titles that are due to be removed soon.

We particularly like the Randomiser tool, which suggests eight selections for you based on criteria such as duration, rating, genre and certificate; and the Stats page, which reveals that there are now 5,102 titles to stream on Netflix UK. The site also provides viewer ratings for each entry, so you don't waste time on a dud. Once you find something you want to watch, just click the link to open it on the Netflix website. ■

NEXT ISSUE

on sale Wednesday 18 April 2018

# DOWNLOAD THIS

# ...NOT THAT!

We reveal the best free alternatives to outdated, overrated and ineffective software

## PLUS...

- **SEND MONEY ONLINE**  
Transfer cash quickly and easily without using PayPal
- **PREVENT PC PROBLEMS**  
Set up an early-warning system for hardware failure
- **MAKE IT EASY AS ABC**  
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# Does it REALLY work?

We test intriguing tech hacks from the web to discover if they're fact or fiction



## Fix stuck pixels with a damp cloth

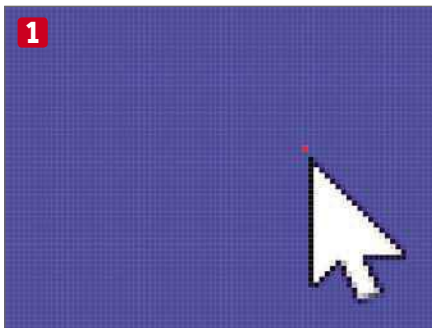
**Wayne Williams** tries to avoid buying a replacement monitor with the aid of a damp cloth, a pencil and some gentle rubbing

**Y**our monitor's screen may display several million individual pixels so a single stuck (or dead) one really shouldn't matter. However, once you spot it, you won't ever be able to unsee it – that tiny wrong-coloured dot will taunt you continually. Fortunately, you may be able to unstick it with nothing

more high-tech than a warm cloth.

Before we progress, it's important to explain the difference between a stuck pixel and a dead one. If your problem pixel is displaying a different colour from all the pixels around it (slightly changing hue as the colours around it change), then the pixel is stuck. If it's

permanently black, then it's probably dead. A stuck pixel, which can be red, green, blue or any combination of these colours, can be unstuck, but a dead one can't be brought back to life. That said, stuck pixels can sometimes look like dead ones, so it's still worth trying to unstick it.



*The LCD DeadPixel Test clearly highlights the problem pixel on our screen*

### How we tested it

Our first step was to give the entire screen a gentle clean, to make sure any problem pixels we'd identified weren't merely specks of dust. We then fired up our web browser, set it to full-screen mode and ran the LCD DeadPixel Test ([bit.ly/pixel446](http://bit.ly/pixel446)). The test displays pages with a solid background colour (black, white, red, green or blue) to make it easy to spot any stuck (or dead) pixels. **1**

We were already aware of one stuck pixel on our test monitor, and used the solid background to check whether there were any others. Having established that there was just the one, we took a blunt pencil and wrapped the point in a small piece of cloth, then lightly dipped the end in boiling water. We then carefully – and gently – applied pressure in a circular motion to the problem pixel, **2** taking care not to press too many surrounding pixels.



*Press the pencil's cloth-covered point on the stuck pixel and massage it gently*

The idea here is to massage the stuck pixel so that the liquid in its sub-pixels is spread equally and it lets through the right amount of light.

### The result

After a couple of attempts, we managed to unstick the pixel, but about 20 minutes later, it stuck again. We repeated the process a second time but – again – it only worked temporarily and the stuck pixel simply came back again, suggesting this problem isn't something that can be easily fixed. However, it's still worth trying as it may work for you.

Because this fix involves an element of risk (if you're not careful you could damage your screen), it should be treated as a last resort. We would recommend trying the JScreenFix method first (see boxout, below), or if your monitor is still within warranty, you could try returning it for a replacement.

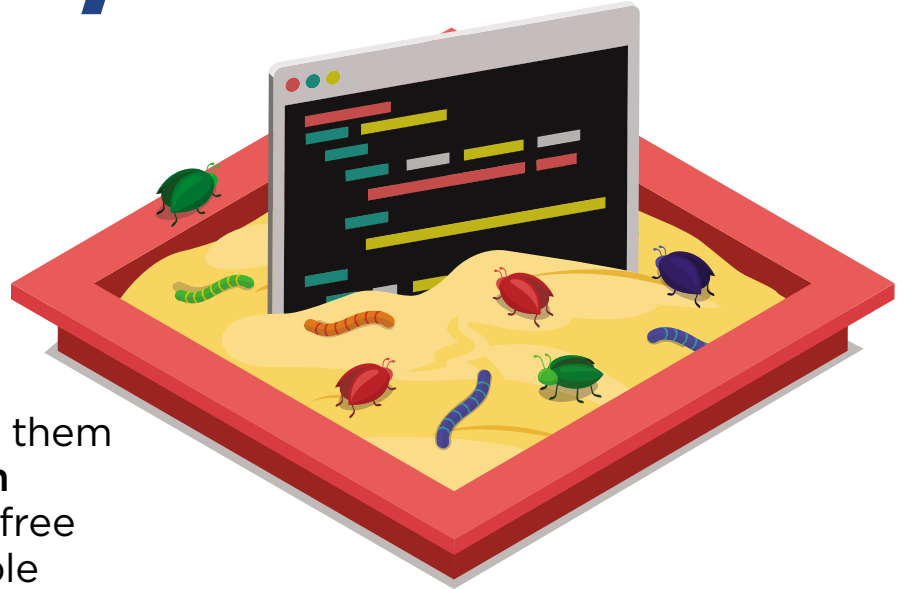
## TRY THE SOFTWARE APPROACH

Another way to tackle the problem of stuck pixels is to use a web-based solution such as JScreenFix ([www.jscreenfix.com](http://www.jscreenfix.com)). To use it, just click the Launch JScreenFix button and drag the pixel fixer (a square of continuously flashing and cycling pixels) over the problem area, then leave it there for around 10 minutes – or longer, if you're not in any hurry. JScreenFix's creators say it can fix most LCD or OLED screens and has a 60% success rate. Unfortunately, it didn't work for our stubborn stuck pixel.

*JScreenFix claims to unstick most problem pixels, so it's worth a try*



# Free sandbox tools that keep your PC safe



Running programs in an isolated environment stops them harming your PC. **Jonathan Parkyn** compares the best free sandboxing options available

**Sandboxie** | [bit.ly/sandboxie446](http://bit.ly/sandboxie446) | ★★★★★  
FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★☆

WebUser  
GOLD  
AWARD

## What we liked:

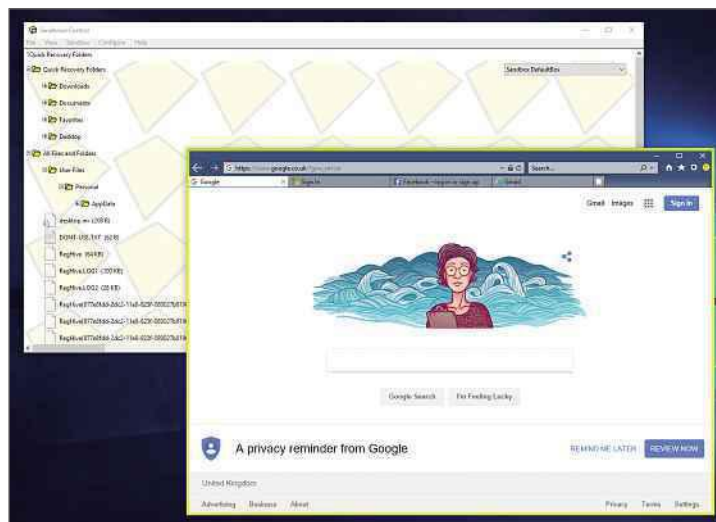
Sandboxie's motto is "trust no program" – a maxim that's worth keeping in mind, especially when

you're installing or running software from unknown sources. Whether a program is stuffed full of malicious code or just badly written, Sandboxie will render any software harmless with a few simple clicks.

Install Sandboxie and you'll be taken through a brief tutorial that explains the main functions of the tool. After this, you can sandbox a program by right-clicking its shortcut or EXE file and selecting Run Sandboxed. Alternatively, you can just drag and drop the program into the Sandboxie window.

Move your mouse over a sandboxed program and you'll notice a yellow border around the program window, which indicates that it's running in Sandboxie. You'll also see a hash symbol [#] by the program's name.

Beyond the basics, Sandboxie offers a number of very useful tools, including



the ability to transfer files quickly to and from the sandboxed environment – such as files you download via a sandboxed web browser, for example. You can also quickly kill running applications or delete the contents of your sandbox by right-clicking Sandboxie's notification-area icon, then selecting DefaultBox and choosing Terminate Programs or Delete Contents.

## How it can be improved:

After 30 days, Sandboxie will start presenting you with a nag screen every

time you use it, reminding you to upgrade to the paid-for version. That's because Sandboxie is actually shareware and, in theory, users are supposed to cough up for a licence (currently around £25) after the trial period ends. However, as long as it's for personal use, you can carry on using Sandboxie for free and the program will continue to function as normal.

Only a handful of high-end features (including the ability

to force programs to run in Sandboxie, and the option to run programs in more than one sandbox at a time) are exclusive to the paid-for version.

## OUR VERDICT

Lightweight, powerful and regularly updated, Sandboxie is by far the best dedicated sandboxing tool around. The free version's nag screens are a bit annoying, but worth tolerating.

## Shade Sandbox | [www.shadesandbox.com](http://www.shadesandbox.com) | ★★★★★

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

WebUser  
SILVER  
AWARD

### What we liked:

Shade does much the same thing as Sandboxie but on a simpler scale.

Once installed, it's very easy to use – just drag program shortcuts into the Shade window or right-click

and select 'Put into Shade'. Shade lacks some of Sandboxie's advanced features and customisability, but where Sandboxie can only force specific programs to run in a sandbox if you pay for the premium version, Shade remembers any application you've sandboxed and will run it in a sandbox every time, unless you explicitly tell it not to (by clicking 'Remove an application from Shade'). This is very useful if you have programs – such as older, unsupported tools – that you always want to run in isolation.

### How it can be improved:

Users on older PCs may notice some slowdown when sandboxing certain programs. Not all programs work well with Shade, either. Internet Explorer, in particular, slowed our test system



right down when we ran it in a sandbox.

Although it's free, Shade suffers from a somewhat convoluted installation process that requires you to obtain a licence key via email. It's a bit of a faff, but you only need to do it once.

### OUR VERDICT

It's basic compared with Sandboxie and seems to suffer from a few performance issues but, for the most part, Shade Sandbox provides an easy way to isolate programs you use frequently.

## VirtualBox | [bit.ly/virtualbox446](http://bit.ly/virtualbox446) | ★★★★★

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

WebUser  
BRONZE  
AWARD

### What we liked:

Technically speaking, VirtualBox is a virtualisation tool, not a sandboxing one. The idea is that you create a virtual PC – an entire pretend computer that runs within your real one. To all intents and purposes,

your virtual computer works exactly like a normal one, except that you can install and run any programs you like on it and they'll remain completely isolated from your real-life PC and your files.

VirtualBox can virtualise older versions of Windows, such as XP, so it's ideal for keeping older programs running. You can also take Snapshots, allowing you to revert your virtual PC to a previous state within a few clicks.

### How it can be improved:

VirtualBox can seem a little unfriendly at first, but it's easy to use once you've set up your virtual PC. If there's one drawback with VirtualBox (and similar tools), it's that you'll need an entire copy of the operating system you want to



run. That's okay if you happen to have a spare copy of Windows hanging around (along with a valid product code). If you haven't, then the cost of buying a new one (currently around £80 on Amazon) can make virtualisation a less attractive route.

### OUR VERDICT

VirtualBox provides a brilliant alternative to straightforward sandboxing, especially if you happen to have a spare copy of Windows you can install. It's great for keeping XP-era tools going beyond their sell-by date.

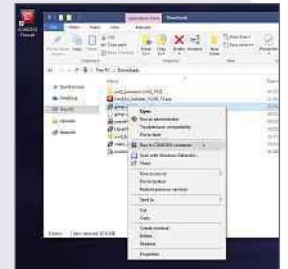
## BEST OF THE REST

### Comodo Free Firewall or Comodo Antivirus

[www.comodo.com](http://www.comodo.com) and [antivirus.comodo.com](http://antivirus.comodo.com)

Normally, we'd take issue with the amount of bloat that comes with Comodo's free security tools, but we'll admit that its inclusion of a sandboxing tool is actually rather useful.

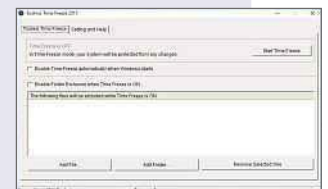
It comes as part of both Comodo Free Firewall and Comodo Antivirus. Right-click any program file or shortcut and select 'Run in Comodo Container' to sandbox it, but take care to deselect the many unwanted permissions and components Comodo attempts to foist on you during installation.



