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Powerful new VPN everyone will soon be using **p52**

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The 21 biggest mistakes you don't realise you're making p38

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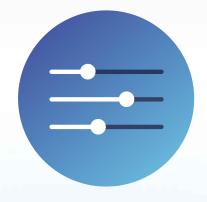
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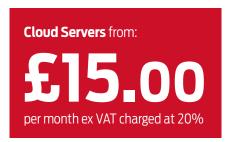
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21 wrongs don't make a right

Barely a day goes by without some poor soul telling me how long their PC takes to start. "Did you defrag your hard drive?" I suggest. "Of course," they reply. "Have you gone into 'msconfig' and unticked unnecessary programs?". "Yes, obviously". "Have you tried fusing your processor with the brain of a Colombian spider monkey?". "No, that would be playing God".

The fact is that there's no catch-all solution to a slow PC and many speed-up tricks recommended on the web will actually make things worse. In this issue's cover feature (page 38), we round up 21 of the most common mistakes and bad practices that adversely affect the performance of your system, so you can avoid them in future and get your PC back to optimum speed.
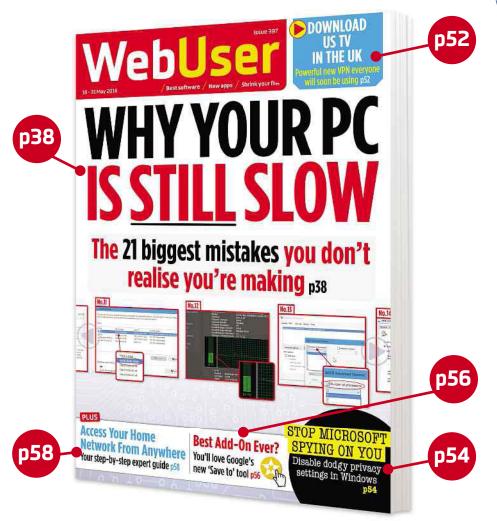
On a separate note, I'd like to thank everyone who has bought our 2016 Back Issues Disc (bit.ly/webusercd15), which quickly sold out on Amazon. It's now back in stock at its lowest price yet.
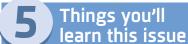
Robert Irvine
robert_irvine@dennis.co.uk
#webuser

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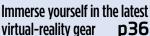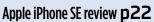
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Access your home network when you're away **p58**

What's New Online

Listen to SoundCloud music offline

The way we listen to music has changed greatly over the past few years. Not only have we been casting aside CDs for downloads, but the likes of Spotify and Apple Music have grown massively in popularity, streaming millions of tracks over the web and offering advanced services for a set fee each month.

Now SoundCloud is joining them with a service that promises a catalogue of 125 million tracks, among them the many exclusive remixes and mashups that have made SoundCloud so popular over the last eight years. Available, as with rival services, for £9.99 per month, SoundCloud Go also lets you download music to listen to offline and unlock previews as full tracks.

The new subscription option could well encourage more artists and labels to reap financial rewards for their creative efforts by only making

their tracks available to paying listeners. It should also help SoundCloud compete with existing music services. That said, Apple Music, with 13 million subscribers, is planning an overhaul next month with an

expanded radio service and better download and streaming integration; while, Spotify – with 30 million paid-up listeners – is unlikely to shut its ears to any threat.
soundcloud.com/go

Get your supermarket shop from Amazon

bit.ly/prime397
It's hard to fault Amazon's ambition when it comes to efficiently delivering items to your door. Not content with offering Amazon Pantry, which lets you stock up on long-life groceries and household products, it is rolling out Amazon Fresh to bring you fresh food, too, following small trials in Birmingham and London.

Meanwhile, the company has also expanded its one-hour delivery service, Prime Now, to cover large parts of West Yorkshire, Surrey, Hampshire and Berkshire, as well as London. Customers (who must be Prime members) still have to use a mobile app to place UK orders but there's now a dedicated website providing information about the service.

Create app 'recipes' using Microsoft Flow

flow.microsoft.com
Ever since IFTTT (If This Then That, ifttt.com) launched, we've been able to make our lives easier using automated processes called 'recipes', which allow a host of web-based services to work seamlessly with each other. Now Microsoft is getting in on the act with Flow, a service that connects more than 35 cloud services, including Twitter, Dropbox and Office 365.

Although that's only a fraction of what IFTTT offers, it already looks promising. To sign up and create your own 'flows', you need a work or school email address, but once in you can choose from dozens of recipe templates including 'OneDrive Photos to Google Drive Photos' and 'Save email attachments from Office Outlook 365 to Dropbox'. You can also create your own flows using a series of drop-down menus. In time, we're sure that artificial intelligence will also play a part, given Microsoft's recent work in the field.

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

Explore the Sydney Opera House

bit.ly/sydney397

Google Street View now lets you marvel at the magnificent Sydney Opera House using 360-degree panoramic images of the building and its interior. The high-quality photography and behind-the-scenes footage already give you a feeling of being there, but for an even more immersive view, call up the images on the Street View mobile app and slot your phone into Google Cardboard.

Try a quantum processor online

quantumexperience.mybluemix.net

Quantum computing has the potential to perform calculations far beyond the capabilities of current systems. That's because it eschews the ones and zeros of traditional bits in favour of quantum bits, or 'qubits', that are capable of having both at the same time. IBM has long been working on quantum technology and now it's making a five-qubit processor accessible to everyone via the cloud. Sign up for an invite and you'll be able to drag and drop 'logic gates' on a simple web interface and use the tutorial to make sense of it all.

Check out the new Android N emoji

bit.ly/beta397

The next version of Android – codenamed N – is still in development but Google is already teasing users with some sneak peeks. The most eye-catching are new emoji that offer more scope to express yourself visually. They include more human-type figures, each supporting a range of skin tones along with some contemporary images such as face palm and selfies, and a few much-requested additions, from bacon and exercise to a dancer and juggler. Try them for yourself by signing up to the Android Beta programme.

Play Sega Megadrive games online

bit.ly/sega397

The launch of the Sega Mega Drive some 26 years ago was a spiky affair in more ways than one, not least for introducing Sonic the Hedgehog. Now a free update on Steam gives access to Sega's Mega Drive Classic Hub packed with games to play and buy. Among them are unique, authorised gamer-modified versions that add new features and tweaks to the all-time classics.

5 TO FOLLOW ON TWITTER

@VicsDustbin
Find out what the Victorians threw away by having a rummage through the bins of history

@royalfamily
The Queen's account has changed its name from @BritishMonarchy

@thenicebot
To counteract the nastiness on Twitter, this bot is programmed to be very nice indeed

@WMO
Summer's here, so see what the World Meteorological Organisation has to say about the weather

@championsleague
Real Madrid versus Atlético Madrid sounds like a mouthwatering final

Turn your phone into a lightsaber

lightsaber.withgoogle.com

All *Star Wars* fans dream of using a lightsaber to swipe Stormtroopers, and Google has now made the fantasy real. It's a Chrome app that connects wirelessly with your phone to turn it into a controller for a lightsaber game, with sound effects.

Find Facebook's live videos

www.facebook.com/livemap

Facebook's new Live service lets you post live videos on the network. The flashing dots on the Live Map let you see who is broadcasting live and where they are in the world.

Explore the 2016 Olympic stadiums

bit.ly/olympic397

If you can't wait for the Olympics in Rio, Google Maps is letting you explore maps of 25 indoor venues and enhanced maps of 12 outdoor venues that will be showcasing events in August.

Free Windows 10 upgrade will definitely end in July

What happened?

Microsoft has been offering free upgrades to Windows 10, its latest operating system, since its launch last summer, but the company confirmed in a blog post (bit.ly/w10blog397) that the free ride will soon be over and not (as had been speculated) extended past the one-year deadline.

As of 29 July, Microsoft will no longer be offering the new OS as a free upgrade for those already running Windows 7 and Windows 8+. That still leaves users with plenty of time to make the move for free.

Anyone opting to upgrade after the cut-off will have to pay for the privilege, and it won't come cheap. The standard version of the software, Windows 10 Home, costs $119 or £99 including VAT. The business version, Windows 10 Pro, costs $199 or £189 inc VAT.

As well as ending the period for the free upgrade, Microsoft will also kill off the near-constant upgrade notifications that have been popping up in Windows 7 and 8 PCs. Microsoft pushed the Get Windows 10 app onto qualifying PCs as part of Windows Update, to the annoyance of millions of users.

The app is designed to make it easy to download and install the new OS, but it also keeps nagging users to upgrade. If you upgrade, the nagging stops. For those who choose not to upgrade to Windows 10, the app will eventually disappear from their system sometime after the July 29 cut-off, Microsoft has confirmed.

Microsoft has confirmed it won't extend the free upgrade period for Windows 10

How will it affect you?

If you want to upgrade to Windows 10, what are you waiting for? Perform your backup, download the free OS and install it while it's still free. You'll have until 29 July to start that process, but it's likely the download servers will be busy towards the end of July as procrastinators finally make the jump, so the best bet is to get on it as soon as possible. If you haven't yet decided whether you want to upgrade, consider downloading it before the cut-off date, so you don't have to pay down the line.

If you have any friends or family who aren't as tech-savvy but may want to make the move, make sure they're aware of the cut-off date, too. They'll probably get a blizzard of notifications from Microsoft via the Get Windows 10 app, but we've all learned to ignore those so they may miss the deadline.

Of course, you don't need to upgrade if you don't want to, and if Windows 10 doesn't appeal, you can stick with Windows 7 or 8. However, if you want to give it a try, now's the time to do it – you can always roll it back to a previous version if the new OS doesn't appeal.

What do we think?

Microsoft claims 300 million people have already switched to Windows 10, and more are certain to do so before the free upgrade deadline. However, it currently lags far behind Windows 7 in popularity, with StatCounter (www.statcounter.com) numbers suggesting the older OS still holds 41% of the global OS market, well above the 16% nabbed by Windows 10. That figure includes older PCs in use across the developing world; in the UK alone, the gap narrows to a few percentage points.

Microsoft has good reasons for wanting us to upgrade: Windows 10 is easier to support, gives a wider market to app developers and ensures a safe, modern, PC experience. But abstainers have equally good reasons to avoid the upgrade: newer software can be buggy, their existing OS is working just fine and they don't like the design or changes in the updated version, especially the features that invade their privacy.

The best way to get people to upgrade is to create software that they actually want, with new features that entice them away from older versions. If that's not enough, making it free is a clever move, but anyone avoiding the upgrade isn't going to want it once it costs £99. Microsoft would be wiser to keep the upgrade free to encourage users to switch in their own time. Better late than never, after all!

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

272 million webmail logins stolen

What happened?

Login details for hundreds of millions of Gmail, Yahoo, Hotmail and other webmail accounts were stolen and sold by a hacker, according to security researchers at Hold Security (bit.ly/hold397).

The largest tranche was from the Russian email provider Mail.ru, which had 57 million passwords leaked, with 40 million from Yahoo, 33 million from Hotmail and 23 million from Google's Gmail. In all, 272 million credential combinations were in the list, but Google said that almost all the leaked Gmail logins were "bogus".

How will it affect you?

There's no reason to panic over this hack. Firstly, although the numbers sound big, it's worth remembering that Gmail, for example, has more than a billion users, so there's only a small likelihood that you'll be one of the 23 million affected – even if the leaked logins do turn out to be genuine.

Mail.ru's analysis of the leaked data shows many of the usernames are repeated, which suggests that the breach affects even fewer people than initially thought, and that much of the data is out of date.

Secondly, Microsoft has said that any compromised accounts would require additional user information to log in, giving anyone who is affected an extra layer of protection. The other companies are likely to follow suit, so you should hear from your webmail provider if you're at risk.

On top of all that, the hacker didn't think the data was valuable, offering it for sale for 50 pence, and eventually handing it to Hold Security for no more than a few 'likes' on his social-media page.

What do we think?

What an odd hack. What's alarming isn't the leak of millions of login credentials, but that such data isn't considered worth much anymore – there's so much of it floating around the internet that this isn't even that special. However, it reiterates the importance of changing your password regularly and not using the same login for several sites, to safeguard against future security breaches.

EU cuts mobile roaming charges

What happened?

The EU has again slashed the price of using your phone while abroad, ahead of scrapping the additional charges altogether in June 2017.

Operators can now only charge €0.05 (4p) extra per minute for calls made while roaming in European Union countries, down from €0.19 (15p) on top of standard calling rates. For mobile browsing, the cost has fallen to a €0.05 (4p) surcharge per megabyte of data – down from €0.20 (15p).

That means any bills you rack up while travelling in the EU this year should automatically be a bit cheaper.

How will it affect you?

You won't need to do anything to get this discount – it's up to operators to ensure they're not overcharging users. Do keep in mind that the final price depends on the rate you pay at home, so you could end up paying more or less than a fellow traveller simply because of what your operator charges in the UK.

Given that most of us don't pay by the minute or the megabyte, you may not even know your current rates. Either way, sending a few texts or checking email will now cost noticeably less.

Don't forget, also, that the cuts only apply to EU member states – you can still get a big bill when browsing in non-EU countries.

What do we think?

Remember the headlines about an unwitting traveller being handed a £3,000 bill because their child spent an hour on YouTube while in France? Thanks to the EU, that's no longer possible – and its work is making mobile charges increasingly simple and sensible. We all depend on our smartphones in our day-to-day lives, even more so when we're away from home and need to keep in touch or find our way around unfamiliar locations using online maps. The high charges of using a device abroad always seemed unfair, so we can only applaud the EU for this consumer-friendly regulation.

NHS shares 1.6 million patients' data with Google

What happened?

DeepMind, Google's artificial intelligence company, was revealed to have access to 1.6 million NHS patients' records thanks to a data-sharing agreement with the Royal Free NHS Trust.

The deal – uncovered by *New Scientist* – gives DeepMind access to healthcare data for patients attending any of the Royal Free NHS Trust hospitals in London – Barnet, Chase Farm and the Royal Free. It also includes patient data from the last five years, including information from Critical Care and Accident & Emergency departments.

DeepMind's partnership with the NHS started in February, when they collaborated on an app called Streams, designed to help hospital staff monitor patients with kidney disease. The data-sharing agreement is directly related to this project. Google argued that, because data on these patients is not separated, it needs access to all patient data for the app to work.

The information available to the company includes day-to-day hospital activity logs, results of some pathology and radiology tests, and even patients' visitors. It is not clear whether patients can opt out of the agreement.

How will it affect you?

If you attended any of the hospitals mentioned above in the last few years, you may be feeling uneasy about your private medical details being in Google's hands. The NHS has been criticised on previous occasions over plans to collect patient data from GP medical records to share with the national Health and Social Care Information Centre (HSCIC). Patients and GPs pushed back against the plans after it was revealed that the data collected would potentially identify individuals.

The terms of the latest deal state that Google cannot use the data in any other parts of its business, and it will be stored only until the agreement expires in September 2017, after which all records must be restored to the NHS or destroyed.

What do we think?

In our 'Google Exposed' cover feature Issue 381 (bit.ly/webuser381), we said that "it's largely a mystery what DeepMind has been up to". Now, we know that it's been nosing through medical records – presumably to help Google further its research into the prevention and treatment of conditions such as kidney disease. While this is a noble aim, the methods seem creepy nonetheless.

We think patients should have a say over their data being shared, and be able to 'opt out' if they feel uncomfortable with companies other than the NHS seeing their private information.

