47 FREE APPS
To Improve Your Life!

Why you should be using…

…**Waze** • **Nexar** • **Snapseed**
Sickweather • **Flio** • **Glympse**
Telegram • **Shpock** • **JustWatch**
SwiftKey… and many more p38

only
£2.10

9 771473 709158

28>

JOIN THE PRO SQUAD!

iiyama G-MASTER™
MONITORS4GAMERS

RED EAGLE™

24" | 27" | 144Hz | Free Sync

GB2488HSU I GB2788HS I GB2760QSU

Panel	TN LED (Full HD – WQHD)
Response time	1 ms, 144Hz, FreeSync™
Features	OverDrive, Black Tuner, Blue Light Reducer, Predefined and Custom Gaming Modes
Inputs	DisplayPort, HDMI, DVI
Audio	speakers and headhpone connector
Height adjustment	13 cm

gmaster.iiyama.com

Appiness is just a tap away

I'm not a cigar smoker, but I still have fond memories of those old 'Happiness is a cigar called Hamlet' adverts. The idea that nirvana could be achieved by burning a foul-smelling brown stick to the strains of Bach's *Air on the G String* appealed to me, although these days cigars are only acceptable if your wife has just had a baby or you're impersonating Winston Churchill (see right). It's now much healthier and smarter to use an app to enhance your life, so in this issue's cover feature (page 38) we've rounded up the best tools for the job. From simplifying everyday tasks to solving annoying problems and even earning you some extra cash, we've chosen 47 free apps to make your life easier and, hopefully, happier.

Thanks for all your emails regarding the encrypted message on our cover last issue. Maurice Durbin was the first to decrypt the code as '*Web User* is the only magazine you need' and wins a *Web User* mug. It *was* a bit easy, wasn't it?!

Robert Irvine
robert_irvine@dennis.co.uk
#webuser

5 Things you'll learn this issue

1 How to protect your personal files using unbreakable AES encryption
page 28

2 How to skip ads on YouTube without depriving video creators of revenue
page 31

3 How to remove junk files from your phone to free up space and memory
page 32

4 How to stream Sky Sports from your phone to your TV for a fiver a month
page 69

5 How to tweak your Wi-Fi connection to make your network more stable
page 66

p58

p38

p48

abc Average sales, Jan-Dec 2016, 28,298 copies per issue

Contents

COVER FEATURE
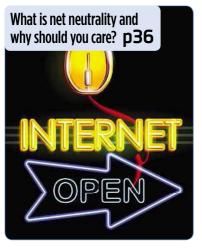
47 FREE APPS
To Improve Your Life!

The best free apps you're probably not using, but should be

p38

What is net neutrality and why should you care? **p36**

The best free online image editors **p46**

Microsoft launches its new Surface Laptop **p20**

Contents

FAVOURITES Must-read regulars

Keep your greedy hands off the net, say web giants **p74**

Practical WebUser
Workshops, tips, projects and problem solving

16 pages

Improve YouTube in Chrome **p54**

Replace your PC's memory **p58**

Lost your Android phone? Here's how to find it **p56**

What's New Online

Share Google photos more easily
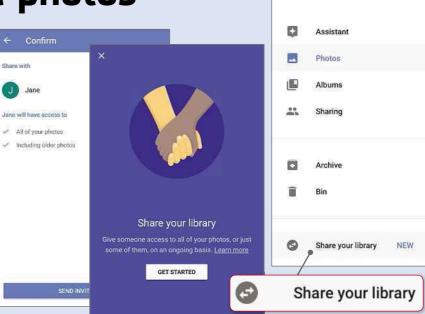
Google has added two useful features to Photos that make it much easier for you to share your snaps. Rolled out for Android, iOS and the web, the new additions rely on automation, using machine learning to identify the people in your photos, the location of the shot and your sharing habits. This information helps Google recommend images for you to share and people to share them with. You'll see these in a new Suggestions section when you tap the Sharing tab. You'll also be able to see photos that others share with you, even if they don't use Google Photos.

The second feature is Share Your Library, which you'll find in the top left-hand menu. Select this and enter the email address of someone you want to share your images with. From this point on, every time you take a photo, they'll be sent a notification prompting them to have a look. You can also specify a date in the past to let them view historical images, and they'll be able to choose which of your photos they want to keep.
photos.google.com

Explore the marvels of Malta

bit.ly/malta427
The tiny Mediterranean island of Malta is steeped in thousands of years of history and attracts two million visitors every year. If you've never been, you can now see what all the fuss is about by taking a virtual tour of its narrow, winding streets using Google Street View.

Soak up the delights of the capital Valletta, admire the hilltop town of Mellieha and roam the beautiful, fortified city of Medina. As well as taking your own tour, you can wander across neighbouring Gozo's Ggantija Temples, learn about the Great Siege and take in 360-degree views of catacombs, ancient houses, museums and tourist resorts via a new Google Arts & Culture project. There are lots of online exhibits to enjoy along with artworks, historic collections and details of prehistoric gems.

Use emoji in Messenger video chats

www.messenger.com
If you enjoy video chats in Facebook Messenger, you can now use emoji to express your emotions, to add fun and colour to your conversations. Just tap an icon to indicate love, happiness, sadness, shock or anger. Some reactions incorporate your face, sending tears from your eyes, for example, and the emoji also change depending on whether you're in shot or not.

Facebook has also added new video filters that can be previewed live, along with a range of extra masks that fit your face and interactive animations. Best of all, you can now tap the camera icon when you're talking in a group or individually to save a screenshot, which can be posted on Facebook or shared elsewhere.

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

Send GIFs in WhatsApp

www.whatsapp.com

WhatsApp now lets you send and receive GIFs, and search the world's biggest library, Giphy (giphy.com). If you're struggling to find this new feature, just press the emoticon face in the bottom-left corner of the screen in Android, or tap the '+' symbol in the same location in iOS and select 'Photo and Video Library'. Press the GIF button, then search for and select the animation you want.

Trace history's greatest journeys

bit.ly/journey427

A Race of Discovery is a set of maps that lets you trace the journeys of some of the world's most famous explorers and discover how long it would take you to make the same trip today. There are 11 voyages to follow, including those made by Christopher Columbus, Marco Polo and Captain Cook, along with fun maps showing astronaut Tim Peake's expedition to the International Space Station and Elon Musk's intended route to Mars. Read about the key stages of each journey and click through to online travel agent Travelbag to book a similar trip.

Discover how artworks are connected

bit.ly/artwork427

Choose two artworks from a selection of photos and X Degrees of Separation will find a visual connection between them. It's based on the theory that any two people can be connected via friends of friends, and uses machine learning to analyse the visual features of both pieces before displaying a potential path of artworks. Search for specific art collections and share your results, or click an image to discover more about it. Click the heart icon to view some pre-discovered pairings.

See locations featured in Harry Potter

bit.ly/potter427

To celebrate the 20th anniversary of the first Harry Potter book being published, you can now take a Google Earth tour of 12 real-life locations associated with the boy wizard. They include Platform 9¾ at King's Cross station in London, Alnwick Castle, a theme park in Florida and The British Library. Each entry includes a short description and the chance to take a look around.

5 TO FOLLOW ON TWITTER

@Sanemavcil
A look at the amazing things being created with Apple's Augmented Reality kit

@edfringe
The annual Edinburgh Festival Fringe is on from 4 to 28 August

@TeviotPlace
The UK's Anatomical Museum is now tweeting about its best bits

@iaaforg
Stay on top of the medal count at the IAAF World Championships

@colorseffect
See how colour is used to tell stories in films

Play a 2D version of Nintendo classic

bit.ly/nintendo427

Super Smash Bros was a much-loved 3D fighting game by Nintendo, and you can now play it for free in 2D in your browser. The retro styled, fan-made Super Smash Flash 2 features iconic characters including Pac-Man, Zelda and Mario.

Watch developers pitch apps

www.planetoftheapps.com

Apple has launched its first original TV series to take on Netflix and Amazon Prime. Similar to *Dragon's Den*, developers pitch apps to a panel of celebrity judges. The first episode is available to all, with later episodes only on Apple Music.
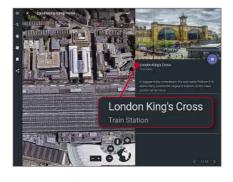
Get a new Google font

bit.ly/font427

A new, versatile font has been designed specifically for the screen and it is now available to use in Google Docs, Sheets and Slides. It can adapt to fit any layout and screen size, and you can now use it for free in your own web pages.

+ Tell us your favourite new things at forum.webuser.co.uk

Not again! Petya ransomware attack wreaks global havoc

What happened?

Another massive ransomware outbreak disrupted companies around the world, locking down data and demanding Bitcoin in return for its release.

Known as Petya – or, confusingly, as NotPetya by some researchers – the attack appears to have started in Ukraine and spread to 60 countries, taking out major corporations, such as ad giant WPP, and even shutting down a terminal in the Port of Los Angeles. The attack followed the WannaCry ransomware outbreak in May, which infected networks in more than 100 countries and knocked swathes of the NHS offline.

Although there were some similarities between the attacks, including the use of an infection technique developed and leaked by the US National Security Agency, it now appears that Petya's purpose *wasn't* to extract money from victims. Instead, it may have been designed as a distraction to conceal the installation of further malware.

Petya doesn't allow the attackers to decrypt their victims' data, which suggests that they aren't actually expecting people to pay up – though some already have. Instead, the 'ransomware' is being described as a 'wiper': a different type of malware that destroys data rather than simply locking it down until a ransom is paid.

Additionally, entire networks weren't taken offline, as happened with WannaCry, raising the question of why the attackers wanted a few computers to remain unaffected. One hypothesis is that they're hoping to infect those

The Petya attackers are more interested in wiping data than extorting money

machines with a separate malware.

With the main target appearing to be Ukraine, many fingers point to Russia as the likely culprit, although evidence is thin, as is usual with such incidents, and large Russian firms including oil giant Rosneft and gas company Gazprom were also hit by the attack.

How will it affect you?

If you've been hit by this attack, there's no point in paying the ransom. The email account the attackers were using has been taken offline, and there appears to be no way for them to actually decrypt your data.

So, what can you do? Sadly, very little. Ransomware is on the rise and battling it requires forward planning. Ensure your operating system and software are up to date, run antivirus and always have backups of important data.

WannaCry and Petya both use a flaw that's since been patched by Microsoft, but that's no guarantee against future infection. The malware was spread via legitimate government accounting software through its real update system. Sometimes, there's nothing you can do to stay safe; but if you have backups of your data, you can wipe your machine and continue unaffected.

If this attack has frightened or concerned you, use that as motivation to set up backups. And if you already have them in place, test your system to ensure you can easily recover your backed-up data.

What do we think?

It's one thing to be targeted by criminals hoping to make a quick buck out of holding our data hostage – or the myriad other ways hackers extract money from victims – but it's harder to protect against these new attacks, which are the digital equivalent of being caught in the crossfire between warring nations.

The exploit that allowed this Petya attack to happen was developed by the NSA to use in matters of national interest. The details were leaked, and are now being used against Ukraine as weapons, like stolen missiles or guns.

This means security is getting harder for all of us. These are sophisticated attacks, not kids making mischief or criminal gangs after an easy payday, and their apparent success means we should expect to see more of them.

Consider Petya a shot across the bows. You've been warned that protecting your data is becoming increasingly vital, so run your updates and back up all your important files and documents. You might not be the target of attacks such as Petya, but that doesn't mean you won't be a victim.

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

Kodi users could face prison sentences

What happened?

The anti-piracy group FACT (Federation Against Copyright Theft) says its investigations could soon target buyers of 'fully loaded' Kodi boxes. So far, the Kodi crackdown has targeted the people selling these boxes, but FACT says the net is widening and anyone found using illegal add-ons may now be threatened with fines and even prison sentences.

The comments come from Kieron Sharp, the chief executive of FACT, who says an investigation against Kodi-box owners will be launched "in the very near future". Sharp told the *Independent*: "What we've been looking at in conjunction with many of our clients and members are the different levels of crime being committed. We'll also be looking at – at some point – end users [because] they are committing criminal offences".

A ruling by the European Court of Justice in April said that the use of media players to stream copyrighted content would be considered a criminal activity, whereas previously it was only illegal to download the content. It also ruled that the sale of Kodi boxes preloaded with software capable of accessing copyrighted content was illegal.

How will it affect you?

FACT clearly means business in clamping down on the use of illegal add-ons, but if you only use Kodi to stream content legally, then you've got nothing to worry about. However, anyone buying a fully loaded Kodi box needs to be aware that they could face a custodial sentence if they get caught. Sentencing for copyright infringement has become more severe since the Digital Economy Act was introduced earlier this year, so watch out!

What do we think?

People who use Kodi to stream subscription content for free must know that they're breaking the law, but FACT's threat to pursue users as well as sellers makes the risk even greater. There are plenty of legal uses for Kodi, and hundreds of official add-ons to try, so it would be a shame if piracy ultimately ruins the software for everyone.

Google finally stops scanning your emails

What happened?

Google will stop reading your messages in Gmail to personalise its advertising, the company has confirmed. Previously, Google analysed the content of emails sent and received for behavioural advertising purposes – which is why a message about a holiday or wedding can suddenly spark a slew of very specific ads.

This change in policy is believed to be an attempt to appease corporate customers. Gmail is free for individuals, but companies pay for the webmail service as part of Google's cloud-based collection of productivity tools, G Suite. Messages sent in corporate Gmail aren't scanned for advertising, but some companies believed differently and weren't happy about it. To avoid such confusion, Google has dropped email scanning for everyone.

How will it affect you?

If you're a Gmail user, Google will not look at the content of your emails – you may be alarmed to learn that it had that power previously. However, that doesn't mean behavioural advertising is being ditched, because Google will use personalisation data across its other services, based on your account settings.

If you want to turn off behavioural advertising, go to My Account (myaccount.google.com) and under 'Personal info & privacy', click Ads Settings. You can turn off advertising personalisation entirely, or select topics you'd like to see or prefer to avoid – and see Google's guess at your gender and age, which is sometimes amusingly incorrect.

What do we think?

We're amazed that the scanning of emails for advertising purposes has lasted as long as it has – if such a system was rolled out now, there'd be uproar! We'd either grown accustomed to the corporate giant reading our messages or failed to realise it was doing so. Admittedly, "read" only means a machine looking for keywords to serve ads, but it just shows how easy it is to give up our right to privacy. Hopefully, we won't give in so easily next time.

Personalise the ads that you see

Make the ads that you see more useful to you or opt out of seeing personalised ads on Google. If you opt out, you'll still see ads, but they'll be less relevant. Keep in mind: Google doesn't sell your personal information.

MANAGE ADS SETTINGS

Google fined €2.4bn by EU watchdog

What happened?

The European Commission has fined Google €2.4bn (£2.1bn) for abusing its search dominance to disadvantage online shopping rivals. The complainants in the long-running case allege that Google promoted its own shopping services above independent alternatives, hitting their traffic by 85% in the UK. "What Google has done is illegal under EU antitrust rules," said EC competition commissioner, Margrethe Vestager. "It denied European consumers a genuine choice of services and the full benefits of innovation."

Although the fine is a record from the EC for 'antitrust' issues, it amounts to just 2.5% of the web giant's annual revenue, and Google could have been hit with a punishment of up to 10%. The fine is based on Google's comparison shopping revenue from 13 countries, and the company could be liable for further fines of €10.6m (£9.3m) a day if it doesn't resolve the situation within 90 days. Google has denied the EC's findings and says it is reviewing the ruling before deciding whether to appeal.

How will it affect you?

If Google doesn't appeal against the decision, the search results you see when shopping online will change. At the moment, if you search for a specific product, you're likely to see a Google carousel of different online stores. That's likely to disappear in favour of other shopping options, to appease European regulators.

This isn't the only case before the EC. Google also faces an investigation into claims that its AdSense advertising products limit consumer choice, while a third case involves the inclusion of Google services such as search in Android, which the EC says is unfair.

What do we think?

This long-running case may not yet be over, depending on whether Google decides to fight back with an appeal, but it's safe to say that Vestager isn't winning any fans in Silicon Valley. She's already been accused of anti-American sentiment for targeting corporate dominance, but European consumers should applaud her. Vestager is willing to stand up to the web giants in a way we haven't seen before in the name of consumer rights rather than corporate cash or power. Tech firms, wherever they're from, shouldn't be allowed to ride roughshod over local laws, and it's good to have at least one regulator watching closely to ensure they don't.

We'll take a closer look at the darker, greedier side of Google in next issue's cover feature, and will be recommending products and services you can use instead.

👁 FIRST LOOK

OnePlus 5
oneplus.net/uk/5

The long-awaited OnePlus 5 is finally on sale, with prices starting at £450 from the OnePlus website. But is the company's latest and greatest 'flagship killer' (a phone that has all or most of the features of a high-end phone but costs less) worth your hard-earned money?

The OnePlus 5 is a 5.5in smartphone with an AMOLED 1,920x1,080 screen and a dual-lens camera. The aluminium unibody design offers a handful of distinguishing features: a dual-lens camera that protrudes from the back, a 'do not disturb' switch on the left edge and a 3.5mm headset jack and USB-C port. Like its predecessor, it also has a central fingerprint scanner.

Qualcomm's latest 2.45GHz Snapdragon 835 processor makes the OnePlus 5 a near-perfect multi-tasker, with a generous 6GB or 8GB of RAM and storage options starting at 64GB. In fact, it performs almost identically to the Samsung Galaxy S8 and the HTC U11, both of which are much more expensive.

A long battery life is often a priority when choosing a phone, and the OnePlus 5 doesn't disappoint. In our battery-life test, with the screen set to 170cd/m^2 brightness and Flight mode switched on, the OnePlus 5 lasted 20hrs and 40mins. That's more than twice as long as Sony's XZ Premium. What's more, the phone charges incredibly quickly, thanks to the included Dash Charge 3 charger.

The rear snapper, made in collaboration with DxO Labs, features a 16-megapixel main camera and a 20-megapixel telephoto camera. These work together to produce some of the best shots we've seen on a device of this price. Only the camera's HDR mode failed to impress.

The OnePlus 5 is the best smartphone the company has ever produced, but we wouldn't be surprised if the price rise – up to £449 from £399 for the OnePlus 3T – eats into its dominance among mid-range phones.

WHAT'S THE RUMOUR

Will Android O be called Oatmeal Cookie?

Google hasn't officially revealed its codename for Android O, but reports suggest it may be 'Oatmeal Cookie'. Past versions of the mobile operating system have been named after desserts and other sweet treats, and references to 'oc.dev' spotted in Android 8's source code point to Oatmeal Cookie as the most likely candidate.

Of course, 'oc' could stand for another dessert, but the latest find came after other sharp-eyed Google fans noticed references to "oatmeal_cookie" in slides shown off at Google's IO developer conference in May. Google staff could even be leaking a false name to throw us off the scent, and Android 8 may actually be called Oreo, Orange Juice or Ovaltine.

The real codename doesn't actually matter because the new operating system will be officially known by its release number, but that doesn't stop the speculation over the name that usually precedes an update. Previous releases were codenamed KitKat, Lollipop and Nougat, while earlier names include Eclair and Froyo (frozen yogurt). Google usually sets up an Android character at its headquarters themed around the dessert of choice.

Whatever the OS is called, Android O could start rolling out as early as August, according to some sources. Google's own Pixel and Nexus phones are likely to receive the update first, and Google's new 'Project Treble' initiative should mean that users with devices from other manufacturers won't have to wait as long to get it as with previous versions.

LIKELIHOOD RATING
✓✓✓✓✓

There hasn't been an Android release with a crunchy-sounding codename since Gingerbread (2.3) – the last two were the soft Marshmallow and chewy Nougat, so we reckon Oatmeal Cookie is a definite possibility, even if it doesn't sound like a particularly tasty or exciting treat.

What's new on Kickstarter
Our favourite new project on the crowdfunding site

Pellet
bit.ly/pellet427 | **From £45**

Dog owners can usually tell when their pets need to relieve themselves, but not when they're in another room. Pellet solves this problem by letting your pooch alert you electronically when it wants to go to the toilet, rather than barking, whining or scratching at the door. When your dog presses the Pellet with its paw or nose, it sends a notification over Wi-Fi to your phone or smart TV, so you can let it out. There are Pellets for both indoors and out, for when your dog has finished and wants to come back in. The creator hopes to raise £22,500 by 26 July.

WEBOMETER

WE LIKE...

⬆ Facebook helps you find free Wi-Fi
Facebook's Find Wi-Fi feature, which helps users locate free Wi-Fi hotspots, is rolling out around the world. Until recently, it was available only in a few countries. Users can use the Facebook app to find free hotspots by tapping the More tab then Find Wi-Fi.

⬆ Liberty to challenge Snooper's Charter
The High Court is to allow human-rights charity Liberty to challenge the Investigatory Powers Act, also known as the Snooper's Charter. Liberty has raised over £50,000 through the crowdfunding site CrowdJustice to cover legal costs.

WE DON'T LIKE...

⬇ Phone screens are damaging our eyes
Smartphones are damaging people's vision by making their eyeballs grow, says a leading ophthalmologist. His views echo the findings of a 2015 King's College London study that examined the connection between myopia and increased phone and computer use.

⬇ NHS Google trial broke privacy law
The ICO has ruled that a UK hospital failed to protect patient privacy when it shared data with Google. The search giant's DeepMind division was given details of around 1.6 million patients during the medical trial to develop a detection system for acute kidney injury.

Stay Safe Online

News about the latest threats and advice from security experts

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

Gov.uk breach exposes user data

The Government Digital Service (GDS) has told users to change their passwords following a security breach affecting its website Data.gov.uk. During a routine security review, GDS found that a clutch of usernames and email addresses had been left on a publicly accessible system.

A spokesperson for the Cabinet Office said: "During a routine review of Data.gov.uk, it was discovered that a file containing some users' names, emails and hashed passwords was publicly accessible on a third-party system". The hashed passwords mean they're scrambled and therefore harder to crack.

Data.gov.uk provides information published by government departments and agencies, public bodies and local authorities. The data is used to help people to learn more about how the government works, carry out research and build applications and services based on the data. The spokesperson added that the breach was very recently discovered and action was taken as soon as possible to notify users and the UK's data watchdog, the Information Commissioner's Office. The breach affects users who signed up to Data.gov.uk on or before 20 June 2015.
bit.ly/gov427

HMS Queen Elizabeth 'runs on vulnerable XP'

Britain's newest aircraft carrier, the £3.5bn HMS Queen Elizabeth, appears to be running the outdated Windows XP operating system, and is likely to be vulnerable to the same style of cyber-attack that hit the NHS. The HMS Queen Elizabeth, Britain's largest ever vessel, is the culmination of a nearly decade-long project to build two new aircraft carriers. However, an extraordinary discovery was made during a tour of the warship, as photos published by *The Telegraph* taken inside a control room onboard seemed to show computer screens displaying a Windows XP login screen.

Officers on board the aircraft carrier said that there are teams of cyber-specialists onboard to deal with any security threats against its systems. Mark Deller, commander on the Queen Elizabeth, told the Guardian: "I would say compared to the NHS buying computers off the shelf, I would think we are probably better than that. If you think more NASA and less NHS, you are probably in the right place."
bit.ly/hms427

Security Helpdesk | Your questions answered by security specialists

**THIS ISSUE'S EXPERT:
Marty P Kamden,
CMO of NordVPN
(www.nordvpn.com)**

Q **What's the best way to avoid ransomware such as Petya (see page 8)?**
Rhys Ball, Twitter

A After your PC gets infected with ransomware, it will wait for about an hour until it reboots. This reboot is required for the malware to encrypt your system. In some cases, shutting down your PC disrupts the encryption process and your data can be saved. For this reason, you should power down as soon as you see any suspicious pop-ups. If you see a Check Disk message, quickly turn off your PC to stop your files being encrypted by the ransomware.