### ToolWiz Time Freeze

[bit.ly/timefreeze446](http://bit.ly/timefreeze446)

Time Freeze uses a clever type of virtualisation to sandbox your entire PC. Whenever you enable Freeze mode, it takes a snapshot of your PC. You can then



install any software, run any program or make any changes to your system – everything will be discarded when you next restart your PC. On the downside, a reboot is required every time you switch Freeze mode off.

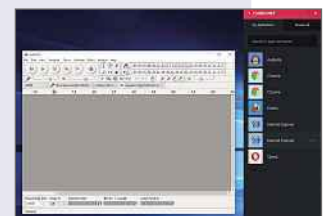
### Turbo.net

[turbo.net](http://turbo.net)

This tool takes a completely different approach, in that it has a bunch of programs already stored in the cloud – including Chrome, Firefox, media players and more.

Sign up for a free account, install the desktop launcher and you can run any of these programs in a

virtualised sandbox on your PC. With a paid-for account (£21 per month), you can run programs in the cloud – which is even safer!





# What's secretly killing your Wi-Fi?

Your home Wi-Fi can be slowed down by all kinds of household objects. **Wayne Williams** reveals the items that could be affecting the speed of your wireless connection



## Microwave oven

If you own a microwave oven, you may have noticed that your wireless signal drops considerably whenever you're using it to cook, reheat or defrost food. That's because microwave ovens leak interference in the 2.4GHz band – one of the two bands that Wi-Fi transmits on (5GHz being the other). Tests performed some years ago by the Farpoint Group ([bit.ly/farpoint446](http://bit.ly/farpoint446)) suggested that wireless data throughput could drop by 64% within eight metres of a microwave.



To avoid this particular problem, make sure your router is nowhere near your microwave and, when it's being used for cooking, stand well away when you access the internet. Even better, switch your router and devices to work on the 5GHz band and try changing the wireless channel you connect through. You can perform both of these tweaks via your router's settings page in your browser.

**Killer rating** 🐻🐻🐻🐻🐻

## Bluetooth

Devices that use Bluetooth to communicate, such as phones and smart speakers, can also interfere with



your wireless signal, but contrary to some articles you may read online, it's not likely to cause you any major problems. Bluetooth transmits over the 2.4GHz radio frequency (between 2.402GHz and

2.480GHz, to be exact), which – as we've already mentioned – is one of the bands used by Wi-Fi. However, this doesn't pose a serious problem because, unlike Wi-Fi, Bluetooth sends out signals over a short range.

Additionally, Bluetooth technology uses something called spread-spectrum frequency hopping to rotate between 79 randomly chosen frequencies, changing 1,600 times a second.

You can reduce the interference problem further – if you are experiencing issues, that is – by using the 5GHz band for Wi-Fi wherever possible and minimising the number of active Bluetooth devices nearby.

**Killer rating** 🐻

## Mirrors

Mirrors work by reflecting photons – rays of light – which bounce off the smooth surface of the mirror at the same angle. Mirrors don't only reflect light, however, they also reflect wireless signals, sending them back the way they came. This reflected signal then interferes with the signal coming from your router, degrading it before it reaches your device. This only becomes a problem if you have a large mirror (at least one metre in height or width)



in close proximity to your router. Small mirrors some distance away will have very little effect.

Clearly, the easiest way to fix this problem is to not have any large mirrors facing your signal. On a related note, you can actually use a large mirror to redirect your wireless signal around objects that might be getting in the way of your Wi-Fi, such as wall columns. However, it will take a lot of experimentation to get this right.

**Killer rating** 🐻🐻🐻

## Solid walls and furniture

Anything that a wireless signal has to pass through, be it walls, floors, doors or heavy furniture, can degrade its strength. Some materials are worse than others: wood, glass, and synthetic material don't put up too much resistance, but bricks, marble, and – surprise! – water have greater impact. Plaster and concrete provide a high level of interference, but even these are topped by metal, which can really mess



up your signal, especially if the metal object is super-shiny.

The trick to avoiding this kind of problem is to make sure your router is positioned somewhere central and away from anything in your home that could degrade the signal. So put your router on top of a desk, rather than under it, for example – and definitely not in a cupboard. The fewer objects around the router, the better. It should also go without saying that if you mostly connect to the internet on the ground floor, then that's the floor your router should be on. Finally, if your router has directional aerials (not all do), point them away from any problematic items.

**Killer rating** 🐼🐼🐼🐼

## Cordless phones

As we explained in our cover feature in Issue 444, landlines are becoming something of a rarity these days, as most people have at least one mobile phone that they can use to communicate with (and who wants to have multiple phone numbers to remember?). If you do still have a landline, and your cordless handset operates in the 2.4GHz or 5GHz range, then this, as you might expect, can cause interference when you're making a call.

The solution to this problem – aside from switching exclusively to a mobile phone – is to make sure you position yourself away from your router when you make a call.

**Killer rating** 🐼



## Christmas tree lights

Despite their festive glow, those sparkly fairy lights on your Christmas tree can – according to Ofcom ([bit.ly/tree446](http://bit.ly/tree446)) – reduce Wi-Fi performance by 25%. Even more, if the lights are blinking. Turn the lights off when you need better Wi-Fi, or connect to the internet (or stream video) away from the tree. On the plus side, you've got another eight months before this is going to be a problem!

**Killer rating** 🐼🐼



## Your neighbours

If your neighbour's Wi-Fi signal overlaps yours, it could have a significant impact on your connection speed, especially if their Wi-Fi is stronger – for example, if they have an 802.11ac router that backs onto a shared wall. To overcome this problem, you can try changing the channel in your router to one that's different from theirs.

You'll need to log into the router settings to do this. You can use guesswork to figure out the best channel, but a smarter option is to use Acrylic Wi-Fi Home ([bit.ly/acry443](http://bit.ly/acry443)), which won our Gold Award in Issue 443.

## IS YOUR WI-FI KILLING YOU?

Back in 2007, a BBC1 *Panorama* investigation found that RF (radio frequency) radiation levels in some Wi-Fi-enabled schools were up to three times higher than the levels emitted by a typical mobile-phone mast. This raised a lot of concerns at the time, and was especially worrying for parents. Some teachers even went so far as to suggest that Wi-Fi should be banned in schools until its possible dangers had been fully investigated.



For some people, these fears still exist, and Public Health England (PHE) recently confirmed that “people using Wi-Fi, or those in the proximity of Wi-Fi equipment, are exposed to the radio signals it emits and some of the transmitted energy in the signals is absorbed in their bodies.”

So should you be worried about Wi-Fi putting your health at risk? In short – no. PHE says that there is no consistent evidence to date that exposure to Wi-Fi signals adversely affects people's health. Also, the signals are very low power and the frequencies used by Wi-Fi are broadly the same as those from other RF devices such as radios, TVs and mobile phones.



Launch this excellent free tool and it will show you all the SSIDs (networks) in range and the channel that they are using. Handily, you can sort the list by channel to find the least congested one, then switch to it.

**Killer rating** 🐼🐼🐼





# Practical WebUser

16 pages of workshops, tips, projects and problem solving

## Improve your digital photos for free using Darktable

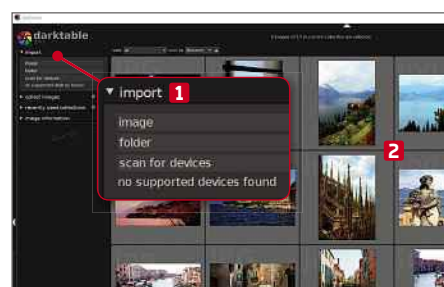
Darktable is a free, open-source photo editor, similar to Adobe Lightroom. Here's how to use it

Darktable: [www.darktable.org](http://www.darktable.org) | ⌚ 20 mins | 🖥️ 7, 8, 10 🍏 🐧

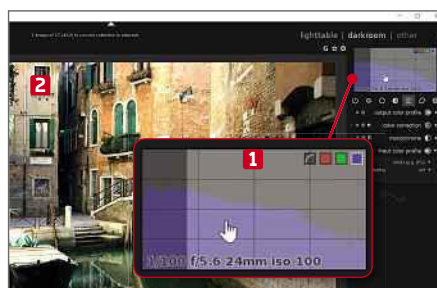
**A**dobe Lightroom ([bit.ly/liro446](http://bit.ly/liro446)) is an excellent photo-editing tool that can edit, organise and share your images. However, you need to sign up for a subscription to use it, at a cost of at least £9.98 a month.

Darktable is an excellent free alternative. Unlike Lightroom, it doesn't offer cloud storage, but it does provide

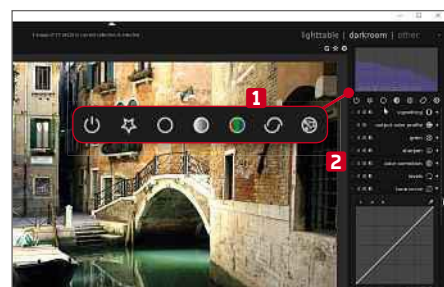
all the editing features you are likely to need, including RAW processing, professional colour-management, a powerful export system and a wealth of highly configurable editing tools. It also offers 'non-destructive' editing throughout, which means you can make lots of changes to a photo without overwriting the original.



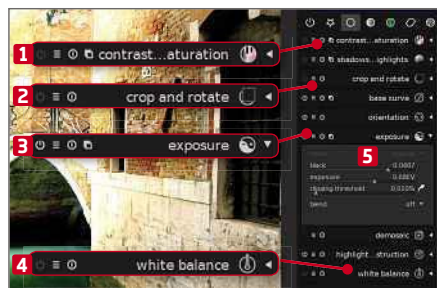
**1** To get started, expand the 'import' option **1** and add individual photos, folders or scans from connected devices, such as a memory card containing images. In the window that opens, navigate to your content, select it, and click Open. Thumbnails of the images appear. **2**



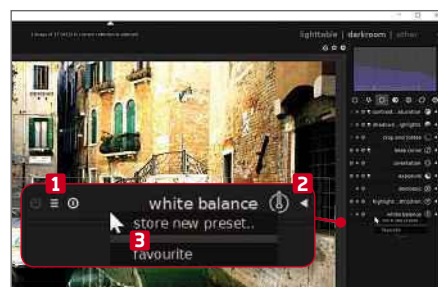
**2** Double-click an image to edit it. A histogram window appears at the top of the panel on the right. **1** Click and drag the right-hand side of the graph to change the photo's exposure; or on the left-hand side to change the black point. The changes you make are reflected instantly in the main window. **2**



**3** All the editing tools you'll need are accessible in the right-hand sidebar. You can choose to view only active modules, favourites, basic group, tone group, colour group, correction group or effects group. **1** Clicking a button once shows only the tools on offer there, **2** while clicking twice displays every tool.

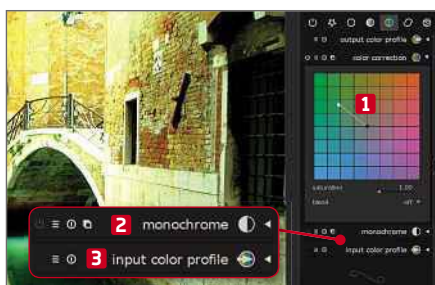
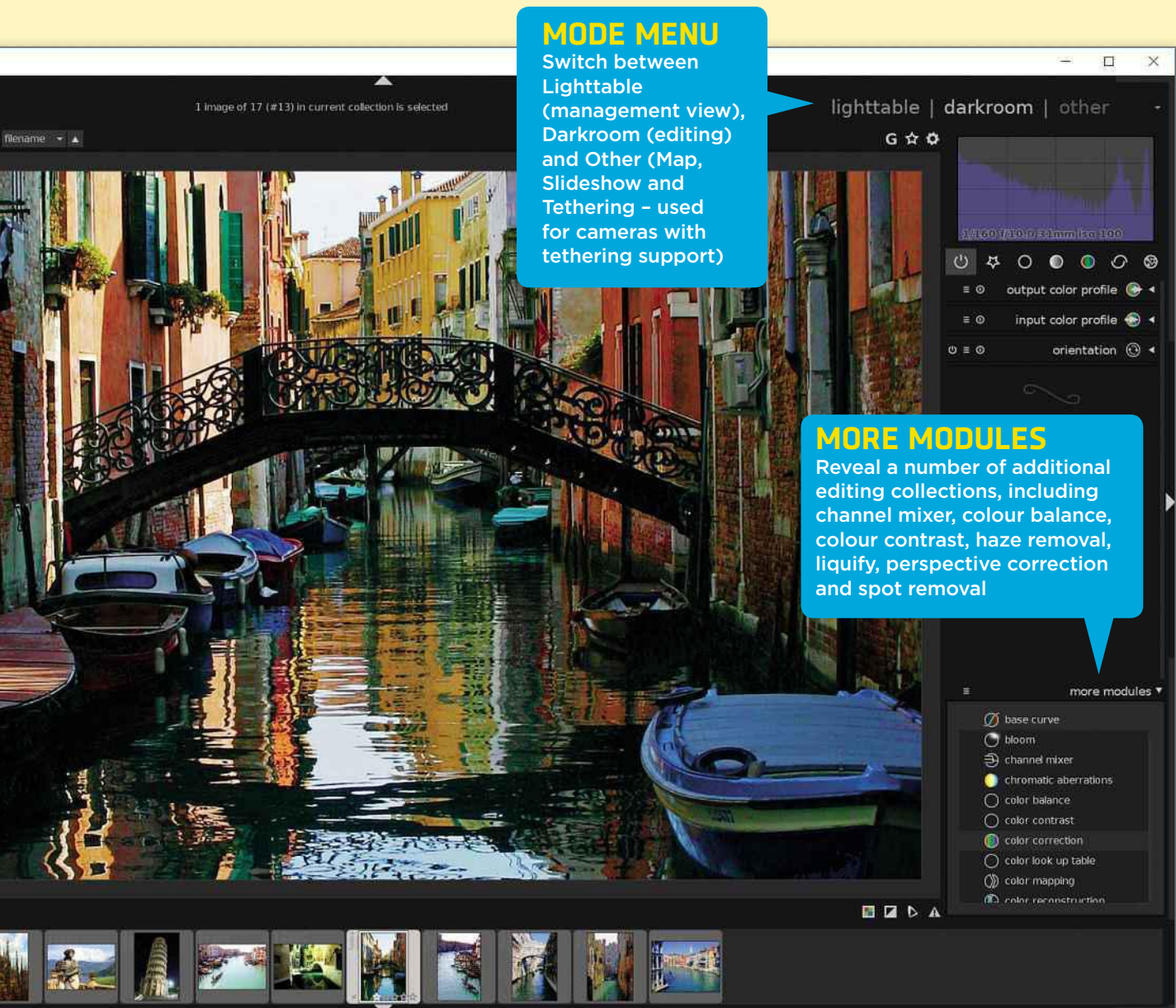