👁 FIRST LOOK

Amazon Kindle Oasis
bit.ly/oasis397

The £270 price tag is bound to prompt an outraged exclamation, but there's more to the Kindle Oasis than your average e-reader. As light as a feather and small enough to be slipped into your pocket, it's thinner and weighs less than any previous incarnation of Kindle. It's also a very practical device – the offset screen at the front and the grip at the rear give you somewhere to put your fingers and thumbs without any accidental page turns.

The Oasis also comes with a premium leather cover that clips magnetically to the rear of the reader and has its own built-in battery. When used in conjunction with the e-reader's main battery, this can deliver an astonishing eight weeks of battery life.

Its screen is just as good as any Kindle that's come before it. Measuring 6in – exactly the same size as the screen on the Voyage and the Paperwhite – it has the same resolution with a pixel density of 300ppi. Text is as crisp as on the printed page and the front light boosts contrast and allows you to read at night.

As with last year's Voyage, the Oasis' display is topped with a semi-matte layer of toughened glass that keeps reflections at bay, but its light employs 60% more LEDs than the Voyage, ensuring a more even, consistent illumination than we've seen on any other e-reader.

If you're hoping for a better interface for your money, however, you'll be disappointed. The Amazon Kindle Oasis uses exactly the same front end as other current Kindles.

There's no arguing about whether the Kindle Oasis is a fabulous device for reading – it's the best in the business, no doubt. As to whether it represents great value for money – we'd say not, but that's clearly not the point of this device.

See Barry's column on page 74 for his views on the Kindle Oasis.

❓ WHAT'S THE RUMOUR

Will YouTube launch an online TV service?

Rumours suggest that YouTube could launch its own TV service from next year. The service, dubbed 'Unplugged', has reportedly been in development since 2012 and will be an extension of its paid-for subscription service Red (which offers unlimited ad-free content and access to original YouTube shows), letting users watch major cable TV channels on the web.

According to Bloomberg, which quotes sources 'familiar with the project', YouTube is aiming to offer a package that costs no more than $35 (about £24) a month and includes the main four US broadcast networks along with a number of popular cable channels. It has already had meetings with US television networks including 21st-Century Fox, Viacom and NBC, but no rights have yet been secured.

The service is one of YouTube's biggest priorities and the company has already overhauled its technical architecture to accommodate it, according to Bloomberg's sources. This is not the first time YouTube's interest in offering a live TV package has been reported, but it does represent the first time that a name or details of the service have been leaked.

LIKELIHOOD RATING
✔✔✔✔✔

The detailed nature of Bloomberg's story suggests there is some veracity to the claims that YouTube is launching an online cable TV streaming service. However, because discussions have only taken place with US TV networks, it's difficult to see how a similar deal would work in the UK.

A comparable service called Sling TV has been available in the US since early 2015, but there's no evidence that it'll be coming to the UK anytime soon. With YouTube Red still only available in the US for now, we can't see Unplugged launching in the UK next year.

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

Askey
bit.ly/askey397 | **From £25**

Do you ever panic after leaving the house that you haven't locked the door properly? It's easily done, but help is at hand from a clever accessory called Askey, which tracks when you last used your key to give you peace of mind when you pop out. It recognises the rotation of your key in the lock, then lets you confirm that the door is secure with a simple button press. There's also an Askey app that lets you check the status of the door and location of your keys from your phone. The Askey team hopes to raise £36,000 by 30 May.

⬆ WEBOMETER ⬇

WE LIKE...

⬆ **Vodafone introduces new roaming bundles**
Vodafone has announced that all new and upgrading customers taking out its Red pay-monthly plans will benefit from inclusive roaming in 40 European destinations and 4G coverage in 93 countries.

⬆ **Netflix helps you avoid expensive data charges**
Netflix has introduced a new settings menu to its mobile apps that lets you choose the quality of your video stream and control how much data you use.

WE DON'T LIKE...

⬇ **Microsoft stops Cortana using Google**
Microsoft announced in a blog post that it was stopping Cortana from using search engines other than Bing and that Edge would be the only browser launched by the personal digital assistant.

⬇ **Paypal cuts crowdfunding protection**
Paypal has made changes to its terms and conditions that mean it no longer protects purchases made on crowdfunding sites such as Kickstarter. However, the UK is not currently one of countries affected by the new terms.

Stay Safe Online

News about the latest threats and advice from security experts

Android ransomware downloads malicious apps

A new type of Android malware that automatically downloads malicious apps has been uncovered by security researchers after it attacked one of their company's test devices. The exploit kit, which is the first stage of the attack, is delivered via a malicious ad on a website that contains hostile JavaScript, according to security firm Blue Coat. The kit then installs ransomware masquerading as an app onto the Android device. This ransomware executes automatically at a time of the malware author's choosing. When executed, it poses as a message from fake law-enforcement agency Cyber Police, displaying seals of the FBI and NSA to make it look authentic.

This veneer of credibility is almost immediately undermined, however, because it demands payment in iTunes gift cards. The malware itself is actually rather crude – rather than encrypting the whole device and all the files contained on it, as most modern ransomware does, it instead simply locks it. While in this respect the attack is quite dated, Blue Coat researcher Andrew Brandt said this was the first time "an exploit kit has been able to successfully install malicious apps on a mobile device without any user interaction on the part of the victim".
bit.ly/ransom397

All ATMs can be hijacked with malware

ATMs can be easily hacked to install malware for stealing funds, a report by Kaspersky Labs has revealed. The company identified two key hardware flaws with the ATMs it researched: the computer inside the machine can be easily accessed and it is running outdated software, which means it can be easily infected.

"The results of our research show that even though vendors are now trying to develop ATMs with strong security features, many banks are still using old insecure models," Olga Kochetova, security expert at Kaspersky Lab's Penetration Testing department, said. "This makes them unprepared for criminals actively challenging the security of these devices. This is today's reality that causes banks and their customers huge financial losses."

Many ATMs studied by Kaspersky were running Windows XP, which is no longer supported by Microsoft. This means their security isn't up to date and malicious malware can be installed without too much effort.
bit.ly/atms397

Security Helpdesk | Your questions answered by security specialists

**THIS ISSUE'S EXPERT:
Paul Fletcher, cyber-security evangelist at Alert Logic
(www.alertlogic.com)**

Q **Should you pay hackers the ransom if your files are encrypted by ransomware?**
Mark Strickson, Twitter

A In my opinion, ransomware victims should not pay to get their data back. Whether the attack is against an organisation or an individual, as in the recent example of extortion attempts against Ashley Madison users, the victim has no guarantee that the attacker will return the stolen data or remove it from every location in which they stored it.

Since there is no guarantee that the files will be returned, paying the 'ransom' leaves the victim vulnerable to follow-up requests by the same attackers, asking for more money. It also encourages other attackers to use the same tactic.

Paying the ransom might be a last resort for an individual who is trying to protect a secret. They may feel it's worth paying the first

> " Paying attackers the ransom only sets up follow-up demands and encourages other attackers "

time, but eventually the price demand will increase beyond their means.

Businesses may pay the ransom as an easy, quick fix and to stay out of the headlines but, in my opinion, organisations should cut their losses, declare a breach, remediate and move forward.

The best way to prevent people from becoming the victims of ransomware is to educate them to be aware of the situation and safeguard their files against attacks. Maintain frequent (daily) backups of data; create a system to move backup data offline away from attackers; patch software frequently; and enable email filters to block malicious email from attackers.

Web User **says:** We'll be taking a closer look at how to combat the latest ransomware threats in our next issue, on sale 1 June.

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

Best New Websites

CREATIVE RELAUNCH
Newspaper Club
www.newspaperclub.com

"Print's not dead!" runs the tagline for this brilliant site, and we totally agree – especially because it's now easier than ever to design and print your own newspaper. Choose between tabloid, broadsheet and magazine styles; then either upload your text and photos and lay them out using the online tool, or use prepared PDFs. We love the site's smart, friendly new look and speedy ordering process, and the Get Inspired section that showcases other users' work. You can sell your newspaper through the site and order a free sample to see how the finished item will look. Just remember that the name *Web User* is taken!

Our rating ★★★★★
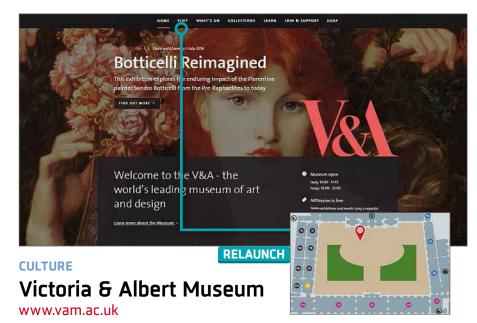
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CULTURE
Victoria & Albert Museum
www.vam.ac.uk

Last issue, we raved about the Museum of London's new website (museumoflondon.org.uk) and now another of the capital's cultural delights has a superlative online home. It's beautifully designed with gorgeous backgrounds, simple navigation and a layout that works perfectly on any device. As well as viewing highlights from the V&A's art and design collections, you can learn more about many items through in-depth articles and videos, and plan your visit to the museum using the interactive map. The revamp is still a work in progress - not all the sections have been updated yet – but it already looks as stylish and impressive as many of the V&A's exhibits.

Our rating ★★★★★

TICKETS
The Week Tickets
theweektickets.co.uk

Take in a show without paying through the nose using this site from *The Week* magazine. It offers tickets for all the latest plays, musicals, operas and other cultural events, as well as many popular tourist attractions, in cities including London, Birmingham, Sheffield and Glasgow. There are lots of big discounts on offer – for example, 50% off *The Railway Children* – and no hidden charges, with booking fees waived entirely for many performances. Seating plans are provided so you can choose where to sit, and ordering tickets couldn't be easier.

Our rating ★★★★☆

Reviews by Robert Irvine

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

NEWSAGENT
Sell your newspaper through the site or buy someone else's publication

CREATE
Design your newspaper using the online layout tool or upload some PDFs

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POLITICS **NEW**

Crowdpac

www.crowdpac.co.uk

Launched in perfect time for the EU referendum next month, Crowdpac wants us to engage more with politics. Its Political Matchmaker test asks for your responses to statements such as "rich people do not pay enough tax" to determine which parties and politicians your views are most aligned with. You can then browse campaigns for relevant candidates and causes, and support them through donations and social media. It's an interesting idea, especially if you're unsure what your politics are these days, but it's a pity you need to log in through Facebook to view results.

Our rating ★★★☆☆

ENERGY **NEW**

What Powers the World?

bit.ly/power397

This illuminating site from Gocompare .com reveals how much of the world's electricity still relies on coal, oil and gas. It works in two ways: firstly, flick the switches for the three energy types – Fossil Fuels, Nuclear and Renewables – to see how turning off their supplies affects the global light map. Secondly, hover your mouse over a country for a breakdown of its energy sources; the UK, for example, draws 64% of its power from fossil fuels, while France is, surprisingly, 74% nuclear. It'll give you food for thought when you next turn on the light.

Our rating ★★★☆☆

HEALTH **NEW**

Verywell

www.verywell.com

We love the name and design of this comprehensive health-advice site and, although it's based in the US, it should prove equally useful to Brits with medical problems and queries. Verywell offers more than 50,000 articles on topics ranging from acid reflux to vision loss, written in a knowledgeable, easy-to-understand manner by medical experts. Its clearly presented content lets you jump straight to the info you need, while the photos and illustrations are attractive and fun. Verywell is definitely one to bookmark for those times when you're not very well.

Our rating ★★★★☆

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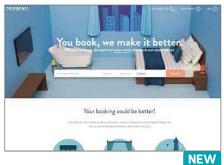
NEW

MONARCHY

Keeping Up With the Queen
keepingupwiththequeen.com

What was the Queen doing at your age? She certainly wasn't reading an internet magazine, but if you want to compare your experiences to Her Majesty's in an equivalent year, just enter your age and click Search to view highlights from her life, illustrated with photos, videos and animated GIFs. Discover, for example, that at 40 she watched England win the World Cup, at 56 she had an unwelcome bedroom visitor and at 77 she underwent keyhole surgery for her knees. The site only picks one or two things per year, but it's tastefully done and could give you some perspective on your own life.

Our rating ★★★☆☆

NEW

TRAVEL

Triprebel
www.triprebel.com

Hotel-booking sites often pressure you into booking with warnings such as "only two rooms left at this price!", but TripRebel takes a calmer approach so you don't get ripped off. It finds you hotels for your desired destination and dates and, as well as the current price, tells you whether the rate is likely to rise or drop. If you book now and the price falls before you check in, Triprebel will refund you the difference. It's a great idea, superbly presented with stunning photos, TripAdvisor ratings and search results that update as you move its maps. Bear in mind, though, that Triprebel doesn't cover hotels' non-refundable rates.

Our rating ★★★★☆

NEW

TRANSPORT

Traffic Cameras
www.trafficcameras.info

Sat-nav devices and apps may provide live traffic updates, but it's far better to see what's happening on the roads with your own eyes. This new site saves you getting stuck behind a tailback of lorries by letting you view live traffic cameras from around the UK. Choose a region from the drop-down menu to view a list of available cameras, or check your journey using the map view. You can also save three traffic hotspots to receive alerts when they're flagged as being busy. Traffic Cameras looks a little rough around the edges, but it's free to use and offers extra features and cameras for £1 per month.

Our rating ★★★☆☆

NEW

TECHNOLOGY

Circuit Breaker
bit.ly/circuit397

This spin-off from tech-news site The Verge describes itself as 'the world's best gadget blog', which seems rather presumptuous considering that it's only just launched and isn't really that special. Its large, knowledgeable team of writers do a good job of making even the dullest devices sound interesting, but it hardly lives up to its promise to let visitors "watch the future get invented in real time". Most of the content consists of analysis of press releases instead of hands-on tests or opinion, and the site seems annoyingly keen to direct you to its Facebook page. Still, it's early days and hopefully things will improve as it develops a separate tone and identity to its parent site.

Our rating ★★★☆☆

WEBSITE SECRETS

Make YouTube videos more 'awesome'

The progress bar that creeps along the bottom of YouTube videos to show how far you've watched is usually red and relatively inconspicuous. If you fancy jazzing things up a bit, start playing a video and either click within the player or switch to full-screen. Type the word 'awesome' on your keyboard and the video will pause while the progress bar starts flickering in rainbow colours. Click 'play' and the progress bar will continue to move across in its awesome, colourful splendour, even when you start watching another video. Refresh the page to return to normal. ∎

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

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Monthly guide to free WordPress themes

Torque (torquemag.io) is a brilliant blog about WordPress, containing lots of interesting posts. One of our favourite features is a monthly round-up of the latest free themes, showcasing them with a description and a screenshot. If you're looking for a new theme for your WordPress site, it's well worth taking a look and going through the previous months' finds, which are archived at bit.ly/torque397.

Let Jimdo design your site

Jimdo (www.jimdo.com) makes it easy to create a website because it removes all the technical aspects, but its template system means all your pages can end up looking the same. The newly launched Suggested Layouts provides a greater variety of Jimdo templates: just choose the

type of page you want from Home, About, Services, Contact and Gallery, and Jimdo will create a suitable layout and fill it with place-holder text and images that you can then replace with your own content. You don't have to stick with Jimdo's suggestions, either – the design can be tweaked as much as you like.

Deal of the Fortnight

Cyber Host Pro (www.cyberhostpro.com) is offering 10% off its hosting deals, making its Budget Hosting Plan just £32.99 per year. Type WEBHOST10 into the Apply Promo Code box before checkout.

