DOWNLOAD BANNED APPS & SOFTWARE

100% SAFE p40

Get back what they've taken from you p40

PLUS

BEST VPNs TESTED
Our Gold winner is a bit controversial! p46

HACK YOUR OWN ROUTER
Faster streaming • More storage • Better security **page 58**

Wide enough for your **best ideas** with panoramic UltraWide screen

Expand your experience with this panoramic 34" (86 cm) UltraWide Philips display. See the big picture with all the details with AH–IPS and QHD 3440 x 1440 resolution. Multitask like never before with multiple applications at once.

PHILIPS

BDM3470UP
BDM3270UP

The best of the banned

A sure-fire way to make anything more desirable, regardless of its quality, is to ban it. Just look at all the horrific low-budget horror films that gained instant, undeserved allure when they were added to the Video Nasties list in the Eighties.

You won't find any gory scenes of cannibalism and murder in our round-up of banned software and apps on page 40, but you will find lots of useful tools that have been unfairly prohibited by Apple, Google, Microsoft and other official sources. Often, this is because the app or program breaks one of the website's rules, but sometimes the only reason a tool is banned is because it poses direct competition to one of the company's own products. Follow our advice and you'll be able to get your hands on these forbidden gems, without putting your phone or PC at risk.

I'm also excited that our long-awaited back issues CD, containing all 27 issues of *Web User* from last year, is now available to buy. Turn to page 19 for full details.

Robert Irvine
robert_irvine@dennis.co.uk
#webuser

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5 Things you'll learn this issue

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abc Average sales, Jan-Dec 2014, 29,057 copies per issue

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FAVOURITES   Must-read regulars

Which version of Windows were they 'friends' with? **p51**

Practical WebUser
Workshops, tips, projects and problem solving
16 pages

Get to grips with Icecream Screen Recorder **p52**

Preview
Doctor Who Series 9 Teaser
New monsters, new adventures, new stories. Your full journeys with the Doctor begin here!

Full description   Programme website   Credits

More on series 9

Use your router to its full potential **p58**

What's New Online

Stream tracks in Amazon Prime Music

A year after launching in the US, Amazon's music-streaming service has finally crossed the Atlantic. It's been added to the services available through Amazon Prime, which costs £79 a year to subscribe to. Over 12 months, that works out cheaper than Apple Music and Spotify (both £9.99 a month), but Amazon's music library is much smaller – only a million tracks, compared with its rivals' 30 million.

Once you've signed up, you can listen to music on Amazon Fire tablets, the Amazon Fire TV, the Fire TV Stick, iOS and Android devices, PCs, Macs and through the Amazon website. Phone and tablet users will be able to download music to listen to offline. Downloaded tracks will only be available within the Amazon Music app, though, to stop people exporting them to other devices.

Like Spotify, Amazon is relying on the power of playlists to keep people listening. You can choose from hundreds of hand-built Prime Playlists, covering all manner of artists, genres, occasions, moods and activities. There's even a dedicated 'commuting' playlist for the morning train ride. For more information, read Amazon's 'About Prime Music' page at bit.ly/prime377. www.amazon.co.uk/prime

Watch 120 years of news on YouTube

www.youtube.com/c/aparchive
Between them, the Associated Press and British Movietone have put over 550,000 videos of archived news on YouTube, dating back to 1895. It's an unbeatable collection of news footage, covering many of the 20th Century's major events, including the fall of the Berlin Wall, VE Day in London and the Hindenburg airship disaster. You'll see Charlie Chaplin on honeymoon in 1936; George Formby entertaining the troops during World War Two; and The Beatles receiving their MBEs in 1965. Click the link above for the AP Archive, and visit www.youtube.com/c/britishmovietone for the British Movietone footage.

Listen to Nasa's Voyager Golden Record

bit.ly/nasa377
Attached to the Voyager probes that Nasa launched in 1977 is the Golden Record – a disc containing sounds and music representing life on Earth. Should an alien civilisation ever find the probe and have the wherewithal to play the disc, they would hear classical music, greetings in 55 languages and sounds from the natural world. It's the last of these that Nasa has now put on Soundcloud, in high quality, replacing the poor-quality versions that had been scattered around the web. You can hear animals (chimpanzees, hyenas, elephants and birds), weather (wind and rain), transport (cars, trains, tractors and ships) and human sounds (laughter and crying).
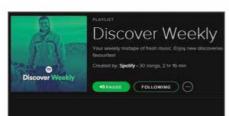
The probes have now travelled further through space than any other man-made object. Nasa tracks their progress in real time at bit.ly/voyager377. When we last checked, Voyager 1 was 19,681,793,065km from Earth.

We highlight 10 of the most amazing and amusing things you can do on the web this fortnight

Get a personalised Spotify playlist every week

bit.ly/spot377

Spotify has been busy adding features to its music-streaming service, hoping to persuade its users to stay loyal in the wake of Apple Music's launch. The latest is a two-hour playlist of recommended songs, called Discover Weekly, which Spotify says is like "having your best friend make you a personalised mixtape every single week". Tracks are selected based on your tastes, and those of people who like similar music to you. Look out for it at the top of your playlist folder every Monday.

Use Windows 10 Twitter app

bit.ly/twitapp377

Twitter didn't waste any time launching an app for Windows 10, releasing it on the day the operating system was made available to download. Its standout feature is showing tweets in the Start menu's live tiles, without you having to sign in. However, if you do sign in, you can do much more, including attaching multiple photos to tweets and watching Vine videos. Click the link above to download the app from the Windows Store, and read more on Twitter's blog: bit.ly/twitter377.

See where you've been in Google Maps

www.google.com/maps/timeline

Google has a habit of making tools that are simultaneously useful and a bit creepy. The latest is 'Your Timeline', which shows in Google Maps where you've been in the real world, as well as photos you took on the route. On its blog (bit.ly/maps377) Google says it's a way to "remember the places you've been on a given day, month or year", though this obviously means the company is watching your every move! If this worries you, just turn off 'Location History' in Google Maps.

Translate 20 new languages using Google's app

bit.ly/translate377

Turkish, Polish, Indonesian and Catalan are four of the 20 languages Google has added to its Translate app, which deciphers words using your phone's camera. The new languages join the original seven the app could read when it launched in January: English, French, German, Italian, Portuguese, Russian and Spanish.

5 TO FOLLOW ON TWITTER

@Commodoresmart
News on the Commodore Pet phone, which runs a customised version of Android 5.0

@BBCWiT
Updates on who's about to appear on BBC radio, along with photos ('WiT' stands for 'Who's in Today')

@susie_dent
Expand your vocabulary with *Countdown*'s resident lexicographer

@GoogleTrends
Insights and analysis from Google's experts on top searches

@CloudAppSoc
Beautiful photos from the Cloud Appreciation Society

+ Sync your Office files with Google Drive

bit.ly/drive377
Google has launched a plug-in that synchronises your Microsoft Office and Google Drive accounts. It lets you open and save Word, Excel and PowerPoint files online in Drive as easily as you already can in Microsoft's OneDrive.

Get Wikipedia alerts via IFTTT

https://ifttt.com/wikipedia
The new Wikipedia channel on IFTTT has lots of useful 'recipes', but our favourite is the weekly email digest of articles. We also like the option to receive Wikipedia's Picture of the Day (bit.ly/potd377) on your phone.

Sign up for YouTube Gaming

gaming.youtube.com
This summer, YouTube will launch its Gaming channel, hoping to rival the success of Twitch (www.twitch.tv). Sign up to get an alert when it goes live (though it may already be by the time you read this). Read more on YouTube's blog: bit.ly/yt377.

Windows 10 accused of compromising users' privacy

What happened?

Windows 10 arrived at the end of July, with 14 million users installing it on the first day. However, the new operating system has already raised concerns about privacy.

Many users have complained about Windows 10's default settings, particularly those that involve Wi-Fi passwords. Wi-Fi Sense is Microsoft's new way of sharing your wireless connection. If you're sitting next to a friend – which Microsoft identifies by looking at your Skype, email or Facebook contacts – they can get access to the Wi-Fi connection you're logged into. This saves you needing to dig out your Wi-Fi password when you have a guest in your home

However, security experts have warned that this could prove a problem, with access to your network being given to too many people. In defence of Wi-Fi Sense, Microsoft says that it only shares an encrypted version of your password, and that you have to approve anyone who tries to log in via your computer.

Wi-Fi passwords aren't the only worry relating to Windows 10 and privacy; Microsoft's new advertising system has

also prompted complaints. Every user has a unique ID tied to their Microsoft email address, and that's now being used to target personalised adverts. The advertising isn't shown directly in the operating system, but appears on the web and in some Windows Store apps.

Most of the options causing these privacy concerns can be turned off in Windows 10's settings, but Microsoft is being criticised for activating them by default and for making users jump through hoops to disable them, with the various options spread across multiple privacy settings screens.

There is one setting you can't change: whether to install security updates. Microsoft is letting you decide whether you want to be asked before it restarts your PC for updates, but it's making the updates compulsory. That should be good news for users, because many people delay updates, which leaves them at risk of being hacked.

How will it affect you?

If you're not keen on Wi-Fi Sense, you can turn it off and remove permission for anyone you've previously approved. Simply go to Settings, click 'Network

and Internet' and then Wi-Fi. You can turn off the features under Manage Wi-Fi Settings. You can also prevent the service from using your Wi-Fi by changing the name of your wireless access point (the SSID) so that it finishes with the phrase "optout".

For the other problems, you'll need to take the time to step through Microsoft's many settings to disable anything you're not keen on. Frankly, it's good advice to do this with any operating system, even one you've been using for years or a mobile system such as Android, so you can understand what your options are, even if you don't in the end disable anything.

What do we think?

It's understandable that Microsoft is trying to learn about our behaviour and interests, so it can boost its earnings from advertising, but why can't it put the same effort into important areas such as privacy and security? It's willing to show us ads to sell products, so it should do a better job of clarifying privacy and security settings for users.

A simple privacy setup wizard could guide you through any changes and let you opt in or out of the features in an informed manner. Wi-Fi Sense is a clever system that could save time for many of us, but some people will disable it because they don't understand the risks or limitations, which is a shame.

The assumption that these systems need to be opt-out, or users will never turn them on and they'll be worthless, also seems like an imposition. An alternative would be for Microsoft to simply ask every user whether they want to use them. Some people may complain that the long list of requests will make slow work of completing the installation, but users could also be offered the option to set up their own privacy settings, or default to a privacy-focused mode or sharing mode.

Windows 10 Solitaire bombards you with ads

Microsoft has returned Solitaire to Windows 10, but with caveats. The free version of the classic card game is now full of advertising, including video clips that you can't skip. The only way to dodge watching the ads is to upgrade to the paid-for version at a cost of $10 (£6.41) a year. This is rather ironic because Windows 10 itself is a free upgrade.

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

Switching phone network to be easier

What happened?

Telecoms regulator Ofcom revealed plans to make it easier for customers to move from one mobile network to another. At the moment, anyone looking to switch networks and keep their phone number must get a Porting Authorisation Code (PAC) from their current provider and pass it on to their new one. Ofcom wants the new network to look after this process on behalf of the customer, making it easier to switch and hopefully increasing competition between networks.

But these regulations won't be introduced for a while. Ofcom has started a consultation process, seeking feedback from both mobile networks and the public. The results won't be published until next Spring.

How will it affect you?

It should save you money. If it's easier to switch networks, it's easier to take advantage of new deals, regardless of how long you've been with an operator.

Typically, loyal customers are punished by sticking with the same contract year after year. As with interest rates and saving accounts, everyone knows that they should shop around for a new deal when their phone contract ends. But Ofcom's research shows that the complexity of switching deters many people, which allows networks to keep their prices high.

What do we think?

Ofcom should be praised for finally taking steps to improve how companies that make billions of pounds in profit from communications contracts treat their customers. Networks need to learn that the way to keep customers is through good service and fair prices, not by making it so difficult to switch that they lock us in.

That said, it's a shame Ofcom's consultation will take so long. After all, it's already made similar changes to the broadband market, so it's hard to believe it won't eventually do the same for phones.

Android bug puts millions at risk

What happened?

Security researchers exposed one of the most serious bugs ever to be found in Android, saying it could affect up to 950 million phones worldwide.

Researchers from San Francisco-based security firm Zimperium revealed that the so-called 'Stagefright' bug could allow hackers to access the data on your phone and listen to your conversations, simply by sending you a text message. The most worrying aspect of this bug is that the hackers wouldn't need to trick you into doing anything and could even wipe the message before you're able to read it, with the damage already done.

Zimperium said that Stagefright affects all versions of Android from 2.2 (Froyo) onwards. Around 95 per cent of phones are vulnerable to varying degrees of severity, although the newer your phone, the more likely it is to have security defences that are strong enough to reduce some of the risk.

How will it affect you?

Don't panic, because it's not clear whether the bug is being used by hackers. You should install any Android updates immediately, although they may take a while to filter through, and may never be released for older phones. This is why you shouldn't hang on to an old phone for too long, or should only use it in ways that don't leave it vulnerable to hacks. As always, keep your important data backed up and only download apps and visit websites you trust.

What do we think?

Some security experts have suggested that this is a reason to switch from Android to the iPhone, which is updated more regularly. We wouldn't go that far, but manufacturers of Android phones need to improve how they release security updates. We'd like to see a faster, more universal system for applying fixes because this won't be the last vulnerability that's discovered in Android.

Government porn-block plans under fire

What happened?

Prime Minister David Cameron has announced plans to block adult websites that fail to keep children from seeing their content. The Conservative Party has long been pushing to crack down on online pornography, all but forcing major ISPs to offer parental-control software two years ago. Now, the government is demanding that pornography sites use age-verification systems to prove how old users are before they can access their content. This means that anyone wishing to see the site will have to identify themselves, most likely by using a credit card.

Any site that doesn't cooperate will be shut down and, if based overseas, blocked, so it can't be accessed by UK viewers – although that still won't stop people using some well-known, simple techniques to dodge such blocks. The plans are currently under consultation by the government, with a decision expected this autumn.

How will it affect you?

There are other age-verification methods available, but Cameron has suggested he favours using credit cards. If the plans come to fruition, it means you'll have to share your identity with the site. This could cause privacy and security problems – the recent hack of online 'adulterous affairs' site Ashley Madison showed that material of this nature can attract hackers who are looking to blackmail members. Additionally, pornography sites are notoriously dodgy – and not just because of the pictures and videos they contain. They are often a source of malware, and fake sites could easily be set up to harvest credit card details.

Cameron has said that any adult site that doesn't verify your age for access will be shut down. That's easy enough to enforce in the UK, but overseas sites can't be controlled by UK court order, although they can be blocked. ISPs have long used blocking technologies to stop images posted online of children being sexually abused being viewed in the UK, and have over the past few years used the same technology to block illegal piracy sites. Well, they've tried to, but many of the piracy sites have shifted to alternative technologies, such as BitTorrent, or simply rehosted the site on a different domain. Users, meanwhile, can easily access a site blocked in the UK by installing a VPN.

What do we think?

The government is right to try to protect children online – there's a lot of content, pornography included, that any right-thinking adult would want to shield from young minds. But, as is often the case, the government clearly doesn't understand the full implications of what it's trying to do or the ease with which such technical restrictions can be dodged. Does David Cameron really want the UK's porn habits to become a hacking target for criminals the world over? We need to protect children – and anyone else who doesn't want to see such material – but there has to be a better way. Here's hoping that the consultation finds some smarter solutions.

👁 FIRST LOOK

Gramofon
gramofon.com

The biggest problem with using Spotify to listen to all your music is that it's tied to your PC, tablet or mobile, which might not be connected to your best speakers. To transfer your music to your hi-fi – or any other speakers – there's a new device called the Gramofon.

This is a stylish-looking black box that streams Spotify over Wi-Fi, and plays it out through a simple 3.5mm stereo output. It works with any speaker or hi-fi that has a standard 3.5mm auxiliary-in socket you can plug it into.

You need an Android or iOS device to control the Gramofon, because it doesn't have any buttons or a screen of its own. You just download the Gramofon app to run its setup, which will attach it to your Wi-Fi network. The Gramofon then uses Spotify Connect to link directly to the music-streaming service so, once it's set up, you just use the Spotify app as normal to play your music. Choose the Gramofon from the Spotify Connect menu and it will start streaming your selected tracks through the device. Spotify Connect is only available in Spotify Premium (£9.99 per month).

The Gramofon connects directly to Spotify via your Wi-Fi network, so the app is essentially just a remote control. However, it has some sophisticated extras, including a multi-room control system that lets you sync more than one Gramofon and have them all playing the same music around your house. It will also stream your digital music, if it's stored on a DLNA-compatible device.

Another great recommendation for the Gramofon is its price. You can buy it direct for €59 (around £42), which is great value for money if you're already a Premium user.

Although the basic headphone-style connection it isn't going to appeal to audiophiles, it's a handy way to get music from the Spotify service on to your favourite speakers.

WHAT'S THE RUMOUR

Will the new iPhone have Force Touch?

Nothing in the world of tech generates more rumours than a new iPhone. Even the choice of name can trigger endless speculation. But we don't blame anyone for getting excited about the prospect of Force Touch arriving on the next iPhone. It could revolutionise how you use the device.

Force Touch, which is already available on some of the latest MacBooks, lets you perform different tasks depending on how hard you press the trackpad. For example, if you highlight a word while browsing the web, you can then press the trackpad to see links to sites such as Dictionary.com and Wikipedia (see other options on Apple's website: bit.ly/force377). The Apple Watch also supports Force Touch.

Because everything you do on an iPhone requires tapping and swiping, Force Touch seems an obvious addition to the device. App developers would be able to build menus and options that appear when you press hard, which is different from the long-press that the iPhone already responds to.

Rumours began in March when *The Wall Street Journal* reported the development of Force Touch – information it gathered after speaking to insiders from companies that supply materials to Apple. Regular reports reinforcing the rumours have emerged

since, but they contain more enthusiasm than detail.

As for when the iPhone will launch, our sister website Alphr confidently predicts 18 September (bit.ly/alphr377). It also thinks the device will be called the iPhone 6S. We agree with its logic on both counts.

LIKELIHOOD RATING
✓✓✓✓✓

We're going to be bold and say that, yes, the next iPhone will have Force Touch. The rumours have come from a wide range of sources, from attention-seeking bloggers to internationally respected newspapers, which suggests that they could be accurate. The phone itself won't look that different, but you'll be able to do so much more with its apps.

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

Remix Mini Android PC
bit.ly/remix377 | **From $20**

Windows 10 may be grabbing the headlines but, if it flops, rival operating system Android may benefit. Many PC manufacturers think the mobile OS has huge potential on computers, but no device has yet caught the public imagination. That could change when the Remix Mini launches this autumn. Its makers, three ex-Google engineers, say it lets you control Android apps using traditional PC functions and hardware, such as a taskbar and mouse. Kickstarter members have raised $930,000 (about £595,531), smashing the $50,000 (about £32,000) target. You have until 29 August to pledge cash.

WEBOMETER

WE LIKE...

⬆ **New memory technology that's 1,000 times faster**
After 10 years of research, Intel and Micro have unveiled 3D XPoint (bit.ly/xpoint377), a "revolutionary" type of memory that's a thousand times faster than NAND flash used in solid-state drives.

⬆ **Browse anonymously at high speed**
Security experts have built a browser called Hornet that lets people browse the web anonymously at super-fast speeds (bit.ly/hornet377). It will be tested before being released to the public.

WE DON'T LIKE...

⬇ **Windows 10 ransomware on emails**
Hackers are spreading the CTB-Locker ransomware in scam emails that claim to come from Microsoft and say that Windows 10 is ready to download. It demands payment within 96 hours.

⬇ **Twitter data-bill shock**
Twitter users have been advised to change their settings to avoid huge data bills, following the website's decision to automatically play videos. Read more on MoneySavingExpert.com at bit.ly/twit377.

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

Facebook launches Security Checkup tool

Addressing past complaints that it doesn't care enough about its users' privacy and security, Facebook has created a Security Checkup tool that makes it easier to find and use the security controls for your account. To use the feature, click the Get Started button that appears in your News Feed under the title Stay Secure on Facebook, and then follow the prompts through three simple steps. The first step helps you log out of devices you haven't used in a while or have forgotten about, so you're only logged into Facebook in locations you want to be. Next, you can turn on a feature called login alerts, which notifies you if anyone tries to log into your account from an unfamiliar device or browser. Finally, Facebook offers a few tips for creating a strong and unique password, and keeping it safe. The Security Checkup feature is being gradually rolled out to the Desktop version of Facebook over the next few weeks, and to the mobile version later this year.
bit.ly/facebook377

Steam flaw let hackers hijack accounts

A hole in Steam's password-reset system let hackers hijack accounts using nothing more than the usernames. The online games store rushed to patch the flaw, which reportedly affected some of the world's top gaming professionals. Attackers simply needed to open the Steam client, go to the password recovery page and enter an account name. At this point, they could enter a random verification code or even leave the box blank, then select a new password to access other users' accounts. In a statement, Steam's owner, Valve, admitted that the bug had been present for a week, and that passwords had been reset for several accounts. However, accounts with the Steam Guard security tool activated were protected from unauthorised logins, even if the password was modified. Affected users were sent an email containing a new password.
bit.ly/steam377

New OS X malware 'could kill your Mac'

It's long been thought that Mac OS X was virtually invulnerable to traditional forms of malware, but researchers have created a new worm that has the potential to infect any Apple computer, even if it's not connected to the internet. Dubbed Thunderstrike 2 by its creators, the worm exploits a vulnerability in OS X and is virtually undetectable, with no easy way to remove it.

Thunderstrike 2 is the latest worm created by the research team, and starts its life on infected Thunderbolt peripherals. After being connected to an Apple machine, Thunderstrike 2 uses the vulnerability to write itself into the computer's firmware. The worm is able to copy itself to any other peripherals used by an infected machine, so it can easily be transmitted to other computers.

According to a blog post by one of the researchers, the issue was partially fixed by an Apple patch last month. However, OS X is still vulnerable to the hack, and Apple is working with the researchers to fix the issue.
bit.ly/thunder377

Security Helpdesk
Your questions answered by security specialists

THIS ISSUE'S EXPERT:
**Simon Edwards of Dennis Technology Labs
(www.dennistechnologylabs.com)**

Q How big is the risk of Android malware installing on your phone if you visit an infected website?
Beth Marsh, Facebook
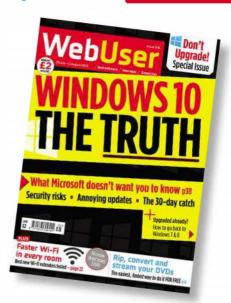
A The risk is low, if you keep your wits about you, because currently there are no known fully automatic web-based threats against Android. Researchers have found examples where the bad guys are getting close but, ultimately, you still need to click a button to install the malware.

That said, the criminals are finding very sneaky ways to trick victims. For example, it is technically possible to hide buttons on the screen so users are unaware that they are clicking them.

Such advanced attack methods are unlikely to become common in the near future because criminals are still enjoying a lot of success by tricking people using tried and tested methods. For now you should be quite safe.

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

⭐ Best New Websites

Site of the Fortnight

TECHNOLOGY `NEW`

Windows 10
blogs.windows.com/launch
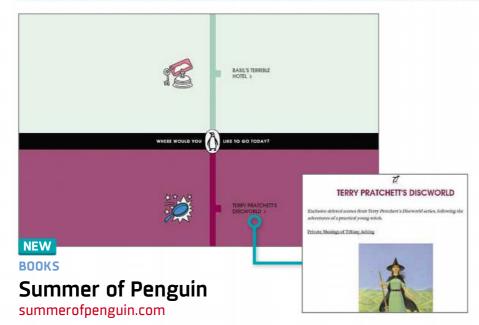
If you want the latest news on Windows 10 and top tips for using it, the best place to start is the very magazine you are now holding in your hands. But if you're looking to experience a bit more of the hoopla surrounding the launch of Microsoft's new operating system, head to the official site where you'll find the latest blog posts, along with articles and videos highlighting its features, such as voice assistant Cortana and the new Edge browser. There's also a section collecting feedback from fans and photos showing how they celebrated the launch. Now turn to page 20 to read our verdict.

