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It's never been easier page 58

WebUser

Issue 436

15 - 28 November 2017

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STOP USING WINDOWS

Switch to Chrome OS, Linux or Mac – they're faster & smarter!

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FIX THE WI-FI FLAW THAT PUTS EVERYONE AT RISK

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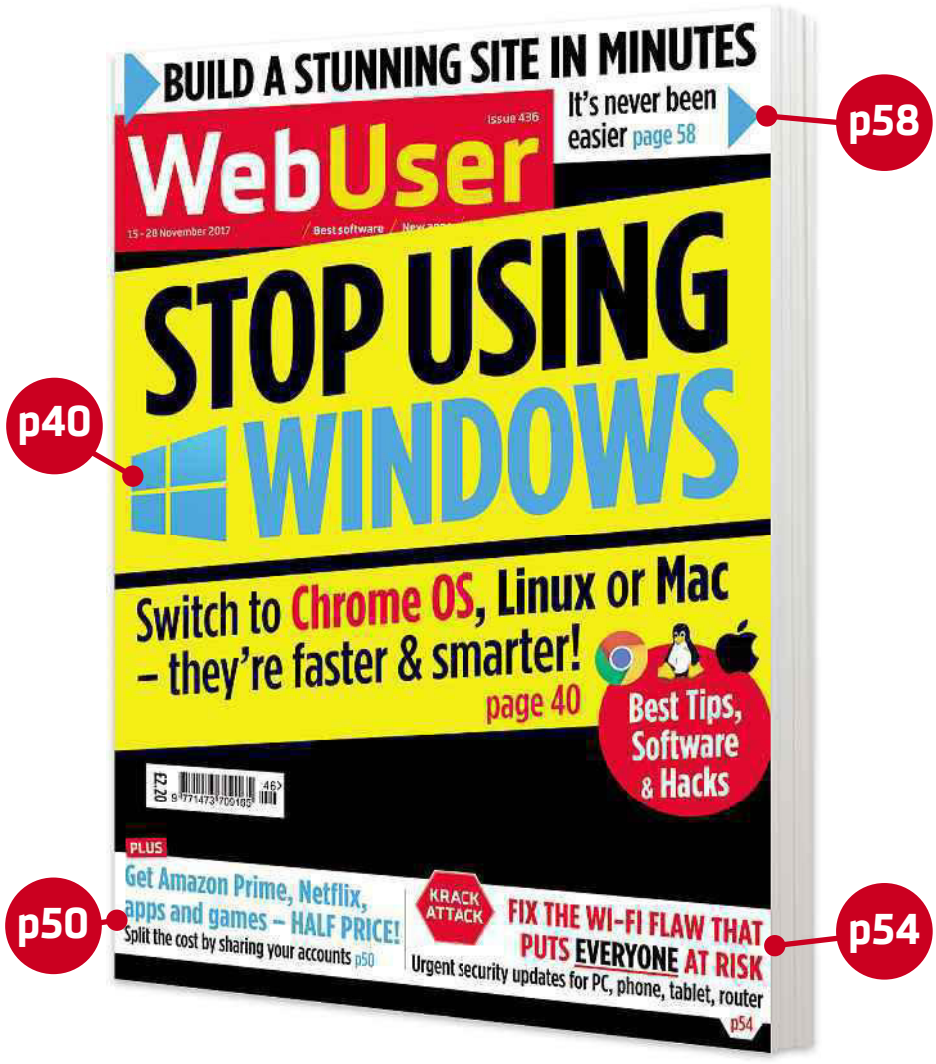
Wind down your Windows

Our cover feature in Issue 428 advised you to 'Stop Using Google', prompting a flurry of emails, tweets and carrier pigeons pointing out our blatant hypocrisy: "You say stop using Google, yet you recommend Google on pages 6, 11, 25 [and so on], and you probably wear a Google T-shirt and have 'I love Google' written on your pencil case!".

However, as with this issue's 'Stop Using Windows' feature (page 40), our point was not to suggest you abandon something you rely on every day, but to try something different for a change. Microsoft's operating system is the most popular in the world, but can it match the cloud-based convenience of ChromeOS or the delightfully different distros of Linux? We think not, which is why we've devoted eight pages to explaining why you should switch – if only temporarily – to a Windows alternative. We've also tried to make this issue as Windows-lite as possible, though in sections such as Best Free Software it's unavoidable!

Robert Irvine, Editor
robert_irvine@dennis.co.uk
#webuser



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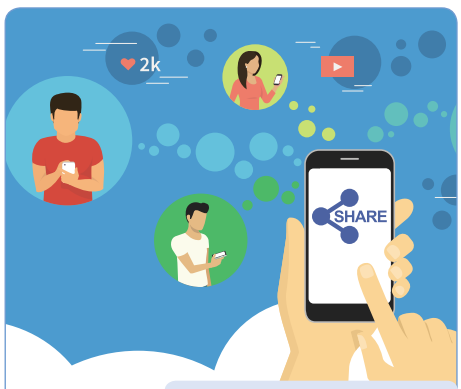

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What's New Online

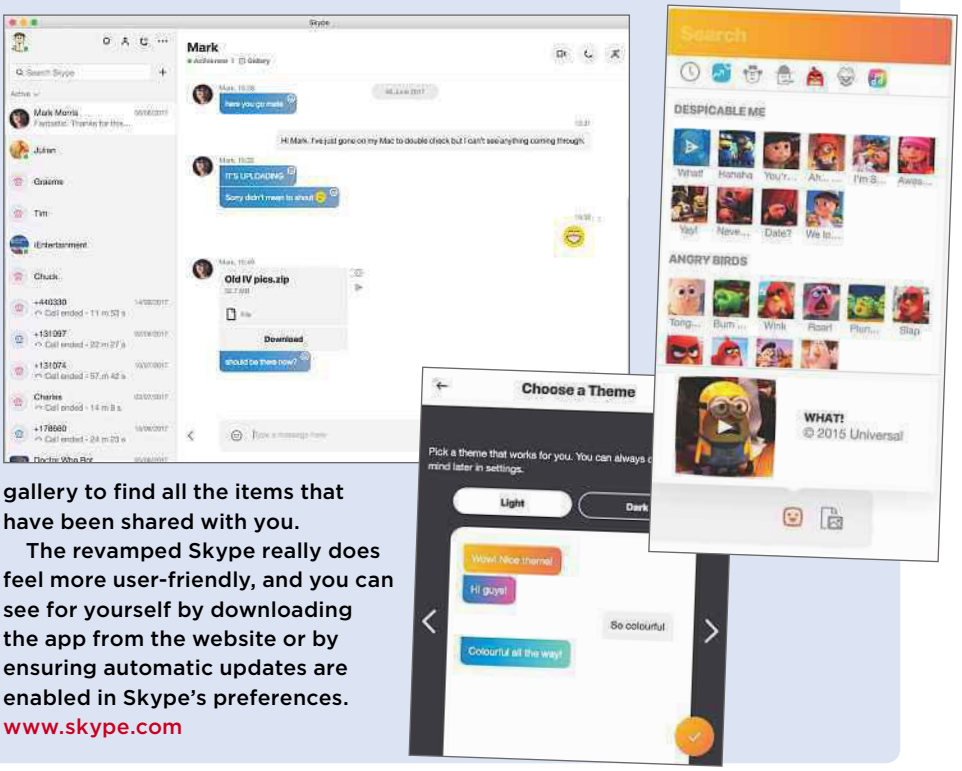
Chat and share more easily in Skype

In its bid to keep people talking about – and using – Skype, Microsoft has refreshed its chat apps. Having tackled mobile in the summer, it's now turned its attention to the Desktop, adding new tools to Skype on Windows, Mac and Linux that place a greater emphasis on messaging. For example, you can now click reaction icons to express your feelings, mention people in group chats using the '@' symbol, share images in phone calls and instantly see if someone is around using the reintroduced status updates.

Other new features include the option to select a light or dark theme, a way to better organise your chat list by time, and to see whether or not the messages are unread or the person is currently active. It's now easier to share photos, videos and files of up to 300MB in size, by dragging and dropping, and you can go straight to the new chat media gallery to find all the items that have been shared with you.

The revamped Skype really does feel more user-friendly, and you can see for yourself by downloading the app from the website or by ensuring automatic updates are enabled in Skype's preferences.

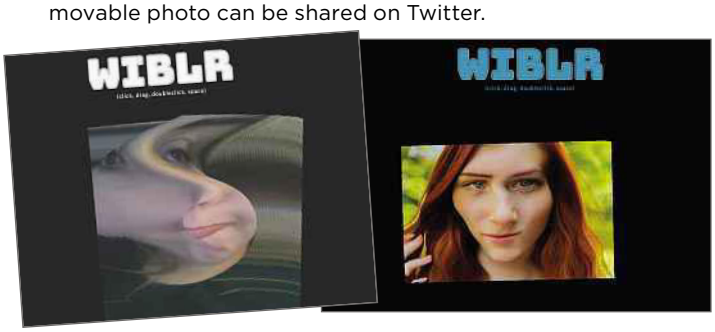
www.skype.com



Animate images in amazing ways

bit.ly/animate436

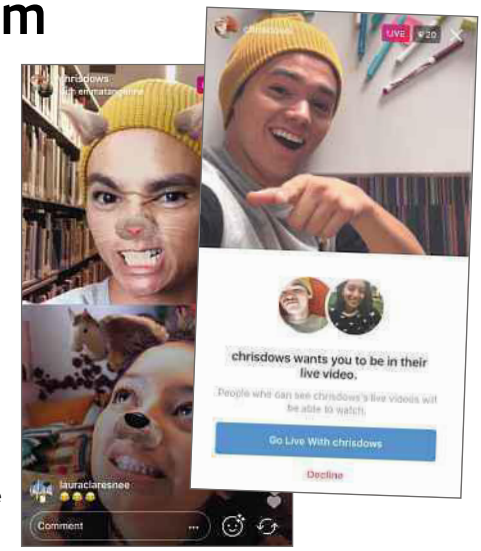
This fun Chrome experiment brings photos to life by letting you jiggle them around on screen for comic effect. It's utterly pointless, of course, and actually made us feel a bit seasick, but whether you capture or upload a photo or use one of the provided random images, you can play around to your heart's content. The tool works by stacking circular image segments of your photos, allowing you to click and drag to animate. Double-click (or double-tap if you're using a tablet or phone), then throw in some randomised effects or, if it gets too much, hit Space (or tap with two fingers) to pause the action. Selecting More Options lets you choose the quality and central size of the image, and a link to your movable photo can be shared on Twitter.



Live-stream with a friend on Instagram

www.instagram.com

Live broadcasting over the web can feel daunting, even if you're only streaming to people you know. Instagram's new Go Live With feature lets you bring a friend for support and broadcast alongside them. To use it, tap the camera icon in the top-left corner of the screen, select Live, Start Live Video, then tap the two-face icon and choose the person you want to invite. If they accept, the screen will split in two, with you taking the top half and them the bottom. You'll then stream together, with viewers seeing you both in action. Because the feature is flexible – with guests able to drop out at any time and the option to swap them for someone else – it could be a great medium for interviewing people live. When the broadcast ends, you can save the video to Stories or discard it.

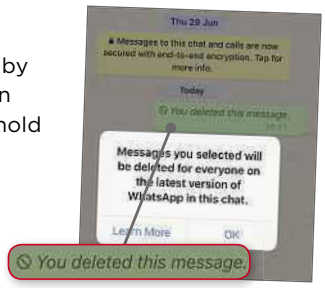


We pick the 10 best things you must do on the web this fortnight

Unsend messages in WhatsApp

www.whatsapp.com

WhatsApp now lets you avoid embarrassing yourself by giving you the option to delete messages within seven minutes of sending them. To unsend, simply tap and hold a message, choose Delete and select 'Delete for Everyone'. The feature works for both group and individual chats, and replaces your words with, "this message was deleted", which may leave the recipients even more curious about what you said!



Get help choosing your curry

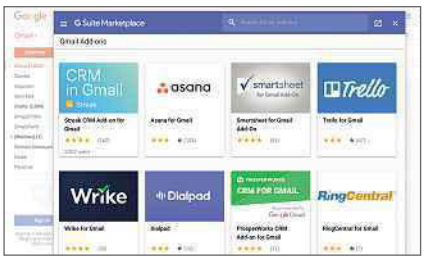
bit.ly/curry436

If you fancy a more adventurous choice of curry than your usual chicken tikka masala, a new tool from Just Eat should spice up your appetite. Called Curry Explorer, it maps 30 dishes available from local restaurants and takeaways to help you pick a tasty alternative. Start with a familiar dish such as korma and work your way around the more exotic curries following arrows that indicate whether they are Hotter, Smokier, Sweeter, Milder, Nuttier and so on. Each curry is comprehensively described and when you find one that suits your tastebuds, you can order through Just Eat.

Use third-party Gmail add-ons

bit.ly/addons436

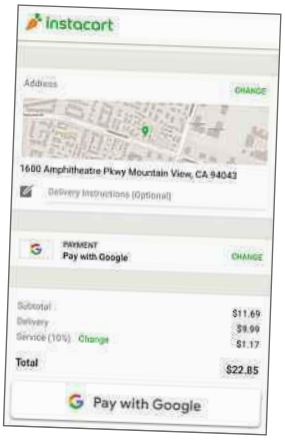
Google has made it easier to complete tasks directly from your inbox using third-party plugins called Gmail Add-ons. These ensure that features such as the ability to turn emails into tasks or to-do lists are just a couple of clicks away. So far, the add-ons are primarily business-focused but that should change over time. To try these new tools, click the Settings icon in the top right-hand corner of Gmail, select Gmail Add-ons, select a plugin and install those you want to try. They work across the web and Android, with iOS compatibility on its way.



Make payments using Google

bit.ly/paywith436

If you have a credit or debit card added to your Google Account, you can now use it to make swift payments via Chrome on the web or Android. Simply visit an app or site that lets you pay with Google, select the required option, and your payment information and delivery address will be shared. UK services such as Dice.fm are already using it. Deliveroo and StubHub are among those coming soon.



5 TO FOLLOW ON TWITTER

@probabot_
This bot looks for accounts that tweet about politics to figure out if they are bots too

@louistherouxbot
Another bot, this one mimics the unique delivery of investigative reporter Louis Theroux

@WebMD
Beat the chills and ills – keep up to date with health news and info

@UKWX_
Get daily weather updates and insightful explanations

@NoelGallagher
The former Oasis songwriter has a new album out on 24 November

Share your Facebook screen

www.facebook.com

You can now use Facebook Live to share the content of your computer screen. You'll find the Share Screen button on the Live Broadcast page when using Chrome. Hitting it for the first time will prompt you to download the necessary extension.

Find Europe's best beers

www.beermap.net

You'd have to embark on a major pub crawl to sup in all the locations on Lufthansa's beer map but if you're interested in discovering European bars serving craft ales, it's worth a look, even though it mostly focuses on major cities.

Try new emoji in iOS 11.1

bit.ly/emoji436

Apple has released iOS 11.1 for iPhone and iPad, which adds more than 70 new emoji. These include 'bearded man', 'grinning face with star eyes' and 'face with open mouth vomiting', as well as mythical creatures such as wizards, mermaids and vampires.

Need to Know

Fake WhatsApp app tricks more than a million users

What happened?

Android users downloaded a fake version of WhatsApp more than a million times before Google spotted the malicious app and removed it.

The fake app, called Update WhatsApp Messenger, was live on the Google Play store and its use of the WhatsApp logo looked enough like the real thing to convince millions of users. The app spoofed WhatsApp's developer ID by simply registering the same name – WhatsApp Inc – with a space at the end, so it looked identical to users. Additionally, it had a four-star rating and plenty of reviews, so it's no wonder it managed to fool so many people.

Once downloaded, the fake version of WhatsApp hid behind a blank icon on phones' home screens. The dodgy app was malicious, but its only effect was to serve advertising to make money, rather than hoovering up user data or anything more dangerous.

Researchers at security firm Avast investigated further, revealing that there are plenty of other fake apps pretending to be the legitimate messaging app in the Google Play store. This isn't the first time the Google Play store has been hit by malicious applications and a quick glance at the app market reveals major brands such as Facebook are still being spoofed by dodgy duplicates.

How will it affect you?

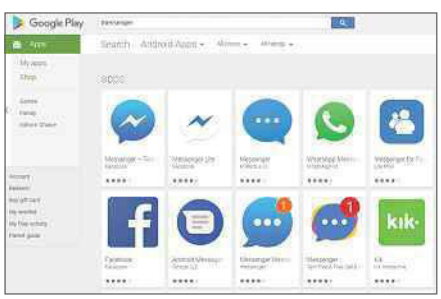
If you already have WhatsApp installed, it will automatically update when a new version becomes available – you don't need to go hunting through the Google Play store for it.

Whether you're installing WhatsApp for the first time or downloading it again because you've got a new phone, make sure you're choosing the genuine article by looking closely at the developer name, screenshots and logo. For WhatsApp, it should – if Google is doing its job correctly – be the first one listed.

Another indicator is the number of downloads – fake apps may get thousands of false reviews and downloads, but it's hard to hit a billion unless you're legitimate (although the million in this case is definitely worrying).

It's tougher for less popular apps. There are many other apps and brands being spoofed on Google Play, and you may not be as familiar with their logo. Or the developer may not be one you've heard of – it's easy enough to recognise Facebook as the listed developer of its Messenger app, but you probably won't be familiar with the developer of a retailer or restaurant app.

If you're ever in doubt, head to the website of the brand or app in question, which is likely to have a link to the official download page on Google Play. If you downloaded the fake WhatsApp app but can't find it for removal, head to Settings, then Apps to see a list of everything you've downloaded so you can uninstall unwanted entries.



At the time of writing, the Play store still has fake Facebook Messenger apps

What do we think?

Google needs to clean up its Play store, and fast. Of course, users need to take responsibility and pay attention when installing apps, but we've been repeatedly told that Android apps downloaded from the official store are safe, yet a million downloads of the fake WhatsApp version proves otherwise.

Although Google promptly cleaned up the listing for WhatsApp, a quick search for Facebook's Messenger app reveals a similar problem that Google has failed to address, which is shameful. Because although the fake WhatsApp wasn't particularly dangerous – it simply showed advertising for profit – other fakes have caused far more damage, taking over phones to mine cryptocurrencies or harvest bank details.

It's a huge embarrassment for Google. The company is developing some of the most advanced artificial intelligence in the world, including driverless cars that can halt to avoid a pedestrian stepping into the street, yet it can't spot duplicate apps stealing a popular developer's logo? We're not impressed.

Even if Google can't automate its way out of this problem, it should hire a couple of staff to check its top 10, 20 or 30 apps every day to remove spoof versions, or recruit more staff to approve apps from unknown developers before they go live. Anything less is putting its users – and the company's reputation – at risk.

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

Windows 10 free upgrade to end

What happened?

The last remaining route to get Windows 10 for free is finally being shut down by Microsoft. The company originally provided a window of one year – ending in July 2016 – for all Windows 7 and Windows 8.1 users to upgrade for free to the new operating system. However, earlier this year, Microsoft gave assistive technology users an extension to upgrade to Windows 10 for free, but that too now has a deadline of 31 December. After that date, anyone wishing to upgrade to the new operating system will need to shell out for a new PC or pay £120 for the software.

How will it affect you?

Assistive technology includes speech recognition, screen-reader apps such as Narrator and Magnifier, the digital magnifying glass that zooms in on part of the screen – all tools built into Windows to make it easier for someone with poor vision or other physical challenges to use the operating system.

Microsoft does not specify which assistive technologies a user must depend on to qualify for this benefit, nor does it require you to confirm your needs. The aim is simply to give more time to those who may need it to ensure their assistive devices and apps will work with the upgrade. Head to the upgrade page at bit.ly/upgrade436 to claim the free download.

What do we think?

If you missed the deadline for the free upgrade, this is one way to get it. Benefiting from an exception made available to people using assistive technologies may feel morally questionable, but if you truly can't afford the upgrade and need it, remember two things: Microsoft *wants* you to upgrade, because it's easier for the company if we're all using the same software, which is why the upgrade was free for a year; and there's no limit to downloads – nabbing your own free upgrade doesn't prevent those with genuine assistive needs from getting it, too.

Bitcoin reaches its highest price ever

What happened?

Digital currency Bitcoin has topped $7,000 (about £5,327) in value and is predicted to soar even higher before the end of the year. Released in 2009, it had virtually no value until 2013, when it climbed in price from a few dollars per Bitcoin to peaks of $1,200. Since then, it's fluctuated up and down – until this year, when it's been steadily climbing to new highs month after month.

To get Bitcoin, users 'mine' it by setting their computer to solve a challenge, with each task getting progressively more difficult. This method exists purely to slow the release of blocks of Bitcoin, so they aren't all released at once.

How will it affect you?

You don't need to mine Bitcoin these days because you can simply buy it, which is much easier.

Mining has become more difficult as the number of people involved in Bitcoin has increased. To compete, you need a top-end graphics card and a willingness to burn through electricity to keep your mining rig powered.

To trade Bitcoin, you can simply buy some and hang on to it until the prices go up. To do so, you'll need a Bitcoin wallet – there are plenty of guides online, but a good place to begin is bitcoin.org/en/getting-started. You don't need to buy an entire Bitcoin to get started, which is handy because the high price has made that increasingly difficult.

What do we think?

Is it too late to get on the Bitcoin bandwagon? It's impossible to say because the value fluctuates so much. You could buy at $7,000, and the next day the price could nosedive to nothing, or it could leap to $10,000 by the end of the year. It was certainly easier to get into Bitcoin back when it was almost worthless and the risks were lower. But if the idea intrigues you, there's no reason not to dip your toes in the Bitcoin waters – just don't expect to get rich overnight.

Google Docs locks users out of their files

What happened?

Google temporarily locked some users out of their Google Docs files, preventing them from editing or sharing their documents.

Files were flagged up as violating Google's terms of service, and users who tried to access documents they had been editing only moments before found that they had frozen. A message then appeared on screen saying: "This item has been flagged as inappropriate and can no longer be shared".

Docs users who approached Google for clarification about why their document had been locked – or if it could be unlocked – received a note reading: "Sorry, an error occurred while submitting the appeal request".

A Google spokesperson said the issue was the result of a faulty code push. "The morning of October 31, we made a code push that incorrectly flagged a small percentage of Google Docs as abusive, which caused those documents to be automatically blocked," they said.

"A fix is in place and all users should have full access to their docs. Protecting users from viruses, malware and other abusive content is central to user safety. We apologise for the disruption and will put processes in place to prevent this from happening again."

While the majority of affected users were unable to access files, another

Google Docs user, Iain Mackenzie, told the BBC that he saw the words "game is over" appear in a document he had been editing for a few hours (bit.ly/bbcgame436).

He insists he was the only person editing the document at the time and even the revision history couldn't shed any light on what had happened.

How will it affect you?

If you were affected by the temporary lockout from your Google Docs – which lasted a few hours in some cases – you'd be forgiven for panicking that something more sinister than a 'faulty code push' was responsible and worrying that you may have lost access to important documents. Fortunately, Google was – as ever – quick to fix the problem and issue an explanation and apology, so you won't have needed to fret for long.

What do we think?

Considering how many billion users Google has, it's surprisingly uncommon for Google services to suffer such glitches, although the company may want to rethink the wording of its scary lock-out warnings. The real mystery here is why Mr MacKenzie saw the sinister "game is over" message in his document, but perhaps this can be attributed to the incident occurring on Halloween!

FIRST LOOK

Amazon Kindle Oasis

bit.ly/oasis436

Amazon's new Kindle is its best-ever e-reader. The device has had an across-the-board revamp, with a larger display, better battery life and some welcome new features.

The new model is still incredibly thin and light, and is now made of smooth, gun-metal aluminium, which gives it a touch of luxury. What's more, there's no need to panic if you drop the Kindle Oasis in the bath because one of the e-reader's big new features is that it's waterproof and able to survive complete immersion in up to 2m of water for 60 minutes.

But you don't have to drown your new Kindle to enjoy its benefits. The screen is the largest ever on a Kindle and measures 7in across the diagonal, which means more text per page and less frequent page turns. The display looks as sharp as ever, too.

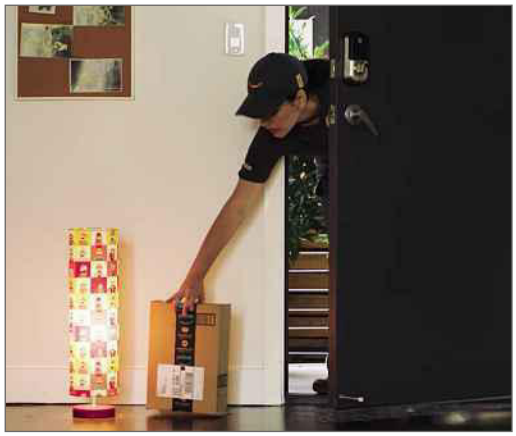
The Oasis' other big new feature is the ability to play your Audible titles via Bluetooth. This means that if you own both ebook and audiobook editions, you can switch between them, picking up on one where you left off on the other. To move from reading to listening, simply tap the top portion of the touchscreen, look for the headphone button in the bottom-right corner and tap it to switch. The Oasis will then download the audio file.

One annoyance is that there's no 3.5mm headphone jack or built-in speaker – you're limited to Bluetooth only. You should also bear in mind that audiobooks are much larger than ebooks, so you need to keep an eye on available space.

Despite those caveats, Amazon's latest luxury e-reader is easy to recommend, with its improved hardware, software and design. At £229.99, it's also cheaper than the original Kindle Oasis, all of which makes it the best e-reader that money can buy.

WHAT'S THE RUMOUR

Does Amazon really want the key to your house?



Amazon's latest innovation lets its couriers unlock your front door and leave your packages in your home – which, some online commenters say, "crosses the creepy line". The smart-lock and security-camera combo – known collectively as Amazon Key – will cost $249.99 (approximately £189).

The cloud-controlled Cloud Cam is the 'brain' of the operation and comes with night vision and two-way audio to allow customers to remotely watch their front door being opened. Once installed, a courier will knock on your door and, if no one answers, they can 'unlock' your home via an app. The Cloud Cam then records the courier as they drop off the delivery, while sensors in the door and app make sure they close it behind them. The courier won't be authorised to proceed to their next delivery until they've shut and locked your door.

The Cloud Cam is also being pitched as a standalone security device, with motion detection that learns over time what should and shouldn't be in your house. That means footage will be regularly analysed over the cloud to detect things like pets, which shouldn't be flagged as intruders. Amazon Key is being launched in 37 US cities, but the company said it plans to expand the service in the future.

LIKELIHOOD RATING

✓✓✓✓✓

Amazon is clearly serious about its new service and has even stated that it'll be "a core part of the Amazon shopping experience from this point forward". However, customers need not worry about handing over an actual key to the company because the service is much more sophisticated than that. For starters, you'll be able to watch the entire process live on your phone if you're worried about the courier entering your home. The system also ensures that your doors are locked so that the property is fully secure.

What's new on Kickstarter

Our favourite new project on the crowdfunding site

T-BOTS Balancing Robots

bit.ly/tbots436 | From £45

No matter how impressive your robot looks, it won't seem so smart when it topples over. Based on the open-source programming language Arduino, T-BOTS use a combination of accelerometers and gyroscopes to precisely measure their tilt, so they can maintain their balance as they move around. You can design your own T-BOT skins, invent games and learn to program using Arduino or just assemble the robot, download the software and play. Your T-BOT can also be controlled using your phone or PC. The T-BOT team hopes to raise £100,000 by 22 November.

WEBOMETER

WE LIKE...

BBC to stream more live sport

The BBC has announced a major increase in live sport, making an extra 1,000 hours available online for free via the BBC Sport website and the iPlayer. The expanded coverage has been made possible by low-cost streaming technology.

Sheep View captures Faroe Islands

The remote Faroe Islands have been added to Street View, after a resident created her own version by strapping 360-degree cameras to five sheep. Google was so impressed with 'Sheep View' that it sent her equipment to finish the job.

WE DON'T LIKE...

Cockatoos attack Australian broadband

Australia's broadband network is under attack from cockatoos, who are chewing the steel-braid fibre cables to sharpen their beaks. Aussie broadband is already notoriously slow and the bird damage runs to tens of thousands of dollars.

10% of Facebook users are fake

Facebook has admitted that up to 270 million of its two billlion user accounts are fake or duplicate. The news raises questions about the social network's integrity while it is under pressure over Russian groups using it to spread propaganda.

Stay Safe Online

News about the latest threats and advice from security experts

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

Bad Rabbit ransomware breeds trouble

A new strain of ransomware that bears a striking resemblance to the NotPetya threat from earlier this year (see Security Helpdesk, below) is spreading through organisations in eastern Europe. Dubbed 'Bad Rabbit', it has hit government departments in Ukraine, Kiev's public transport system and Russian news agencies.

Bad Rabbit uses the common ransomware trick of fooling users into infecting their computers with malicious files disguised as something legitimate, in this case an Adobe Flash installer. The ransomware slowly encrypts a user's files after it is installed and, just like NotPetya, can schedule an automatic reboot of the system that shuts down the computer. Users are then presented with a splash screen that asks them to pay 0.05 Bitcoin (around £247) for a decryption key.

Researchers have already developed a vaccine against BadRabbit, but this requires creating a custom file that blocks the write permissions of the ransomware. Once you're infected, you have little choice but to pay the ransom or abandon the files.

bit.ly/badrabbit436

Dell loses control of customer backup website

A web address used by Dell to help customers restore their data was taken over by a third party for a month, between mid-June and mid-July. The built-in backup and recovery program installed on Dell computers periodically checks a web address called DellBackupandRecoveryCloudStorage .com. A software backup and imaging company called SoftThinks, one of Dell's partners, previously had control of this address but forgot to renew the domain in mid-June, leaving it open to abuse. The site then started showing up in security alerts for pushing malicious software.

A spokesperson for Dell told *Web User*'s sister site IT Pro that the domain "expired earlier in 2017 and was subsequently purchased by a third party. The domain reference in the Dell Backup and Recovery (DBAR) application was not updated, so DBAR continued to reach out to the domain after it expired. Dell was alerted of this error and it was addressed."

Dell said it doesn't believe calls to the URL during the period in question resulted in the transfer of information to or from the site, or infected any users with malware.

picture: Kaspersky Lab official blog

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT: Tyler Moffitt, Senior Threat Research Analyst at Webroot (www.webroot.com)

WEBROOT Smarter Cybersecurity™

Q What have been the worst ransomware attacks of 2017?

James Bletchley, Twitter

A NotPetya came top of our list as the most destructive ransomware attack of 2017, followed closely by WannaCry and Locky in the number two and three spots, respectively.

NotPetya took number one because of its devastating intent to damage an entire country's infrastructure. This ransomware started as a fake Ukrainian tax-software update that, once applied, spread laterally through networks like a worm.

Unlike most ransomware attacks, NotPetya's code wasn't designed to extort money from its victims but rather to destroy everything in its path.

The ransom originally asked for about $300 (£225) in Bitcoin, but the system that collected money from victims for decryption keys quickly disintegrated. NotPetya was designed to do as much damage to the Ukrainian infrastructure as possible. Not only did it shut down Ukrainian power plants, banking services and supermarkets, but NotPetya also infected hundreds of thousands of computers in more than 100 countries.

Additionally, the ransomware shut down Maersk, the largest shipping container vessel in the world, along with FedEx (causing a reported $300m in damage).

WannaCry initially spread via spam emails, including fake invoices, job offers and other traps. It was the first ransomware to take the whole world by storm, infecting several hundred thousand people in a single day. Some reports say the damage could amount to $4bn.

Luckily, a security researcher in England managed to discover a kill-switch domain, which was all that was needed to disable WannaCry.

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

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Best New Websites

Site of the Fortnight

SHOPPING

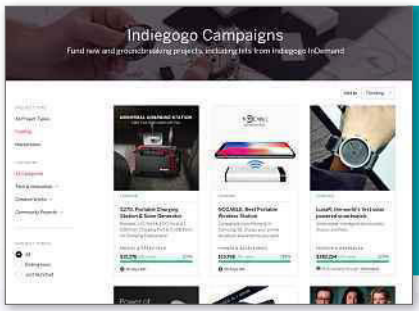
NEW

Indiegogo Marketplace

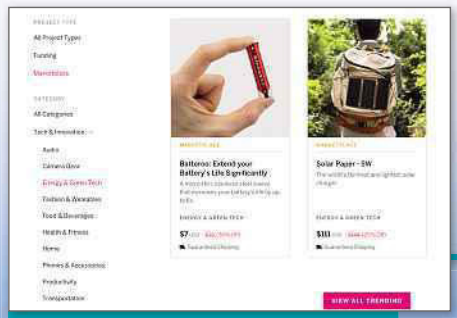
bit.ly/indie436

Indiegogo is second only to Kickstarter as a go-to site for crowd-funding projects. But unless you're constantly on the lookout for initiatives to fund, you're likely to miss many of its fledgling products. Indiegogo Marketplace rounds up these clever innovations and lets you buy them immediately, with the promise of a refund if the item isn't sent within the specified time. We like the listings' detailed explanations and accompanying videos, the straightforward checkout process and sheer range of unique items. Just be aware that most prices are in US dollars.

