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## Ultimate **Secret Tips** For

# VLC



# MEDIA PLAYER

Stream, record & convert files in  
brilliant **new ways** you've never tried

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**INSTALL THIS SSD  
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More storage, more speed

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**Why Your Wi-Fi Router  
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# Introducing Routers with Voice Controls



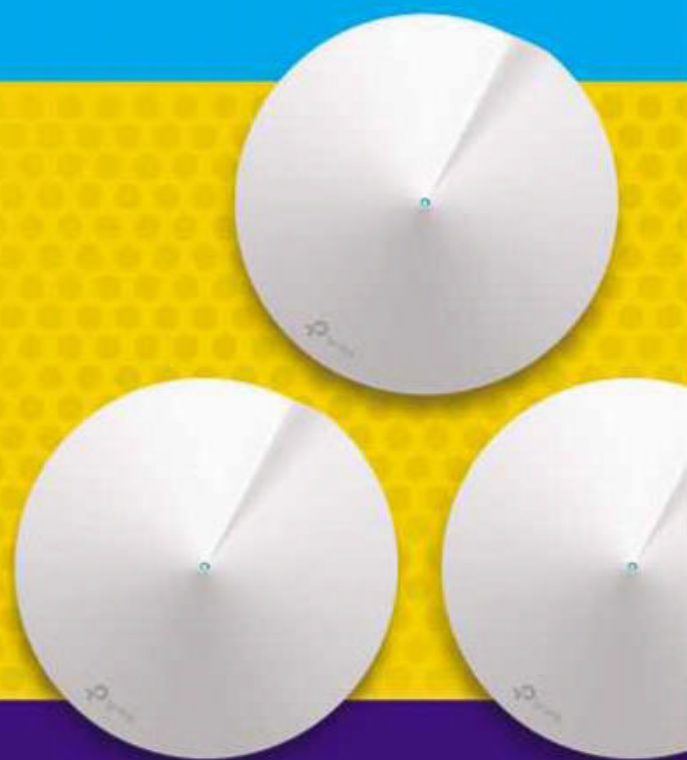
"Alexa, **tell TP-Link**  
I have friends coming."



"Alexa, **ask TP-Link** to  
prioritise video streaming."



"Alexa, **ask TP-Link** to  
do a speed test."



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## Hooray for Valley Leisure Centre!

**T**he fascinating website All Acronyms ([www.allacronyms.com](http://www.allacronyms.com)) lists 114 different meanings for 'VLC' (which is technically an initialism, not an acronym). My favourites include Very Low Calorie, Virginia Lacrosse Club and the Village Library of Cooperstown, all of which sound more interesting than VideoLAN Client. Fortunately, *that* VLC is the best one of all (sorry Vancouver Lake Crew) – a marvellous free media player that can handle any audio or video file, on any device.

In this issue's cover feature, we pay tribute to the versatile VLC by revealing our

ultimate power tips for the program. From recording your desktop and downloading from YouTube to streaming web radio and converting videos into jigsaws, our very large collection of VLC tricks has plenty of new stuff for you to discover.

Speaking of large collections, our 2018 Back Issues Disc is now available from Amazon ([bit.ly/wudisc18](http://bit.ly/wudisc18)), featuring more than 2,500 pages of tech advice!

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



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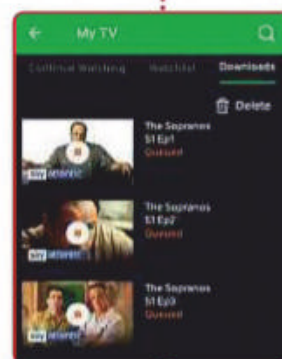
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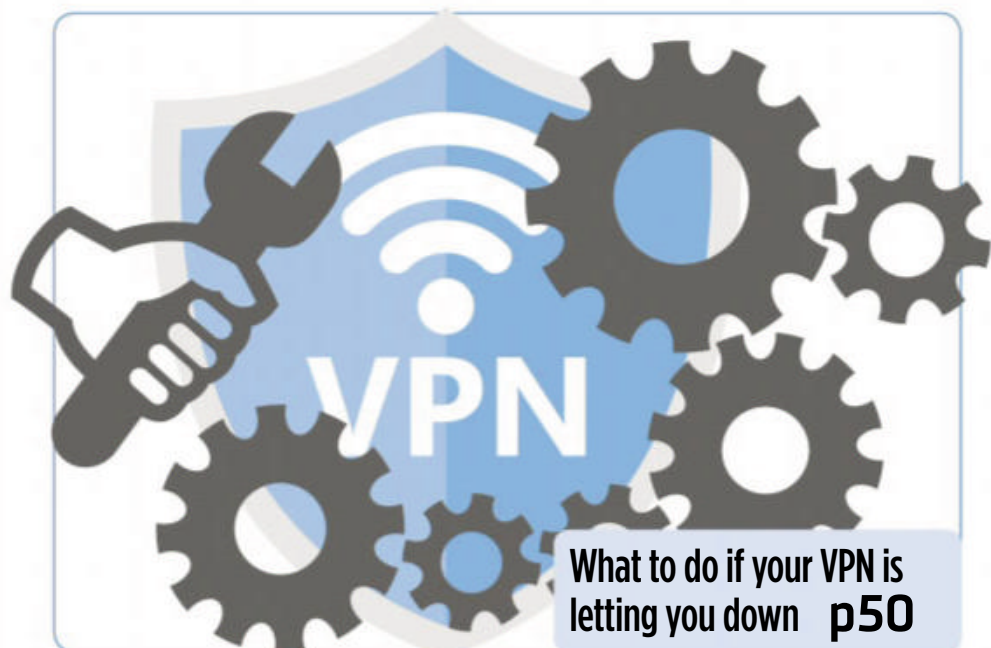


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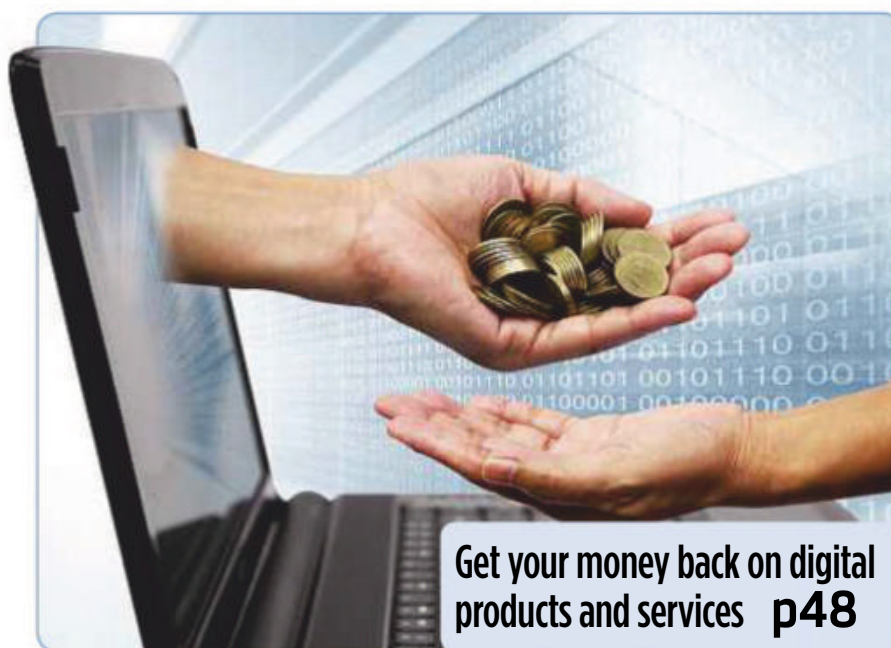
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# What's New Online

## Play Google's shadow puppet game

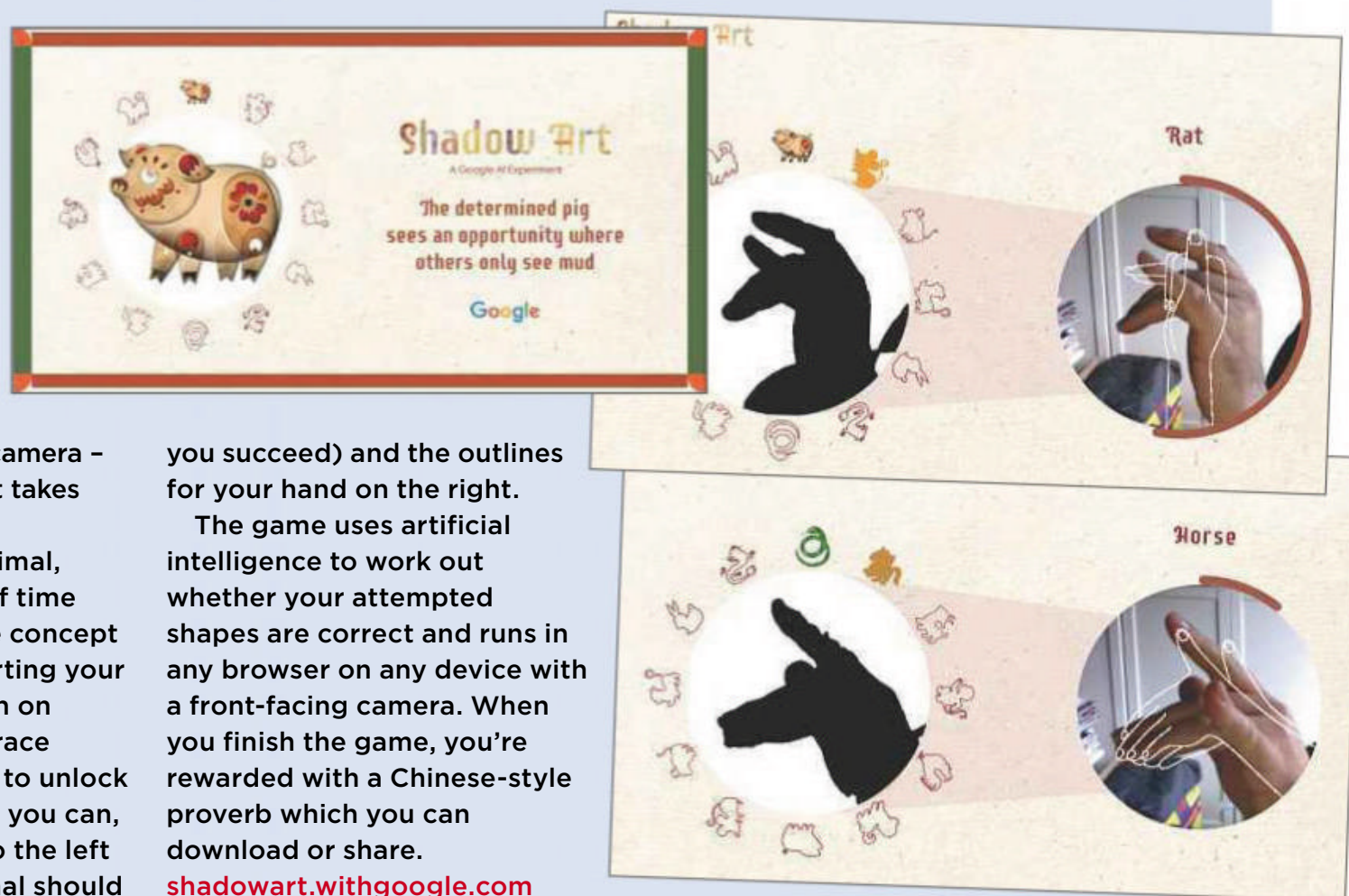
**S**hadow puppetry is an ancient Asian storytelling technique and Google's fun new game updates the concept for the 21st Century. After asking you to specify your zodiac animal or enter your date of birth, it challenges you to form 12 shadow animals by positioning your hands in front of your webcam or mobile device's camera – a feat that sounds simple but takes a bit of practice to get right.

Thankfully, for the first animal, you're given a fair amount of time to get to grips with both the concept and the tricky task of contorting your hands into the outline shown on screen. From then on, it's a race against the clock as you bid to unlock as many of the 12 animals as you can, with the shadows forming to the left (changing to a cartoon animal should

you succeed) and the outlines for your hand on the right.

The game uses artificial intelligence to work out whether your attempted shapes are correct and runs in any browser on any device with a front-facing camera. When you finish the game, you're rewarded with a Chinese-style proverb which you can download or share.

[shadowart.withgoogle.com](http://shadowart.withgoogle.com)



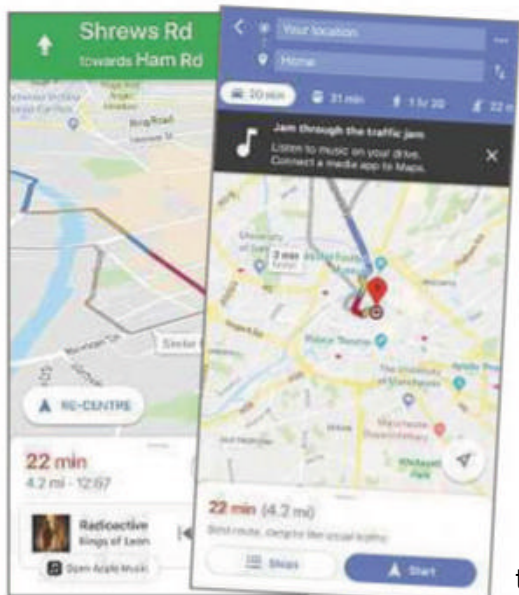
## Stream music while navigating in Google Maps

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

Don't sit in silence while stuck in traffic or risk getting lost when you embark on a journey: use Google Maps' tie-in with Spotify, Apple Music and Google Play Music to listen to songs while being directed to your destination. The latest version of the Google Maps app provides a set of controls to play and pause tracks, and skip back and forth between them. You don't even have to leave the navigation screen, although with one press you'll be directed to the streaming

service to select an album, podcast or playlist before quickly returning to the map.

Obviously, you shouldn't fiddle with the screen while driving, but streaming is easy to set up. In iOS, tap the menu button and select the Settings cog, press Navigation, then Music Playback Controls and choose your preferred player. In Android, open Settings, select Navigation Settings and toggle Show Media Playback Controls to On before making your choice.

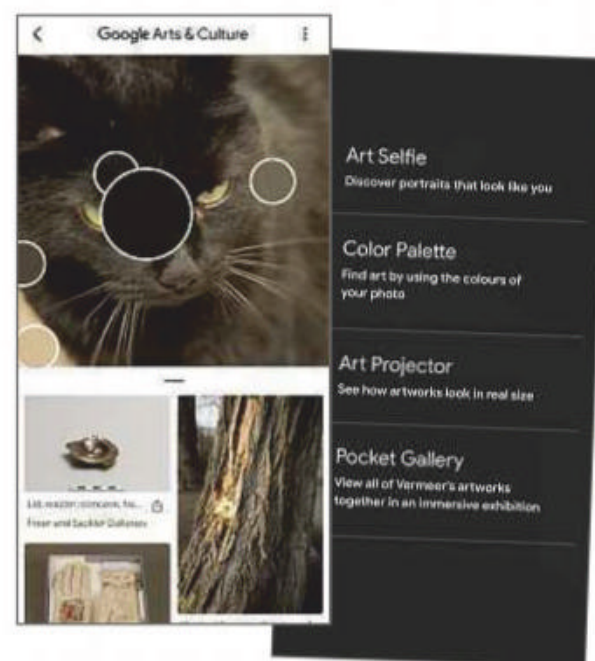


## Explore art using your phone's camera

[artsandculture.google.com](http://artsandculture.google.com)

Over the years, Google has added lots of fun tools to its Arts & Culture app for iOS and Android that let you view artworks in galleries and museums from an entirely fresh perspective – and it's now created a dedicated Camera tab to bring these features together. These tools include Art Selfie, which lets you discover your art doppelganger by matching a photo of yourself with similar figures in paintings. There's also Color Palette, which finds connections between multiple artworks and the colours within a photo that you've taken.

Another feature is the augmented-reality tool Art Projector, which lets you view artworks in real size by overlaying them in one of the rooms of your home or even outside. Finally, you can explore all of Vermeer's known artworks within a virtual exhibition space.





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

## Listen to Apple Music in a browser

**musi.sh**

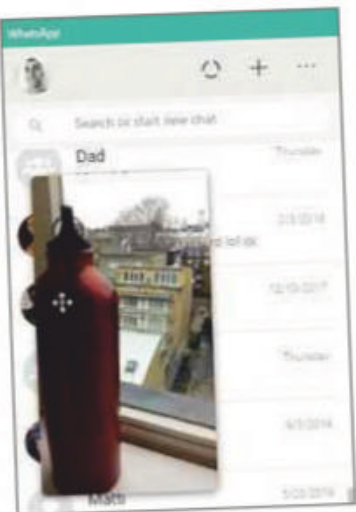
Musish lets you sign into Apple Music using your Apple ID and, like Spotify's Web Player, play tunes in your browser. It offers access to your library and playlists, and lets you order, queue and shuffle songs. There's a 'just browse' option (with 30-second limits) if you don't want to log in, but in any case it promises not to store your login details.



## Watch WhatsApp videos in a floating player

**web.whatsapp.com**

WhatsApp has already added picture-in-picture support to its apps for iOS and Android, and it's now letting you enjoy the feature in its desktop app. If you're sent a video from YouTube, Instagram, Streamable or Facebook, you can have the preview pop out from the window, then resize the floating player and move it around or watch full-screen. You can also use the player's controls,



including the volume, while continuing to read your messages. To use the feature, download the WhatsApp desktop app for PC or Mac, ensuring you have at least version 0.3.2041.

## Create art using virtual particles

**sandspiel.club**

Sandspiel is an intriguing new experiment that uses virtual particles that interact with each other to produce interesting and unique pieces of art. Play around and watch as sand sinks in water, fungus spreads, mites eat away at wood and acid corrodes everything in its path, then marvel as the seeds grow and fireworks produce copies of the first thing they touch. Clicking Info explains the interactions, but playing involves simply choosing an element, selecting a size and trying whatever you fancy. When you're done, upload your creation to the game's server and check out other people's efforts.



## Create tunes in an Amiga audio tool

**bit.ly/amiga469**

Bassoon Tracker is a retro-style audio tool based on the popular Soundtracker program for the Commodore Amiga. It's written in JavaScript and lets you load musical compositions created for the Amiga from various online databases, while letting you play around with a piano, edit samples, fine-tune your 16-bit masterpieces and save them – all from within your browser.



## NEW VOICE COMMANDS

### Keep track of your health

Add the health-tracking app Lifesum to Google and say "talk to Lifesum", then add meals ("add a large dinner") and track your weight ("I weigh 80kg").



### Use AirPods hands-free

The forthcoming iOS 12.2 will support hands-free commands using Siri on the next generation of AirPods. It's currently being tested in the beta version of the next operating system update.



### Enjoy interactive books

Two titles from the Choose Your Own Adventure series – The Abominable Snowman and Journey Under the Sea – are now available as audio stories. Say "Alexa, open Choose Your Own Adventure".



### Discover the UK's most dangerous roads

**bit.ly/roads469**

Type a city or postcode into this map to see the number of fatal and serious crashes, colour-coding the roads black, red, orange, yellow and green depending on the risk.

### Invite guests to live Periscope streams

**www.periscope.tv**

Broadcasters on Periscope can now invite up to three viewers to join them live. Tap the face icon on the pre-broadcast screen and, once the broadcast begins, invite guests or accept join requests.

### Lock WhatsApp with your face

**www.whatsapp.com**

You can now lock the WhatsApp iOS app using Face ID or Touch ID in version 2.19.20 and above. Simply go to Settings, Account, Privacy, Screen Lock and indicate when the security measure should kick in.





# Need to Know

## Hotel-booking sites forced to end misleading sales tactics

### What happened?

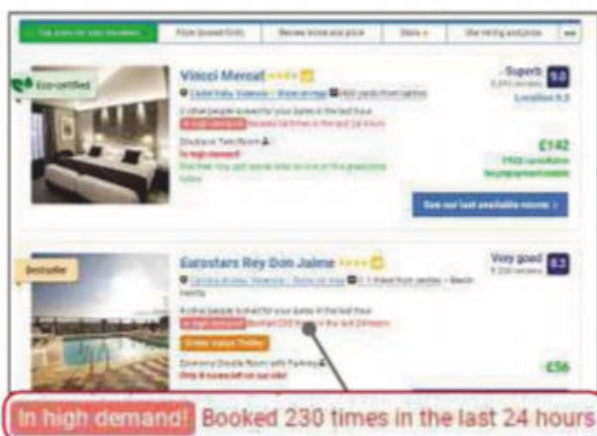
"Only one room left at this price!"

"Booked twice in the last hour!"

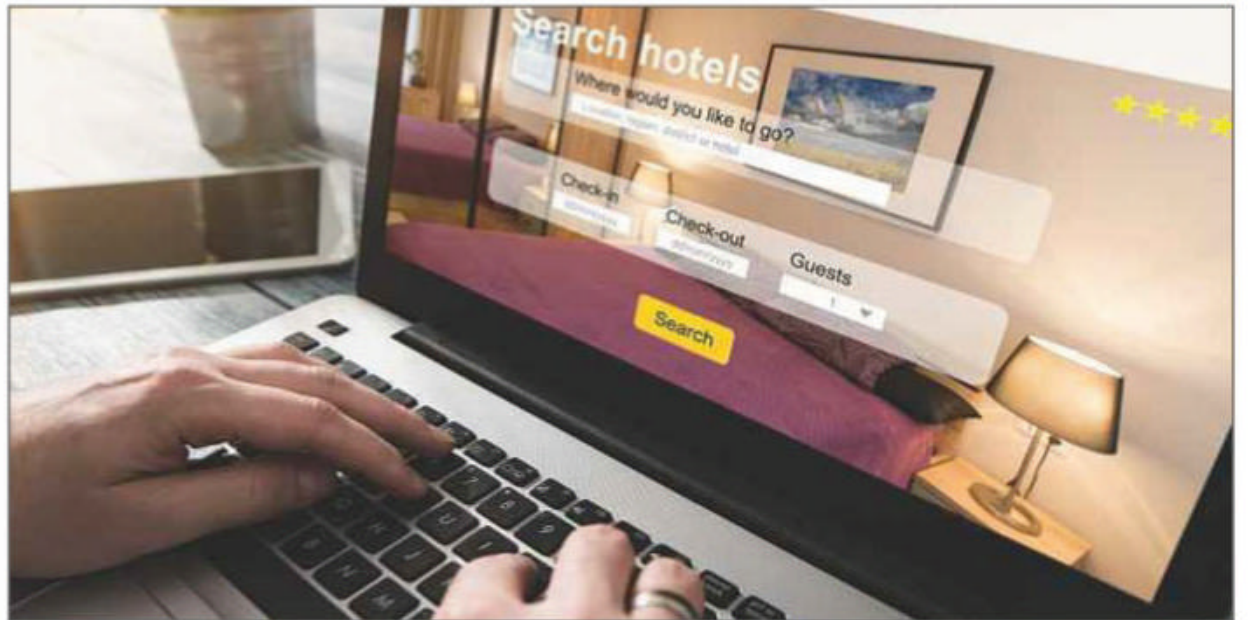
If you've ever browsed holiday accommodation online, you're sure to have seen these alerts, which are designed to ramp up the urgency and harry you into making a booking. However, the pressure will soon be off because such tactics, along with hidden charges, have been banned by the Competition Markets Authority (CMA).

Six leading websites have agreed to make changes to their practices after an investigation by the CMA uncovered serious concerns around pressure selling, misleading discounts and reordering results listings to earn commission. The changes must be applied by 1 September, although some websites may decide to roll out improvements sooner. Expedia, Booking.com, Agoda, Hotels.com, Ebookers and Trivago were all named in the enforcement action ([bit.ly/comp469](https://bit.ly/comp469)).

The changes should mean that the websites become less aggressive, and stop nagging you to book now to get a cheap deal or risk losing the room to another customer. They should also make it clearer when hotels are given a prominent spot in search results in return for commission kickbacks. However, the agreement isn't binding, so there's little to force companies to improve their behaviour other than regulator pressure. That said, the six named booking sites have all agreed to make some improvements, at least.



**Booking.com is one site affected by the clampdown on pressure-selling tactics**



### How will it affect you?

From September, the six websites named will voluntarily make four changes. The first involves clearer search results, with sites telling shoppers when their rankings have been influenced by the amount of commission a hotel pays the site.

Second, pressure-selling messages must be accurate, so they can't highlight that other customers are looking at the same hotel without noting that it's for other dates; or populate the search results with sold-out hotels to give the impression that a city is selling out of accommodation.

Third, discounts and promotions can only be compared if they show a customer's actual search criteria, rather than pitting weekend-room rates against weekday prices to make the latter look like a better deal than it actually is. And lastly, all taxes and fees need to be included in the headline price to make comparisons easier.

So far, only the six largest hotel-booking sites have agreed to the terms. The CMA says it will try to make the rest of the sector meet the same standards, but it's worth noting that these are merely guidelines. In fact, the CMA admitted that not all of the companies named would necessarily make the four listed changes, but would "abide by all the principles set out in the undertakings". That said, any company

found to be misleading shoppers or stopping them from getting the best deal possible could be breaking consumer law, and be subject to further enforcement action.

That's important to know as other sites start using pressure-selling techniques. The CMA is also investigating the use of personalised prices, when you're tracked online and given a higher or lower price based on your previous searches.

Such tactics, be they pressure selling or personalised prices, may well break consumer law, but most of us don't have the power of the CMA to force change. Still, it helps to realise that such tactics are bogus, and that you don't need to panic and make a booking immediately. Instead, you can release some of the pressure, shop sensibly and take your time to find the best deal.

### What do we think?

Tactics such as pressure messages and countdown clocks are a reaction by retailers to consumers' ability to use the web to shop around more easily, but that doesn't make them excusable. The web is a tool to inform us and increase efficiency, not deceive us to spend over the odds. The CMA's efforts are welcome, but we wish they went further. Such tactics should be banned outright not only in the hotel-booking sector, but for all online shopping.



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

## Spotify bans users who block adverts

### What happened?

Music-streaming service Spotify updated its terms of service, adding a new rule that bans tools that try to block or circumvent its ads. Spotify said last year that 2% of its two million free users employed technical measures to avoid ad interruptions.

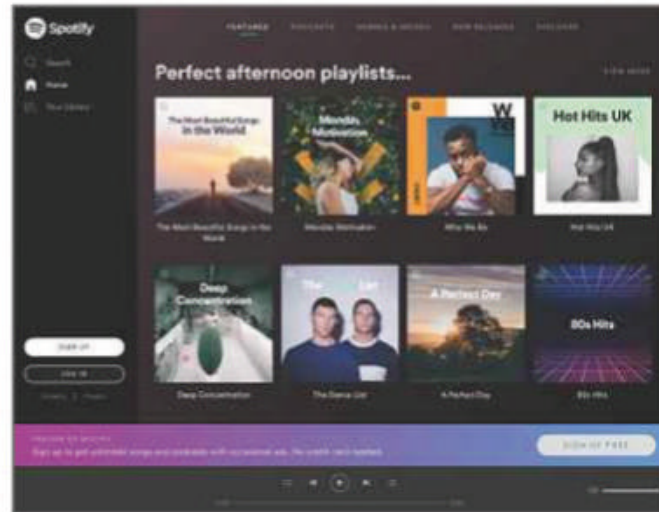
Spotify offers a free, ad-supported version of its streaming service; anyone wanting to avoid ads can pay £9.99 a month for a subscription, which includes offline playback and higher-quality audio.

The new terms come into effect on 1 March, and let Spotify terminate the account of anyone deemed to be breaking the rules.

It's not the only effort Spotify has taken against freeloaders, as the service already uses technical tools to spot ad blockers. The company has previously sent warning emails to users about this problem.

### How will it affect you?

If you use an ad blocker on the Spotify Web Player, you should whitelist the site before March or risk being banned. It's unclear if Spotify will be taking further technical measures against users with ad blockers, or if



the updated terms simply give the company better legal grounding to kick freeloading users off the service permanently. Either way, expect Spotify to continue cracking down on ad blockers.

If a tenner a month seems too high, Spotify's family subscription offers five

accounts to people living in the same home for £15 a month, so you don't need to shell out for everyone individually.

### What do we think?

No one likes ads but Spotify already offers a way to avoid them with its paid-for subscriptions. While £10 a month may be beyond the budgets of many, there's nowhere else you'll get ad-free music for free, as even the radio and YouTube have adverts. Additionally, Spotify has been widely criticised for the low rates it pays artists, and using an ad blocker means the streaming service earns even less revenue to pass on.

## Google launches password-security tool

### What happened?

Google has released an extension for the Chrome browser that checks if your password has been hacked. The Password Checkup tool compares your login details against a repository of hacked or leaked credentials, and if your password is in the database, you'll be warned and instructed to set a new one. The system is entirely encrypted, so Google itself won't learn your usernames or passwords.

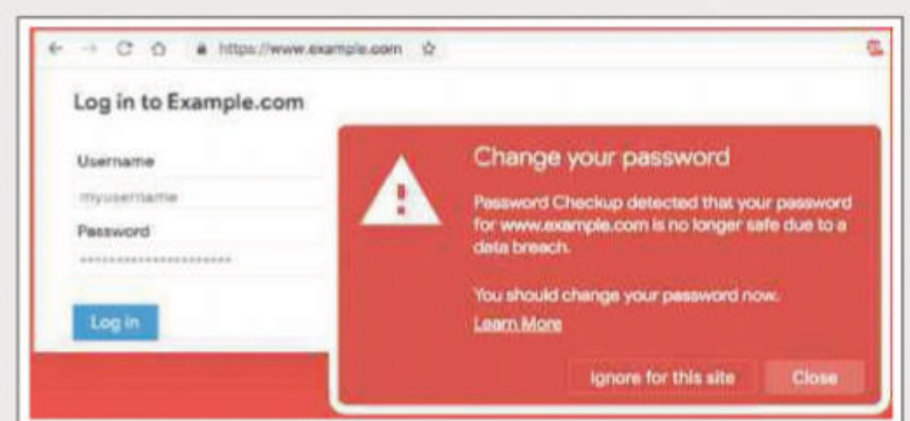
### How will it affect you?

If you're worried about your passwords in the wake of increasingly frequent security breaches, you can install the Password Checkup tool

from the Chrome Web Store at [bit.ly/password469](https://bit.ly/password469). This extension will give you a heads up if your password details have been leaked or hacked.

The system isn't perfect, because not all hacks and leaks will be included in the database, but it's a good, free security tool for Chrome users. Password Checkup is easy to use, so once you've set it up yourself, you could help less tech-savvy friends and family do the same.

So far, the Chrome extension hasn't been made available for other browsers, but other, similar tools exist. Anyone can visit Have I Been Pwned ([haveibeenpwned.com](https://haveibeenpwned.com)) to check if their email address or other account details have been breached,



and Firefox uses that same database in its own automated tool, called Monitor ([monitor.firefox.com](https://monitor.firefox.com)).

### What do we think?

Whenever a new hack hits the headlines, security savvy web users leap into action, either checking that their own credentials haven't been breached using sites like Have I Been Pwned or by changing their passwords

just to be safe. Tools such as Password Checkup not only make the job easier, but keep an eye on your login details even when a hack isn't breaking news or doesn't catch your attention.

Staying safe online is difficult enough for experts, let alone the rest of us, so we're thankful for any new tools that make the job easier.



# Virgin Media tests 'hyperfast' 8Gbps internet

## What happened?

In the village of Papworth in Cambridgeshire, Virgin Media has been busy testing so-called hyperfast broadband, which is capable of reaching speeds of more than 8Gbps. The six-month trial saw 50 participants obtain internet speeds 216 times faster than the national average, using the company's existing fibre cable network at no extra cost.

Virgin's impressive speeds were confirmed by SamKnows ([www.samknows.com](http://www.samknows.com)), Ofcom's official technical partner, which fast-tracked the development of tools to test the technology. According to its founder, "this trial has been delivering speeds far in excess of what we typically see in customers' homes [and] Virgin Media was able to inexpensively troubleshoot issues quickly to consistently deliver innovative multi-gigabit speeds to real customers".

This isn't the first time the Cambridgeshire village has been a Virgin Media guinea pig – in March 2018, the provider tested technology allowing for 1Gbps internet. It's a timely trial, too, because recent rumours suggested that the upcoming 5G, which offers speeds of 1.4Gbps, would be the final nail in the coffin for current cabled internet. Now it seems Virgin Media has other ideas: in its press release ([bit.ly/vmpr469](http://bit.ly/vmpr469)),



Credit: Jevanto Productions / Shutterstock.com

the company stated that "Virgin Media is not going to stand still; this trial is about looking ahead to the next decade and beyond", although it is currently tight-lipped about the exact timeframe.

## How will it affect you?

While multi-gigabit connections may sound like the stuff of dreams – and expensive dreams, at that – Virgin seems intent on delivering hyperfast broadband to our homes. However, there's no guarantee that your property will be able to take advantage of these speeds – real-world implications notwithstanding, you'll also need to live in a Virgin Media-supported area. But once ISPs start offering hyperfast speeds, you'll be able to download

a 5GB HD movie in just five seconds, a 100GB video game in two minutes, and upload 300 photos in three seconds.

## What do we think?

Although hyperfast broadband is only in the trial phase, this is an exciting development. For too long, too many of us have suffered from poor or patchy performance, and in our super-connected world, that's simply not acceptable. We'd like to see other broadband providers research the possibilities of faster, more reliable connections, to ensure full national coverage. However, don't bank on hitting 8Gbps any time soon. And when it finally does happen, expect it to cost you a pretty penny.



## FIRST LOOK

### Amazon Echo Input

[bit.ly/echoinput469](http://bit.ly/echoinput469)

The Amazon Echo Input is an Alexa-fuelled microphone that makes 'dumb' speakers smart. Don't mistake this for an Amazon-styled Chromecast Audio, though, which lacks the smarts to listen in and needs to be controlled using a separate Google Home or app.

If you already own your ideal hi-fi setup or amp, the Echo input saves you having to switch it for one of Amazon's smart speakers – just attach the device to your existing setup using either Bluetooth or the 3.5mm audio jack. Audiophiles may be disappointed, though, because there's no optical output and no RCA.

Once you're connected, the 3in disc does everything its older (and bigger) siblings manage to do, from streaming



music and sounding alarms to answering all your urgent questions.

It's not the most attractive device, and looks like a cheap, plasticky hockey puck, but according to Amazon, that's deliberate. Unlike Amazon's centrepiece Echo, with its snazzy fabric-quilted design, the Echo Input is made to be tucked just out of sight – or, as Amazon calls it, 'low profile'.

There are two buttons either side of

the "I'm listening" light on the lid, for muting the mic and wordlessly waking Alexa. As for volume controls? What volume controls? Just use your voice!

The four built-in microphones work well, picking up voices with the usual Alexa accuracy (mostly hits with a few misses). Audio quality is less impressive, though, especially when cabled via the 3.5mm jack – but if the so-so sounds offered by smaller smart speakers like the Echo Dot don't bother you, you're unlikely to spot the difference. There's also no support for more obscure codecs such as LDAC and AptX.

The Amazon Echo Input costs £34.99 – a fiver more than the standard Echo Dot, but that's a fair price for connecting your stereo to the internet and integrating it into your smart-home setup.





## WHAT'S THE RUMOUR

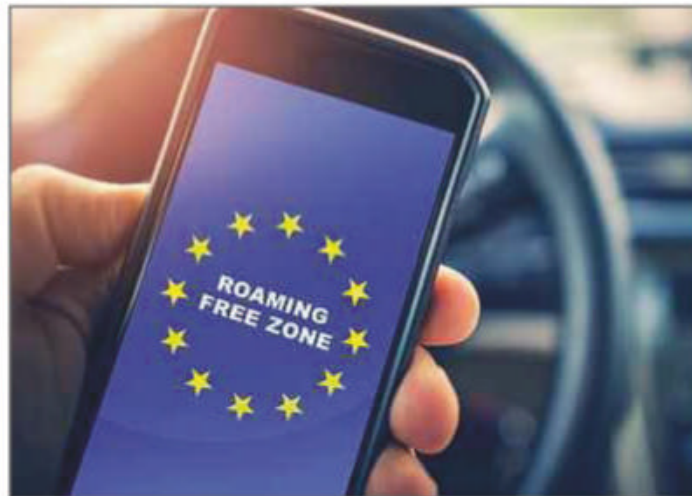
## Will EU roaming charges return after Brexit?

Among the many predictions concerning life after Brexit, one issue that keeps popping up is EU roaming charges. Some days, we're promised there will be no change; on others, we're told it'll cost us thousands just to ring home from a European country.

In 2017, the EU abolished all roaming charges and rather pompously declared the measure "one of the greatest and most tangible successes of the EU" ([bit.ly/roam469](http://bit.ly/roam469)). However, due to Brexit uncertainties, there are now fears that these costly calling fees could be making an unwelcome return.

An investigation by consumer-advice site MoneySavingExpert.com revealed that only two network providers, Three and the Three-owned Smarty, have confirmed they won't reintroduce the often extortionate fees. When pushed for a cast-iron guarantee, 10 firms – with a combined 85% UK market share – refused to rule out a return to the charges.

Instead, providers including Vodafone and EE would only offer "hope" of a deal being reached, while O2 claimed to be "working closely with the Government and other European operators to try and protect the current arrangements". Four of the 16 networks didn't even respond, which doesn't bode well for customers.



So, while none of the main providers openly want to see roaming charges back on your phone bill, the decision – for now – is at the mercy of politics.

## LIKELIHOOD RATING



**We think there's a 50-50 chance that the dreaded fees will return. The issue remains that the ban on roaming charges is an EU law, which won't cover post-Brexit Britain – unless UK and European politicians can thrash out a deal with network providers. We don't doubt that companies would be happy to whack that surcharge on your bill, but they'd quickly lose EU 'roamers' to more flexible, less expensive providers such as Three.**

## WEBOMETER

## WE LIKE...

## Google adds dark mode to Chrome

Google is to introduce a long-requested dark mode to its Chrome browser for Windows and Mac OS. The feature is currently being tested in the Chrome Canary developers' build and should appear in Chrome 74, which is due for release in April.



## Flickr extends deletion deadline

Flickr is now giving users until 12 March to download their photos from the service before it deletes them, following the controversial introduction of a 1,000-image limit for free accounts. It previously planned to remove photos on 5 February.



## WE DON'T LIKE...

## Instagram forces IGTV on users

Instagram has started showing auto-playing previews of clips from its IGTV video-sharing service directly in its users' main feeds. The vertical videos from the unpopular service appear between posts from people you follow.



## Mumsnet suffers data breach

Mumsnet reported itself to the Information Commissioner's Office after a botched upgrade logged users into other people's accounts, letting them see email addresses, account details, posting history and personal messages.



## What's new on Kickstarter

Our favourite new project on the crowdfunding site

## Picoh

[bit.ly/picoh469](http://bit.ly/picoh469) | From £77

Picoh may look like a robot from a vintage sci-fi TV series, but it's actually a fully customisable AI-enabled smart gadget that lets you program its personality and how it responds to the world (and you). You can use the developer's OhBot app ([bit.ly/ohbot469](http://bit.ly/ohbot469)) to control everything from voice recognition to text and speech output. But the real draw is the bot's expressive nature: its animated LED eyes and motorised movements give it far more character than a smart speaker. Paying £10 supports Picoh's production, while £77 gets you your own programmable robot.





# Stay Safe Online

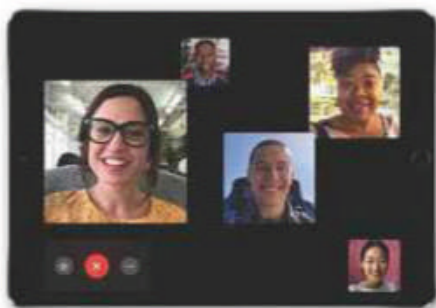
News about the latest threats and advice from security experts

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

### FaceTime bug let users eavesdrop on iPhones

Apple was forced to suspend the group video-calling feature in its FaceTime app after a software glitch let users "eavesdrop" on other people's iPhones. FaceTime users could call anyone using the app and hear the person on the other end before they had accepted or rejected the incoming call.

It was also discovered that pressing the volume button after the microphone bug was triggered granted access to the iPhone's front-facing camera. In some cases, this resulted in video being broadcast from the recipient's device. The glitch occurred even when 'Do Not Disturb' mode was enabled, and affected iPhones running iOS 12.1.



"Luckily, Apple is usually quick to adapt and patch up the flaws" said Jake Moore, cybersecurity expert at ESET UK. "However, we do not know how long this bug has been around for and if it has been taken advantage of by cybercriminals who exploit these vulnerabilities".

Apple "sincerely" apologised for the FaceTime flaw and released a patch for iOS users.

[bit.ly/facetime469](https://bit.ly/facetime469)

### Cybercriminals target Student Loans Company

The Student Loans Company (SLC) suffered nearly one million cyberattacks in the last financial year, including one successful 'cryptojacking' malware attack.



The government-owned loans and grants body for universities and colleges suffered an attempted 965,639 attacks between 2017 and 2018, according to a Freedom of Information request. The one successful cyber-attack saw the domain [slc.co.uk](https://slc.co.uk) infected with Monero cryptocurrency-mining malware.

The figures show the SLC has become an attractive target for cybercriminals – not surprising considering the body holds a loan book worth £117.8bn, according to its last annual report, and sensitive data on 8.1 million registered customers.

An SLC spokesperson lamented the soaring number of cyber-attacks, suggesting "they have become a part of life. Cybersecurity will always remain a top priority for SLC and we continue to invest in the technical expertise and resources required to keep information safe".

[bit.ly/students469](https://bit.ly/students469)

## Security Helpdesk | Your questions answered by security specialists

**THIS ISSUE'S EXPERT:**  
**David Jacoby,**  
**Security Researcher**  
**at Kaspersky Lab**  
**([www.kaspersky.co.uk](https://www.kaspersky.co.uk))**



**Q** How can I choose strong passwords I'll be able to remember?

Sam Booker, Twitter

**A** There is a lot of confusion about what a strong password actually means. Many websites now demand complex

passwords comprising a mix of at least eight or more upper- and lower-case letters, numbers and special characters. This is what many users have come to equate with a 'strong' password, and it can seem pretty daunting.

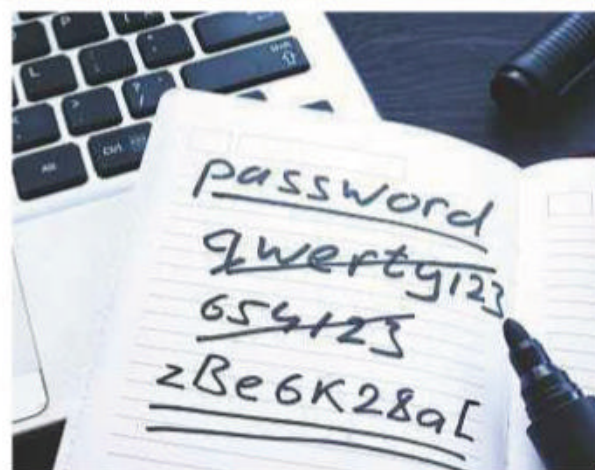
The good news is that strong doesn't have to mean scary. There are easy ways to making passwords unique yet memorable, so they can't be used to breach other accounts.

First, create a 'static string' (the part of the password that doesn't change) using a song lyric, quote from a movie, nursery rhyme or phrase that is memorable to you. Take the first letter from

the first three to five words. Between every letter add a special character, such as @, / or #. You can now base all your unique passwords on this one string.

Next, write down the first word that you associate with a website. For example, if you are creating a password for Facebook, you might associate it with the blue colour in the logo, so append the word "blue" to the end of your static string.

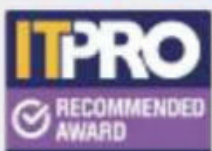
As an example, if the song you think of is 'Twinkle



Twinkle Little Star, How I Wonder What You Are', and the special character that you use is '#', then your Facebook password will be something like: T#T#L#S#Hblue. It makes no sense to other people, but since it's personal to you, it's easy to remember!



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# ★ Best New Websites

## Site of the Fortnight

CHARITY

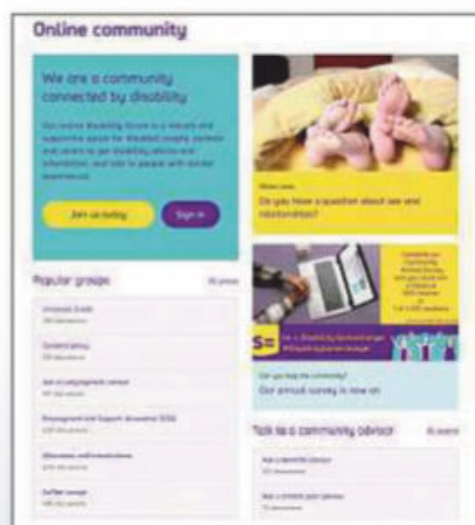
NEW

### Scope

[beta.scope.org.uk](http://beta.scope.org.uk)

Aware that a disability charity's website must be accessible to all, Scope has made a beta version of its revamped site available to get feedback from visitors. So far, it's a huge improvement, bringing Scope's campaigns and latest news to the fore while continuing to offer plenty of online advice and support. The homepage is certainly more eye-catching thanks to prominent images and larger fonts, and the layout benefits from a glossy, modern sheen. We'd suggest more promotion of its search facility for finding charity shops and events, and better signposting to the forum, but otherwise it's very impressive.

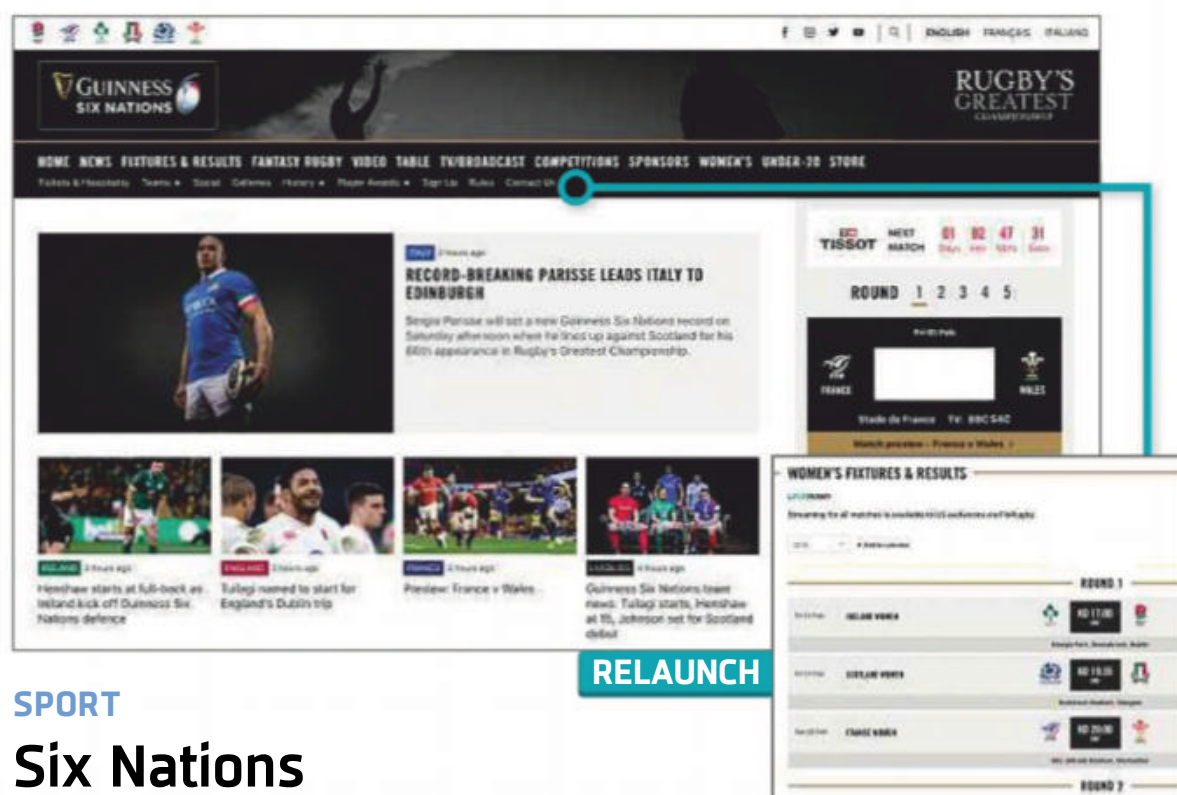
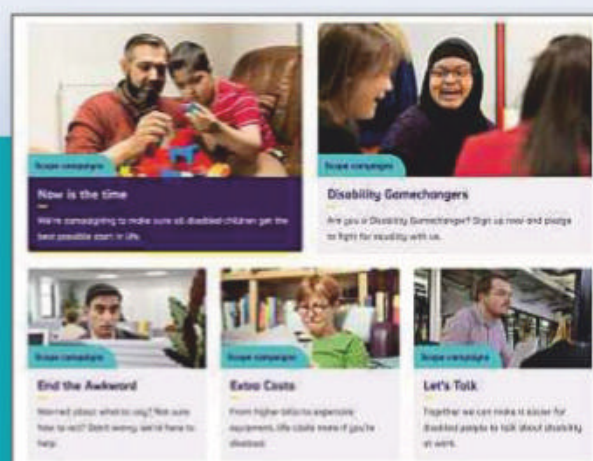
Our rating



**ONLINE COMMUNITY**  
The forum pages offer an opportunity to connect with others in a similar position

### CAMPAIGNS

Scope has several ongoing campaigns that are clearly explained using text and video



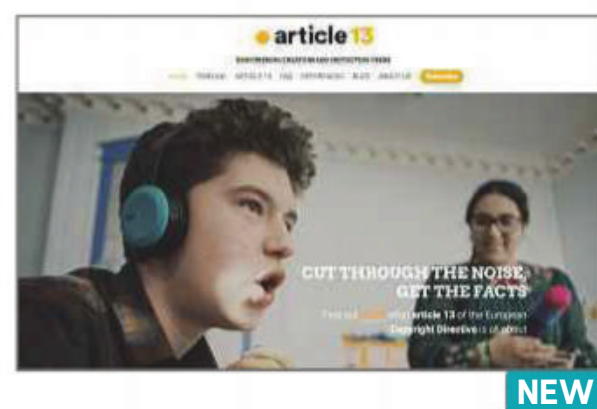
SPORT

### Six Nations

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

Running until 16 March, the Six Nations rugby tournament is well under way and its redesigned official site follows every twist and turn, combining news, fixtures, results and a table with videos and images. You can discover when and where each game is on television, find venue and city information, and check all this on-the-go thanks to the responsive design that works perfectly on mobile. There's also scope to interact via the Social section, win prizes in Fantasy Rugby and take part in a few competitions, too. The dedicated section for the Women's Six Nations is also excellent, although streaming of these games is only available to US audiences.