Ransomware developers often try to trick you into clicking pop-ups displaying malware warnings. Close any that appear with a keyboard command or via your taskbar.

To avoid ransomware in the first place, always install the latest security updates. These often contain patches for the latest vulnerabilities.

Don't open anything suspicious you receive via email. Delete dubious emails purporting to be from your bank, ISP or credit card company, and don't click links or attachments in emails you're not expecting. Never give your personal details – if asked – via email.

Back up your important data to an alternate device and keep it unplugged and stored away.

Finally, use a VPN for additional safety, to protect you against malware that targets online access points. That's especially relevant when using a public hotspot. However, keep in mind that although a VPN stops malware from spreading while it's connected, it cannot protect you from downloading the malware in the first place. So although a VPN encrypts your activity online, you should be vigilant when downloading and opening files and clicking links.

> **Quickly turn off your PC to avoid having your files encrypted by ransomware**

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

Synology®

Video Station

SYNOLOGY ROUTER RT1900ac

Smart WiFi for your home

DiskStation
DS216+II

DS216play | DS716+II | DS216+II

4K TRANSCODING & STORAGE SOLUTION

Ultra HD 4K   dlna CERTIFIED   AirPlay

4K VIDEO TRANSCODING

Transcode 4K videos to make them suitable for all screens and bandwidths whether they are local media players or remote mobile devices.

TURN YOUR NAS INTO A MEDIA CENTRE

Access and share all the multimedia files stored on your Synology NAS anytime, anywhere for home or work through our large range of apps.
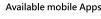
STORE AND STREAM YOUR MEDIA

Stream digital content with Roku, Apple TV, Chromecast, Samsung TV and all Bluetooth, Airplay and DLNA devices effortlessly.

For where to buy visit www.synology.com

Available mobile Apps

iOS

Synology's Media Accolades

PCR awards 2016 WINNER

PC PRO BEST NAS BRAND 2016 SYNOLOGY WINNER

⭐ Best New Websites

NEWS `RELAUNCH`
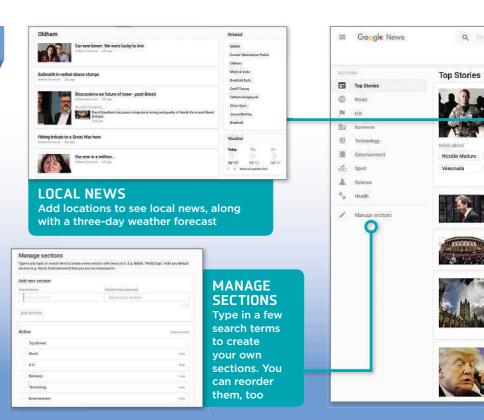
Google News
news.google.co.uk

Google News has been given a much-needed redesign, which has made a world of difference. It's now far less cluttered, with a card-based interface that keeps related news stories grouped neatly together. The menu in the left-hand column is much clearer, too, and you can customise it with sections of your own. We love the way the top navigation bar offers headlines, local news and stories based on your interests. The prominent keyword tags are also welcome, both on the homepage, where they flag up trending topics, and within the story cards, to provide greater depth. The video player is also much improved.

Our rating ★★★★★

LOCAL NEWS
Add locations to see local news, along with a three-day weather forecast

MANAGE SECTIONS
Type in a few search terms to create your own sections. You can reorder them, too

---

CONSUMER

Product Recall
productrecall.campaign.gov.uk

`NEW`

Faulty products can put your health and even your life at risk, but keeping up with product recalls usually entails watching out for easily missed announcements. This government website brings together new and past announcements about product recalls, so you can check all your household appliances and other electrical products, as well as food and drink, vehicles, medicines and international alerts. Most sections link to specific sites, such as the Food Standards Agency, and the hub itself is comprehensive, well designed and easy to use. Be sure to check out the registration section – that way, you'll be able to receive recall notifications by email or post.

Our rating ★★★★★

RETAIL `RELAUNCH`
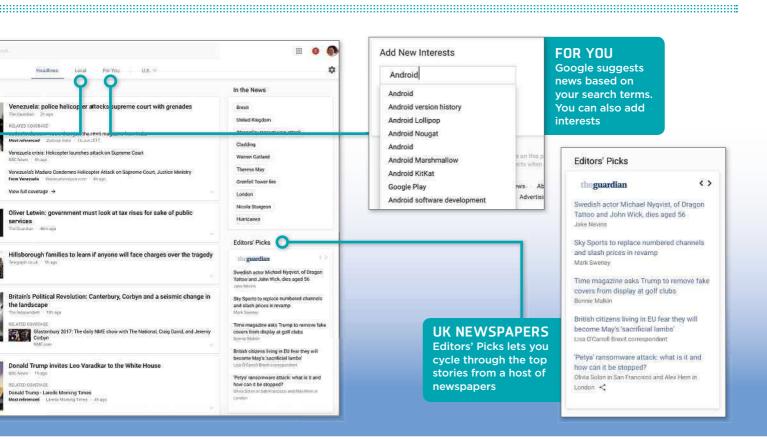
Happy Beds
www.happybeds.co.uk

One downside to buying a bed online is that you can't test whether it's comfortable or not, so Happy Beds tries to give you as much information as possible. Each mattress is accompanied by a list of features and a firmness rating, and you can specify how many will be sleeping in the bed and their weight. The site provides videos, images, precise dimensions and honest customer reviews. The best part is the interactive bed builder, which lets you customise your bed and see it created before your eyes. With mattress guides, sleep advice and an FAQ, it has everything covered.

Our rating ★★★★☆

Reviews by David Crookes

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

FOR YOU
Google suggests news based on your search terms. You can also add interests

UK NEWSPAPERS
Editors' Picks lets you cycle through the top stories from a host of newspapers

---

FOOD `RELAUNCH`

Bagel Factory
www.bagelfactory.co.uk

Feeling peckish and fancy a bagel? One look at this site and you will be. Its pages are filled with appetising photos of bagels bursting with tasty-looking ingredients and, to entice you further, there's a 10% discount for first orders. We like the way the menu section is neatly divided into vegetarian, breakfast, lunch and vegan options, and we were impressed that each bagel's entry lists vital nutritional facts as well as ingredients. If you're near a Bagel Factory shop, you can even place an order for delivery or have your bagels delivered to you by bike using Uber Eats.

Our rating ★★★★☆

EMAIL `RELAUNCH`

Yahoo Mail
upgrade.mail.yahoo.com

Yahoo! Mail has struggled to keep up with rival webmail services such as Gmail, but this redesign may attract new users. The site is now quicker and easier to use, with huge improvements to its search tool and handy options such as the ability to view every photo and document sent or received, and hover your mouse over an image icon for an instant preview. With less clutter, colourful themes, access to animated GIFs and a new emoji set, a lot of care has gone into the site. You can also strip away the adverts by subscribing to the now-cheaper Yahoo Mail Pro option.

Our rating ★★★★☆

INTERNET `NEW`

Bypass Censorship
www.bypasscensorship.org

This new site supported by BBC Worldwide raises awareness of global censorship issues while helping web users bypass restrictions and get full access to news and information. The site links to circumvention tools and resources for Windows, Linux, Mac and Android, and answers a list of frequently asked questions. While these won't be entirely useful to most of us in the UK, where net freedom is high (albeit still lower than in seven other countries), the tools may come in handy when you're abroad or if you simply want to browse the web anonymously.

Our rating ★★★★☆ ➡

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

RELAUNCH

SPORT
Onefootball
www.onefootball.com

This site's goal is to cover football in as many ways as possible. It kicks off with lots of news articles, and also delivers podcasts, scorelines, tweets and plenty of mobile apps. Onefootball is arranged like a blog, with story after story in a series of boxes, some larger than others. Clicking these opens the articles, which are interspersed with images and usually rounded off with a video, podcast links and suggested stories. Use the search facility if you're only interested in news about your club or a particular competition. Otherwise, you need to select tags on each article to access specific sections.

Our rating ★★★★☆

RELAUNCH

RETAIL
Next Day Hardware
www.next-day-hardware.co.uk

This site's main selling point is next-day delivery for any item in stock, including computers, printers, scanners, wearables and other electronic gear. It also promises to hunt for items you can't find, with links to its various social-media accounts. Many of the product shots are low-res, but everything is well described and the ordering system is fluid. You can leave your own reviews and make product comparisons, but it's not perfect. The menus need reordering (clicking the Computers menu brings up Computers in the sub-menu), the Twitter link has an error, Home Security is empty and there are spelling mistakes.

Our rating ★★★☆☆

RELAUNCH
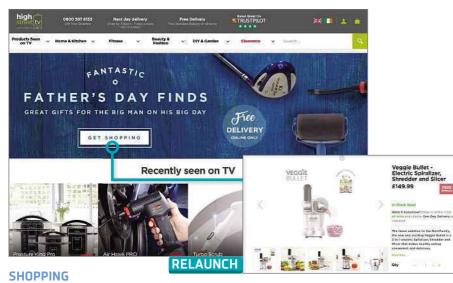
FILM
Joejack Entertainment
www.joejackentertainment.co.uk

Joejack Entertainment is a London-based production company created by award-winning film and TV director John Deery. The site includes a list of feature films that are either finished or in production, as well as Joejack's latest news. Although the site offers brief descriptions of the films and links to the official movie sites and press releases where available, it's low on interactivity. You can't click most of the films that are in development, and the news section has few entries. There are only two trailers, too, and the site uses a background of annoying flashing lights. We were less than star-struck by it.

Our rating ★★★☆☆

RELAUNCH

SHOPPING
High Street TV
www.highstreettv.com

Created for the UK shopping channel of the same name, this site sells a host of 'as seen on TV' products. So if you're after an ab-blasting wonder, an LED gel-nail kit or a six-in-one screwdriver, you can take a close look without the hassle of watching the ads. Each product is thoroughly explained with lots of photos and information about both the item and the buying process. The navigation bar is neatly organised, so you can jump straight to fitness, DIY, home and kitchen and beauty products with a single click. Anyone who has a penchant for infomercials will be disappointed, though: there's currently only a video for the Nutribullet high-speed blender.

Our rating ★★★★☆

COULD DO BETTER

RELAUNCH

ALCOHOL
The Brewers Association of Scotland
tbas.scot

Scotland is famed for its whisky distilleries but it's also home to a number of beer breweries. This site gives you a flavour of 30 of them, but with only a map showing where they are and links to the individual websites, it feels like it's selling itself short. It's aimed primarily at the breweries themselves, but instead of being a thriving hub, it's slow and clumsy (you have to click Site Menu to see the navigation options) and thin on news and information. ■

Our rating ★★☆☆☆

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Google tweaks testing tool

Google has updated its mobile speed testing tool (bit.ly/test427), which times how long your site takes to download on phones and tablets, and offers advice based on its results. The new version estimates the number of mobile visitors you may be losing (apparently, mobile users only wait seven seconds for a website

to appear) and how your speed compares to other sites offering similar content. Speed isn't everything but if you stay on top of your site's download speed, you won't lose potential visitors unnecessarily.

Which WordPress to choose?

If you want to start a new website, most people will recommend you use WordPress, but there are two versions so which do you choose? WordPress.org is the one you have to install on a server via a paid-for web host, though most now offer a one-click installation service or do it for you. WordPress.com is hosted by WordPress, so all you need to do is make an account. The hosted '.org' version is a lot more flexible and customisable than the '.com' version, but if you're still not sure, WPBeginner has a very useful breakdown of the differences at bit.ly/wp427.

Deal of the Fortnight

The '.club' domain is celebrating its third birthday, so GoDaddy (uk.godaddy.com) is offering the domain for just 99p, down from £11.99

Web-building Helpdesk

THIS ISSUE'S EXPERT:
Richard Stevenson, Head of Corporate Communications, ePages (www.epages.com)
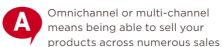
epages

Q I want to sell stuff via a website and have been advised to go 'omnichannel'. How do I do this?
Ben Farrow, via email

A Omnichannel or multi-channel means being able to sell your products across numerous sales channels, such as your website, online marketplaces, in store, on social media and on the phone. This increases your chance of a sale and offers maximum convenience for the shopper to research goods in one way, and purchase or collect them using another. For even the smallest online shop, offering more sales channels ensures you are relevant to more customers. Look for an ecommerce platform that allows you to oversee multiple channels with ease.

MINI WORKSHOP | Add a forum to your free Wix website
Wix: www.wix.com | 🕐 10 mins | Requires a Wix website
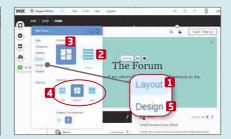
Building a community around your website means providing a place where visitors can get in touch with you and each other. One way is to set up a forum, and Wix users have a fantastic new option available for free

1 With your website loaded into Wix, click the App Market icon **1** and type `forum` into the search box. **2** Choose Wix Forum **3** and click the 'Add to Site' button. This will build a forum page on your website, which is a sort of index with links to your actual forums.

2 Click the Manage Categories button or Categories in the menu. **1** You can change the name of the main forum page by clicking the three-dots button. **2** To add a category – a sub-forum where people can post their messages – click the Add New Category button. **3**

3 Click the Layout option. **1** From here, you can choose the Classic look – **2** a traditional layout with threads listed in horizontal rows; or Cards, **3** which looks more modern. With Cards, you can also set the number of columns. **4** Go to the Design menu **5** to change various elements including colours and fonts.

➕ Email us your website building questions at webuser@dennis.co.uk
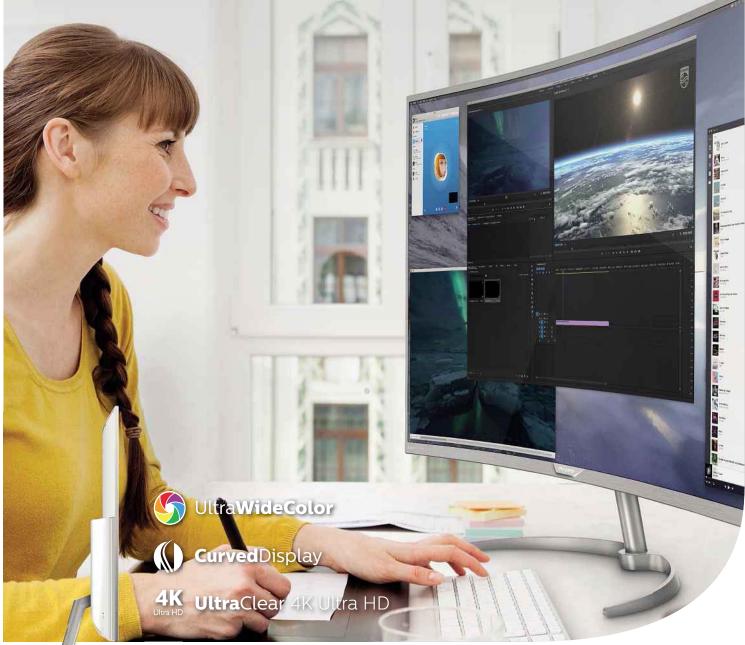
Ultra Wide-Color
with 4K in an immersive design

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

UltraWideColor

CurvedDisplay

4K Ultra HD **Ultra**Clear 4K Ultra HD

40" 4K curved display
(BDM4037U)

PHILIPS

Microsoft Surface Laptop

Microsoft's new laptop aims to marry the familiarity of Windows with the locked-down security of a Chromebook – but the price leaves us baffled

When Microsoft announced Windows 10 S, saying it would only run apps that can be downloaded from the Windows 10 Store, everyone jumped to the conclusion that this would be a cut-down operating system. The logical extrapolation was that Windows 10 S laptops would also be low-powered versions, similar to the Chromebooks that run Google's Chrome OS, which can cost less than £200.

It's something of a surprise, then, that the Surface Laptop – Microsoft's first PC to come with Windows S preinstalled – costs just shy of £1,000. It appears that Microsoft isn't looking to muscle in on Chromebook territory at all, or at least not by rivalling the ubiquitous cheap models.

Software restrictions

The common misapprehension is that Windows 10 S is any different in its system requirements to Windows 10 Home or Pro. Microsoft claims that 10 S will launch faster and run more efficiently, but that's mainly because it's relatively locked down, not because it needs less power to run.

Frankly, this is a disappointing development. Rather than offering something fundamentally different with Windows 10 S, Microsoft has stripped away the wealth of software choice associated with Windows PCs. That flexibility was crucial to the market-leading position of Windows PCs, and removing it seems like a mistake.

> " Microsoft claims that 10 S is faster and more efficient, but that's mainly because it's a more locked-down operating system "

We understand that Microsoft will be able to better control PC security if you can only download software from its Store, but even if this walled garden ends up blossoming in the future, right now it feels more like a prison.

If you don't get on with Windows 10 S on the Surface Laptop, you have until the end of the year to upgrade to Windows 10 Pro for free. We suspect that this is exactly what most people will do, not least because the Surface Laptop is more than capable of running it.

Build and specifications

The Surface Laptop itself has a high-end, sleek design. If you've coveted Apple's svelte MacBook Air laptops, you'll love the way this looks. It has clean aluminium edges and rounded corners, and is seriously skinny to boot, measuring 14.5mm at its thickest edge and tapering to 9.5mm at its thinnest. The super-slim 13.5in 2,256 x 1,504-resolution touchscreen measures a mere 3mm, and the whole laptop weighs only 1.2kg. You start to get an idea of why it's so expensive.

Internally, the basic model comes with an Intel Core i5-7200U, 4GB of memory and 128GB of SSD storage. This will set you back £979 (bit.ly/surlap427). If you want the top-end model (Core i7, 16GB of memory and 512GB SSD), you'll be spending up to £2,149 (bit.ly/surtop427).

This may seem wildly expensive compared to most Chromebooks, but the basic version isn't actually that far off its ultraportable rivals: the 13in MacBook Air costs £949, with the Pro version costing from £1,249; Dell's wonderful XPS 13 range starts at £1,149; and the sleek Asus ZenBook 3 is around £1,000.

As with most laptops, and ultraportables in particular, physical connectivity is somewhat limited. It has a solitary USB 3 port on the left-hand edge, accompanied by a mini-DisplayPort and 3.5mm headset jack. On the right-hand edge, there's a magnetic charging port for the proprietary charger. And that's your lot.

Bizarrely there's not even a USB Type-C port in evidence. If you crave more ports, you can buy a matching dock but that'll set you back another £190.

Top-end touches, performance and power

Open the lid, and the keyboard surround really draws the eye. It's coated in Alcantara fabric (the same fabric coating used in high-end sports car dashboards, steering wheels and bucket seats) and it's one of the Surface Laptop's fanciest features. It's also hardier than you might expect, treated to resist spills, stains and moisture absorption, and it wipes clean remarkably successfully. Sadly, the keyboard itself isn't spill-resistant, but it is a joy to type on. The touchpad is generously sized, too.

Historically, Microsoft's displays have been up there with the very best, and the Surface Laptop's follows the trend, capable of displaying 95.6% of Microsoft's own sRGB colour standard. It's bright enough for use in most environments, with a maximum brightness of 397cd/m², while its 1,490:1 contrast ratio offers up punchy, solid-looking images.

We had to upgrade the laptop to Windows 10 Pro to run our benchmark tests on it, but we'd recommend doing this anyway, rather than sticking with 10 S. The resulting overall score of 49 in our demanding 4K tests is unexpectedly high. You'd expect a device this skinny to buckle under the pressure, but that's not the case. For comparison, last year's Surface Pro 4 reached a score of 44, while the Surface Book lagged not too far behind at 43. This is Microsoft's fastest laptop yet, and we only had the basic £979 model to test.

Even more impressive is the Surface Laptop's battery life. Lasting 10 hours and 42 minutes in our continuous video-playback test (with the screen set to 170cd/m² brightness and Flight mode engaged), it's one of the longest-lasting Windows laptops we've come across in recent times, and will comfortably get you through a day's use.

PRODUCT INFO

Microsoft Surface Laptop

Price: £979
Buy from Amazon:
bit.ly/surlap427

SPECIFICATIONS

- Dual-core 2.5GHz Intel Core i5-7200U processor
- 13.5in 2,256 x 1,504 pixels resolution touchscreen
- 4GB of memory, 128GB SSD
- 802.11ac Wi-Fi
- 1 x USB 3 port
- Windows 10 S
- 308 x 223 x 14.5mm, 1.25kg

FOR

✓ Powerful Windows laptop
✓ Free upgrade to Windows 10 Pro

AGAINST

✗ Expensive
✗ Not the Chromebook rival we were expecting

AFFORDABLE CHROMEBOOK

Acer Chromebook R11, £209.99
bit.ly/acer427

BEST WINDOWS LAPTOP

Dell XPS 15, £1,148.99
bit.ly/dell427

OUR VERDICT

★★★★☆

Microsoft has surprised us by coupling an expensive laptop with a stripped-back operating system. Windows S stops you from installing anything that isn't available in the Windows Store, which may improve security but vastly reduces choice and, as a result, removes one of Windows' core strengths. We suspect many people will immediately replace the OS with Windows 10 Pro.

The laptop itself is powerful and sleek, but there are some great rival laptops available at that price, including the superlative and larger-screened Dell XPS 15.

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

Vodafone Smart N8

We test Vodafone's latest budget Android smartphone, which has a fingerprint reader and the latest version of Android

The Vodafone Smart N8 is the follow-up to one of our favourite budget smartphones of last year, the Smart Prime 7 (bit.ly/pri427, currently £59 but out of stock on Vodafone's website at the time of writing). On paper, the N8 looks like a significant upgrade with a better processor, Android 7 Nougat, a fingerprint reader and a vastly improved camera, but it's a tad more expensive at £85, not including the compulsory £10 Pay As You Go voucher that you'll also need to buy.

Despite still being relatively cheap, the Smart N8 looks and feels far from it, with a textured rear cover and beautifully crafted edges. However, with a thickness of 8.6mm and weight of 151g, it's both thicker and heavier than the Prime 7, which measures 8mm and weighs 128g.

At the front of the phone, there's a front-facing 5-megapixel camera, an unusual front-facing flash and a surprisingly good-sounding speaker. The N8 comes with a 3.5mm headphone jack and a micro-USB port for charging and data transfer. On the back, there's a fingerprint reader, which provides a quick and secure way to unlock your phone.

The 5in HD (720 x 1,280 pixels) IPS display is relatively bright (374cd/m^2) but isn't in the top echelon of phone screens, and you might have trouble viewing it in really bright, sunlit conditions.

The Smart N8 is powered by a 1.3GHz quad-core MediaTek MT6737 processor with 1.5GB of memory. Compared with even cheaper phones, such as the Prime 7, the N8 comes out better on paper but we found using it in the real world felt about the same: sluggish, though no worse than we'd expect for the price. You won't have any problems running casual games such as Candy Crush and Pokémon Go, but don't expect it to manage smooth gameplay on more sophisticated games such as Asphalt 8.

Unfortunately, the phone's battery life is poor. In our video-playback test, the N8 lasted just 8hrs 44mins, which means it will struggle to last a full day on a single charge. By comparison, the Smart Prime 7 achieved a much more impressive 12hrs 55mins.

Having Android N is a significant boon on such a low-priced phone, and it's installed without any annoying skins or launchers. There are a few Vodafone apps but they're easily removed.

Perhaps the biggest gain is the camera, which has been boosted from 8 megapixels in the Prime 7 to 13 megapixels. Performance, especially in HDR mode, is impressive for a sub-£100 smartphone and we found it offered good colour reproduction, good results in low light and our test snaps were bursting with detail. Alongside the regular camera and video modes, there are 360-panorama, time-lapse and video-snapshot modes.

