KODI: KEEP WHAT YOU WATCH PRIVATE

Turn on this setting **p54**

Profile lock

UNLOCK

The Web's

SECRET CONTENT

What you <u>can't</u> find on Google **p38**

Netflix, BBC News, Steam, Deep Web, Wikipedia, Adobe Labs, Quora, Steam, Netflix, Gmail, Amazon, Facebook, YouTube, iPlayer, Google, BBC News, YouTube, Quora, Deep Web, Wikipedia, Adobe Labs, Quora, Steam, Netflix, Gmail, Amazon, Facebook, YouTube, iPlayer, Google, BBC News, YouTube, Quora, Deep Web, Wikipedia, Amazon, Facebook, YouTube, Netflix, Gmail, Amazon, Facebook, YouTube, iPlayer, Google, YouTube, Adobe Labs, Quora, Deep Web, Wikipedia, Amazon, Facebook,

PLUS

Get Faster Wi-Fi...
...By slowing everyone else's
(Keep this hack to yourself!) **p56**

Who's Talking About YOU Online?
Set up alerts that tell you **p46**

WINDOWS 10 CREATORS UPDATE
Best new tools revealed **p48**

Pig out on website secrets

Whether you've been using the web for two years or 28 – in which case you must be Sir Tim Berners-Lee – the chances are that you've pretty much got a handle on it by now. You want to find something, you use Google; buy something, head to Amazon; pass your bank details to hackers, sign up with TalkTalk (only joking, lawyers!). But there's lots more to the web than meets the eye, which means there's always something new to discover if you know where to look.

For this issue's cover feature (page 38), we've been rooting around like a pig hunting for truffles to uncover the secret delights below the surface of your favourite sites. We've got experimental downloads you can try before everyone else, interesting content that doesn't appear in Google, amazing hidden discounts and much more.

Also in this issue, on page 48, we reveal the 10 best new features in the Windows 10 Creators Update, which should no longer be a secret by the time you read this!

Robert Irvine
robert_irvine@dennis.co.uk
#webuser

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5 Things you'll learn this issue

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2 How to check if your favourite Firefox add-ons are about to stop working
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3 How to stop people accessing embarrassing personal photos on your phone
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COVER FEATURE

UNLOCK
The Web's
SECRET CONTENT

Access deleted websites, experimental tools, secret games and other hidden gems online

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Who's talking about you online?   **p46**

Add useful tools to your new tabs in Chrome   **p44**

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ENCRYPTION BROKEN!

Practical WebUser

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Workshops, tips, projects and problem solving

Set up user profiles for Kodi **p54**

Boost your Wi-Fi speed **p56**

Back up your webmail **p58**
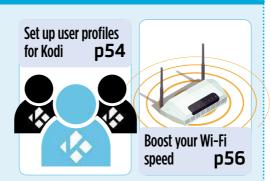
Explore NASA's amazing library

NASA's new online library offers a vast cosmic collection of 140,000 images, videos and audio clips from the last 100 years. This means you can view and download stunning copyright-free photos of Saturn and Mars, see Neil Armstrong on the Moon and take a peek at space launches, the Milky Way and phenomena such as the Northern Lights and solar flares.

From the homepage, you can check out the latest uploads and browse the most popular images and videos. If you want to download the files, there's a variety of resolutions on offer and NASA says you can freely embed them in your own websites and projects. There are also filters to help you narrow down your searches by year and content type, while the list view provides a description and creation date for each result.

NASA has clearly put a lot of time and effort into the site, right down to mobile versions for browsing on the go. You can even see technical info for individual shots, such as the exposure and lens used. As a space-based resource, it's out of this world.
images.nasa.gov

Play another newly discovered Dizzy game

yolkfolk.com/mwd
Back in the Eighties and early Nineties, twins Philip and Andrew Oliver were arguably the most prolific programmers of 8-bit computer games, and they've recently rediscovered several previously unreleased games on dusty disks tucked away in Philip's loft. The latest is Mystery World Dizzy, originally made for the NES console and now free to play online within a Flash-enabled browser. You help Dizzy gather objects to solve puzzles while avoiding obstacles and collecting stars. Use the cursor keys to move left, right and jump; X to chat and pick up or drop objects; and the spacebar to see your inventory. You can also play Wonderland Dizzy, which the Olivers found in 2015 (bit.ly/dizzy421) and Dreamworld Pogie which was discovered earlier this year (www .dreamworldpogie .com).

Download Netflix videos to Windows 10

bit.ly/netflix421
Being able to download Netflix content to an Android or iOS device has revolutionised long journeys and now you can do the same in Windows 10. Netflix is allowing certain movies and TV shows to be saved to your PC or laptop using its official app for Windows 10, which means you can watch content anywhere without an internet connection. You can also choose between standard- and high-quality video. You'll find downloadable content by heading for the hamburger menu at the top of the app, and anything you save will be stored in My Downloads. The app costs 79p, on top of your Netflix subscription. Neflix has also changed how you rate shows and films, ditching the star-ratings for a thumbs-up and thumbs-down system. Your viewing habits and behaviour will be analysed to help Neflix recommend other content that it thinks you'll enjoy.

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

Decorate your selfies with Sprinkles

bit.ly/sprinkles421

A fun new camera app from Microsoft lets you liven up your photos by automatically adding stickers, emoji and captions. The iOS-only app, called Sprinkles, uses facial-recognition techniques to overlay decorations such as hats and moustaches, apply objects relevant to the picture's location, guess the subject's age and even suggest celebrity look-alikes.

Share temporary stories on Facebook

www.facebook.com

Facebook has added a Snapchat-style Stories feature to its mobile app. This lets you create and share collections of photos and videos that disappear after 24 hours, and view those created by your friends, which appear in bubbles above your News Feed. To create your own, tap the camera in the top-left corner or swipe right and hold the button to shoot up to 40 seconds of video or snap a photo. You can add animations, text and graphics, and post by pressing the arrow and selecting Your Story.

Send Instagram messages from your Desktop

bit.ly/insta421

Instagram has updated its Windows 10 app to let you share photos and videos by direct message. Although there's still no way to make public posts from your Desktop, a quick click of the messaging icon lets you share a photo from your computer. You can also grab a live picture from your webcam. It's certainly a step in the right direction and we reckon we'll see the feature extended in the near future so you'll be able to post directly to your Instagram feed, too.

Save mobile data when using Twitter

mobile.twitter.com

Twitter has launched a pared-down version called Twitter Lite that makes it easier to load the social network on your phone or tablet if you have a slow mobile network, expensive data plan or limited storage. As well as reducing data usage by up to 70%, it lets you preview images and videos before loading them.

5 TO FOLLOW ON TWITTER

@aesthetichorror
See frames from iconic horror films to remind you of scary moments

@Amazing_Maps
See interesting statistics about countries and their populations

@Bring221Back
A new account dedicated to persuading the BBC not to axe series five of *Sherlock*

@principalitysta
The UEFA Champions League final will soon be held at Cardiff's Principality Stadium

@thecgf
British cities are currently vying to host the 2022 Commonwealth Games after Durban pulled out

See how far you can travel
bit.ly/travel421
Click anywhere on this map and layers of colours will show how far you can drive from that location within a set period of time, taking into account congestion, public transport and round-trips. You can add up to five destination markers for specific route information.

Build the highest tower
game.guinnessworldrecords.com
This tricky game from Guinness World Records invites you to build the highest tower possible. Click the screen to make individual blocks fall but be careful: should one misplaced brick fall, it's game over.

Stream SoundCloud with iOS
bit.ly/sound421
You've long been able to stream music from SoundCloud to your Chromecast on Android, but not in the iOS app. Now, subcribers to SoundCloud Go+ can benefit on both platforms.

Microsoft comes clean about Windows 10 data collection

What happened?

Microsoft has finally revealed exactly what sort of data it collects from Windows 10 users, via documentation for its latest big upgrade to the operating system, the Creators Update.

The software giant has been criticised for harvesting too much user data from Windows 10 and is now making clear exactly what it collects. Microsoft says it uses the data to improve services, tailor products to its users and keep Windows secure and operating properly.

In previous versions of Windows, users had to opt in to allow collection of telemetry data, so details of your PC activities weren't necessarily sent to Microsoft. In Windows 10, the data is collected automatically with no way of disabling it unless you use the Enterprise edition. This intrusive behaviour annoyed privacy advocates, as well as many users who prefer to be able to choose what data Microsoft does and doesn't get from them.

The Creators Update gives some power back to users by letting them control certain privacy settings, and Microsoft has provided more detail about what it's been collecting. This includes details of your operating system build and location; your Microsoft Account and Xbox user ID; the apps you're using; your IP address; and your PC's specifications, such as available memory and storage.

Microsoft also collects data about how you use apps, what you pin to the taskbar and any errors or crashes. This

Choose privacy settings for your device

Microsoft puts you in control of your privacy. Choose your settings, then select **Accept** to save them. You can change these settings at any time.

Off — **Location**
Windows and apps can't use your location to provide things like local weather, directions, and Find My Device.

Off — **Speech recognition**
You can't talk to Cortana or apps from the Store.

Basic — **Diagnostics**
At the basic level, you'll be sending Microsoft less data to help fix errors you encounter.

Off — **Tailored experiences with diagnostic data**
The tips you get will be more generic and recommendations may be less relevant to you.

Off — **Relevant ads**
The number of ads you see won't change, but they may be less relevant to you.

Select 'Learn more' for info on the above settings, how Windows Defender SmartScreen works, and the related data transfers and uses.

Microsoft has promised to be more open about data collection in Windows 10

is fairly detailed, and includes how long some interactions take, how you type on your keyboard or touchscreen and whether the user is known to be a child.

Microsoft also said it would extend its online privacy dashboard to include details about the voice data it collects through the Cortana voice assistant.

How will it affect you?

The Creators Update launched on 11 April and, depending on how your version of Windows is set up, it will download automatically and install shortly after. To avoid overloading Microsoft's servers, not everyone will get the update immediately. Waiting to install has its benefits, too, because it means you'll avoid the first round of problems, such as software bugs.

During installation, the Creators Update presents a choice of privacy settings, so make sure you consider the options. The settings on offer concern location, speech-recognition data and diagnostics, as well as "tailored experiences" such as recommendations for products and services, and "relevant ads" (which we covered in Issue 419's cover feature). Microsoft also explains exactly what each setting means, so read the full descriptions where available. You should be able to make changes after installation, too.

What do we think?

Many Windows users probably don't worry about the data Microsoft collects about them, but it's time Microsoft answered complaints from those who do. Privacy-minded people aren't irrational, and Microsoft should know better than to treat its customers' information as its own property.

By explaining how it uses the data it collects, Microsoft hopes to assuage concerns that users are being spied on, which is good news for Microsoft's engineers. Telemetry data helps Microsoft spot when users have a problem with a feature, a driver or a crashing PC. When Microsoft identifies problems, it can fix them – otherwise it has to rely on users making sufficiently detailed reports, which can mean minor problems go unnoticed.

To support its case that it uses data responsibly, Microsoft pointed out that it stopped collecting certain types of data after realising it wasn't useful. It's a pity that Windows users had to get up in arms over the company's data collection before Microsoft came to its senses, but better privacy is certainly a welcome addition to the Creators Update.

• See our feature on page 48 to discover the 10 best new features in the Windows 10 Creators Update.

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

Amazon bans all preloaded Kodi boxes

What happened?

Amazon has banned the sale of set-top boxes with Kodi installed in a bid to discourage people from using the popular streaming software for piracy. The company's updated policy on streaming-media players states that people who sell through the site shouldn't offer products that help others infringe copyright.

The policy reads: "If you sell these products, we may immediately suspend or terminate your selling privileges and destroy inventory in our fulfilment centres without reimbursement. In addition, if we determine that your account has been used to engage in fraud or other illegal activity, remittances and payments may be withheld or forfeited."

While Kodi itself isn't illegal, third-party add-ons can be used to find and stream pirated content online. The government's Intellectual Property Office is considering banning the software, and people have been arrested for selling boxes with the system installed on them.

How will it affect you?

Kodi-equipped TV boxes were still for sale on Amazon at the time of writing, but you should expect them to become harder to find. Even if you can't buy a box pre-loaded with Kodi, it's possible to install the system on other devices, as we'll explain in next issue's cover feature. Amazon's ban may make it harder to buy a Kodi-equipped box, but Kodi is still available to use.

What do we think?

The authorities must decide where they stand on Kodi, rather than leaving it to retailers. If Kodi is deemed illegal, online stores such as Amazon will stop selling boxes offering the software. But if it's not illegal, there's no reason why Amazon shouldn't stock them. Hopefully, the IPO will make a quick decision.

That said, Kodi users should understand why such efforts are being made: many streams provided by third-party add-ons offer free shows and movies that have been pirated. Like other sources of pirated material, such as torrent sites, they will be shut down eventually.

Google Home and Wifi arrive in the UK

What happened?

Google's answer to the Amazon Echo and Alexa voice assistant has arrived in the UK. Like Amazon's device, which launched last year, Google Home is a speaker with a built-in voice assistant that lets you ask questions, perform basic tasks using your smart-home accessories and more.

As well as Home, Google launched Wifi, a router priced at £129 that has a few interesting tricks up its sleeve. Multiple Wifi routers can work together to create a mesh network that provides better Wi-Fi coverage throughout your home. It's like installing Wi-Fi extenders but without the effort.

How will it affect you?

Google Home costs £129, which is £21 less than the Amazon Echo, although Amazon's Echo Dot – a smaller version that you connect to your own speaker – costs just £50, and remains the cheapest way to equip your home with a digital assistant. For a further £18 to £36, you can personalise your Home with a fabric or metal base, but we find this a bit pointless.

What do we think?

It's interesting to see Google launch its own router, but it remains to be seen how successful it is. Routers are often complicated to use, and can result in a slower connection than the speed your broadband supports. Google Wifi's networking tools should fix that.

Google Home may be a tougher sell, because many people who were intrigued by the prospect of a digital assistant will surely have shelled out for Amazon's version by now. Voice assistants are certainly handy in many ways – you can ask them to play music, answer questions and set reminders without having to pull out your phone. But before you spend your hard-earned pounds on a fancy speaker, it's a good idea to try one out in a shop. If you run out of things to ask Home or Echo after a few minutes, you may not find it as useful as you thought.

We'll take a closer look at Google Home and Wifi in our next issue.

Android usurps Windows as most popular OS

What happened?

Android has replaced Windows as the world's most popular operating system, according to research carried out by web-analytics company StatCounter (bit.ly/stat421).

In March 2017, Android marginally took the lead of the worldwide OS-usage market share, with 37.93% of web users accessing the internet via Google's operating system, and Windows close behind at 37.91%. This covers total usage across desktop, laptop, tablet and mobile combined.

Aodhan Cullen, CEO of StatCounter, declared the figures represented "a milestone in technology history and the end of an era". He added that it "marks the end of Microsoft's leadership worldwide of the OS market, which it has held since the Eighties. It also represents a major breakthrough for Android, which held just 2.4% of global internet usage share only five years ago."

Cullen suggested that the reasons for the breakthrough were the growth of smartphones to access the internet, a decline in sales of traditional PCs and the impact of Asia on the global market.

Despite this, Windows still dominates the worldwide operating-system market on PCs and laptops, because it held 84.34% of the usage share as of March. What's more, despite Android's combined platform victory, Windows

StatCounter GlobalStats — OS Market Share Worldwide March 2012 – March 2017
■ Android ■ Windows ■ iOS ■ OS X
Android 37.93% / Windows 37.91%

is still dominating usage in Europe – with 51.7% market share versus Android's 23.6%. The story is very different in Asia, where Android leads with 52.2% market share, significantly overshadowing Windows' 29.2%.

How will it affect you?

If you've got an Android phone or tablet, you can now feel satisfied that you're using the most popular operating system in the world; and if you haven't, perhaps it's time to join the revolution. Interestingly, iOS can only claim a 13% usage share – just over a third of its mobile rival – but Apple fans would no doubt point out that most iOS users are running the same, most up-to-date version of the operating system. On an Android device, you could be running anything from Ice Cream Sandwich (v4.0) to the latest release, Nougat.

What do we think?

We're not surprised that Android has overtaken Windows in popularity – if only by a small percentage share. The low cost of Android devices makes them the obvious choice for anyone buying a smartphone or a web-connected device of any kind, especially in developing countries where Windows laptops and PCs remain expensive.

We fully expect Android's market share to continue growing as Windows keeps shrinking.

👁 **FIRST LOOK**

Apple iPad (2017)
bit.ly/ipad421

Apple's latest 9.7in iPad, which has dropped 'Air' from its name, is priced to tempt, with its smallest capacity Wi-Fi-only model (32GB) costing just £339. Despite the low price, Apple hasn't simply taken an existing model and made it cheaper; it's a significant upgrade over the iPad Air 2 in many ways. However, there are also some well-chosen compromises that have allowed Apple to keep the price down. For example, the iPad doesn't use the A9X chip seen in the iPad Pro series, but instead uses the A9 chip featured in the iPhone 6S. That doesn't mean it's slow – with the exception of the pricier iPad Pros, this is easily the fastest iPad Apple has ever made.

The new screen's colours are vivid, and it has a sharp 2,048 x 1,563 resolution, but there's a noticeable air gap between the surface of the display and the LCD beneath it (although you'd only notice if you've used the iPad Pro). The iPad is a little thicker and heavier than the iPad Air 2 but again, it's unlikely you'll notice the difference.

One area where Apple has definitely not compromised is the battery. The new iPad has the best battery life we've seen on any recent tablet, including devices running Android. Apple quotes a 10-hour battery life, but our standard battery test delivered 14hrs 47mins of use, which, compared with 9hrs 32mins on the iPad Air 2 and 12hrs 9mins on the Samsung Galaxy Tab S2, is fabulous.

In conclusion, Apple has managed to come up with an exceptionally good tablet at a price that's only a little higher than comparable Android devices. With those devices, however, you wouldn't be getting access to the best tablet-app library there is, along with excellent performance and a record-breaking battery life. The new iPad is a compromise, but it's a brilliant one.

❓ WHAT'S THE RUMOUR

Is Yahoo merging with AOL under Oath?

A tweet has revealed that Yahoo and AOL are to form a new media division called 'Oath'.

AOL CEO Tim Armstrong announced the name on Twitter, saying the two companies would combine to have more than 20 brands and a billion consumers, as well as hinting that the launch would happen this summer. A Twitter account for Oath has also been created.

The US telecoms company Verizon acquired AOL for $4.4bn (£3.5bn) in 2015, gaining ownership of sites such as Engadget, The Huffington Post and TechCrunch, and will soon own Yahoo's Tumblr and Flickr businesses.

The Oath division will be formed once Verizon closes the $4.83bn (£3.89bn) acquisition of Yahoo. The deal was reduced by $350m (£281m) after two cyber-attacks came to light in which a billion customer accounts were compromised in 2013 and another 500 million in 2014.

With this new Oath conglomerate, Verizon also appears to be taking on Google's parent company, Alphabet, by grouping its digital content services under one umbrella.

However, in our opinion, Oath isn't a great name. Given the hacking setbacks that have dented Yahoo's image over the past few months, it's probably intended to imply security reassurance – an oath to protect your data, hand on bible, sword in hand and all that. In practice, it sounds forcefully binding at best; at worst, like a secondary character from the X-Men.

LIKELIHOOD RATING
✓✓✓✓✓

The creation of Oath seems like a done deal, but that doesn't mean that Yahoo and AOL will disappear – this is more to do with merging their media brands under a new name. However, loyal users of sites that are destined to be grouped under Oath may be right to be concerned about their future.
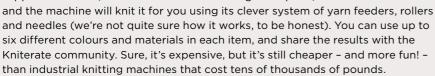

Ⓚ What's new on Kickstarter
Our favourite new project on the crowdfunding site

Kniterate
bit.ly/knit421 | **From $4,699 (£3,764)**

This ingenious device takes the concept of 3D modelling and applies it to knitting. Design a garment using the supplied software, either from scratch or using a template, and the machine will knit it for you using its clever system of yarn feeders, rollers and needles (we're not quite sure how it works, to be honest). You can use up to six different colours and materials in each item, and share the results with the Kniterate community. Sure, it's expensive, but it's still cheaper – and more fun! – than industrial knitting machines that cost tens of thousands of pounds.

⬆ WEBOMETER ⬇

WE LIKE...

⬆ Scientists develop 'self-healing' phone screen
Researchers at the University of California Riverside have created a new polymer that can repair itself, stitching itself back together over 24 hours when fully cracked. It's predicted that the material could be seen in smartphones within three years.

⬆ Apple launches Clips app
Apple has released a free social video-editing app, Clips, to take on the likes of Snapchat and Instagram. The app is available for iOS devices only, and lets you edit individual video clips of up to 30 minutes.

WE DON'T LIKE...

⬇ Half of UK suffers bad broadband
A survey by *Which* magazine found that 59% of web users had a problem with their internet last year, of which 90% described themselves as being 'frustrated' with their service as a result.

⬇ Google pulls Map Maker
Google has closed Map Maker after first announcing the move late last year. The service, which was launched in 2008, let users add missing map content including roads and business details, with a particular focus on developing countries.

Stay Safe Online

News about the latest threats and advice from security experts

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

45% of UK companies hit by ransomware

Almost half of large UK businesses have suffered a ransomware attack in the past year, with nearly one third fearing that, although the problem has been resolved, the criminals may still be lurking in their systems. Security company Citrix surveyed 500 UK-based IT managers in companies with 250 or more employees and found that 45% had fallen victim to a successful ransomware attack. Despite this high figure, the research also found that 11% of businesses this size don't have a formal ransomware policy in place.

Knowing how to deal with a ransomware infection has become increasingly important as this strain of malware grows more prevalent.

"A lot of this is about isolating a potentially infected machine, deciding whether you're going to pay the ransom or not – there's a business choice to be made there – and then being able to build confidence that you have actually dealt with the ransomware attack and it isn't still lurking," said Chris Mayers, chief security architect at Citrix. **bit.ly/ransom421**

Fake airline tickets trick 90% of phishing targets

Phishing attacks designed to look like airline tickets catch out as many as 90% of their intended victims, according to Barracuda Networks. The security firm uncovered the specialist spin on standard phishing emails in its usual scans of customers' emails.

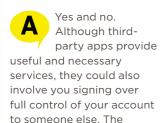"We've seen this attack with several of our customers, especially in industries that deal with frequent shipping of goods or employee travel, such as logistics, shipping and manufacturing," noted Asaf Cidon, vice president of content security services, in a blog post. "Our analysis shows that for the airline phishing attack, attackers are successful over 90% of the time in getting employees to open airline impersonation emails," he added, though targets need to open the attachment or click embedded links to be infected. "This is one of the highest success rates for phishing attacks." **bit.ly/phishing421**

Security Helpdesk | Your questions answered by security specialists

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

Q **Is it safe to connect third-party apps to my Twitter account?**
Mark Rush, Twitter

A Yes and no. Although third-party apps provide useful and necessary services, they could also involve you signing over full control of your account to someone else. The recent Twitter hack, whereby users of the third-party app Twitter Counter had their accounts compromised with messages from political activists (bit.ly/counter421), shows how vigilant you need to be not only about your own security practices but also those of the tools you use. The hack was a clear example of when a third-party app's weakness not only affected the app itself, but also Twitter and thousands of its users.