Web-building Helpdesk

Mark Esho,
Managing Director,
Free Virtual
Servers (www.freevirtualservers.com)

FVShosting

Q Can I get a feed from my webcam to run on my website?
Harry Normington, via email

A To achieve this, you'll need some kind of streaming media server. Most web-hosting packages don't support this type of service, so you have two options: install a streaming media server and stream from your PC; or stream using a third-party service. We'd recommend the latter option because it avoids saturating your internet connection's upload capacity, you won't need a static IP and you don't have to configure your router (although there's a project about doing this on page 58). We'd recommend CamSecure (www.camsecure .co.uk), which is cheap, UK-based and easy to integrate into your website; or Wowza (www.wowza.com), though this is pricier.

MINI WORKSHOP | Find the best time to post new content
Google Analytics: www.google.com/analytics | 🕐 5 mins | Any website

Don't let new posts languish on your site with no views. Instead, try posting your new content when people are most likely to visit your site, to keep it looking lively and regularly updated

1 Sign into your Google Analytics account. Click the Customization tab, **1** then click the New Custom Report button. Give it a Title, such as Daily Traffic. **2** Click the 'add metric' button, open the Users section and select Sessions. **3** Click the 'add dimension' button and click 'Day of Week Name'. **4** Click Save. **5**

2 Daily Traffic will appear at the bottom of your Custom Reports. Scroll down below the line graph to see the information for each individual day, **1** and click the Performance button **2** to turn the percentages into a bar chart, **3** so you can see which days are your busiest.

3 To find out what time of the day you should be posting, follow Step 1 but choose Hour instead of 'Day of Week Name'. When you view the results, choose an appropriate time period. **1** The peaks on the line graph **2** are your busiest times. You can also view the information as a bar chart, below. **3**

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

Dell Inspiron 11 3000 Series

Richard Easton tests a budget laptop that runs a full version of Windows 10 for the price of a Chromebook

Windows 10 has inspired a number of manufacturers to create affordable Windows laptops that offer a viable alternative to Google's Chromebooks. The new Dell Inspiron 11 3000 Series is a great example. Its ultra-low price of £179 immediately grabbed our attention, as it's cheap even compared with many Chromebooks.

The range's bold colours are hard to miss, too. The model we reviewed came in an eye-catching shade of red, which extends beyond the glossy exterior case to the interior. Blue and white models are also available if red isn't to your taste, but whichever one you pick, the coloured matt interior is complemented by a black screen bezel and a modern-looking keyboard with flat, square keys that resemble dark Scrabble tiles.

Build and configuration

It's surprisingly well put together for a budget laptop. There's an abundance of plastic, as you'd expect at this price, but it feels as if it would survive a few bumps and knocks in a backpack. We noticed quite a lot of flex in both the lid and the main body, though.

At 18.5mm thick and weighing around 1.2kg, it's a practical size and weight to carry around without undue strain, but you might not want to work on it for long periods. The keys are a reasonable size, but the keyboard isn't as comfortable to type on as others we've tested. It doesn't offer much feedback when you press a key, which leads to the occasional missed keystroke. At least Dell has used a standard keyboard layout and hasn't done anything crazy to fit it inside the small chassis.

The touchpad is a good size and precise enough, considering how small the laptop is. The integrated mouse buttons work well, and you can adjust the touchpad's sensitivity using Dell's own software. You can also configure multi-touch gestures and the level of pressure required for each swipe to be registered, all of which worked well.

Inside the laptop, you'll find a dual-core 1.6GHz Intel Celeron N3050 processor, which is a popular choice in budget-friendly models. This is paired with just 2GB of memory and 32GB of eMMC storage, which isn't dissimilar to the specifications of other sub-£200 laptops.

Performance

As a result, this PC isn't suitable for strenuous tasks such as gaming or video editing. The Inspiron 11 scored

A limited amount of storage space is something else you'll need to work around. With Windows 10 installed, you have only around 11GB of storage left. Fortunately, the laptop has a microSD slot, so you can add extra storage for keeping media files such as photos, music and video.
A microSD slot is preferable to the full-size SD card slots we've seen on other budget laptops, which often leave the card protruding

> **The ultra-low price of £179 immediately grabbed our attention, as it's cheap even compared with many Chromebooks**

just seven in our Windows benchmarks, but it's still more than capable of handling basic tasks such as checking your email, browsing the internet, working on the occasional document and watching a video.

The laptop will struggle if you try to do too many things at once, however, which is when the limitations of its meagre memory allocation and cheaper processor become apparent. Open too many browser tabs and applications, for instance, and the system slows down noticeably. Provided you work within its limitations, though, the laptop performs about as well as you can expect for its budget price.

from the side by at least a centimetre and aren't ideal if you want to leave the card in the slot permanently.

We were disappointed by the lack of free cloud storage or a bundled Office 365 subscription, which would have helped alleviate the storage problem. A year of Office 365 Personal is worth around £60 alone and is included with other budget laptops. Instead, all you get is a 30-day trial, which feels a little stingy.

Battery life was reasonable at five hours and 50 minutes in our video playback test. It achieved this with the screen set to our standard brightness of 170cd/m², which is perfectly sufficient for

indoor viewing. Under more general use with reduced brightness, you can just about eke out enough power to get through a work or school day.
The display, however, is disappointing. Its resolution of 1,366 x 768 pixels is typical of laptops at this price, but its viewing angles are atrocious, especially vertically. The display is lacking in contrast, too, with a pitiful contrast ratio of 203:1.
This is reflected in its exceedingly high black levels of 1.32cd/m², which makes solid blacks look grey. It also displays only 57.8% of the standard set of sRGB colours, which is poor, but at least the maximum brightness of 266.6cd/m² is reasonable. The screen's other saving grace is its matt coating, which helps limit annoying reflections.

There are only two USB ports, but one of them is a USB3 port. That's something you don't always see on a budget laptop and will make file transfers quicker. A full-size HDMI port is also included for connecting a display, and there's a headset jack for audio.

The two stereo speakers above the keyboard provide a surprising amount of volume. They're not particularly impressive, with a bright, tinny sound, but they're good enough for watching films. A 720p webcam is also included, which is more than sufficient for Skype calls.

SPECIFICATIONS

- Dual-core 1.6GHz Intel Celeron N3050 processor
- 2GB of memory
- 32GB eMMC storage (11GB free)
- 11.6in screen
- 1,366 x 768 pixels resolution
- Touchpad
- 1 x USB3, 1 x USB2 ports
- microSD memory card reader
- 802.11ac Wi-Fi
- Bluetooth
- Windows 10 Home
- 1.18kg
- 292 x 196 x 18.45mm

FOR
✔ Great value
✔ Small and portable

AGAINST
✗ Disappointing screen
✗ Low on storage and memory

BETTER SCREEN
HP Stream 11, £149.99
bit.ly/hp397

BETTER BATTERY LIFE
Toshiba Satellite C40-C, £149.95
bit.ly/tosh397

OUR VERDICT

★★★★☆

As far as budget laptops go, the Inspiron 11 is about as affordable as they get. It feels reassuringly durable and the bold, fun design is appealing. Its only major flaw is the screen, which is decidedly underwhelming, although that might not bother you, given the price.

This laptop isn't powerful or comfortable enough to use all day every day as your main PC but, if you want a small, portable and very affordable laptop for more casual or mobile use, it's good value for money.

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

Apple iPhone SE

David Ludlow tests Apple's new iPhone SE, which packs the latest technology into a device the size of an iPhone 5S

For a while it looked as if Apple had decided to make only larger phones, such as the iPhone 6 and 6S. However, this meant that iPhone 5 and 5S owners who liked having a smaller phone that fits easily in a trouser pocket or small bag were left without an upgrade option. That changes with the iPhone SE, which offers superb build quality in a neat metal chassis that's identical to the iPhone 5S's and even fits in cases designed for its predecessor.

The 4in screen has a resolution of 1,136 x 640 pixels, which is the same as the iPhone 5S but is quite low compared with most recent phones. Because it's smaller, however, its pixel density of 326ppi makes it surprisingly sharp. It's bright, too, with accurate colours, while the 12-megapixel camera is a great all-rounder and very similar to the iPhone 6S's.

Performance

The iPhone SE is powered by the same 1.8GHz A9 processor and 2GB of memory as the 6S range. In GeekBench, the SE scored 2,550 in the single-core test, which is the same as the iPhone 6S achieved, and faster than the Samsung Galaxy S7, which scored 2,115. The S7 took the lead in the multi-core test with a score of 6,437, but it has four processors: the SE has a dual-core processor and still scored 4,444.

As with all iPhones, the slick combination of processor, iOS and Safari makes web browsing a super-smooth experience: the PeaceKeeper browser benchmark score of 4,761 makes the SE one of the fastest phones we've seen in our tests.

Battery life is a key consideration in smartphones, and the SE performed well here, too. Its 1,624mAh battery might sound tiny compared with the 3,000mAh+ batteries found in Android phones, but its smaller screen requires a lot less power. As a result, in our battery test (which plays a video loop continuously with the screen set to a brightness of 170cd/m^2) the iPhone SE lasted an incredible 16 hours and 46 minutes. That's just shy of the Galaxy S7's battery life, and one hour 48 minutes longer than the iPhone 6S lasted.

All the wireless standards you'd expect in a modern phone are present, including 802.11ac Wi-Fi (up to 433Mbps) and 4G LTE (up to 150Mbps). In other words, no matter which type of network you connect to, you'll be able to get the highest speeds.

Price options

Two models of iPhone SE are available: a 16GB (£359) and a 64GB (£439) device. By today's standards, 16GB of storage is really too small and we would have preferred a 32GB entry-level model. With that in mind, we recommend buying the 64GB model, which is still excellent value when compared to a 64GB iPhone 6S (£619).

PRODUCT INFO

Apple iPhone SE
www.apple.com/uk
Price: From £359 (SIM-free)

SPECIFICATIONS

- Dual-core 1.8GHz Apple A9 processor
- 4in 1,136 x 640 pixels IPS screen
- 1.2 megapixels front camera
- 12 megapixels rear camera with LED flash
- 16GB or 64GB storage
- 802.11ac Wi-Fi
- Bluetooth 4.1
- 4G
- 1,624mAh battery
- iOS 9.3
- 124 x 59 x 7.6mm
- 112g

FOR

✓ A smaller, more pocketable iPhone
✓ Reduction in size hasn't compromised performance or quality

AGAINST

✗ Smaller screen has lower resolution than most recently launched phones

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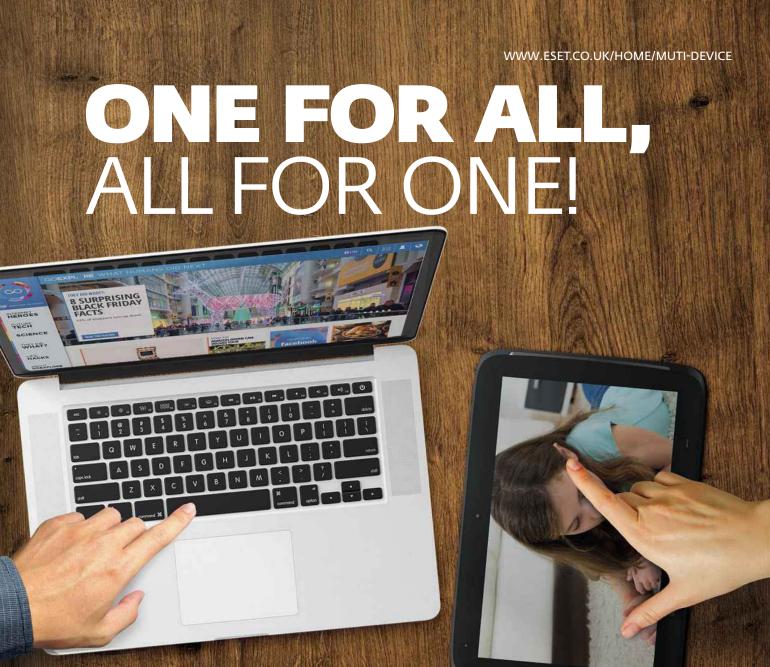
OUR VERDICT ★★★★★

Apple has surpassed our expectations with the iPhone SE. We were expecting a budget plastic handset with an older processor, but instead, we've got a metal handset with the latest processor and a top-notch camera.

For anyone who didn't want to upgrade to the larger iPhone 6S or iPhone 6S Plus but still hankers after a powerful 4in phone, the iPhone SE is an amazing choice. Nothing else comes close to it at this screen size.

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

Web User's Best Buys

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

HARDWARE

TABLET

Samsung Galaxy Tab S2 8.0

£239 from **www.simplyelectronics.net**
Date tested: April 2016

This is the best compact Android tablet currently available. It's light and incredibly thin, which makes it a real pleasure to hold, and offers excellent battery life, a high-quality screen and smooth scrolling when you're browsing the web.

KEY SPECS

8in screen ■ 2,048 x 1,536 pixels resolution ■ 1.9GHz + 1.3GHz octa-core processor ■ 32GB of storage ■ 3GB of RAM ■ 8-megapixel rear camera, 2.1-megapixel front camera ■ 802.11ac Wi-Fi and 4G ■ 135 x 199 x 5.6mm ■ 389g

SMARTPHONE

Samsung Galaxy S7

£569 from **www.samsung.com/uk**
Date tested: March 2016

The Samsung Galaxy S7 is a better phone than the S6 – its camera and performance are improved and it adds storage expansion and disaster-proofing. Fast, sleek and capable – it's a beautiful handset that's a delight to own.
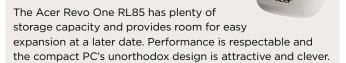
KEY SPECS

5.1in screen ■ Octa-core 2.3GHz processor ■ Quad HD resolution ■ 32GB of storage ■ microSD slot for up to 200GB expansion ■ Android 6.01 Marshmallow ■ 12-megapixel rear camera ■ 3,000mAh battery ■ Dust- and water-resistant

WIRELESS ROUTER

Netgear Nighthawk X4S

£259.99 from **www.currys.co.uk**
Date tested: December 2015

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

KEY SPECS

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

WINDOWS 10 LAPTOP

Acer Aspire One Cloudbook 14

£179.99 from **www.currys.co.uk**
Date tested: April 2016

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

KEY SPECS

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

COMPACT PC

Acer Revo One RL85

£269.99 from **www.ebuyer.com**
Date tested: January 2016

The Acer Revo One RL85 has plenty of storage capacity and provides room for easy expansion at a later date. Performance is respectable and the compact PC's unorthodox design is attractive and clever.

KEY SPECS

Dual-core 1.7GHz Intel Core i3-400SU processor ■ 4GB of memory ■ 500GB hard drive ■ 2 x USB 2 ports, 2 x USB 3 ports ■ Gigabit Ethernet, dual-band 802.11n Wi-Fi ■ Windows 8.1 ■ One-year return-to-base warranty

NETWORK CAMERA

Y-cam HomeMonitor HD

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

This isn't the cheapest security camera, but its unique online-storage option will save you money in the long run when saving captured motion-detected footage online.

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

SOFTWARE & SERVICES

INTERNET SECURITY

Kaspersky Internet Security 2016

£19.99 from bit.ly/shop389
Date tested: January 2016

This performed near-perfectly in our malware tests. Click the link above to save £20 on the software (usually £39.99).
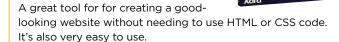
KEY FEATURES
Antivirus and firewall tools ▪ Protects online shopping and banking ▪ Identity, privacy tools ▪ Dangerous website alerts ▪ Advanced parental control ▪ Compatible with Windows 10

ONLINE STORAGE

Google Drive

From free from drive.google.com
Date tested: January 2016

Google Drive offers lots of free storage and it integrates with Explorer, so it's like using any other PC folder.