**4** The basic tools section is the best place to start. From here, you can adjust the brightness, contrast and saturation; **1** crop and rotate the image; **2** adjust the exposure; **3** and alter the white balance. **4** Selecting a tool displays the controls for it. **5** You can make as many changes you like.

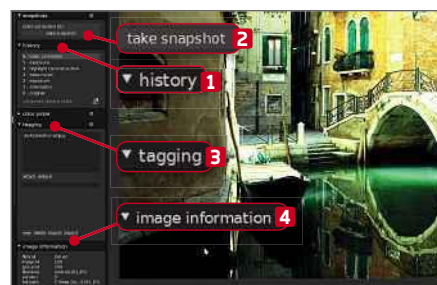


**5** Buttons to the left of each effect **1** let you toggle it on or off, apply presets (if available), reset the tool's parameters and create new instances of that effect (not all tools allow this). The menu arrow **2** lets you expand or hide the tool's controls. Right-clicking lets you favourite the tool or store a preset. **3**

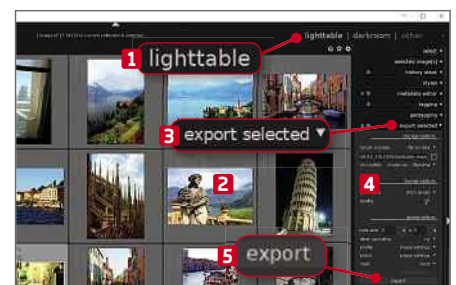




**6** The tone group lets you adjust levels and curves; the correction group can sharpen and apply lens correction (you must specify your camera's lens and make). Drag the line **1** in the colour group to apply colour corrections. You can switch to monochrome **2** or choose a different input colour profile. **3**



**7** The 'history' pane **1** lets you step back through your changes. You can take snapshots at any time, **2** which lets you compare your images at different stages. You can view and add tags, **3** and explore image data, such as the make and model of camera the picture was taken with, and the aperture and exposure. **4**



**8** You'll notice there's no obvious Save button. That's because your changes are automatically recorded in Darktable so you can pick up where you left off. To save the finished image, click 'lighttable', **1** select your photo **2** and go to 'export selected'. **3** Customise the details **4** and click 'export'. **5**



# Streamline Windows by removing unnecessary junk



Auslogics Windows Slimmer: [bit.ly/wsli446](http://bit.ly/wsli446) | ⌚ 60 mins | 🖥️ Windows XP, Vista, 7, 8, 10

## EXPERT TIP

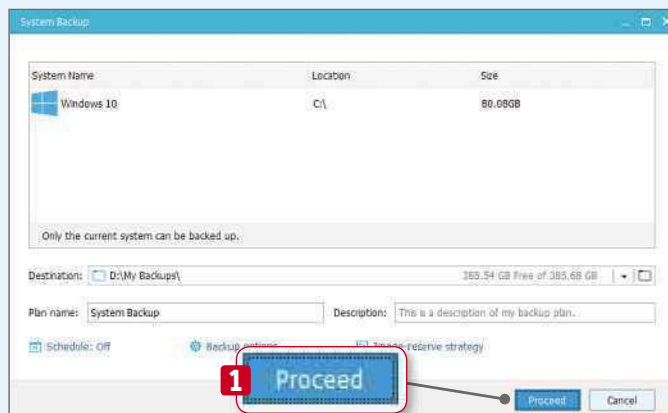
### Andy Shaw says

Although it sounds promising, the Advanced Tools section is just a link to download Auslogics' cleanup software, so avoid this unless you really want it. Also, most of the menu options at the top of the window lead to adverts for other programs, so you're best off just sticking with the three main options available from the main program window, all of which are completely safe and useful.

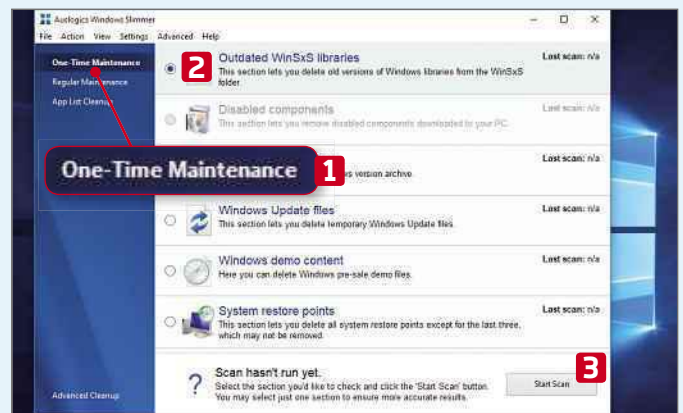


The latest high-spec PCs and laptops can easily handle Windows' increasingly bloated size, but if your older computer is getting slower and more encumbered with every update, there's a lot of unnecessary baggage you can dump by turning off features and trimming programs and apps. However, you have to know where to start.

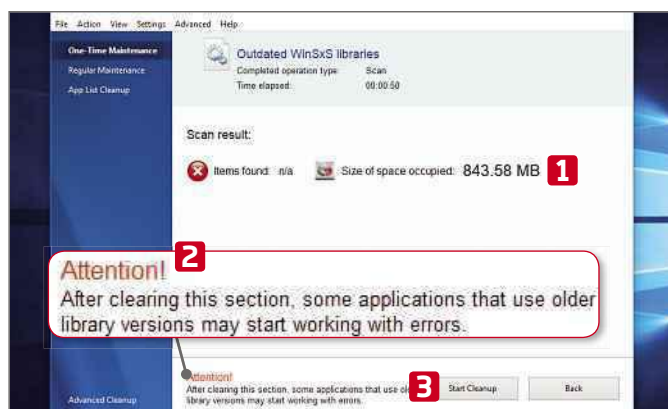
Auslogics has made the task easier by launching Windows Slimmer, which brings together a trio of useful tools to remove the things you don't need. Take note that this software offers to install extra programs you may not want, which helps to keep Windows Slimmer free but may trigger warnings in security software. They're simple to avoid if you pay attention during installation - just untick and decline the BoostSpeed, Driver Updater and Yahoo options.



**1** Before you start, make a complete backup of your operating system. Any tool of this type is thoroughly tested, but it's impossible to guarantee its stability on every configuration of PC and yours might be the one that breaks it. Download EaseUS Todo Backup Free ([bit.ly/easu446](http://bit.ly/easu446)) and perform a System Backup. **1**



**2** Before it can start making any changes, the software needs to know what you've got installed on your PC. Select One-Time Maintenance **1** and choose one of the options from the list, such as 'Outdated WinSxS libraries'. **2** Click the Start Scan button. **3**



**3** The software will scan for that particular problem, looking for things it can remove. Once it's complete, you'll see an information page explaining how much space you could save **1** and whether there are any risks involved. **2** If you're happy to go ahead, click Start Cleanup. **3**



**4** Work your way through the list of options, scanning and cleaning as you wish. There are tools for removing old versions of Windows, **1** Windows Update files, **2** useless demo content **3** and system restore points, **4** though you can't remove the three most recent points. Anything that's greyed out **5** isn't available for scanning.





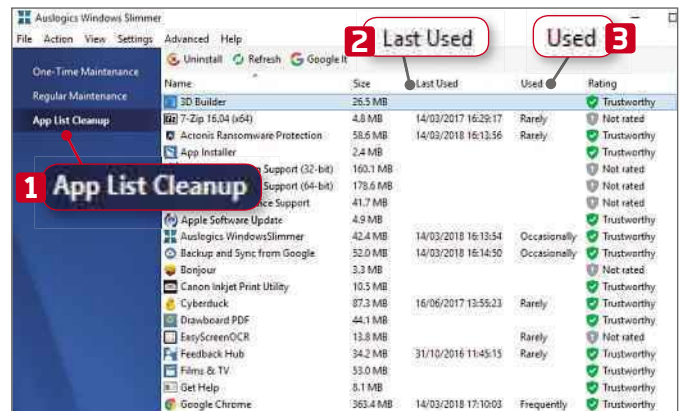
**5** The Regular Maintenance section **1** works in a similar way, except you can scan for as many of these items as you like in one go by ticking the boxes. **2** Start off by ticking all of them, then click the Start Scan button. **3**



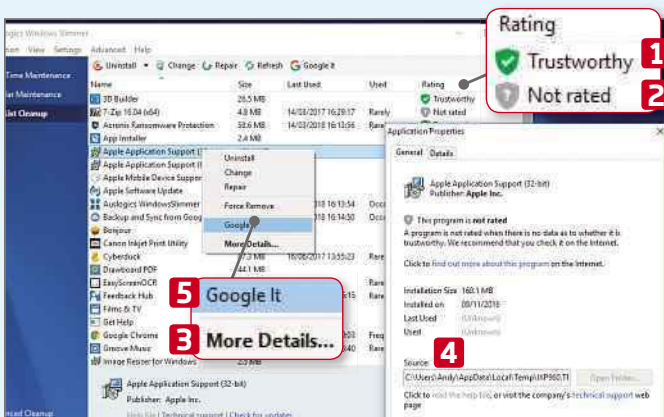
**6** When the scan has finished, the results appear on the same page. A green tick **1** means there's nothing to remove, while a red cross **2** shows that some elements can be cleaned. Click the down arrow **3** to see details of exactly what's going to be deleted.



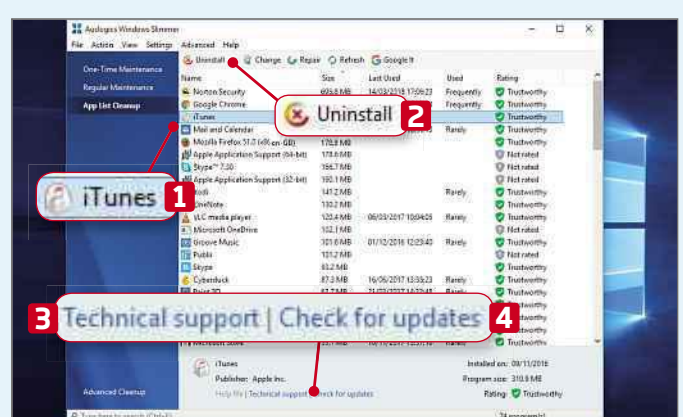
**7** Deselect anything you don't want to clean by unticking the box next to it, **1** then click Start Cleanup to remove the files. **2** When the job's complete, you can Rescan or go back to the previous page. You can also click the 'See full report' link, which will open in a browser and show every file that's been deleted.