If you believe your Twitter account has been affected, you should change your password immediately. However, it is also critical to understand the permissions you agree to when installing

> **An alarming number of people don't read the licence agreement before installing an app**

apps. Kaspersky research recently found that 63% of consumers neglect to read the licence agreement carefully before installing a new app on their phone, and one in five (20%) never read these messages when installing apps. This means an alarming number of people are leaving their privacy – and the data on their phones – exposed to cyber threats due to poor safety practices.

To protect yourself, you should:
• Only download apps from trusted sources
• Be wise in selecting apps to install on your device
• Read the licence agreement carefully during the installation process
• Read the list of permissions an app is requesting. Do not simply click 'Next' during installation without checking what you are agreeing to
• Use security software that will protect your device from cyber threats

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

Best New Websites

Site of the Fortnight

ENTERTAINMENT

RELAUNCH

Kodi
www.kodi.tv

Kodi's old website was quite technical and even a little intimidating, but not any more. Now far friendlier in its approach, it clearly explains what Kodi can achieve and how you can make the most of the software. To this end, the techy stuff has been tucked firmly away in the news section, and the download page is far less wordy and confusing. Kodi has also overhauled its Add-ons page, making it searchable and supplementing the categories with suggested apps. The result is a much more user-friendly offering that, combined with the helpful forum and informative wiki, should win Kodi lots of new fans.
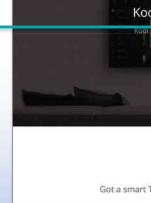
Our rating ★★★★★

ABOUT
Discover what you can do with Kodi, from streaming movies to customising the interface

ADD-ONS
Featured Add-ons are now listed alongside New Additions and recently updated tools

---

SEARCH

RELAUNCH

StartPage
www.startpage.com

StartPage is a long-running search engine that combines results drawn from Google with the promise of total privacy. As well as using proxy links that open sites without leaving a trace, you can set it to automatically highlight your search words on the page when you click through. Welcome additions include better image searching, which lets you fine-tune results using size, colour and type filters; and a new Instant Answers feature, where you can type questions to get answers within the search results. Best of all, because no user data is collected, the results are unfiltered so you get the full web and not just what Google wants you to see.

Our rating ★★★★★

INTERNET

NEW

Google Open Source
opensource.google.com
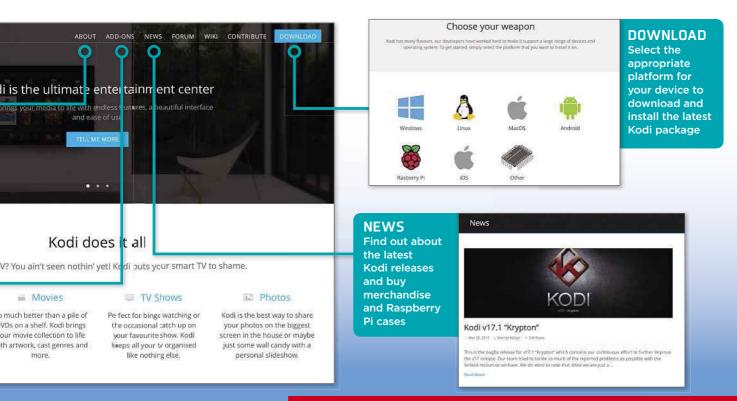
This site brings together all the free, open-source projects Google has created over the years. You can discover what they do, learn how Google uses them and grab the source code for yourself (assuming you're a dab hand at software development). As you'd expect from Google, searching for the projects is quick and easy – there are two list views and a drop-down search menu packed with categories. You'll also find lots of documents, information about hosting an open-source event and details of student programs and contests. Be sure to check out the blog, too.

Our rating ★★★★☆

Reviews by David Crookes

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

DOWNLOAD
Select the appropriate platform for your device to download and install the latest Kodi package

NEWS
Find out about the latest Kodi releases and buy merchandise and Raspberry Pi cases

Look out for our Kodi Unlocked special in the next issue of *Web User*

NEW

WILDLIFE
Keep Bears Wild
keepbearswild.org

Yogi Bear may have loved stealing picnic baskets, but ursine access to human food is a big no-no in real life. You can learn why at this rich resource from officials at Yosemite National Park, California. As well as photos and videos, there's lots of information about bears, their habits and threats, as well as an in-depth blog about the latest conservation efforts. Best of all, Yosemite's online bear tracker uses data from GPS collars to show each animal's location and how many miles it has travelled. The map offers case studies of bears, too, including details of how many have been hit by vehicles since 1995.

Our rating ★★★★☆

RELAUNCH

RACING
Racing Post
www.racingpost.com

It's odds-on that racing fans will like this refreshed website, which puts more information at your fingertips while looking much less cluttered than before. Not only is it better designed for mobile devices, it gives the day's races top billing and lets you watch live with a single click. Race cards have been redesigned to include both the total number of tips per horse and a new Live tab for text commentaries. The data in each horse's profile is presented in sortable columns, and the search engine is more accurate, drawing on more than 200,000 articles from racing experts.

Our rating ★★★★★

RELAUNCH

TRAVEL
Travelzoo
www.travelzoo.com/uk

Discount holiday company Travelzoo still requires you to sign up to access its latest deals, but its website has received a classy redesign that makes browsing them much easier. The search engine is more prominent, with icons highlighting holiday categories such as last-minute deals, cruises and UK breaks. Featured destinations appear on the homepage, which typically include at-a-glance info, top 10 sights and quirky "why we love" lists, and you can even join discussions. Most importantly, the deal pages are clearer and more descriptive, with lots of great savings to be found.

Our rating ★★★★★ ➡

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

NEW

BUSINESS
Amazon Business
www.amazon.co.uk/business

Amazon is hoping to capture a major slice of the UK's business market by selling office supplies, computers, power tools, cleaning products and more, with VAT-exclusive and discount pricing. It offers the same free one-day delivery that Amazon Prime members enjoy, as well as a business-analytics tool to help you track and monitor your spending. You can add multiple users to accounts and set spending limits to ensure no one goes over budget. Amazon says it has 100 million items available for small, medium and large companies to buy, and the service has already proved very popular in the US and Germany.
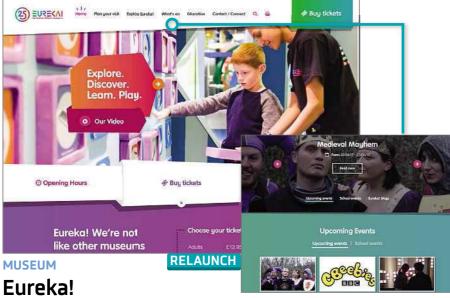
Our rating ★★★★☆

RELAUNCH

ART
National Galleries Scotland
www.nationalgalleries.org

Plans to overhaul the Scottish National Gallery in Edinburgh have been delayed, but its online hub has had no such difficulties. Encompassing the Gallery of Modern Art and the Portrait Gallery, the site lets you explore thousands of artworks, zooming in, sharing, 'liking' and even buying or downloading images of those you like. Pictures are well explained and there are plenty of articles about artists and topics such as portraiture and surrealism, each indicating how much time it'll take you to read. You can also check out exhibition and event information and browse the gift shop.

Our rating ★★★★★

NEW

TRAVEL
Visit Ramsgate
www.visitramsgate.co.uk

This well-presented, easily navigable website does a decent job of selling the southern seaside town of Ramsgate. As well as emphasising its place as the UK's only Royal Harbour, it offers an interesting look at the area's history, with lovely photos taken by local snappers. The site contains everything you need to get a flavour of Ramsgate, with lists of restaurants, a detailed overview of things to do and a page of travel info. But while we like its use of Google Calendar to display events, which makes it easy to copy items to your own calendar, there are too few suggested places to stay and the blog is rather sparse.

Our rating ★★★★☆

RELAUNCH

MUSEUM
Eureka!
www.eureka.org.uk

Eureka, the National Children's Museum, marks its 25th anniversary this year and to celebrate, it has commissioned new designers to play around with its website. The result is a colourful, mobile-friendly offering that makes it easy to explore the venue, find out what's on and check out its educational potential. There are maps that you can download, a fun gallery and lots of information for visitors, including details of its busiest periods. Buying tickets is also much easier than before, thanks to the prominent booking facility. With a regularly updated blog, an email newsletter and videos, the only thing missing is a few games for the kids.

Our rating ★★★★★

COULD DO BETTER

RELAUNCH

BUSINESS
UK Business Circle
ukbusinesscircle.co.uk

Created to bring small and medium-sized UK firms together, this online business network aims to foster a close-knit community offering advice, news, blog posts and a huge programme of events. The problem is that there were only 69 active members at the time of writing, and to contribute you must pay at least £4.99 per month. To make matters worse, the site is hard to navigate, although the search engine lets you look for businesses by name, category and location. Articles written by members are shared with 39,000 Twitter followers. ▪

Our rating ★★★☆☆

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Firefox gets CSS Grid
The latest version of Firefox introduces support for the CSS Grid system. This makes laying out web pages with CSS even easier, using simple mark-up that's similar to creating basic HTML tables. It's currently only supported in Firefox and Chrome, with Safari coming soon (it's already in preview versions), and only works on PC browsers, so it won't help you lay out a site for mobile users just yet. It's being hailed as the future of web layout, though, so it's worth getting up to speed. You can read more about Grid at bit .ly/grid421. For a more thorough guide, try bit.ly/guide421.

Test versions of your website
Making changes to your website is a risk because even if you prefer a new layout or design, it doesn't mean your visitors will. Google's new way to test different versions of your site is Optimize (optimize .google.com) – a free version of the previously paid-for Optimize 360. If you already use the excellent Analytics, there are only a few steps to go through before you can test elements – such as alternative homepages – without committing to any changes. Google has plenty of help and guidance to get you started at bit.ly/opt421.

Deal of the Fortnight
Bluehost (www.bluehost.com) is offering web hosting with a site builder and one-click WordPress installation for £2.36 per month, down from £6.39.

Web-building Helpdesk

THIS ISSUE'S EXPERT:
Nick Leech,
123 Reg Marketing
Director (www.123-reg.co.uk)

Q **What's the best way to protect my website from hackers?**
Richard Fisher, via email

A Website security is a complex issue involving all kinds of factors including the kind of website you have, the passwords you use and, of course, the reliability of your web host. In order to ensure your website is secure, you'll need to take some simple – but crucial – security measures.

It's vital that you continuously update online programs, regularly change passwords and install the latest security products. Software updates usually include crucial security fixes, so if you don't install the latest versions of all software, platforms and plugins, you increase the chances of a security breach.

MINI WORKSHOP | Create a Neocities website
Neocities: neocities.org | 10 mins | Any browser

Lots of people took their first steps in HTML with the free web-hosting software GeoCities. Neocities is its spiritual successor, offering free online web-building tools and letting you edit HTML in your browser

1 Sign up to the service from the homepage and sign in. There's a tutorial if you aren't familiar with HTML, which you can go back to later by clicking the Learn link. **1** There's a drag-and-drop box where you can place files you want to upload to your site. **2** To make changes to a file, hover over it and click Edit.

2 Neocities has a brilliant HTML editor that colour codes text **1** and warns you with a cross **2** if there's a problem with the code. If you don't like the default colours, change them with the Theme drop-down menu. **3** As you make changes, click the Save button **4** to upload them, then click View to see how your site looks. **5**
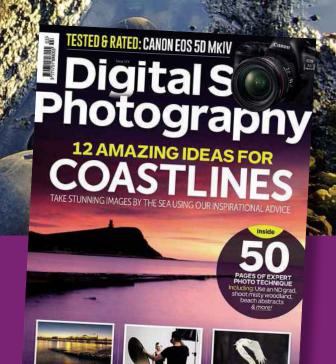
3 As well as providing a place to try out your HTML skills, Neocities has a built-in community. Click the Websites tab **1** to see thumbnails of other users' sites. **2** The Activity tab **3** shows sites that have recently updated. You can follow other sites and comment on their updates once you've made a few changes to your own.

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

Group Test

We test and compare the latest products

Windows 10 laptops

Looking for a new laptop to run Windows 10 at its best?
We've tested five of the latest models

Back in October 2016 (Issue 407, bit.ly/webuser407) we tested a selection of laptops that cost less than £200. These are great if you're on a tight budget but they make compromises in design and performance to keep costs down. If you're happy to spend more, you'll get more bang for your buck with one of these mid-range laptops.

With newer, faster processors, better designed cases and larger screens, the laptops in this round-up will give your computing a significant and noticeable power boost.

HOW WE TESTED

We put each of the laptops through its paces using our Windows benchmarking tools, which give an overall score based on a series of tests including office tasks, image editing and video encoding. We also tested how well the laptops performed when playing games by measuring the frame rate of Dirt Showdown, and then tested the battery life by timing how long each laptop lasted when playing a looping video from a full charge.

Asus ZenBook UX310UA | £564.92 | bit.ly/zen421

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

The slim, tasteful design of Asus's ZenBook calls to mind Apple's MacBook Air, but with more palatable pricing. The resemblance isn't purely aesthetic, either, because this model is also a lightweight travelling companion rather than a desktop replacement.

Unlike most of the other laptops in this test, the UX310UA comes with a dual-core i3 processor, which limits its multitasking capabilities, pushing its performance to third place in our Windows benchmark tests. It also came joint-third in the gaming benchmark, running Dirt Showdown at a playable 29fps (frames per second), outperformed by the Acer and PC Specialist laptops. The specification of its other components is also a bit light: it only comes with 4GB of memory and a small 128GB SSD (solid-state drive).

Despite these limitations, the ZenBook still comes top of the group. Some of this success can be attributed to its screen. Its maximum brightness of 341cd/m^2 (candles per square metre) isn't quite the brightest in this round-up but its superb contrast ratio of 1,282:1 lifts it well above its rivals. Its 13.3in panel offers a Full HD resolution of 1,920 by 1,080 pixels, giving it a sharp pixel density of 165ppi (pixels per inch). It's not a touchscreen but it's by far the best-looking in this group.

Connectivity is good, with 802.11ac wireless and Bluetooth 4.1. There's a decent collection of USB ports (one USB 3, two USB 2 and a USB Type-C), a keyboard that has a great feel to it and a spacious touchpad that doesn't leave you feeling constrained.

The final feather in the ZenBook's cap is its battery life. It delivered 8 hours and 6 minutes of video playback in our looping video test, which was second to the Transformer Mini, but is no less impressive because it doesn't have the Tranformer's low-powered, performance-hampering Atom processor.

*Web**User** GOLD AWARD*

VERDICT
★★★★★

Although it's not the best-performing laptop in this group, we were impressed with the balance between the ZenBook's performance and price, and love that Asus has decided to include a top-quality screen, keyboard and touchpad, rather than cut corners to trim the price. It's these things, after all, that make a computer a pleasure to work on. It also has a healthy battery life that should get you through a working day and it's very portable, being only 18mm thick and weighing 1.35kg.

Dell Vostro 5468 | £564.92 |
www.laptopsdirect.co.uk

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

WebUser SILVER AWARD

Dell's Vostro range is aimed at businesses rather than home users, but if you spend more time using word processors and spreadsheets than gaming, you might appreciate that your money is buying a practical machine with nothing wasted on entertainment-focused fripperies.

It comes with Windows 10 Pro installed, and an Intel i5-7200 processor, paired with 8GB of memory and a 256GB SSD. This combination of components pushed it to the top of the group's Windows benchmarks with an overall score of 48.

The battery life was disappointing, lasting 5 hours and 40 minutes in our looping video test. We also weren't enamoured with the screen, which is a good size (14in) but doesn't have the resolution to back it up: its 1,366 x 768 pixels display only provides 111ppi (pixels per inch). It's not bright, either, with a maximum brightness of 210cd/m² and a contrast ratio of 264:1.

VERDICT ★★★★★

With a sharper and more vibrant screen, the Vostro could have taken our Gold Award, but it's let down by a low resolution and lacklustre brightness. However, it runs Windows better than the ZenBook.

PC Specialist UltraNote IV 14 |
£633 | www.pcspecialist.co.uk

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

WebUser BRONZE AWARD

The other laptops reviewed here are mass-produced, but PC Specialist assembles its laptops to order, so you can tweak the components. This pays off because although the UltraNote is more expensive than our other award winners, it's very well equipped.

An Intel Core i5-7200U processor, 8GB of memory and a 256GB SSD would be impressive enough, but it also has a 1TB mechanical hard drive installed. It wasn't quite as fast in our Windows tests as the Siver Award-winning Dell Vostro, but it performed well in our games, coming a close second to the Acer Spin 3. Its full HD screen isn't as good as that of the Asus ZenBook, but it's a step up from the Vostro's.

However, it's not all plain sailing. The UltraNote's battery only lasted 5 hours and 31 minutes in our test, and the chunky case, which is thicker than any of the other laptops in this test, makes it less portable.

VERDICT ★★★★☆

This is a great all-round laptop, almost as powerful as the Dell Vostro at running Windows but with a better screen for entertainment. Its bulky case means it's not so good for travelling, though, and it has a limited battery life.

Acer Spin 3 | £498.98 | bit.ly/acer421

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

Acer's Spin 3 has the group's lowest price and the largest (15.6in) screen, which can flip to convert into an oversized tablet. However, its 1,366 x 768 pixels ended up looking blocky because they are spread so thin. It's also heavy, weighing 2.14kg, which is particularly hefty for a tablet. Its internal specifications are disappointing, as our Windows performance tests showed (though it was still faster than the Transformer Mini), but it surprised us by giving the best gaming performance in the test, running Dirt Showdown at 37fps.

Asus Transformer Mini | £545.98 | bit.ly/atm421

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

The smallest device in this test, the Transformer Mini is a tablet that converts into a laptop using a clip-on keyboard. This, plus its lighter weight (790g with the keyboard attached, 530g without) makes it easier to hold in tablet form than the Acer Spin 3. Its screen is bright and clear, even outdoors, and its 12 hours and 13 minutes of battery life will keep it going while you're on the move. However, its compact size leaves room for only two ports and a small low-resolution touchscreen of 1,280 x 800 pixels. Its Atom processor placed it last in our performance tests, too.

TEST-RESULTS CHARTS

Windows application benchmarks

- (S) Dell Vostro 5468
- (B) PC Specialist UltraNote IV 14
- (G) Asus ZenBook UX310UA
- Acer Spin 3
- Asus Transformer Mini

0 10 20 30 40 50 60
Benchmark Score

Windows gaming benchmarks

- Acer Spin 3
- (B) PC Specialist UltraNote IV 14
- (G) Asus ZenBook UX310UA
- (S) Dell Vostro 5468
- Asus Transformer Mini

0 5 10 15 20 25 30 35 40
Frames per second in Dirt Showdown at 720p, high detail

Battery life (hours)

- Asus Transformer Mini
- (G) Asus ZenBook UX310UA
- Acer Spin 3
- (S) Dell Vostro 5468
- (B) PC Specialist UltraNote IV 14

0 2 4 6 8 10 12 14
Hours

	Asus ZenBook UX310UA	Dell Vostro 5468	PC Specialist UltraNote IV 14	Acer Spin 3	Asus Transformer Mini
WEBSITE	www.asus.com	www.dell.co.uk	www.pcspecialist .co.uk	www.acer.com	www.asus.com
PRICE	£564.92	£564.92	£633	£498.98	£545.98
BUY FROM	bit.ly/zen421	www.laptopsdirect .co.uk	www.pcspecialist .co.uk	bit.ly/acer421	bit.ly/atm421
PROCESSOR	Intel Core i3-6100U	Intel Core i5-7200U	Intel Core i5-7200U	Intel Core i3-6006U	Intel Atom x5-z8350
MEMORY	4GB	8GB	8GB	8GB	4GB
SCREEN SIZE	13.3in	14in	14in	15.6in	10.1in
SCREEN RESOLUTION	1,920 x 1,080 pixels	1,366 x 768 pixels	1,920 x 1,080 pixels	1,366 x 768 pixels	1,280 x 800 pixels
TOUCHSCREEN	No	No	No	Yes	Yes
STORAGE	128GB SSD	256GB SSD	256GB SSD; 1TB HDD	1TB HDD	128GB eMMC
USB PORTS	2 x USB 2: 1 x USB 3; 1 x USB Type-C;	3 x USB 3	1 x USB 2; 1 x USB 3; 1 x USB Type-C;	2 x USB 2; 1 x USB 3	1 x USB 3; 1 x micro-USB
NETWORKING	802.11ac Wi-Fi; Bluetooth 4.1	802.11ac Wi-Fi; Ethernet; Bluetooth 4.2	802.11ac Wi-Fi; Ethernet; Bluetooth 4.0	802.11ac Wi-Fi; Bluetooth 4.1	802.11ac Wi-Fi; Bluetooth 4.0
MEMORY-CARD READER	SD	SD	SD	SD	microSD
OPERATING SYSTEM	Windows 10 Home	Windows 10 Pro	Windows 10 Home	Windows 10 Home	Windows 10 Home
SIZE	323 x 223 x 18mm	340 x 240 x 18mm	339 x 244 x 31mm	381 x 251 x 23mm	259 x 170 x 14mm (with keyboard)
WEIGHT	1.35kg	1.6kg	1.71kg	2.14kg	530g (790g with keyboard)
WARRANTY	One-year return-to-base	One-year carriage-and-return	One-year return-to-base and two-years labour	One-year return-to-base	One-year return-to-base

OUR VERDICT

It failed to come top in our performance tests, but we were happy with the Asus ZenBook UX310UA's balance between power and price, so we gave it our Gold Award. Asus hasn't cut back on the quality of design, either, and the laptop feels luxurious to work on, with a bright screen and spacious keyboard and touchpad.

For more power, you could opt for the Silver Award-winning Dell Vostro 5468, which pushes all its effort into Windows performance. There's some compromise, though, with a lacklustre low-resolution screen and mediocre battery life.

The Bronze Award-winning PC Specialist UltraNote IV 14 manages to bring a better screen and improved performance to a single package, but it's significantly more expensive, costing almost £70 more than both our Gold and Silver award winners.

Web User's Best Buys

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

HARDWARE

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

MONITOR

AOC Q2781PQ

£299.99 from bit.ly/aoc412
Tested: Issue 412

This good-value monitor offers impressive image quality, a lovely design and 178-degree horizontal and vertical viewing angles. You won't need to calibrate it, either. If you're after a monitor with a resolution of 2,560 x 1,440 pixels, buy this.

KEY SPECS

27in flat screen ■ 2,560 x 1,440 pixels resolution ■ 1,000:1 contrast ratio ■ 350cd/m^2 brightness ■ 60Hz refresh rate ■ DisplayPort, HDMI, VGA inputs ■ 330 x 180mm base ■ Three-year collect-and-return warranty

BUDGET TABLET

Amazon Fire HD 8

£89.99 from bit.ly/8hd410
Tested: Issue 410

For its low price, Amazon's Fire HD 8 is a pleasant surprise: it's great for media streaming and web browsing, its battery life is exceptional and it's easy to use. Once it's integrated with Amazon's Alexa voice assistant, it will be even better.

KEY SPECS

Quad-core 1.3GHz processor ■ 8in 1,280 x 800 pixels resolution screen ■ 2-megapixels rear camera ■ 16GB storage (12.09GB free) ■ MicroSD memory card slot ■ Fire OS operating system ■ 214 x 128 x 9.2mm ■ 341g

CHROMEBOOK

Acer Chromebook R11

£229.99 from www.amazon.co.uk
Tested: Issue 409

The Acer Chromebook R11 laptop has a keyboard that flips behind its touchscreen, so it can also be used as a tablet. It's not hugely powerful but it runs all the web apps you might need and its battery lasted over eight hours in our tests.