KEY FEATURES
16GB free storage ▪ Web-based office software ▪ Android and iOS apps ▪ 100GB extra storage for £1.36 per month; 1TB for £6.01 per month; 10TB for £60.16 per month

WEB DESIGN

Xara Web Designer 11 Premium

£69.99 from www.xara.com
Date tested: November 2015

A great tool for for creating a good-looking website without needing to use HTML or CSS code. It's also very easy to use.

KEY FEATURES
90+ templates ▪ WYSIWYG design ▪ Create responsive websites ▪ Embed codes ▪ Add HTML ▪ Online editing ▪ FTP uploader ▪ Hosting (requires registration)

BACKUP AND SYNC

SyncBackFree

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

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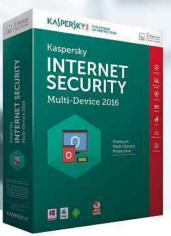Synchronise: Copy files in both directions ▪ Restore back-up files easily ▪ Email logs ▪ Schedule backups ▪ Simple and Advanced mode ▪ Runs on Windows 8, 7, Vista, and XP

Best Free Software

PrivaZer 3

privazer.com
Min requirements: Windows XP/
Vista/7/8+/10
File size: 7.3MB

There are plenty of programs that remove traces of what you've been doing on your PC, but few are anywhere near as comprehensive as PrivaZer. This powerful free program performs more than 100 scans and cleanups, targeting web browsers, cookies, the Registry, your PC's memory, Pagefile.sys and Hiberfil.sys, messenger programs, Windows jump lists, the Recycle Bin, free drive space and much more.

You can choose to install the software on your PC, run it without installation or make a portable version to save to the Desktop or to carry on a USB flash drive (the portable version will allow you to run it on any PC, which you might

find useful).

When you first launch PrivaZer, you'll be able to tailor it to your needs by answering a few simple questions, such as what kind of computer user you are (basic or advanced) and what you want the program to clean or leave alone. This wizard takes under a minute to complete, but you can jump straight to using PrivaZer if you prefer.

The latest, third version adds support for the exFAT file system, and can clean up free space on any drives that use the system. The ability to clean up the exFAT table is also planned for inclusion in a future release. PrivaZer gains new options for cleaning Opera and other general changes include superior Chrome support, faster cleanup of the DNS (Domain Name System) cache and better cleaning of Windows jump lists.

Additionally, various bugs have been fixed and some minor tweaks made to PrivaZer's interface.

MINI WORKSHOP | Protect your privacy using PrivaZer

1 Once you've completed PrivaZer's setup wizard, you can run your first scan. Select the relevant option and click the OK button. The software will go to work analysing your main drive. **1** You can use the tick boxes **2** to change the areas PrivaZer should target. You can stop the process at any time by clicking the Cancel button. **3**
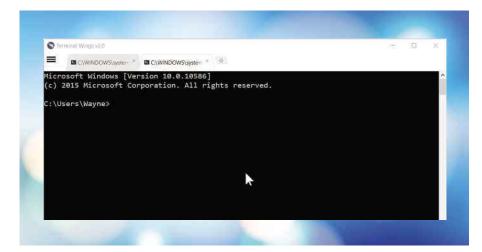
2 Scans can take quite a long time to complete – PrivaZer is very thorough – but you can start the cleaning process **1** and set it to shut down or restart your PC **2** when it's finished. You can also create a restore point **3** and back up the Registry. **4** If you want to continue using your computer during the scan, you can change priorities. **5**

3 When the scan completes, you can choose the cleaning options you require. PrivaZer will automatically detect the type of drive (hard disk or SSD) and adjust the options accordingly. **1** Use the top drop-down menu to change the number of overwrites to make, **2** and the lower one to switch the type of cleanup. **3**

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

COMMAND-PROMPT TOOL
Terminal Wings 2
www.phrozensoft.com
Min requirements: Windows 10 **File size:** 6.7MB

Windows 10's Command Prompt (CMD) is a huge improvement over the version found in previous incarnations of Microsoft's operating system, but Terminal Wings adds even more functionality, including a tabbed interface. There are options to pin, close and switch tabs, and it's very easy to open an elevated (admin) version of the tool. Terminal Wings is built on top of the Windows command-line interface so regardless of all the improvements, it works in the same way.

NOTES CREATOR
Stickies 9
www.zhornsoftware.co.uk
Min requirements: Windows XP/ Vista/7/8+/10 **File size:** 1.6MB

Instead of littering your monitor with Post-It notes you can use Stickies to create virtual ones on your Desktop. All the notes you create are saved to the hard drive, and you can include images and change the background colo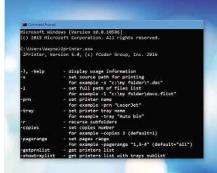ur of each note. The latest version has been rewritten from scratch and includes a new look, high-DPI monitor support and new features including the ability to manually set a note's size.

PRINT TOOL
2Printer 5
www.doc2prn.com
Min requirements: Windows XP/ Vista/7/8+/10 **File size:** 34.6MB

If you need to print lots of documents or images, you can use 2Printer to automate the process. It's a command-line tool, but don't let that put you off, because it's very easy to use once you've familiarised yourself with the commands. The latest version lets you change the printer tray, create a list of printed documents and print password-protected files. It can also now handle CorelDraw documents.

New Windows Apps

Facebook for Windows 10
bit.ly/facebook397
Min requirements: Windows 10
File size: 101MB
The official Facebook app for Windows 10 shows you what your friends are up to and lets you share updates and photos. You'll get notifications whenever someone likes or comments on your posts.

Messenger
bit.ly/messenger397
Min requirements: Windows 10
File size: 78MB
As well as the official Facebook app, there is now also an app for its chat tool. It offers all the essential features, and support for live tiles means you can see instantly when someone has left you a message.

Event Countdowns
bit.ly/eventcountdown397
Min requirements: Windows 10
File size: 24.8MB
This app can count down to any event, be it a wedding, the birth of a child or the arrival of a new *Star Wars* movie. You can change the background and view the countdown on a live tile.
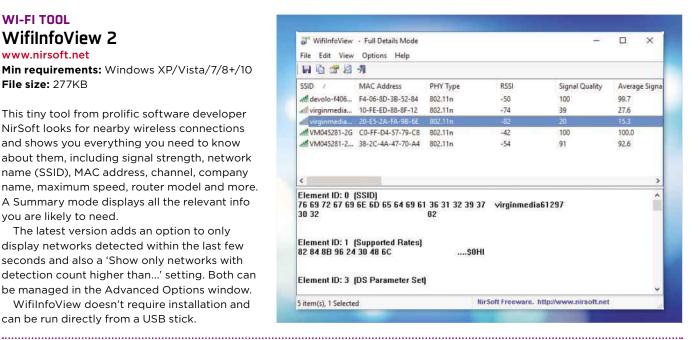
WifiInfoView 2
www.nirsoft.net
Min requirements: Windows XP/Vista/7/8+/10
File size: 277KB

This tiny tool from prolific software developer NirSoft looks for nearby wireless connections and shows you everything you need to know about them, including signal strength, network name (SSID), MAC address, channel, company name, maximum speed, router model and more. A Summary mode displays all the relevant info you are likely to need.

The latest version adds an option to only display networks detected within the last few seconds and also a 'Show only networks with detection count higher than…' setting. Both can be managed in the Advanced Options window.

WifiInfoView doesn't require installation and can be run directly from a USB stick.

EaseUS Partition Master Free 11
www.partition-tool.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 46.5MB

Partition Master can create, resize, format and delete disk partitions; as well as convert, explore and hide partitions; and change drive letters. It can copy whole drives and volumes – useful if you're moving the contents from one PC to another – and also wipe and recover data, and rebuild a damaged or missing master boot record. The latest version gains a surprisingly powerful 'Cleanup and Optimization' module that offers Junk File Cleanup, Large File Cleanup and Disk Optimization tools.

It's now easier to find commonly used functions in the program, and the bootable recovery environment (for use in the event of a disaster) is more efficient, too.
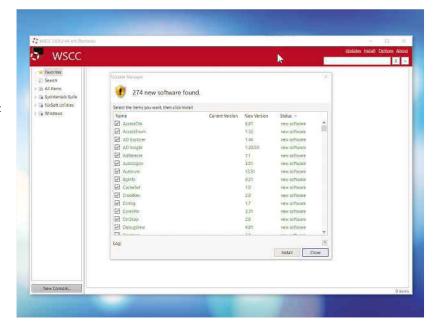
WSCC
www.kls-soft.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 2MB
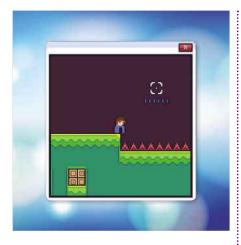
NirSoft and Sysinternals produce many excellent free Windows tools, including WifiInfoView (see our write-up at the top of this page). WSCC – or the Windows System Control Center, to give its full name – makes it easy to install, launch and update any of the programs from either or both of those software developers, as well as built-in Windows functions.

When you install WSCC, it will scan for new applications and let you choose which to add. You can browse the full list, or search by developer and category. If you're not sure which tool you need for a particular task, you can enter a few words relating to it and view a selection of potential matches.

GAME
Windowframe
bit.ly/windowframe397
Min requirements: Windows XP/
Vista/7/8+/10
File size: 2.7MB

Written in less than 48 hours for the
Ludum Dare game creation contest, the
aim of Windowframe is to use stakes to
defeat six vampires. The clever twist is
that you can dynamically change the
shape of the game itself, by shooting
stakes into walls and pulling (not
pushing) them. This will help you solve
many of the puzzles.

❌ **Don't install...**

Windows 10 Privacy Fixer
bit.ly/privacy397
Min requirements:
Windows 10
File size: 924KB

This program, which claims
to stop Windows 10 spying
on you, was released only a
few days after Microsoft's
operating system and the
developer admits that
"since then, way better
tools are available". It's
rather basic and not very
attractive, so if you do
come across it in a Google
search or on a download
site, we'd recommend you
give it a miss.

...Install this instead ✅

O&O ShutUp
bit.ly/shutup397
Min requirements: Windows 10
File size: 179KB

Windows 10 spies on you in various ways and
although you can turn off many of the snooping
settings, you need to know where to look. O&O
ShutUp10 makes this task easier by putting all
these settings on a single screen. Click a tweak
to find out what it does, and enable or disable it
with a single click. The program, which doesn't
require installation, includes nearly 50 privacy
tweaks sorted into categories covering Security,
Privacy, Location Services, Cortana, User
Behaviour and Windows Update. You can change
individual settings or apply all recommended
ones, and easily undo changes later.

UPDATED | New tweaks and fixes for your favourite free programs

SYSTEM CLEANER
CCleaner 5.17
www.piriform.com
Min requirements:
Windows XP/Vista/7/8+/10
File size: 6.6MB

The latest version of the
popular system cleaner
includes improved Firefox
cleaning, better Chrome
extension management
and changes to the
uninstaller for Windows
Store apps. The detection
of startup items and
browser plugins has also
been optimised.

SYSTEM TOOL
WinUtilities Free 12.45
hi.ylcomputing.com
Min requirements: Windows
XP/Vista/7/8+/10
File size: 6.1MB

WinUtilities is a
comprehensive all-in-one
system cleaning and
optimisation suite that offers
a large collection of powerful
tools. The latest version
updates the database and
improves the undelete
module for Data Recovery. It
also improves the program's
performance.

SYSTEM TOOL
Windows Repair 3.8.7
www.tweaking.com
Min requirements: Windows
XP/Vista/7/8+/10
File size: 20.3MB

Windows Repair helps you fix
all manner of annoying
problems caused by a
misbehaving PC in just a few
quick clicks. This update to
the excellent program makes
changes to the Repair Proxy
Settings feature and also
updates the default
permissions for the different
versions of Windows.

BROWSER BLOCKER
Edge Blocker 1.1
bit.ly/edgeblock397
Min requirements:
Windows XP10
File size: 441KB

If you're not keen on having
Microsoft Edge set as your
default browser in
Windows 10, Edge Blocker
changes this setting and
prevents the browser from
loading. The latest update
speeds up the first block
attempt and can now put a
shortcut to Internet
Explorer on the Desktop. ∎

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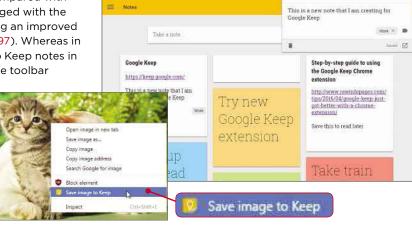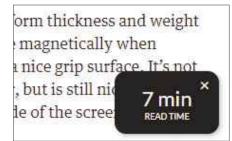
CHROME

Save any web content to Google Keep

Google's note-taking tool, Keep, has been around for a few years, but it has always seemed fairly basic compared with the likes of Evernote. Happily, that's now changed with the addition of some handy new features, including an improved Google Keep Chrome Extension (bit.ly/keep397). Whereas in the past you had to cut and paste content into Keep notes in another browser tab, you can now just click the toolbar button to save the current page. The extension lets you add comments (to remind you why you've saved that page) and apply labels to keep your notes organised. You can also right-click images and highlighted sections of text to save them to Keep notes, and create notes from scratch wherever you are on the web. It's certainly worth trying out if you've kept away from Keep so far.

Get reading-time estimates for web pages

It's easy to lose large chunks of your day to articles that turn out to be longer and more interesting than you thought (we started writing this in February, so we know what we're talking about). Fortunately, a new Chrome extension called Readism (bit.ly/readism397) can help you manage your time better by telling you roughly how a long a news story, blog post or other text-based web page will take you to read. The estimated time appears in a box in the bottom-right corner of your browser and can be set to disappear after a few seconds or when you start scrolling. You can even right-click a link and choose Get Reading Time to view an estimate without visiting the page. If you're a particularly slow or fast reader, it's worth registering with Readism (readism.io) and completing its reading-time test to get more accurate estimates.

View the best photos from Instagram

Instagram is full of celebrity selfies and teenagers playing around with photo filters, right? Well, yes, but there's more to it than that, as a new extension called Take Four (bit.ly/take397) demonstrates. This browser add-on handpicks the best images from the most talented photographers on Instagram and presents them in batches of four on your New Tab page. Every time you open a new tab, you'll see the work of a different photographer and can click through to their Instagram account to see more examples. It's a lot more interesting than the standard New Tab page, and you don't even need to be an Instagram user to enjoy the add-on.
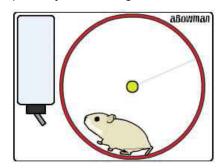
Get a pet hamster for your browser

These pages have featured a lot of cat and dog extensions lately, but you won't find any in this issue. Instead, we're proud to present Adorable Hamster Pet (bit.ly/hamster397), which provides you with a cute, furry companion to accompany you on your travels across the web. That might sound a bit daft, but once you've seen the lovable little fella, you'll wonder how your browser coped without him. Marvel as he runs in his wheel, eats the pellets you feed him and follows your mouse cursor – sorry, hamster cursor – with his twitching nose. And yes, we probably do need to get out more.
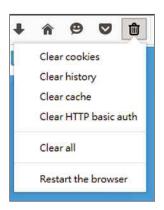
This fortnight's most useful tips and add-ons to help you get the most from Chrome, Firefox, Opera and more

FIREFOX

Delete all your browsing data with one click

If you don't want other people knowing what you've been doing online, it pays to clear your browsing data regularly. To do this in Firefox, you have to go to Tools, Options, Privacy, click 'clear your recent history' and choose what to delete. If you're thinking: "Stuff that for a game of soldiers!" then you can install Clean It (bit.ly/cleanit397) instead. This add-on lets you delete your cookies, browsing history, cached files and other data in one fell swoop by clicking its toolbar icon and choosing the relevant option. Clean It lets you restart Firefox after the cleanup is complete, and you can set it to remind you to clear all data when you close the browser.