Our rating ★★★★☆

UPGRADE YOUR WORLD
Information on how Microsoft hopes Windows 10 will fight hunger and save the enviornment

BOOKS `NEW`

Summer of Penguin
summerofpenguin.com

This website is ideal for anyone who prefers reading books to free newspapers on the train. It's a mobile-focused website from book-publishing giant Penguin, providing free book snippets and interviews to celebrate its 80th anniversary. We spent a happy commute reading Stephen Fry's memoir *More Fool Me* and deleted scenes from one of Terry Pratchett's Discworld novels. While it's targeted at passengers on the London Underground (hence the Tube-map design), there's no reason why we can't all enjoy the content. There's a choice of two authors every day in August, so you should visit it daily throughout the summer. You can click through the site to see previous entries.

Our rating ★★★★☆

LIBRARIES `NEW`
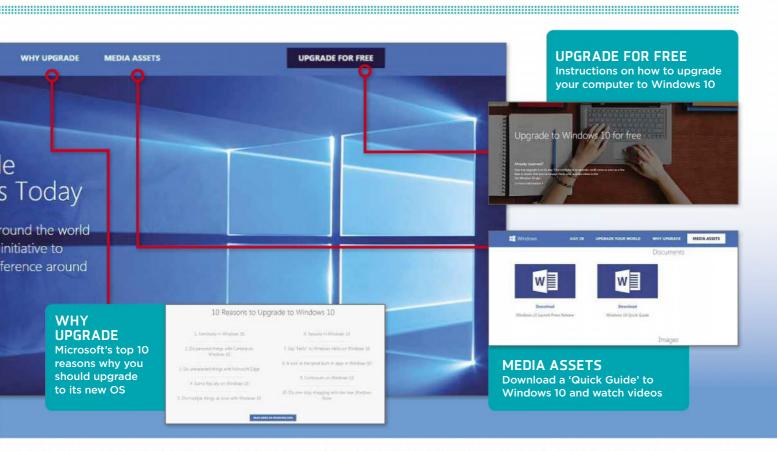
Digital.Bodleian
digital.bodleian.ox.ac.uk

The Bodleian Libraries in Oxford are home to a vast and fascinating collection, ranging from the earliest maps of Britain to Napoleonic-era political cartoons and Victorian board games. Now, more than 115,000 images have been made available for free online. You can browse by topic or search for a specific item and build your own personal library to share with friends, students and teachers as an educational resource. The easy-to-use interface lets you download images and view them in such close detail that you can even see notations made by researchers.

Our rating ★★★★★

Reviews by Nicole Kobie

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

UPGRADE FOR FREE
Instructions on how to upgrade your computer to Windows 10

WHY UPGRADE
Microsoft's top 10 reasons why you should upgrade to its new OS

MEDIA ASSETS
Download a 'Quick Guide' to Windows 10 and watch videos

ARTIFICIAL INTELLIGENCE `NEW`

IBM Watson Personality Cloud

watson-pi-demo.mybluemix.net

IBM's computer Watson has beaten humans on the US TV game show *Jeopardy* and now the artificial intelligence is peeking into our personalities. Input text you've written and Watson will analyse it to get a picture of your personality. It's debatable how good Watson is at discerning our inner selves from 100 words: cheeky web users have dropped in famous speeches from Obama and Hitler and got mixed results. Still, it's a clever way to showcase Watson's abilities and see what your writing style says about you.

Our rating ★★★★☆

TECHNOLOGY `RELAUNCH`

Cult of Mac

www.cultofmac.com

Apple fans rejoice: the beloved Cult of Mac news-and-rumour site has finally rolled out its new look and, given how much iPhone fans love good design, the refresh is a necessary one. Its minimalist redesign not only looks good, but is easier to navigate and features larger, bolder images. The design includes infinite scroll, loading the next story below the one you're reading, which visitors will either love or hate. It has also been upgraded to responsive design, resizing the site's layout for each type of device, be it an iPhone, iPad or – yes – even an Android smartphone.

Our rating ★★★★★

TRAVEL `NEW`

Visit Britain Blog

www.visitbritainblog.com

If you're planning a staycation this year, read Visit Britain's new blog for inspiration and ideas. It highlights different UK destinations, from the Lake District to Harry Potter filming locations, with guest writers revealing their picks for places to visit and tips for the best time to go, the best way to get there and how to travel at a discount. Plus, you can take in a 360-degree digital view of key places of interest, including Salisbury Cathedral, Portmeirion, the parlour of Anne Hathaway's cottage and, especially intriguing for *Pride and Prejudice* fans, the grand hallway in Chatsworth House.

Our rating ★★★★★ ➜

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

⭐ Best New Websites

RELAUNCH

DRINK
Three Wine Men
threewinemen.co.uk

This revamped website lists upcoming events for the Three Wine Men: Oz Clarke, Olly Smith and Tim Atkin (who, rather annoyingly, suffixes his name throughout the site with 'MW' – Master of Wine), so you can benefit from their expertise in person rather than merely catching an appearance on TV and radio. While the claret-coloured site showcases full details of forthcoming events in London, Manchester and Cardiff, with handy links to buy tickets online, there's no information about wine itself. An article or two on why Chilean wine is not to be missed might help whet our palate for the London event.

Our rating ★★★☆☆

NEW

DIGITAL RIGHTS
iRights
irights.uk

As the lives of young people become increasingly connected with smartphones and the web, we need to make sure their rights are protected. That's the premise behind campaigning site iRights, which wants to build a framework of digital rights for young people, including the right to remove content they've uploaded or created when they hit 18 and the right to find out who is holding information on them. The official website lists the groups backing its campaign, and explains what you can do to further the cause, with some particularly good advice for anyone running a website or online service.

Our rating ★★★★★

NEW

FOOD
Unearthed
discoverunearthed.com

Foodies should bookmark Unearthed before their next meal. It finds the best ingredients and ready-made dining delights from across Europe, from Salami Milano to olives in gin. The food on offer has a Spanish tapas vibe, but the site also features recipes for dishes such as Bavarian frankfurters in baked-egg buns and French tapenade, all organised by where they originate from, which is handy if you fancy hosting a country-themed dinner party or want to pair a bottle of wine with a meal from the same region. If that makes your taste buds tingle, you'll have to click through to Ocado to buy online.

Our rating ★★★★☆

NEW

GADGETS
Amazon Launchpad
bit.ly/amazon377

If you're keen to try out cutting-edge tech, visit Amazon's Launchpad – a special shopfront on the site that features the newest gadgetry from start-up companies, including those backed via crowd-funding sites such as Indiegogo. It includes more than 200 products, such as the Petzi Treat Cam – a web-connected camera that lets you dispense treats to your pets when you're not home – and the ICE Orb – a "floating" Bluetooth speaker (pictured) that looks like a prop from a *Star Wars* film. The one downside is that Launchpad is an Amazon.com site, so all the prices are in dollars. However many of the products are also available on the UK site, though sadly not the aforementioned "gravity-defying" speaker.

Our rating ★★★★☆

NEW

NATURE
Rewilding Britain
www.rewildingbritain.org.uk

Imagine finding a wolf track while hiking through a park. The local prey might not be so pleased, and you'd probably feel a little unnerved, but the campaigners behind Rewilding Britain would be delighted. They are hoping to expand the areas of natural wildnerness in the UK in order to encourage a greater range of wildlife. The website lays out the reasons why "rewilding" is important for Britain – it's good for the environment as well as tourism, for example – and lists projects you can visit. It also admits the challenges faced by reintroducing animals such as the lynx.

Our rating ★★★★★

CYCLING
Halfords Marketplace
bit.ly/halfords377

Halfords' online store has added 40,000 new items via its new Marketplace, all from "approved partners" (third-party companies). The retailer will use it to trial new products, which means it could become a good place to visit for the latest niche accessories for your car, home, pets, bikes and camping trips. There are lots of products for children, including a helmet that every seven-year-old cyclist should love (pictured). The site works in a similar way to Amazon Marketplace: items are sold by third-party companies, but delivered to you by Halfords. Returns have to be carried out directly with the third-party company, but Halfords promises to step in if there are any problems.

Our rating ★★★★☆

RELAUNCH

CYCLING
Bikeability
bikeability.org.uk

The Department of Transport wants Britain's cyclists to feel more confident on the roads and stay "safe in the saddle". To make this happen, it's turned Bikeability into a hub of information on how to stay safe while cycling. You can search for local courses ("like cycle proficiency – but better"), most of which are free. They are aimed at both children and adults, and are run by registered cycling instructors. Teachers can find advice and materials on the site to help them promote better cycling to their pupils. There's no longer any excuse not to hit the road – or dedicated cycle pathway – on two wheels.

Our rating ★★★★☆

➕ ALSO NEW

TRAVEL
Can I Bring My Selfie Stick?
www.canibringmyselfiestick.com
★★★★☆

You either think that a trip to a tourist spot isn't worth the ticket price without a selfie stick, or you hate them so much you can't bear to be around people using them. This website lets you check if the museum, sports venue or other location allows their use. Tate Britain, yes; St Paul's Cathedral, no.

GOVERNMENT
Petitions
petition.parliament.uk
★★★★☆

The government's new petition site is designed to be easier to use – though this may be an improvement it might regret. It's already had to reply to one petition (about sacking Jeremy Hunt) because it guarantees a reply after 10,000 signatures and will be "considered" for a debate in Parliament after 100,000. All you need to take part is an idea and five email addresses of people who support it.

JOBS
Rise To
www.rise-to.com
★★★★★

Describing itself as an online dating site for jobs, Rise To's aim is to link up young people with careers. Targeting those between 16 and 24, the site has already signed up 700 businesses offering jobs, work experience and training. Users enter their experience and details and are matched via an algorithm with work that suits them.

DOGS
BarkFeed
feed.barkpost.com
★★★★☆

The project manager of BarkFeed, which is essentially Instagram for dogs, wants each photo to make you "a little bit happier or laugh when you see it". We can confirm that was our experience looking at the snaps of beaming bulldogs, slobbering spaniels and dozy dalmatians. Can we have MeowFeed next?

WEBSITE SECRETS

Are we there yet?
It's the most annoying question any child can ask their parent: "Are we there yet?". Well, it looks like Google Maps also hates being pestered while driving. Set Google Maps on your Android device to give you turn-by-turn navigation directions, tap the mic icon in the top right and ask, "Are we there yet?". Then ask it three more times. At this point Google Maps will snap, and say "If you ask me again, we won't stop for ice cream", echoing Chevy Chase's famous line in *National Lampoon's Vacation*. Now be quiet, sit still and behave! ▪

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

One tool for all your jobs

The latest version of Xara Designer Pro X11 is one of those rare catch-all tools that does everything a web-building enthusiast might need. By including drawing, photo-editing, page layout and website design in a single program, it uses fewer PC resources and can streamline your creative process. Once you've designed your site, you can upload it to any host from within the software, using FTP or SFTP, or host a site of up to 2GB for free on Xara's own hosting service. The whole lot costs £219.99. For more info, visit xara.com/designer-pro.

Extra apps and widgets

Free web-building service Wix (www.wix.com) has increased the number of apps and widgets it offers to users of its web-building service. These include Postific, which streamlines the updating of your social presence, so you can post a message to several social services at once; CoolText, which has great-looking animated text effects; Epic Form Builder, which collects information from your visitors; and a range of gallery tools. There's also a selection of new and revamped templates you can base your design around.

Deal of the Fortnight

Get 1&1's Unlimited hosting package (bit.ly/unlimit377) for £3.59 per month for the first year – the same price as the Starter package. It reverts to £5.99 after the first 12 months.

Web-building Helpdesk

THIS ISSUE'S EXPERT: Nadezda Befus, SEO expert at Jimdo (www.jimdo.com)

Q Visitors to my website from Google results leave without viewing the rest of the site. How can I persuade them to stay?

Ian Newton, via email

A People usually make the decision to stay or leave in just a few seconds. If this is what's happening on your site, you'll see it in the "bounce rate" in your analytics. To fix the problem, make sure it's clear from your navigation where to find the different parts of your website. Provide prominent links to the most important pages, so people can spot them. Look at the keywords visitors are using to come to your site – are they relevant to the information you provide? If not, it could be that you're getting the wrong kind of traffic from search engines, and some SEO work will help – see bit.ly/bounce377 for more tips.

MINI WORKSHOP | Try a free and easy-to-use mobile-website maker
Mobirise: mobirise.com | 20 mins | Windows XP, Vista, 7, 8, 10, Mac OS X

If all you want is a simple mobile website with a few pages, try using Mobirise. It's a handy tool that's completely free to use and creates fantastic-looking sites that fit on screens of any size

1 Click the Menu button **1** to bring up the main menu. Choose New **2** and click OK to confirm. Click the plus icon **3** to add blocks of content to your site. Start off by selecting a Menu, a Header, a Footer and any of the other content blocks that take your fancy. **4**

2 Select the block you want to edit. You can click text to edit it, or make changes to the style from the pop-up box. **1** Use the floating panel on the right to reorder the blocks, **2** change their parameters (you can change the images to your own from here) **3** or remove a block completely.

3 Add more pages to your site from the menu by clicking the Add Blank or Clone buttons. **1** Click the screens **2** to see how the site will look on different devices. The eye button **3** opens it as a preview in a browser. Click Publish **4** to save it or send it to the web via FTP or Google Drive.

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

Product Test

We test and compare the latest products

Windows 10

Windows 10 is finally here. **Andy Shaw** delves deep into its new features and reveals whether it's worth installing

Windows is and always has been the world's most popular operating system (OS), but Microsoft has frequently put its users through a bumpy ride. Each new generation of its OS has brought overhauls and redesigns, prompting strong reactions that veer from love (XP) to hate (Vista) and back to love again (Windows 7), and it was out of favour again with its most recent disaster – Windows 8.

Following this alternating pattern, Windows 10 ought to be a hit, but we've approached it with several reservations. For a start, we've never been overly keen to recommend OS upgrades, because older PCs often struggle with the requirements of the latest software.

Furthermore, the first few months of a new OS are often riddled with teething problems, from general instability to a lack of drivers. That said, the unique way in which Microsoft has opened up its Technical Preview program to anyone who wants it should have helped to reduce this.

Offering Windows 10 for free to Windows 7 and 8 users also removes the biggest barrier that most people encounter when deciding whether to give a new OS a go: how much it costs.

So, in this review, we have some big questions to

Upgrading to Windows 10 is a slick and easy process

answer. Is Windows 10 worth the time and bother of downloading, installing and getting used to? Are its new features enough to draw you away from your older OS? And how likely is it that this upgrade will play havoc with

> **" Installing the upgrade only took about an hour, which is very reasonable "**

your PC's files and settings, at least until the groundswell of early adopters start fixing the problems and the solutions to common gripes appear online?

Performing the upgrade
We waited until after the Windows 10 launch day to start writing this definitive review because a new operating system isn't just

about how the Technical Preview runs, but how the operating system installs over the top of your existing software. We sacrificed a much-loved and well-used home PC to the process, which was purchased with

Windows 8 installed. Having survived the upgrade to Windows 8.1, it has been running smoothly ever since. If we weren't using it to test the upgrade process, we'd have left the upgrade for at least a few weeks until the early adopters could confirm Windows 10 was up and running without too many problems. However, despite our reservations, by 11am on

upgrade day, we checked Windows Update and were able to push through the installation.

The process is incredibly slick. Installing the upgrade only took about an hour, which is very reasonable. We barely needed to touch the PC during the installation and, although it rebooted a few times, we were warned that this was likely to happen. For most of the hour, a large grey circle occupied the screen, slowly filling up with blue, to indicate its progress. When the circle turned completely blue, the PC rebooted and the new Desktop appeared.

On the first boot, we suffered a crash after about five minutes. The Desktop flashed repeatedly and we had to reboot. After using the PC for an afternoon, we suffered another crash that black-screened and rebooted the PC. But by day three, we hadn't suffered any further crashes. While that's not a perfect record, we were expecting much worse.

Stability and compatibility
The most common problem we've encountered following an OS upgrade is that peripheral hardware stops working, so we checked this first. We were pleasantly surprised to find that the printer, scanner and all our other devices seemed to be operating normally.

However, after using the PC for a while, we noticed our security software (Kaspersky Internet Security 2015) had been disabled. The program suggested that we should restart the computer to take it out of Safe Mode, but because it wasn't actually in Safe Mode, the reboot failed to solve the problem and the same error reappeared. Searching for a solution online was tricky because Kaspersky didn't offer a version for the Technical Preview, so support information was thin on the ground. We got it sorted eventually by uninstalling and reinstalling the software, and manually turning off Windows Defender. Since then, other Kaspersky users on the Web User forum (a great place to go for upgrade help) have informed us that a Kaspersky update has now solved this problem.

We expect some instability and incompatibilities in the early days of the operating system and although the Windows 10 upgrade process hasn't been as much of a disaster as some we've seen in the past, we'd still advise waiting as long as you can before you upgrade. Let the early adopters find the bugs and incompatibilities (such as our Kaspersky problem), so that they're ironed out by the time you take the plunge. If

Lots of adverts for Microsoft products are pre-installed in the Start menu but they're easily removed

you simply can't wait, you'll have to expect a bumpier ride, no matter how tech-savvy you are.

It's also worth noting that the Technical Preview, which we installed from scratch from an ISO image on a separate (older) computer, has been significantly more stable throughtout. If you'd prefer to go down this route by performing a full clean install, we'll show you how to in next issue's Weekend Project.

Appearance and design
The flatter-looking design of Windows 10 is becoming
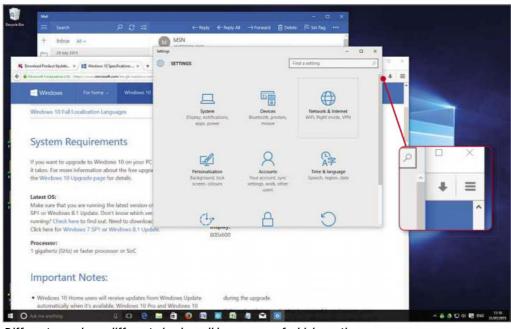
> ❝ If you're not moving your cursor over a window, there's no longer any visual clue that there may be more content below ❞

ubiquitous across modern devices, with Apple and Google adopting similarly clean aesthetics. In Windows 10, it looks elegant and sophisticated, and feels like a hark back to a simpler era, before computers had the processing power to create 3D interfaces and translucent windows. The borders on

windows have all but disappeared, so the software uses subtle shadowing to imply layers. The simpler design has the effect of making Windows 10 feel like it's faster to use, so we're all for it.

If there's one thing we don't like, it's the new scroll bars. In Windows apps, they disappear if you're not moving your cursor over the window, so there's no longer any visual clue that there may be more content below. They're also narrower, which makes them harder to grab and move around, and the arrow buttons at the top and bottom are now minuscule. Thankfully, software that hasn't been adjusted to the Windows 10 interface still displays the wider scrollbars, though this creates an inconsistency in the way different software displays, which doesn't look great. We suspect it will only be a matter of time before all Windows apps and programs slim down to fit in with the latest design.

The other big visual change

Different apps have different-sized scroll bars, some of which are tiny

is that Windows 8's Start screen has gone (and good riddance). The Start menu is back and, by default, it won't take over your whole screen (though you can revert to that if, for some reason, you've become so used to Windows 8's foibles that you want to keep them).

The Charms bar has been replaced by the Action Centre

However, while Windows 7 users might be familiar with a small Start window popping up from the bottom-left corner of the screen, its design in Windows 10 is a lot fussier. Microsoft hasn't entirely ditched the whole-screen tiled Windows 8 Start page, it's just compacted it into a quarter of the space.

When you first install the OS, the new Start menu is crammed with Windows 10 apps, some of which, such as News and Money, scroll pictures of current stories. This brings to mind the link-bait ads you see at the bottom of many websites and feels like an annoying invitation to procrastinate. Others tiles are blatant Microsoft adverts, with icons for Xbox and Office. These will probably be the first things you'll want to right-click and unpin.

Another unpopular Windows 8 legacy was the Charms bar – a failed attempt to bring a second, touch-friendly taskbar to the OS. In Windows 10, it's been replaced by the Action Centre. Press Windows+A and, like the Charms bar, it appears from the right, but it's a significant improvement, with more useful information immediately available. It's also configurable, so you can decide what information is

displayed, and there are handy quick-access buttons to a few regularly used settings.

We show you how to configure all these new tools to get them just how you like them in our Workshop on page 54.

Ease of use

Upgrading to a new operating system is always going to take some getting used to. No matter how much certain elements look like those in previous versions, the new OS is called Windows 10, not Windows 8.2, and the fuss and fanfare have to be justified by major changes, rather than tiny tweaks.

Windows 8 users have

practical tool that gives experienced users quick access to important functions, and we already use it a lot.

One of the most awkward things about Windows 8 was the dual existence of the Control Panel and the Settings app, and this is still the case in Windows 10. In essence, the Settings app is a simplified version of the Control Panel, and may eventually take over the latter's functions entirely. Windows 10 pushes the Settings app further to the fore, making it much more accessible by placing its icon in the Start menu (in Windows 8, it was hidden away in the Charms bar).

> " Microsoft hasn't entirely ditched the whole-screen Windows 8 Start page, it's just compacted it into a quarter of the space "

nothing to fear, though, because everything that was any use in Windows 8 is still here. Small touches such as the Windows+X menu, which was introduced in Windows 8.1 because no-one could ever find the tools and programs they were looking for, have stayed. This is a good thing because although it doesn't fit in with the sophisticated design of Windows 10, it's a

Meanwhile the Control Panel (which has stayed essentially untouched since Windows Vista) moves further into the background.

While this may be a significant change for Windows 7 users, the design of the Settings app is more in keeping with the overall flat, mobile-like design of Windows 10. More tools from the Control Panel have made

their way across to the Settings app, but you can still use the Control Panel if you prefer, because nothing appears to have been removed from it.

Keeping both the Settings app and the Control Panel may be an attempt to keep everyone happy, but we find it confusing. While everything is slowly moving over to the Settings app, it's frustrating while the process is in transition because once you start getting used to it, you find yourself looking for things that haven't made it across yet and wasting several mouse-clicks searching for things in the wrong place.

Another way in which Windows 10 hopes to fundamentally change the way we use our PCs is via its search box on the taskbar. This is your link to Cortana, but it also lets you search your PC and the internet, without having to first launch Explorer or a web browser.

However, by rolling these three tools into one, Windows 10 again causes confusion. As you type a search, Windows 10 starts finding results, listing settings and apps at the top, adding a few potential web searches below, then listing files and documents at the bottom. You can refine your search by clicking the 'My stuff' or Web

Type something into the search box and you get results for both programs and from the web

buttons, but keeping all three functions can make the box very messy and we think this search tool is trying too hard to do too much.

Our Workshop on page 54 shows you how to set up the search tool so you don't have Cortana's algorithms trying to anticipate your every move. You can also limit the box to only searching your PC, if you'd prefer to continue using your browser for web searches, which we think works better.

If you set up the bar as we've recommended in our Workshop, the taskbar space given over to the search box

Windows 8 didn't have many improvements but the Windows+X menu was one and it's stayed in Windows 10

will seem excessive. To its credit, Microsoft has anticipated such complaints, and you can easily shrink it to an icon or even remove it completely by right-clicking on the taskbar and choosing Search.