KEY SPECS

Dual-core 1.6GHz Intel Celeron N3050 processor ■ 2GB of memory ■ 11.6in touchscreen ■ 1,366 x 768 pixels resolution ■ 16GB eMMC drive ■ 1 x USB 2, 1 x USB 3 ports ■ 802.11ac Wi-Fi ■ SD card reader ■ 295 x 203 x 20mm ■ 1.2kg

WINDOWS 10 LAPTOP

Acer Aspire One Cloudbook 14

£199.98 from www.pcworld.co.uk
Tested: Issue 407

The Cloudbook 14 is as good a laptop as you'll get for less than £200. It's not particularly fast and doesn't have a brilliant display, but it's fantastic value, especially because it includes a year's subscription to Office 365 Personal.

KEY SPECS

Dual-core 1.6GHz Intel Celeron N3050 processor ■ 2GB of memory ■ 32GB SSD ■ 14.1in non-touchscreen ■ 1,366 x 768 pixels resolution ■ 1 x USB 3, 1 x USB 2 port ■ 802.11n Wi-Fi ■ 339 x 235 x 17.9mm ■ 1.6kg ■ One-year return-to-base warranty

All prices correct at time of review

🛒 Web User's Best Buys

E-READER

Amazon Kindle (2016)

£69.99 from **www.amazon.co.uk**
Tested: Issue 405

The highly capable Kindle is lightweight, great for reading and, when it comes to the most important things – usability and content – it's just as good as any of its pricier rivals. Despite the lack of a front light, it remains the best e-reader you can buy for less than £100.

KEY SPECS
6in E Ink Pearl screen ■ 800 x 600 pixels resolution, 167 ppi ■ Optical touchscreen ■ 4GB storage ■ 160 x 115 x 9.1mm ■ 161g ■ No front light ■ £10 less with Amazon Special Offers ■ Up to four weeks battery life (if used for 30 minutes a day)

BUDGET SMARTPHONE

Motorola Moto G4

£159 from **www.amazon.co.uk**
Tested: Issue 404

This fantastic smartphone offers better features and performance than any other phone of this price. Its magnificent screen is sharp and bright, and both its cameras are excellent. Battery life is well above average, too, and the Moto G4 feels sturdy and high quality.

KEY SPECS
5.5in screen ■ Octa-core 1.5GHz processor ■ 16GB of storage, expandable by 128GB ■ Android 6.0.1 Marshmallow ■ 13-megapixel rear camera, 5-megapixel front camera ■ 1,980 x 1,080 pixels resolution ■ 3,000mAh battery ■ 153 x 77 x 7.9mm ■ 155g

MEDIA STREAMER

Roku 3

£83.98 from **www.very.co.uk**
Tested: Issue 403

The Roku 3 has all the best elements of the previous models and is as close to a perfect TV-streaming device as you'll find. It offers all the terrestrial catch-up services and a choice of Netflix, Amazon Video, Google Play and Sky services.

KEY SPECS
HDMI video output ■ 1 x USB 3 port ■ 512MB internal storage with microSD slot ■ 802.11n Wi-Fi and Ethernet connectivity ■ Plex and UPnP streaming servers ■ 89 x 89 x 25mm ■ 142g ■ One-year return-to-base warranty

WINDOWS 10 PC

Palicomp AMD Avenger

£500 from **www.palicomp.co.uk**
Tested: Issue 401

The Palicomp AMD Avenger's medium-sized case still provides plenty of room to upgrade. Its carefully chosen components offer good performance, especially when playing games.

KEY SPECS
Quad-core 4.5GHz AMD Athlon X4 880K processor ■ 8GB of memory ■ 1TB hard drive, 240GB SSD ■ 2 x USB 2 ports, 3 x USB 3 ports ■ Ethernet ■ 485 x 420 x 235mm ■ Three-year return-to-base warranty ■ 4GB Palit GeForce GTX 960 graphics card
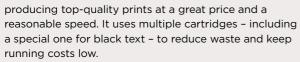
MULTIFUNCTION PRINTER

Canon Pixma MG5750

£65.59 from **www.photospecialist.co.uk**
Tested: Issue 398

The MG5750 is an excellent all-rounder, producing top-quality prints at a great price and a reasonable speed. It uses multiple cartridges – including a special one for black text – to reduce waste and keep running costs low.
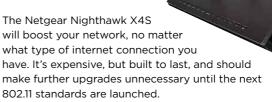
KEY SPECS
Thermal inkjet multifunction printer with scanner/copier ■ 4,800 x 1,200dpi maximum print ■ 1,200 x 2,400dpi (24-bit) optical scan resolution ■ 5 cartridges ■ USB and 802.11b/g/n Wi-Fi ■ 100-sheet tray ■ Duplex printing ■ 455 x 369 x 148mm

WIRELESS ROUTER

Netgear Nighthawk X4S

£259.99 from **www.currys.co.uk**
Tested: Issue 388

The Netgear Nighthawk X4S will boost your network, no matter what type of internet connection you have. It's expensive, but built to last, and should make further upgrades unnecessary until the next 802.11 standards are launched.

KEY SPECS
Dual-band 2.4GHz, 5GHz ■ 802.11ac ■ 2.53Gbps theoretical max speed ■ ADSL2+ and VDSL ■ 5 x 10/100/1,000Mbps Gigabit Ethernet ports ■ Dual-core 1.4GHz processor ■ WPA and WPA2-PSK encryption ■ 285 x 185 x 50mm ■ One-year return-to-base warranty

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. It performed well in our tests and has plenty of options, giving you full control over what's backed up and when.

KEY FEATURES
$59.99 (around £49) per year for 1 PC ■ Unlimited storage ■ Back up external drives ■ Adaptive versioning ■ Continuous and daily backup schedules ■ 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, blocking all malware with its robust defences. Use the URL above to save £15.04 on the software (normal price £34.99).

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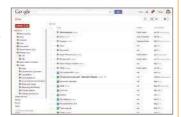
ONLINE STORAGE

Google Drive

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

Google Drive is easy to use and has lots of free storage. The Windows software integrates with Explorer, so saving and syncing files is like keeping them in any other PC folder.

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

Web User Gold Award winners

REMOTE-DESKTOP SOFTWARE

TeamViewer

NEW!

Free from **www.teamviewer.com**
Tested: Issue 420
This powerful free remote-desktop program has an impressive array of features that raises it well above its rivals.

SCREEN RECORDER

oCam

Free from **bit.ly/ocam419**
Tested: Issue 419
With oCam, you can record for as long as you like, in any format, and use great extras such as picture-in-picture video.

MUSIC PLAYER

MusicBee

Free from **getmusicbee.com**
Tested: Issue 418
MusicBee offers everything you need from a music player. It's fast, easy to use and can be customised to your tastes.

SAFER-BROWSING TOOL

Webutation

Free from **www.webutation.net**
Tested: Issue 417
The excellent Webutation combines a reliable blocker with a database built on trusted services and users' experiences.

ANDROID KEYBOARD

SwiftKey

Free from **bit.ly/swiftkey416**
Tested: Issue 416
SwiftKey is the king of Android keyboards, with an unmatched combination of features, usability and performance.

STICKY-NOTES TOOL

Stickies

Free from **bit.ly/stickies415**
Tested: Issue 415
Stickies is simple to use, lets you display almost anything in its notes and has lots of useful options.

ANDROID CAMERA APP

Open Camera

Free from **bit.ly/open414**
Tested: Issue 414
Open Camera is by far the best replacement for your phone's camera app, and offers an unrivalled selection of tools.

Best Free Software

MUSIC CREATOR

Magix Music Maker

bit.ly/music421
Min requirements:
Windows XP/Vista/7/8+/10
File size: 698MB

You don't need to be able to play a musical instrument to write and record your own songs. With a PC and the right music-creation software, pretty much anyone can craft a semi-decent tune. Magix Music Maker has been around for more than 20 years as a paid-for product, with the 2016 version priced at £44.99, but now for the first time it's available to everyone for free.

This versatile software gives you pretty much everything you need to record, produce and share your music, and it comes with 425 sounds and loops, three instruments and eight effects to get you started. If you require more than that, you can expand your collection by buying additional instruments for £24.99 per pack, and there are also paid-for versions of Music Maker you can upgrade to.

Music Maker also offers Soundpools – which are collections of building blocks

or loops – that you can combine using drag-and-drop to construct songs quickly. The free version comes with just the one Soundpool (Music Maker – Feel Good), but you can buy more through the integrated store. Prices start from £14.99 per Soundpool but each one comes with an audio preview so you get an idea of what to expect.

However, there's really no need to pay extra because the free version is packed with features: you can create and edit sounds in the MIDI editor; distort, amplify and alter your recordings with the virtual guitar amplifier; record live music and vocals by plugging in a

microphone, guitar or USB keyboard; and apply various effects to perfect your musical masterpiece.

⚙ MINI WORKSHOP | Create your own tunes using Music Maker

1 When you open Magix Music Maker for the first time, it will display its colourful interface and load a sample song to give you an idea of what it's possible to achieve with the software. To listen to this track, just click the Play button. **1** You can adjust the volume **2** and toggle the metronome on or off. **3**

2 Making changes to the sample song is easy enough. You can move samples **1** by clicking and dragging them around. To add more samples, browse the list of instruments, **2** then drag the one you want from below **3** into position. You can solo (silence all other instruments) or mute tracks. **4**

3 Click the Templates tab **1** and you can drag effects to any of the tracks to change how things sound. Click the Instruments tab on the right **2** to open any existing instruments or buy more. **3** Add content of your own through the File Manager **4** or buy additional Soundloops in the store. **5**

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

ANTI-MALWARE TOOL
Xvirus Anti-Malware 7
bit.ly/xv421
Min requirements: Windows Vista/7/8+/10 **File size:** 2.6MB

Xvirus Anti-Malware is designed to run as a second line of defence alongside any existing antivirus software you might have on your system. It takes seconds to install and will run an initial scan as soon as it starts. There are three protection shields – File Guard, System Guard and Network Guard – and you can easily toggle each one on or off. The main menu lets you run a scan, update the software, view the scan history and access the software settings.

ENCRYPTED NOTES
Cobbler
bit.ly/cobb421
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 969KB

Cobbler is a tiny tool that can store plain text in an encrypted file, which makes it ideal for securing a list of passwords or bank details. Launch the software, enter a master password (one that you'll remember, but no one else could guess) and type in the text you want to secure. Cobbler automatically saves the file and locks the contents using AES-128-CBC encryption. It's quite basic (and looks it!), but it works very well.

SYSTEM TOOL
CCSIO Benchmark
ccsiobench.com
Min requirements: Windows Vista/7/8+/10 **File size:** 210KB

If you want to know how fast your hard drive really is, Cold-cache Sequential I/O Benchmark can tell you. This could be useful if you suspect a drive is running slower than it should, and also gives you an idea of the sort of benefits you might get from switching to an SSD. To use it, just run the software and click the Start button. It runs through a series of tests that takes around five minutes to complete.

New Windows Apps

Castles and Kingdoms — Empire
bit.ly/castles421
Min requirements: Windows 10
File size: 580KB (installer)
Castles and Kingdoms is a fun multiplayer online strategy game. You start with a small castle and need to add and upgrade new buildings, gather an army and take on your rivals.

wTorrent
bit.ly/wtorrent421
Min requirements: Windows 10
File size: 21.6MB
This free BitTorrent downloader for Windows 10 was originally called WPTorrent. It supports background downloads and uploads; built-in video playback; power saving features; and download/upload rate management.

mBlock
bit.ly/bblock421
Min requirements: Windows 10
File size: 508.3MB
This graphical programming app based on Scratch 2.0 lets you create interactive stories, games and animations, and program robots and other hardware tools.

✚ Recommend free downloads at www.facebook.com/webusermagazine

⬇ Best Free Software

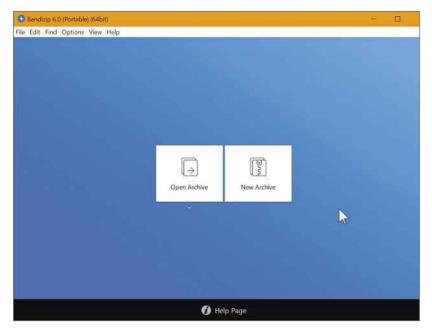## HD Video Converter Factory 10
bit.ly/hdconvert421
Min requirements: Windows XP/
Vista/7/8+/10
File size: 45MB

There's no shortage of tools you can use to trim, crop, merge and convert your videos. HD Video Converter Factory is another such program, and is actually a cut-down version of a paid-for product. This means there are some limitations to be aware of – not all the export formats are available, you're limited to 720p resolution conversions, and it's a bit slower – but it still has plenty to keep you happy.

To use HD Video Converter Factory, you just drag a video file to the program's interface, make the desired changes using the Clip, Crop and/or Effects tools, pick an output format and click Run.

ZIP ARCHIVER
Bandizip 6
www.bandisoft.com
Min requirements: Windows Vista/7/8+/10
File size: 3.4MB

Bandizip is a superfast, easy-to-use compression tool that supports all the main file formats, including ZIP, 7Z and RAR. It offers a good selection of features, including the ability to create self-extracting archives, split ZIPs across volumes and encrypt files. The latest new-look version sports a new installer and console program, and offers faster extracting and compressing. Bandizip can also now open and extract files from archives in the ZPAQ and LZIP compression formats.

There are installer and portable versions available but as with a growing number of products, it no longer works on systems running Windows XP.
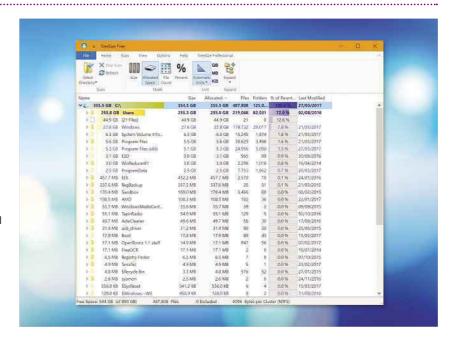
SPACE MONITOR
TreeSize Free 4
bit.ly/tree421
Min requirements: Windows Vista/7/8+/10
File size: 7.1MB

Even if you have a sizeable hard drive, it can soon begin to fill up with large programs and media files. If you've ever wondered where all that free space on your hard drive has vanished to, or which files are taking up the most room, the excellent TreeSize Free can tell you.

This new release introduces the hierarchical treemap chart that was previously only available in the Pro edition. This makes it easier to visualise data distribution across your system. The program has also had a makeover, and now sports a ribbon interface and a touch-friendly design. It will display better on high DPI screens, too.

GAME
Bendy and the Ink Machine
bit.ly/bendy421
Min requirements: Windows XP/Vista/7/8+/10, MacOS or Linux
File size: 62.1MB

This highly polished first-person horror game takes place in a creepy animation workshop and has you looking for your old partner. The striking graphics are inspired by the very early Disney cartoons, such as *Steamboat Willie*. This is actually just the first chapter of what will hopefully become a full adventure game.

✗ Don't install...

Stardock Object Desktop
www.stardock.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 6.8MB

Want to make your Desktop look more interesting? Of course you do. Want to pay $49.99 (£40.10) to do so? Probably not, but that's the high price of Stardock Object Dekstop. In fairness, you get a lot of bang for your buck, with loads of enhancements, effects and useful tools, but you could easily compile a similar suite yourself – for free.

...Install this instead ✓

Rainmeter
www.rainmeter.net
Min requirements: Windows 7/8+/10
File size: 2.1MB
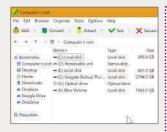
It's easy enough to make simple changes to your Desktop, such as replacing the wallpaper and relocating the taskbar, but Rainmeter 4.0 lets you take things much further. It can fully customise the look of your Desktop, using floating applets, sidebars, system monitors, news feeds and more. The program comes with an attractive ready-made theme to get you started, and there are plenty more available to download from the web. Themes are customisable, too, so you can make innumerable tweaks until you get the perfect look. If you can't find a design you like, you can easily create your own.

UPDATED | New tweaks and fixes for your favourite free programs

FILE-COMPRESSION TOOL
PeaZip 6.4
www.peazip.org
Min requirements: Windows XP/Vista/7/8+/10
File size: 7.1MB

PeaZip is an open-source file and archive manager that supports 188 popular formats. The new version introduces (optional) tabbed browsing, and the ability to archive and extract content using relative, full or absolute paths.
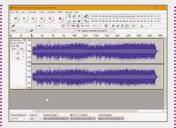
SYSTEM TOOL
Driver Booster 4.3
bit.ly/booster421
Min requirements: Windows XP/Vista/7/8+/10
File size: 17MB

Driver Booster scans your system looking for outdated and missing drivers and lets you update them with a single click. The latest version of the program optimises the scan engine and lets you disable its rather unnecessary animation effects. It also adds support for more drivers.

AUDIO TOOL
Audacity 2.1
audacityteam.org
Min requirements: Windows XP/Vista/7/8+/10
File size: 23.1MB

Changes in the latest version of this popular audio editor include a new distortion effect, a new scrub ruler, Rhythm Track (previously called Click Track) and Sample Data Import. Effects are no longer greyed-out when pausing a track, and there are new features in Timer Record.

SCREEN RECORDER
Icecream Screen Recorder 4.7.3
icecreamapps.com
Min requirements: Windows XP/Vista/7/8+/10 or MacOS
File size: 50.3MB

The 'freemium' screen recorder (you need to pay for unlimited functionality) has been tweaked since our review in Issue 419. It's fixed the border problem when recording from a webcam and added the ability to trim videos after recording.

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

Best New Browser Tools

CHROME

Add bookmarks to YouTube videos

YouTube remembers how much of a video you've watched, so you can instantly resume playback, but as a bookmarking feature it's not very sophisticated.

A much better option is the new Chrome extension YouTube Bookmarker (bit.ly/bookmarker421), which lets you easily bookmark your favourite parts of videos for future enjoyment. To use the add-on, just click the Bookmarker button below the video to open a panel on the right. Click Set to bookmark the start point of the desired section, then set the stop point and click Save. You can also enter a title for the bookmark, and create multiple bookmarks for the same video. All the bookmarks you save are grouped under the relevant video's title in YouTube Bookmarker's pop-up toolbar panel, so you can open or delete them in a couple of clicks. It's a brilliant tool for YouTube addicts.

Get more options for closing tabs

Google recently announced plans to drop two little-used options from the tab right-click menu: 'Close other tabs' and 'Close tabs to the right'. If you'd prefer to keep these options, as well as adding several useful new ones, you need Tab Ninja (bit.ly/ninja421). This new extension expands Chrome with options to close all pinned, audible or muted tabs; tabs to the left or right of the active one; tabs displaying pages from the same website; and more. On the downside, you right-click the page rather than the tab to see the options, and you can't customise the lengthy menu to remove entries you don't need.

Stimulate your baby while browsing

Trying to browse the web while looking after a very young child is nigh-on impossible, but thankfully Saatchi & Saatchi Interactive has come up with a clever solution called Baby Browser (bit.ly/baby421). This absorbing add-on lets you read online articles in a bubble in the corner of your browser, while the remaining space displays quirky animations that have been "scientifically proven to stimulate your baby's brain". Just click the toolbar button to extract the text from your chosen website and then navigate it by pressing the Space bar or the arrow keys on your keyboard. All the while, your baby will be gurgling with delight and developing their mental faculties by watching red, white and black shapes float and pulsate before their eyes. The pace of the animation is related to the length of the article you're reading, and you can revert to the original article at any time with a single click. Even if you don't have any young children or grandchildren, you can enjoy the spectacle yourself – the effect is pretty far out, man!

Bring back Clippy in Chrome

Forget Cortana and Siri – everyone knows that the original and best virtual personal assistant was Clippy, Microsoft's adorable paperclip character, who made writing letters such a pleasure in old versions of Office. Now Clippy is back as a Chrome extension called Clippy Everywhere (bit.ly/clippy421), which brings its chirpy and not-at-all-annoying brand of assistance to every web page you visit. To be honest, this incarnation of Clippy doesn't do much more than introduce itself, look around for a while and then have a snooze, but it still has nostalgic value, and you can use it to drive other people up the wall.

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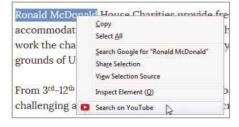
FIREFOX

Check if your add-ons will stop working

As you may be aware, Mozilla is planning to ditch traditional Firefox add-ons soon in favour of newfangled WebExtensions that work across other browsers. Some developers have updated their tools accordingly, but many haven't got round to it yet, which means their add-ons won't work in future versions of Firefox. You can find out if a favourite tool is in jeopardy by visiting its page on the Mozilla Add-ons site (addons.mozilla.org) and clicking the Permissions link next to the 'Add to Firefox' button. If you see a message that says: "Please note this add-on uses legacy technology", that means a WebExtension version isn't yet available. There's still plenty of time for the developer to create one, so don't panic, but you'll want to keep an eye on the page. WebExtensions are set to take over completely when Firefox 57 is released in December.
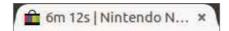
Search YouTube by right-clicking

Most modern browsers let you search the web simply by highlighting and right-clicking a name, word or phrase on a page and choosing 'Search Google for...'. Wouldn't it be useful if you could use the same technique to find videos on YouTube? That's the idea behind 'Search on YouTube' (bit.ly/youtube421), which adds just such a command to your right-click menu so you can find anything on YouTube in a jiffy. The search results open in a new tab so you won't be taken away from your current page.

Monitor eBay auction times

Have you ever missed out on an eBay bargain because you opened a new tab and forgot about the auction? If so, you'll appreciate eBay Time Left (bit.ly/ebay421), which helpfully uses the tab's title to display how many minutes and seconds remain until the auction ends.

This means you can see at a glance how long you have left to place your bid and win the desired item.

Remove tracking data from URLs

Have you ever noticed that some of the links you click on the web have a lot of gobbledygook after the main URL, such as: '?utm_source=google_ &utm_medium=cpc&utm_campaign'? This is usually added so the website or a third party can track what you do next, for analytics or advertising purposes. In our opinion, it's a gross invasion of privacy. Fortunately, help is at hand from a new Firefox add-on called Untrack Me (bit.ly/untrack421), which automatically strips the tracking information from web address, so you can browse without being spied on. You can pause the add-on when required, and Untrack Me keeps count of how many times it has blocked a website's tracking abilities.
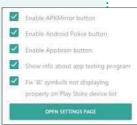
OTHER BROWSERS

Add new features to Google Play

In our 'Secret hacks for Google Play' feature last issue, we recommended a Chrome extension called Toolbox for Google Play Store (bit.ly/ play414), which adds several useful options to the app store. We're delighted to confirm that it is now also available for Opera (bit.ly/tool421) and works in exactly the same way. The extension adds a button to app pages that lets you download the app's APK file to your PC, as well as others that link to information on AppBrain and Android Police. It also tells you if an app offers a beta-testing program that lets you try the latest version before everyone else.