Our rating



POLITICS

### Article 13

[www.article13.org](http://www.article13.org)

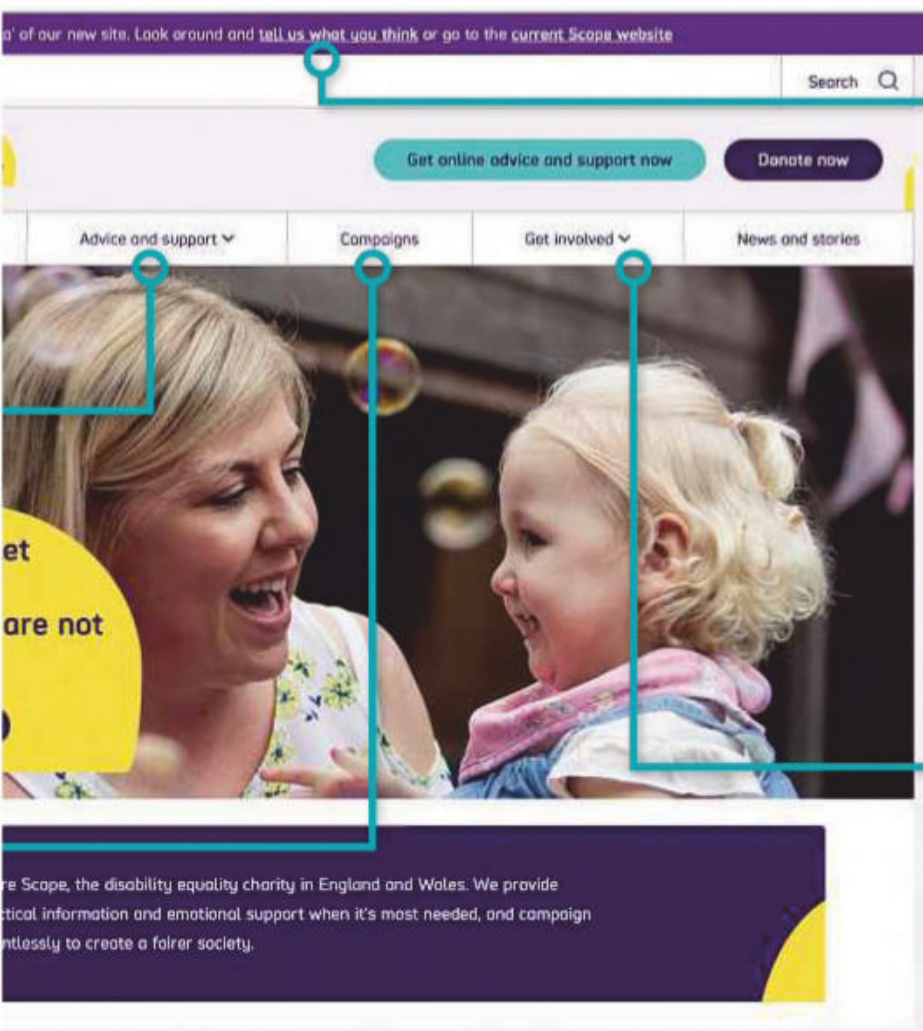
There's been much discussion about the EU's Article 13 – a directive focused on copyrighted content. We covered it in Issue 465's FAQ ([bit.ly/webuser465](http://bit.ly/webuser465)), while social media has been in a panic that memes and mashups might be banned by the supranational body. Now, Article 13, set up by 'Europe for Creators', wishes to explain how the directive affects you and the artists, not just vocal Redditors and YouTubers. Sure, it's propaganda – there's no argument to protest the move – but it's well put together, and a welcoming, soft-touch site that avoids wordy 'politicese'.

Our rating





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



**Website feedback form**

We're working hard to make sure our website is error free and as accessible as possible. But, if you have noticed something is wrong, please use this form to tell us the problem.

All fields marked with an asterisk (\*) are required.

**How did you access our website?**

What device were you using?

☐ Windows desktop computer

☐ A Mac

☐ iPhone

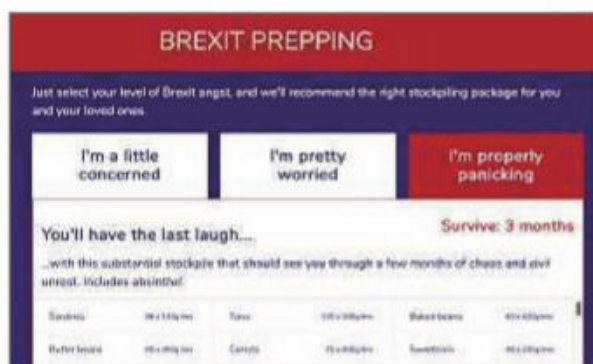
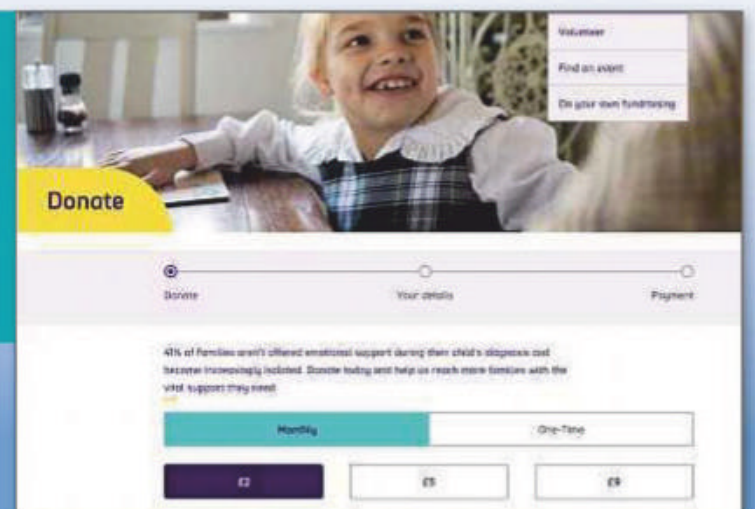
☐ Android phone

☐ iPad

☐ Android tablet

**GIVE FEEDBACK**  
If you experience any problems with the site, you can let the web developers know

**GET INVOLVED**  
Discover how you can make a difference by donating your money, items and time



**NEW**

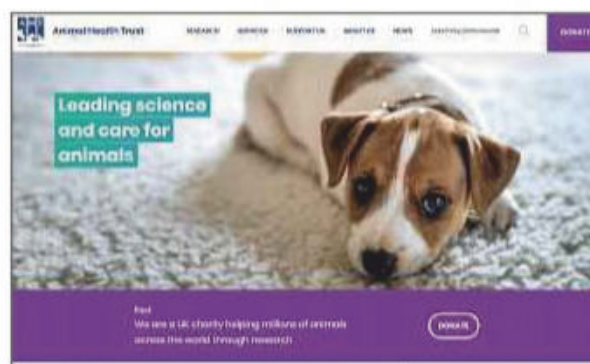
## FOOD & DRINK

### Brexit Prepping

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

Do you have a Brexit box filled with daily essentials tucked away in a cupboard? No? Then let's hope it's not too late. As crazy as it sounds, some people have been stockpiling food for months for fear of a forthcoming apocalypse and this tongue-in-cheek website will either fan the flames or reassure, depending on your personal stance. The site starts by asking if you're "a little concerned", "pretty worried" or "properly panicking", before displaying enough supplies for a week, month or more, so you can create a shopping list. Three months costs £1,415 and includes a bottle of absinthe!

Our rating



**RELAUNCH**

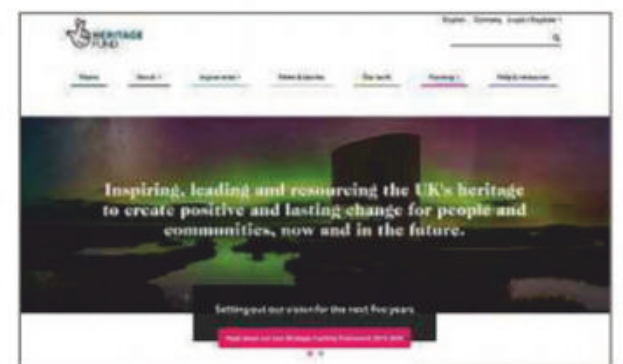
## CHARITY

### Animal Health Trust

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

It's fair to say the old site for this animal charity looked a bit 'ruff', but it now offers a much better showcase for the organisation's research into animal diseases and injuries. It lists a range of services for sick cats, dogs and horses, and points veterinary professionals towards clinics, courses and disease surveillance programmes. There's also a good range of news, filterable by topic, and a wonderful abundance of cute pet pictures scattered about its clean, well organised pages. These could be enough to encourage you to donate via card or PayPal, and you can select a 'pet' cause.

Our rating



**RELAUNCH**

## LOTTERY

### Heritage Fund

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

The Heritage Fund distributes National Lottery grants to projects across the UK and this site lets you view the difference this money has made to your region, and learn more about the organisation's campaigns. In the process, you'll find information about applying for funding including a wealth of resources, a good selection of news and inspiring stories about changed lives. However, it's not perfect: the regional pages are filled with a confusing array of headlines, some of which appear to repeat, and we found that clicking Project always took us to the message "no matching content".

Our rating





# BACK ISSUES DISC 2018

NOW  
AVAILABLE!



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

For more information, visit [bit.ly/wudisc18](http://bit.ly/wudisc18) or search for 'webuser disc' on Amazon

You can still buy our **2017 Back Issues Disc** from [bit.ly/wudisc17](http://bit.ly/wudisc17)







NEW

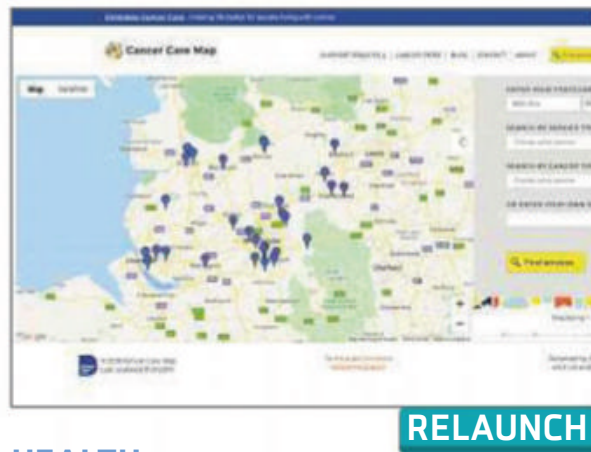
## CREATIVE

# Prolific London

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

Aiming to build on the success of sister site Prolific North ([prolificnorth.co.uk](http://prolificnorth.co.uk)), this website hopes to be the go-to hub for news, features and events in the capital's creative sector. It details the wider industry's comings and goings while reporting on new launches and profiling key London-based companies. There is also a growing list of job opportunities. The site is mainly of interest to people working in this field, but it's professional-looking and informative, and is already successfully tapping into the community. You can also keep abreast of the latest news by signing up for the daily newsletter.

Our rating



RELAUNCH

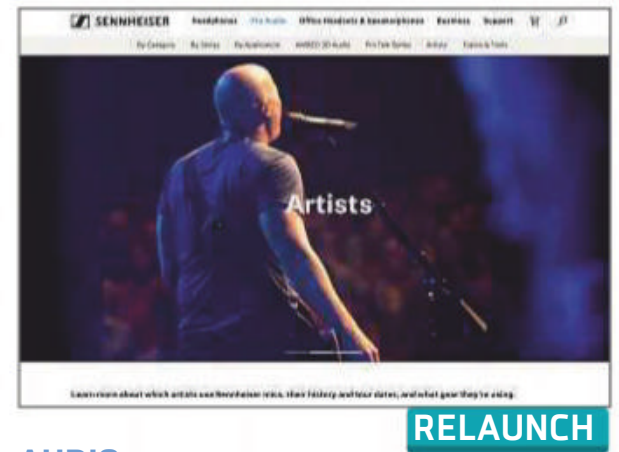
## HEALTH

# Cancer Care Map

[www.cancercaremap.org](http://www.cancercaremap.org)

Being diagnosed with cancer is tough but solid support can help ease some of the associated worries. With that in mind, Dimbleby Cancer Care has relaunched its searchable online map, allowing visitors to enter their postcode, search for specific services or indicate a cancer type to view the locations of charities, centres and groups within a set distance. Clicking a map pin reveals phone numbers, emails, websites and information, and you can then email or print the details, share them via social media and suggest edits. There is also a blog, although it's not updated frequently enough and feels rather dry.

Our rating



RELAUNCH

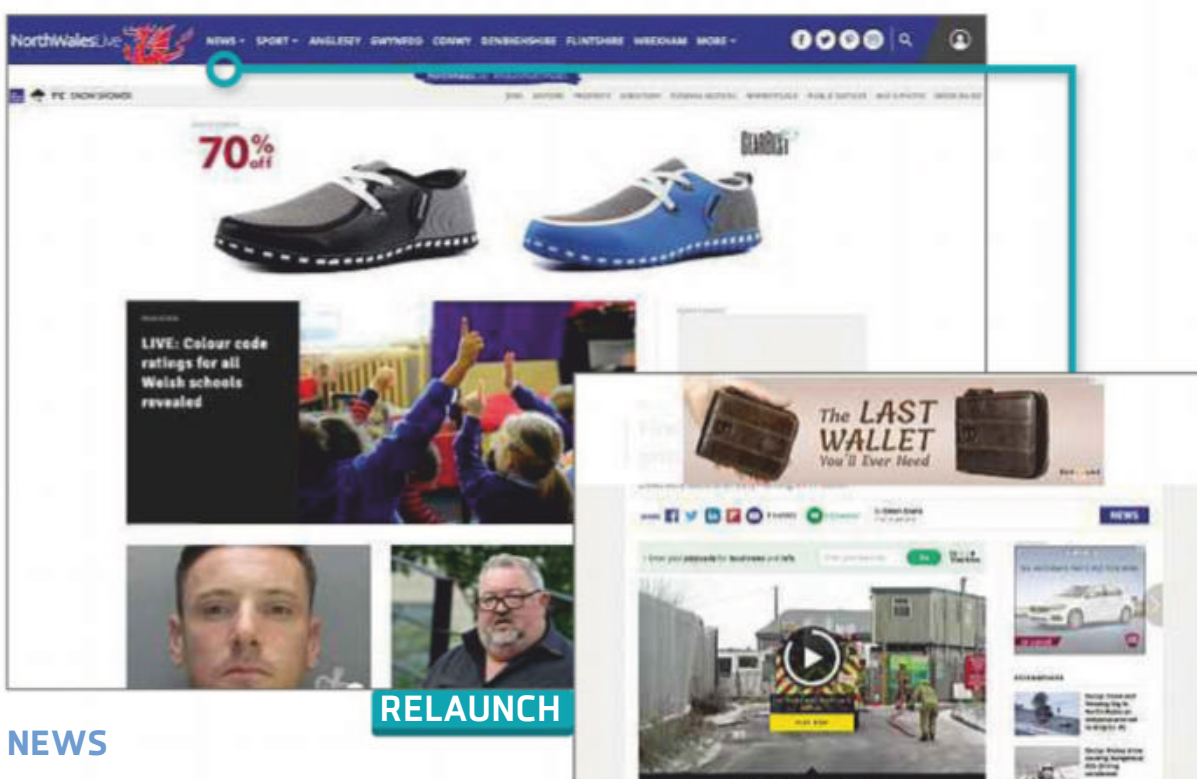
## AUDIO

# Sennheiser

[en-uk.sennheiser.com](http://en-uk.sennheiser.com)

Having listened intently to its customers, German audio specialist Sennheiser has improved the site's navigation and filtering to make it more useful and appealing. For starters, it's added a new International Frequency Advisor that lets travellers view detailed information about a country's wireless frequency spectrum. It also now clearly flags downloads, reviews and training opportunities on the redesigned Professional Audio pages. For most people, though, the Artists section will be of most interest, featuring biographies and tour dates for stars such as Anastacia and Drake, while listing the Sennheiser gear they use.

Our rating



RELAUNCH

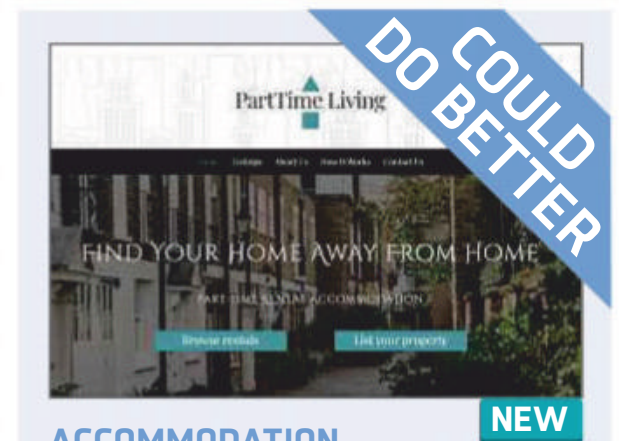
## NEWS

# North Wales Live

[www.northwales-live.co.uk](http://www.northwales-live.co.uk)

In recent months, newspaper group Reach has introduced a new brand called Live, aimed at readers in different parts of the UK. North Wales Live is the latest addition, replacing the online Daily Post and incorporating news from a host of local weeklies. On balance, it works well: the menu bar features a list of locations while place names are inserted above many headlines, to help identify relevant news. There's also a prominent breaking-news blog, a healthy sports section, a smattering of features and a daily email newsletter. Sadly, the many ads feel intrusive and articles are interrupted by poorly placed photos and auto-playing videos, making the site feel messy.

Our rating



NEW

## ACCOMMODATION

# PartTime Living

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

The concept of this service is sound: it helps people who travel for work find a rentable base in a particular location for a set number of nights, every month. However, the website doesn't get this point across well and it's only by looking at the listings themselves that it becomes clear. More work is needed, not only to boost the number of properties (there were only three London homes available when we looked) but to expand the FAQ, safety reassurances and currently empty blog. It is a new startup, though, and entirely free to use.

Our rating





# Build a Better Site

Specialist tips, top tools and practical help

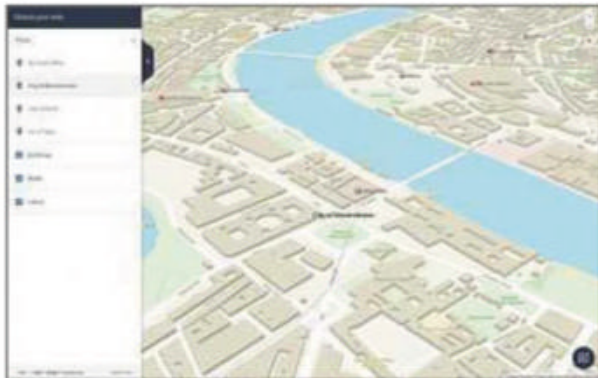
## Top Tips of the Fortnight

### Go back to Classic

You've probably had plenty of time to experiment with WordPress 5.0's new Gutenberg interface by now, but what if you don't like it? Don't worry, you're not stuck with it. Just as you could try Gutenberg as a plugin before it was launched, you can now get a plugin that reverts your interface back to how it was before. If you'd like to keep things as they were, download and install the Classic Editor plugin ([bit.ly/class469](https://bit.ly/class469)).

### Host a detailed map

The Ordnance Survey has launched OS Open Zoomstack ([bit.ly/oszoom469](https://bit.ly/oszoom469)), a new mapping tool you can use, free of charge, to create maps on your website. You have to download and host the data yourself, so it's not quite as simple as dropping



a link to OpenStreetMap ([www.openstreetmap.org](http://www.openstreetmap.org)) but it's a more sophisticated option with a wider range of map types and greater control. Check out the website for more information or go to [bit.ly/stack469](https://bit.ly/stack469) for a demo of what the service is capable of.

### Deal of the Fortnight

GoDaddy ([uk.godaddy.com](http://uk.godaddy.com)) is selling '.com' domains for £1.19 per year and '.co.uk' for £1.06. The offer is limited to one per customer.

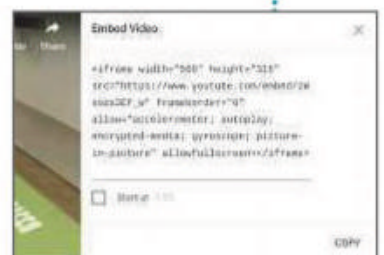
## Web-building Helpdesk

**Q** I'm building a website for showing off my videos. Should I upload them to the website and stream them from there, or use a hosting service such as YouTube?

Graham Turner, via email

**A** There are risks with running video from your own web host: the videos might not play smoothly or people may not be able to play them at all, and a surge of viewers could break your bandwidth limits. Hosting your videos elsewhere is a better idea. YouTube ([www.youtube.com](http://www.youtube.com)) is the easiest but can restrict your control, such as which related videos are advertised at the end. Vimeo ([vimeo.com](http://vimeo.com)) allows a bit more control. If your site is purely hosting video, take a look at the Rivyt workshop below – it may create the site you need in just a few clicks.

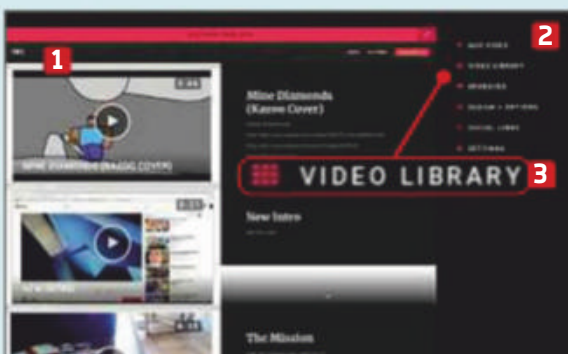
Andy Shaw, Technical & Reviews Editor, Web User



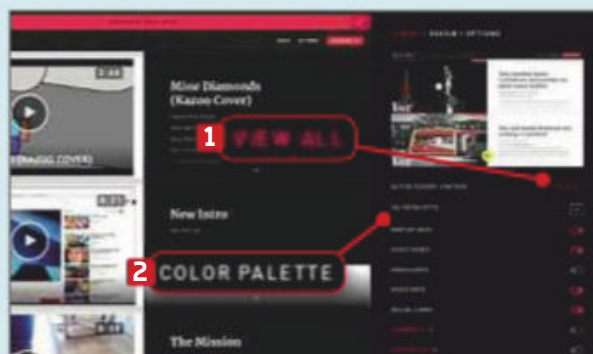
## MINI WORKSHOP | Create a website from a YouTube channel

Rivyt: [rivyt.com](http://rivyt.com) |  10 mins | Any website

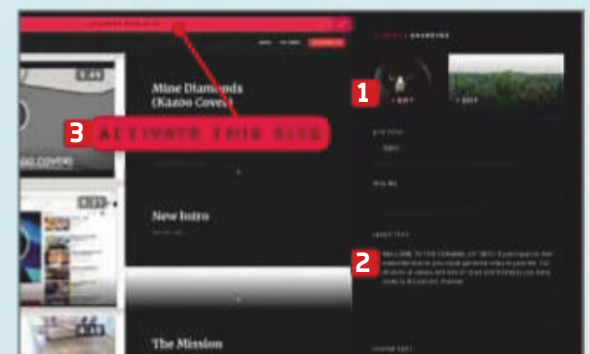
Setting up a website to display your best work from your YouTube channel gives you more control over what viewers see. Rivyt lets you create a simple, configurable site to house videos automatically and for free



**1** Type your channel name into the space above the red line and press Enter. You can choose a design from the 21 free options available. A preview of the site is created on the left of the screen **1** with a menu of options on the right. **2** You can remove videos or rearrange their order from the Video Library. **3**



**2** The 'Design + Options' tab contains a range of customisations. If you decide you want to change the template, click View All **1** and select a different one. Some designs also let you change the colour palette, **2** so you can personalise the look of your site.

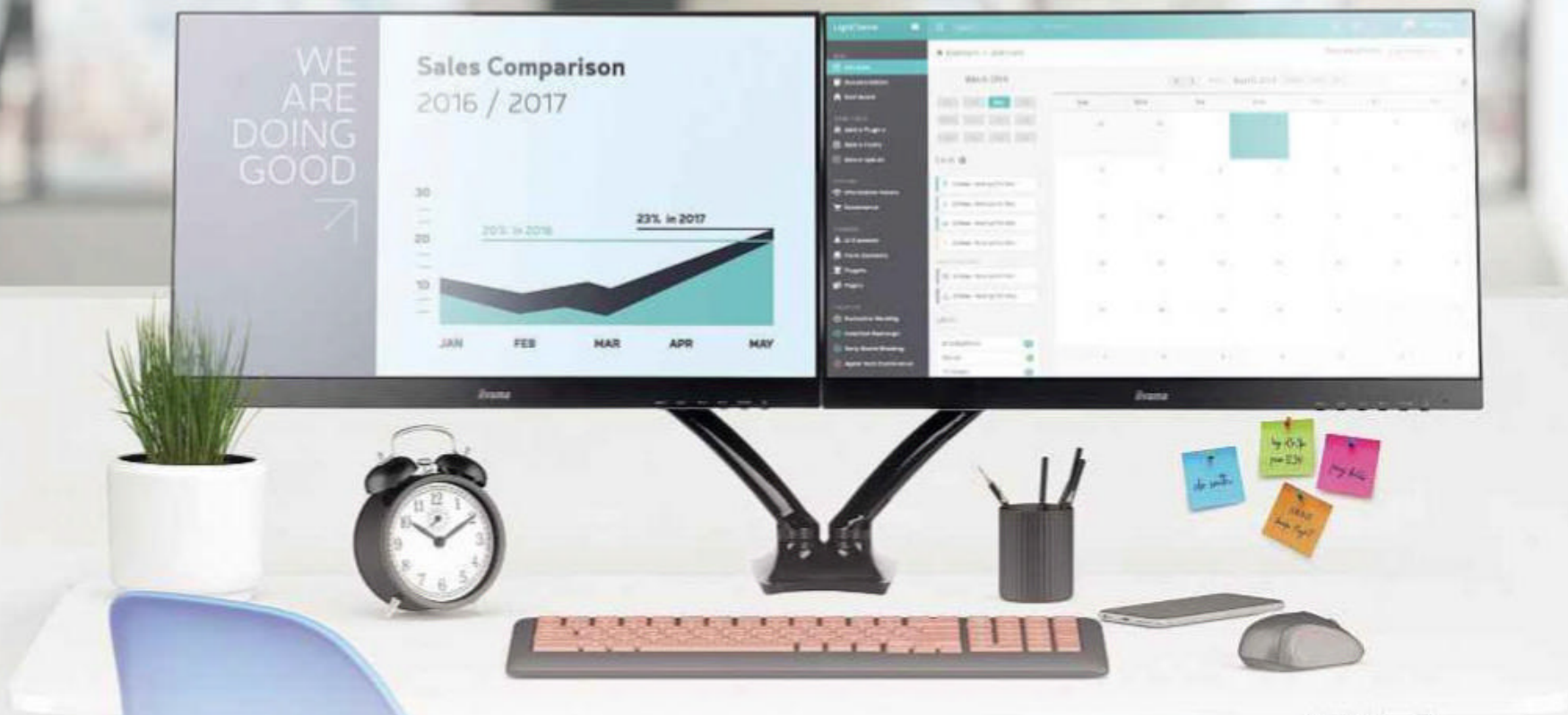


**3** The Branding menu pulls its information from your YouTube channel, such as your thumbnail icon **1** and description, **2** and also lets you edit these elements. Use the Social Links menu to add links to social-media sites. When you're ready, click Activate This Site. **3**



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# What To Watch Online

## Pick of the fortnight

**NOW**TV



### Drive for your life in Sky's new thriller *Curfew*

From 22 February

*Mad Max* meets *The Handmaid's Tale* on the dark, deadly streets of Britain in this high-octane new street-race drama from Sky.

Sean Bean heads an A-list cast that includes Miranda Richardson, Billy Zane, Adrian Lester and other familiar faces, lining up to race their pimped cars through the night from London to the north of Scotland. What's going on? How long will Sean Bean survive this time?

There don't seem to be any rules to this road race, just a dog-eat-dog fight to escape a mysterious totalitarian government before sunrise brings a curfew slamming down. *Curfew's* writer Matt Read cut his teeth as producer of *Peaky Blinders* (on Netflix at [bit.ly/blinders469](http://bit.ly/blinders469)), so we're expecting shoot-outs, one-liners and a visceral emotional punch from this big-budget thriller – plus plenty of “don't try this at home” driving stunts.

Eight episodes air weekly on Sky One, which you can stream live and on-demand with a Now TV Entertainment Pass (£7.99 per month, [bit.ly/nowent469](http://bit.ly/nowent469)) and even download – see opposite page. Gear up with the official trailer at [bit.ly/curfew469](http://bit.ly/curfew469).



### Eat the rich in *The Giant Beast That Is The Global Economy*

From 22 February

Eight lessons in world economics may not sound like much fun, but just wait until you see these episodes' titles. *Money Laundering: A How to Guide, Is Money Bull\*\*\*t?* and similarly brusque briefings are brought to you by former White House staffer Kal Penn and filmmaker Adam McKay, who's made a career out of exposing dodgy dealings in films starring Christian Bale (including *The Big Short*, streaming now via Amazon Prime: [bit.ly/bigshort469](http://bit.ly/bigshort469)). Guest stars include Ted Danson and Brit

journalist Jon Ronson ([www.jonronson.com](http://www.jonronson.com)). Watch the intriguing official trailer at [bit.ly/beast469](http://bit.ly/beast469).

### **N** Be inspired by *The Boy Who Harnessed the Wind*

From 1 March

British Oscar-nominee Chiwetel Ejiofor (*12 Years a Slave*) makes his directorial debut with this BBC-backed Netflix film, which tells the story of a 13-year-old Malawian boy who built a wind turbine from old bike parts.

Teenager William Kamkwamba came up with the idea after his family could no longer afford to send him to school. The turbine generated electricity for his entire village and turned William into a

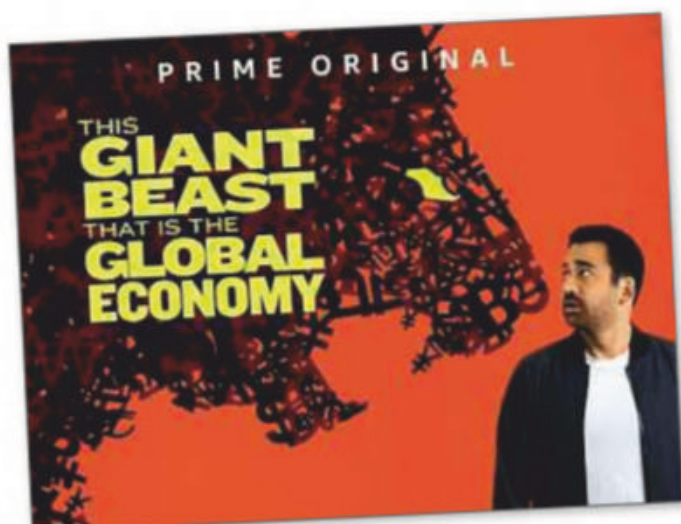
media sensation, with a TED Talk ([bit.ly/windted469](http://bit.ly/windted469)), a bestselling book ([bit.ly/windbook469](http://bit.ly/windbook469)) and now this dramatised film, which premiered at last month's 2019 Sundance Film Festival. Newcomer Maxwell Simba plays William, and Ejiofor stars as his father. Watch the official trailer at [bit.ly/wind469](http://bit.ly/wind469).

### **N** Seek revenge in a new season of Mafia thriller *Suburra*

From 22 February

Netflix's critically acclaimed Mafia drama – a prequel to the 2015 film, also on Netflix ([bit.ly/subfilm469](http://bit.ly/subfilm469)) – returns for a revenge-driven second season of deadly doings in the underworld of Rome.

Its depiction of a corrupt society where big business, crime and religion overlap reminds us a little of HBO's classic series *The Wire*, but *Suburra* is more epic (boomy music, cliffhangers, views of St Peter's Basilica and so forth) and mainstream, despite the dialogue being in Italian. US audiences have to





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



put up with dubbing, but Netflix UK opts for English subtitles. Catch the latest trailer at [bit.ly/subtrail469](http://bit.ly/subtrail469).

### **Watch England v Windies live online**

20 February-5 March

England's cricket team rounds off its Caribbean tour with a series of one-day internationals (ODIs) and T20 matches, all streaming live and on-demand via Now TV. Captain Eoin Morgan leads five ODIs against the West Indies in Barbados (20, 22 February), Grenada (25, 27 February) and St Lucia (2 March). England's white-ball side then remains in St Lucia for the first of three T20s on 5 March.

You can follow all the action online,



**In case you missed it...**

A 40-second teaser for BBC One's forthcoming *This Time With Alan Partridge* appeared on YouTube ([bit.ly/partridge469](http://bit.ly/partridge469)), just as *Web User* went to press. To celebrate, here's where to catch up with Steve Coogan's incomparable



creation online. Head to Netflix for *I'm Alan Partridge* ([bit.ly/imalan469](http://bit.ly/imalan469)) and *Knowing Me Knowing You* ([bit.ly/knowning469](http://bit.ly/knowning469)); Amazon Prime for *Alpha Papa* ([bit.ly/papa469](http://bit.ly/papa469)); Now TV for Season 1 of *Mid Morning Matters* ([bit.ly/mid1469](http://bit.ly/mid1469)) then Sky Go for Season 2 ([bit.ly/mid2469](http://bit.ly/mid2469)).

Another new trailer promises even darker

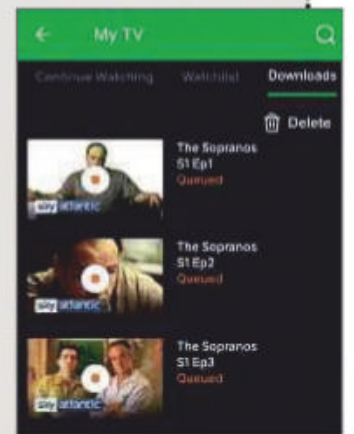
things from *The Handmaid's Tale* ([bit.ly/tale469](http://bit.ly/tale469)). Seasons 1 and 2 have just returned to Now TV at [bit.ly/handmaid469](http://bit.ly/handmaid469), ahead of Season 3's spring due date. Finally, a couple of new Netflix films worth putting on your list: *Velvet Buzzsaw* with Jake Gyllenhaal ([bit.ly/buzz469](http://bit.ly/buzz469)), and noir thriller *Polar*, with Mads Mikkelsen and Matt Lucas ([bit.ly/polar469](http://bit.ly/polar469)).

## Download Now TV shows to watch offline

Now TV's Android and iOS apps now let you download TV shows and films to watch without an internet connection. Sky's popular streaming service introduced the feature last year with its Kids Pass, and has now added it to the monthly Entertainment and Sky Cinemas.

The offline option lets you view downloaded content on Android and iOS phones and tablets for up to 30 days, although you only have 48 hours to watch once you've started playing them.

To use the new feature, just tap the download icon next to a TV-show episode or movie – you'll need to be connected to Wi-Fi because of the amount of data involved. Content you've downloaded – or queued to download – can be found in the My TV section of the Now TV app. Popular series you can watch offline include *The Sopranos*, *Game of Thrones* and *The Wire*.



live and on-demand, with a Now TV Sky Sports Pass (£7.99 per day, £12.99 per week or £33.99 per month; [bit.ly/newsport469](http://bit.ly/newsport469)). See Sky's website for fixtures and scores: [bit.ly/skycricket469](http://bit.ly/skycricket469).

### **Say farewell to *Shadowhunters* Netflix 26 Feb**

There's no fan quite like a broken-hearted *Shadowhunters* fan. When US channel Freeform pulled the plug on the fantasy show after three seasons, fans leapt into action with a #SaveShadowhunters social media campaign ([bit.ly/save469](http://bit.ly/save469)), website ([www.savesshadowhunters.com](http://www.savesshadowhunters.com)), petitions and even bus adverts – but Freeform wouldn't budge. Their only concession is six final episodes, billed as Season 3b and screened in the UK by Netflix.

New episodes of the show, which is based on Cassandra Clare's book series

*The Mortal Instruments* ([bit.ly/mortal469](http://bit.ly/mortal469)), arrive on Netflix each week, a day after airing on Freeform in the States. Watch the latest trailer at [bit.ly/shadow469](http://bit.ly/shadow469) then explore the links to umpteen related YouTube videos – including the cast crying at the sight of a #SaveShadowhunters video ([bit.ly/shadow469](http://bit.ly/shadow469)). Bet your warlocks this isn't the last we see of this show.







# Group Test

We test and compare the latest products

## Upgrade your laptop's SSD

We've tested seven M.2 solid-state drives that could improve your laptop's performance and increase its storage space

**T**here are two types of SSD (solid-state drive): those with a standard SATA connection, which usually come in a 2.5in drive case and look a bit like regular hard drives; and M.2 models, which look more like memory modules, except that they're a bit squarer and the gold teeth that connect them to your PC's motherboard are along the short edge, rather than the long one.

M.2 SSD drives are usually found in laptops rather than desktop PCs, because they're more compact. However, because they have direct contact with the motherboard, they also tend to be faster than regular 2.5in SSDs, which is why they're now cropping up in desktop PCs, too.

### HOW WE TESTED

We ran seven M.2 SSDs through a series of benchmark tests. Some were 'artificial' tests that push the drives to their limits so you can monitor their raw performance; others were 'real world' tests, where we look at how well a standard PC performs with the drives inserted, and time how quickly it can be used to transfer data to and from the PC.

**T**he **Samsung 970 Evo** (£75.51 for 256GB | [bit.ly/sevo469](https://bit.ly/sevo469) | ★★★★★) is a popular M.2 SSD that appears in a lot of PCs nowadays. It's not hard to see why – it offers the same class of memory as the 970 Pro (see opposite) but at a much cheaper price. This discrepancy is down to technicalities (this one has 2-bit architecture compared to the Pro's

3-bit, if you must know) but the key point is that the drive didn't perform like a second-class product in our tests.

We tested the 256GB model but it's worth getting a larger one if you can, because 512GB and above SSDs have a quoted maximum write speed of between 2,300MB/s (the 512GB model) and 3,400MB/s (the 2TB model), while

the 256GB model tops out at 1,500MB/s. Despite this, in our real-world tests, its read speed was very close to the fastest drive we tested. This is precisely where SSD's should excel – they're all about shifting large amounts of data into the computer's memory at top speed, which is why launching operating systems and other software on PCs with SSDs

### Buying an M.2 SSD

There are a few things you need to check before you buy an M.2 drive and most important of all is whether your PC accepts them. Have a look in the documentation for your computer or motherboard, or contact the manufacturer. If you're upgrading, make sure you can access the M.2 slot and the existing drive.

The physical size of M.2 drives varies. If you're upgrading, check the size of the unit you're removing. When buying a replacement drive, you'll normally find a four-digit number in the device's name, such as 2280. This indicates the

size in mm: 22 x 80mm. Measure your existing device or check the distance between the M.2 slot and the hole you screw it into. Most are 22mm wide but vary in length, though 80mm is the norm. Some motherboards may have more than one screw-hole, so you can fit different-sized devices.

There's also the complication of interface. M.2 SSDs started off reconfiguring standard SATA interfaces, like you get on standard hard drives. However, newer



*An SSD's interface type is usually written on the module – just check what your PC can accept*

motherboards may have PCIe M.2 ports, which can transfer data faster. Fastest of all are the NVMe drives, but again, that's a different M.2 format. You should check the spec of your existing drive or research your PC or motherboard specification for information on what you can use.



installed is much faster.

The write speed (transferring files from the PC to the drive) of the 970 Evo sits in the middle of the group but isn't far behind the leaders, and its multi-tasking benchmark score achieved a similar position. We think it offers the best balance between price and performance. However, if you want more power from your SSD, it's worth considering other options.

The **Corsair MP510** (£189.84 for 960GB | [bit.ly/corsa469](http://bit.ly/corsa469) | ★★★★★) came second in all our speed tests, only just behind the Samsung 970 Pro. If you want a bit more performance than the Samsung 970 Evo but don't want to pay Pro prices, then this is a serious contender. In some of the artificial performance tests we ran, the Corsair model outpaced even the 970 Pro, though we'd put greater weight on the real-world performance results shown in our graphs.

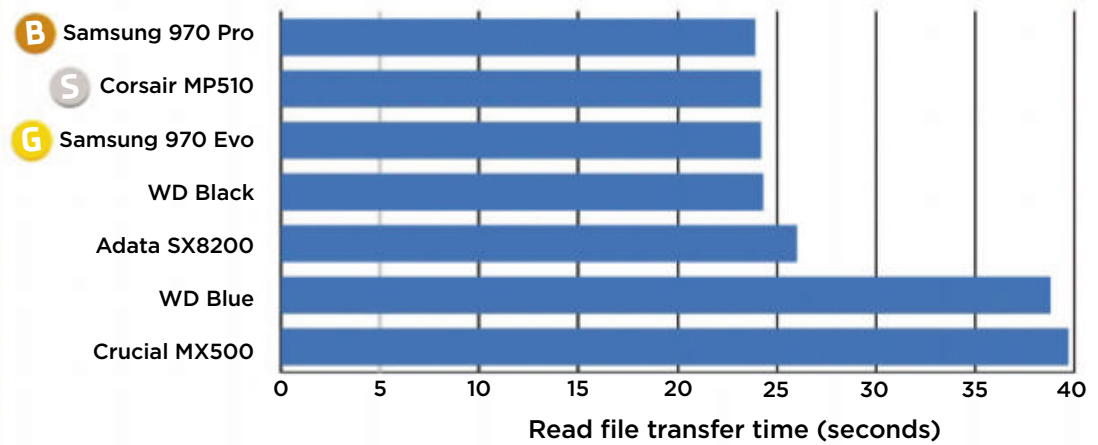
We've already mentioned the **Samsung 970 Pro** (£157.57 for 512GB | [bit.ly/spro469](http://bit.ly/spro469) | ★★★★★☆) because it's the best performer in this Group Test. The Corsair may have pipped it in some of our raw-performance tests but the Pro has it where it counts, racing through our realistic everyday performance benchmarks at a blistering pace and scoring at the top of all our charts.

Despite this superlative achievement, we didn't give it our top award because it's expensive and its results are marginal rather than runaway, particularly when pitched against the Corsair MP510. Pay less and you still get superb value for money for only a modest reduction in performance with the 970 Evo.

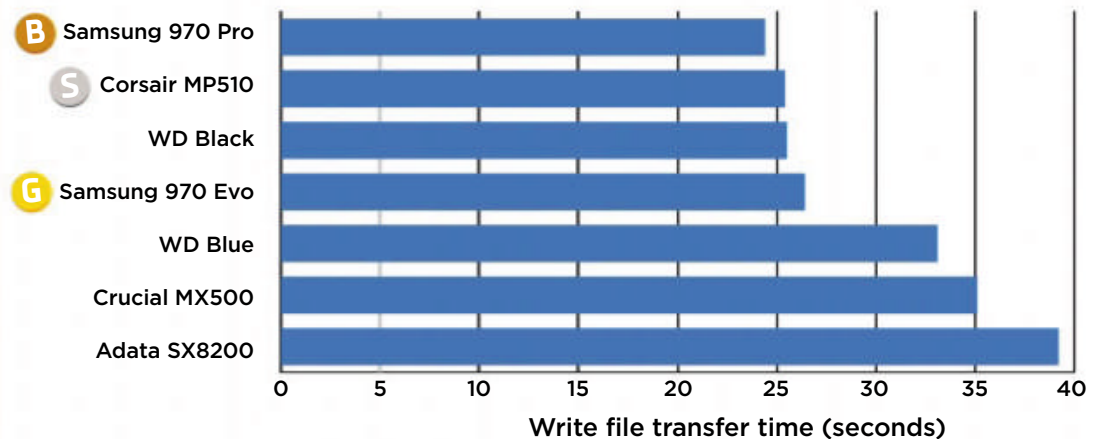
Not quite making our awards but still

## TEST-RESULTS CHARTS

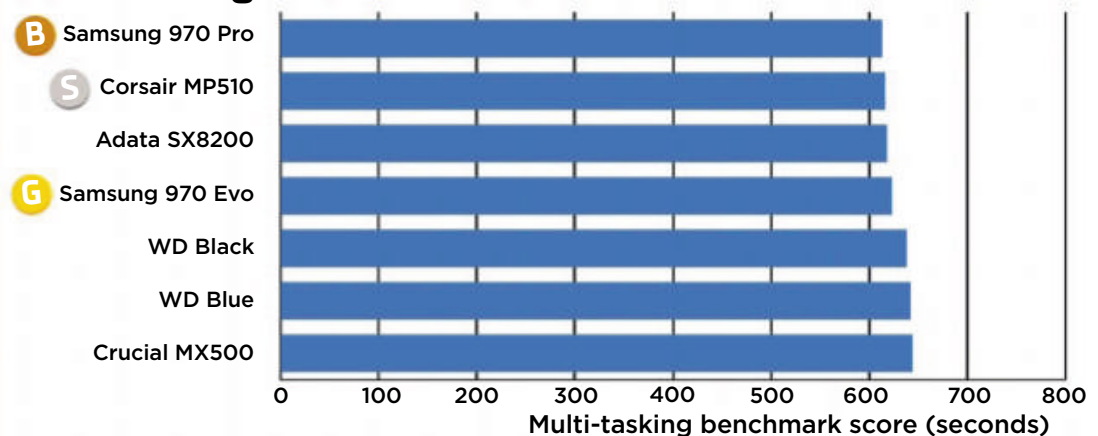
### Read file transfer times



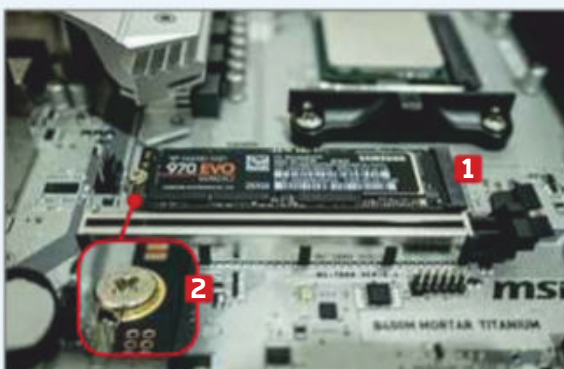
### Write file transfer times



### Multi-tasking benchmark score



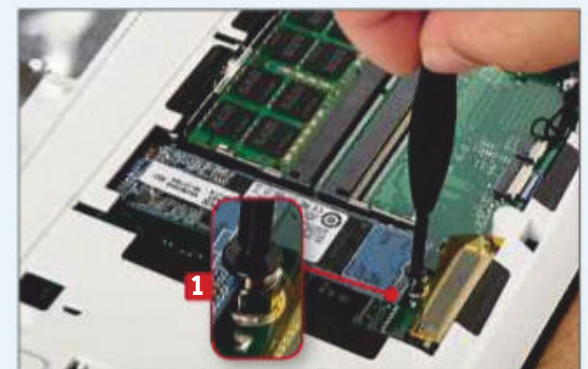
## MINI WORKSHOP | How to install an M.2 SSD



**1** Open the case and locate the existing M.2 drive or slot, which should be located on the motherboard. The M.2 drive will be connected on one of the short ends **1** with a screw at the other. **2** Don't confuse it with the memory modules, which connect on their long sides.



**2** Undo the screw securing any existing device, and lift the end of the SSD that you've unscrewed so it's raised at an angle to the motherboard but still inserted in the connector. **1** Now pull the SSD away from the connector and it should slide out easily.



**3** To install the new one, hold it by its long edges, facing upwards, and insert the end with the gold teeth into the slot from which you removed the old SSD. Gently lower it into position before screwing it in place. **1** If it's not fitting, take it out and try again. Don't force it.