Innovation and value for money

There are two truly innovative things about Windows 10. The first is the way it's been developed in plain sight. Previous versions of Windows have provided beta programs where the chosen few have

been able to test the software for free and give feedback, but Windows 10 has carried this out on an unprecedented scale. Anyone with a PC has been given the opportunity to download and test it on their own computers, and the evolution of the software from those first Technical Previews has been incredible to witness.

This isn't just a marketing ploy; Windows has been tested by the very people who are actually going to use it, and the open availability should mean that more hardware and software manufacturers are ready with the required patches and updates, which will ensure their products run smoothly on the new version.

The other remarkable aspect of Windows 10 is its cost. Microsoft has given us free stuff in the past, such as Windows Essentials software (Movie Maker, for example) and online services such as OneDrive, which provide a generous amount of free storage space. However, operating systems have been a core part of Microsoft's money-making operation, ever since MS-DOS was installed on the first IBM PCs. While you could just about understand giving away the new OS as a goodwill gesture to those who suffered under Windows 8, stretching that gift to Windows 7 users is a generous step.

Of course, all freebies have strings attached and, as mentioned previously, Microsoft is pushing a lot of unwelcome ads into the Start menu. If you haven't already got a Microsoft account, you probably will have by the time you've set up Windows, whether you like it or not, although you can then convert your Windows user account back to the standard version (see our Workshop

Hey Cortana

Microsoft is making a big deal about including the voice-activated search assistant in the PC version of Windows 10. How excited *you* should be about this feature depends on how interested you are in speaking aloud to your computer. We've used other voice-activated assistants like Apple Siri and OK Google, but even on mobile devices that don't have good keyboards, it's quicker to type search requests than try to make yourself understood by a computer.

We found a similar

problem with Cortana. Although the speech recognition picked up our words perfectly while we were testing it, turning them into the correct text on screen, it struggled to convert our natural speech into meaningful instructions. At the point when we asked "Can you show me how to get to Manchester?" and Cortana led us to set up a reminder rather than offering a map or directions, we quit. In the grand scheme of things, it's easier to open Google Maps and do it yourself.

Click on the box to type a search into Cortana or click the microphone to speak into it instead

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How good is Edge?

Internet Explorer has been laid to rest and from now on, it will only receive security updates on previous versions of Windows. Microsoft's ambitions now rest with the new Edge browser, which is only available through Windows 10.

However, it's a bit disappointing. Yes, it's faster than Internet Explorer, but so is nearly every other modern browser. The trouble with Edge is that it's brought nothing new to the party. Its new tools don't offer anything more than Chrome, Firefox or any other browser can already do, either natively or through add-ons.

We'll be carrying out a full comparative review of browsers in a forthcoming issue of *Web User* but, from our first impressions, we don't think Edge is enough of an improvement to entice you to switch from your current favourite browser.

The new Edge browser is fast, but it's still no match for Chrome and Firefox

on page 54 if you want to do this).

The pushy services are a bit of an intrusion but it's relatively easy to clean up the Start menu and remove the taskbar link to the Store, if you don't want them.

If Microsoft had decided to sell Windows 10 for around £100, we'd be sorely disappointed with its OS. Removing a bunch of things that bugged us about Windows 8 and adding a few features of debatable merit wouldn't represent good value for money. But by giving it away for free, we're left with less cause for complaint.

Should you upgrade?

By the time you read this, Windows 10 will have been available for at least a couple of weeks. We don't think that's enough time for Microsoft to iron out all the bugs and problems that we've already seen hitting the software, and there's no magic moment at which point the upgrade process will become completely trouble free. However, the longer you leave it, the smoother your experience will be.

Although our upgrade was reasonably quick, we'd advise setting aside a day or two for the job, so you can fiddle around with the new OS. It's also a good idea to schedule the task for a time when you can afford not to have your PC to hand because there's always a chance that something might go wrong. If you desperately need your PC the day after you upgrade, you'd be best advised to hold off until you've got more time. It's just not worth the risk.

For Windows 8 users, the upgrade is a sensible choice. Windows 10 is easier to use and refines some of the clunkiness of the previous version. But for Windows 7 users, it's not so clear-cut. It remains relatively free of additional nonsense such as touchscreen apps and voice-activated search assistants and represents the high point in the history of Windows. Although you should certainly take advantage of the free Windows 10 upgrade before 28 July 2016, so you can lengthen the life of your PC for free, we would recommend you leave it as long as possible if you're still happy using Windows 7.

PRODUCT INFO

Windows 10
bit.ly/win377
Price: free

SPECIFICATIONS

- 1GHz or faster processor
- 1GB of memory for 32-bit; 2GB for 64-bit
- 16GB of hard-drive space for 32-bit; 20GB for 64-bit
- DirectX 9 or later compatible graphics with WDDM 1.0 driver
- 800 x 600 pixel-resolution display
- Windows 7 or 8 for free upgrade

OUR VERDICT

★★★★☆

Windows 10 is going to be a massive success for Microsoft but not because it's a brilliant new operating system. Its greatest innovation is in changing the rules of how an operating system is delivered, maintaining its control over our computers by giving it away to anyone with a PC that's powerful enough to run it.

Contrary to how this might sound, we're not against Windows 10. If you've got Windows 8 installed, you should upgrade, if only to reclaim the Start menu and ditch the horrible Charms bar.

If you're on Windows 7, you have to ask yourself how ready you are to abandon it. Windows 10 might offer your PC a speed boost because you'll be replacing your update-laden older copy of Windows with a shiny new installation that doesn't come with all that extra baggage. But the extras on offer – a search bar you can speak to, a browser that's still playing catch-up and touch-friendly apps that you probably don't need – just aren't worthy of the hype. It's a good idea to get it while it's free, but you may as well enjoy Windows 7 for a bit longer and make sure Windows 10 is right for your PC before you upgrade.

On the whole, Windows 10 is worth the upgrade, but only because it's free. And we'd still advise caution – leave it another few weeks (or months, if you can wait that long), because everything about your upgrade will get easier if you let other people sort out its problems first.

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

FOR

✓ Latest version of Windows is best supported and safest
✓ Free
✓ Improves on Windows 8

AGAINST

✗ Few genuinely useful new tools
✗ Early adopters will suffer from bugs and other teething problems

Web User's Best Buys

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

HARDWARE

WI-FI EXTENDER

Netgear Nighthawk AC1900 Extender

£130 from **www.broadbandbuyer.co.uk**
Date tested: July 2015

The Netgear Nighthawk is pricey, but it's also fast, powerful and built to last. Its advanced tools will be compatible with future Wi-Fi standards and it provides excellent performance.

KEY SPECS

AC1900 Wi-Fi ■ Dual-band ■ 5 x Gigabit Ethernet ports ■ USB 3 ■ WPA and WPA2 security ■ DLNA server ■ 252 x 174 x 31mm ■ Two-years return-to-base warranty

NETWORK CAMERA

Y-cam HomeMonitor HD

£150 from **www.homemonitor.me**
Date tested: June 2015

The Y-cam HomeMonitor HD will save you money in the long run if you want to save captured motion-detected footage online. Its free online storage option supports a wide range of devices.

KEY SPECS

Apps for Android, iOS, Windows Phone, Roku ■ 1/4in CMOS sensor ■ Viewing angle: horizontal 80°, vertical 45°, diagonal 87° ■ 1,280 x 720 pixels resolution ■ 15fps frame rate ■ Ethernet and 802.11n Wi-Fi ■ 85 x 85 x 30mm ■ 1150g

BUDGET PC

Chillblast Fusion Cyborg

£600 with monitor, £500 without from **www.chillblast.com**
Date tested: May 2015

The Chillblast Fusion Cyborg is compact, quiet and capable of excellent performance. There isn't much room in the case for future expansion, but it's a great value PC.

KEY SPECS

Quad-core 3.2GHz Intel Core i5-4460 ■ 8GB of memory ■ 1TB hard drive ■ 21.5in monitor ■ 1,920 x 1,080 pixels resolution ■ 3 x USB 3 ports, 5 x USB 2 ports ■ Windows 7 or 8.1 ■ 427 x 364 x 189 mm ■ Three-years return-to-base warranty

BUDGET LAPTOP

HP Stream 11

£179.99 from **store.hp.com/ukstore**
Date tested: April 2015

The HP Stream 11 offers excellent performance and a respectable battery life. It's a sleek, attractive laptop, available in blue or magenta, with a good screen that offers wide viewing angles.

KEY SPECS

Dual-core 2.16GHz Intel Celeron N2840 processor ■ 2GB of memory ■ 11.6in non-touchscreen ■ 32GB flash drive ■ 1,366 x 768 pixels resolution ■ Single-band 802.11n Wi-Fi ■ 300 x 206 x 20mm ■ 1.29kg ■ One-year return-to-base warranty

MULTIROOM SPEAKER

Sonos Play:1

£167 from **www.currys.co.uk**
Date tested: March 2015

The Sonos Play:1 offers impressive audio quality and comes with excellent software and great apps that provide seamless integration with music services. It's the ideal speaker to use as a starting point for a home entertainment system.

KEY SPECS

Two speakers ■ 802.11n Wi-Fi, 1 x 10/100 Ethernet ■ Android and iOS apps ■ Compatible with UPnP and SMB servers ■ AAC, FLAC, MP3, OGG and WAV ■ 161 x 12 x 12mm ■ 1.8kg

SSD

Samsung 850 Pro 256GB

£136.03 from **www.kikatek.com**
Date tested: February 2015

The Samsung 850 Pro is crammed with new technology that makes it faster and more durable than its competitors. You could buy a similarly sized SSD for much less, but in our tests the cheaper models weren't as fast and they don't come with the 850 Pro's generous 10-year warranty.

KEY SPECS

256GB (also available in 128GB, 512GB & 1TB) ■ 53p per GB ■ SATA III interface ■ 2.5in drive case ■ 10-year warranty ■ 100 x 70 x 7mm ■ 66g

All prices correct at time of review

Web User's Best Buys

TABLET

Google Nexus 9

£319 from **play.google.com**
Date tested: February 2015

The Nexus 9 is our favourite Android tablet. It has a fantastic screen, even better than the iPad Air 2's, and superb battery life, lasting over 15 hours in our tests. It's cheaper than the latest iPad and comes in 16GB and 32GB capacities.

KEY SPECS

8.9in screen ▪ 2,048 x 1,536 pixels resolution ▪ Dual-core 2.3GHz 64-bit Nvidia Tegra K1 Denver processor ▪ 16/32GB storage ▪ 4G option costs £60 extra (32GB models only) ▪ Android 5.0 ▪ 228 x 154 x 8mm ▪ 425g

WINDOWS 8.1 LAPTOP

Asus Transformer Book Flip TP300LA

£449.95 from **www.johnlewis.com**
Date tested: January 2015

This touchscreen laptop folds over into a chunky tablet. It's well built, did well in our performance tests and has a fantastic battery life.

KEY SPECS

Dual-core 1.9GHz Intel Core i3-4030U processor ▪ 4GB of memory ▪ 13.3in touchscreen ▪ 1,366 x 768 pixels resolution ▪ 500GB hard drive ▪ 802.11ac Wi-Fi ▪ 326 x 232 x 22mm ▪ 1.75kg ▪ One-year collect-and-return warranty

WIRELESS ROUTER

D-Link DIR-868L

£65.97 from **www.dabs.com**
Date tested: December 2014

If you're willing to switch your wireless devices to the 5GHz network, the D-Link DIR-868L offers fast and reliable performance at a great price. It's simple to set up and provides a handy wizard to guide you through the process.

KEY SPECS

Dual-band 2.4GHz and 5GHz ▪ 802.11b/g/n ▪ 1,300Mbps theoretical maximum speed ▪ Six internal antennas ▪ 4 x 10/100/1000Mbps Ethernet ports ▪ WPA and WPA2 encryption ▪ 1 x USB 3 port ▪ 217 x 123 x 102mm ▪ One-year return-to-base warranty

DESKTOP PC

Chillblast Fusion Obelisk

£699.98 from **www.chillblast.com**
Date tested: November 2014

This great all-round desktop PC achieved a good overall performance in both our Windows and gaming tests. It runs quietly, has a good-quality monitor and is packed with great components, including a fast SSD and a generous hard drive.

KEY SPECS

Quad-core 4.2GHz Intel Core i5-4690K processor (overclocked) ▪ 8GB of memory ▪ 5 x USB3, 5 x USB2 ports ▪ Gigabit Ethernet ▪ 120GB SSD ▪ 1TB hard drive ▪ 1,920 x 1,080 pixels resolution ▪ Windows 8.1 ▪ 465 x 430 x 192mm

KEYBOARD

Cherry MX-Board 3.0

£55 from **www.kikatek.com**
Date tested: November 2014

The Cherry MX-Board 3.0 is a hard-wearing mechanical keyboard that's a pleasure to type on. It's quiet for a mechanical model but still makes more noise than a standard keyboard. It doesn't have a lot of features, but it's ideal if you're looking for a standard, good-quality keyboard.

KEY SPECS

104 keys ▪ 1 x USB port ▪ 1.8m detachable cable ▪ 2 non-slip surfaces ▪ 2 rubber caps for adjustable feet ▪ 44.6 x 15.8 x 2.8cm ▪ 0.83kg ▪ Win-Key lock

NAS DRIVE

Asustor AS-202TE

£199.66 from **www.scan.co.uk**
Date tested: September 2014

This NAS drive put in an excellent performance in our tests, transferring files over our network faster than any of the other devices we tested. It has an impressive range of tools, including an HDMI output for streaming to TV.

KEY SPECS

EXT4 file system ▪ SATA3 hard drive ▪ 2 x 3.5in bays ▪ 1 x 10/100/1,000 Ethernet ▪ 2 x USB 2 ports, 2 x USB 3 ports ▪ 1 x HDMI (1.4a) ▪ 1 x 3.5mm mini-jack ▪ 230 x 164 x 108mm ▪ 1.87kg ▪ Two-years return-to-base warranty

SOFTWARE & SERVICES

BACKUP AND SYNC

SyncBackFree

Free from bit.ly/syncback366
Date tested: March 2015

SyncBackFree is very capable software that gives you plenty of control over how it can be used. If you know what you need from your backups and you're prepared to spend some time configuring the options, SyncBackFree has everything you need.

KEY FEATURES
Synchronise: Copy files in both directions ▪ Restore back-up files easily ▪ Email logs ▪ Schedule backups ▪ Simple and Advanced mode ▪ Runs on Windows 8, 7, Vista, and XP ▪ Extensive Help documentation and support

INTERNET SECURITY

Kaspersky Internet Security 2015

£17.99 from bit.ly/kaspoffer
Date tested: January 2015

Kaspersky Internet Security performed near-perfectly throughout our tests last year, with only one unwanted program slipping through. Our sister title *Computeractive* is selling it at the reader-offer price of £17.99 (full price £39.99). Click the link above.

KEY FEATURES
Anti-virus and firewall tools ▪ Protects online shopping and banking ▪ Identity and privacy tools ▪ Dangerous-website alerts ▪ Advanced parental control ▪ Licences for one, three and five PCs; for one or two years, or pay monthly ▪ Multi-Device version for Mac and Android protection

PHOTO EDITING

Adobe Photoshop Elements 13

£81.08 from www.adobe.com/uk
Date tested: December 2014

With its tidy interface and pop-out trays, Adobe Photoshop Elements provides everything an amateur photographer needs and helps you quickly find the right editing tools.

KEY FEATURES
Compatible with Windows XP, Vista, 7, 8+ (32- and 64-bit) ▪ Bundled photo organiser ▪ Content-aware edits ▪ Guided edits ▪ People-beautifier tools ▪ RAW support

VIDEO EDITING

Adobe Premiere Elements 13

£81.08 from www.adobe.com/uk
Date tested: December 2014

Premiere Elements 13's superb interface makes its many features neat but accessible. You won't find better video-editing software for the price.

KEY FEATURES
Automatic editing ▪ Export to multiple video formats ▪ Burn to DVD and Blu-ray ▪ Image stabiliser ▪ Stop-motion capture ▪ Motion tracking ▪ Musical scores and sound effects ▪ Upload to YouTube and Vimeo

ONLINE STORAGE

Google Drive

From free from drive.google.com
Date tested: August 2014

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
15GB free storage ▪ Web-based office software ▪ Works with Windows XP, Vista, 7 and 8+ ▪ Chrome browser add-on ▪ Android and iOS apps ▪ 100GB extra storage for £1.19 per month; 1TB for £5.97 per month; 10TB for £59.51 per month

ONLINE SITE BUILDER

Weebly

From free from www.weebly.com
Date tested: May 2014

Weebly's drag-and-drop interface makes it extremely easy to use. Its templates are a little restrictive, but there are still plenty of options to choose from and the results look great. It also has free Android and iOS apps.

KEY FEATURES
115 templates ▪ Unlimited storage ▪ SEO tools ▪ Meta tags ▪ Password protection ▪ E-commerce tools ▪ Ad-free Starter edition ▪ Android and iOS apps ▪ RSS ▪ Site stats

⬇ Best Free Software

BACKUP TOOL

AOMEI Backupper Standard 3

www.aomeitech.com
Min requirements: Windows 7/8+/10
File size: 78MB

Most backup tools only cover the basics; they let you back up files and folders to a choice of destinations, but that's about it. AOMEI Backupper Standard is much more advanced and can back up your system drive, partitions, files and folders. It also clones drives and partitions, making it easy to migrate data to a larger drive. You can schedule backups to run daily, weekly, monthly and on a specific day or date; and the program offers lots of flexibility.

Version 3.0 is a massive upgrade and the program now offers four types of backup: Full, Incremental, Differential and Automatic Space Management. Incremental backs up only the files that have changed since the last backup; while Differential targets those items that have changed since the last full backup. Automatic Space Management is similar to Differential, but it automatically removes old backups to free up space for new ones.

This latest version also introduces

support for 4K monitors and the ability to set your PC to restart, sleep or hibernate once a backup completes. The interface has been given a polish, too.

Despite the wealth of backup options, the software is very easy to use. Just choose an action from the panel on the left – Backup, Restore or Clone – then select an option in the window on the right.

The Utilities section lets you check the backup hasn't been corrupted, as well as create bootable media, explore an image, and export or import a backup configuration file.

⚙ MINI WORKSHOP | Back up your PC using AOMEI Backupper Standard

1 To get started, click Backup **1** in the panel on the left. You'll be presented with a selection of choices **2** that let you back up a drive, a partition, a file or your entire system. Scroll down the list for an option to back up folders using file synchronisation, **3** which doesn't require you to create an image file.
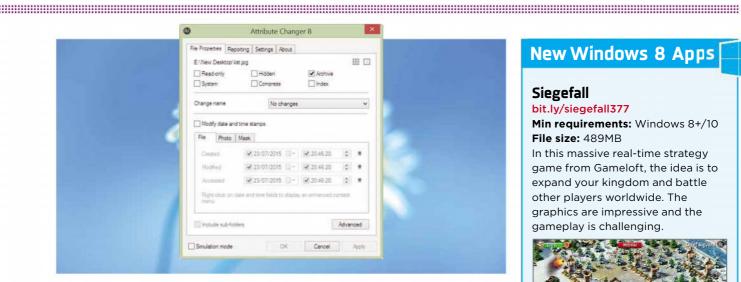
2 In this Mini Workshop, we are backing up a hard drive. Click this option and select the drive you want to copy. **1** A second window opens. Select the drive in this window **2** and click Add. **3** Next, select the destination drive. **4** You can give the task a new name **5** and either start the backup manually **6** or schedule it. **7**

3 Backup Options **1** has tools for adding comments to the current operation; managing the compression settings; **2** splitting the backup into manageable chunks; **3** and choosing whether to perform intelligent sector backup **4** (only used sectors) or an exact backup. To load a previous backup, go to Restore, **5** select the task and click through the wizard.

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

SYSTEM TOOL
Attribute Changer 8.0
www.petges.lu
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 2.6MB

This program changes the attributes of any file or folder on your PC. You can modify standard file properties including Read-only, Hidden, Archive, System, Index and Compress; and change the date and time, which is handy for photos that have an incorrect time zone. You can also quickly switch between upper- and lower-case to change the case of filenames. The latest version adds support for Windows 10, includes changes to the interface and icons, and can randomise the date and time.

REMOTE CONTROL
AndroMouse
andromouse.com
Min requirements: Windows XP/ Vista/7/8+/10, Android phone
File size: 831KB

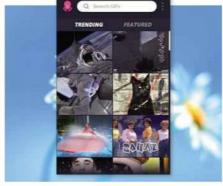AndroMouse lets you control your PC remotely using an Android device. Install the desktop server program on your PC and the AndroMouse app on your phone, then connect via Wi-Fi or Bluetooth to use your phone or tablet as a mouse and keyboard. The PC component now has an improved interface, the ability to change themes and better Bluetooth connection.

GIF FINDER
PopKey for Desktop
popkey.co/send-gifs
Min requirements: Windows 7/8+/10 or Mac OS X **File size:** 48.8MB

Animated GIFs enliven web pages, Tumblr blogs, forum posts and Facebook and Twitter updates, and PopKey helps you find, save and share them. You can search for GIFs by subject or browse trending and featured choices. Clicking a GIF copies its URL to your clipboard and right-clicking displays the Save and Copy menu. You can also drag and drop a GIF straight into a post.

New Windows 8 Apps

Siegefall
bit.ly/siegefall377
Min requirements: Windows 8+/10
File size: 489MB
In this massive real-time strategy game from Gameloft, the idea is to expand your kingdom and battle other players worldwide. The graphics are impressive and the gameplay is challenging.
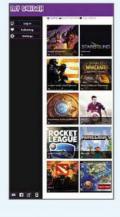
MyTwitch
bit.ly/mytwitch377
Min requirements: Windows 8+/10
File size: 1.93MB
MyTwitch is an unofficial app for Twitch that lets you view your favourite games being played live, and chat with other users. You can follow channels and pin favourites.

Shuffle
bit.ly/shuffle377
Min requirements: Windows 8+/10
File size: 8.77MB
Shuffle is a word game in which the aim is to put all the letters back in the right order. There is only one solution for each set of words.

WINDOWS TOOL
WinToFlash Lite 1.0
wintoflash.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 35.6MB

WinToFlash makes it much easier to install Windows on any PC by transferring all the required setup files to a bootable USB stick. The free version of the program works with any edition of Windows, from XP right the way up to Windows 10. It's very easy to use – you just follow the wizard interface, then point the program in the direction of the Windows file path (DVD or ISO) and target USB drive. WinToFlash Lite will do the rest. There are also lots of advanced tweaks you can apply if you wish.
• Make sure you choose the Custom setup during installation and untick the unwanted browser change.

SYSTEM BACKUP
EaseUS System GoBack Free
www.easeus.com/system-go-back
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 76.3MB

If you're worried about upgrading to Windows 10, you'll be pleased to know that you can roll back to your previous version of the operating system through Settings, Update & Security – provided you do so within 30 days. EaseUS System GoBack Free offers a different solution. It lets you create an im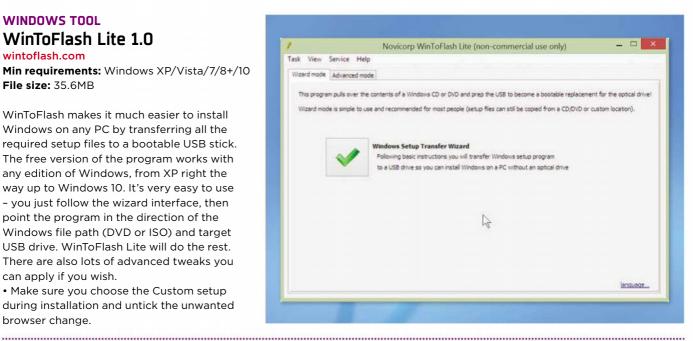age of your Windows drive prior to upgrading, which you can then use to restore everything if you decide Windows 10 is not for you (or if you run into problems). It even works with older versions of Windows, such as XP. The program has just two buttons – one to create the backup and one to restore it.