Analyse your history in Vivaldi

Want to know which websites you visit most or what your busiest times of day are for browsing? Now Vivaldi can tell you, thanks to a new History feature that presents your browsing patterns in the form of graphs, charts and a colour-coded calendar. You can view the data by day, week or month and see statistics such as the number of pages you visited and what time you opened each one. All the information is stored locally, so no-one else can see what you've been doing.

Best Free Apps

App of the Fortnight

AUTOMATION

Workflow
workflow.is

 8

UPDATED

Make everything you do on your iPhone and iPad quicker and easier using this outstanding IFTTT-style app, which has just been bought by Apple – and dropped its price from £2.29 to nothing. There are no hidden charges or ads, either.

App Store users who paid to download Workflow don't seem disgruntled that it's now free. They simply like the app too much to care. Quite right, too, because Workflow's automated connections make iOS much more pleasurable to use.

Many things you do with your iOS device involve a repetitive series of steps – for example, you take a photo, add your favourite filter to it and then post it on Facebook. Workflow shrinks that series of actions to a single step called – you guessed it – a workflow. You can run a workflow with a single tap or let the app run it automatically in response to a trigger, such as opening the camera or arriving at a certain location.

For more examples, launch the app and let the workflows float across your screen. 'Add to Reading List', 'Make Video from GIF', 'Back up Photos' – it's like a list of chores you were supposed to have done last weekend. With a little patience, you can even create your own workflows, but there's probably no need when you have more than 200 presets to choose from, and you can edit their ingredients to suit you.

Workflow currently has no plans to launch on Android or online, and its acquisition by Apple is unlikely to change that. The app has even dropped support for certain Google services, including Chrome and Street View, although it works with IFTTT (ifttt.com/workflow). You may soon wonder how you coped without it.

Our rating
★★★★★

MINI WORKSHOP
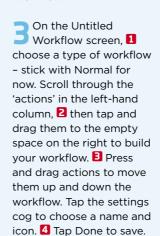## Create automated iOS actions using Workflow

1 Install and launch Workflow. Before you can begin, you'll have to wade through several intro screens, including 'We picked out a few workflows for you!'. **1** Tap one or more of the suggested workflows, **2** then tap the right arrow. On the next screen, tap Add Widget. Swipe down, tap Edit and tap the green '+' next to Workflow. Tap Done, then Done again.

2 At last, you'll arrive at My Workflows, **1** which opens automatically next time you launch the app. Any workflows you tapped in Step 1 appear here. **2** Double-tap one to run it. Tap Gallery **3** to browse and search 200 more. To add a workflow, tap Get Workflow. Long-press any workflow on My Workflows to edit or delete it. To create one from scratch, tap Create Workflow. **4**

3 On the Untitled Workflow screen, **1** choose a type of workflow – stick with Normal for now. Scroll through the 'actions' in the left-hand column, **2** then tap and drag them to the empty space on the right to build your workflow. **3** Press and drag actions to move them up and down the workflow. Tap the settings cog to choose a name and icon. **4** Tap Done to save.

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

MESSAGING
NEW

Wuu
wuu.co
🍎 10

Take a pinch
of Instagram
and a soupçon
of Snapchat,
and Wuu is
what you get.
It's description
page is full of
lofty ambition
("turn personal
moments into ephemeral works of
art… Set yourself free") but this is
really just another picture-based
messaging app that sets your 'Wuus'
to vanish automatically – after 24
hours, by default. You can also send
'Wuubombs' that disappear in seconds.
The emphasis is on emoji and heavily
filtered photos rather
than actual words, and
you can also share videos
and audio clips. Coming
soon to Android.

Our rating	★★★☆☆

SLEEP
NEW

Wakemode
wakemode.com
🤖 4.3 🍎 8

Sometimes
sleep is the most
productive thing
you can do. But
instead of
allowing
ourselves to
recharge,
we often slog
through the day
and night, trying to "get things done"
until we're little more than zombies.
Wakemode aims to change that by
analysing your sleep patterns and then
calculating your 'battery level', which
changes through the day to reveal
when you could benefit from a nap or
an early night. The app supports
Bluetooth sleep-tracking
devices, but you can also
enter your sleep patterns
manually. It's easy to use
and surprisingly engaging.

Our rating	★★★★☆

EDUCATION
UPDATED

Unidays
bit.ly/unidays421
🤖 4 🍎 9.4

For students,
as well as their
parents and
grandparents,
this is your
21st-century
student discount
card. The
Unidays app
and website are
stuffed with savings, exclusive deals,
coupons and perks that you can use
while shopping online and in store.
Unidays isn't affiliated with the NUS but
instead strikes commercial deals with
'partner' companies, which currently
include Apple, Microsoft, Deliveroo,
ASOS and McDonald's (all the
essentials, then). It's free to
join but you have to verify
your account by entering
your college or university
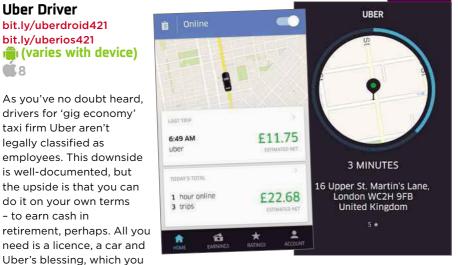and course details.

Our rating	★★★★☆

DRIVING
UPDATED

Uber Driver
bit.ly/uberdroid421
bit.ly/uberios421
🤖 **(varies with device)**
🍎 8

As you've no doubt heard,
drivers for 'gig economy'
taxi firm Uber aren't
legally classified as
employees. This downside
is well-documented, but
the upside is that you can
do it on your own terms
– to earn cash in
retirement, perhaps. All you
need is a licence, a car and
Uber's blessing, which you
can apply for online (bit.ly/uber421) or through this app. Uber Driver's
main role is to make life on the road less stressful and more financially
rewarding by helping you find customers, get them from A to B, then
log their payments. The app has just received a major update on both
platforms, with redesigned GPS navigation that now includes turn-by-
turn directions, colour-coded traffic alerts and a night mode to stop
you being dazzled by the map while driving at 3am.
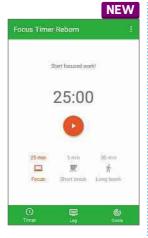
Our rating	★★★★☆

PRODUCTIVITY

NEW

Focus Timer Reborn

bit.ly/focus421

🤖 4.0.3

Get more work done by using this new app to set concentrated 'focus sessions', then log your progress automatically over days and weeks. The default focus session is 25 minutes, which is frankly workshy, but you can change this in Settings. As well as focus sessions, it offers countdowns for different uses – short breaks (default five minutes), long breaks (30) and a daily goal (eight blocks of focus) – all with customisable sounds, including a "ding ding" boxing bell. You have to sign in via Google so the app can back up your log, but "don't worry about your privacy," it says, not at all reassuringly.

Our rating	★★★★☆

EBOOKS

UPDATED

Kindle

bit.ly/kindle421

 9

The iOS version of Amazon's app is now a 'read it later' app as well as an e-reader. Its new 'Send to Kindle' feature lets you save documents and web pages from Safari to your Kindle library and read them at your leisure on any Kindle app or device. Documents and pages are converted to Kindle format, so you can adjust the text size, font and page colour. The app also now includes Comixology's Guided View (www.comixology.co.uk), an immersive – nay, 'cinematic' – reading mode for comics. With any luck, these features will arrive on Kindle's Android app soon (bit.ly/kindledroid421).

Our rating	★★★★★

5 NEW APPS WORTH PAYING FOR

RADIO

Caroline

bit.ly/carolinedroid421
bit.ly/carolineios421
Price: £1.99 (Android), £2.99 (iOS)

🤖 4 8

Legendary offshore station Radio Caroline is still going, although these days it mainly broadcasts from dry land (www.radiocaroline.co.uk). Tune in using the official app, which also offers schedules, presenter profiles and music trivia.

PDF SCANNER

JotNot

bit.ly/jotdroid421
bit.ly/jotios421
Price: £4.79 (Android), £4.99 (iOS)

🤖 4.4 8

Digitise your bills and receipts using this powerful PDF scanner app. What makes JotNot worth a fiver is its 'processing algorithm', which automatically delivers the best quality possible.

ART

Living Sketchbook

bit.ly/sketchdroid421
bit.ly/sketchios421

Price: £4.89 (Android), £4.99 (iOS)

🤖 4.4 9

Dinotopia author and artist James Gurney (gurneyjourney .blogspot.co.uk) takes you on an audio-narrated tour of his real sketchbooks, with 'super high-res' zoomable images and behind-the-scenes videos.

PRODUCTIVITY

Doo

bit.ly/dooapp421
Price: £3.99

 8.1

Turn your to-do lists into stacks of virtual cards that you can shuffle and swipe as you progress, and use the customisable snooze feature to set different snooze responses for different chores and times of day.

NOTES

Real Notepad

bit.ly/notepad421
Price: 59p

🤖 4.1

Get Windows Notepad and Explorer-style features on your Android device, including plain text, font formatting, HTML export and cut and paste. A free ad-supported version is due out soon.

Caroline	JotNot	Living Sktechbook	Doo	Real Notepad

Best New Mobile Games

ACTION **NEW**
Super Mario Run
supermariorun.com

🤖 4.2 🍎 8

Four months after its iOS release, Super Mario Run has arrived on Android to a rather mixed reaction. It's undoubtedly enormous fun to guide the athletic plumber through colourful landscapes, collecting coins, jumping over obstacles and bouncing on enemies' heads, but frankly it's a bit of a rip-off. Although the app is free to download, and you can try the three game modes without paying a penny, it costs a tenner to continue playing. Nintendo stresses the benefits – play 24 courses across six worlds and unlock more characters – but it's still steep for a mobile game.

Our rating ★★★☆☆

ACTION **UPDATED**
Chicken Scream
www.perfecttapgames.com

🤖 3 🍎 7

This isn't a game to play on public transport, unless you really want to annoy your fellow passengers. The aim is to control the titular bird as it navigates increasingly precarious platforms but instead of tapping your screen, you use your voice. Talk or sing to your phone or tablet to make the chicken walk, and scream to tell it to jump. When you stay quiet, the bird keeps moving slowly but if you don't pipe up, it's likely to fall into the water or collide with a sharp object and die. The latest update lets you trade the coins you collect for new chickens, to make the game even more of a scream.

Our rating ★★★☆☆

SKILL **NEW**
Clawbert
bit.ly/claw421

🤖 4.0.3 🍎 7

Unlike those infuriating claw machines in amusement arcades that always miss the prizes, Clawbert is a friendly two-fingered claw with a "full heart". In this ridiculously cute game, you manoeuvre the claw to grab eggs from below in the hope of landing a prize. These take the form of adorable toy animals, with a further surprise available once you've collected them all. Occasionally, you'll also spot a rare surprise egg that needs to be grabbed before the machine resets. Clawbert is very addictive and much less stressful than screaming at a chicken!

Our rating ★★★★☆

❌ Don't install...

McDonald's
bit.ly/mcdon421

🤖 4.0.3 🍎 8

In theory, the updated McDonald's app is a winner – letting you order food wherever you are and collect it at a convenient time. In practice, it's still a work in progress, particularly because only 22 UK restaurants currently accept mobile payments. We like that you can browse the whole McDonald's menu and view the nearest participating restaurants on a map, but registering for an account is fiddly, and you may still end up waiting for your meal, anyway.
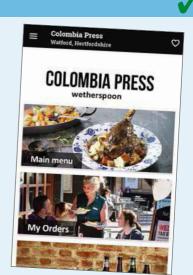
...Install this instead ✔️

Wetherspoon Order and Pay
bit.ly/spoon421

🤖 4.4 🍎 7

No, we're not encouraging you to hit the bottle, we just reckon the Wetherspoon Order and Pay app (as reviewed last issue) is a brilliant way to skip the queue when you fancy a pub meal and a pint (or soft drink, of course). Find a table in a Wetherspoon's establishment, browse the menu on your phone, place your order, and your food and drink will be brought to you without you having to venture anywhere near the bar. The app lets you pay using Android Pay, PayPal or a debit or credit card, and you can apply in-app offers to your order to get instant discounts. Bottoms up! ■

➕ Recommend games at www.facebook.com/webusermagazine

End-to-end encryption

It's the most secure way of sending messages so why is it under threat from the British government? **David Crookes** explains all

What is it?

End-to-end encryption is a system of communication that only allows the intended participants to access the information that's being sent back and forth between them. It is used to prevent third parties from intercepting and reading sensitive and private data, since it virtually eliminates the risk of messages and documents falling into the wrong hands. For this reason, end-to-end encryption is typically employed by businesses, banks and messaging services such as WhatsApp. Yet it is also proving to be highly controversial.

Jane is wisely sending messages using end-to-end encryption

Why is it in the news?

The technology came to the fore in the wake of the Westminster terrorist attack on 22 March when it emerged that Khalid Masood had used WhatsApp seconds before carrying out his actions. Home Secretary Amber Rudd was keen to discover what he was doing in the app but she was frustrated that the intelligence services were unable to access his encrypted messages in their search for clues. She called on WhatsApp's developers to allow future monitoring of the service, saying "there should be no places for terrorists to hide".

Sounds reasonable. So what's the problem?

WhatsApp's end-to-end encryption is there for a reason: it prevents cybercriminals, hackers and snoopers from seeing what users are sending

each other. It is such an effective tool that WhatsApp itself is unable to see the content of messages, so Rudd's insistence that the company hand over details of what they contain is futile – it doesn't actually have anything it can share. This situation has led to Rudd's comments being labelled "uninformed" – see Barry's column on page 74 for his views on the matter – and has also prompted fears that the Facebook-owned WhatsApp – which has more than a billion users who value its privacy and secrecy – could lose a crucial selling point.

MP Amber Rudd is not impressed by end-to-end encryption

What can the government do?

Amid talk of banning the technology, Rudd has raised the question of whether a 'backdoor' needs to be built into end-to-end encryption systems, so that the intelligence services can take a sneaky peek at what's being sent – whether that's text, images, documents, contacts or audio. To weigh the consequences of this, however, it's crucial to have an understanding of how end-to-end encryption works.

So how does it work?

To answer that, we need to look at the WhatsApp process, which starts with a public key being generated and saved on the WhatsApp server when you sign up to the service. When you begin chatting with someone, the recipient's public key is retrieved and used to scramble your message into a long series of digits. The message is then sent on its way, eventually landing on the recipient's device. At this point, it is unlocked using a private key that is only saved on the device itself, so the message can be read. This means that any attempt to intercept a message en route will only result in gobbledegook because there is no way to get hold of the private key without having the device to hand.

WhatsApp's T&Cs explicitly mention its end-to-end encryption

Why does this mean a 'backdoor' wouldn't work?

Simply because it would go against the entire principle of end-to-end encryption. Producing a master key of sorts that could wiretap WhatsApp's messages would compromise the whole system and it is impossible to allow access to one single third-party without potentially opening it up to hackers and cyber-criminals, too. Opponents to this kind of move say it would also infringe on the civil liberties of millions of users and create a free-for-all. Ultimately, it would render end-to-end encryption useless.

Does that mean terrorists can continue to hide?

If end-to-end encryption remains in place with no way for third-parties to intercept and read messages, then yes, perhaps it does. Only those involved in a given conversation can read those messages and that will, unfortunately, mean the bad guys can operate undetected. But it doesn't mean there is absolutely no way in. WhatsApp retains metadata that includes the numbers contacted over the service along with IP addresses. This information has, in the past, been handed to the authorities without compromising the content of the messages. What's more, if the intelligence agencies found a way to control someone's single device remotely, for instance, then they would be able to access any messages – sent or received – as if they were the user. However, such hacking of individual devices is a different issue entirely.

A backdoor goes against the principle of end-to-end encryption

So does that mean my data is still at risk?

Not really. The chances of the authorities wanting to spend the necessary time and resources to access your phone and messages are slim, unless you are known to be up to no good. You'd be at far greater risk from hackers if they knew they could intercept your messages and financial information. The problem is that you can't create a backdoor for a select group of people. It's all or nothing.

Could someone turn off your end-to-end encryption?

Not with WhatsApp, because end-to-end encryption is turned on by default. This means any messages you send through it can only be viewed by the person receiving them – and the same goes for phone calls. The only requirement is that both you and the person you're chatting with have the latest version of WhatsApp installed on your devices. You'll also be made aware that calls and messages you make and send are end-to-end encrypted when you see a message in the app telling you so.

> **Jane**
> last seen today at 18:11
>
> Mon 14 Nov
>
> 🔒 Messages you send to this chat and calls are now secured with end-to-end encryption. Tap for more info.

Nobody can prevent Jane from using end-to-end encryption

Why aren't all messaging services end-to-end encrypted?

That's a question for the developers. The technology is certainly there, but although all services encrypt your messages, most only do so between the customer and the service itself. For example, Instagram stores your messages on its own servers and someone could feasibly read them from there. But that doesn't mean the authorities will be let in without a fight. Last year, Apple refused to allow the FBI to access a password-protected iPhone belonging to a gunman. Tech companies generally understand the importance that most of us place on the privacy of our data, and they are reluctant to undermine our trust in them.

Will the government succeed in banning such encryption?

Maybe, although previous discussions about removing the technology have come to nothing. In 2015, former Prime Minister David Cameron proposed banning encryption, saying he was against a method of communication that, "even in extremis, with a signed warrant from the Home Secretary personally cannot be read". Last July, the government said Amber Rudd would be given powers to ban end-to-end encryption. Yet it would be interesting to see how much power the UK can exert over Silicon Valley.

Isn't this just a way to bolster the Snooper's Charter?

Some reckon so, but a ban on end-to-end-encryption would require an amendment to the Investigatory Powers Act – the so-called Snooper's Charter. It's rather telling that a previous plan to outlaw the technology within the proposed bill was dropped following widespread opposition. David Davis, the current Brexit secretary, said: "Such a move would have had devastating consequences for all financial transactions and online commerce". The debate looks set to rumble on.

Without end-to-end encryption, anyone can eavesdrop on you

TURN ON END-TO-END ENCRYPTION IN MESSENGER

Although WhatsApp offers end-to-end encryption as standard, in Facebook Messenger you have to activate it manually. By doing so, you will be limited to using the service on one device, but it means that your chats will not end up on Facebook's servers, making it impossible for them to be handed over to the authorities.

To enable what Facebook calls Secret Conversations within the mobile app, open Messenger and tap your profile image. Tap the option for Secret Conversations and turn it on. You'll be asked to confirm that you want to do this. Now, when you want to write a message in Android, you can start a chat and tap the Details icon to select Secret Conversation. In iOS, you can tap the pencil icon in the right-hand corner, select Secret, choose a user and write what you like.

> **Secret Conversations**
> Only one device at a time will be able to send and receive secret messages. All secret conversations on other devices will be closed.
>
> Dele
>
> **Turn on secret conversations?**
> This will be the only device you will be able to use to send and receive encrypted messages.
>
> Cancel   Turn On

UNLOCK

The Web's
SECRET CONTENT

COVER FEATURE

Some of the web's most interesting and useful content is buried beneath the surface. **Wayne Williams** reveals how to access hidden gems that few people know about

The web has so much great free stuff that it might seem greedy to want even more, but if you dig below the surface you can uncover all manner of delights. Some of the most interesting online content isn't immediately visible to the casual browser because it's either still being tested, is supposed to have been removed, isn't prominently flagged on the site's homepage or can't be found for some other, more mysterious reason. In this feature,

we reveal the web's best-kept secrets. Over the following six pages, we show you how to access content that's no longer available, unlock hidden tests and experiments, reveal secret tools and forbidden sites, and much more.

We also reveal some of the latest Easter Eggs concealed in your favourite websites and software, from the cute cat that's hidden in Android Nougat to Google's secret stock of animal noises.

TRY SECRET TESTS & EXPERIMENTS

Download Adobe Labs pre-releases

Adobe rolls out beta versions of programs through its Labs site (labs .adobe.com) for you to try, although you'd be forgiven for never knowing it was there. These downloads include new versions of Flash Player and Adobe AIR, as well as plugins and extensions for Adobe's Photoshop and Lightroom image-editing tools. Occasionally, it also makes preview builds of major programs such as Lightroom available for free, so it's certainly worth checking back from time to time.

Adobe lets you try beta releases of its software for free

Sign up for BBC iPlayer beta tests

The BBC is always experimenting with new features and technology in its iPlayer service, and invites you to try its latest tools. If you own an Android device, you can sign up for the Mobile iPlayer beta programme (bit.ly/iplayera421) and test new features in the mobile app prior to full release. In recent years, these have included programme downloads and the Live Restart option for rewinding live broadcasts. There's also a beta version of iPlayer for connected TVs and games consoles. See the FAQ at bit.ly/iplayerc421 for instructions on switching to this.

Become an iPlayer beta tester to be among the first to try its latest features

Download AVG Antivirus betas

Popular antivirus firm AVG has a secret section on its website for beta testers. Sign up to test its software and get a free copy of the latest beta releases for AVG AntiVirus Free and/or AVG Internet

You can download AVG's secret beta software for free

Security. Bear in mind that the software may be buggy and offers no updates or technical support, but if you still want to try the new software for free, you can sign up at bit.ly/avgbeta421.

Test secret beta tools on Wikipedia

Wikipedia has an experimental section called Beta Features that lets you try out new tools on the encyclopaedia and other Wikimedia sites. You need to be logged into the site to test the new features and, once you are, go to bit.ly/wikibeta421. Example new features include Page Previews, which displays previews when you hover the mouse over a page link; and a New Wikitext Mode for editing articles.

Try experimental Wikipedia tools before everyone else

Sample secret YouTube experiments

TestTube (bit.ly/testtube421) is Google's secret ideas incubator for YouTube,

Try experimental YouTube features before everyone else

where you can test experimental features for the video site before everyone else gets to try them. New features come and go, and at the moment YouTube is promoting ultra-high-definition 4K videos, including some that run at 60fps (frames per second). If you have a display capable of viewing this content, sign up for TestTube and take a look at the impressive 4K60 playlist. Make sure the quality is set correctly under Settings.

Uncover the secrets of Gmail Labs

Google used to introduce various experimental features to its webmail service through its Labs. Sadly, this element of Gmail is no longer updated but Labs still exists and you can enable any of the tools that are available there. To access it, log into Gmail using your web browser and click the cog icon. Select Settings, then click the Labs tab and enable or disable any features that catch your eye, such as custom keyboard shortcuts, canned responses, multiple inboxes and a preview pane.

Gmail no longer updates Labs, but it's still worth a look

BEST NEW EASTER EGGS

Tech companies love to sneak hidden features – known as Easter Eggs – into their sites and software. Here are some new ones you might not have discovered

Feed cats in Android Nougat

If you've got the latest version of Android, open the Settings menu, swipe down to 'About phone' and tap 'Android version' until an N appears with a cat emoji underneath. Pull down from the top of the screen twice to open the quick-settings menu, tap Edit and drag the 'Empty dish' icon to the notifications bar. Tap 'Empty dish', choose the food you want and a cat will eat it. You can name your pet and share it with friends.

View web pages that have disappeared

Web pages can vanish from the internet for all sorts of reasons – they could be pulled by the site administrator, removed due to legal issues or culled accidentally. The site itself may currently be down or undergoing a revamp.

If you can't open the page you want, it's possible that Google may have 'cached' (saved) a copy when it indexed the site. To find out, search for the site or page in Google and, when the results appear, click the down arrow next to the web address and select Cached. The most recently saved version will then open in your browser, even if the page itself has since vanished.