Stop squinting at badly designed websites

Web design has come a long way in 20 years, but there are still plenty of people out there who think small text and garish colours are acceptable. You can fix these eyesores using a new Firefox add-on called NoSquint Plus (bit.ly/nosquint397), which updates the popular but discontinued NoSquint tool. When viewing a site that's hard to read, you can use the zoom controls on your toolbar to enlarge the text, and NoSquint Plus will remember the setting for next time. Right-clicking the page and choosing Site Settings allows further customisations, such as changing the text and background colour, disabling background images and choosing the colour of visited and unvisited links.

Hide the Bookmarks bar until you need it

The Bookmarks bar in Firefox is very useful when you want to open a bookmark (that's the point of it, after all), but the rest of the time it just takes up valuable screen space. If you'd rather not see it until you need it, install BookmarksDropDown (bit.ly/bookmarks397), which hides the bar without disabling it altogether. When you need a bookmark, move your mouse pointer to the top of the browser and the bar will appear.

Look up online images using Google

Google Images has a useful 'search by image' feature that lets you discover more about a picture – such as what's in it, where it was taken and who took it – and view similar images. The new Firefox add-on 'Search images on Google' (bit.ly/images397) adds this option to your right-click menu so you can quickly get information from Google about any image on the web. Results open in a new tab, so you won't lose the current page.

OTHER BROWSERS

Look up words on Urban Dictionary

If you're ever baffled by the latest lingo people are using on the web – what on Earth is a 'flexitarian', for example? – you'll appreciate the new Opera extension Urban Dictionary Search (bit.ly/urban397). This allows you to look up mystifying words and phrases by highlighting them, right-clicking and choosing 'Check Urban Dictionary for...'. The add-on takes you straight to the sometimes crude but often illuminating website for a helpful definition. A flexitarian, by the way, is an occasional meat eater.

Manage tabs easily in Vivaldi

The makers of our favourite new browser, Vivaldi (vivaldi.com), are certainly keeping busy this year. Following the first stable release (see last issue's Best Free Software), they're already on version 1.1. This offers enhanced tab-management features that give you greater control over how your tabs open and close. For example, you can now close all but the current tab by holding down Alt and clicking its close button. When you close a tab, you can choose whether the tab to its left or right becomes the active one, and you can 'hibernate' stacks of background tabs to save memory until you need them.

App of the Fortnight

KEYBOARD

Chrooma Keyboard

bit.ly/chrooma397

Min requirements: Android 4.4 **Size:** 48MB

The most powerfully customisable alternative to Google's default Android keyboard app is now free to download. Chrooma may not be the flashiest – there are hundreds of emoji-based and slideout keyboards to choose from – but it's the one you're likely to stick with, especially if you're a grown-up.

Chrooma doesn't push you out of your mobile-typing comfort zone. Instead, it nudges you gently beyond it by letting you do more with your device's built-in keyboard than you're used to. An example is the 'Thumb typing' option that moves the keyboard to the left or right of your screen for easier typing with one thumb. Shift the keys off to the right so you can type with your right thumb while you hold a cup of tea with your left hand. This trick is perfect for tablets or large phones, but we found it makes the keys a little too small for comfort on our small phone screen. Or maybe we need a smaller thumb.

Some of Chrooma's tricks come as a surprise. For example, once you've set it as your phone or tablet's main keyboard, you'll notice that it takes on the exact colour scheme of whatever app you're using it in, such as Facebook's bright blue or WhatsApp's earthy green. If you find this chameleon effect annoying, you can fix the colour to something more friendly to your eyes. When you're in low light, Chrooma's Night Mode automatically adapts its colour tone to match.

More sensibly, Chrooma can switch between dozens of foreign-language keyboards. These don't translate text for you, but they offer auto-correct in other languages and let you type non-English characters, such as letters with acute accents (é) and umlauts (ö; tap and hold a letter to see these options).

The downside, as so often, is unexpected paywalls. A couple of advanced extras such as a single multi-lingual keyboard and different fonts are supposed to be free, but this isn't the case yet.

MINI WORKSHOP

Type more easily using Chrooma Keyboard

1 Download and launch Chrooma, then swipe through the setup screens. Tap Enable, then Select, then Select again to choose supported languages. First toggle off 'Use system language', **1** then toggle on any languages you want, from Afrikaans to Zulu, via QWERTY, Esperanto and, of course, 'English (UK)'. **2** You don't have to accept the permissions for the app to work.
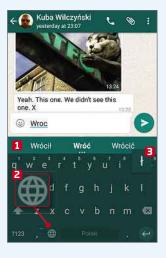
2 Open any app that supports typing, such as WhatsApp. You'll see that the keyboard now matches the app's colour scheme. **1** To type in another language, tap the globe **2** repeatedly until the language you want appears on the space bar. Tap and hold a letter to access special characters, such as the Polish 'ł'. **3**

3 Tap and hold the three dots, **1** then slide your finger onto the cog icon that appears. The box that opens contains links for changing the keyboard colour, changing available languages and, for advanced options, 'Open app settings'. Under 'Thumb typing option', tap Left or Right to move to keys to that side of the screen for one-handed typing. **2**

Our rating ★★★★★

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

TRAVEL

NEW

Cuvva
bit.ly/cuvva397
Min requirements: iOS 9
Size: 15.5MB

This useful app helps you get insured to drive a friend or family member's car for the day. There's some initial messing about involved – Cuvva needs to verify that you're over 21 and have a full UK driving licence (Northern Ireland excepted), and you'll need to submit a selfie and your address when you register. After that, Cuvva is quick and easy to use. Enter the number plate of the car you're borrowing, specify your hours (one hour minimum, up to 24 hours), get your quote and buy your insurance.

Our rating ★★★★☆

GAMES

NEW

Yahoo Esports
bit.ly/esports397
Min requirements: Android 4.1
Size: 15MB

It may sound like another sports app (not that there's anything wrong with that), but this is something quite different: instead of sport, Esports covers professional gaming. The likes of Sky and ESPN already broadcast pro-gaming, so there's a growing market for coverage of competitive Counter-Strike, Street Fighter V, League of Legends and so on. The app has everything you'd expect from sports coverage: live commentary, streaming video and updates; plus fixtures, stats, news and highlights.

Our rating ★★★★☆

SYSTEM TOOL

NEW

Nero TuneItUp Free Cleaner
bit.ly/nero397
Min requirements: Android 4
Size: 5.2MB

Another fortnight, another great Android-boosting app from a trusted name. Like HTC's Boost+ (bit.ly/boost396), featured in Issue 396, this new app has a one-tap boost option for freeing up memory, and also includes tools for specific chores. The most interesting feature is a WhatsApp cleaner, designed to rid your Android of the junk files and caches you create by sending and receiving messages, photos and videos. It also makes fast work of removing large files and sensitive data from your device.

Our rating ★★★★☆

SECURITY

NEW

Secret Calculator Plus
bit.ly/secret397
Min requirements: iOS 8
Size: 7.9MB

If you just want a nice-looking iOS calculator app, here it is. But those sums have a James Bond secret. Tap in your chosen PIN code and the calculator opens a vault for content you don't want anyone else to see (or delete).

This isn't just a place to hide naughty photos. Secret Calculator Plus contains excellent tools including a private browser, a photo and video viewer and album creator, plus a note-making tool for writing private notes, licence numbers and so on.

Unlike many similar apps, it doesn't attract attention by calling itself 'My Private Stash' or suchlike. However it does display an advert for a Pro version (available via dreaded in-app purchase), which may give the game away, so make sure your PIN code is a good one.

Our rating ★★★★☆

Best Free Apps

VIDEO

NEW

Video To Photo
bit.ly/vidphoto397
Min requirements: Windows Phone 8.1, Windows 10 Mobile
Size: Varies by device

Extracting stills from videos is a tricky business involving lots of trial, error, pausing and fuzzy screenshots. This great new app, which also works on Windows 10 PCs, takes away all the fiddling and fuzziness. Choose a video from your device and use the visual slider to move quickly back and forth to find your favourite bits, then use the click wheel to go through it frame by perfectly sharp frame. To save a still as a photo in your camera roll, click the camera button. Supported video formats include MP4, AVI, WMV and even the Apple Quicktime format MOV.

Our rating ★★★★★

CULTURE

NEW

Google Arts & Culture
bit.ly/arts397
Min requirements: Android 4.4
Size: Varies by device

There's nothing to match the power of seeing famous artworks in the flesh, but this app tries its best – and it's a lot cheaper than a plane ticket to New York or Sydney. It takes you on 360-degree panoramic tours of hundreds of museums and art galleries around the world, and lets you zoom in to see the artworks in amazing detail for as long as you want (without getting in anyone's way). You can also tour heritage sites and landmarks, search for cultural gems and read all about them. The app chews up data so it's a shame there's no offline mode, but otherwise it's spectacular.

Our rating ★★★★★

5 NEW APPS WORTH PAYING FOR

PRODUCTIVITY
5217
bit.ly/fivetwo397
Min requirements: Android 4.1
Size: 6.5MB **Price:** £1.09
This app is named after a scientific idea that you'll get the most out of your day by alternating between 52 minutes of work (cleaning, typing, whatever) and 17-minute breaks. We suspect some bosses may not agree.

SECURITY
Blink
bit.ly/blink397
Min requirements: iOS 8 (and a Mac computer)
Size: 200KB **Price:** £1.49
If you've got an Apple computer, use this tiny app to keep tabs on your Mac from afar. It'll alert you when your Mac's screen is woken up. Is your spouse snooping? Or has your cat walked on the keyboard again?

MUSIC
Animoog
bit.ly/animoog397
Min requirements: iOS 7.1 (iPad only)
Size: 31.9MB **Price:** £22.99
This pricey app recreates a fully-functioning Moog synthesiser – backbone of Beatles albums and the Seventies disco sound – on your iPad. With the equivalent model Moog costing £4,000, the app is worth buying an iPad for.

CUSTOMISATION
Mojemo
bit.ly/mojemo397
Min requirements: iOS 8
Size: 58.6MB **Price:** £1.49
This 5,000-strong searchable database for emoji goes far beyond smileys and sparkles. Text a weather emoji to your mum, send your friend a "beer" and post increasingly sporting emoji during the latest game.

CALLS
Call Recorder
bit.ly/call397
Min requirements: Android 4.1
Size: 1.7MB **Price:** £2.34
This app is useful for recording important calls to the council or utility providers, or if you keep being spammed by a company. It's simple, efficient – and legal (just let the other person know you're recording.

5217	Blink	Animoog	Mojemo	Call Recorder

Best New TV Apps

TV & FILM

TalkTalk TV
www.talktalktvstore.co.uk
Min requirements: Android 4, iOS 8, Windows Phone 8.1, Xbox One or 360, Samsung or LG Smart TV
Size: Varies with device

The streaming service formerly known as Blinkbox and owned by Tesco has been reborn as TalkTalk TV. This serves as both an online store from which you can buy and rent thousands of films and TV shows, and as an app called TalkTalk Player that lets you watch the content you stream or download. The app is available on an impressive number of devices and is very easy to use, with the same varied selection that made Blinkbox quite popular until it was crushed by the big guns of on-demand viewing such as Amazon. However, it's not cheap: the HD version of *Star Wars: The Force Awakens* costs £4.45 to rent for 30 days or £13.99 to buy. You don't need to be a TalkTalk customer to use the service.

TV & GAMES

Android TV for iOS
bit.ly/android397
Min requirements: iOS 8
Size: 9.7MB

Apple and Google aren't exactly the best of friends, so we're surprised to see a new iPhone app that works with Android TV (it's obviously already available on Android). This lets you use your phone as a remote control for your Android television or set-top box (assuming you have one – they haven't exactly rocketed off the shelves). You can skip back and forth through programmes, navigate menus and switch between using a touchpad and a D-pad so you can play Android games onscreen. Although the interface looks rather basic, the app does offer the useful ability to operate its controls using your voice when you can't be bothered to pick up your phone, but surely iPhone users will prefer Apple TV.

KIDS TV

Now TV Kids Pass
www.nowtv.com/kids
Min requirements: Android, iOS, PlayStation 3 or 4, Xbox One, smart TV, Roku or Now TV box
Size: Varies with device

As if children don't have enough TV to watch today, Sky is launching a Kids Pass for its Now TV streaming service. This differs from the Sky Kids app (featured on this page in Issue 395), because you don't need a Sky Family or Sky Q subscription but pay £2.99 per month to keep the kids entertained. It offers six live channels, including Nickelodeon, Cartoon Network and Boomerang, and its picture-led interface learns young users' fave shows so they can access them instantly. The Kids Pass will be from 21 June, with a 14-day free trial. Note that the kids' channels have now been removed from Now TV's Entertainment Pass.

✗ Don't install...

FileDup
bit.ly/filedup397

This app is supposed to find duplicate files on your phone or tablet, but it really isn't much cop. It consists solely of a big green button and two options – to scan everything on your device or just selected folders – which seems simple enough. However, when you run a scan it quickly tells you that no duplicates were found, even when you know there are some, as if it can't be bothered to look.

...Install this instead ✓

Duplicate Media Remover
bit.ly/duplicate383
Min requirements: Android 2.3
Size: 2.3MB

It's easy to end up with one more instance of a photo, video or PDF on your phone or tablet, which takes up valuable space and increases the time it takes to find other files. Duplicate Media Remover is our favourite tool for removing these unnecessary duplicates, while leaving the originals intact. It lets you scan every folder on your device and memory card, or just selected folders, for duplicate files and then delete them all in one go by tapping the dustbin icon. You can switch easily between Audio, Images and Videos, with original files deselected automatically to prevent accidental deletion. ◼

Virtual-reality headsets

Fancy immersing yourself in another world while sitting at home? **David Crookes** explains why virtual-reality headsets are this year's must-have gadget

What is virtual reality?

Virtual reality (or VR) is the name given to simulated 3D worlds that not only immerse you in a digital environment but allow you to explore and interact with it. By putting on a VR headset that covers your eyes, you can look around the replicated world in the same way you would the real one.

How does it work?

VR headsets come in many different guises, but they all work in much the same way. Software sends a pair of images to a screen mounted in front of your face, close to your eyes, which you view through two slightly angled lenses. Your left eye sees one image and the right eye sees another, creating an illusion of depth that fools your brain into thinking you're actually in the world the headset is presenting. When you move your head, the device detects where you're looking and the software updates the images accordingly.

Hasn't VR been around for ages?

It certainly has. The very first head-mounted display (HMD) was created in

Nintendo's Virtual Boy VR headset never took off, because it was rubbish

1961 by two engineers at the Philco Corporation. Called Headsight, it included a CRT screen and a magnetic tracking system that could work out which way the viewer's head was pointing. Aside from a flurry of interest in the Eighties and Nineties, however, VR technology has remained largely on the fringes. Even gaming giant Nintendo was unable to bring VR into the mainstream: its monochrome-screened Virtual Boy, launched in 1995, was discontinued within months.