**8** The final option is the App List Cleanup, **1** which shows all the programs and Windows Store apps on your PC so you can check whether you need them. The Last Used column **2** can help identify things you haven't used in a long time. If it's blank, you may have never used it. The Used column can also help with this. **3**



**9** Auslogics gives each program a rating, so you can see what's Trustworthy. **1** If an item isn't rated, **2** it doesn't mean something's bad – just that it hasn't been tested. You can right-click a program to get More Details, **3** such as where the file is kept. **4** To search the web for further information, right-click an item and choose Google It. **5**



**10** Once you've found something you want to get rid of (in our example, we're going to remove iTunes), select it **1** and click the Uninstall button. **2** There are a few extras in the description at the bottom, including a link to technical support **3** and the option to check for updates to the software. **4**





# Send videos and photos to YouTube and Facebook

**M**ovavi Share Online is an uploading tool that lets you send photos and videos directly to YouTube, Facebook, Amazon S3 or FTP servers. It simplifies the upload to just a few mouse clicks, which makes it much quicker and easier

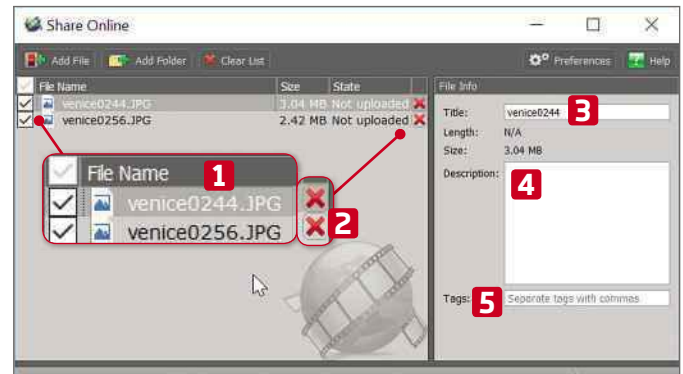
than visiting each of the respective sites and uploading from there, particularly if you want to send your files to more than one place.



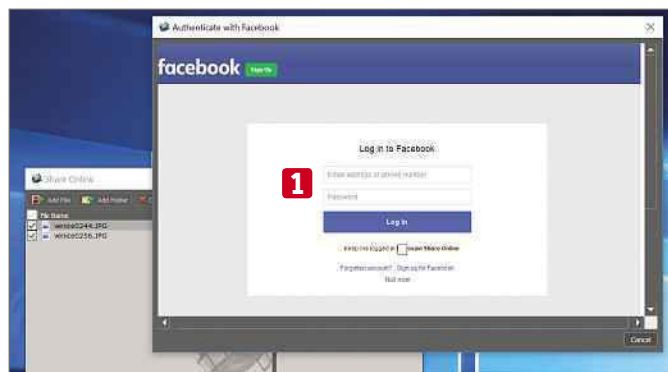
**Movavi Share Online:** [bit.ly/mov446](http://bit.ly/mov446) | ⌚ 20 mins | 🖱️ Windows XP, Vista, 7, 8, 10



**1** Share Online is straightforward and easy to use. Simply drag the photos or videos you want to share to the program's interface. **1** Alternatively, you can click the buttons to add a file **2** or – if you want to share multiple items at the same time – a folder. **3**



**2** Items you add appear in a list. **1** You can remove any you don't want by clicking the corresponding red X. **2** Click an item to change its name in the File Info window, **3** write a description **4** and add some tags, **5** separating each one with a comma.



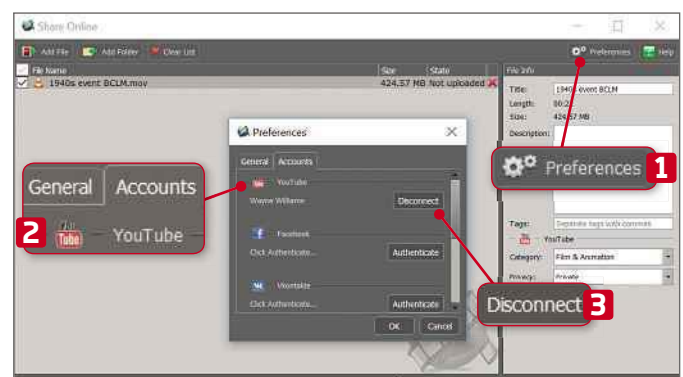
**3** Choose the site or service you want to upload your content to by clicking the relevant button. From left to right, these are YouTube, Facebook, VKontakte (a Russian social network), Amazon S3 and an FTP server. A login page for your chosen place opens in a new window. **1**



**4** To post content on Facebook, log in with your username and password, and choose whether to remain logged in via the program. Click the 'Log in' button, then choose who can see the photos you post on the site – Public, 'Friends of friends', Friends, 'Only me' or Custom. **1**



**5** Uploading a video to YouTube is a similar process. Log in with your Google account details, select the video and fill in the title **1** and description. **2** Add tags, pick a category **3** and set the privacy level (Private or Public). **4** Click Upload **5** to send the video to YouTube.



**6** If you have an S3 account, you can log in with your Bucket address, access key and secret access key. For FTP, enter the server host name, username and password. You can specify an optional directory. The Preferences button **1** lets you manage saved accounts **2** and disconnect unwanted ones. **3**



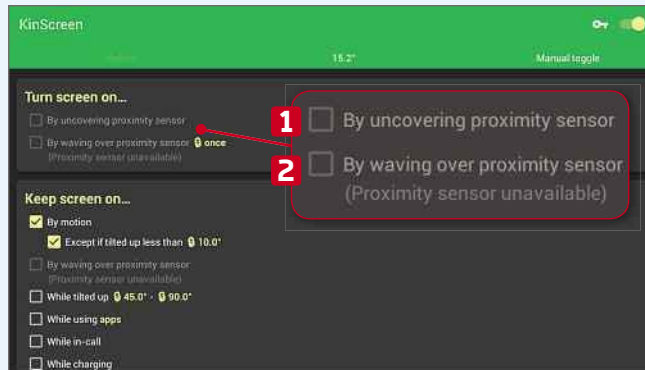
# Control how Android wakes up and stays awake

**M**obile devices always seem to switch off at the wrong time – just as you're reading a tricky bit of a recipe with dough-covered hands or you're wondering what song is playing while doing the washing up. KinScreen helps

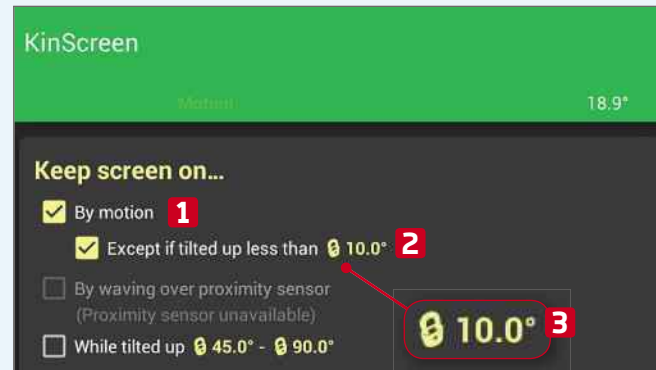
you avoid the inconvenience of having to touch your screen, either by reactivating with a wave or a nudge, or by not switching off if certain conditions are met.



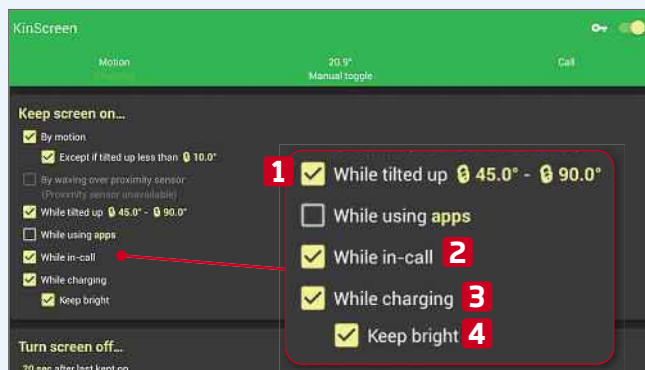
**KinScreen:** [bit.ly/kins446](http://bit.ly/kins446) | 10 mins | **Android 4.1+**



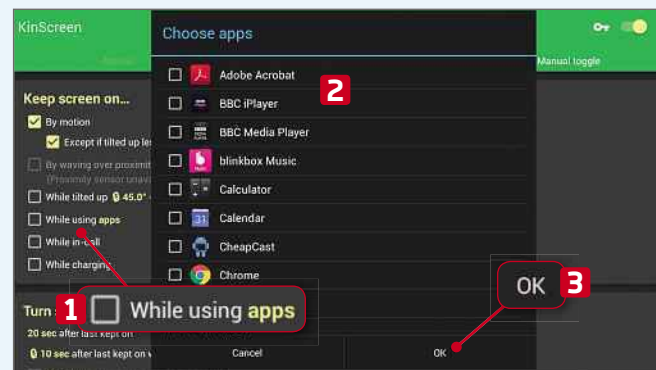
**1** A proximity sensor switches off a phone's screen when you hold it to your head to make a call. If your device has one, KinScreen lets you use it to activate your device, by taking it out of a pocket, for example; **1** or by waving at it **2** if it's switched off and your hands are dirty or busy.



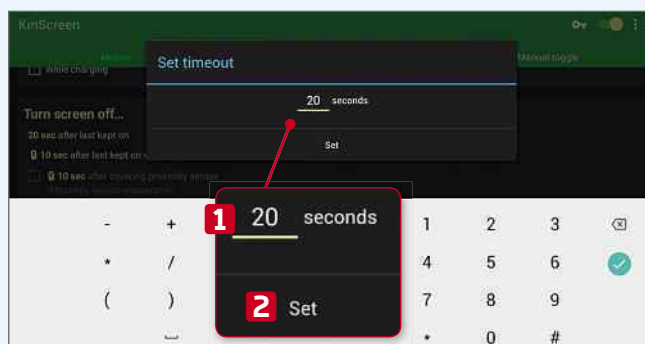
**2** You can keep the screen on 'By motion', **1** simply by holding it. To override when the phone is flat on an unstable surface, such as a train table, tick 'Except if tilted up less than 10.0°'. **2** The lock icon **3** indicates that you can only change the angle if you pay for an upgrade.



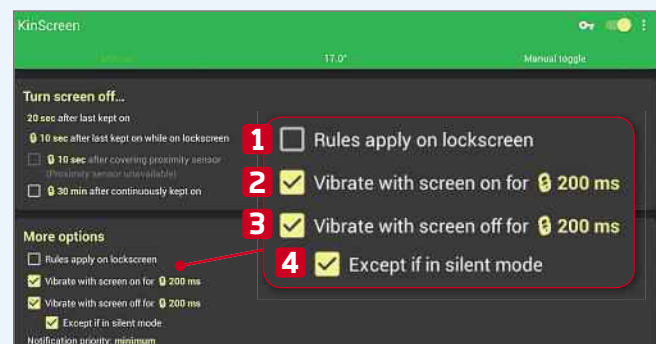
**3** You can also keep the screen on when it's upright – for example, propped up on a stand in the kitchen; **1** while you're making a call; **2** or while the device is plugged in. **3** The latter option comes with a sub-option, which can be used to keep the screen at its current brightness. **4**



**4** Tick the box next to 'While using apps' **1** to bring up a list of all the apps on your device. **2** Tick the box next to any apps that you'd like to keep the screen on, even when the device is left unattended. Tap OK. **3**



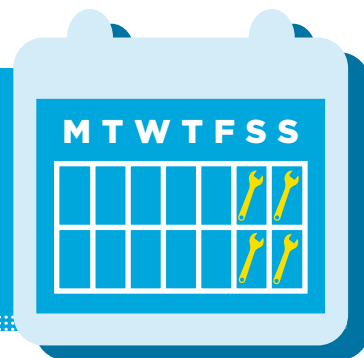
**5** In the 'Turn screen off' section, you can set the length of time before the screen switches off by tapping '20 sec' and changing it to a new value. **1** Tap Set. **2** You can also set the screen to switch off when the proximity sensor is covered and after 30 minutes of being left on.



**6** The 'More options' section lets you apply any of these rules to the lockscreen, **1** as well as when you're actually using the device. You can also set the device to vibrate briefly when the screen switches on **2** or off, **3** and set whether this changes if you're in silent mode. **4**

# Weekend Project

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



How to...

## How to safely set up a second-hand device

Buying a second-hand laptop, tablet or phone? **Wayne Williams** shows you how to make sure it's free of unwanted baggage

If you're not bothered about owning the very latest cutting-edge tech, or if money's tight and you enjoy the thrill of a bargain, snapping up a second-hand PC or smartphone can save you a small fortune. Buying a used device is not without risk, however. If the seller hasn't taken steps to properly wipe it, you could end up

with their personal data or, worse still, some form of malware which could end up stealing *your* personal data.

In this issue's Weekend Project, we detail the steps you need to take to make sure that your new purchase isn't encumbered with any unwanted leftovers, so it's completely safe to use.