Check Google's Cached pages to view a web page that no longer exists

Travel into the past with the Wayback Machine

The Wayback Machine (web-beta .archive.org) is a crucial part of the massive Internet Archive that stores multiple snapshots of websites going back years. It currently has more than 284 billion pages that it's saved over time. Just type in a site URL, press Enter and pick a year. Click any of the coloured circles on the calendar to see the site as it looked back then.

To give you an idea of the scale of what's cached, the Web User site (www.webuser.co.uk) has, at the time of writing, been saved 1,106 times between 4 April 2001 and 16 March 2017.

A handy Site Search feature was added to the Wayback Machine last October, which lets you look for a site

This is what the Web User homepage looked like back in 2003

by typing in keywords that describe it (for example, "new york times") rather than the exact URL. There's also a new Wayback Machine add-on for Chrome (bit.ly/wbmchrome421) that lets you view an archived version of any site you visit, be it a recent capture or the site's very first incarnation.

Some images and media elements may be missing from older snapshots on the Wayback Machine, and the layout might not be quite as it was, but it gives you a good idea of how things looked, and may be the only way to view older removed content.

See an archived version of a page that's been removed

Access pages hidden in Google search results

The 2014 European Court of Justice 'Right to be forgotten' ruling forced Google (and other search engines) to remove links to certain stories deemed "inadequate, irrelevant, no longer relevant or excessive, and not in the public interest". The stories themselves remain on the web, but they no longer appear in search results. The ruling only affects searches performed in Europe, not the US, so if you search
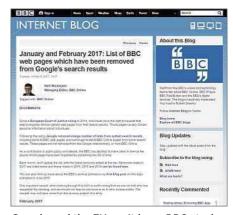
www.google.com rather than www .google.co.uk, you'll probably find the results you want. Google has removed the 'Use Google.com' link that used to appear on the Google.co.uk homepage (although not vice versa), but you can go to www.google.com/ncr to stop the web giant redirecting you to the UK version of the search engine.

Use the US version of Google to find removed content

Read BBC news stories hidden by Google

BBC news stories frequently get removed from Google as part of the European 'Right to be forgotten' ruling. The BBC lists all the affected entries in an effort to maintain transparency and trust – something it's been doing since 2014. The list gets updated every month and you can view the removed stories at bit.ly/removedbbc421. It will be interesting to see if the EU ruling still applies post-Brexit.

Google and the EU can't keep BBC stories off the web!

Discover removed Wikipedia articles

Wikipedia (en.wikipedia.org) regularly removes articles that "do not meet the relevant criteria for content of the encyclopaedia". Reasons for this include copyright violations, advertising or spam, vandalism and unreliable sources. Deletionpedia (deletionpedia. org) rescues Wikipedia articles which are "under discussion" before they can

BEST NEW EASTER EGGS

Visit Skull Island on Google Maps

Kong: Skull Island hit the cinemas earlier this year, and Google has added the location of the fictional island to Google Maps. It's in the Pacific Ocean, just south of the equator (bit.ly/skull421). You can't explore the island (there's a marker, but nothing else), but you can leave a review.

Browse articles that have been deleted from Wikipedia

be deleted, and hosts a copy on the site. As with Wikipedia, you can search for a topic by name or view a random page. There are currently more than 44,000 rescued pages available to read – by repeatedly clicking 'Random page',

we found forbidden articles on Trains of Central Railway (India), obscure actor Todd Michael Schwartzman and, ironically, a complaint about Wikipedia's resident 'deletionists'.

View hidden content on Google Maps

Google Maps now covers most of the planet – but not all of it. Some places are so classified they have been removed – typically blurred or covered – from Maps for security reasons. These include military air bases, nuclear sites, army headquarters and high-security prisons. You won't be able to see them in Maps, but you can find out about some of them by watching the video at bit.ly/hiddenmaps421.

Google Maps blurs certain locations that Bing Maps doesn't

One workaround is to try rival mapping service Bing Maps (www.bing .com/maps), which uses its own aerial photography that's sometimes higher quality and uncensored.

REVEAL SECRET WEB TOOLS

Unlock Facebook's secret inbox
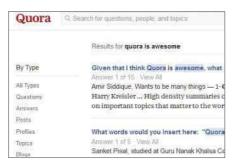
If someone who isn't friends with you on Facebook tries to get in touch, their messages may end up being filtered into Facebook's secret inbox. This is essentially a hidden spam folder but many non-spam messages end up here, too. To access the inbox in the web version of Facebook, click the Messages button at the top of the page, then click the Message Requests link and select 'See filtered requests'. In iOS or Android, open Messenger and, at the bottom, tap People. Tap Message Requests and view 'Filtered requests'.

Check your secret Facebook inbox for lost messages

Browse Quora without logging in

Quora (www.quora.com) is a useful question-and-answer site but, annoyingly, the only way to browse it is by signing in with your Google or Facebook credentials, or by creating an account with your email address. Otherwise, the content is hidden behind an overlay. However, there's a trick you can use that lets you view Quora content without needing to log in. Simply browse Google for the question you want answering – "What are the funniest answers on Quora", for example. Click a Quora result that comes up, and you'll be able to view the answer on the site without logging in.

Alternatively, install the Firefox

You don't need to register to read Quora's hidden content

add-on Quora Login Bypass (bit.ly/ quora417) to close the overlay and jump straight into this hive of knowledge.

Uncover secret Netflix sub-categories

There are thousands of secret categories in Netflix that you can only access by manually entering a specific code at the end of the URL – netflix.com/genre/mockumentaries, for example. Instead of trying to guess all the secret categories, you can use the FindFlix add-on to do all the hard work for you. It's available for both Chrome (bit.ly/ff421) and Firefox (bit.ly/ fffox421), and provides instant access to more than 7,500 hidden categories.

Access hidden categories for Netflix TV shows and films

Find secret Amazon discounts

Amazon regularly cuts the price of products on its site, which can help you bag a bargain – if you know where to look. MoneySavingExpert.com has a handy Amazon Discount Finder (bit.ly/ adfinder421) that lets you find hidden deals with up to 75% off the usual price. Choose a department to check, and an optional sub-category, and enter some keywords if you're after something in particular. You can specify the discount range you're looking for – by default, this is 50 to 100%, but you can widen or narrow it as required. You can also set a minimum and maximum price for the item, and choose to only show items that qualify for free delivery. Click the Search button to open Amazon in a new tab and see the available deals.

On the same page, MSE also has a tool that tells you whether a particular item is becoming cheaper or dearer on Amazon. Simply enter the product URL and click Go to view a full price history from the excellent price-tracking tool CamelCamelCamel (camelcamelcamel.com).

Uncover big discounts that Amazon hides from you

Go beyond your normal searches into the Deep Web

Search for content on the Deep Web

Not to be confused with the Dark Web – which is a collection of often legally and morally dubious websites on an encrypted network that can only be accessed using special software – the Deep Web refers to all the pages on the web that you can't find using a normal search engine. There's a huge number of these pages that you don't know about – it's estimated the Deep Web is around 500 times the size of the web itself – but you can uncover them if you know how.

You'll find an extensive list of Deep Web search engines you can try at bit .ly/deepweb421 – our favourites include the WWW Virtual Library (vlib.org) and DeeperWeb (deeperweb.com).

Access banned websites

Many sites that allow illegal downloads and file sharing have been banned by the UK courts. If you try to visit any of them, you'll see a message from your ISP telling you that the site is blocked for legal reasons. You can get around this by installing a VPN, of which TunnelBear (www.tunnelbear.com) and CyberGhost (www.cyberghostvpn.com) are our current free favourites. Both work on Windows, MacOS, Android and iOS, and offer reliable, reasonably fast download and upload speeds. TunnelBear also has a nifty Chrome extension (bit.ly/tbear421).

Although your ISP can tell when you
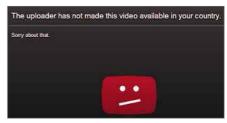
TunnelBear lets you browse websites blocked in the UK

access the web through a VPN (the port used by the tool to connect to the internet makes this apparent), it can't see what you're doing there and, besides, VPN services are perfectly legal to use.

Watch geographically restricted videos

Some YouTube videos – mostly music and TV ones – won't play in the UK because of geographical restrictions. This can be frustrating, but you can get around the block by using the TunnelBear VPN add-on for Chrome mentioned in the previous tip. When you encounter a video that's restricted in this country, set TunnelBear to the US, toggle it on, and reload the page.
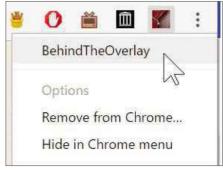

Some YouTube contect is blocked in the UK and can't be viewed

View content hidden behind overlays

Some websites use an overlay to mask their content. The overlay could be a message asking you to sign up to a mailing list, for example, or pestering you to subscribe. Not only do you have to waste time reading the message that appears over the site, but you then have to work out what you need to do to close the overlay.

To solve this problem, install BehindTheOverlay (bit.ly/btoverlay421) for Chrome and Firefox and, when you encounter a site with an overlay, just click its toolbar button to close the annoyance and reveal the page below. The add-on hasn't been updated in a while, but we found that it still works fine.
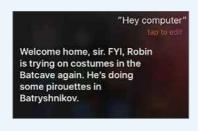

Remove overlays that block your access to web content

OIOI BEST NEW EASTER EGGS

Siri thinks you're Lego Batman

If you have an iPhone or iPad, summon Siri and say "Hey computer", and she will respond to you as if you are Lego Batman. Try it several times to get different responses. This was added to tie in with the recent *Lego Batman Movie* and may be removed eventually.

Google's Chrome smileys

If you open more than 100 tabs in Chrome on iOS or Android (hey, some people do), the tab counter will switch to show an old-school smiley face – :) on iOS and :D on Android. However, if you open over 100 tabs in Chrome in Incognito mode in Android, you'll see a winking face – ;)

Listen to animal sounds in Google Search

If you ask Google: "What sound does a cow make?", the search giant will respond with a mooing noise. That's not the only animal sound available to listen to, either. The rest of the menagerie includes sheep (baa), horse (neigh), lion (roar), tiger (grr) turkey (gobble gobble), dog (woof), cat (meow), and ape (ooh ooh eeh eeh).

UNLOCK SECRET FUN & GAMES

Get a free Android app every week

Google Play has followed Apple's lead and introduced a free App of the Week. This is available to Android owners via the Google Play store, but it's currently only offered to users in the US. However, Android owners in the UK can see what the free app is by using a VPN to visit the new page at bit.ly/freeapp421 (the page won't display if you visit it without a VPN). As well as being able to view the free app, you'll also be able to install it on your device.

Use a VPN to claim a free Android app every week

Visit Google Play's secret Indie Corner

Some of the best Android games come from independent developers and Google Play is highlighting these in its Indie Corner, which you'll find at bit.ly/indie421. You can browse New Indie

Access hidden independent games on Google Play

Highlights, view Google's Android Picks and explore Indie Masterpieces such as Room, Monument Valley and Alto's Adventure.

Play Facebook Messenger's secret games

Facebook Messenger comes with some hidden games you can challenge your friends to play. These include a basketball game (send a basketball emoji to the person you're chatting with, then tap the emoji in the chat window); a chess game (type @fbchess

Play the secret chess game in Facebook Messenger

to play during a conversation); and a football game (send a football emoji to the person you're chatting with, then tap the emoji in the chat window). You can also play classic arcade games such as Pac-Man, Track & Field 100M and

Galaga. To access these, start a chat with someone, tap the game controller icon, pick a game and start playing.

Play Steam Early Access games

Entertainment platform Steam (store .steampowered.com) lets you play and purchase games. It also has a special Early Access section (bit.ly/steam421) that lets you discover and play early versions of new titles. These games are likely to evolve over time, based on community feedback. To try an Early Access game, you either buy it, or – if it's free – start playing it. Once you have the game, all future updates for it will be free. ■

Play the latest titles on Steam before other gamers

0101 BEST NEW EASTER EGGS

Play games in Google Search

To play Solitaire, just search for solitaire in Google. Or search for tic-tac-toe if you fancy a game of noughts and crosses instead. This works in both the web version and in Google's mobile app.

Settle an argument using Google Search

If you can't decide between two possible choices, the easiest solution is to flip a coin. If you don't have any loose change on you, Google can help. Go to Search and type flip a coin and Google will tell you Heads or Tails.

NEXT ISSUE   on sale Wednesday 3 May 2017

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Best New Tab add-ons for Chrome

Make your New Tab page more useful by adding extra features to it. **Edward Munn** rounds up six of the best tools for the job

Beautab | bit.ly/beautab421 | ★★★★★

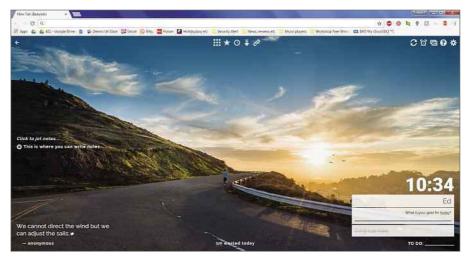FEATURES ★★★★☆ PERFORMANCE ★★★★★ EASE OF USE ★★★★★

What we liked:

Beautab offers the strongest combination of features, usability and performance of all the New Tab tools in our round-up. Like the other award winners, it uses stunning wallpapers to make its pages inspiring and easy on the eye, but it also has a range of practical features to help you keep on top of your daily tasks.

Below its prominent clock, Beautab invites you to set a goal for the day, week or month, so you're reminded of this important task every time you open a new tab. For additional items, you can use the add-on's to-do list, and there's also a jotter, which is useful when you need to quickly make a note of important information such as a phone number or email address.

Beautab offers simple, clear shortcuts to the Chrome pages for history, apps, downloads and bookmarks, which we found both quicker and easier to access than the tools provided by the other add-ons in this test. If you have other links and bookmarks that you want to access directly from the New Tab page, Beautab supports this with its Quick Links feature. For Google searches, the extension offers one-click access to the standard Chrome New Tab page, which is also handy for viewing your most visited sites.

If you're the type of person who's prone to procrastination, you'll benefit from Beautab's Wasted Time feature, which gives a live update of how much time you've wasted on popular sites such as Facebook and Reddit.

Other embellishing features include daily inspirational quotes and the option to set a countdown to an important event. Everything about Beautab is simple and intuitive and the New Tab page is automatically synced across all your computers.

How it can be improved:

Beautab lacks the weather tools of our other award winners and you're only allowed to use your own photos as wallpaper if you make a one-off payment of $1.50 (around £1.20).

OUR VERDICT

There's very little not to like about Beautab. It's fast, attractive and easy to use, so unless you desperately want a weather widget, we'd recommend it ahead of the other add-ons in this round-up.

Infinity | infinitynewtab.com | ★★★★☆
FEATURES ★★★★☆ **PERFORMANCE** ★★★★★ **EASE OF USE** ★★★★☆

WebUser SILVER AWARD

What we liked:
Every time you open a new tab, Infinity displays a simple, intuitive grid of app shortcuts and bookmarks (along with a Google search bar) to make it quicker and easier to launch your favourite websites and services. Indeed, if you're not a fan of Chrome's default bookmarks bar, Infinity offers an excellent alternative that's fully customisable, so you can rearrange, add and remove shortcuts, and even choose how many icons to display on a page. By default, it includes handy apps for History, Bookmarks and Apps, so you don't need to use Chrome's built-in tools. You can add more apps by clicking the '+' icon and searching Infinity's library or save any web page by clicking the Infinity icon on the toolbar when you're viewing it.

Infinity offers free cloud syncing, so the launcher will look the same on all your computers. It also lets you use your own wallpaper and add additional search engines. We like that Infinity's app icons can display live info including the current weather conditions and the number of unread messages in Gmail.

How it can be improved:
Infinity's launcher-style interface doesn't display elements such as to-do lists at a glance – you need to open the relevant app. It also takes a little longer to set up than our other award winners and has a less inspiring design.

OUR VERDICT
If you want to add a fully customisable launcher to your New Tab page, Infinity is the best tool for the job. It's fast, free and easy to use, making it an excellent choice for those who want more than Chrome's default tools.

Momentum | momentumdash.com | ★★★★☆
FEATURES ★★★★☆ **PERFORMANCE** ★★★★☆ **EASE OF USE** ★★★★★

WebUser BRONZE AWARD

What we liked:
Like Beautab, Momentum offers a range of handy productivity tools within a simple, attractive interface. In addition to its striking wallpapers, there's a large clock, under which you can set your main focus for the day. A simple to-do list lets you add further reminders, and you can see the current weather conditions at a glance, too.

As with our Gold Award winner, Momentum encourages you get the most out of your day by displaying inspirational quotes and showing you what percentage of your working day you've completed – just double-click the clock to see this.

Like Beautab, it also assumes that you're happy to use Chrome's built-in tools to manage bookmarks. However, you can save further links directly to the new tab page by clicking Momentum's Links button, which already offers quick shortcuts to your Chrome apps, Gmail and a standard Chrome tab. You also get a simple Google search bar for carrying out instant searches.

How it can be improved:
All Momentum's standout features, including the option to integrate it with external services, require you to pay a fee of $2.50 (around £2) a month. Furthermore, the tool's settings menu can be a bit slow and buggy at times, and we found it frustrating that there was no option to set the start and end times of your working day.

OUR VERDICT
Momentum looks great but it failed to offer any standout features for free, and we found Beautab faster and easier to use.

Currently
bit.ly/currently421
Currently is by far the simplest tool in this round-up. It displays the current time and a five-day weather forecast in a simple, attractive interface, steering away

from the landscape photography and clutter of many of its competitors. Beyond changing the background and text colour, however, there are no customisation options, and most users will find it lacking in features.

DayBoard
bit.ly/dayboard421
DayBoard is an excellent tool that asks for your five most important tasks for today (and tomorrow) so that you see them every time you open a new tab. You can set it to block you from visiting distracting websites so that you get more work done, and it will count the number of times you're distracted during the

day (to guilt-trip you into concentrating on work!). Although it offers quick shortcuts to your bookmarks and apps, DayBoard came up short on features when compared to our award winners.

Toby
bit.ly/toby421
If you're the sort of person who normally has far too many tabs open, Toby can help you to get on top of the problem by helping you save and manage your web pages for viewing later. It's a handy tool that

can improve your focus, but it lacks the tools for creating to-do lists and taking notes that our award winners provide. We also found its lack of wallpaper rather disappointing.

WHO'S TALKING ABOUT YOU ONLINE?

Nobody likes being talked about behind their back but it's useful to know if it's happening. **Robert Irvine** reveals how to find out whether and where you've been mentioned online

Ask Google to alert you to online mentions

It may seem vain to get Google to scour the web every day for mentions of your name – after all, it probably has many more important things to do. But as the biggest, fastest and most accurate search engine, it's by far the best place to start, and its excellent Google Alerts service (www.google.com/alerts) does the job for free.

To use Google Alerts, simply visit the site while signed into your Google account and it will suggest an option or two for creating alerts: usually your name and email address. Select one or both of these, then click the Edit button to specify how frequently you want to receive alerts (once a day, once a week or "as it happens"); the type of sources to peruse (news stories, blogs, videos, web pages or discussions); the language and region to search in; and if you want "only the best" results or all of them.

Google can alert you when someone mentions your name online

Alerts are sent directly to your inbox – unless you choose to receive them as an RSS feed – and can be deleted at any
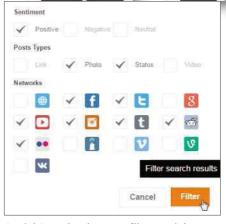
You can receive alerts once a day or week, from specific sources

time. Because Google Alerts is free, it won't cost you anything to also search for common misspellings of your name, in case the person who's talking about you is a sloppy typist.

Keep track of mentions on social media

The 'walled gardens' of social networks are difficult for Google to penetrate, but their own search engines are pretty poor. Fortunately, there are several options available that *can* find mentions of your name on sites including Twitter, Flickr, Reddit and Instagram – Facebook is more of a challenge because it now blocks third-party search tools – although many are aimed at 'brands' rather than people.

Our favourite is Social Searcher (www.social-searcher.com), which lets you search across all the main social networks in one place and filter your results by date, popularity, content type and even sentiment – positive, negative or neutral. The free version limits you to 100 searches and two email alerts

Social Searcher lets you filter social mentions by various criteria

per day; you can get other useful features such as live monitoring, from £3 per month.

Another option is Social Mention (www.socialmention.com), which is free to use but not as extensive as paid-for tools such as Mention (mention.com) or eClincher (eclincher.com). Search for your name and where to look, such as in blogs, micro blogs (meaning Twitter), bookmarks (meaning Reddit, oddly), videos or across everything.
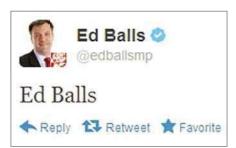

Find out if anyone is talking about you on social-media sites

To monitor social-media mentions in real time, you can't beat Hootsuite (hootsuite.com), which provides live, side-by-side feeds of Facebook, Twitter, Instagram, YouTube, LinkedIn and Google+ profiles. This means you can see posts about or directed to you as soon as they appear, and reply straight away, as well as searching for your name across every service. The free version of Hootsuite limits you to three social accounts; you can manage up to 10 for £7.99 per month.

Just make sure you don't blunder as Ed Balls did six years ago and tweet your own name instead of searching for mentions of it. That fateful date – 28 April – has become known as Ed Balls Day, much to the former Shadow Chancellor's eternal embarrassment.

Six years ago, Ed Balls made an embarrassing Twitter blunder

Search across online discussion boards

Despite the popularity of social networks, plenty of internet message boards are still going strong, including

Use Boardreader to find mentions of your name on forums

our own Web User Forums (forum.webuser.co.uk) – drop by and say Hi! You can find out if anyone's discussing you on a discussion board using the dedicated forum-search engine Boardreader (boardreader.com). Just enter your name (or your forum pseudonym) and click the Search button to find matching results from boards across the web. Click the cog icon to filter results by date, domain and whether the match was found in a forum post or in a thread title (if you're *really* paranoid!). Boardreader doesn't search every forum, but we found it fast and accurate.

Find out who's looking for you online

If someone's really interested in you, chances are they'll want to know where you live, which is even more unnerving than them casually mentioning your name. Online directory 192.com has a service called See Who's Looking For You (bit.ly/see421), which alerts you
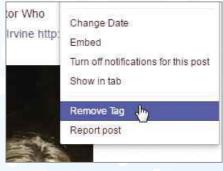
Discover who's been searching for your name on 192.com

when someone searches for your name on the site. The information is collated in the form of detailed reports that tell you exactly who was looking for you, the dates and times they did so, and even the search terms they used. You don't need to be listed on 192.com to receive this data, but you do need to pay a subscription of £3.59 per month or £35.99 per year. The first 30 days are free, but you need to provide your card details and remember to cancel.

Check who's tagged you on Facebook

Some people like being tagged in Facebook posts and photos, but the rest of us regard it an irritating invasion of privacy. To discover who's been tagging and talking about you, go to www.facebook.com/settings and click Privacy. In the 'Who can see my stuff?' section, select Use Activity Log next to 'Review all posts and things you're tagged in' to see a list of links, photos, status updates and comments that mention you. Click the Edit button in the top-right corner of an item and choose Remove Tag to stop it appearing when people search Facebook for your name.