PRODUCT INFO

Vodafone Smart N8
Price: £85
Buy from Vodafone:
bit.ly/voda427

SPECIFICATIONS

- Quad-core Mediatek MT6737 processor
- 1.5GB of memory
- 16GB of storage
- 5in 720 x 1,280 pixels resolution display
- microSD memory-card slot (up to 32GB)
- Nano-SIM
- 13-megapixel rear-facing camera, 5-megapixel front-facing camera
- Android 7.0 (Nougat)
- 145 x 72 x 8.6mm
- 151g

FOR

✓ Fingerprint reader
✓ Camera performance is impressive, for the price
✓ Android 7 Nougat

AGAINST

✗ Poor battery life
✗ Sluggish performance

OUR VERDICT

★★★★☆

The Vodafone Smart N8 has a good range of new and improved features over last year's Prime 7, such as a better camera, the inclusion of a fingerprint reader and its latest Android Nougat operating system. However, its poor battery life and sluggish performance let it down.

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

It's still great value for money but if you can afford to spend more, you'll inevitably end up with a better phone.

Web User's Best Buys

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

HARDWARE

£500 PC

Mesh Home PC

£499 from **www.meshcomputers.com**
Tested: Issue 426

The Mesh Home PC is compact and quiet, with a great processor. It has a premium operating system in Windows 10 Pro and includes an SSD and a dedicated graphics card.

KEY SPECS
Quad-core 3.4GHz intel Core i5-7500 processor ▪ 8GB memory ▪ 120GB SSD, 1TB hard drive ▪ 2GB Asus GeForce GT710-2-SL graphics card ▪ 6 x USB 2 ports; 2 x USB 3 ports ▪ Windows 10 Pro ▪ Lifetime labour warranty, two-years parts, one-year collect-and-return

INKJET PRINTER

Brother MFC-J5330DW

£125.78 from **bit.ly/brot425**
Tested: Issue 425

Provided you can find space for this bulky printer, you won't be disappointed, because it's very reasonably priced, cheap to run and produces great-looking prints – especially photos. You won't have to wait long for them to print, either.

KEY SPECS
4,800 x 1,200dpi maximum print resolution ▪ 1,200 x 2,400dpi maximum scan resolution ▪ 250-sheet input capacity ▪ 100-sheet output capacity ▪ Double-sided printing ▪ 802.11n Wi-Fi ▪ 530 x 398 x 304mm ▪ 16.9kg

TABLET

Apple iPad

From £339 from **bit.ly/ipad424**
Tested: Issue 424

Apple has reduced the price of its new standard 9.7in iPad, making this tablet the cheapest it's ever produced. Battery life is excellent, performance is swift and the screen and build are top quality.

KEY SPECS
Tri-core 1.5GHz processor ▪ 8-megapixels rear camera ▪ 9.7in 2,048 x 1,536 pixels-resolution screen ▪ 1.2-megapixels front camera ▪ 32/128GB storage ▪ 2G RAM ▪ iOS 8.1 ▪ 240 x 169.5 x 6.1mm ▪ 437g ▪ One year return-to-base warranty

SMART ASSISTANT

Google Home

£129 from **bit.ly/home422**
Tested: Issue 422

Google Home is a remarkable home helper and we can't recommend it more highly. It can already control a variety of apps and services, with more to come, and has a good-quality speaker. It's simply designed to enrich your life.

KEY SPECS
High-excursion speaker ▪ Supports HE-AAC, LC-AAC, MP3, Vorbis, WAV, FLAC and Opus ▪ Far-field voice recognition ▪ microUSB, DC power ports ▪ Android 4.2+ and iOS 8+ ▪ 477g ▪ 142.8 x 96.4mm ▪ 802.11b/g/n/ac Wi-Fi (2.4GHz/5GHz)

GRAPHICS CARD

Asus AMD Radeon R7 250

£78.59 from **bit.ly/250amd416**
Tested: Issue 416

This graphics card provides enough power to make less challenging games run smoothly in 1080p resolution with high-detail settings enabled. It's very cheap and benefits from plenty of speedy stream processors.

KEY SPECS
2,048 stream processors ▪ 128 texture-mapping units ▪ 32 render-output units ▪ 926MHz GPU frequency ▪ 4GB RAM ▪ Supports up to six displays ▪ 4,096 x 2,160 pixels resolution ▪ DisplayPort, DVI-D and HDMI video connectors

WI-FI REPEATER

TP-Link RE450

£44.99 from **bit.ly/tpl414**
Tested: Issue 414

The TP-Link RE450 provides a strong signal at a price that's hard to resist. It's better at extending the 5GHz network than the 2.4GHz, but it also acts as a bridge to transfer older devices to the newer network.

KEY SPECS
2 x 60mm, 1 x 42mm antennae ▪ 3.8W power consumption ▪ 2.4GHz (450Mbps) and 5GHz (1,300Mbps) ▪ 802.11ac Wi-Fi ▪ WPS button ▪ Repeater and access point modes ▪ 163 x 76 x 37mm ▪ Three-year return-to-base warranty

All prices correct at time of review

SOFTWARE & SERVICES

CLOUD BACKUP

CrashPlan

£49 per year from
www.crashplan.com
Tested: Issue 420

If you've got a substantial archive of data, CrashPlan is an impressively versatile and cost-effective way to keep it safe.
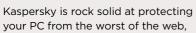
KEY FEATURES

$59.99 (around £49) per year for 1 PC ▪ Unlimited storage ▪ Back up external drives ▪ Compatible with Windows 7/8+/10, MacOS 10.9+, Linux, Android 3.2+ and iOS 7+

INTERNET SECURITY

Kaspersky Internet Security 2017

£19.95 from **bit.ly/kaspersky2017**
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. Use the URL above to save £15.04 (normal price £34.99).

KEY FEATURES

Antivirus and firewall tools ▪ Protects online shopping and banking ▪ Identity and privacy tools ▪ Advanced ad blocking

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, 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 ▪ Extra paid-for storage available

Web User Gold Award winners

ANDROID CALENDAR

Google Calendar

NEW!

Free from **bit.ly/googlecal426**
Tested: Issue 426
Google Calendar offers the perfect combination of usability and features, making organising your schedule incredibly easy.

STREAMING MEDIA RECORDER

ActivePresenter

Free from **bit.ly/active425**
Tested: Issue 425
ActivePresenter does an excellent job of capturing streaming video and provides an exhaustive set of editing tools.

TO-DO LIST TOOL

Todoist

Free from **todoist.com**
Tested: Issue 424
Todoist is the ultimate to-do list tool. Adding new tasks is simple, whether you're managing small projects or complex ones.

PRIVATE BROWSER

Epic Browser

Free from **www.epicbrowser.com**
Tested: Issue 423
For total privacy online, Epic Browser is fast, easy to use and offers all the tools you need to stay anonymous.

VIDEO-CALLING APP

Google Duo

Free from **duo.google.com**
Tested: Issue 422
Google Duo is designed to put you at your ease. Calls are smooth and it's easy to set up.

⬇ Best Free Software
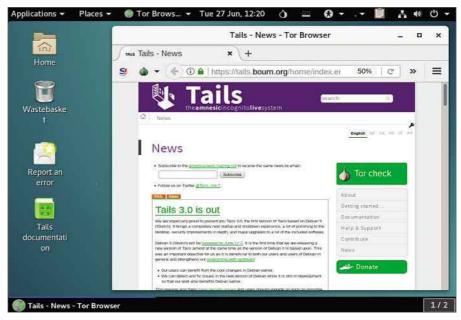
SECURE OS

Tails 3

tails.boum.org
Min requirements: 64-bit processor, USB flash drive or blank DVD
File size: 1.12GB

The Amnesiac Incognito Live System – Tails, for short – is a privacy-focused live Linux operating system that you can boot into from a DVD, USB memory stick or SD card. This versatile free OS can hide who and where you are; encrypt your files, emails and instant-messaging chats; and protect you from malware threats. NSA whistleblower Edward Snowden is a big fan, for obvious reasons!

The latest version of Tails is based on the Debian 9 (Stretch) Linux operating system and features a new startup and shutdown, a more polished Desktop, numerous security improvements and major upgrades to much of the bundled

software. It also now only runs on 64-bit devices because the Tails Team made the decision to drop 32-bit support for security reasons. See our feature on page 48 for more about 64-bit software.

Tails comes with a good selection of non-privacy related applications, such as LibreOffice (office suite), GIMP (image editor), Inkscape (drawing program) and Audacity (sound editor), so you can do pretty much anything you need to without leaving the secure operating system. If you haven't used

Linux before, don't worry because Tails is not too dissimilar to older versions of Windows, and offers a straightforward Desktop environment.

If you plan to install and run Tails on a USB flash drive, you will need two memory sticks with capacities of at least 4GB – one of which you use to set up an intermediary version of Tails that lets you install the full OS on the second drive. You can't currently install the OS directly from Windows. Alternatively, you can download Tails in ISO format and burn this straight to DVD.

⚙ MINI WORKSHOP | Get started with Tails

1 Boot into the operating system from your memory stick or DVD, and select Tails from the menu screen. Click Language, **1** then click the arrow next to English **2** to display more options. Select 'English – United Kingdom'. The keyboard and date formats will change automatically. Click the plus button **3** if you want to view additional settings.
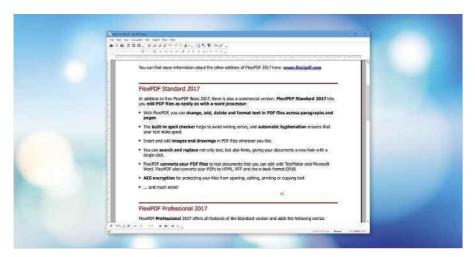
2 Click Start Tails. The operating system will load and present you with the Desktop. There are icons for Home **1** (the file manager) and Wastebasket **2** (recycle bin). You can launch any of the bundled software through Applications **3** and browse folders under Places. **4** Tails offers different workspaces which you can switch between. **5**

3 The icons in the top bar let you display an on-screen keyboard (to defeat keylogging software), **1** open accessibility settings, **2** change the language, **3** manage the clipboard, **4** open network **5** and sound **6** settings, and shut down or restart the operating system. **7** Right-click the Desktop to display the context menu. You can also change the background here. **8**

This fortnight's top new software downloads to help you make the most of your PC, and they're all FREE
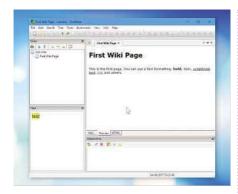
PDF TOOL
FlexiPDF Basic 2017
www.flexipdfbasic.com
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 115MB

FlexiPDF Basic is a cut-down version of SoftMaker's commercial FlexiPDF editor. The previous free build only allowed you to view PDFs, but the new update introduces some handy editing functions. You can now change the page order in a PDF, delete pages and insert new pages from other files. The free tool also lets you create PDFs in all Windows programs, including Microsoft Word; and comment on and print existing PDFs.
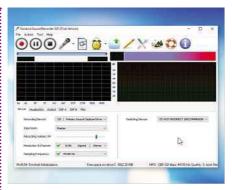
NOTES ORGANISER
OutWiker 2
bit.ly/outwik427
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 20.6MB

OutWiker is a 'personal wiki' tool that lets you enter and organise your personal notes in a tree structure. You can format the notes however you wish; add lists, tables and headings; and insert images, graphs and more. Unlike DTP or Office software, it isn't WYSIWYG (what you see is what you get) – you need to use special wiki notation to create your pages. This is easy to get to grips with, though, and plenty of help is provided.


SOUND RECORDER
Sonarca Sound Recorder Free 5
bit.ly/son427
Min requirements: Windows 7/10
File size: 3.71MB

Sonarca Sound Recorder records sound input in WAV and MP3 formats. It's very easy to use – just choose the audio-input device and specify the output options (mono or stereo, bit resolution and the sampling frequency), then hit the large Record button to begin recording. You can pause and stop the process at any time, or end recording automatically after a specified period.

New Windows Apps
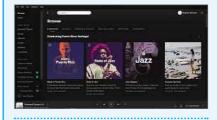
Spotify Music
bit.ly/spot427
Min requirements: Windows 10
File size: 84.25MB
The popular music-streaming service finally arrives for Windows 10. You can listen to your favourite songs and albums, browse the charts and stream playlists, podcasts and audiobooks.

IrfanView
bit.ly/irfan427
Min requirements: Windows 10
File size: 18.8MB
This is a Windows 10 port of the popular free image viewer and converter. Features include thumbnails, slideshow, batch conversion/editing, effects such as sharpen/blur, and add watermark.

Flow for Facebook
bit.ly/flow427
Min requirements: Windows 10
File size: 19.2MB
This third-party client for Facebook offers a Turbo mode that's designed for use on a slow or unstable internet connection; a dark theme; and the option to download photos and videos to your PC.

⬇ Best Free Software
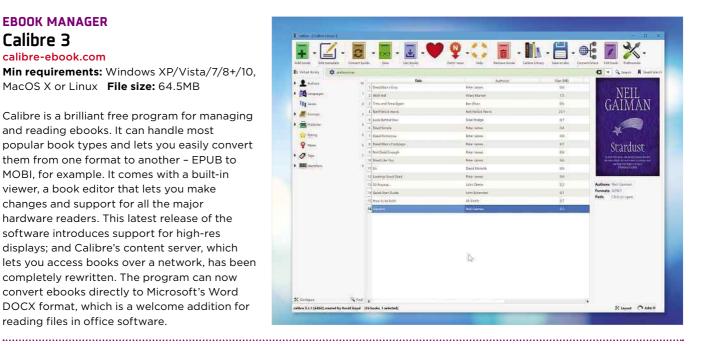
EBOOK MANAGER
Calibre 3
calibre-ebook.com
Min requirements: Windows XP/Vista/7/8+/10,
MacOS X or Linux   **File size:** 64.5MB

Calibre is a brilliant free program for managing and reading ebooks. It can handle most popular book types and lets you easily convert them from one format to another – EPUB to MOBI, for example. It comes with a built-in viewer, a book editor that lets you make changes and support for all the major hardware readers. This latest release of the software introduces support for high-res displays; and Calibre's content server, which lets you access books over a network, has been completely rewritten. The program can now convert ebooks directly to Microsoft's Word DOCX format, which is a welcome addition for reading files in office software.

ENCRYPTION TOOL
AES Protect
bit.ly/aes427
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 32KB

AES Protect keeps your personal files safe from prying eyes by securing them using strong AES encryption, which we discussed in last issue's Essential Guide to Encryption. The portable tool is only 32KB in size, but offers three programs – AES Protect (encrypts single files), AES Metal (a more advanced option) and AES Command (a command-line tool). AES Protect is very easy to use – just select the file to encrypt and enter a name and folder to save the secure version to. Enter a passphrase twice, click Start and the file will be encrypted. To unlock it, select the file, switch Encrypt to Decrypt and enter the passphrase again.

VIDEO TOOL
Free Video Rotator 3
www.dvdvideomedia.com
Min requirements: Windows Vista/7/8+/10
File size: 7.4MB
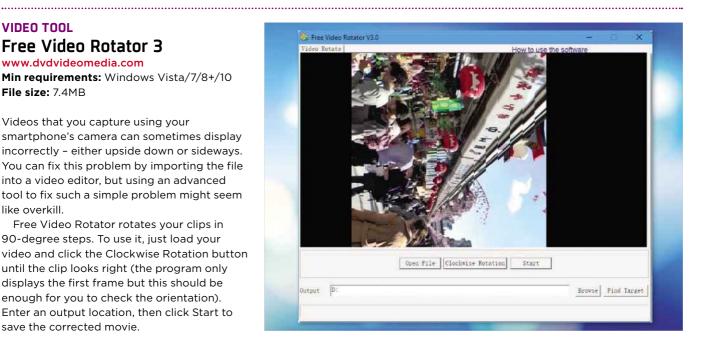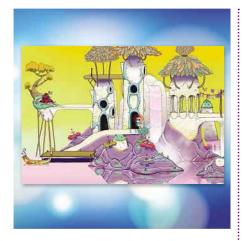
Videos that you capture using your smartphone's camera can sometimes display incorrectly – either upside down or sideways. You can fix this problem by importing the file into a video editor, but using an advanced tool to fix such a simple problem might seem like overkill.

   Free Video Rotator rotates your clips in 90-degree steps. To use it, just load your video and click the Clockwise Rotation button until the clip looks right (the program only displays the first frame but this should be enough for you to check the orientation). Enter an output location, then click Start to save the corrected movie.

GAME
Reditum
bit.ly/red427
Min requirements: Windows 7/8+/10, MacOS or Linux **File size:** 67.1MB

Created by three students for a school project, Reditum is a beautifully illustrated point-and-click exploration game. As the warden of one of the suns for the planet, your role is to bring light all around the world and experience first-hand what's happening to the environment and the people, while you travel the pink oceans and bliss out to the trippy sitar music.

✗ Don't install...

GoldMemory
www.goldmemory.cz
Min requirements: Windows XP/Vista/7/8+/10
File size: 986KB

To be fair to the developer of this memory-diagnostic tool, he does make clear that "yes, there are plenty of free programs" that do the same thing, and that GoldMemory is not free software. However, he doesn't really justify why you should pay $29 (£22.70) for it, other than that GoldMemory uses "different algorithms". The program and its website both look very dated, too.

...Install this instead ✓
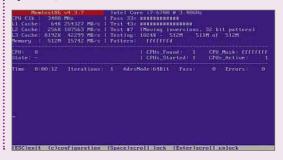
MemTest86
www.memtest86.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 4.5MB

Problems with your PC's RAM can lead to freezes and crashes, which is no fun at all. MemTest86's powerful memory-diagnostic tool boots from a CD or USB flash drive and runs a series of tests looking for faults with your computer memory. Although the program looks very technical, all you really need to know is that any errors it reports indicate that there's a problem with your PC's RAM and you should probably replace it. Our Weekend Project on page 58 explains how to do so.

Despite its name, which relates to x86 (32-bit) systems, MemTest86 works fine on 64-bit PCs.

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

SYSTEM CLEANER
CCleaner 5.31
www.piriform.com
Min requirements: Windows XP/Vista/7/8+
File size: 9.2MB

Yet another update to the hugely popular system-cleaning tool. This latest version improves support for the Windows 10 Creators Update and tweaks Firefox and Chrome History cleaning. It also optimises high-DPI support for users with larger screens.

REGISTRY CLEANER
Wise Registry Cleaner Free 9.45
www.wisecleaner.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 2.7MB
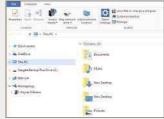
This program finds and fixes problems with the Windows Registry, offering both on-demand and scheduled scanning. It also defrags the Registry and tunes up your system. This release improves cleaning up after the uninstaller and updates the 'auto back-up registry'.

FILE MANAGER
Clover 3.3.6
ejie.me
Min requirements: Windows XP/Vista/7/8
File size: 5.8MB

Clover is a tab-based alternative to Windows Explorer that lets you jump between multiple open folders and bookmark favourite locations. The new version improves the Add Bookmark Manager feature, and fixes problems with the bookmark icon, along with other glitches.

PASSWORD MANAGER
Dalenryder Password Generator 4.3
dalenryder.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 1.3MB

Dalenryder Password Generator (our lead program in Issue 423), is a collection of security tools packaged up in a smart, intuitive interface. The new release improves program performance, fixes several bugs and adds a password-recovery option. ∎

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

Best New Browser Tools

Remove the bubbles from Twitter's redesign

As we reported in last issue's What's New Online, Twitter has undergone a major redesign that makes it look cleaner, bolder and bubblier – with square profile pictures replaced by round ones. Naturally, some Twitter users aren't happy about the changes and have been threatening to quit the site, stage protests in the street and cry into their pillows forever, which is where Twitter Debubbler (bit.ly/debubbler427) comes in. This new extension undoes the social network's curvy design tweaks to restore the familiar

BEFORE
AFTER

straight edges and corners.

When you are ready to make the transition to the new bubbles, you can simply disable the add-on.

Experience a web without net neutrality

You'll probably notice that this issue has a bit of theme, with our FAQ on page 36 and Barry's column on page 74 both addressing the topic of net neutrality, and how dreadful the web would be without it. You can see for yourself using a new Chrome extension called Removal of Net Neutrality (bit.ly/neutrality427), which demonstrates the full horror of an internet controlled and shaped by the government and ISPs. You'll find your connection slowed by throttling; favourite sites blocked in favour of sponsored alternatives; search boxes obstructed; and other annoyances that stop you enjoying a fair and free web in which all data is treated equally. Although the add-on is designed to educate US web users about net neutrality, there's no guarantee the UK won't fall prey to these same anti-competitive and unfair online practices.

Spruce up Gmail messages using templates

Gmail's simple, minimalist interface is one of its biggest strengths, but it can also make your emails look rather plain – especially if you're wishing someone a happy birthday or congratulating them on successful corrective-eye surgery. You can make your salutations a little more interesting by installing Gmail Email Templates (bit.ly/templates427), which transforms your messages using colourful, attractive templates tailored for specific types of recipient and occasion. For example, you can send party invitations, legal letters and job applications; and import newsletter templates from MailChimp (mailchimp.com); customising the designs to suit your needs. Just click the Insert Template button in the bottom-left corner of a new-message window. You need to sign up with cloudHQ to use the add-on, but this is free and easy to do.

Decorate your new tabs with monkeys

It's been a while since we featured an animal-themed add-on in this section, but we're delighted to reintroduce the trend with an ape-ealing, simian-themed extension called Monkey Wallpapers (bit.ly/monkey427). This displays random photos of adorable primates every

time you open a new tab, or you can choose a monkey image to set as your default. The page also provides the time and weather forecast for your location; a large search box that lets you choose between Google, Bing and Yahoo; and links to further monkey pictures and GIFs on Facebook, Twitter and Tumblr. Our tabs gave us orangutans, ring-tailed lemurs, baboons, gorillas and many more – it's enough to drive you bananas!

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

FIREFOX

Skip YouTube ads without cheating creators

Few of us enjoy sitting through adverts before YouTube videos, but we understand that without them creators wouldn't be able to offer their content for free. Still, some ads are way too loud and drag on for ages, which is why we have no qualms in promoting a new "ethical ad skipper" for Firefox and Chrome called YouTube Auto Ad Skipper (bit.ly/skipper427). This ensures that video creators earn ad revenue from their hard work by only skipping ads after 30 seconds - the minimum length of time for a creator to get paid. Additionally, the sound is muted as soon as an ad begins and unmuted when the video starts playing. If that doesn't sound tough enough, then you're better off blocking all YouTube ads using Adblock Plus or uBlock Origin – but on your conscience be it, pal!

Merge all open Firefox windows into one

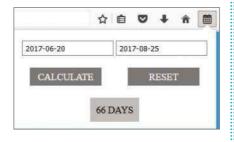It's reasonably easy to keep track of all your open tabs when they're in a single Firefox window, but things get more confusing when you have several open tabs spread across multiple windows. The new add-on Merge Windows (bit.ly/merge427) provides an easy solution by allowing you to – you guessed it – merge every open window into a single one, so all your tabs are neatly grouped side by side. Simply right-click anywhere and choose 'Merge all windows' to bring them together. Alternatively, you can drag tabs individually from one window to another, but using the add-on is much faster.

Check how many days between two dates
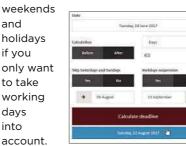
If you're impatient to know how long you have to wait before you head off on holiday or until you celebrate your birthday, then you need a simple but useful add-on called Date Diff Finder (bit.ly/date427), which tells you the precise number of days between two dates. Just click the calendar button on the toolbar, select 'from' and 'to' dates and click Calculate to view the number of days. That's all there is to it, really, but it certainly beats counting on your fingers!

Along similar lines, the Firefox tool QuickDate Calculator (bit.ly/quickdate427) lets you find an exact date in the past or future by adding or subtracting days or months to or from the current date. It's particularly useful for calculating deadlines for projects, repayments and applications, with the option to ignore weekends and holidays if you only want to take working days into account.