### PREPARE A SECOND-HAND PC



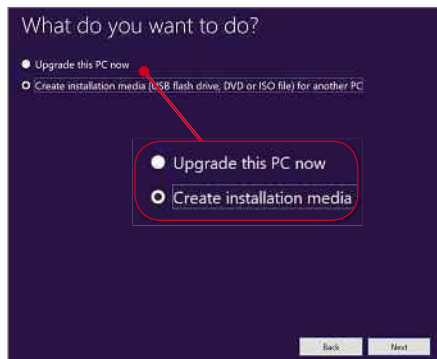
If the person you bought the computer from has prepared it properly, when you switch it on you should be faced with either a blank, formatted hard drive or the Windows Out-Of-Box Experience (OOBE), ready to guide you through the Windows setup procedure. If, however, the PC boots straight to Windows, you'll

want to wipe it and start afresh. It may seem convenient to switch on a new (to you) PC and boot straight into Windows, so you can get on with customising things to your taste and start using it with the minimum of fuss, but a second-hand PC could contain all kinds of hidden nasties, such as keyloggers. If the PC comes with a copy of the

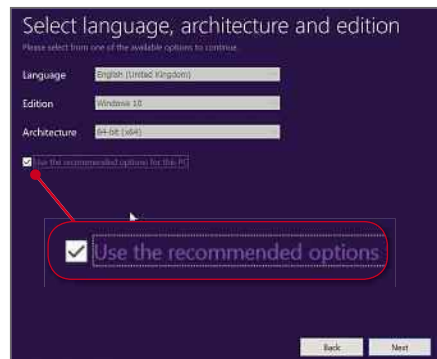
operating system on a DVD, you can use this to perform a clean install. However, make sure you've been supplied with an official installation disc because a copy burned to a CD or DVD with the key scrawled on it could be equally dodgy.

If you have your own Windows installation disc, you can use that or – better still – download the latest installer

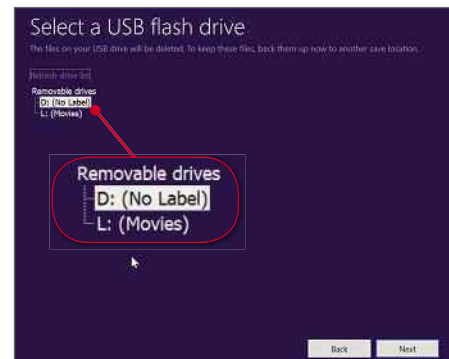




Microsoft's Media Creation Tool downloads a fresh copy of Windows 10 for your PC



It automatically chooses the version for your PC but you can untick it if it's wrong



Make sure you select the correct USB flash drive from the list

from Microsoft. To do this, download the Media Creation Tool from [bit.ly/dlwd446](http://bit.ly/dlwd446). Run the file and agree to the 'Applicable notices and license terms'. You'll be offered two choices: upgrade the PC you're on to the latest version of Windows 10 or create your own installation media. Since we'll be using this for a clean install, select the latter. Click Next and select the language, edition (the one that matches the Windows licence you have) and architecture – 32-bit, 64-bit or both.

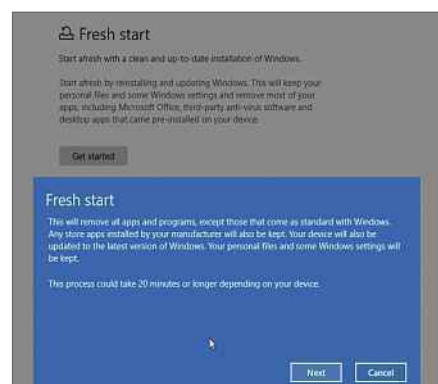
Click Next and choose either 'USB flash drive' or 'ISO file' as your installation media. If you select the latter, you'll need to burn it to DVD later. Click Next and the tool will download the file. If you opted for the USB option, you'll need to select your drive from the list. This drive will need to be at least 8GB in size and it's important to note that the process will erase any files on it, so make sure you back up anything you need. Click Next, then Finish. We show you how to install a fresh version of Windows in our Mini Workshop, below.

If you'd rather just refresh the OS,

wiping the personal data but keeping the existing version of Windows, follow our Mini Workshop on page 61.

## Find the Windows 10 key

If the PC has an activated copy of Windows 10 running on it but you don't have the accompanying licence key – which you'll need if you plan to do a format and reinstall – you can use ProduKey (search for it at [www.nirsoft.net](http://www.nirsoft.net)) to find it for future reference. The program doesn't require installation – just



run it and it will display the key used to activate Windows, as well as your current version of Microsoft Office, if it's installed.

## Refresh Windows 10

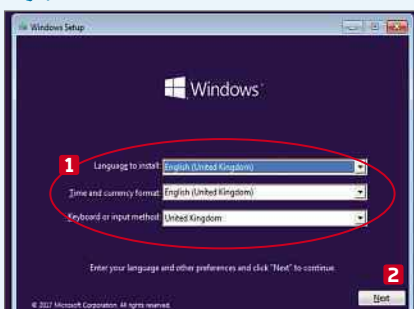
Alternatively, Microsoft offers a tool you can use to install a clean copy of the latest version of Windows 10 Home or Windows 10 Pro, which removes any additional programs that came installed on the PC. This works in much the same way as the Reset option built into Windows 10, except it downloads a copy of the OS from the internet and then installs it.

To get the tool, open Settings, go to 'Update & security' and click Recovery. Click the 'Learn how to start afresh with a clean installation of Windows' link under 'More recovery options' and download the tool from the page that opens. You can also download it directly from Microsoft ([bit.ly/afresh446](http://bit.ly/afresh446)).

*Fresh Start is another way to refresh your PC, but it preserves old personal files and some settings*



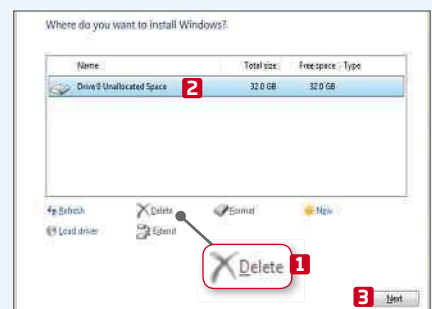
## MINI WORKSHOP | Perform a clean Windows 10 installation



**1** Assuming you're installing Windows 10 from a USB flash drive created using the Media Creation Tool, you'll need to insert the drive into a spare port and boot from it. The setup screen will load. Select the language, time and currency format, and keyboard or other input method. **1** Click Next. **2**







**2** Click the Install Now button. If you have a product key, enter it. If you don't, but your PC was running an activated version of Windows, you can select 'I don't have a product key'. Select your version of Windows and agree to the licence terms. Click the option 'Custom: Install Windows only (advanced)'. **1**



**3** If Windows is installed, select the partition it's on and click Delete. **1** Select the empty drive (Drive 0 Unallocated Space) **2** and click Next. **3** This step is the same even if you have a blank drive. The installer will wipe the drive and perform a clean installation. You can now get Windows set up how you want it.

# Broadband Deals

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2		EE: Broadband	<b>£28.50</b> (£19.00 for 18 months)	<b>18</b> months	<b>17Mbps</b> max speed	∞ unlimited*	<b>£228.00</b>
3		Sky: Broadband	<b>£28.99</b> (£20.00 for 12 months)	<b>12</b> months	<b>17Mbps</b> max speed	∞ unlimited	<b>£240.00</b>
4		Virgin: Broadband	<b>£48.00</b> (£29.00 for 12 months)	<b>12</b> months	<b>50Mbps</b> max speed	∞ unlimited*	<b>£348.00</b>

Terms & Conditions apply - see ISP sites for details

\* Fair-usage or restriction policy applies.

Data supplied by [www.broadbandgenie.co.uk](http://www.broadbandgenie.co.uk). Correct as of 22 March 2018.

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## PREPARE A SECOND-HAND PHONE OR TABLET

It's very easy to prepare a phone or tablet for sale – you just need to use the built-in options to wipe the contents and reset it to the factory settings. This should be how you receive a newly bought second-hand device but when you turn it on, it may start up and be immediately ready to use. As with the PC, there's the possibility that the device could contain malware, but it could also contain apps you don't want, and may even be missing apps that come as standard. Fortunately, this is easy to fix – just take the same steps the seller should have done to wipe the contents and go back to the defaults.

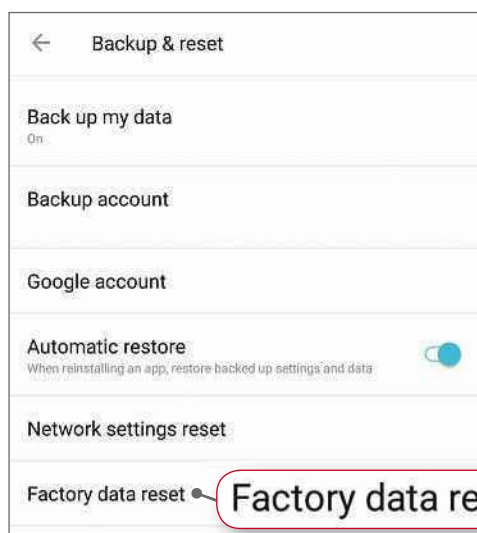


To reset an iPhone or iPad, go to Settings, General. Scroll to the bottom of the screen and tap Reset. From here, you can choose any of the following options:

- Reset All Settings
- Erase All Content and Settings
- Reset Network Settings
- Reset Keyboard Dictionary
- Reset Home Screen Layout
- Reset Location & Privacy

*Wiping an iPhone or iPad is very easy and doesn't take long*

Select the second option – Erase All Content and Settings. You'll be prompted to enter your passcode and Apple ID to complete the reset process.



To reset an Android device, open the Settings menu and tap 'Backup & reset' under System. Tap 'Factory data reset', then view the information that appears on screen and tap 'Reset phone' (or 'Reset tablet'). You will need to enter the pattern, PIN or password used to unlock the device. Tap 'Delete everything' to remove all data from the internal storage. When it's done, reboot your device.

*You can wipe an Android device ready for setting up afresh*



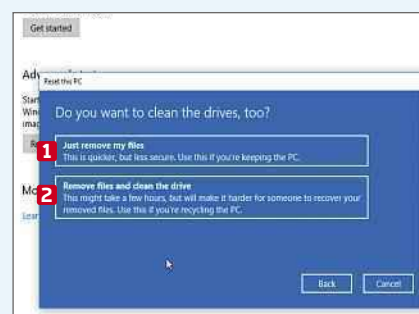
### MINI WORKSHOP | Reset a Windows 10 PC



**1** If Windows 10 is already running on your recently acquired PC and you can't be bothered to go through the hassle of a clean install, there is another option: reset the operating system. This will wipe everything and give you a fresh copy of Windows. Go to Settings, Update & Security and click Recovery. **1**



**2** The option to 'Reset this PC' appears. Click the 'Get started' button **1** and a new window pops up, offering you the choice to 'Keep my files' **2** or 'Remove everything'. **3** Select the latter option. This will remove any personal files on the PC, as well as non-standard apps and settings.



**3** You'll now be given the choice to 'Just remove my files' **1** or 'Remove files and clean the drive'. **2** You could opt for the first choice, but it's better and more secure to just wipe everything and start over. Click the Reset button on the final screen and wait for the software to do its work.

## NEXT ISSUE

**How To...** Get new Android P and iOS 12 tools now

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# Web User Masterclass

OneDrive's mobile apps have been updated with new tools to enhance your Windows 10 experience. Our experts explore the highlights

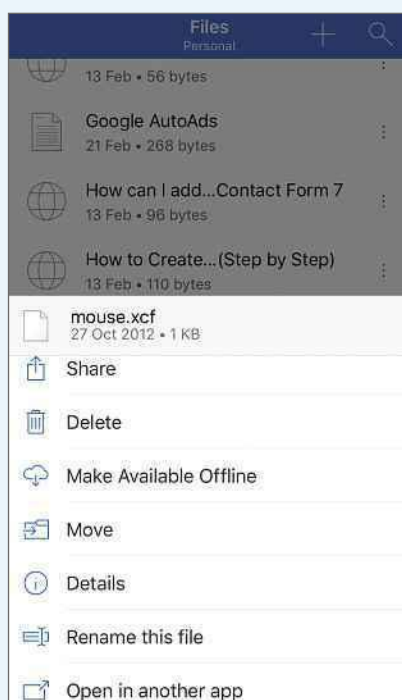
## View file and folder actions



**A** recent update to the OneDrive mobile app has made it easier to see which actions can be performed on files and folders. To the right of or below each file and folder is a menu button (represented by three vertically aligned dots). Tap it to display a context menu that lists all the actions that can be applied.

Many of the menu actions are common to all files and folders, such as renaming them, moving them, saving them to the device, keeping them offline and sharing them with other people. However, some file types have special actions. For example, a photo offers the option to add it to a photo album. Press the 'i' in the top-right corner of the context-menu panel to display additional information about the file or folder.

*Press the menu button to see a list of file and folder actions*



you could only use portrait view). The OneDrive app can view 130 different file types, so if you come across a file you can't open on your PC, try putting it in your OneDrive folder and see if it opens on your mobile device.

## Send files to other apps

If you have a file stored in OneDrive that you want to use in another app, tap the menu button and select Share.

In Android, pull up the screen to show all the apps that can accept the file and tap the one you want to use. On Apple devices, swipe left and right over the two rows of icons and select the one you want.



*To share files with another app on your device, select it from the Share menu*

## Share files with others

Files added to OneDrive on your PC automatically appear on your phone and can be shared with other people. On a phone, press a file's menu button and tap Share, then tap Invite People.

Android has a menu that lets you choose whether people can view or edit the file, and you can set an expiry to stop sharing after a certain date. Tap the links to set these options, then tap 'Invite people'.