	Samsung 970 Evo	Corsair MP510	Samsung 970 Pro	WD Black	Adata SX8200
WEBSITE	<a href="http://bit.ly/sssd469">bit.ly/sssd469</a>	<a href="http://bit.ly/cors469">bit.ly/cors469</a>	<a href="http://bit.ly/sssd469">bit.ly/sssd469</a>	<a href="http://bit.ly/wd469">bit.ly/wd469</a>	<a href="http://bit.ly/adat469">bit.ly/adat469</a>
PRICE	£75.51	£189.84	£157.57	£234.99	£71.86
BUY FROM AMAZON	<a href="http://bit.ly/sevo469">bit.ly/sevo469</a>	<a href="http://bit.ly/corsa469">bit.ly/corsa469</a>	<a href="http://bit.ly/spro469">bit.ly/spro469</a>	<a href="http://bit.ly/wdbk469">bit.ly/wdbk469</a>	<a href="http://bit.ly/adata469">bit.ly/adata469</a>
CAPACITY TESTED	256GB	960GB	512GB	1TB	240GB
INTERFACE	M.2 PCIe Gen 3x4	M.2 PCIe Gen 3x4	M.2 PCIe Gen 3x4	M.2 PCIe Gen 3x4	M.2 PCIe Gen 3x4
MAXIMUM BANDWIDTH	3,600MB/s	3,600MB/s	3,600MB/s	3,600MB/s	3,600MB/s
CONTROLLER	Samsung Phoenix 5-core	Phison PS5012-E12	Samsung Phoenix 5-core	SanDisk	SMI SM2262
FLASH-MEMORY TECHNOLOGY	Samsung V-NAND 3-bit MLC	3D BiCS NAND	Samsung V-NAND 2-bit MLC	3D BiCS NAND	64-layer 3D TLC NAND
DIMENSIONS	22 x 80 x 2.38mm	22 x 80 x 3mm	22 x 80 x 2.38mm	22 x 80 x 2.38mm	22 x 80 x 3.5mm
WARRANTY	5 years	5 years	5 years	5 years	5 years

impressive were the **ADATA XPG-SX2800** (£71.86 for 240GB | [bit.ly/adata469](http://bit.ly/adata469) | ★★★★★) and the **WD Black M.2** (£234.99 for 1TB | [bit.ly/wdbk469](http://bit.ly/wdbk469) | ★★★★★). The ADATA drive did well in the general performance benchmark, coming third overall, but its write speed let it down, where it sits at the bottom of the test. The WD Black is much better at writing files, where it came third overall, but its performance in the

Windows benchmark placed it in the bottom half of the group. If you have a SATA M.2 connection, you'll need to opt for one of the slower-performing models. The **Crucial MX500** (£116.27 for 1TB | [bit.ly/cruc469](http://bit.ly/cruc469) | ★★★★★) was a full 30 seconds slower than the Samsung 970 Pro when completing our Windows benchmark test, which placed it at the bottom of the group. It was also the slowest of the

lot at transferring files to our PC (the read test). The **WD Blue M.2** (£128.69 for 1TB | [bit.ly/wdbu469](http://bit.ly/wdbu469) | ★★★★★) also failed to shine. Although it was marginally faster in our tests, it still kept the Crucial SSD company at the bottom of the speed charts. If you only have the option of an SATA M.2 connection, however, this is the better of the two that we tested.

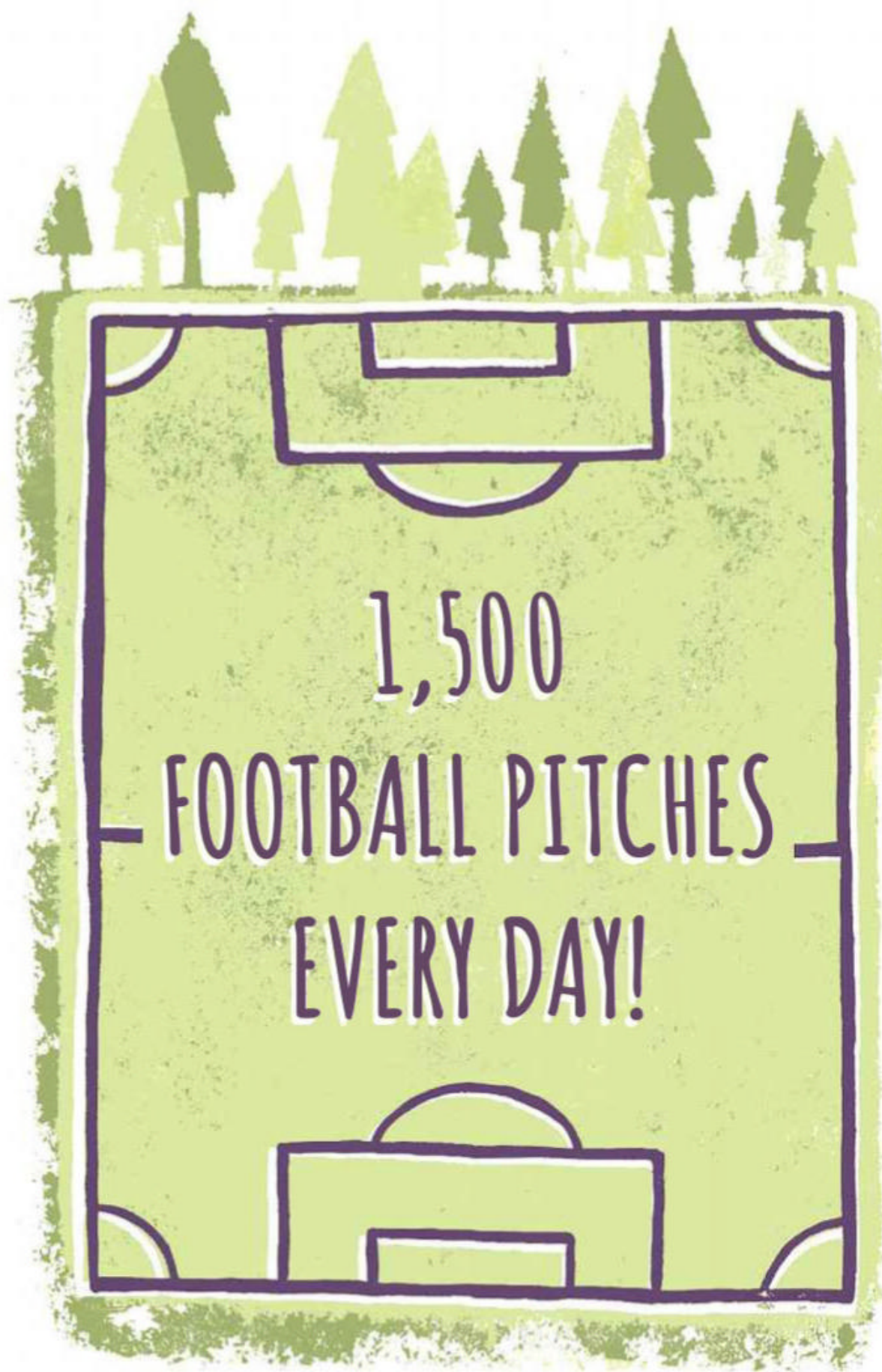
**OUR VERDICT**

All three award-winners are superb, it's just a question of where your budget lies. You want the largest capacity SSD you can afford, so if you can get a larger Gold Award-winning Samsung 970 Evo within your budget, and don't mind compromising a little on absolute top speeds for a good deal, we'd thoroughly recommend it. If you need the fastest performance, the Samsung 970 Pro, which won our Bronze Award, is worth the extra cost. It was the speediest drive in the vast majority of our tests, so is well worth the expense if you're looking for the best. It missed out on the Silver Award to the Corsair MP510.



This is a best-of-both-worlds alternative to the two Samsung models, with performance that approaches the Pro at prices that are closer to the Evo.





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UNFAO, Global Forest Resources Assessment 2005-2015

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[twosides.info](http://twosides.info)







# Web User's Best Buys

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

## HARDWARE

### LAPTOP SSD

#### Samsung 970 Evo

£75.51 from [bit.ly/sevo469](https://bit.ly/sevo469)

Tested: Issue 469



The Samsung 970 Evo is a smart, affordable choice for anyone looking to get better performance from their laptop. It's very fast, with excellent file-transfer speeds, and there are higher capacity versions with up to 2TB of storage.

#### KEY SPECS

256GB capacity ■ 3,600MB/s maximum speed ■ M.2 PCIe Gen 3 x 4 interface ■ Samsung Phoenix 5-core processor ■ Samsung V-NAND 3-bit MLC flash memory ■ 22 x 80 x 2.38mm ■ five-year warranty

### MINI PC

#### Lenovo IdeaCentre 620s

£479 from [bit.ly/lenovo467](https://bit.ly/lenovo467)

Tested: Issue 467



This compact PC crams in more power for entertainment, work and gaming than you might think, and includes decent graphics performance at an affordable price.

#### KEY SPECS

Quad-core 2.4GHz Intel Core i5-7400T processor ■ 1TB hard drive ■ 8GB memory ■ 4 x USB 2 ports ■ 802.11ac Wi-Fi ■ 4GB Nvidia GeForce graphics adapter ■ Windows 10 Home ■ 224 x 212 x 102mm ■ One-year return-to-base warranty

### BUDGET SMARTPHONE

#### Motorola Moto G6

£199.99 from [bit.ly/motog466](https://bit.ly/motog466)

Tested: Issue 466



A budget phone that looks good, feels natural to use and takes great photos, the Motorola Moto G6 offers powerful features found in handsets that cost twice as much.

#### KEY SPECS

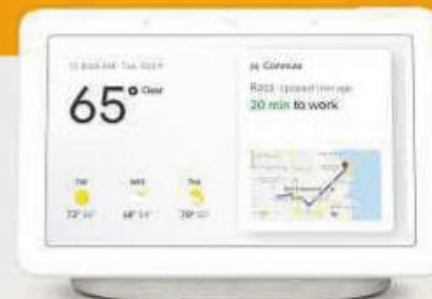
Octa-core 1.8GHz Qualcomm Snapdragon 450 processor ■ 3GB RAM ■ 64GB storage ■ 5.7in, 2,160 x 1,080-pixel screen ■ 12-megapixel rear camera, 8-megapixel front camera ■ 154 x 72 x 8.3mm ■ 167g ■ One-year return-to-base warranty

### SMART SPEAKER

#### Google Home Hub

£139 from [bit.ly/homehub463](https://bit.ly/homehub463)

Tested: Issue 463



Its low price, seamless integration with Google services and ability to double as a digital photo frame make the Google Home Hub the best smart screen we've seen.

#### KEY SPECS

7in LCD touch screen ■ 1,024 x 600-pixels resolution ■ Dual-band 802.11b/g/n/ac ■ Bluetooth 5.0 ■ 178 x 118 x 67mm ■ 480g ■ Choice of Aqua, Chalk, Charcoal or Sand ■ One-year return-to-base warranty

### MONITOR

#### Philips Brilliance 241B7QPJKEB

£209.20 from [bit.ly/phil462](https://bit.ly/phil462)

Tested: Issue 462



This Philips monitor is superb value for money. Its impressive colour accuracy and contrast ratio make it ideal for watching films and browsing the web.

#### KEY SPECS

24in screen ■ 1,920 x 1,080-pixel resolution ■ 16:9 aspect ratio ■ IPS ■ 60Hz refresh rate ■ 1,000:1 native contrast ■ Webcam ■ HDMI, VGA and DisplayPort ports ■ 5ms response time ■ 2W internal speaker ■ Three-years return-to-base warranty

### TABLET

#### Amazon Fire HD 8

£79.99 from [bit.ly/amazon461](https://bit.ly/amazon461)

Tested: Issue 461



The Fire HD 8 offers excellent battery life, superb build quality, seamless Alexa integration and impressive performance – all at a great-value price.

#### KEY SPECS

Quad-core 1.3GHz processor ■ 16GB storage ■ 1.5GB memory ■ 8in, 1,280 x 800-pixel screen ■ 2-megapixel rear camera, VGA front camera ■ 802.11b/g/n Wi-Fi ■ 214 x 128 x 9.2mm ■ 341g ■ One-year return-to-base warranty



## SOFTWARE & SERVICES

### PHOTO-EDITING SOFTWARE

#### DxO PhotoLab

£99 from  
[bit.ly/dxo455](http://bit.ly/dxo455)

**Tested:** Issue 455

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

#### KEY FEATURES

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



Web User Gold Award winners

### DUPLICATE CLEANER

#### Duplicate Cleaner Free

Free from [bit.ly/dc468](http://bit.ly/dc468)

**Tested:** Issue 468

With its streamlined design and rapid performance, this tool is the ultimate duplicate file remover. It makes clearing out your PC a breeze.

**NEW!**



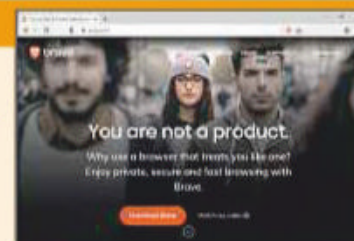
### PRIVATE BROWSER

#### Brave

Free from [brave.com](http://brave.com)

**Tested:** Issue 467

For everyday use, Brave is like Chrome on steroids, and when you want maximum privacy, it offers a quick and convenient switch to Tor.



### PHOTO CLEANER

#### AVG Cleaner

Free from [bit.ly/avgcleaner466](http://bit.ly/avgcleaner466)

**Tested:** Issue 466

AVG Cleaner is a delight to use and is packed with handy features that go beyond merely tidying up photos on your Android phone.



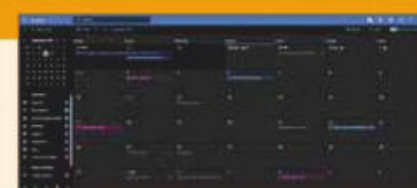
### ONLINE CALENDAR

#### Microsoft Outlook

Free from [bit.ly/outlook465](http://bit.ly/outlook465)

**Tested:** Issue 465

This excellent cross-platform calendar organises your life – on any account and any device, wherever you are.



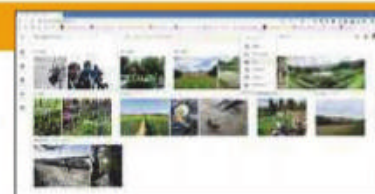
### PHOTO-SHARING SERVICE

#### Google Photos

Free from [photos.google.com](http://photos.google.com)

**Tested:** Issue 464

Simple and smart, Google Photos' unlimited free storage and helpful Assistant make it the best way to share photos online.



### VIDEO-EDITING SOFTWARE

#### Adobe Premiere Elements 2018

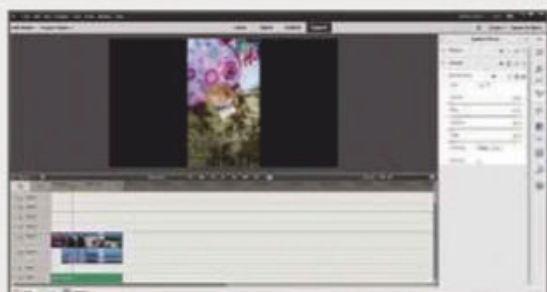
£86.56 from  
[www.adobe.com/uk](http://www.adobe.com/uk)

**Tested:** Issue 453

With its clean interface and sackful of special effects, Elements performs just about every action you'll ever need from a consumer-level video-editing suite. It's a powerful beast and rendering is super-speedy, even when exporting at 4K – but note that it only runs on 64-bit systems.

#### KEY FEATURES

Automatic editing ■ Image stabiliser ■ Surround-sound support ■ Stop-motion capture ■ Variable-speed control ■ Unlimited timelines ■ DVD disc authoring (no Blu-ray support) ■ 4K support ■ Requires Windows 7/8.1/10 or Mac OS (64-bit versions only)



# WEB USER

## BACK ISSUES DISCS

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EVERY ISSUE FROM  
2014 TO 2018





# Best Free Software

## PARTITION TOOL

### MiniTool Partition Wizard Free 11

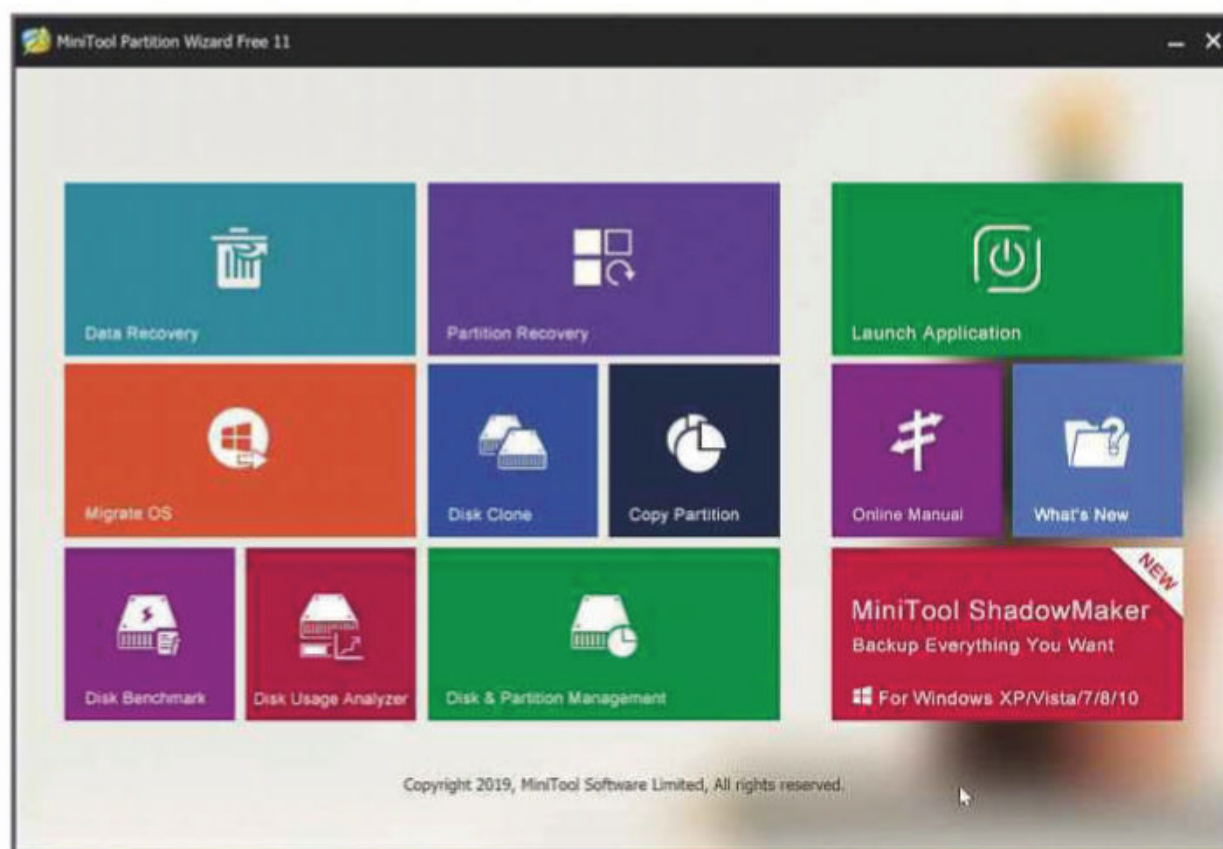
[bit.ly/minitool469](http://bit.ly/minitool469)

**Min requirements:** Windows 7/8.1/10

**File size:** 52.5MB

Windows comes with its own partitioning tool for dividing up your hard drive, but there are much better free solutions available. Partition Wizard Free is a powerful partitioning tool that lets you create, delete, wipe, copy, resize and move partitions; clone disks; convert disk types and file systems; and more. It can also check a problem drive and align partitions, run a surface test, rebuild the MBR (master boot record) and scan for lost or deleted partitions (although you'll need to upgrade to the paid-for version to recover anything it finds).

The latest version of Partition Wizard



Free introduces a couple of major new features. Disk Benchmark measures your drive's performance by running sequential and random read/write tests; and if you've ever wondered where all your previously free disk space has vanished to, the new Space Analyser tool can tell you. Run a scan and it will show you which of your files, folders and installed applications are using the most space (see our feature on page 46 for more tools like this).

Partition Wizard Free 11 also sports an updated interface, and fixes a number

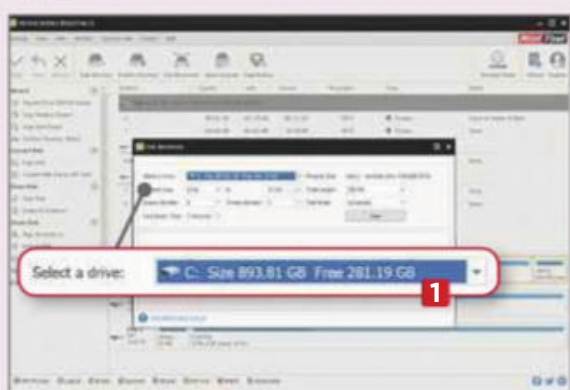
of bugs including external dynamic disks showing as bad, and an inability to create mirrored volumes in Windows 10.

Although the free version of the program will suit most users' needs perfectly, the paid-for edition includes a number of extra features in addition to the previously mentioned lost-partition recovery. These include partition conversion tools, data recovery and dynamic disk management. It costs \$59 (£45.22) for a lifetime licence.

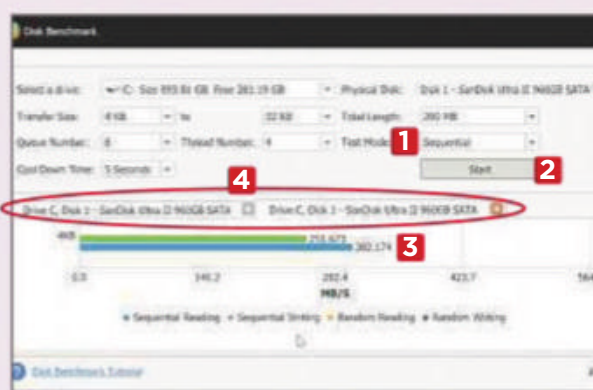
Be sure to decline any bundled junk during installation.



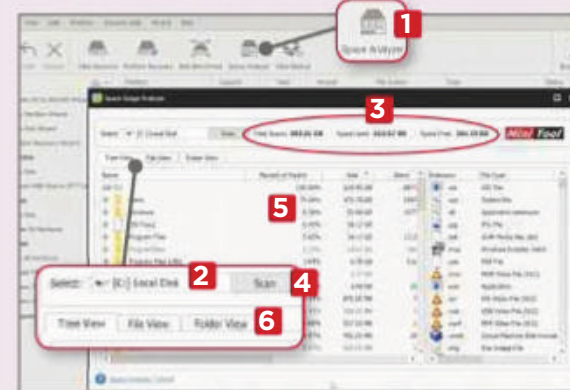
## MINI WORKSHOP | Use the new tools in MiniTool Partition Wizard Free 11



**1** Partition Wizard Free has a colourful, tiled front end that's similar in style to Windows 8.1's Metro design. To use it, just select one of the options and the main interface will open, along with the component you want. This is the new Disk Benchmark tool. Select a drive in the drop-down menu. **1**



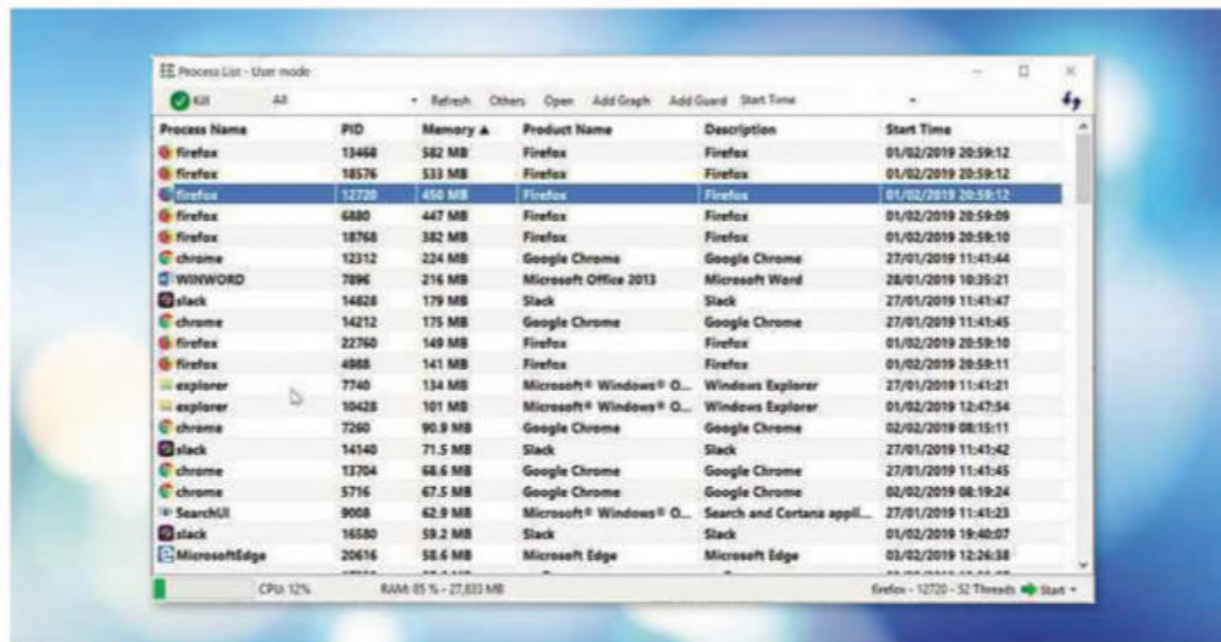
**2** You can change various settings and pick a test mode - sequential, random, or sequential *and* random. **1** Click Start **2** to begin the tests. You can cancel the benchmarking at any time. When done, the results will appear in the window below. **3** Use the tabs **4** to review the different findings.



**3** The new Space Analyser can be launched from the front end or from the menu in the main interface. **1** Choose a drive to target. **2** It will show the total amount of space and the free space remaining. **3** Click Scan **4** and wait while the results appear. **5** You can switch between Tree, File and Folder views. **6**



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



## SYSTEM TOOL myProcesses

[bit.ly/myp469](http://bit.ly/myp469)

**Min requirements:** Windows 7/8.1/10 **File size:** 2.3MB

This program monitors background activity on your PC, showing all running processes. You can sort the list by name, memory usage, start time and more. It also displays the current processor and total memory usage. You can end any misbehaving items by selecting them and clicking the Kill button. Right-clicking a process brings up additional options which include opening the process, jumping to its folder and scanning it on VirusTotal.

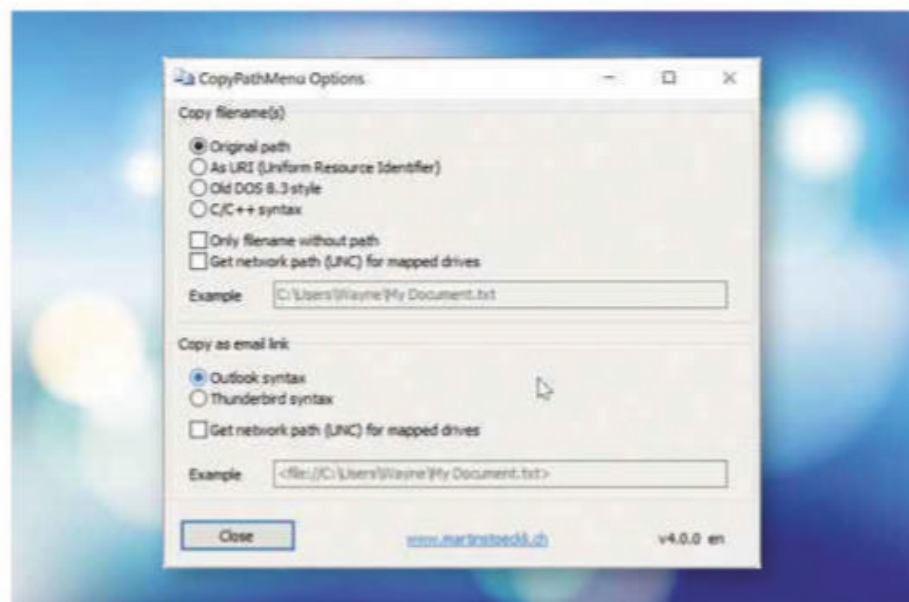
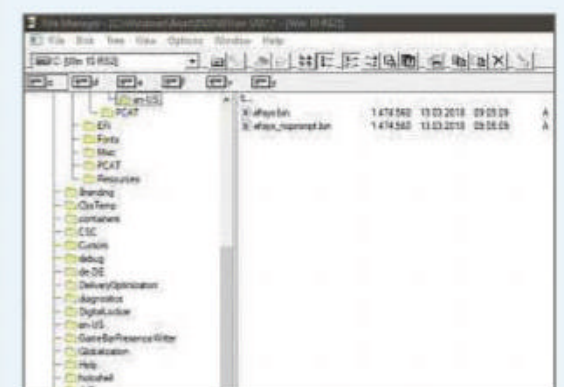
## Best Windows 10 App

### Windows File Manager

[bit.ly/fileman469](http://bit.ly/fileman469)

**Min requirements:** Windows 10  
**File size:** 7.44MB

Last April, Microsoft open-sourced the original dual-pane file manager from Windows 3.0, and a developer updated it for Windows 10, to run with modern keyboard shortcuts. That file manager – which first appeared in 1990 – is now available as a nostalgic UWP (Universal Windows Platform) app you can download from the Microsoft Store.



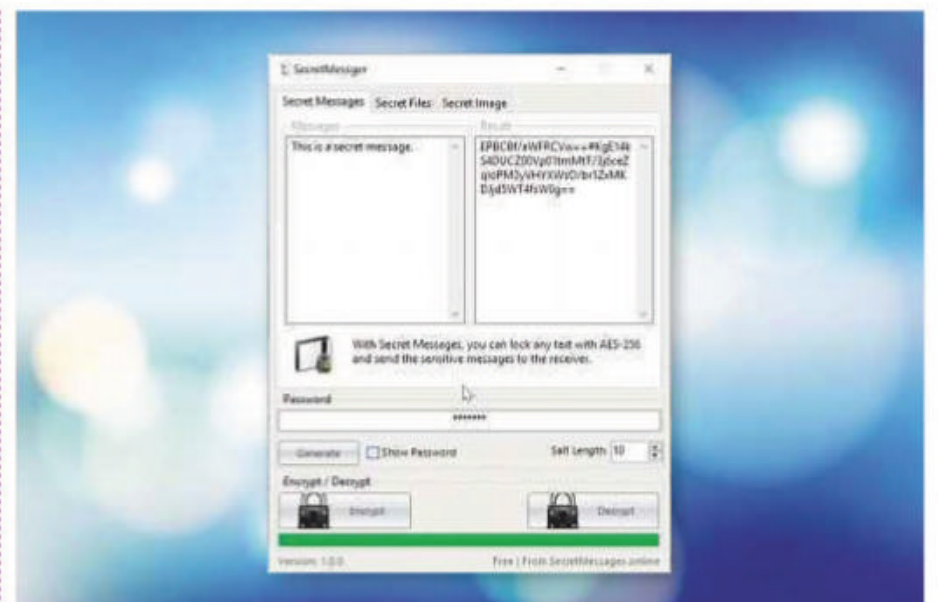
## SYSTEM TOOL CopyPathMenu 4

[bit.ly/cpm469](http://bit.ly/cpm469)

**Min requirements:** Windows 7/8.1/10

**File size:** 1.5MB

CopyPathMenu is a handy free tool that lets you easily copy the full path to any file or folder on your PC. It works by adding commands to the context menu, so all you have to do to use it is right-click an item and select 'Copy as Path'. You can choose to copy one or more filenames (this includes the item's name as well as the full path), copy an email link (for sharing) or open the program's options. This update includes a 64-bit version.



## ENCRYPTION TOOL Secret Messenger

[bit.ly/secret469](http://bit.ly/secret469)

**Min requirements:** Windows 7/8.1/10

**File size:** 5.3MB

Secret Messenger is a free AES-256 encryption tool that secures your private messages before you send them. It can also encrypt your personal files and hide messages within image files (a process called steganography). Use the tabs at the top of the program to choose a feature, set any options, then enter the password you want to use and click the Encrypt button. There are installer and portable versions available.



## PARTITION TOOL

### AOMEI Partition Assistant 8

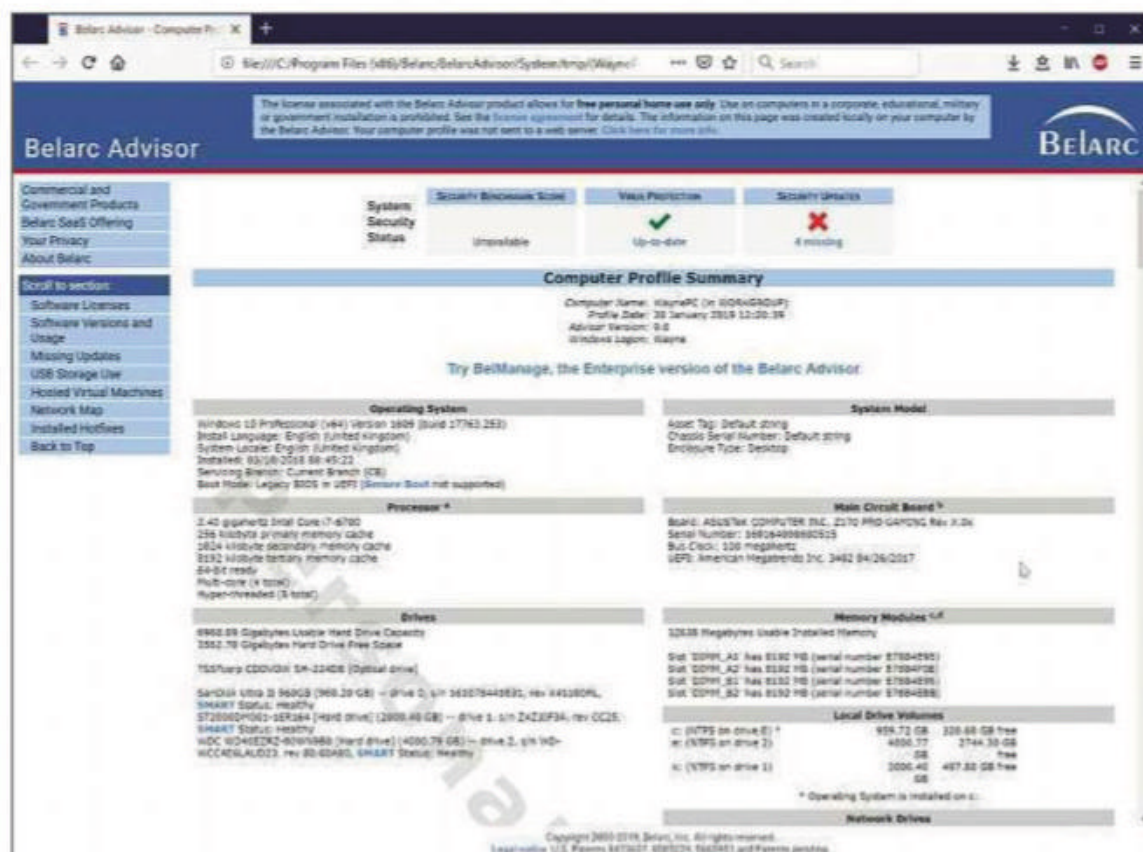
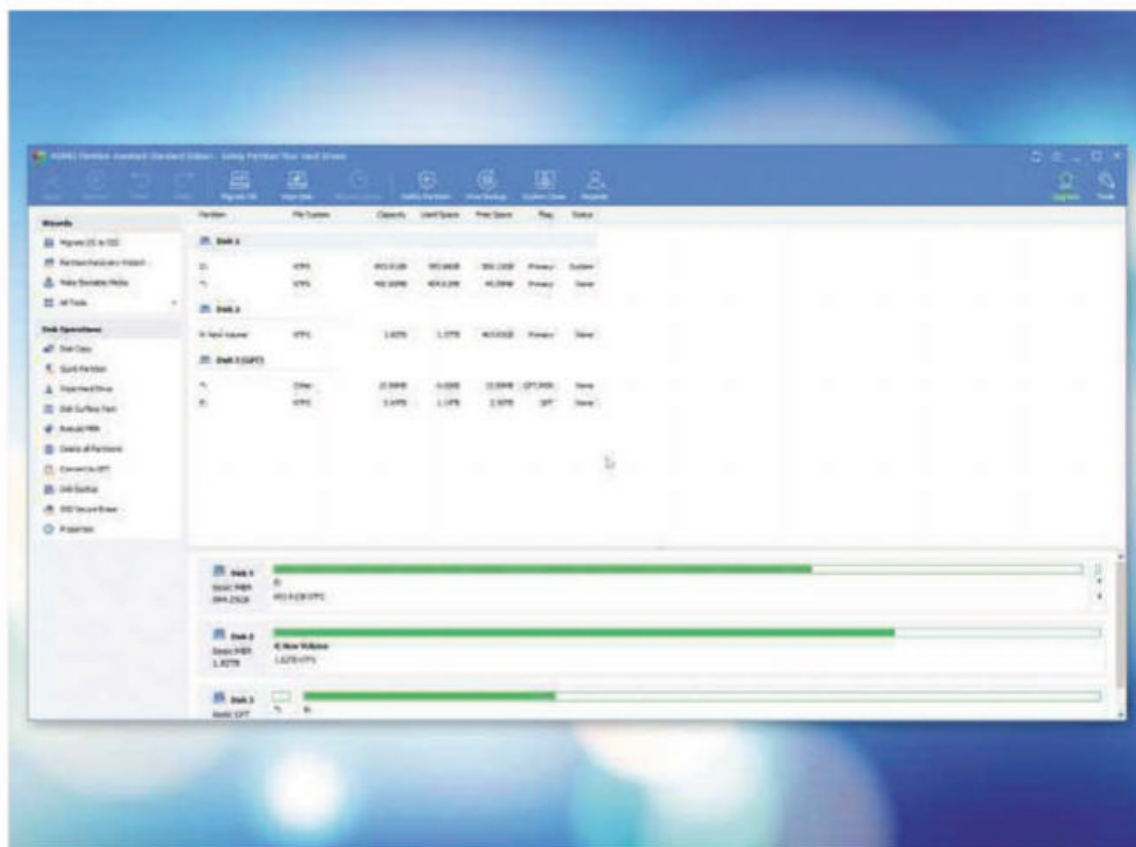
[www.disk-partition.com](http://www.disk-partition.com)

**Min requirements:** Windows 7/8.1/10

**File size:** 22.4MB

MiniTool (see page 28) isn't the only company with an updated partition manager this issue – AOMEI has one too. This powerful tool is free for both personal and commercial use, and can create, resize, move, merge and split partitions, clone a hard drive or partition, and migrate your operating system from a hard drive to an SSD. This latest release is a major update that sports a brand-new user interface, with a more modern look and feel. Additionally, this release fixes a problem that was causing the previous version to crash and hang.

Make sure you decline the bundled junk during installation.



## SYSTEM ANALYSER

### Belarc Advisor 9

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

**Min requirements:** Windows 7/8.1/10

**File size:** 13.9MB

Belarc Advisor debuted back in 1996 as an internet sales tool, but it has since evolved into a popular PC auditor. The program scans your system and provides a meticulously detailed profile of all the hardware and software you have installed. It lists software versions and licences, installed and missing Microsoft Hotfixes, and even reports your IP address and Windows product key. Just run the software and it will scan your system and display its findings in a local web page in your browser (this information never leaves your PC).

This version of Belarc Advisor identifies newer software and hardware.

## NOTIFICATION TOOL

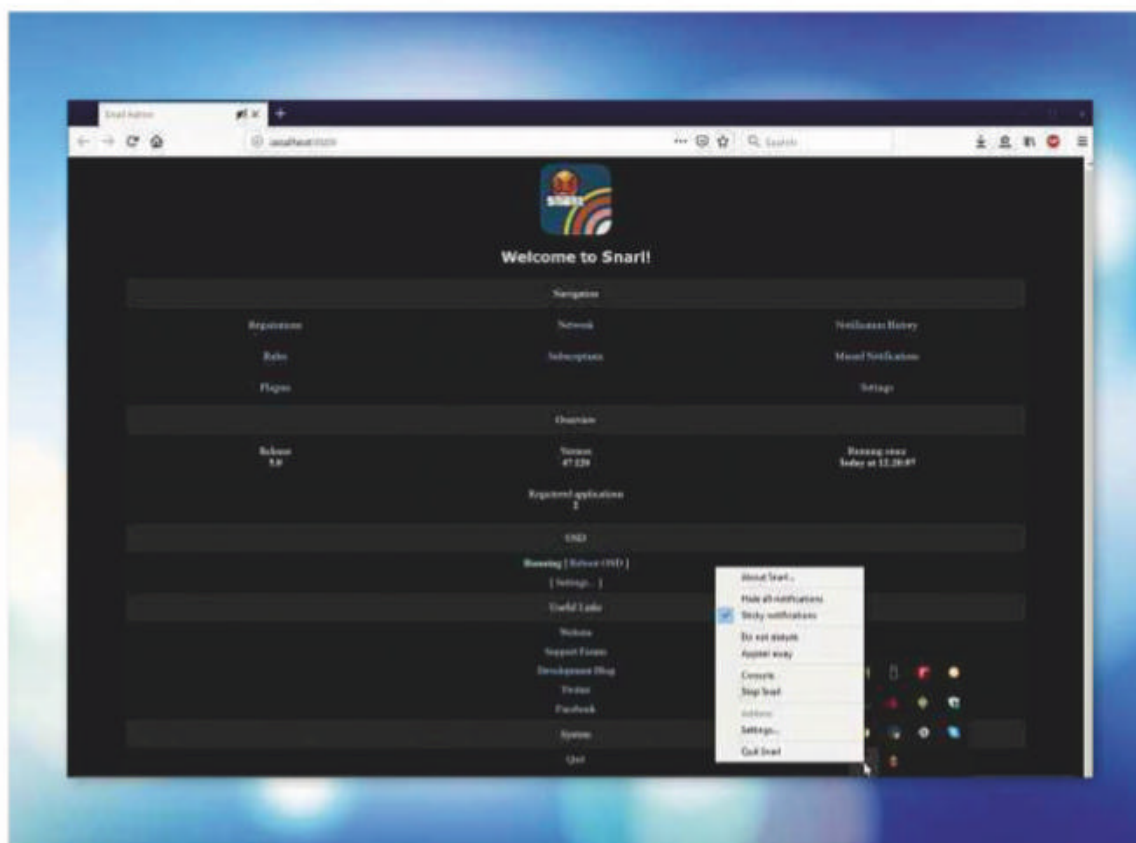
### Snarl 5

[bit.ly/snarl469](http://bit.ly/snarl469)

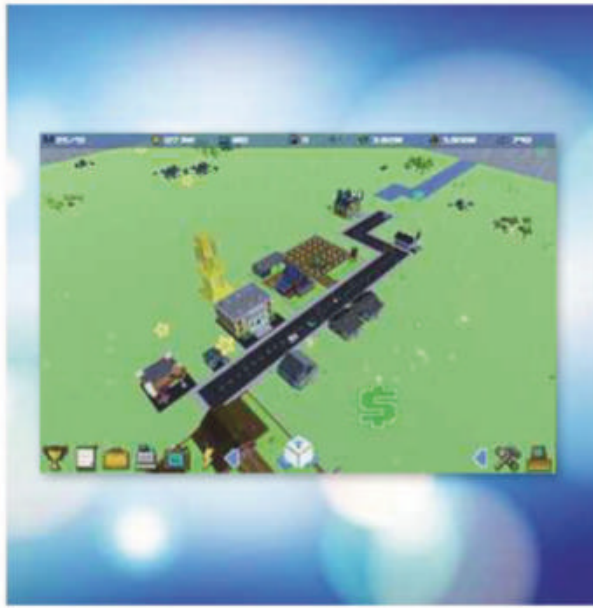
**Min requirements:** Windows 7/8.1/10

**File size:** 12.7MB

Windows 10 comes with a built-in notification manager that alerts you whenever something important happens on your PC – such as when you get messages, a program needs your attention and so on. Snarl works in a similar way, and provides notifications in the form of attractive pop-ups that fade in and out. You can choose which alerts you want to receive by connecting applications and external sources, then create rules and have Snarl forward notifications to your smartphone or email inbox. You can customise the look of the notifications, change their shape, size and colour, and even have alerts read aloud when they arrive.







## GAME

### Turbo Town

[bit.ly/turbo469](http://bit.ly/turbo469)

**Min requirements:** Windows 7/8.1/10

**File size:** 71.7MB

The aim of Turbo Town is to build and manage a 3D city, planning ahead to balance your resources and make as much profit as possible to feed your narcissistic vision. You design the layout of your metropolis, add buildings and infrastructure, and equip and upgrade it as required. There are more than 30 resources to craft and the game has a detailed tutorial to help get you started.

## Don't install...

### UltraVNC

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

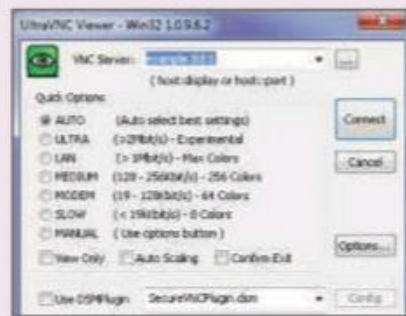
**Min requirements:**

Windows XP/

Vista/7/8.1/10

**File size:** 2.7MB

Ultra VNC is a powerful free remote-desktop tool that supports file transfers and text-based chat. However, it's aimed at advanced users, not those looking to help friends and family with basic tech. Setting up the program requires an understanding of port forwarding, so we'd steer clear unless you're a networking expert.



## ...Install this instead

### Iperius Remote Desktop

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

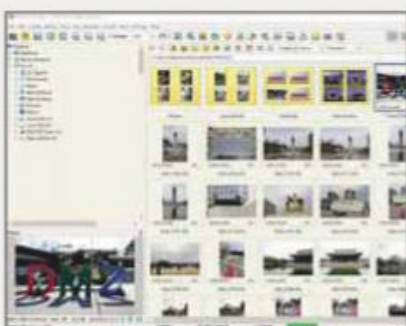
**Min requirements:** Windows 7/8.1/10

**File size:** 5.7MB

There are lots of reasons for wanting to access another computer remotely, such as solving a friend's PC woes by logging into their PC from yours to fix any problems they're having. Iperius Remote Desktop lets you easily connect to another computer (with the owner's permission), and take control of it from a distance, transferring files and chatting with the person at the other end. Iperius Remote Desktop is free for personal use, with more features available in the paid-for business editions, such as allowing concurrent connections so that multiple users can access the same target PC.



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



## PHOTO VIEWER

### FastStone Image Viewer 6.9

[www.faststone.org](http://www.faststone.org)

**Min requirements:**

Windows 7/8.1/10

**File size:** 6.7MB

This photo browser, editor and converter is packed with powerful tools. This update introduces support for the M2TS video format, adds a shortcut (Alt+I) for showing File Properties and fixes a copy-and-paste bug in the thumbnail browser.



## SYSTEM TOOL

### Windows Repair 4.4.4

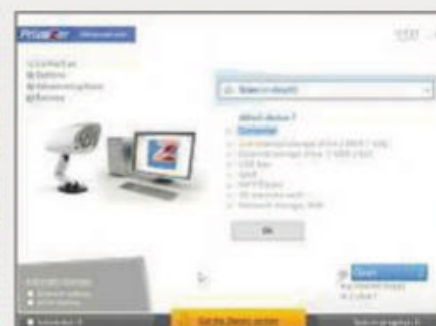
[www.tweaking.com](http://www.tweaking.com)

**Min requirements:**

Windows XP/Vista/7/8.1/10

**File size:** 37.5MB

Windows Repair comes with a host of mini-fixes for tackling common problems in Windows. In this release, the 'windefend' service for Windows 10 has been removed from the repairs list because Microsoft keeps changing the path for Windows Defender so the fix doesn't work.



## PRIVACY TOOL

### PrivaZer 3.0.63

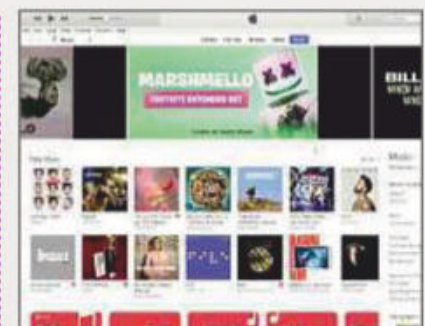
[privazer.com](http://privazer.com)

**Min requirements:**

Windows XP/Vista/7/8.1/10

**File size:** 7.7MB

PrivaZer is a very thorough PC and privacy cleaner that's designed to remove all traces of private-usage data lurking on your PC and storage devices, such as USB keys and external drives. The new release improves the program's MFT (managed file transfer) scan and cleaning features.