OTHER BROWSERS

Customise your Start page more easily

One of the most welcome changes in Opera's recent revamp (see our workshop in Issue 424) is the ability to customise your Speed Dial start page with attractive wallpapers and sidebar shortcuts. The latest version of the browser (46) makes things even easier by adding a dedicated button for changing the look of the page. Simply click the three-line 'Customise start page' button in the top-right corner to choose and apply your preferred wallpaper, enable Opera's new dark theme, select which shortcuts to display in the sidebar and turn Speed Dial suggestions on or off. If only Chrome and Firefox offered similar flexibility.

Try the latest extensions for Edge

We've often scoffed at the lack of extensions for Microsoft's Edge browser, but we're not scoffing now because no fewer than five new extensions have been added to the Windows Store. However, only one of these is likely to have mass appeal and that's Enhancer for YouTube, which adds useful new features to the video site (much like our workshop on page 54). The others are more niche: Moderator Toolbox for Reddit, Live Editor for CSS and Flyview for SharePoint, although Give As You Live Donation Reminder is a worthy addition that tells you when you can donate to UK charities as you browse the web.

Best Free Apps

App of the Fortnight

SYSTEM CLEANER
NEW
ES Disk Analyzer
bit.ly/esdisk427

🤖 4

Hard-drive housekeeping is second nature for a computer user, and this new app from the maker of ES File Explorer aims to encourage a similar habit with your phone and tablet.

High time, too. If you've shopped for a new Android phone lately, you'll have noticed that expansion slots – normally microSD – are disappearing. Manufacturers say it's because SD cards compromise performance and "confuse" users; others say it's because manufacturers want to cut costs. Whatever the true reason, expandable storage is on its way out, leaving you to make the most of the space you've got.

One way to do this is to keep large media files off your device. But backing up and streaming costs data, and leaves you without photos to show to friends. So ES Disk Analyzer – or DiskAnalysis, to quote its display name – offers a compromise, at least for photos, by shrinking them to a third of their size. Before using this 'Image compression' tool (see our Mini Workshop, right), back up the originals using a service such as Google Photos.

Then there's the hidden junk – the caches and duplicate files that seem to grow out of nowhere. ES Disk Analyzer has a one-tap duplicate cleaner that judges duplicates by exact contents rather than file names – a crucial distinction. It also lets you clear caches with a couple of taps, and lets you back up then uninstall 'Rarely used apps'.

The app is easy to use, fast and small (just over 5MB), and it's certainly worth installing. But we'd have liked to see options for removing temporary files and app leftovers. You may be able to clear this stuff manually using the app's built-in file manager, but these space hogs could do with their own one-tap sections.

Our rating ★★★★★
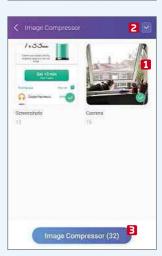
MINI WORKSHOP
Shrink your photos to free up space and memory

1 Install and launch ES Disk Analyzer. It'll ask for 'usage access', to see how your installed apps use storage, memory and battery. Tap Allow, then DiskAnalysis, then tap the toggle. Tap the Back button twice to open the Analysis Master screen. **1** To quickly remove duplicate files of all kinds, press 'Clean up'. **2** Tap 'X' to close the pop-up Like ES box.
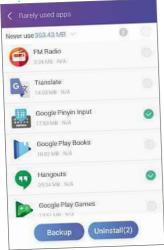
2 Swipe up to 'Image compression' and tap 'Try it'. On the Image Compressor screen that opens, you'll see thumbnails for folders that contain large photo files. **1** Folders for apps that already compress photos, such as WhatsApp, won't appear here. Select a folder to select it or tick the box to select all. **2** To start shrinking your photos, tap Image Compressor. **3**

3 The 'Compression effect' screen lets you choose how much to shrink the files. 'JPG lossless compression' (default) converts them to moderate-quality JPEG files. **1** The second option, 'JPG lossy compression', shrinks them even more to free up maximum space and memory. **2** Make your choice, then tap Compress. **3** Choose Confirm to go ahead or Cancel to go back.

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

---

PERSONAL SAFETY

Companion Safety App
companionapp.io

🤖 4 🍏 9

If your friends and family often ask you to text them to let them know that you're okay, you can save time and typing by installing this new app, which reassures your loved ones on your behalf. Enter your destination and select individual contacts to be your 'Companions', and Companion Safety App will let them track your progress on a live map. They don't even need to install the app themselves. If you start running or your headphones are yanked out, it'll ask "Are you OK?" and alert your Companions if you don't respond.

Our rating	★★★★★

VIDEO & AUDIO

Shabaam
www.shabaam.co
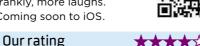
🤖 5

GIF purists, look away now. Shabaam (no relation to Shazam) lets you add audio to normally silent GIFs. Choose a GIF, then tap the button to record a brief voice message to accompany the clip (Ours went: "Hello? Dog on tortoise, repeat, dog on tortoise.") The app saves your 'shabaam', automatically plays it back (be afraid), then lets you save or share it. You can't import music and there's no stock audio, but voice recordings make for smaller file sizes and, frankly, more laughs. Coming soon to iOS.

Our rating	★★★★☆

TECH SUPPORT

Stack Overflow
bit.ly/stackdroid427
bit.ly/stackios427

🤖 4.1 🍏 9

Building a website is a challenge, and Stack Overflow's community is here to help. The online forum (stackoverflow.com) has been around for years and boasts a membership of 7.3 million programmers and coding enthusiasts, swapping advice and ideas – and it's finally launched an app. The tool is thoughtfully designed, with features including advanced search filters, the ability to draft questions offline, support for code blocks and images in posts, and full browsing history.

Our rating	★★★★★

SYSTEM TOOL

Kaspersky Battery Life
bit.ly/battery427
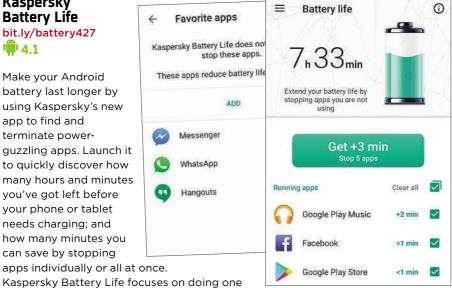
🤖 4.1

Make your Android battery last longer by using Kaspersky's new app to find and terminate power-guzzling apps. Launch it to quickly discover how many hours and minutes you've got left before your phone or tablet needs charging; and how many minutes you can save by stopping apps individually or all at once. Kaspersky Battery Life focuses on doing one job very well, even in its current beta mode. But it also has some extras up its sleeve. It'll alert you if an app suddenly uses more battery than usual, and you can designate 'Favorite apps' that are allowed to use as much battery as they please. There's also an option to automatically stop apps that try to restart, but you need to enable this in Settings.

Our rating	★★★★★

➕ Recommend free phone apps at www.facebook.com/webusermagazine

📱 Best Free Apps

BROWSER
Firefox Focus
bit.ly/focus427
🤖 5

Mozilla's fast, data-light 'privacy browser' has made it to Android at last, eight months after launching on iOS (bit.ly/focusios427). It dispenses with the clutter that slows you down and may compromise your privacy – so there are no tabs, ads or trackers, and you can't take screenshots (annoying for us, but true to the Focus philosophy). You can instantly erase your session history, including cookies and passwords, with one tap of the bin icon. The Android app adds a counter that reveals the number of ads Focus has blocked per site, and the option to enable trackers if a site won't load without them.

NEW

Brought to you by
moz://a
A brand you trust

Our rating	★★★★★

CHARITY
Olio
olioex.com
🤖 4.1 🍎 8

Every year, more than £10bn-worth of edible grub is thrown away by households and businesses in England alone (bit.ly/waste427). Add all the toiletries and cleaning products everyone buys too many of, and you've got a mountain of usable waste. Olio aims to shrink it by making it easy for neighbours and local firms to share surplus groceries for free, a bit like Freecycle. Post photos and descriptions of your stuff, then browse other people's giveaways and even get directions. Fantastic idea, but it'll only work when more people join – at the moment it's too hard to find other users nearby.

NEW

OLIO
Annabel
★★★★★
Beautiful organic juicy tomatoes!
♡ Like   ⇄ Share
Request item 💬

Our rating	★★★★☆

⑤ NEW APPS WORTH PAYING FOR

TRAVEL & CYCLING
EuroCycle
bit.ly/eurodroid427
bit.ly/euroios427
Price: £1.69 (Android), £1.99 (iOS)
🤖 4.4 🍎 9
Download all 15 cycling routes on the EuroVelo network, then use them offline. This app also offers useful local info about places to stay and sights to see.

ALARM
UnreliAlarm
bit.ly/alarm427
Price: 99p
🤖 4.3
Set specific apps as your alarms. For example, set Google Play Music to launch at 7am with your favourite song, or set the BBC Radio app to wake you up. It's a brilliant idea with great user feedback.

PHOTOGRAPHY
MScopesPro2
bit.ly/mscopes427
Price: 99p
🤖 4.3
This isn't a camera app;

it's a hub for cameras that you plug into your Android device via USB, such as microscopes and webcams. Version 2 adds features including full-screen mode and colour and exposure adjustments.

BOARD GAMES
Board Game Stats
www.bgstatsapp.com
Price: £2.59 (Android), £2.99 (iOS)
🤖 4.1 🍎 8
Keep track of your board-game wins, losses, scores and opponents using detailed graphs and tables, then upload your high scores to the tie-in site, Board Game Geek (boardgamegeek.com).

SPEAKING
One Minute Voice WarmUp
bit.ly/voicedroid427
bit.ly/voiceios427
Price: £2.99
🤖 4.1 🍎 9
Take some of the terror out of public speaking by using this app to warm up your voice and boost your confidence. Content includes video tutorials, step-by-step vocal exercises and breathing exercises.

EuroCycle	UnreliAlarm	MScopesPro2	Board Game Stats	One Minute Voice WarmUp

Best New Mobile Games

ACTION `NEW`
Altered Beast
bit.ly/beastdroid427
bit.ly/beastios427
🤖 4.4 🍎 8

"Wise fwom your gwave!". If you remember that call to action, you'll be thrilled to hear that the classic beat-'em-up Altered Beast is now available to play on your phone or tablet, as part of the new Sega Forever collection. As with the original arcade and Sega Mega Drive game, the aim is to morph into killer predators, then "claw, maul and hack your way" to the depths of hell to rescue Zeus' daughter, Athena. The gameplay has been simplified for mobile devices, and the controls are a bit fiddly, but the nostalgia value is immense – even the old cheat codes work!

Our rating ★★★★☆

ARCADE `UPDATED`
Sonic the Hedgehog
bit.ly/sonicdroid427
bit.ly/sonicios427
🤖 4.4 🍎 8

Sega's most famous game isn't new to mobile devices but thanks to the launch of the Sega Forever collection, it's now available to play for free on Android and iOS. However, as you can probably guess, there is a catch in that it's supported by ads, which you need to pay £2.99 to remove. Ignore those and Sonic is still as fast and fun to play as ever, as you guide the iconic blue hedgehog across colourful landscapes, around loops and through seven classic zones, collecting rings and avoiding deadly spikes. Sega has also been doing its best to fix reported bugs.

Our rating ★★★★★

SIMULATION `NEW`
Mouse Simulator
bit.ly/mouse427
🤖 4.1

There are plenty of dog and cat simulation games, so it only makes sense for there to be a mouse one, too, in which you discover how it feels to live like a rodent. This impressively realistic game offers two locations – a huge forest and a sprawling cottage – and challenges you to navigate objects, collect food and avoid predators, including a persistent and vicious cat. As you level up, you can mate with another mouse and have a baby, but the fun really lies in exploring your environment and resisting the temptation to pay real money to buy extra items.

Our rating ★★★★☆

✘ Don't install...

Property Search Organizer
bit.ly/property427

As if finding a new home wasn't expensive enough, this app charges you £1.59 to log details of the properties you're interested in. It claims to let you search and import information from property websites in the US, UK and Australia, but it failed to find any places for us, let alone relevant ones. What's more, it suffers from an ugly, dated interface, which is hardly surprising considering it hasn't been updated since 2011.
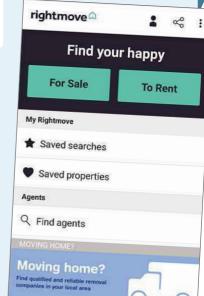
...Install this instead ✔

Rightmove
bit.ly/right427
🤖 4.2 🍎 9

If you're looking for a property to rent or buy, you can use Rightmove's app to beat rival homeseekers to the best places. With its bold, simple design, it's very easy to use, with a good selection of filters – price, number of bedrooms, furnishing, garden, retirement – for narrowing down your search to the most relevant results in your preferred area. You can also quickly access your saved searches and properties, view locations on a map and see how places really look (as opposed to estate agents' photos) in Street View. The only thing we don't like is the app's use of the naff term 'Find your happy'. ■

✚ Recommend games at **www.facebook.com/webusermagazine**

Our guide to net neutrality

Web giants including Amazon and Netflix are fighting to save the web from political and corporate interference. **David Crookes** explains all

What is it?

Net neutrality is the concept that all online traffic should be treated equally whether it's an email, a social-media post, a voice call, a shopping purchase or a YouTube video. It effectively means web access without restriction and discrimination, and it ensures that the internet remains free and open – not only by preventing broadband providers from blocking content but by stopping companies paying more to benefit from faster data delivery. It is currently under threat in the US and some of the biggest names in tech are trying to save it.

Does the UK have net neutrality?
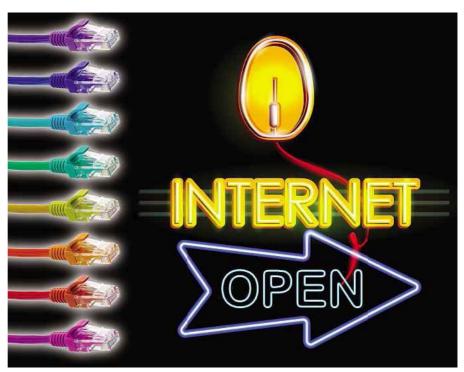
Yes, at the moment. For just over a year, the EU has banned the blocking, throttling and discrimination of online content, applications and services. This means that ISPs are not allowed to restrict or make it difficult to access a service, and it prevents them from slowing down certain traffic to the detriment of any other. They are also prevented from prioritising, for example, Netflix over BBC iPlayer or My5, which means that one piece of data can't overtake another piece of data to get to its destination more quickly.

Net neutrality means that Peppa Pig *on Netflix doesn't stream faster than on My5*

But are there exceptions?

There certainly are. When net neutrality was enshrined in EU law last April, it included several exceptions. For example, ISPs are able to manage traffic if they are legally obliged to, so if a court orders that certain content has to be blocked,

then that must be acted on. Internet providers can also interfere with the flow of data if it makes the network more secure or to avoid congestion at specific times. What they can't do, however, is slow down Spotify, for instance, while allowing Apple Music to continue unaffected, because equivalent categories of traffic – in this case, music streaming – must be treated equally.

Does the US have net neutrality laws, too?

Yes, it does. In 2015, the Federal Communications Commission (FCC) ruled in favour of net neutrality, changing the classification of a broadband provider from "information provider" to "common carrier" (which means it carries traffic without discrimination and interference). The new Open Internet rules treat the internet as a public utility and, as in the EU, ISPs are prevented from throttling or blocking content online. But the situation is changing and the FCC is already looking to reverse the rules.

What would scrapping net neutrality achieve?

It would allow network owners to produce 'slow' and 'fast' lanes on the internet. By paying extra to ISPs, major services such as Google, Facebook and Amazon would be able to move around the internet faster than those services that pay less or nothing at all.

So why doesn't the FCC want net neutrality?

Republican Ajit Pai, who was named Chairman of the FCC by President

The FCC introduced Open Internet rules in 2015 and now wants to change them – FFS!

Donald Trump, believes enforcing net neutrality has slowed consumer access to faster broadband connections and reduced investment in network expansion. He is backed by US cable companies who want the freedom to grant preferential treatment to selected content. They say innovation has been stifled and that the amount of money put into broadband has fallen by as much as 3%.

Pai favours "voluntary" compliance with the net-neutrality rules that state there should be no discrimination, blocking or paid prioritisation. This would leave ISPs that don't want to volunteer for compliance free to cash in on deals with services willing to pay for prioritised traffic. US networks Comcast and Verizon have said they need to charge some companies more to help tackle congested traffic.

Ajit Pai looks delighted to be Chairman of the net neutrality-opposing FCC

What do the supporters of net neutrality say about this?

As you'd expect, they are up in arms, fearing that ISPs will try to interfere in content delivery. A record four million public comments were posted ahead of the introduction of the Open Internet rules and its backers are not going down without a fight. They want the same speeds for all data and they want all legal content treated equally. Certainly, they are opposed to any moves that would allow ISPs to set up fast lanes that give paying content providers better speeds and prioritisation. They argue that rolling back the Open Internet rules impedes innovation and that ISPs rather than users will end up determining which companies win and lose. It's rather telling that more than 800 internet-based startups have signed an open letter against the move.

It's a bit late to sign up now, but the Day of Action looked set to be an exciting one

But what are the big tech companies doing about it?

Some of the internet's largest companies made 12 July their 'Day of Action' protest (www.battleforthenet.com/july12). Those involved included Amazon, Kickstarter, Reddit, GitHub, Etsy, Mozilla, Netflix, BitTorrent and Vimeo together with the American Civil Liberties Union, American Library Association Center for Media Justice, Demand Progress, MoveOn, Greenpeace and Organizing For Action. It's not surprising to see such opposition given the level of protests against similarly restrictive bills five years ago. Back then, more than 50,000 websites blacked out their homepages for a period of 12 hours.

Will net neutrality win again?

It's hard to tell because Pai appears determined to see it overturned (we'd rather see an overturned pie). In May, the FCC voted two to one in favour of an order to eliminate net-neutrality rules, but it still has to go through the current period of comment and a final vote in a month or two. A good number of senators are also against the repealing of net-neutrality rules and have signed an open letter published on TechCrunch (bit.ly/techcrunch427). "President Trump's FCC is threatening to take away your ability to have free and open use of the internet," they wrote.

Lots of big websites support net neutrality, including Amazon, Reddit and Pornhub

Will Brexit affect net neutrality in the UK?

The current plan for Brexit is that the Great Repeal Bill will repatriate EU law into British law when we leave the European Union. But that doesn't prevent laws from being repealed later. Ofcom is a member of the Body of European Regulators for Electronic Communications (Berec), which oversees the net-neutrality rules for the EU. It could decide to set out its own guidelines if it ceases to be a member. However, that would mean companies that operate in both the EU and UK markets would face different rules, which could prove confusing.
• See Barry's column on page 74 to read his views on the threat to net neutrality.

HOW NET NEUTRALITY COULD AFFECT YOU

If net neutrality is overturned in the US, it could have some wide-ranging, long-term consequences for all web users

Extra costs
The big internet companies would – reluctantly – pay for access to the "fast lane" but the extra costs involved could end up being passed on to consumers. Services such as Netflix may have to spread the burden on American customers by increasing subscriptions globally.

Less choice
Smaller companies in the "slow lane" may find they don't attract enough users and so they may not expand to these shores in the way we'd hope. New startups will be affected because the cost of providing an optimum service will rise.

Blocked content
If one company – let's choose Spotify as an example – pays an ISP a fortune, then removing restrictions that prevent broadband providers from discriminating could see rivals restricted or even blocked, and that would inevitably have a knock-on effect worldwide.

A tiered internet
Although changes across the pond won't water down the EU's net-neutrality laws, it's still scary to hear suggestions that ISPs may seek to offer basic internet packages limited to certain content, with charges for wider use.

47 FREE APPS
To Improve Your Life!

Unlock the full potential of your phone or tablet and transform your life for the better. **Robert Irvine** reveals the best free Android and iOS apps that you probably aren't using – but definitely should be!

Some apps are so ubiquitous that they need no introduction: Google Maps, WhatsApp, Spotify, Facebook, BBC News – you've probably used at least one of them in the last hour. But what about the millions of other apps you've never tried, whose existence you may not even be aware of? In this feature, we round up 47 of the best free Android and iOS apps that you may not have heard of, each of which can enhance your life in some significant way.

In preparation for this cover feature, we installed and tested thousands of lesser-known but top-quality names, distilling them down to a varied and versatile selection of tools that can help you learn new skills, earn you some extra cash, improve your health, keep you entertained, fix everyday problems and more.

Please let us know if we've neglected to include any of your favourite apps, or if you disagree with any of our choices.

MASTER NEW SKILLS

WikiHow
bit.ly/droidwiki427
bit.ly/ioswiki427
🤖 4 8

The modest aim of this amazing free app is to help everyone on the planet learn how to do anything. It lets you browse more than 180,000 WikiHow articles, providing step-by-step photo guides, how-to videos and clear instructions, and handily lets you bookmark articles to peruse later, even when you're offline. As well as helping me fix a failing fridge and fit a door handle, it's taught me less dextrous but equally useful tricks such as levelling a shaky table in a restaurant.

Khan Academy
bit.ly/khan427
🤖 4.1 8

I never paid much attention in maths at school, which means I'm hopeless when asked to solve complex trigonometric equations (happens all the time!).

Fortunately, help is at hand from the incredible Khan Academy, which provides free courses to fill any gap in your knowledge. Its 10,000 videos and 40,000 interactive exercises cover everything from science and economics to art history and music basics, and although there's a US bias to the content, the quantity and quality of information is beyond question.

Elevate
www.elevateapp.com
🤖 4.0.3 9

There are so many brain-training apps around, it makes the mind boggle, but if your busy schedule leaves you no time for a daily flex of your grey cells, then Elevate is a great choice. It offers short exercises of only a few minutes each, designed to improve your attention, speaking skills, processing speed, memory, maths ability and more. The app rewards you for accuracy and speed, and tracks your progress to determine whether your training is working.

First Aid by British Red Cross
bit.ly/redcross427
🤖 4.0.3 9 🪟 10 Mobile

Would you know what to do if someone suffered a diabetic emergency or allergic reaction? Thanks to the concise, easy-to-follow instructions and videos in this superb first-aid app, even clueless types like myself can save other people's lives. It covers every emergency you can think of, from choking and strokes to road accidents and heatwaves.

ENTERTAIN YOURSELF

Wetherspoon Order & Pay
bit.ly/spoon427
🤖 4.4 7
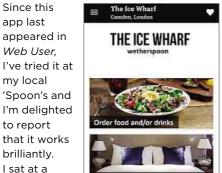
Since this app last appeared in *Web User*, I've tried it at my local 'Spoon's and I'm delighted to report that it works brilliantly. I sat at a table as far away from the crowded bar as possible, ordered a gourmet burger with chips and a pint of lager, and 10 minutes later my food and drink arrived without me even taking out my wallet (cynical friends may say this is not an uncommon occurrence). The app now works at all Wetherspoon pubs and hotels across the UK.

JustWatch
bit.ly/just427
🤖 4.1 7

Are you suffering from TV-streaming overload? I know I am, but my GP insists it isn't a "real problem" so I've turned to JustWatch instead. This marvellous app saves you the hassle of channel hopping by letting you search all the main streaming services from your mobile device. Enter the title of a film or TV series and JustWatch will scour providers including Netflix, iPlayer, Now TV and Prime Video, to tell you exactly where you can stream, rent or buy it, or see it at the cinema.

Songkick Concerts
bit.ly/songdroid427
bit.ly/songios427
🤖 (varies with device) 9
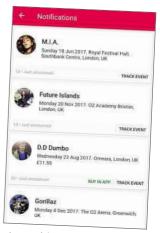
We've all been there: you hear that your favourite artist has announced a tour, you head online to buy tickets and you find that they've already sold out, only to appear at inflated prices on eBay and StubHub. Songkick Concerts helps you beat this problem by importing your favourite artists from services including Spotify, Apple Music and Deezer, then notifying you as soon as tickets for their concerts go on sale, so you can hopefully get in there before those resale rotters.