IMAGE EDITOR
ImBatch 4
bit.ly/imbatch377
Min requirements: Windows XP/Vista/7/8+/10 **File size:** 12.9MB

If you have a lot of photos you want to make changes to – whether it's to rename them, resize them, add frames, apply filters or upload them to Facebook – ImBatch is the perfect tool for the job because it can make numerous adjustments to whole batches of photos at once. Just add your images, then choose the options to apply.

The new version of the program adds a handful of tasks, including Add Selection, Make Selection Feather, Make Selection Gradient, Invert Selection and Fill Colour. There's also a new Quick Search tool. The Remove EXIF/IPTV Tags task has gained some additional options, too.

✗ Don't install...   ## ...Install this instead ✓

Download Accelerator Plus
www.speedbit.com/dap
Min requirements:
Windows XP/Vista/7/8+/10
File size: 10.3MB

We used to be big fans of this speedy download manager, but most of its best features are now only available in the paid-for version, which costs from £18.95. Also, the free version comes bundled with various unwanted extras and browser redirects, so you'll need to be very careful when installing the program.
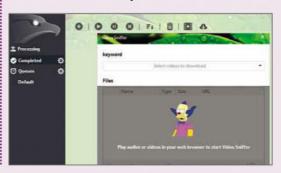
EagleGet
www.eagleget.com
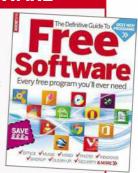**Min requirements:** Windows XP/Vista/7/8+/10
File size: 5.6MB

The excellent free EagleGet speeds up your downloads by up to six times and can resume broken transfers if you lose connection part of the way through. It integrates with Chrome, Firefox and Internet Explorer, automatically intercepting download links as you click them, and lets you save videos from sites including YouTube, Facebook and Vimeo. Just hover your mouse over a playing clip, then click the small Download button when it appears. EagleGet also lets you schedule downloads for faster and more convenient times of day.

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

EBOOK MANAGER
Calibre 2.33
calibre-ebook.com
Min requirements:
Windows XP/Vista/7/8+/Mac OS X
File size: 61.8MB

This version of the popular ebook manager and viewer includes additions to the Edit Book feature, and can replace incorrect spellings with suggestions from user-created word lists. The Viewer now saves the current reading point at 10-second intervals.

SYSTEM CLEANER
CCleaner 5.08
www.piriform.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 6.3MB

The latest version of the system-cleaning tool improves compatibility with Windows 10. Cleaning up after Microsoft's new Edge browser has also been improved, as has "Include" and "Exclude" wildcard support. There are also the usual bug fixes and interface tweaks.

MONITOR TOOL
SunsetScreen 1.22
bit.ly/sunset377
Min requirements: Windows XP/Vista/7/8+/10
File size: 881KB

The highly customisable SunsetScreen changes the colour of your monitor display in the evenings, reducing the harsh glare and limiting the "blue light" it produces. The latest version has a new Invert Colours mode, which is useful if you need the darkest screen possible.

ART PROGRAM
FotoSketcher 3.10
www.fotosketcher.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 5.9MB

FotoSketcher lets you transform photos into stylish works of art. In this update, the default DPI (dots per inch) is set to 300 for better print quality, and the compression quality of JPEGs has been improved, resulting in fewer artefacts (distortion caused by lost data).
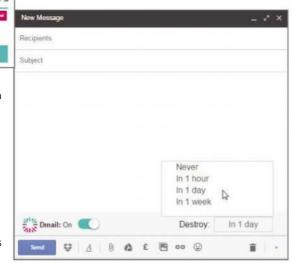
Best New Browser Tools

Revoke access to emails sent from Gmail

In issue 375 (bit.ly/webuser375), we covered Criptext Mail (bit.ly/criptext377), a Chrome extension that lets you send, track and recall encrypted emails from Gmail. DMail (bit.ly/dmail377) is a new tool that works in a very similar way by letting you set encrypted emails to self-destruct an hour, day or week after they're sent. If you don't select a 'Destroy' time, the extension lets you revoke access manually whenever you like. Despite still being in beta, DMail integrates neatly with Gmail: you activate it via an On/Off switch, use the drop-down Destroy menu in the New Message window and press a button on the homepage that lets you review your messages and revoke access. Recipients can read DMail messages by simply opening a link in the email they receive – they don't have to install the extension. Despite this, DMail does not yet have the functionality to let you see when your messages have been read.

Stream UK radio stations

Founded by a number of UK broadcasters including the BBC, Radioplayer is a useful web service that lets you play live or catch-up radio from more than 350 UK stations. The company's new Chrome extension (bit.ly/radioplayer377) makes accessing your favourite radio stations easier than ever by giving you a one-click shortcut to the player. When you first launch the service, you're recommended a variety of radio stations, but you can also use its search bar to search stations, subjects, people and programmes until you find something to your taste. By default, Radioplayer automatically resumes the last station you played when it's opened, and a handy side menu makes it easy to access your saved or recently played stations.

Protect your privacy

Did you know that websites can identify

you with remarkable accuracy simply from the way you type? The technology that makes this possible could be successfully harnessed to improve online security but it also has significant privacy implications – using Tor Browser or a VPN becomes largely redundant if you have Javascript enabled and can be identified based on your keystrokes. Because it's impossible to know exactly when your typing is being profiled, two security researchers developed Keyboard Security (bit.ly/keyboardprivacy377), a Chrome extension that randomises the rate at which characters are processed by your browser in order to protect your privacy. The current version is only a proof-of-concept (for purposes of demonstration), but its developers are already working on a more reliable release for the mass market.

Check Weather conditions at a glance

Weather (bit.ly/weather377) by Tim Leland is a simple tool for checking the weather forecast from your Chrome toolbar without loading any external web pages. The extension sources its information from forecast.io and determines your location automatically, so with a single click you can see the forecast for the next five days (as well as a detailed breakdown for the next eight hours). All the important information including high and low temperatures and chance of precipitation is displayed and the extension's icon is also updated to show the current conditions, which is perfect for checking whether you need to wear a jumper or your sunglasses if you're about to pop out for a stroll!
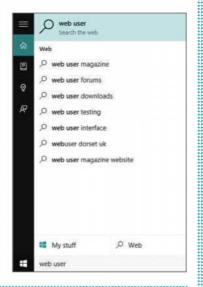
This fortnight's most useful tips and add-ons to help you get the most from Chrome, Firefox, Opera and more

FIREFOX

Search Google using Cortana

If you've upgraded to Windows 10, you'll notice that Cortana's web searches are powered by Bing. Provided that Firefox is set as your default browser, you can force Cortana to use Google instead of Microsoft's search engine by installing the Bing-Google add-on (bit.ly/binggoogle377). This new tool works by redirecting any searches you make with Bing to Google, meaning the same happens even when you visit www.bing.com by choice. We think this is a small price to pay for the option of using Google from Cortana and, frankly, it's unlikely that Microsoft will release an update that lets you change the default search engine anytime soon. There's usually a slight delay while the add-on redirects your search, but otherwise Bing-Google provides a simple and effective solution.

Add favicons to search results

When you use a search engine, it's not always obvious which website a result belongs to, because your eye is usually drawn to the blue page title rather than the URL below it. Search Engine Favicons (bit.ly/favicon377) solves this problem by showing each website's favicon alongside search results in Google, Bing and Yahoo. This makes spotting web pages from well-known brands much easier, thanks to their familiar logos. Remember, though, that just because a website has a familiar favicon, doesn't mean it's legitimate, so you should always check the URL, too.

Clear your browsing cache quickly

When you browse the web, Firefox stores a cache of many of the files you download, so that it's quicker to load similar pages in the future. However, when your cache is full, it can make your PC to run slower and web pages can

sometimes load incorrectly. Easy Clear Cache (bit.ly/cache377) is a handy tool that lets you clear these files without having to dig around in Firefox's Options menu. Note that it should not be used to delete records of a browsing session, because you'll need to clear your browsing history and cookies, too.

Reload closed tabs more easily

When you accidentally close a tab, you can reload it by pressing Ctrl+Shift+T, as long as it was the last tab you closed. If it wasn't, you must click the Firefox menu, select History and choose the pages you want to load below Restore Closed Tabs. Undo Close Tab Button (bit.ly/undoclosetab377) makes this task much easier by giving you a drop-down menu on the toolbar, from which you can select any of your recent tabs. By default, the add-on loads as two separate buttons (one of which simply reloads the last closed tab) but you can turn it into a dual-purpose button from its Options menu.

OTHER BROWSERS

ⓞ Detect WordPress themes and plug-ins

You don't need to be an expert programmer to build a website using WordPress. Installing free or premium themes lets you easily customise your site's design and layout without knowing a single line of code, and you can add lots of functionality using WordPress' catalogue of free plug-ins. WordPress Themes and Plugin Detector (bit.ly/operawordpress377) makes it easy to identify the themes and plug-ins used by your favourite websites, so you can use them, too. When a WordPress site is loaded, an icon appears in your address bar, which you can click to see a summary of the different installed elements.

ⓞ Reload tabs automatically

Refreshing your browser manually to see if a web page has been updated can quickly become tiresome, especially if you're juggling multiple tabs. Tab Reloader (bit.ly/tabreloader377) makes this job much easier by letting you choose how often you'd like each tab to be refreshed. By default, Tab Reloader is set to five minutes, but you can change this to anything from 10 seconds upwards before flicking the switch to activate it for the given tab. Once you've activated one or more timers, a counter appears on the Tab Reloader button to indicate the number of tabs that are being controlled by the add-on.

Best Free Apps

App of the Fortnight

FILES

Pushbullet

UPDATED

bit.ly/pushbullet377
Min requirements: Android 4.0, iOS 7.1
Size: 5.7MB

Many of you will already be familiar with Pushbullet – a handy service that lets you 'push' files between your devices, share content with others, and read and send text messages from your PC. Both the Android and iOS Pushbullet apps have recently received major updates, introducing a new interface and some important tweaks to its features.

The app's new design makes finding messages and files much easier than before. It now collects all the files you've transferred between your devices under the 'Me' menu while grouping messages from others under 'Friends'. This means your own files won't get lost among those sent by others. It's also much easier to find all content sent by one person, thanks to the app's new 'conversation' view which groups their messages in one place.

Pushbullet's SMS functionality is another area that has seen several improvements. You can now see your entire SMS history and even browse your contacts list to send new text messages. Although it's not a new feature, we especially like that Pushbullet lets you see your Android notifications (including incoming calls) instantly on your PC. If you find yourself constantly checking your device for new notifications because it's set to silent, this can be an invaluable time saver.

Our rating ★★★★★
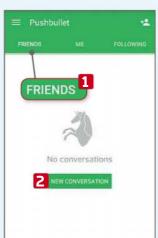
MINI WORKSHOP
Send files with Pushbullet

1 To send a file to one of your own devices, tap Me **1** and choose the device from the drop-down menu. **2** Next, tap the Attachment icon **3** to take a photo or choose a file, then select the Send icon. **4** Text messages must be sent separately using the text box. **5**

2 To send a file to a friend, tap Friends **1** and select New Conversation. **2** Contacts who already use Pushbullet will be at the top of the list, but you can also send files to those who haven't joined. Select a file using the Attachment button and tap the Send icon as described in Step 1.

3 If you send the file to a friend who doesn't have a Pushbullet account, they'll receive an email containing a link to it. To remove an item from your conversation history, press and hold it, **1** then select Delete. Items you've sent or received can be shared via other websites and by email using the Share button. **2**

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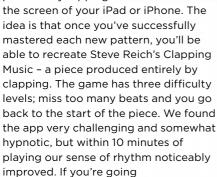
GAME

Steve Reich's Clapping Music
bit.ly/clapping377
Min requirements: iOS 8.1
Size: 20MB

NEW

This fun, addictive game challenges you to repeat rhythmic patterns by tapping the screen of your iPad or iPhone. The idea is that once you've successfully mastered each new pattern, you'll be able to recreate Steve Reich's Clapping Music – a piece produced entirely by clapping. The game has three difficulty levels; miss too many beats and you go back to the start of the piece. We found the app very challenging and somewhat hypnotic, but within 10 minutes of playing our sense of rhythm noticeably improved. If you're going to play, just remember to be considerate to those around you and wear a pair of headphones!

Our rating ★★★★☆

FOOD

Plan Well Eat Well
bit.ly/eatwell377
Min requirements: Android 2.3.3, iOS 6.0
Size: 2.9MB

NEW

Plan Well Eat Well makes it easier than ever to eat healthy meals. The app includes an impressive catalogue of wholesome recipes. Once you've found something you like, you can save it to your planner with a couple of taps and its ingredients will be added to your shopping list. The app's developers claim that by planning your meals in this way, you'll not only have a healthier diet but will also save money by wasting less food. Once you've set up an account, you can access your planner by logging into planwelleatwell.com, where you can also manage your shopping list and add your own recipes.

Our rating ★★★★☆

ROUND UP | Quick bites

10Calc (advanced calculator)
bit.ly/10calc377
Min requirements: Windows Phone
Size: 2.16 MB

10Calc is a fast, lightweight app that offers a range of functions you won't find on your default Windows Phone calculator. Along with a powerful scientific calculator, it includes a unit converter, time-difference calculator and even an intelligent bill splitter.

Pocket
bit.ly/pocket377
Min requirements: iOS 7
Size: 31.8MB

Pocket is a popular tool for saving articles and videos to your smartphone or tablet for viewing later, even while you're offline. Text-to-speech has recently been added to the iOS version of the app, so you can now have any articles you've saved read aloud.

Plex
bit.ly/plex377
Min requirements: Android 3.2
Size: 6.7 MB

Plex, which won a Silver Award in our round-up of media–centre software in Issue 372, has updated its Android app. It now has a new Material Design and some tweaks for Chromecast that let you change the video quality and turn on subtitles during playback.

VIDEO

Hyperlapse
bit.ly/hyperlapse377
Min requirements: Android 4.4
Size: 15MB

NEW

Like its Desktop counterpart, which we covered in Issue 373 (bit.ly/webuser373), Microsoft Hyperlapse Mobile aims to make your first-person videos more entertaining and "cinematic" by speeding them up and smoothing out camera wobble. Until recently, only a beta version of the app was available, but now a stable release can be downloaded directly from the Google Play Store. It's very straightforward to use: launch it, and you're offered a choice between importing an existing video or recording a new one. You can then can use the slider to accelerate the footage by anywhere between two and 32 times, and a preview is displayed on screen. It's a simple idea, but one that might succeed in making your wobbly holiday videos less painful viewing.

Our rating ★★★★☆

Best Free Apps

CURRENCY
Travelex Money
bit.ly/travelex377
Min requirements: Android 4.0, iOS 8
Size: 11 MB

NEW

Travelex Money lets you order more than 45 different currencies from your smartphone or tablet and have the cash delivered directly to your home (or nearest Travelex store). Using the app's Get Currency section is very easy: after searching by currency or country, you specify how much you want to order by swiping your finger up and down the on-screen slider. If you're not sure how much cash to take on holiday, the app also has a handy calculator that suggests a sensible figure based on how lavishly you like to live. When we tested the app, there were no commission or admin fees and its exchange rates were highly competitive.

Our rating	★★★★☆

TRAVEL
FailPop: travel tips
bit.ly/failpop377
Min requirements: iOS 7
Size: 46.6 MB

NEW

Failpop is another useful app for embarking on a trip abroad. It informs you of local customs around the world and provides a tip for each country from the following four categories: 'Meeting people', 'How to eat', 'What to wear' and 'More fails' (the latter requires an upgrade to the Pro version, which is due to launch soon). Every tip is accompanied by a GIF, which not only makes it more entertaining, but also helps you remember the information by providing a visual clue. Although we enjoyed reading Failpop's concise, clear tips – and we definitely learned a thing or two – the free version of the app is no substitute for a detailed guide book.

Our rating	★★★☆☆

5 NEW APPS WORTH PAYING FOR

PRODUCTIVITY
Coda for iOS
bit.ly/coda377
Min requirements: iOS 8.3
Size: 29.8MB **Price:** £7.99
One for keen coders, Coda for iOS is an advanced text editor offering syntax highlighting for programming languages including CSS, HTML, Java, PHP, Python and many more. The app also includes a full file manager and lets you preview pages you've written.

TRAVEL
Smarter Paris
bit.ly/paris377
Min requirements: iOS 7
Size: 230MB **Price:** £2.99
This brilliant app offers a wealth of information to enhance your trip to France's capital with features including 'What's on', 'Food & drink' and 'Themed walks'. All the app's content, including its detailed map with points of interest, is available offline.

GAMES
Clangers – Playtime Planet
bit.ly/clangers377
Min requirements: iOS 6.0
Size: 129MB **Price:** £2.29
Aimed at pre-school children, this fun app lets you explore the Clangers' planet with the TV show's lovable characters. You can take part in five different activities including playing hide and seek with Tiny and Small, and helping them catch peas in a basket.

VIDEO
Video 360
bit.ly/360video377
Min requirements: Windows Phone
Size: 1.5MB **Price:** £1.49
Video 360 is the Windows Store's first 360-degree player. By connecting the app to Tubecast (bit.ly/tubecast377), you can watch 360-degree YouTube videos directly from your smartphone. Just move your device to change your viewpoint.

PHOTOGRAPHY
Adobe Lightroom
bit.ly/lightroom377
Min requirements: Android 4.1
Size: 17MB **Price:** Free (requires Adobe subscription)
If you subscribe to Adobe's Creative Cloud Photography plan, you'll be pleased to learn that editing images in Lightroom for Android is faster than ever, thanks to a new way to crop images and a feature that lets you copy adjustments from one photo to another.

Coda for iOS

Smarter Paris

Clangers – Playtime Planet

Video 360

Adobe Lightroom

📺 Best New TV Apps

VIDEO

YouTube
bit.ly/youtube377
Min requirements:
Android (varies with device), iOS 7 (not updated), Windows Phone (not updated)
Size: Varies with device

YouTube has applied some welcome improvements and added new features to its Android app. You can now switch instantly between your channel subscriptions, recommended videos and account settings by tapping the relevant tab at the top of the screen, which makes it easier to find and watch interesting new content. New in-app editing tools let you trim the videos you upload, apply effects and filters, and add a musical soundtrack, which saves having to use a separate app to edit your clips to perfection. You can also watch vertically shot videos on your phone or tablet full-screen, rather than putting up with unsightly black bars.

FILES

Dropbox for Roku
bit.ly/roku377
Min requirements: Roku device
Size: N/A

Plenty of Android apps have now added support for Chromecast but, strangely, Dropbox isn't yet one of them. Instead, the popular online storage service has decided to side with rival streaming device Roku, which now has a dedicated Dropbox channel. This means you can search for, browse and view photos and videos from your Dropbox account on your television, as well as other files that you've stored in the cloud. All Roku devices, including the Roku streaming stick and the recently updated Roku 2 player, which we reviewed in Issue 374, are compatible with HDMI TVs, and there are now more than 1,400 streaming channels to enjoy.

TV & FILM

Netflix
www.netflix.com
Min requirements: Smart TV
Size: N/A

Following the recent revamp of the Netflix website, which we reviewed in Issue 374 (bit.ly/webuser374), the streaming service has now updated its smart TV app, which had remained untouched for two years. Improvements to the interface include a display showing video playback while you're viewing information about a film or TV show to "let the content speak for itself" and provide "a more immersive and cinematic experience". You can turn off this auto-play feature if you find it annoying rather than useful. It's also now easier to browse titles using your remote control. The update is being rolled out gradually, so it may take a few weeks to reach the Netflix app on your television.

✗ Don't install...

Twitter
twitter.com/download

Described by one user as "the worst app for Twitter ever", the official Twitter app seems specifically designed to annoy you. It frequently crashes, is slow and fiddly to use and lacks many useful tools offered by unofficial apps for the social network. Worst of all, it often fails to serve its primary purpose, which is to let you browse the latest tweets, either because it fails to update at all or floods your phone with so many notifications that you have to turn it off.

...Install this instead ✓

TweetCaster
tweetcaster.com
Min requirements: Android 2.3 (including Kindle Fire), iOS 6
Size: Varies with device

Describing itself as "the best thing to happen to Twitter since Twitter", TweetCaster converts the chaos of the social network into manageable chunks. Its clean, easy-to-navigate interface is speedy and stable, and it offers lots of useful features that you won't find in rival Twitter clients. These include Search Party, which lets you narrow your searches to relevant results, rather than an endless stream of rubbish; Zip It, which hides unwanted tweets without unfollowing the offending tweeter altogether; photo effects to make your uploads more interesting; and much more. You can manage an unlimited number of Twitter accounts from within the app, and even post to Twitter and Facebook simultaneously. ■

GoPro Cameras

Are you the type to throw yourself into extreme pursuits? Or do you prefer a leisurely stroll? **David Crookes** discovers that whatever your idea of fun, it's better with a GoPro camera

What are they?

GoPros are a range of high-definition video cameras that have become popular among people who want to capture dramatic, extreme-action, point-of-view footage of thrill-seeking escapades. They are small and sturdy, which makes them easy to attach to anything from helmets and handlebars to skateboards and surfboards. Although they have been sold by a company called GoPro (gopro .madison.co.uk) since 2002, the name has become a proprietary eponym – used to describe similar products by rival manufacturers. 'Hoover' is probably the most famous example of such an eponym.

How do GoPros work?

Using special mounts, you can attach it to whatever you want. When the device is turned on, it captures wide-angle footage with great depth of field and sharpness, thanks to its advanced inner components. There are only a few buttons, and slots for connections and SD cards. These, along with on-board Wi-Fi, let you control the camera remotely, alter the video settings and get footage off the camera. The settings can be adjusted remotely using a remote control or a free app (bit.ly/proapp377).

So what's new?

GoPro has refreshed all its products and is making a lot of noise about its Hero range. Priced £329.99, The Hero4 Session is 50 per cent smaller and 40 per cent lighter than earlier models, and is able to plunge 10 metres (33 feet) underwater without the need for a special case. It takes video in 1080p at 60fps (frames per second). At the top of the range, the Hero4 Black, priced £409.99, films footage in 4K; for those on a tighter budget, the new GoPro Hero+ LCD adds an LCD screen to the most basic Hero and costs £249.99.

How does the GoPro app work?

The app, which was recently updated to work with the Hero4 Session, offers full remote control of the camera functions while allowing you to see live previews of what your camera is seeing. It also lets you copy videos and photos to your device to play back later, and you can even delete files saved on the microSD card inserted into the camera. But the killer feature is HiLight Tagging, which lets you mark key moments during recordings, making it easier to share the best moments with friends.

What other companies make action cameras?

Sony's impressive AS100V Action Cam was released last year, while Panasonic has launched a wearable camera, the HX-A500 4K. TomTom's new Bandit has a built-in media server, letting you edit video without having to download it. Now, even mobile phone companies are getting in on the act. In June, EE announced the 4GEE Action Cam, which streams to a service called Skeegle. This gives it the jump on GoPros, which don't have internet broadcasting as standard, although add-ons are available.

Why would I want a GoPro?

Because while they are all the rage with extreme-sports fans, they're just as good for filming more sedate pursuits, such as a countryside bike ride or a round of golf. You could even attach one to a drone for some stunning aerial shots or take inspiration form Dave Akerman (www.daveakerman.com), a high-altitude ballooning enthusiast who straps GoPros to home-made "space crafts" powered by a Raspberry Pi computer to send live images from near space.

What do people do with the footage?