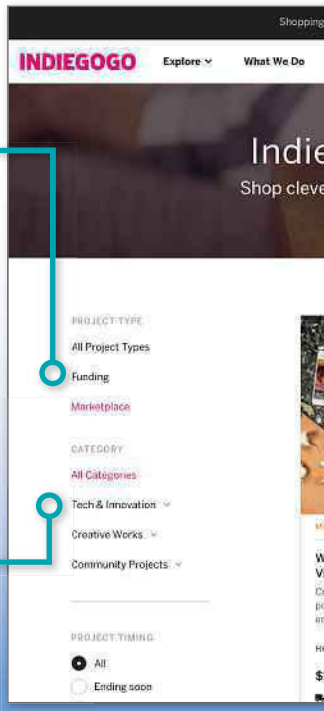
Our rating ★★★★★

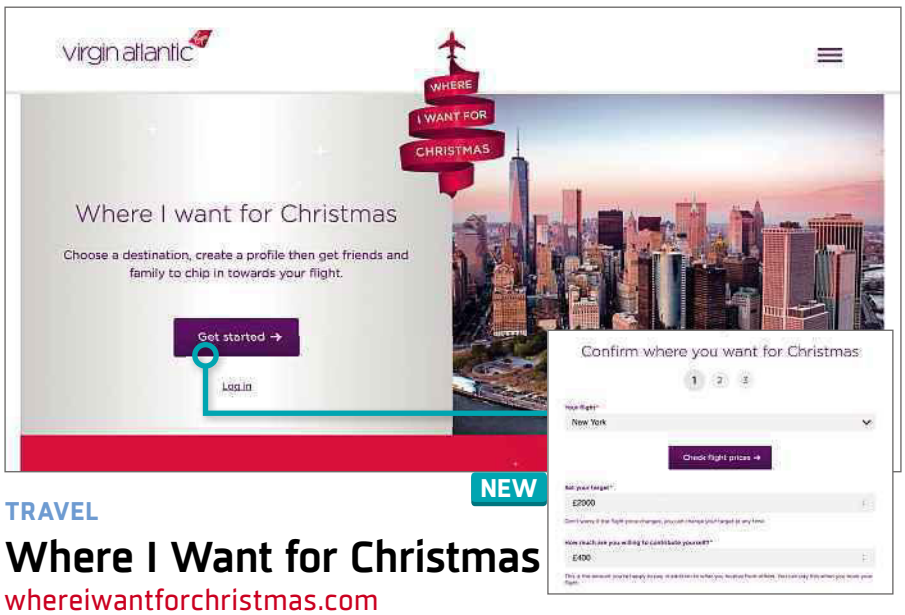


ONGOING CAMPAIGNS
See which projects are currently seeking money from the Indiegogo community



CATEGORIES
Click Tech & Innovation, Creative Works or Community Projects to see lots of sub-categories





NEW

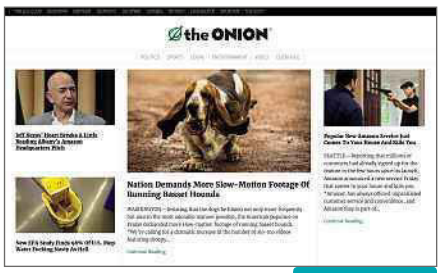
TRAVEL

Where I Want for Christmas

whereiwantforchristmas.com

Sick of receiving socks for Christmas and just want to get away from it all? Then steer your friends and family to Virgin Atlantic's new 'crowd-funding' website and you could be jetting off somewhere warm and relaxing come the New Year. Simply choose a destination and enter a suitable cost to generate a page asking others to chip in for your holiday. The hope is that you'll hit your target and get enough cash for a return flight, although you can revise the cost up and down should the flight prices change. It's a nice, well implemented idea, even if you are restricted to Virgin flights and its list of destinations. We reckon it's bound to take off.

Our rating ★★★★☆



RELAUNCH

HUMOUR

The Onion

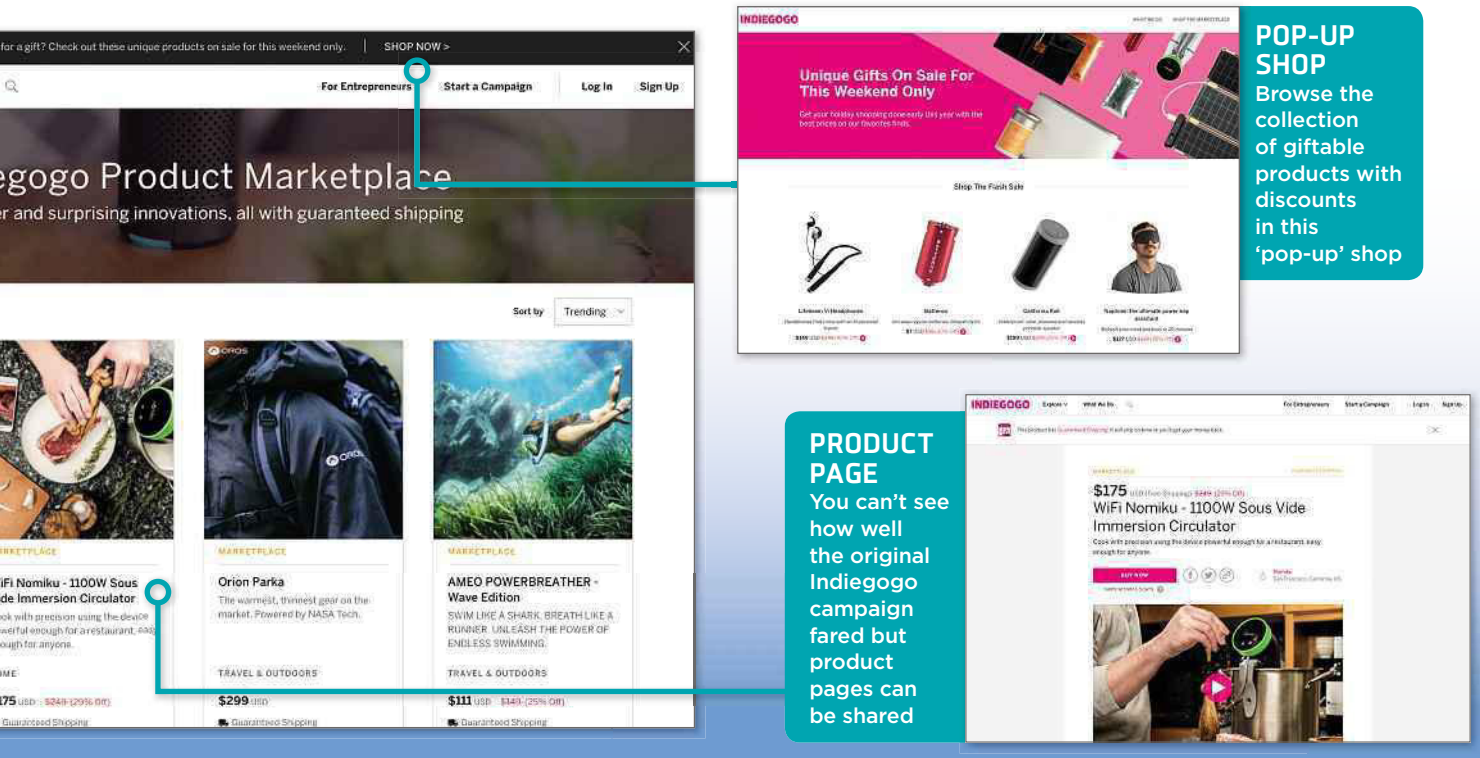
www.theonion.com

The bods behind the popular satirical news site The Onion have peeled backed the layers of their previous design and come up with a less cluttered, more easily navigable offering that makes better use of available space. Boiling down the main links to just Politics, Sport, Local, Entertainment, Video and Clickhole (The Onion's parody of clickbait), the revamped site has more of a blog-like feel. It's still very US-focused (despite removing the tagline 'America's Finest News Source') but that's not to say it won't touch your funny bone, and we like that stories are easy to share.

Our rating ★★★★☆

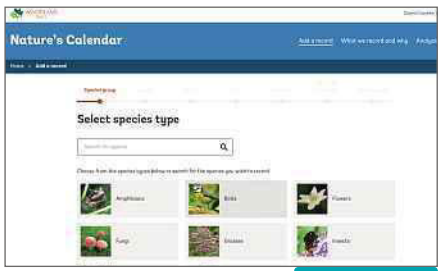
Reviews by David Crookes

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



POP-UP SHOP
Browse the collection of giftable products with discounts in this 'pop-up' shop

PRODUCT PAGE
You can't see how well the original Indiegogo campaign fared but product pages can be shared



RELAUNCH

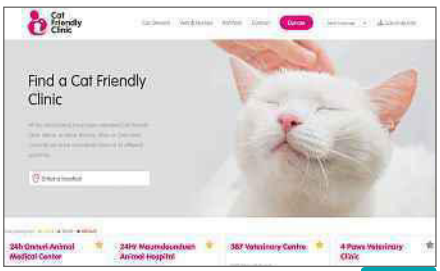
ENVIRONMENT

Nature's Calendar

bit.ly/nature436

In its bid to study seasonal changes in plants and animals, the Woodland Trust is asking you to help expand its database by recording your own observations. The task is made easy, with a step-by-step process that involves selecting a species group before noting the event, date and location, together with a photo and comments. All your submissions can be viewed on live maps alongside those of other contributors, and there's a small section of recent records to look at. The site also explains what's being recorded and why, and provides interesting seasonal and research reports, too.

Our rating ★★★★★



NEW

CATS

Cat Friendly Clinic

catfriendlyclinic.org

Created to help vets become more feline friendly, this informative site is purr-fect for cat owners, too. As well as explaining what it means to be a cat-friendly clinic, it helps you quickly find suitable local vets simply by entering your location. It then lists clinics according to its own gold, silver and bronze ratings, and lets you see where they are on a map. You can view the addresses and websites of most clinics, and – if you're a vet – discover how you can become accredited. There's also a donation button to support the charity's work, along with links to its other sites.

Our rating ★★★★☆

NEW

FOOD

Natvia

www.natvia.com

We're well aware of the perils of eating too much sugar so this site dedicated to cutting out the white stuff is rather sweet. Stuffed with sugar-free recipes you can save or share, it uses large, mouth-watering images to lure you in before clearly explaining how to make each dessert. The recipe pages also include preparation and cooking times, a list of ingredients and a measurement converter, and you can post reviews and click tags to see similar recipes. The accompanying videos, recipes available via email and interesting articles certainly make it an appetising mix.

Our rating ★★★★☆

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

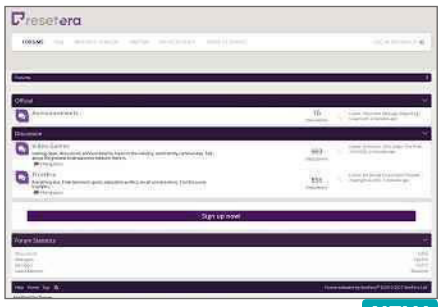
BACK ISSUES DISC 2016

ON SALE NOW

Our **2016 Back Issues Disc** containing all 26 issues from last year is now on sale from Amazon

For more information, visit **bit.ly/wudisc16** or search for 'webuser disc' on Amazon

You can still buy our 2015 Back Issues Disc from bit.ly/wudisc15



NEW

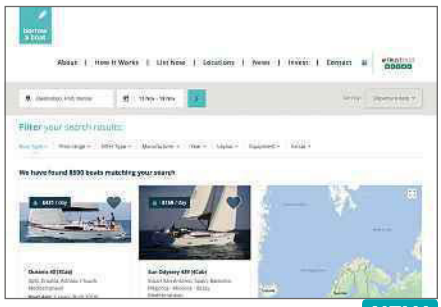
GAMING

Reset Era

www.resetera.com

Allegations against the founder of gaming forum NeoGAF saw the once-popular site go into meltdown in October. Rather than abandon the community that had run for more than a decade, a group of users decamped to a new message board called Reset Era, which has already attracted thousands of members. As you may expect, the forum isn't much to look at aesthetically, departing little from the look of many other similar offerings. But for anyone interested in discussing games, entertainment, sports, politics and education, it's already proving to be a bustling destination with hundreds of lively discussions.

Our rating ★★★☆☆



NEW

SAILING

Borrow a Boat

borrowaboat.com

This site aims to make hiring a boat plain sailing, by giving you access to more than 13,000 privately owned and local charter vessels in more than 50 locations across the world. Finding them is a simple matter of entering a destination, boat type and time frame. You're then able to see how much a boat costs to hire and get a feel for its age and facilities. As well as filtering the results by price, layout and manufacturer, you can specify extras such as on-board Wi-Fi or even a cook. We love the comprehensive descriptions, but we'd like to see more boats available to book online rather than having to contact the boat owner.

Our rating ★★★★☆

RELAUNCH

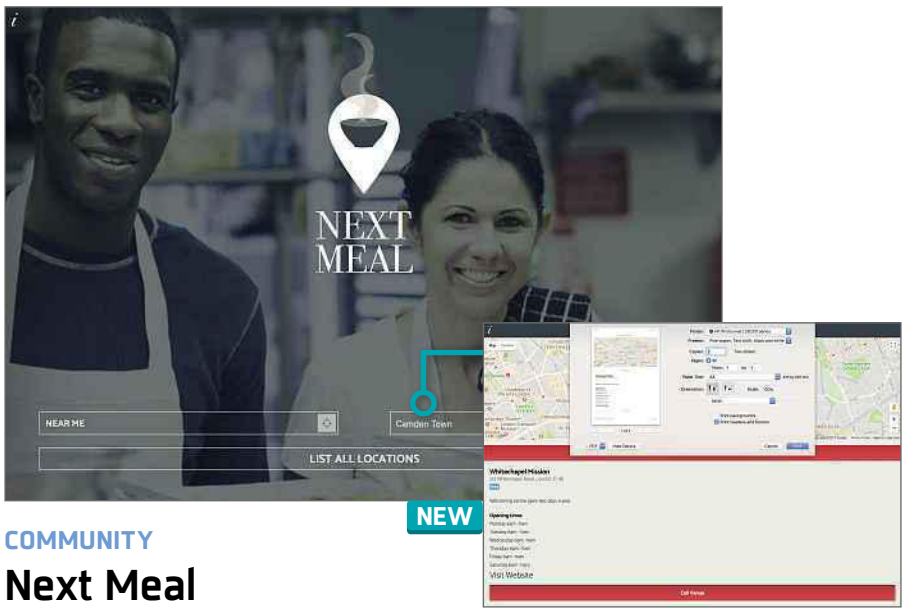
SHOES

The Shoe Shack

www.theshoeshack.co.uk

This online shoe shop is heading in the right direction with a polished look and easily navigable design that makes finding and buying footwear a breeze. Broken down into five main categories covering shoes for women, men, girls, boys and school, there isn't a huge choice (just 39 products for women, for example), but there's a good selection of photos, decent descriptions, a simple checkout process that uses PayPal and an online message facility if you have any queries. In all cases, the prices are very reasonable and if you spend £25 or more, you get an extra 10% discount. Standard delivery is also free.

Our rating ★★★★☆



NEW

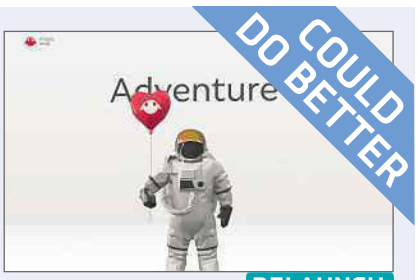
COMMUNITY

Next Meal

nextmeal.co.uk

Created by Martin Stone, who runs the Muswell Hill Soup Kitchen in North London, this site aims to help homeless people in the capital find a meal and much-needed support. It does so by allowing visitors to enter a location before displaying a list of places willing to assist. Click a result to see an address, opening times, a map and details of how to call or visit the venue's site. Crucially – since a homeless person may not have internet access – each page is simply designed, so anyone with internet access can print a page of results and hand it to someone in need. Next Meal currently only caters for London, but it's an excellent idea that could expand nationwide.

Our rating ★★★★☆



RELAUNCH

AUGMENTED REALITY

Magic Leap

www.magicleap.com

Magic Leap was founded in 2010 and is said to be working on a head-mounted augmented-reality device. But seven years later, there's still no sign of a product, which makes this new modern-looking website all the more intriguing. In essence, you get a video showing how the company began, a sign-up "keep in touch" page and a list of careers along with a cute astronaut and the word "Adventure". It may still be worth a visit, if only because Redditors are actively trying to find Easter Eggs within it. Try typing `phydre` on a 404 page, for instance.

Our rating ★★☆☆☆

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

New Jimdo site builder

Jimdo has launched a new website-building tool called Dolphin, which streamlines the design process for anyone who wants to quickly build a templated site. The tool asks a series of questions to find out what you need, then designs you a website based on your answers. If you connect social-media accounts, it will grab your photos and fill the site with content automatically. The software is still being tested but you can try it out for yourself at www.jimdo.com/dolphin.

Test the speed of your website in other countries

It's easy to find out how quickly your website loads from your home country, but do you know how well it performs when people visit it from overseas? Now you can find out by going to Website Speed Test (bit.ly/webst436). Type in the address of the page you want to test and select one of the 14 international locations, which include New York, Frankfurt, Singapore and Sydney, from the drop-down menu. Then click the Run button for a breakdown of how long each page element takes to load, as well as the total time taken.

Deal of the Fortnight

Tsohost (www.tsohost.com) has more than 80 domains available at discounts of up to 80%.

Web-building Helpdesk

THIS ISSUE'S EXPERT:
Nick Akam, CTO,
Easy Internet
(www.easy-internet.co.uk)

Q I don't need to earn a fortune from my website, but I'd like it to cover its costs. What's the best way to create a small income from a website?

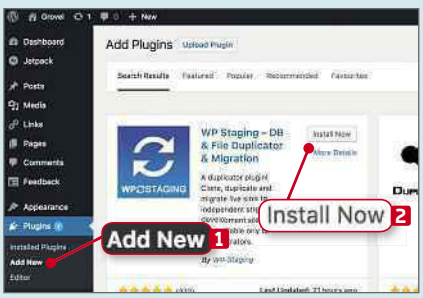
Tristram Newstead, via email

A The easiest way to earn an income from your website is to place adverts alongside your content that pay out when a visitor clicks them. The most common program for this is Google Adwords. The amount you earn depends on how many clicks you get but also on the topic of your content, because some subjects can result in far larger payments than others. A website specialising in legal information, for example, may earn five times the revenue for every click of a site offering software downloads.

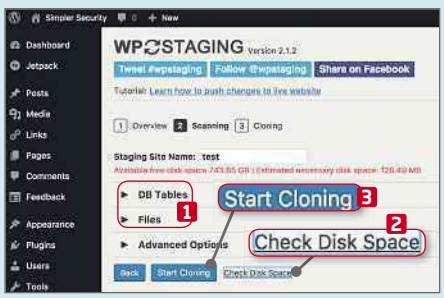
MINI WORKSHOP | Experiment on your website in a safe staging area

WP Staging: wp-staging.com | 30 mins | Self-hosted WordPress website

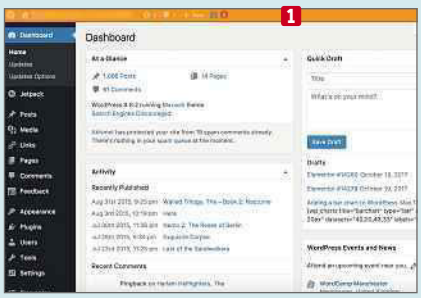
Any changes you make to a WordPress website go live straight away, but you can use a staging area to check how changes will look before you make them public. Here's how to set one up using the WP Staging plugin



1 To search for the WP Staging plugin in WordPress, click Plugins followed by Add New. 1 Click the Install Now button, 2 then Activate. You'll see an advert for the Pro version. Click the 'Skip – Start Cloning' link.



2 Click the 'Create new staging site' link and check the settings under DB Tables and Files. 1 The default settings create a replica of your site. You can untick anything you don't need, but leave this alone if you're not sure. Click Check Disk Space 2 to make sure you have enough, then click Start Cloning. 3



3 When it's finished, click 'Open staging site' and enter your username and password. The staging site looks just like your website except that it has an orange bar across the top. 1 You can make any changes you like and preview them as you usually would, but they won't affect your main site.

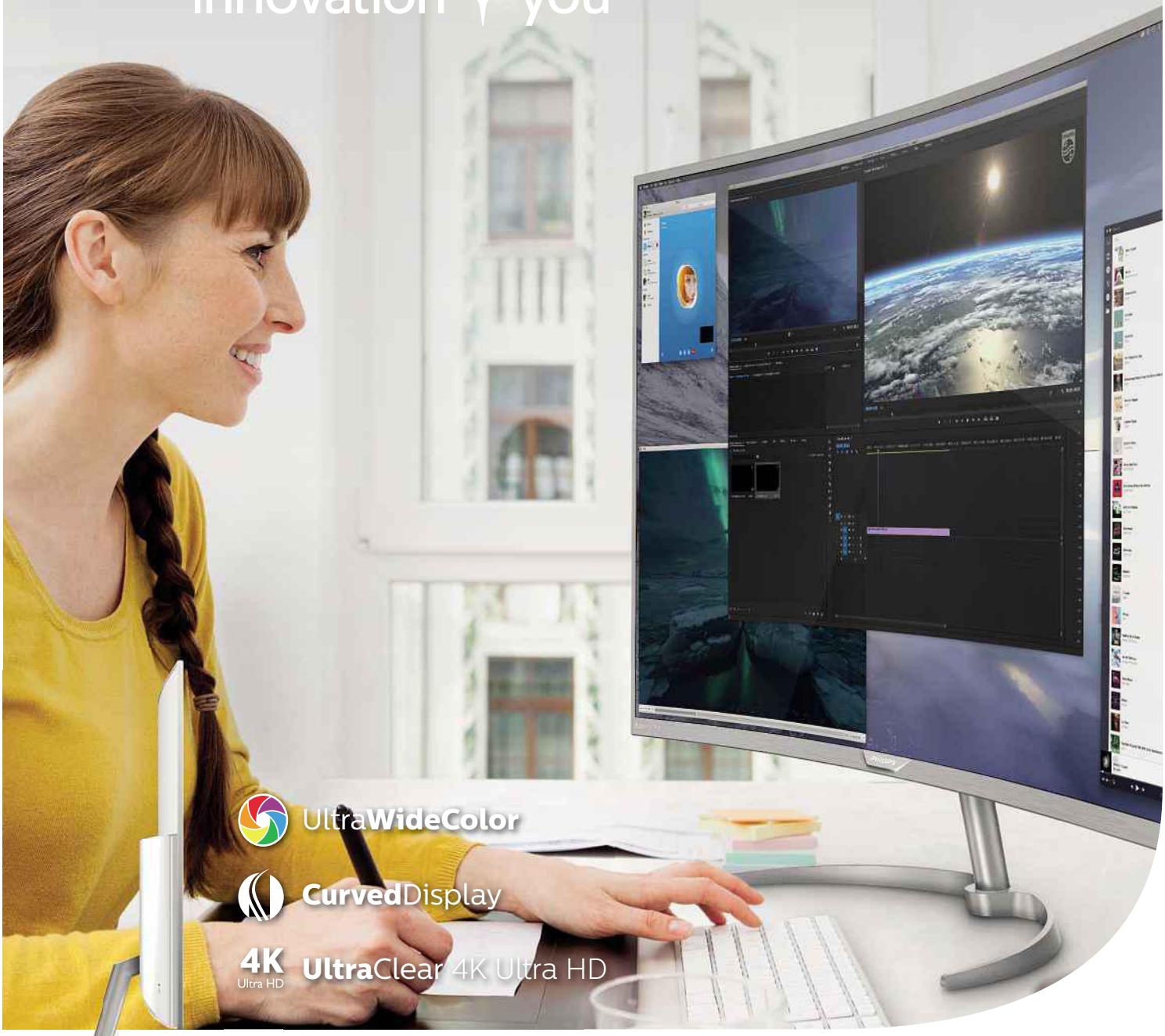
+ Email us your website building questions at webuser@dennis.co.uk

Ultra Wide-Color

with 4K in an immersive design

Colours like you've never seen before. This brilliant 4K UHD resolution display with Ultra Wide-Color offers the richest and most vivid colours wrapped in an immersive curved design for a your best creations yet.

innovation you



40" 4K curved display
(BDM4037U)

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amazon.co.uk
ebuyer.com
BT Business Direct

PHILIPS

What To Watch Online

Pick of the fortnight

BT Sport

Watch live coverage of The Ashes on BT Sport

From 23 November

In a major win over Sky, BT Sport has gained exclusive rights to the 2017-18 Ashes as part of a new five-year deal with Cricket Australia. The first of the five Test Matches starts on 23 November at The Gabba in Brisbane (22 November here in Blighty) and is followed by the first-ever Ashes Day Night Test match, which will take place at the Adelaide Oval.

The live coverage includes an all-star line-up of pundits. Joining former English and Australian cricket captains Michael Vaughan and Ricky Ponting in the commentary box will be Geoffrey Boycott, Adam Gilchrist, Graeme Swann and Damien Fleming. BT Sport's Matt Smith will present the coverage.

As well as screening every minute of live action on TV, in the BT Sport app and online at sport.bt.com – where the "enhanced video player" will provide an interactive timeline and in-depth real-time statistics – BT Sport will show a daily 90-minute highlights programme. Short highlights of the Ashes will also be available for free every evening from 7pm through the website and app. With Australia's David Warner promising "hatred" and "war", let's hope England can retain the title.

Download *Doctor Who: Shada*

From 24 November

Thirty-eight years after filming was abandoned due to BBC strike action, the 'lost' Doctor Who story *Shada* has been completed (again) using a combination of original footage, animation and specially recorded dialogue. Tom Baker and Lalla Ward reprise their roles as the Doctor and his companion Romana, following the original Douglas Adams script to bring the six-part serial to life. Unlike previous recreations of *Shada* (and there have been several), the production team had access to nearly seven hours of raw footage from the original 1979 shoot, which they used to edit the new version from scratch after scanning the original film negatives in full HD. The new episodes come in the wake of last year's successful animated recreation of the lost 1966 Doctor Who story *The Power Of The Daleks*.

Shada will be available as a digital download from iTunes initially (bit.ly/shada436) before being released on DVD and Blu-ray on 4 December.

Watch Marvel's *The Punisher*

From 17 November

Marvel's Netflix series are among the most popular on the streaming service, so we expect *Daredevil* spin-off *The Punisher*, which is based on the Marvel Comics character of the same name,

to also prove a hit with viewers. The 13 episodes star Jon Bernthal as vigilante Frank 'The Punisher' Castle, as he uncovers a conspiracy involving the people responsible for the death of his family, and exacts his deadly revenge.

Watch 'feminist' Western *Godless*

From 22 November

New Netflix original show *Godless* puts an intriguing feminist twist on the conventional Western. With Steven Soderbergh as executive

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

producer, the "dark, gritty" series focuses on an outlaw (Jack O'Connell) hiding from his former mentor (Jeff Daniels) in a New Mexican mining town populated entirely by women, including *Downton Abbey's* Michelle Dockery. There are seven episodes in the series, and you can watch the official trailer at bit.ly/godless436.

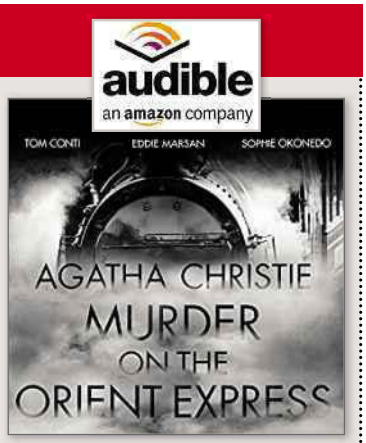
Join Three's binge-watching club

Part of the enjoyment of watching TV series is discussing the episodes afterwards, so Three has launched a 'Binge Club' to bring together viewers from across the UK. It takes the form of a live, interactive online programme that invites "bingeing Britons" to engage in spoiler-filled conversations and discuss fan theories. The Club kicked off on 31 October with a group chat about Netflix original series *Stranger Things 2*, hosted by YouTube personality Wall of Comedy.

Watch Irish-language shows on iPlayer

The BBC has apparently remembered that iPlayer is supposed to cater for the whole of the UK, and has launched a new portal that makes programmes for viewers in Northern Ireland easier to find. Irish-language programmes include *Ar Bhealach na Gaeltachta*, in which presenter Conall Ó Máirtín visits the islands and coastal Gaeltacht regions around Donegal, and the music series *Trad Ar Fad!*. Meanwhile, Ulster-Scots programming will include three series of *Brave New World*, which explores Ulster's links with Canada, the US and New Zealand. All programmes on the Northern Ireland portal (bit.ly/nireland436) will be available to watch beyond the standard 30-day period.

What To Listen To Online



Amazon's audiobook division Audible is offering a new adaptation of Agatha Christie's classic whodunnit *Murder on the Orient Express* to download for free (bit.ly/murder436). Tom Conti plays Hercule Poirot in the all-star Audible Original production, with Rula Lenska, Sophie Okonedo and Eddie Marsan – and sound effects recorded on the Orient Express itself! Amazon Prime members can sign up for a free three-month trial with Audible and claim three free audiobooks. For everyone else, it's one month and one book.

Enjoy more ways to buy films

Sky has revamped its digital store to give us more choice over how we pay for and enjoy films and boxsets. Rather than simply buying or renting a title, you can now opt to only pay for the download or receive a DVD or Blu-ray through the post, too. You can also rent titles or stream them to your mobile device. Prices start at £9.99 for an HD digital copy; £13.99 for an HD download and DVD; and £16.99 for an HD download and Blu-ray. Sky Store is available on Sky Q and Sky+ boxes, and for Android and iOS.

Streaming deal of the fortnight

Earn 1,000 Clubcard points on a Freesat box

Tesco Clubcard customers who are looking for a new set-top box can currently earn an extra 1,000 points if they buy a Freesat box from the supermarket's online store. The offer applies to the Humax Freesat Recorder HDR-111S, which lets you tune in to more than 200 free TV and radio channels, stream catchup services including iPlayer, ITV Hub and All4, and record hundreds of hours of programmes to its 500GB hard drive. If you're a former Sky subscriber, you can simply connect the box to your existing dish.

The Recorder costs £169, but if you don't need to record TV programmes, you can still earn 500 extra Clubcard points on a Freesat Humax Smart TV Receiver for £99.99. See bit.ly/freesat436 for more info on both Tesco deals.

Product Test

We test and compare the latest products

Roku Express vs Roku Streaming Stick+

Roku has launched two new streaming devices for your TV. **Andy Shaw** finds out which one is right for you

Roku Express

Price: £29.99
Buy from Amazon:
bit.ly/rokue436

FOR

- ✓ Great value
- ✓ Lots of viewing choice

AGAINST

- ✗ Only 2.4GHz networking
- ✗ Infrared remote
- ✗ No 4K

★★★★☆

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

Roku Streaming Stick+

Price: £79.99
Buy from Amazon:
bit.ly/rokuss436

FOR

- ✓ 4K compatible
- ✓ Bluetooth remote
- ✓ 2.4GHz and 5GHz Wi-Fi networking

AGAINST

- ✗ Expensive

★★★★★

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

Roku has replaced its entire previous range with the launch of two new devices: the bargain-price Roku Express (£29.99) and the full-featured Roku Streaming Stick+ (£79.99).

The Roku Express consists of a box that you connect to your TV with the included HDMI cable. It looks a bit like someone's taken one of the older Roku boxes, cut it in half and sliced a good chunk off the top, and it's now small enough to come with double-sided tape so you can mount it on your TV. It's powered by a USB cable, which you can either plug into a port on your TV or connect to a standard 3-pin socket using the supplied power adapter.

The Roku Streaming Stick+ is even smaller and plugs in directly to your TV's HDMI socket. It's more expensive because it comes with a better remote and supports resolutions up to 4K – presuming you have a compatible TV.

Once you've installed either device, which requires a Roku account, you're unlikely to notice much difference between these and previous versions. The interface on the Express is certainly slicker than previous models and the Stick+ is even more so, making operation fast and smooth. However, you essentially get the same services on all Roku devices, so you won't notice anything new by browsing around the interface.

Remote control

One thing that has changed is that Roku has modified the shortcut buttons on its remote. Where our last Roku remote had buttons for Netflix, YouTube and Google Play, this one looks like it's got some new sponsors. You still get Netflix but its button sits alongside arguably less universal providers: Red Bull TV, Rakuten TV (movie rentals) and Yupp TV (South Asian channels).

The Express remote uses infrared so you have to point it at the Roku box to operate it, while the Stick+ remote is Bluetooth, so it can point in any direction so long as you're in range. This sounds like a superfluous luxury but is actually vital because there's no clear line of sight for infrared to operate between your sofa and the back of the TV where the Stick+ is plugged in. It's also a fantastic excuse for unfettered sloth since you don't even have to lift your arm to control the device. One day all remotes will be like this.

Interestingly, the remote of the Stick+ still has an infrared beamer built into it, and has three more buttons than the Express remote: a power button, and volume up and down. These aren't for the Roku itself, but can be used to control the main volume and standby setting of your TV, via the TV's own infrared receiver. Our first thought was that this would require some fiddly and time-consuming setup – but no, the Roku has a go at doing this all by itself and we were more than pleasantly surprised when it set up the option perfectly on the Panasonic TV we tested the devices on.

Resolution and hardware

The main difference between the two devices is the resolution. If you have a 4K TV or are thinking of getting one, the Streaming Stick+ is the obvious option. We found that, when plugging it in, our TV and the Roku's apps were able to automatically detect that a 4K device was in use, so we could access 4K programming on apps that supported it and got invited to join the BBC iPlayer's UltraHD trial. The Express supports the more standard 1080p (Full HD), which is compatible with most modern TVs.

The other significant difference is that the Express only works with 2.4GHz Wi-Fi networks, while the Streaming Stick+ can connect to 5GHz networks, too. It's helpful to have two networks to choose from if your internet traffic is heavy but it can lead to complications if you're trying to connect to the Roku from other devices, because you might need to work out which network you're on before connecting to it.

We miss some of the hardware options that used to be available on previous Roku models, though. We're still mourning the passing of Ethernet sockets, which were great if your device was near your router or you used HomePlugs to beat problems with your Wi-Fi's reach. There's also no USB socket for streaming music, photos and videos from a USB stick, though we guess that's probably just something people don't do any more. There's no headphone socket either, which was a brilliant addition to the Roku 3.

Choice of apps

One of the big plus points of Roku devices was the wealth of available apps and this, thankfully, continues to be the case with these latest devices. On a basic level, you can get all the UK terrestrial catchup services: BBC iPlayer, ITV Hub, All 4 and Demand 5. While the iPlayer is almost universal across streaming devices, you'd be surprised how many don't offer access to some of the commercial catchup services.

It's also strong on the streaming services, with apps for Netflix and Amazon Prime Video leading the charge, backed up with a range of rental options, from Google Play and Sky Store to Rakuten and Sainsbury's, so you can browse around and find the best deal on any movie or TV series you might be interested in. This means you aren't tied to a single system, so you can look out for deals and switch between services as often as you like.