UK Bus Checker
bit.ly/ukbus427

📱 4 🍎 8

As a non-driver, I'm often at the mercy of erratic bus services, so this app is a godsend. It provides up-to-date timetable data for all 300,000 bus stops and stations in the UK, so you always know how long you have to wait and can plan your journey in advance. The useful Stop Alert tool tells you when to get off and you can save favourite stops and routes for easy access. Live information is available for 40 towns and cities. The ad-free version costs £2.99

Flio
www.flio.com

📱 4.2 🍎 9

Airports can be confusing and costly, but Flio gets you through the terminal quickly, cheaply and relatively stress-free. It covers more than 900 airports worldwide and provides full arrival and departure times, airport maps,

Nexar
www.getnexar.com

📱 4.1 🍎 9

Trying to explain how you were nearly in an accident because "some muppet" cut in front of you often yields yawns rather than sympathy, so why not record your motoring mishaps using Nexar? This app turns your phone or tablet into a dashcam, collecting video evidence of vehicles in front of you in case you need it for insurance, legal or social purposes. Cleverly, it calculates the direction, speed and acceleration of every vehicle in view, and automatically saves the data.

discounts on food and shopping, and tickets for shuttle buses and trains. Particularly useful for us webby types are the app's automatic connection to free (official) airport Wi-Fi and its locating of power points, so you can charge your gadgets before takeoff.
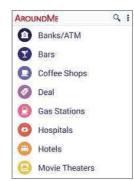
AroundMe
www.aroundmeapp.com

📱 2.3 🍎 7 🪟 10 Mobile

Don't get me wrong: Google Maps is fantastic, but sometimes you only need to know if there's a cashpoint, supermarket or taxi rank nearby, without faffing around

5 Apps That Improved My Life

Our resident columnist **Barry Collins** reveals the free mobile apps that have made his life worth living

Waze
www.waze.com

📱 (varies with device) 🍎 8

I tested this satnav app a couple of years ago but was put off by its distracting – and frankly dangerous – social features. Then recently I discovered that its mapping, speed-camera warnings and ability to swerve jams were much better than its rivals'. Waze shaved five minutes off a half-hour route I'd been driving for years, by finding a backstreet shortcut I'd never considered, and the kids thought Christmas had come early when I told them they could record their own voice directions.

Podcast Republic
podcastrepublic.net

📱 (varies with device)

I'm a podcast addict: I devour them on dog walks, attend live recordings and I even appear on one or two myself. Podcast Republic is perfect for a control freak like me, who wants to dabble with every setting. You can choose how many episodes of each podcast to download, decide when and how to download them, and fiddle with the sound settings until your fingers fall off. It barely scrapes the battery, unlike Spotify, and resumes where you left off the moment you put your headphones back in.
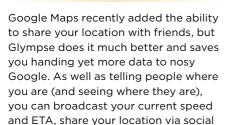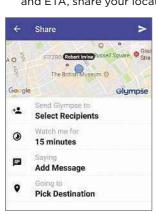
with a map. That's the idea behind AroundMe, which quickly detects your position so you can select from a list of amenities – including hospitals, petrol stations and pharmacies – to see what's available and how to get there, as well as other useful information including contact details, opening hours and customer reviews.

Glympse
bit.ly/glympse427
(varies with device) 8
10 Mobile
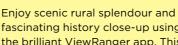
Google Maps recently added the ability to share your location with friends, but Glympse does it much better and saves you handing yet more data to nosy Google. As well as telling people where you are (and seeing where they are), you can broadcast your current speed and ETA, share your location via social media and other apps, specify your destination and limit how long someone can track you for. You can also send messages, such as "are you picking me up or what?".

ViewRanger – Trails & Maps
bit.ly/view427
(varies with device) 8

Enjoy scenic rural splendour and fascinating history close-up using the brilliant ViewRanger app. This provides outdoor trails for countries all over the world, which you can browse by distance, difficulty level and whether you want to walk, hike, cycle, canoe, ride and more. Its GPS maps and routes are available for free offline, but you need to pay to view its detailed Ordnance Survey and topographic maps.

Weather Underground
bit.ly/weather427
4 8

I love the familiar look of the BBC Weather app, but I don't find it particularly accurate and it's occasionally led to me getting caught in the rain without a brolly, and having to spend the rest of the day in sodden clothes and soggy shoes. Weather Underground is far more comprehensive, providing loads of useful weather data in a clear, easy-to-understand format, as well as satellite maps, severe-weather alerts and detailed 10-day forecasts. I could do without the ads, though.
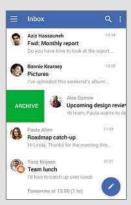
Outlook
bit.ly/outlook427
4.1 9 10 Mobile

I pay £8 a month for Outlook (well, Office) on my PC, and it frequently fails to discriminate between wheat and chaff. Meanwhile, I pay diddly squat for Outlook on my phone, yet it combines all three of my accounts in a single inbox and automatically separates the messages I want to read from guff such as LinkedIn Premium invites. I implore Microsoft's Outlook team to do on PC what they offer for free on mobile.

Goodreads
www.goodreads.com
(varies with device) 9

As any book snob knows, you can't trust Amazon ratings from the general public, who do dumb stuff like read Dan Brown. Better to trust the bookish opinions of one's friends, which is what Goodreads delivers. You can see what your pals are reading, how they rate each book and what's on their wishlist. Furthermore, because it's owned by Amazon, if you're a Kindle user, you can easily rate a book when you reach the end and then pick something else from your 'to-read' list.

Snapseed
bit.ly/snapdroid427
bit.ly/snapios427
4.1 9

I used to teach my photography students how to use PC image-editing software, but now I barely bother because Snapseed makes even sophisticated edits incredibly easy on your phone or tablet. Interloper in your perfect landscape? Swipe them away with the healing brush. Shadow falling harshly in a portrait? Brighten the subject's face. Snapseed keeps adding pointless novelties, such as altering the direction of someone's gaze, but its core tools are still phenomenal for a free app.

Fabulous: Motivate Me!
www.thefabulous.co
🤖 4.0.3

With its promise to "Reset your habits! Unlock your potential! Transform your life!", this colourful app was an obvious contender for this feature, and it more than justifies its exclamation marks. Fabulous takes you on a motivational journey that involves such easily achievable challenges as 'drink water' and, over time, its friendly tips and reminders will help you feel energised, sleep better, eat healthier, concentrate more and build self esteem. It's really rather splendid.

Twilight
bit.ly/twilight427
🤖 (varies with device)
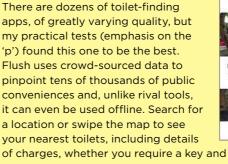
I'm terrible for checking my phone during the night, despite the potential damage to my eyes. So I was delighted to discover Twilight, which adapts your screen to the time of day by reducing
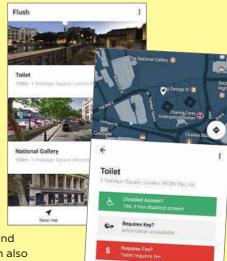
Flush Toilet Finder
bit.ly/flushdroid427
bit.ly/flushios427
🤖 4.0.3 🍎 8

There are dozens of toilet-finding apps, of greatly varying quality, but my practical tests (emphasis on the 'p') found this one to be the best. Flush uses crowd-sourced data to pinpoint tens of thousands of public conveniences and, unlike rival tools, it can even be used offline. Search for a location or swipe the map to see your nearest toilets, including details of charges, whether you require a key and if they provide disabled access. You can also add loos you've found to the app's database.

the amount of blue light it emits and applying a soft and pleasant red filter. The light intensity adjusts according to your sunset and sunrise times, so you can read your Android phone or tablet in bed without harming your peepers. On iOS, there's a similar, built-in feature called Night Shift.

Pzizz
www.pzizz.com
🤖 4 🍎 8

If you have trouble sleeping, or have friends or family who do, this marvellous app provides an effective cure for insomnia and stress. Promising "sleep at the touch of a button", Pzizz draws on

5 Apps That Improved My Life

Web User Staff Writer **Edward Munn** reveals the handful of apps that he couldn't live without
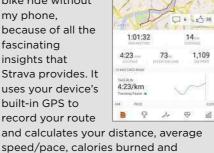
Strava
www.strava.com/mobile
🤖 (varies with device) 🍎 10

I find it almost impossible to go for a hike, run or bike ride without my phone, because of all the fascinating insights that Strava provides. It uses your device's built-in GPS to record your route and calculates your distance, average speed/pace, calories burned and elevation gained. The Segments feature measures your performance between two points and tracks improvements over time, as well as offering comparisons with the Strava community. It's a great way to motivate yourself!

Telegram
telegram.org
🤖 (varies with device) 🍎 6
⊞ 8 Mobile

WhatsApp might be the most popular messaging app, but I've always resented using it because it doesn't let you continue where you left off on another device when your phone's battery has run out of juice. Telegram overcomes this problem by securely storing your messages in the cloud, so you can use it on a PC or Mac as well as iOS and Android phones and tablets. Its Secret Chat function, which lets you set messages to self-destruct, is also very handy when you want to share sensitive information such as passwords or bank details.

'psychoacoustics' to deliver a soothing blend of music, voiceover and sound effects that relax your mind, ease you into a deep slumber and then wake you feeling refreshed. It even works with afternoon 'power naps'.

MyNoise
mynoise.net

🤖 4.1 🍎 8

Silence may be golden but it can also be unsettling and not conducive to a productive work session or decent night's sleep. MyNoise ensures your ears are only troubled by sounds you like, from white noise (which is scientifically proven to mask tinnitus) to soothing rainfall and sci-fi-tastic Warp Speed. The app is free of ads and lets you customise its noises to suit your audio preference, although some are only available as 79p additional purchases.

Sickweather
www.sickweather.com

🤖 4.0.3 🍎 8

Fever, common cold and coughs are afflicting my area, according to this app, which crowdsources illness reports from social media and presents the data on a real-time map of maladies. It alerts you when you enter a sick zone, pinpoints specific illnesses – be they respiratory, gastrointestinal and environmental – and lets you view a five-day forecast of forthcoming bugs, and share your own ailments.

Echo
www.echo.co.uk

🍎 8

If, like me, you have to take prescription medicine every day, you're sure to have missed at least one dose, or else double-dosed by accident. Echo stops this happening by reminding you to take your medication at the correct times, and lets you scan a barcode to order repeat prescriptions from your NHS England GP, which are delivered to your door in discreet packaging. A beta Android version is available from bit.ly/echobeta427.
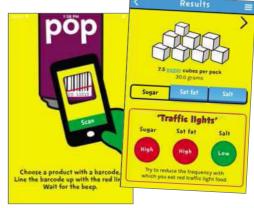
Change4Life Be Food Smart
bit.ly/change427

🤖 4.1 🍎 8

No matter what nutritionists tell you, eating healthily is pretty boring, so this app from the NHS tries to make sure you at least choose food and drink containing low amounts of sugar, salt and saturated fats. Use your phone's camera to scan the barcodes of items in the supermarket to view traffic-light colour coding and images depicting the unhealthy content – for example, nine sugar cubes.

Swiftkey
swiftkey.com

🤖 (varies with device) 🍎 9

Thankfully, the days of T9 predictive-text input (think back to the early Nokia phones!) are long gone, but the keyboard apps that come with many smartphones still leave a lot to be desired. SwiftKey is the best replacement I've found, because even when you tap the wrong keys, it seems to know what you meant to type and corrects it accordingly. The app's Flow feature, where you swipe a finger or thumb between letters instead of tapping them, makes one-handed text input much easier on phones with larger screens.

Trainline
bit.ly/train427

🤖 (varies with device) 🍎 9

Since working at *Web User*, I've had to depend on the dreaded Southern Rail, which is frequently named among the worst rail networks in the UK. With the Trainline app, I can take the sting out of travelling by checking for delays before I leave home. If they're really bad, I'll work remotely and save myself the dismal experience of a stuffy train packed with other disgruntled commuters. Even at the station, the app often provides more up-to-date information than the departure board!

Barclays Mobile Banking
bit.ly/barclaysm427

🤖 4 🍎 9.3

I'm of a generation that rarely carries cash, which can be a problem if I've left my debit card in another pair of trousers! The Barclays Mobile Banking app has got me out of one or two tricky situations, because it lets you make contactless payments of up to £100 using your phone's NFC (near-field communication) chip. It also lets me see the balance on all my Barclays accounts at a glance, and lets me easily send payments, making it truly irreplaceable!

SOLVE ANNOYING PROBLEMS

Truecaller: Caller ID and Dialer
bit.ly/true427
🤖 4.0.3 🍎 8 ⊞ 10 Mobile

I used to receive at least one nuisance call a day – either the type where you hear nothing but a click (so you phone back at high cost) or when the pushy caller insists that you've been in an accident. Since installing Truecaller, which identifies and blocks spam and marketing calls and texts, I've enjoyed total peace and quiet, leaving me free to ignore interruptions from people who I know but don't want to speak to!

Splitwise
www.splitwise.com
🤖 (varies with device) 🍎 9

"Neither a borrower or a lender be" goes the saying, but if it's unavoidable, then Splitwise ensures that friendships and family ties remain intact. It keeps track of all your shared bills, expenses and loans, so you can instantly see who owes how much and what for, when you or they need to pay by, and if it's time to settle a balance or call one in. Splitwise also offers a useful app called Plates (plates.splitwise.com), which lets you quickly and fairly split restaurant bills, but this is currently iOS-only.

Workflow
workflow.is
🍎 6

This automation app was formerly priced at £2.29, but Apple recently made it free to make all iPhone and iPad users' lives much easier. Forget all the taps and swipes required by everyday tasks such as editing photos, calculating travel times and adding favourite songs to playlists, and let Workflow combine them into a single step, which you can run automatically or in response to a specific trigger. It's ad-free and offers unlimited functionality, unlike the similar Android tool MacroDroid (bit.ly/macro427).

Three InTouch
bit.ly/threedroid427
bit.ly/threeios427
🤖 4 🍎 6

I rely heavily on this app when visiting my mum in the wilds of Scotland, where mobile coverage is as patchy as a tartan blanket. It lets you call and text over your nearest Wi-Fi network, with no need for a username or password, and at no extra cost. Call quality is great and the latest version lets you access the impressive-sounding 4G super-voice network, which means you can keep talking in places that were previously blackspots.

Flypay
www.flypay.co.uk
🤖 4.1 🍎 8

When the *Web User* team goes out for lunch, paying the bill invariably takes longer than the meal itself, which is why Flypay is such a great idea. It saves time, arguments and fumbling in pockets by letting you pay directly from your phone, whether you're covering the whole bill yourself or splitting it with others – you don't even need to wait for the waiter. It works with several big restaurant chains including Wahaca, Gourmet Burger Kitchen and Jamie's Italian.

FixMyStreet
www.fixmystreet.com
🤖 4.1 🍎 6

There was a time when I'd merely tut at potholes in the road, mattresses dumped on the pavement and bad-mannered pigeons, but I now use this app to – at least, try to – get such problems sorted, and make the filthy streets of London slightly cleaner. FixMyStreet lets you report details of local eyesores to your council, capture photo evidence and browse other people's reports. It's been around for a while but the app was recently updated to let you log details even when you're offline.

GET INSTANT ANSWERS

SoundHound Music Search
soundhound.com/soundhound
🤖 (varies with device) 🍎 9
⊞ 10 Mobile

This superior rival to Shazam instantly identifies songs and provides you with full lyrics, artist info and more. Very useful for impromptu karaoke sessions.

Yahoo Answers Now
bit.ly/answers427
🤖 4.4 🍎 9

One of Yahoo's best remaining services is now available on mobile, so you can quickly consult the knowledgeable Answers community when you're feeling baffled on the move.

CamFind
camfindapp.com
🤖 (varies with device) 🍎 8

This app helps you identify any mystery object, person or creature you come across by snapping it with your phone's camera. Its speedy answers are surprisingly accurate.

Dice 3D
bit.ly/dice427
🤖 2.3

Make impromptu life decisions by throwing a set of virtual dice using this excellent, ad-free app. You can customise the colour, number and shape of the dice as required.

EARN EXTRA CASH

Google Opinion Rewards
bit.ly/rewards427
🤖 4.1

The last time I recommended Google Opinion Rewards, back in Issue 420 (bit.ly/webuser420), my earnings balance stood at £10.49, so I'm delighted to report that I've now reached £13.34! I'm aware that's hardly a fortune, but bear in mind that I've accumulated this Google Play credit simply by completing short surveys. These are (anonymously) tailored to your lifestyle and interests, which I'm sure will earn you more than my humdrum existence.

Rewardable
rewardable.com
🤖 4.1 🍎 9

I'm always sceptical about apps that claim to give you real cash for doing very little, but Rewardable is one of the better examples, with an acorn-collecting rewards system that pays you to complete various tasks. These range from answering quick questions and completing surveys to playing games and performing jobs in your area. Oh, and viewing lots of ads.

Roamler
www.roamler.co.uk
🤖 4.1 🍎 9
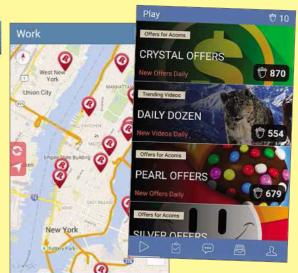
Want to earn some extra money by helping people (well, 'brands')? Then you'll like Roamler, if you can get past its registration process. This only lets you sign up if you live in an area where there aren't already enough 'Roamlers' or if you enter an activation code (try your postcode or request a code via Roamler's social-media pages). It's worth the hassle, though, because

Shpock Boot Sale & Classifieds
shpock.com
🤖 (varies with device) 🍎 9

I've got loads of stuff I'd like to flog at a car-boot sale but I'm hampered by the fact that I don't have a car. Fortunately, the brilliant Shpock lets you sell items directly from your phone or tablet, with no listing or transaction fees, so you can make as much money as possible, and arrange collection instantly. Shpock is equally good for browsing and buying, with listings arranged by proximity to your location.

this is one of the most rewarding tasks-for-cash apps available.

Wish
www.wish.com
🤖 4.1 🍎 8 ⊞ 10 Mobile

When an app gives you a free gift simply for signing up, you know you're onto a winner – I plumped for the snazzy sunglasses. Wish offers huge discounts on all manner of appealing products, including clothes, bags, household items, electronics and tools. User reviews and ratings give you an idea of the quality of each listing, and the ordering process is very straightforward. It's a must for shopaholics. ■

NEXT ISSUE
on sale Wednesday 26 July 2017

STOP USING GOOGLE!
Why it's time to ditch Google tools for superior alternatives

PLUS...
⊕ **EDIT VIDEOS ONLINE**
Free movie-making tools that equal paid-for downloads

⊕ **INVEST IN BITCOIN**
How to buy and use the leading cryptocurrency

⊕ **SSDs ON TEST**
Speed up your PC – upgrade to a solid-state drive

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

Best free online image editors

You don't have to leave your browser (or pay!) to edit your photos. **Andy Shaw** tests six of the best free online image-editing tools

Pixlr | pixlr.com | ★★★★☆
FEATURES ★★★★★ **PERFORMANCE** ★★★★☆ **EASE OF USE** ★★★★☆

What we liked:

At some point in Pixlr's history, its developers decided that you can't have everything in one program. Hence, this simple-to-use image editor that's stuffed with enough features to keep experienced photo-tweakers happy is split down the middle to provide two free tools, each catering for different demands.

The Express version (left-hand screen grab, above) has an app-like feel that wouldn't look out of place on a tablet or phone. It's designed for quick image tweaks such as crops, rotations and adjustments to brightness and colour, and lets you add fripperies like stickers and borders, though these are admittedly a bit naff. You'll find stacks of similar online tools elsewhere but Pixlr Express is good at what it does.

Where Pixlr really shines, however, is in its Editor version (right-hand screen grab, above). If you've used Photoshop Elements or Paint.net, Pixlr Editor will look and feel familiar, and it's made no compromises in the transition from installed software to web-based app. Run it full-screen and you wouldn't know you were in a browser.

The standout feature is that it provides layers and masks, so you can make changes to specific areas of your image and easily undo them. This is something that serious users of software image editors lean on heavily, and Pixlr Editor is the only online image editor we found that comes close to providing such expert functionality for free.

How it can be improved:

Our only gripe was with Pixlr's design. On the one hand, it looks modern and is packed with features, including a bank of easily accessed toolbars.

The advanced tools are organised in a set of menus across the top of the screen, but the Times New Roman font they use looks old-fashioned. Pixlr also includes ads, though they're relatively unobtrusive, especially if you're using a large, high-resolution screen.

OUR VERDICT

Pixlr Editor is a sophisticated image-editing tool that rivals the software you install on your PC. Pixlr Express works well for quick fixes, but the Editor version provides superior power and a range of tools that beat anything else in this test.

Photoshop Express Editor | www.photoshop.com/tools |
★★★★☆ FEATURES ★★★☆☆ PERFORMANCE ★★★★★ EASE OF USE ★★★★☆

WebUser SILVER AWARD

What we liked:
Photoshop Express is a free online editor with a very familiar look and feel, and is the best looking of all the editors we tested. It has a wide range of well-designed tools in an attractive and intuitive interface that uses familiar Adobe icons and even provides a short text description of each tool. The toolbar is split into Edit and Decorate sections using tab-like buttons at the top. Edit includes everything from cropping to pixelation, while Decorate covers elements you can add in, such as text, speech bubbles and a small collection of frivolities such as balloons and cartoon animals.

Compared to the full version of installable software such as Photoshop (or even Photoshop Elements), this online editor feels heavily pruned. However, the core features are present and correct, including some useful context-specific tools such as red-eye and skin-blemish removal.

Despite its limited features, Photoshop Express has no locked-down tools that you can't access, so at least you can use everything that's available.

How it can be improved:
There's no option to select areas of a photo and split it into layers, so it's only suitable for casual editing. Annoyingly, it also only lets you edit JPEG files.

> ### OUR VERDICT
> **Photoshop Express is a little short on tools compared to our other award winners, but you know what you're getting and aren't taunted by locked tools. It looks good and is great for performing quick edits if you don't want to have to launch a Windows image-editing tool.**

LunaPic | www.lunapic.com | ★★★★☆
FEATURES ★★★★★ PERFORMANCE ★★★★☆ EASE OF USE ★★★☆☆

WebUser BRONZE AWARD

What we liked:
LunaPic mimics the design of installed software by providing a menu across the top of its working area and a bank of icons down the left-hand side. At first glance, its layout looks similar to Gold Award-winning Pixlr, but in most other ways it feels more like a website than an app. Options for specific tools pop up above your image and when you make changes to an image, the entire page appears to reload.

As Web User forum member lizzygraham mentions in Readers Helpdesk on page 70, LunaPic has a lot of filters and doesn't nag you to upgrade to a paid-for version. Unfortunately, it hosts obtrusive adverts that can detract from your images while you're editing them.

How it can be improved:
The toolbar is unconventionally organised, with icons for tools such as Save and Print positioned in the middle, wedged between the various drawing tools for shape-drawing and freehand design. This is typical of the LunaPic software design as a whole, which is powerful and loaded with useful tools but doesn't seem to have had much thought applied to its layout.

> ### OUR VERDICT
> **LunaPic has more features than any of the other image-editing tools we tested but the clunky design means they're listed by name in one of its very long drop-down menus. What it gains in power, it loses in ease of use and general finesse.**

BEST OF THE REST

Polarr
photoeditor.polarr.co
Polarr is all about filters and it has loads to play with, though not as many in its free version as LunaPic has. However, if the latter's ugly interface puts you off, Polarr is vastly better looking. There is a paid-for version available, so some of its tools are locked, which can be frustrating, but there's still plenty to play with before you have to pay.

Fotor
www.fotor.com
Fotor has a clever interface that lets you have more than one photo open for editing at a time – just switch between them using the thumbnail bar on the right. It has loads of tools you can experiment with, but some are locked unless you pay for the full version, which can be frustrating. Also, the free version is surrounded by adverts, which isn't unusual on a website but is distracting when you're trying to edit an image, particularly when the ads are animated and flashing.