A lot of it ends up online. Around 6,000 GoPro videos are added to YouTube

4GEE Action Cam accessories (L–R): a waterproof case, a mount and a Viewfinder watch

every day and searching the site for 'gopro' throws up 14.5 million results. A man fighting off a Great White Shark in Sydney Harbour (bit.ly/shark377) a year ago has attracted a whopping 31,613,946 views and an official GoPro production showing close-up footage of lions in Pretoria (bit.ly/lion377) has been watched 27,707,450 times.

Animals are popular choices, then?

It would seem so. You can attach a GoPro to your pet to see how they see the world from their perspective (which makes for a nice spin on the web's ubiquitous cat videos). But sometimes, animals like to take control of their own filming. Two pieces of footage show seagulls snatching GoPros and taking to the air in Spain's Cies Islands (bit.ly/gull377) and in San Francisco (bit.ly/seagull377). Thankfully, neither device appeared to be harmed following the impromptu 'bird's-eye' views.

Can I make money from these videos?

Yes, and it's become easier to do so now that GoPro has launched a content-licensing portal (bit.ly/gplicence377) that allows advertising agencies to discover, license and download the best GoPro flicks. It launched with more than 600 amateur and professional videos. But even on YouTube, there is an opportunity to make money from the most popular footage (bit.ly/earnyoutube377).

Are there other benefits to GoPros?

One growing use for these cameras is security. Cyclists have taken to wearing them on their helmets so they can film cases of bad driving and instances of road rage (*Daily Mail* writer Sarah

Vine disparagingly dubbed them the "Cycle Stasi" and "Lycra-clad moral vigilantes"). But similar, cheaper cameras are also being placed on car dashboards. These so-called dashcams help with insurance claims and accident reports. Even the British bobby is getting in on the act: video cameras – albeit not GoPros – are now also worn by police officers, perhaps to avoid any future 'Plebgate' incidents.

Could I just use my mobile phone instead?

Of course, but a smartphone is less robust than a GoPro camera and not as suitable for rugged rides or for sending into the air. Mobile phones may be replacing standalone compact cameras but not many people would want to use them as an action-cam. GoPro is now worth a cool $3bn (about £1.9bn) and CEO and founder Nick Woodman told the *Daily Telegraph* that he even wore one on his head to film when his three sons were born.

Are GoPros the future of filming?

Quite possibly. Every Toyota Tacoma truck sold next year will come with a GoPro camera mount and we may see more Hollywood films containing GoPro footage. Director Michael Bay has been using the technology since 2013 and indeed, the GoPro HD Hero is listed at imdb.com (bit.ly/pain377) as one of the cameras used to make the 2013 film *Pain & Gain*, staring Mark Wahlberg.

BEST GOPRO-FILMED VIDEOS

A flying eagle's point of view
Strapped to the back of an eagle, the GoPro camera captures some stunning footage above the French Alps, giving a real feeling of being at one with nature as the wind howls in the background.
bit.ly/eagle377

Full wash cycle in a dishwasher
It may not sound like the most riveting video on the web, but if you've ever wondered what happens when you close the door of your dishwasher, you're set to find out. It shows the benefits of owning waterproof cameras.
bit.ly/dishwash377

Felix Baumgartner's 24-mile freefall
In 2012 Austrian skydiver Felix Baumgartner jumped from a balloon over New Mexico and plummeted 24 miles in what was the highest ever freefall. The heart-stopping feat was captured from his point of view.
bit.ly/freefall377

Fireman saves a kitten
Kittens are an online favourite when it comes to the "awww" factor, so it's not surprising that this video of a fireman saving little fluffykins has been watched 27 million times on YouTube.
bit.ly/kitten377

GoPro STOLEN by a SEAGULL!! - Unique San Francisco sunset...

Cycling Stasi: Never mind drivers eating cereal. SARAH VINE says the real menaces on our roads are vigilantes in Lycra filming your every move

DOWNLOAD BANNED APPS & SOFTWARE

Google and Apple love to tell you what you can and can't download. **Wayne Williams** ignores their petty restrictions and reveals how and where to get (safe) apps and add-ons they've banned, and software that's been discontinued

I f an app has been removed from the Google Play or Apple App Store, or been forbidden entry in the first place, there's usually a good reason. It may have been found to contain malware or offensive material, or is buggy and unstable. However, there are also many examples of Google and Apple 'banning' apps for self-serving reasons, such as because they supposedly undermine their business model (advert blockers being a prime example), provide direct competition to one of the company's own tools, breach copyright restrictions or don't meet the store's submission guidelines.

In this feature, we look at some of the best (safe) forbidden apps and explain how to get them. We also do the same for software that has been abandoned before its time.

To install banned apps on Android, you'll need to sideload them. To do this, open Settings on your Android phone and tick Unknown Sources – it'll be under Applications or Security. You'll now be able to download apps in APK format and install them.

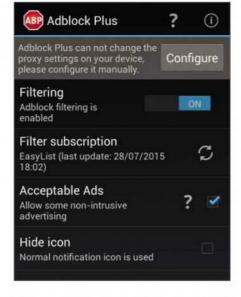# INSTALL BANNED APPS

Adblock Plus and Adblock Browser for Android
adblockplus.org
What is it?
An app that blocks adverts on Android devices.

Why is it banned?
Adblock Plus used to be available in Google Play but it was pulled in 2013, along with other ad-blocking apps. Google cited "interference with another service or product in an unauthorized manner" as the reason for the removal, but the real motive was financial: Adblock Plus was reducing the amount of money Google was making from adverts. Ad-blockers are also banned from the Apple App Store.

Why would I want it?
Because adverts can be annoying and distracting, and the Adblock app removes them while you browse the web on a phone or tablet. From the same developers, the Adblock Browser for Android (bit.ly/browser377; coming soon to iOS) is a browser that automatically blocks ads.

What's the catch?
You don't have to root your Android phone to use Adblock Plus, but the app's developers says it is desirable. Even when you install it, some ads will still be let through. Also, the Adblock Browser for Android is only in beta at the moment, so it could prove a bit buggy and unreliable.

DRONES, FLAGS AND FARTS: THE WEIRDEST BANNED APPS

Apps are usually banned for straightforward and understandable reasons. Apple cracks down on apps that are offensive or racist, so it has blocked games that simulate drug dealing, people smuggling and running a sweatshop. However, in the wake of the Charleston church shooting in South Carolina, Apple also banned any apps featuring the Confederate flag, after it was linked to the racist killings. Among the apps removed were ones which included the flag for legitimate purposes, such as American Civil War games. After an outcry, Apple backtracked partially, and now allows some games to display the flag, although many are still banned.

While Apple will permit you to install 'fart' apps (which make the sound of someone breaking wind) on an iPhone, they are banned on the Apple Watch. Similarly, Apple won't allow apps on the Watch if their primary function is telling the time.

An app that notified users whenever a drone strike was recorded anywhere in the world was blocked by Apple for reasons of national security, as was a WikiLeaks app. The I Am Rich app that did nothing more than display "I Am Rich" with a red diamond in the background, was pulled by Apple for lack of functionality, but not before eight people bought it, paying $999 each.

Virus Shield was the number one paid-for app on Google Play for a while, until Google eventually pulled it last year when it was discovered that a scan with the anti-malware app actually did nothing at all except change its icon from a cross to a tick, implying that the app had given a device the all-clear.

Amazon Appstore
www.amazon.co.uk/getandroidapp
What is it?
An Android app store from Amazon.

Why is it banned?
Google doesn't want to promote a rival to Google Play, which is what Amazon Appstore is. If Google made the Appstore freely available, users might choose to use it to shop for apps, which would mean a loss of revenue for the search giant. It is, of course, available by default on Amazon devices, such as the Kindle Fire tablets.

Why would I want it?
Because it allows you to compare the price of apps from two reliable sources instead of one. Amazon hosts regular app sales and giveaways – for example, there's a Free App of the Day – which means there's a good chance you'll be able to bag some bargains.

What's the catch?
There's no catch as such. Amazon Appstore provides a good alternative to Google Play, but it doesn't offer as much breadth of content, and you need to have an Amazon account to use it, with 1-Click payment method set up.

GBA4iOS
www.gba4iosapp.com
What is it?
A Game Boy Advance emulator for the iPhone and iPad.

Why is it banned?
Apple doesn't allow emulators in the App Store because they let users play games without paying for them, most often (if we're honest) illegally.

Why would I want it?
It does a great job of emulating the Game Boy Advance handheld console, and gives you access to a range of much-loved games including Mario Kart: Super Circuit, Kingdom Hearts and Pokemon.

What's the catch?
For starters, there are legal issues. Like any emulator, if you own the ROM (the game) that you're playing, then it might be legal for you play it on GBA4iOS; if not – well, you're breaking the law. GBA4iOS, like Shou Screen Recorder (see right), also frequently becomes unavailable, which means installing it is far from easy. If you're running iOS 8.1 or later, you'll be advised to use the paid-for version.

TubeMate
tubemate.net
What is it?
A YouTube downloader for Android.

Why is it banned?
Google doesn't like people being able to download videos from YouTube (which it owns) because it means it makes less money from the adverts on them.

Why would I want it?
You might want to watch YouTube videos when on the go, without using your network connection. TubeMate lets you save music videos and listen to the music from them whenever you like.

What's the catch?
Naturally, it's against Google's terms and conditions to download videos from YouTube, and the legality of doing so is dubious.

Shou Screen Recorder
emu4ios.net
What is it?
A screen recorder for iPhone and iPad.

Why is it banned?
Apple doesn't allow applications that can record your iOS activity. The company says that a malicious app could record your screen without your
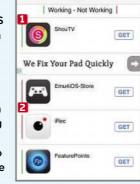

⚙ MINI WORKSHOP | Install banned apps in iOS using Emu4iOS

1 Emu4iOS provides a way for you to install iOS apps that aren't allowed in the App Store, including screen recorders (such as Shou),

emulators and BitTorrent clients. It doesn't require you to jailbreak your iPhone. Open Safari on your iPhone or iPad and browse to https://emu4ios. net. The apps appear in a list. **1**

2 The problem with Emu4iOS is that while a decent number of apps are available, many of them stop installing or working, usually due to changes made by Apple. To

save you wasting time, ones that work are marked with a green line **1** and ones that don't have a red line. **2** Newly updated (working) versions appear from time to time.

3 Click Get **1** to install a working app, then click Install **2** in the message that appears on screen. The app will install in the same way as a regular app and can be

accessed from the Home screen. You can move and delete it as you would normally.

knowledge, and be able to steal your log-in details.

Why would I want it?
You can use Shou to capture anything you do on screen. You can also use it to record streaming videos, such as TV programmes from iPlayer, and live broadcasts from services such as Periscope (www.periscope.tv).

Follow our Mini Workshop at the bottom of the opposite page if you want to find out how to install it.

What's the catch?
Shou is perfectly safe, but you should make sure you don't record anything on your screen containing personal information. Also, Shou will pick up external sounds and any notifications you receive while recording, so make sure you use it in a quiet room. Apple will occasionally take steps to prevent apps such as Shou from installing. There are workarounds – setting the date back a few days, or even years, sometimes works – but usually, if it won't install, you'll just have to wait until the developers release a new version.

Popcorn Time
popcorn-time.se
What is it?
An app that streams TV and movie torrents to Android and iOS devices.

Why is it banned?
Popcorn Time lets you watch thousands

BEWARE OF DODGY APPS

Most of the malware that makes its way on to Android devices comes from people installing apps from sources other than Google Play or Amazon Appstore (occasionally dodgy apps do find their way into official stores, so there's no guaranteed safe download location). When installing an app from an external store, treat it with suspicion. Get it from somewhere trustworthy – if you install Adblock Plus on Android, for example, get it from the Adblock Plus website. If there are reviews accompanying the app, take the time to read them because they may alert you to any problems. And remember, don't trust 100-per-cent star ratings. They are likely to be fake. Android's app-verification tool warns you about potentially harmful apps. Make sure the tool is turned on by opening Settings, and tapping the Security option under Personal. Under 'Verify apps', make sure 'Scan device for security threats' is set to on. You should also install a security tool such as Lookout for Android (www.lookout.com/android).

of TV episodes as well as popular movies, all for free. The problem is it does so illegally, using torrents.

Why would I want it?
The ease with which you can find and start watching almost any TV episode or film leads to Popcorn Time being frequently compared to Netflix. It gives your phone or tablet access to a phenomenal amount of streaming content.

What's the catch?
The big problem is that the content on offer comes via illegal torrents, so anything you watch will be without the copyright holder's permission and you'll be breaking the law. There's another problem, too. The UK High Court has ordered all the major ISPs to block access to the Popcorn Time site (and other similar locations). This has led many people to use the app through a proxy server or a VPN, such as TunnelBear (www.tunnelbear.com) which may get around the restriction, but still breaks UK law.

For more on VPNs, see our feature on page 46.

REVIVE DISCONTINUED SOFTWARE

TrueCrypt
bit.ly/truecrypt377
What is it?
Once popular, but now discontinued drive-encryption software.

Why was it discontinued?
TrueCrypt development ceased in 2014 when Microsoft support for Windows XP came to an end. Because later versions of Windows – from Vista onwards – offered integrated support for encrypted drives and virtual drive images, the developers believed there was no longer a need for a third-party tool that did much the same thing. The

official website (truecrypt.sourceforge.net) explains how users can migrate from TrueCrypt to BitLocker in Windows.

Why would I want it?
The software can secure any hard drive (including system drives) and transform a spare USB stick into a portable, private vault. It's a great tool for ensuring that only you can access personal files on your computer. Although it's been discontinued, it still works very well.

What's the catch?
The software is no longer being worked on and, in the words of the developers:
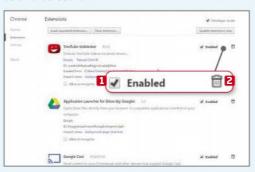
How to install banned extensions in Chrome

1 Google no longer allows you to install extensions from outside its own web store. This is for reasons of security, but also because Google wants to control which extensions are used with its browser. It used to be easy to circumvent this, but now the process is a little more involved. Click the Menu button, **1** select Settings **2** and click Extensions. **3**

2 Download the extension you want to install. It should be in CRX format. Use a program such as 7-Zip (www.7-zip.org) to extract the extension's contents into a folder on the Desktop. Tick the 'Developer mode' box at the top **1** and click the 'Load unpacked extension' button. **2** Browse to the folder that you have extracted the extension to and select it.

3 If everything has gone according to plan, the add-on will install and be available to use. The Extensions page should show it as enabled. **1** To disable or delete it, untick the Enabled box or click the bin icon. **2** You can now delete the folder containing the unzipped extension contents.

"using TrueCrypt is not secure as it may contain unfixed security issues". However, it's probably safe enough for most people to use. You'll want to make sure you grab TrueCrypt 7.1a (no earlier or later versions), and only from a trustworthy site, such as the one our bit.ly URL redirects you to. Don't get the installer from truecrypt.sourceforge.net.

MSN Messenger
bit.ly/msn377
What is it?
Microsoft's much loved instant-messaging service that launched back in 1999.

Why was it discontinued?
MSN Messenger had an estimated 330 million users in 2009 but, as the new decade arrived, the software began to lose its way. In 2011, Microsoft acquired Skype from eBay and made the decision to merge it with MSN Messenger. The ageing chat service was turned off in 2013 and, towards the end of last year, Microsoft moved the remaining users across to Skype.

Why would I want it?
If you prefer MSN Messenger to Skype – either for nostalgic reasons, or you just don't need to make voice or video calls – then it's still a decent program, and it's great for chatting with friends.

What's the catch?
Although you can download the program, the servers supporting it no longer work, so you can't sign in or chat. Its successor, Windows Live Messenger 2012, still works but you'll need to make use of Messenger Reviver 2 (bit.ly/

msnrevive377). And there's another catch – your friends probably won't be using it anymore, which might make finding someone to chat with a bit difficult.

Winamp
bit.ly/winamp377
What is it?
A popular media player that arrived in 1997.

Why was it discontinued?
AOL didn't give a reason when it closed the service at the end of 2013, but it was probably due to lack of use. Millions of people now use music-streaming services instead. Winamp was bought by the "digital-audio advertising network" Radionomy (www.radionomygroup .com) in early 2014, but there's still no official new version and no word of when (or if) it will be released.

Why would I want it?
Winamp was a decent media player, with some useful features. If you used it in the past you might want to revisit it for nostalgic reasons.

What's the catch?
The only reliable version available is a patched build of Winamp 5.666. This isn't an official release, and is only intended as a stopgap until a new revamped Winamp arrives.

DOWNLOAD BANNED ADD-ONS

YouTube Unblocker
bit.ly/ytunblock377
What is it?
An extension for Chrome that automatically unlocks blocked YouTube videos.

Why is it banned?
Google wants to control the extensions used in its browser and doesn't want any that make changes to how its other services work.

Why would I want it?
YouTube Unblocker lets you bypass geographical restrictions by attempting to open the videos using foreign proxy servers. This means that videos that aren't allowed in the UK should play without problem.

What's the catch?
Should the developers ever decide to change the extension and introduce malicious code, you could be at risk (this has happened with other extensions in the past). It's very unlikely to happen, though.

YouTube Center
bit.ly/ytcenter377
What is it?
A Chrome add-on designed to expand the functionality of YouTube.

Why is it banned?
Like YouTube Unblocker, this add-on makes changes to how YouTube works – and that doesn't make Google happy.
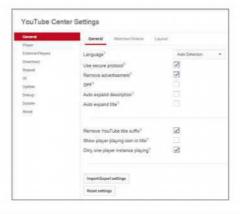
Why would I want it?
It lets you choose how YouTube looks and behaves in Chrome. If there's something about the video site that irks you, there's a good chance that you can banish the annoyance using YouTube Center.

What's the catch?
You need to configure the add-on to get it working how you want it to, and it's not particularly easy to use. Updates aren't very fast and if or when Google makes a change to YouTube, it may mean the extension no longer works.

Follow our Mini Workshop on the opposite page if you want to find out how to install blocked Chrome add-ons.

What you say...

WU [twitter] [facebook]

We asked *Web User* readers which apps and programs would you like to see banned? Here's what you told us:

Google. It should be in Room 101 by now. Snapchat because it's pointless. And anything that censors knowledge.
Jack @imthegoldmaster

Facebook, because it would seem that the world revolves around it nowadays.
Joe Joiner @joejoinerr

Pinterest, because I am sick of having notifications of my pins being 'repinned'. Grr.
Jason 'Boz' Bowyer

Instagram, because of all the 'what I had for dinner' food pictures.
Chris Cole

Odd choice, but iTunes. It's incredibly bloated, takes over your system and it's rarely used. My iPhone updates over iCloud, so I never need to use iTunes.
Si Mellor

Periscope, which appears to be an excuse for people who think they have talent to exercise their egos.
Martin Phillp

Walking around town, it sounds like a swarm of incoherent nonsense (am I allowed to say 'swarm'?), so I'd ban the 'phone' app itself.
James McGinnis

NEXT ISSUE
on sale Wednesday 26 August 2015

WINDOWS 10
WHAT YOU NEED TO DO NOW

One month on from the launch of the new operating system, we explain how to fix problems, uncover hidden tools and make it work better for you

PLUS...

⊕ **SPEED UP YOUR BROWSER**
Make Chrome and Firefox as fast as they used to be

⊕ **NEW MAPPING TOOLS**
Clever apps and sites that go beyond Google Maps

⊕ **IMPROVE YOUR VIDEOS**
Best ways to create, edit and share mobile movies

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BEST VIRTUAL PRIVATE NETWORKS

Virtual Private Networks – or VPNs, for short – are clever tools and services that allow you to surf anonymously and visit websites hosted abroad that you typically can't access from the UK. **Rob Beattie** rounds up six of the best.

Hola | hola.org | ★★★★★

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

What we liked:

We thought long and hard before giving Hola the Gold Award, because it's a controversial winner. However, it's the most effective free way we've found to get access to content that isn't normally available to UK web users, with a free service that rivals the other award-winners' paid-for options.

The problem is that it uses peer-to-peer networking. This means Hola's paying customers gain access to your bandwidth to get a better service. Security experts recently accused Hola of not being secure enough, and claimed it allowed hackers to use it to create a botnet that was used to attack at least one website.

For occasional use, the service is very easy to use. You can install the Chrome extension, activate it while you're using the service and disable it when you're not. Unlike all the other free services we tested, there are no restrictions on time or data, and it includes presets for accessing popular services including Netflix, Hulu and Comedy Central. You also don't have to sign up to start using it.

In our tests, it barely impacted on our broadband performance, with download speeds of 73.92Mbps and uploads of 7.74Mbps, compared with our usual 74.92Mbps and 10.42Mbps.

How it can be improved:

Accusations against the service have been significant and well researched – the website adios-hola.org lists the potential problems. These are worth reading before you consider using the service. Hola counter-claims that only legitimate businesses can pay to use the bandwidth offered by its network and that it's continually working to improve security (see bit.ly/hola377). However, there's undoubtedly an element of risk involved and, in a worst-case scenario, your IP address could be linked to activity that you have no control over. The same is true of any peer-to-peer activity so although Hola offers a great service for free, it's only worth exploiting if you're prepared to live with the risks.

OUR VERDICT

Compared with how the other free services are hobbled or restricted, Hola is the only VPN we tested that works as well as a paid-for service. However, there are risks involved so if you aren't comfortable with peer-to-peer sharing, you should steer clear.

TunnelBear | www.tunnelbear.com | ★★★☆☆

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

WebUser SILVER AWARD

What we liked:

TunnelBear brings some playfulness to its VPN, giving it the most character of our three award winners. For example, as it installs, messages about "unboxing the bear" and "brushing fur" appear on the screen. Although its initial free offering of 500MB of downloads a month doesn't seem very generous – despite being described on the site as a "hearty helping" – a single tweet can increase this to 1.5GB. You can simply repeat the tweet each month to get your maximum free quota.

The software runs on PCs, Macs and iOS and Android devices. It's also available as a Chrome add-on (though it's currently still in beta) and has a consistent, clear and attractive wood-grained interface that makes it easy to monitor your current data limit. There are also good visual clues, such as the pop-up of a roaring bear's head, to alert you when your connection is not secure. At 57.1Mbps download and 15.4Mbps upload, it compares well with Hola.

How it can be improved:

TunnelBear doesn't feel as responsive as it used to and takes a while to get going. Worse, Hulu.com spotted it straight away and wouldn't play content. A more generous free allowance would encourage more paid-for subscriptions, and it should use AES encryption, rather than Blowfish.

OUR VERDICT

If you're worried by Hola's security, TunnelBear is a safer alternative for occasional use – up to 1.5GB a month. It's great if you just want to dip a toe in the waters of VPNs.

CyberGhost | www.cyberghostvpn.com | ★★★☆☆

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

WebUser BRONZE AWARD

What we liked:

CyberGhost runs on pretty much anything – Windows, OS X, Linux, Android and iOS – and offers a versatility only matched by Hola. Unlike TunnelBear, there are no download limits (although the free version will disconnect every three hours, you can just re-connect and carry on) and the adverts (20 seconds when you first log on and then every two hours after that) aren't too intrusive.

You're encouraged to set up an account but, unlike with TunnelBear, you don't have to; CyberGhost will connect you straight off the bat. There's no noticeable drag on the browser and download speed was a respectable 54.12Mbps, while uploads clocked in at 13.03Mbps. It's easy enough to install and offers 80 proxy servers across 16 different countries. The interface is well designed and it's always clear what's going on – we especially like the use of the world map to indicate your simulated geographical position.