## MEDIA MANAGER

### iTunes 12.9.3.3

[bit.ly/itunes469](http://bit.ly/itunes469)

**Min requirements:**

Windows 7/8.1/10 or

Mac OS

**File size:** 256MB

If you own an iPhone, iPad or Mac then it's likely that you have Apple's music player and organiser installed. The iTunes software has now been updated to add support for AirPlay 2 multi-room audio and HomePod stereo pairs. ■

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



# Best New Browser Tools

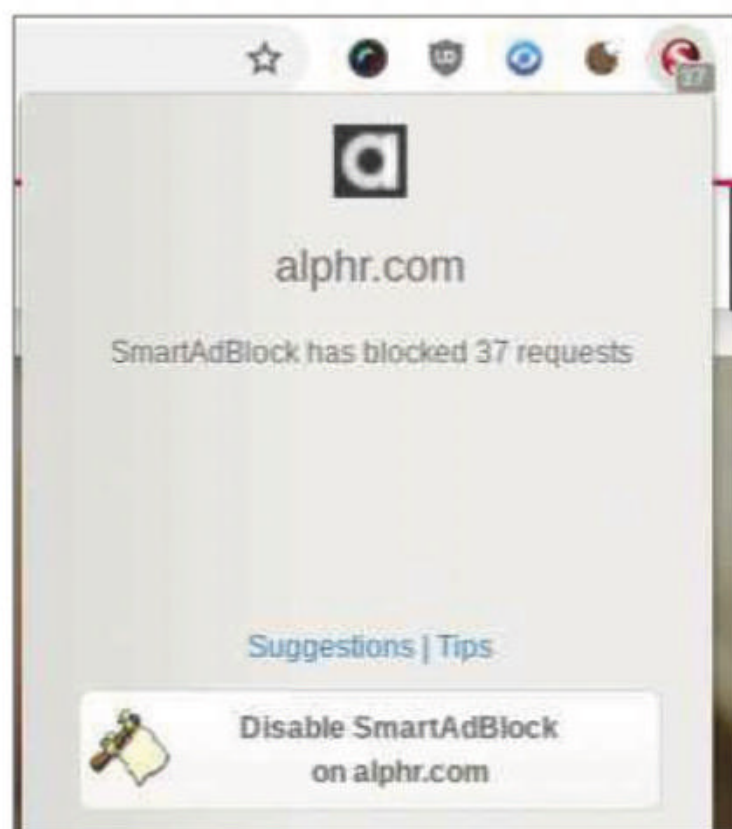


## CHROME

### Block all ads, pop-ups and cookie warnings

If you like to browse the web without being distracted, obstructed and tracked by adverts, then you probably have an ad blocker such as Adblock Plus, Ghostery or uBlock Origin installed. Still, there's no harm in trying something new and if you find that your current tool isn't working as well as it could – or you just fancy a change – then consider switching to SmartAdblock ([bit.ly/smart469](http://bit.ly/smart469)). This simple but powerful new extension for Chrome and Firefox automatically blocks all ads on web pages – making no allowances for paid-for 'acceptable' ones – and all pop-ups that get in your way. This includes those annoying GDPR-enforced warnings about cookies and privacy policies.

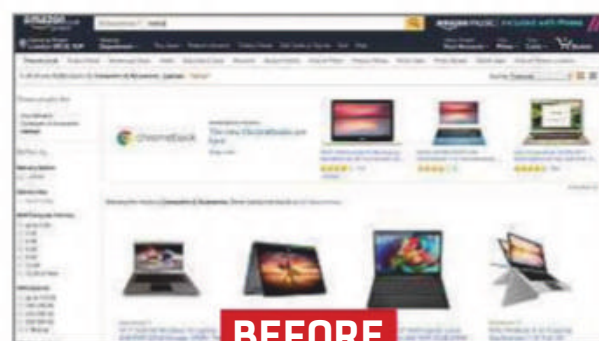
Unlike other, similar tools, SmartAdblock doesn't guzzle memory on sites where it's not needed (such as Wikipedia), and protects you against malicious scripts (such as cryptominers) on 'hostile' pages. There are no options to configure and it's completely free to use – the developers admit that "our business model is totally crap"!



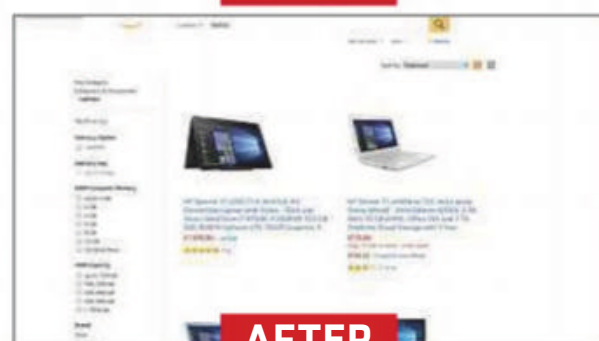
### Strip unnecessary clutter from Amazon

Just as over-eager shop assistants can be more of a hindrance than a help, Amazon thrives on complicating your online purchases. Sponsored products, recommendations and adverts vie for your attention on every page, and can sometimes make you forget what you wanted to buy in the first place.

For a more focused and less pushy shopping experience, install Amazon Lite ([bit.ly/amazon469](http://bit.ly/amazon469)), which strips all the unnecessary clutter from the store, so you don't get diverted from your purchase. Amazon's homepage is reduced to a Google-style search box,



**BEFORE**



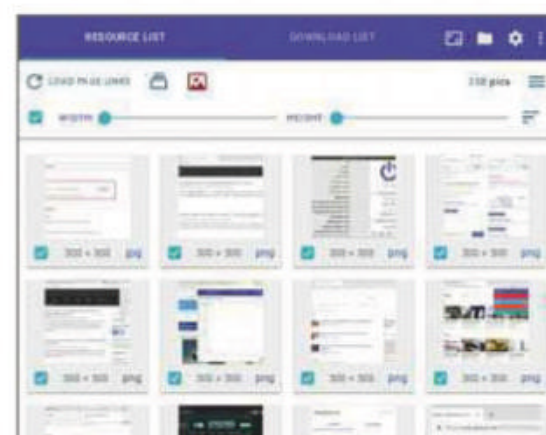
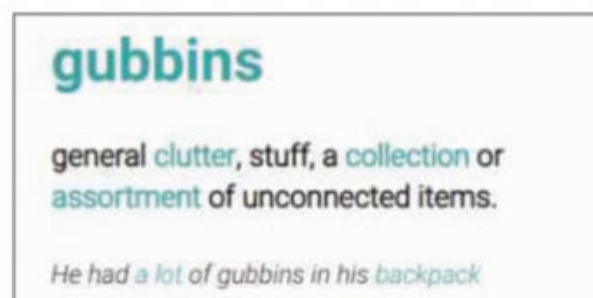
**AFTER**

and when you look up an item you're presented with 'pure' search results, untainted by distractions. You can disable the extension when you want to return to unfiltered Amazon.

### Learn new words from Urban Dictionary

The English language is constantly evolving, which means that many new words and phrases you see on the web or hear on the street may baffle you. Urban Dictionary ([www.urbandictionary.com](http://www.urbandictionary.com)) has long been an essential – if rather ribald – resource for deciphering modern lingo, and there's now an unofficial extension to enlighten you about trendy terms. Urban Dictionary Random Word ([bit.ly/urban469](http://bit.ly/urban469)) displays a definitions from the site every time you open a new tab, for example: "Flawful: full of flaws and errors; bad or undesirable". You can switch between dark and light mode, and filter words you don't want to see.

Be warned that some of the content may be considered offensive!



### Download every file from every tab

Chrome's built-in download manager is pretty basic and not much use for downloading multiple files at the same time. A far superior option is Simple Mass Downloader ([bit.ly/downloader469](http://bit.ly/downloader469)), which not only lets you download every item from the current page in one go, but every item from every page across all your open tabs (or just specific tabs). As you're unlikely to want *all* of that, you can filter the files it finds by name or type, choose to view images only and manually select the items you want. The add-on also let you decide which folder the files you bulk-download are saved to, and batch-rename items before downloading. Simple Mass Downloader is also available for Firefox ([bit.ly/ffdownloader469](http://bit.ly/ffdownloader469)).



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



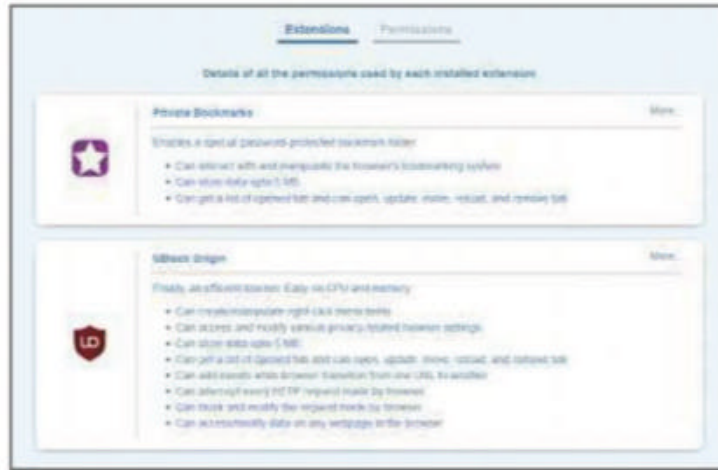
## FIREFOX

### Check your permissions

When you install an extension in Firefox, the browser tells you what permissions it requires, such as "Access your data for all websites", but it's easy to skip past this message without reading. Also, unlike Chrome, Firefox doesn't let you check these permissions once the add-on is installed.

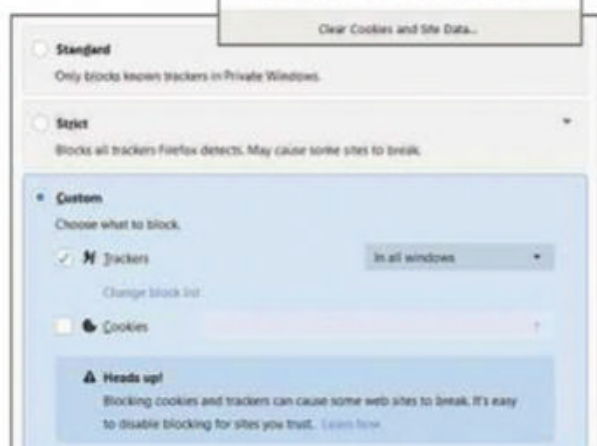
Fortunately, help is at hand from a new tool called Permission Inspector ([bit.ly/permission469](http://bit.ly/permission469)), which provides a snapshot of all permissions used by your installed extensions – even those that aren't mentioned upfront. Just click the inspector's toolbar (a silhouette of a man and a padlock) to view a list of extensions and details of their permissions.

Alternatively, you can browse by permission type, for example Bookmarks, Storage or Tabs, to see which add-ons have been granted that access.



### Optimise your privacy in Firefox 65

The biggest improvement in the latest version of Firefox, 65, which was released at the end of last month, is to the browser's built-in tracking protection. Long gone are the days of the vague 'do not track' option, and you can now see exactly what's trying to track you and easily block it. When viewing a website, click the 'i' icon in your address bar to open the 'Site information panel', then click the Trackers option in the Content Blocking section to view a list of trackers embedded in the current page. Similarly, choose Cookies to



see tracking and third-party cookies.

To boost your privacy and block these elements, click the Manage Content Blocking button and either select Strict to block all detected trackers, or Custom to choose what to block. By default, Firefox uses the basic block list from the privacy tool Disconnect.me, which lets through some trackers so that websites can function properly.

### Install former Test Pilot add-ons

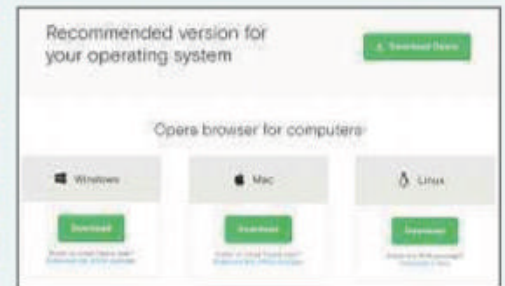
As big fans of Firefox's Test Pilot site, and its cute logo of a fox flying a spaceship, we were sad when Mozilla closed this experimental playground for new browser tools, on 22 January. The good news is that any Test Pilot add-ons you have installed in your browser, such as Email Tabs, Side View or Firefox Color, will continue to work for the foreseeable future. Even better, all active Test Pilot experiments have been migrated to the Firefox Add-ons site, so you can install them from there, and some may eventually be added to the browser itself. See [bit.ly/test469](http://bit.ly/test469) for more information about the closure of Test Pilot.



## OTHER BROWSERS

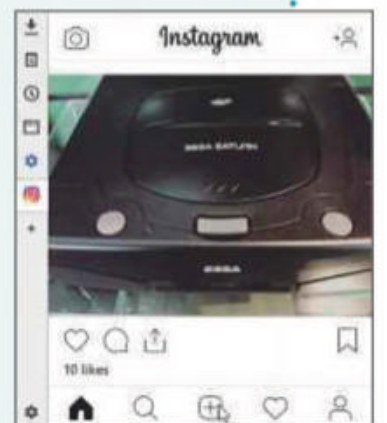
### Download new versions of Opera

Opera 58, released last month, failed to introduce much of note except a warning when you close a window containing multiple open tabs. More interesting is the browser's new download page ([www.opera.com/download](http://www.opera.com/download)), which brings together all its different versions in one place. These include Opera for Windows, Mac and Linux; its three browsers for Android and iOS; and its beta and developer builds. Even XP and Vista users get a look in – they can download the three-year-old Opera 36 – and the site tells you the best version for your operating system.



### Post to Instagram from Vivaldi

Instagram lets you upload images via your mobile browser, but not from your desktop – unless, that is, you use the Vivaldi. The innovative browser's Web Panels feature allows you to post photos and videos on the social network directly from your hard drive. It uses the mobile version of the Instagram site to bypass the desktop restriction and gives you access to the usual filters. To use this feature, click the plus-sign in Vivaldi's side panel (go to View, Show Panel if you can't see this), open [www.instagram.com](http://www.instagram.com) and log in.







# Best Free Apps



## App of the Fortnight

### MESSAGING

#### Viber Messenger

[bit.ly/viberdroid469](http://bit.ly/viberdroid469)

[bit.ly/viberios469](http://bit.ly/viberios469)

(varies) 9.3

UPDATED

WhatsApp might be the current king of messaging apps, but there are plenty of compelling reasons to use its rival Viber instead (or as well), particularly now that Facebook has announced worrying plans to merge WhatsApp with its Instagram and Messenger tools. Viber's latest release, version 10, brings a host of new features and improvements to an already brilliant app to make it an even more appealing alternative to WhatsApp.

If you've ever used this voice, video and text chat app, the first thing you'll notice is that Viber's entire interface has been given a major facelift. Out goes the heavy overuse of purple in favour of a classy, mostly white look, with subtle splashes of Viber's signature violet tones. Navigation has been simplified, too: there are now just three main navigation buttons on the bottom bar – Chats, Calls and More. All your private messages, group chats, Communities and favourite public content is now accessed from the main chat list without the need to switch between different screens.

Performance has been enhanced, and Viber claims that sending messages is now twice as fast as it was in previous versions, while voice and video calls have also received a significant quality boost.

Another interesting new feature in Viber 10 is a 'Hidden-number Chats' option in Communities, which offers a safe way to make direct contact with new people you meet via the app. It lets you chat without revealing either side's phone number until you both decide you're ready to do so. And that's not

all. A further update (due "very soon") will add Group Calls to Viber, so you can enjoy voice calls with up to five people at a time.



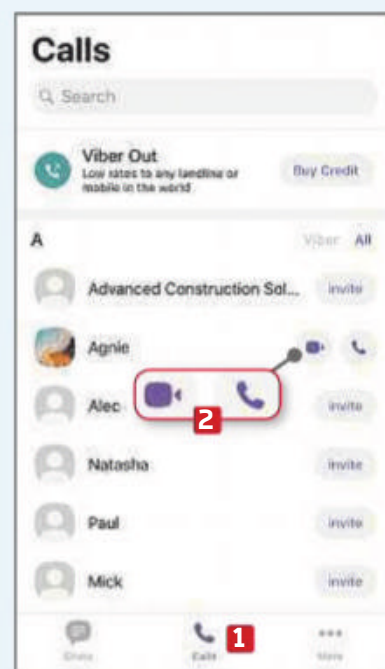
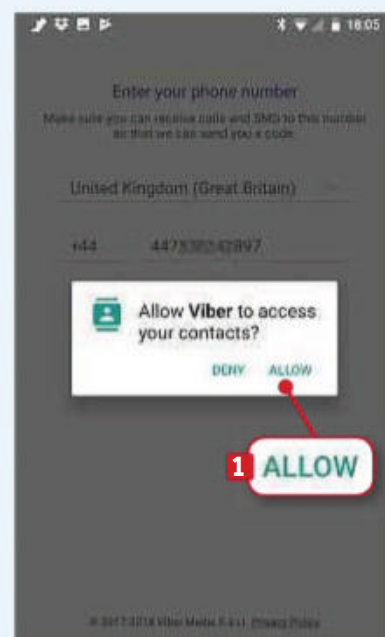
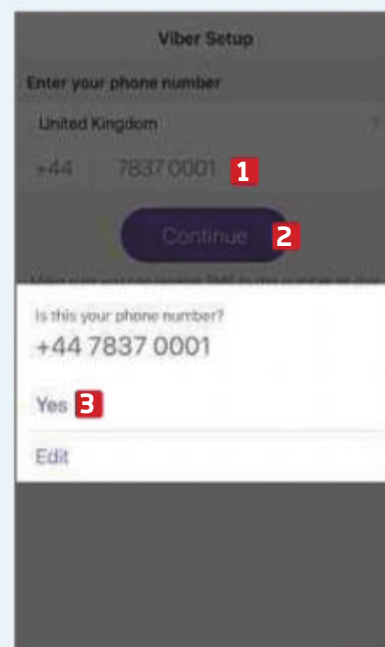
### MINI WORKSHOP

#### Make free voice and video calls using Viber

**1** Download the Viber Messenger app to your device and launch it. Press Continue on the introduction screen, then enter your mobile phone number **1** and tap Continue, **2** then Yes **3** to confirm the number when prompted. On certain devices, you may receive an automated phone call – often from a number abroad. You shouldn't need to answer or decline this – it will be picked up by the app automatically.

**2** In other cases – such as if you're using an iPhone rather than an Android device – you will receive an activation code via SMS rather than an automated call. Enter this when you receive it to confirm your phone number. Now you'll be asked to grant various permissions requested – you'll need to allow these **1** or you won't be able to make and receive voice and video calls or access your contacts.

**3** You'll be prompted to send a message to friends who are already using Viber to let them know you're now using the service, too. Select a greeting, then tap the Send button next to one of your contacts below. To make a free voice or video call to another Viber user, press the telephone icon in the lower toolbar, **1** then tap the phone or video camera icon next to a contact. **2**



Our rating





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

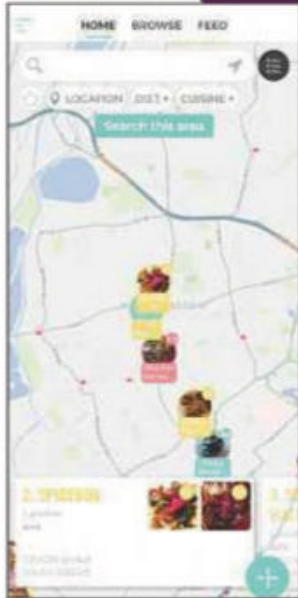
### EATING OUT

#### Eaten

[bit.ly/eaten469](http://bit.ly/eaten469)

 8.2

Eaten is a community-driven restaurant finder that lets you locate nearby eateries, record your dining experiences and share them with other foodies. Over time, you'll build up your very own 'Eaten Map', where you can refer back to venues you've visited and favourite dishes you've sampled. You can also build up a wish list of restaurants you want to try, while the social element lets you follow other users and see what they've been enjoying, too. It's early days for this app, so its restaurant listings are still building, but it shows great promise.





Our rating



### MESSAGING

#### Telegram

[bit.ly/teledroid469](http://bit.ly/teledroid469)

[bit.ly/teleios469](http://bit.ly/teleios469)  
 (varies)  8

Many messaging apps are let down by boring backgrounds behind the chat bubbles. It seems Telegram's developers have recognised this problem, which is why they've released a big update that focuses on providing users with lots of new options for customising backgrounds and generally sprucing up their chatting environment. You can now apply colours or patterns and adjust their intensity, or search the web for wallpapers, adding motion and blur effects and sharing your favourite backgrounds with friends via links.



Our rating



### GAME

#### Tetris Classic 1984

[bit.ly/tetris469](http://bit.ly/tetris469)

 4.4

This free Tetris game is styled after the classic Game Boy release of the much-loved 1980s block puzzler, which sold somewhere in the region of 30 million units. This version adds nothing new, but – adverts aside – it remains pretty faithful to the original, complete with monochrome graphics and retro Game Boy-style controls. If you ever played Nintendo's handheld version, this app will bring back a flood of memories. And if you somehow lived through the latter decades of the 20th Century without playing Tetris, then download this to see what you missed.



Our rating



### EMAIL

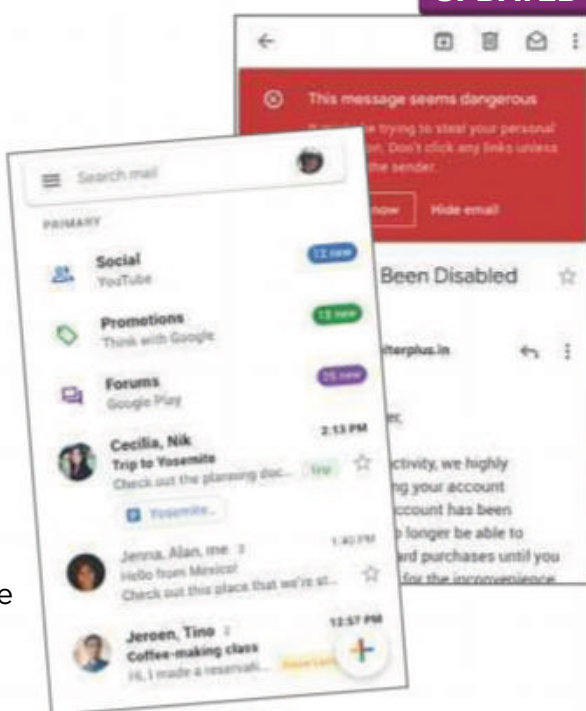
#### Gmail

[bit.ly/gmaildroid469](http://bit.ly/gmaildroid469)

[bit.ly/gmailios469](http://bit.ly/gmailios469)

 (varies)  11

Google is rolling out a major new update for its Gmail mobile apps to bring them more in line with recent changes to the browser-based version of its email client and other services, such as Drive and G Suite. Apart from an overall redesign, users gain the ability to view attachments, such as photos, without having to open or scroll through a conversation. It's now easier to switch between accounts and you'll also see a big, red alert warning you of any potential phishing emails. If your device hasn't received the update yet, you can expect to see it "in the coming weeks", according to Google.



Our rating



### FITNESS

#### Easy Pedometer

[bit.ly/easyped469](http://bit.ly/easyped469)

 4.1

Why spend money on a fitness tracker when you can just use your phone instead? Most fitness apps with a built-in step-tracking function cost money, but not so Easy Pedometer, which is completely free, though ad-supported. Like its paid-for equivalents, Easy Pedometer counts your steps as you walk and appears to do so with relative accuracy. You can also view reports on other data, such as distance, calories burned and more. On the downside, Easy Pedometer's full-screen adverts can be a little intrusive. And we're not sure why it asks permission to make and manage phone calls.



Our rating





# 5 NEW APPS WORTH PAYING FOR

## IMAGE EDITOR

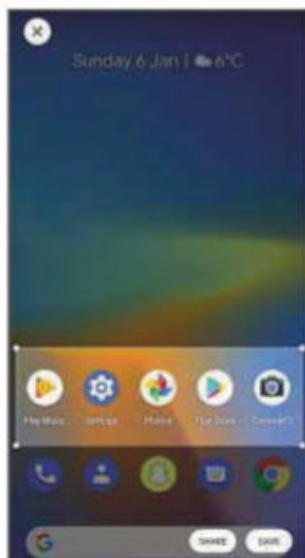
### Screen Crop

[bit.ly/screencrop469](http://bit.ly/screencrop469)

Price: 79p



This app places a handy icon in your quick settings tray that lets you select and capture specific chunks of your screen, rather than taking a full-size grab that you have to crop.



## GAME

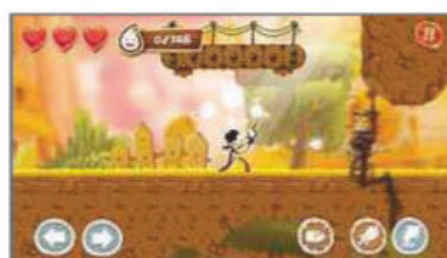
### Spirit Roots

[bit.ly/spirit469](http://bit.ly/spirit469)

Price: £4.99



This retro-styled platform game might look cute and colourful, but it's deceptively tricky as you run, jump and fight your way through 50 levels and numerous bosses.



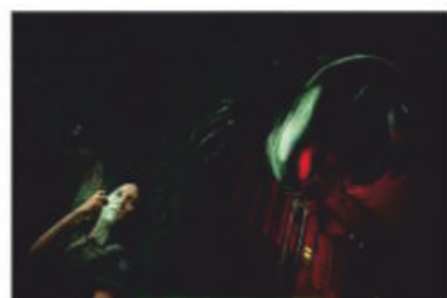
## GAME

### Alien Blackout

[bit.ly/aliendroid469](http://bit.ly/aliendroid469)

[bit.ly/alienios469](http://bit.ly/alienios469)

Price: £4.99



Play as Amanda Ripley and guide the crew of a doomed space station to safety while avoiding the deadly jaws of the omnipresent Xenomorph in this terrifying horror sequel.

## TOOLS

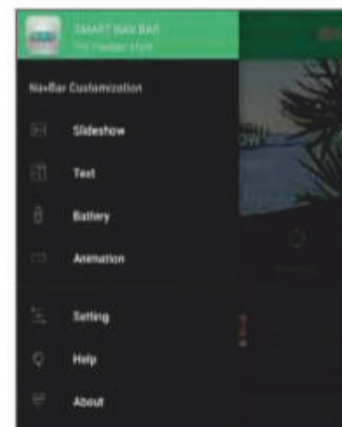
### Smart Navigation Bar

[bit.ly/smartnav469](http://bit.ly/smartnav469)

Price: 69p



If you want more control over your Android device's navigation bar, this app lets you customise the bar with a photo or animated background, text notes and more.



## PDF READER

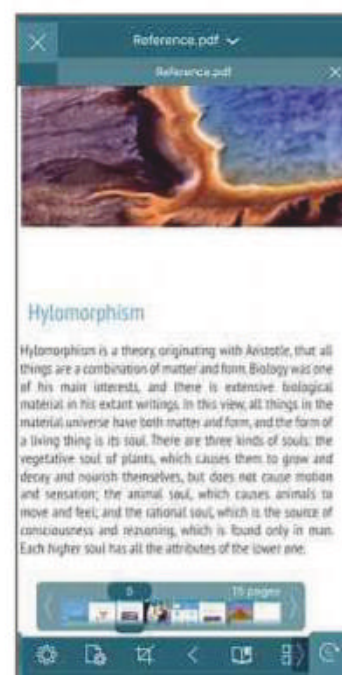
### GoodReader

[bit.ly/goodread469](http://bit.ly/goodread469)

Price: £5.99



The best iOS PDF reader just got even better, with a redesigned interface, improved navigation, support for Apple Pencil 2 and, if you pay a further £5.99 for the Pro Pack, military-grade AES-256 encryption.



Screen Crop



Spirit Roots



Alien Blackout



Smart navigation bar



GoodReader



## Don't install...

### Costa Coffee Club

[bit.ly/costadroid469](http://bit.ly/costadroid469)

[bit.ly/costaios469](http://bit.ly/costaios469)

Looking for an app to go with your morning coffee? Well, unless you live in London and have vast reservoirs of patience, this probably isn't it. Coffee Club members can earn points for purchases at Costa Express machines but, according to numerous negative customer reviews, the app is plagued with registration and account glitches. On top of that, the app's key benefit - letting you order ahead before collecting from your local Costa - is limited to just 100 branches in the capital.



## ...Install this instead

### Caffè Nero

[bit.ly/nerodroid469](http://bit.ly/nerodroid469)

[bit.ly/neroios469](http://bit.ly/neroios469)



For simple functionality, Caffè Nero's app is streets ahead of Costa's. It acts like a digital loyalty card, adding virtual stamps for every purchase and providing you with ways to earn regular rewards, offers and promos. Better still, you can link a debit or credit card for easy payment. Of course, the coffee loyalty app you use will be defined by the chain you usually buy your coffee from. If you're a Starbucks person, you're also well served. The Starbucks app for Android ([bit.ly/stardroid469](http://bit.ly/stardroid469)) and iOS ([bit.ly/starios469](http://bit.ly/starios469)) lets you earn and redeem rewards, pay online and order ahead from a wide range of branches. ■







# Take a Screen Break

Give your eyes a rest from your browser by taking our fiendish fortnightly challenges. Can you guess our 1980s albums emoji and our tech year?

**WIN A  
WEB USER  
2018 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 EIGHTIES ALBUMS FROM THE EMOJI?

1 👍 🙏

2 🔒 🕒

3 😊 4 💥

4 👶 ➡ 🇺🇸

5 🐕 🐕 ⬅️ ❤️

6 👦 👦 ➡ 💪 💪

## GUESS THE TECHNOLOGY YEAR

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

**1** WannaCry ransomware wreaks havoc across the world, locking more than 200,000 users out of their PCs, including staff at 48 NHS trusts.



**2** Microsoft launches its MacBook-rivalling Surface Laptop, which offers a touchscreen and up to 14.5 hours' battery life, and runs Windows 10 S.



**3** The UK's best-selling internet magazine reveals the 100 best things you can download for free and tests Google's new WiFi mesh router.



**4** Google takes on Amazon's Echo Dot smart speaker with the Home Mini, a tiny voice-controlled device that costs £49 (it's now even less).



**5** In December, Bitcoin reaches its all-time highest value of \$19,783 per coin. It's been downhill for the controversial cryptocurrency ever since.



## COMPETITIONS

### WIN 1 OF 6 Hex Icon Wallet for iPhone XR

Hex's Icon Wallet case for the iPhone XR includes up to five slots for cards to block RFID (radio-frequency ID) hacking, and a cash pocket. There's also a camera cut-out for photography, and an elastic strap for firm and easy closure. For more details on Hex cases and bags visit [hexbrand.co.uk](http://hexbrand.co.uk) and follow @hex\_brand on Twitter.



WORTH  
AROUND  
£50  
EACH

### WIN 1 OF 4 Boxi Bluetooth Speakers

KitSound's compact Boxi is the Bluetooth speaker that you can take everywhere. It has a weatherproof rating of IP66, meaning it's water resistant, and will easily survive a little dust and sand. To enter, email your address to [webusercomp@dennis.co.uk](mailto:webusercomp@dennis.co.uk) with 'boxi' in the subject line. For more details on KitSound products, visit [www.kitsound.co.uk](http://www.kitsound.co.uk) and follow @KitSoundUK on Instagram.



WORTH  
£24.99  
EACH





# FAQ

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

## Cloud gaming services

Don't let resource-hungry games put a strain on your computer – stream them instead. **David Crookes** looks at the future of gaming

### What are they?

Cloud gaming services let you stream games over the internet and play them as if they were installed on your own computer or mobile device. They're often referred to as a "Netflix for games", and with some of the biggest names in computing involved – including Microsoft, Google and Amazon – they're set to become an ubiquitous gaming platform in the very near future.

### How do they work?

Rather than going to the trouble of downloading individual games to your PC or console, or visiting a high-street shop and buying a physical product to install, these services typically host and run games on their own servers. Players choose one of the titles and the game displays on their machine. When the gamer then uses their keyboard, mouse or gamepad, the input is sent to the server and the action is carried out. Players see the result in real time and it should feel as if the game is running locally.

### Haven't these services been around a while?

Yes, they have. In 2003, a company called OnLive launched and, as well as allowing games to be streamed and played on PCs, Macs, smartphones, tablets and many other devices, it introduced its own hardware gaming system in 2010. Unfortunately, it didn't last the distance



and Sony acquired its patents in 2015.

Meanwhile, one-time rival Gaikai was sold to Sony in 2012 for \$380m. Founded in 2008, it initially concentrated on allowing top quality blockbuster games to be played inside web browsers before switching its attention to consoles. By doing so, it sowed the seeds of streaming.

### Why is Sony so interested?

Gaikai's technology ended up underpinning PlayStation Now ([bit.ly/psnow469](https://bit.ly/psnow469)), a monthly subscription service that gives players streaming access to more than 600 games.

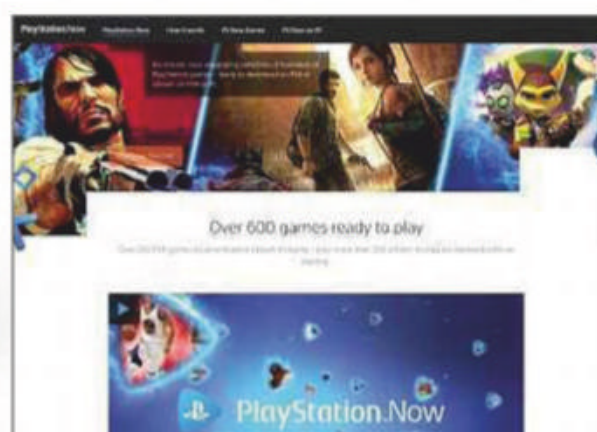
Launched in the UK in 2015, it allows players to stream older PS4, PS3 and PS2 games including big names *Dirt 4* and *Prey*, as well as exclusives such as *Uncharted 3: Drake's Deception* and *The Last of Us*. PlayStation Now is available in many countries across the world and is very popular.

### So is Microsoft launching a rival service?

Yes. Microsoft has announced plans to draw on its large back catalogue of Xbox and Windows games for an initiative dubbed Project xCloud. Claiming to use "state-of-the-art global game-streaming



*OnLive was the first cloud game-streaming service but it may have arrived too early*



*Sony's PlayStation Now service lets you stream games rather than download them*



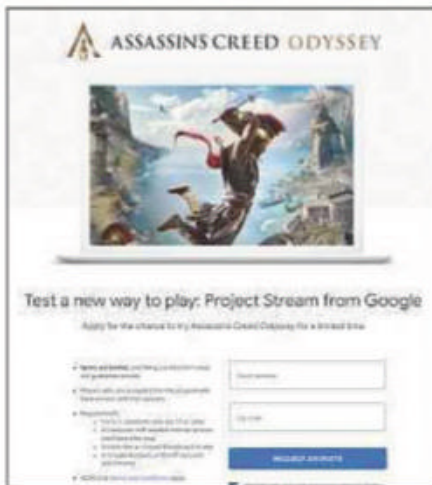
*Microsoft's new gaming service Project xCloud is being tested on mobile devices*



technology”, it’s about to start public testing on mobile phones and tablets, and will look at how well they work with both touch input and an Xbox Wireless Controller through Bluetooth.

## What about Google?

Google has teamed up with games publisher Ubisoft and began testing Project Stream last October, letting gamers play Assassin’s Creed Odyssey in its Chrome browser. This was an invite-only technical test to see how far



**Google tested Project Stream by letting gamers play Assassin’s Creed Odyssey**

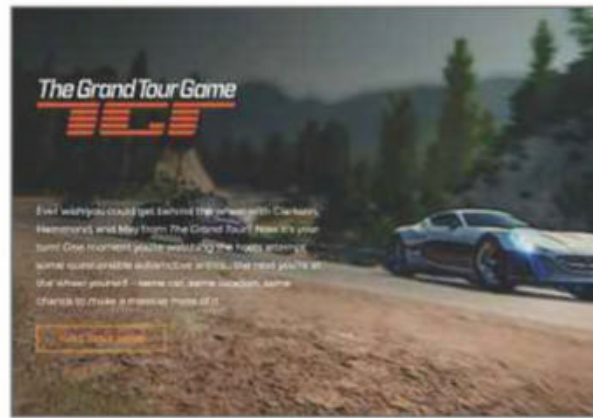
streaming could be pushed with a demanding game. Now that the trial is over, Google is assessing its next move with a view to perhaps entering the market properly. Last July, there

was even talk of it launching a game-subscription service and integrating YouTube for instant walkthrough guides.

## And what about Amazon?

Amazon is also rumoured to be looking at ways to stream games using its cloud-computing platform Amazon Web Services. It has already made inroads into online gaming: notably with the live-streaming service Twitch, which it bought in 2014, and the creation of Amazon Game Studios ([www.amazongames.com](http://www.amazongames.com)) six years ago. The Grand Tour Game, released in January, can be downloaded for PS4 and Xbox On.

Certainly, a cloud gaming service



**Amazon Game Studios offers console games including The Grand Tour Game**

seems like a natural step for a company that has already successfully entered the TV and film-streaming market with Amazon Prime Video.

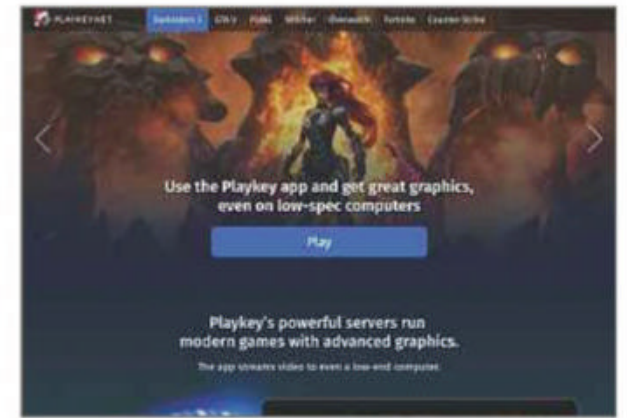
## Are any other companies involved?

They sure are. Nvidia is already pinning its hopes on GeForce Now ([bit.ly/geforce469](http://bit.ly/geforce469)), which is currently in beta and gives access to a virtual gaming PC. It has a range of free-to-play titles, though most games need to be bought from Steam, Uplay or Blizzard Battle.net.

Other services include Playkey.net ([www.playkey.net](http://www.playkey.net)); Parsec ([parsecgaming.com](http://parsecgaming.com)) – which is akin to DIY cloud-gaming since it supports cloud access to a virtual PC; and Shadow ([shadow.tech](http://shadow.tech)), which claims to turn any screen into a high-end PC.

## How much do these services cost?

PlayStation Now costs £12.99 per month, or you can opt for an annual subscription of £84.99. Costs for the others vary: GeForce Now is currently free to use but, as we mentioned, you need to own or purchase the games that it supports from other providers, so bear that in mind. PlayKey.net costs from £2.40 a day to £35 a month, and Shadow will set you back £26.95 per month.



**Playkey provides you with high-quality game streaming even on a low-spec PC**

## Won’t I need a powerful PC to stream games?

Well, one of the most intriguing selling points of cloud gaming services is that you should be able to run them on a low-spec laptop, an inexpensive tablet or a rudimentary console, set-top box or smart television. Because the technology required to run these games is taken care of by the server, all you need, in theory, is a fast broadband connection. In reality, however, some providers ask for certain specifications and devices. PlayStation Now, for example, requires a PS4 or Windows 7 PC and above, while GeForce Now requires at least 64-bit Windows 7 or Mac OS 10.10, or an Nvidia Shield TV or tablet.

## What’s deemed a fast connection?

PlayStation Now recommends a connection speed of at least 5Mbps. GeForce Now asks for at least 15Mbps for 720p streaming quality or 25Mbps for 1080p to enjoy games running at 60fps (frames per second). We’d recommend 50Mbps if you’re serious about getting the most out of these services. The better your connection, the smoother the games will play – otherwise, you may experience jitters at a crucial moment, which is sure to have you screaming at the heavens, never mind the cloud.

## WHAT ABOUT THE ‘LAG’?

When you’re playing a game, you want an instant reaction. It’s no good pressing a button to jump out of the way of imminent danger if it then takes a second for that action to be performed.

In the early days of cloud gaming, there was a problem with high latency – that is, a delay before data is transferred after an instruction is issued. Combined with major compression, this ‘lag’ is a key reason why cloud gaming services have been slow to take off.

Thankfully, much work has been



done in this area. Nvidia GRID’s graphic processors decrease input-to-display latency by including both graphics processing and video encoding in

a single device. Google’s Project Stream experiment with Assassin’s Creed also sought “near-instant interaction between the game controller and the graphics”.

The words “near-instant” are revealing. Unless you have an ultra-fast broadband connection, the risk of lag will always be present and and it’s nigh on impossible to get perfection, especially when the distance from your device to the server is an issue and milliseconds count. However, in many cases, you may not even notice.

Credit: Milkovasa / Shutterstock.com



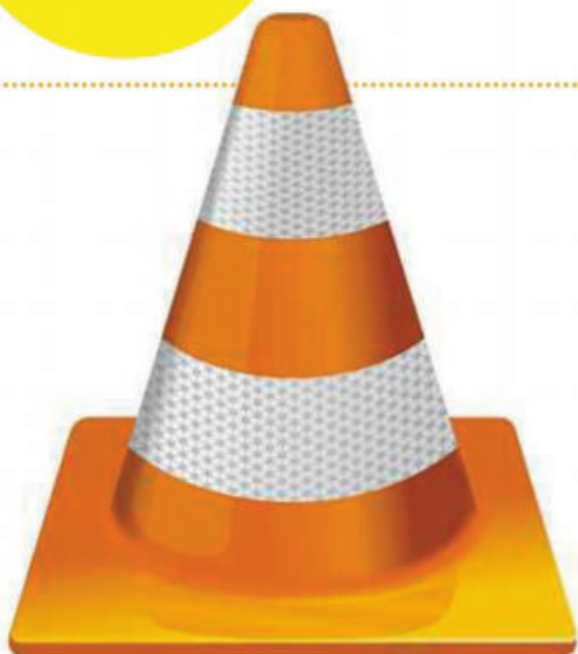
# Ultimate **Secret Tips** For

# VLC

# MEDIA PLAYER

**COVER  
FEATURE**

VLC Media Player is one of the most popular and versatile programs available. **Wayne Williams** reveals the best hidden tricks that every VLC user should know



**V**LC Media Player began the year by revealing that it has now been downloaded more than three billion times. The software's developer, Videolan, also announced the addition of several exciting new features to VLC, including support for Apple's AirPlay streaming service.

Such is VLC's popularity that we imagine most *Web User* readers already use it, whether on Windows, Mac, Linux, Android or iOS, but the program's incredible versatility means there are always new tools

to discover and tricks to master.

In this feature, we celebrate 18 years of VLC Media Player (released in February 2001, it's one month older than *Web User*!) by rounding up the best hidden hacks and lesser-known tips for the marvellous media player.

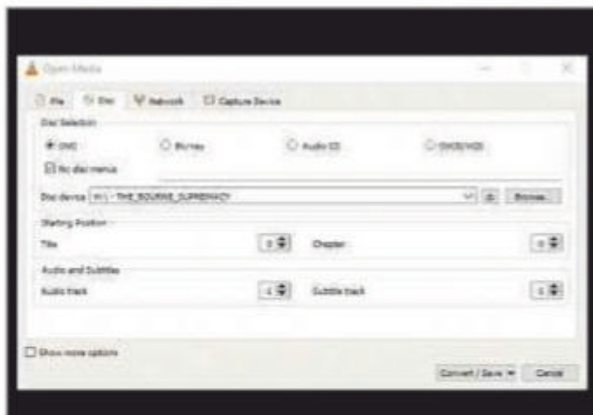
Even if you think you know VLC inside out, we guarantee we have a few surprises for you. And, if that's not enough, we also reveal the new features coming in the next major milestone – VLC 4.



## MANIPULATE YOUR MEDIA FILES

### Rip CDs, DVDs and Blu-rays

If you have a collection of audio or video discs, you can rip them to your computer using VLC. This means you'll be able to listen to your favourite music or watch your favourite films without needing the original CD, DVD or Blu-ray. To do this, insert the disc to rip in your optical drive and, in VLC, go to Media and click Convert / Save (or press Ctrl+R). Click the Disc tab and, under Disc Selection, choose the type of disc you want to rip. For video, make sure 'No disc menus' is ticked. Use the drop-down menu to select the correct disc drive and click the Convert / Save button. Choose the format you want to save the file in, select a destination and click Start.

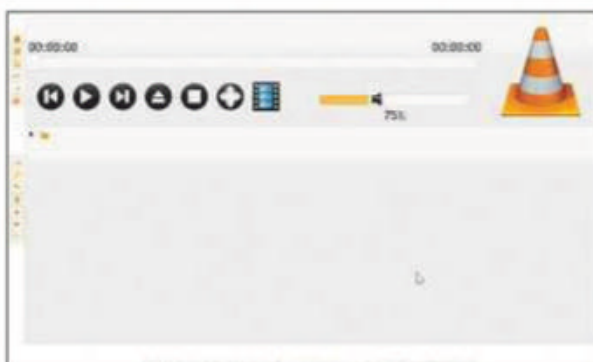


VLC lets you rip CDs, DVDs and Blu-rays to your computer

### Control VLC via a web browser

You can use any web browser as a remote control for VLC Media Player. To enable this option, go to Tools, Preferences and, under 'Show settings' at the bottom of the Interface tab, click All. Click the arrow next to Interface to expand that section, then click 'Main interfaces'. Tick the Web box on the right, expand the 'Main interfaces' section and click Lua, then enter a password under Lua HTTP, click Save and restart VLC.

To test the remote-control function, open a browser, type localhost:8080 into the address bar and press Enter. Type your password when prompted and VLC's remote control interface will appear.

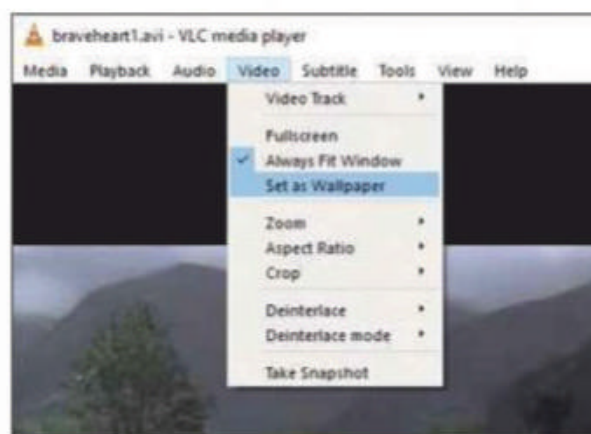


Access VLC's secret remote-control feature in your browser

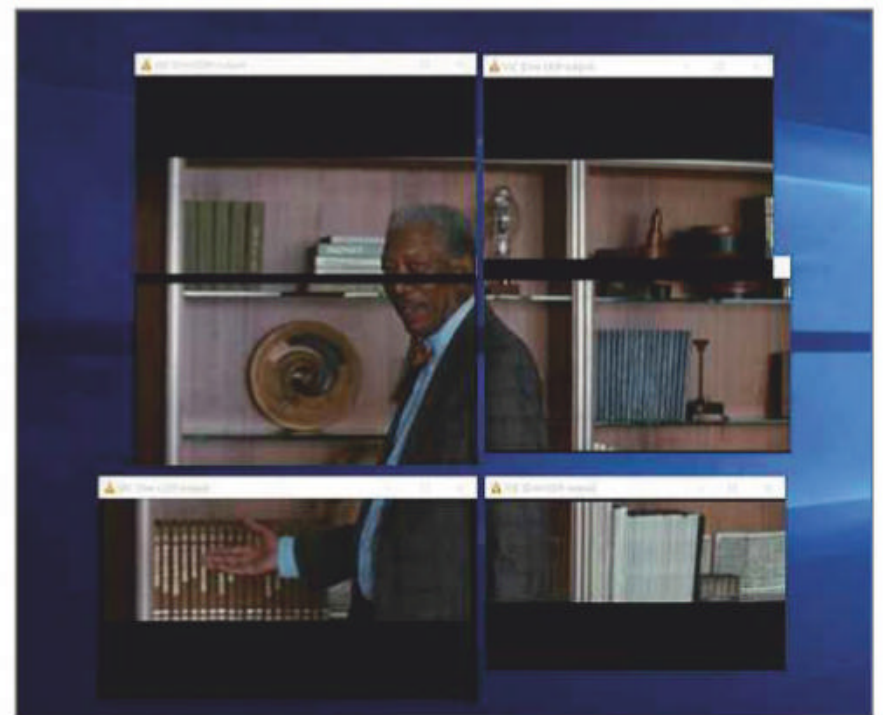
To use this feature on a remote browser, find out your computer's IP address (see 'Stream videos over the internet' tip on page 43) and use this with the '8080' port to access the interface. It will be something like: <http://128.0.0.1:8080>.

### Set videos as desktop wallpaper

One of the best but least known features in VLC is the ability to display videos as desktop wallpaper. In previous versions of the program, this allowed video to run in the background, just like regular (albeit moving) wallpaper behind open windows and icons. This has been changed in the newer release and it now just behaves like a modified version of full-screen mode. To activate the



VLC lets you create moving desktop wallpaper from videos



VLC's Wall feature plays videos across several windows

feature, right-click a playing movie, go to Video and select 'Set as wallpaper'. The video will switch to full-screen mode, but you'll be able to access the Windows Start menu and taskbar, and drag windows on top of the playing clip.

### Create a wall of videos

While it's not the most sensible way to watch a video on your PC, VLC's video-wall effect is rather impressive. Go to Tools, Effects and Filters and click the Video Effects tab. Click the Geometry tab below that and tick Wall. Set the number of rows and columns that you want (keep the number relatively low if you want to avoid your system slowing to a crawl), then drag a video clip to the player and it will be displayed across a number of movable and resizable windows.

## WHY THE TRAFFIC CONE?

Much as we love VLC Media Player, there's one thing that's always baffled us about the program: its traffic-cone logo. Yes, it's striking and instantly recognisable, but traffic cones have very little to do with playing media files, which makes the logo seem rather incongruous.

After extensive research (well, visiting a source cited on Wikipedia: [bit.ly/cone469](http://bit.ly/cone469)), we can reveal that the reason for the cone dates back to VLC's genesis as a student project. Said students, at the École Centrale Paris (Central School of Paris), had a drunken penchant for stealing traffic cones, and when they needed a logo for the exciting new program they were developing, the orange-and-white witch's hat was the obvious choice.