On iOS, all the options are on one screen and you can allow editing, set an expiry date, require OneDrive

## Drag and drop items

Dragging and dropping files and folders to move them comes naturally on a PC, but you may not have realised you can do this on the iPhone and iPad, too (though, sadly, not on Android). Tap and hold a file to pick it up, then drag it to a folder and let go.

## Scan paper documents

The OneDrive app can also be used as a scanner, to turn paper documents into PDF files. Press the plus button in the phone app and select Scan. Point the phone's camera at the paper document you want to scan and press the

button. You'll be prompted to enter a filename and choose the OneDrive folder to save it to.

## List and thumbnail views

The icon in the top-right corner of the OneDrive app lets you select either list view or icon view. In icon view, images show as thumbnails, which makes it

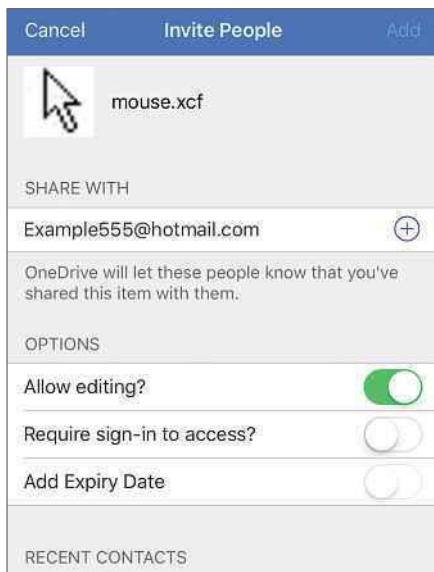
easy to browse your photos. Folders that contain images show a tiny bit of an image on the folder icon, but iOS shows it more clearly.

Both the Android and iOS apps now support landscape view (not so long ago



*Point your device at the document you want to scan and take a photo of it*





**Share files and choose whether people can view or edit them**

sign-in and add the email addresses of the people to share the file with.



### Stop sharing files

It's easy to share a file or folder but it's not obvious how to then *stop* sharing it. On the iOS app, tap the file's menu button and select Details. At the bottom, it lists people with access, such as 'Anyone with this link'. Tap it, then tap Remove Access.

On Android, tap the menu button, then the tiny 'i' in the corner to display information about the file. The people it is shared with are listed at the bottom. Tapping them cancels sharing.



### New sharing icons

To make it easier to see which files are shared in OneDrive, the iOS app overlays the file or folder with an icon showing two people. It is very small on the iPhone and easier to see on the iPad's larger screen. OneDrive on the iPad has a Sharing column, where shared files or folders have a 'Shared' entry listed, so you can see what's being shared at a glance.

In both the iOS and Android apps, press the Shared icon at the bottom of the screen to see a list of people sharing files. Tap yourself to see the files and folders you are sharing. Anyone who shares files with you is listed and tapping them lists the shared files.

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.

## TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave



### Online vs offline storage

Normally, the OneDrive folder on your PC is an exact copy of everything stored in your online OneDrive account. However, it's possible to configure the settings so your files are only stored online, to free up space on your PC's hard drive.

Right-click the OneDrive cloud icon in the notification area of the taskbar and select Settings, then the Settings tab. Tick the box under 'Files On-Demand' and click OK. Open Explorer, right-click OneDrive in the sidebar and select 'Free up space'.

It takes a while, but eventually all the files and folders in OneDrive will have a cloud icon on them – to indicate that they are stored online. These files can still be accessed – it just takes a little longer to open them because they have to be downloaded first.



### Access your desktop from mobile

If you set OneDrive as the default storage location for the Windows desktop, you can access any files you keep on your desktop from other computers, phones and tablets. When you're out and about, you can open these files using your phone, just as easily as you would if you were sitting in front of your PC. The host computer (the one with the desktop you are accessing) doesn't even need to be switched on.

To set this up, right-click the OneDrive icon in the notification area and select Settings. Select the Auto Save tab and set the Desktop drop-down menu to OneDrive. Any icons, files and folders on the desktop will disappear, but don't worry, they are still in C:\Users\YourName\Desktop. The new desktop is now a folder in OneDrive.

Open the OneDrive app on a phone or tablet and the desktop folder is right there. Any item on your PC's desktop is available on your mobile device. Equally, if you upload files from your phone or tablet to your desktop, those files will appear on the Windows desktop on your PC.



**Access your PC's desktop on a mobile by setting the desktop location to OneDrive**

Install the Word and Excel apps on your phone or tablet and you can also edit any documents that are on your PC's desktop.



### Save files anywhere

The iOS app is a little more advanced than the Android app and has extra features. For example, files can be moved from OneDrive to any location.

Press the menu button next to a file and select Share, then press 'Save to Files' in the panel that slides up. You'll see a list of locations. The options that are available depend on which apps you have installed, and could include iCloud Drive, Google Drive, Dropbox. Select the location you want and the file will be added to it.

This makes it easy to move files from OneDrive to Google Drive, for example. Don't forget that multiple files can be selected by long-pressing a file, then using the tick boxes to select more. They can then all be moved to a new location at the same time.



**Files can be moved to other online storage services from the iOS OneDrive app**

# Ask the Expert

**Roland Waddilove**, computer programmer and PC journalist since 1981, answers all your technical questions. Email us for help at [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)



## BROWSERS

### Block bad ads in Chrome

**Q** I use Chrome as the main browser on my Windows 10 PC and my Chromebook, and it works well. However, I can't get your 'Block annoying ads' tip from Issue 442 to work on either computer because I can't see an entry for Ads under 'Site settings'.

**Tim Hudson, via email**

**A** First, check that you have the latest version of Chrome: go to the menu and click Help, then About Google Chrome. Next, go to a website and click the first icon in the address



*The latest version of Chrome includes ad blocking*

box. This displays a panel of information about the site. Click 'Site settings' at the bottom, and a page appears with settings related to the site. The Ads setting is halfway down and should be set to block by default.

We haven't noticed any reduction in advertising on websites since Google introduced this tool. The ads must have to be really bad to trigger blocking, because it seems to let all the ads through on the sites we visit.

**A** It didn't necessarily catch anything – sometimes updates just go wrong for no apparent reason. It's too late for this now, but for the benefit of others, backing up with a tool such as EaseUS Todo Backup Free ([bit.ly/easu446](http://bit.ly/easu446)) allows you to restore Windows easily.

There are several possible fixes. First, go to Start, All Programs, Accessories, System Tools, System Restore. Here, you'll find a list of restore points. Select one that was saved on a date before your problems started, click Next and follow the instructions.

Another possible fix is to go to Start, All Programs, Accessories, Command Prompt. Right-click it and select 'Run as administrator'. In the window, type `sfc /scannow` and press Enter.

A final thing to try is to press F8 just after switching on your PC to summon the Advanced Boot Options screen. Here, you can select either Last Known Good Configuration or Repair Your Computer. The repair option boots into a Windows-like screen with System Recovery Options. Try using Startup Repair and System Restore.

If all else fails, your friend's suggestion of hooking up your drive to his PC as a second drive may help.

## GENERAL PC

### Give other users permission to access files

**Q** When I try to move a video file from my hard drive to my network-attached storage (NAS) device, I receive the message "You need permission to perform this action". However, I've done this many times in the past without any trouble. I did switch from a Windows administrator account to a normal account, but I think a Windows 10 update might have caused the problem.

**Terry Wareing, via email**

**A** Files can be assigned to specific accounts, which means one user can have permission to do what they like with it while another is blocked. You can change a file's permissions – there's a simple way to do this and a more complicated one.

## SECURITY

### Investigate mysterious user account

**Q** I was looking at my hard drive the other day and in C:\Users, I found folders for the Default account, the Public account, my account and another one called UpdatusUser. This is also listed as a user account in file permissions, but it doesn't appear in the User Accounts sections of the Control Panel or the Windows Settings app.

I'm worried that this may be malware or that a hacker might have got into my computer. Should I delete the folder? How do I delete the account if I can't see it in Settings or the Control Panel?

**J Harris, via email**

**A** We can see how finding a strange user account hidden on your PC could be worrying but in this case, there's no cause for alarm.

On some computers with Nvidia graphics cards, the driver creates this account to perform updates. It's a special write-restricted account, which you can't access in the usual ways. Deleting it may stop the video driver being updated, so it's best left alone.

## GENERAL PC

### Stop cycle of PC crashes

**Q** My PC crashed while I was updating Windows and a few other programs. When I rebooted, some programs failed to start and a window opened telling me that System32.dll had failed.

A friend suggested I replace the DLL file and use my Windows 7 disc to repair the hard drive, but the DVD drive won't read, and an external DVD drive didn't work either. My friend said the only other option might be to connect my hard drive to his PC and recover or reinstall from there. What did my PC catch?

**Roger Irwin, via email**



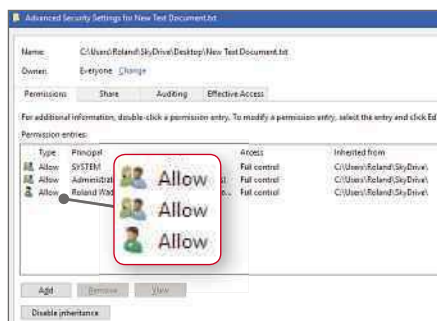
*Access these tools from the boot menu to Repair Windows 7*



First, try the easy way. Log into Windows with an administrator account, right-click the problem file and select 'Give access to', then 'Specific people'. This shows who has access to the file, and gives you the option to add people. Click the arrow next to the Add button and select Everyone. Click Add to remove all limitations from the file.

If that doesn't work, you'll have to try the complicated way. Right-click the file and select Properties from the menu. Select the Security tab and click the Advanced button. Click the Change link next to Owner at the top, then click Advanced in the next window. Click the Find Now button and a list of accounts appears. Select Everyone and click OK, then OK again to return to the Advanced Security Settings window.

Click Add at the bottom, then 'Select a principal' in the next window. As before, click Advanced, then Find Now, select a user (such as Everyone) and click OK, then OK again. Tick all the items in the 'Basic permissions' list, select Allow at the top and click OK at the bottom.



**You can change which users have permission to access individual files**

## NETWORKING

### Find out who's on your network

**Q** How can I find out which computers and devices are connected to my home network? Could I tell if someone, such as a neighbour, was using it?

**Ashley Morris, via email**

**A** To see the devices connected to your network, you can either check the router's logs or scan for devices. Checking the logs is more reliable because scanning only detects devices that are currently connected, whereas logs include details of past connections.

Type the router's IP address into a browser to view the homepage and log in. The password may be in the documentation or on a sticker on the base of the router. Look for the section that shows devices and IP addresses. Different routers have different menus,

so we can't give precise instructions, but some routers link to this information from their homepage.

To scan for connected devices, use a free tool such as Advanced IP Scanner ([www.advanced-ip-scanner.com](http://www.advanced-ip-scanner.com)). Click Scan to see a list of the devices on your network. Often it lists manufacturer names, so you'll have to match your devices with their entries.



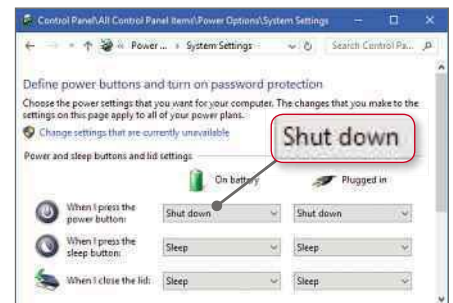
**Routers list all the devices connected to them and their IP addresses**

## HARDWARE

### Help a PC shut down properly

**Q** When I try to switch off my HP laptop, a message tells me that a program is preventing Windows from shutting down. There's a button I can click to shut it down anyway, but it won't shut down by itself. I have to click 'Shut down' on the Start menu, wait for the message and click this button.

**Neil Taylor, via email**



**Set the power button to shut down the computer when pressed**

**A** One possible solution is to remove or update the program that stops Windows shutting down. The next time it happens, make a note of the name. If it's a program that appears as an icon on the right-hand side of the taskbar, right-click it and select Quit or Exit before shutting down Windows.

See if the program has an option to check for updates, or try the developer's website. If it's a driver, check the device manufacturer's website or right-click the Start button and select Device Manager. Expand the section containing the device, right-click it and select 'Update driver'.

Sometimes, pressing the power button to shut down the PC works better than selecting 'Shut down' on the Start menu. Open Power Options in the Start menu and click 'Choose what the power buttons do' on the left. Set 'When I press the power button' to 'Shut down'. After that, a short press is all you need to power off the computer.

## BROWSERS

### Repair or reset Edge

**Q** I use Chrome to browse the web, but I recently gave Edge a try to see if it had improved since I last used it. Unfortunately, it crashed, and now I can't open it at all. This isn't too much of a problem because I use Chrome but I'd like to know what went wrong and, if possible, fix it.

**Paul Fox, via email**

**A** We can't say what caused the crash – it may have been an incompatibility with a website or even malware. Microsoft is aware that such problems can occur and although you can't uninstall Edge and download it again, you can repair or reset it.