Aviary
www.aviary.com
Aviary was once a brilliant photo editor but it's now owned by Adobe and hasn't seen much love of late, left to limp along behind more sophisticated tools. There's no paid-for option, so it doesn't tantalise you with tools you can't access, as other programs with paid-for upgrades often do – but its options and tools are rather limited overall.

Switch to 64-bit software

Are you still running at half speed? **Wayne Williams** explains how and why to make the move from 32-bit to 64-bit software without losing any data or settings

Upgrade to 64-bit Windows 10

Many programs and apps are 32-bit, but 64-bit software tends to be faster and more secure, and makes better use of available system memory. A 32-bit program will run on both 32-bit and 64-bit systems; but 64-bit software requires you to have a compatible 64-bit processor and operating system to get the most from the extra power it offers. There are numerous benefits in doing so, including support for more memory (see this issue's Weekend Project on page 58 for tips on upgrading your PC's memory).

You can easily check if you're running 64-bit Windows 10 by typing `about` into the search box and selecting 'About your PC'. Next to System Type, it should say '64-bit operating system, x64-based processor'. If it says '32-bit operating system, x64-based processor' that (unsurprisingly) means that your PC is running a 32-bit version of Windows on a 64-bit processor.

Check to see if you have 64-bit Windows and a compatible processor

Unfortunately, there isn't a direct upgrade path from the 32-bit version to the 64-bit one, so the only solution is to perform a clean install of Windows 10. Download and run the Windows 10 Media Creation Tool (bit.ly/win10mct427). Choose to create installation media for another PC and make sure you select 64-bit as the architecture type. You can write the installer to a USB flash drive or save it as an ISO file for burning to DVD. Fully

To upgrade to 64-bit Windows, you'll need to perform a clean reinstall

back up your PC (everything will be overwritten, so this is a vital step), then boot into the flash drive/DVD and start the installation process. If you previously had a 32-bit version of Windows 10, you won't need to enter a product key.

When asked what type of installation you want, select 'Custom: Install Windows only (advanced)'. Select and delete the system partitions and follow the installation instructions. When it finishes, go to Settings, 'Update & security', Windows Update to get the latest updates and drivers. If your PC is a little old, it may not have compatible 64-bit device drivers for all your

hardware, in which case you will need to get those from the relevant product manufacturers.

Switch to a 64-bit browser

Upgrading to a 64-bit version of your web browser makes a lot of sense because you'll benefit from improved speed and security, and are less likely to encounter memory problems.

There are 64-bit versions of both Chrome and Firefox available and when you download a new browser, the correct build should automatically install on your computer (provided you're running a 64-bit operating system). However, if you're currently using a 32-bit browser or have older plugins installed, you may need to manually update it to 64-bit. Thankfully, the process is very straightforward and you won't lose any user data, such as passwords or bookmarks.

In the case of Chrome, click the three-dot button in the top-right corner and open the Settings menu. Click About and you'll see which version

Make sure you're running the latest 64-bit version of Chrome

you're running and whether it's 64-bit or not – Chrome may even update itself to the latest release while you are here. If it doesn't say you have a 64-bit build, go to the Chrome download page (bit.ly/chromedl427) to get the latest version. The download box should say 'For Windows 10/8.1/8/7 64-bit'. Install it to upgrade your current browser, with all your data and settings left intact.

Firefox users can check if they have the 64-bit version by clicking the three-line 'hamburger' button and clicking the Help question mark at the bottom. Click About Firefox and you'll see either '(32-bit)' or '(64-bit)' next to the version number. To upgrade the browser, go to the Firefox download page (bit.ly/ffdl427) and click the 'Firefox For Other Platforms & Languages' link. Click the Windows 64-bit link in the box and when the download completes, install it. Again, you won't lose any existing settings.

Firefox now offers a 64-bit version, but many users are still on 32-bit

There's also a third-party dedicated 64-bit version of Firefox called Waterfox (www.waterfoxproject.org) which has been optimised for speed so it may be faster than Firefox itself on older computers. Likewise, Pale Moon – which was originally based on Firefox – has a 64-bit version that you can download from bit.ly/pale427.

Microsoft Edge on Windows 10 is 64-bit only, while Internet Explorer is available in both 32- and 64-bit downloads.

Change to 64-bit Office
The 32-bit version of Office is automatically installed unless you select the 64-bit version at the beginning of the installation process. You can check which version of Microsoft Office you're running by opening Word and going to File, Account, About Word. If it's the 32-bit version, you will need to first uninstall your existing cop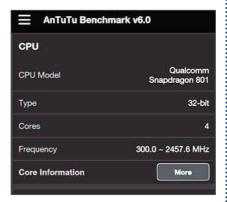y of Office, then reinstall it, this time selecting 'Office – 64-bit' under Version in the 'Language and Install Options' box.

CHECK IF YOUR MOBILE DEVICE IS 64-BIT

When Apple introduced the iPhone 5S four years ago, it was noteworthy for being the first mobile device powered by a 64-bit system on a chip (SoC) processor. Other companies have since followed suit and introduced 64-bit devices of their own. If you have an iPhone 5S or newer (not 5S), it will be 64-bit. To check an Android phone, install the AnTuTu Benchmark app (bit.ly/antu427), open it and tap the 'Info' tab at the bottom. Look for the Android entry and it will tell you if you're running the 32- or 64-bit version of Google's mobile operating system.

If you see a message on iOS warning you that a particular app might slow down your iPhone, it's because that app is 32-bit. The bad

Find out if you're running 32- or 64-bit Android on your phone

news is that unless the developer updates the app, it won't even run in the forthcoming iOS 11 because Apple is dropping support for non-64-bit apps in the new OS.

Download other 64-bit programs
Before downloading a new piece of software, check to see if there is a 64-bit version available. The download site may automatically detect that you are running a 64-bit OS and present you with the correct option.

Some downloads include both 32-bit and 64-bit versions and you need to select the correct one during the installation process. In other cases, you need to select the correct download option from the website. For example, when you go to the download page for the popular ebook manager Calibre (bit.ly/cali427, see page 28) you are presented with options for Windows, MacOS and Linux, a portable version and, finally, the Windows 64-bit version. Try to get in the habit of looking for 64-bit builds.

Always check to see if a 64-bit version of a program is available

It's worth checking all your installed programs – or at least the most frequently used ones – and replacing 32-bit versions with 64-bit ones wherever possible. You'll definitely notice the benefit of doing this.

Try the new 64-bit Kodi
The MacOS, Linux and Android versions of Kodi have been 64-bit for a while, but the developers of the popular media player have only just now begun the transition on Windows. Kodi 18 'Leia' will be the first 64-bit compatible build for Microsoft's operating system, and although that isn't officially available

Kodi's new 64-bit version for Windows is still in development

yet, you can try it now by installing a 'nightly' developers' version from bit.ly/kodi427. Be sure to grab the latest download from the top of the list.

You should be aware that because Leia is pre-release software, certain third-party packages and add-ons won't run on it – at least for the moment.

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	sky	Sky: Broadband	£28.99 (£18.99 for 12 months)	12 months	17Mbps max speed	∞ unlimited	**CHEAPEST** £227.88
2	TalkTalk For Everyone	TalkTalk: Broadband	£25.50 (£20.00 for 12 months)	12 months	17Mbps max speed	∞ unlimited	£240.00
3	EE	EE: Broadband	£28.50 (£21.00 for 18 months)	18 months	17Mbps max speed	∞ unlimited *	£252.00
4	Virgin media	Virgin: Broadband	£40.00 (£32.00 for 12 months)	12 months	100Mbps max speed	∞ unlimited *	£384.00

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

Data supplied by www.broadbandgenie.co.uk. Correct as of 28 June 2017.

Ofcom

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

Give your eyes a rest from your computer by taking our fortnightly challenges. Can you guess our film emoji and solve our word puzzle?

CAN YOU IDENTIFY THE FILMS FROM THE EMOJI?

1. 🏊 🦈 💀 🛥️
2. 🏨 👭 🛁 🚪 😱
3. 🛸 🌍 👽 🇺🇸 🎆
4. 👨 🕷️ 🏙️ 🕸️
5. ⌚ ⬅️ 👦 👴 🚗
6. 👨 👱 🏠 🎈 🐕

WEB USER WORD PUZZLE

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

1. Band with members Syd Barratt and Roger Waters (4,5)
2. Red syrup used in cocktails
3. UK figure skater, 1976 World and Olympic champion (4,5)
4. Quadrilateral with one pair of parallel sides
5. Author of *The Da Vinci Code* (3,5)
6. Angelina Jolie's father, star of *Midnight Cowboy* (3,6)
7. National flower of Wales
8. Capital of Sweden

COMPETITION

WIN 1 OF 12
Peli Phone And Tablet Cases

In this special competition, we're celebrating 20 years of Peli, worldwide manufacturers of high-performance protective cases for phones and tablets. We have 12 cases to give away – three Vault cases for the iPhone 7 (pictured right); three Voyager cases for the iPhone 6; three Adventurer cases for the Samsung Galaxy S8; and three Guardian cases for the Samsung Galaxy S7 (pictured far right).

To enter, email your address to webusercomp@dennis.co.uk with the name of your preferred case in the subject line.

For more information about Peli's products, visit www.pelimobileprotection.com/en, 'like' Peli on Facebook (www.facebook.com/PelicanLife) and follow @Peli_Products on Twitter.

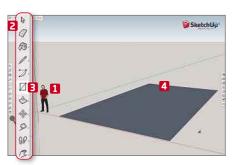# Create 3D models and scenes online with my.SketchUp

This free web-based 3D-modelling tool lets you save creations in the cloud. Here's how to use it

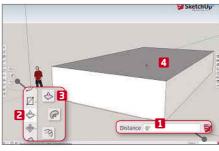**my.SketchUp: bit.ly/su427** | ⏱ **20 mins** | **Any browser**

S ketchUp, the 3D scene-creating software that used to be owned by Google, has just launched a web version that saves you having to download and install any software. Creating detailed 3D models sounds like a complicated and skilled process, but my.SketchUp makes it easy. You just lay down a flat geometric shape, then push or pull it to add a third dimension. You can add other forms to your construction and use tools to reshape them. You can also import existing 3D models and adapt them for your own purposes.
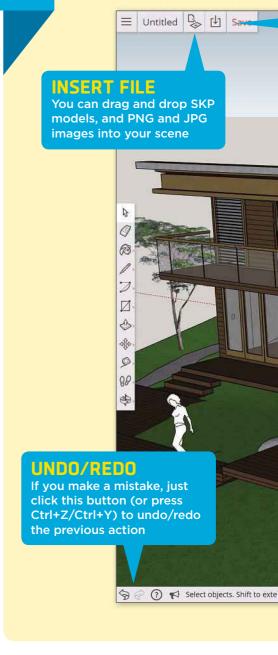
It's entirely free, and your creations can be saved in the cloud, so you can pick up where you left off on any computer using any web browser.

INSERT FILE
You can drag and drop SKP models, and PNG and JPG images into your scene

UNDO/REDO
If you make a mistake, just click this button (or press Ctrl+Z/Ctrl+Y) to undo/redo the previous action
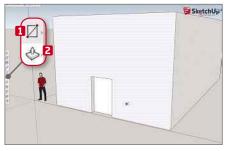
1 Launch my.SketchUp to load the workspace. The man **1** is there to give you an idea of scale, and can be deleted. The strip of tools on the left **2** contains everything you need to get started. To produce your first 3D shape, select the Rectangle tool **3** and draw a 2D rectangle in the space. **4**
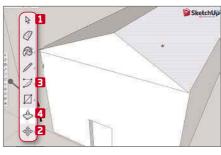
2 You can change the measurements of the shape by entering real-world dimensions in the box. **1** To turn the 2D object into a 3D one, select the Push/Pull tool, **2** then select Push/Pull from the options. **3** Click the shape and drag upwards until you reach the height you require. **4**

3 You can change the height, width or length of the box by hovering your mouse over the side you want to adjust, then clicking and dragging. Click the Rectangle tool again and select another shape. **1** Draw that on the first box and use the Push/Pull tool **2** to change it as required.
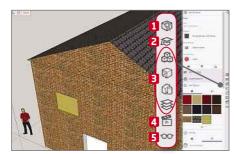
4 Fully select an object by drawing a rectangle around it with the Select tool, **1** then use the Move tool **2** to move the item elsewhere. The Move tool can also slant objects and turn flat roofs into apex ones. Use the Line tool **3** to draw a bisecting line, then pull it upwards. **4**
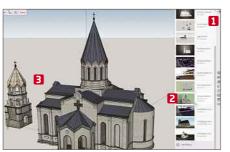
5 Use the Eraser tool **1** to remove lines and sides, and colour in some or all of your objects using the Paint tool. **2** You can Create curves with the Arc tool **3** and check sizes with the Dimensions tool. **4** The Walk and Orbit tools **5** let you explore your scene in different ways.

DOWNLOAD MODEL
Download your creations to your computer in SKP (SketchUp) format for use in other projects

CONTEXT MENU
Right-click anywhere in the app to display a context menu of available options

Entity Info
Erase
Hide
Lock

Edit Component
Make Unique
Explode

Unglue
Reload...
Save As...

3D Warehouse ▶

Change Axes
Reset Scale
Reset Skew
Scale Definition

Intersect Faces ▶
Flip Along ▶
Soften/Smooth Edges
Zoom Selection
Add to Layer: Layer0

...nd select. Drag mouse to select multiple.

Measurements

6 In the bar on the right, the Entity Info tool **1** tells you about a selected item; while the Instructor **2** provides handy tips and tricks. There are also Components, Materials, Styles and Layers tools. **3** Views **4** lets you pick a different camera angle, and you can change how the scene looks under Display. **5**

7 You can add 3D models designed by other users. Click the Components button and search for the type of object you're after. **1** Browse the selection **2** and when you find a model you like the look of, click it. The 3D model will be downloaded and automatically added to your scene. **3**

8 When you're ready to save your creation, click the Save button **1** and create a Trimble ID **2** or sign in with your Google credentials. **3** Choose a location on the TrimbleConnect cloud service where you want to save your creation (you can create new folders), give your project a name and click 'Save here'.

The add-on that makes YouTube even better

Magic Actions: www.chromeactions.com | 🕐 **15 mins** | 🌐 **Chrome** 🦊 **Firefox** ⭕ **Opera**

Magic Actions brings an impressive range of powerful features to YouTube, adding a bar of buttons across the bottom of the video panel to give you one-click access to Night mode, Cinema mode, colour filters and more. You can also capture still images from video frames and play segments of a video on a continuous loop with the Multi-Range Looper.

In this Workshop, we show you how to take advantage of these features and also how to configure Magic Actions' Options menu to hide ads, stop autoplay and strip out YouTube elements you don't want to see, such as related videos and comments. Once you've configured the settings to suit your preferences, you can export them for safekeeping and to use on another PC.

For the purpose of this Workshop, we've used Chrome, but Magic Actions is also compatible with Opera and Firefox.
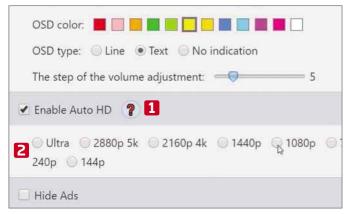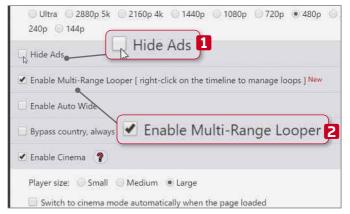
1 Install Magic Actions, making sure to click Skip when you're offered an additional extension during setup (unless you actually want it). Click Settings **1** and, on the web page that loads, scroll down to view the extension's Options window. This is where you control most of the settings. 'Instant control over volume' is enabled by default.
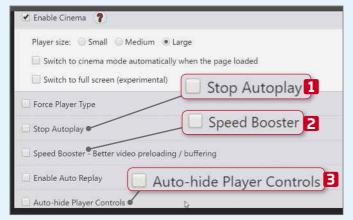
2 You can turn the volume up or down by scrolling the wheel on your mouse. If you use a laptop and don't have a mouse wheel, you might prefer to choose the option 'By holding right mouse button and moving mouse', **1** which better suits a trackpad. Below this, you can fine-tune how the volume of a video is displayed. **2**

3 AutoHD is also enabled by default. **1** You can change this and set YouTube to play videos at your screen's resolution, **2** whenever possible. Alternatively, if you have a slow internet connection and find your videos sometimes pause, you can choose a lower resolution so the video streams more smoothly.

4 The next entry in the Options menu lets you 'Hide Ads'. **1** Below this is 'Enable Multi-Range Looper', which is ticked by default. **2** This lets you select one or more sections of a video to play on an endless loop. We show you how to do this in Step 9.

5 Another option enabled by default is Cinema, which lets you view videos with the 'Magic Backlight'. We show you how to adjust this in Step 7. Below this, you can enable handy options such as Stop Autoplay; **1** Speed Booster, **2** which makes clips load more quickly; and Auto-hide Player Controls, **3** to hide video controls when a clip starts playing.

6 Ticking the box for Hide Page Elements **1** lets you opt to hide specific features including Header, Footer, 'Related videos', **2** 'Video description' and Comments. There's no need to save your configuration but when you're happy with the setup, you can export your settings by scrolling down and selecting the appropriate button.

7 Load a YouTube video and you'll see a strip of new buttons that belong to Magic Actions. The Settings cog loads the Options page where you made your customisations and clicking the film strip next to it enables Cinema mode. In Cinema mode, click the top-right icon **1** to choose a backlight colour.

8 Click anywhere outside the video to disable Cinema mode. In the top-left corner, you'll see a light-switch icon that lets you enable or disable the dark-themed Night mode. **1** To add a colour filter to the video, click the filter button **2** until you find a suitable option.

9 To set a section of the video to loop, move the red dot to an appropriate starting point on the timeline, then right-click to mark an end position. A green line appears, indicating your selection. **1** You can add multiple segments in this way. Right-clicking a loop deletes it.

10 Clicking the camera icon lets you capture a still image of the current frame. After clicking the button, a new tab loads showing the dimensions of the image and its file size. **1** You can choose up to two filters **2** and set the image quality **3** and format **4** before clicking Save. **5**
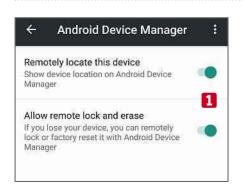
Find your phone from another Android device

Android Device Manager has been renamed Find My Device and updated to include handy tools that let you check your phone's Wi-Fi and battery status as well as its location. In this Workshop, we show you how to find, lock and erase the contents of your phone using another Android smartphone or tablet, in the event that you lose it or discover that it's been stolen.
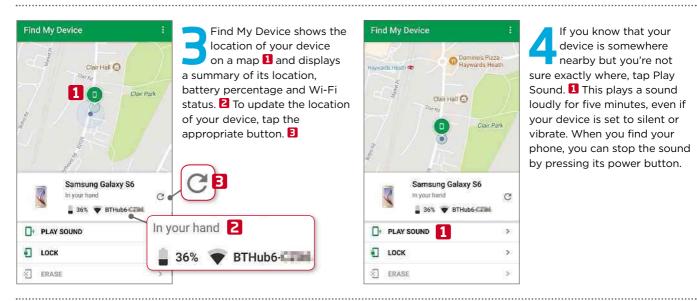
Find My Device: bit.ly/find427 | ⏱ **10 mins** | 🤖 **Android 4.0+**

---
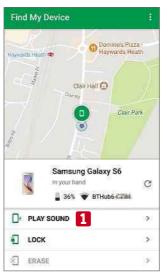
1 Don't wait until you've lost your phone to set up Android Device Manager because it will be too late! Tracking must be enabled for the app to work, so open Settings, then tap Google and Security. From this menu, tap Android Device Manager and check that both 'Remotely locate this device' and 'Allow remote lock and erase' are enabled. **1**

2 Should you misplace your phone, ask a friend if you can install Find My Device on their Android phone or tablet. Open the app, tap the option to 'Sign in as guest', **1** then enter your email address or phone number before tapping Next. Now enter your password and tap Sign In.

---

3 Find My Device shows the location of your device on a map **1** and displays a summary of its location, battery percentage and Wi-Fi status. **2** To update the location of your device, tap the appropriate button. **3**
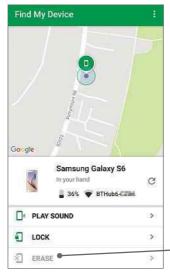
4 If you know that your device is somewhere nearby but you're not sure exactly where, tap Play Sound. **1** This plays a sound loudly for five minutes, even if your device is set to silent or vibrate. When you find your phone, you can stop the sound by pressing its power button.

---

5 If you still can't find your phone, use the Lock option to protect your data. Your phone may already have a screen lock, but Find My Device's Lock option lets you add a message of up to 100 characters **1** and a phone number **2** (don't use the number of the device you've lost). If someone finds your device, they can use this info to return it to you.

6 Only use the Erase option **1** if your phone is irretrievably lost or has been stolen, and you're sure you want to permanently erase all its data. After using this option, you'll be unable to use Find My Device again with your phone.

Use mouse gestures to navigate the web

Gestures are a great way of streamlining your browsing. Rather than having to use precision mouse clicks to access fiddly buttons and menu options, you can enter commands simply by moving your mouse in a certain way.

SmartUp Gestures is a Chrome add-on (bit.ly/sm427) that now works in Firefox, too. We're using Firefox here, but it works in both browsers.

SmartUp Gestures: bit.ly/ffsm427 | ⏱ 10 mins | 🦊 **Firefox (and** 🔴 **Chrome)**

---

1 When you install the add-on, its icon appears in the Toolbar. **1** Gestures will start working straight away, but only on the current tab and any subsequent tabs you open, so if you want to use it on any previous tabs, you'll have to restart the browser and reload them.

2 To make a gesture, hold down the right mouse button and draw a shape on the screen. A line appears as you draw. **1** If you've created a shape that the add-on can understand, a description appears. **2**

3 There are lots of commands you can use. To see what's available, click the icon and choose Options. **1** Click Mouse Gestures, then Actions. **2** Hover your mouse over one of the actions to see the direction in which you need to move your mouse. **3**

4 If your mouse has a middle button, you can use this instead of the right-hand one. In Options, click Mouse Gestures, then Settings. **1** Select Middle Button from the 'Operating mode' menu. **2** You can set the Shift, Control or Alt key to temporarily disable gestures. **3**

5 You can customise gestures and create your own. In Options, select Mouse Gestures, then Actions. You can edit existing gestures **1** or click the '+' button **2** to add your own. Draw the gesture, choose the action from the drop-down list **3** and click Save. **4**

6 Some settings in the software are switched off by default but they're worth exploring. From Options, choose General, then 'Features ON'. **1** For example, if your mouse has a wheel or a rocker, you can assign basic left, right, up and down gestures to it. **2**
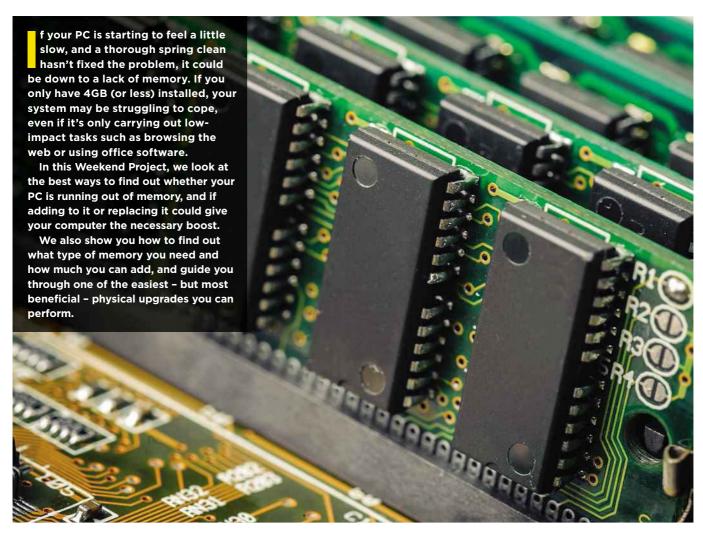
✚ Get more practical advice at forum.webuser.co.uk

How to...