How it can be improved:

It's a pain when all the free user slots are taken and you have to wait for one to become free. Also, three hours isn't very long for a free session and, a couple of times, Hulu spotted we were using an anonymous proxy and blocked us from watching content.
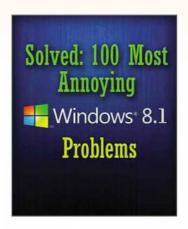
OUR VERDICT

The paid-for service might be great but the free trial is hobbled too much for our liking, and there's a lot of hanging about waiting for the free servers to become available.

BEST OF THE REST

Hotspot Shield
www.hotspotshield.com

Available for PC, Mac, iOS and Android devices, Hotspot Shield's website has no information about its free version so you just have to try it for yourself. This automatically activates the Elite trial period whether you want it or not. The free version only has one virtual location (in the US) and displays a payment wall when you try to access popular services such as the BBC and Hulu. Disappointing.

PrivateTunnel
www.privatetunnel.com

Although it's beefed up the offering since we last looked, the free version of Private Tunnel still only offers a measly 500MB of data. After this, you have to buy a paid-for data pack, available in 50GB, 100GB and 500GB chunks. There's no time limit on using them, though, so it may be worth exploring if 500MB is enough data for your needs.
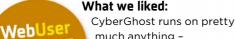
Hideaway
bit.ly/hide377

The paid-for version of Hideaway provides support for rules that you can tweak to improve its performance with individual websites and services. This may make it seem powerful but the free version requires you to sign up to the service and it then pauses every few minutes, which makes it too frustrating to use and unlikely to persuade you to pay for it.

✚ Discuss free VPN software at **forum.webuser.co.uk**

BEST FREE tech ebooks

Why waste money on expensive tech ebooks when you can get lots of useful titles for free? **Rob Beattie** selects eight of the best free examples, which will save you more than £100

Solved: 100 Most Annoying Windows 8.1 Problems
by Jason Miller
bit.ly/windows377

What you'll learn: This book is essentially a list of numbered tips, starting at '1' and finishing at '100'. It helps with many of the problems most frequently raised by Windows 8.1 users, including setting up the Desktop and Start menu, turning off window 'snapping', connecting to the correct wireless network, using search to find Control Panel settings and many more. Many of the tips apply to other versions of Windows, too.
Knowledge level: There is a mix of tips, tricks and techniques, but the book is on the whole designed for beginners
Supported formats: Kindle
How much you'll save: £14.39 on Windows 8.1 for Dummies (bit.ly/dummies377).

Introducing Windows 10 for IT Professionals, Preview Edition
by Ed Bott
bit.ly/10windows377

What you'll learn: The ins and outs of the Windows 10 operating system, which Microsoft hopes will make up for the debacle of Windows 8. There's a fair bit on 'enterprise-wide deployment' and other flannel you can sail past, but there's also plenty of good information on the interface, setting up OneDr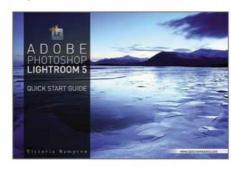ive, whether to upgrade or install from clean, setting up user accounts and Microsoft accounts, as well as new features including Hello, Microsoft's biometric authentication.

Note that this title covers the Technical Preview of Windows 10, released in April this year, but the author says he will update it for the final version of the operating system.
Knowledge Level: The title suggests it's for pros, but the style is engaging and inclusive, making it a good read for confident users.
Supported formats: Kindle, PDF, Mobi, ePub
How much you'll save: £6.49 on Windows 10: A Beginner's Guide (bit.ly/beginners377).

Adobe PhotoShop Lightroom 5: Quick Start Guide
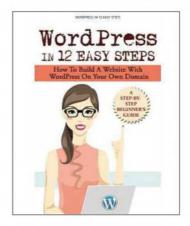### by Victoria Bampton
bit.ly/light377

What you'll learn: You'll find out what Adobe's flagship image-management and editing program can and can't do; and how to install it, set up a proper workflow for your images, sort them into collections, add metadata, find the ones you're looking for and then use the program's built-in tools to edit the best ones. There are loads of screenshots and step-by-step workshops, making it a great guide for novices.
Knowledge level: It assumes only basic knowledge, so it's suitable for beginners.
Supported formats: PDF
How much you'll save: £24.79 on Adobe Photoshop Lightroom for Digital Photographers (bit.ly/adobe377).

WordPress in 12 Easy Steps
by Megan Hussey
bit.ly/wordpress377

What you'll learn: Everything. WordPress powers millions of websites the world over and this book shows you – step by exhaustive step – how you can join in the fun. The hosting section is skewed towards the author's favourite

two services but, that aside, this does a great job of getting you started, explaining the difference between pages and posts, installing themes and plug-ins, and sorting out your site's SEO.

Knowledge level: It assumes the readers knows nothing about anything WordPress-related, so it's suitable for beginners.

Supported Formats: Kobo
How much you'll save: £17 on the paperback edition of the same book (bit.ly/press377).

Mastering Excel Macros Introduction
by Mark Moore
bit.ly/excel377

What you'll learn: The book introduces the language of macro programming (VBA or Visual Basic for Applications), explains how to record and use some simple macros and promises further 'chapters' when you sign up to the author's free newsletter. It's short, but there's plenty of useful introductory information that provides enough to get you started with this powerful, often neglected feature of Excel.

Knowledge level: It's written for someone who uses Excel regularly and wants to learn more about writing their own macros, so you'll need to be a confident user.

Supported formats: Kobo
How much you'll save: £21.99 on Excel Macros for Dummies (bit.ly/macros377).

Own Your Space - Keep Yourself and Your Stuff Safe Online
bit.ly/space377

What you'll learn: How to avoid adware, spyware, scareware, ransomware and viruses. It also provides plenty of good information on cyberbullying (and how to spot it), along with online shopping advice and an explanation of the risks associated with webcams and sexting. It avoids too much finger-wagging and should go down particularly well with younger teens.

Knowledge level: It's designed for teens, parents and teachers, some of whom may be knowledgeable about technology but naive when it comes to online safety. Suitable for beginners and upwards.

Supported formats: PDF
How much you'll save: £12.50 on The Teen's Guide to Living with the Internet and Online Dangers (bit.ly/teen377).

The Operation Quick Money Handbook
bit.ly/money377

What you'll learn: This wouldn't be a true round-up of tech ebooks if we didn't include at least one get-rich-quick scheme. This book claims to promote a proven system (of course) that will start making you big bucks within two weeks. The secret? It's our old friend affiliate marketing, whereby you promote other people's products on your website or blog. It pushes the ClickBank affiliate program and suggests you start by promoting a self-help book/DVD combo called Wake Up Millionaire. You have been warned.

Knowledge level: Beginner
Supported formats: PDF
How much you'll save: Who cares – you'll be making thousands of pounds!

CSS3 Succinctly
by Peter Shaw
bit.ly/css377

What you'll learn: All about CSS (Cascading Style Sheets), the visual power behind HTML-based web pages. Even if you use template-based services such as WordPress, Wix or Weebly for your website, knowing a bit of simple CSS can really add pep to your pages. The language is clear and concise, the advice is good, the examples are relevant and it covers the latest version of CSS. It would have been useful to see some stuff about CSS animations and transitions but we're nit-picking.
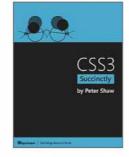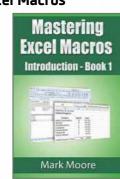
Knowledge level: This will appeal to anyone from 'beginner' level right through to 'expert' user.

Supported formats: PDF, Kindle
How much you'll save: £9.45 on CSS3 in Easy Steps (amzn.to/1MMlzuL).

OTHER SOURCES OF FREE EBOOKS

■ **Daily Free Books (bit.ly/daily377) provides a list of titles that are currently available to download for free on a time-limited basis. When we visited, there were good ebooks on eBay, hacking, WordPress and Photoshop.**

■ **It's worth checking out individual software vendors to see if they have any extra tutorial materials and guides you can download for free. AVG, for example, has a range of free ebooks you can download on** subjects including Facebook, hacking and online safety. (avgread.me/1MuU4sz)

■ **Finally, don't discount your local library. Many carry a good selection of computer-related titles (especially the popular 'For Dummies' series) and make them available for download in multiple formats. Go to www.overdrive.com to find out if your local branch is one of the 30,000 libraries in more than 40 countries that's part of the scheme.**

Broadband Deals

Take a Screen Break

To celebrate the launch of Windows 10, we're testing your knowledge of the first 11 major versions of the operating system. Can you tell us **which version of Windows…**

1 Was developed under the codenames Neptune and Whistler, added a new two-column Start menu and had a default wallpaper called Bliss?

2 Required a hard drive of 6-7MB and was the first to include Solitaire?

3 Had a redesigned taskbar that allowed you to 'pin' programs to it?

4 Came with a design called Aero and the Windows Search tool?

5 Was supported by Microsoft for 16 years – the longest run of any version of Windows?

6 Was the first to come with Windows Movie Maker?

7 Prompted Apple to sue Microsoft because its "look and feel" was similar to Apple's operating system?

8 Was promoted with a 'How to' video featuring Jennifer Aniston and Matthew Perry as their characters from *Friends*?

9 Introduced touchscreen apps you could download from the Windows Store?

10 Had a reported "63,000 known defects", according to a leaked Microsoft memo (which the company denied was accurate)?

11 Added Disk Cleanup and System File Checker, and was so popular that Microsoft had to extend support by 18 months to June 2006?
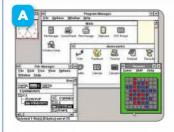
Each of the 11 operating systems are included as a single answer. Tick them off as you go: 1.0, 2.0, 3.0, 95, 98, 2000, ME, XP, Vista, 7, 8

WHICH VERSIONS OF WINDOWS ARE SHOWN IN THESE SCREENSHOTS?

A   B   C   D

Get the answers online at www.webuser.co.uk/quiz377

COMPETITIONS

WIN 1 OF 3
KitSound Rock Bluetooth speakers

WORTH £69.95 EACH

With five different modes including flash, strobe, fade, smooth and one which changes in time to your music, the KS Rock Bluetooth speaker's built-in light always creates the right atmosphere. It lasts for an impressive 18 hours when fully charged. To enter, email your address to webusercomp@dennis.co.uk with 'rock' in the subject line. For more information, visit www.kitsound.co.uk and follow @KitSoundUK on Twitter.

WIN 1 OF 5
Roku 2 (2015)

WORTH £69.99 EACH

The 2015 upgrade to the excellent Roku 2 has updated the hardware and software to make it perform faster. It comes in a new case and has a redesigned remote control with buttons for Netflix, YouTube, Google Play and Rdio. In total, you can watch 1,500 channels. To enter, email your address to webusercomp@dennis.co.uk with 'roku' in the subject line. For more information on Roku products visit www.roku.com and follow @RokuUK on Twitter.

Record anything on your PC with Icecream Screen Recorder 2

bit.ly/ice377

You can take screenshots or record video using Icecream Apps' updated free screen-capture software. Here's everything you need to know

Icecream Screen Recorder lets you capture any area of your screen, either as a screenshot or a video file. You can record any actions you are performing on your PC – such as explaining how to perform a task or playing a game – and record streaming videos, such as iPlayer programmes and Skype calls.
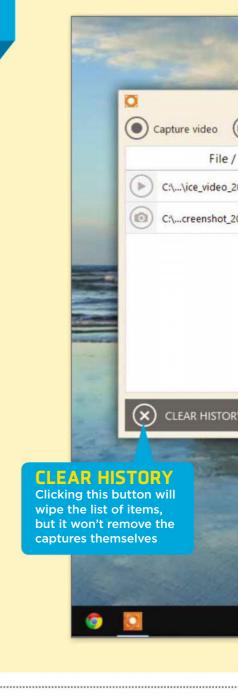
Like all Icecream Apps software, Screen Recorder is very easy to use and offers all of the tools you are likely to need to produce high-quality screen captures. The latest release offers some new audio options, and lets you mix in webcam footage and adjust the video-output quality.
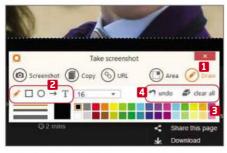

CLEAR HISTORY
Clicking this button will wipe the list of items, but it won't remove the captures themselves

1 The front screen provides two main options: to capture video **1** or take a screenshot. **2** We'll start with the latter option. Click the button and position the floating 'Select Text Area' label on the part of the screen that you want to capture. Click and drag to lasso the exact section.

2 A 'Take screenshot' window appears with options to adjust the dimensions of the area to be captured. **1** You can also resize the boundary by clicking and dragging the handles, **2** and move the box around the screen. The drop-down menu **3** lets you capture the full screen, or choose from a range of pre-set sizes.
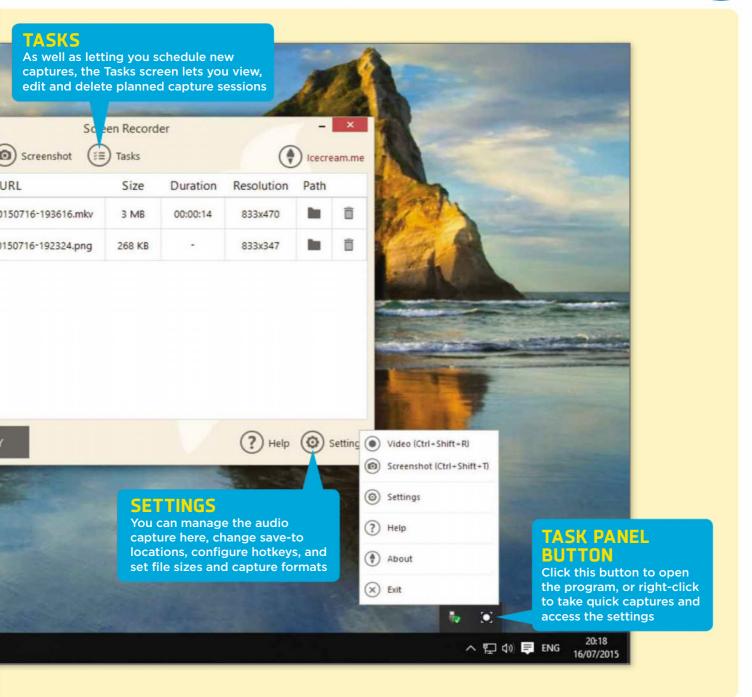
3 You can add annotations to the area you'll be grabbing. Click the Draw button **1** for tools that add lines, shapes, arrows and text to the area to be captured. **2** You can choose from a range of colours. **3** If you make a mistake, you can undo the last addition or clear everything. **4**

4 When you've selected the area you want, you can take a screenshot. **1** The snap will be saved to the Desktop. You can also save the capture to the clipboard **2** for pasting elsewhere or upload it to the web **3** and get a link for sharing.

5 Recording your screen as a video is a similar process. Click 'Capture video' to record a streaming movie, draw around the video window and resize as necessary. **1** The Switch button **2** lets you switch between the program and what you're recording – so you can start and stop a video playing, for example.

TASKS
As well as letting you schedule new captures, the Tasks screen lets you view, edit and delete planned capture sessions

SETTINGS
You can manage the audio capture here, change save-to locations, configure hotkeys, and set file sizes and capture formats

TASK PANEL BUTTON
Click this button to open the program, or right-click to take quick captures and access the settings

6 Click Rec **1** to start recording. A three-second countdown will appear. As with the Screenshot button, you can use Draw **2** to add annotations to videos. You'll need to make good use of the Pause and Switch **3** buttons to do this. You can mix in webcam footage if you wish. **4** Click Stop **5** when it's done.

7 Captured screenshots and videos are saved to your PC and can be accessed through the History screen (which appears when you stop recording). Click the folder icon **1** to open the save location (double-clicking an item will do the same thing). You can also delete unwanted captures. **2**

8 Screen Recorder has a handy Tasks tool, which you can use to schedule screen-capture sessions. Click the Tasks button on the front (or History) screen, then click the plus button. Select the recording area **1** and set the start and end recording date and times. **2** Give the task a name **3** and save it. **4**

Workshop 2

Set up Windows 10 exactly how you like it

Windows 10: bit.ly/win377 | 🕐 **20 mins** | ⊞ **Windows 10**

Although Windows 10 doesn't stray too far from what we've come to expect from Windows 7 and 8, elements of the new operating system will still be unfamiliar when you first upgrade. For example, Windows 8 users will recognise the Settings tool, but Windows 7 users might want to spend time exploring it. The Start menu may have shrunk back to look more like Windows 7's, but users of the older OS will find some strange new icons in it. Some unpopular Windows 8 features such as the Charms bar have also been removed – we now have the Action Centre instead.

In this Workshop, we'll show you where to find these features and guide you through the new options for setting up your computer. A lot of this will become second nature in the coming weeks and months, but it's worth taking the time to explore your new environment now, to make sure you have everything just as you want it. If you haven't decided whether to upgrade yet, read our review on page 20.
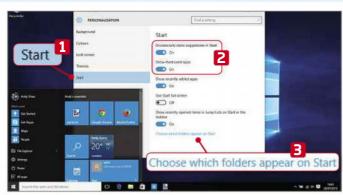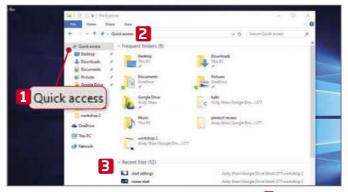

1 Begin by customising the Start menu. You can reduce its width and height by left-clicking the sides and dragging inwards. The 'Most used' list **1** gets shorter and the app icons **2** realign as a column underneath, rather than to the side. Drag the menu bars **3** to reorder them if you wish.

2 A lot of the configuration options can be found in the Settings app. **1** As with Windows 8, the Control Panel still exists if you'd rather perform tasks from there, but the Settings app is easy to launch from the Start menu **2** and contains a lot of options you can configure.

3 To further configure the Start menu from the Settings app, click Personalisation, then Start. **1** Turn off anything you don't like, including suggestions and most used apps. **2** Click 'Choose which folders appear on Start' **3** to add shortcuts to frequently used folders such as Documents and Pictures.

4 File Explorer has a new 'Quick access' area **1** where the Favorites used to be. You can now click 'Quick access' to open it in its own view, **2** with 'Recent files' listed below. **3** To add a folder, right-click it and choose 'Pin to Quick access'. Right-click to unpin folders from it.
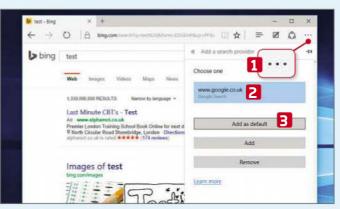
5 The Charms bar has been replaced with the Action Centre. Click the speech bubble **1** to open it. Click Expand **2** to see more Quick Action buttons. To change the four that are permanently displayed, **3** go to Settings, System then 'Notifications & actions'. **4** Click a box and choose a new icon. **5**

6 Bing is the default search engine in the new Edge browser. To change this to Google, choose Settings from the menu, **1** then scroll down and click 'View advanced settings'. Scroll down to 'Search the address bar with' and choose 'Add new'. Click Google **2** and 'Add as default'. **3**
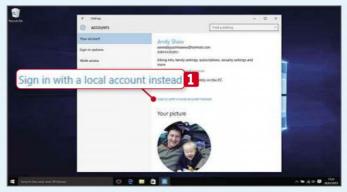
7 If you'd rather stick with your favourite browser, you might find that Edge has usurped its default status. Go back to Settings, click 'Default apps' **1** and scroll down to 'Web browser'. Click the Microsoft Edge button **2** and choose from the list. **3** You can change other software defaults here, too.

8 To use Cortana, you must sign in with a Microsoft account. Click the Notebook icon **1** and choose Settings. Cortana can give you suggestions **2** and listen out for your instructions. **3** 'Taskbar titbits' **4** lets you choose whether you want Cortana to interrupt, even if you aren't searching.

9 You can turn off Cortana and internet searches to make the search box more like a PC search tool. Go back to Cortana's settings and click the Cortana switch to Off. **1** The available options will change. You can now turn off 'Search online and include web results'. **2**

10 If you don't need Cortana search and integration with OneDrive, switch to a local account. Open Settings, then click Accounts, 'Your account' and 'Sign in with a local account instead'. **1** Enter your password to create a new basic Windows account that doesn't require a Microsoft sign-in.

Find duplicated music files on your PC

Mediapurge is a handy free program that helps you to tidy up your music library by providing tools that are designed to identify duplicate files. In this workshop, we show you how to use its basic duplicate finder and its audio-comparison tool, which analyses the acoustic fingerprint of your tracks. Download the software using the bottom link (mp3find Pro) at bit.ly/media377.

Mediapurge: bit.ly/mediapurge377 | 🕐 **15 mins** | 🪟 **Windows 7, 8, 10**
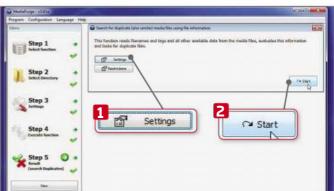
1 After installing Mediapurge, click 'Find duplicate files' and 'Duplicates (similar file information)'. Click Add Directory **1** to select the folder you want to search. Leave 'read with subdirectories' **2** selected to search all the folder's subdirectories; or select 'only files in selected directories'. **3**

2 Repeat the process of adding directories until you have included all the folders you want to search, then click Next. Click Settings **1** if you want to tweak the software's search tools. Click Start **2** and Yes to begin the search. A notification appears if any duplicates are found.
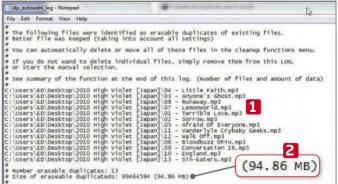
3 Click 'Continue manual selection' **1** to choose, file by file, the duplicates you want to keep; or click 'Start auto selection' **2** to view a list. By default, better-quality files are kept, but you can modify the criteria in the Settings **3**. To delete the list of duplicates, click 'Delete duplicates'. **4**

4 Click Complete to exit the operation. Next, click 'Step 1 Select function', **1** 'find duplicate files' **2** and 'Duplicates (audio comparison)' **3** to use the acoustic fingerprint-based tool. The previous search's directories remain selected, so click Next to search them or New to choose new ones.

5 Click Start and Yes to begin the search. A pop-up shows the progress of the analysis and a notification appears if duplicates are found. Click 'Continue manual selection' to see the duplicate files. **1** You can Play, Delete, Keep or Move **2** either version of the file.

6 Click 'Start auto selection' to show a list of the identified duplicates in Notepad **1** and the amount of drive space they occupy. **2** Deleting a filename from the log and saving the list stops the file being deleted or moved when you click 'Delete duplicates' or 'Move duplicates'.

Remove Firefox's new tools and icons

Mozilla frequently updates Firefox, improving the browser's stability and features. But what if you don't like the changes? In this Workshop, we show you how to remove new tools such as Pocket and Firefox Hello through the browser's advanced settings. If you miss Firefox's classic design, we'll show you how to restore this, too, using the Classic Theme Restorer add-on.
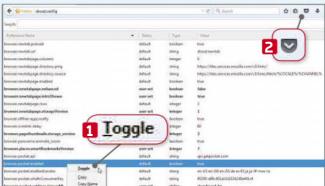
Firefox: bit.ly/firefox377 | 🕐 **10 mins** | 🦊 **Firefox**
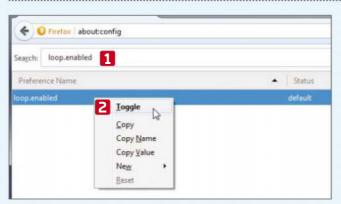
1 Run Firefox, type `about:config` into the address bar **1** and press Enter to access its advanced settings. You'll be asked to confirm that you know what you're doing by clicking "I'll be careful, I promise". **2**

2 Pocket is a handy built-in tool that lets you save articles from the web. If you don't want it, type `browser.pocket.enabled`, right-click it when it appears and select Toggle. **1** Or you can just hide the Pocket icon by right-clicking it **2** and selecting 'Remove From Toolbar'.