OUR VERDICT

If you're looking for a great-value streaming device, you won't be disappointed with the Express. It's a refined product that's been through a great number of iterations and has all the same basic functionality as the more expensive Streaming Stick+.
In general use on a regular HD TV, you'd struggle to notice the difference.

The Streaming Stick+ has a number of benefits, though, including a Bluetooth remote and the ability to switch to a second Wi-Fi network.

But the real deciding factor is whether you want 4K. If you don't need it yet, the Express is perfectly sufficient. But if you're planning to upgrade to 4K and UltraHD any time soon, you may as well spend the extra on the Streaming Stick+ and enjoy the significant bonus of its bundled benefits.

Motorola Moto G5S

Christopher Minasians reviews the latest budget smartphone from Motorola

Following on from the Moto G5 (which we reviewed in Issue 423, bit.ly/webuser423), Motorola has gone back and tweaked its budget handset. The Moto G5S has a larger battery, an upgraded camera and a newly refined design. It's £20 cheaper at launch than the G5 was, but the older phone is now discounted and costs around £40 less than the G5S.

Build and screen

Where the G5 merely had an aluminium rear panel, the G5S's unibody design is cast entirely from aluminium. This makes the 5.2in phone look and feel a lot more upmarket – the little details, such as its chamfered edges, are a rare sight on a budget phone.

Motorola has again opted for a front-mounted fingerprint reader, which doubles up as the Home button. Turn the phone over and you'll notice the G5S's protruding camera, but we like its indented logo, which provides a subtle finger-hold that makes the phone easier to grip single-handed.

There's a micro-USB port at the bottom (no USB Type-C, unfortunately) and, thankfully, a 3.5mm headphone jack at the top. Dual-band Wi-Fi 802.11a/b/g/n and Bluetooth 4.1 are also included.

The 5.2in screen is a Full HD (1,920 x 1,080 pixels) IPS display, with an impressive backlight that hit a peak of 500cd/m² (candles per square metre) in our tests. If you crank the display to maximum brightness, you'll be able to read the screen in the brightest sunlight.

Image quality is pretty good across the board, too. With a contrast ratio of 1,708:1 and the capability to display 80.4% of the sRGB colour standard, the G5S is able to produce a reasonable array of colours, while retaining the darkest shadows and brightest whites.

Interface, performance battery and camera

As ever, Motorola hasn't tinkered extensively with Android. Switch on the G5S and you're faced with an almost pristine installation of Nougat 7.1.1. And there's more good news: Android Oreo 8.0 is slated to come to the phone sometime this winter.

The phone's performance, however, is disappointing and hasn't improved much over the G5's results. This is because it retains the same 1.4GHz quad-core Snapdragon 430 processor and 3GB of RAM as its predecessor. In our benchmark performance tests, it kept pace with its Moto G5 siblings and was narrowly beaten by the Vodafone Smart V8 and Lenovo P2.

With a 3,000mAh battery replacing the G5's 2,800mAh, we were hoping for a better result in our battery-life test, but the G5S lasted 12hrs 12mins, which marks only a small improvement over the G5's 11hrs 51mins. Both continue to lag far behind the Lenovo P2's incredible battery life of 28hrs 50mins.

On a more positive note, the G5S's camera is its standout feature and dramatically better than similarly priced rivals. It picks up plenty of light, ekes out lots of detail and captures natural-looking colours.

PRODUCT INFO

Motorola Moto G5S

Price: £219
Buy from: bit.ly/moto436

SPECIFICATIONS

- Android 7.1 operating system
- 1.4GHz quad-core Qualcomm Snapdragon 430 processor
- 450MHz Adreno 505 GPU
- 32GB internal storage
- 5.2in 1,920 x 1,080 display
- 3,000mAh battery
- 16MP rear camera
- Dual-band 802.11a/b/g/n Wi-Fi
- 150 x 74 x 8.2mm (9.5 mm at camera bump)
- 157g

FOR

✓ All-metal design
✓ Fast fingerprint reader
✓ Incredible rear camera

AGAINST

✗ No faster than the Moto G4
✗ Mediocre battery life

OUR VERDICT

★★★★☆

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

Despite its flaws, the G5S deserves a lot of praise. Motorola has improved on the G5 in many respects, making this model a true budget contender. Its fingerprint reader is fast; the design is beautiful; the relatively untouched Android experience is a breath of fresh air; and the camera is simply incredible at this price. If you're after the best-looking budget smartphone, with the best camera, then this is it.

BEND YOUR REALITY

AG352UCG AG352QCX

QHD | NVIDIA G-SYNC | 200HZ | Adaptive Sync | 35"

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

HARDWARE

HIGH-SPEED ROUTER

TP-Link Deco M5

£229.99 from bit.ly/tpl435
Tested: Issue 435

This is a finely balanced mesh system with good range, although it isn't the fastest router available. However, it's got great additional features including built-in antivirus and powerful parental controls.

KEY SPECS
Mesh-networking kit ■ 802.11ac Wi-Fi ■ Combined network of 2.4GHz and 5GHz bands ■ WPA2-AES security ■ 1 x WAN port ■ 2 x Gigabit Ethernet ports ■ 120 x 120 x 38mm ■ Three-years return-to-base warranty

BUDGET TABLET

Amazon Fire HD 8

£89.99 from bit.ly/fire433
Tested: Issue 433

Long battery life, superb build quality and decent performance make this an excellent 16GB tablet for the price. It's worth paying the extra £10 for this ad-free version, too.

KEY SPECS
Quad-core 1.3GHz MediaTek MT8135 processor ■ 1.5GB memory ■ 16GB storage (expandable to 256GB) ■ 8in 1,280 x 800 pixels screen ■ 2-megapixel rear camera ■ Fire OS ■ 214 x 128 x 9.7 mm ■ 369g ■ One-year return-to-base warranty

BUDGET PHONE

Samsung Galaxy J5 (2017)

£219 from bit.ly/sams432
Tested: Issue 432

Samsung's updated Galaxy J5 does everything you could ask of a budget phone. Battery life is top-notch, the screen is rich and vivid, and its camera quality is excellent.

KEY SPECS
Octa-core 1.6GHz Exynos 7870 processor ■ 13-megapixel front and rear cameras ■ 2GB RAM ■ 16GB storage ■ 5.2in 1,280 x 720-pixel screen ■ Android 7 ■ 146.2 x 71.3 x 8mm ■ 160g ■ Two-years return-to-base warranty

HYBRID LAPTOP-TABLET

Lenovo Yoga Book

£548.97 from bit.ly/lenw431
Tested: Issue 431

The Yoga Book laptop-tablet hybrid genuinely feels like a step forward, with its virtual keyboard and fantastic writing surface that makes it an exceptional note-taking device.

KEY SPECS
Quad-core 2.4GHz Intel Atom x5-Z8550 processor ■ 4GB memory ■ 64GB storage ■ 10.1in 1,920 x 1,200-pixel screen ■ 1 x Micro USB port ■ 802.11ac Wi-Fi ■ Windows 10 ■ 256 x 170 x 9.6mm ■ 690g ■ One-year return-to-base warranty

NAS DRIVE

Synology DS216j

£161.13 from bit.ly/syn430
Tested: Issue 430

The DS216j is a great-value network storage device with lots of features that make it incredibly flexible. It's not the most powerful choice, but it can do most of the things other NAS drives can do, including pricier models.

KEY SPECS
Dual-core 1GHz Marvell Armada 385 32-bit processor ■ 512MB DDR3 memory ■ 2 x drive bays (drives not included) ■ 20TB (2 x 10TB drive) maximum capacity ■ 165 x 100 x 225.5mm ■ 880g ■ Two-years return-to-base warranty

SSD

Samsung 960 Evo

£211.16 from bit.ly/s9e428
Tested: Issue 428

It looks expensive on paper, but the Samsung 960 Evo is an excellent 500GB SSD that came at or near the top of all our performance tests. It comes with Samsung's Data Migration software to clone your existing Windows installation from your old hard drive.

KEY SPECS
250GB – 1TB capacity ■ AES-256 encryption ■ M.2 connection ■ 200TBW write tolerance ■ Samsung Magician, Samsung Data Migration software

All prices correct at time of review

SOFTWARE & SERVICES

INTERNET SECURITY

Kaspersky Internet Security 2018

£19.95 from bit.ly/kaspersky2018
Tested: *Computeractive* Issue 493

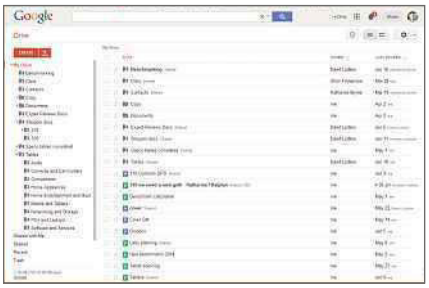
Kaspersky is rock solid at protecting your PC from the worst of the web, and has come top in nine of our most recent tests, blocking all malware with its robust defences. Use the URL above to save £15.04 on the software (normal price £34.99).

KEY FEATURES

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

ONLINE STORAGE

Google Drive



From free from drive.google.com
Tested: Issue 389

Google Drive is easy to use and has lots of free storage with the option to buy more if you need it. The Windows software integrates seamlessly with Explorer, so saving and syncing files is like keeping them in any other PC folder.

KEY FEATURES

16GB free storage ■ Web-based office software ■ Works with XP, Vista, 7, 8+ and 10 ■ Chrome browser add-on ■ Android and iOS apps ■ 100GB extra storage for £1.36 per month; 1TB for £6.01 per month; 10TB for £60.16 per month

Web User Gold Award winners

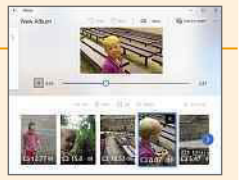
ANDROID LAUNCHER

Microsoft Launcher

Free from bit.ly/microsoftl435
Tested: Issue 435
For all-round performance, usability and features, Microsoft Launcher is the best free launcher you can get. It's very fast and supports gestures.

VIDEO-EDITING TOOL

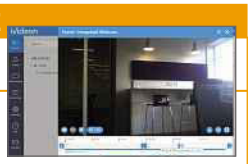
Microsoft Photos



Free from bit.ly/phot434
Tested: Issue 434
This tool is built into your Photos app and is very efficient at turning your home videos into professional-looking movies.

HOME-SURVEILLANCE SOFTWARE

Ivideon



Free from bit.ly/ivid433
Tested: Issue 433
Simple to set up and use, Ivideon is ideal for monitoring one or two cameras and lets you store footage for 24 hours.

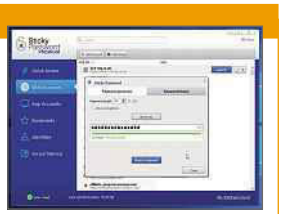
PDF READER

Sumatra PDF

Free from sumatrapdfreader.org
Tested: Issue 432
Sumatra is simple and easy to use. It's also one of the fastest PDF readers available.

PASSWORD MANAGER

Sticky Password Premium



From £19.95 per year from www.stickypassword.com
Tested: Issue 431
Packed with features, this password manager is very secure and good value for money.

WEB USER
BACK ISSUES DISCS

Search for 'webuser disc' on Amazon

EVERY ISSUE FROM 2014 TO 2016

Best Free Software

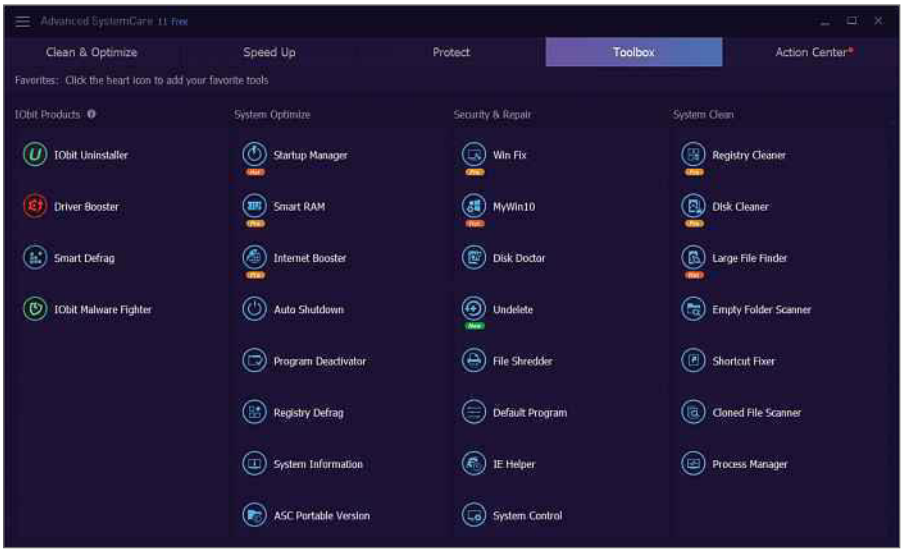
SYSTEM TOOL

IObit Advanced SystemCare 11

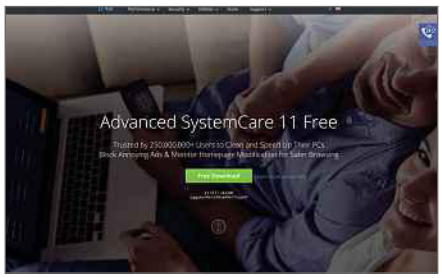
bit.ly/asc436

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

File size: 24.9MB



IObit's Advanced SystemCare aims to fix all manner of PC problems, as well as cleaning your system, boosting performance and protecting your privacy. As with all previous versions of the program, it's very easy to get started – you just click the Scan button on the home screen and Advanced SystemCare will run through a series of selected tasks in sequence. By default, these are Startup Optimisation, Privacy Sweep, Junk File Clean, Shortcut Fix, Registry Clean and Spyware Removal. You can untick any modules you don't require or add extra options, such as Internet Boost, System Optimisation and Vulnerability Fix.

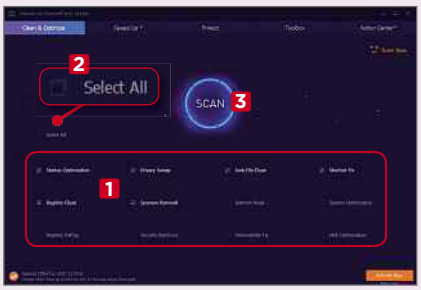


Tabs along the top of the interface let you switch between different sections – Speed Up, Protect, Toolbox and Action Center. There are a lot of tools on offer, although some – including Internet Booster, Win Fix and Disk Cleaner – are only available in the paid-for Pro edition, which costs $19.99 (£15.18).

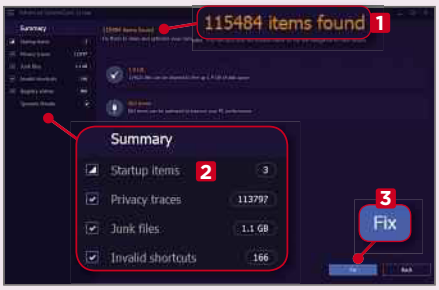
Advanced SystemCare's interface has undergone a slight makeover for this new version, and performance has been improved as well, with IObit claiming that the entire cleaning process is now up to 150% faster, compared to the previous version. There's a new disk-optimising engine that intelligently organises drive data, and the Performance Monitor has been redesigned.

Advanced SystemCare 11 also has a newly integrated Security Reinforce feature that can diagnose and fix system weaknesses and improve your PC's security to minimise the risk of hacking. Finally, the new Homepage Advisor feature detects any modifications to your homepage and search engine, and there's also a larger online database and a Surfing Protection & Ads Removal feature, too.

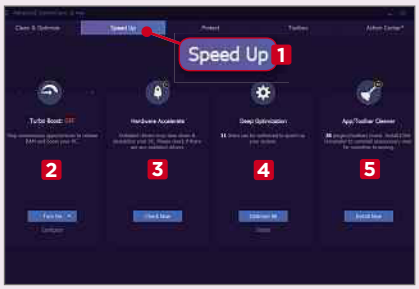
MINI WORKSHOP | Clean up your PC using Advanced SystemCare 11



1 Begin by running a Clean & Optimise scan. Select the modules you want to include. 1 For a full health check, tick the box for Select All. 2 Click the Scan button 3 and the software will run through the selected tasks in sequence. You can skip any stage, end the scanning process at any time and choose to automatically fix any problems.

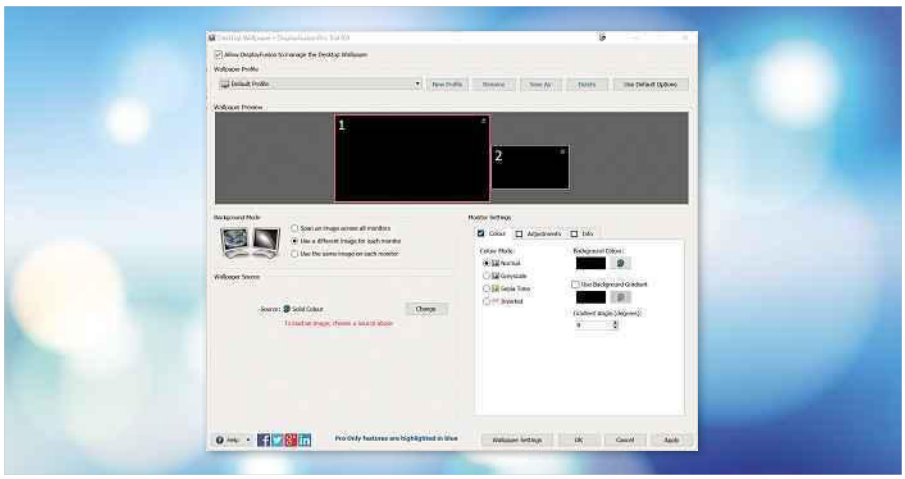


2 When Advanced SystemCare has completed its scan, you'll be presented with a summary screen. This displays the total number of problems found. 1 The sidebar breaks down the findings by section. 2 Click any result to view the details for it. Deselect any items you don't want to clean, then click Fix. 3



3 The Speed Up section 1 contains options that may boost your PC's performance. Turbo Boost 2 stops unnecessary apps and services from running, freeing up resources. Hardware Accelerate 3 manages drivers, Deep Optimisation 4 speeds up various system elements and App/Toolbar Cleaner 5 removes items you don't use.

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



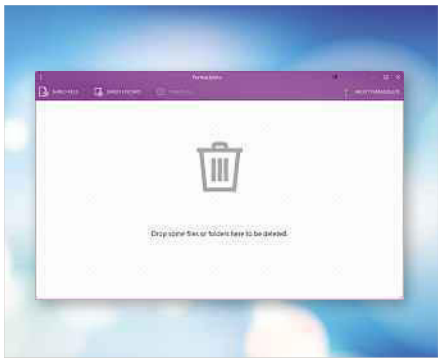
MULTI-MONITOR MANAGER

DisplayFusion 9

www.displayfusion.com

Min requirements: Windows 7/8+/10 **File size:** 20.5MB

Working with two or more monitors helps boost productivity, and the tools in DisplayFusion make the process even more efficient. It offers precise monitor controls, window 'snapping' and the ability to grab and apply wallpaper from various sites. Version 9 adds support for the Windows 10 Fall Creators Update and gains new features such as Monitor Fading and better multi-DPI scaling. DisplayFusion comes with a free 30-day trial of the Pro edition, which offers lots more features.



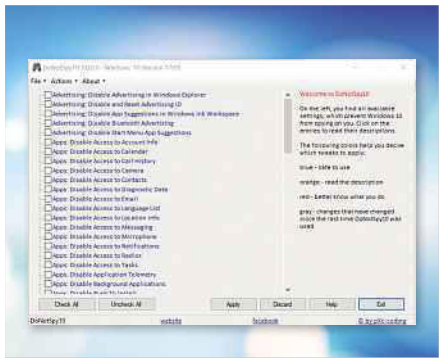
FILE SHREDDER

Permadelete

bit.ly/perma436

Min requirements: Windows XP/Vista/7/8+/10 **File size:** 1.3MB

When you delete files, they end up in the Recycle Bin from where they can be easily retrieved. Even if you empty the bin or bypass it in the first place, your deleted files can still be recovered. Permadelete lets you shred any files and folders that you want to delete for good. Just drag and drop them to the program interface and click the Shred button. You can also shred content via the Windows right-click menu.



PRIVACY TOOL

DoNotSpy10 3

bit.ly/notspy436

Min requirements: Windows 10

File size: 1.6MB

Windows 10 has a (mostly deserved) reputation for spying on users, although recent releases have reined this in and introduced more ways to manage your privacy. DoNotSpy10 provides a simple front end that lets you quickly turn off any features you're unhappy about. The new version is compatible with the Fall Creators Update and gains new tweaks for that edition. Be sure to decline the junk offers during installation.

New Windows Apps

MyPodcasts

bit.ly/pod436

Min requirements: Windows 10

File size: 25.1MB

MyPodcasts is a free podcast player. Features on offer include a mini-player, the ability to create standard and smart playlists, a light mode, swipe-gesture recognition, and video podcast support.

Paddington Run

bit.ly/pass436

Min requirements: Windows 10

File size: 866.7MB

This is a Paddington Bear-themed endless-running game from Gameloft. It includes multiple levels, costumes and boots to collect, and mini-games to play. You can also try to top the leaderboards.

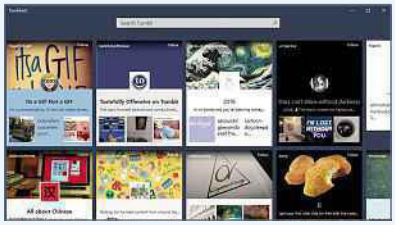
Tumblast

bit.ly/tumb436

Min requirements: Windows 10

File size: 29.2MB

Tumblast is an unofficial Tumblr client for Windows 10. It supports multiple windows and can create and convert animated GIFs; paste and share content; and publish posts to your Tumblr blog.



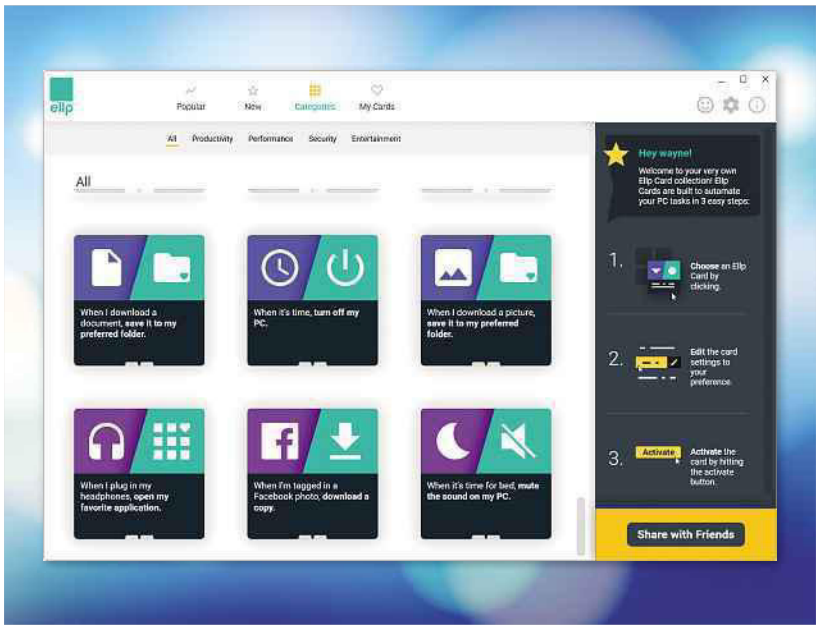
SYSTEM TOOL

BootRacer 7

bit.ly/bootr436

Min requirements: Windows XP/Vista/7/8+/10
File size: 15.3MB

The excellent free tool BootRacer tells you exactly how long your computer takes to boot into Windows and reveals which programs are slowing you down. If it seems to take forever for Windows to get up and running, BootRacer can help you fix the problem, and you can track the changes and improvements in the program's History section. The latest version can detect BIOS Post Time Delay (UEFI and Windows 8/10 only), and the Startup Control function has been totally redesigned. It's also fully compatible with the newly released Windows 10 Fall Creators Update. If you require additional functionality, there's now a paid-for Premium version of BootRacer available for $24.95 (£18.94).



AUTOMATION SOFTWARE

Ellp

www.ellp.com

Min requirements: Windows XP/Vista/7/8+/10
File size: 3.6MB

Ellp is a handy program that aims to save you time by automating common tasks. Once installed, you can activate any of the ready made choices, which include: 'When my hard disk is getting full, free up space', 'When I get disconnected from the internet, alert me' and 'When there is a new open Wi-Fi spot, let me know'. There are currently 39 tasks available, sorted into various colour-coded categories including Productivity, Performance, Security and Entertainment. You can edit tasks as required.

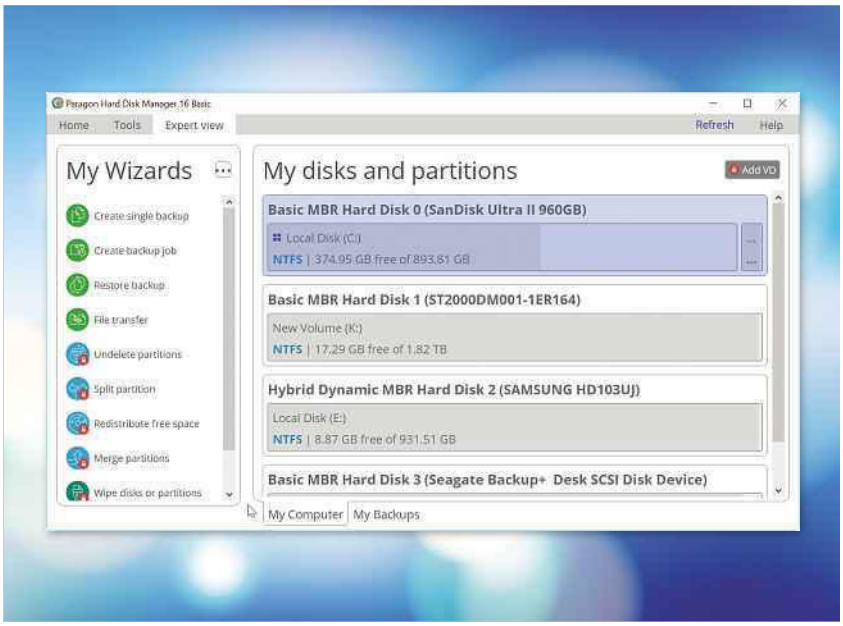
Ellp is now out of beta, and this first stable release will automatically update itself when improvements and new cards get added.

SYSTEM TOOL

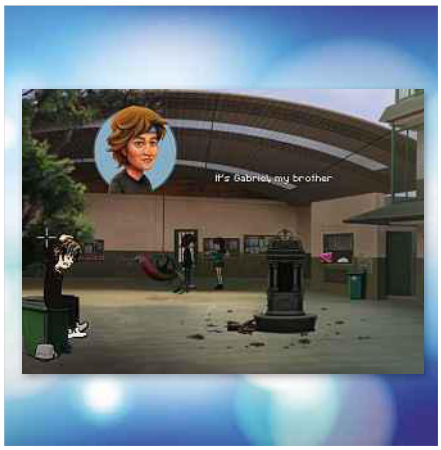
Paragon Hard Disk Manager 16 Basic

bit.ly/phdm436

Min requirements: Windows XP/Vista/7/8+/10
File size: 147MB



The free cut-down version of Paragon Hard Disk Manager offers a selection of drive-focused tools, including a partition manager, backup-and-restore feature and recovery-media builder. There are 32- and 64-bit versions of the program which, once installed, must be activated within five days by creating a free Paragon Account or signing in with your Facebook credentials. The tab-based interface provides access to the different modules, though some are only available in the paid-for edition, which costs a whopping £59. As its name suggests, it is quite basic but there are enough useful tools to make it worth using.



GAME

Sol 705

www.sol705.com

Min requirements: Windows XP/Vista/7/8+/10 or MacOS
File size: 152MB

This is an old-school, fully voiced, point-and-click adventure with impressive graphics. Set in 1974, the story takes place in a sleepy rural Argentinian town where locals claim to have seen unusual lights in the night sky. The members of Sol 705, a student club devoted to the search for extraterrestrial phenomena, are on the case!

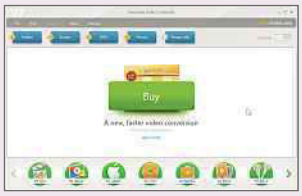
✗ Don't install...

Freemake Video Converter

www.freemake.com

Min requirements: Windows XP/Vista/7/8+/10
File size: 1.8MB

Freemake Video Converter used to be a *Web User* favourite – we loved its handy tools and simple interface. However, since it became 'bundleware', the software is difficult to recommend. The junk it comes packaged with is designed to install itself on your PC whether you like it or not, which is a shame because it's still a good program.



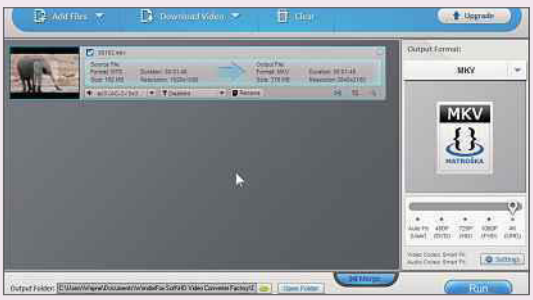
...Install this instead ✓

HD Video Converter Factory

bit.ly/hdvid436

Min requirements: Windows XP/Vista/7/8+/10
File size: 46.6MB

This versatile tool can trim, crop and merge your videos, and convert them from one format to another. It also lets you download videos or music from YouTube and other video sites for personal use. The free download is actually a cut-down, older version of a paid-for product, so there are some restrictions to be aware of, such as being limited to 720p-resolution conversions, but all the standard export options are available. It's very straightforward to use: just drag your video file to the main window, make any required changes using the Clip, Crop and/or Effects tools, pick an output format and click Run.



UPDATED | New tweaks and fixes for your favourite free programs

SYSTEM CLEANER

CCleaner 5.36

www.piriform.com/ccleaner

Min requirements: Windows XP/Vista/7/8+/10
File size: 9.9MB

The popular system-cleaning tool has added CCleaner updates as a Windows scheduled task and improved cleaning in all the major browsers. It no longer cleans Office and Windows Defender by default, so you need to select the options manually.

MEDIA CENTRE

Kodi 17.5

kodi.tv

Min requirements: Windows XP/Vista/7/8+/10 MacOS or Linux
File size: 78MB

The subject of last issue's cover feature, Kodi can play any kind of audio and video – both local and streaming. The latest build solves a number of problems and updates FFmpeg to the newest version. It also adds support for the most recent Apple devices.

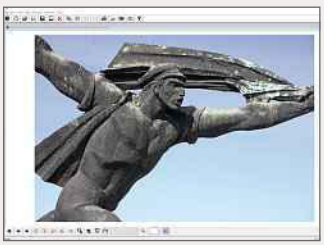


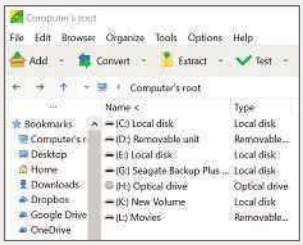
IMAGE VIEWER

FreeVimager 7.5

bit.ly/freev436

Min requirements: Windows XP/Vista/7/8+/10
File size: 1.7MB (installer)/ 4.6MB portable

FreeVimager is a free, speedy and feature-packed image viewer and editor. This update adds better brightness, contrast, saturation and hue adjustment, and a Tabbed Document Interface (TDI) that makes it easier to switch between image files.



FILE COMPRESSION TOOL

PeaZip 6.5

www.peazip.org

Min requirements: Windows XP/Vista/7/8+/10 or Linux
File size: 7.4MB

PeaZip is an open-source file and archive manager that supports 188 formats. The new version improves the archive manager and archive conversion process, and lets you move and rename objects inside existing archives. There are 32- and 64-bit versions. ■

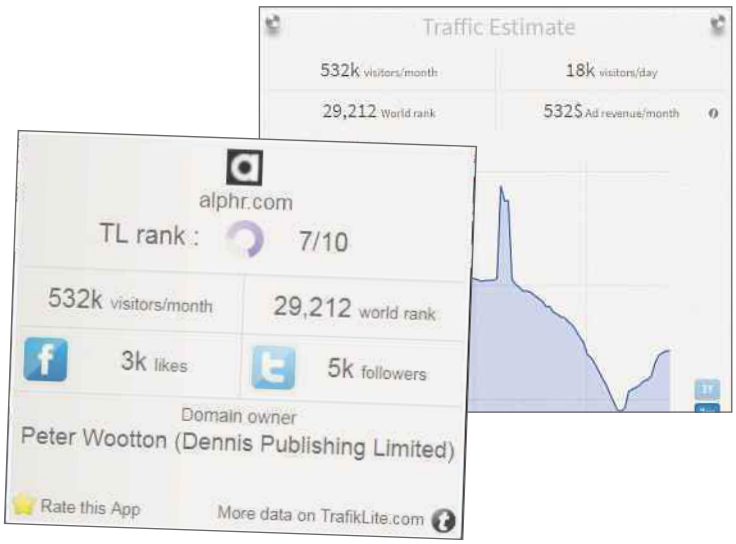
GET FREE SOFTWARE FIRST subscribe to Web User at subscribe.webuser.co.uk

Best New Browser Tools

CHROME

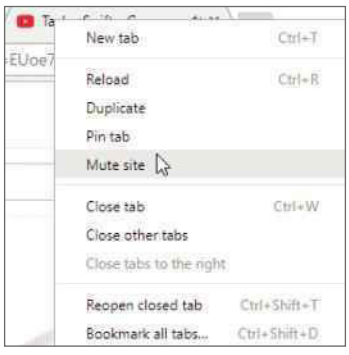
Check the popularity of any website

Anyone who works for a website will know how important (and addictive) it is to keep track not only of the number of visitors to your site but also how many your competitors attract. TrafikLite (www.trafiklite.com) is an extension for Chrome, Firefox and Opera that puts this information at your fingertips, so you can check the popularity of any site instantly. Just click the toolbar button to see the current site's monthly visitor numbers, Twitter followers and 'likes' on Facebook, as well as its global ranking. You can also view TrafikLite's own 'reputation' rank for the site as a score out of 10. For example, the world's most popular site, Google, gets 9 out of 10, while Dennis Publishing's tech-news site Alphr (www.alphr.com) earns 7 out of 10. Select 'More data on TrafikLite.com' for a more detailed breakdown, including ad revenue and traffic trends over the past few months.