To prevent unauthorised tagging happening in future, select 'Timeline and Tagging' on the Settings page and set the option 'Review posts that friends tag you in before they appear on your timeline' to On. You should also ensure that 'Who can see posts you've been tagged in on your timeline' is set to Friends or Only Me. ∎
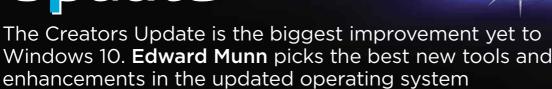
SHARING YOUR NAME ONLINE

Before you get angry that someone on Twitter has called you a "wazzock", remember that there are probably hundreds if not thousands of people with the same name as you. My research for this feature was hampered by the fact that I share a moniker with a critically acclaimed cellist and a 'celebrity' chef. The latter Robert Irvine even has his own eponymous TV chat show and magazine (see picture), making it difficult to find my humble self among his worshipping fans. One way around this problem is to use the old tricks of placing a minus sign in front of word to exclude it from a search, and a plus sign to force its inclusion, for example:
`"Robert Irvine" —chef —cello —"TV chat show" +"Web User" +London`. It's useful to include

terms such as places you've lived and worked, job titles and the names of friends and partners. Otherwise, you may come across mentions such as: "Why the hell has that douche bag Robert Irvine got a TV chat show now?" (bit.ly/why421).
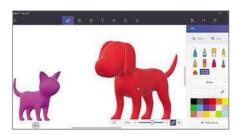

Frankly, we wish we'd never discovered this

Remove tags to stop people talking about you on Facebook

Best New Tools in the Creators Update

The Creators Update is the biggest improvement yet to Windows 10. **Edward Munn** picks the best new tools and enhancements in the updated operating system
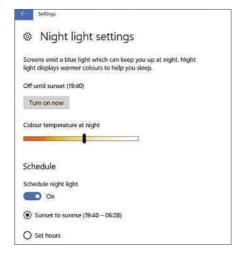
1 Paint 3D

Paint 3D is a new app built into Windows 10 that lets you easily 'doodle' 3D objects and scenes. It's fun to play with, and you can achieve impressive results with a little clicking and dragging around.

Although you can work with pre-made models from Microsoft's Remix 3D website and even send your creation to a 3D printer, Paint 3D lacks the precision tools needed to create complex real-world objects and is not a substitute for specialist design software. Nor does it replace the original Paint tool that's been packaged with every version of Windows ever released, so you can simply steer clear of the new 3D app if you prefer working with flat drawings.

2 Night Light
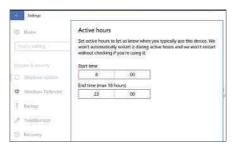
If you find the blue light from your monitor keeps you awake at night, you should try the excellent new Night Light tool included with Creators Update. Similar to F.lux (justgetflux .com), this handy new feature automatically changes your screen to a warmer colour at night to reduce the strain on your eyes. To enable it, open Settings, System and Display, then click Night Light Settings and 'Turn on now'.

You can use the slider to pick a colour temperature you like and turn 'Schedule night light' to On to choose the hours for it to be active.

3 Better controls for Windows Update

One common complaint about Windows 10 is that it forces you to install updates, often at inconvenient times. Although Microsoft hasn't changed its mind on this, you can now pause updates for up to seven days in Windows 10 Pro and Enterprise so you're not interrupted when you're in the middle of something.

To do this, open Settings, then click 'Update & security' and 'Advanced options' under 'Update settings'. On this page, turn Pause Updates on.

Microsoft has also extended the maximum length of your 'active hours' from 12 hours to 18 hours on all versions of Windows 10, so you can make sure you don't get caught out by updates when you restart your PC in the evening. Choose 'Change active hours' below 'Update settings' in 'Update & security', then set the hours during which you'd rather not be interrupted by Windows Update.

4 Improved privacy controls

Another common concern that accompanied the release of Windows 10 was the lack of privacy it offered users. Before you install Creators Update, you'll be invited to review your privacy settings and are no longer encouraged to pick an Express, recommended configuration. Instead, a page appears providing clear information that lets you pick a configuration that best suits you.

Along with this change, Microsoft has introduced a new online privacy centre

where you can check up on the information that's stored about you online, and delete it from Microsoft's servers. Simply visit account.microsoft.com/privacy, sign into your account and you can use the appropriate buttons to view your browsing, search and location history.

5 Better tab-management in Edge

Edge has been updated in the latest Windows build to include some handy new tab-management tools. First, the browser now lets you preview all your open tabs at once simply by clicking the down arrow in the tab bar. There are also new icons at the left side of the tab bar that let you 'set aside' all your current tabs, temporarily hiding them in a sidebar from which you can restore them when it's convenient to do so.

6 Do more with Cortana

Cortana has also had a major overhaul in the Creators Update and now lets you perform new actions including controlling the volume of audio, and locking, restarting or shutting down your PC or laptop. The personal assistant now also supports third-party applications for the first time, so you can use it to control apps including Netflix, Wunderlist and the

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WHAT'S MISSING IN THE CREATORS UPDATE

Several tools set to be introduced in the Creators Update were not available to test in the Insider Preview at the time of writing. Cortana, for example, is expected to bring much greater continuity between your devices. By installing the Cortana app on your iOS (bit.ly/cortanai421) or Android (bit.ly/cortanaa421) device, you'll be able to view your smartphone notifications on your PC and access important PC notifications on your smartphone. What's more, Cortana will even let you sync your clipboard between devices and use the 'copy to' voice command to copy content between them.
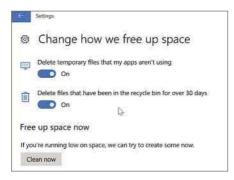

Weather Channel. To view a full list of apps that are compatible with Cortana, visit bit.ly/cort421.

7 Buy and read ebooks

For the first time, Edge now supports unprotected EPUB files, meaning you can open ebooks in your browser in the same way that you open a PDF file. The Microsoft Store has also added a section for Books and when you download one, it automatically opens in your browser so in theory, you could get rid of your Kindle and use your Windows tablet or laptop as an e-reader instead.

8 Free up space automatically

If you're forever running low on hard-drive space, you can now set Windows 10 to automatically free up storage by deleting temporary files and emptying your Recycle Bin. This new feature is called Storage Sense and can be activated by opening Settings, then System and Storage. If you would rather it only deleted temporary files and not files that have been in your Recycle Bin for over 30 days, click the button to 'Change how we free up space'.

9 Auto-lock your PC when you're away

The Creators Update lets you set Windows to automatically lock when you move away from your PC. To take advantage of the feature, you simply need to pair your computer with

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a compatible Bluetooth device (from Settings, Devices) and turn on Dynamic Lock. To do this, open Settings and Accounts, then click 'Sign-in options' and scroll down to 'Dynamic lock'. Tick the box to 'Allow Windows to detect when you're away and automatically lock the device' – and that's it. Windows will automatically lock when you've been away from your PC for more than 30 seconds.

10 Better Start menu

The Start menu is now more versatile than ever thanks to the new app-grouping feature added in the Creators Update. To group apps in the Start menu, drag and drop one on top of another. Clicking the new tile will expand the group to let you see its contents and if you want to remove an app, you can do so by simply dragging it back out of the folder. If you want to hide the app list on the Start menu, you can now do this by opening Settings, Personalisation and Start, then turning 'Show app list in Start menu' to Off.

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	£45.00 (£37.00 for 12 months)	12 months	100Mbps max speed	∞ unlimited *	£444.00

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

Data supplied by www.broadbandgenie.co.uk. Correct as of 5 April 2017.

Ofcom

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

☕ Take a Screen Break

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

CAN YOU GUESS THE FILM TITLES FROM THE EMOJI?

1. 🦁 👑
2. 🗡️ ➡️ ⬭
3. 📅JUL 17 📅Mar 27 🍷 🌹 🌹
4. ♠️ ➡️ ⬬
5. 🤣 👧
6. 🪙 🪙 🪙 ➡️ 🖼️

WEB USER WORD PUZZLE

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

1. Mexican hat
2. Catholic saint known as the Maid of Orléans (4,2,3)
3. 2016 Beyoncé album
4. American football team based in Washington DC
5. Unit of length: 0.62137 miles
6. 1974 Polanski film starring Jack Nicholson and Faye Dunaway
7. River flowing through Turkey, Syria and Iraq
8. First novel by Kingsley Amis (5,3)

COMPETITIONS

See Ordnance Survey maps in 3D

Explore the UK in amazing detail with this new 3D map from the cartographic experts

OS Maps Aerial View: bit.ly/ordsur421 | ⏱ **20 mins** | **Any browser**

Ordnance Survey has launched a spectacular new 3D mapping service, which integrates with its online OS Maps tool. The new feature uses the unrivalled topographic OS surveys of the English, Welsh and Scottish countryside to create a three-dimensional landscape, which it then overlays with detailed aerial photos. The result is a realistic and incredibly detailed virtual landscape stretching from Lands End to John O' Groats, which you can move around and zoom into.

You have to pay for the service, but there's a free seven-day trial if you'd like to give it a go. If you decide to keep it, you can pay an annual subscription of £19.99 or buy access for a single month (perhaps if you're going on a walking trip or want to extend your trial) for £3.99.

1 If you already have an Ordnance Survey account, sign into the service. **1** Otherwise, click the '7 day free trial' button **2** to give it a go. Once you're in, click the Layers button and choose Aerial 3D. **3** You can then explore using the mouse to drag the landscape around.

2 Switch to 'Standard + OS Leisure Maps' **1** to set a route. You can view both the 1:25k Explorer series and the 1:50k Landranger series. Just zoom in and out to switch between them. The bar is colour-coded, with orange for Explorer and pink for Landranger. **2** The grey section **3** is more like a road atlas.
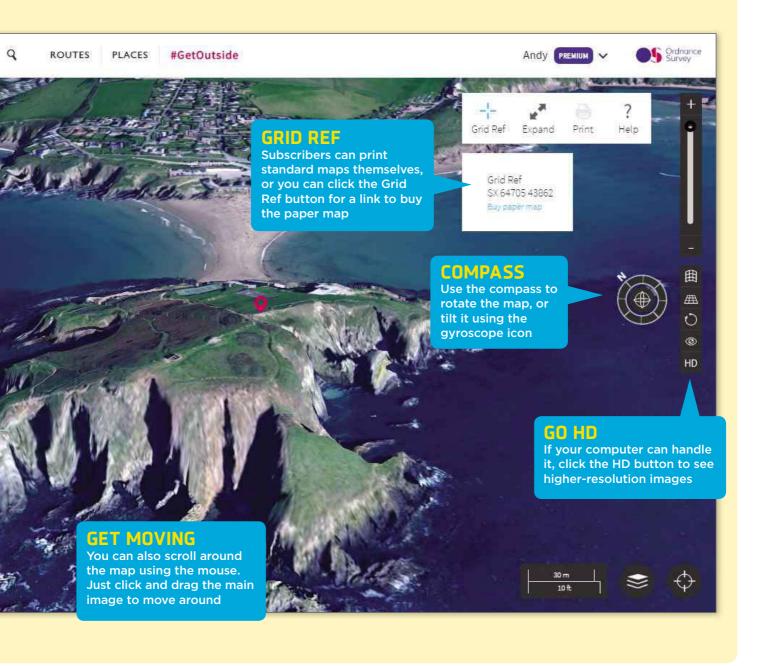
3 Use the search box to find a particular place. **1** The software will drop a pin on the location. **2** Click the 'More info' link **3** to open a sidebar with options to create a route, get directions and check the weather. **4**
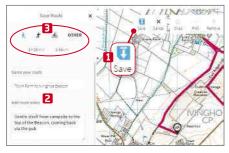
4 Zoom into the area so you can see where you want your route to start. Click the Routes tab, **1** then click Create Custom Route **2** in the sidebar. Click a point on the map where you want the route to start, and a waypoint (a white dot with a pink centre) will appear there. **3**

5 Click to add further points along your route, particularly where there's a bend or junction in the track. This places further waypoints, connected by pink lines. **1** You can see the distance you'll travel **2** and the changes in elevation, **3** so you can prepare yourself for any steep climbs.

ROUTES   PLACES   #GetOutside

Andy PREMIUM ⌄   Ordnance Survey

Grid Ref   Expand   Print   Help

Grid Ref
SX 64705 43862
Buy paper map

GRID REF
Subscribers can print standard maps themselves, or you can click the Grid Ref button for a link to buy the paper map

COMPASS
Use the compass to rotate the map, or tilt it using the gyroscope icon

GO HD
If your computer can handle it, click the HD button to see higher-resolution images

GET MOVING
You can also scroll around the map using the mouse. Just click and drag the main image to move around

30 m
10 ft

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6 Click the Save icon **1** to give your route a name and description. **2** The software tells you how long your journey is likely to take, depending on your mode of transport. **3** Scroll further down the options to choose whether to keep your route private or share it with other users.

7 You can now view your route in 3D. **1** Click the layers button and choose the Aerial 3D option. If you want a full-screen view, click the Expand button, **2** which removes the sidebar and switches your browser to full-screen mode so you can see the landscape in more detail.

8 Many more trails are available from users and other sources, such as magazines and the AA's walking guides. From the Routes tab, choose Discover Routes to load all the potential options visible from your current viewpoint. Click one to view it in 3D **1** or return to a 2D map from the layers button if you prefer.

Create Kodi user profiles to control household viewing

Kodi: kodi.tv | 🕐 **20 mins** | 🪟 **Windows 7, 8, 10**

You can watch almost anything you like on Kodi – from videos you've recorded or downloaded to TV shows and blockbuster movies. However, this Kodi content is shared with everyone in your household, and it's difficult to see who has watched (and favourited) what. If you don't like the idea of sharing your media library or you want to stop people watching content illegally through add-ons, you can use Kodi's support for multiple profiles. Each user has his or her own watchlist, and you can block them from using add-ons that you haven't sanctioned. Switching between profiles is very easy via the login screen that appears each time you start Kodi.
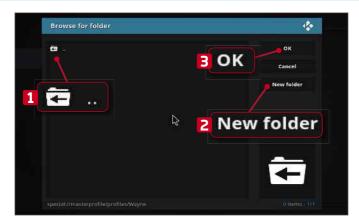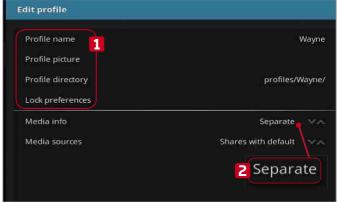
1 Make sure you have the latest version of Kodi installed – it's called Krypton and uses the Estuary interface. If you don't, the interface will be different to this Workshop and the steps won't be quite the same. Launch the software and click the gear icon at the top-left to open the program settings. In the System menu, select the 'Profile settings' tile. **1**

2 On the Settings – Profiles page, select Profiles. **1** If you've never created a profile before, you'll see just two tiles – 'Master user' (which is the default) **2** and 'Add profile', **3** which we'll use to create our first new user. Click the 'Add profile' tile. On the following screen, enter the first user's name and click OK.
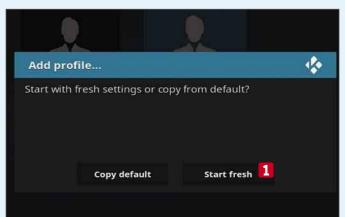

3 Each user will have their own profile folder. If you want this to be in a particular location on your hard drive, you can browse for it. **1** You can also create a new folder by clicking the button. **2** If you're happy to accept the default choice, click the OK button **3** to move on.

4 The 'Edit profile' screen appears. You can change the profile name, add a picture, change the profile directory and manage the 'Lock preferences'. **1** If you have shared media files, you can keep 'Media info' (information about music and videos) and 'Media sources' (where you keep downloaded music and movies) separate **2** or share them with other profiles.

5 Click 'Lock preferences' and set a Master Lock password. You will need to enter this to make changes in the future. Enable 'Profile lock' **1** to protect a profile with a password. You can lock individual elements of the interface, **2** lock the file manager **3** and lock the settings. **4** If you don't want add-ons being added, lock the add-on manager. **5**
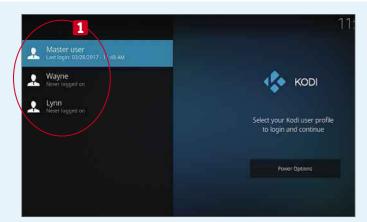

6 You're asked if you want to 'Start with fresh settings or copy from default'. Copying over the current settings will save you time and won't affect the choices you selected for media info and sources, but if you have anything installed that you don't want to pass on, such as add-ons, choose 'Start fresh'. **1**

7 Back on the Settings – Profiles screen, your new profile **1** appears next to the 'Master user'. If you want individual profiles for other family members, click 'Add profile' **2** again and repeat the setup process for the next Kodi user, until everyone has their own profile.

8 To ensure that everyone logs into their own profile when they use Kodi, you need to enable the login screen (it's off by default). On the Settings – Profiles page, click the General tab **1** and switch on the 'Show login screen on startup' setting. **2** If you don't do this, Kodi will automatically load the last used profile when it starts. **3**

9 To test the login screen, go back to the homepage, click the power button and select 'Log off Master user'. Kodi will log out and return to the login screen, presenting the available profiles, including 'Master user', in a strip down the side. **1** Select the profile you want to open from the list of choices.

10 The first time you select a new account, the 'First logon, edit your profile' screen appears. You can change the username **1** and add a profile picture, **2** if this wasn't added during setup. Click OK **3** and that user will now be able to customise Kodi within the limits set up in Step 5.

Get the best Wi-Fi on your network

Sharing your network with other people – especially if they are streaming video or playing games – can feel like you're not getting your fair share of the bandwidth. You can prioritise your own devices (to the detriment of others!) by tweaking the Quality of Service settings on your router. All routers are different but here are some guidelines to help you find your settings.
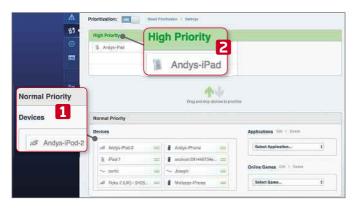
Your router's settings | 🕐 **10 mins** | **Router with QoS**

1 Log into your router from a browser. Most routers have an address you can enter but if yours doesn't, type `ipconfig` into a Command Prompt window and use the IP address **1** next to Default Gateway. Enter the username and password **2** (these can often be found printed on the base of the router).
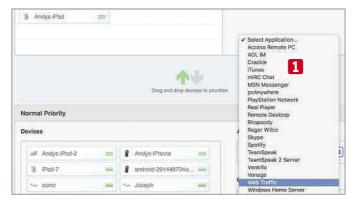

2 Look for your router's Quality of Service settings. If your router splits its settings into Basic and Advanced, it will probably be in the latter. Some routers may call it Media Prioritization **1** or something similar. Basic ISP routers may not have it at all.
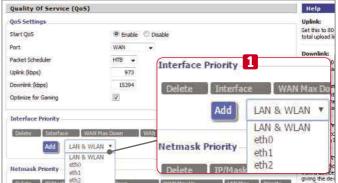

3 Add a device you want prioritised and drag it from Normal Priority **1** to High Priority. **2** This router gives identifiable names to attached devices but some routers use a MAC address, which you can find in a device's settings or, on a PC, by running `ipconfig /all` and looking for Physical Address.

4 Some tools let you set the amount of prioritised bandwidth so you can manage download and upload speeds, **1** and ensure other users aren't hit too hard. Speedtest (www.speedtest.net) shows your broadband speed so you can devote some (but not all) of it to a favoured device.

5 You may be able to give priority to specific services, and some may be set up already. **1** You can use these settings to ensure that gamers aren't getting in the way of your video streaming or vice versa. If a service you want to restrict isn't listed, see if you can add it by searching for its settings.

6 If the device you want to prioritise is connected to your router using an Ethernet cable, you may be able to favour this over Wi-Fi connections (or vice versa). Look for options that let you choose Interface Priority **1** (or something similar).

Stop nosy people swiping through your photos

Have you ever handed your phone to someone to show them a photo, then watched in horror as they merrily swipe through your entire collection of snaps and see something you'd rather they hadn't? ShowStopper fixes this problem by showing only the images you select in a protected slideshow, so your private photos are protected and kept away from prying eyes.
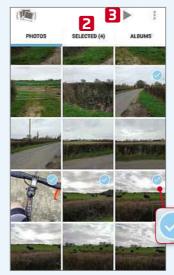
ShowStopper: bit.ly/showstop421 | 🕐 **10 mins** | 🤖 **Android 3.0+** 🍎 **iOS 7.1+**

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1 Install ShowStopper, open the app and choose 'Set passcode pattern'. **1** Use your finger to draw a passcode pattern (you need to enter this whenever you want to quit a slideshow), then tap Continue. Redraw the pattern, then select Confirm.

2 Select the photos you want to show someone by tapping the images, one by one. A tick will appear in the corner of the selected images. **1** You can view a summary of your chosen items by tapping the Selected tab. **2** To deselect an image, tap it again. Select the Play button **3** to display your selection in a slideshow.
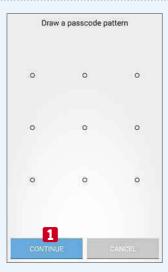
3 Swiping to the left moves from one photo to the next and you can pinch to zoom, as you would in any other gallery app. The home button and notification tray are disabled to stop the viewer leaving the slideshow, but the Recent Apps button still works. If a notification pops up, tapping it exits the slideshow and loads the app.

4 When you've finished showing off your snaps, long-press anywhere and enter your passcode pattern to quit the slideshow. To make an album of the photos, so you can show them off again, tap 'Make an album'. **1** Choose a name for the album, then tap Accept to confirm.

5 Tapping the Albums tab **1** lets you review your saved albums. Use the buttons here to delete an album **2** or play it again. **3** You can't remove individual photos from an album, but you can add more by creating a new slideshow (as described above), then choosing 'Add to existing album' instead of 'Make an album'.

6 To change your passcode pattern, tap the main menu and select 'Set passcode pattern'. Draw a new pattern, press Continue **1** then draw it again and press Confirm. If you forget your passcode and need to exit the app, the easiest way is to press the Recent Apps button, then swipe ShowStopper away to quit it.

✚ Get more practical advice at forum.webuser.co.uk
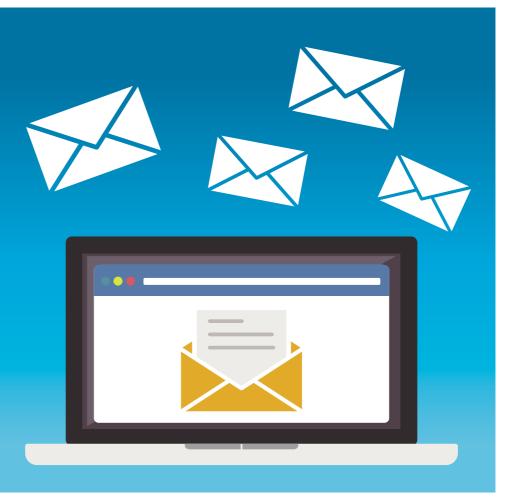
MTWTFSS

How to... Back up your webmail messages

What happens if your webmail company hits the wall? **Wayne Williams** shows you how to back up your emails, just in case

Most people now use webmail, rather than an email service provided by their ISP. It's easy to understand why – webmail lets you view and access your messages from anywhere, on any connected device, whether that's a PC, laptop, tablet or smartphone. You can even access your email on smart TVs.