So when you next look at the iconic VLC logo on your desktop, phone or this issue's front cover, you can credit the cone to inebriated student hijinks!



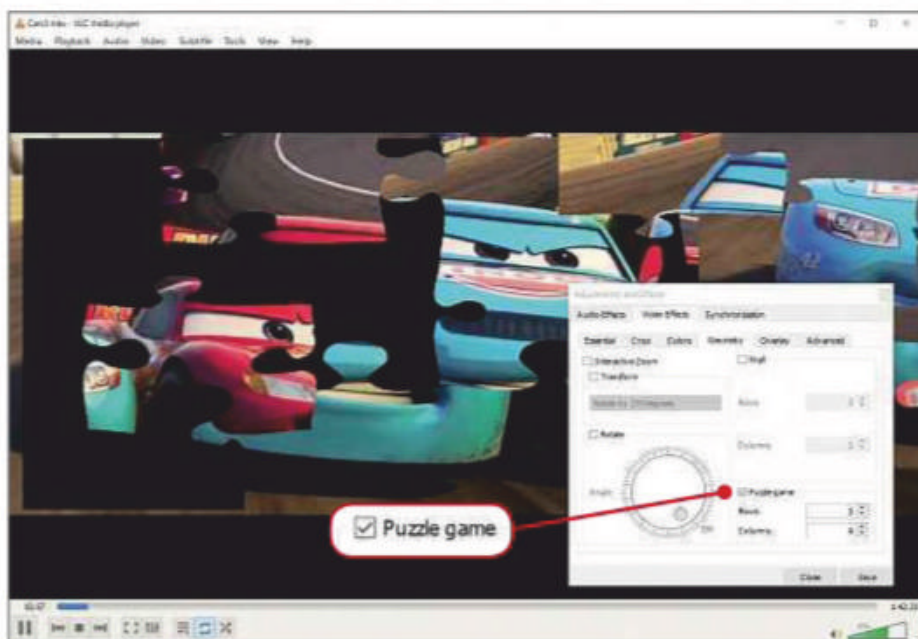




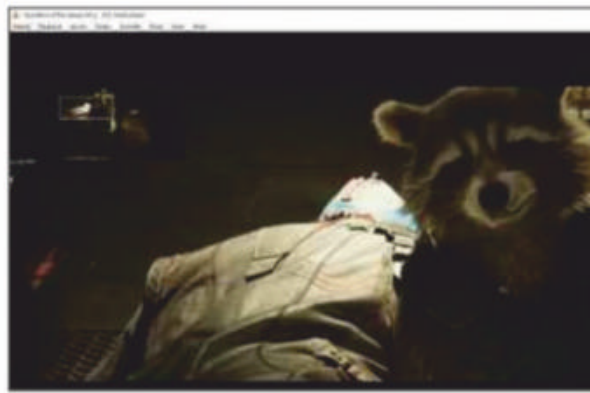
## Unlock VLC's hidden jigsaw puzzle

In the same way that the video wall detailed on page 41 is a fun diversion, VLC lets you turn a playing video into a solvable jigsaw puzzle. Start playing a video, then go to Tools, Effects and Filters. Click Video Effects, then go to the Geometry tab and tick the 'Puzzle game' box. The video will instantly turn into a jigsaw puzzle.

You can click individual puzzle pieces and drag them around inside the playing window. When one piece connects with another, it will snap into place, and you'll be able to move that section around. If you find the game is too easy – or too hard – you can adjust the number of rows and columns (that is, the number of pieces).



Turn a video into a jigsaw to make playback more interesting

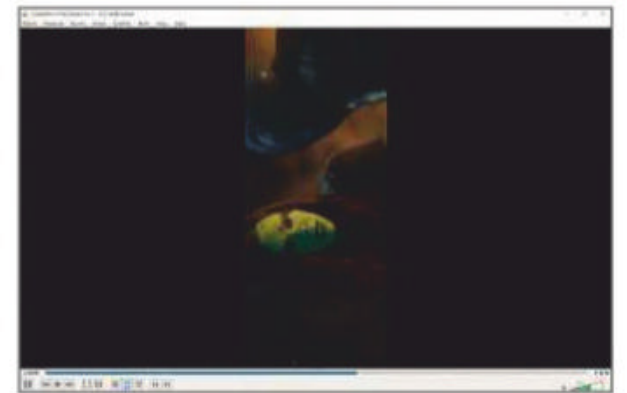


Enlarge any area of a video using VLC's Interactive Zoom

## Activate VLC's Interactive Zoom mode

You can zoom into any part of a video using VLC's Interactive Zoom. This gives you a close-up of an area and keeps you focused on that spot as the video plays.

To use the zoom, start a video playing, then go to Tools, Effects and Filters. Click Video Effects, then the Geometry tab and select the Interactive Zoom box. The video will automatically zoom in. You'll see a thumbnail showing the full video in the upper-left corner. Inside this is a small box. Click and drag it, and the main video will move accordingly to show you the



You can rotate videos that play at the wrong orientation

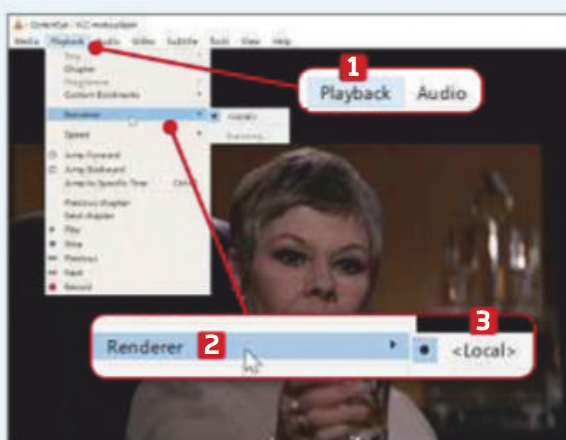
area underneath that box. Below the thumbnail is the zoom control. Use this to zoom in or out. To go back to normal, just untick the Interactive Zoom box.

## Rotate a video in VLC

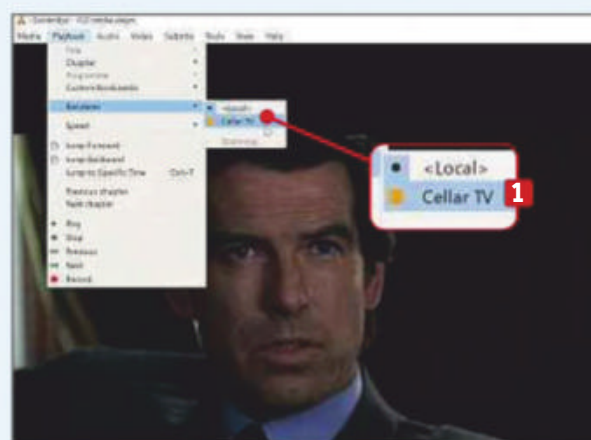
VLC should automatically detect which way up a video is supposed to play, but some clips – typically those shot on mobile phones – may display upside down or sideways. The best way to fix this is to use a video-editing program, but VLC offers a temporary solution that lets you watch the video in its correct orientation. Start your movie playing, then go to Tools, Effects and Filters. Click Video Effects, select the Geometry tab and tick the Transform box. Use the drop-down menu to choose the amount of rotation in 90-degree steps. You can also flip the video horizontally or vertically, and transpose or anti-transpose the playback. If you tick the Rotate box, you can use the wheel to spin the video around.



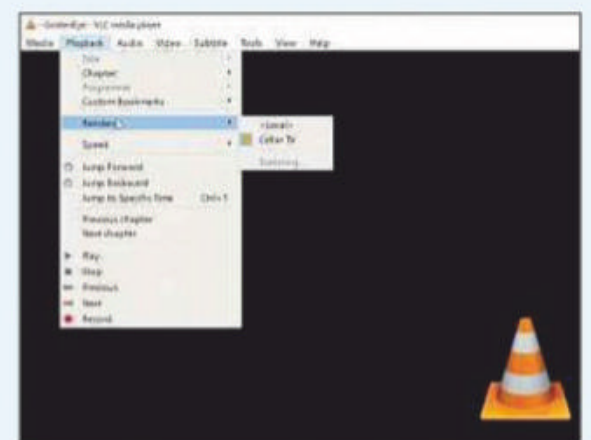
## MINI WORKSHOP | Stream video from VLC to your Chromecast



**1** Attach your Chromecast to a TV or monitor and make sure it's properly set up and connected to your network. Start a video playing on VLC, then open the Playback menu **1** and select Renderer. **2** <Local> should already be selected (meaning video plays inside VLC). **3** The software will scan your network.



**2** Wait for a short while, then open the Render menu again. This time you should see your Chromecast listed (ours is called Cellar TV). **1** If you don't see the entry, make sure the Chromecast is connected to the same wireless network as your PC and repeat the process.



**3** Select your Chromecast. The screen will go black and the video will stream to your device. Control playback in VLC as you would if it were playing in the video window. When you've finished, go back to the Render menu and select <Local> again. The video will return to playing in VLC again.



## STREAM & DOWNLOAD USING VLC

### Stream from VLC to Chromecast

Google Chromecast ([www.google.com/chromecast](http://www.google.com/chromecast)) is a £30 dongle that plugs into a spare HDMI socket on your TV or monitor, so you can enjoy streaming video from a wide range of sources, including YouTube, Netflix, BBC iPlayer and Google Play Movies & TV. There's no convenient button you can press to stream video directly from VLC to your Chromecast, but the last major version of the software introduced an option that lets you connect to Google's device via the Renderer menu. Find out how to use this feature in our Mini Workshop on the opposite page.

### Stream internet radio stations

VLC used to let you stream Shoutcast radio stations, but the option is no longer available. You can, however, tune into online radio stations using the Icecast streaming-media server. To do this, click the View menu tab and select Playlist. In the left-hand pane, click the Icecast Radio Directory option. Wait while the list of stations downloads. Find one you want to listen to or use the search box to track down a station by name, then double-click your choice and it will start playing. If you like a particular radio station, you can bookmark it for easy future access by right-clicking it and selecting 'Add to Playlist'. You can access your favourite stations from the Playlists entry at the top of the left-hand column.



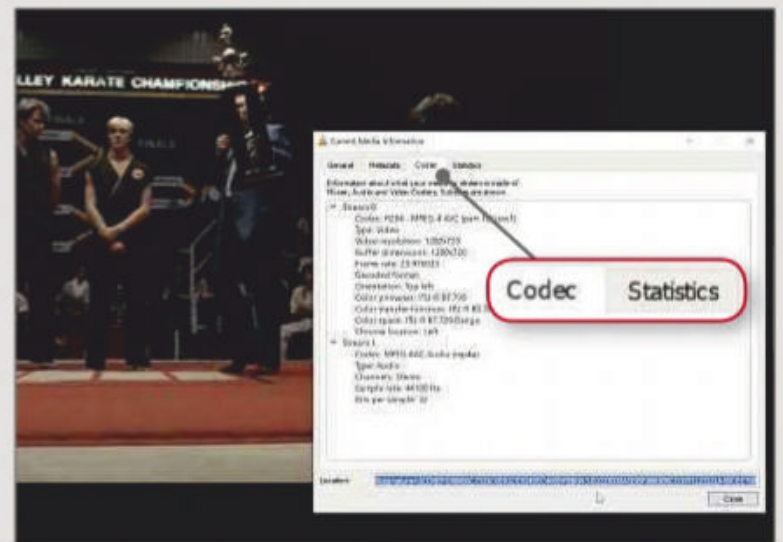
*Tune into thousands of online radio stations through VLC*

### Stream videos over the internet

You can remotely watch videos stored on one PC on another, provided that both systems have VLC installed on them. On the host PC (the one with your videos on), find your IP address by clicking Start, typing CMD and pressing Enter. Type ipconfig into the command prompt and press Enter. Make a note of the address next to IPv4 Address. With that done, return to VLC and go to Media, Stream. Select a video to play and click the Stream button.

## Watch and download YouTube videos

If you want to download a video from YouTube to watch offline, VLC can grab it for you. Copy the video URL from YouTube, open VLC and go to Media, Open Network Stream. In the Network URL box, paste in the copied video address and click Play. VLC will begin streaming the video. Now go to Tools, Codec Information and copy the long URL in the Location box at the bottom of the window. Paste this into your browser's address bar. The video will begin playing there. Right-click this and save the video



*VLC has a built-in option for downloading YouTube videos*

from the context menu. Once it's downloaded, select it, hit F2 and give it a more descriptive name.

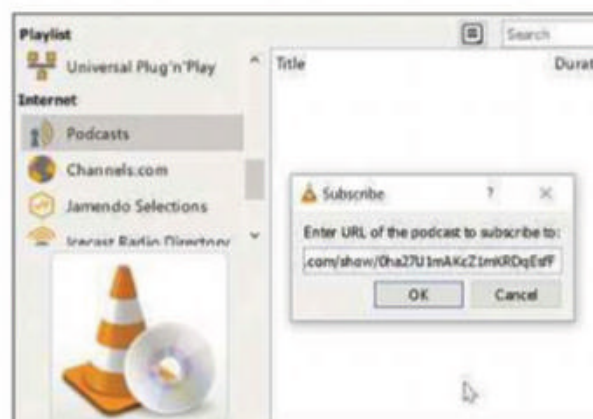
A wizard will open. Click Next, select HTTP in the 'New destination' drop-down menu and click Add. Click Next, then Next again, and click Stream.

On the remote PC (the one you plan to watch the videos on), go to Media, Open Network Stream and enter <http://ipaddress:8080> (replace 'ipaddress' with the other PC's actual IP address). If the video doesn't play, it may be that the Windows Firewall is blocking the stream on one or both systems. Go into Firewall settings in Windows to fix this.

### Subscribe to podcasts in VLC

VLC has a built-in subscription feature for streaming the latest podcasts. However, you will need the feed URL of the podcast you want to subscribe to because VLC doesn't provide a way to browse available episodes. You can usually find the feed address on a show's website or in the notes.

Once you have this, go to View, Playlist and scroll down on the left until you see Podcasts listed under Internet.

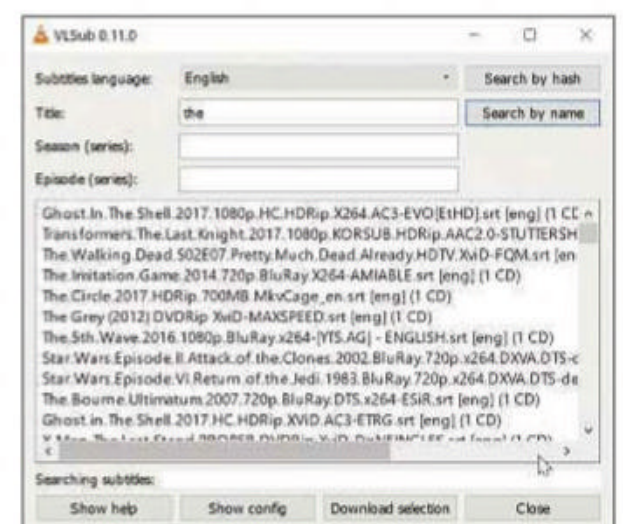


*You can subscribe to your favourite podcasts through VLC*

Select this, and click the plus sign. Enter the URL of your podcast into the Subscribe box. To unsubscribe from a show, hover over its name on the left and click the minus button.

### Download missing subtitles for films

If you've downloaded a foreign-language movie or TV show that doesn't come with subtitles, you can add them manually. Finding the correct subtitles can be difficult, but VLC can track them down through its VLSub ([bit.ly/vlsub469](http://bit.ly/vlsub469)) add-on. To use it, download the LUA file and copy it to the extensions folder, which should be located at C:\Program Files\VideoLAN\VLC\lua\extensions. Close and restart VLC (if it's running), then go to View, VLsub. Click 'Search by name', enter the title of the movie or show, then select the relevant subtitle and click 'Download selection'.



*Make foreign films easier to follow by downloading subtitles*



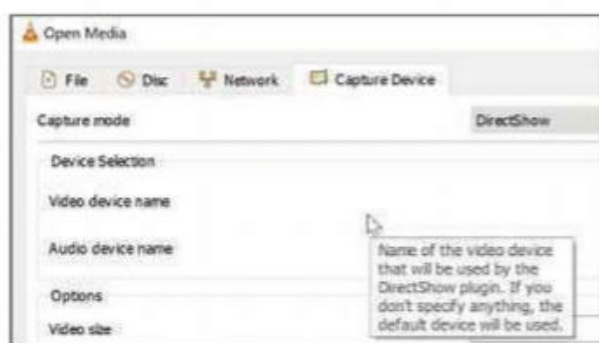


## CONVERT & RECORD USING VLC

### Record your webcam

You can use VLC Media Player to record footage from your webcam to watch later. To do this, go to Media, Open Capture Device and set 'Capture mode' to DirectShow. Use the drop-down menu to change 'Video device name' to your webcam, and 'Audio device name' to your microphone. Click 'Advanced options' and change the video input frame rate to 30, or tick the box next to 'Device properties.'

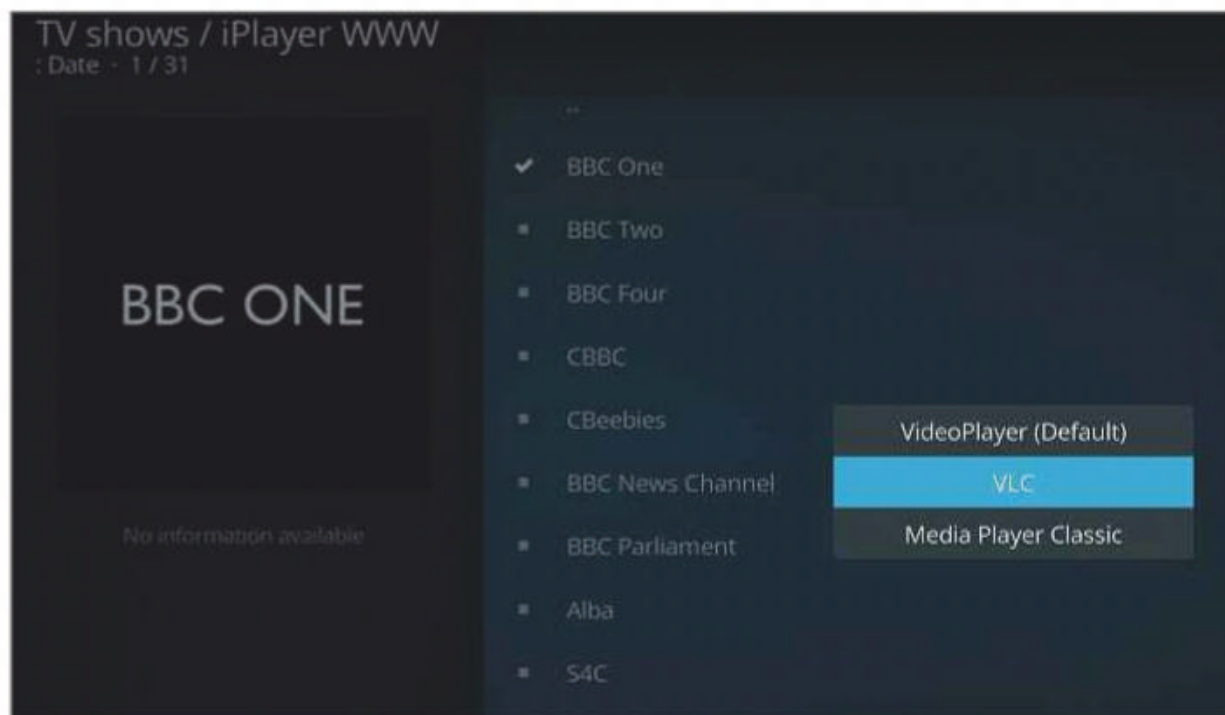
You can then start watching the live feed. To record something on screen, right-click it and hit the Record button to start capturing, or click the arrow next to Play and choose Convert instead. When done, hit Stop and the recording will be saved.



**VLC can record video footage directly from your webcam**

### Record your desktop

Recording your desktop in VLC isn't too different from recording your webcam, as detailed above. Go to Media, Convert / Save and, in Open Media Window, click the Capture Device tab. This displays the current capture mode. Click



**You can record streaming video from Kodi to play in VLC**

the 'Capture mode' drop-down menu and switch from DirectShow to Desktop. By default, VLC will capture your desktop activity at a rate of 1 frame per second. This obviously isn't going to produce a very good video, so change this to 25 or 30 fps (bear in mind this will increase the size of the saved video significantly). Click the Convert / Save button at the bottom of the page, and a new window will open. The source of the capture should be: screen://.

Click the Profile drop-down menu and select the video and audio codecs/formats to use. Enter a name for your screen capture, then click Browse to navigate to the save location. Click Start and VLC will begin capturing your

screen. When you've finished your on-screen activity, click the Stop button to end the recording.

### Record Kodi streams

Kodi is great for watching local or streaming content, and though it comes with its own built-in player, you can use VLC for playback instead. This lets you apply effects and filters, and even record video as it streams.

First, download the 'playercorefactory.xml' script from [bit.ly/script469](http://bit.ly/script469) and copy this into the Kodi folder at %APPDATA%\kodi\userdata. You may need to change the path inside the script. To check this, open the playercorefactory.xml file in Windows Notepad. The VLC.exe is probably listed as being in C:\Program Files\VideoLAN\VLC. If the program is actually installed in C:\Program Files (x86)\VideoLAN\VLC, you'll need to change the path in the script to match. Save the file and open Kodi. When you start a local video playing, it should open directly in VLC. If you're streaming something in Kodi, right-click it, choose 'Play using...' from the menu, then select VLC. Your stream will open in the external media player and you can start watching.

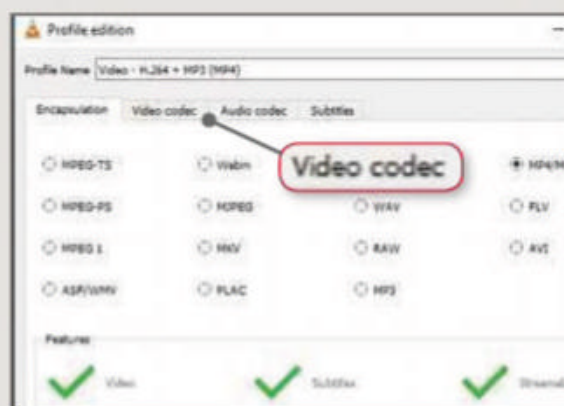
To record a stream, go to Tools, Preferences in VLC and click Input/Codecs. Click the Browse button next to 'Record directory or filename' and navigate to the folder you want to save your Kodi recordings in. Click Save. Return to the playing stream, right-click the screen and select Record. Recording will begin, even though it may appear as if nothing is happening. To end recording, right-click and select Stop.

See our Workshop on page 52 for details of the new version of Kodi.

## Convert files to different formats

You don't need to install a special program to convert audio or video files to different formats - VLC can do it for you. The program offers a large selection of preset codecs and formats to choose from, or you can specify the exact format and the video/audio codecs to use. This can be useful for reducing the size of a video for playing on a mobile device.

To convert a file, go to Media, Convert/Save, click Add and find the video you want to convert. Click the Convert/Save button, then the drop-down menu next to Profile and choose any of the listed options. For more manual control, click the spanner button to the right of the Profile box and pick an 'encapsulation' (the file format). When you select one, the list of features supported by it will be

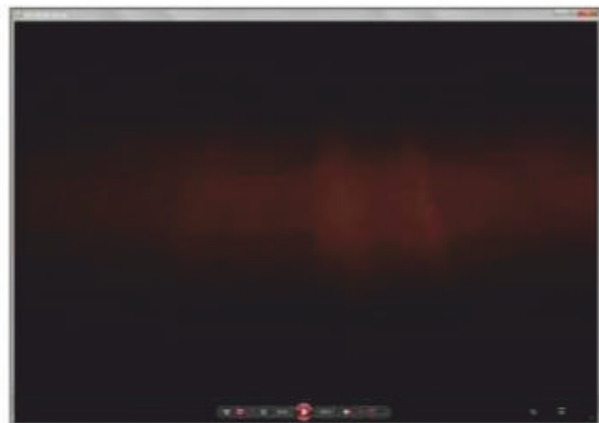




## CUSTOMISE & ENHANCE VLC

### Change VLC's appearance

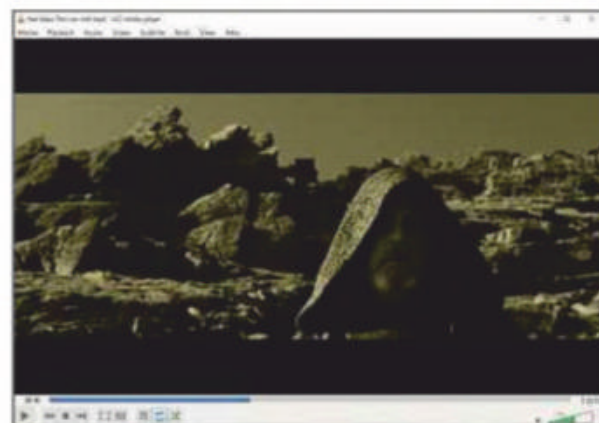
If you're not a fan of VLC's default appearance, you can customise how the player looks using skins. Go to Tools, Preferences and select the Interface tab. Under 'Look and feel' select 'Use custom skin'. Download any skin you like the look of at [bit.ly/skins469](http://bit.ly/skins469). Click the Choose button next to the 'Skin resource file' box and select a downloaded skin. Click Save, restart VLC and it should open with the new interface. You can also make changes to the media player's look by going to Tools, Customise Interface.



Customise VLC's look by changing its skin

### Apply video and audio effects

VLC lets you apply a number of fun effects to videos and music files as they play. Go to Tools, Effects and Filters, and browse the options in the Audio

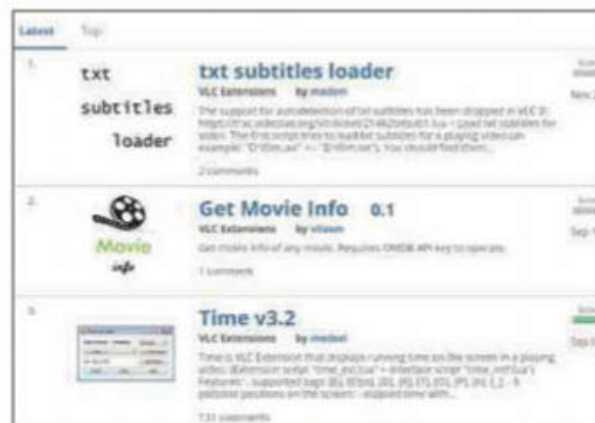


Apply fun filters to your videos in VLC

Effects and Video Effects tabs. The choices are sorted into a separate row. Under Video Effects, you can adjust colours, including watching the video in sepia; crop a clip; and add a logo or text. Under Advanced, you can add blurs and effects such as Mirror and Psychedelic.

### Install the best VLC add-ons

VLC supports add-ons, which lets you introduce additional functionality to the media player. To install an add-on,



VLC has lots of great add-ons to make the player even better

download the LUA file for it and copy it into the extensions folder, which should be located at C:\Program Files\VideoLAN\VLC\lua\extensions\.

Close and restart VLC. You can browse the full list of available add-ons at [bit.ly/vlcadd469](http://bit.ly/vlcadd469) but here are some of the better ones we'd recommend trying:

- **TIME** Displays the running time of a video on the screen.
- **MEDIA CONTEXT** Displays contextual information about the currently playing media.
- **CHAPTER SKIPPER** Lets you automatically skip a chapter in a video (provided the video has chapter data associated with it).
- **MOMENTS' TRACKER** Lets you bookmark your favourite moments in a video.
- **SKIP INTRO/OUTRO CREDITS** Jump straight to the action by skipping the start or end of a video.

## WHAT'S NEW IN VLC 4

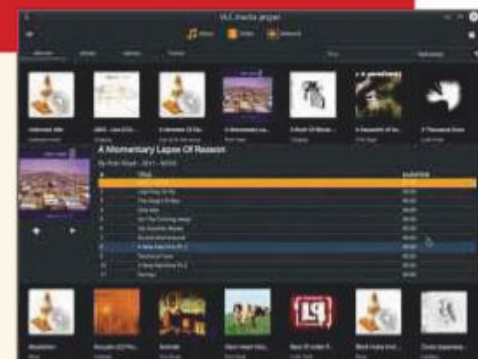
Videolan, VLC's developer, is hard at work on the next big update of the media player, VLC 4.0, and has just released a preview build of the software, which you can download from [bit.ly/vlcpreview469](http://bit.ly/vlcpreview469).

Changes include a more modern interface; a new input manager that adds support for gapless audio; and a revamped media library that makes the desktop player more like the Android version.

Videolan has also confirmed that AirPlay compatibility is on its way, which will allow videos to be sent from VLC on an iPhone or Android device to Apple TV, and provide support for virtual-reality content.

VLC is set to be available on more platforms, too, including Roku devices, PlayStation 4 and Nintendo Switch, though version 4.0 will be the first not to work on Windows XP or Vista.

Note that the preview build of VLC 4.0 is likely to have a few bugs and stability issues, so you may want to wait for the stable release later this year.



## NEXT ISSUE

on sale Wednesday 6 March 2019

# TIME TO DITCH ANTIVIRUS?

Free security tools that promise the same protection as traditional third-party software



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# Delete huge files to free up hard-drive space

Disk-space analysers identify space-hogging files that are slowing down your computer, and help you manage your hard drive more effectively. **Steve Clark** makes room for the best free space-analyser tools



**WinDirStat** | [windirstat.net](http://windirstat.net) | ★★★★★  
FEATURES ★★★★★ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

WebUser  
GOLD  
AWARD

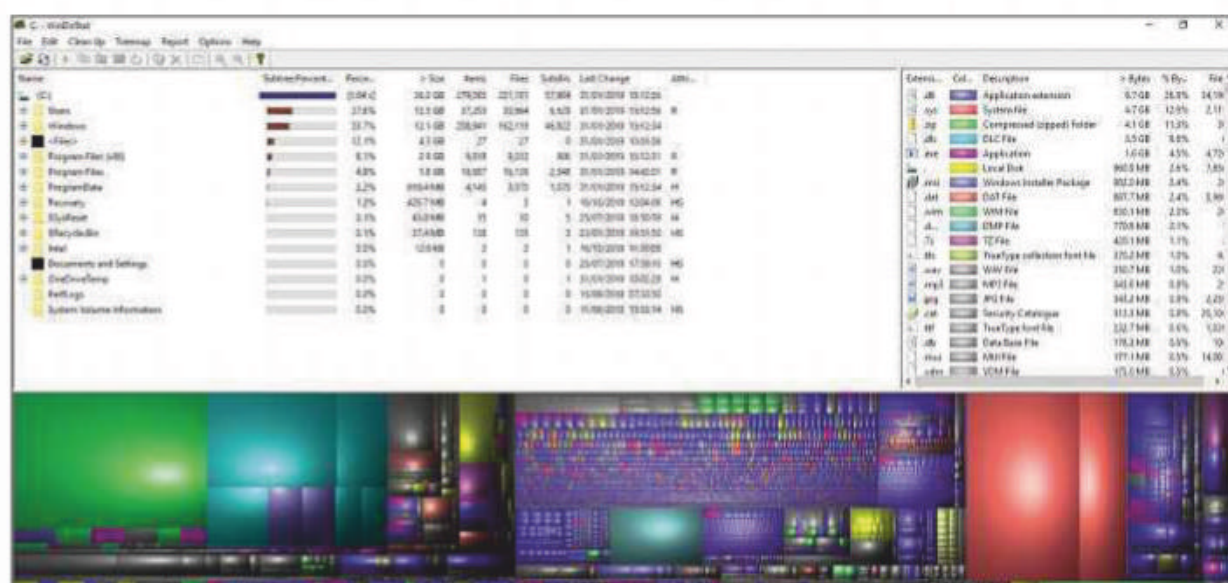
## What we liked:

WinDirStat has been an essential tool for Windows users for a long time and, if our tests are anything to go by, that's not likely to change any time soon. And we're not just saying that because of its Pac-Man animations.

Start by selecting a drive – you can scan your entire PC or individual drives (even floppy disks, if you still have them). WinDirStat has a reputation for being slow, but it's worth the wait.

Once your scan is completed, the tool displays three panes: the Explorer-style Directory List presents folders in a tree view, with the largest at the top; while the Extension List shows you which file types are taking up the most space. However, it's the Treemap that really draws the eye, mapping your entire drive with coloured blocks representing individual folders and files (although we could do without the phoney lighting effects).

Clicking any block – we recommend zooming in to delve into the nitty-gritty – shows the file in the Directory, while right-clicking it lets you Select Parent. This fences off, for instance, all the files within a certain folder, so you can better



see what you're dealing with. Zeroing in on your chosen file and right-clicking presents a range of actions, including two Delete options sitting side by side – very handy for removing files from inside the tool, but be careful not to irreversibly remove a file you just wanted to banish to the Recycle Bin.

If you'd rather not lose hard-drive space by installing WinDirStat, just grab the portable version from PortableApps ([portableapps.com](http://portableapps.com)) and put it on a USB stick.

## How it can be improved:

The main drawback of WinDirStat – apart from the awful colour scheme of the Treemap – is that the Report

function doesn't work. Try as we might, every attempt to email a full log with 'Send Mail to Owner' got blocked by a Server Busy error message. As such, we failed to create a report for later comparison.

## OUR VERDICT

WinDirStat delivers comprehensive, uncomplicated results and makes it easy to take action. Its deep functions are a bit slow, but they offer more than the at-a-glance stylings of other drive-space analysers. It's also compatible with every version of Windows since 95.



**SpaceSniffer** | [bit.ly/spsn469](http://bit.ly/spsn469) | ★★★★★☆  
 FEATURES ★★★★★☆ PERFORMANCE ★★★★★☆ EASE OF USE ★★★★★☆

WebUser  
SILVER  
AWARD

## What we liked:

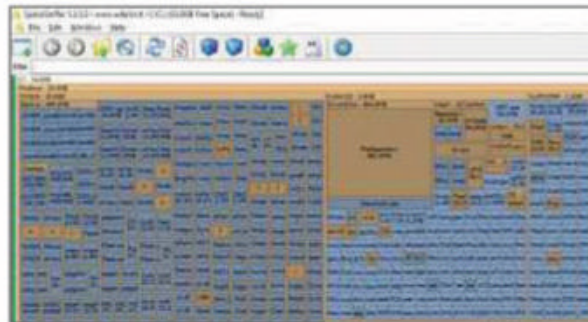
The portable SpaceSniffer is like a Matryoshka doll in that clicking each block in the treemap reveals more blocks hidden inside, each one representing a folder or file. It's an effective, visual way to let you review results without getting overwhelmed, at least until you click the 'More detail' button.

SpaceSniffer feels a bit like a web browser, with icons along the top of the window and Back and Forward buttons to navigate. However, what's missing is a proper Delete button; you need to right-click your unwanted file, send it to the Recycle Bin, then manually delete it from there.

But SpaceSniffer has a few aces up its sleeve, including the Tag tool. This lets you add a coloured mark to files you wish to track. The program also includes a built-in filter to narrow results to certain file types. Results can then be exported as text files or as a 'SpaceSniffer Snapshot' for later review.

## How it can be improved:

Despite being highly visual, the tool isn't



about to win any beauty contests and would benefit from more appearance customisations. The SpaceSniffer Log Console initially seems like a handy addition, alerting you to folders that can't be examined, but it soon becomes an annoyance – even when running the program as an administrator, it relentlessly pops up to distract you.

## OUR VERDICT

This is a solid and speedy option for reviewing your drive space. Squeezing every last drop of function from SpaceSniffer is child's play – particularly those powerful filtering options. On the other hand, it lacks some of the 'hardcore' features found in WinDirStat.

**RidNacs** | [bit.ly/rid469](http://bit.ly/rid469) | ★★★★★☆  
 FEATURES ★★★★★☆ PERFORMANCE ★★★★★☆ EASE OF USE ★★★★★☆

WebUser  
BRONZE  
AWARD

## What we liked:

RidNacs (that's Scan Dir backwards) is a lightweight drive analyser, with a basic interface and simple controls. You have the option to scan any drive and save the result as a CSV file, and not much more – but then, most folks won't need anything else. RidNacs comes in two official flavours: a fully installed program or a portable version.

Results are displayed via a percentage bar, which keeps the tool feeling tidy and uncomplicated. Once you've run scans on different drives and folders, they'll start showing up in the Favorites folder for quick access in future.

Locating individual files with RidNacs is more laborious than with its rivals because you need to click through the tree view to find them. Once you've identified something that's taking up unnecessary space, highlight it and press Extras to open the file, view the location or hit Delete to banish the clunky space-hog to the Recycle Bin.



## How it can be improved:

Call us lazy, but we'd like to have the C: Drive as the top option when preparing a scan. It's not the default choice, so you have to browse to select it, although it's likely that most users will want to scan their entire PC more often than targeting individual drives.

## OUR VERDICT

RidNacs is ideal for a quick scan and check – and boy, is it quick. However, the basic no-frills design makes it difficult to drill down into the data.

## BEST OF THE REST

### WizTree

[bit.ly/wiztree469](http://bit.ly/wiztree469)

WizTree has a near-identical layout to WinDirStat, with a less garish colour scheme and superior analysis speed. At the top of the window is a summary of your current drive usage. Choose to delete a file and it's struck through with a red line, just so it's clear that this file is no longer a member of the party. There's also support for keyboard shortcuts. It's a decent alternative to our Gold Award-winner.



### JDiskReport

[bit.ly/jdisk469](http://bit.ly/jdisk469)

JDiskReport lets you choose how results are presented, with icons to switch between pie chart, ring chart and bar graph. There's also a tree view pane. However, it has annoying problems, such as needing Java to run



and the lack of a true export feature (you can only 'copy to clipboard'). Make sure you select 'Show files' under the View tab, so you can see what's inside folders. The tool is also even slower than WinDirStat.

### HDGraph

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

HDGraph is a good alternative to JDiskReport, if you don't mind a tool that hasn't been updated for years. Double-clicking any segment of its sprawling pie chart lets you explore where space is poorly utilised. Ensure you visit Tools, Options, 'Application behaviour', and switch on 'Allow to delete folders from the right click menu'. Otherwise, once you've located your space-hogging folder, you'll need to deal with the cumbersome files in File Explorer.





# RECLAIM YOUR MONEY *from the web*



If you're unhappy with a download you've bought, you can't return it to the shop, but you have the right to a refund. **Steve Clark** explains how to get your money back on digital products and services

**Y**our right to a refund for digital content is covered by the Consumer Rights Act 2015 ([bit.ly/conact469](https://bit.ly/conact469)), which defines digital content as “data that is produced and supplied in digital form. Examples of digital content are software, games, apps, ringtones, ebooks, online journals and digital media such as music, film and television”.

All digital content must meet three basic requirements: it should be of satisfactory



quality, fit for purpose and as described. If it's not, you are absolutely entitled to a refund – so don't let anyone fob you off by claiming otherwise!

You also have “the right to have faulty digital content repaired or replaced”, as well as “a reduction in price, after or instead of a repair or replacement, if certain criteria are met”. These rights also cover any digital content that causes any damage to the device it's downloaded to.

## APPS & GAMES

If you've bought a mobile app that doesn't do what it's supposed to, or you've discovered that a paid-for game is unplayable without in-app purchases, Apple and Google both have clear refund policies. For Android apps, you have a two-hour refund window and a 48-hour window – just to make things confusing.

When requesting a refund within two hours of purchase, open the Play Store app and search for the app you just bought. You should see two options: Open and Refund. Click the latter, and you should be reimbursed straight away.

If you've left it too late, go to your

Google Play account in your browser ([bit.ly/playacc469](https://bit.ly/playacc469)) within two days and view your Order History. Click the three-dot menu beside your purchase to reveal the 'Request a refund' option. Fill in the online form and, fingers crossed, Google will accept your request.

Apple is more flexible, giving you 90 days to claim a refund on an iOS app. However, there needs to be a genuine reason for return, such as the app not working properly.

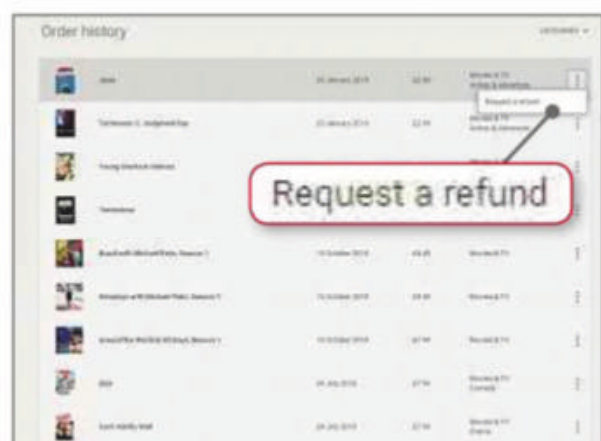
To get your money back, either open your Purchase History in the iTunes app, or go to [bit.ly/apple469](https://bit.ly/apple469) or [reportaproblem.apple.com](https://reportaproblem.apple.com) in your browser. Tap or click the order – if you bought multiple items, select the individual app or game – then locate the button to 'Report a Problem'. Tell Apple why you need a refund (for instance, a game won't play on your device) and submit your request. Apple should hopefully process the refund automatically, but it may also get in touch for more details.

## EBOOKS

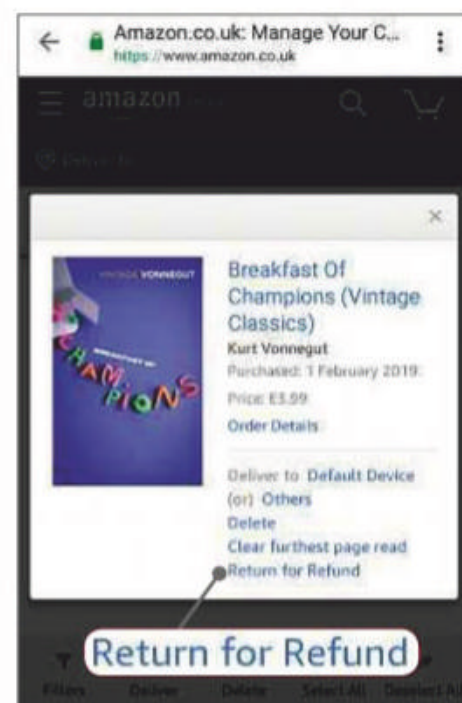
If the latest ebook you downloaded to your Kindle isn't what you expected, or it's poorly formatted, Amazon gives

you 14 days to get a refund. To start this process, visit Amazon's 'Manage My Content and Devices' page ([bit.ly/kindle469](https://bit.ly/kindle469)) and look for Your Content, where you should see a list of orders. Click the three-dot menu button and you'll be given the choice to 'Return for Refund'. Explain why you're returning the book, then click 'Return for Refund' again. The ebook will be removed from your Kindle and your account will be credited.

Kindles also offer a fail-safe option should your finger slip and you buy the wrong book: quickly press 'Purchased by Accident? Cancel this Order' to immediately halt the purchase.



*You have a two-hour window to request a full refund via Google's Play Store app*



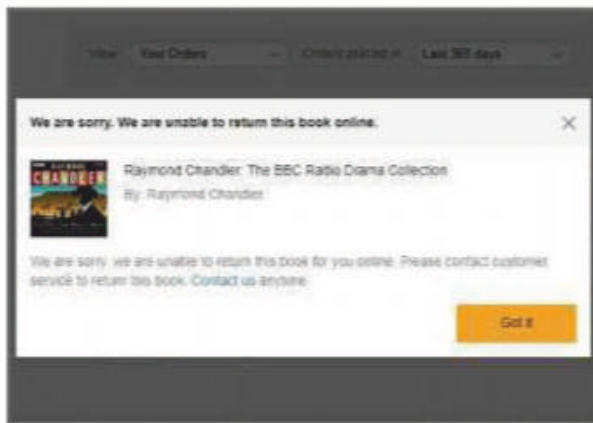
*You can get a full refund on almost any Kindle eBook you buy*



## AUDIOBOOKS

Amazon's audiobook store, Audible ([www.audible.co.uk](http://www.audible.co.uk)), features possibly the most generous returns policy we've ever seen: a 365-day refund period. Whether you're on your phone or computer, open your Purchase History in the Account Details section and, to the right of your past orders, you'll see the option to Return. Click or tap this, describe why you're returning the audiobook, then select Return again and wait for the refund-confirmation notification.

However, if you see a warning that your audiobook is 'Not eligible for return', you'll need to contact the Audible team using the form at [www.audible.co.uk/contactus](http://www.audible.co.uk/contactus), explaining why you want to return the book.



**Even if you miss the refund deadline, you can still request one from Audible**

Scribd ([www.scribd.com](http://www.scribd.com)) has been around for a while, and has recently gained popularity for its curated subscription service, which offers ebooks, audiobooks and magazines. Refunds are straightforward: you have 30 days to contact Scribd Support ([support@scribd.com](mailto:support@scribd.com)) or drop an email to [support@scribd.com](mailto:support@scribd.com).

You'll need to let the support team know the order number and date of purchase, the total amount and either your PayPal email address or the last four digits of your payment card.

## SUBSCRIPTIONS



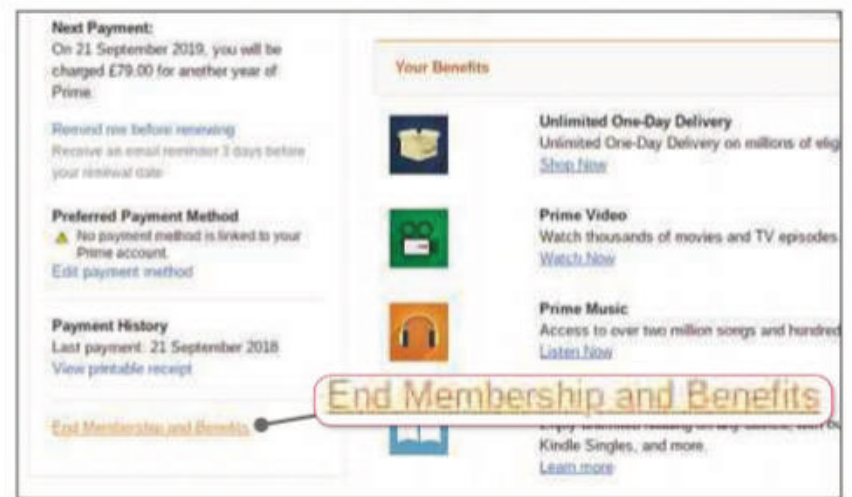
For years, the cry of "I didn't even realise I had Amazon Prime!" has been commonplace among people who get stung for the annual subscription fee of £79 or the monthly one of £7.99. However, if you forget to cancel your Prime subscription after the 30-day free trial period has finished, Amazon at least makes it easy to get a refund on your membership, as long as you haven't used any Prime 'benefits'.

Go into the Your Account section on Amazon and select Prime. In the left-hand column, you'll see the choice to 'End Membership'. The site may urge you to change your mind, but stay firm and choose End Now and, provided you haven't used any Prime services since the trial ended, you'll automatically get the £7.99 or £79 fee refunded.

If you joined Prime without a free trial, you have 14 days to end your membership and claim a refund. If you used any Prime services within that period, you'll be issued a partial refund based on your "use of Prime benefits". If you're past the two-week cut-off, get in touch with Amazon to explain the situation – if you ask nicely, they may relent.



Like Amazon Prime, Spotify gives you a 14-day grace period in which to cancel your Premium subscription for a full refund, provided you haven't used the streaming service. Using either the app or the browser, go to

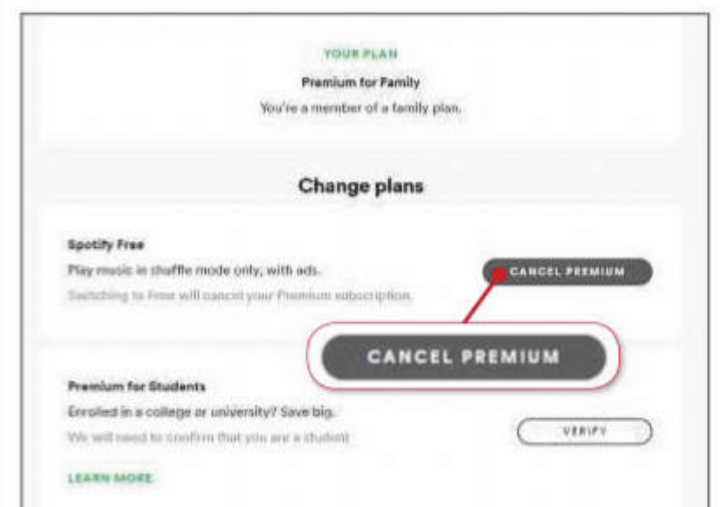


**You can get a refund on your Amazon Prime membership if you haven't used any 'benefits'**

your Account and open the Manage Subscriptions page ([bit.ly/spot469](http://bit.ly/spot469)), where you can opt out of the service and get your cash back.



Sadly, you can't get a refund on your Netflix subscription even if you haven't watched anything on the streaming service. However, you can cancel your account by either tapping the More icon in the app and selecting Account, or visiting [www.netflix.com/youraccount](http://www.netflix.com/youraccount) and selecting Cancel Membership. You'll have access to films and TV until your next billing date, at which point you'll be locked out until you resubscribe. ■



**If you haven't used Spotify Premium yet, you can cancel it and get your cash back**

## GET COMPENSATION WHEN YOUR BROADBAND GOES DOWN

If your ISP experiences an outage, leaving you with no internet, you may be entitled to compensation. It's worth contacting your provider as soon as your broadband goes down to see what you can get, although not every company will compensate you – at least, not right away.