3 Firefox Hello is another new tool, which can set up video conversations and screen-sharing sessions without requiring an account. If you don't have any reason to use it, search for `loop.enabled` **1** from 'about:config' and Toggle **2** it to remove it.

4 Firefox's new Options menu was introduced in version 38 of the browser and opens up as a new tab. If you preferred the old-style menu, you can get it back by searching for `browser.preferences.inContent` **1** and toggling its value to False. **2**

5 Many of Firefox's old features were scrapped in last year's version 29. If you miss them, use Classic Theme Restorer (bit.ly/classictheme377) to get them back. After restarting the browser, the Firefox button, **1** classic squared tabs **2** and bookmarks sidebar **3** are immediately restored.

6 To customise your browser further, click the menu button, **1** select Add-ons and click Options next to Classic Theme Restorer. To make the browser even more like previous versions, click Settings **2** and 'Classic preset'. **3** You can restore the default settings from here at any time.

How to... Hack your router

Are you using your router to its full potential? **Wayne Williams** shows how to use the advanced features available on many models

Most people don't give their router much thought until it needs a reboot or they connect a new device to it. But routers can do more than simply provide you with an internet connection and they often come with extra tools and advanced features. Exactly what you can do with your router will depend on the make and model, and the ports it's equipped with. In this Weekend Project, we'll look at some of the possibilities.

Get more features by replacing the firmware

Firmware is the software that has been written to the ROM (Read Only Memory) of the router, and will stay installed on the device even if you turn it off or restart it. The firmware your router is running determines how it works and what you can do with it. Hardware manufacturers occasionally release firmware updates that fix bugs and add extra features, and you can apply these

DD-WRT is open-source router software that works on a variety of devices and comes with plenty of extra tools

If DD-WRT doesn't work with your router, there are other options, including OpenWrt

updates by downloading the update and sending it to the router (a process that's usually called 'flashing the ROM').

However, it's also possible to get more from your router by swapping the manufacturer's firmware with compatible software that other people have created. There are several choices available for routers, including OpenWrt (openwrt .org) and Tomato (tomato.groov.pl), although our preferred choice is the excellent DD-WRT (dd-wrt.com). You can check if your router is compatible with DD-WRT by browsing the router database at bit.ly/dddb377.

The process of flashing the ROM is straightforward but not without its dangers, so only do this to a router you can afford to lose. Carefully follow the installation steps at bit.ly/install377 and you should be fine. Just make sure you don't turn the router off or disconnect it during the upgrade.

Set up a guest network

Most routers let you set up one or more guest networks. These let you share internet access with friends without them being able to access other devices on your network, so they can't go rifling through the files on your PC, for example. You can also set up a guest network that's tailored to suit your children, with parental controls that ensure their network is switched off after bed time. You'll be able to choose a security type (and even disable wireless security altogether, although this isn't recommended), and allow or deny devices using wireless MAC (Media Access Control) filtering – the unique

Setting up guest networks lets you control what people can access

code that identifies all wireless devices.

As with most advanced features mentioned in this project, if your router doesn't offer the ability to enable a guest access point, installing the DD-WRT firmware should make this feature available.

Prioritise traffic

If you do a lot of media streaming or gaming, it's worth making sure that your router gives that type of network traffic priority. This is done using the Quality of Service (QoS) tool. For example, if you make streaming TV programmes or movies a priority, it should mean that someone listening to Spotify or playing online games elsewhere on the network doesn't interrupt your viewing.

Some routers can intelligently prioritise traffic, while others require that you specify the type of traffic you want to manage and assign it a priority – typically high, medium, normal or low. You might be able to shape the traffic priorities for specific applications, ports or devices. We'll show you how to set up QoS on a typical router in the Mini Workshop, below. Unfortunately, not all routers offer QoS – Virgin Media's Super Hub doesn't, for example.

If you want to use the feature, but it isn't supported by your router, you can either buy another router or install the DD-WRT firmware which has a QoS section (just click the NAT/QoS tab to access it).

Create your own cloud storage

You can store personal files in the cloud using storage services such as OneDrive and Google Drive. This means you can

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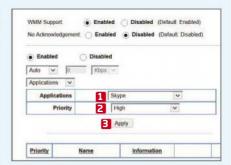
⚙ MINI WORKSHOP | Prioritise traffic using QoS settings

1 The process for configuring the QoS will depend on your router. You'll need to find the QoS setting, which isn't always in an obvious location. In the Cisco router used in this Workshop, it's under Applications & Gaming. **1** Click the QoS submenu option. **2** If you can't find the setting, it might not be available on your router.

2 To turn on QoS, select Enabled **1** next to Internet Access Priority. Upstream bandwidth can be set to Auto or Manual. **2** The latter lets you specify the maximum outgoing bandwidth that applications can use. The Category box **3** lets you choose between Applications, Online Games, MAC Address and Voice Device.

3 We'll stick with Applications. Click the box and select the program you want from the list. **1** You can also add and configure your own software choices. Select the required priority: High, Medium, Normal or Low. **2** Don't set all your applications to the same priority, as it defeats the object. Click Apply. **3**

WebUser Bookstore

Seagate Personal Cloud is a NAS that's specifically configured to help you access its contents over the internet

securely access them from anywhere, on any device. However, they tend to be limited to a few gigabytes, which is a lot less than you'd normally get when storing files locally on a hard drive.

You can create your own cloud storage with a lot more space by connecting an external drive to your router. There are two ways of doing this: if your router has a USB port, you can connect a standard USB hard drive, or you can connect a Network Attached Storage (NAS) drive using an Ethernet cable.

Various companies, including WD (www.wdc.com) and Seagate (www .seagate.com), offer NAS drives that are reasonably easy to configure alongside a router. One of the simplest we've tried is the Seagate Personal Cloud. You can get a 3TB drive from Ebuyer (bit.ly/ personalcloud377) for £125. This acts as a central repository for music and video files, and you can automatically back up data from any PC, smartphone and tablet using a free app. It also comes with two USB ports (a USB 2 port on the back, and a USB 3 port on the right-hand side), so you can back up the device to a standard hard drive for extra security. We'll show

you how to set one up in our Mini Workshop, below.

If you have a spare internal hard drive (or two), you can create your own NAS drive. You just need to buy a NAS enclosure, which will let you connect the drives to your router via Ethernet. Enclosures can vary in price depending on what options are available with it, so weigh up the pros and cons of making your own storage versus buying a ready-made option.

If you have an external USB drive, you might be able to convert this into a NAS device using an adapter. The Addonics

Your router's domain-blocking tool can stop access to a particular website

NAS Adapter (bit.ly/nas377) lets you plug in the USB drive at one end, then link the device to your router using an Ethernet cable at the other.

Use parental controls

It's likely your router will offer some form of parental control, which can come in handy if you have young children. You will probably be able to manage what sites they can access in two different ways – domain blocking and keyword blocking. Domain blocking is a more targeted solution and will let you prevent anyone accessing certain websites – Facebook, for example. You can choose which sites to block, and enable and disable the block at any time.

Keyword blocking takes a more scattergun approach and will block any sites containing keywords (in the URL or body content) that you specify. The benefit is that using the keyword 'facebook' will not only prevent access to www.facebook.com, but will also stop any results displaying for queries such as 'How do I access Facebook if it's blocked'.
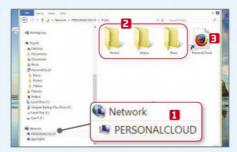
Keep in mind that anyone accessing the internet, including you, through your router will be affected by the controls you set up, unless your router allows you to configure different controls on different networks.

You will be able to view a log containing details of any attempts to access blocked sites and keywords, and also request email alerts. ■

MINI WORKSHOP | **Set up your own cloud storage using Seagate Personal Cloud**

1 To get started, connect the storage device to your router using the supplied Ethernet cable, **1** then attach the power. **2** The device will configure itself. This can take up to 10 minutes, after which the blinking light on the front of the box stops flashing and the device is ready to use.

2 You can access your Personal Cloud through Explorer, and drag and drop content into folders. Go into the Public folder under Network/ PERSONALCLOUD **1** to find subfolders for photos, videos and music. **2** There's also an internet shortcut. **3** Open this to launch the Seagate Personal Cloud Setup Wizard. Follow the instructions.

3 If there's a firmware update, you'll be prompted to install it. The web interface displays a selection of icons: Device Manager, Download Manager, Backup Manager, App Manager, Sdrive and Seagate Media. Sdrive **1** is a Windows/Mac program that offers secure access to your content, while Seagate Media **2** is the app for mobile devices.

NEXT ISSUE **How To...** Install a clean version of Windows 10

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Web User's Top Tips

Driven round the bend by dodgy drivers? Our experts offer advice and tips to get your PC running smoothly

TOP TIPS FOR UPDATING DRIVERS

Get drivers from Microsoft

The Windows operating system works with a vast range of hardware and peripherals, from PC components to plug-in devices. The reason they can be set up and run so quickly and conveniently is because Microsoft provides drivers for most popular components and devices, and support for them is built into the operating system. However, if you find you're having problems, it may be because you don't have the latest available drivers for a device. To check, go to the Control Panel, select a category view and open 'Devices and Printers'. Right-click your computer in the Devices list and select 'Device installation settings'. Find "Do you want Windows to download driver software…" and select Yes. Windows will download and install the latest drivers automatically as updates become available.
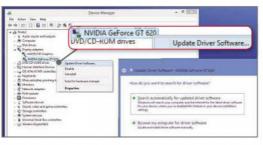
Are you getting the latest driver updates? To make sure, select the Yes option in the Device Installation Settings

When to update drivers

Windows automatically updates some drivers and has tools for finding and updating others, but while an update to a driver might fix problems with your computer, and offer more features or greater performance, there can be disadvantages. For example, an updated driver might not be compatible with your computer, printer, scanner or software, and it might introduce bugs that were not there before. It's not common, but it happens.

If your computer is running perfectly and you want to play safe, don't update any drivers. But if your hardware isn't working properly, it's worth updating the drivers because it might fix the problem.

If you see words that `look like they've been typed in a typewriter`, follow the instructions and type them exactly as they appear, paying close attention to spaces and punctuation.

Select an individual device from the Device Manager to see if its drivers have been updated

Update a single driver

Microsoft's drivers tend to be the most compatible with Windows but they are also the most conservative. They are designed to work on the widest range of hardware, and produce the fewest problems, but they are rarely cutting edge. We've shown you how to keep Microsoft's drivers up to date in the tip above, but it's also possible to update them yourself and to choose which ones are updated.

Open the Control Panel and click Device Manager. Expand a category, such as Bluetooth or Imaging Devices, to view its devices and components. Right-click an item and select Update Driver Software. Select the option to 'Search automatically for updated driver software'. This searches the PC and the internet for newer drivers and installs any it finds.

Use Windows Compatibility Center

Windows Compatibility Center (bit.ly/wincomp377) lets you search for devices, gadgets, printers, scanners, phones, webcams, game controllers and anything else you might want to use with your PC, and tells you whether they are compatible. In some cases, it also provides a link to download the software and drivers for an item. For example, if you search for a printer, Windows Compatibility Center may tell you it's compatible,

The Windows Compatibility Center shows more info about your devices and drivers

and provide a link to download the driver from the manufacturer's website. This can be a handy way to get the latest driver for a device.

Back up drivers

It is a good idea to back up the drivers on a PC before using Windows Update or other tools to install updates. Software such as AOMEI Backupper (www.backup-utility.com) or Backup & Recovery (bit.ly/paragon377) save the current state of your PC and can restore it by booting from a CD or USB stick if the computer undergoes a total failure.

Unfortunately, these take hours to run and you might not want to back up the whole hard drive just to update one driver. One alternative is to go ahead and install the driver without backing up. If a driver doesn't work for some reason, it is likely that it will only affect that device. So an update to a webcam driver will probably only affect the webcam and is unlikely to prevent Windows from starting.

When an update fails, go to Device Manager in the Control Panel, expand the section with the device, such as Network Adapters, right-click the device and select Properties. On the Driver tab, you'll find a Roll Back Driver button, which removes the current driver and replaces it with the previous one.

Another way to protect your PC from bad updates is to use a driver backup tool, such as Driver Magician Lite (bit.ly/magic377) or Double Driver (bit.ly/driver377). Driver Magician displays all the drivers on your system: those from other manufacturers are highlighted in red, while 'normal' ones are Microsoft's own drivers that come with Windows. Tick the boxes next to the drivers to back up (or use the Select All button) and click Start Backup. To restore a backup, open the folder it was saved to, right-click the INF file and select Install on the menu.

Use the roll-back tool to replace a bad driver with the previous version

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

Find missing drivers

Autoruns (bit.ly/auto377) is a great tool for finding out what starts when Windows launches on your PC, and its Drivers tab shows the driver files that load. Run it and select the Drivers tab when it has finished scanning. Any item highlighted in yellow is missing. This may be because a driver for a device you no longer use was uninstalled. It might also indicate a f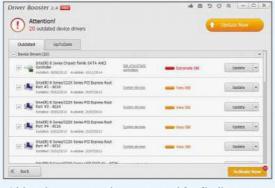aulty driver installation. Either right-click and delete the highlighted item (because it is no longer needed) or Google the filename to find out which driver it is and then reinstall it.

Windows might still be trying to load drivers that you no longer need and have uninstalled

Use driver-update tools
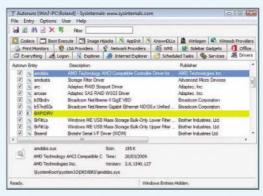
There are several free tools designed to keep your PC's drivers up to date, such as SlimDrivers (bit.ly/slim377) and IObit Driver Booster (bit.ly/boost377). If you're downloading Driver Booster 2, pay attention during the installation because you need to untick certain options to make sure it doesn't also install advertising software.

The software lists any non-Microsoft drivers and tells you if they are old, very old, extremely old and so on. The categories are colour coded, with extremely old drivers shown in bright red. But don't confuse old with bad. If you have an old PC, then an old driver might be the best one for it because the latest update might not support the old hardware.

Click the Update button on the right to update a driver. Driver Booster finds the update, downloads it and installs it, all without you having to do anything. It is slick, and very useful,

but only update drivers if you need to fix a problem with the computer or its software, to patch security flaws or to cure bugs. If a driver is working fine, the best advice is to leave it alone.

Just to the right of the Update button, you'll find a drop-down menu. The Details option shows the current version of the installed driver and the version of the update. There is also a Roll Back option to restore the previous driver, if you encounter any problems.

Update one driver and make sure the computer is running without problems before you update another. Do not click the big Update Now button to update everything at once because if there's a problem, you won't know which of a dozen or more updates is the cause.

Take control of drivers

Like other similar tools, ServiWin (bit.ly/serv377) lists all the drivers on your PC, but it also has some extra features. For example, it can start, stop and restart drivers, and change the startup type. This tool is for experts only and you have to be careful not to change anything that is essential to running Windows.

ServiWin doesn't need installing – you just right-click it in Explorer and select 'Run as administrator'. Select Show Only Non-Microsoft Services on the Options menu to filter the drivers. Select a driver and, on the Actions menu, use Change Status to start, restart or stop it, and Change Startup Type to set it to Automatic, Manual or Disabled.

IObit Driver Booster is a great tool for finding and installing driver updates

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

INTERNET
Making mobile websites

Q I read your article about setting up a mobile-friendly website from scratch in Issue 377 (bit.ly/webuser377). That's fine, but if the website in question already exists and was built using old software programs, such as an old version of Dreamweaver, in the days before you could browse the web on mobile devices, what are we expected to do? Amend the sites to the specific criteria provided by Google or make duplicates that fit that criteria? Is there free software available that will automatically convert these sites to mobile-friendly versions?
C.H.A. Reilley

A There's no easy way to make a website mobile-friendly when it was hand-built using an HTML editor or outdated software. You need a brand new mobile-friendly website and there is no way around this. Either create new site templates (a few dummy pages) using HTML and CSS, or search the web for 'free responsive template'. You can then load each page from the old site into an HTML editor, copy and paste the content into the new responsive template and save it, overwriting the old page. However, this is a tedious and slow process.

Alternatively, you could use a

There are plenty of free responsive site templates, such as these at html5up.net

modern web-design program such as Xara Web Designer (bit.ly/xara377) or WebPlus X8 (bit.ly/webplus377). Just load a page from the old site and copy and paste the text and images into the new responsive one. Both programs have HTML import tools, which may reduce the amount of work involved, but whether this is successful or not will depend on the content of the old site.

Also, consider WordPress. Most web hosts will install it for you and it has plenty of free responsive templates. As with the other methods, you have to copy the content from the old site into the new one, page by page. WordPress URLs will be different, but visitors can easily be redirected to the new pages (see www.htaccessredirect.co.uk). WordPress has plug-ins for just about everything and HTML Import 2 (bit.ly/html377) might be just what you need. The documentation on the author's website is essential reading.

INTERNET
VPN vs TOR

Q I read with interest your article in Issue 372 (bit.ly/issue372) about using Tor Browser as an alternative to a VPN (Virtual Private Network). I have been toying with the idea of a VPN and Tor appears to offer similar securities. However, I recently came across another software alternative: Firetrust's Hideaway VPN (www.firetrust.com), which comes from the publishers of the excellent MailWasherPro.

I'm not clued up on the technical aspects of network security, but Hideaway appears to offer advantages over Tor and can easily be customised. Hideaway's makers are full of praise for the software, but I wondered if the experts at *Web User* could figure out if it's as good as it appears to be.
Paul Younger

A It is hard to know how good software is if you only have the developer's word to go on. To help you

decide, we've reviewed Firetrust Hideaway and other free VPN software on page 44.

HARDWARE
Battling with a bad battery

Q I recently replaced the battery in my HP Spectra XT laptop. On first switching it on, the charging indicator in the notification area said it was plugged in and charging but, after a while, this icon changed to a red cross with no battery detected. When I pulled out the mains lead, the laptop kept running but, once I shut it down, it wouldn't restart without the mains lead connected.

Currently, the laptop starts off saying it's plugged in but is not charging, then this changes to no battery being detected after a while. Now, when I withdraw the mains lead, the laptop shuts down. Otherwise, it works fine.
David Williams, via email

A There are several things to try here. Sometimes a hard reset solves the problem, so try unplugging the power cable and everything else that is connected to the laptop. Remove the battery, then press and hold the power button for at least 15 seconds to drain any residual charge. Replace the battery and any other cables you have removed and switch it on as normal.

If that doesn't work, try resetting the BIOS. Turn on the computer with the power button and enter the BIOS by tapping F10 several times (or whichever function key is used on your laptop – check on screen before the Windows logo appears). The BIOS setup program

HP supplies battery software you can use to make sure yours is charging properly

will start. Find an option called Reset Defaults or Setup Defaults and select it. Confirm your action, exit and restart the laptop.

There is a useful battery tester built into the HP support tool that should be pre-installed on the laptop. If it's not there, download it from bit.ly/hp377. It shows useful information, such as the cycle count. Batteries are designed to be recharged a certain number of times and this tool shows you the current number and the maximum. Some people get more cycles, others get less – it's not an exact figure. The Design Capacity figure shows the maximum charge the battery was designed for and the Full Charge Capacity shows what it can currently be charged to. Over time the Full Charge Capacity falls.

EMAIL
Email size exceeded

Q I'm trying to send a two-page document by BT Mail but each time it fails and I receive a message saying: "552 #5.3.4 MESSAGE SIZE EXCEEDS LIMIT". Surely it's not impossible to send a simple two-page document by BT Mail?

BT's help desk said I should cut down the file size. I eventually managed to send the document in two separate emails but surely there's a way of overcoming this fault?

John Rowntree, via email

A There are several limitations that can apply when dealing with email, and one is the size of the message. According to BT, in this case the limit is 25GB but, depending on how the attachments are encoded, you might have problems sending files bigger than 20MB. There's also a limit on the total size of your email account. Both sent and received emails are stored, along with their attachments, and you might eventually reach the limit of your allocated space. A further limit affects the size of email attachment that can be received. You may be able to send a 25GB attachment, but the person you are sending it to might use a different email provider with, say, a 15GB maximum.

You don't specify the document size in your query, but if splitting it over two emails worked, it's likely that the problem was with the email's size. Either the document was very large or you have a low limit, so check the size of the document. People don't like receiving large email attachments and a better option might be to upload them to

Gmail lets you email a link to a file on Google Drive, instead of attaching it

Google Drive, OneDrive, Dropbox or another online storage service and send a link via email. The recipient can then click the link to download the file.

NETWORKING
Camera access denied

Q I have enjoyed the view of Snowdon and nearby mountains through my Panasonic BB-HCM735/CE network camera for over two years using an Ethernet cable connected to my BT Hub. But since the router developed a fault and was replaced with the new BTHub5-W2P6 about two months ago, it will not make contact with the camera.

I contacted BT support and was told that because I was not a business, they would 't allow me access to the camera, despite providing access to me and my family (to whom I had given the address) for the previous two years. Is there a way to regain access to the camera without an address from BT?

Brian Wakeham, via email

SOFTWARE
iTunes upgrade error

Q I recently downloaded an iTunes upgrade but, when I tried to open it, I received an error message saying: "iTunes can't open. Error 7 (windows 193)". Having searched the web for an answer, I found lots of users and forums giving advice on how to fix it. One suggestion was to uninstall iTunes and all its other bits in a particular order, delete them from the Recycle Bin, restart the PC and reinstall iTunes. Another was to run 'chkdsk' to repair the bit that's causing the problem, but I don't know how to do this. I have uninstalled and re-installed iTunes three times and still get the same message. I am at my wit's end.

John Morton, via email

A We don't know how the old router was set up – it may have been done using configuration options that are no longer supported in new routers. Here's how to configure the camera to get it up and running with the new router.

Press Windows+R, type `cmd` and press Enter to open the Command Prompt. Type `ipconfig`, look for the Default Gateway and type those numbers (192.168.2.1, for example) into a browser to access the router's setup. Look for a feature called UPnP and turn it on. If there is a 'maximum idle time' option anywhere in settings, disable it.

Run the camera software on your PC and select the Internet tab at the top. Select Enable under Auto Port Forwarding (IPv4), then select 'Register with Viewnetcam.com'. Click Save, and the camera and router should automatically configure themselves. Go to the www.viewnetcam.com registration page, which should appear automatically, and follow the instructions to register. This is a service for Panasonic Network Cameras that opens them to access over the internet.

When Auto Port Forwarding setup is complete, click 'To Single Camera page'. An IP address and a URL are displayed. The IP address is for accessing the camera from computers, phones and tablets on your home network; and the URL is for accessing it over the internet, for family and friends. The camera's documentation can be downloaded from bit.ly/pancam377.

If an iTunes update fails, follow Apple's instructions for reinstalling it

A We would advise uninstalling and reinstalling iTunes in a particular way, too. This is a complicated procedure with dozens of steps that would fill this page, so go to bit.ly/itunes377 where you will find step-by-step instructions.

This fortnight Roland took a hammer to his old hard drive, saying: "You can't be too careful when disposing of old disks".

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

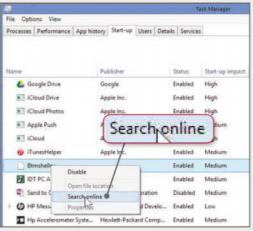**£25 winner**

GENERAL PC
Search for startup items

I often see PCs with startup problems, where the computer takes five minutes to get going before you can do anything. The usual advice is to find out which programs are starting with Windows to see whether you need them all. You can do this in Windows 8 and above by right-clicking the taskbar and selecting Task Manager. The Startup tab shows (some of) the things that start with Windows, and you can then get rid of any you don't need.

That's fine for experts but the rest of us have difficulty knowing whether startup items with obscure names are useful or not. It's not obvious, so readers may not realise this, but you can right-click a startup item and select 'Search online'. This opens a browser with search results that link to information about the item, which you can use to help establish whether the program is useful or not.