The downside to webmail is that you need an internet connection to browse and open old messages, and there's always the danger that the company that's storing the data could disappear and take all your messages with it. While that's unlikely to happen with Google or Microsoft (Yahoo is less of a sure bet), it won't do you any harm to prepare for the worst.
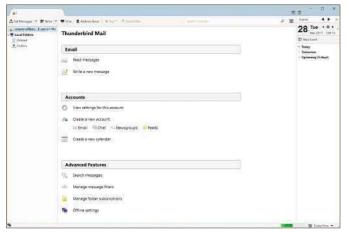
Software to back up your webmail

There are two types of programs you can use to back up your messages. The first is a traditional email client such as Thunderbird (bit.ly/thunbird421), Mailbird (www.getmailbird.com) or The Bat (bit.ly/batemail421). Windows 10 users can also make use of the Mail app that comes with their operating system. Follow our Mini Workshop on page 61

to find out how to download your messages to Thunderbird.

The other option is to use a program such as MailStore Home (bit.ly/msh421). This backs up all your emails and works with any webmail service, including Gmail, Outlook.com and Yahoo Mail. Adding a new account takes seconds and everything is configured automatically – all you need to know is your username and password. You can read, search and

consolidate your messages, and the program fully encrypts all databases and password-protects archives. It also intelligently reduces the amount of space your emails take up by only saving the first instance of an attachment. We show you how to use MailStore Home in our Mini Workshop, opposite.

If you're a Gmail user, you can back up your messages using a program such as Gmvault (gmvault.org) or Got Your Back

Thunderbird is a powerful email client that works with any webmail service

MailStore Home provides an easy way to back up any webmail service to your PC

(bit.ly/gotyb421). The latter is a command-line tool that backs up and restores your Gmail account.

If you're happy to pay for a service that backs up your messages to the cloud, there's Dropmyemail (bit.ly/dmye421). It costs from $19.99 (around £16) a year for 10GB of storage, and you can try it for free for 15 days.

Clean up before backing up

Webmail services provide a lot of space for messages and attachments, which means there's no reason to regularly delete unwanted emails. As a result, many of us have large, crowded inboxes.

Before you back up anything, you should tidy up and remove any junk. Gmail has a powerful search function that makes it very easy to find and delete unwanted messages. If you want to delete everything from a specific sender, type in their email address and press Enter. Click the tick box under the search bar to select all the messages and then

delete them by clicking the bin icon. You can also identify messages with attachments by typing `has:attachment` into the address bar.

If you want to display only the largest messages, you can specify a size in bytes. – for example, `size:1000000`. If you want to remove all older messages, type `in:inbox before:YYYY/MM/DD` and specify a cut-off date. Typing `in:inbox`

Dropmyemail is a paid-for tool that backs up your emails to its own cloud servers

`before:2012/12/01` for example, will bring up all messages received before that date. You can then select and delete them.

Copy your messages over to another service

Copying your webmail from one service to another – Gmail to Outlook.com, for example – is one way to make sure your emails are safe, even if one service shuts down or becomes unavailable. However, this is no longer as easy as it once was. Webmail services such as Google, Microsoft and Yahoo all used to use a service called TrueSwitch to simplify the process of switching from one email provider to another, but that closed down some years ago. Yippie Move (www.yippiemove.com) is the closest modern equivalent, but will cost you from $14.95 (around £12) for a transfer.
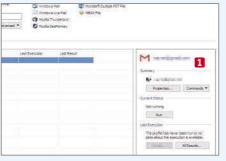
You can import messages from any existing webmail account to Gmail using Google's ShuttleCloud-powered tool.

⚙ MINI WORKSHOP | Back up your webmail with MailStore Home

1 Launch the program and click the Archive E-mail link under Quick Access. From here, you can archive messages from any of the supported email clients **1** or load email files. **2** To back up content from a webmail service, enter your email address in the box **3** and click Start. **4**
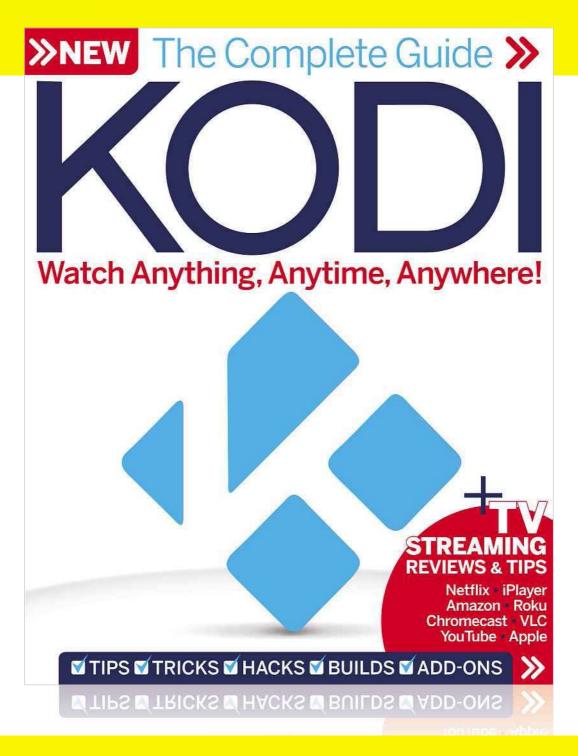
2 The process that follows will depend on the webmail service you use. If it's Gmail, a browser window will open for you to select your account (if you have more than one) and grant MailStore Home permission to manage your email. A profile will be created. **1** Double-click it to start the archiving process.

3 The software will begin importing your email. This will take a while but you can just leave it running in the background. To view your download messages, open My Archive **1** and expand your profile name, then choose between Inbox and Sent. Select a message **2** to view it. **3**
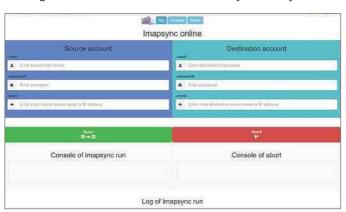
Gmail comes with a tool that lets you import messages from another webmail service

MailStore Home can be installed on any external drive – just select it from the list

Yippie Move quickly transfers your email from one webmail service to another

In Gmail, click the cog and select Settings. Click the 'Accounts and Import' tab and click 'Import mail and contacts'. Enter the details of the account you want to import your messages from, then step your way through the wizard.

A final option to consider is Imapsync (bit.ly/ims421). This open-source tool can migrate email between two IMAP

(Internet Message Access Protocol) servers – which covers most webmail services. To use it, you just enter some text instructions in the Windows Command Prompt box. It sounds complicated but it's not – just follow the simple instructions on the website. Imapsync costs €50 (around £43) but you can try it online at bit.ly/imsy421,

The online version of Imapsync lets you try before you buy, if you don't mind entering your email login information

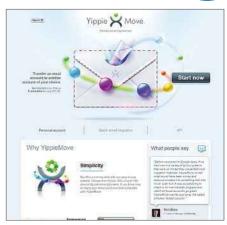provided you don't mind entering your email addresses and passwords for both source and destination accounts.

Back up your email to an external drive

If you want to be able to access your webmail from anywhere, even when you are

without an internet connection, it makes sense to back up your emails to an external drive that you can carry around with you. This could be to an external hard drive or a USB memory stick (it just needs to have a large enough capacity).
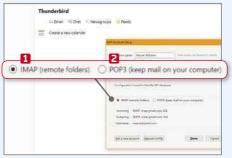
You can do this in MailStore Home. During setup, choose where the program should be installed. If you have an external drive plugged into your computer, it will appear as a destination in the list. Select it and install a portable version on it. All your emails will be downloaded to this drive and can be accessed from there.

Alternatively, MailStore Home offers you the option to back up to an external drive from the main menu. Click the 'Backup to HDD or USB' link, then browse to the drive and folder you want to save the backup to. ∎

⚙ MINI WORKSHOP | Download your messages using Thunderbird

1 When you first run Thunderbird, it will ask if you want a new email address. Click 'Skip this and use my existing email'. The Mail Account Setup wizard will open and fill in your name for you (you can change this if you want). **1** Enter your email address and password. **2**

2 Click Continue. You'll have the choice of using IMAP **1** or POP3. **2** IMAP keeps everything in sync, so if you delete a message in Thunderbird, it will vanish from the web, too. With POP3, messages are simply downloaded so deleting an email in Thunderbird won't remove it from your webmail.

3 Click Done. If you're using Gmail, a browser window will open and you'll be asked to sign in with your account details and grant Thunderbird permission to manage your mail. Click Inbox **1** to view messages being downloaded in the background. Download new emails at any time by clicking the Get Messages button. **2**

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Web User Masterclass

Master **messaging apps** on your phone, tablet and PC. Our experts present their best tips

Send animated GIFs

WhatsApp on the iPhone has the ability to send animated GIF images, which are much more fun than static photos. They can be sent to other iPhones and Android phones, but Android users can only receive them and can't create them.

Open WhatsApp and create a new message. Tap the plus sign and select Photos & Video Library. Select a video clip in the Camera Roll. If you don't see a Video/GIF button, it means the video is too long. Drag the left and right edges to select a short section from a long video and the Video/GIF selection button will appear at the top. Select GIF, enter the message or image caption, then send it.

Create animated GIFs from videos using WhatsApp on the iPhone

Build up the blocked list and stop annoying text messages

Block annoying messages

If your phone number falls into the hands of spammers, they can bombard your messaging inbox with sales pitches – PPI and accident claims, double glazing, solar panels and more. Block the number and you won't see them again.

If you're an Android user, open the text-messaging app on your phone and tap More, Settings, 'Block messages', then 'Block list'. If you know the number you want to block, type it in, othe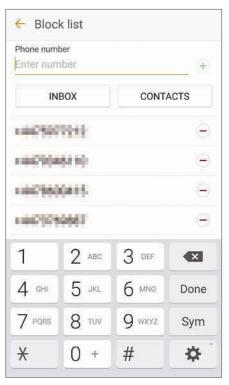rwise tap Inbox to list all your messages and then tap the one you want to block. The sender's number is automatically inserted. Tap the plus button to add it to the blocked list.

Different phones and versions of Android have different menus. If you use Android Messages, for example, open a message, tap the three-dot menu button and select 'People & options'. Tap Block.

WhatsApp can also block people. Open the offending conversation on your Android phone, tap the menu button and select More, then Block. On the iPhone version, tap the person at the top of the conversation screen to show the contact, then scroll down to the bottom and tap 'Block this Contact'.

The Messages app on the iPhone has a selection of useful blocking tools. For example, go to Settings, Messages and turn on Filter Unknown Senders. This disables notifications for people who aren't in your Contacts so they can't pester you. Messages from unknown people are put in a separate list, so you can still access them.

Also in Settings, you'll find the Blocked option. Tap it, then tap Add New to select a contact you want to block. It stops messages, phone calls and FaceTime. If a message comes from someone who is not in your contacts, tap the message in the Messages app, tap the 'i' in the top right corner, then tap the icon and phone number. At the bottom of the screen, you'll find 'Block this Caller'.

Block bad language

If blocking individual numbers isn't doing the trick, try blocking messages by content instead. Keywords and phrases can be specified, then messages containing those words will be blocked.

Open the text-messaging app on Android, go to the menu, select 'Block messages' and tap 'Blocked phrases'. Type a word or a phrase, then tap the plus button to add it to the list. Any

---

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.

messages containing these words or phrases will be blocked from your inbox.

View blocked messages on Android

If you're worried that a message you want to see might have been blocked, go to the messaging app, open the menu, tap Settings, then 'Block messages'. Tap 'Blocked messages' to see a list of items. It works just like the regular inbox, so you can tap a message to read it, long-press to select it for deletion and so on.

React to Apple Messages

Like Facebook, Messages on the iPhone lets you show your reaction to a message. When viewing a message in a conversation, press and hold until an icon bar appears above it. Tap one of the icons, such as the heart, thumbs up or down, laughter, exclamation points or question mark.

Show how you feel about a message using these icons on the iPhone

Use WhatsApp on your PC

If you're sitting at your computer, you might find it quicker and easier to type messages on a proper keyboard instead of your phone's screen. It's very easy to set up – just open a browser and go to web .whatsapp.com. A QR code is displayed. Open WhatsApp on your iPhone and tap the gear icon to open Settings. Tap WhatsApp Web/Desktop and point your phone at the computer screen. It connects instantly and you're immediately online.

TAKE IT TO THE NEXT LEVEL
More advanced tips for when you're feeling brave

Express iPhone emotions

Messages between iPhones can include animations created in the Messages app. Open a conversation and tap the icon next to the text box showing a heart with two fingers. This opens a panel at the bottom. Tap with two fingers to send an animated kiss or long press with two fingers to send an animated heart beating.

Click the up arrow in the bottom-right corner and the whole screen can be used to draw on, like a sketchpad. Tap a colour and draw with your finger. When you've finished, the message is sent as an animation and the recipient will see your drawing appear on their screen.

Change the look of WhatsApp messages

When sending a message to someone, you might want to emphasise certain words or phrases. Type an asterisk to make the text following it bold and then type another asterisk to return to normal – for example, *love*. To make words italic, use an underscore in the same way; and to make words both bold and italic, enter an asterisk followed by an underline, then type your text and enter underline asterisk after to return to normal – for example, *_love_*.
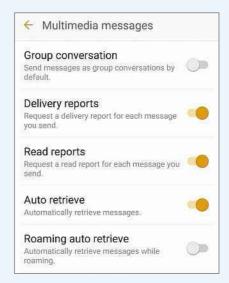
To use strikethrough, enter a tilde (~) before and after the text: ~love~.

WhatsApp has two slightly different fonts and you can switch from one to the other with a secret code. Just surround the text with three single quotes ('''). It's easy to do but there are two quote symbols and you must use the correct one. On Android tap the Sym button to switch keyboard, then tap 1/2 to switch to a third keyboard with more symbols. Tap the tick in the top-left corner three times. Enter some text, then add three more ticks to change back.

Get delivery reports

Have you ever sent a message and heard nothing back? You could be worried that the person didn't receive it, hasn't read it or is deliberately ignoring you. Delivery reports solve this problem.

On an Android device, open the Messages app and press More.

Ask for delivery reports to find out whether messages are received

Select Settings on the menu, then More Settings. Select 'Text messages' and switch on 'Delivery reports', then select 'Multimedia messages' and switch on 'Delivery reports' and 'Read reports'.

The process on the iPhone is a little different. You can't request a read receipt but you can enable your own read receipts, which tells people when you have read their messages. Ask your friends to enable their read receipts so you can tell when your messages have been read.

Switch messaging apps

Android lets you swap the standard text-messaging app that comes with your phone for a different one. The alternatives have different tools and ways of working that might suit you better. For example, go to the Google Play store and find Android Messages by Google. Install it and, when it is first opened, it will set itself as the default messaging app. All your messages are imported and you can use the new Android Messages app instead of the app installed by your phone's manufacturer.

To switch back at any time, open Android Messages, go to Settings and tap 'Default SMS app'. Select the app you want to use from the list. This can also be done from within the phone's settings. Open Settings, tap Applications, then 'Default applications'. One of the options is to set the default text-messaging app.

Ask the Expert

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

GENERAL PC
Access the Windows Store

Q I can't access the Windows 10 Store. I'm not too bothered because I download most of my software from other websites, but it would be nice to fix it.
Edwin Ferrer, via email

A There's a hidden reset command that can fix this problem. Go to Start, find the Windows System folder in the list of applications and click it. Right-click Command Prompt and select More, then 'Run as administrator'. In the command prompt window, type `wsreset.exe` and press Enter to reset the Store.

Another method is to reinstall the Store and its apps. Go to Start, right-click Windows PowerShell and select More, then 'Run as administrator'. At the command prompt, type:

Resetting Windows 10 can refresh your PC if something isn't working

```
Get-AppxPackage -AllUsers |
Foreach {Add-AppxPackage
-DisableDevelopmentMode
-Register "$($_.
InstallLocation)\
AppXManifest.xml"}
```

If all else fails, reinstall Windows. This is easier than it used to be. Open Settings, click 'Update & security' and select Recovery. Find 'Reset this PC' and click 'Get started'. Choose the option to keep your files so you won't lose anything. A major update may also fix the problem, so make sure you've got the Creators Update.

SOFTWARE
Avoid future PC problems

Q My old PC became so slow and clunky that it was practically useless, so I bought a 15in laptop from Dell. Is there anything I can do to stop my new computer going the same way after a couple of years of use?
Brian Prado, via email

A One of the main causes behind computers slowing down over time is the software installed on them. Every application you install adds to the system's workload. If the application loads components in the background, it uses memory and processing power, which leaves less for other applications. Even when you uninstall software, files are sometimes left behind.

To keep your new computer running speedily, avoid installing software and, whenever possible, use portable applications instead. These are provided as ZIP files or executable programs that extract the files and save them to the hard drive, but they have less impact on the performance of the PC and are more easily removed if you decide you don't want them. There are lots of portable programs available at PortableApps (portableapps.com) but you can get them from plenty of other places, too.

Each new version of Windows requires more processing power, memory and hard-drive space than the previous one, so if you want to preserve your PC's speed, stick with the operating system that came with your computer rather than upgrading. This may be difficult or even impossible with Windows 10, but anyone who currently runs Windows 7 should stick with it for best performance.

HARDWARE
Check your HP battery is safe

Q I was told that some HP Pavilion laptops have faulty batteries, so

I went to HP's website (bit.ly/batt421), and downloaded a file that checks for problems (HPBRCULauncher.exe). When I clicked Save, Run it told me that HPBRCULauncher.exe is safe. Have I done the right thing?
Darren, via email

A There have been problems with batteries in a variety of devices, from mobile phones to laptops. In rare cases, they can even catch fire so it's a good idea to keep an eye out for manufacturers recalling suspect units. HP's tool checks whether the battery in your laptop is part of a batch that has been identified as potentially faulty. You've done the right thing in checking the battery, and every HP laptop owner should do the same.

SOFTWARE
Fix a freezing computer

Q My computer freezes at least once every few days. When it happens, I can't click anything, close any programs or even restart the PC – I have to hold down the power button until it switches off. Do you think the hard drive, memory, processor or other component is failing? If so, can it be repaired?
C Hogan, via email

A There are a number of things you can try before worrying about hardware repairs. One problem that often affects old computers is a build-up of dust clogging the fans and coating components. You probably have a fan on the processor and another near the power supply. Buy a can of compressed

Update drivers one at a time, testing the PC to make sure it's working

air and use it to blow away the dust.

Many computer problems are caused by software bugs and removing or updating the offending program can often stop your PC freezing. Start by updating Windows. Go to Windows Update in the Control Panel or Settings app and check for updates. If you use Windows 7, you may also see optional updates. Install those, too.

Next, check all your installed software for updates. Some programs have a menu option to check for updates, or you may need to visit the developer's website. For example, Microsoft releases an update for Office every month, which you'll find at bit.ly/offup421.

Drivers are another common cause of freezes and should be updated to the latest versions. We'd recommend using a driver update tool such as IObit Driver Booster Free (bit.ly/driverb421) but take care when installing it that you don't opt into any offers for extra software.

Update one driver at a time, and make sure the PC is working properly before you update the next one.

INTERNET
Get a better broadband deal

Q I pay just under £30 a month for unlimited fast fibre broadband but I'm at work all day and only use it for a couple of hours in the evening after dinner. This seems like a lot of money to pay for two hours of internet use a day. Is there any solution? Does such a thing as evening internet exist?
Dave Miller, via email

A It's annoying, but the same applies if you pay for a TV subscription – you watch TV for a couple of hours in the evening and the rest of the day you are either at work or asleep.

Ask yourself whether you need such a fast internet connection. Some plans offer 17Mbps connections for £20 or less, which would save you £10 a month. If you're the only person at home using the internet, 17Mbps is fast enough for browsing the web and streaming video to a single device.

There are also savings to be made with all-in-one deals that provide internet, telephone and TV. Go to uSwitch (www.uswitch.com) to compare the deals available to you.

GENERAL PC
Play DVDs in Windows 10

Q I tried several times to upgrade my Windows 7 PC to Windows 10 while it was free, but I could never get it to

finish. It would try but then spend ages restoring the system to the way it was.

In the end, I took my PC to a local computer shop where they successfully installed Windows 10, but now my computer won't play DVDs. Should I take my PC back and demand that they fix it?
Gary Webb, via email

A Windows used to include the software to play DVDs, but this was removed in Windows 10, which means you now need to install DVD-player software separately. Microsoft Windows DVD Player is an option, but it costs £11.59 in the Windows Store and has quite a low rating. We recommend VLC (www.videolan.org), which is a popular, free media player that supports a wide range of discs and media file types.

Windows 10 needs DVD-player software, such as VLC, to play DVDs

TV
Get British TV while abroad

Q I'm going abroad for my summer holiday this year, and I don't know if I'll be able to get English TV or Netflix. If I sign up for a VPN, will I be able to access Netflix? Could I connect to a UK server and pretend I'm still at home?
Robert Gaffney, via email

A In theory, yes. VPN services have servers in lots of countries, including the UK. However, the BBC, Netflix and other broadcasters don't always have the rights to distribute programmes and movies worldwide, so they have to limit where they can be viewed. The security systems for these services may still stop you watching from abroad.

SECURITY
Recover a lost Microsoft password

Q Help! I can't log into my Windows 10 PC. I'm sure I'm typing my login details correctly but I can't get in. Do you have any suggestions?
Sarah Taylor, via email

A Several things spring to mind, and one is that your keyboard may have a faulty key. You may be typing your password correctly, but one or more keys isn't working. Use the mouse to click the 'Ease of access' button in the bottom-right corner of the login screen and select the onscreen keyboard, then click the keys with your mouse to enter your password.

Below the password box, you'll see Sign-in Options. Click it and select PIN or Password. You may be typing a PIN when Windows is expecting a password or vice versa.

Your Windows 10 account is linked to an online Microsoft account, and changing this online also changes it on your PC. If you're using this type of account (rather than a local account for that PC only), use another computer, phone or tablet to access your account and reset the password. Visit bit.ly/reset421 or go to OneDrive or Outlook. Click your profile picture, go to your account and click Security. Follow the instructions to reset the password.

Opera has a free VPN built into the browser, which you can use for private browsing in public spaces

A better option is to download programmes before you go. BBC iPlayer, Netflix, All 4 and others allow you to download movies and TV shows. Visit each app's settings and choose to download in standard resolution rather than HD to reduce the size of the files so you can fit more on your devices.

A VPN is still useful for the extra security it provides while you're abroad. It encrypts the internet connection from your PC so no one can spy on you while you use the public Wi-Fi in hotels and cafés.

This fortnight Roland has been tidying up his Google Photos, which syncs with his phone. He found some awful shots!

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

SOCIAL MEDIA

Clean out social media apps

It's becoming increasingly common for websites, games and apps to use other services to log in, such as Facebook or Twitter. It's very convenient because you don't have to fill out any forms or use a separate username and password to sign in. The only drawback is it can allow the website or app to post to your account and share updates with your friends, and if the app or website is hacked, the hacker can use your identity to post to Facebook!

In Facebook, click the arrow in the top-right to show the menu and click Settings. Select Apps and click Show All. All the apps shown are potential security risks, so it's a good idea to remove any you don't need. As you

Check which apps access your Facebook account and delete any you don't trust

move the mouse over each app, a Remove icon appears. Click this and the app can no longer post to your Facebook feed.