Press Windows+i to open the Settings app and click Apps. Select 'Apps & features' on the left and wait



**If Edge isn't working properly, repair or reset it**

for all the apps to appear, then find Microsoft Edge in the list and click it. Click the 'Advanced options' link and you'll see two buttons: Repair and Reset. Click Repair and restart Windows. If Edge still won't open, try Reset. If nothing else works, the next Windows update may fix the problem.



This fortnight Roland's other half has been away, so he has been playing games non-stop on his PC and phone.



# Your Top Tips

Our pick of the best advice from our readers. To get help or offer it to others, visit [forum.webuser.co.uk](http://forum.webuser.co.uk)



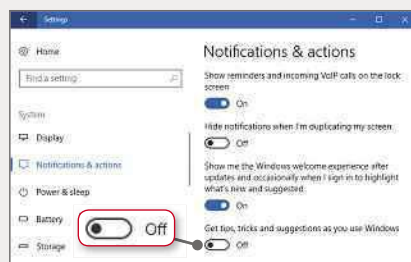
## TOP TIP

### GENERAL PC

## Turn off adverts in Edge

Microsoft has been pushing its Edge browser hard recently, and I was beginning to find this annoying. While using Chrome, I would see lots of pop-ups saying that Edge is faster, uses less battery, uses less memory and has more of this, that and the other. Thankfully, I (or rather Google) managed to find a way to curb and perhaps eliminate these messages.

Open the Windows 10 Settings app (Windows+i) and click System. Click 'Notifications & actions', and, among the settings, you'll see one called 'Get tips, tricks and suggestions as you use Windows'. Since switching this off,



**Switch off the tips option to get rid of unwanted suggestions in Windows 10**

I haven't seen a single Edge pop-up. I'm keeping my fingers crossed that I've finally seen the last of them.

**Gary Lee, via email**

### GENERAL PC

## Switch Explorer columns

If you use the Details view in Explorer, you may find that the columns of information it displays aren't always in the most convenient order. For some reason, mine are always arranged by Name, Date, Type then Size. I prefer Size to come before Type, but now I've found that you can click and drag the column headings to change the order. Click and drag Size to the left, for example, and you can drop it to come before Type.

To add or remove columns, right-click any title and select the attributes you want to show.

**Tom Spencer, via email**



**Drag to reposition columns in Explorer's Details view, or right-click to change them**

### MOBILE

## Record your Android screen straight to YouTube

I've found a trick that lets you record the contents of your Android device's screen and send it straight to YouTube. It uses YouTube's gaming site at [gaming.youtube.com](http://gaming.youtube.com). The site has been set up to let gamers share live footage, as a response to the arguably more famous Amazon-owned service Twitch ([www.twitch.tv](http://www.twitch.tv)). However, there's nothing to say you have to use it for games.

First, download the YouTube Gaming app from [bit.ly/ytg446](http://bit.ly/ytg446) and install it on your Android device. You can choose whether you want to stream live video straight to YouTube, or simply record the

### GENERAL PC

## Check your PC's health

You can't always tell whether your PC is healthy or not, so it's a good idea to perform a health check now and then. If you use Windows Defender, right-click its icon in the taskbar and select Open, or go to Settings (Windows+i), 'Update & Security', Windows Defender, then Open Windows Defender Security Centre.

Open the menu at the side if necessary, and select 'Device performance & health'. This has four sections: 'Windows Update', 'Storage capacity', 'Device driver' and 'Battery life'. If your PC is healthy, you'll see 'No issues' under each heading, but if there are problems, you can expand the highlighted section to find out more.

**Jason Farmer, via email**



**Is your PC feeling OK? Get a health report from Windows Defender**

### GAMES

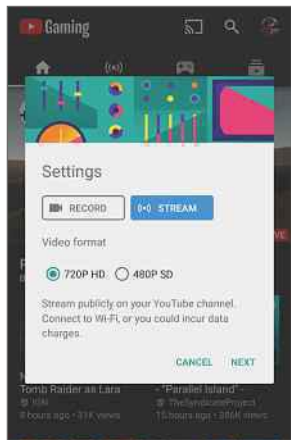
## Card games with Undo

It's frustrating when you make a mistake while playing the solo card games that come with Windows. However, a few of our favourites offer an Undo option, so you can go back a step if you accidentally play the wrong card. You can do this with Klondike in Windows 10, and also in the Windows 7 version of Solitaire, although if you're using it in Windows 10, you have to press Ctrl+Z to undo your move – there's isn't a more obvious option. If you play Solitaire in Windows 7, however, you can select Undo in the Game menu as well as using the Ctrl+Z keyboard shortcut.

**Cantrel, Madeline and roy5051uk, Web User Forums**



**Use Undo if you mess up a move in Klondike. It's not cheating - honest!**



### YouTube's Gaming app lets you stream your Android screen

that happens in your chosen app, and also records anything it hears through the microphone. When you've finished, swipe down from the top of the screen to stop recording.

Simon Richardson, via email

### MOBILE

#### Mail on the web

Both Gmail and Outlook let you access your email through a web browser. This works on mobile phones and tablets, as well as on your desktop PC. If you want to save space and battery power while using email on your mobile device, delete your Gmail and Outlook apps and use their web versions instead.



### Use webmail on your phone to save storage space

to go straight to your email. The websites work surprisingly well on a phone, and the only feature they lack is new message notifications – you have to visit the website to see if you've got any new messages.

Bill Ewart, via email

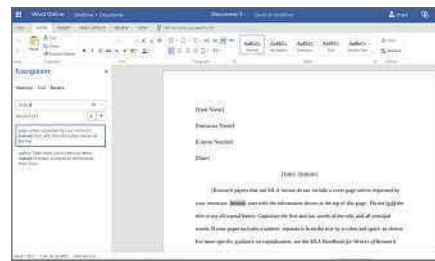
### OFFICE

#### Word's superior search

The Word Online web app ([bit.ly/word446](http://bit.ly/word446)) is the only word processing software I need these days – I certainly don't need to spend money on Microsoft Office. When browsing the web, I often

footage to your phone or tablet so you can edit it before uploading it. On the next screen, choose the app you'd like to record – the YouTube Gaming app will suggest some of the games on your device but you can tap All Apps and choose anything you like.

The YouTube Gaming app records and streams everything



### The Word app's search tool takes your browser's Ctrl+F command a step further

use Ctrl+F to open the search box, which lets you search for specific text on a page. However, the Word app goes one step further and opens a search panel at the side. This is really useful because it shows a short extract of the piece of text that contains your search term, so you can see the context. You can then use the up and down arrow keys to move through the search results, and Word Online updates the display to show its location in the document.

Jane Doyle, via email

### ONLINE STORAGE

#### Stop Kaspersky blocking Google Drive

I recently started using the new Google Drive Backup and Sync tool, and everything was fine for a week or so until it started throwing up error messages and stopped working. After some investigation, I discovered that Kaspersky Anti-Virus was causing the problem.

To get the two programs to work with each other, you have to add the Google

drive shell extension (.dll) to Kaspersky's trusted apps. You also have to uninstall and reinstall the Google tool, but when I tried to do this, Kaspersky stopped me reinstalling it until I had added the Google Installer as a trusted program. There's nothing on the Kaspersky forum to indicate that a fix is forthcoming.

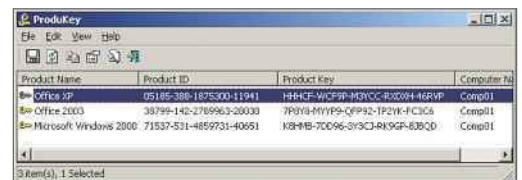
rufford155, Web User Forum

### GENERAL PC

#### Uncover your licence keys

Many thanks for your help with the problems I was having with my hard drive (see Ask the Expert, Issue 444, [bit.ly/webuser444](http://bit.ly/webuser444)). Your readers may find it useful to know where to find their Windows licence key. It's in the Registry, but for some reason it's stored in Binary form. Thankfully, NirSoft ([www.nirsoft.net](http://www.nirsoft.net)) offers a small free program called ProduKey that converts the binary key back into a more manageable number. It can also do the same for other Microsoft products, some of which go back many years. Head over to the NirSoft website and search for ProduKey.

Ian Reed, via email



If you can't find a Microsoft product key, try NirSoft's handy free software

## BLUNDER OF THE FORTNIGHT

### SOFTWARE

#### Fix shaky handheld videos

I had promised to deliver some handheld video footage of a friend's daughter's wedding, but ended up having a few too many drinks between shots. When I looked at my footage after the event, it was a little wobbly.

Luckily, I've found some software called Easy Shaky Video Fixer ([bit.ly/esvf446](http://bit.ly/esvf446)) that's specifically designed to help smooth out wobbly video, and it worked remarkably well with my footage. You'll find this feature on other video-editing software, but the process is usually automatic, and I found that tweaking the manual settings in Easy Shaky Video Fixer provided greater control when



Easy Shaky Video Fixer has plenty of settings to help fix wobbly camera work

eliminating my unstable camera work.

David Whittaker, via email

Have you managed to fix a PC-related disaster?

If so, please send your story to [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)



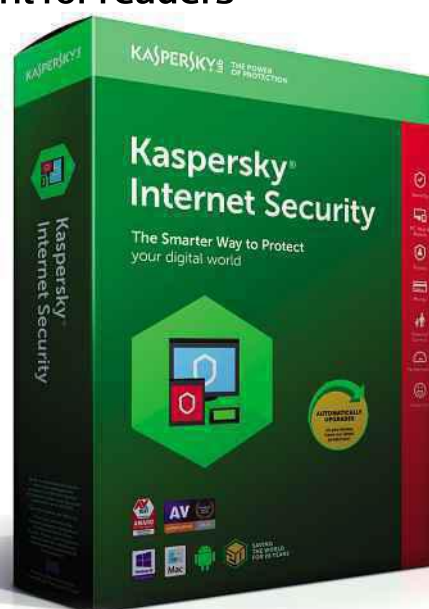
## OFFER OF THE FORTNIGHT

# Kaspersky Internet Security 2018 - on sale now

Our sister title *Computeractive* is now selling the 2018 edition of the award-winning antivirus Kaspersky Internet Security at a special discount for readers

### WHAT'S NEW IN KASPERSKY 2018:

- ✓ Blocks infections that strike as your PC boots
- ✓ Improved notifications for hacked websites
- ✓ Faster startup and update times
- ✓ Stops viruses modifying files on your computer



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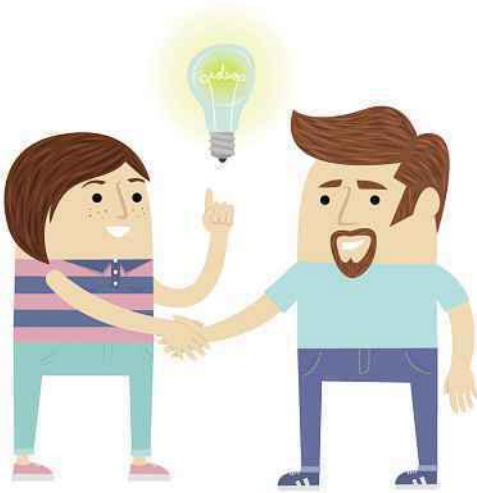
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ANTIVIRUS TESTS**





# Readers' Helpdesk

Our pick of the best solutions posted on our reader forums. Visit [forum.webuser.co.uk](http://forum.webuser.co.uk) – it's friendly and free!

## VIDEO

### Playback HD video on an old PC

**Q** I'm trying to play a 720p HD video on a Dell PC that's around 10 years old and has a 1.8GHz Intel Celeron processor. Is this possible? I've tried VLC ([www.videolan.org](http://www.videolan.org)), Media Player Classic ([mpc-hc.org](http://mpc-hc.org)) and SMPlayer ([www.smplayer.info](http://www.smplayer.info)), changing a few settings in each one to try to get it to play. However, it seems I can't get a video that plays smoothly, whatever the setting.

I suspect that the computer is probably not capable of playing the video in HD. If I could play the video in standard definition, that would be enough for my needs, but it's going to be a painful process to convert every video I want to watch.

**industrialkitten, Web User Forums**



*Modern programs may not run well on older PCs, so try software that's as old as the PC*

**A** Yesterday I tried the video again. Unsurprisingly, VLC couldn't play it but the same video plays perfectly in Windows Live Photo Gallery!

**industrialkitten, Web User Forums**

## GENERAL PC

### Fix a hal.dll problem

**Q** My PC has started to struggle to shut down, and I get a nasty message when I restart, saying that the file hal.dll either can't be found or has become corrupt. This means that I don't have a keyboard driver installed and Windows 10 says that there's no keyboard attached. I have a Logitech G910 keyboard, which I got for free, but I'm wondering if this might be the problem.