After months of wrangling, Ofcom and the big five ISPs have agreed to a system of compensation beginning sometime this year ([bit.ly/ofcom469](http://bit.ly/ofcom469)). If a fault knocks your

internet connection offline, you'll be due £8 each day after the first two days; £25 should a provider miss an appointment; and £5 for each day that a new service switch-on is missed. The downside is that many ISPs are factoring potential compensation costs into their contracts. In other words, to accommodate the estimated £142m a year they expect to pay in compensation fees, you should expect a monthly price hike.





# Fix your VPN problems



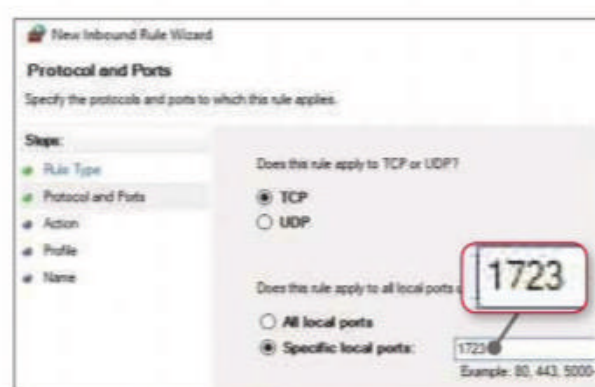
Browsing anonymously with a VPN should be as simple as ‘click and connect’, but sometimes problems occur. **Robert Irvine** explains how to solve common woes

## I can't connect to a VPN server

If you've downloaded and installed VPN software but you can't connect to a server, there are several fixes you can run through. The server you are trying to connect to may be unavailable, so try choosing one in a different location. If that doesn't work, give the cure-all ‘turn it off and on again’ trick a go – restart your computer and ensure your internet connection is active.

If you still can't connect to a server, temporarily disable your firewall and try connecting to the VPN server again. If you succeed, it's likely that your firewall is blocking the VPN, so you'll need to configure it to allow the connection (don't just leave the firewall switched off). If you're using Windows 10's built-in firewall, open the Windows Defender Security Centre, choose ‘Firewall & network protection’ and click ‘Allow an app through the firewall’. Click the ‘Change settings’ button above the list of allowed applications, select your VPN, then tick the Private and Public boxes, and click OK.

Still no joy? Try tweaking your firewall's advanced settings to accept VPN connections. In the Windows Firewall, click Inbound Rules, then New



*You may need to open port 1723 in your firewall for your VPN to connect*

Rule and select Port. Click Next, choose TCP and enter the port number 1723 (which is used by most VPNs) in the ‘Specific local ports’ section. Click Next, select ‘Allow the connection’, then click Next again and tick all three boxes under ‘When does this rule apply?’. On the next screen, enter a name for the rule and click Finish to open port 1723 for your VPN.

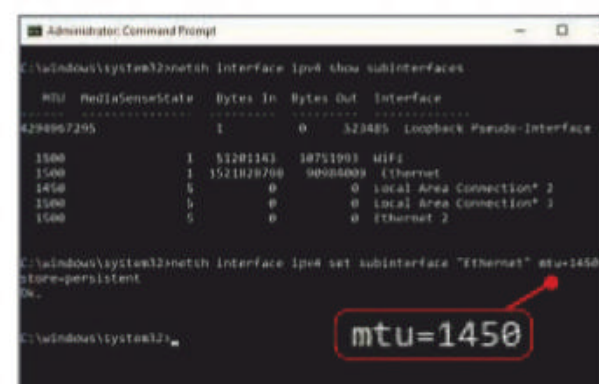
## I can't access websites

A common problem with VPNs is that you can connect to a server but can't load any websites. If you are seeing an “unable to connect” message in your browser, the advice in the previous tip might resolve this; if it doesn't, try the following fixes.

The first involves adjusting your network's MTU (maximum transmission unit), which determines how much data can be sent over your internet connection. Your VPN requires extra space within this data ‘packet’, so decreasing the size of the MTU may give it the room it needs to load websites. Some VPNs let you optimise the MTU via their advanced settings, but if not, you can do this through the Windows Command Prompt.

Type cmd into the Windows search box, then right-click Command Prompt

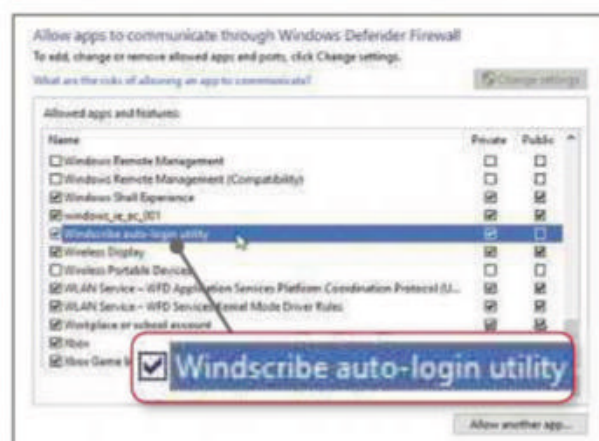
and choose ‘Run as administrator’. When the command window opens, type `netsh interface ipv4 show subinterfaces` and press Enter to view your network connections and their MTU size – this is usually 1,500 (octets). To reduce the size of your MTU, type `netsh interface ipv4 set subinterface "Local Area Connection" mtu=1450 store=persistent` replacing ‘Local Area Connection’ with the name of your active network in the Interface column – for example, ‘Ethernet’ or ‘Wi-Fi’. Press Enter, restart your PC and try the VPN again. If you still can't load sites, set the ‘mtu=’ number to 1458, 1430 or 1380, or else revert to the default of 1500.



*Decreasing your MTU size gives your VPN more data for loading websites*

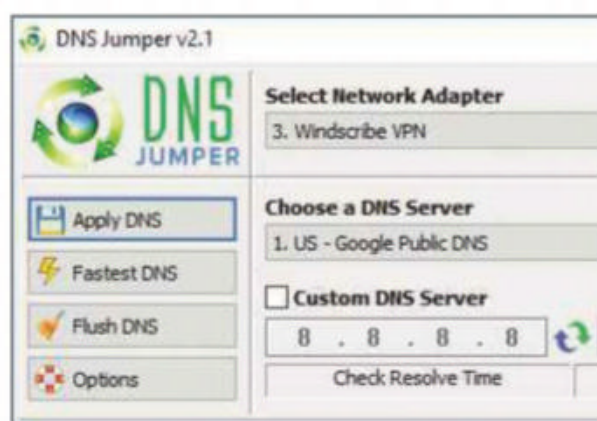
If tweaking your MTU has no effect, changing your VPN's DNS settings might be the solution. This will route your connection through a different server and hopefully fix the problem that's preventing websites from loading – for example, if your ISP is ‘throttling’ your VPN.

You can switch your DNS server manually via the ‘Network and Sharing Center’ in Windows, but it's much easier to use the free tool DNS Jumper ([bit.ly/dnsjumper469](https://bit.ly/dnsjumper469)). Download and extract it, then launch your VPN and connect to a server. Run DNS Jumper, select your



*Configure your firewall to allow your VPN software access to the internet*





**If your VPN is having problems accessing websites, try switching DNS servers**

VPN from the drop-down Network Adapter menu and choose a DNS server from the options provided – Google Public DNS and OpenDNS are both reliable options. The DNS settings will be filled in for you automatically. Click Flush DNS to clear the cache for your current DNS server, then Apply DNS to switch to the new one.

## My VPN connection is really slow

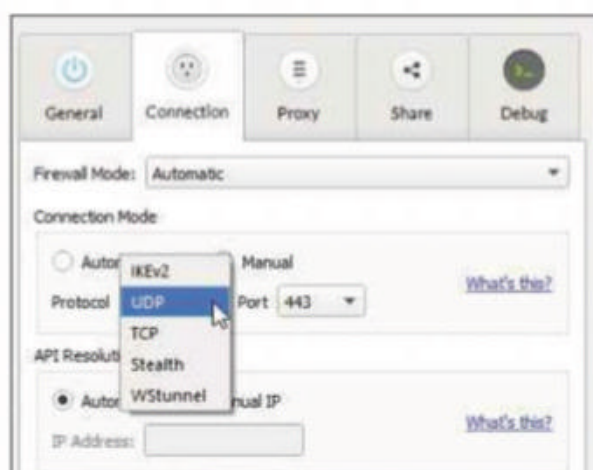
Free VPNs are invariably slower than paid-for services, although some – such as TunnelBear – deliver fast speed but restrict how much data or how many servers you can use. If your VPN is frustratingly slow, there are a few tricks you can try to speed things up.

Unless you're using your VPN to access US-only content, there's no point connecting to an American server, so choose one closer to home. Your data will have less distance to travel, which should speed up your browsing.

If you aren't doing anything particularly sensitive with your VPN, such as shopping or banking online, consider reducing the level of encryption. That may sound dangerous, but the stronger your VPN's encryption, the more bandwidth the encrypted data consumes, which can have an adverse effect on speed. Go into your VPN's settings and look for an encryption-protocol option. If this is set to SSTP or IKEv2, which offer strong encryption but slower speeds, try switching to an alternative protocol such as OpenVPN



**Choose a server in a country close to home to boost your browsing speed**



**Switching from TCP to UDP gives you a faster but less stable connection**

or even PPTP (weak encryption but very fast). This may also fix problems with your VPN losing connection. Remember to change back to the more powerful encryption option when you need to protect your privacy.

Switching your connection protocol from TCP to UDP can also boost your VPN's speed. This is because TCP needs to verify that your data has been received by the sites you visit, whereas UDP sends the data without checking. Bear in mind though that while UDP is faster, it provides a less reliable connection than TCP.

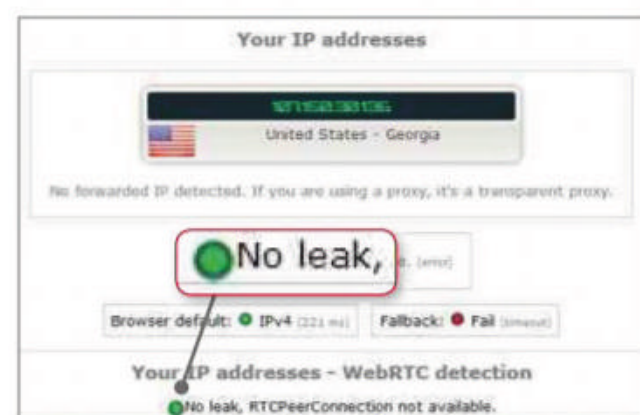
## My VPN isn't keeping me anonymous

VPNs are meant to disguise your real location, so you can stop websites knowing where (and who) you are. This makes it all the more annoying when a site instantly detects that you're in the UK (or wherever you really are) and filters its content accordingly. It may even recognise you from previous visits. Failing to fool a site doesn't mean your VPN isn't working – for example, BBC iPlayer uses algorithms to block VPNs automatically – but it's worth identifying the cause of the problem.

Start by checking that your VPN is concealing your real IP address and is successfully making you appear to be in the desired country. Visit IP Location Finder ([www.iplocation.net](http://www.iplocation.net)) while connected to the relevant server and it will tell you the IP address it sees, the location it believes you to be in and the ISP it thinks you're using. If all these details identify your genuine location, then your VPN isn't keeping you anonymous. Restart it and try again. If the details place you in a different country to the one you selected, switch to another server.

If your IP address is sufficiently 'spoofed' but websites still know where you are, try clearing cookies and cached data from your browser to remove all personal info that sites have stored about you. In Chrome, go to Settings, Advanced, 'Clear browsing data'; in Firefox, go to Options, 'Privacy & Security', Clear Data. Alternatively, switch to incognito mode to access VPN-thwarting sites.

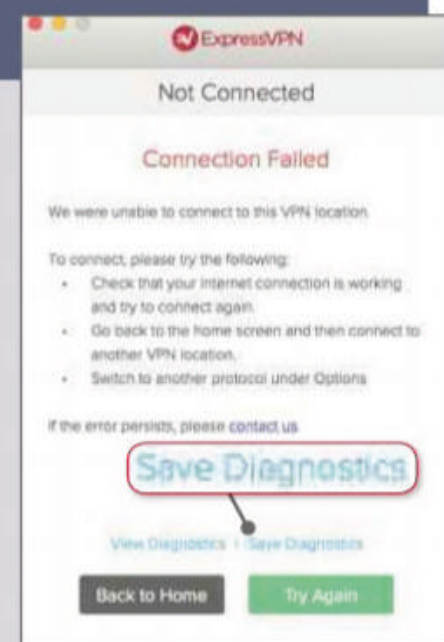
A more worrying possibility is that your VPN is leaking more than just your IP address. Go to [ipleak.net](http://ipleak.net) with your VPN active and see what data the site detects. Ideally, there should be no WebRTC or DNS leaks, and your location should be concealed. If you seem to be leaking data, consider changing your VPN. ■



**A properly working VPN should spoof your IP address and prevent WebRTC and DNS leaks**

## SEND A LOG FILE TO SUPPORT

If none of our advice solves your VPN problem, you should send a connection log to your provider's customer-support team – most paid-for VPN services offer a live-chat facility for this purpose. The process of viewing and saving log files differs between companies – for example, ExpressVPN offers View and Save Diagnostics buttons on its error screens, while NordVPN has a Run Diagnostics Tool in its advanced settings. Diagnostics reports can be uploaded to the live chat, and contain technical rather than personal information, so they won't affect your anonymity. In any case, the VPN provider should delete your log once the problem is resolved.







# Practical WebUser

16 pages of workshops, tips, projects and problem solving

## What's new in Kodi 18 'Leia'

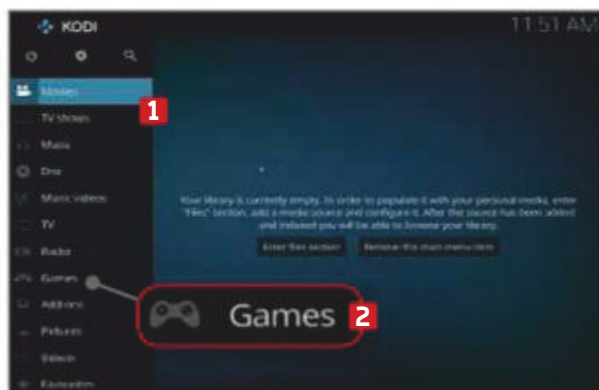
After two years in development, the latest version of Kodi is now finished and available to download. Here's what you need to know

Kodi: [kodi.tv](http://kodi.tv) | ⌚ 20 mins |    

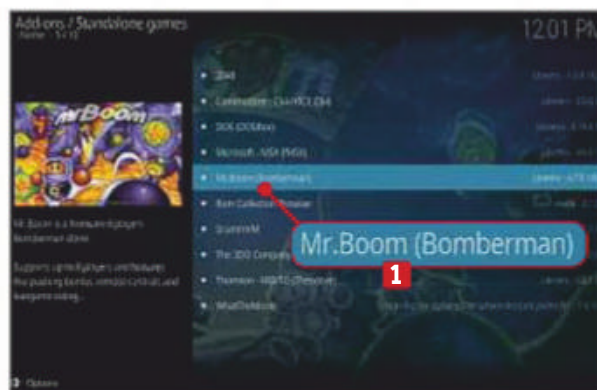
**K**odi launched in 2002 as XBMC, and it's become very popular in recent years. The cross-platform home-theatre software plays locally stored music and video, and streams all manner of content for free over the internet. Though it's often synonymous with piracy and streaming paid-for content without paying, Kodi itself is perfectly

legal. Just don't use illegal add-ons to watch copyrighted content. Many other add-ons are perfectly legal.

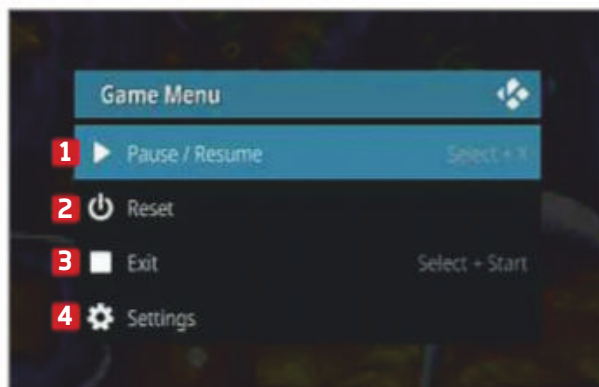
Kodi 18 'Leia' - named after the late Carrie Fisher's iconic Star Wars character - introduces a wealth of improvements and new features. If you're already running Kodi, you can install this version without having to uninstall the old one.



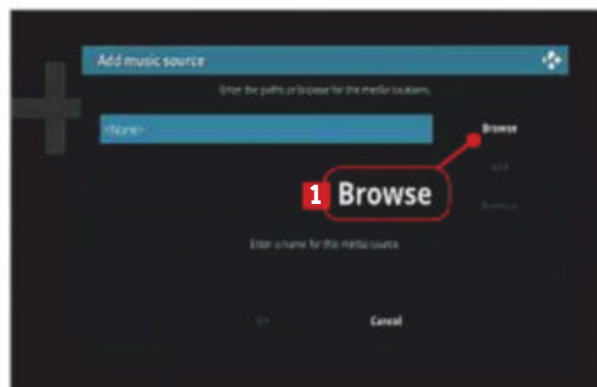
**1** Kodi 18 doesn't look massively different from its predecessor: the skin is much the same, as are the menus, and it displays a long list of categories accessible from the sidebar. **1** What is new is Leia's support for gaming emulators and game controllers - hence the addition of a Games section. **2**



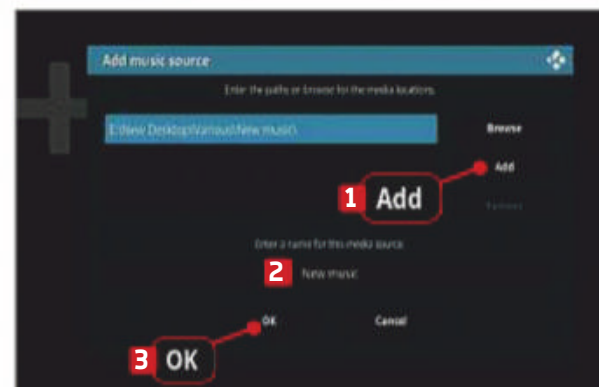
**2** To add games, click the Settings cog from Kodi's front screen, then click Add-ons. Click 'Install from repository', then select 'Game add-ons'. We've chosen 'Standalone games' from the various options and, because we're old Bomberman fans, Mr. Boom seems like a good choice. **1** Click Install, then OK.



**3** Once it's installed, go back to the home screen and hover over Games. The game you've installed should be shown. In this release, you need a game controller to play it. The in-game menu will let you Pause/Resume, **1** Reset, **2** Exit **3** and open Settings. **4**



**4** Kodi is mostly used for watching videos but it's also a capable audio player, and the Music section has been overhauled in this new version. To add some songs, click the Music category, then Files and 'Add music'. Click Browse **1** and locate the folder where you keep your music.



**5** You can add extra locations if you wish. **1** Give this media source a name **2** and click OK. **3** You're asked if you want to add the media from that source to your library. Click Yes. When the files have been added, you can access and play them through the Music section.

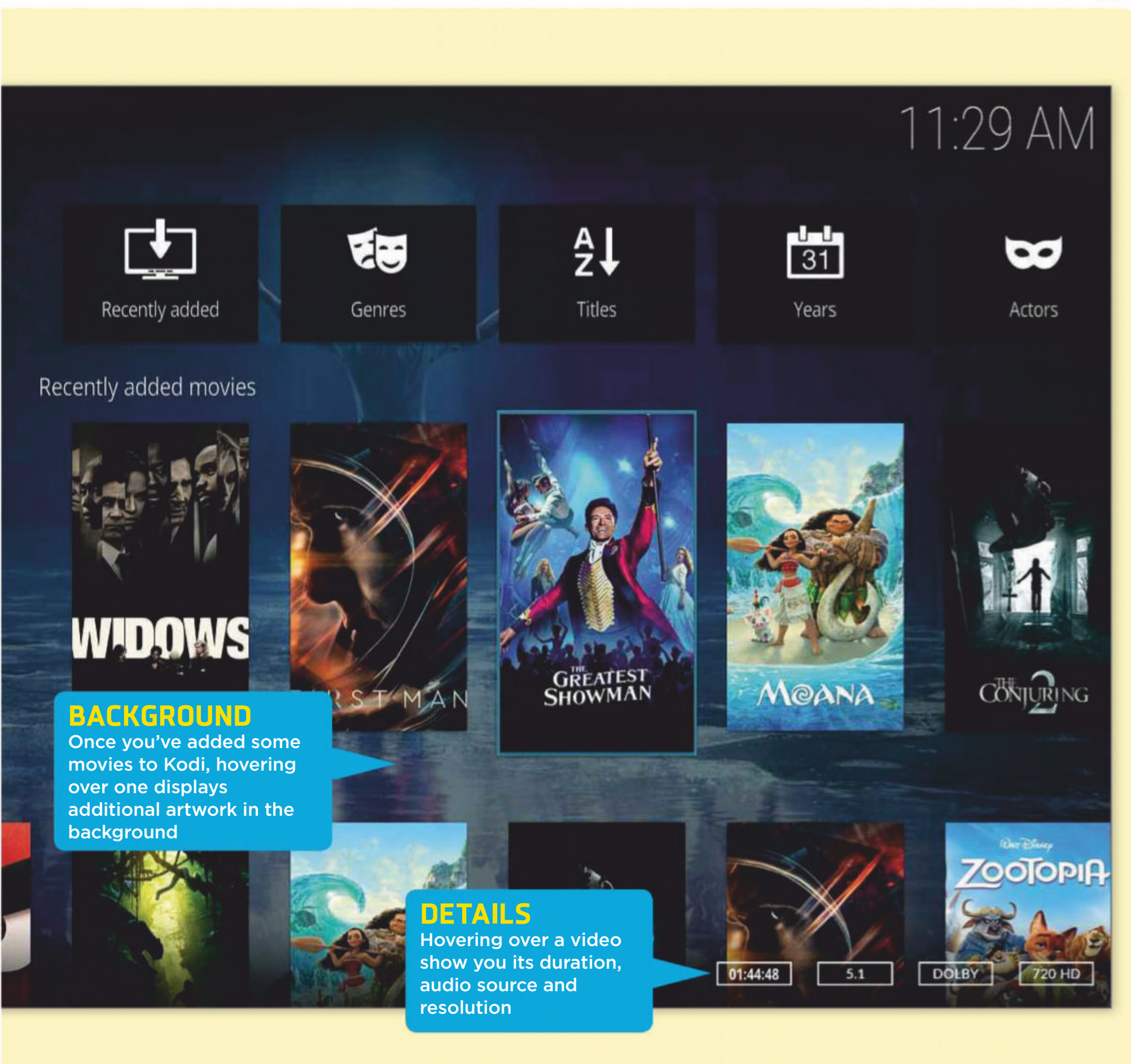
### DISC

If you insert a CD, DVD or Blu-ray into the PC that's running Kodi, you can launch it from here

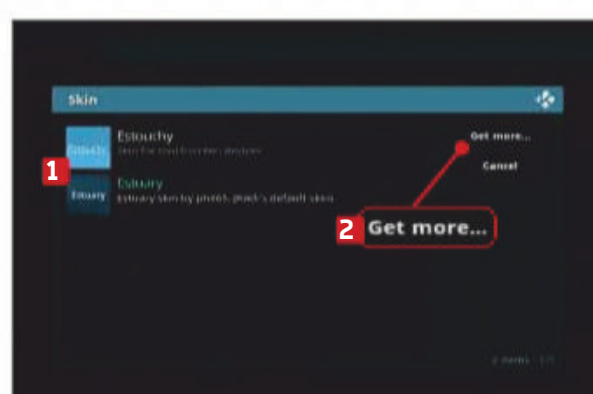
### TV

TV and PVR (personal video recorder) tools are no longer included by default, but if you have a hardware tuner you can easily install everything you need from within Kodi

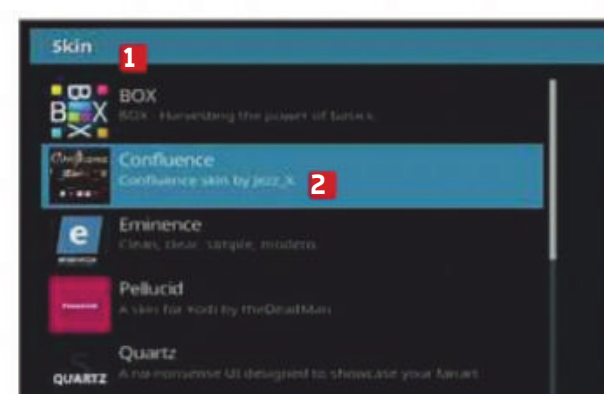




**6** The Settings menu, reached by clicking the cog on the main screen, hasn't changed much from Kodi 17. However, the icons have been simplified and reordered. The most popular ones appear at the top **1** and there's a new Games setting menu. **2** To customise Kodi, click Interface. **3**



**7** Kodi 18 comes with the same default skin - Estuary - and there is a touchscreen version called Estouchy that you can switch to if you prefer. Click Estuary in the Interface Settings screen and pick a skin. **1** If you want to install something completely different, click the 'Get more' button. **2**



**8** A new window opens with a list of available skin choices. **1** If you've been using Kodi for a while, you may recognise Confluence **2** - it was the default skin used in versions up to Kodi 17. Click a skin to install it. You're given the choice to use it now or switch to it later from the Skin menu.





## Workshop 2

# Use a private chat tool that's better than email

Riot: [riot.im](https://riot.im) | ⌚ 20 mins | Any browser, 🖥️ Windows 7, 8 or 10

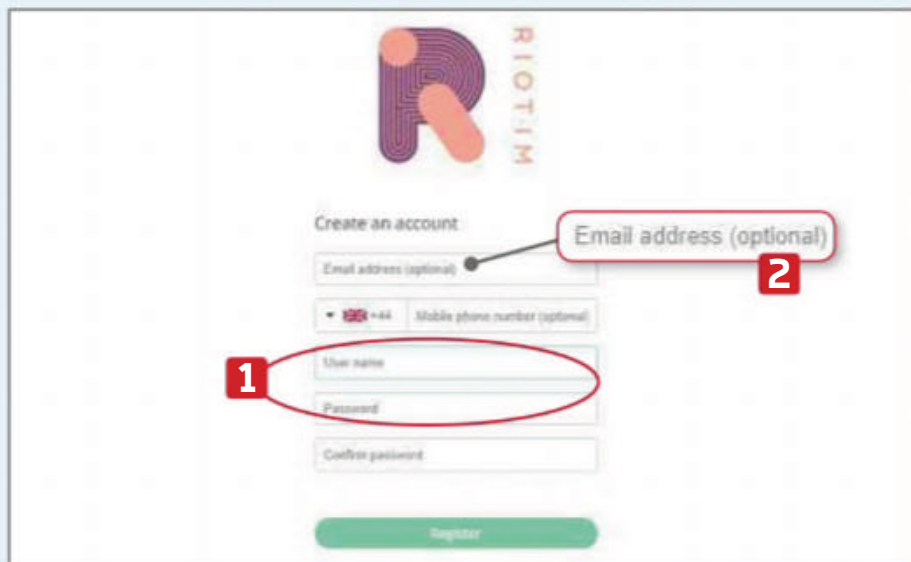


### EXPERT TIP

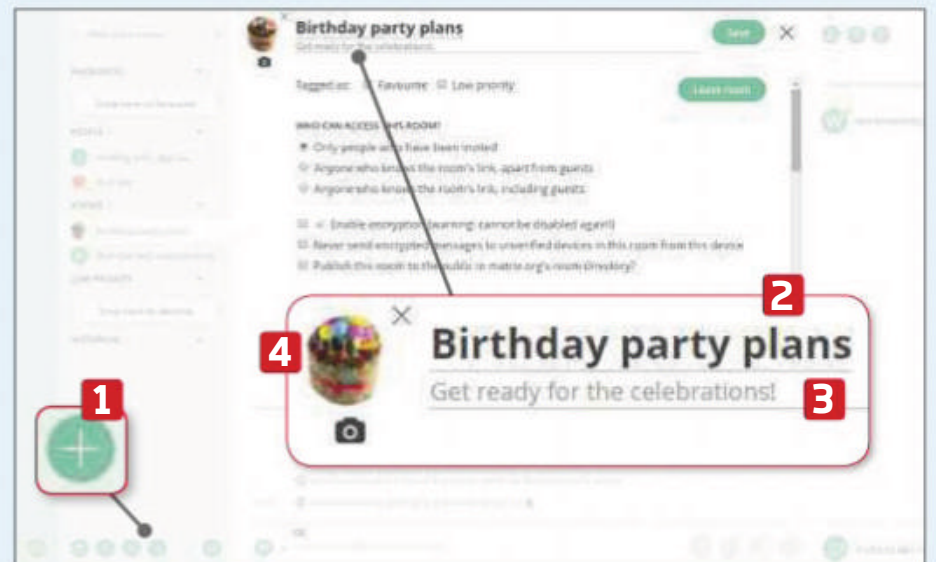
#### Andy Shaw says

Riot is essentially a front end for a service called Matrix ([matrix.org](https://matrix.org)). For conversations to be completely private, you need to host them privately on your own server. You can learn more about this at [bit.ly/riot469](https://bit.ly/riot469). If that seems too complicated, try Mattermost ([mattermost.com](https://mattermost.com)) and Rocket.Chat ([rocket.chat](https://rocket.chat)). Be warned, however, these still aren't for the faint-hearted – you'll need a spare PC and probably the best part of a weekend to tinker with it.

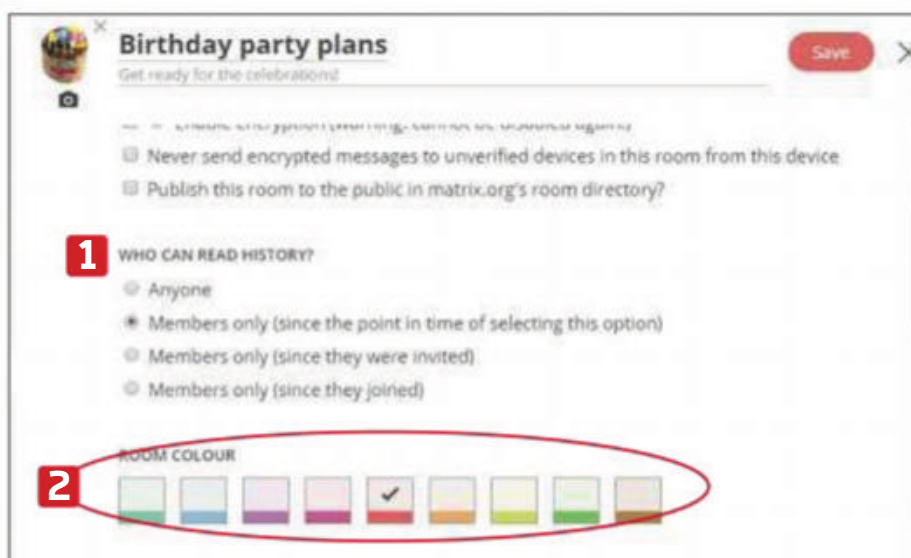
Email isn't likely to disappear anytime soon but it has started to feel a bit staid and clunky for certain types of communication. Casual group conversations, for example, are much better suited to newer online tools that combine zippy mobile texting with a chat-room environment. Slack ([slack.com](https://slack.com)) is the most well-known of these tools, but unless you work in a pretentious, swanky office, you may not have tried it. However, free clones of this corporate communications tool are springing up, with the same ability to make chatting with your friends and family smooth and swift. Riot is a brilliant example. Just get your contacts on board and you can stop emailing and start chatting.



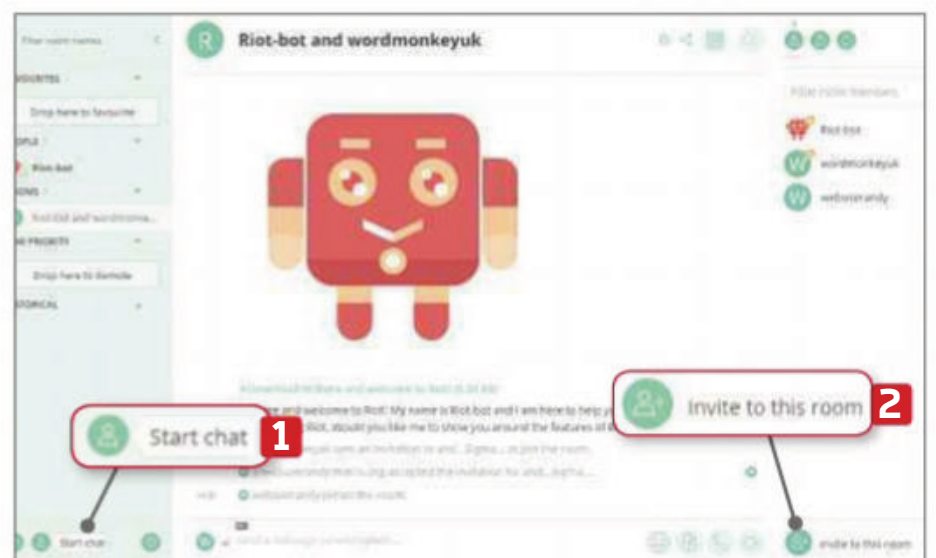
**1** Riot can be used completely anonymously – even signing up for an account with a username and password **1** can be done without having to enter an email address or phone number. **2** However, adding an email address will help you retrieve your password if you forget it.



**2** You can start using Riot straight away from your browser at [riot.im/app](https://riot.im/app). Create a private room to chat in by clicking the 'Create new room' button. **1** Click the room's title or the cog to change its name, **2** give it a subheading **3** and change the image associated with it. **4**

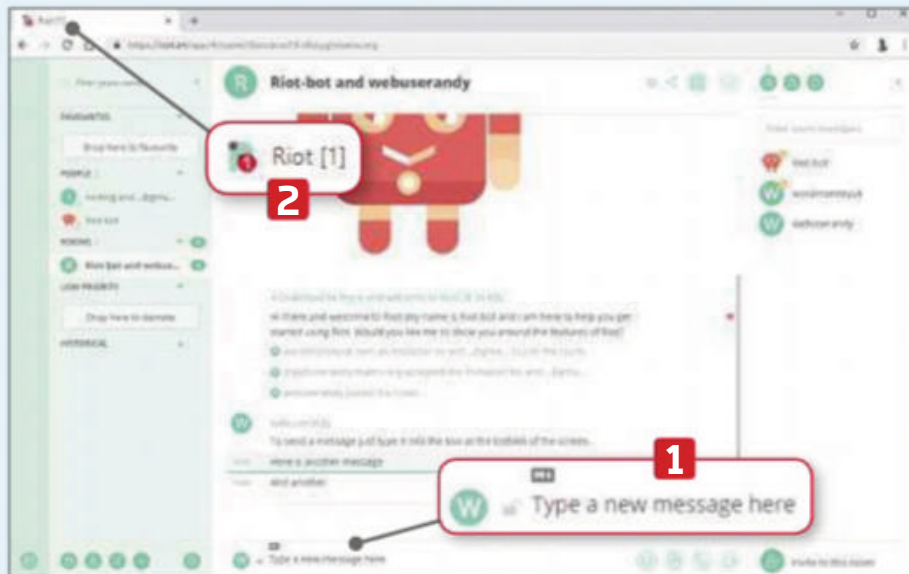


**3** You can also change a room's settings from here, before people start arriving. You can set whether newcomers can see older messages from before they joined **1** and change the way the room looks by switching its colour scheme. **2**

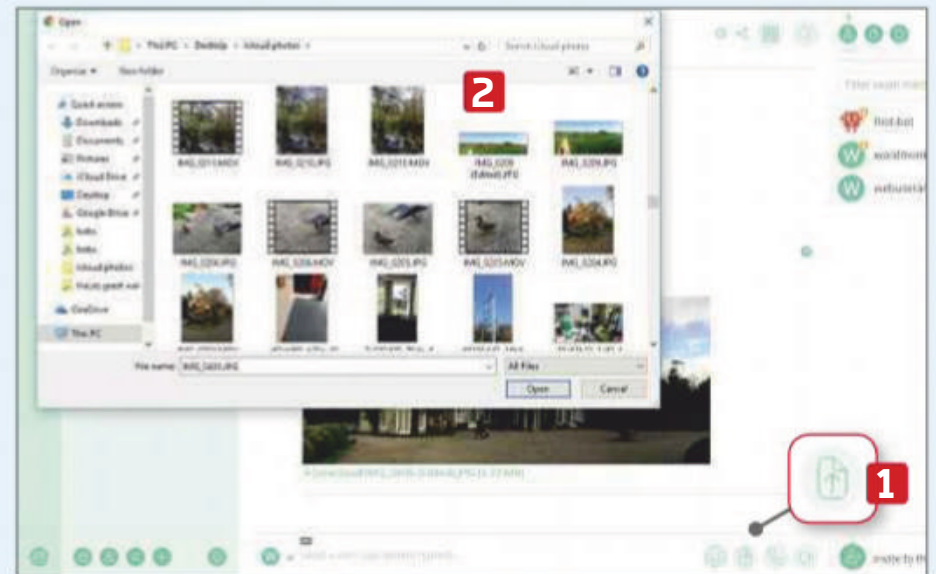


**4** Invite someone to your room by clicking the 'Start chat' button **1** or the 'Invite to this room' option. **2** You can invite people by their usernames, if you know them, or extend the invite to those who haven't signed up yet by email. They don't have to have an account to enter the room and chat, but can set one up if they wish.

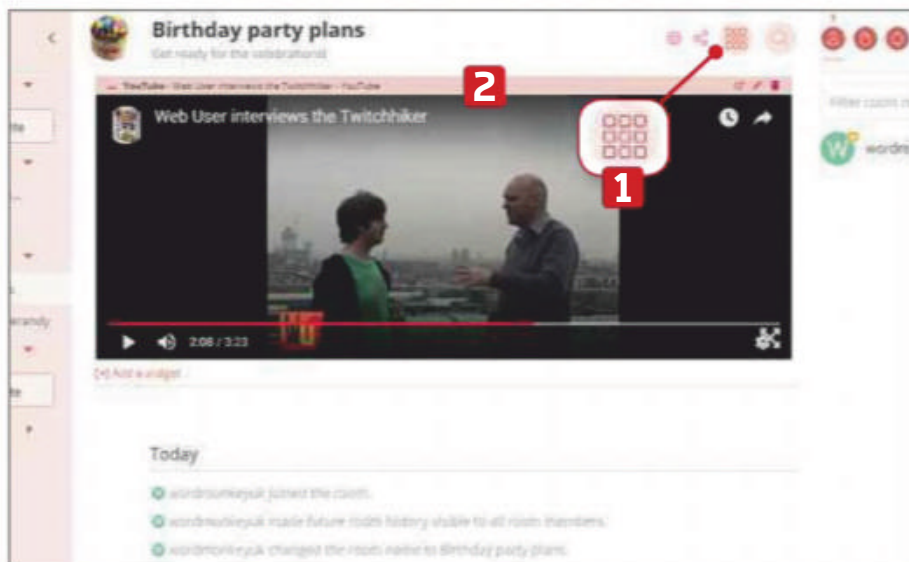




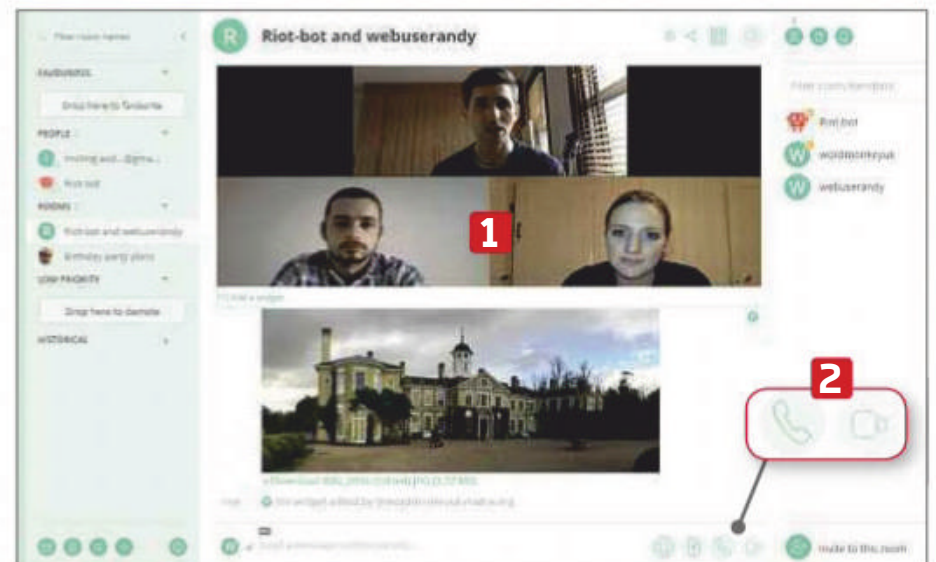
**5** Click in the box at the bottom **1** to type a message to everyone else in the room. Press Enter when you're ready to send it. Other people who are currently in the room will get a notification of a new message on Riot's browser tab. **2** If people are invited but not present, the message will appear on their screens when they arrive, even if you're no longer there.



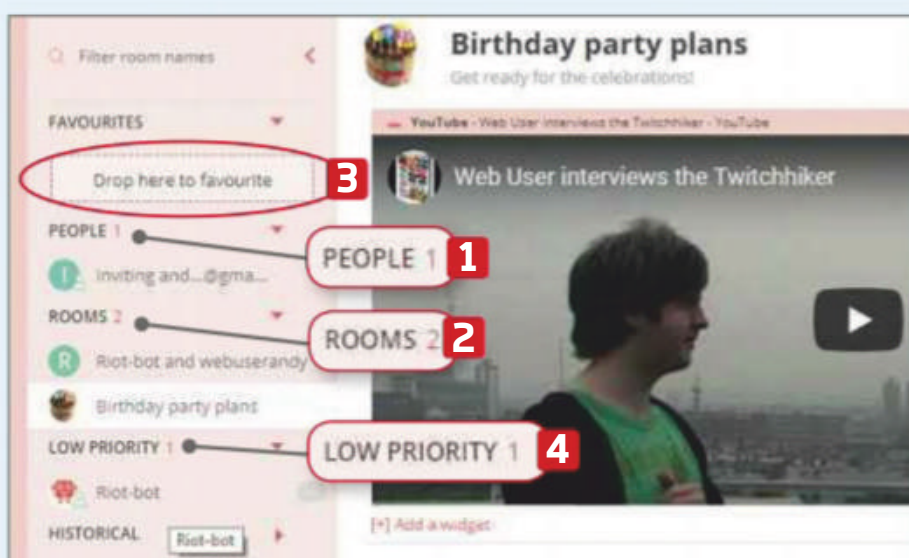
**6** Click the 'Upload file' button **1** if you want to share something with the other room members. This is a great way to share photos, but you can share any type of file in this way – just select it from the Open window that pops up. **2**



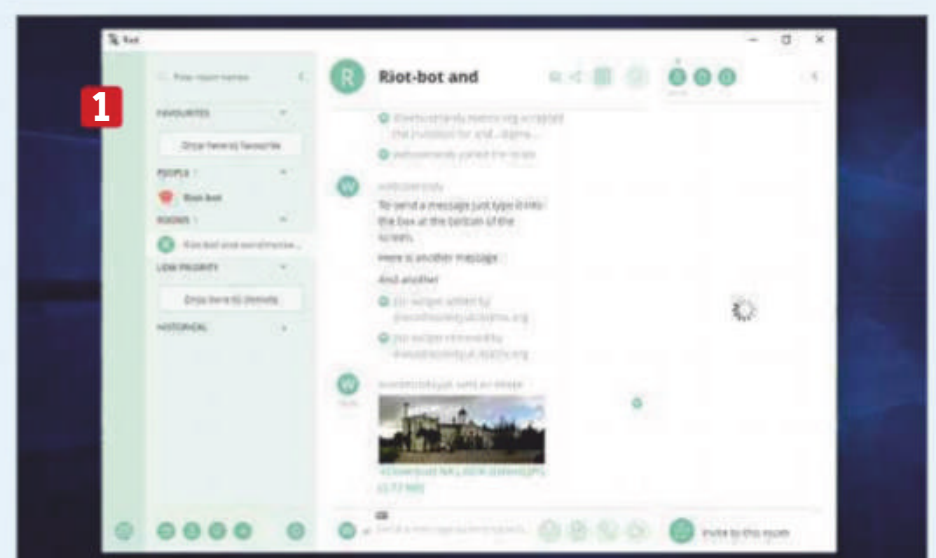
**7** Riot also has what it calls 'integrations', which let you perform impressive actions with certain types of links and files. Click the Manage Integrations button **1** and choose the thing you want to link to. For example, you can post a playable video using YouTube. **2**



**8** If you've got lots to talk about and typing isn't quick enough, you can launch a voice- or video-chat instead. **1** Click one of the two options **2** and the appropriate integration will be opened. If your device has a working camera attached, the app may ask for permission to use it.



**9** You can rearrange the people **1** and rooms **2** in the left-hand column in your order of preference, so your favourites are always at the top. Just grab the thing you want to move and drop it over the box with the broken outline. **3** You can also demote people and rooms that you're less interested in. **4**



**10** One of the great things about Riot is that you can use it on any of your devices. For most of this workshop, we've been using the web interface but here you can see the Windows version, **1** which is basically identical. There are also versions for Android, iOS, Mac OS and Linux.





## Workshop 3

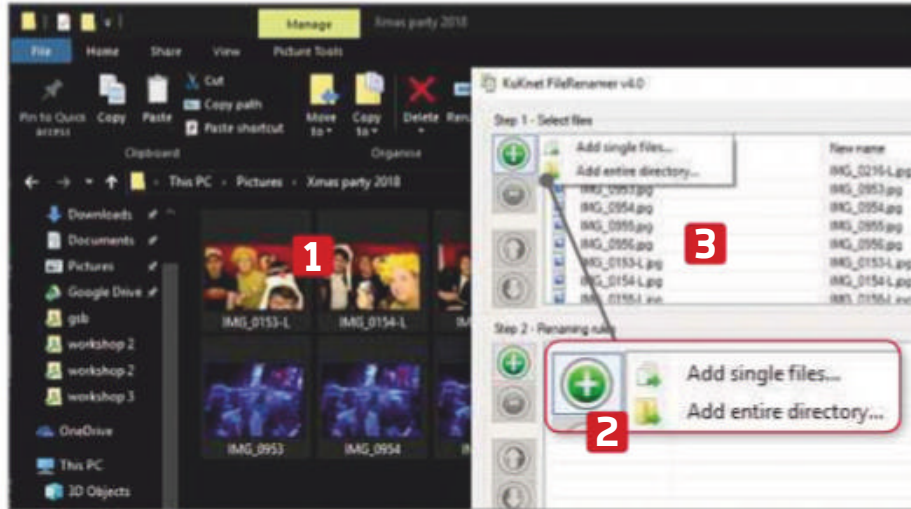
# Give recognisable names to photos and other files

Organising photos would be a lot easier if they weren't called things like IMG\_0956.jpg, but who wants to plough through renaming all their image files? FileRenamer is a handy free tool that lets you choose any group of files you

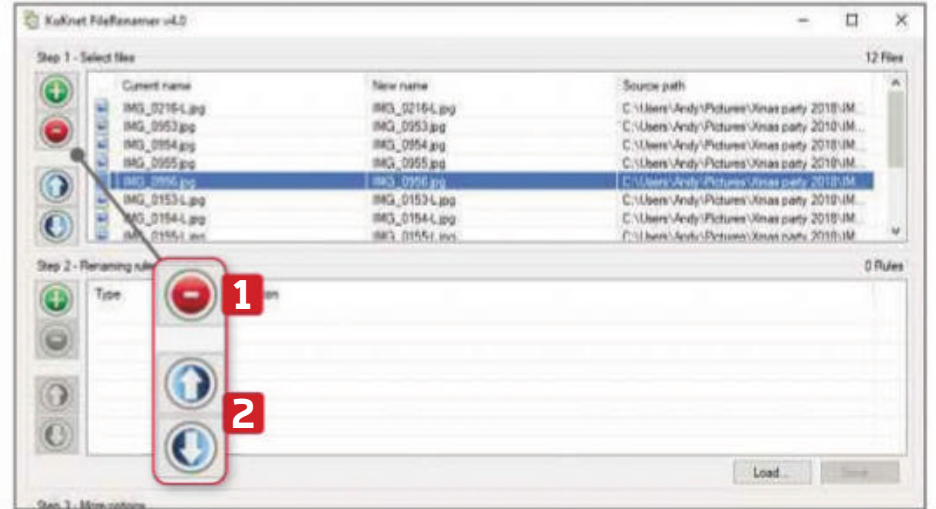
want to rename, load them into the program and configure your changes. The software does the rest. It's portable, too, so it doesn't need to be installed.