Upgrade your PC memory

Wayne Williams shows you how to find out whether you have enough memory in your PC, and how to upgrade it

If your PC is starting to feel a little slow, and a thorough spring clean hasn't fixed the problem, it could be down to a lack of memory. If you only have 4GB (or less) installed, your system may be struggling to cope, even if it's only carrying out low-impact tasks such as browsing the web or using office software.

In this Weekend Project, we look at the best ways to find out whether your PC is running out of memory, and if adding to it or replacing it could give your computer the necessary boost.

We also show you how to find out what type of memory you need and how much you can add, and guide you through one of the easiest – but most beneficial – physical upgrades you can perform.

Gather information

It's very easy to check how much memory there is inside your computer, and you don't even need to open the case. On a PC running Windows, you just press Ctrl+Shift+Esc to open the Task Manager, then click the Performance tab and select Memory on the left-hand side. This will show you the amount of memory you have installed, as well as how much is currently in use and how much is available.

You can see at a glance the speed of your RAM, the number of memory sockets in use inside your PC, the form factor (DIMM, for example) and the amount of memory being reserved by hardware. The graph on the left side shows the percentage of memory that is currently in use. This detail is important because if it's too high, your PC is likely to experience problems.

The Windows Task Manager provides an overview of your PC's memory

Clicking the Memory tab puts running programs in order of memory consumption

The Resource Monitor provides a detailed overview of what's happening with your PC

Depending on your computer and the software you're running, if you're using 70% (or more) of your installed memory, then you are in danger of slowdowns, freezes and crashes. This threshold is even more pronounced in PCs with limited memory.

If you're wondering exactly what's hogging your PC's memory, there are two ways to find out. You can either click the Processes tab at the top of the Task Manager and explore the Memory column; or open the Memory section under Performance in the Task Manager and click the 'Open resource monitor' link at the bottom. In the new window that opens, click the Memory tab to get a detailed display of how much memory is in use, and what is using it.

The good news is there's a very simple way to speed up a computer that's currently using more than 70% of its memory, and that's to restart it. Obviously don't do this if you're in the middle of some important work!

The percentage of memory in use can have a serious impact on your PC's performance

Another option is to close the programs that are using the most memory – this will often include your web browser. If you've got a lot of tabs open in your browser that you don't want to lose, click the Processes tab in Task Manager, select your browser in the Name column and click 'End task'. This closes the browser and frees up some memory. Launch the browser again and select the Restore option (this appears in the top-right corner in Chrome). All the

tabs you previously had open will reappear, but your browser won't be using as much memory as before.

Upgrade your memory

If you don't have at least 8GB of memory – which is really the minimum amount you need these days – and you're often at or above the 70% in-use threshold, then you need to perform an upgrade. However, not every computer is receptive to an upgrade. Most desktop PCs are

---

⚙ MINI WORKSHOP | Find out more about your existing memory with PassMark RAMMon

1 PassMark RAMMon (bit.ly/ramm427) scans your PC and provides data about your installed memory. The summary at the top **1** shows the number of 'memory devices' (RAM modules), as well as the total amount of physical memory, the amount of available memory and the current load percentage.
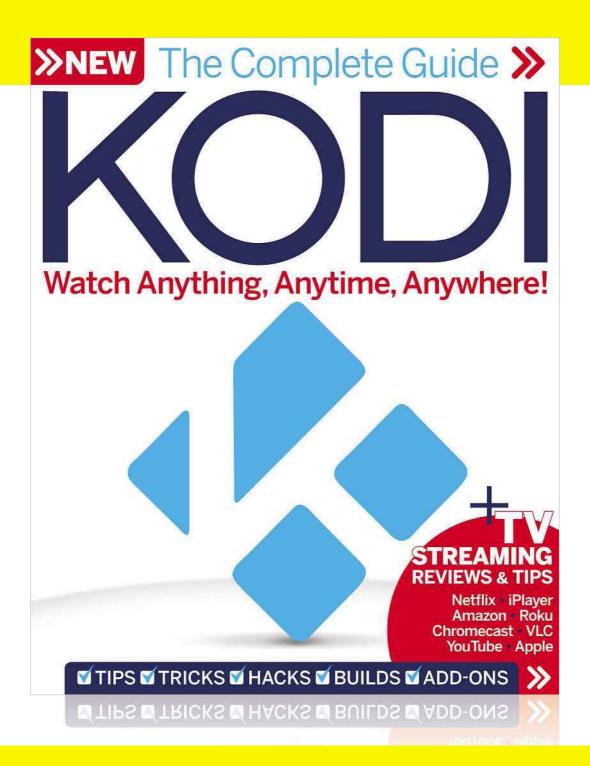
2 Look below to see detailed information for each memory slot (if the memory is all the same, the details should be identical in each column). You can see the memory type and its speed, **1** the capacity of the module, **2** and the manufacturer. **3**

3 The software even tells you when the RAM was manufactured **1** and provides in-depth technical details on every aspect of it. Click the Export/Copy button **2** to save the report in HTML or Text format, **3** copy it to the clipboard or write it to a file. **4**

---

upgradeable, but not all laptops are. There are other restrictions to bear in mind – you're limited by the number of free memory slots (unless you plan to scrap and replace all the existing memory and start afresh), and the version of Windows you're running.

The 32-bit versions of Windows 7, 8 and 10 can only recognise a maximum of 4GB (and use a total of around 3.5GB) of memory. The 64-bit Home Premium edition of Windows 7 can use up to 16GB, while the Professional and Ultimate editions can access up to 192GB. The 64-bit Windows 10 Pro, Enterprise, and Education editions support up to 2TB of memory, but the 64-bit version of Windows 10 Home is limited to 128GB.

Upgrading to a different version of Windows may allow you to install more

Crucial System Scanner tells you about your PC memory, and suggests upgrade options

memory, but bear in mind you will only be able to run a 64-bit edition of the operating system if your PC has a 64-bit processor.

If you're not sure which version of Windows you're running, press Windows+i, then choose System and About. See our feature on page 48 for more on this topic.

Which memory to buy

You need to buy memory that's compatible with your PC. If yours uses DDR3 RAM (DDR stands for Double Data Rate), don't buy DDR4 because it won't fit. If you're adding (rather than replacing) memory, you need to make sure the speed of the new modules matches that of your existing ones. Although mixing and matching different speeds won't cause any harm, your installed RAM will only run at the slowest rate of all your installed modules.

Bear in mind that not all memory is created equal. You don't need to spend a fortune on branded products but if you are replacing (rather than adding to) the memory in your PC, make sure you get all the modules from the same supplier to avoid potential problems. Two of the best memory suppliers are Crucial (bit.ly/cruc427) and Kingston (bit.ly/kin427).

The Crucial System Scanner (bit.ly/crucss427) will tell you the type of memory your system is using and the type you need to buy. However, you have to buy your memory from Crucial.

Crucial's Ballistix Sport RAM is high-quality, superfast memory that will noticeably improve your PC's performance

We show you how to install memory in our Mini Workshop, below.

Upgrade laptop memory

Adding more memory to a portable PC is much the same as installing it in a standard computer, but getting into a laptop can be tricky. Some devices, like Microsoft's new Surface Laptop (see our review on page 20), are sealed with glue, and the supplied memory is soldered into place so it can't be replaced.

If you can open your laptop without damaging it, it's likely there will only be the one RAM slot, in which case you will need to replace your existing memory module with a single, higher-capacity one. Laptop memory is different from desktop memory so make sure you buy the correct type. ◼

⚙ MINI WORKSHOP | How to install more memory

1 Turn off your PC and switch the power off at the wall but leave it plugged in. Earth yourself – for example, by touching a metal radiator. Open the case and lay it flat on the floor. Locate the memory sockets **1** and ensure you have clear access to them. You may need to move or unplug any cables that are in the way.

2 Open a memory slot by pressing down on the locking tab. If you're replacing existing RAM, pull out the module and set it aside. Insert your new memory module, making sure the notches align. It will only go in one way. Press down firmly until the locking tab **1** pops up, securing the module in place.

3 Add the rest of the RAM, **1** then put your PC back together again and power it up. The new memory should be listed on the boot-up screen. If it isn't showing the correct amount, follow the instructions in Step 1 to open your PC and make sure each module is seated correctly.

SUBSCRIBE NOW!

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

Each issue of *Web user* will be delivered directly to your device each fortnight.

HOW TO SUBSCRIBE...

...on an iPad or iPhone

STEP 1   Return to the *Web user* library

STEP 2   Choose your subscription term and tap twice on the 'price' box

STEP 3   Choose whether to create an optional PixelMags account

STEP 4   Enter your Apple ID password to confirm

Download on the **App Store**

...on a Kindle Fire

Kindle Fire subscriptions come with a FREE one month trial.

STEP 1   Tap 'Free Trial Subscription' in the *Web user* library

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

STEP 3   Tap 'Subscribe'

available on
kindle fire

...via the Zinio app

STEP 1   Search for *Web user* via the search box in the Shop tab

STEP 2   Tap the 'Subscribe' button

STEP 3   Choose whether to create an optional Zinio account

STEP 4   Enter your Apple ID password to confirm

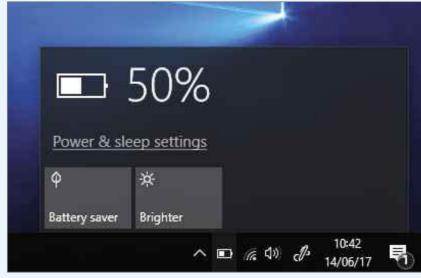## Subscribe to *Web user* today and save on the single issue price

Prepare your battery before going on holiday

Laptops are designed for carrying around so you may be surprised that this tip isn't about getting the most from a computer battery when you're using it on holiday. No – we're actually offering advice on what you should do if you've decided to leave it at home! While you're sunning yourself by the pool for two weeks, your laptop's battery will be idle, and it's important to leave it in a healthy state to avoid causing permanent damage.

It's tempting to charge the battery to 100% just before you head off but this isn't actually ideal. Charge it to 100%, then use it and run down the battery to about 50-70%. Don't just close the lid of the laptop because it might only go into sleep mode and drain the battery. Instead, power it off and pull out the power cable before you put it away.

Don't leave your laptop's battery on 0% or 100% while you're on holiday. It's much better for its long-term health to leave it at 50-70% charge

Stop background apps

Windows 10 apps that run in the background use power and increase the speed at which the battery drains. If you stop them running, the battery will last longer. Press Windows+i to open Settings and type `background` into the search box. Click 'Choose which apps can run in the background'.

All the Windows 10 apps are listed, with on/off switches next to them, which determine whether they can run. Alarms & Clock, Calendar and a few others are obviously useful, but apps like Candy Crush Saga don't need to run in the background, so switch them off.

Stop background apps from running in Windows 10 so they don't drain the battery

Pick a power plan

Windows power plans consist of configuration settings that determine how your PC's components function. Some components have two or more modes, each of which consumes a different amount of power; other components are variable and can operate at a range of different speeds – the processor, for example, varies its speed according to the amount of work it has to do.

You can change to a different power plan when your PC needs a performance boost or if you need to reduce power consumption to make the battery last longer. Open the Control Panel and open Power Options. If necessary, click 'Show additional plans' to see them all.

Selecting 'Power saver' reduces battery drain so you can work for longer when you don't have access to a mains plug. It works by limiting the performance of the CPU and other components, which affects some but not all software.

If programs are running slowly,

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.

select the 'High performance' power plan to set all the hardware components to maximum speed. This uses considerably more power and the battery drains faster, but certain activities, such as fast action games, will only run properly in this mode.

Calibrate the battery

Click the battery icon in the taskbar to see the percentage charge and the time remaining. This gauge can become wildly inaccurate over time, shutting down while still at 20% or even 30% charge, or with an hour or more power remaining. To solve this, you need to recalibrate the battery so that the percentage displayed accurately indicates your battery's status.

The simplest method is to charge the battery to 100%, then unplug the power. Use the computer until it shuts down, then leave it for an hour or so and charge it back up to 100%.

Alternative battery calibration

If your laptop still shuts down while showing more than 10% charge, the calibration hasn't worked and you should try this next method. Charge the battery to 100%, then open Power Options in the Control Panel and click 'Create a power plan' on the left. Name it whatever you like and click Next. Set the display to never turn off and the computer to never sleep when running on the battery. Click Create and select the plan, then close the Control Panel.

Use the laptop as you would normally on battery power until it shuts down. Plug in the power cable and charge it up. It should now be calibrated. You can now return to Power Options and set your preferences for the display to turn off and computer to sleep.

Reset the battery

Resetting the battery can fix problems and calibrate it at the same time. Try powering off the laptop, then hold down the power button for 10 to 15 seconds. This doesn't work with all laptops, but it's worth trying.

If you have an older Lenovo laptop, plug in the power cable and charge it up. Go to Power Manager, select the Battery tab, then click Battery Maintenance and the Perform Reset button.

If your Lenovo laptop is a more recent model, run Energy Management and click the gear icon. Click the Start button next to Battery Gauge Reset. You need to connect to the mains power and close all applications before you click the Continue button.

You should be aware that this takes several hours to run.

Test the battery

Some laptops have their own diagnostic software for testing the battery. If you have an HP laptop, for instance, switch it on and press the F2 key several times. The HP PC Hardware Diagnostics UEFI utility appears. Using the up/down arrow keys, select Component Tests and press Enter. Select Battery in the next menu, then Run Now.

If the results of the test show that the battery is working fine, go back through the menus and quit. If a problem with the battery is found, a repair and calibrate test will run. This could take a couple of hours or more, so only run this when you don't need your computer for a while.

Get a battery report

Click the Search box on or next to the Start button and type `command prompt`. Right-click Command Prompt and click 'Run as administrator'. Type `powercfg /batteryreport` in the command window and press Enter. The report is created and saved to the hard drive at the location shown. Open Explorer, go to the folder and double-click the file to view it.

In the 'Installed batteries' section, you'll see numbers for Design Capacity and Full Charge Capacity. The Full Charge Capacity reduces over time as your battery wears out. By comparing the two, you can see how much capacity has been lost. Use Windows Calculator to divide the full charge capacity by the design capacity, then multiply by 100. This tells you the percentage charge the battery can hold. When it falls below 80%, you should consider replacing the battery.

Test your Chromebook

If you have a Chromebook, press Ctrl+Alt+T to open the terminal window and type `battery_test`. This displays a brief battery-health report showing the current charge and health as a percentage. When the health falls below 80%, you should consider replacing the battery.

To get more information, type `chrome://power` into the browser's address bar and press Enter. Find Battery Charge and, next to it, click Show. This displays the battery discharge rate as a chart.

Delete the driver

Some battery problems can be cured by deleting the current driver and replacing it with a new one. Click the search box on or next to the Start button and type `device manager`. Click to open it and expand the Batteries section to view the items. Right-click anything named 'Microsoft ACPI-...' and select 'Uninstall device'. Now restart your computer to make Windows install the default driver.

Remove the device driver for the battery and let Windows reinstall it

Customise the power plan

Once you've picked a power plan (see tip on opposite page), you can tweak its settings. Open the Control Panel, open Power Options and click the 'Change plan settings' link next to a power plan. On the next screen, click 'Change advanced power settings'.

Expand each section to see two options: 'On battery' and 'Plugged in'. Click the setting next to 'On battery' for a menu or an input box where you can type a value to customise the setting.

Select the 'Power saver' plan and go through each section, setting the maximum power savings for

Limit your laptop's processor speed in the power plan to extend its battery life

each item. For example, expand 'Processor power management' and 'Maximum processor state'. Set it to 50% so that the CPU only runs at half speed when you're using the battery. This will slow down your PC but also makes considerable power savings so the battery will last longer.

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

---

GENERAL PC
Fix a forgotten PIN

Q My brother has set up his Microsoft account so that he uses a password rather than a PIN to sign into Windows. However, he has forgotten his PIN. Does he still need it? If so, how can he get it back?
Darren, via email

A You can add a PIN to Windows 10 as an alternative way to log in, but it's never the only option. On the login screen, you can choose to enter a PIN or a password. Click Sign-in Options, click the keyboard/password icon, then type your password. Windows will remember this setting.

It's best to delete a forgotten PIN. Press Windows+i to open Settings, then click Accounts. Select 'Sign-in

Windows 10 offers several alternative ways to log in. Find them in Settings

options', find the PIN section and click Remove. This actually deletes all alternatives, such as a fingerprint or picture password. You can always create a new PIN afterwards. Creating or removing a PIN doesn't affect the account password in any way.

SOFTWARE
Solve PDF page-count problem

Q I recently downloaded a 711-page book in PDF format. When I tried to print a few pages, I found that they were numbered only as far as page 532. The page numbering to that point was accurate and corresponded to the numbers in the book, but when I tried to print a page after 532, either by printing the current page or entering a number, the printer just printed a random page.

After fiddling with the settings, I found I had greater success if I first click View, 'Page display', then 'Single page view'. If I then print from the File menu

Problems with PDF files? Try a different PDF viewer or even a web browser

(choosing Print, then 'Current page') it works, but not if I used the printer icon. Is there a more satisfactory way of printing pages beyond 532 and up to 711?
Lynnette Hammet, via email

A We downloaded a PDF book with over 1,300 pages and had no trouble printing right up to the end. Your PDF may be corrupt after page 532, and a glitch in the file may be causing your problem, so try downloading it again.

Another possibility is that there's a bug in the program you're using to print the PDF. We used Microsoft Edge, which is Windows 10's default PDF viewer. When you view PDF files in a web browser, you have two ways to print: you can select Print from the browser menu or click the printer icon in the PDF display. The two systems are different, which is why you may get different results.

Try a different PDF viewer, such as Microsoft Reader (bit.ly/read427), Adobe Reader (bit.ly/ad427), Foxit Reader (www.foxitsoftware.com) or Nitro's Free PDF Reader (bit.ly/nitr427).

GENERAL PC
Make a Wi-Fi connection more stable

Q Why does my Asus laptop keep losing its internet connection? I don't have any problems with either of my Android tablets.
Dave Tansley, via email
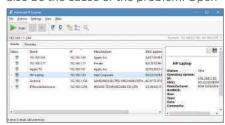
A Try switching off the router, waiting a few seconds and then switching it back on. Some routers automatically scan for the best Wi-Fi channel to use when starting up. If the current channel clashes with your neighbours' Wi-Fi, your router may change channels.

All network devices have a unique IP address, such as 192.168.1.2; the problems arise when two devices try to use the same one. Turn off Wi-Fi on everything except the laptop to see if that solves the connection problem. If it does, there may be a clash of IP addresses.

Use Advanced IP Scanner (bit.ly/aips427) to view IP addresses when all your devices are switched off and again when they're switched on. Each one should have a unique IP address.

If you discover that your laptop is using the same IP address as another device, change it manually. Open Control Panel, find the 'Network and Sharing Centre' and click the link for the current network. Click Properties, then double-click Internet Protocol Version 4 in the next window. Select 'Use the following IP address' and enter an IP address that's different to all the others in use. The subnet mask should be 255.255.255.0 and the default gateway is your router's IP address.

Your computer's power plan could also be the cause of the problem. Open

See which devices are on your home network and view their IP addresses

---

Power Options in the Control Panel and click 'Change plan settings' next to the currently selected power plan. Click 'Change advanced power settings'. Expand Wireless Adapter Settings and then Power Saving Mode. Set 'On battery' and 'Plugged in' to Maximum Performance.

SOCIAL MEDIA
Stop joining unwanted Facebook groups

Q I recently saw some posts on my Facebook news feed from a group I can't remember joining. Did someone add me to the group to boost their numbers? Is this possible without my knowledge? Can I stop people adding me to groups?

S Dallam, via email

A The owner of a Facebook group can add people by name or email address, and this can be extended to all members. It is designed to make it easy to increase a new group's membership. When you begin typing in the Add Members box on the group page, a list of your friends appears and you can click to add them.

People are sent a notification when they're added, but it's easy to miss if you receive a lot of notifications. We can't see any way to stop friends adding you to groups, so you'll have to remove yourself and let your friends know that you're not interested.

GENERAL PC
Check Windows user account settings

Q Because I'm the only person who uses my computer, I use an administrator account, which is the only account on it. However, when I run some programs, I have to give permission for them to run. Also, when I use the Command Prompt, I have to right-click and select 'Run as administrator', even though I'm already logged in as one!

Brian Baker, via email

A This security feature, called User Account Control, was introduced with Windows Vista and has been annoying people ever since. Having an administrator account doesn't mean you are logged into Windows as an administrator; it means you have the authority to give programs that require administrator rights permission to run. Anyone using an ordinary user account would not be able to do this.

Open the Control Panel and search for

User Account Control can protect a PC from harm but usually just irritates people

it. Click the link to change its settings and you'll see a slider with four positions. Dragging it to the bottom stops all requests for permission.

Bear in mind that this is a safety feature that stops potentially damaging changes being made to Windows without you noticing, which is why it's best left in the default position.

HARDWARE
Reusing old hard drives

Q I've accumulated quite a few hard drives over the years, both small laptop drives and standard-sized drives. Some are in USB 2 enclosures and some aren't. Some have SATA connections, some have IDE connections and some have PATA connections. I have both wireless and wired connectivity through my Plusnet router.

I would like to know if there's a way I can connect all the drives in some kind of box or system, so that I can access them all from my laptop. I'm rather strapped for cash so I am looking for an inexpensive solution, if possible.

John Page, via email

GENERAL PC
Don't worry about mystery Viewer

Q I've found an app called Wireless Display Media Viewer on my Windows 10 Start menu. I didn't install it, and when I click it, all I get is a black window. Is it malware? There doesn't seem to be any way to uninstall it.

Harry Johnson, via email

A Wireless Display Media Viewer is part of Windows and nothing to worry about – it helps you see what you're doing when displaying photos and video on a TV or monitor. It's supposed to be hidden and shouldn't

A You'd have to buy a drive enclosure for each one. A quick search on eBay shows items for around £5 to £10 – include the connection type in the search, such as 'drive enclosure SATA'. You can then plug each one into a USB hub and connect that to your computer. The hub and possibly the hard drives will need power.

Such a setup would create a mess of boxes, a tangle of cables and possibly power problems. You could instead buy a new USB hard drive for less than you'd spend on cases, hubs and cables for your old hard drives, and it would probably have more storage. When we checked eBay and elsewhere, we saw 320GB drives for £20, 640GB for just £30 and 1TB drives for £40.

GENERAL PC
Back up without a hard drive

Q I know I need to back up my files but I don't have an external hard drive. Can I back them up to the hard drive in the computer?

L Morris, via email

A You can, but it's a really bad idea. If the hard drive gets corrupted or fails, you won't be able to access your backup. If you don't have an external drive, it's best to use an online drive.

Instead of storing all your files in the regular Documents, Music, Pictures and Videos folders on the disk. Store them in those folders under OneDrive. This will sync anything you put in there with your online storage, so you'll have a copy online in the event of a disaster. A USB drive is better, though, because it provides a lot more storage.

Ignore Windows Display Media Viewer, it does nothing important

be on the Start menu, but this known bug was introduced in the Creator's Update. You can't uninstall it, but the next Windows update will probably remove it from the Start menu.

This last fortnight Roland has spent valuable time and effort cleaning a website infected with malware

✚ Find more solutions to PC and web problems at forum.webuser.co.uk

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

BROWSERS

Choose a new Chrome theme

Whenever I see someone browsing the web with Chrome, it always looks exactly the same. Either people like the default theme a lot or they don't realise how easy it is to change the way the browser looks.

Go to Settings and click the Get Themes button. Browse the themes, find one you like and click the Add To Chrome button to install it. Some of them add fantastic images to the New Tab page.