## EMAIL

### Try new email software

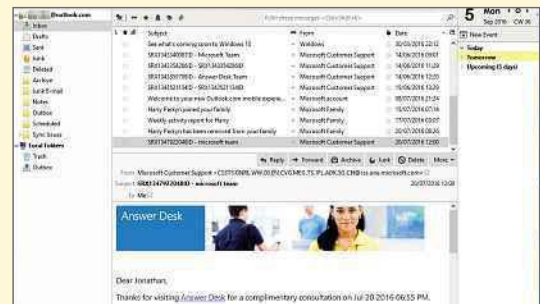
**Q** I haven't had decent email software since Windows Live Mail, which is no longer supported, so I tried eM Client ([www.emclient.com](http://www.emclient.com)) after you gave it your Gold Award in Issue 442 ([bit.ly/webuser442](http://bit.ly/webuser442)). Sadly, it just wasn't for me.

I want something that supports lots of email addresses (I have several), keeps them in a combined inbox and works with RSS feeds. I would also like a folder that combines all the unread emails from my contacts. eM Client does some of those things, including the combined inbox, but it doesn't also show all my emails individually.

At the moment, I'm stuck with Outlook and I have to look at each email address individually.

**AlfredTheGr8, Web User Forums**

**A** It might be worth checking out Thunderbird ([www.thunderbird.net](http://www.thunderbird.net)), which won the Silver Award in the same test. It supports more than one email address, although I don't



*Mozilla's Thunderbird email software lets you switch between several email accounts*

know if there's a limit.

It doesn't have a combined inbox but if you go to the View menu and choose Folders, then Unified, it will list all your emails from various inboxes in one place. You can separate them again by going back to Folders and choosing All. When they're unified, you can sort them by clicking the various headings (such as Subject, Correspondents and Date), and you can open each email individually, too.

There are some useful links providing further information, such as this article about Thunderbird's unified inbox ([bit.ly/uni446](http://bit.ly/uni446)), how to set up RSS feeds ([bit.ly/trss446](http://bit.ly/trss446)) and plenty of other information about Thunderbird ([bit.ly/thun446](http://bit.ly/thun446)).

**Madeline, Web User Forums**

I had this error before and managed to fix it by using Lazesoft software ([www.lazesoft.com](http://www.lazesoft.com)) to boot up and replace hal.dll with a reserve copy of hal.dll from a folder, where I keep a fresh copy. Rebooting after that makes the PC work fine. However, it's a right pain having to keep doing this and I'd prefer to fix the problem properly.

**MeesterChris, Web User Forums**

**A** There are several things that might fix this. If you have more than one hard drive, your PC may be trying to boot from the wrong one first, so check the boot order of your BIOS settings. It might be a hard-drive error or you may need to use a startup repair. There's a full list of steps you could try going through at [bit.ly/halDll446](http://bit.ly/halDll446).

**Cantrel, Web User Forums**

```
Windows could not start because the following file is missing
or corrupt:
C:\Windows\System32\hal.dll.
Please re-install a copy of the above file.
```

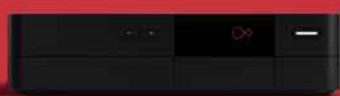
*Problems loading a DLL file could be caused by a hard-drive error*

## Star Email

### Virgin Media's upgrade is hardly progress

I would like to correct your correspondent George C Griffiths ('The downside of Virgin Media's upgrade', Inbox, Issue 444). If he swaps his TiVo for a V6 box, it will still use the same cable, so all the TV channels and recording features will be received in the normal way. The connection to the Super Hub is required to allow use of on-demand features, but TV programmes and recordings will be unaffected if the Super Hub ceases transmitting because these features are not reliant on Wi-Fi. As regards whether Mr Griffiths

Our new Virgin TV V6 box  
powered by TiVo®



Meet our smallest, smartest, fastest box yet.

should swap or not, I give the following advice. I have a TiVo and a V6 (with no Ethernet connection) installed. Apart from there being more channels that you can record on the V6, I find little else

to recommend it. In my opinion, the increase in speed is all hype. So if I were him, I would wait until the change is compulsory.

More worryingly, in the name of progress, Virgin Media plans to have all its services delivered to your house combined. At present, the telephone is on a separate line, which is useful because you can use your landline to call

Virgin on 150 to report TV and internet problems. Combine them and there is no way to contact Virgin to report a fault. Some progress!

*Chris Dunford, Brighton*

### Satellite broadband works for me

I found the 'Ditch Your Landline' article very interesting - I'd love to ditch our expensive landline! Unfortunately, the mobile signals we get

here are very unreliable and I need to have a telephone available, particularly when I'm here on my own. Our calls last quarter totalled less than £1!

We get our broadband via satellite and have done for some time now. We took advantage of a Better Broadband Scheme grant from the Welsh Government, which you mentioned in the article ([bit.ly/better444](http://bit.ly/better444)).

Incidentally, I was working for BT when Buzby was around. My boss had to dress up as Buzby for some reason - marketing probably - and she hated it and him!

*Madeline, Web User Forums*

### Call over Bluetooth instead of BT

I got fed up with subsidising BT's foray into sport TV and dumped them a few years ago. The final straw was being charged 'extra' for paper bills and not signing up to a Direct Debit.

I have four cordless phones dotted around the house and would have missed them, but I found a gadget called

a 'cellular gateway' from XLink in the US (you can now get them in the UK, too). Plug the base station of your cordless phone network into the gateway and you can connect up to three of your mobile phones via Bluetooth. Meanwhile, you can still use the cordless phones to make and receive calls as usual. The Bluetooth connection is automatic, and there are no extra diversion charges. It all worked 'out of the box', but can also be configured via a PC.

This all became possible when the car showroom next door was replaced with houses. The huge wood frames that went up, which were lined with aluminium foil,

meant my mobile signal went from zero to three bars indoors. Yes!

*NikoBold, Web User Forums*



### Windows 10 should scrap its apps

I enjoyed Barry Collins' column in Issue 444, 'Now we know what the "S" stands for'. It seems that Microsoft is completely incapable of producing a secure operating system, and should give up now. It simply cannot keep up with Apple and Google in

## Quiz Answers: Issue 445

1 *Sleeping Beauty*



2 *The Lion King*



3 *The Fox and the Hound*



4 *The Sword in the Stone*



5 *Beauty and the Beast*



6 *Bedknobs and Broomsticks*



## WINNER!

Well done to **Callum Rowley** who wins a Web User Back Issues Disc



TECH YEAR

**2011**



restricting downloads to Windows Store items, probably because its Store items are inadequate.

Why doesn't Microsoft do a complete about-face, dump its apps altogether and issue a version of Windows 10 without all the apps and other bloatware? And stop doing half-yearly system upgrades that just mess up people's computers. Continually trying to make a silk purse out of a sow's ear does

not work. The whole system is so convoluted, with essential items (such as the Control Panel



and Restore function) so hidden away that Windows 10 is no longer suitable for everyday computing.

I'm an ex-Windows 10 user and am proud to have left.

*roy5051uk, Web User Forums*

## Smart meters are safe to use

Your Security Helpdesk item about smart meters was timely because on the day I received Issue 444 of *Web User*, my new smart meters were being installed. I read your expert's answer to the question on smart meter security but I must disagree with his analysis.

I fail to see how smart meters, which connect using a totally separate system from the internet in my house, could affect any of the appliances I own. They do not have any access to my network and they communicate with their servers using a SIM card similar to the type used in mobile phones.

A few minutes of digging around on the web will provide some interesting information that should allay users' fears about using smart meters. And to imply that by hacking a smart meter, a criminal could cream off money from my bank is pretty far fetched! To do that, the criminal would need to have access to my own completely separate network, hack my bank account and adjust my Direct Debit to my energy supplier!

For more information on these matters, read the smart-meter security review from the National Cyber Security Centre, which is part of GCHQ, at [bit.ly/smart446](https://bit.ly/smart446).

*Jeff Brown, via email*

## What you say...

### EE IS GIVING LONDON CUSTOMERS 1GB FOR FREE ([bit.ly/eelondon446](https://bit.ly/eelondon446)). WOULD ANY NON-LONDONERS CARE TO COMMENT?

So once again only London counts. Thank God I'm not a customer of this awful company anymore.

*Joanne Evans*

With the plethora of Wi-Fi hotspots available around the capital, I'm not sure it matters if you're not an EE customer.

*Nat Grove*

Ask and thou shalt receive. I'm with EE - not in London - rang them up and said "Please sir, I want some more". And they replied "MORE, boy?". I managed to get not one but five extra gigabytes out of them.

*Gary Olsen*

I have unlimited data with Three so I'm not missing anything.

*Pamela J Anderson*

1GB of data is nothing these days. What can anybody do with it, really?

*Tasiru Hassan*

### HAVE YOU EVER FELT FORCED INTO BUYING EXTRAS WHEN PURCHASING A COMPUTER?

I never felt forced. If they try to sell me the extended warranty, then I just walk out and buy the item from elsewhere.

*Phil Graham*

I had a truly awful experience at PC World last year when collecting a reserved laptop. The amount of pressure to up-sell made me complain. It was that bad.

*Si Mellor*

I was once told if I didn't buy Microsoft Word, I wouldn't be able to open emails. At least the shop assistant had the decency to blush when challenged.

*Richard Morgan*

Whenever I buy tech, I always ensure I research prices first, then ask for a price match and ask them to throw in some extra items for free.

*Sam Higgins*

### APPLE HAS PATENTED A CRUMB-PROOF KEYBOARD ([bit.ly/crumbs446](https://bit.ly/crumbs446)). HOW MANY CRUMBS ARE ON YOURS?

Enough to make a sandwich.

*Colin Wallace*

None, I use a gel cover.

*Paul Wallace*

I'm thankful my keyboard is washable. It's not just crumbs, it's got the odd blob of jam.

*Jenny Jacks @JenJacks3*

I don't have any crumbs. I vacuum my keyboard (plus I don't eat near it).

*Jason 'Boz' Bowyer*

### THE GOVERNMENT HAS DELAYED AGE-CHECKING RULES FOR PORN SITES ([bit.ly/govtage446](https://bit.ly/govtage446)). DO YOU THINK THEY'LL EVER WORK?

No. If I were a teen and wanted to look at porn, all I would do is take a picture of a parent's credit card, then put the details in whenever I visited a porn site. Parents wouldn't find out as no payment is being taken.

*Gavin Green*

Not unless they introduce DNA testing where it's taken at birth and is used to test a number of things, including a person's age. So, no!

*Anthony Higham*

It's the ideal real-world use case for blockchain technology, in my opinion.

*Chris Howse*



# ! Page 404



Barry Collins finds a cheap speaker to beat his mobile reception woes

## It's good to talk – to the Google Home Mini

**S**ometimes I think BT exists purely to find inventive new ways to diddle me. My broadband charges seem to irreversibly and incessantly tick upwards like a taxi meter, I've had more faulty routers than microwaved dinners and now my BT Mobile reception has become so patchy that I have to climb a tree in the garden just to hear my callers.

So poor has the reception become that I recently resorted to making calls on my landline phone instead of my mobile, to save me from having to guess every third word. What that didn't save me, of course, was money.

I've got enough bundled minutes on my mobile plan to recite *War and Peace* without fear of creeping into extra call charges, yet the only time I get free calls on the landline is at weekends. And have you seen the regular BT call charges lately? 13p a minute to call landlines, 17p a minute to mobiles and a 22p 'set-up fee' to place the call in the first place. A recent 30-minute

conference call cost me the thick end of a fiver!

Then a device entered my life that changed everything: the Google Home Mini. I bought this handy little smart speaker out of sheer curiosity, having read so many reviews claiming how

much better it was than the Amazon Echo Dots that I've got – well – dotted around the house. Google was having one

of its regular price cuts, which dropped the price to only £40, and in that very same week it launched a new feature that would shortly cover that outlay: free calls to UK landlines and mobiles.

Making calls on the Google Home Mini could barely be easier. If you've got an Android phone, as I have, Google probably already has your contacts stored in its cloud. Now all I have to do is say "OK Google, call Robert Irvine",

for instance, and it starts ringing the editor of this fine organ.

It's much smarter than that, too. Because Google knows everything, you can even ring a business for which you don't have a number stored.

I can command Google to call "Chifoo restaurant in Burgess Hill" if I want to order a Chinese takeaway, or "the nearest Pets at Home store" when I need to get

“My BT Mobile reception has become so patchy that I have to climb a tree in the garden just to hear my callers”

the dog wormed (don't ask) – and all without first having to find their number. If you already have a number to call, you can tell Google to do that, too.

Better still, you can enter your mobile number in the Google Home Mini's settings and have that displayed as the caller ID when you're making calls from the speaker, so friends and family know it's you calling and not some random stranger who's heard they've been in a car accident.

The only time the Google Home Mini comes up short is when you're confronted by a computerised call-answering system that wants you to "press one to speak to an advisor". There's no "one" to press on a Google Home Mini – it's a buttonless puck of a speaker. However, if you hang on the line and don't press a button, those systems tend to throw you to a human operator eventually, so you can usually get what you called for.

At a stroke, this cheap little device has half-solved my dodgy mobile-reception woes – it can't take incoming calls, but I can at least have those routed to my landline when I'm at home. If only my other BT problems were so easy to solve.



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