Mute every page on a website in one go

The stable version of Chrome 62 is now available, and among its otherwise fairly unexciting list of new features is a useful tool for controlling the sound on noisy websites. Instead of right-clicking a specific tab and choosing 'Mute tab', you can turn off the sound across every page on a site. To activate the feature, go to `chrome:flags` and search for the entry 'Sound content setting'. Select Enabled from the drop-down menu and restart the browser. Now, when you want to silence every page on a website, simply right-click any of its tabs and choose 'Mute site' to turn off the audio across the board. When you want to restore the sound, right-click a tab and select 'Unmute site'.



Discover the best move in online chess

We'd never advocate cheating, especially at something as serious as chess, but if you want to improve your board skills – or show an online opponent who's boss – this new Chrome extension can help. The charmingly named Grand B**tard (bit.ly/chess436 – what is it with crass names for add-ons these days?!) tells you the best move to make when you're playing live chess on Chess.com or Lichess.org. The add-on automatically detects the board's current layout and advises where to place your next piece, as well as predicting the likely response from your opponent. And yes, we realise that using this extension is as devious as using a dictionary while playing online Scrabble, so please don't tell Garry Kasparov!

Get cooking inspiration on your new tabs

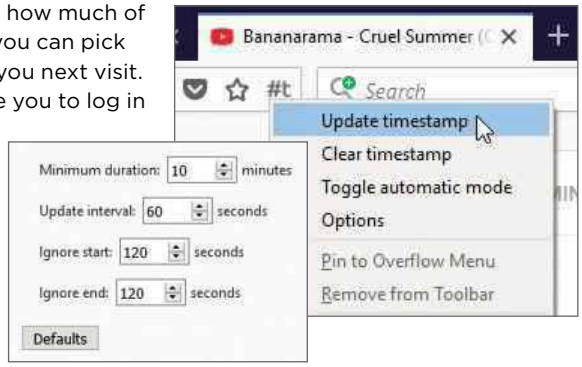
Work up a healthy appetite while browsing the web and get fresh ideas for dinner by installing the tasty new Chrome extension What Should I Eat (bit.ly/whateat436). This attractive tool offers culinary advice and tempting recipes in every new tab you open, complete with mouthwatering photos. Our random selection included recipes for pesto pasta salad and chicken and shrimp pad Thai, as well as a recommendation that we combine lemon with hot pepper to "create a delight of the palate".

See our feature on page 48 for our pick of the best New Tab extensions for Chrome.

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

FIREFOX

Timestamp videos to resume watching later



Some video sites remember how much of a video you've watched so you can pick up where you left off when you next visit. Others don't, or they require you to log in or allow the site to store a cookie on your computer, which may not suit your private-browsing needs. A new WebExtension called Media URL Timestamper (bit.ly/time436) solves this problem by letting you save your place in long videos, podcasts and other streams so you can resume your watching or listening later. By default, it timestamps all streams that are more than 10 minutes long at 60-second intervals, but you can easily change the settings or timestamp videos manually by right-clicking the address-bar icon and choosing 'Update timestamp'. The tool works on a wide range of streaming sites, including YouTube, Vimeo, SoundCloud, Dailymotion and BBC iPlayer.

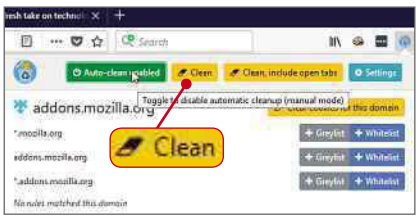
Try the new LastPass

Now that the fantastic Firefox 57 has finally arrived – see our Workshop on page 52 for full details – many developers have upgraded their add-ons to WebExtensions, which are compatible with the new browser. One such tool is the popular password manager LastPass. A beta version of the LastPass WebExtension (bit.ly/lastpass436) has been released, although we hope the stable version will be available by the time you read this. As with the old add-on, it lets you manage all your passwords in one place, storing logins securely so you can enter them on any website automatically, and protecting them with a single master password.

Delete cookies automatically

One handy add-on that hasn't made the transition to WebExtension is Self-Destructing Cookies, which helps you protect your privacy online by setting websites' cookies to delete 10 seconds after you've closed their tabs. Fortunately, an excellent alternative called Cookie AutoDelete (bit.ly/cookie436) is available that *does* work with Firefox 57. This WebExtension offers several options: you can make cookies disappear automatically when you close a tab, delete them manually for the current website, remove cookies for all open tabs or clear any cookies you haven't specifically chosen to keep.

We particularly like the way the add-on lists individual domains, so you can whitelist any site whose cookies you want to keep (to stop the website logging you out when you leave, for example), or 'greylist' them so your browser only stores the site's cookies until it next restarts.



OTHER BROWSERS

Stop websites mining your PC

Last issue, we addressed the growing problem of websites that sneakily harness your PC's processing power to 'mine' for cryptocurrency, and recommended a Chrome extension called MinerBlock (bit.ly/miner435) to stop them. You can get the same protection in Opera by installing a new add-on called Mining Blocker (bit.ly/mining436), which scans websites for mining processes and code, and disables them before the site loads. The crypto-blocker then checks the site again after it has loaded to ensure no miner is running. It blocks more than 20 known cryptocurrency miners including CoinHive, JSEcoin and Minecrunch.

Block pop-up ads in Edge

Like most browsers, Microsoft Edge has a built-in pop-up blocker. Go to More, Settings, 'View advanced settings' and switch on 'Block pop-ups'. If you find that pop-ups – and especially adverts – still appear, however, you can increase your blocking power by installing the new Popup Blocker extension (bit.ly/popup436). Any time a website requests to open a pop-up, this lightweight tool stops it and lets you accept or deny the request. You can also choose to open the pop-up in a background tab if, for example, it's essential for logging into the site or viewing important information.

Best Free Apps

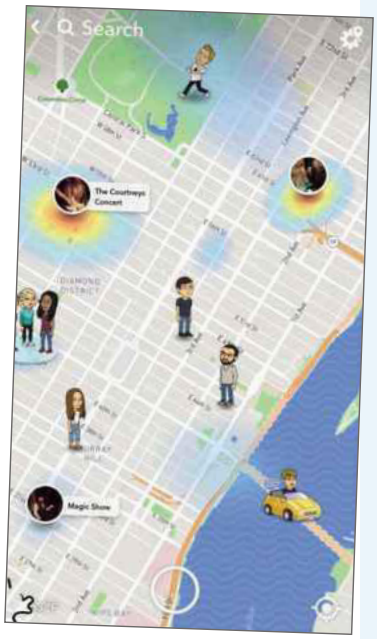
App of the Fortnight

SOCIAL

Snapchat

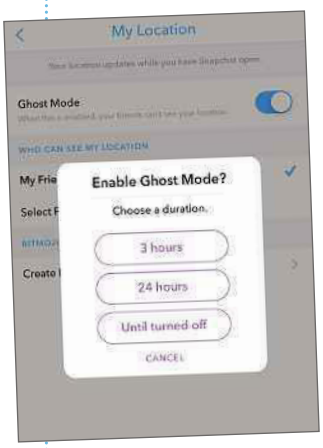
UPDATED

bit.ly/snapdroid436
bit.ly/snapios436
(varies) 9



If the recent rumours circulating online are to be believed, then Snapchat's foray into hardware with its much-hyped Spectacles (think sunglasses with built-in cameras) has turned out to be a colossal flop. Thankfully, the company's short-sightedness doesn't extend to its mobile app, which continues to be updated with new and genuinely useful features.

The iOS version of Snapchat, for example, has just received a major update that adds a trio of very handy abilities. For starters, it's implemented a proper sharing option for iPhone and iPad, which means that you can now easily post photos, links and more on Snapchat from within other apps, such as your web browser or the Photos app, via the Share function. An equivalent feature has been available for Android users for some time and is long overdue for Apple Snapchatters – finally, no more tedious copying and pasting links. We explain how to set up Snapchat's new sharing function in our Mini Workshop, right.



Also new is a useful shortcut that lets you view a friend's Story or send them a Snap by long-tapping their name. And iOS users now get to choose how long they want to drop off the radar for in Ghost Mode (under See My Location in Settings). Location sharing is a key part of how Snapchat works, but not everybody wants to broadcast their whereabouts all the time. The new update provides the option to temporarily disable Snapchat's location-sharing feature for a period of either three or 24 hours – in addition to just turning it off until you turn it back on again. These two features weren't available in the Android version of the app at the time of writing, but are expected to be added in the very near future.

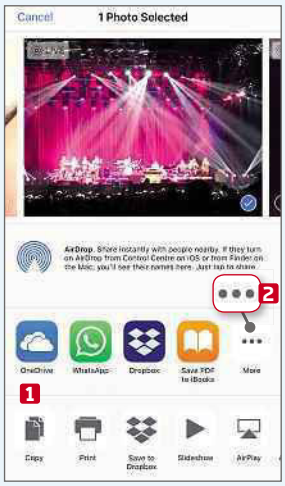
Our rating ★★★★★

MINI WORKSHOP

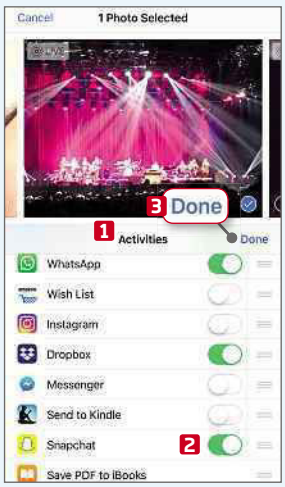
Set up sharing in Snapchat for iOS

1 Install the Snapchat app for your iOS device if you haven't already, and work through the setup process, entering your name, birthday and username as prompted. If you already have the Snapchat app installed, make sure you update it to the latest version, then open your Photos app, tap a photo and then tap the Share button (the box with an arrow pointing upwards) at the bottom of the screen. 1

2 Along the lower section of the screen, you'll see two rows of icons representing apps that you can use to share your photo. 1 Swipe to the left to see more. The chances are that there won't be an icon for Snapchat yet, but it's easy to add it. Tap the More (three dots) icon 2 on the far right of the top tier of app icons.



3 In the Activities panel that opens, 1 swipe down until you see the Snapchat option, 2 then tap it to switch it on and tap Done. 3 You'll now see a Snapchat icon among the sharing icons whenever you tap the Share button in Photos – tap this to launch the photo in the Snapchat app and upload it to your Story. This works when you tap the Share button in other apps, too, including Safari.



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

NAVIGATION

UPDATED

Street Complete

bit.ly/streetdroid436

4.2

Think you know all the nooks and corners of your neighbourhood? Then why not share your intimate local knowledge with the rest of the world using StreetComplete, a crowd-sourcing app for the OpenStreetMap (OSM) project. Fill in missing info – opening hours of nearby businesses, type of road surface and so on – by scanning for Quests and tapping icons on the map. You'll need an OSM account to contribute, though. Sign up at www.openstreetmap.org, then authorise the app to connect to your account when prompted.

Our rating ★★★★☆

LAUNCHER

NEW

Lawnchair Launcher

bit.ly/lawndroid436

5

Fancy owning a Google Pixel phone without having to cough up £600? Well now you can (sort of), by installing Lawnchair Launcher on your existing Android device. It's an open-source project that faithfully recreates the look and feel of the Pixel's user interface, including identical homescreen icons and quick-swipe access to Google Now – all without having to root your device. It also offers a ton of customisation options, such as changing the size of your icons. One caveat is that it's still in beta, so there may be a few minor performance issues.

Our rating ★★★★☆

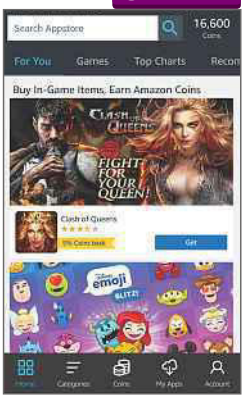
SHOPPING

UPDATED

Amazon Appstore

bit.ly/amzndroid436

(varies)



Amazon's revamped Appstore benefits from a cleaner interface with improved navigation, a My Apps tab (to find apps you previously downloaded) and a new way to save on purchases using Amazon's currency-cum-loyalty scheme, Coins, which can be earned for free as rewards and are discounted when bought in bulk. The Appstore app isn't available from Google Play, so if you're using a non-Amazon-branded device, you need to download it by visiting the link above and enabling 'Install unknown apps' when prompted.

Our rating ★★★★☆

EBOOK READER

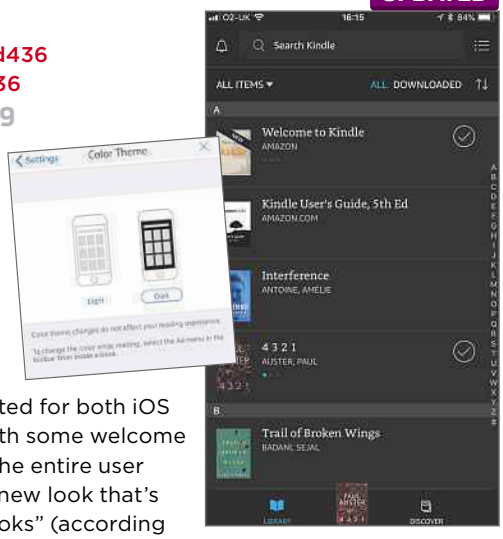
UPDATED

Kindle

bit.ly/kinddroid436

bit.ly/kindios436

(varies) 9



The Appstore isn't the only Amazon app that's had a fresh lick of paint. The company's Kindle app has also been updated for both iOS and Android with some welcome new features. The entire user interface has a new look that's "inspired by books" (according to Amazon) with a new icon, fonts and a choice of light and dark themes (tap Color Theme in Settings). Navigation is also improved, thanks to a bar at the bottom of the screen that provides one-tap access to your current book or library, and there's a more prominent search bar at the top of the screen.

Our rating ★★★★★

GAME

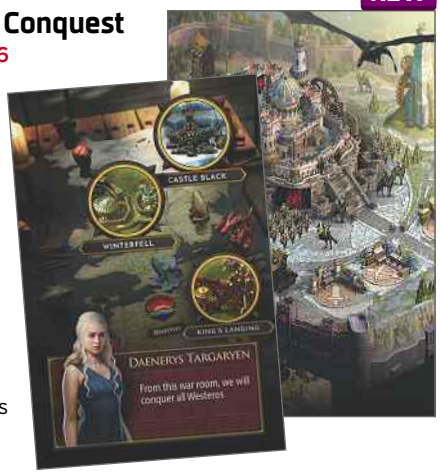
NEW

Game of Thrones Conquest

bit.ly/thronedroid436

bit.ly/throneios436

6 10



If you're a 'Thronie' who's thirsty for something to fill the vast, icy chasm of nothingness that's stretching out between now and Season 8 of the swords-and-sauciness series, then this multiplayer strategy game might be just what the Maester ordered. There's nothing startlingly original about the gameplay – build keeps, upgrade your forces, fight battles and so on. It's a formula that other (arguably better) games – such as Game of War – follow closely. But then other games don't have the Mother of Dragons popping up on screen to congratulate you on your latest victory or that cool map from the opening credits of your favourite show.

Our rating ★★★☆☆

5 NEW APPS WORTH PAYING FOR

PHOTOGRAPHY

VHS Camcorder

bit.ly/vhsdroid436
bit.ly/vhsios436
Price: £2.79 (Android), £2.99 (iOS)

4.4 10

Want to turn your device's pristine, pin-sharp HD or 4K video recordings into a fuzzy, analogue mess? This videotape emulator takes your clips and adds tracking lines, blocky date stamps and other authentic Eighties noise.

GAME

Thimbleweed Park

bit.ly/thimdroid436
bit.ly/thimios436
Price: £8.99 (Android), £9.99 (iOS)

4.4 9

This nostalgia-fest manages to channel everything from the X-Files to vintage point-and-click adventure games such as Monkey Island. Refreshingly bizarre characters, brain-melting puzzles, retro pixel art and some very funny gags make this a must.

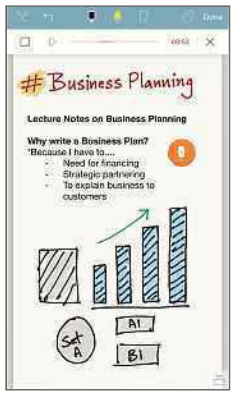
GAME

Push

bit.ly/pushdroid436
bit.ly/pushios436
Price: 59p (Android), 99p (iOS)

4.1 7

This game requires you to use logic to work out the correct sequence in which to push buttons on floating 3D objects. Fresh mechanics are continually introduced to keep you on your toes.



NOTE TAKING

Noteshelf 2

bit.ly/noteios436
Price: £6.99

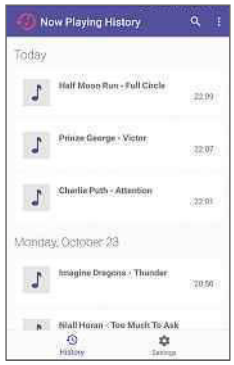
10

The already brilliant Noteshelf app now supports iPhones as well as iPads. It offers customisable Apple Pencil pressure options on iPad Pro for scribbling handwritten notes, annotating PDFs and more.

MUSIC

Now Playing History

bit.ly/nowdroid436
Price: 99p



8

Pixel 2 phones have a brilliant Shazam-like feature that listens for music and displays whatever's playing on the lock screen. Now Playing History makes this feature even better by providing a list of previously identified tracks.

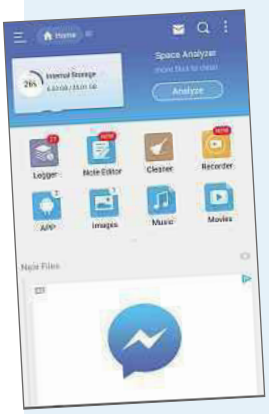
VHS Camcorder | Thimbleweed Park | Push | Noteshelf 2 | Now Playing History

✗ Don't install...

ES File Explorer

bit.ly/esfiledroid436

This once-brilliant app used to be one of the best and most popular file explorers available.



But time has not been kind to ES File Explorer, which seems to have evolved into bloated nagware. The current version foists tools you never wanted on you, including messaging and cleaning functions, and spews a relentless torrent of annoying notifications and adverts. How are the mighty fallen.

...Install this instead ✓

Total Commander

bit.ly/totaldroid436

1.5

If you're as fed up with ES File Explorer as we are, there are several free replacements on Google Play, including Asus File Manager (bit.ly/asusdroid436) and Flashlight + Clock's File Manager (bit.ly/filedroid436). However, there's something reassuringly old school about Total Commander that keeps us coming back. No, it doesn't have the smartest design and it isn't exactly bursting with extra features. But for copying, moving, deleting, renaming, archiving, dragging and dropping – and more besides – Total Commander is easy to use and dependable. And, crucially, it does its job without spamming you with ads or confusing you with tools you don't need. ■

Take a Screen Break

Give your eyes a rest from your browser by taking our fiendish fortnightly challenges. Can you guess our children's-book emoji and solve our word puzzle?

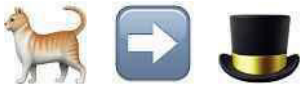
WIN A WEB USER MUG!
Email your answers to webuser@dennis.co.uk – one correct entry will win a *Web User* mug

CAN YOU GUESS THE CHILDREN'S BOOKS FROM THE EMOJI?

1

2

3

4 

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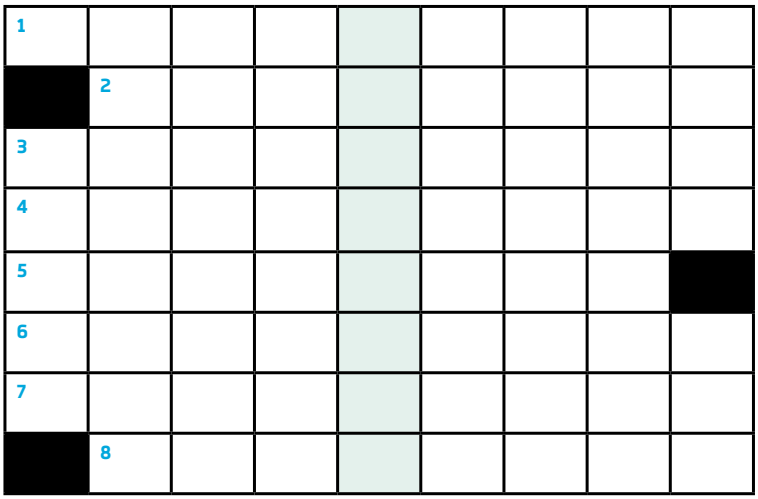
6

WEB USER WORD PUZZLE

Enter the answers in the grid to reveal a tech-related term in the highlighted column

1. Capital of Somalia
2. Old Testament city destroyed by fire and brimstone
3. Globe or Jerusalem vegetable
4. UK Poet Laureate from 1984 to 1998, married to Sylvia Plath (3,6)
5. Tree bearing winged seeds
6. Culture Club singer and one-time judge on *The Voice* (3,6)
7. Olympic gold-medal swimmer and *Celebrity Masterchef* semi-finalist
8. British queen, successor to William IV



COMPETITIONS

WIN 1 OF 3
Sound BlasterX Kratos S3

WORTH £69.99 EACH

Creative's Sound BlasterX Kratos S3 gaming speakers are designed to enhance your experience when playing games. The solid wooden casing provides a fuller, warmer, more natural sound than plastic-based designs. To enter, email your address to webusercomp@dennis.co.uk with 'Kratos' in the subject line. For more information, visit uk.creative.com, and follow @creativelabs on Twitter.

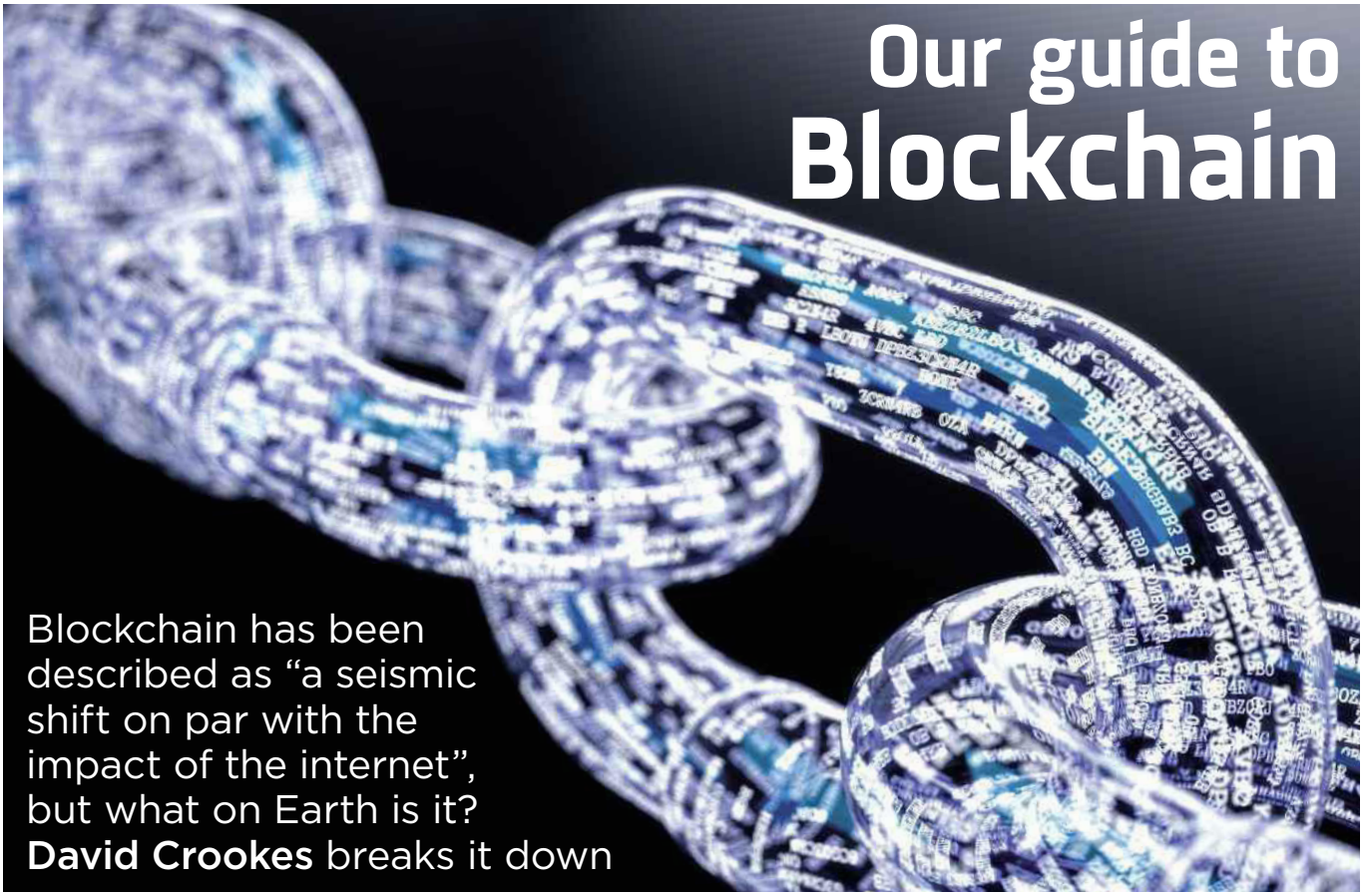
WIN 1 OF 3
MAGIX Movie Edit Pro Premium

WORTH £99.99 EACH

The 2018 version of MAGIX's video-editing software uses hardware acceleration to process videos five times faster than before. The Premium version contains HitFilm Movie Essentials, which includes 15 high-quality effects used in professional film production. To enter, email your address to webusercomp@dennis.co.uk with 'Premium' in the subject line. For more information on MAGIX products, follow @MAGIX_INT on Twitter.

FAQ

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



Our guide to Blockchain

Blockchain has been described as "a seismic shift on par with the impact of the internet", but what on Earth is it? **David Crookes** breaks it down

What is it?

Well, that's a question and a half. Blockchain is being heralded as the next game-changer in technology, but conveying exactly what it entails is no mean feat. In the simplest of terms, blockchains are a method of digital bookkeeping that chains together a continuously growing list of transactions in secure batches of data known as blocks. They are the protocol upon which cryptocurrency services such as Bitcoin are built.

Ah, Bitcoin. Can you explain that one again?

Sure. Bitcoin (bitcoin.org) is virtual money that can be transferred direct from one person to another without third-party interference from a bank or central authority. It is secured by military-grade cryptography and lets you send and receive payments without revealing your identity. Some people confuse Bitcoin with blockchain but this isn't quite correct because the blockchain is the network on which Bitcoin relies. It just so happens that Bitcoin has become the first useful application for such technology. We'll see more uses soon.

Bitcoin uses blockchain technology, but it isn't the same as blockchain

How do blockchains work then?

Basically, whenever a change is made to a database, it is detailed in a block. When another change is made, another block is created and this is added – or chained – to the previous one. This continues block after block after block, but here's the thing: for a block to be added, it must be verified by all the previous blocks. If, for some reason, there appears to be something amiss, then the block will be rendered invalid and it won't be added – this is crucial for the overall security of the blockchain.

So each block in a chain could contain a transaction?

Exactly. Just think of a blockchain as a publicly available shared ledger of records, which anyone can browse and verify. The blocks are like pages of the most recent transactions to have taken place and the verification process involves everyone with access to the chain (or ledger). Only if everyone agrees will a new page be added to the back of the ledger, otherwise it will be rendered invalid and scrapped.

Blockchain is like a ledger to which lots of people contribute

But how are the blocks verified?

Blockchains use a technology called hashing (see box, right), which means every block is assigned a unique number. This number is called a hash and is a way of boiling down the hefty amount of data contained in each block into a smaller chunk for the purpose of sorting, referencing and comparing. But here's the clever bit. The hash for a new block

has the hash of the previous block embedded in it. This ensures that each block in the chain is inextricably linked. If there is a break in the chain, it will be easy to identify.

Could the chain be broken?

Yes, but it would be very difficult to do so and not just because the whole chain is protected by complex cryptography. Let's say you were able to target a block in the centre of a Bitcoin chain that stated you had bought one coin. If you decided to falsely alter the information to say that you purchased 10 Bitcoins, an entirely new hash would be created. This would place it out of sync with the blocks either side, so the system as a whole would not validate the change. The only way to force that block into the chain and not invalidate the whole lot would be to create a new chain from scratch. Fraudsters would be wasting their time and energy even trying.

You can't break a blockchain to increase the value of your Bitcoin stack

So why is it such a game changer?

It primarily comes down to the way the blockchain is stored. Rather than follow, say, traditional banks, which store databases on their own servers, the blocks of a blockchain are scattered across hundreds of thousands of computers and there is no master copy. This makes it difficult to hack because there is no single go-to location. More importantly, it means the database is not under any central, sole authority.

What's so good about that?

Because one organisation or person is not able to keep hold of all the records, the blockchain is entirely verifiable. Anyone can check transactions and hashes going back to the start and it will always remain an immutable record. So everything in the blockchain is permanent, unalterable and accessible to anyone on the internet. Indeed, you can actually download the Bitcoin blockchain and view transactions in near real-time (bitcoin.org/en/download) – just be warned that it's more than 145GB in size!

Download the Bitcoin blockchain to see transactions in real time

Doesn't that compromise my privacy?

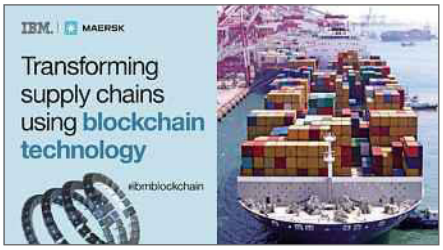
Privacy is definitely a concern. Many individuals and companies are wary of publishing their information to what is, in effect, a public database that can be read without restrictions. Furthermore, since there is no central controlling authority, there are certain issues of trust. But the records are at least tamper-proof and private keys are issued to users to prevent fake transactions. Just don't lose them – otherwise you can wave goodbye to your Bitcoins!

What else can blockchain be used for?

Anything to do with transactional data that can't be altered after it has been created. People have looked into using the technology for the processing of land titles, or to track and trade stocks and bonds. Shipping giant Maersk plans to use blockchain to track flowers and machine parts on its cargo ships, while Dubai is seeking to trace goods through its ports via blockchain. Six big banks including Barclays and HSBC hope to let financial markets settle transactions using a digital-cash equivalent called the Utility Settlement Coin.

Could blockchain be used for illegal activities?

Sadly, yes. Criminals already use virtual currencies to obscure their identities during transactions and to funnel their finances around the world. Former Dark-Web operator Ross Ulbricht ran a hidden website called Silk Road that sold illegal drugs to people using Bitcoin. It shows that many people are seeking to take advantage of the way blockchain technology works.



Shipping company Maesrk is planning to use blockchain to track its cargo

And could it affect our economy?

Possibly. Imagine that a blockchain-based virtual currency replaced national currencies in the global financial system. Governments would lose control – they wouldn't be able to devalue their currencies in a meaningful way. This is a long way off, however, and certainly not something to worry about right now.

Could this black cat be using a blockchain to trade mice on the Dark Web?

HOW IS A HASH CREATED AND USED?

Blockchains use a system called hashing, which creates a unique value for every set of data. In each case, however, the length of the hash is the same. So, let's say we had the sentence "i love web user" in a block. This could result in a seven-figure hash of 7fgs637.

But now let's say the following block contained a second sentence: "i love web user a lot". Again, we could get a seven-figure hash (perhaps 8f6e67a). This time, however, the hash for the previous block has formed part of the data used in generating the second. This is very important.

Why? Well, if you subsequently try to change the first block – maybe by adding capitals ("I Love Web User"), an entirely new hash would be formed for it. That would have a knock-on effect on the second hash, rendering it invalid. If there are third, fourth, fifth hashes and so on, then they'd be affected too, all along the line.

To rectify the problem, you'd need to go back to where the problem began – at the stage where the capitals were added. Of course, the complications are somewhat deeper, but the intrinsic linking of the blocks aids security.

STOP USING WINDOWS

COVER FEATURE

Windows isn't the only operating system for your computer – and it may not even be the best. **Wayne Williams** explains how and why to ditch Microsoft's OS for an alternative option

Windows is by far the most popular operating system in the world, but that doesn't mean it's the best option for your personal computing needs. And while Windows 10 is generally reliable, Microsoft has been accused of taking liberties with users' privacy ever since its launch in 2015 – only last month, the Dutch Data Protection Authority found it guilty of multiple privacy violations.

On top of that, users have reported update problems, and the recent Fall Creators Update disappointingly failed to bring any interesting new additions to the table (well, Desktop). As of next year, you won't even be able to get Windows 10 for free via the assistive upgrade, after Microsoft announced it will close the loophole on 31 December (bit.ly/assist436).

Fortunately, there are alternatives to Windows that are constantly improving and adding new features, and you can run them on your current PC without having to upgrade your hardware. In this feature, we explain how to install and make the most of Chrome OS, Linux and MacOS, and offer reasons why you might (and might not) decide to use them instead of Windows.

We're not suggesting you abandon Windows for good, so there's no need to regret splashing out on that new PC or laptop. With our help, however, you can try a different operating system for size – to see for yourself what advantages it offers.

SWITCH TO CHROME OS

Why Chrome OS is better than Windows:

Windows' size and drain on system resources make it a bit of a bloated beast, and the OS needs regular maintenance. So if you're not using your computer for high-end tasks, such as playing 3D games and intensive video editing, it can seem like overkill – especially now that we download fewer programs than ever. If, like many people, you only use your computer to browse the web, check your email and social-media accounts, stream music and write documents in a word processor, Chrome OS is likely to provide everything you need with less hassle.

Given that we perform so many of our computing tasks online these days, it makes sense to use a modern operating system that's designed purely for use on the web – which is exactly the aim of Google's OS. Unlike Windows, it's very lightweight, which means it starts quickly and runs beautifully, even if you run it on an older computer with a lower specification.