Malware, spyware, adware and other

Right-click a program in the Task Manager to search for it on the web

unwanted programs appear on the Processes tab but, again, working out what should and shouldn't be there is difficult unless you are an expert. As with startup items, just right-click anything suspicious and select 'Search online'. Someone somewhere will have a web page that tells you what the program is and whether it's safe.

Ryan Fox, via email

BROWSERS
Load Google Tools as Desktop apps

I use a lot of Google apps, such as Gmail, Drive, Calendar and so on. The usual way

Configure Chrome apps to run like regular software in a window on the Desktop

to access them is to open a browser window and type the URL, or go through the menu in the top-right corner of the Google homepage. However, there is a better way, which lets you run Chrome apps in a separate window, as you would a regular program.

In Chrome, type `chrome://apps` into the address bar. Right-click the Gmail app, for example, and select 'Open as window' in the menu. Right-click it again and this time select 'Create shortcuts'. In the window that appears, you can choose to create a Desktop shortcut or pin it to the taskbar.

When the Desktop or taskbar icon is clicked, Gmail opens in a window that looks like a regular application, with none

of the browser's usual clutter such as the address bar, tabs and toolbar icons. It's simpler and cleaner.

Alan Carrol, via email

BROWSERS
Save videos for later

Have you heard of a browser called Torch (www.torchbrowser.com)? It's based on Chrome, so it looks familiar, but it has some extra features that Chrome doesn't.

I have an old broadband internet connection with a download limit during peak evening hours, which is exactly when I like to browse the web and watch videos on YouTube. I find Torch useful because it has a Download Media button in the toolbar. I can go to a page on YouTube and, as soon as the video starts, I click the button to save it to my hard drive. It downloads much faster than it plays. I can do this outside peak hours when there is no data limit. I then use VLC Media Player to play the videos whenever I like, even if I'm offline.

Megan Reid, via email

The Torch web browser is similar to Chrome but has a lot more features

APPS
Make cheaper calls when you're abroad

When I was on holiday in Thailand last month, I benefited from a *Web User* reader's tip that recommended using WhatsApp to make free Wi-Fi phone calls. The app let me call many of my friends using my hotel's Wi-Fi at no cost whatsoever, saving me a small fortune

Skype has competitive rates on calls to UK mobiles and landlines, wherever you are

compared to paying my network's roaming charges.

In their tip, the reader mentioned that they had used Skype for the same purpose in the past, but had fewer friends who used the app, which made WhatsApp a more useful service. While I'd agree with this, what they failed to mention is that it's also possible to make very cheap calls to landlines using Skype by simply adding credit to your account. Although you still need to be connected to Wi-Fi, it's a really handy option if you want to phone someone who isn't always near to a smartphone or PC. It could save you an enormous amount of money compared to using your mobile network to make the call.

Making and receiving calls on my mobile network in Thailand could have cost me anywhere between £1 and £2 per minute but, with the Skype app, I called both local and UK numbers for only a few pence per minute.

Tim Booth, via email

GENERAL PC
Shortcuts for non-keyboard symbols

I often produce documents that use symbols not included on a standard keyboard and sometimes I receive emails from people asking how they can insert these symbols into their documents. It occurred to me that some *Web User* readers might also find this information helpful, so I've shared it on the forum at bit.ly/keyboard377.

My post includes Alt codes for a number of popular symbols, but there are more than this and you should be able to find any you want to use by searching Google for 'Alt codes'. To use a code, position your cursor where you want the symbol to appear, hold down the Alt key and type the relevant numbers, then release the Alt key.

The shortcuts should work in most applications, including Microsoft Word, and I generally find it much easier than opening the Character Map.

Tornado, Web User Forums

APPS
Back up all images to the cloud with Google Photos

Since I installed the new Google Photos app for my Android phone, I've loved knowing that it'll back up all the snaps I take using its unlimited online storage. However, I recently noticed the app only backs up files captured with the main camera app on your device, so photographs you take using other apps or store elsewhere won't automatically upload to the cloud.

To change this, open the side menu of Photos and select Device Folders. From here, you can tap the cloud icon alongside folders such as Screenshots, WhatsApp Images and Download, to back up their contents to the cloud. Remember, you'll need to be connected to a Wi-Fi network for the files to be uploaded unless you visit Settings, 'Backup & sync' and turn on backup 'over Wi-Fi or mobile network'. Once the upload starts, its progress is shown in the Assistant section of the app.

Another feature of the app that I find really handy is that it offers to free up storage space on your device when it's getting full by deleting the local files that have already been uploaded.
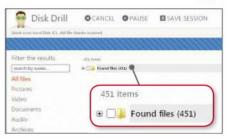
William Armstrong, via email

Google Photos provides notifications that help you free up space on your device

WINDOWS
Recover lost data for free

In Issue 374 (bit.ly/webuser374), I read a reader's tip recommending EaseUS Data Recovery Wizard for Mac (bit.ly/macrecovery377) for restoring lost image files. It made me wonder if something similar is available for Windows, because I had recently lost some important files by deleting them accidentally.

Although EaseUS makes Data Recovery Wizard for Windows (bit.ly/windowsrecovery377), you're limited to

Disk Drill shows all recoverable files as it scans your hard drive

recovering 2GB of data for free, which is no good if you work with lots of large image or video files. Fortunately, a few searches led me to a data-recovery program that's completely free called Disk Drill (pc.cleverfiles.com). The application was originally made for Macs, but it's now also available on Windows, letting you recover all manner of files including documents, photos, video and music. When you've installed the program, simply click the drop-down menu alongside your hard drive, select 'Run all recovery methods' and it'll run both a quick and deep scan until your deleted content can be recovered.

Tony Price, via email
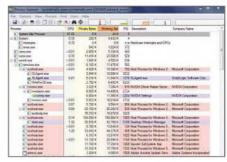
GENERAL PC
Find out which Windows process is using a file

Have you ever tried to open a file, only to receive an irritating message saying that it's already in use by another program or user? Sometimes this can be easily resolved by closing an application, but other times it can persist even after you've seemingly closed everything.

I recently stumbled across a handy application that's designed to tell you which process is using a file, so that you can establish exactly why you're unable to open it. Process Explorer (bit.ly/process377) is lightweight and free to download and, once you've installed it, identifying the process that's using a file is as easy as dragging the app's gun-sight icon to the error message. Once you've established which program is the culprit, you can also use Process Explorer to kill the process by simply tapping the Delete key.

Guy Roberts, via email

Process Explorer gives you a detailed list of all the processes running on your PC

Readers' Helpdesk

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

ONLINE STORAGE
How do I share videos with friends and family?

Q I'd like to email videos I've created to friends and family. How do I make them small enough to send? Do I need a special program and will the recipient need another special program to receive and open them?

Zante, Web User Forums

A To make the videos small enough to email, you'd have to compress them to the point that the quality would almost certainly be compromised. Instead, it would be better to upload them to a cloud-storage service such as Dropbox (www.dropbox.com) and copy links to the files directly into your emails. This would overcome the size restrictions on email attachments and neither you nor the recipient will need to download any other software – it can all be done directly from your browser. With Dropbox, you get 2GB of storage for free, but if you've already got a Google account, it's worth trying Google Drive (drive.google.com), which also lets you share links to your files and offers 15GB of free storage.

If you'd rather not sign up to a service, the free version of We Transfer (www.wetransfer.com) lets you send files totalling up to 2GB by entering your own email address and that of your recipient. The recipient then receives an email that lists the files available for download. You can add your own personal message so they know it's legitimate.

Sneakybeaky, Moonshine and izzit, Web User Forums

Upload videos to online storage and you can share the link with friends and family

HARDWARE
Where can I buy a used iPad?

Q I want to buy a used iPad for my sister and wondered if anyone can recommend a good place to buy from. I've tried eBay and Gumtree, but is there somewhere else I could try?

smudger879n, Web User Forums

A You could look in your nearest Game store (bit.ly/game377). Alternatively, Cash Converters (www.cashconverters.co.uk), Cash Generator (www.cashgenerator.co.uk) and CeX/Entertainment Exchange all sell second-hand iPads. The pricing at these stores should be fairly consistent and you may even get some kind of warranty (unlike on eBay and Gumtree). However, these second-hand tablets don't usually represent very good value for money. For example, Game sells a used 16GB Wi-Fi iPad for £279.99, even though the very same specification is available brand new for £300 from Amazon.

Refurbished iPads can be bought at discounted prices directly from Apple

The Apple Store's refurbished section (bit.ly/refurbished377) is worth a look, because its tablets have been fully tested by Apple and should more closely resemble new devices.

If you're determined to buy a 'pre-loved' device, be aware that iPads come in different models as well as storage sizes, so a difference in pricing that appears to be a bargain may just be an earlier (and less powerful) model with less storage space. There's a handy table showing how the iPad has evolved in iMore's iPad Air review (bit.ly/ipad377), which is a good place to start comparing models.

Sneakybeaky, Stewart40, ezyduzzit, izzit and succulent95, WU Forums

BACKUP
How do I back up my music to an external hard drive?

Q I've just been given a portable hard drive made by Buffalo and I want to back up my music to it. I was going to drag and drop the files across, unless there is an easier or better way of doing it. I am running Windows 7.

Davidnhdg, Web User Forums

A Drag and drop is definitely the easy way. You can highlight multiple files, either by clicking, holding and dragging your cursor to select them or by holding down Shift and clicking the individual files and folders you want. Once you've done that, click and hold to drag the files to the location you want to copy them to.

I recently used this method to copy a load of photos to an external hard drive and it worked just fine. If you don't like using Windows Explorer, a free file manager such as FileVoyager (www.filevoyager.com) can move, copy, delete and rename files. Since you're likely to be constantly updating your music library, you might want to have a look at Microsoft's SyncToy (bit.ly/synctoy377), which makes syncing two locations much easier than doing it manually.

succulent95, Cantrel and Stewart40, Web User Forums

You can drag and drop files in Explorer, but an alternative such as FileVoyager is better

Star Email

Windows 10: I will upgrade… on 28 July 2016!

From what I've read on Facebook and other sites, opinion on Windows 10 seems to split into two camps. The first bunch are so adamant that they won't be upgrading that they almost seem offended by Microsoft asking them to. Windows 7 or 8 suits these people just fine, it would appear.

The second bunch have no such doubts. They've gone for it from the minute the first Windows 10 Preview was made available last year. I can imagine millions of people did a mental double-take when they learned that Windows 10 would be a free upgrade. From that moment, they were sold on the idea of upgrading. I suspect that a lot of vexed Windows 8 users fall into this group.

But I bet there are lots of people who fall somewhere between the two. I count myself as one. I don't like

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upgrading for the sake of it, but I always do – eventually. Without doubt the worst upgrade I ever made was from Windows 7 to 8, so I sympathise with those who want to escape its clutches.

The 'eventually' in this case will be on

the final day Windows 10 is available as a free download, in a year's time. I don't see any advantage in installing it before. During my year's wait, I will keep an eye on the bugs and whether they've been fixed. I'll also wait for anti-virus tests to be conducted using Windows 10, to see which security software works best with it.

There's another important factor to consider. You can't opt out of updates in the Home version of Windows 10. I can understand Microsoft's decision, but it could prove very annoying, especially if some of the updates are less than perfect (past experience suggests this will be the case). I shall study how this affects Windows 10 and prepare a strategy for coping but, until next July, I'm happy to use a combination of Windows 7, 8 and Linux on my various computers.

Bob Fenton, via email

I'm going to stick with Windows 7

Wow *Web User* – when you want to say something, you don't hold back! I refer to Issue 376's Cover Feature, imploring us not to upgrade to Windows 10. I tend to agree with you that upgrading straight away is fraught with danger. I also think – what's the point? I love Windows 7 on my PC, and tolerate Windows 8.1 on my laptop. How would Windows 10 make my life any better? The short answer is, it wouldn't, so I'll step back from the hype, watch from the sidelines, and see what happens.

But even if Windows 10 is considered a resounding success and half the world's PCs use it by Christmas, I'll stick with Windows 7. I think the only reason I would switch to Windows 10 is if I accidentally smash my Windows

7 PC to smithereens in my sleep.

Douglas Bleasdale, via email

I'm taking the Windows 10 plunge!

While I enjoyed reading your scepticism about Windows 10 in Issue 376, I'm going to disobey your orders and take the plunge. I use Windows 7, and I find it does what I need. But sometimes you just have to take a leap into the (relatively) unknown, otherwise you'll never learn anything new.

The dilemma about whether to upgrade reminds me of my reluctance to use the internet in the first place. This was about 10 years ago. I didn't think the web held any pleasures for me. I was happy just watching TV, reading books (paperbacks, not ebooks) and listening to the radio. But I'm glad my neighbour (hello, Len!) changed my mind. Since then, I use the web every day, have subscribed to *Web User*

and now regret my initial reticence.

It's with the same sense of 'oh well, let's give it a go' curiosity that I'm upgrading to Windows 10. It is free, after all, so why not give it a try? The other option is to stick with Windows 7 until 2020, when Microsoft ends support, but by then I'd have been using it for 10 years! It's time for a change.

Wish me luck!

Richard Cosgrove, via email

Want an ad-free Gmail? Pay up or shut up

I understand why Mason Burgess wants to complain about Google's desire to devour all our data (Star Letter, Issue 376), but he loses my support when he moans about Gmail containing targeted advertising. I have a few questions for Mason: would he be prepared to pay for Gmail? Or part with money to search on Google? Or cough up to use Chrome? I suspect not.

It's a simple fact that people will never pay to use email, search the web or browse online. Until

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

they do, companies like Google can make money in only one way: advertising. Like it or lump it, but don't moan about it.

Justin Gale, via email

Don't let 18-year-olds wipe their web history

Whenever anyone is losing an argument, they trip up the other person by talking about "my rights". It usually derails the other person because nobody likes to be seen as a tyrant, depriving people of their rights. I was reminded of this tactic when I read about so-called 'iRights' (bit.ly/rights377), which would allow teenagers to wipe what they've done online when they hit 18 (see Best New Websites, page 16).

According to this campaign, any 18-year-old has the right to eradicate evidence showing them to be an online bully. They would also have the right to remove racist or homophobic statements on Twitter. These aren't 'rights', they are just things it would be nice to be able to do. What this campaign seems to imply is that under-18s should be allowed to do whatever they like online because, bless their cotton socks, their brains have yet to fully mature. And anyway, don't we all do stupid things when we're young?

I disagree. Anyone who has recently spent time with 14-18-year-olds (as I have – I'm a teacher, and would like to remain anonymous) will know that they're not blind to morality. If they bully someone online, or upload sexual photos against the other person's will, they know it's

wrong. Indeed, many of them do it *because* it's wrong. Evidence of their wrongdoing shouldn't be wiped from history. This ill-conceived idea simply sends a message to teenagers that they can get away with anything up to the age of 18. I dread that people will take it seriously.

Name and address supplied, via email

Scrapping the MAC helps scammers

I've just read your article in Issue 375 on switching your ISP. From a personal and professional point of view, this is the worst thing Ofcom could have done because without the need for the MAC, there is no customer intervention. The requirement of a MAC or another form of transfer authorisation from the customer is the protection people need from rogue companies hijacking telecoms services without knowledge or permission.

My mum has had her phone line and broadband hijacked by three different companies since these regulations came into effect. She has been with BT for all services for the best part of 30 years. Recently, there was a problem with a crackly phone line, so I called BT. They told me that our services aren't with them and, understandably, refused to assist further. They couldn't tell me who the service had been taken over by, nor when it was done. This has happened three times!

Fortunately, no bills or contracts have landed on the doorstep. Even if they had,

my mum signed no contract with anyone, so the law would be on our side.

So tell me, what price are you willing to pay either financially or in time to sacrifice your security and services? Well done Ofcom for removing that level of protection.

Danny Leonard, via email

All that glitters is not gold

On the face of it, the new Ofcom measures to allow us to switch ISPs more quickly are to be welcomed. But for many years, when I've phoned up my ISP to ask for a MAC, they give me the opportunity to continue with them at a much reduced rate. So what will I do now? Phone them up only to be told I don't need a MAC, or contact the new provider who will let my old ISP know and wait to see if they will offer me a better deal to stay? I don't think I'll hold my breath. The only option would seem to be to just phone and ask for a better deal, but will it achieve the same result? I doubt it.

Eric Lucas, via email

BBC is too dominant online

Regarding the debate about whether people who only watch TV on the iPlayer should pay the Licence Fee, I don't care whether they do or don't. What concerns me more is how dominant the BBC website is becoming, especially in the area of local news. A good friend of mine who used to work on a 100-year-old local newspaper was made redundant recently. The reason his bosses gave was that people prefer to read local news on the BBC's site, rather than in newspapers. Because my friend pays the Licence Fee, he was in the frankly preposterous position of subsidising the growth of an institution that ultimately cost him his job. How can that be fair?

Ian Whitman, via email

Split the BBC Licence Fee

The solution to the Licence Fee is staring the BBC in the face. They need to split the fee into chunks, so people can pick and choose which services they want. I have never watched BBC Three, last listened to Radio 1 back when the Bay

[Twitter logo] [Facebook logo] [WU logo]

City Rollers were Number One (any chance of a photo?), and think BBC News 24 is dull and amateurish. Surely some clever accountant at the Beeb could work out how much money I would save if access to these three services were rescinded? This is the only way the BBC will survive in the internet age.

Mary Fullerton, via email

A poet *and* an IT whizz-kid

My grandson Huw and I are both computer and web geeks. He's 11 years old, while I've just recently celebrated my 77th birthday. On my birthday card he wrote:

There was an IT whiz from Stroud
Of his PC knowledge, he was proud
He had so many files
In fact, he had piles,
That he nearly filled up the cloud!

He has a Raspberry Pi with which he codes in Python and is an avid Minecraft fan. Together we have also coded an Android app using MIT's App Inventor 2 (ai2.appinventor.mit.edu) following instructions in your sister magazine *Micro Mart*. Not a bad range of talents for an 11-year-old! I was 22 before I started operating and programming an ICT 1301 computer (pictured, below).

Harri Bonner-Barlow, via email

© ICT-Model-1301" by Robocomm - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons

What you say...

WHAT ARE YOUR FIRST IMPRESSIONS OF WINDOWS 10?

I love it. It boots up fast and has given my laptop a new lease of life. Yes there are bugs, but those will be ironed out.

Michael Bradbrook

I quite like it. Bit of a hiccup when it wouldn't connect to my WD My Cloud drive, but it's all sorted now.

Ady Colclough @AdyC76

Downloaded it in five minutes and installed it within 30. Everything is as it should be and it's flying along nicely. A noticeable speed difference from Windows 8.1. I haven't had bugs so far.

John Wells

I don't like that it uses TLS instead of SSL for Outlook 2013. Causing email problems! But it's fast, responsive and looks great. It was a simple upgrade from Windows 8.1 on an Asus X555L.

John Campbell @John_Cam2013

It's much better than Windows 8.1. The Edge browser is really fast, so I think it's goodbye to Chrome. Two or three games were pre-installed – I don't want those.

Fred Turton @fedory

Blitzing speed boot up, Edge is great, looks and feels good. But old programs not working properly, and had to reinstall them.

Jason 'Boz' Bowyer

DID ANYONE MANAGE TO GET ANY BARGAINS DURING AMAZON PRIME DAY ON 15 JULY?

It was no better than an electronic car-boot sale. Utter trash or massively overpriced gadgets with 6 per cent off. Really poor.

Peter Fitzsimmons

It was rubbish. Nothing good and low discounts.

Paul Chapman

I discovered today that the DVD I ordered was cheaper on eBay.

Jayne Preston

ARE YOU ANNOYED THAT TWITTER HAS MADE YOUR BACKGROUND WHITE?

It's sad and makes Twitter look dull. My background was a collage of memories with friends.

Sam Higgins

Yes, I really do not like bright backgrounds. Won't be using Twitter any more, then.

Paul Wallace

I'm completely outraged! No, not really, because I only use the Twitter mobile app.

Stuart A Hordern

When websites like Twitter (and Facebook) are free to use, I don't see any reason to complain about minor changes. Within a few days you no longer notice them.

Caroline Sharman

It makes you wonder why they give you these customisable options in the first place. The words 'fickle' and 'contrary' spring to mind.

Lynn Sharpe

HOW MANY BROWSER TABS DO YOU NORMALLY HAVE OPEN?

Two or three. The more tabs you have open the slower the browser responds.

Brian Brown

Half a dozen is the norm, with a great deal more if I am researching something.

Ian Phipps

⚠ Page 404

Barry Collins wants our data to be deleted the moment it reaches its sell-by date

We all need a digital time bomb

Think of the all incredible things we've done over the past couple of decades to reduce waste. We go to extraordinary lengths to preserve energy – meticulously sorting our rubbish into eight separate colour-coded bins to ensure it's recycled properly; pumping the walls of our houses with hamster bedding to prevent heat from escaping; spending the first 10 minutes at home on a winter's night in toe-stubbing, shin-cracking darkness while we wait for the energy-saving lightbulbs to warm up. And yet, in other ways, we are incredibly wasteful.

Take data. It's mushrooming at an uncontrollable rate. I went to look up a figure for the estimated amount of data in the world today, but it's absolutely meaningless to you (and me). You couldn't grasp the scale of a quintillion exabytes of data (or whatever the figure is) any more than you could count the number of atoms in Berkshire. It's beyond comprehension.

What's easier to understand is the scale of Google's data centres. Visit www.google.co.uk/about/datacenters/gallery and look at the photo galleries. They show football stadium-sized buildings stacked full of servers, with kilometres of coloured pipes pumping huge volumes of water around the buildings just to keep the servers from cooking. Google insists these are state-of-the-art, energy-efficient campuses, but even still, they use more power than hundreds of thousands of homes.

Why does Google (and Microsoft, Facebook and dozens of others) need these massive data factories? Because we're hopelessly wasteful with data. The 5GB of emails in my Gmail account include tens of thousands of

> **" Trying to grasp the scale of a quintillion exabytes of data is like counting the number of atoms in Berkshire "**

unmemorable messages I've never bothered to delete. I've got Hotmail messages stretching back as far as 1998, containing nothing more important than which pub I was meeting my then-girlfriend in. I've got thousands of old contacts in a now-defunct Yahoo account, and all of this absolute guff will be stored in triplicate in servers dotted around the globe, on the off-chance I might ever need it. I won't.

It's the same at home. I've got hard drives stuffed with tens of thousands of photos I'm never going to look at again, along with work documents going back 15 years, 99 per cent of which haven't been opened since the day they were saved. And, because I'm a good boy, all of this data is backed up on multiple hard drives and online – gigabyte upon gigabyte of data that I maintain purely because it's easier to keep than it is to sort out.

What we really need is a digital time bomb: an expiry date on every digital photo, email, document and other digital file. Fail to even look at that file for three years and Windows or your online service deletes it; open it up and the clock resets for another three years. Once a month you're given the option of reviewing the files headed for the recycling bin, and those not plucked out of the pile are permanently purged. Use it or lose it.

It sounds draconian. Reckless, even. But you don't need all that data; you just think you do. And if Google needs a few less Wembley-sized server silos to store our data in, it will do far more for the environment than sticking your potato peelings in the brown bin.

Illustration: Andrew Torrens

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

THE INTERNET OF EVERYTHING

presents

the last queue

We're building the Internet of Everything for business. With UCS Server solutions providing data centre performance everywhere, mobile applications and analytics keep queues short and customers happy. Let's confine queueing to yesterday.

See how at cisco.co.uk/thelastqueue

CISCO

TOMORROW starts here.

Cisco UCS with
Intel® Xeon®
processors

intel inside™ XEON®