You can remove the theme by

Give Chrome a makeover with a new theme. There are lots to choose from

clicking the 'Reset to default theme' button in Settings.

Tom Keane, via email

INTERNET

Empty your online bins

Most of us know that deleted files and folders are moved to the Recycle Bin but did you realise that the same thing happens online with OneDrive and Google Drive? Deleted files and folders use up your online storage space and you can run out of room simply because your bin is full. If you get OneDrive or Google Drive warnings that you are out of space, try emptying the bin.

Go to onedrive.live.com in a browser and select 'Recycle bin' in the left panel. If you're sure you don't need the files, click 'Empty recycle bin'. On Google Drive, select Bin on the left, click Bin at the top to show the menu, then click

Empty the Recycle bin on OneDrive and Google Drive to free up space

Empty Bin. There could be files in there you deleted years ago!

Bill Frost, via email

EMAIL

Get Gmail notifications

My favourite Chrome add-on is Checker Plus for Gmail (bit.ly/chk427). It adds an icon to the browser's toolbar and displays a notification in the corner of the screen when an email lands in your Gmail inbox. It also adds a number to the icon to show the unread email count.

Even more usefully, you can read emails without having to leave the web page you are viewing or open another tab. Click the Checker Plus toolbar button and it shows your email in a drop-down panel. You can read, delete and apply other actions to emails in the panel. When you have finished, just continue browsing. It's a great add-on.

Paul Fuller, via email

BROWSERS

Faster streaming in Epic

I've recently been using the Epic Privacy Browser and found that it's great for watching videos – mostly on YouTube, but on other sites, too. Click a video and it starts playing immediately, with no

buffering or any kind of faffing about. I've found it's even better than Opera in this respect.

This is just my experience, and it may be different for other people, but if you're having trouble watching videos online, it may be worth trying Epic.

Madeline, Web User Forums

GENERAL PC

Make use of Windows troubleshooters

I just installed the Creators Update for Windows 10 and got an error message when it started for the first time, saying that an 'accelerometer dll' was missing. I ran the 'Hardware and Devices' troubleshooter and it fixed the error. If anyone else has errors after installing Creators Update, I can recommend the troubleshooters.

To start, open the Control Panel, click Troubleshooting, then click 'View all'. If you are not sure which troubleshooter you need, try a few. Even if it's not the right one, it shouldn't do any harm.

Michael Lee, via email

GENERAL PC

Play old games in Windows 10

I'm sure I remember reading recently that someone had had a problem when trying to play an older game on Windows 10,

Turn on DirectPlay to play old games in Windows 10

and were shown an error regarding Direct Play. Well, I've also had this problem and I was able to fix it.

Open Control Panel, select Programs, then 'Programs and Features'. From this menu, click 'Turn Windows features on or off', then click to expand Legacy Components and tick the box for DirectPlay. Once you've done this, your old games should play!

Stewart40, Web User Forums

APPS
Revo Uninstaller for mobile

In Your Top Tips of issue 425 (bit.ly/webuser425), Alan McCarthy said that he

didn't think there was an Android equivalent to Windows uninstallers such as Revo Uninstaller. In fact, there is a mobile version of Revo Uninstaller, aptly named Revo Uninstaller Mobile (bit.ly/revoa427).

Use Revo Uninstaller Mobile instead of your phone's built in application manager

Like the PC software, this handy app lets you see a list of all your installed apps. You can then batch uninstall several apps at once and also clear leftover junk files.

John Arnold, via email

APPS
Watch Sky Sports for less

About five years ago, I wrote a tip on the Web User forums about watching Sky Sports on your TV legally, at little cost and with no contract (see bit.ly/skysports427). The method involved installing the official Sky Sports Mobile app for iOS (subscriptions start at £4.99), then jailbreaking your iPhone so you can connect the device to your TV using a cable (and transmit the audio).

Five years on, the tip more or less still works, except I now use the app on a Samsung S7 and there's no need to root or jailbreak it. I installed Sky Sports Mobile TV (bit.ly/ssports427), picked one of the services and could flawlessly cast the channels to my LG Smart TV. Depending on your device and TV, you may have to use a specialist cable instead of casting. Even if you can't connect your phone to your TV screen, £4.99 is pretty good value for money for watching the main Sky Sports channels on your phone.

Mugsy0151, Web User Forums

APPS
Get Windows 10 Spotify app early

This week, Spotify has introduced a Windows 10 Store app, but for some reason it's not yet available in the UK. You can find the app at bit.ly/spotify427, but the 'Get the app' button is greyed out and says 'This app does not work on your device'. When I checked the System Requirements, English UK was not listed under supported languages.

To get around the issue, I therefore searched for region in Windows and then changed my location from UK to US before clicking Apply. After this, you need to close and reopen the Windows Store, but you should then be able to

To get Spotify for Windows 10, temporarily change your PC's region to United States

search for Spotify and install the app. When you switch your location back to the UK again, the app should carry on working fine.

Jack Gold, Web User Forums

ANDROID
Quicker access to Android settings

In the last issue of *Web User*, Ed Wright explained how he accesses different settings, such as battery and data usage, since Samsung removed the 'Quick settings' panel in Android 7.0. I thought I'd add that I've discovered an even faster way of accessing settings on any phone if you have Nova Launcher (bit.ly/nova427).

Just long-press the Home screen and tap Widgets, then long-press the Activities option below Nova Launcher and drag it to a suitable location on the Home screen. A pop-up appears letting you choose from a range of different options. Swipe up to Settings, expand it, and you can then create a shortcut for any Settings page on your Home screen.

I've done this for the settings I use most regularly, such as 'Battery usage' and Wi-Fi.

Tony Brown, via email

BLUNDER OF THE FORTNIGHT

HARDWARE
Restore your old printer to its former glory

After not using my old inkjet printer for several months, I was worried that the long period of inactivity had caused it to stop working properly because none of the sheets I printed was legible. Before consigning the printer and its cartridges to the dump, however, I thought I'd see if there was anything I could do to bring it back to life.

I had a look through the maintenance menus and found an option to clean the printheads. After selecting this and waiting a few minutes for the process to complete, I tried printing again and was pleased

Clean your printer's printheads to improve its performance

to see my trusty old Epson printing like new again!

It might seem obvious, but if you ever have problems with your printer's performance being sub par, cleaning the printheads should be one of the first things you try. In future, I certainly won't leave it so long without using the printer again!

Tim Shaw, 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!

SECURITY
Should I pay for antivirus software?

Q My new Windows 10 PC came loaded with a trial of Norton (uk.norton.com) and I also have a trial of Malwarebytes Premium (bit.ly/mw427). After the trial period, what should I use for security software? Is there a good free option?
mal23, Web User Forums

A I don't usually pay for programs but I can recommend paying for Norton's security software. I've used various versions of Norton Internet Security, which includes Norton Antivirus, since the 2002 version and I've never had a virus or serious malware infection on any PC.

It's worth noting that you can usually save a bit of money by buying a licence from a high-street retailer rather than through Norton's website, unless there's an offer available. Norton Security Deluxe, which covers five computers, normally sells at Argos for £29.99, but its retail price is £59.99 when purchased direct from Norton.

If you really don't want to fork out for antivirus software, it's worth checking if your internet service provider offers a free package – these are usually rebadged versions of one of the major antivirus tools. If you want a free program that you can download right away, Avast Free (avast.com/free) is highly rated and probably better than Windows Defender.
Cantrel, Madeline, calimanco and FratPark, Web User Forums

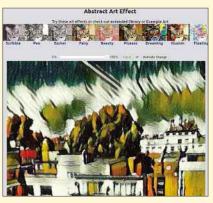*Norton is an effective internet security tool that offers genuine peace of mind*

SOFTWARE
How can I add artistic effects to my photographs?

Q Does anyone know of a website that lets you reproduce photos in the style of Picasso, da Vinci or other famous artists, for free? I've had a look around but can't find anything.
Minnehaha, Web User Forums

A You should try the online image editor LunaPic (bit.ly/lunapic427) which includes 'instant' artistic effects called Picasso, Van Gogh, Kandinsky and Abstract, among others. Just upload your photo to the editor, then click Art and pick from the listed options. After you've tried one effect, previews of all the other instant effects appear above your image to give you a quick idea of how they might look. If you click Famous Art Works from the Art menu, you can scroll down and

Lunapic lets you apply a range of fancy artistic effects to photos

pick from a range of Rendered Styles in addition to the instant effects.

Neural Styler (neuralstyler.com) is a similar tool for offline use. It comes as a portable .7z file so you may need a tool such as 7-Zip or PeaZip to extract it.
lizzygraham and Stewart40, Web User Forums

Web User **says**: We've reviewed LunaPic and more free online image-editing tools on page 47.

GENERAL PC
Why does Windows Update keep failing?

Q For the past three months, I have repeatedly tried to run Windows Update but every time it reaches 100%, a message appears saying "We couldn't complete the update...undoing changes...don't turn off computer". Is there any simple thing I can do to get all the updates installed? My version of Windows 10 is 1607 and the build is 14393.1066.
Tnorman, Web User Forums
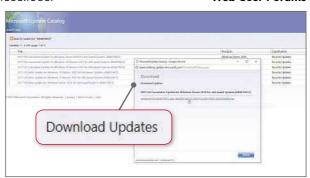
A It's possible that your antivirus software is responsible. Try disabling it momentarily when you run Windows Update. An error code, if one is reported, could help to determine the cause, so try searching for `Event Viewer` and

`Reliability History` from the Start menu to see if there are any clues there.

Manually updating may resolve the problem. According to Microsoft's update history (bit.ly/update427), aside from Creators Update, you're only missing the May update (KB4019472). I'd therefore try installing the standalone version from the Microsoft Update Catalog, which you can find at bit.ly/catalog427.
Cantrel and Stewart40, Web User Forums

Try installing updates manually if Windows Update fails

Inbox

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

Star Email

Mug winner

How to save the NHS computer system

I read with interest Barry Collins' column in Issue 425 of *Web User*, 'Don't blame Windows XP for WannaCry'. Barry suggests that the NHS must "root out those [Windows] XP machines". I agree. But given that in the majority of cases, software cannot be upgraded (or rewritten) to later versions of Windows, the NHS will, instead, have to implement a rigorous legacy-systems-maintenance regime, maintaining these old machines – probably in a separate, isolated, network space (that is, not networked) for as long as possible. There are many NHS machines, not just computers, that are out of warranty and out of parts (and 'patches')!

A replacement plan should be included in this programme. There is easily enough programmer-capability in the world to write new software to replace all the NHS legacy systems.

It is just a matter of the NHS specifying and tendering out the projects. This is easier said than done, though in many cases the NHS hasn't even made a start. A lot of the legacy software is simple to rewrite and wouldn't take that long (a week, in some cases).
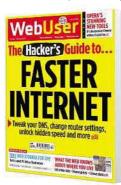
I don't work in or for the NHS but from what I read about large-scale tenders in the organisation, I would suggest it produces thousands of mini-tenders for individual programmers instead of giving large tenders to one or two big companies. As you say, the new NHS patient-records system failed! It was just too big to manage.

There are, indeed, hundreds of separate IT departments in the NHS, each with around a hundred different systems to manage. Let each IT department be the 'stakeholder' for each replacement project. They are, after all, the most knowledgeable about their own managed systems. The users (staff) should also be involved, in a formal capacity, in replacement projects.

Les, BSc and MIAM (Member of the Institute of Asset Management)

Who needs high-speed internet, anyway?

No doubt your obsession with faster internet (Issue 424) stems from your IT-trade promotional obsessions. I take a pragmatic attitude and install nothing that isn't useful to me. This is why I'm still using an ADSL connection via a BT phone line – as I have done through several PC updates and a few home moves since the advent of the internet.

I have found that ADSL serves me well enough for browsing, email and even (shock horror – no buffering!) the occasional BBC iPlayer programme I might fancy playing.

Most of the rubbish apps you at *Web User* keep pushing are of no interest to me whatsoever. I'd rather avoid the clutter that would result and, of course, the unwelcome intruders that high

speeds encourage. That's what I take my hacking axe to.

Graham Vine, via email

Why old laptops are better than new ones

While rummaging around my loft, I came across a rather old and neglected laptop. It's so old that the badge has fallen off,

so I've no idea what make it is. It has a CD drive and a 20MB hard drive, though, so it was clearly once a 'must have'.

I decided to take it downstairs to see if I could start it up but, alas, no joy – it was well and truly dead, with a black screen. But my reason for writing is to mention two wonderful features on this laptop. The first of these – a noticeable

Quiz Answers: Issue 426

#	Answer
1	*Hungry Like the Wolf*
2	*Shock the Monkey*
3	*Kiss from a Rose*
4	*Crocodile Shoes*
5	*When Doves Cry*
6	*The Lion Sleeps Tonight*

WINNER!
Chris Gardner was the first to email us the correct answers and wins a Web User mug

WORD PUZZLE

Touchpad

❝ Donald Trump promised to unite America, and on 12 July he will have succeeded ❞

improvement over modern laptops – is that it has no 'brick', just a (long) mains cable that uses a standard two-pin plug, as seen on many appliances today.

The second really useful feature – again, absent from any modern laptop – is a removable hard drive. A 'secret compartment' slides away to reveal a removable 'draw-out' caddy, which allows you to have totally separate drives for different operating systems, or a drive for home/personal use and another for business. You could even have a backup hard drive in the event of a failure, enabling you to just swap them out in 10 seconds – bliss!

Having spoken to a few friends and work colleagues about these features, it seems there would be a lot of interest – especially with the removable hard drive. So think on, manufacturers!

Ron O'Brien, Luton

Keep software simple and unchanged

Having been a computer user for many years and a reader of *Web User*, I find many of your hints, tips and tests very useful. However I am rapidly losing any enthusiasm for using my laptop and smartphone. Windows is constantly updating but many of these updates fail, while Android apps change themselves far too often. Gmail is a perfect example – every time I get it to work the way I want, Google changes it.

I must have tried installing half the email apps in the Play store and could not even work out how to start some of them. Those that do work are 'slide to do this', 'slide the other way for something else', 'press to do something you don't

want to do'. It is the same with browsers – why do the designers think everyone needs half the screen filled with icons for Facebook, Twitter and other services?

Facebook – yes, the dreaded Facebook – I will not use by choice, because I don't wish to know what people are having for breakfast or if they are on the second visit to the loo in an hour. Yet more and more businesses make it the only way to contact them. Even when I had an account with the most stringent privacy settings, I encountered friends I didn't know I had – so it had to go.

Basically, what I want is a simple, uncluttered browser on my PC, and Android apps that remain how I want them. Any ideas, anyone?

Stephen Perkin, via email

Give us more content for Mac users

I really enjoy your magazine but the latest issue prompted me again to wonder whether Mac users like me are getting fair treatment.

Although Mac compatibility gets an occasional mention, sections such as 'Best Free Software' and features including 'Record what you watch online' seem to assume we all use Windows. You also provide features on the best Windows 10 apps, but not Mac tools.

I realise that Macs may have fewer users, and fewer software releases, but it feels like *Web User* has got the balance wrong. This is odd, because you treat iOS and Android in a pretty even-handed way, and cover Chrome OS and Linux, too. Applying this balance and making it clear what is Windows or Mac compatible would make a great read even better!

Richard Nosworthy, Cardiff

Trust the government? Don't make me laugh

I read the Star Email from Gerry Walker in Issue 423, 'Online surveillance is for our protection'. If anyone hasn't read it,

I highly recommend it for when you are feeling down; I never expected to find belly laughs in *Web User*.

Gerry comments on a letter from a Peter Savage and talks about online surveillance, saying the following: "Those who plead the human-rights argument for privacy invariably suffer an innate distrust of authority. I've never understood this. Society collectively performs what the individual cannot – this is why we have government". Here comes the punch line: "When this is bound by the democratic right of consent – as it is in our country – the distrust of government cannot be sustained". How I laughed at good old Gerry, sat there in his innocence and naivety. I swear he actually believes that!

Gerry, have you seen anything in the news in recent years about a chap called Edward Snowden? It's in the same article as the words "illegal surveillance". I won't bother to go further or mention that GCHQ takes part in the same procedures. Gerry, I truly wish your comments could be taken seriously but it's time to wake up and smell the coffee.

As it happens, I do believe that the government needs to be able to crack down on the terrorists' activities and even on organised crime, and to do that we probably do have to lose some of our privacy. However, can we believe that any government anywhere can always be trusted? Never in a million years; power corrupts, and absolute power corrupts absolutely.

The Shadow, Web User Forums

Defence against surveillance

Colin South (Inbox, Issue 425) is quite correct in his remarks about the need to protect our personal data. The government's arrangements will be abused from day one to monitor bloggers, journalists, dissidents and so on. The best defence, short of using traditional mail, is a good paid-for VPN,

a web-based email service based in a non-surveillance country and use of high quality file- and disc-cryptography tools such as VeraCrypt and earlier versions of TrueCrypt.

As for unsavoury foreign powers wrecking the NHS – I hardly think it matters because a rather unsavoury government much closer to home has already made a perfectly adequate job of wrecking it.

JimD, via email

Help me rescue my BBC Store purchases

I just read your article in Issue 425, 'Record what you watch online'. My specific problem is that over recent months, I have purchased and downloaded various programmes from the BBC Store. These are accessible to watch by signing into the store with my username and password.

The problem is that, from November this year, the BBC Store is closing down and apparently I won't be able to access these programmes, because I won't be able to sign in! The BBC will, until November, reimburse people who have bought its content, either with an Amazon voucher or by paying the amount of money spent into their bank accounts.

I've checked to see if the programmes I bought are available to purchase again, on Amazon or elsewhere – some are, but not all. The BBC says that it hopes to make said programmes available elsewhere, at some point in the future, but it can't guarantee if and when this might happen!

Does anybody know of a way to save these programmes on my Mac or to a USB memory stick? After all, I paid for these shows and even on the BBC Store site it says: 'These programmes you own'!

T Richardson, via email

What you say...

WHICH APP HAS MADE THE BIGGEST DIFFERENCE TO YOUR LIFE?

Workwise, either Google Calendar or Slack. Outside work – National Rail!
Bruno Di Gradi @Bruno_Di_Gradi

Shazam. I no longer have to scratch my head wondering what that tune is.
Lynn Sharpe

I can't pick between WhatsApp (video chat/phone calls) and Google Drive.
GoCrazyRobin @David13Robinson

Medisafe (medisafe.com). It's an excellent medication reminder, and can send test results to your doctor.
Cunningham @cunninghamhutch

The TripAdvisor app. I use it every day to check on places I visit regularly and those I'm looking to visit in the future.
Gavin Green

Facebook, as I'm terrified of flying and I've got relatives abroad. Also, the Wish app (www.wish.com) – it's handy for buying birthday presents.
lori @gadgetgal16

THE IPHONE IS 10 YEARS OLD. BUT IS IT BETTER THAN ANDROID PHONES?

Android has more devices to choose from and is more customisable.
Derek @dlee1

My daughter's iPhone is always freezing. My Samsung works fine and is half the price!
Nicholas Brewer

I use an iMac and iPad, but my phone is a bargain Moto G. The iPhone is nice but expensive.
Harvey @haskipsey

I much prefer my OnePlus 3T. It syncs better with all my devices, casts to my smart TV without extras and works with my printer.
Jenny Jacks @JenJacks3

A NEW SURVEY SHOWS THAT TAMWORTH HAS THE UK'S FASTEST AVERAGE BROADBAND, WITH 30.4Mbps. HOW DOES YOURS COMPARE?

Wireless is about 60-80Mbps with Virgin, depending on which room I'm in. I get 150Mbps and more on my wired PC, depending on the time of day.
Jim @j1mmyr1ddle

Closer to 70Mbps. Plenty fast enough. More than fast enough.
Sir Cumference @Gary_Olsen

37.85Mbps in north Wales with Sky.
Joanne Evans

150Mbps with Virgin in Greater Manchester.
Stuart A Hordern

DO YOU ALWAYS CHANGE THE DEFAULT PASSWORD ON YOUR ROUTERS?

I always change the Wi-Fi name and password, as well as the Admin login details. For even more security, lock your network down with the MAC address of each device you want to add to your network.
Brian Brown

Yes. If someone can connect to it you'll be in all sorts of bother.
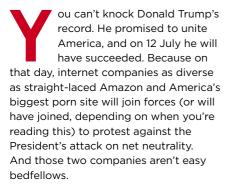*Si Mellor*

You should also change the default Wi-Fi password. The number of routers I've seen on people's downstairs windowsills with the preprinted Wi-Fi password in full view!
Andrew Duerden

Eh? Do what to the black box thingy with the flashing lights? Isn't it safe?
Paul Mudge

⚠️ Page 404

Barry Collins hopes that web giants can fend off the latest threat to net neutrality

Why sites should go offline to save the web

You can't knock Donald Trump's record. He promised to unite America, and on 12 July he will have succeeded. Because on that day, internet companies as diverse as straight-laced Amazon and America's biggest porn site will join forces (or will have joined, depending on when you're reading this) to protest against the President's attack on net neutrality. And those two companies aren't easy bedfellows.

Net neutrality, as David Crookes explains on page 36 of this issue, is the well-established principle of treating all internet traffic equally. It means your broadband provider will give the same priority to traffic from your website as it would Facebook's or YouTube's or anyone else's.

President Trump's advisors are not keen on this legislation, most likely because it's not got enough dollar signs in it. Instead, they're siding with America's telecoms providers, who want the option to charge Netflix and YouTube – and you and me – to put their traffic in the 'fast lane'. They may even reserve the right to block websites altogether. So if, let's say, Trump.com paid an American provider $5m, it could slow or bar access to the websites of other hotel chains. Or even political rivals.

Scrapping net neutrality plays straight into the hands of the big boys. If, 10-15 years ago, internet providers were charging companies to make their content run smoothly over their networks, there would be no YouTube, no Netflix and no Spotify, because these startup companies wouldn't have been able to afford the fees. It's expensive enough to run servers to reach millions of people, let alone pay the broadband providers to make sure that content gets through.

As a group of 800 tech startups wrote in an open letter to the US

> **"** Without net neutrality, there would be no YouTube, no Netflix and no Spotify **"**

Federal Communications Commission (FCC) earlier this year: "Without net neutrality, the incumbents who provide access to the internet would be able to pick winners or losers in the market. They could impede traffic from our services in order to favour their own services or established competitors. Or they could impose new tolls on us, inhibiting consumer choice."

This makes it all the more staggering that companies such as Amazon and Netflix are leading the protests, because if they were acting entirely in their own interest, they could wipe out competition in a heartbeat. Both companies are rolling in cash and can afford life in the fast lane. They could consign rival video services to 'buffering' screens, making their own services as untouchable as BBC1 and ITV were on British television a generation ago. There would literally be no competition.

Instead, they've done the decent thing and joined dozens of other companies in protesting against the threat to net neutrality. At the time of writing, it wasn't clear what form the protest would take, but I know what I'd love them to do: switch their sites off.

Do it for an hour, for an evening, or ideally for the whole day – but make everyone realise what the net would be like if some of the massive sites we rely on simply weren't there.

Have they got the guts to do it? I'm not sure, but Donald Trump has certainly got the nerve to push his legislation through. The cost of scrapping net neutrality will be far greater than a few hours offline.

Illustration: Andrew Torrens

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

WebUser

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

What's inside the next issue:

COVER FEATURE: STOP USING GOOGLE!

PLUS:
- Edit videos online for free
- Get started with Bitcoin
- Fix website annoyances

AND...

Upgrade your hard drive to an SSD

**Don't worry if you miss this deadline –
you can subscribe to* Web User *at any time!*

Subscribe to *Web User* today and you'll pay just **£19.99*** for the next 13 issues – that's a 26% saving on the shop price. As an added bonus you'll also receive a free gift – **a mini torch**

Subscribe online at
subscribe.webuser.co.uk
or call now on **01795 592 926**

*Includes FREE DELIVERY   Quote offer code: **P1714P**