Once you're used to working in the cloud and storing all your personal files there, you might find it difficult to switch back to Windows. The ability to access everything from anywhere (as long as you're online) is refreshingly convenient.

What you should be aware of:

Chrome OS runs on Chromebooks and Chromeboxes, which are lightweight, and (usually) inexpensive devices. You need an internet connection to use Chrome OS, but don't let that put you off. Fast, reliable Wi-Fi is everywhere these days, so it's rare that you'll be stuck without a working internet connection for long. Even if you can't find a wireless hotspot, you can always turn your mobile phone into a portable one, solving the problem temporarily.

The Google Pixelbook is the newest device to run ChromeOS

You have to use web apps with Chrome OS, which means you won't be able to install your favourite Desktop programs, such as Photoshop Elements and Microsoft Office. However, you can use online versions or web-based alternatives that work just as well. There are also plenty of Chrome apps that you can use offline – see page 43 for five of our favourites.

Google doesn't make Chrome OS available for download (otherwise people wouldn't buy its Chromebooks), but you can get around this limitation by installing Chromium OS, the open-source operating system it's based on.

How to switch to Chrome OS:

To use the official Chrome OS, you need a Chromebook – take a look at our three recommendations on page 42. If you're happy to settle for Chromium OS (which is close enough), you have two main choices. The oddly named website ArnoldTheBats World of Whimsy (chromium.arnoldthebat.co.uk) hosts daily, weekly and special builds of the operating system. There are three different types: CARMOS, for devices powered by ARM processors; Camd64OS for 64-bit systems; and Cx86OS for 32-bit systems.

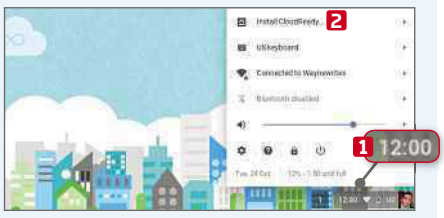
The other option is to install CloudReady: Home Edition (www.neverware.com), which is essentially a version of Chromium OS designed to run on home PCs. The installation process is fairly straightforward but you need to be able to boot into a USB flash drive. Most PCs are set to do this automatically but if yours isn't, watch the screen when you first turn on your system and follow the instructions for which key you need to press to enter

Arnold the Bat offers special builds of Chromium OS for PCs

MINI WORKSHOP | Install CloudReady (Chromium OS) on your PC

1 Go to bit.ly/cr436 and click to download USB Maker for Windows 7 and newer. Run it and choose the version of CloudReady you need 1 and the drive you want to install it on. You should use an 8GB or 16GB model – larger versions aren't ideal, and SanDisk drives are not recommended.

2 The creation process shouldn't take long. Once it has finished, plug the USB drive into the computer you want to use with CloudReady and power it up or reboot it. The computer should recognise the drive and run the CloudReady installer. When prompted, select your language 1 and keyboard. 2



3 Click the Let's Go button, select your network and sign in with your Google account details. Next, click the clock in the bottom-right corner 1 and select Install CloudReady 2 from the menu. Read the information, then click the Install CloudReady button. You can use it as the computer's only OS or install it alongside Windows.

CloudReady lets you download Chromium OS to a USB drive

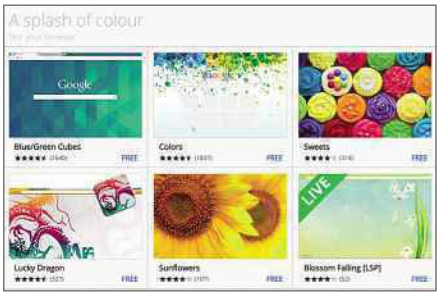
the settings. It's usually F12 or Delete. Once you're in the BIOS or UEFI screen, look for a boot-order menu and set it so that the USB flash drive is first to boot.

When you install CloudReady, you can choose whether to use it as your only OS or install it as a dual-boot system alongside Windows. If you opt for the latter, you can set which of the two operating systems you want to launch when you switch on your PC. See our Mini Workshop on page 41 to find out how to get started with CloudReady.

EXPERT TIPS FOR USING CHROME OS

Customise how Chrome OS looks

As with Windows, you can customise



the Chrome OS Desktop's colour scheme and background. To change the Desktop wallpaper, find an image you like on the web and download it (if you need some inspiration, search for 'desktop wallpaper' to see thousands of images). Close your browser, right-click the Desktop and select 'Set wallpaper'. Click the plus button, then click 'Choose file'. Select the Downloads folder and double-click the image you want to use. To position your image, choose Centre, Centre Cropped or Stretched, depending on which looks best.

To apply a theme to Chrome OS, go to Settings and, in the Appearance section, click Themes. This opens the Chrome Web Store and displays the available themes. Browse them and when you find one you like, select it and click the Install button.

Perform calculations and conversions

The search box in the Chrome OS launcher (the equivalent of the Windows Start menu) does more than just find information. For example, you can also use it to perform calculations. Click the search box and type `23.78 * 54.12`. Chrome opens to show the answer and also displays a calculator keyboard in case you want to use the answer to do further calculations.

You can also use the search box to convert quantities from one unit to another. For example, it can convert miles to kilometres, pounds (in weight) to kilograms, and pounds sterling to US dollars using the current exchange rate. Enter the conversion you want, such as '$50 in pounds', '1 light year in miles' or '3 tablespoons in millilitres'. Chrome OS can convert almost anything into another corresponding unit.

BEST NEW CHROMEBOOKS TO BUY

Google Pixelbook

£999 from bit.ly/pixel436

There's no question that the Google Pixelbook is expensive, but its gorgeous two-tone design, backlit keyboard, rotatable screen and super-thin (10mm), lightweight (1kg) build make it a pleasure to use. Its specs are more in keeping with its Windows 10 rivals, too, with a choice of Intel Core i5 or Core i7 processor; 128GB, 256GB or 512GB of storage; and up to 16GB of RAM. It's the first laptop to come with Google Assistant built in, allowing you to perform everyday actions using your voice. It may be pricey, but it's now the Chromebook that sets the standard.

Acer Chromebook R11

£240 from bit.ly/acerr436

The Acer Chromebook R11 is an incredibly versatile device at a fantastic price. With just 2GB of RAM (and 16GB of drive space), it's by no means the most powerful Chromebook available, but it's more than good enough for browsing the web and working with apps. The touchscreen is versatile, too, because it allows you to scroll through web pages and press buttons with your fingers rather than using the touchpad. The option of flipping it into tablet mode is a valuable extra, although the 11in screen is relatively small and its battery lasted less than nine hours in our tests.

HP Chromebook 14 G4

£325 from bit.ly/hpchrome436

HP's latest Chromebook is very well constructed. It weighs just over 1kg and has more memory (4GB) and a faster processor (1.83GHz) than many other models at this price. It's also very easy to use, with a large touchpad and three USB ports for connecting peripherals, but its main selling point is its generous 14in screen, which is even larger than the Google Pixelbook's. What's more, unlike most Windows laptops, this Chromebook is extremely quiet and offers a decent battery life, as well as 32GB of built-in storage plus an extra 100GB from Google Drive.

Switch between windows easily

Mac users will be familiar with the useful Mission Control feature, which lets you see all your open windows at once. Chrome OS has a similar feature called Overview. To use it, press the F5 key (if you're running a version of Chromium OS or CloudReady on a PC) or swipe down with three fingers from the top of a trackpad or touchscreen. Select a window to switch to it.

Control Chrome OS using shortcuts

Google's Chrome OS makes excellent use of keyboard shortcuts, but there are far too many to remember. Press Ctrl+Alt+? to bring up an onscreen keyboard. If you then press the Shift, Ctrl and Alt keys in various combinations, the available keyboard shortcuts will appear on the keys.

Move or hide the shelf

Chrome OS has a 'shelf' bar at the bottom of the screen that's similar to the Windows taskbar, containing a search button, app launcher and icons for frequently used apps. Right-click an empty part of the Desktop and a menu appears that lets you position the shelf to the left, right or bottom of the screen. You can also set it to hide automatically.

Perform a barrel roll

This isn't particularly useful, but it's fun. Open a few windows in Chrome OS, then hold Ctrl+Alt+Shift+Reload (or F3) and the screen will perform a barrel roll. The same happens if you type `do a barrel roll` into the browser.

Redeem special offers

If you buy a Chromebook, you can enjoy special offers for services including Google Play, Google Play Music and Google Drive. Just go to bit.ly/cboffers436 and redeem any offers that grab your attention. At the time of writing, these included 90 days of unlimited free music streaming, 100GB of free storage and a £20 discount on a Samsung Chromebook.

BEST CHROME OS APPS TO USE OFFLINE

Polarr Photo Editor

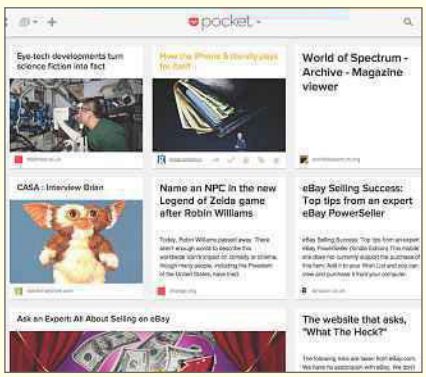
bit.ly/polarr436

Polarr is undoubtedly the best image-editing app for Chrome OS, with many of the advanced features offered by traditional Desktop software. It includes in-depth tutorials to help you get to grips with its many tools, and records every edit you make in case you need to undo any. Offline highlights include face detection; clone, masking and brushing tools; more than 100 filters; and the ability to add watermarks.

Pocket

bit.ly/pocket436

The Chrome app for the advanced bookmarking tool pulls together all your online articles, videos, images and links, so you can read and view them offline. Pocket works within its own app window, presenting your entries in a list or tile view and giving you a snapshot of their content. Naturally, you need to go online to save the content, but you can tag, search and 'favourite' items offline, and archive or delete those you've finished with.



History Eraser App

bit.ly/history436

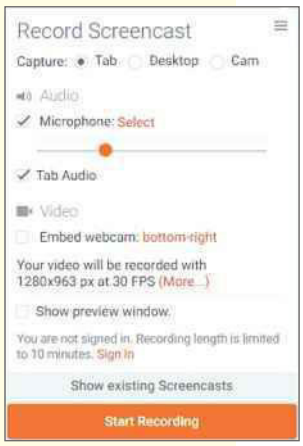
History Eraser protects your privacy by performing basic maintenance such as clearing Chrome's history, emptying the cache, clearing saved passwords and removing cookies. It works offline in its own window and lets you specify time frames for

deleting items – for example, the last four days. Best of all, there are backup and restore options in case you delete something accidentally.

Screencastify

bit.ly/screen436

Although you can't install traditional video-capture software in Chrome OS, you can use the brilliant Screencastify to record what's playing in a tab, on your Desktop or via your webcam. Screencastify supports offline recording (up to 10 minutes), offers a selection of drawing tools for annotating your videos and lets you save recordings locally or in Google Drive, or upload them to YouTube when you reconnect to the internet.



Solitaire

bit.ly/solitaire436

This offline version of the card game gives you the choice of nine Solitaire variants including Klondike, Forty Thieves, Pyramid and three variations of Spider. Each game offers useful options to undo unlimited moves; hints for when you get stuck; and the option to restart a game with the same cards. It certainly beats the ad-stuffed Windows 10 app!

Why Linux is better than Windows:

Windows comes in a variety of paid-for editions (such as Windows 7 and Windows 10), each of which offers several different versions (Home, Pro and, in the case of Windows 10, S). The one you opt for will depend on your budget and computing needs, but if you're buying a new PC, it will almost certainly come with Windows 10 preinstalled, and there are plenty of people yet to be convinced about the benefits of Microsoft's latest OS.

With Linux, there are a lot of different operating systems – or 'distros' – to pick from and they're all free. Depending on what you intend to do with your OS, you'll be able to find a distro that's perfect for your needs. For example, Ubuntu (www.ubuntu.com) and Mint (linuxmint.com) are ideal if you're switching from Windows; Elementary OS (elementary.io) is a good choice if you're accustomed to using a Mac; and LXLE (www.lxle.net) is perfect for anyone who wants to run an OS on an old or slow system.

The beauty of Linux operating systems is that you don't have to just pick one and stick with it. You can run any OS directly from a DVD or USB flash drive, try it for as long as you like and then install it if you decide it's for you.

Another benefit is that, although Linux operating systems are free, you're not necessarily forced into updating to the latest version (as you are with Windows 10). Opt for an LTS (Long Term Support) version and you'll receive five years of free security and maintenance updates, which means your PC won't be left vulnerable to malware threats and performance problems but you can still stick with an OS you are familiar with and not have unwanted 'improvements' foisted on you.

Linux Mint is the ideal distro for PC users switching from Windows

What you should be aware of:

Linux isn't actually an operating system, it's a kernel – the central component that operating systems are built around (Windows is built around a Windows kernel). There's a chance that you may already be using Linux without realising – Android, Google's mobile operating system, is actually based around it.

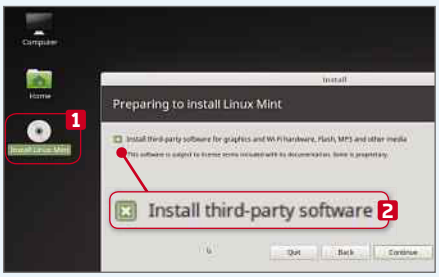
Switching from Windows to Linux isn't that difficult – a lot of popular distros, including Ubuntu and Mint, look and work in much the same way as Microsoft's OS. However, performing some operations, such as installing software and making major changes, involves a bit of a learning curve.

You can run Windows software on Linux, but you first have to install the WINE (www.winehq.org) compatibility layer. WINE (Wine Is Not an Emulator) can run most Windows programs flawlessly, exactly as if they were running on Microsoft's OS. You can also use WINE as the default installer for your Windows programs, which saves you the hassle of having to configure them.

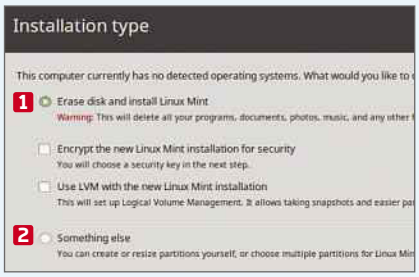
Another thing to be aware of is that

MINI WORKSHOP | How to install Linux Mint on your PC

1 Download the ISO image file from linuxmint.com, write it to a disc or USB flash drive, and boot from it. You'll be greeted by the Desktop and can start using the OS without making any permanent changes to your computer. It works like Windows – click the Mint button 1 to open the equivalent of the Windows Start menu.

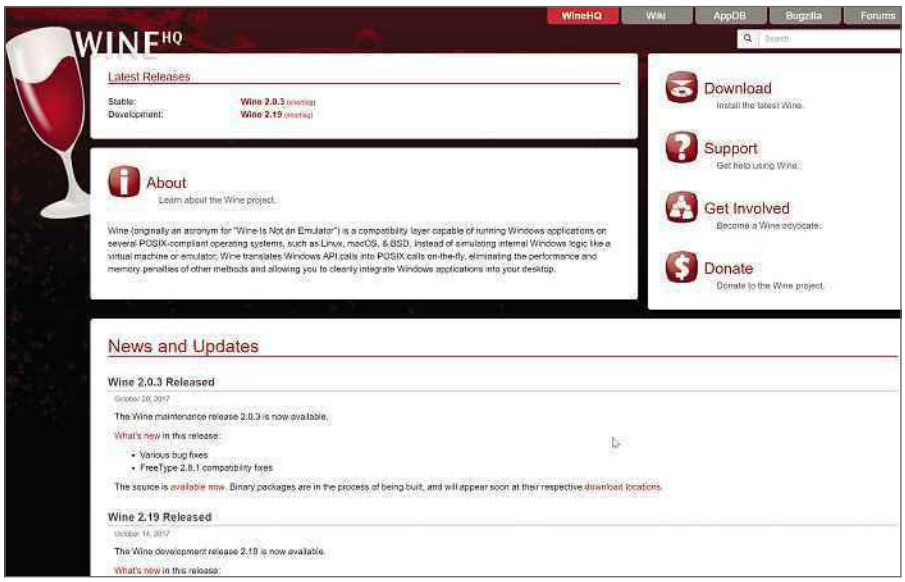


2 Try Mint out for as long as you like. Once you're ready to install the OS, double-click the Install Linux Mint icon on the Desktop. 1 A wizard will open. Select your language and click Continue. Tick the box to allow the installer to fetch third-party software for graphics and Wi-Fi. 2



3 Click the Continue button. If you're installing Mint on a clean hard drive, select 'Erase disk and install Linux Mint'. 1 If you want to create or resize a partition for the OS first, tick 'Something else' 2 instead. While Mint is installing, set your location and keyboard layout, and enter your details.

COVER FEATURE



The WINE compatibility layer lets you run Windows software in Linux

Linux has different Desktop environments (interfaces) to choose from, including Cinnamon, Unity, GNOME and MATE. So once you've decided which operating system you want, you have another choice to make – which may be one step too many for some people. Linux Mint, for example, is available in 32- and 64-bit variations, and with Cinnamon, KDE, MATE and Xfce Desktop environments.

How to switch to Linux:

Simply decide which Linux operating system you want, then download it. You can then write it to a DVD or USB flash drive, boot into it, try it out and then install it. You can dual-boot the distro alongside Windows if you want, which will allow you to choose which operating system you prefer to use at boot up.

To do this, install Windows first, then create a partition for installing your Linux OS. Boot from your live Linux disc or flash drive and select the install option. The 'Installation type' screen should show you an option to 'Install Linux OS alongside Windows' (the actual wording will vary depending on the operating system).

Ubuntu has a familiar appearance for anyone used to Windows

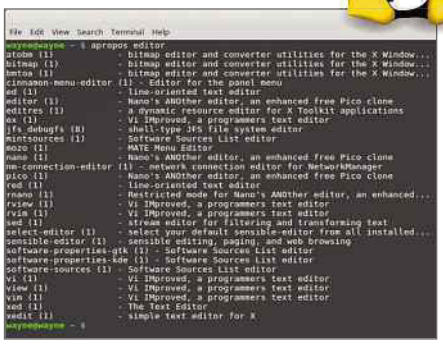
EXPERT TIPS FOR USING LINUX DISTROS

Learn Linux commands

You can use the main Linux interface for pretty much everything, but typing commands into the text-based Terminal window saves a lot of time. To master all the available commands, we recommend using the 'apropos' command with a description. Typing `apropos editor`, for example, will show a list of all the commands that relate to any editing programs on your system.

Make the most of Sudo

Of all the commands you can use in Linux, Sudo ('super user do') is the one you'll want to be most familiar with. It essentially runs any command that follows with elevated privileges – a bit like running something in administrator mode in Windows. There are some switches you can use with it, such as `sudo –b`, which runs the command in the background, and `sudo su`, which makes you the root user ('su' stands for switch user).



You can use Sudo to quickly install applications. For example, typing `sudo apt-get install gimp` installs the popular image editor Gimp.

Auto-hide the Dock in Ubuntu

By default, the Dock remains visible on the left side of the screen at all times. If you don't like it taking up space, you can hide or unhide the launcher.

In the latest version of Ubuntu, click the down arrow at the top right, click the Settings button and select Dock on the left, then choose to Auto-hide the Dock. You can also change its position by moving it to another screen edge.

TERMINAL KEYBOARD SHORTCUTS

Make your actions more efficient in Terminal – Linux's version of the Windows Command Prompt – by memorising these handy shortcuts:

ctrl + A	Moves the cursor to the start of the line.
ctrl + E	Moves the cursor to the end of the line.
alt + F	Jumps to the next space.
alt + B	Jumps back to the previous space.
ctrl + U	Deletes all text before the cursor.
ctrl + K	Deletes all text after the cursor (to the end of the line).
alt + Backspace	Alt+Backspace: Deletes the previous word

SWITCH TO MacOS

Why MacOS is better than Windows:

The Mac interface is renowned for being very intuitive to use, with its customisable dock that contains shortcuts to all your favourite programs and folders. Also, MacOS and iOS work together beautifully – you can start performing an action on one device, then switch to another and pick up where you left off. If you own an iPhone or iPad, you can access pretty much anything on any of your Apple devices. When you copy something on your iPhone – provided you have Bluetooth turned on and are logged into iCloud – you can paste the item directly into a program on your Mac.

The apps that come bundled with MacOS are (arguably) better than their Windows equivalents, and Siri is at least on a par with Cortana in the battle of the digital assistants.

Furthermore, as we've often reported, Windows 10 spies on its users, and comes with advertising (or 'suggestions', tips and promotions, as Microsoft calls them) throughout. MacOS doesn't force these invasions of privacy and space on its users.

You can turn your PC into a 'hackintosh', but Apple won't like it

MacOS has a simpler and more attractive interface than Windows

What you should be aware of:

You really need an Apple computer to run MacOS – that could be a MacBook or an iMac, iMac Pro or Mac Mini – and they are far from cheap. There is a way around this restriction, and that's to build a so-called 'hackintosh' – non-Apple hardware that's been 'hacked' to let it run the Mac operating system. However, it's important to know that Apple frowns on hackintoshes (not least because it provides a way for people to avoid buying Apple hardware) and the licence agreement that comes with MacOS specifies that you're not allowed to install it on non-Apple hardware. So if you do, Apple could potentially sue you for copyright infringement and breach of contract. It won't, of course, but you should still be aware of the potential risks.

How to switch to MacOS:

The quickest and easiest method of switching to MacOS is to – you guessed it – buy an Apple computer that comes with the operating system preinstalled. If you can't afford to do that, or you decide to go down the hackintosh route, you'll first need a copy of the OS, which you'll have to get by using an actual Mac and downloading it from the Mac App Store. Once you have that, you'll need to make changes to your computer's BIOS/UEFI, install the OS, install the required drivers and update your device. It's a long process that may send you crying back to Windows.

You can find an 'Always up-to-date' guide at bit.ly/hackintosh436 that tells

Buying an Apple computer is the best way to experience MacOS

RUN ANDROID APPS ON YOUR PC

There are lots of fantastic games and apps to be found on Google Play – a much better selection than what's on offer in the Windows Store. Running Android apps in Windows, rather than on a phone or tablet, is actually very straightforward: you just need an Android emulator such as MEmu (www.memuplay.com) or Bluestacks (www.bluestacks.com).

These free programs emulate Google's mobile operating system on your PC monitor and let you run virtually any Android app you like. You can either install apps that are available on Google Play or sideload ones from other sources. The apps can be viewed in a window or full-screen, and controlled using your mouse rather than your finger (unless you have a touchscreen). You can also sync them with your Android device.

you everything you need to know about how to create a hackintosh, and it's very easy to follow.

EXPERT TIPS FOR USING MACOS

Optimise your file storage

The latest version of MacOS, High Sierra, offers useful options for optimising your storage. To access them, click the Apple menu in the top-left corner of your screen and choose About This Mac. You can set your Mac to keep photos, music and other downloads on your Mac only until storage is low, and then hive it off onto iCloud Drive. This is a big help for anyone with a small drive – including those with only 128GB of space.

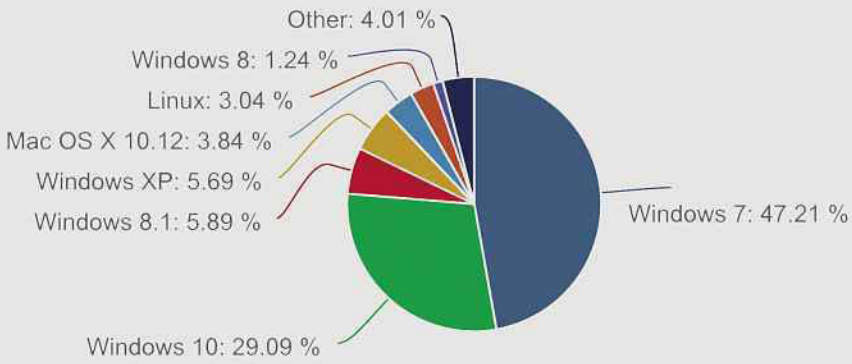
Another option designed to save space is the ability to optimise all storage on your Mac. Open iCloud Drive options and you can set up iCloud Drive to keep all your files on your Mac until it starts to fill up. Sierra will then start to move files you haven't used for a long time online, easing the load on your local storage.

Manage files in a tabbed window

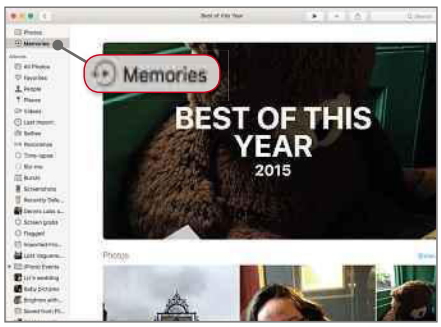
The MacOS file manager, Finder, is now available in every application. This means that rather than having multiple windows open, you can now keep things tidy by putting all your open documents in a single tabbed window instead. The best thing about this feature is that it will work with any app that uses standard windows, without you having to make any changes.

WHAT'S THE MOST POPULAR OS?

As you can see from this pie chart, Windows dominates PCs worldwide, with rival operating systems claiming less than 11% between them



Source: NetMarketShare (www.netmarketshare.com)



Relive your memories as slideshows

One of the most interesting tools in High Sierra is Memories, which is a new feature in the Photos app. As with the version in iOS 10 – and a similar tool in Google Photos – it carries out smart image analysis to group your pictures together into 'memories', based on their location, subjects' faces and more. The idea is to resurface your best pictures, such as a set from last year's camping holiday in France or all the photos featuring a particular person.

You can view your memories as a slideshow by double-clicking a set, clicking the Play button and choosing Play Slideshow. Slideshows can also be customised using the theme and music of your choice. ■

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Best New Tab pages for Chome

New Tab pages can make your browsing experience faster and more productive. **Edward Munn** tests six of the best

Momentum | bit.ly/momentum436 | ★★★★☆

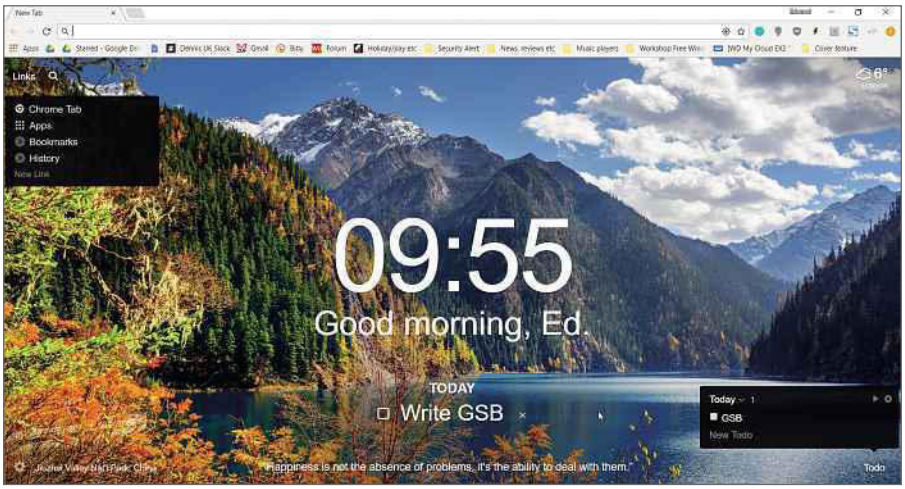
FEATURES ★★★★☆ PERFORMANCE ★★★★☆ EASE OF USE ★★★★★

WebUser GOLD AWARD

What we liked:

Momentum won the Bronze Award in our last round up of New Tab pages but it's since improved while its rivals have remained largely unchanged. It assumes that you're happy overall with Chrome's built-in tools for managing your history, bookmarks and extensions, and uses the New Tab page to offer a range of extra productivity tools. Its interface is simple and intuitive, featuring a prominent clock to ensure you never lose track of time. Below this, there's a box to set your 'focus' for the day, along with a simple to-do list – split into Today and Inbox – that you can use to add reminders.

Momentum aims to inspire you with quotes and wallpapers that change daily, and you can also enable a tool that shows you what percentage of your working day you've completed by double-clicking the clock. The problem of not being able to set your working hours has thankfully been fixed, and with it the developers have added a new 'Balance' option that lets you automatically disable any productivity tools outside of your working day. This is great if you want to be able to switch on your PC in the evening without being tormented by upcoming tasks.



There's a Links button that lets you quickly access your Chrome apps, a standard Chrome tab or any other custom shortcuts you choose to add. And last but not least, the extension shows the weather forecast for the week, without you needing to leave the page. Your focus, lists and all other settings are synced between all your computers when you log in with the same Momentum account.

How it can be improved:

Our only gripe with Momentum is that some of its best features – including integration with Todoist and the option to add longer notes – are only available when you upgrade to Momentum Plus for a far-too-expensive $29.95 (approximately £23) a year.

OUR VERDICT

Momentum manages to fit an impressive number of useful tools into a page that's both attractive and simple to use. If you're looking to be more productive, this add-on is a great starting point.

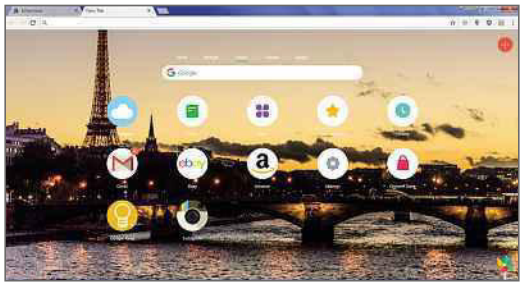
Infinity | bit.ly/infinity436 | ★★★★☆

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

WebUser SILVER AWARD

What we liked:

If you're not a fan of Chrome's default bookmarks bar, Infinity offers an excellent alternative. Its simple, intuitive grid of app shortcuts and bookmarks (along with a Google search bar) make it easier than ever to find your favourite websites and services.



The New Tab page is fully customisable, so you can rearrange, add and remove shortcuts, and even choose the number of icons to display. By default, it includes apps for History, Bookmarks and Apps, so you don't need to use Chrome's built-in tools. You can add more apps by clicking the '+' icon and searching Infinity's library or save any web page by clicking the Infinity icon (in the toolbar) when you're viewing it.

Infinity's free cloud syncing means the launcher will look the same on all your PCs. You can upload your own wallpaper and add additional search engines. One standout feature is that its icons can display live info, including the current weather and Gmail's unread count.

How it can be improved:

Infinity's launcher-style interface is a little dull and it doesn't let you see to-do lists and the like at a glance. It also takes a little longer to set up than our Gold Award winner.

OUR VERDICT

Infinity provides the tools to add a fully customisable launcher to your New Tab page. It's fast, free and easy to use, making it an excellent choice for anyone who wants more than Chrome's default.

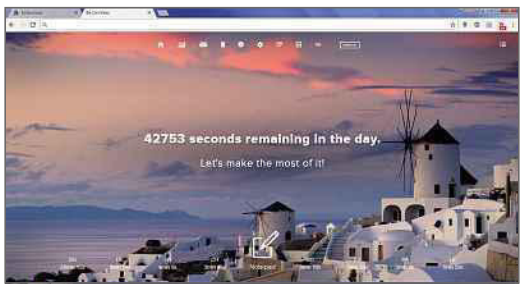
Be Limitless | bit.ly/limitless436 | ★★★★☆

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

WebUser BRONZE AWARD

What we liked:

If you worry that you're easily distracted online, Be Limitless could help you get more done. It's a newcomer to Chrome and, like our Gold Award winner, puts a range of handy tools at your fingertips, letting you set a goal for the day, create to-do lists and notes, and even send emails from your Google account. Similar to Momentum, it also shows a new quote and wallpaper every day to inspire you.



The extension's standout feature is that it provides detailed insights into how you've been using the web. Every day, it keeps track of how much time you've spent on social media and email (you have to tell it which categories some sites belong to), and you can add your own labels such as 'work' or 'shopping'. What's more, it lets you explicitly specify which sites are productive, so it can give you an overall productivity score for the day.

How it can be improved:

Be Limitless has a more confusing interface than our other award winners. To see long-term analytics, you have to pay £1.29 to upgrade to the Pro version of the extension.

OUR VERDICT

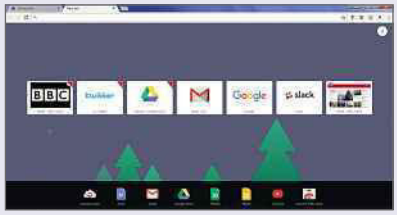
There's no need to guess how much time you've wasted on the web with Be Limitless, because it tells you! However, if tracking your productivity isn't of interest to you, you're better off with one of our other award winners.

BEST OF THE REST

Speed Dial 2

bit.ly/speeddial436

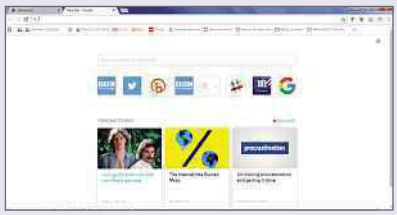
Speed Dial 2 is an excellent launcher-style New Tab page that provides instant access to your most visited pages, bookmarks and history. It's super fast and there are loads of customisation options, but it lacks the productivity tools of our other award winners, and you need to pay a one-off fee of $4.99 (around £4) to enable syncing between devices.



Save to Pocket

bit.ly/pocketc436

Trending stories are put on every New Tab page when you install Save to Pocket, and you can open them there and then, or opt to save them for reading later on your PC, phone or tablet with a single click. The extension can also display your most visited sites and bookmarks, but otherwise it has no standout features and we found it distracting rather than helping us focus on our work.



Beautab

bit.ly/beautab436

Beautab won the Gold Award in our last round up but, unfortunately, it's not been updated since, which makes us worry that it may no longer be supported. If that doesn't put you off, then it's well worth installing because it includes an excellent range of productivity features including daily goals, a to-do list, countdown timer and a note-taking tool.