So what has changed?

The VR headsets of the past suffered from poor-quality graphics and a lack of processing power that meant the software ran too slowly. Today's much faster VR technology can produce stunning graphics, however, and a lot more money is being invested in it than ever before. According to market analyst firm IDC, more than nine million VR headsets will be shipped this year (bit.ly/idcvr397) – a staggering 8.6 million more than last year.

Which companies are investing in VR?

Some of the biggest names in technology have thrown their virtual hats into the simulated ring, but two devices in particular look set to dominate. One is Oculus Rift, which raised $2,437,429 (£1.67m) from 9,522 Kickstarter backers

The Oculus Rift was funded by Kickstarter backers and looks pretty clever inside

and is now owned by Facebook. The other is PlayStation VR, which is made by Sony and looks set to be a massive seller when it launches in time for Christmas. These, together with the HTC Vive (see our 'First Look' in Issue 396), are examples of near-complete units that come with screens and trackers built in.

Do these headsets require other hardware?

Oculus Rift and HTC Vive rely on PCs for their processing power, while PlayStation VR hooks up to a PlayStation 4 console. There are other, inexpensive devices that work with your smartphone, however. Google Cardboard, Samsung Gear VR, LG 360 VR and the Zeiss VR One are all designed to hold your phone handset in front of their lenses, providing not only a high-quality screen but also the necessary processors to generate a solid virtual-reality experience.

Google Cardboard looks like the result of a Year 7 school project

Who is using virtual reality?

VR is attracting people from all walks of life. Gamers are using Oculus Rift to immerse themselves in rich gaming worlds, while Google Cardboard (which you can pick up for around a tenner) is proving ideal for watching videos. The technology also has uses in medicine, travel, communication, design and more.

Why is Facebook involved?

When Facebook bought Oculus for

Facebook 360 presumably looks a lot better when you're wearing a VR headset

$2bn in 2014, CEO Mark Zuckerberg wrote a blog post asking readers to "imagine enjoying a court-side seat at a game, studying in a classroom of students and teachers all over the world or consulting with a doctor face to face – just by putting on goggles in your home". In line with this enthusiasm for VR, the company recently launched Facebook 360, a 360-degree video platform.

So could virtual reality be the future of the web?

It will almost certainly play a big part. YouTube recently started supplementing its pre-recorded 360-degree VR videos with live streams from events, beginning with the Coachella music festival in California. A JavaScript tool called WebVR (webvr.info) is hoping to provide access to VR devices through browsers, and Mozilla has been experimenting with VR for a couple of years at MozVR.com.

Could we soon be streaming TV and movies in VR?

It looks likely. Sky filmed a five-minute interview with David Beckham in its new VR studio, which was shown on Facebook 360. More groundbreaking was the first VR-broadcast Premier League football match – Manchester City against Arsenal – which was streamed through VR platform LiveLike on 8 May.

The BBC has been experimenting with VR, too, the results of which you can see at its Taster site (bit.ly/bbcvr397). These include virtual tours of Rome and CERN.

Will we be able to explore the world using VR?

Virtual-reality tours are already available. One example is the Chernobyl VR Project (bit.ly/chernobyl397), which combines 3D scans with spherical photography, stereoscopic videos and hand-made models to give viewers a "first-hand" look at the site of Russia's nuclear power plant disaster 30 years ago.

VR also lets you witness private events. Royal London Hospital cancer surgeon Shafi Ahmed broadcast the first live surgery in VR using two 360-degree cameras (although there was a minute's delay in case anything went wrong).

But couldn't VR go the same way as 3D?

It's fair to say that 3D TV was a flop, which some put down to the reluctance of viewers to wear special specs while watching the box. But 3D television had limited use, whereas VR offers a host of possibilities that go beyond simply watching telly. We sense that this is only the beginning.

Who wouldn't want to look as stylish and sophisticated as this VR user?

WHICH VR HEADSET SHOULD YOU BUY?

Oculus Rift
www.oculus.com
With a 1080p OLED display, 90Hz refresh rate and 110-degree field of view, the Facebook-owned Oculus Rift requires a powerful PC. The headset comes with a remote and a camera sensor that uses LEDs on the headset to detect movement. Software is available from the Oculus Store.
Price: £499

PlayStation VR
bit.ly/playstation397
Created to work with the PlayStation 4, the PSVR will have a 5.7in 1080p OLED display with a 100-degree field of view and a 120Hz refresh rate. More than 50 games have been earmarked for launch, but you'll need to buy additional Move controllers and a PlayStation camera. Released in October.
Price: £349

HTC Vive
www.htcvive.com/uk
HTC's Vive has 32-sensors including an accelerometer, laser position sensors and a gyroscope. Along with a 1,080 x 1,200 pixel resolution, 90Hz refresh rate and 110-degree field of view, it has a front-facing camera that lets you see the real world without having to take off the headset.
Price: £689

Google Cardboard
bit.ly/cardboard397
Google Cardboard is the best choice for anyone who wants to dip their toe in virtual reality without the expense and hassle of the larger kits. You have to assemble it yourself (it takes mere minutes) but there are lots of compatible Android and iOS apps. Just slip in your phone and play.
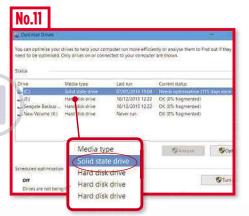**Price: £10**

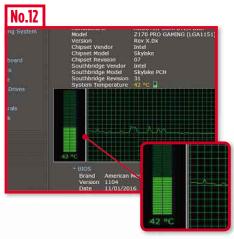### Samsung Gear VR
bit.ly/samsung397
Built for compatible Samsung phones, this relatively inexpensive device runs Oculus software and provides a wide field of view. More than 185 apps are available for it, including Netflix streaming for a big-screen experience. It's comfortable to wear, too. A top choice for Samsung owners.
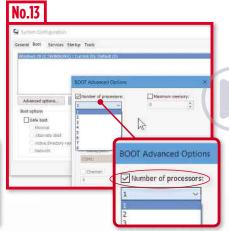**Price: £80**

WHY YOUR PC IS STILL SLOW

Many common PC speed tips actually make things worse. **Wayne Williams** exposes 21 mistakes that you may not realise are slowing down your system

COVER FEATURE

No.11

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No.13

We're sure that regular readers of this magazine understand the importance of regular PC maintenance and are familiar with the basics, such as defragging your hard drive, deleting junk files, uninstalling old programs and so on. Following these good practices won't necessarily guarantee you're getting the maximum possible speed from your computer, however – there are plenty of mistakes we all make that can adversely affect how quickly and smoothly our PCs run.

In this feature, we highlight 21 common blunders and oversights, and explain how you can avoid them to give your computer a significant speed boost. Over the following eight pages, we explain how cleaning your system too regularly – or too thoroughly – can actually slow it down, and highlight common hardware-related errors you might be making that stop you getting the maximum speed out of your system. We also explain what you should be doing to make your PC faster.

CLEANUP CONFUSION

1 Cleaning the Windows Registry

The theory behind Registry cleaners and defragmenters is sound enough. A Registry cleaner scans the Windows Registry, identifies errors and outdated keys that could be causing performance problems, and offers to remove them. A Registry defragmenter, on the other hand, reorders the database so all the important data is kept together and there no gaping holes. Such tools might have been beneficial in the days of Windows XP, but modern computers are so fast that even if there are hundreds of incorrect and outdated entries in the Registry, they're unlikely to slow down your PC or cause problems. Despite what the developers of such programs (which can cost upwards of £20) tell you, any speed boost you get from defragging the Registry will be negligible.

Scrubbing the Registry may slow down your PC rather than speed it up

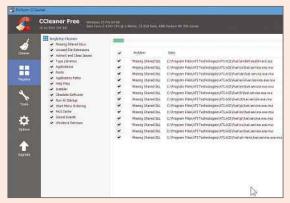It's true that it may be worth cleaning the Registry very occasionally as part of a full maintenance routine, especially on a PC that hasn't received any care or attention for some time, but you definitely shouldn't do it too often. Deleting a single important entry by mistake will do more harm than good and may actually bring Windows to a halt.

3 Emptying the Prefetch folder

Windows keeps an eye on how your PC boots and which programs you run, and stores this information in a number of small files (with a '.pf' extension) in the Prefetch folder. This folder works like a cache. When you run a program, Windows refers to these files to help speed up the loading process. A common PC myth (Google it to see what we mean) says that cleaning out the Prefetch folder can be beneficial because it stops Windows wasting time reading the files and removing old, superfluous items as it boots up.

In fact, cleaning this folder actually increases program loading times and may even cause other problems. The Prefetch folder is self-maintaining and stores a maximum of 128 of your most recently used programs. If you remove entries from the Prefetch folder,
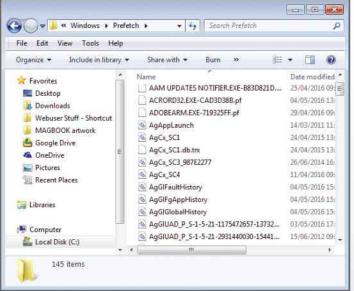
2 Running CCleaner too thoroughly

CCleaner (www.piriform.com/ccleaner) is a brilliant free maintenance tool for your computer. As well as cleaning up the junk files that are left behind by programs and everyday use, it includes a startup manager, browser plugins remover, disk analyser, duplicate finder and drive wiper. CCleaner does an excellent job of keeping your system tidy, but the program makes it all too easy to go overboard with cleaning, which can cause performance problems.

For example, CCleaner cleans your browser's cache by default, which actually slows down your web browsing. That's because, when you visit a site, your browser caches the web content it downloads. The next time you return to that site, the browser retrieves elements that haven't changed from the cache rather than downloading them again, which saves time. Any old files are removed from the cache automatically so it really doesn't need cleaning.

CCleaner is definitely worth using, but you shouldn't use it more than once a month, and perhaps avoid cleaning the browser cache unless you really have to.

CCleaner is a highly effective maintenance tool, but you should check its default settings before running it

Deleting items from the Prefetch folder is unnecessary and will lead to tears before bedtime

Windows will simply recreate them the next time you load the related program, so your best bet is to leave well alone.

4 Ignoring Windows 10 installation files

Whether you've upgraded to Windows 10 or are still running Windows 7 or 8.1, there's a good chance you'll have Windows 10 installation files sitting on your hard drive, taking up huge amounts of space unnecessarily. If your hard drive is becoming dangerously full, you should definitely consider removing these files to reclaim space and boost performance.

The process is very straightforward. Click Start, type Disk Cleanup and launch the Disk Cleanup app. Make sure your system drive is selected and click OK. Next, click the 'Clean up system files' button, select your system drive again and click OK. The tool calculates how much space you can save and highlights any Previous Windows installation(s). These may include a 20GB-plus entry created by Windows 10. Tick this box and the one next to 'Temporary Windows
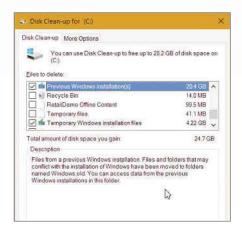
installation files' (which will save you another large chunk of space), then click OK to remove those files and reclaim your missing drive space.
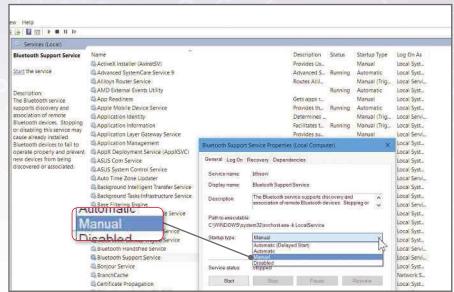
Before you delete the files, however, be aware that if you recently upgraded to Windows 10, these are the files you need to roll back your system to a previous installation of Windows. Removing them takes away that option.

If you're not planning to upgrade to Windows 10, clearing away these files makes a lot of sense, but there's a good chance they'll reappear because Microsoft *really* wants you to upgrade. To stop this happening, use Never 10 (bit.ly/never396) to disable these 'recommended' updates.

Disabling Windows services may have the opposite effect to the desired one

Remove Windows 10 installation files that are secretly hogging your hard drive

5 Disabling or delaying Windows services

Windows launches a lot of services when it starts up, and you have to wait for them all to load before you can use the operating system properly. You can disable or delay some of these items by using the Services tool. If you click Start, then type `services.msc` and hit Enter, you can browse the list of services. Double-click one and, in the Startup type box, you can choose Automatic, Manual, Automatic (Delayed Start) or Disabled.

Tempting as this may seem, disabling or delaying some of these services won't necessarily result in faster Windows startup. Today's computers have enough memory to handle all the services Windows wants to launch without slowing down. It usually loads more than one at a time and, once it has loaded them all, your PC is ready to use. If you delay services, Windows simply loads them two minutes later, so if you think about it, all you're really doing is prolonging how long Windows takes to start up fully.

HOW SLOW IS YOUR PC?

You may be reading this feature and thinking "well, my PC is a bit sluggish but it isn't *that* slow". But how do you know unless you've tested it and compared the results with those of other computers that have similar specifications? Fortunately, there are some useful free tools you can use to find this out.
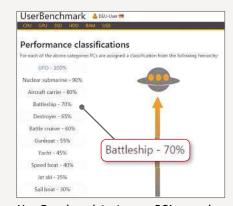
Our favourite is the fantastic BootRacer (bit.ly/boot397), which measures exactly how long your

Track and compare the speed of your PC over time using the brilliant BootRacer

computer takes to start up and provides a speed rating. It does this every time you boot your PC (unless you switch it off), so you can find out whether your system is getting faster or slower. BootRacer also provides a graph to show the degree of speed degradation, warns you of any potential performance problems and lets you enter a Worldwide Boot Time Contest – currently topped by a lady called Nina with a lightning-fast startup of five seconds.

For a more comprehensive assessment, run UserBenchmark (www.userbenchmark.com), which tests the speed of different components in your PC, including your processor, graphics card and hard drive. The benchmark takes less than a minute to complete and displays the results in your browser as a percentage rating, as well as an overall 'performance classification' that ranges from 'tree trunk' to 'UFO'. UserBenchmark works with all

UserBenchmark tests your PC's speed and gives it a performance classification

versions of Windows and compares your components like for like with those of other users – so if, for example, people with the same Intel processor as you have much faster systems, something is clearly not right with yours. Hopefully, reading this feature will help you solve the problem and climb the performance classifications to 'battleship' at least.

HARDWARE HOWLERS

6 Not rebooting your PC regularly

It's easy to leave your computer running for days, weeks or even months without rebooting. As with iPads and mobile phones, we've got used to having our devices switched on and ready to use at all times. If your PC takes a while to boot up, you may decide to use a low-power standby mode rather than shutting down so you can get back into Windows faster. Although that's perfectly understandable, regularly shutting down your computer will give your system a noticeable performance boost. Your PC accrues all sorts of junk while it's running and can suffer from problems such as memory leaks. Over time, these can make your PC sluggish. Shutting down your system fixes any problems you might be having and gives your PC a fresh start.