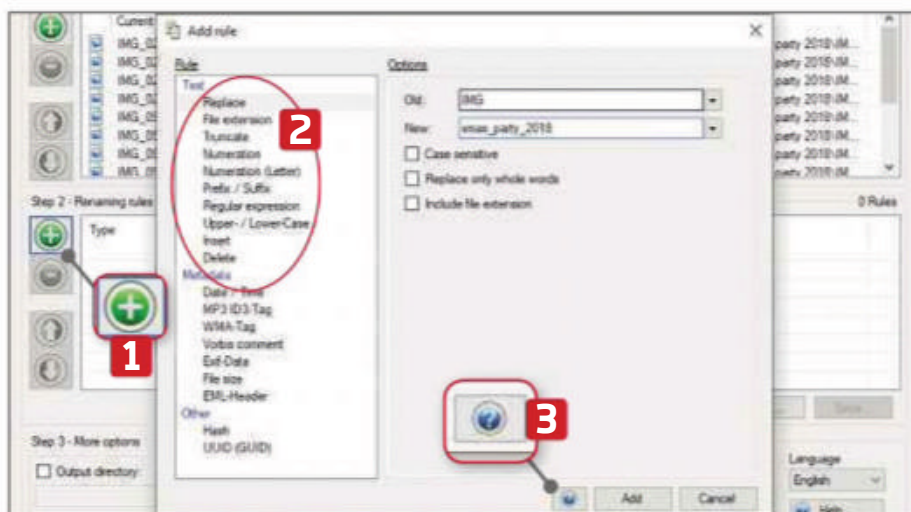
**KuKnet FileRenamer:** [bit.ly/fren469](https://bit.ly/fren469) | 10 mins | Windows 7, 8, 10



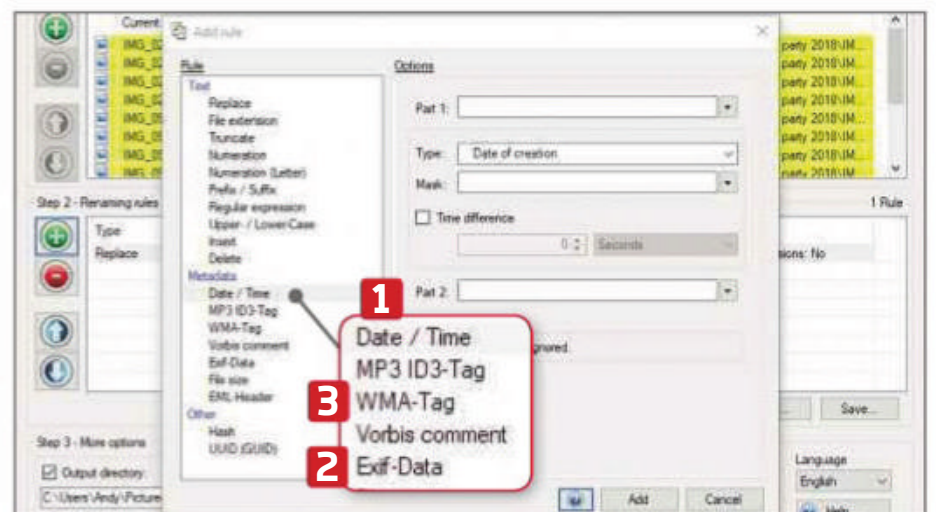
**1** Choose the files you want to rename. You can drag and drop them into the 'Select files' box from File Explorer, **1** or click the Add button **2** and choose 'Add single files' or 'Add entire directory'. A list of all your chosen files will appear in the 'Select files' panel. **3**



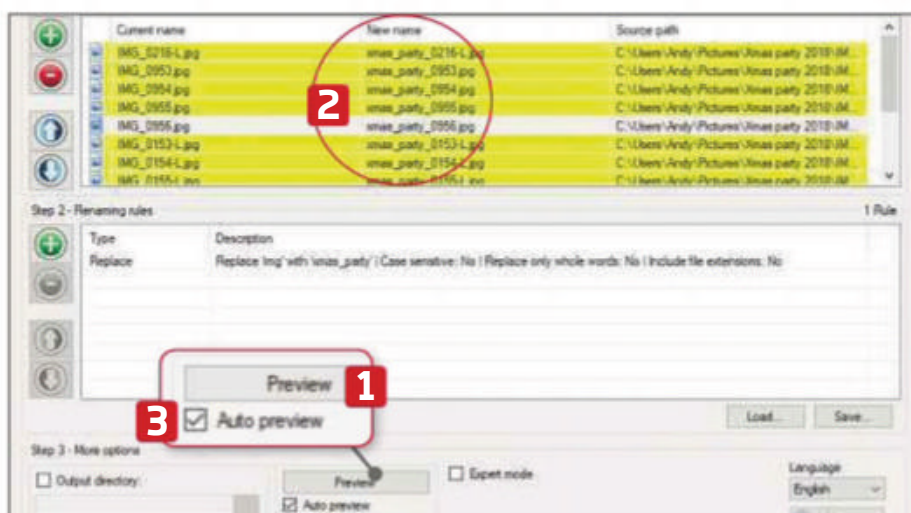
**2** If you add something by mistake, use the Remove button. **1** Name changes are applied in order, from the top. If this looks like it won't work – for example, if the images were taken on different devices – reorder them manually by selecting a file and using the up and down arrows. **2**



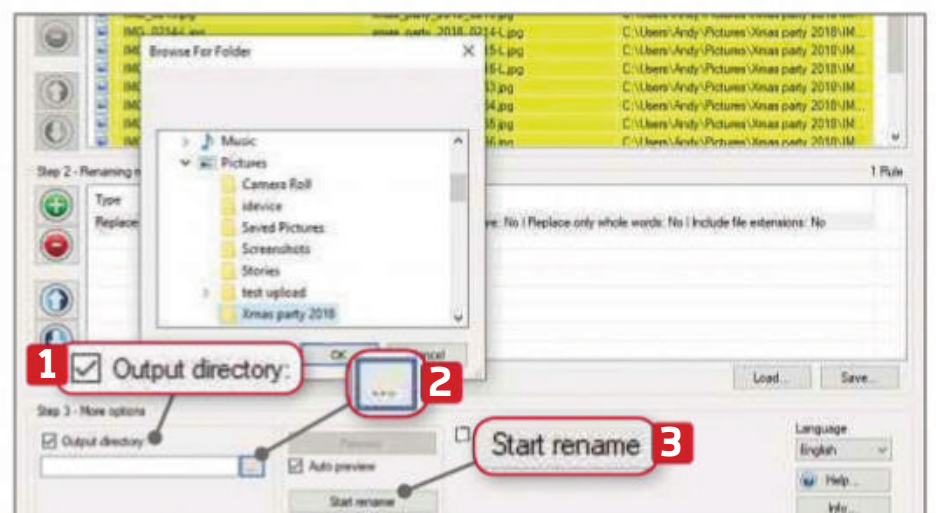
**3** Move down to the 'Renaming rules' section and click the Add button. **1** Most filename changes are managed in the Text section. **2** You can replace text, change the file extension, rewrite the numeration, change the case and more. If you don't understand the options, click the Help button. **3**



**4** As well as renaming a file, the software lets you change its metadata so you can, for example, make changes to the date and time that a photo was taken if those details were wrong on your camera. **1** You can edit the EXIF data of photos **2** and the information held in a music file. **3**



**5** Click the Preview button **1** to see the names of the files as they will appear displayed in the 'New name' section **2** of the panel above. If you want this preview to display automatically, without you having to click the Preview button, tick the 'Auto preview' box. **3**



**6** To change where the files will be saved, tick the 'Output directory' box **1** and click the three-dot menu button **2** to browse to a new folder. If you choose the folder the images are currently stored in, you'll get a warning. When you're ready to make the final changes, click 'Start rename'. **3**





# Save interesting things to your inbox

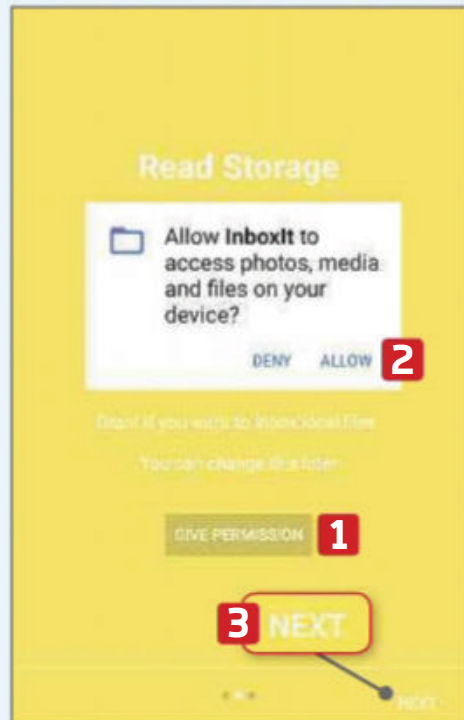
InboxIt is a handy, hassle-free app that lets you quickly share interesting things straight to your inbox. No more opening Gmail to paste links and attach files – with one tap, you can ‘inbox’ everything from websites to photos and

videos stored on your phone.

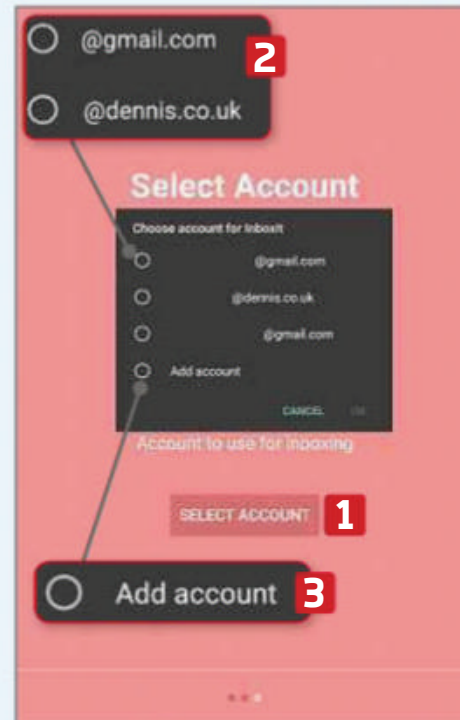
You’ll need a Gmail account to use InboxIt, and for £2.79, you can also upgrade to premium for more features, but it’s not necessary.



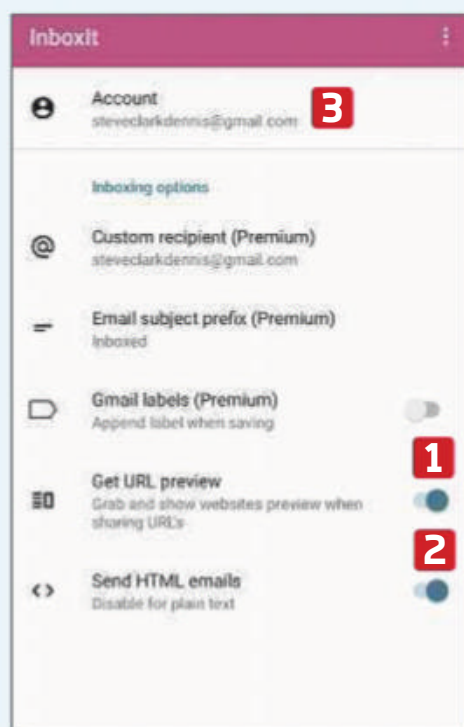
**InboxIt:** [bit.ly/inbox469](http://bit.ly/inbox469) | ⌚ 10 mins | 🤖 Android 4+



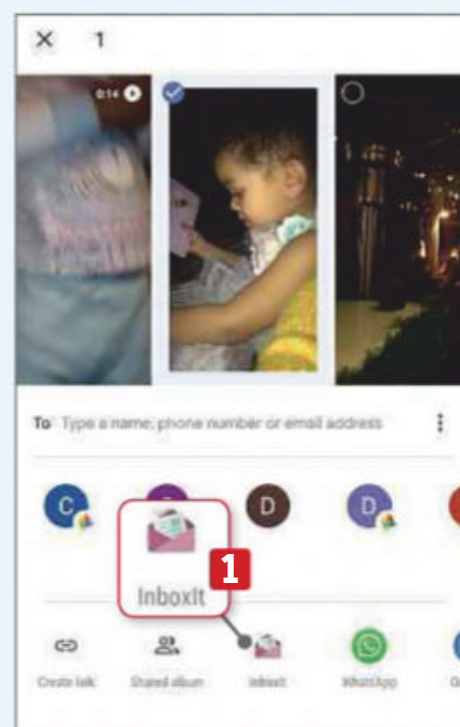
**1** During startup, InboxIt asks you to Give Permission **1** to the app to access local files. Tap the button, followed by Allow. **2** This lets you ‘inbox’ photos, music and files already on your phone. If you’d rather not, tap Next **3** to select your Gmail account.



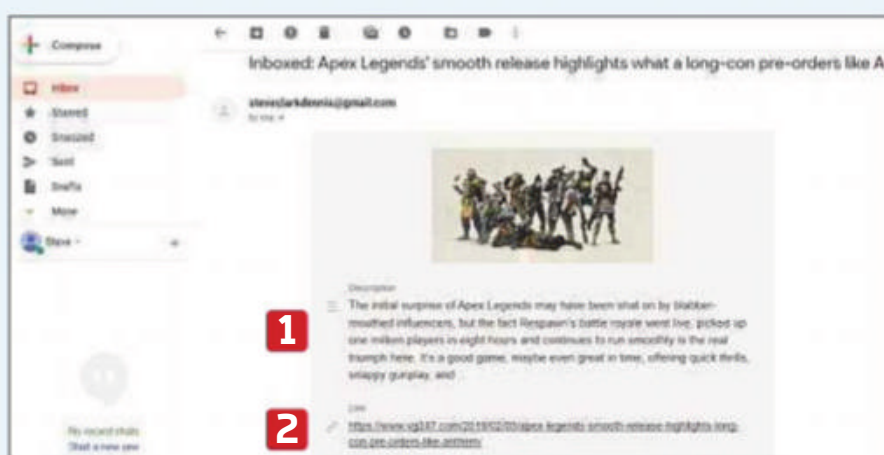
**2** After tapping Select Account, **1** a pop-up lets you choose an email from the available options **2** or tap ‘Add account’ **3** to use an unlisted address. This needs to be a Gmail account. Once you’ve signed in, tap Finish to be taken to the app’s home screen.



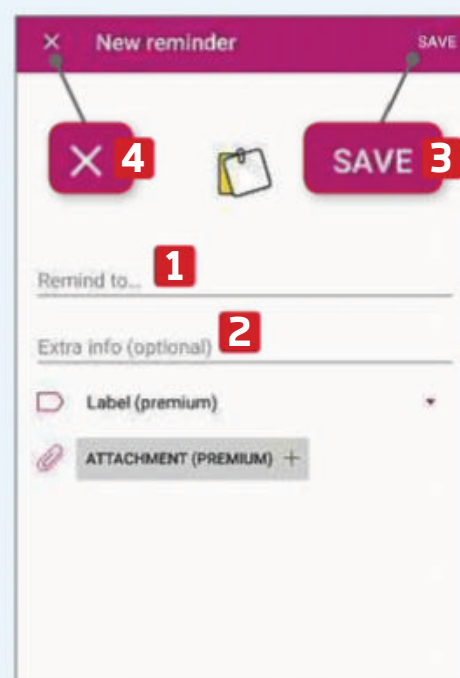
**3** On the home screen, you can tweak how content appears when sent to your inbox. Toggle on both ‘Get URL preview’ **1** and ‘Send HTML emails’ **2** for a richer experience – or switch them off for the basic view. Tap Account **3** to switch from your current email setup to a new one.



**4** Find the web page, online media or local file you want to send to your email, then tap to Share. If you’re sharing via a mobile browser, this is typically found by pressing the three-dot menu. Select InboxIt at the bottom of the screen. **1** You’re notified that the content has been ‘inboxed’.



**5** Go to your InboxIt-connected email account to retrieve the things you sent. Any URL you’ve inboxed features a description of the web page **1** and a link to the site. **2** Files and media, such as photos and music, appear as standard email attachments you can download.



**6** InboxIt doesn’t just let you share files and websites – you can also send reminders. To do this, visit the app’s home screen and tap the three-dot menu. Now type your reminder **1** and include any additional details. **2** Once that’s done, tap Save **3** to inbox it or press the ‘X’ **4** to cancel.



# Weekend Project

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



How to...

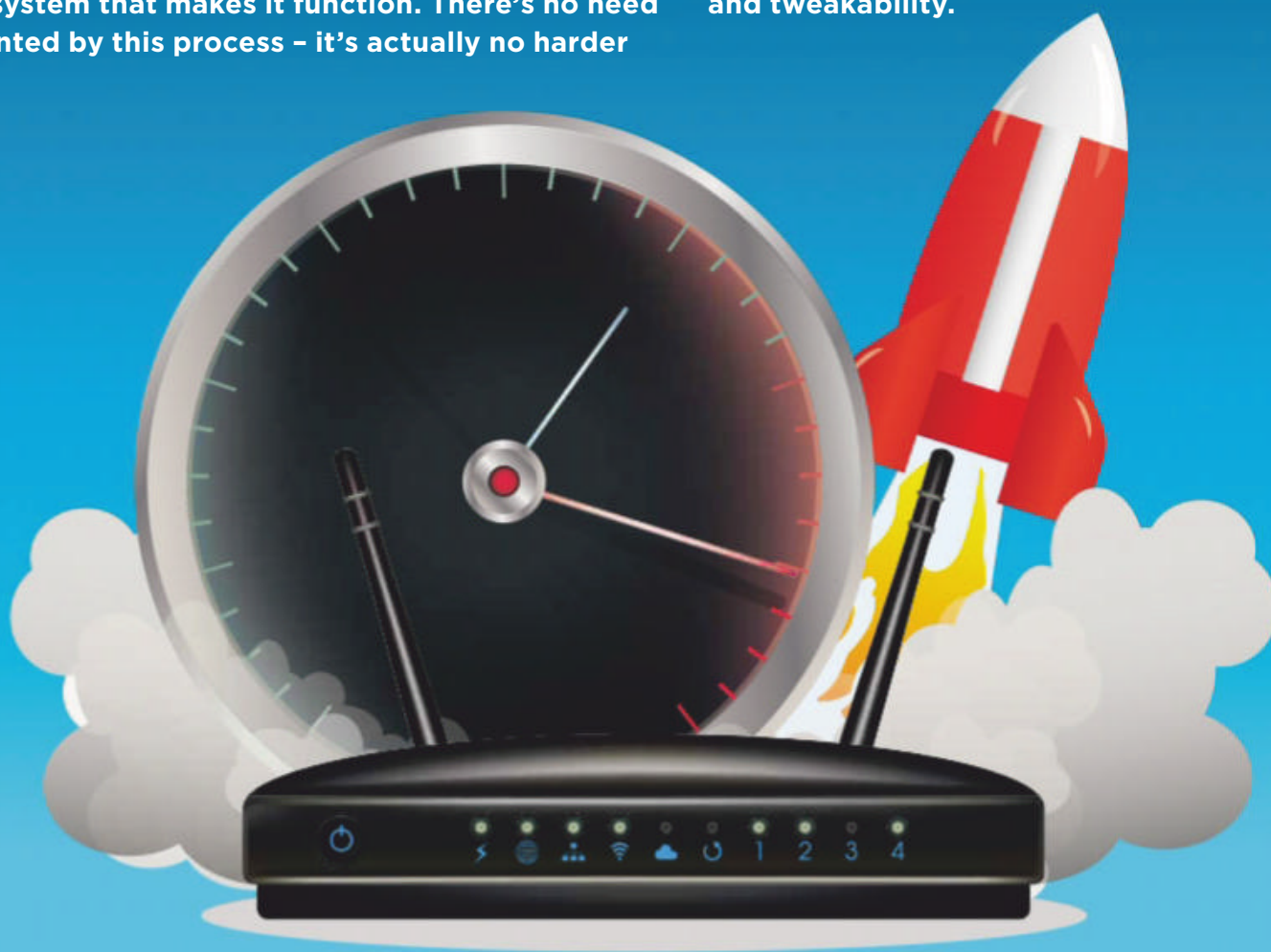
## Update your router with super-charged firmware

**Wayne Williams** shows you how to install DD-WRT to equip your router with new tools and give it a speed boost

In last issue's cover feature, we explored the actions you need to take to secure your router and make it unhackable. One of the suggestions we touched upon was to replace your router's firmware – the software that's installed on the router's ROM (Read-Only Memory). This firmware boots the router and houses the operating system that makes it function. There's no need to feel daunted by this process – it's actually no harder

than installing a piece of software on your computer, although it is a little riskier.

In this Weekend Project we'll show you how to install and use the excellent open-source DD-WRT firmware ([dd-wrt.com](http://dd-wrt.com)), which adds any tools that your router may be missing, and improves your router's performance and tweakability.



### What you'll need

First of all, you'll need a spare router that's compatible with DD-WRT. If you only have one router, you can still use it, but if things go wrong (they shouldn't, but they might!), then you could be left without access to the internet until you solve the problem.

Although you can install DD-WRT on many different makes and models of router, there's no guarantee that yours is

supported, especially if the device has been supplied by your ISP. In that instance, you can either replace the supplied router with one you can install DD-WRT on, or you can put your ISP router into modem mode and attach a different router to it.

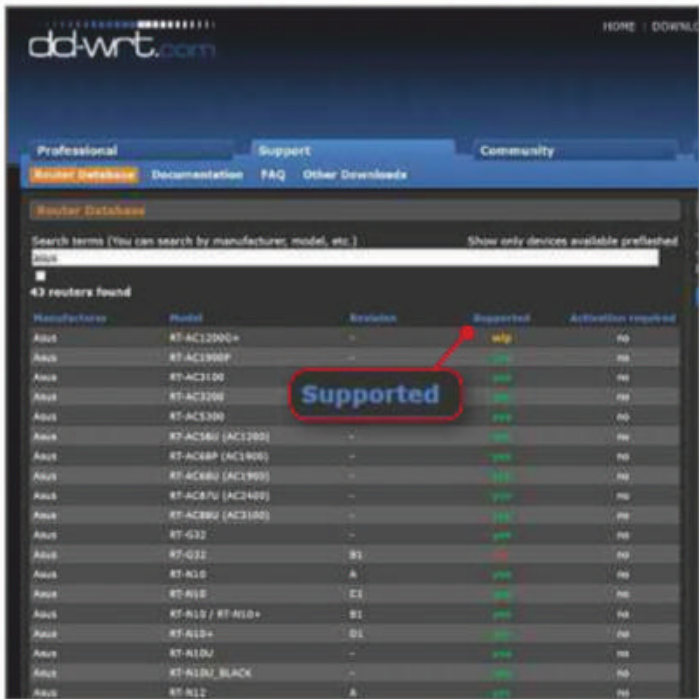
Because we're replacing the router firmware, the device you use doesn't have to be brand new, but it's worth mentioning that older routers will only

support slower Wi-Fi standards (802.11n instead of 802.11ac, for example) and upgrading the firmware isn't going to change that.

### Perform a hard reset

To start upgrading your router, follow our Mini Workshop, right. At several points in the upgrade process, you're prompted to perform a hard reset. This will usually happen before you begin, and then again



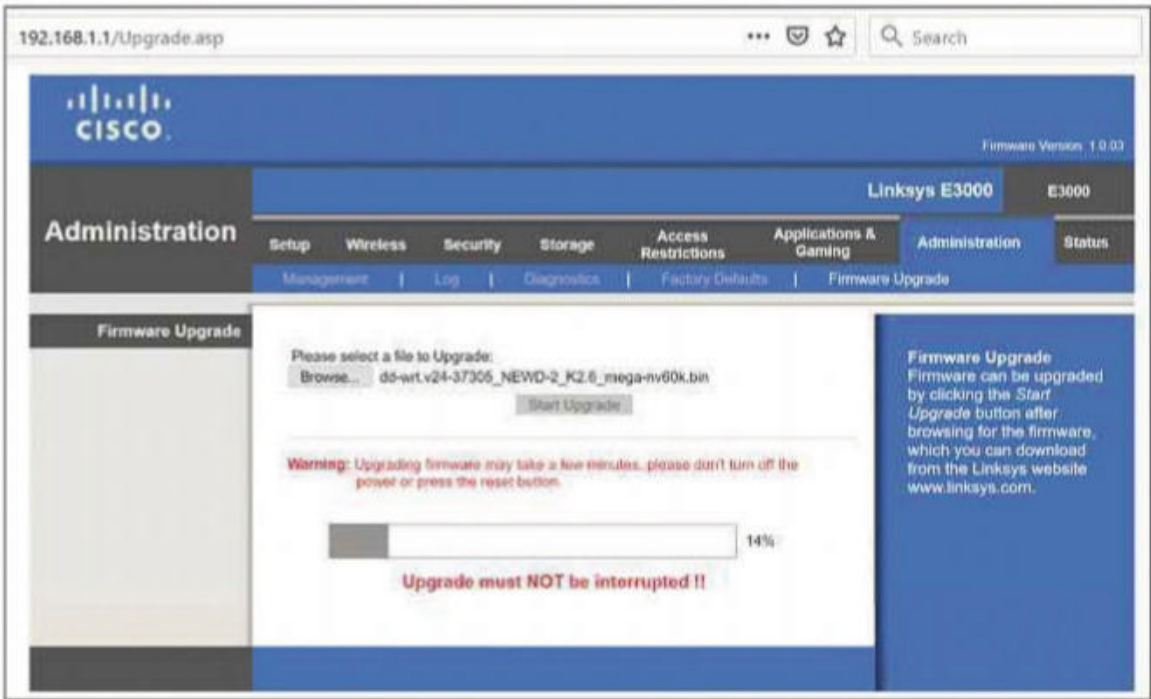


Search the router database to see if your make and model is supported

afterwards, once the firmware update is complete. What this does is basically return the router to its factory settings, wiping any configuration tweaks you might have made previously, such as changing the default login, security, IP address and so on.

The method for performing a reset will vary depending on the make and model of your router, but it usually involves pressing and holding down a button on the back of the device, or inserting a paperclip into a reset hole for 30 seconds or so. The lights on the front of the router will change to indicate when the reset has been actioned. Wait a few minutes until your router becomes usable again and you can continue with the next step of the process.

To help you get started, follow our Mini Workshop on page 61.



Don't touch your PC or turn off the router once the upgrade process begins or you could permanently damage your router

### What can DD-WRT do?

DD-WRT unlocks all sorts of advanced features that you'll usually only find in high-end routers. If your old router's firmware was relatively basic, you might find the many options spread across numerous tabs a bit overwhelming, but don't worry – if you're not sure what a particular item does, you can simply leave it alone or visit DD-WRT's wiki ([bit.ly/ddwiki469](http://bit.ly/ddwiki469)) to find out more about it.

The key is to work methodically through the top row of tabs – Setup, Wireless, Services, Security, Access Restrictions, NAT/QoS/ Administration and Status – then explore the tabs displayed below in each section. Different versions of the DD-WRT firmware, and different router models, offer their own unique tools, such as the ability to set up

your router as a range extender and boost the coverage of your Wi-Fi.

Here are some highlights you should have access to:

#### • NAT/QoS

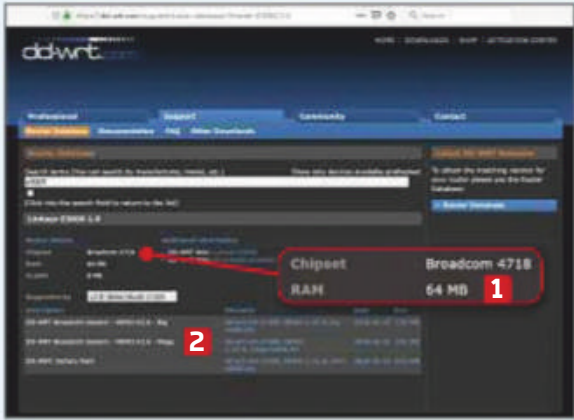
Lets you manage port forwarding, UPnP (Universal Plug and Play) and QoS (quality of service). This last option prioritises services that access the internet. Make Skype a priority, for example, and you should always enjoy smooth video and audio calling.

#### • Access Restrictions

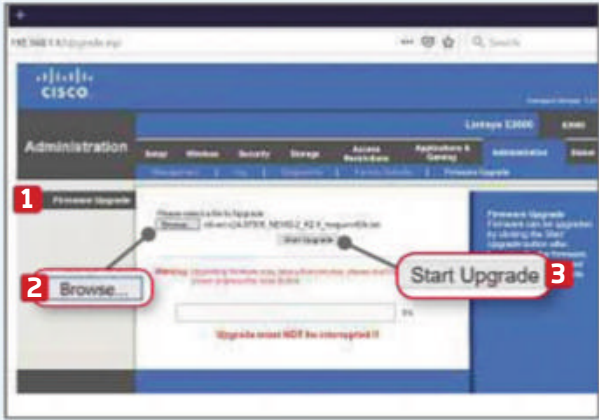
Creates a set of policies to control the internet access that different devices on your network can have. You can specify days and times to apply the rules, and block certain devices, websites, traffic types and keywords.



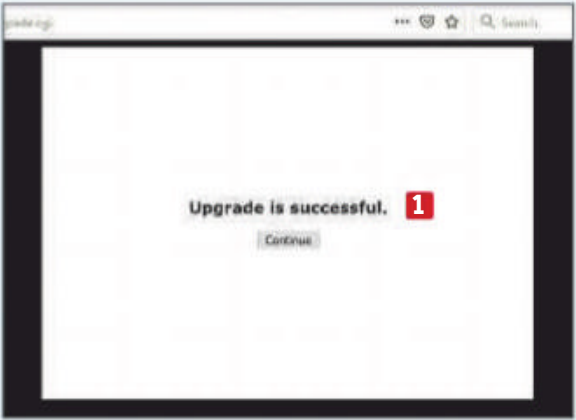
### MINI WORKSHOP | Install DD-WRT on your router



**1** Open the router database ([bit.ly/rodb469](http://bit.ly/rodb469)) in your web browser and search for your specific make and model. If it's there, click the name. The page that opens provides details about your router, such as its chipset and amount of memory. **1** It also offers download links to the files you need to install DD-WRT. **2**



**2** The exact installation process varies depending on your router. The DD-WRT Wiki at [bit.ly/ddwk469](http://bit.ly/ddwk469) can provide specific details. Perform a hard reset, then log into your router's settings page using your browser. Look for a Firmware Upgrade option. **1** Browse for the DD-WRT firmware you downloaded **2** and click Start Upgrade **3** to begin installation.







**3** Avoid doing anything with your PC until this has completed and don't reboot your router during the process. You should see a message confirming that everything has gone according to plan. **1** If not, check to see if there's a different firmware to try. Wait a few minutes, then do another hard reset. That's it – DD-WRT is now installed on your router.



# Broadband Deals

Call **FREE** on **0800 083 2357** to switch your broadband

	Provider	Package name	Monthly price	Contract length	Broadband speed	Allowance	First-year cost*
1		TalkTalk: Fast Broadband	<b>£17.95</b> (£27 after 18 months)	<b>18</b> months	<b>11Mbps</b> avg. speed	∞ unlimited	<b>CHEAPEST</b> <b>£215.40</b>
2		Sky: Broadband Unlimited	<b>£18.00</b> (£30 after 18 months)	<b>18</b> months	<b>11Mbps</b> avg. speed	∞ unlimited*	<b>£216.00</b>
3		First Utility: First Broadband	<b>£18.99</b>	<b>18</b> months	<b>11Mbps</b> avg. speed	∞ unlimited	<b>£227.88</b>
4		Virgin Media: Player Bundle + Fibre Broadband + Weekend Calls	<b>£32.00</b> (£56 after 12 months)	<b>12</b> months	<b>108Mbps</b> avg. speed	∞ unlimited	<b>£384.00</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 4 February 2019.

**Ofcom**

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

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

**SNEAK  
PREVIEW!**

Computer  
**active**

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• Digitise your paperwork and make it searchable

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The QoS section lets you prioritise certain types of web traffic for better performance



Keep an eye on your traffic usage in the Status section

• TX Power

Go to Wireless, Basic Settings and tick the Advanced Settings box. Look for the TX Power setting. This can boost your router's ability to transmit and make it more powerful. However, it may already be set at the maximum figure and you should be aware that raising it too high could damage your router. Do some research at [bit.ly/ddtx469](http://bit.ly/ddtx469).

• Channels

A wireless router can transmit on various channels. If your Wi-Fi is unreliable, pick a different (less congested) channel. You can change channels by going to Wireless, Basic Settings, Wireless Channel. Adjust channels for both the 2.4GHz and 5GHz bands.

• Ad blocking

You can block adverts at the router level, which means you won't see ads on any of the devices on your network. This isn't a feature you can simply enable or disable, though. To set it up, you need to use the

script found at [bit.ly/adbl469](http://bit.ly/adbl469). It doesn't work with all routers or all versions of DD-WRT, so read the information on the site first.

Keep an eye on traffic


DD-WRT's Status tab provides useful information about your router, including its name, model and firmware version. It also records the length of time that it's been switched on, which is good to know because regular reboots can help keep it running smoothly.


The WAN tab holds data on your IP Address and DNS, but it also shows incoming and outgoing traffic in real time and by month, which is handy if you're on a capped plan. You can skip backward and forward through each month, though your router will only have traffic data recorded from when you first installed it. There are also status tabs for LAN (Local Area Network), Wireless and Bandwidth. This last one offers a selection of graphs showing all traffic across your network.

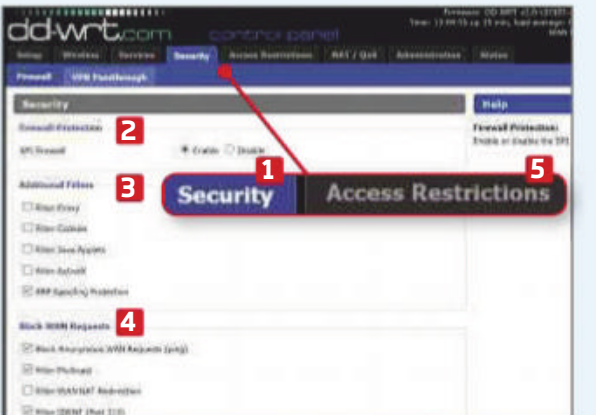
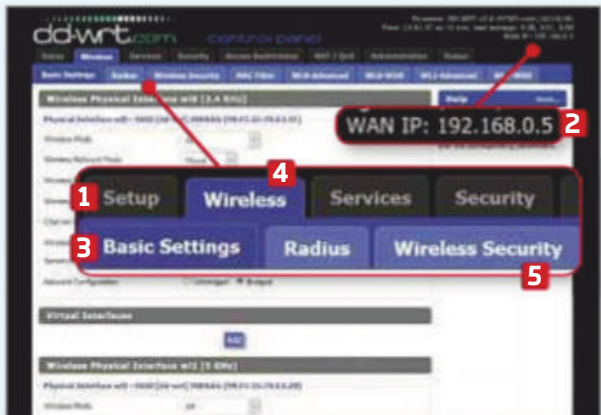
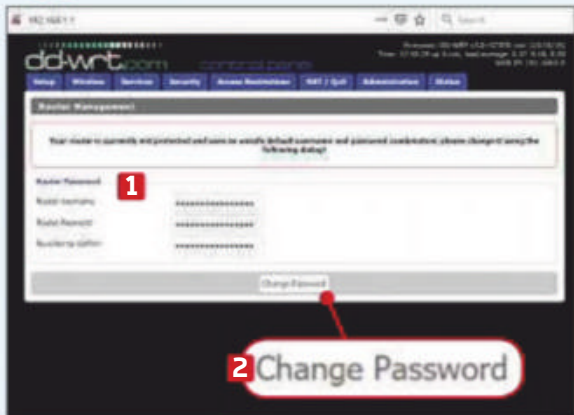
OTHER CUSTOM FIRMWARE CHOICES

DD-WRT is our favourite custom router firmware, but if it doesn't work or you just want to try something different, there are other options available. The two others we'd recommend are OpenWrt ([openwrt.org](http://openwrt.org)) and Tomato ([tomato.groov.pl](http://tomato.groov.pl)).

OpenWrt is an alternative firmware to DD-WRT that's worth exploring



 MINI WORKSHOP | Get started with DD-WRT



1 Once you've installed the firmware, log into DD-WRT's management page by typing the usual router address into your browser (this will likely be <http://192.168.1.1>). You're prompted to enter a new username and password. 1 Do that now and click Change Password. 2 The System Information page loads.

2 Click the Setup tab 1 and enter your login details when requested. The Basic Setup section lets you customise the WAN (Wide Area Network) settings, 2 and Network Setup. 3 Click the Wireless tab 4 to configure the settings for the 2.4GHz and 5GHz Wi-Fi bands. Click the Wireless Security tab 5 to secure your network.

3 Click the Security tab. 1 From here, you can enable or disable firewall protection, 2 add filters 3 and configure settings. 4 The Access Restrictions tab 5 lets you control internet access, so you can allow or block the internet at specific days and times - handy for limiting online access for children and grandchildren.



# SUBSCRIBE NOW!



Subscribe to **Webuser** today and save on the single issue price.

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SEE NEXT PAGE FOR SET-UP INSTRUCTIONS



# HOW TO SUBSCRIBE...

## ...on an iPad or iPhone

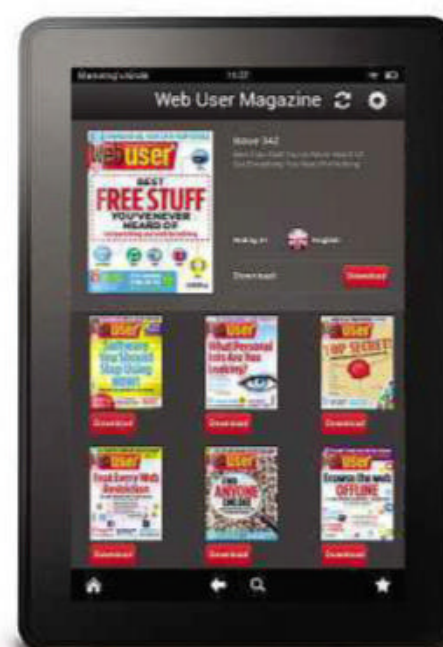
- STEP 1** Return to the **Web user library**
- STEP 2** Choose your subscription term and tap twice on the '**price**' box
- STEP 3** Choose whether to create an optional **PixelMags** account
- STEP 4** Enter your **Apple ID password** to confirm



## ...on a Kindle Fire

Kindle Fire subscriptions come with a **FREE** one month trial.

- STEP 1** Tap '**Free Trial Subscription**' in the **Web user library**
- STEP 2** Chose your subscription term from the drop down menu on the popup that appears
- STEP 3** Tap '**Subscribe**'



## ...via the Zinio app

- STEP 1** Search for **Web user** via the search box in the **Shop tab**
- STEP 2** Tap the '**Subscribe**' button
- STEP 3** Choose whether to create an optional **Zinio** account
- STEP 4** Enter your **Apple ID password** to confirm



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# Web User Masterclass

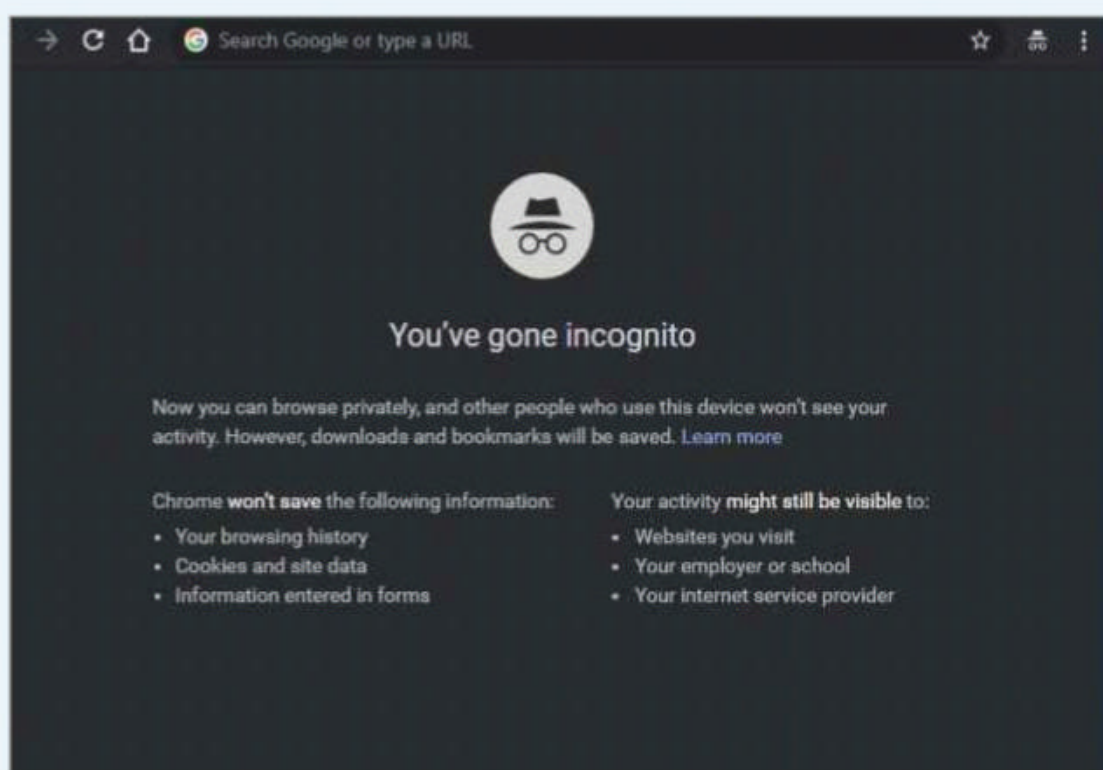
## Control how and when your browser add-ons appear



### Disable every add-on in one go

**B**rowser add-ons can access the addresses and content of any web pages you visit. Hopefully, they won't be misusing the information, but you can't be certain. There's a small risk that an add-on could be tracking your shopping, banking and email activities, gathering data and sending it on to someone.

Bear this in mind the next time you fill in a form or visit a store's checkout. To browse privately without any add-ons spying on you, open an incognito (Chrome) or InPrivate (Edge) browser window. Firefox allows add-ons to run in its Private Browsing windows, so if you want to block them, hold down Shift when you launch it and select 'Start in Safe Mode'. Unless you deliberately change the settings, all extensions are blocked by default in these modes, making banking, shopping and other activities safer.



*Open an incognito window to disable all Chrome extensions*



### Connect an add-on to a specific profile

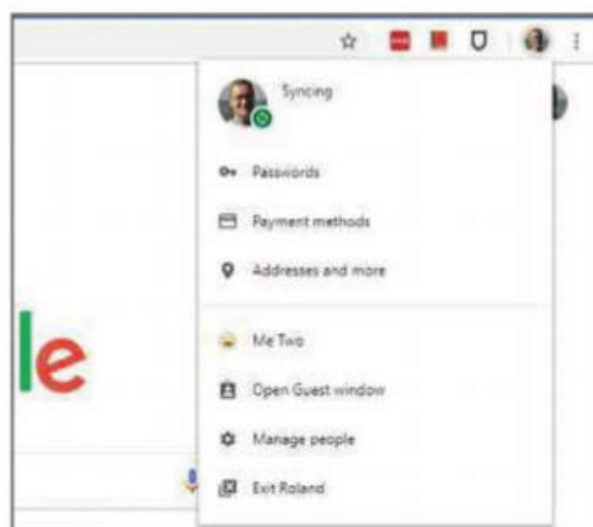
You can set up several versions of Chrome with different add-ons and settings, and use them on the same PC. For example, you could have one version using a set of add-ons for work and another for personal browsing. You can even create a profile for accessing just one website, set up to use only the add-ons specifically needed for it.

Click your account picture in the top-right corner of Chrome and select 'Manage people'. Click 'Add person' in the window that appears, then select an icon for the account picture. Ignore any prompts to switch on syncing.

If you're not automatically switched to

the new account, click your profile picture in the corner and select the new one you just created. This should open a new browser window.

Any actions you perform in this window will be completely separate to your normal browser. To see the proof of this, go to the Chrome Web Store ([bit.ly/webs469](https://bit.ly/webs469)) and install an add-on. Switch back to your original profile on the account menu and the add-on won't be there.



*Create different profiles in Chrome for different sets of add-ons*



### Use extensions everywhere

Some browser add-ons, such as ad blockers, are very useful, but they are switched off by default in Incognito (Chrome) or InPrivate (Edge) browsing mode. Firefox already allows add-ons through in Private Browsing, but they are easy to enable in other browsers, too.

In Chrome, go to the menu and select 'More tools', then Extensions. Click the Details button on the tile of the add-on you want to allow through, then turn on 'Allow in incognito'.

In Edge, open an InPrivate window, open the menu on the right and select Extensions. Move the mouse over an add-on and click the cog icon. Tick the box 'Allow for InPrivate browsing'.

The point of incognito and InPrivate modes is usually to stop anyone from being able to track you, and block them from finding out who you are and what you're browsing. Add-ons undermine this, because they have access to everything you do – so think carefully before enabling them.

**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.**



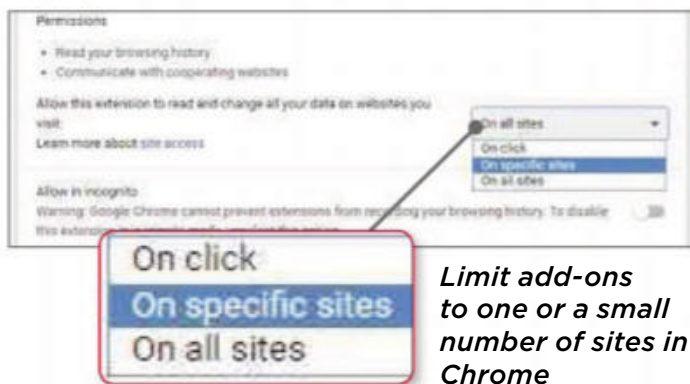


## Limit add-ons to specific sites

Ignoring the ones built for specific websites such as YouTube, browser add-ons normally have access to every website you visit. If you're not happy with this, it's possible to limit an add-on to just one site or a few selected sites.

In Chrome, open the menu and select 'More tools', then Extensions. Click the Details button on the one you want to work with. You'll see an option to 'Allow this extension to read and change all your data on websites that you visit'. On the right is a menu with three options: 'On click', 'On all sites' and 'On specific sites'. Select the latter and enter the address of the site the add-on is allowed to access. Use the Add button to add more sites if you need to.

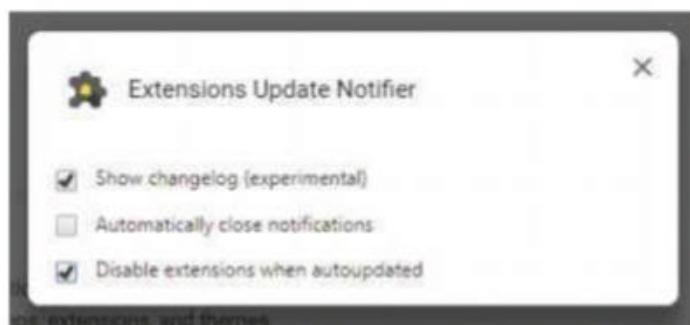
We had mixed results with this because some add-ons didn't work if they were limited to a single website.



## See update notifications

Add-ons are automatically updated when newer versions are released. If you'd like to be notified when this happens, install Extensions Update Notifier ([bit.ly/exun469](http://bit.ly/exun469)). You'll see a notification appear on your screen when an add-on is updated. It shows the old and new version numbers.

Updates can sometimes cause problems and incompatibility issues, so there's an option to automatically disable an add-on when it's updated. This gives you an opportunity to check out the changes and see if anyone has reported problems on the add-on's page in the Chrome Web Store. Right-click the Extensions Update Notifier icon in the toolbar and select Options, then tick the box 'Disable extensions when autoupdated'.



**Get a notification when an add-on is updated, to see what has changed**

## TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave



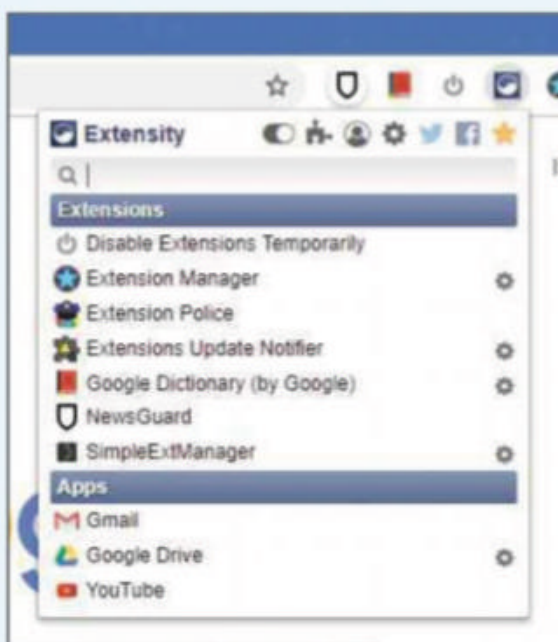
## Disable extensions

Opening an incognito window in Chrome not only disables all your add-ons but it also stops access to other things that you might need, such as your history, identity, saved passwords and cookies containing your login details.