Julie Morrison, via email

GENERAL PC
Run Windows' built-in memory-diagnostics tool

If your PC isn't running properly and you're worried that a faulty RAM module could be the cause, Windows has a built-in tool that lets you test its memory for problems. To run the tool, type `Windows Memory Diagnostic` into the Start menu, then press Enter to run it. You'll see two options: 'Restart now and check for problems' and 'Check for problems the next time I start my computer'. Pick the option you prefer and when your PC reboots, it'll run two separate memory

Launch Windows Memory Diagnostic from the Start menu

tests, which take about 15 minutes.

My PC was running very erratically recently, so I ran this diagnostic test and the results came back all clear, so I was able to eliminate faulty RAM as the cause of my problem.

Victoria M, via email

IOS
Play YouTube videos in background

I recently discovered how to listen to YouTube videos in the background on my iPhone, which is handy for listening to music videos when you put the device in your pocket, for example. You'll need headphones that have an inline remote, such as Apple's Earpods, and will have to visit the YouTube website instead of using the official app.

Open Safari and visit www.youtube.com, then find a video you want to play. Tap Play, then press the Home button to close Safari. Now, press Play on your headphones' remote and the video should start playing in the background, enabling you to either use other apps or lock the phone.
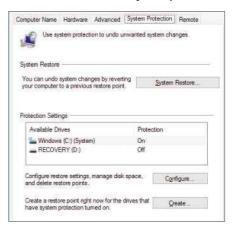
Joseph Howells, via email

GENERAL PC
Back up in two clicks

System Restore is useful for fixing faults with Windows and I have used it several times to undo changes that caused problems with my PC. Here's how to set up System Restore so it can be accessed in two clicks. Open the Control Panel (click or right-click Start), click System then 'System protection'. Right-click the icon on the taskbar and pin it. Now you can open System Properties with one click, then select Create to make a backup or System Restore to restore it.

Ryan W, via email

Pin System Restore to the taskbar to make it really easy to access

APPS
Ask for help with Alexa

Ask My Buddy is an app for Amazon Alexa that lets you alert someone you know that you need help, using only your voice. To use the service, register your details at www.askmybuddy.net, adding the contact details of those you wish to alert. Next, using the Alexa app, enable the Ask My Buddy skill and link your registered account with Alexa.

To alert someone in your contact list, just say "Alexa, Ask My Buddy to alert Fred" to your Echo or Dot, substituting the contact name as required. Or, more simply, you can say "Alexa, Ask My

Buddy to send help". For more help getting started, see bit.ly/askmb421. Bear in mind that this isn't a substitute for contacting the emergency services but it can be a useful addition.

Alexa's voice recognition can be troublesome so you might find it easier to ask Alexa "to contact" rather than "to alert" a named contact. At present, Ask My Buddy is a free service but you're limited to 60 voice or SMS messages in a 30-day period.

ezyduzzit, Web User Forums

SOFTWARE
Open Safe Mode faster

I have been looking for a shortcut to let me restart my PC in Safe Mode and eventually found BootSafe (bit.ly/bs421). It's an incredibly small, lightweight tool that saves you from having to repeatedly tap F8 when you boot your PC to choose an alternative boot mode. The tool lets you choose from Safe Mode, 'Safe Mode with Networking' and 'Safe Mode with Command Prompt Only', as well as Normal Mode. You can also choose to Restart Windows immediately or to Configure Only, if you want to just change the setting and then restart at your own convenience.

FratPark, Web User Forums

BootSafe lets you quickly boot into Safe Mode without all that F8 tapping

GENERAL PC
Hold back the Creators Update

With the old saying "If it isn't broken, don't fix it" in mind, you may want to put off downloading the Windows 10 Creators Update, if you haven't already installed it. It may or may not be compatible with your PC. Who knows? I'm playing safe and putting off upgrading, at least till I know it's bug-free.

One way to do this is to set your internet connection as metered. This tells Windows that your bandwidth is limited and not to download anything big, such as the Creators Update. Open Settings, click Network & Internet, select WiFi and click the network connection on the right. Turn on 'Set as metered connection'.

Another way to put off updates is to change the active hours. Open Settings and click 'Update & security'. Select Windows Update and click Change active hours. Set the active hours to

cover the time you use the PC. For example, 10am to 10pm. Updates won't automatically install if you only use the PC between these hours.

Paul Baker, via email

GENERAL PC
Print lists of files

If you have a lot of photos, music, videos or other files, you may want to create a list of them, and perhaps print it. Here's how to do it in Windows 10. Open the folder in Explorer and click File, then 'Open command prompt' or Open Windows PowerShell, depending on the one you have. At the prompt, type `dir >FileList.txt` and press Enter. To list everything in the folder and subfolders, type `dir /s >FileList.txt`.

The result is a text file called FileList.txt, which you'll find in the folder you started working from. Open it in Notepad and you can print it from there. If there's too much information for you, try typing `dir /s /b >FileList.txt`, which strips out a lot of the data.

You can use the same commands in other versions of Windows but you need to make sure you're in the correct folder.

Dave Williams, via email

PRIVACY
Check how your Facebook profile appears to the public

If you've ever posted in a public group or page on Facebook, you may be worried about how much of your profile others

Select View As to see how your Facebook profile appears to the public

can see when they click your name. The easiest way to check this is to load your profile (by clicking your name in the top toolbar), then click the three-dot button on your cover photo and select View As.

By default, this page shows how your profile appears to a random member of public, but you can also click 'View as Specific Person' and enter the name of anyone on your friends list to see how your profile appears to them. If there's something on your profile that you don't want to be publicly visible, load your profile normally, click the down-arrow next to the timestamp of the post you want to change and pick one of the available options. The 'Friends except...' and 'Specific friends' can both be very handy, but they're best used when you first create a post rather than retrospectively.

Bear in mind that posts will be visible to people who are tagged in a post (and their friends), even if you're not friends with them.

Seb Coates, via email

BLUNDER OF THE FORTNIGHT

GENERAL PC
Fix a slow PC with Windows 10 reset

My tip isn't about a one-off blunder, but about me neglecting to perform routine maintenance on my laptop, which resulted in it becoming incredibly slow and almost unusable. I tried uninstalling programs I didn't need, checked that all Windows updates were installed and even used CCleaner (bit.ly/cc421) to clear out some junk, but still my PC was very sluggish. So, I thought I'd investigate the easiest way to perform a clean Windows installation. I discovered that Windows 10 offers a simple 'reset' option (which reinstalls the OS while retaining all your personal files) and since using this, my laptop's running like new again.

Reset your PC to improve performance and stability

To reset your PC, type `Reset` into the Start menu and click 'Reset this PC'. Next, click 'Get started' and follow the instructions on screen. Remember to back up your personal files first, in case something goes wrong.

Matt Burns, 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!

GENERAL PC

What happens if I never update Windows 10?

Q I want to buy a new laptop, which I have no intention of ever connecting to the internet. Now that updating is mandatory in Windows 10, what will happen if I never install Microsoft's updates? Will my laptop continue to function properly, and if so for how long? Should I consider using an alternative operating system instead?
NikoBold, Web User Forums

A Generally speaking, your PC should be fine. Updates sometimes fix bugs in the operating system and make it run better, but they can also make it worse! They patch security vulnerabilities, too, but if you never connect to the internet this shouldn't be much of a concern.

At some point, you may want to install a new application that requires a particular version of Windows 10, such as the forthcoming Creators Update. If so, you could download the update and transfer it using a USB memory drive or simply connect your PC to the internet temporarily (although the downloads would take a long time). You'll find the latest updates at bit.ly/update421. To check which version of Windows 10 you're using at any time, type `winver` into the Start menu and press Enter.
FratPark, Cantrel, calimanco and Helmut, Web User Forums

About Windows tells you which Windows build you currently have installed
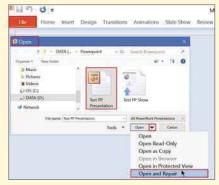
SOFTWARE

How do I fix a broken PowerPoint file?

Q I've been trying to open an old PowerPoint 2003 file but I keep getting a message that says it's not a recognisable format. I tried opening the file in another version of PowerPoint on a different computer but still had no luck. Can anyone suggest how I might fix the document?
Richnes125, Web User Forums

A Later versions of PowerPoint have an Open and Repair option, which should do the trick. Start PowerPoint, then click File, Open and navigate to the problematic file. Select it, then open the drop-down menu and choose 'Open and Repair'.

If that doesn't work, you could try opening the file using the open-source

Try using PowerPoint's 'Open and Repair' feature to fix corrupt presentations

PowerPoint alternative OpenOffice Impress (bit.ly/impress421). If you're using Windows 8 or 10, you can avoid similar problems in the future by setting up File History, which lets you access previous versions of your files. To set this up, open the Settings app, then select 'Update & security' followed by Backup. You need an external hard drive to use it, though.
lizzygraham and Helmut, Web User Forums

SOFTWARE

What's the best free video editor?

Q Recently, whenever I've tried to watch videos that a friend of mine has uploaded to Facebook, the sound distorts badly even though it plays perfectly well on his computer. He has been editing his videos with Movie Maker in Windows 10 and is now looking for a different video editor. What's the best free alternative?
The Badger, Web User Forums

A Do you mean the best free video-editing software or the easiest? The two are not the same – and, of course, they're largely subjective, too. One of the most powerful editors is Lightworks Free (www.lwks.com), but it's not the best choice for inexperienced users because it has a pretty steep learning curve. In *Web User* Issue 412, (bit.ly/webuser412), VSDC (www.videosoftdev.com) was recommended as a full-featured video editor, which comes with a handy guide to getting started, as well as online tutorial videos to help you learn the techniques.

One of the easiest tools to use is undoubtedly YouTube's online editor (www.youtube.com/editor). You'll have to upload all your original files to the site to edit them, but once you've done that, it's easy to trim and combine them. You can see the list of features YouTube's editor offers at bit.ly/features421.
jak and fossewayfella, Web User Forums

YouTube lets you edit your uploaded footage before you make it public

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 WebUser

Copyright infringement is a confusing issue

When the question of whether or not you can copy music legally was finally settled sometime last year, I believe the answer was: "*No, you can't*". One result of this, I believe, was that the music-storage box manufacturer Brenan had to change its advertising because it might have been encouraging people to copy music to Brenan players direct from CDs.

I use Google Play Music Manager, as I assume thousands of other readers do too. This allows me to access music that's already on my computer from the cloud. As well as encouraging me to buy streamed

music, this is an inducement for me to copy my CDs to my hard drive. By transferring my music from my computer to Music Manager's cloud

server (from which I can later access it on my phone or tablet), isn't Google implicated in some aspect of a copyright offence?

It may be that Music Manager copies only a reference to the music, which it then uses to play tracks from its own database, but given the amount of time it takes to upload to the cloud, I suspect the company has actual copies of the music on my hard drive.

I hope I don't sound like a grumpy pedant, and I certainly don't wish Google any harm. It's just that this law is so ridiculous, I wonder how far it actually reaches.

Ian Acocks, Nottingham

Stop charging us for the same product

In response to your Star Email in Issue 419, 'Download restrictions encourage piracy', my biggest beef with the movie and recording industry is this: how many times am I supposed to pay for the same product?

In the Sixties, I bought music by The Beatles on vinyl records. Then eight-track cartridges came along and, later, cassettes and CDs – all media that were eventually superseded as the formats changed over the years. Now it seems I'm supposed to go online and pay again.
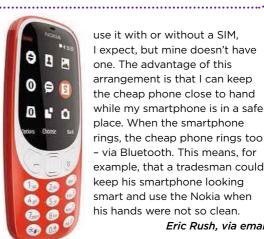
The same is true of films and TV programmes, and yet the industry and artists still complain that they're not making money. Well, let's see, why don't they just change the format again? VHS, DVD, Blu-ray? I can't wait to buy *It's a Wonderful Life* in 4K so that everyone can collect more royalties and I can pay for the same film yet again. Or maybe I should just pirate the film. Under the circumstances, it's easy to see why this prospect is so tempting.

Frank Roman, via email

Why the Nokia 3310 *is* a smart phone

Both you and your sister magazine have written about the new Nokia 3310, and although the articles were good, the writers didn't like the phone's limited capabilities. However, there is one use that both publications missed: the phone can be Bluetooth-enabled.

I've used Bluetooth to connect a cheap £20 mobile to my more expensive smartphone. You can

use it with or without a SIM, I expect, but mine doesn't have one. The advantage of this arrangement is that I can keep the cheap phone close to hand while my smartphone is in a safer place. When the smartphone rings, the cheap phone rings too – via Bluetooth. This means, for example, that a tradesman could keep his smartphone looking smart and use the Nokia when his hands were not so clean.

Eric Rush, via email

Quiz Answers: Issue 420

1 The Holy Bible
2 Fear of Flying
3 The Name of the Rose
4 The Girl with the Dragon Tattoo
5 To the Lighthouse
6 A Dance to the Music of Time

WINNER!
Gren Manuel was the first to email us the correct answers and wins a 2016 Back Issues Disc

WORD PUZZLE

Dualcore

> **"** Home Secretary Amber Rudd talks of "the cloud" as if it's a shady nightclub in Damascus **"**

Give more space to paid-for app reviews

I have been a subscriber to your magazine for some time now and have found it both interesting and valuable. I have come to trust the advice given.

I appreciate that space for app reviews is limited but you allocate much less space per app to your '5 Apps Worth Paying For' than to the main Best Free Apps. As a consequence, when I purchased the Discover Britain's Gardens app, which you recommended in Issue 419, I was disappointed to find that my own region, the North West, doesn't feature in it, and that the app is reissued three times a year. The current release covers only events during the winter period, so it's understandably rather 'thin'. What's more, when I bought the app, it had only a month left to run. Neither of these points was mentioned in your review.

I missed Google Play's two-hour deadline for a refund, so I've contacted the developers in the hope that they will be reasonable. However, I have now learned that I should seek a second opinion before leaping into purchases on the basis of your app recommendations.

Perhaps you could at least give your paid-for recommendations as much space as the free ones. Maybe then the reviews would be a little more thorough.

Alan Toms, via email

Thoughts on Iris and ImgBurn

Your review of Iris (iristech.co) in the Best Free Software section of Issue 419 correctly points out that the program intelligently changes your screen's hue to match your environment and the time of day. What you failed to mention is that the main reason for Iris's existence is to eliminate screen flicker caused by the rapid switching on and off of the backlight LEDs, which controls the brightness in most monitors. This flicker may not be visible to most PC users, but it does exist and can cause problems. For some people, myself included, this results in severe eye strain and headaches. Also, although Iris is free, there is a paid-for version, Iris Pro, that provides greater control over various settings. There is also a Mac version.

On a separate topic, you gave a thumbs-down to ImgBurn in the same section. By pure coincidence, I have used this tool three times in the past week to burn ISO images to a DVD, and I find that it does exactly what I need. The main screen displays the tasks it can perform in a form that's easy to understand, and the program created my bootable DVDs in no time and without any fuss. The main screen of the recommended alternative, Ashampoo Burning Studio, would instantly put me off with its fussy graphics and a hard-to-read menu in the left-hand pane!

Anthony Shanahan, via email

Online privacy is a human right

Regarding all the reports about the government wanting to break end-to-end encryption so they can read our personal messages [see FAQ on page 36]. Some people say: "If you're not doing anything illegal, you have nothing to worry about", but I think this misses the point. It's not about trying to hide stuff from the authorities, it's about human rights. What right has anyone got to intercept my private communication under the pretence of trying to protect the country? Also, how is it even practical to monitor every message sent by everybody in the UK every day? It will surely cost billions, and no doubt us taxpayers will be expected to foot the bill.

If the government does win the right to spy on WhatsApp messages, it will only drive people to use other, lesser-known services in order to protect their privacy, as well as Dark Web tools such as Tor that are harder to crack. Why let a few idiot terrorists ruin things for everyone else?

Peter Savage, via email

Please don't ban Kindles on flights

I sincerely hope that the ban of electronic devices on planes isn't extended beyond flights from Middle Eastern countries. My Amazon Kindle is my most valued travel companion and I shudder at the thought of having to spend four or five hours in the air without it. Yes, I'm aware of an invention called 'books', but lugging around a 1,000-page paper brick feels unnatural and unwieldy to me now, and I much prefer the portability and convenience of a Kindle. Not to mention the fact that it can store thousands of books, in case you fancy a break from the one you're reading.

Personally, I think it's ridiculous that the terrorist threat is robbing us of the freedom to use our electronic devices on planes. Surely there's just as much risk of a rigged laptop or tablet exploding in the hold as there is in the cabin. And I think a terrorist would have to be some sort of technical genius to turn a Kindle into a bomb.

However, it's not my area of expertise so maybe the security experts in the government know best. I certainly won't be leaving my Kindle at home, though.

Leanne Fuller, via email

Question about a graphics card

In Issue 416 of your magazine, you reviewed the XFX XMD Radeon

RX 470 and gave it a Gold Award. When I follow the Amazon link (bit.ly/470amd416), the graphics card pictured on the website is different to the one featured in the magazine.

Can you help me identify which graphics card this is so that I can be sure to buy the one you recommended?

Mark Malekpour, via email

Web User says: As we were going to press with that issue, the graphics card we reviewed was updated to a newer version with a faster processor and fewer fans. This means it isn't exactly the same as the card we reviewed, but it's the next version up and is identical in practically every other way. The improvements should mean it's faster and draws less power, so it's an even better buy overall, even though it's ever so slightly more expensive.

Fat cats don't care about us

Barry is right to criticise fat cats in his column in Issue 419, but he's wrong if he thinks it's only in the tech industry that company bosses are remunerated for their incompetence. Sadly, departing CEOs are almost always rewarded with huge payoffs, even if their tenure was deemed unsuccessful and provided poor service to customers. Rail bosses, banking executives, NHS chiefs – they all take the money and run, without a thought for those of us who have suffered due to their poor decisions and sloppy management. In fact, I read the other day that by any given lunchtime the CEOs of the companies in the FTSE 100 have earned as much as the average worker in the UK earns all year.

With ineffectual government regulation and a general indifference to the needs of the public when there's money to be made, I can't see the situation changing any time soon. That's a pity, because these thoughtless, greedy fat cats always get away scot-free with their wallets bulging.

Ian Grigsby, via email

What you say...

WOULD YOU EVER PAY FOR A PREMIUM TWITTER ACCOUNT (bit.ly/twitter421)?

I think I would pay £50 a year if Twitter used the money to get rid of all the racists and trolls, and made the service more professional.

Paul Golder @eddiecurry

If it meant I had better control over what I see. I get frustrated by people who post vulgar language.

Alan McClean

Don't see the point of membership. As long as I can follow the football and get assistance from companies' customer services if there's a problem, it's perfect for me.

Caroline Sharman

No. Even in business I'm not sure why you'd pay for it. Generally you can see the 'likes', the retweets and the number of followers you have.

Gavin Green

SHOULD THE LAW BE CHANGED TO STOP SERVICES SUCH AS WHATSAPP USING END-TO-END ENCRYPTION?

No. The Government spies on us too much already. It's all for our own good, of course! Not.

Iain Kenworthy-Neale

Encryption is just maths. You can't ban it. It exists. You can ban WhatsApp, but what will that do, apart from upset everyone who uses it to avoid extortionate MMS charges?

Andrew Duerden

The Government already has far-reaching mass surveillance powers. The arguments against breaking end-to-end encryption haven't changed.

Bobby Moss @bob_moss

So because one nutter used WhatsApp, we must ban end-to-end encryption! He used a car as a weapon, too, so will they ban cars and make us travel on public transport?

Greg Talt

HAS LAST YEAR'S EXPLODING-PHONE DEBACLE PUT YOU OFF BUYING SAMSUNG'S NEW GALAXY S8?

No, but the price tag does. I currently use a Galaxy S7 Edge, and switching isn't an option. I'm on a SIM-only deal to keep the monthly costs down, but who can afford the minimum of £650 for the S8 alone?

Stuart A Hordern

I have a Samsung A5. I haven't been put off by the exploding phone saga. I am put off by the cost, however. I could buy a 4K TV for that money.

Geoffrey Boow

Currently using a Galaxy S6. The exploding battery hasn't put me off, but I'll wait to see if any problems surface with the S8.

Gary Olsen

DO YOU THINK MANUFACTURERS EXAGGERATE THE BATTERY LIFE OF LAPTOPS?

No, I think they are near enough spot on. Users overcharge them or only charge them halfway, which ruins li-ion batteries.

Jason 'Boz' Bowyer

They're probably about as honest as miles-per-gallon figures from car manufacturers – laboratory conditions and all that.

Jim @j1mmyr1ddle

The problem is Windoze. Run Xubuntu and batteries last longer than stated.

joemattinson @joemattinson

Barry Collins offers to help the Home Secretary with her tech teething problems

WhatsApp Amber? Not getting the message?

Terrorism today, well it's just not cricket. "It used to be that people used to steam open envelopes or just listen into phones when they wanted to find out what people were doing," the Home Secretary lamented to Andrew Marr, days after the recent terror attack in Westminster. Now companies such as WhatsApp and Apple are providing a "secret place for terrorists to communicate". What's a spook supposed to do?

Yes, despite any credible evidence that the terrible events in Westminster were planned over WhatsApp or iMessage, the Home Secretary and a vengeful media have got it in for encrypted-messaging services.

To be clear, Amber Rudd doesn't want to ban encrypted messages, she just wants the spooks to have access to them. She doesn't understand that effectively amounts to the same thing – break encryption for the security services and you also break it for the thieves, terrorists and oppressive regimes who want access to private messages, too. But then judging by her performance on *Marr*, the Home Secretary doesn't seem to understand much about technology at all.

"We're not saying open up, we don't want to go into the cloud," said Rudd, talking of "the cloud" as if it's a shady nightclub in Damascus. "I would ask [Apple CEO] Tim Cook to think again about other ways with helping us work out how we can get into situations like WhatsApp on the Apple phone," she added. "It's not necessarily Apple itself, sometimes it's WhatsApp and the other situations on it." Yes, we've all installed those 'situations' on our phone, and suddenly found ourselves in an awkward conversation with Jihadi John.

> " Break encryption for the security services and you also break it for thieves, terrorists and oppressive regimes "

Still, Rudd's not stopping there. She's going to demand Google takes down websites publishing terrorist manuals – seemingly confusing a search engine with web hosts – and then, best of all, she's going to meet with "the best people who understand the technology, who understand the necessary hashtags". Perhaps they could start with #CluelessHomeSecretary?

Now, of course, it's very easy for me to sit here with 20 years of experience in technology and poke fun at the Home Secretary, in exactly the same way it's far too easy for someone with a career spent in investment banking and recruitment to be put in charge of the country's anti-terrorism unit. Which is why, having watched her stumbling television appearance, I tweeted the following:
"Genuine offer to @AmberRudd_MP: I'll get a group of internet/security experts together to brief you properly, so you don't repeat #Marr."

I wasn't expecting a reply. But a day later, when having read my message and made a similar offer of his own, Wikipedia founder Jimmy Wales retweeted the message, I thought it might at least pique some interest. After all, he runs the fifth biggest website in the world. He's bound to know all the necessary hashtags.

So, I repeat the offer here, safe in the knowledge that at least one Conservative MP reads this column (Hi Grant!). One hour with me, Jimmy and the best experts I can find: free of charge. Hit me on WhatsApp if you're up for it, Amber.

Illustration: Andrew Torrens

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

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