As to how often you should reboot, that depends on your system. Older, slower computers with limited memory need to be rebooted more often than newer PCs that have lots of memory. Rebooting at least a couple of times a week is a good target.
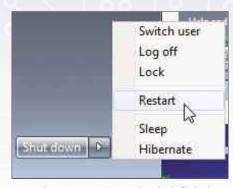
7 Leaving your PC plugged in constantly

As well as shutting down your PC, it's also worth draining any power from it, because this will reset the hardware properly and make it work faster. Once your computer has shut down, remove the power cable, or take out the battery if you're using a laptop. Press the 'on' button several times to drain any remaining power, then plug the cable back in or reinsert the battery, and power it up again.

Replacing your hard drive with an SSD is the best upgrade you can perform

Don't leave your PC running indefinitely – reboot it for a speed boost

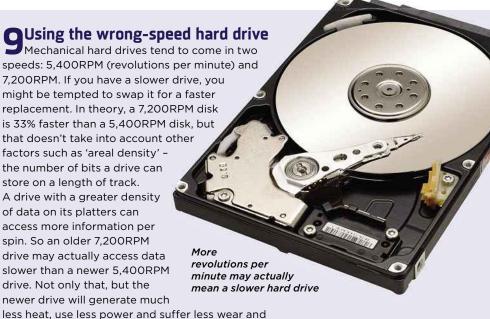### 8 Using a hard drive instead of an SSD

Many people think that when their hard drive gets too full, it will lead to slowdowns. That's true in part because Windows likes to have some room to work, but provided your computer has a reasonable amount of memory installed, Windows won't need to use a portion of the hard drive as virtual memory (see tip 10). If you need more storage space for your files, such as video clips, music and photos, then by all means buy a larger hard drive, but for a speed boost you're better off replacing your standard hard disk drive (HDD) with a solid-state drive (SSD).

Switching to an SSD is easily the best hardware upgrade you can perform, and will make a huge difference to how quickly your PC boots up and programs load. The ideal situation is to have a decent SSD for your system drive, and an HDD for items you don't need to

access continually, such as your personal files. If you have an old laptop that's really sluggish, replacing its hard drive with an SSD will give it a new lease of life. Per gigabyte, SSDs are much more expensive that HDDs, but we think the benefits easily outweigh the cost.

10 Installing the wrong type of memory

Installing an SSD is the best way to speed up a slow computer, but adding extra memory is the next thing to try. When Windows needs more memory than is available, it uses virtual memory – reading and writing data to an area of the hard drive known as the page file. This is a much slower process than accessing real RAM (especially if you have a mechanical HDD installed rather than an SSD), so adding more memory modules will obviously speed things up. However, the amount of RAM you can

9 Using the wrong-speed hard drive

Mechanical hard drives tend to come in two speeds: 5,400RPM (revolutions per minute) and 7,200RPM. If you have a slower drive, you might be tempted to swap it for a faster replacement. In theory, a 7,200RPM disk is 33% faster than a 5,400RPM disk, but that doesn't take into account other factors such as 'areal density' – the number of bits a drive can store on a length of track. A drive with a greater density of data on its platters can access more information per spin. So an older 7,200RPM drive may actually access data slower than a newer 5,400RPM drive. Not only that, but the newer drive will generate much less heat, use less power and suffer less wear and tear on the head. It's also likely to be cheaper.

More revolutions per minute may actually mean a slower hard drive

Give your PC the occasional rest by pulling out its power source

Newer systems use faster DDR4 memory modules

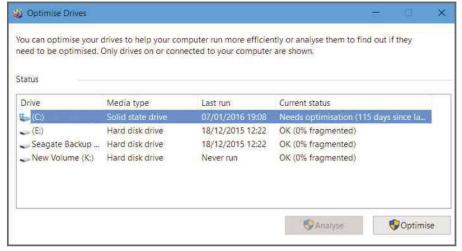*Use Task Manager to find out if you need more memory*

add is limited by your motherboard and the operating system you're running. If you have the 32-bit version of Windows 7 installed, for example, you can only make use of around 3.5GB. The 64-bit version of Windows 10 Pro can handle up to 2TB, which is quite a difference. The type of RAM you should install depends on your motherboard. Older systems may use DDR2 or DDR3 modules, while the newest will use DDR4. These come in different rates, too, and although you can combine modules of different speeds, they will run at the speed of the slowest module.
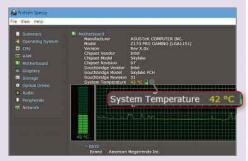
While it can be tempting to cram your PC with extra memory modules, it may not lead to huge speed boosts – it all depends on how you use your system. To check your memory usage in Windows 10, press Ctrl+ Shift+Esc to open the Task Manager, click the Performance tab, then click Memory and use your computer as you would normally for a while. This will show you how much RAM you usually use and give you an idea of how much extra RAM – if any – you require.

11 Defragging your SSD

Unlike mechanical hard-disk drives, solid-state drives don't require defragging – ever! In fact, frequent defragging of an SSD can shorten its lifespan significantly. Newer operating systems, including Windows 10, recognise when a drive is an SSD and won't allow it to be defragged. The same is true of newer disk-defragmentation software, but that may not be the case with older operating systems and defrag tools.

However, defragmentation programs can optimise SSDs using the TRIM command. This tells the SSD which blocks of data are no longer considered in use and can be wiped. To see this in action in Windows, click Start, type `defrag` and run the Defrag function. Your system drive should be listed as a Solid State Drive under Media Type. Select it and click the Optimise button.

That's not to say treating your SSD in this way will actually make any difference to its performance. In fact, you probably won't notice any speed improvements,

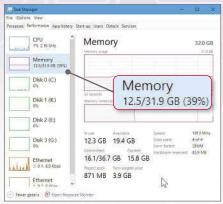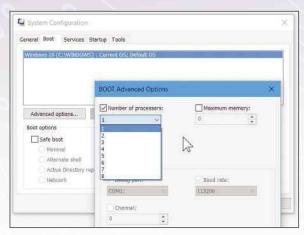**Defragging your SSD is one of the worst things you can do to your PC**

12 Letting PC components overheat

Heat is the enemy of sensitive electrical components, and if your PC doesn't have adequate ventilation – perhaps because the air vents are clogged with dust and hair or blocked by a wall or other object – that can make your system run slower or crash. Excessive heat can also affect a laptop's battery life. Make sure your air vents are clear, and keep an eye on the temperature inside

Use Speccy to make sure your PC's components aren't overheating

your PC. Most motherboards allow you to monitor this, and Piriform's free system-information tool, Speccy (www.piriform.com/speccy), can show you how hot your PC is running. Ideally, it should be around 40-45°C and no more than 60°C. If your computer gets too warm, consider adding more fans or a water-cooling system to bring the temperature down.

13 Increasing the number of processor cores

If you open the Windows System Configuration tool (click Start and type `msconfig` to launch it), then click the Boot tab followed by the 'Advanced options' button, you'll see a box that lets you specify the number of processors (cores) to use during startup. It might seem logical to increase the number of cores here in the hope that it will speed up the boot process (we've often seen this advice offered on the web), but actually you'll see no benefit at all. This

Increasing the number of processor cores does nothing to boost your PC's boot speed

feature is intended to let users limit the number of cores Windows uses at bootup for testing purposes. Under normal circumstances, the operating system uses whatever cores are available without your input.

14 Relying on ReadyBoost for extra speed

Windows ReadyBoost – a feature that was introduced in Vista and is still available in Windows 10 – lets you use one or more USB flash drives as a cache for the Windows swap file. Look online for ways to speed up your PC, and you'll often find ReadyBoost in the list of suggestions. To use it, you simply insert a blank memory stick into a spare port (not a hub), click Speed Up My System and select the option to dedicate the device to ReadyBoost.

However, although ReadyBoost can improve performance on a slow PC that has limited memory (512MB or 1GB, for

example), most systems are likely to see no speed increase whatsoever. In the rare instance that you might benefit from using ReadyBoost – perhaps because you're working on a laptop with a low specification – you should make sure you insert a fast USB drive because using a slow device (the minimum speed that Microsoft will allow) won't give you much of a performance boost at all. It's also worth pointing out that ReadyBoost is only useful on systems that have mechanical hard drives, not SSDs – which are fast enough already.
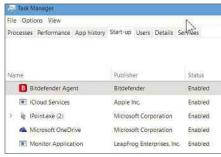

ReadyBoost might bring about faster speeds, but they're not guaranteed

SOFTWARE SLIP-UPS
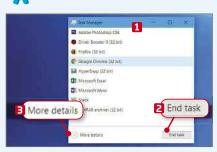
15 Loading resource-hungry startup items

Many programs set themselves to start as soon as Windows boots up, which can really increase the time the operating system takes to get into a usable state. Although you'll obviously want your antivirus program to load at startup, other programs, such as Java Update Scheduler and Google Installer, aren't essential and simply slow down the boot process. They also run in the background once the PC has started, using resources unnecessarily.

You can manage Windows startup directly in the operating system, or use a third-party tool such as CCleaner, but before you start disabling programs, you need to find out which are having the most impact and slowing things down. In Windows 10, press Ctrl+Shift+Esc to open the Task Manager and click the 'More details' link. Click the 'Start-up' tab at the top, then click Status to show a list of Enabled items. The column on the right
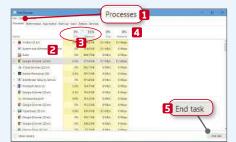

Turn off non-essential startup items to make Windows 10 run faster

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⚙ MINI WORKSHOP | Monitor Windows 10 using Task Manager

1 Open the Task Manager by pressing Ctrl+Shift+Esc, or right-clicking the taskbar and selecting it there. The basic view shows only the programs that are currently running. **1** Select one you don't want (or that's frozen) and click 'End task' **2** to terminate it. Click the 'More details' link **3** to expand the view.

2 The Processes tab **1** shows all the processes (from programs and Windows) that are currently running. **2** If your system seems a little slow, check the CPU and Memory columns **3** to see if a particular process is consuming too many resources. You can reorder the list by clicking a heading. **4** Terminate **5** any misbehaving items.
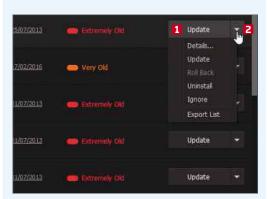
3 The Performance tab **1** lets you keep a closer eye on your system's hardware, including CPU, memory, hard disks and network. Select an item in the column on the left. **2** Double-clicking the graph **3** expands it and hides all other information. Right-clicking the CPU graph **4** lets you inspect individual processor cores.
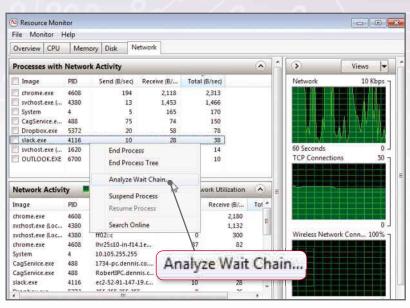
1 Run Driver Booster and it will get to work, scanning your system for missing and outdated drivers. The banner at the top **1** shows the number of device drivers available to update. You'll see the list of old drivers below. **2** These are colour coded so you can tell how old they are.

2 To download and install the latest version of a driver, click the Update button beside it. **1** Click the down arrow to the right of the button to access additional options. **2** You can view the driver's details, update it, roll back changes, uninstall it, ignore it and export the list for later reference.

3 You can also update drivers in batches by selecting the ones you want **1** and clicking the Update Now button. **2** You may need to disable your antivirus software temporarily before doing this. You can view all the drivers on your system under the UpToDate tab. **3** Click the menu button **4** to configure the software.

Resource Monitor offers the useful ability to analyse 'wait chains'

shows how much of an impact each of the launch items is having on your PC's boot time. You can disable any that are marked High by selecting them and clicking the Disable button. Only remove those you know you don't need to start alongside Windows.

See our Mini Workshop on page 43 to find out how to make the most of Task Manager.

16 Ignoring hidden System Tray items

If you don't keep Windows startup in check, you may end up with too many programs running simultaneously and hogging your computer's resources without you even realising it. Click the arrow in your system tray to open the notifications area, and you may be surprised by how many programs are running. Disable any you don't need, then remove them from Windows startup.

17 Overlooking wasteful processes

You can use the built-in Windows Resource Monitor to get an in-depth overview of Windows' system performance and start, stop, suspend and resume non-essential processes and services. As well as

detailed information on CPU, memory, drive and network usage, the program usefully analyses 'wait chains' to identify why an application isn't responding, so you can kill the process that's causing the problem. To run the tool, click Start and type `resmon` into the search box. Right-click a program and choose Analyse Wait Chain to find out what's slowing it down.

18 Using the wrong security software

When a computer starts to run really slowly, one of the first things many users think of is a malware infection. Having an antivirus program installed keeps your PC safe from such problems, but it's not uncommon for users to mistrust their existing security software and call on another tool for a second opinion. Anti-malware programs can be very resource-heavy and cause your PC to run slower than it should – and having more than one installed can compound the problem.

The trick is to choose the right anti-malware tool for your system. If you have a powerful modern PC, you can run the likes of Kaspersky Internet Security 2016

Use a lightweight security tool such as Avira Antivirus on an older PC

(www.kaspersky.co.uk) without the system getting bogged down, but if you have an older computer, you're better off using a less demanding program such as Avira Antivirus Pro 2016 (www.avira.com), which did well in recent tests by AV Comparatives (www.av-comparatives.org).

If you require a second opinion, use a rescue CD (all the main security software companies now offer these) that you can boot into, and which won't affect your system's performance.

19 Failing to deselect junk extras

Although your virus program can protect you from all sorts of malware, it probably won't stop you accidentally installing the junk that's often bundled sneakily with free software. Getting rid of this can be a nightmare – uninstalling it usually involves jumping through hoops, and some programs make it almost impossible. Pay careful attention when installing a program, and don't be fooled by greyed out Decline buttons that – despite appearances – are fully clickable. Use the brilliant Unchecky (unchecky.com) to stay safe by automatically declining unwanted and unrelated 'offers' in installers.
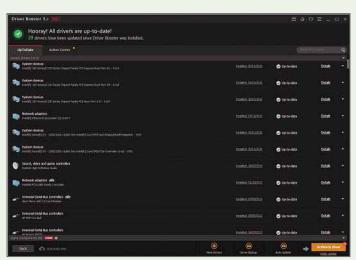
Use Unchecky to automatically deselect the junk that's bundled with free software

20 Using outdated hardware drivers

Drivers enable your PC to control the hardware that's installed in or attached to it, and old, outdated or missing drivers can cause problems. Although you can look for newer versions of drivers manually on each hardware manufacturer's website, or use a specific tool (graphics cards usually come with a control panel for this purpose), a simpler solution is to use the free program Driver Booster (bit.ly/booster391). This scans your system and provides you with links to newer drivers for your PC. See our Mini Workshop opposite to find out how to use Driver Booster.
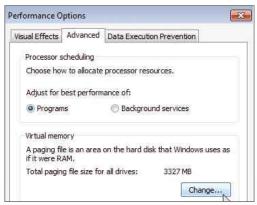
Run Driver Booster to detect outdated drivers that might be slowing down your computer

21 Changing the page-file size

When Windows needs more memory than is installed in your PC, it starts reading and writing data to 'virtual memory' instead. This is actually a reserved area of the hard drive called the page file. Windows manages the page file's size automatically, although it gives you the option to set it manually if you prefer. You can even disable it completely if you believe you have enough RAM installed to make it unnecessary. However, just because you can, that doesn't mean you should. Windows knows what it's doing here, and can be trusted to manage its own virtual memory use without your help. If your PC has a decent amount of memory installed, Windows is unlikely to use the page file much anyway, so don't worry about it. ∎

Never change the size of the page file – or 'paging file', as it's called in this screen grab

Best free file-compression tools

Windows can store your files in compressed folders to save space, but it doesn't give you much choice over how it does this. **Andy Shaw** tests six free programs that work faster and compress your files into smaller packages

PeaZip | www.peazip.org | ★★★★★
FEATURES ★★★★★ **PERFORMANCE** ★★★★☆ **EASE OF USE** ★★★★★

What we liked:
Earlier this year, PeaZip launched a new version (6.0), which brought a handful of tweaks to the already excellent software. It may not have the most dynamic interface but at least it's clear, functional and works in a sensible way, which certainly can't be said of all the programs we've tested here. It uses the same layout as an Explorer window, so it's instantly familiar.