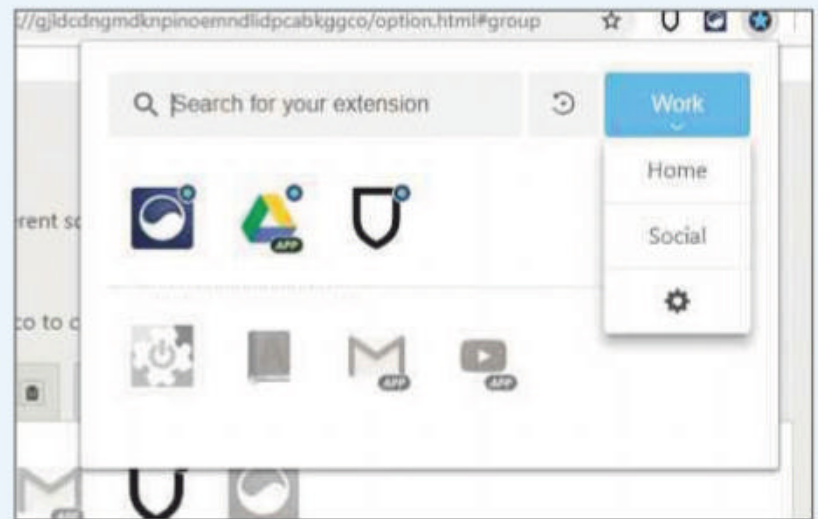
Disable Extensions Temporarily ([bit.ly/detmp469](http://bit.ly/detmp469)) is a simple tool that adds a button to the Chrome toolbar to enable or disable add-ons. One click of this button and your add-ons are switched off; simply click it again to switch them back on. Use it when you use online banking, shopping and on other sites where you don't want add-ons accessing your information.

Extensity ([bit.ly/exte469](http://bit.ly/exte469)) offers even more control. Click it to display a menu and find the switch at the top that will disable all add-ons (except itself). As with Disable Extensions Temporarily, they can be re-enabled by clicking the switch again.

However, Extensity goes a step further by providing some individual control over your add-ons. A list is displayed and you can click an add-on to enable or disable it like a toggle switch. This means you can enable the add-ons you want and deselect any you don't. For example, you might want to keep your password manager but disable the rest.



**Manage add-ons with Extensity and use it to enable or disable them**



**Use Extension Manager to create collections of add-ons in Chrome**



## Create add-on sets

Our tip opposite, 'Connect an add-on to a specific profile', explained how a new profile for Chrome creates a browser window with its own unique set of add-ons. You can create profiles for work or personal browsing, social media or shopping, and easily switch from one profile to another. However, it's a different matter for your identity, history, cookies and everything else, which you'll notice if you rely on Chrome to remember passwords.

Extension Manager ([bit.ly/exman469](http://bit.ly/exman469)) lets you turn add-ons on or off as needed, but also lets you store add-ons as a set, so you can switch from one set to another as you need to, when browsing the web.

Install the add-on, right-click the Extension Manager icon and select Options. In the Group Management section, find the tab containing light-grey icons and click the pencil next to it, to give it a name - Work, for example. Select the add-ons you want to appear on this tab by clicking the icons. Click the plus button to add another tab, name it (Home, for example), then select the add-ons you want to appear there, too.

When you are browsing the web and want to switch sets, click the Extension Manager icon and move the mouse over the current set on the right. A list of sets appears. When one is selected, the add-ons contained within it are enabled.

SimpleExtManager ([bit.ly/sem469](http://bit.ly/sem469)) is another option that lets you create groups of add-ons. Click the toolbar icon to list all your add-ons, then use the switches to enable and disable them. A group switch enables or disables all extensions within a group.



# 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)



## MOBILE

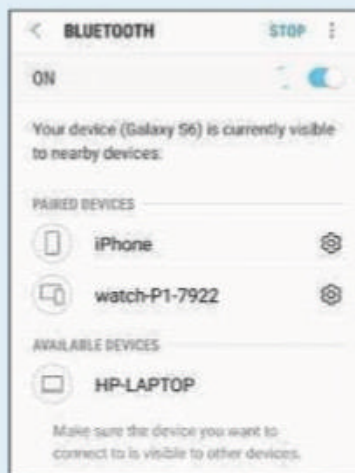
### Is Bluetooth safe?

**Q** When I connect to Bluetooth on my phone or tablet, a message says: “Your phone (Galaxy S8) is currently visible to nearby devices”. Is it safe to use for playing music as I walk around the park? I want to buy some Bose wireless headphones but I’m concerned about who might be able to see my device.

**Allan Carre, via email**

**A** A device that’s invisible to other Bluetooth devices is more secure than one that’s visible, but seeing a device isn’t the same as accessing it. For one device to access another via Bluetooth, they must be paired, which involves agreeing to the connection on both devices. So you would agree to this request when pairing your

*Nearby Bluetooth devices can be seen but must be paired to share files*



phone with your Bluetooth

headphones, but if some random person tried to connect to your phone, you would see the request and be able to reject it.

The contents of your phone are not at risk but, because your phone can be detected, it could alert someone to your presence in the park if they were scanning for Bluetooth devices and specifically watching out for your phone to appear.

– it costs £9.25 per month to make and receive VoIP phone calls.

A VoIP adapter lets you use your regular telephones as VoIP handsets, but you still need a compatible provider and subscription.

## SECURITY

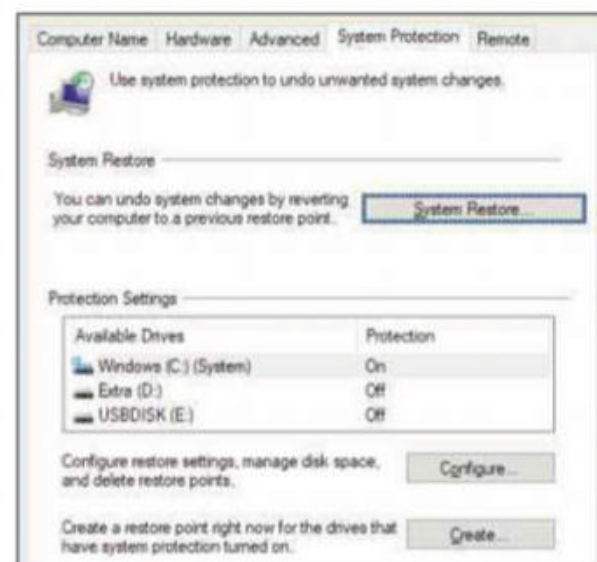
### Alternatives to Microsoft Sandbox

**Q** I read in a recent issue of *Web User* that Microsoft is introducing a sandbox to Windows 10. I’m a silver surfer who has been caught out by bogus EXE files hidden in emails; if this sandbox malarkey is not too technical to set up and use, it would be great for me.

Microsoft isn’t going to release this until next year, when it will no doubt fail to function correctly. I was wondering if there are other sandboxes available that are simple to set up and use, preferably free and have a proven track record.

**Paul Younger, via email**

**A** There are several sandbox programs available, and Windows has built-in tools that do a similar job. Windows System Restore, for example, takes a snapshot of your PC and saves it. Restoring a snapshot undoes many changes made to Windows settings and files. Type `system restore` in the search box on the taskbar, then click the result. The window that opens lets you switch System Restore on or off, and



**Create restore points and open System Restore to rewind your PC**

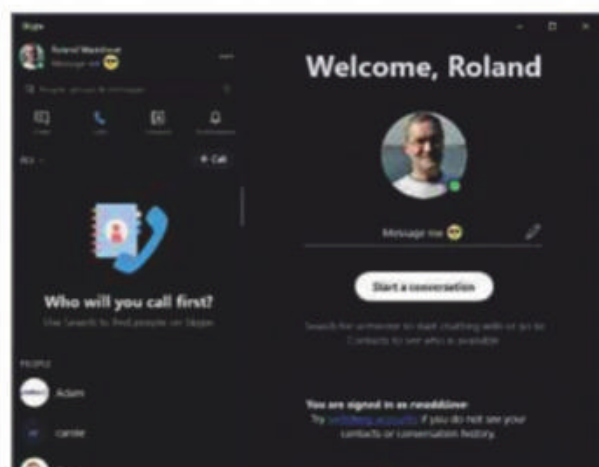
## INTERNET

### Switch to VoIP calls

**Q** I’d like to switch my phones to VoIP (Voice over Internet Protocol) and use Google Voice and Hangouts. Is this option available in the UK, and can it be used as an alternative to a landline? Also, can I use VoIP adapters to convert my old phones into VoIP phones?

**Harry Hall, via email**

**A** VoIP uses the internet to make phone calls, and the simplest way to do this is via two web-connected



**Skype is bundled with Windows and lets you make internet calls between devices**

devices, such as a computer, tablet or mobile phone. However, both devices need to be using the same software.

Hangouts and Google Voice are still around, but there are better and more popular alternatives. WhatsApp ([www.whatsapp.com](http://www.whatsapp.com)), Facebook Messenger ([www.messenger.com](http://www.messenger.com)), Viber ([www.viber.com](http://www.viber.com)) and Skype ([www.skype.com](http://www.skype.com)) have more than a billion users each, and voice calls between users are free. These are mostly mobile apps, but some will also run on your computer.

To call a landline or a mobile phone that doesn’t have a VoIP app costs money. For example, Skype charges £6 a month to allow calls to UK phones. To let someone with a landline or mobile phone call you costs another £5.16 per month. Charges vary slightly from service to service, but not by much.

Some VoIP systems don’t require an app or mobile phone, and use what looks like a standard telephone handset plugged into a router (rather than a phone socket). Shop around the many suppliers to see what’s on offer: Vonage ([www.vonage.co.uk](http://www.vonage.co.uk)) is a good example





manually create a restore point. You can also access the System Restore tool, which provides access to previous snapshots and lets you restore them.

Controlled Folder Access prevents malware and unauthorised programs from accessing your files by locking system folders. Open Settings (Windows+i) and search for it, then click the search result to switch it on. Unfortunately, it sometimes prevents programs from working and can be more trouble than it's worth.

True sandbox utilities include Shade ([www.shadesandbox.com](http://www.shadesandbox.com)) and Sandboxie ([www.sandboxie.com](http://www.sandboxie.com)). They let you run programs in an isolated environment, so they can't access Windows and make permanent changes to your PC. They also block malware and prevent malicious programs from damaging Windows.

ToolWiz Time Freeze ([bit.ly/twtf469](http://bit.ly/twtf469)) is like a cross between System Restore and a sandbox. It sandboxes the whole computer and no matter what happens or what changes are made, everything is undone and the original state is restored when the PC is restarted.

## MEDIA

### Choose a video player

**Q** I have two optical drives in my Chillblast Sentinel computer, and I already have VLC installed, but I wanted something simpler, so I downloaded and installed the free DVD & Video player ([bit.ly/dvdvid465](http://bit.ly/dvdvid465)) mentioned in Issue 465 ([bit.ly/webuser465](http://bit.ly/webuser465)). However, when I tried to launch it, a page appeared briefly and immediately disappeared. I tried to open it from the Start menu icon but the same thing happened.

I checked my Downloads and Program folders, but couldn't find it in Explorer. Following the attempted launch from the Start menu icon, the app details were listed in Settings, which said it should be immediately terminated.

Having tried to download the app and deleted the attempts, I then checked the Microsoft store and found the same app listed under free listings, which showed 'owned'. How can this be if I have deleted all traces of it? I am beginning to worry that this is a rogue app.

When I asked the tech guys at Currys for advice, the app was blocked on their system. Is there a way of checking to see if any malicious software remains?

**Keith Warwick, via email**

**A** We downloaded the app from the Windows 10 Store and it installed



*Play almost any kind of video or DVD with PotPlayer*

without any problems, creating a Start tile and Start menu icon, which ran the program when clicked. Windows Defender reports that it's clean, so it's not malware.

Try uninstalling the app by right-clicking the Start tile or Start menu item, then open the Store app, search for it and download it again. Any app installed from the Store will display as 'owned', even if you uninstall it. This is so it can be download again without charge, in case you have to reinstall a paid-for app because of a problem.

Alternatively, try PotPlayer ([potplayer.daum.net](http://potplayer.daum.net)). This media player looks good, is straightforward to use and works with a wide range of video file types and DVDs.

Some parts of VLC Media Player are complicated, but playing DVDs is one of

its simpler functions. For other types of media file, install the VLC app from the Windows 10 Store. It doesn't play DVDs but it has an easy-to-use interface that lets you browse the videos and music on your PC and devices, and play them.

## MOBILE

### Remove unwanted ads

**Q** How do I get rid of unwanted ads appearing on my Samsung phone?

**Graham Reeves, via email**

**A** Many free apps earn money for the developer by showing ads. Some are small and unobtrusive, but others can be irritating and overly aggressive. Usually, they only appear in the app, but sometimes they can pop up when you unlock your phone or plug in the charger. Of the hundreds of thousands of ad-supported apps, there are loads that use intrusive advertising.

To hunt down the app that's responsible for these ads, ask yourself which ones display the most irritating ads within the app itself. It's probably one of those.

To uninstall an app, go to Settings, Apps and select an app. Press Force Stop, then press Storage and clear the data and caches. Then use the Uninstall button.

## SECURITY

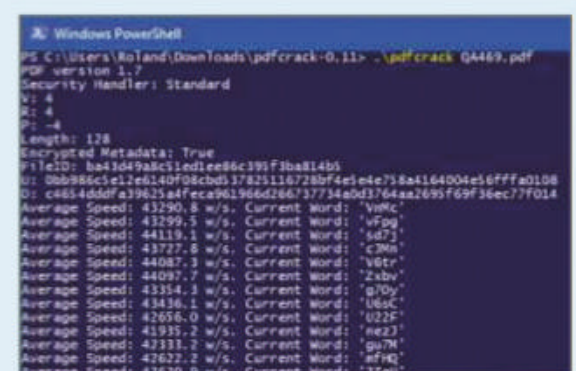
### Recover a lost PDF password

**Q** I'm trying to open a PDF file but I've forgotten the password. Is there a program I can use to help me?

**Brian Twist, via email**

**A** It's illegal to crack PDFs you don't own, but if you do own it – perhaps you created one some time ago and forgot the password – then there are tools that can help. The best program to use depends on the combination of the tool and the PDF file, so you may need to try a few.

We created a PDF and used Small PDF ([bit.ly/smpdf469](http://bit.ly/smpdf469)) to password protect it. We then used PDFCrack ([bit.ly/pdfc469](http://bit.ly/pdfc469)) to see if the password could be recovered. PDFCrack uses brute force, which means it simply tries all combinations of characters. A four-character password can be found quite easily but the longer the password, the more time it takes to



*Lost passwords to PDF files can take days or weeks to find*

crack – it could take days or weeks for a slow PC to crack a long password.

Unzip PDFCrack to its own folder, then copy the PDF file to it. In Explorer, open the folder, select File, then Open Windows Powershell. Type `.\pdfcrack filename.pdf`.

GuaPDF ([www.guapdf.com](http://www.guapdf.com)) is another PDF password-recovery tool. The free demo version is fine for small PDF files and works with a range of protection options. However, the estimated time to recover a password on a PC with a Core i5 processor is four days! Brute force seems to be the only way – there is no quick solution.



This fortnight Roland has salvaged a 1TB hard drive from a broken NAS



# Your Top Tips

Our pick of the best advice from our readers. Please send questions and answers to [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)

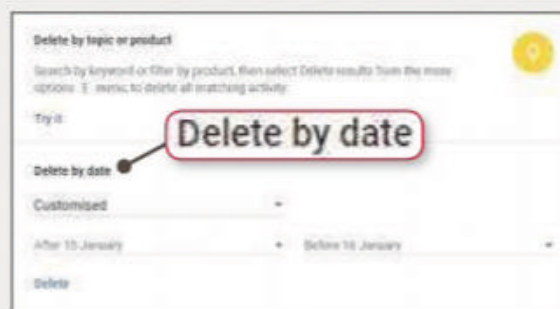


## TOP TIP

### PRIVACY

## Cover your search tracks

Google remembers everything you search for, which could be embarrassing if you've ever entered any risqué search terms – deliberately or otherwise. Even if you haven't, you might want to hide details of birthday presents you've bought and other things you want to keep secret because you don't want to spoil the surprise. On Google's homepage, click Settings in the bottom-right corner, then History. On the page that appears, select 'Delete activity by' on the left. Under 'Delete by date', pick two dates



**Delete your Google search history between any two dates**

and Google will delete your history between those days.

**Scott Kirby, via email**

### MAIL

## Recover webmail space

My Outlook webmail address dates back to the time when Microsoft bought Hotmail. If you've been around as long as I have, and you send and receive lots of large files such as photos, you may eventually run out of storage space.

Microsoft gives you 15GB for free, which is probably enough for tens of thousands of text emails, but messages with large attachments will eventually fill it up. To see how much of your 15GB you've got left, go to the Outlook site ([outlook.live.com](http://outlook.live.com)) and click the cog icon, then 'View all Outlook settings' at the bottom of the panel. In the new window that appears, select General in the first column, then Storage in the second column.

If you're nearing the 15GB limit, a useful way to free up space is to delete messages that have attachments. Return to the inbox, click the arrow next to

Filter, then select Attachments. Scroll down the list of emails to the oldest and start deleting anything you no longer need. Any attachments you want to keep, you can save to your hard drive. Don't forget to empty the Deleted Items folder when you've finished.

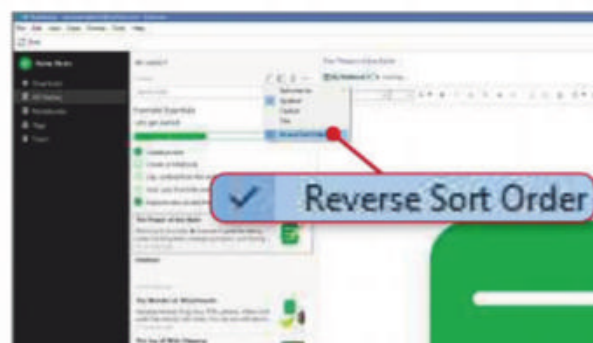
**Rob Doyle, via email**

### SOFTWARE

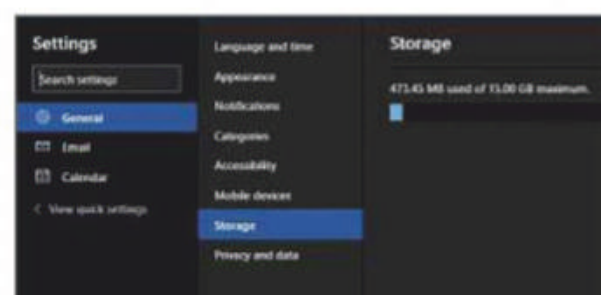
## Change the order of notes in Evernote

I was viewing my notes in Evernote recently when the order suddenly reversed. I thought I knew how to correct this, but the tool I used before didn't work. Resolving the problem took ages, but the answer is to go to the icons at the top-right of Evernote and click the first one – it's the one with the down arrow. Then select Reverse Sort Order.

**FratPark, via email**



**Change the order of your notes using Evernote's Sort Order feature**



**See how much storage space you have left in your Outlook webmail account**

### GENERAL PC

## See all the settings

I'm sure most people have heard of the so-called 'God Mode' in Windows, which lists everything in the Control Panel. If you haven't, right click the desktop and select New, Folder. Call it:

```
CPanel1.{ED7BA470-8E54-465E-825C-99712043E01C}
```

When it opens, you'll see the entire contents of the Control Panel, including settings you never knew existed. I haven't found a similar trick that shows everything in the Windows 10 Settings app, but there is a way to see most of it. Open Settings (Windows+i), locate the search box and type a vowel into it. When the short list of results appears, click 'Show all results' to see every setting that has that letter in its name.

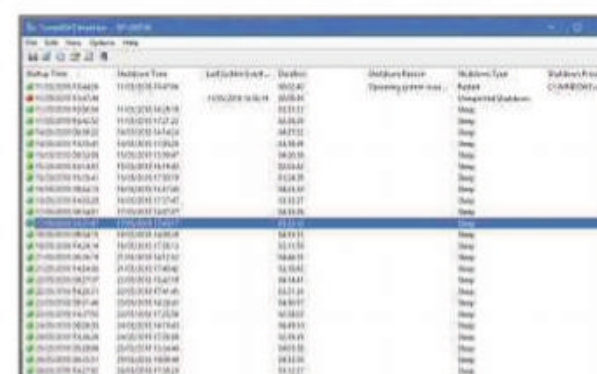
These are common letters found in almost all words, so they match every setting in the Settings app. You have to search each vowel separately, but it's still a useful way to see everything. I've seen this tip mentioned for searching the Control Panel before but I didn't realise until recently that it also works in the Settings app.

**E Walsh, via email**

### GENERAL PC

## See how long your PC has gone without crashing

Because I'm a curious chap, I wanted to know how long my computer had been up and running without a crash.



**TurnedOnTimesView lets you log your computer's up-times**





I remember, back in the day, many of my older PCs were forever crashing, but I think they're more stable these days – although whether that's because of Windows 10 or despite it, we may never know.

Download NirSoft's TurnedOnTimesView (search for it at [www.nirsoft.net](http://www.nirsoft.net)) to see an event log with time ranges. The information can be a little in-depth, but the website explains how to use the tool.

**Ken Cosby, via email**

## SEARCH

### Search a specific site

Many websites have a built-in search tool to help you find what you're looking for. If a site doesn't have this feature (or it does but it's not very good), you can use Google to search the site. In the search box, type the search term, then a space, followed by `site:` then the website address (without a space). For example: `homer site:simpsonswiki.com`. You'll only see results from that website.

**Andrew Cannon, via email**

## BROWSERS

### Add notes to bookmarks

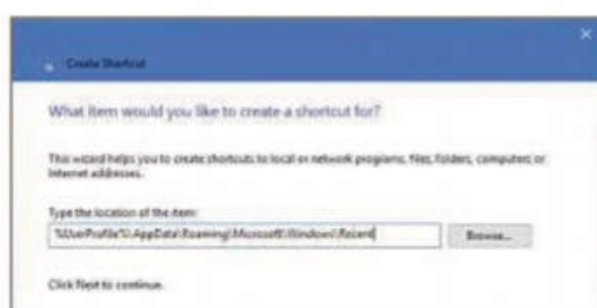
Did you know that browsers let you add notes to your bookmarks? I haven't seen anyone else mention this but it's a simple tip that I use all the time to help me keep my bookmarks organised. To do this in Chrome, add a bookmark to your bookmark bar, then right-click the icon and select Edit. You can now change (or add to) the Name box to include your note. The method is similar for Firefox, except that after right-clicking, you choose Properties to edit the site name and add a note. I find this very helpful for reminding me why I bookmarked certain websites in the first place.

**Mick Farnham, via email**

## GENERAL PC

### Access recent files from the Start Menu

If you miss having your recent files in the Start Menu, this handy tip can bring back some of that functionality. Right-click your desktop, then Select New, Shortcut. In the pop-up that appears, type `%UserProfile%\AppData\Roaming\Microsoft\Windows\Recent`. Once



Create a new shortcut to add Recent Items to the Start menu

the shortcut has been created, right-click it and select 'Pin to Start'. Move it to the most convenient spot, and you can now access your Recent Items folder easily.

**Joseph Frost, via email**

## iOS

### Block iPhone spam texts

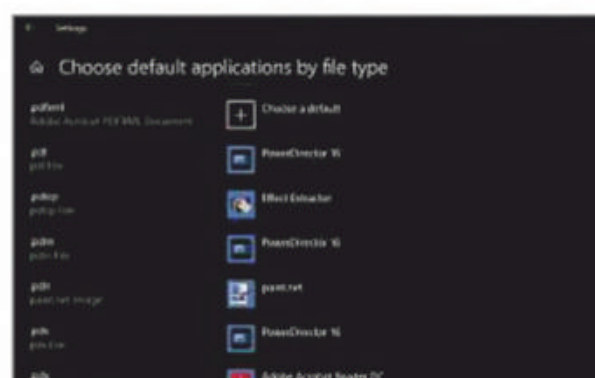
Here's a quick tip for everyone. Malwarebytes' free iPhone app doesn't only provide an ad blocker for your smartphone, as so many other apps do, but also stops you receiving dodgy texts from scammers and spammers. It does this by looking for suspicious links and other clues in the message, then moves those texts to a junk folder. Well worth downloading if you value your security – and your sanity.

**Wayne Pilson, via email**

## GENERAL PC

### Change your default apps

Windows 10 now lets you change the default app for opening different types of file, which will come as a relief if, like me, you slavishly download *Web User's* recommended software. The most



Switch your default apps and programs based on the type of file you're opening

obvious method is to right-click a file and select 'Open with'. At the bottom of the list is a tick-box that lets you change this app to the default. But I prefer to go to Settings, Apps, then 'Default apps'. Scroll to the bottom of the window and click the option 'Choose default apps by file type.' You'll see a list of file extensions, with the default app beside it. Click these to change the app to your preferred option.

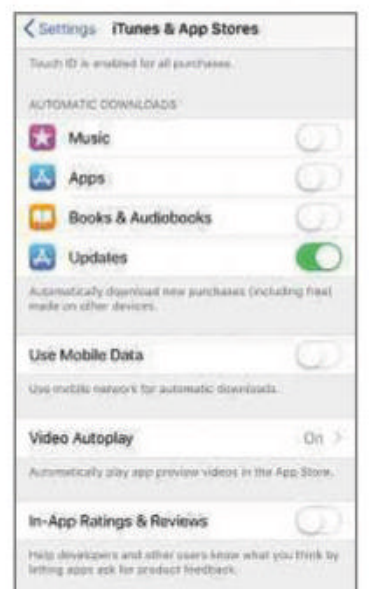
**David Speyer, via email**

## iOS

### Stop apps requesting ratings

I hate being pestered by apps that want me to rate and review them, especially when I've already done so. At one point I decided I'd either have to uninstall the offending apps or hurl my iPhone out of the window. Then I found out about a third, less destructive option: you can switch off rating requests in iOS. You need to go to Settings, tap 'iTunes & App Store' and scroll to 'In-App Ratings & Reviews'. Turn this off. You might still get the odd request for a rating, but it's nowhere near as frequent or annoying.

**Albert Kamen, via email**



If you don't want to rate iOS apps, switch off the nag in Settings

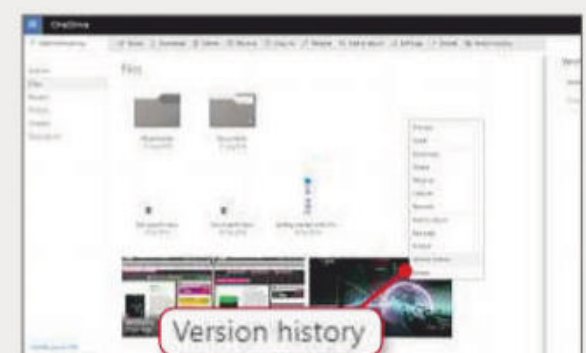
## BLUNDER OF THE FORTNIGHT

## ONLINE STORAGE

### Restore older file versions in OneDrive

More than once, I've accidentally overwritten a file in OneDrive ([onedrive.live.com](http://onedrive.live.com)) by tapping the 'Replace' button without thinking. Then, when I next opened the file, I'd panic that I might have lost the original work document or photo I edited.

Thankfully, OneDrive is fairly forgiving and stores multiple versions of files, even though you can't see them in the folder. To get back older versions, simply right-click your file and choose 'Version history' in the context menu. You'll see a list, sorted by date, with the most recent versions of your file at the top. Click to



Use OneDrive's version history to recover older files

download the version you want. You're then free to upload it again, either as a new file or a replacement for the one you accidentally copied over. Phew!

**Jeff Scarlett, 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)





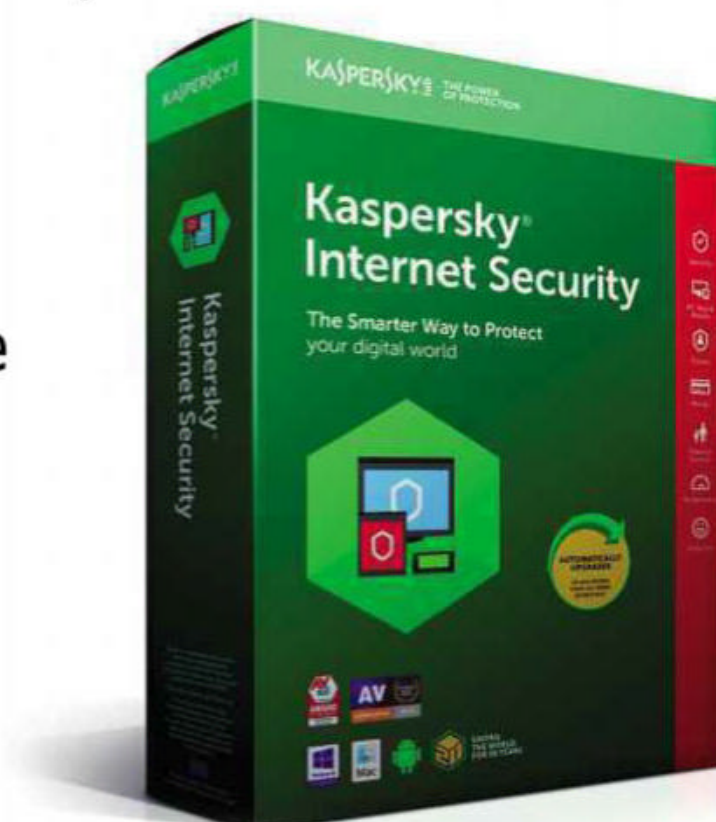
### OFFER OF THE FORTNIGHT

## Kaspersky Internet Security 2019 - on sale now

Our sister title *Computeractive* is now selling the new and improved 2019 edition of the multi-award-winning antivirus Kaspersky Internet Security at a special discount for readers

### WHAT'S NEW IN KASPERSKY 2019:

- ✓ Finds and removes dodgy browser extensions
- ✓ Identifies software that needs to be updated
- ✓ Gives you more control over which adverts are blocked
- ✓ More advanced options to keep malware off your PC



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# Readers' Helpdesk

Can you help your fellow readers with their computer problems? Send your questions and answers to [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)

## EMAIL

### Stop spam emails in Outlook

**Q** How can I stop receiving spam emails in Outlook? I get loads every day and some important messages, such as those from PayPal, are ending up in my Junk folder, which takes me ages to go through. I can block senders but it doesn't make much difference. This is my only Outlook account that receives loads of spam emails and I've never signed up to receive emails from any of the senders.

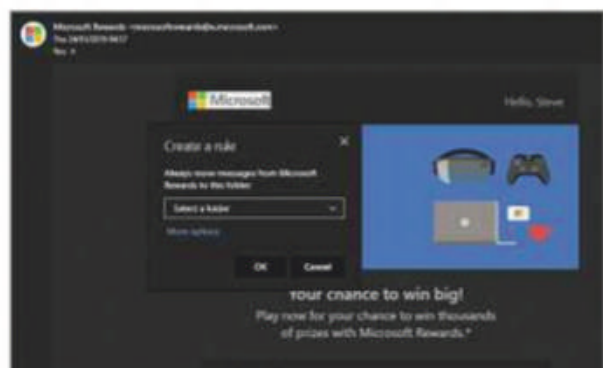
**David Griffiths, via Facebook**

**A** The quickest way to block spam emails in Outlook is to open the offending email and click the three-dot menu in the top-right corner. Instead of just blocking the sender, make sure you click 'Mark as spam'. You should also try clicking 'Create rule', followed by 'More options'. Under 'Add an action', select 'Mark as Junk' and Delete. This will automatically remove unwanted emails.

For trusted emails you want to keep, such as those from PayPal, open the sender's email, click the three-dot menu and choose 'Add to Safe senders'. Next, select 'Create rule' and choose a folder in which to place all future emails from the sender. Alternatively, open Windows Mail and right-click the email you want to keep, before choosing 'Always move to Focused'.

It may also be worth checking to see whether your email address has been compromised by searching for it on [haveibeenpwned.com](http://haveibeenpwned.com).

**Steve Clark, Features Writer, Web User**



**Take control of your inbox and banish spam forever**

## READERS RESPOND

### Edit a Spotify playlist image

**A** Back in issue 467, a reader requested help with editing playlist images in Spotify. Is it possible? Not 'arf! Here's how all pop-pickers can change the image for any playlist they've created. Open your playlist in the Spotify app, click the three dots beside the image and click Edit Details. One of the options is Choose Image. Make sure you've already saved the



**A picture speaks a thousand song lyrics**

picture you want to use, then navigate to it through File Explorer. Click Open and save your changes. Poptastic!

**Nigel Evans, via email**

## CAN YOU HELP?

[webuser@dennis.co.uk](mailto:webuser@dennis.co.uk)

You can seek help or suggest solutions to other readers' problems by emailing [webuser@dennis.co.uk](mailto:webuser@dennis.co.uk) or via [www.facebook.com/webusermagazine](https://www.facebook.com/webusermagazine) or [twitter.com/webusermagazine](https://twitter.com/webusermagazine).

## BROWSERS

**Q** I often work in multiple browser windows at once and I've noticed this is severely hampering my computer's processing speed – the loud whirring noises make it sound like it's steam-powered! A friend told me that Vivaldi does some sort of tile-windows thing, but I've only ever used IE and Chrome. Can someone confirm

if Vivaldi supports this and whether the browser is worth switching to?

**Will Browne, via email**

## WINDOWS 10

**Q** Any idea why my Windows 10 Pro might suddenly insist that I use a password to sign in? I have it set not to use one.

**Jojomike Blackpool, via Facebook**

## MAC

### Get Google Assistant for your Mac

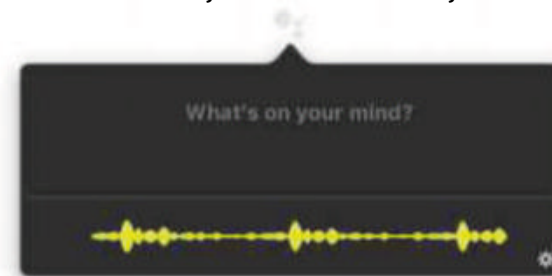
**Q** In Reader's Helpdesk in Issue 466 ([bit.ly/webuser466](http://bit.ly/webuser466)), I found your explanation on how to get Google Assistant on an iPhone very useful. I have a similar request I thought you might be able to help with: what dark arts must I perform to get Google's assistant on my MacBook?

**Martin Connor, via email**

**A** No dark arts required, Martin. Just visit GitHub, where you can install the clever MacAssistant ([bit.ly/macassistant469](http://bit.ly/macassistant469)). This tool has been built using Google Assistant API, so once you've logged in with your Gmail account,

you'll notice it's more or less identical to the assistant found on Android phones, Chromebooks and smart-home devices. The only real difference is that it doesn't support the 'Hey Google' or 'OK Google' wake-words; instead, you have to click the icon to get started. Once you've woken the assistant, you can speak your searches into the mic as normal.

**Steve Clark, Features Writer, Web User**



**Bring Google Assistant to your iMac and MacBook Pro**

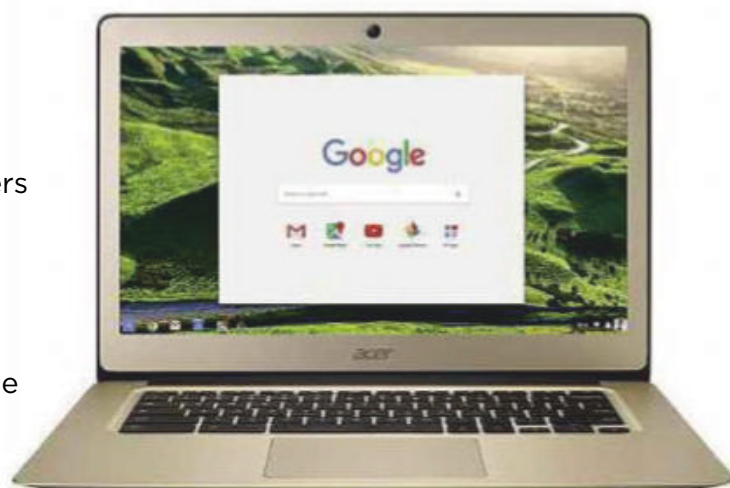


## Star Email

### Chromebooks are perfectly capable offline

I'm writing in response to Roger Bentley's email in Issue 467, 'Chromebooks fail without the cloud'. I'd like to point out that Chromebooks – including computers that have been converted into Chromebooks using CloudReady from Neverware (which you recommend in your cover feature in Issue 467) – are perfectly capable of running Chrome apps offline, thereby providing you with access to your documents, downloads and media files.

Head to the Chrome Web Store ([chrome.google.com/webstore](http://chrome.google.com/webstore)) and you'll immediately notice the Runs Offline option under Features. Tick the box and you'll see plenty of apps to choose from. My favourites include Google Keep, Calculator, Google



Drawing, Kindle Cloud Reader and Cut The Rope.

Another offline app, which is essential if you're a business user, is Office Editing for Docs, Sheets & Slides. If you keep some (or all) of your documents offline (a standard feature of Google Drive), you can edit them when you're offline. And if

you're a Gmail user, you'll probably want to configure offline mail, too. Do this by going into the Offline tab in Gmail's settings.

Last, but not least, install the Play Movies extension on your Chromebook to download videos to your computer and enjoy them offline. You can also view your photos and videos offline if you sync them to your device or access them via USB storage.

Cheaper Chromebooks have limited storage, so you may have to prioritise what you can access offline. You should also consider using your phone's hotspot feature to get your Chromebook back online when you're away from regular Wi-Fi or suffering a broadband outage.

**Richard Edwards, via email**

**Back Issues disc winner**



### WhatsApp private messages could be devastating

I need to express my concerns about your What's New Online item in Issue 467, 'Reply privately in WhatsApp', and its disregard of the consequences stemming from such features in social-media services. I am disappointed that *Web User* did not detect this aspect and convey it to readers.

The article encourages the use of private messages in group chats as "handy", but it is at best divisive and at worst devastating to younger and more sensitive people who may be part of a group. It should be understood that if a member should learn they have been excluded or criticised in a covert message, this can

lead to very unwanted outcomes.

I am sure the large majority of WhatsApp users will find the feature genuinely useful, but the vulnerable few must be properly protected from those intent on abuse. WhatsApp should think again about this option and advise those who wish to communicate privately that

they can and should do so using other direct communication methods available to them – not secretly from within an established group where all messages are for all members.

Your influential magazine could help by requesting WhatsApp remove or redesign this feature. WhatsApp would be no less appealing as a communication tool without it.

**Bob Clare, via email**

### Data about you doesn't belong to you

One simple fact seems to have been forgotten when you complain that your data is being stolen or sold by tech giants like Google and Facebook: it's *their* data, not yours. They collected it, they own it and they store it on their servers.

Think of it like this: suppose you're at a party and you pose while someone

## Quiz Answers: Issue 468

1 **Baby Love**



2 **Please Mr Postman**



3 **Tears of a Clown**



4 **Ball of Confusion**



5 **Three Times a Lady**



6 **I Heard it Through the Grapevine**



**WINNER!**

Well done to **Stewart Gibson** who wins a Web User Back Issues Disc



TECH YEAR

**2004**





takes a photo of you. Who owns the photo? Is it yours or does it belong to the photographer? Have they “stolen” your photo?

What if a newspaper is about to publish embarrassing facts they’ve discovered about Facebook, but Mark Zuckerberg finds out and turns up in the editor’s office with a team of lawyers, demanding that all the data collected by the journalists about Facebook must be erased because the data belongs to Facebook, not the newspaper. If you think that the data about Facebook actually belongs to the newspaper, because they’re the ones who collected it, then it must also mean that data about *you* belongs to Facebook because they collected it from you.

So many people mindlessly repeat the mantra about “their” data being stolen or sold, or used in ways they don’t want it to be used – and *Web User* is just as guilty of making these accusations. But at the end of the day, try to remember one thing: data about you doesn’t belong to you.

*Dennis Ellis, via email*

## Get the right Lenovo mini PC

I just wanted to commend your review of the top-rated Lenovo mini PC (Group Test, Issue 467), which I’ve been using for a number of weeks. It’s brilliant in my tiny home office and the dedicated graphics make a bit of gaming possible when I need a distraction.

However, I was quietly congratulating myself when I noticed that your purchase link is to Currys PC World, which doesn’t actually sell the model you reviewed. I inadvertently bought one from Currys and had to return it and buy direct from Lenovo because the Currys version has integrated graphics, not the Nvidia GeForce GTX 1050 Ti graphics card. It might be wise to provide a different purchase option in case others make the same mistake.

*John McCormick, via email*



**Web User says:** Thanks for letting us know, John. We’ve updated the link for the Lenovo IdeaCentre 620s in our Best Buys section.

## What you say...

### AMAZON IS TESTING DELIVERY BY ROBOTS ([bit.ly/robot469](http://bit.ly/robot469)). ARE YOU COMFORTABLE WITH THIS?

What if I want to order one of those robots for myself? Will it arrive in a bigger robot that I’ll also want to get?

*Joseph Doherty*

No. People round here would just grab the robots and nick ’em.

*Billy Green*

Smash them up and give people jobs.

*Richard McGill*

As long as it’s not ED-209 from *Robocop*. I’d hate to think what would happen if there was no answer at the door.

*Paulio @atpaulw*



### IT’S RUMOURED THAT GOOGLE WILL STOP AD BLOCKERS WORKING IN CHROME. IF SO, WILL YOU SWITCH BROWSERS?

I use Adblock Plus, which does a good job. If Google decided to block it, I would use another browser – either Brave or maybe DuckDuckGo, which respects your privacy.

*Kevin Gadget Man Benton*

I don’t know yet. It may not happen. When/if it does, I may try Vivaldi.

*Claudia Ridley*

I already have. I became so sick of Chrome suddenly deciding to run slower than a tortoise in treacle for no reason whatsoever every couple of months that I changed to Firefox about a year ago.

*Lee Dodgson*

A wonderful day for Firefox if they do.

*Chris Armstrong*

### WHAT DO YOU THINK ABOUT FACEBOOK’S PLAN TO MERGE MESSENGER, WHATSAPP AND INSTAGRAM ([bit.ly/merge469](http://bit.ly/merge469))?

I think it was inevitable considering Facebook owns them all, but I don’t think people will be pleased about it. They will move to other services.

*Richard Squires*

WhatsApp will become less secure. Everyone should move to Signal ([signal.org](http://signal.org)) or similar.

*Mark Cheesman*

I refuse to have any Facebook apps on my phone. If MI5 did tracking apps, they would be less intrusive.

*Garry Gazzadp Povey*

I don’t want random acquaintances on the same messaging app as my close friends and family. It’s just lazy programming.

*Adrian Millington*

Sounds good to me. Too many people only using this app or that app to message. What happened to the good old text message?

*Tim Ennals*

I’m for it. It will tidy things up and make messaging people easier

*Russell Cox @RussWWFC*

### OF COM SAYS 71% OF 12-15 YEAR OLDS ARE ALLOWED TO TAKE THEIR PHONES TO BED. DO YOU APPROVE?

No. Mine are not allowed their phones at night. They leave them on charge downstairs.

*DL @LFCPC421*

1964-1977 transistor radios; 1977-1984 TVs; 1984-1996 games consoles; 1996 to ongoing, computers. Same old whining (all dates approximate).

*Richard Morgan*

Better than being out on the streets wielding knives or taking drugs.

*Geoffrey Boow*



# ! Page 404



YouTube and Netflix are this generation's VHS videos, argues **Barry Collins**

## Don't panic, it's just another screen

It's not often you hear people complaining that kids aren't watching enough telly, but that's the implication of a new piece of Ofcom research into children's viewing habits.

The concern? Jasper and Chloe aren't watching *Blue Peter* or *Horrible Histories* or whatever the common currency is on CBBC these days. Instead, they are increasingly watching video-on-demand over the internet, hammering YouTube and Netflix on their smartphones and tablets. In fact, five to 15-year-olds now spend around 20 minutes more online each day than they do in front of the box.

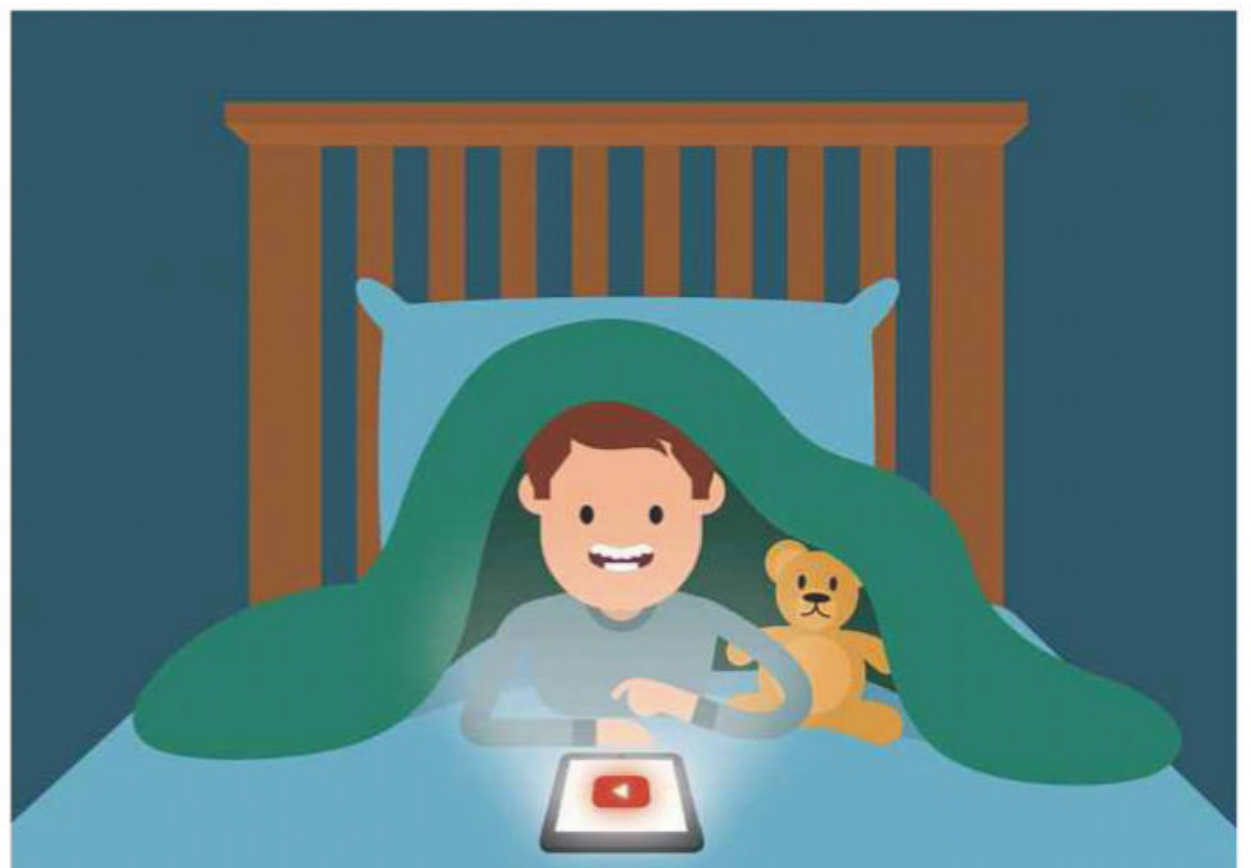
The problem – so the fearmongers will tell you – is that parents don't have the first clue what their offspring are watching on the privacy of their mobile devices, whereas the worst thing young Jasper could flick over to at 4pm on the Sky box is *Homes Under The Hammer*. Won't someone think of the children and put them back in front of the telly for hours on end?

My message to parents and grandparents? Relax. Of course, it's harder for parents to control and monitor what

their kids are watching on mobile devices, but don't assume they're up to no good. I know for a fact that the majority of what

my eight-year-old watches on YouTube, the BBC iPlayer or Netflix is pretty much the same stuff she watches on the telly – *The Dumping Ground*, *Millie Inbetween*, the vast canon of kids' animated movies – because we keep an eye on what she's watching and restrict the apps she has access to. It's called parenting.

“My message to parents and grandparents? Relax – and don't assume your kids are up to no good”



The key is to take control before they do. Instead of letting young children run riot on YouTube, install the dedicated YouTube Kids app on their device. This lets you select the age of the child so that only age-appropriate videos are

offered. Parents get to set the parameters, block channels they don't like, and can even turn off search if they're worried Chloe is still going to find something shocking. The app's not perfect, and the odd inappropriate video might slip through, but it's far safer than giving them free rein on the main YouTube app, where they can easily stumble across adult content or Nigel Farage.

The same goes for Netflix. It's possible – ideal, even – to set up profiles

for each member of the family, all under the one account. Profiles can be marked as children's accounts, barring them from watching *Stranger Things*, *Orange Is The New Black* or anything else that's going to teach them some colourful new words or give them nightmares until they're 25. Better still, when the kids go on a Disney Princess movie marathon, your personal viewing history and recommendations aren't battered in the process.

Every generation has its own scare stories about kids' viewing habits. For Baby Boomers it was the TV giving you square eyes, for my generation it was access to iffy VHS movies, for my own kids it's the internet. The threats stay roughly the same, it's just the size and shape of the screen that changes.

As with most of the output on television these days, there's nothing new to see here.

Illustration: Andrew Torrens



**WebUser**

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# ENJOYED THIS ISSUE?

## GET THE NEXT ONE EARLY!

**T**hank you for reading this issue of *Web User* – we hope you found the tips and advice useful. The good news is that you don't have to wait too long for the next issue. If you subscribe to *Web User* by **Monday 25 February (8pm)\***, you'll receive it through your letterbox before it's available in the shops!

### What's inside the next issue:

### COVER FEATURE: IS IT TIME TO DITCH YOUR ANTIVIRUS?

#### PLUS:

- Boost your Wi-Fi using Android
- Convert an old PC into a PVR
- Best apps for private messaging

#### AND...

Optimise Windows 10 for gaming

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