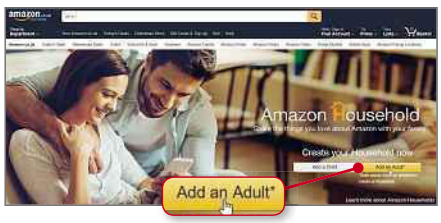
Share your accounts with friends and family

The cost of signing up to lots of different online services soon mounts up. **Edward Munn** explains how to save time, money and hassle by sharing your accounts with other people

Share your Amazon Prime benefits

If one of your household is already an Amazon Prime subscriber, you don't have to log into their account to enjoy Prime benefits such as free next-day delivery and Prime Video streaming – Amazon lets you share a Prime membership between two accounts using its Amazon Household option. To set this up, visit www.amazon.co.uk/myh/households on the account with Prime membership and select 'Add an Adult'. Log in with the secondary account and you can start sharing Prime benefits across the two accounts at no additional cost.

Prime benefits can't be shared with children's accounts, but clicking 'Add a Child' from the Household page lets you share digital content with your children and manage the parental controls on their Amazon devices.



Amazon Household lets you share your Prime benefits with one other adult

Add multiple profiles to your Netflix account

You can stream Netflix on more than one device at a time, as long as you've signed up to the right plan. Currently, the Standard plan (which costs £7.99 per month) entitles you to watch Netflix content on up to two devices at once, while the Premium plan (£9.99 per month) lets you stream to four different screens simultaneously.

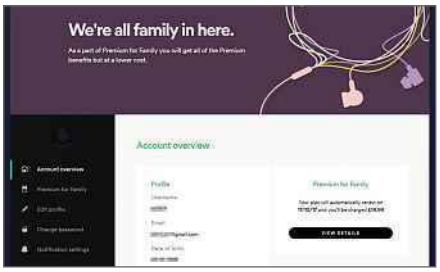
Irrespective of which plan you're signed up to, you can also add up to five different profiles to every Netflix account, which allows you and your family to have your own personalised TV recommendations and recently watched lists. To add a profile, click the account name in the top-right corner and select Manage Profiles.

Netflix's Premium plan lets you stream content to four devices at the same time

Note that all users must still log in using the account holder's credentials. You can then select your own profile after launching the Netfix app or site.

Share Spotify Premium with five people

Spotify Premium for Family lets you share Spotify Premium membership between five friends and family members, provided they all reside at your address. Unlike some of the services in this feature, Spotify lets everyone keep their existing login details, so you can keep your music libraries and playlists totally separate. At £14.99, it's more expensive than a normal Premium membership (£9.99), but it's still a lot cheaper than buying six separate subscriptions.

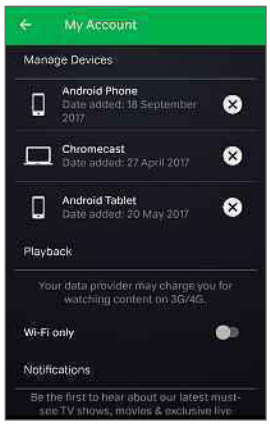


Spotify Premium for Family costs from £2.50 per person per month

To set up a Family membership, visit www.spotify.com/uk/family, then click Get Started. Once you've set up Spotify Premium for Family, you can manage the other accounts at any time by opening your Account page and selecting 'Premium for Family'. Clicking an empty slot lets you invite someone by emailing them or copying a link and, if they're already a Spotify Premium subscriber, they will simply be moved to the Spotify Premium for Family plan at the end of their current billing period.

Stream Now TV shows to four devices

Now TV lets you register up to four devices at any time, but the catch is that you can only watch on two simultaneously. What's more, once you've registered four devices, you can only make one change to your devices list every month. This means that even if you remove more than one device, you can still only add one new one each calendar month.

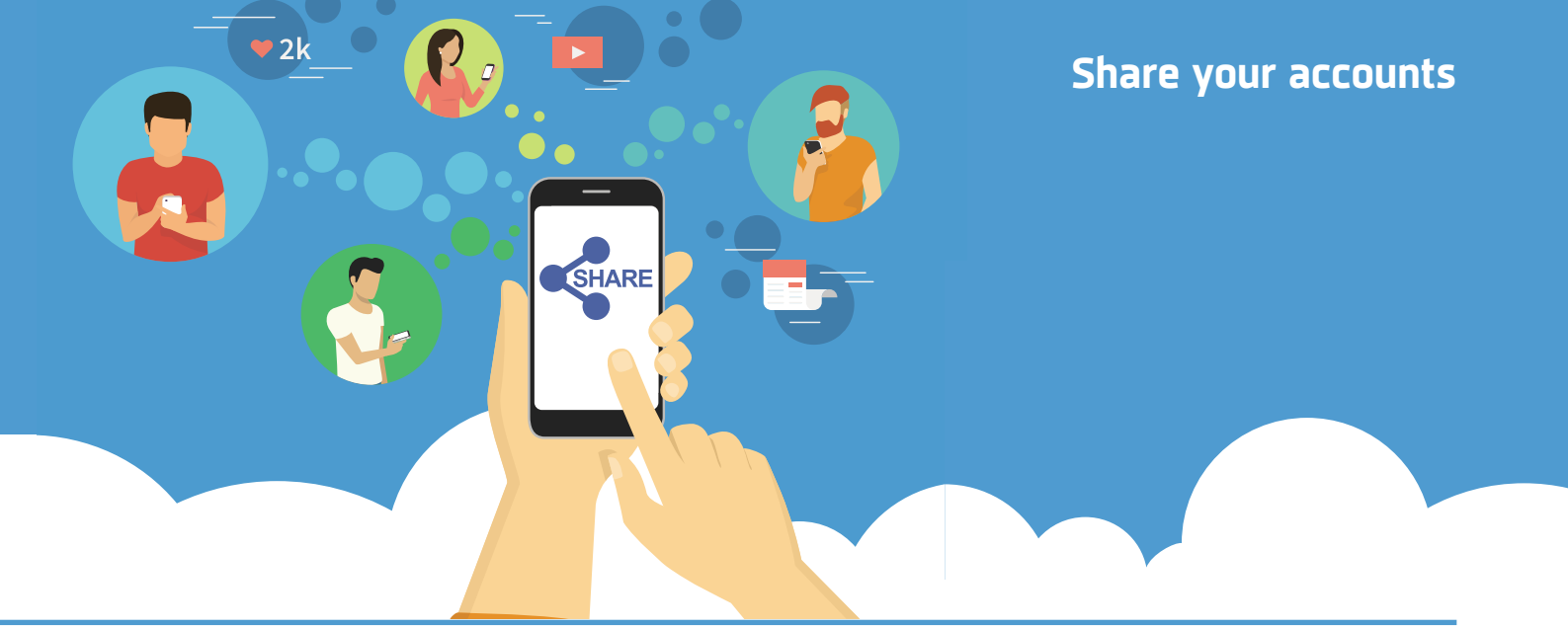


Remove devices you don't use from Now TV to add news ones

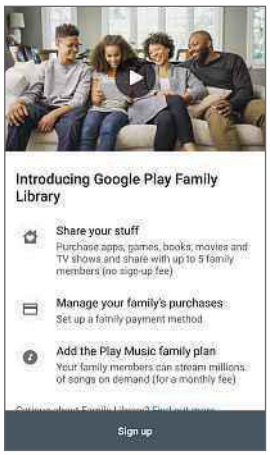
To add a device, just start watching something on it by logging in with the appropriate account credentials and pressing Play. To remove a device, go to 'Manage devices' in the My Account menu and clear it from there.

Share your Google Play purchases

You can share apps, games, movies, TV shows and books that you've bought from Google Play with up to five family



members using Google Play Family Library. To set up Family Library, open the Play Store app on your mobile device, then open its main menu and select Account. Tap Family, then 'Sign up for Family Library' and follow the on-screen instructions to set up a family group. Once you've invited your family members, they also need to follow the above steps to set up Family Library.

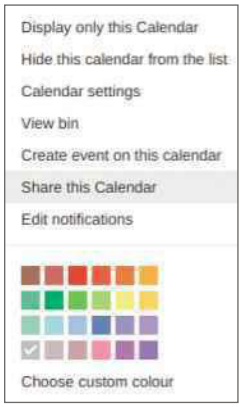


Share apps, games, movies and books with all the family

You can choose to add purchases to the family library automatically or to add them manually after you've bought them.

Use one calendar for all the family

Coordinating each family member's plans so you know everyone's comings and goings can be a challenge, and Google's family calendar feature is here to help. After you've set up a family group (see previous tip), a calendar called Family is created automatically. Anyone in your family can see, create, edit or delete events on the family calendar. You can't add non-family members to the calendar, but you can still invite them to individual events.



Share your Google Calendar to let other people contribute to it

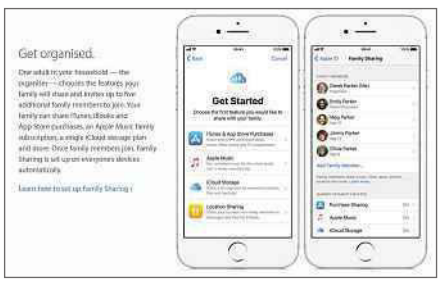
To share a calendar with a non-family member, visit calendar.google.com on your computer, then go to My Calendars and click the down arrow next to the calendar you want to share. Select 'Share this Calendar' and, under 'Share with specific people', add the email address of the person you want to share with. You'll then be able to select their permissions.

Give your family access to iTunes

Like Google Play's Family Library (bit.ly/family436), Apple lets you share apps, books, music, movies and TV shows bought from the App Store and iTunes Store. To set up Family Sharing, go to Settings on your iPhone or iPad and tap your name, then tap Setup Family Sharing and Get Started, and follow the instructions on screen.

Note that by setting up purchase sharing as the family organiser, you are agreeing to pay for any iTunes and App Store purchases that your family members make. However, you'll be invited to set up 'Ask to Buy' for any family members under the age of 18. This means you'll receive a notification when a family member wants to buy an app, and you can choose whether to approve or deny the request.

Apple Family Sharing also lets you share your iCloud storage and Apple Music plan with up to five other family members.



Your kids can ask to buy apps and iTunes content once you've set up Family Sharing

SHARE YOUR GOOGLE PHOTOS LIBRARY

Account sharing isn't limited to content you stream or download. Google Photos recently introduced a new feature that lets you automatically share your photo library with your partner so you no longer need to send them photos you want them to see. The tool lets you filter images by date or by the faces that appear in them, so you don't have to share everything with your partner.

To set up library sharing, open the main menu in Google Photos on your phone and select 'Share your library'. Tap 'Get started', then follow the instructions on screen to choose what you share. You'll need to ask your partner to do the same in order to browse their photos in the app.

Sharing your library with your partner means you don't have to send photos individually

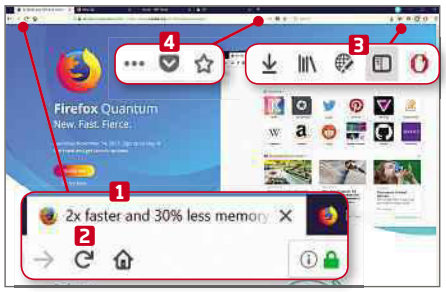
Try the new Firefox Quantum

Mozilla's redesigned browser has a significantly faster engine and some welcome changes. Here's what you need to know

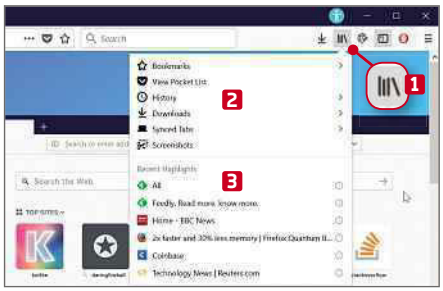
Firefox Quantum: bit.ly/ffqu436 | 10 mins | XP, Vista, 7, 8, 10

Firefox has lost a lot of ground to Chrome over the years, but it's still an excellent and very capable web browser. Now, Mozilla has overhauled its software with a faster engine – Firefox Quantum – that makes use of multiple processor cores and prioritises the tab you're currently using. The browser has always been a bit of a resource hog, but the latest release (also known as Firefox 57) uses around 30% less memory when compared to the old version.

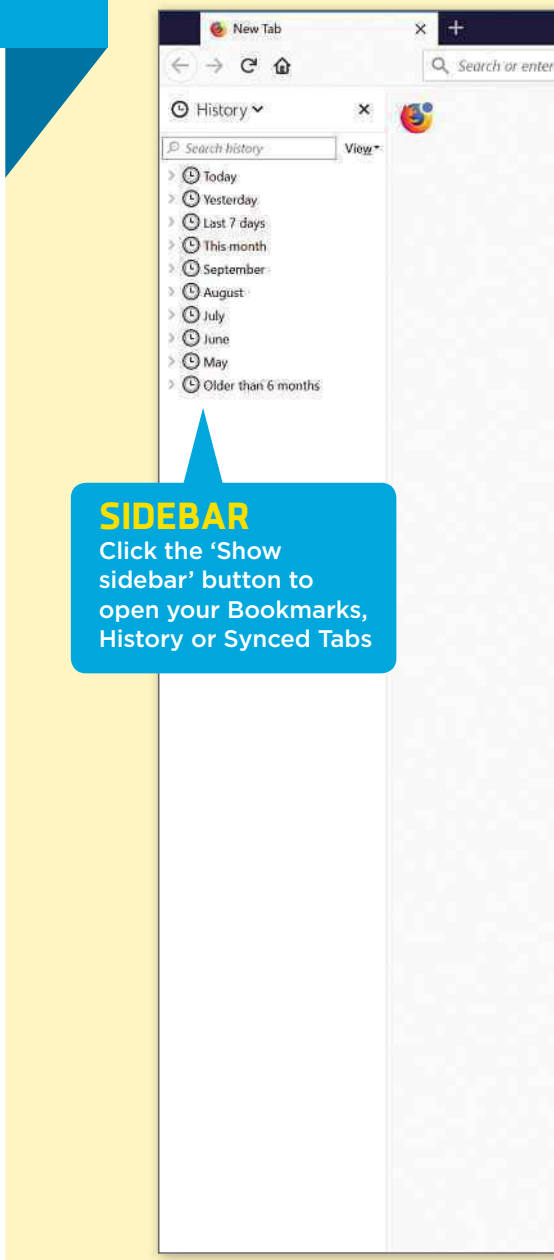
And that's not all that's changed. The refined and rebuilt interface has square tabs, smooth animations and a Library, which provides quick access to saved content such as bookmarks, browser history, downloads, tabs and screenshots.



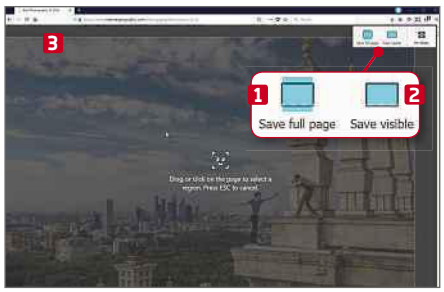
1 Firefox Quantum's new interface isn't hugely different from previous versions of the browser, but the tabs 1 now have sharper edges, the page-reload button has moved 2 and there are some new buttons in the top-right corner. 3 'Save to Pocket' is now part of the address bar. 4



2 The Library section is one of the main new management tools and is home to all your saved content. Click the button 1 to access your bookmarks, Pocket list (saved items), history, downloads, synced tabs and screenshots. 2 Recent Highlights – sites you've visited – appear below. 3

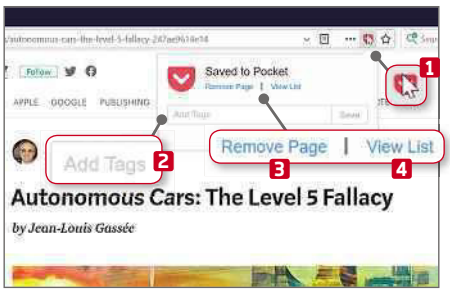


SIDEBAR
Click the 'Show sidebar' button to open your Bookmarks, History or Synced Tabs

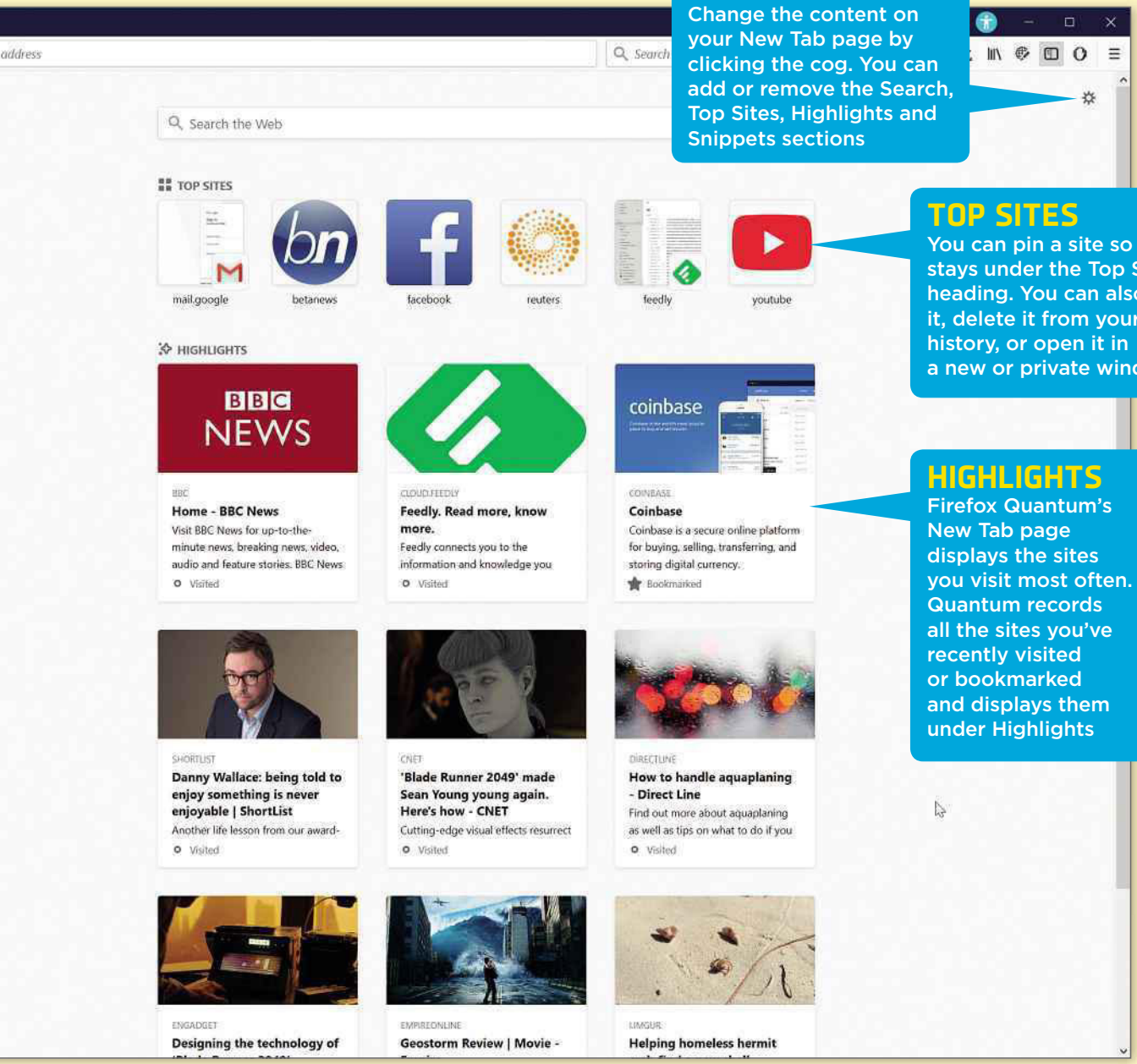


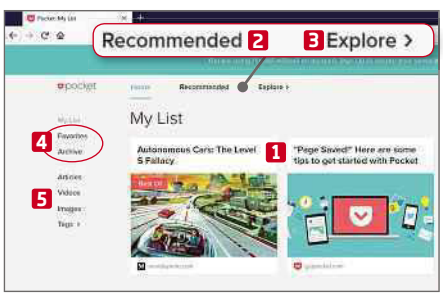
3 You can now take and save screenshots directly in Firefox. Go to a page you want to capture, right-click and select 'Take a Screenshot' to open the screenshot tool. You can save the full page, 1 just the visible area 2 or select part of the page by hovering over a web element. 3

4 You can also click and drag around an area of the screen to capture a specific section. When you let go of the mouse, the area will be selected. Use the handles (dots) 1 at the corners and sides to resize it. You can cancel the capture, 2 download the screenshot 3 or save it to the cloud. 4

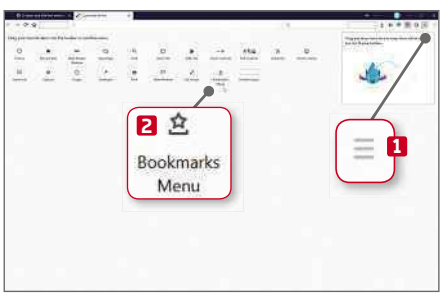


5 Pocket is now a major part of Firefox. When you visit a site or page that you want to view later, just click the Pocket button. 1 You'll be able to add tags, 2 remove the page 3 or view your list of saved pages. 4 Saved pages can also be viewed via the Library. You can use Pocket with or without an account.





6 The Pocket page shows any content you've saved. 1 Click the Recommended link 2 to see articles and videos you might like, based on past saves. Explore 3 lets you view the best of Pocket. The sidebar gives you access to Favourites and the Archive, 4 and you can filter results by type and tags. 5



7 You can access your bookmarks via the Library, but this takes longer and they aren't organised in any logical way. Thankfully, you can restore the old Bookmarks button. Click the menu button, 1 go to Customise, then find the Bookmarks icon 2 and drag it to the toolbar. Place it next to the Library.

8 Firefox Quantum's main selling point is its new browser engine. If you want to see how fast it is, try Mozilla's Speedometer (bit.ly/speed436). Click the Start Test button to run through a series of tests in a window, 1 with a progress bar below. 2 Run the test in other browsers to compare the results.

Protect all your devices from the KRACK flaw

KRACK: www.krackattacks.com | 30 mins | Windows MacOS Chrome OS Linux iOS Android

As we reported in Issue 435 (bit.ly/webuser435), researchers have discovered how to crack the WPA2 encryption that protects your Wi-Fi from snoopers. The flaw, called Key Reinstallation Attack (KRACK) lets a skilled hacker see anything you send over your connection.

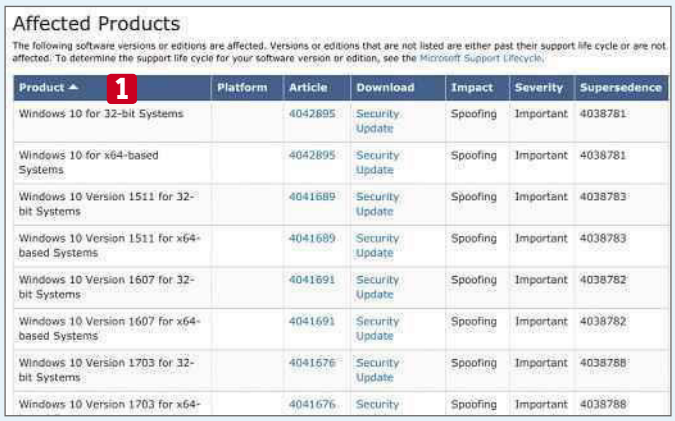
Now that details have been confirmed, we have a better idea of what's affected and how we can protect ourselves. If you can, you should update any devices that connect to the internet, including computers and mobile devices. Routers are also vulnerable and should be updated if possible. This Workshop will guide you through your current options.

At the time of writing, some devices hadn't been patched, so keep an eye on the various manufacturers' support pages.

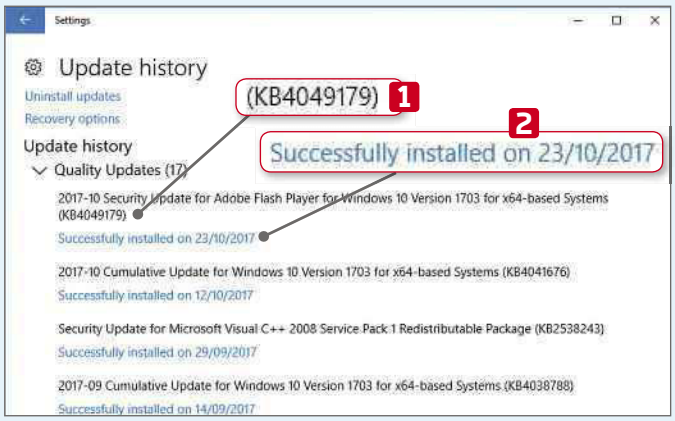
EXPERT TIP

Andy Shaw says

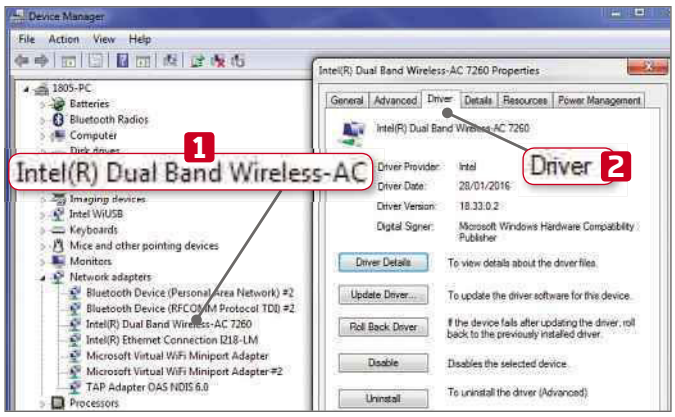
If you haven't updated your devices, you're at greatest risk from KRACK when using public Wi-Fi networks because you can't tell whether or not they've been patched. In this situation, you should proceed with caution. Use a VPN if you can (see our Workshop on hassle-free VPNs in Issue 435) and connect to HTTPS versions of websites when possible.



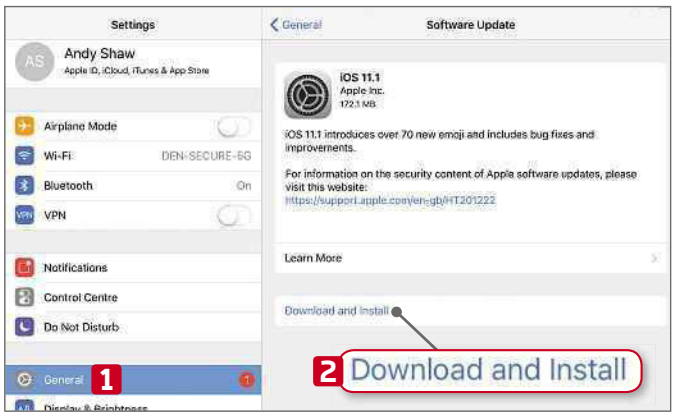
1 The good news for Windows users is that your PC should already be patched and protected, as long as you're using Windows 7 or later and haven't switched off automatic updates. You can see a full list of the updates for various versions of Windows by visiting bit.ly/sectc436 and scrolling down to Affected Products. 1



2 To check that you have received the update in Windows 10, open Settings (Windows+i) and select 'Update & security', Windows Update, then 'Update history'. If the update has been installed, you should see a KB number between 4041600 and 4042900 1 and an installation date from early- to mid-October. 2



3 Many PCs use Intel Wi-Fi hardware but, thankfully, Intel has released a patch. To find out which hardware it covers, visit bit.ly/ints436. Check which hardware your PC uses by typing `device manager` into the Start menu. Open 'Network adapters', right-click the Wi-Fi adapter 1 and choose Properties. Click the Driver tab 2 and update if necessary.



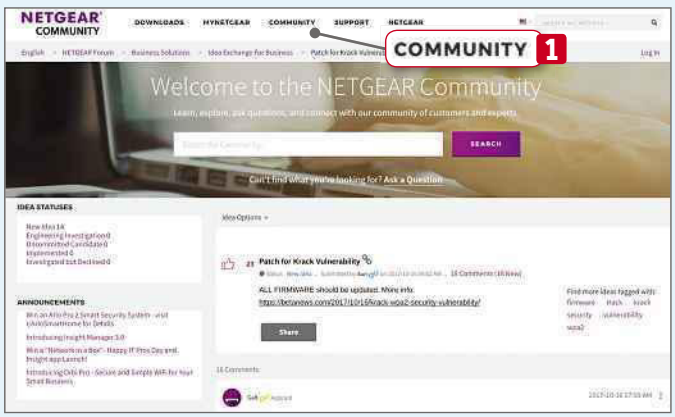
4 iOS has recently been updated to version 11.1, which fixes KRACK on Apple's mobile devices. To check you have it, go to Settings, General, 1 Software Update. If your device hasn't updated yet, you'll see the 'Download and Install' option. 2 Tap this to start the installation. You may need to plug in your device.

5 Macs will be fixed in MacOS Version 10.11.1. To find out which version you have, click the Apple icon in the top-left corner and choose About This Mac. Here you can see which version of MacOS you're using. 1 If you don't yet have 10.11.1 (which was still in beta at the time of writing), click the Software Update button 2 to see if it's available.

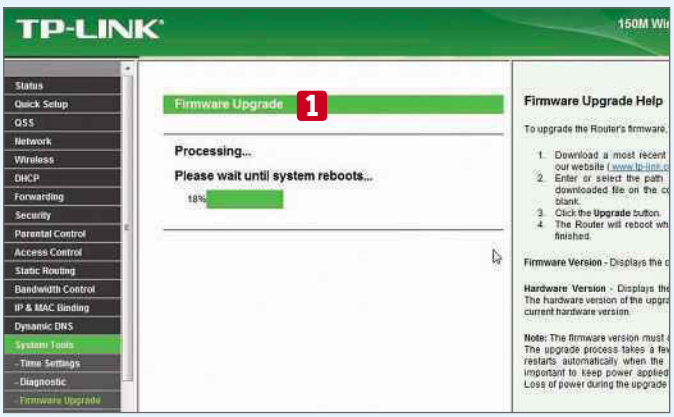
6 Some versions of Linux have been updated already, including Ubuntu, Arch, OpenBSD and Debian. To upgrade Ubuntu, for example, go to Settings and locate the Update Manager. Click Check 1 to see the latest updates and Install Updates 2 to download them.

7 Android poses more of a problem. Google issued a patch for KRACK on 6 November and the company's own devices should receive it soon after that, but other manufacturers will have to produce their own updates. Android 6 devices are the most vulnerable. When the patch arrives, you'll be able to 'Download updates manually' 1 from 'About device' in Settings. Until then, follow the advice in our Expert Tip, opposite.

8 Updating your router will solve the problem for any device that connects to your home network. Although most router manufacturers were aware of which devices were affected at the time of writing, they hadn't yet released fixes. Keep up to date with the comprehensive list at CERT (bit.ly/cert436). 1



9 The CERT site links to any advisory information your router manufacturer has announced. It's also worth searching for 'krack' on the company's support website or forum. You'll probably find that most of the results are posts from concerned customers on the forums 1 but these threads should also link to any announcements from the manufacturer.

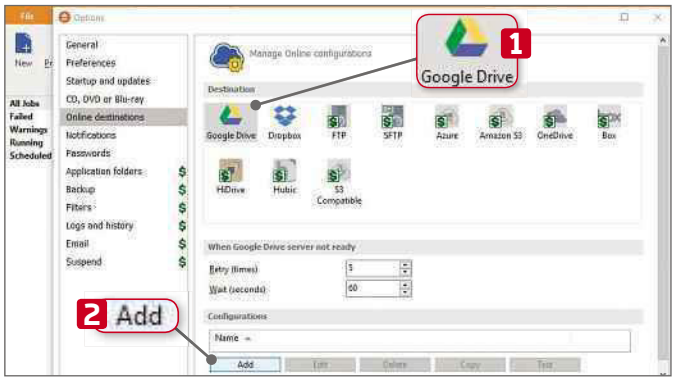


10 If a firmware update is available for your router, you'll need to go into its settings, which usually means typing its IP address into your web browser. Some routers, such as the TP-Link model we've used here, will find, download and update their firmware on demand. 1 Others may require you to download the patch separately.

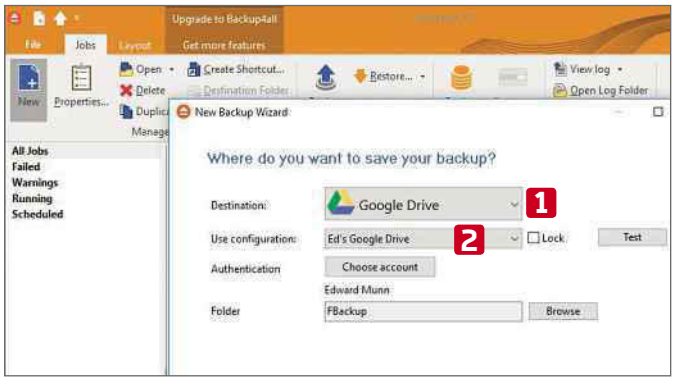
Back up securely to Google Drive

Google Drive is great for syncing selected folders to the cloud, but it doesn't offer all the features of a dedicated backup tool. FBackup fixes this shortcoming by letting you choose Google Drive as a backup destination, so you can create scheduled and encrypted backups, and save them directly to your Drive cloud storage.

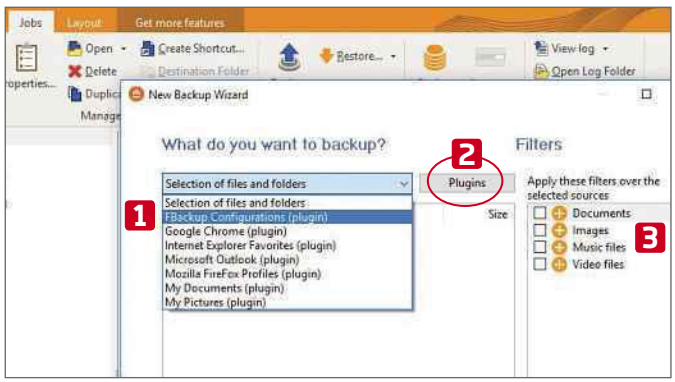
FBackup: fbackup.com | **20 mins** | **Windows**



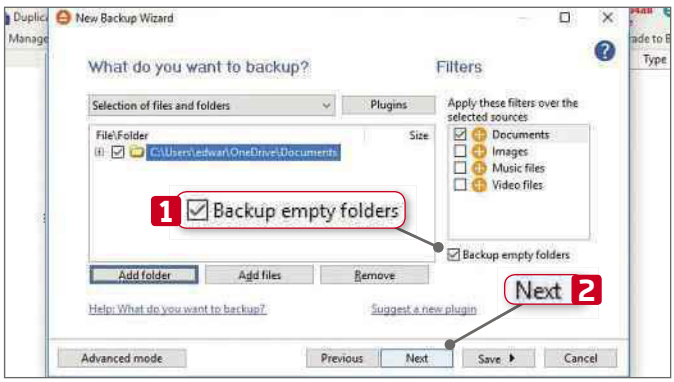
1 Open FBackup and click File, Options, 'Online destinations'. Click Google Drive, **1** then Add **2** and choose a name for your configuration, such as 'My Google Drive'. Then click 'Choose account' and follow the instructions to log into Drive. Select a folder for your backups, then click OK twice.



2 Click New, give your backup a name and a description and click Next. Select Google Drive from the Destination menu. **1** In the next menu, select your configuration **2** and click Next. 'Selection of files and folders', which lets you pick files and folders to protect, is highlighted by default.

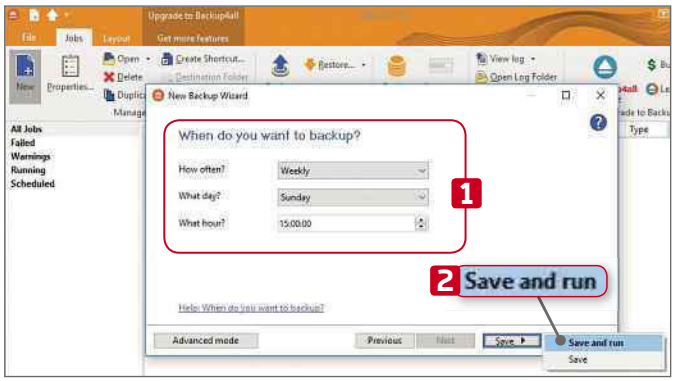


3 Presets in the same menu let you back up specific programs and file types. Click the drop-down menu to select one. **1** To browse a wider selection of presets, click Plugins. **2** Once you've chosen your backup source, you can use the filters **3** for greater control over what's protected.



4 When you select a filter, only files of that type will be backed up, so if you want to back up files of every type, simply leave all the boxes unticked. Note that there's an additional box you must tick if you want to back up empty folders. **1** Click Next **2** when you're happy with your selection.

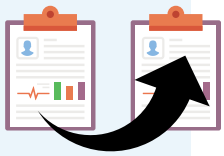
5 On the next screen, choose 'Make full' **1** from the drop-down menu if you want to create an archive of all your files; or select 'Make mirror' to create an exact copy without compressing the files. If you select the archive option, you can click 'Yes, use password protection' **2** to encrypt it.



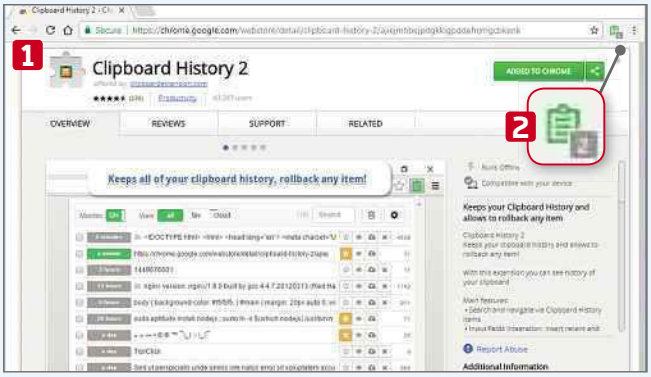
6 Click Next, then choose how often you want the tool to create a new backup. **1** Finally, click Save, then 'Save and run' **2** and the backup will start. To restore a backup, click the appropriate button for the backup on FBackup's home screen.

Share your clipboard between different PCs

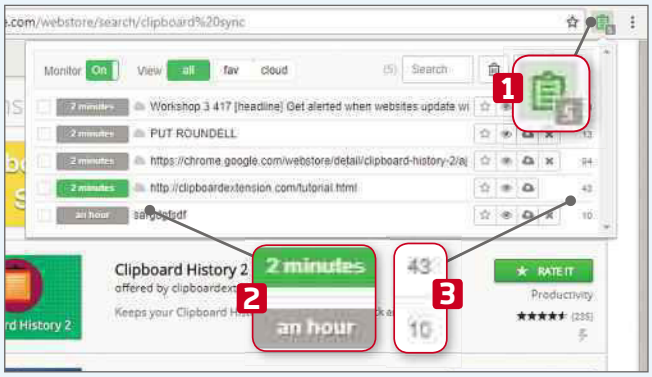
If you sign into Chrome using your Google account details, you can see the pages you have open on other devices, thanks to its excellent History tool. Now you can take this a step further by installing the free Clipboard History 2 add-on, which lets you share any text you copy to your clipboard with any computer that runs Chrome, whether it's Windows, Chrome OS, MacOS or Linux.



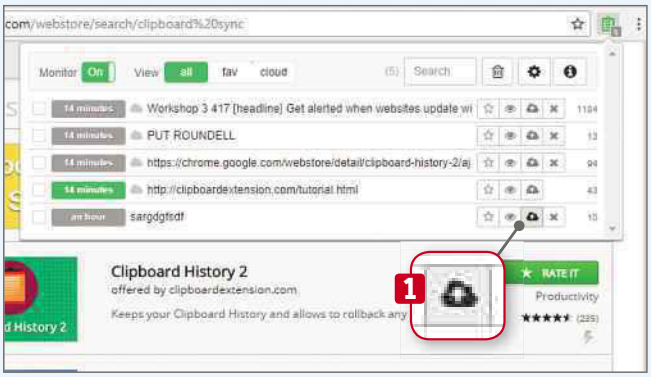
Clipboard History 2: bit.ly/chis436 | **10 mins** | **Chrome (except mobile versions)**



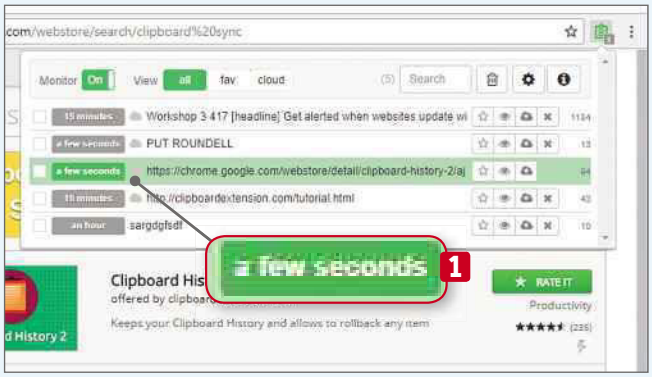
1 Sign into Chrome using a Google account, then install the add-on from bit.ly/chis436. **1** A clipboard icon will appear next to the address bar. **2** You only need to install it once, because it should install automatically on your other computers when you next sign into Chrome on them.



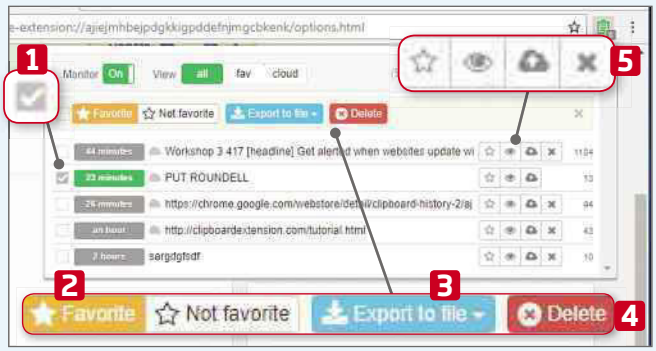
2 Now, when you copy to your device's clipboard, the number on the Clipboard History icon **1** increases. Click this for a full list of the items you have saved to the clipboard, as well as details of how long they've been there **2** and how many text characters they contain. **3**



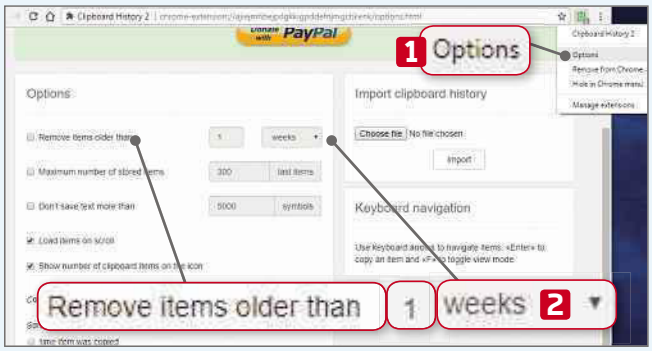
3 Items saved on your clipboard will only appear on your other devices if you click the 'Send to cloud' button. **1** This uploads the information to Chrome's cloud storage. Within a couple of minutes, your saved clips will appear in the lists on your other devices.



4 Click any item in the list to copy it back to your clipboard so you can paste it into another document. Copying a clip turns its time icon green and resets the time to 'a few seconds' **1** to show when it was last used. You can switch to any other application and paste it as normal.



5 To manage items on your list, use the tick boxes to select them. **1** You can then add them to a 'Favorite' list, **2** export one or more items to a text file **3** or remove them completely. **4** The icon buttons also let you add to favourites, view the full text and delete clippings. **5**



6 To configure the settings, click the Clipboard History icon and choose Options. **1** Here, you can decide how long items remain in your clipboard list **2** (the default is to keep them forever), choose how to sort items and import the text file you exported in Step 5.

Weekend Project

Get to grips with some serious PC DIY to boost your computer's performance

How to...

Finally create that website you've been putting off

Got a great idea for a website but no idea how to do it? **Wayne Williams** shows you how, with Wix's useful site-building tools

When the web first took over the world, there were just two ways of building a site – using a WYSIWYG (What You See Is What You Get) editor or manually coding in HTML. These days, there are many more options available to would-be site owners, including web-based creators such as Weebly (www.weebly.com/uk) and Wix (www.wix.com). These use a simple drag-and-drop approach, so you can concentrate on the actual content of your site without having to worry about coding or whether your site will display properly in every possible browser. These services even host your finished site free of charge until you feel ready to buy a domain name and take on hosting duties yourself.

If you've been thinking of creating your own website, but weren't sure how and where to start, we'll show you just how easy it is to put together a great-looking site in minutes. You can see the site we created at bit.ly/tmt436.

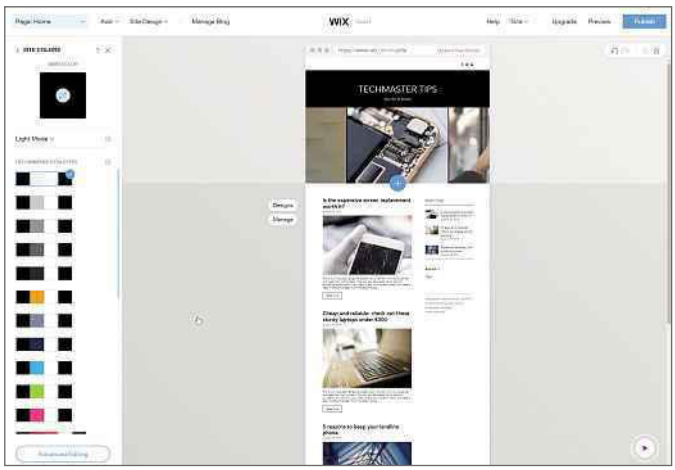
Get started with Wix

Wix is a brilliant online website builder that provides two separate design tools: Wix ADI (Artificial Design Intelligence), which puts together a site based on your answers to a handful of questions; and Wix Editor, which lets you choose a template and customise everything to your requirements, picking and choosing from thousands of advanced design elements.

To begin, you just need to go to www.wix.com, click the Start Now button and create an account or sign in using your Facebook or Google credentials. Wix will ask you what kind of website you want to create. Pick an option that best suits the kind of topic you're going to be covering. If you don't see anything suitable, select

When creating your website, Wix asks you to pick a type from a list of options

Wix offers two different site builders – Wix ADI for beginners and Wix Editor for more advanced users



Pick a main colour and Wix ADI will suggest a palette of complemetary colours based around your choice

Other. You can then choose which method you want to use to create your site. We'll mostly focus on ADI in this project because it provides the simplest way to get started.

For help with your first few steps, follow our Mini Workshop, below. If you'd rather go straight to the Editor for greater control over your site's design, follow our Mini Workshop on page 61.

Customise your site design

Once you have a basic website created using ADI, you can get started with the customisation tools. The Site Design menu lets you pick a design theme from a sidebar and select a colour scheme. Pick a main colour and Wix will recommend a palette of colours that complement it, so you don't end up with a headache-inducing site of clashing hues. You can switch between dark and light modes, and there's an advanced editing option you can use to pick the colours you require.

The Design panel also lets you change your site's fonts. There's a wide selection of typefaces on offer – just pick one you like from the sidebar. You can adjust the size of the font using a slider.

Wix also offers various animations you can apply to your site to give it a modern feel. Options include none, fade, float, slide, fly, fold and turn. You can also choose a scroll effect (parallax, reveal, zoom in and fade in) and page transitions (none, horizontal, vertical, cross fade and out-in). Make whatever changes you like and click the Preview button at the top to see the results.

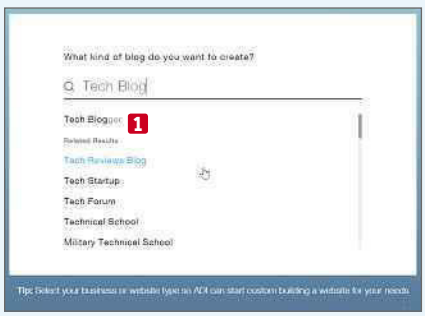
Browse available apps in the App Market and add any you like directly to your site

You can also change the design of each site section. If you're not happy with the site header, for example, clicking the Designs button will let you pick a different one from the options. You can then change the colour, text settings and animation for that section.

To edit the content, pick a section to change and replace (or remove) the title, subtitle and description. You can also swap or edit any images, galleries and videos, as well as any buttons and links.

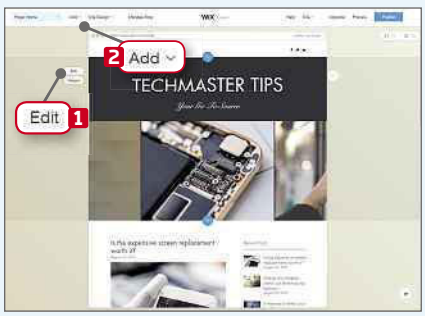
As your site grows, you can add new sections to a page, or new pages, by selecting the relevant option, then clicking and dragging.

MINI WORKSHOP | Have Wix ADI create a site for you



1 Once you've signed into Wix and selected the type of website you want to create, you'll be asked to pick a method for creating your site. Select Wix ADI and click Start Now. You'll be asked what you want to create a website for (non-profit, school, author, blogger and so on). Type something and it will display some matches. 1

2 Select an option, then click Next. You'll be asked if you need a facility to sell online, take bookings or get subscribers. Tick any options you require and click Next again. Enter a name for your site, then an optional address. Check the details 1 and add a logo 2 if required. You can connect a social network, too. 3



3 Click the Start button and select one of the offered designs. Click the 'Create my Homepage' button and wait while the site is generated. Content will be added automatically. Hover over a section to make changes to it 1 and click Add to introduce new sections or pages. 2

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 For Everyone	TalkTalk: Broadband	£27.00 (£18.95 for 12 months)	12 months	17Mbps max speed	∞ unlimited	CHEAPEST £227.40
2	sky	Sky: Broadband	£28.99 (£20.00 for 12 months)	12 months	17Mbps max speed	∞ unlimited	£240.00
3	EE	EE: Broadband	£28.50 (£21.50 for 18 months)	18 months	17Mbps max speed	∞ unlimited *	£258.00
4	Virgin media	Virgin: Broadband	£40.00 (£29.00 for 12 months)	12 months	50Mbps max speed	∞ unlimited *	£348.00

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

Data supplied by www.broadbandgenie.co.uk. Correct as of 2 November 2017.

Ofcom

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

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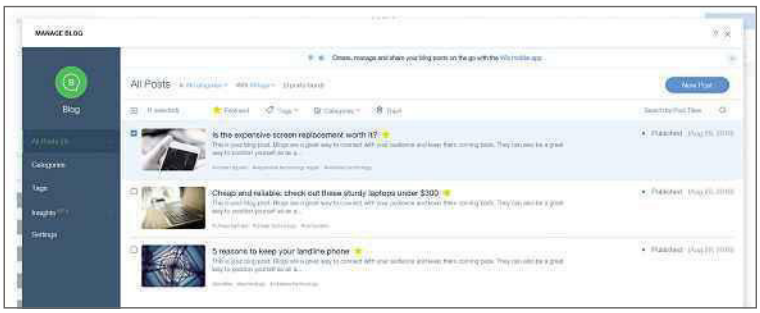


The Manage section lets you promote posts, add tags, assign categories and delete content

Publish your site and improve its ranking

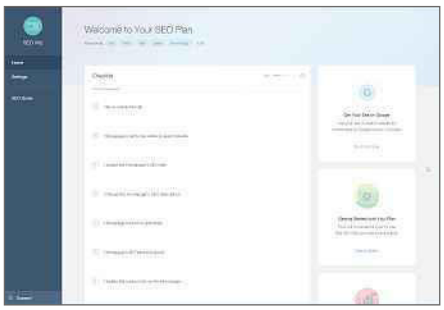
When you're happy with how your customised ADI site looks and have added all your content, you can publish it to the web, ready for the hordes of visitors who will be clamouring to view it. To do this, just click the Publish button top right. You can use a free Wix.com domain (which will include your name, and 'wixsite.com', as well as any customisable addition), or connect your own domain, if you already have one.

Click 'Publish & Continue' to view the site in your web browser, then go back and make any changes you require.

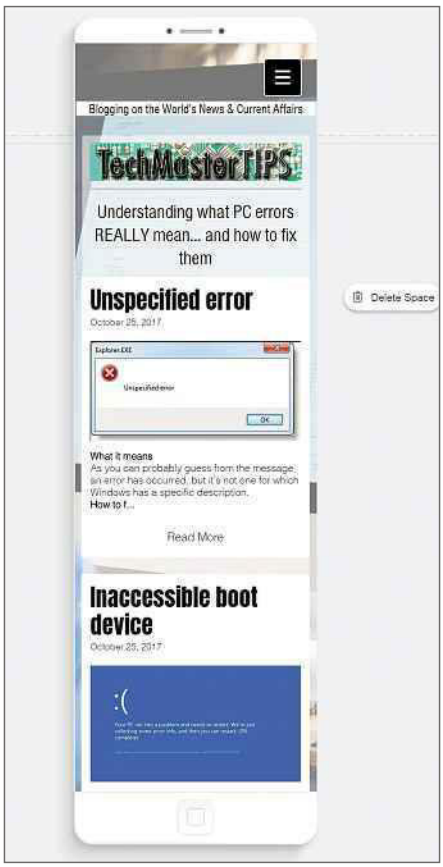
In order to attract visitors to your site, you'll need to promote it. You can do this through word of mouth, and by using social sites such as Facebook and Twitter. Wix also offers help with getting your site noticed. In the Pages sidebar, click the Settings cog and select Page SEO in the pop-up menu. SEO – which stands for Search Engine Optimisation – helps people find your site on Google, Bing and other search engines.

Give your page a description (explaining what makes it unique) and add some keywords that relate to the content. Google uses these keywords to build a picture of your site. If you don't want a particular page to appear in search results, you can hide it.

Wix has a 'Get Found on Google' plan that you can use to improve your SEO. You have to enter some tags, optionally have Wix analyse them and suggest some alternatives, then go to your plan and see what you need to add or change to potentially get ranked higher.



Explore Wix's SEO plan to find ways to make your site more appealing to Google

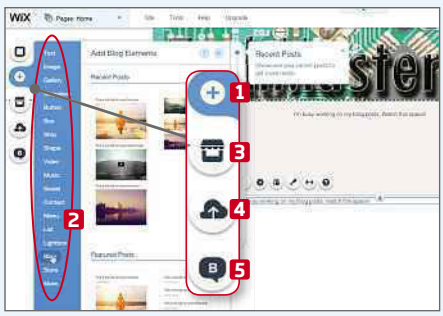


Switch to the mobile view and change how your site will look when viewed on a phone

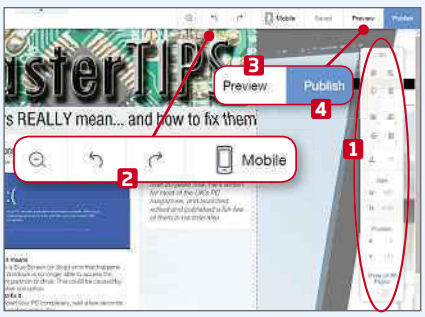
Once your site has been up and running for a while, you can use Wix's Manage section to view Insights into your traffic, including how many visitors you've had and where they're visiting from. ■

MINI WORKSHOP | Create an advanced website using the Wix Editor

1 Pick a template to build your site around. Browse the selection and choose one that best works for your subject. Click the Background button **1** to pick an image, colour or video. **2** You can upload your own images, pull them from your social networks, use free ones from Wix or buy some from Shutterstock (www.shutterstock.com).



2 The Add button **1** lets you add anything to your site, including images, buttons, boxes, video, music and a store. **2** Click the Apps button **3** in the sidebar to get additional elements for your site, such as a forum and comments section. You can upload content to your site from the sidebar **4** and add and manage a blog. **5**



3 Change the look of your site by clicking and dragging elements around the screen. The Toolbar on the right **1** lets you easily customise everything. Use the bar at the top **2** to zoom in or out, undo changes, and switch between desktop and mobile view. Preview your site **3** and, if you're happy with the results, publish it. **4**

NEXT ISSUE **How To...** Build a Windows 10 PE recovery tool

On sale Wednesday 29 Nov

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STEP 3 Tap 'Subscribe'

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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

There's no need to abandon your browser when you lose your internet connection. Our experts explore all kinds of stuff you can still do offline

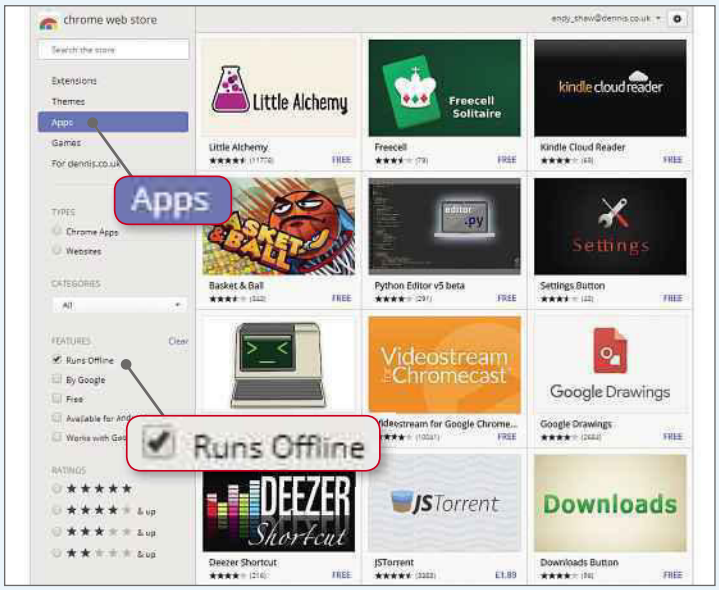
Install offline apps

Chrome doesn't just display websites, it also runs apps, and these often have as many tools and options as paid-for Windows programs. While most apps are for online use, it's worth remembering that some of them also work offline, so you can install them in Chrome and use them even when you aren't connected to the internet.

To find offline apps, go to chrome://apps and click Web Store. Select either Apps or Games on the left and look further down the menu. Under Features, tick the box for Runs Offline. Your results will be filtered to show all the items that can be run offline.

You can also check whether an app will run offline from its description. Click an app and, in its information column on the right, look for the lightning bolt and the words Runs Offline. Clicking this will take you back to all the other apps that run offline.

When you've found an app you want to use, click 'Add to Chrome' to install it. You'll find your apps in chrome://apps, where you can also run them.



To see a list of Chrome apps and games that run offline, tick the box in the Features section

Read PDF files offline

You don't have to install a standalone tool to view PDFs; you can use your browser instead, even when you're offline. Double-clicking on a saved PDF in Windows 10 automatically opens it in the Edge browser, which received some extra tools for handling PDFs in the Fall Creators Update, including the ability to fill out forms and make annotations. You can also open PDFs in Chrome, by dragging and dropping a file from an Explorer window. Press Ctrl+F to search the text.

Drag a PDF file to Chrome to read it in the browser

View animated GIFs

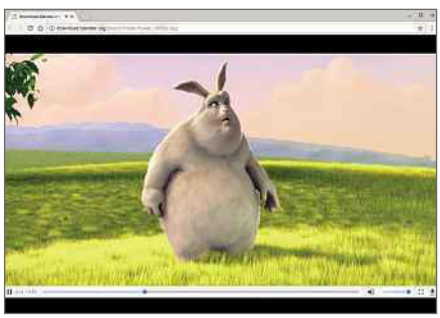
If you find an animated GIF on the web that you want to keep, you can save it to your hard drive by right-clicking it and using the 'Save image as' menu option – just as you would with a regular static image. However, many image viewers aren't able to display the animated version, so if you want to see the GIF in all its glory, you should reopen it in your browser. Drag it from the folder you saved it to and drop it on the browser window or address box. Hold down the Ctrl key and spin the mouse wheel to zoom in and out.

Watch movies

You can't download movies from Netflix and many other streaming services, but if a video on a web page can be right-clicked and saved to your hard drive, it can be watched later offline using your browser. This should also work for videos attached to an email or shared using an online service. When you're ready to watch the video, simply drag it from an Explorer window and drop it on the browser window or address box.

Not all video file formats are supported by all browsers, but Chrome covers the widest range so it's usually the best option. If the video is in a compatible file format, it will begin playing immediately;

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.



Use your browser to watch videos saved to your hard drive

any video that is in an incompatible file format will be saved to the Downloads folder, even if it's already saved elsewhere.

The '.mp4' file format most commonly used by phones will play fine in Chrome and Firefox, but not in Edge.

Listen to music

It's a similar story with music files: Chrome and Firefox can play audio files dragged from Explorer and dropped on the browser window, but Edge can't. Common audio file formats that are often found on the web can be played offline, such as MP3 and M4A, but not all audio formats play. Any file format that can't be read will be saved again, even if it's already stored on the hard drive.

Read ebooks out loud

Ebooks in EPUB file format can be read if you have Edge in Windows 10, even if your PC is offline. Just double-click the file in an Explorer window and the file will open in Edge, which is set as the default book reader. If the browser window is large enough, it displays two pages side by side, just like a real book.

Edge is a fully fledged ebook reader and comes with all the usual features: click your mouse anywhere to display a toolbar at the top and a progress bar at the bottom. You can drag the slider to jump to a new part of the book or use the mouse's scroll wheel to flip pages, and you can click the button in the top-left corner to open the ebook contents and jump to any chapter or section. The buttons in the top-right corner of the toolbar let you select the font style, text size, spacing and more.

To hear the ebook read out loud, click the book/speaker icon in the toolbar. If you want to change the speed at which the text is read or the voice that Edge is using, pause the reading and click the person icon to make your adjustments.

Using Edge as an ebook reader is particularly useful on hybrid laptops, which have screens that fold flat or can be detached and used like a tablet.

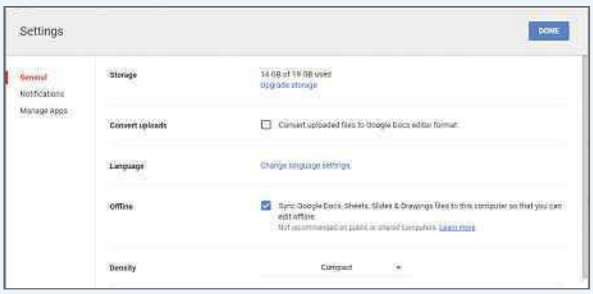
Read ebooks offline in Edge. It can even read them out loud to you

TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave

Use Gmail offline

If you're often without an internet connection, you can set up Gmail for offline use – as long as you use Chrome. Go to Gmail Offline in the Chrome Web Store (bit.ly/gmol436) and click the Visit Website button. A page opens where you can enable or disable offline mail.



Enable offline use of Google Docs, Sheets and Slides

When you are connected to the internet, just visit mail.google.com to access your email in the normal way. However, when you're offline, go to chrome://apps and click the Gmail icon. In offline mode, you can see and read all the emails you've received over the last seven days. Any new messages that are created are sent the next time you're online and using Chrome.

If the last seven days of email isn't sufficient, go to chrome://apps and click Gmail. Click the gear icon in the top-right corner and select Week, 2 Weeks or Month next to 'Download mail from past'. Click Apply. Normally, file attachments in emails can be up to 25MB but when you are offline there is a 5MB maximum.

Read emails and create new ones with Gmail Offline

Use Google Docs offline

Google's online office suite of Docs, Sheets and Slides lets you create documents, spreadsheets and slide shows. However, if you lose your internet connection, Chrome freezes your work and waits until the internet connection is restored. This is clearly less preferable to using Microsoft Office on your PC, which never needs an internet connection.

There is a workaround, though, and if Google Drive is set up for offline use, you can carry on working. Offline mode lets you open and edit documents even when there's no internet connection, because it stores a copy of your files on the hard drive. Any changes you make are automatically synced the next time you go online.

To set up Google Drive and Google Docs for offline use, go to Google Docs Offline on the Chrome Web Store (bit.ly/docsol436) and install the extension in Chrome. Now, go to Google Drive (drive.google.com) and click the cog icon in the top-right corner. Select Settings from the menu and tick the box next to Offline.

Install Google Backup and Sync to keep a folder on your hard drive that's synced with Google Drive online, so you can access your other files offline. Go to drive.google.com, click the gear icon and select 'Download Backup and Sync for Windows'.

Save websites for reading offline

Go to getpocket.com and sign up for a free account. In Chrome, install the Pocket app from the Chrome Web Store (bit.ly/pock436), then go to chrome://apps, run the Pocket app and sign into your Pocket account. Return to the Chrome Web Store and install the Save to Pocket add-on (bit.ly/savep436). This adds a button to the Chrome toolbar.

When you're browsing the web and want to save a page to read later, click the 'Save to Pocket' button in the Chrome toolbar. To read your saved web pages, go to chrome://apps and click the Pocket icon. It opens a new window in which you can browse your saved pages and open them to read, even if your computer is offline.

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

SOFTWARE

Update Google Drive software

Q Google Drive has been telling me that I'm using an old version and need to update. How do I do this? Should I back up all the music and documents stored there to a memory stick first? Drive's site doesn't make it clear whether I have to uninstall the software and download afresh.

Carole, via email

A Yes, you should definitely back up everything on Google Drive. It's unlikely that anything will go wrong during the upgrade, but a backup insures you against problems, and you'll kick yourself if you don't do it and then something goes wrong.

Google Backup and Sync lets you back up more folders than Google Drive did

When you download and install the new software, it automatically replaces Google Drive with the new 'Backup and Sync' tool, which keeps all your old settings and files. When it starts, it asks you if you want to back up extra Windows folders, such as the Desktop, Documents and Pictures folders. These may use a lot of space, so deselect them if you don't have enough online storage space.

HARDWARE

Fix PC after CD drive upgrade

Q I was surprised to find that my new Mesh PC (www.meshcomputers.com) came without a CD drive, so I removed the blanking plate and fitted an HP CD drive I had. The power cables wouldn't fit the drive, so I used the cables from an older PC. Now when I switch on, nothing appears on screen. It says Asus and then "No signal". Could it be the cables? The cooling fans on the removable side aren't working either.

Gerald Stephenson, via email

A CD and DVD drives are becoming obsolete now that so many people download software, listen to music on Spotify and stream movies from Netflix and other services. The easiest way to add a CD or DVD drive is to buy a USB model. Prices start at around £20, and you just plug them into a USB socket.

If your computer isn't working with the CD drive installed, you should remove the drive and any cables you added. If this fixes the problem, there is a compatibility issue with the CD drive or cables. It may be that the power supply is at its limit, and adding an extra component is too much for it. Make sure the cables are the right way round, too. If you can't get it to work, the external USB option is probably the cheapest and easiest solution.

HARDWARE

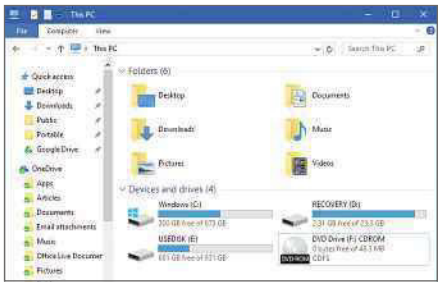
Use software DVD alternative

Q I have a Dell laptop with Windows 7 and a DVD-RW drive, and I've just bought a new Dell PC that doesn't have a DVD drive. How do I install a program from a disc on my new Dell?

Geoff Wheeler, via email

A As we pointed out to Gerald Stephenson, above, the simplest solution is to buy a USB DVD/CD-writer. However, if you don't want to spend any money, you could try a software option.

Download InfraRecorder (infrarecorder.org) and use it to copy the software disc to the hard drive of your Windows 7 laptop (which has a DVD drive). To do this, select Actions, Copy Disc and Disc Image. Then transfer the resulting ISO file to the new computer – you can use a USB memory stick, transfer it over your network or Zip it and sync it with OneDrive, Dropbox or Google Drive.



Double-click an ISO file to create a virtual CD/DVD-Rom drive in Windows 10

On the new computer, download and install Microsoft's Virtual CD-Rom Control Panel (bit.ly/msvcd436). This lets you mount an ISO file as a virtual CD/DVD drive on Windows XP, Vista and 7 (Windows 10 doesn't need it). The Virtual CD/DVD drive works just like a real one, so open it in Explorer and run the software.

SOFTWARE

Enhance images in PDFs

Q I do volunteer transcription work for a family history society, which scans old documents and fiches and makes PDFs of them. Volunteers then transfer the text of the PDFs into a spreadsheet.

Some of our elderly volunteers are having difficulty reading the PDFs because the original documents are faint or use old typewriter fonts. It would be nice if we could enhance the text in the PDF to make it darker or convert the image to a negative, such as white text on a black background. Is there any PDF software that will do this?

Keith Griffiths, via email

A The best time to make your documents easier to read is while scanning, because scanner software offers a choice of resolutions, colour settings, filters and so on. Once you've created a PDF, there's no simple way to edit the images. If money is no object, using Adobe Acrobat and Photoshop may help, but even that would probably require time-consuming work and technical knowledge.

You can use Smallpdf to convert to and from PDF files for free twice an hour

There are a couple of other possible solutions, but we can't guarantee they'll work. One is to load your PDF files into PDF-Xchange Editor (bit.ly/pdfx436) and select Document, then 'OCR pages'. It analyses the image and turns it into an editable text document. You can then select text by dragging over it with the mouse, press Ctrl+C to copy it, switch to another application and press Ctrl+V to paste it in. That's fine in theory, but its success depends on the scan's quality.

Another option is to export PDFs as JPEG images and load them into a photo editor, such as Paint.Net (www.getpaint.net). You can then make them black and white, sharpen them and so on. To save a PDF as JPEG images, go to Smallpdf (smallpdf.com) and click 'PDF to JPEG'. Drag a PDF to the browser and drop it. After a few seconds, you can download a Zip file containing all the pages as JPEG images.

GENERAL PC

Bring back Action Centre notifications

Q Thanks for your response to my email in Issue 433 (Ask the Expert, bit.ly/webuser433) about missing notifications when unplugging USB storage devices. I tried following your suggestions but I can't find the Policies tab. I would add that I hear a short jingle sound when I insert or remove a USB memory drive from any USB port.

I now understand that each app has its own settings and that they need to be configured for notifications to work, but having checked that they're switched on for all my apps, I'm no further forward. I now believe it's not simply a setting change. What should I do next, and is Action Centre even worth all the hassle?

Graham DA Hefferman, via email

A USB hard drives don't have a Policies tab with performance and removal options, but USB memory sticks do. Perhaps that's why you couldn't find the setting. However, that's not the main problem here. A lack of notifications is usually a configuration issue, but because changing settings hasn't helped in your case, you need to try a more powerful fix. Right-click the Start button, select Command Prompt (Admin) and enter these commands, pressing Enter after each one:

```
sfc /scannow
dism.exe /Online /Cleanup-image /Scanhealth
dism.exe /Online /Cleanup-image /Restorehealth
```

Each one could take up to 20 minutes to run. Restart Windows afterwards.

Is Action Centre worth the hassle? It's a matter of personal preference. Some people like notifications, others find them irritating. It's your choice.

GENERAL PC

Solve shutdown error

Q Since installing Windows 10 Anniversary Update, a task-host error box appears when I try to shut down my PC, with options to Cancel or 'Shutdown anyway'. If I wait, Windows resumes after a short while. Choosing 'Shutdown anyway' doesn't appear to cause any problems, but it's irritating.

Trevor Reeves, via email

A You're not the only person to have this problem. One suggested solution is to disable fast startup. Open Power Options in the Control Panel and click 'Choose what the power buttons do', then click 'Change settings that are currently unavailable' at the top. At the bottom, clear the tick box for 'Turn on fast start-up'.

When you tell your PC to shut down, Windows sends a message to all programs to quit. It may be that they need more time, especially if you have shortened the time to make shutdown faster. Increasing the time may help: press Windows+R, type `regedit` and press Enter. Go to:

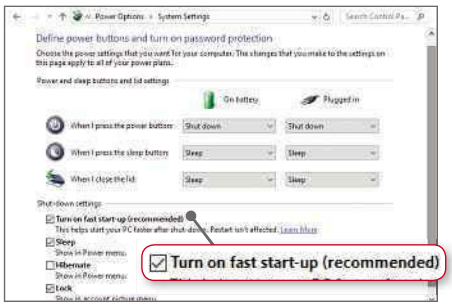
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control

On the right, double-click WaitToKillServiceTimeout and increase the number. If it's 5000 (five seconds) then set it to 8000 or 10000 (eight or 10 seconds). Next, go to:

HKEY_CURRENT_USER\Control Panel\Desktop

Look for HungAppTimeout, WaitToKillAppTimeout and AutoEndTasks on the right. If they don't exist, select Edit, New, String Value and create them.

Double-click HungAppTimeout and set the value to 8000 or 10000, which gives it a little more time than the default five seconds. Then double-click WaitToKillAppTimeout and set the value to 20000 or 25000 (20 or 25 seconds). Double-click AutoEndTasks and set it to 1. This tells Windows to quit background programs automatically without asking.



Turning off fast startup can help with shutdown problems

SECURITY

Too many PUPs

Q How do I get rid of potentially unwanted programs (PUPs), and how do I avoid them in the first place?

Monte Byrne, via email

A PUPs aren't usually malicious, so security software often ignores them, but they are annoying and can be hard to remove. A good way to avoid downloading PUPs is to get the software directly from the developer's website rather than a download site, and to avoid pirated software.

The free version of Malwarebytes Anti-Malware (www.malwarebytes.com) is better at removing PUPs than many antivirus programs. To clean Chrome, go to Settings and click Advanced, then click Reset. Open 'Programs and Features' in the Control Panel and uninstall any that look suspicious, particularly toolbars, browser helpers and add-ons.

Malwarebytes Anti-Malware Free is good for removing PUPs

This fortnight Roland spent a lot of time installing the Fall Creator's Update, MacOS High Sierra and iOS 11

Your Top Tips

Our pick of the best advice from our readers. To get help or offer it to others, visit forum.webuser.co.uk

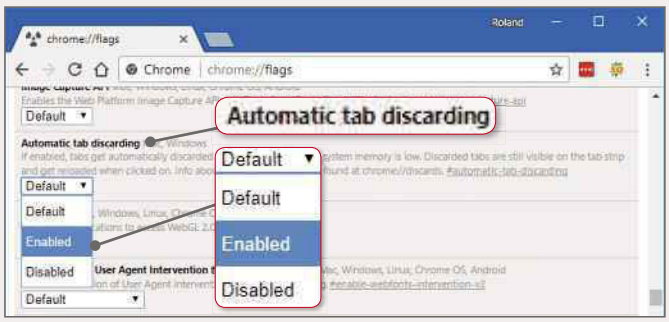
TOP TIP

Mug winner

BROWSERS

Automatically ditch unused tabs

If your PC has 4GB of memory or less, it's easy to run out. Having just 10 tabs open in Chrome will sometimes max out the memory on my PC and slow it to a halt.



Discard the contents of Chrome tabs to free up memory

There's a hidden setting in Chrome that can solve this problem. Type `chrome://flags` in the address bar and look for a setting called 'Automatic tab discarding'. On most PCs, it's set to Default – but it doesn't say what the default is! Click it and set it to Enabled, then click the Relaunch Now button that appears.

If your PC's available memory gets low, this setting frees up some by discarding any web pages on tabs you're not using. You don't lose the tab or the web page – you can just click the tab to reload the page so you can continue browsing.

I have found this is a great help when I have lots of Chrome tabs open.

Will Carroll, via email

APPS

Hide addictive apps with Microsoft Launcher

One of my favourite features of Microsoft Launcher (Gold Award winner in Issue 435's round-up of Android Launchers; bit.ly/webuser435) is the option to hide apps. I've long been aware that I waste too much time on apps such as Facebook and Instagram, but if I delete them altogether, I've always ended up reinstalling them.

Hide apps from the app drawer using Microsoft Launcher

To wean myself off them, my first step was to simply remove the apps from my home screen and put them slightly out of reach in the app drawer. Now that I've installed Microsoft Launcher, I've gone one step further and hidden them completely, making them even harder to find and open!

To hide an app, open the Launcher's Settings menu, then tap Customisation and 'Hidden apps'. Tap 'Hide apps' and tick the apps you don't want to be visible in the app drawer. Once that's done, you can only open these apps by navigating to the 'Hidden apps' menu, as described.

As well as taking away the temptation to use time-wasting apps, it's a handy feature if you don't want someone to see an app you have installed!

Tom Brown, via email

GENERAL PC

Windows Calculator update

I just upgraded Windows 10 to the Fall Creators Update and there are lots of new things in it. Check out the new Calculator, for example. It looks normal but that's because it defaults to Standard mode. Click the menu to open the side menu and you can switch to Scientific, Programmer and Data Calculation views, or choose from a long list of converters such as currency, volume, length, weight, temperature and more. The Programmer mode is new, I think, and has extra scientific functions.

Windows 10's Calculator has some new tools and can now convert currencies

Richard Power, via email

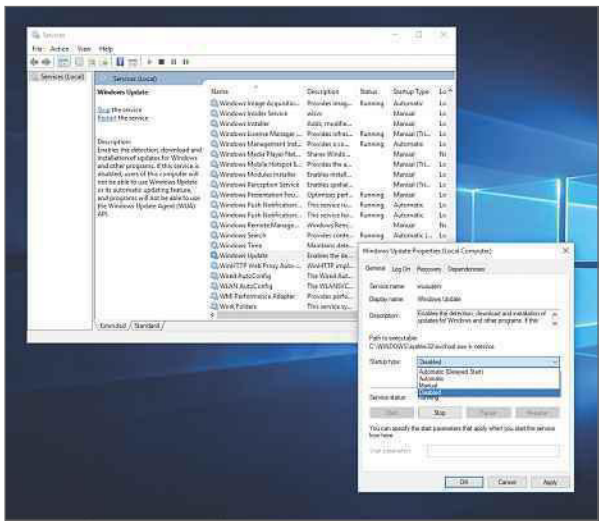
GENERAL PC

Turn off Windows Update in Windows 10

Automatic updates are switched on by default in Windows 10. This is great because it means your PC always has the latest and best features, but some users might not want automatic updates because it can hog system and network resources at critical moments.

In Windows 8.1 and before, Microsoft allowed users to turn off auto updates completely. Unfortunately, there's no such option in Windows 10, but I have a workaround. Search for `services.msc` in Cortana/Search box and open it. Find Windows Update in the Services list, then double-click it. In the Windows Update Properties window, select Disabled in the Startup type list box. Click Apply and OK and, from now on, the Windows 10 Update process will not start in your PC.

I'd recommend only using this workaround when you really need to disable Windows 10 automatic updates. Afterwards, follow the same steps only



Stop automatic updates by disabling Windows Update from Services

choosing Automatic instead of Disabled to activate it again.

Ian Somerville, via email

INTERNET

Organise your Google tools

When you visit the Google homepage or any other Google site, you'll see a grid icon displayed in the top-right corner. Clicking it shows icons for Calendar, Drive, Gmail and so on, but did you know that you can rearrange their order and put your favourite ones at the top? Just click and drag the icons to move them around and they make space for you to drop them wherever you want.

Click the More link at the bottom to see further Google services and their icons. I use Google Keep a lot and found it hidden below the More section. I have now dragged the icon up to the first row where I can open it in one click. The changes are saved and work on every Google site as long as you're logged in.

Mike Morris, via email

APPS

Record your walks easily

After seeing last issue's tip about the BBC iPlayer Radio widgets, I thought I'd investigate which of my other apps have useful widgets. The best I discovered was the widget for Strava (bit.ly/strava436).

I've used the app to track my hikes and bike rides since it was recommended in *Web User* last year, but one gripe I had with it was that it's quite fiddly to start recording an activity and even more so to pause it. The Strava widget puts a 'Start recording' button on your home screen; when you tap it, the appropriate page in the app opens instantly. Tap Start to begin recording and you can then stop and resume the activity from the widget, and tap Finish when you're done.

When an activity is not in progress, the widget also displays your total mileage for the week including bar charts for the days of the week. I find this really useful because knowing how far I've walked is the reason I use it in the first place!

A Palmer, via email

IOS

Turn off the iPad sidebar

For months, whenever I'd swipe from right to left on my iPad Air, I would accidentally enable a sidebar displaying Twitter. After doing some research, I discovered this Slide Over feature is intended for multitasking because you can use it to display a range of different apps while continuing to use whatever other app you have open on the rest of the screen.

If you didn't realise this was its intended purpose, swipe in from the right-hand side of your screen, then swipe down from the top of the sidebar to pick from a range of apps including Messages and Mail. If you have an iPad Air 2 or newer, you can swipe the edge of the sidebar to expand it to a 50/50 split screen.

If you don't want to use Slide Over or Split Screen, you can disable these features altogether by opening Settings and tapping General, then Multitasking. Next, switch 'Allow multiple apps' to off. You'll no longer be irritated by unwanted sidebars appearing when you swipe.

Tina W, via email

WEBSITES

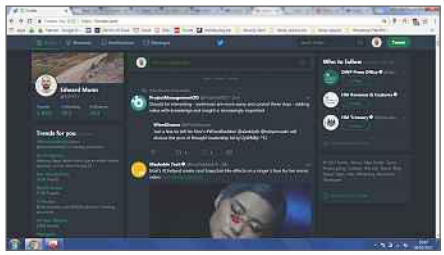
Stop Twitter keeping you awake

Did you know that you can stop Twitter from straining your eyes by enabling its dark-themed night mode? To enable it from your browser, click your profile picture to open the site's main menu and select 'Night mode'. Doing the same again disables the feature.

In the Twitter app for Android (bit.ly/twitter436), you can enable automatic night mode by tapping your profile picture, then 'Settings and privacy'. Under General, select 'Display and sound' and tap 'Night mode' and 'Automatic at sunset'. The app might ask for permission to access your location.

If you prefer to toggle it manually, you can just tap the moon icon in the bottom-left corner of the app's main menu. The latter works in the iOS app, too.

James Thompson, via email



Twitter's 'Night mode' enables a dark theme that's easier on the eye at night

BLUNDER OF THE FORTNIGHT

MESSAGING APPS

Delete accidental Telegram messages

The other day, I made a mistake I've made once or twice before and sent a message to the wrong person on Telegram (bit.ly/telegram436). Luckily, it was nothing embarrassing, but to save myself the hassle of explaining what I'd done, I thought I'd check if the message could be deleted. I long-pressed it and saw a trash icon.

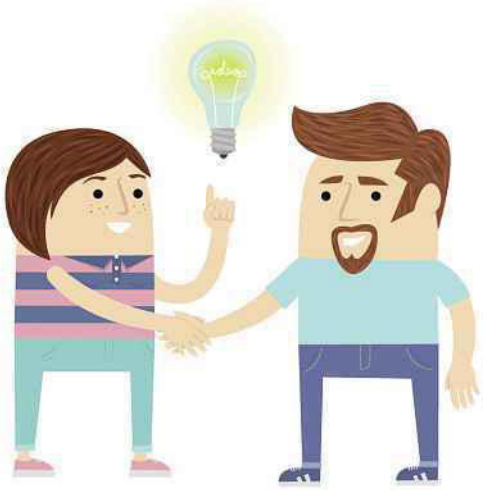
I thought this might only delete the message at my end but after tapping it, I got the option to 'Delete for [recipient's name]'.

Telegram lets you unsend messages you've sent by accident

I ticked this, tapped OK and the message was deleted from their device before they had a chance to read it. I know it worked because they never questioned me about it! I've heard that such a feature is coming to WhatsApp but until it does, it's one clear advantage that Telegram has over its rival messaging service.

Lawrence S, via email

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



Readers' Helpdesk

Our pick of the best solutions posted on our reader forums. Visit forum.webuser.co.uk – it's friendly and free!

iOS

Why is my iPhone sending iMessages to Android?

Q When I send a message from my iPhone to a friend who has an Android phone, the message appears in blue, showing that it was sent as an iMessage. However, you can't get iMessages on an Android phone, so he never receives them. In fact, before I've even started typing the text, the box at the bottom where you type your message has 'iMessage' written in it. For all my other Android contacts, the box says 'Text Message' as expected. Can anyone explain why my iPhone is being tricked into thinking it's sending messages to another iOS device?

vista, Web User Forums

A Is it possible that the recipient has used an iPhone in the past? If so, your iPhone may still recognise the phone number as belonging to an iPhone, even though it no longer does.

To stop this, the recipient needs to put their SIM card back in their old iPhone, tap Settings, Messages, then turn off iMessage. Next, they should open FaceTime from Settings and turn this off, too. If they don't have the iPhone any more, they can deregister iMessage using the form at bit.ly/deregister436. It's important that they follow these steps, otherwise they might fail to receive messages from anyone who tries to contact them using an iPhone.

The messages app shows if you're sending an iMessage or a text

If you're ever struggling to send an iMessage (maybe the recipient is abroad and has mobile data turned off), did you know you can opt to send it as a normal text message by long-pressing it and selecting 'Send as Text Message'?

Ed7471 (Web User staff), Web User Forums

SOFTWARE

Can I burn videos to DVD with VLC?

BurnAware lets you burn your videos to DVD

Q I've got some videos that I want to burn to DVD. Can I use VLC Player or is there another tool that will do the job?

jedcop, Web User Forums

A The simplest way to burn files to DVD (and one that wouldn't require you to download any additional software) is to use File Explorer. Put a blank disk in the drive and, if AutoPlay is enabled, you can simply select 'Burn files to disc using File Explorer' before dragging and dropping the files and selecting the option to burn to disc. This method will burn the files in their existing formats, so that you can open them on another computer.

If you want to burn to DVD in a format that a standard DVD player will recognise, you'll need DVD 'authoring' software. It apparently can be done with VLC but looks rather convoluted so I'd recommend using a dedicated tool such as BurnAware Free (www.burnaware.com) instead. Just make sure you opt out of any extras when installing it.

Stewart40, Web User Forums

GENERAL PC

Why doesn't a window appear when I plug in a USB stick?

Q Since the latest Windows 10 update, when I insert a USB memory stick into the USB port on my laptop, it doesn't show up and I have to go into the File Explorer to open the drive.

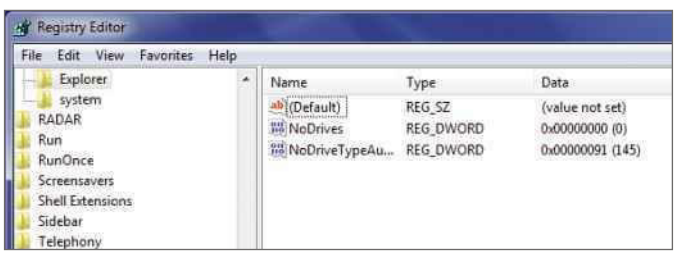
I've tried looking in the AutoPlay section of Control Panel but have failed to solve the problem.

sjw, Web User Forums

A Open the Registry Editor by typing `regedit` into the Start menu, then right-clicking the app and selecting 'Run as administrator'. Navigate to:

HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer

From here, check that 'NoDriveTypeAutoRun' is set to a value of 91 (hexadecimal) or 145 (decimal). If it's not, right-click it, select Modify and enter the appropriate value. Now the AutoRun window should appear when you insert a CD or any other removable media. As always, back up your Registry before making any changes, by clicking File and Export.



Enable AutoRun for removable media in the Registry

Stewart40, Web User Forums

Inbox

You can let us know your views via:
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www.twitter.com/webusermagazine and forum.webuser.co.uk

Star Email

Mug winner

Mobile networks must stop ripping us off

I am pleased that mobile-phone companies are finally being exposed for ripping off their customers over the cost of handsets (Need to Know, Issue 435). When you sign up for a two-year contract that charges you £50-odd quid a month, you're effectively paying around £1,200 in total (£50 x 24 months). Yes, I realise that includes calls, text and data, but it's still a lot of money.

The least the mobile networks can do when the two years is up and you've paid for the phone is to lower your monthly payment to the appropriate amount. But it seems that instead they go on charging you the same sum for as long as they can get away with it. Either that or they try to convince you that you need to upgrade the handset you've just

finished paying for to whatever the latest iPhone, Samsung or top-of-the range model is, so they can keep on ripping you off indefinitely.

I've had the same HTC phone for the last five years and it still works perfectly well. As soon as I reached the end of my two-year contract with Vodafone, I moved to a cheaper SIM-only deal with Three and put the new SIM card in the old phone. I've paid for it, after all, which means I can do what I like with it.

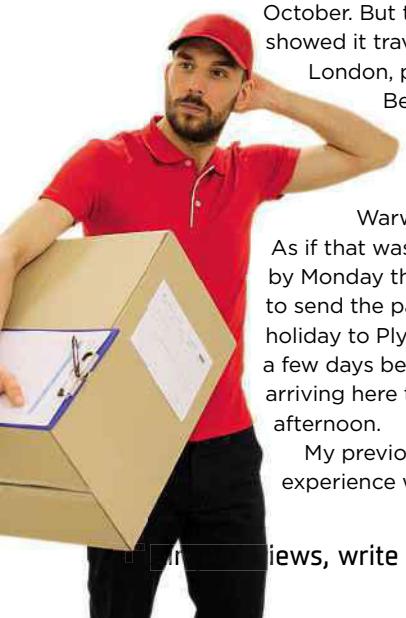
Mobile companies have a duty to be fair to their customers rather than deliberately overcharging them beyond the end of their fixed deals. This is especially true for older people who may not realise that once their contract is up, they don't have to keep paying the same amount – or even stick with the same company. You're free to sell the phone once you've paid for it, although you probably won't get much for an old model.

Jamie Hathaway, via email

Online delivery keeps passing me by

Over the past two months, I've ordered two items online and the experience has both frustrated and infuriated me. The companies and the products were fine, but they were sadly let down by the courier, which in both cases was Hermes. Both transactions suffered exactly the same problem: the packages were sent halfway around the country before arriving at my address.

The first, a purchase from eBay, promised delivery by Saturday 21 October. But the tracking showed it travelling from London, past Bedfordshire (where I live) to end up in Rugby, Warwickshire. As if that wasn't enough, by Monday they decided to send the package on holiday to Plymouth for a few days before finally arriving here this afternoon.



My previous experience was even worse – the package was sent to Nottingham, then Bristol before arriving two weeks late.

When I complained to Hermes, I got a standard letter explaining that they deal with thousands of packages and occasionally the odd one (always the one addressed to me!) goes astray. The irony is that this afternoon I received an email asking for my feedback on how they handled my complaint. I couldn't wait to click the link but – guess what? The link was dead! I think that says it all.

Castman, Web User Forums

Make your emoji quiz easier

I think your 'Take a Screen Break' emoji quiz is getting too hard. I doubt that anyone is guessing all the right answers and winning the coveted Web User mug. With this in mind, here are my say-what-you-see guesses for the horror-film emoji

Quiz Answers: Issue 435

1. *Interview with the Vampire*
2. *The Silence of the Lambs*
3. *Candyman*
4. *An American Werewolf in London*
5. *The Omen*
6. *The Devil Rides Out*

WINNER!

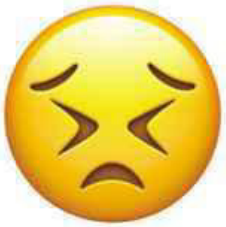
Well done to Eric Walden who wins a Web User mug

WORD PUBLISHING

Document

"Sky will collapse faster than a deckchair in a hurricane"

Turn to page 74 to find out what's making Barry mad this issue



in Issue 435:
1 Microphone Vampire
2 Mute Sheep
3 Sweet Old Man
4 Wolf Between Flags
5 Circle of Holding Hands
6 Satan Races Upwards

I hope these wild guesses persuade you to make things a bit easier in future.

Andy Briers, via email

***Web User* says:** Nice try Andy, but you didn't guess any of those emoji correctly – you'll find the right answers on page 71. We do try to include a range of easy, medium-hard and difficult-to-guess posers each issue – see how you fare this fortnight on page 37.

Tech is no excuse for bad manners

What a patronising Star Email in Issue 435 from Humbert, San Antonio ('Get with the 21st century, grandpa!'). It's true that the youngsters of today are obsessed with and constantly glued to their mobile phones, but that doesn't mean we shouldn't expect them to put their devices down once in a while. This is especially true at mealtimes, when fiddling with a phone instead of concentrating on your food is downright rude.

Rather than mocking 'grandpa' for not being 'down with the kids' perhaps Humbert should acknowledge that the ubiquity of modern technology does not preclude the need for basic manners! Despite Humbert's assertion, I'm sure that plenty of children still enjoy talking to their grandparents, and know that ignoring people around you in favour of your phone is simply unacceptable.

Catherine Jameson, via email

Short-sightedness *can* be genetic

As someone who has been short-sighted for as long as they can remember, and whose parents are also short-sighted, I take issue with Terry Sims' comments in Issue 435 about the causes of myopia. In fact, I suspect that his claims are factually incorrect.

I have read several scientific reports that link more than two dozen genes to an increased risk of children developing myopia, and short-sightedness has long been observed – if you'll pardon the pun – to run in families. As for saying that "the condition can be reversed", well I wish someone had told my opticians that information because I could have saved a fortune on spectacles over the years!

However, where I partly agree with Mr Sims is that children today don't do their eyesight any favours by staring close-up at computer and mobile-phone screens all day long. I don't believe that straining their eyes in this manner is the sole cause of myopia, but I imagine that it exacerbates existing conditions and could potentially lead to serious vision problems in later life.

Janet Bishop, via email

Crafty crypto-mining should be illegal

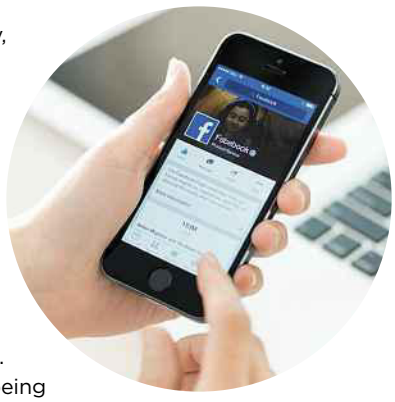
I was interested and slightly horrified to read not one but two items in your latest issue about websites using the processing power of their visitors' PCs to mine for Bitcoin and other cryptocurrency. Surely this devious practice is completely illegal? If not, then it certainly should be. How can it be allowed for websites to deliberately slow down your computer so they can surreptitiously use your system to make money for themselves?

I'm pleased that you recommended tools that can prevent this from happening, but as with malware, adverts and so on, I imagine that no sooner do you block one set of known culprits than another springs up. I certainly don't want my PC being exploited for somebody else's gain so I will be installing the strongest protection possible to stop this crafty and unauthorised 'crypto-mining'.

Colin Price, via email

Facebook is what you make it

Gold Master makes some good points about Facebook (Inbox, Issue 434). If people don't like the annoyances and autoplaying videos, then they're not forced to use it. He is also correct that there is a certain degree of peer pressure these days that obliges one to be 'on Facebook'.



Personally, I find Facebook useful because I make sure I am in total control of what I see and do on it. I don't like being pestered with adverts, so I use an ad blocker. I don't like my personal life being made public, so I have my privacy settings tightened to the max, to prevent intrusion. And I don't like having to wade through the minutiae of people's everyday lives, especially when I barely know them, so I am only Facebook friends with real-world friends and family members.

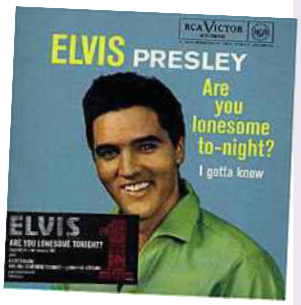
If I get bored of seeing a particular person's holiday snaps, or don't want to be invited to play unfathomable games, then I adjust my news feeds to see fewer posts of

that ilk. It's very easy to do, and makes for a more pleasant Facebook experience. I'm also careful not to 'overshare' information about my own activities because I'm loath to be perceived as a Facebook bore myself!

I apologise if this sounds at all patronising, but Facebook is very much what you make it, and it pays to remember that you – and not Mark Zuckerberg and his advertising cronies – are in control.

Miriam Grayson, via email

My birthday Number One is the King



In your Turn Back Time Online feature in Issue 435, you ask: "Is your birthday song cooler than 'If' by Telly Savalas?". I have two points to make: not only is that song blooming awful – the original by Bread is far superior – but my birthday song, according to the Birthday Jams website (www.birthdayjams.com) is considerably cooler. It's 'Are You Lonesome Tonight?' by the King himself, Elvis Presley!

Roger Charlton, via email

Google Clips sounds like a joke

Reading your FAQ about Google Clips in Issue 435, I had to wonder if it was some sort of April Fool's joke come six months early (or late). Who in their right mind would willingly have a camera in their home, constantly watching, listening to and recording what they are doing? Particularly one from Google, which is already notorious for using the web to spy on us. Is it now trying to spy on us in our homes, too? I assuredly won't be asking for one for Christmas.

Colin Birch, via email

What you say...

KODI BOX SELLER BRIAN THOMPSON RECEIVED A SUSPENDED SENTENCE (bit.ly/kodi436). WAS THIS THE RIGHT VERDICT?

He should have gone to jail as a deterrent to others. We should all pay for the services we choose to use.

Jenny Jacks @JenJacks3

The next person will go to prison. Any 'grey area' clouds will turn to clear-as-crystal skies with no doubt as to what the law means.

Gavin Green

People selling Kodi boxes often don't tell buyers they are doing wrong. Hopefully they'll crack down on these traders so our Sky subscriptions don't need to go up even more in future.

David Batty

My biggest gripe is that he was making money by selling cheap boxes with free software added at a hugely inflated price.

Dave Harper

YOUTUBE IS MAKING MORE VIDEOS ELIGIBLE FOR ADVERTS (bit.ly/youtube436). WOULD THIS STOP YOU VISITING THE SITE?

I wouldn't stop using it, but I'd find it very annoying.

Iori @gadgetgal16

Goodbye YouTube. I would watch Veoh, Dailymotion and Vimeo instead.

Phil Owen

I use Tube Player (www.tubeplayer.top). No ads, no annotations, no annoyances. Just pure YouTube videos. Simples.

Gary Olsen

Why would I want to sit watching YouTube when I've got a 49in 4K TV?

Geoffrey Boow

AMAZON IS TESTING A SYSTEM THAT LETS COURIERS DROP ITEMS IN YOUR HOUSE WHEN YOU'RE OUT (bit.ly/amazon436 – see page 9). WOULD YOU USE IT?

Not unless they are going to employ their own criminal-record check for staff. Certainly not the 'men with cars' we get delivering at the moment.

Nat Grove

I don't think our German shepherd dog would take too kindly to the idea.

John Hewett

Don't think so. Great idea for those who fancy a claim on their house insurance, I suppose.

Liz F Lambeth

They can't get my deliveries right anyhow, so there's not much chance of us letting them in.

Iain Elkington

AMAZON HAS RELEASED ITS FIRST WATERPROOF KINDLE (bit.ly/kindle436 – see page 8). DO YOU EVER READ YOURS IN THE BATH?

Yes, I do. The new one looks great, but it's still pretty pricey so I'll stick with my cheap basic one for now.

Dario @dario006

Not a Kindle, but I always listen to music on my iPhone in the bath. Never dropped it in and I've been doing it for years. I wouldn't chance my tablet, though – it's a bit too cumbersome.

Ady Colclough @AdyC76

I'm still waiting for the next big thing, and this is certainly not it. Those of us of a certain age miss the days when a must-have bit of kit seemed to be released every other month. 'Floats in the bath' doesn't cut it.

Richard Morgan

Page 404

Barry Collins refuses to pay Sky's HD tax and predicts the company's collapse

The Sky is falling in on rip-off HD

At some point in the next five to 10 years, Sky is going to the wall. I promise you. Netflix, Amazon, Facebook or a combination of the three is going to snatch Sky's sports rights and the company will be finished – its boxes sitting redundant under our TVs like old branches of Woolworth's on the high street.

When it does capitulate, we'll look back at this era of TV and wonder how the hell Sky got away with it for so long. Because when you examine what we're being asked to pay – twenty, thirty, forty quid or more for each month – it's ridiculous. Genuinely insane.

Sky might be flogging the life out of Ultra HD right now, but in our household we're still leading the rebellion against bog-standard HD. Sky has the front to charge you £10 extra if you want to access HD channels, and I've always flatly refused to pay the ransom – not least because you can still get most of the main channels in HD without plumping Murdoch's cushions.

Sky doesn't like to tell you this, and you'll certainly struggle to find the information anywhere on its website, but it's obliged to deliver the HD channels for the BBC, ITV, Channel 4 and 5, even if you don't pay for HD. It's only Sky's own channels and the rest of the 654 makeweights that aren't available if you don't fork out for HD. Somehow, we've managed to muddle by without high-definition pictures from Psychic Today and QVC.

> "Somehow, we've managed to muddle by without high-definition pictures from Psychic Today and QVC"

Still, Sky finds bizarre and novel ways to punish us for not paying the HD tax. Take, for example, the on-demand services. If I set my Sky+ to record Channel 4's *Grand Designs* in HD this evening, I can keep that recording on my box in perpetuity, until the box dies or I cease to be a Sky customer. If I try to download the same show from the Channel 4 catchup service on Sky – the exact same digital bits and bytes that are broadcast to the satellite dish – I *can't* watch it in HD and the download is automatically deleted from my box 28 days later. It's beyond irrational.

To be fair to Sky, some (but only some) of this is due to regulatory restrictions placed on on-demand services such as the iPlayer to prevent them from harming commercial rivals. Nevertheless, it's an inordinately stupid way to treat customers who (like me) pay £22.50 per month – and I'm on one of the cheapest packages available.

Now, compare that to Netflix or Amazon, both of which cost much less than a tenner a month. All the shows are in HD (unless the original series was only recorded in standard definition), with many in Ultra HD if you pay £10 a month on Netflix – less than half of what Sky charges me for fuzzy vision.

The Netflix app is available on as many devices as I want it to be, and two of us in the home can watch different shows on Netflix at the same time. Sky, on the other hand, limits your household to only three devices and you can only change one device per month, just to be extra awkward.

Sky's day is coming. It'll collapse faster than a deckchair in a hurricane once someone steals its football rights. And I won't be sending flowers to the funeral.

Illustration: Andrew Torrens

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

WebUser

SUBSCRIPTION OFFER
FOR MORE INFO SEE PAGE 62

ENJOYED THIS ISSUE?

GET THE NEXT ONE EARLY!

Thank you for reading this issue of *Web User* – we hope you found the tips and advice useful. The good news is that you don't have to wait too long for the next issue. If you subscribe to *Web User* by Monday 20 November (8pm)*, you'll receive it through your letterbox before it's available in the shops!

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