Making a new archive is easy: you just select the files you want to include and click the Add button. From the window that appears, you can simply click OK to create the default Zip file or choose from a range of options that include file encryption and a choice between faster or smaller compression options. You can also choose from a broad range of files types, which include self-extracting files (for when you're not sure the recipient of a file will have the right software) and file formats such as ZIP, ARC, 7Z and PeaZip's own PEA. It also adds tools to Windows' right-click menu that make

your compressing jobs even easier.

PeaZip's range of extra tools goes above and beyond those of its rivals, but they're useful and well aligned with the overall purpose of the software. For example, there's a handy 'Secure delete' button on the toolbar that lets you remove original files securely once you've archived them. There's also an

Organize menu that lets you rearrange the interface by removing elements from it, which is great if you'd like to simplify it further, but we preferred using its Explorer-like design.

In our tests, 7-Zip compressed files slightly faster than PeaZip, but only by a few seconds on very large files. Both tools squeezed exactly the same amount of space out of our test files, making them just as good as each other, although PeaZip's interface is easier to use.

How it can be improved:
While it's perfectly functional and sensibly designed, PeaZip's interface could be a little more attractive. It's not horrible but it would definitely benefit from a designer's touch.

OUR VERDICT

PeaZip is a powerful compression tool that's easy to use and offers much more than Windows' built-in alternative. What it lacks in looks it more than makes up for in its ability to turn large files into smaller ones.

WebUser GOLD AWARD

7-Zip | www.7-zip.org | ★★★★☆
FEATURES ★★★★☆ PERFORMANCE ★★★★★ EASE OF USE ★★★★☆

WebUser
SILVER AWARD

What we liked:
7-Zip is a straightforward open-source compression tool that works with both Zip files and the 7Z format. The interface presents a simple list of files: go to the folder that contains the files you want, select them as you would in Windows Explorer, then click the Add button to open a window that lets you control the compression. None of it looks particularly special – it's even more basic than PeaZip – but all the options you might need are available. The only serious omission is support for a full range of file formats, although it supports the most widely used, including ZIP, 7Z and TAR. It's also able to open many more formats than it can create.

This software provided the best performance in our tests. It equalled PeaZip's compression on our test files but performed the process slightly faster. There wasn't much in it but, if you can live with 7-Zip's plain interface and limited format types, you'll save a little time during the process.

How it can be improved:
7-Zip's interface could do with a bit of an overhaul and the program can only create a handful of compressed file types, although for most users, ZIP and 7Z should be sufficient.

OUR VERDICT
7-Zip is a reliable old classic. It may not have the good looks or fancy tools of the newer upstarts but it offers superb core performance.

B1 Free Archiver | b1.org | ★★★★☆
FEATURES ★★★★☆ PERFORMANCE ★★★★☆ EASE OF USE ★★★★☆

WebUser
BRONZE AWARD

What we liked:
If you use compression on more than one type of device, such as a Mac, a Linux computer or an Android device, you'll appreciate B1 because it has versions that work across all these operating systems. The Android version looks a little different, but the computer-based versions all have the same interface, which is as attractive as free compression software gets.

The program offers a good range of options. It can zip and unzip files in its own B1 format, as well as ZIP, 7Z, TAR, GZIP and BZIP2. It has sensible options for splitting archives and encrypting files, and is very nicely presented.

It's fast, too. Compressing to its own B1 format at maximum compression took a quarter of the time our other award-winners took, although it didn't squash the files as thoroughly.

How it can be improved:
The program looks nice, but some of its fine-tuning options aren't clear. You can choose from compression options that include Store, Smart, Classic or Maximum, for example, and while you may guess that Maximum refers to the level of compression, it's hard to work out which might be the fastest. Sadly, the Help files don't help – they appear to be for a previous version.

OUR VERDICT
Looks aren't everything but if you're tired of boring-looking tools, B1 Free Archiver brings a little style to compression software. Its fast, too, particularly in its own format, but it doesn't compress files quite as well.

BEST OF THE REST

Bandizip
bit.ly/band397
Bandizip has put some effort into making its software look nicer than the average compression tool, but the way it works is a bit confusing. Instead of presenting an Explorer-like interface from which you select files to compress, you create the compressed file and then choose the files you want to put in. After using the other programs, this feels counterintuitive.
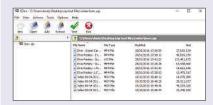
IZArc
www.izarc.org
IZArc is a simple if rather basic compression tool, and while it didn't compress our test files as well as PeaZip and 7-Zip, it came very close in a fraction of the time. The only thing holding us back from recommending it is that, until the very latest version, IZArc came bundled with OpenCandy adware. The developer claims it's now free of adware, and we found this to be the case, but it might be worth treating it with caution for a version or two to ensure it stays that way.

FreeArc
freearc.org
We had high hopes for FreeArc, which claims to offer "fast but efficient compression." We weren't enamoured with its interface, however, and in our tests we found that its ARC format files were slow to compress and ended up larger than with any of the other tools we tested.

✚ Discuss file-compression tools at forum.webuser.co.uk

Escape unwanted subscriptions

Many websites offer free trials to entice you to use their services, but make it hard to cancel your subscription. **Edward Munn** reveals how to avoid being charged by nine well-known companies

AMAZON PRIME

Signing up for a free trial of Amazon Prime is easy, but if you forget to cancel your subscription, it'll cost you £79 a year (or £7.99 a month). To cancel your Prime membership before you're charged, go to www.amazon.co.uk, hover your cursor over Your Account and choose Your Prime Membership. Select 'Do not continue' to cancel your free trial or, if you're already paying for the premium service, click 'End membership'. If you choose 'Do not continue' on the day you sign up for a free trial, you'll still receive the benefits until the trial period ends 30 days later. If you then decide during the trial that you'd like to reactivate your subscription, you can do so by navigating to the same menu and selecting 'Continue membership'.

NOW TV

When you buy Sky's Now TV box, it usually comes with a free Sports, Movies or Entertainment Pass, but if you don't remember to cancel it, you'll be charged the standard subscription fee for the service. To cancel your pass before this happens, log in to www .nowtv.com and select My Account and My Passes. Select the Cancel option next to the pass you no longer want. When we tried cancelling an Entertainment Pass, we were offered the service at a reduced rate of £3.49 a month (instead of £6.99) for four months. Even if you accept this offer, you can stop the pass renewing later. If you've signed up to a Now TV trial without buying the box – for example, through its mobile app – you can still cancel your pass by following the steps above.

NETFLIX

To cancel your Netflix subscription before your 30-day trial expires and the service starts charging you £5.99 per month, log into www.netflix.com, hover your cursor over your username and select Your Account from the drop-down menu. Click Cancel Membership, below Membership & Billing, and on the next page you'll see the date on which the next payment would have been taken. Click Finish Cancellation to complete the process. Netflix keeps your viewing preferences for 10 months so you can reactivate your account at any point during that time.

OFFICE 365

You can cancel your subscription to Office 365 during the free trial period by visiting microsoft.com, signing into your account and selecting View Account and 'Services & subscriptions'. Look for Office 365 under Subscriptions, then click Cancel to be downgraded to a reduced set of features once the free trial has finished. You can still open and print documents in this mode, but you'll be unable to edit them and will lose all perks, including extra OneDrive storage and free Skype minutes.

SPOTIFY

If you signed up to Spotify through its website (see below if you signed up from an Apple device), visit www.spotify.com/uk then select Accounts and Subscription. The website shows the renewal date for your subscription and how much you'll be charg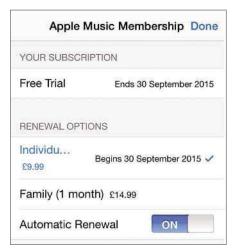ed if you fail to cancel it by then (from £9.99 for Spotify Premium). Click the link to cancel your subscription and your account will revert to the free version on the renewal date. You can still listen to music on all your devices with the free version but only on shuffle, and with a limited number of 'skips' and the occasional advert between tracks. Remember, too, that there's no option to store music offline with Spotify Free, and you can't listen to music at high quality.

APPLE SUBSCRIPTIONS

You can manage your Apple subscriptions, such as Apple Music (and Spotify, if you signed up from an Apple device), by opening Settings on your iPhone or iPad, then scrolling down and selecting iTunes & App Store. Tap your Apple ID, then View Apple ID and enter your password. On the page that loads, tap Manage in the Subscriptions section and you'll see a list of all your current and past subscriptions. Tap the subscription you want to manage. From here, you can switch Auto Renewal off to cancel a subscription at the end of your current billing cycle.

To manage Apple subscriptions from a Mac or PC, open iTunes and sign in. Click your name and select Account Info from the drop-down menu. Enter your password when prompted, then select the Manage option next to Subscriptions. To cancel a subscription, select it and flick the Auto Renewal switch to the off position. If you can't find a subscription here, it may be because you subscribed through the provider rather than Apple, in which case it's best to contact them directly.

To manage your iCloud storage plan, you need to select iCloud from the iOS Settings menu rather than iTunes & App Store. From this menu, select Change Storage Plan, then tap Downgrade Options and enter your password when prompted. Choose which plan you want to use when your current subscription ends and tap Done.

GOOGLE PLAY

If you've bought a subscription in an app you downloaded from the Google Play store, simply uninstalling the app won't cancel your recurring payments automatically. Instead, you need to visit payments.google.com, sign into your account when prompted and select the 'Bills and accounts' option. From here, choose the subscription you want to cancel and click 'Cancel subscription'. You can also see details of previous subscriptions from this screen by selecting the Inactive tab.

EXPERIAN CREDITEXPERT

Experian offers a 30-day trial that lets you check your credit score for free, but failing to cancel your subscription could cost you £14.99 a month. Unlike the other services we've covered, cancelling your Experian subscription isn't as simple as clicking a button on a website. Instead, you need to contact Experian by email (help@creditexpert

SET YOURSELF A REMINDER

If you sign up for a free trial but haven't decided whether or not you'll keep the subscription at the end, set a reminder so that you don't forget to cancel and end up paying charges you'd rather have avoided. You can do this using Google Now by saying 'OK Google, remind me to cancel my Netflix' and it'll ask you to choose a time when you'd like to be reminded. You can do the same thing using Siri on an iOS device or Cortana in Windows 10.

.co.uk), phone (0800 561 0083 or 0344 481 0800) or post (CreditExpert, PO BOX 7710, Nottingham, NG80 7WE) quoting your full name, address, email address and reference number. If your request is made but not processed before the next billing date, you'll be refunded any payments that are taken.

ANCESTRY

A subscription to Ancestry costs £10.99 a month. To stop the website renewing automatically once your 14-day free trial has ended, log into the website, click your username and select My Account Options from the drop-down menu. In the Subscription Options section, click Cancel Subscription, then enter your password to verify your account and click Continue. You'll be asked to choose an option from a drop-down menu to say why you're leaving. Click Continue again and 'No thanks, confirm cancellation'.

Broadband Deals

	Provider	Package name	Monthly price	Contract length	Broadband speed	Allowance	First-year cost*
1	TalkTalk	TalkTalk: Broadband	£7.50 (FREE for 18 months)	18 months	17Mbps max speed	∞ unlimited	**CHEAPEST** £0.00
2	plusnet	Plusnet: Broadband	£9.99 (FREE for 12 months)	18 months	17Mbps max speed	∞ unlimited	£0.00
3	sky	Sky: Broadband	£10.00 (FREE for 12 months)	12 months	17Mbps max speed	∞ unlimited	£0.00
4	EE	EE: Broadband & Calls	£9.95 (£1 for 12 months)	12 months	17Mbps max speed	∞ unlimited **	£12.00

Terms & Conditions apply - see ISP sites for details

*First-year cost does not include line rental. Cost is calculated at monthly price x12 with all introductory offers subtracted. Additional charges incurred outside of free inclusive calls not included in first-year cost.

** Fair-usage or restriction policy applies.

Data supplied by www.broadbandgenie.co.uk. Correct as of 4 May 2016.

Ofcom

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

Take a Screen Break

Give your eyes a rest from your computer by taking our fiendish fortnightly challenges. Can you unravel our ISP-themed word search and guess our album-title emoji?

WEB USER WORD SEARCH

Can you find the following internet providers in the grid on the right? Names may appear vertically, horizontally or diagonally, and forwards or backwards

BT GROUP
ECLIPSE
EE LIMITED
PLUSNET
SKY
TALKTALK
THREE
VIRGIN MEDIA
VODAFONE
ZEN INTERNET

T	L	S	C	Q	E	U	F	M	R	U	F
E	W	N	L	B	B	X	Q	M	V	Z	T
N	E	H	B	A	B	T	G	R	O	U	P
R	P	L	U	S	N	E	T	X	D	T	O
E	O	R	I	N	H	E	V	S	A	B	T
T	K	O	F	M	N	R	S	L	F	T	T
N	B	T	S	W	I	H	K	U	O	R	D
I	O	G	C	R	V	T	Y	D	N	P	Z
N	S	D	O	D	A	C	E	P	E	U	H
E	S	P	I	L	C	E	S	D	A	Y	K
Z	M	L	K	W	R	E	I	K	O	E	K
A	I	D	E	M	N	I	G	R	I	V	D

CAN YOU IDENTIFY THESE CLASSIC ALBUMS FROM THE EMOJI?

1 👌 💻

2 🐶 🐱 🐹 🔊

3 👶 ➡️ 🇺🇸

4 🌉 😢 🌊

Get the answers online at bit.ly/quiz397

COMPETITIONS

Browse privately using Opera's new VPN | **www.opera.com/developer**

Opera has built a free VPN into its browser, so you no longer need a separate tool to secure and hide your browsing. Here's how to use it

Virtual private networks (VPNs) disguise who you are and where you're browsing from. When you connect to one, your PC acts as if it's on the VPN's local network and uses its IP address. If that network is in the US, for example, any websites you visit will think you are in the US, which can help you get around annoying geographic browsing restrictions.

Until now, if you wanted to use a VPN, you had to install one, such as TunnelBear (**www.tunnelbear.com**). This, like most VPNs, gives you some free traffic, but you have to pay if you need more. Opera has just integrated a VPN into its browser, giving users free, unlimited data secured with 256-bit encryption. It's only available in the developer version for now, but expect to see it in the stable build soon.

GEO-BLOCKED CONTENT
Can't view something in the UK? Change your location to a compatible country and try again

1 Make sure you have the Developer version of Opera. If you're not sure, click the Opera button **1** and select About Opera. **2** The page that opens should say you have the Developer version. **3** If not (and assuming the VPN isn't yet in the stable release), download it from **www.opera.com/developer**.

2 The VPN is switched off by default. To activate it, click the Opera button and go to Settings. In the page that opens, click the 'Privacy & security' link. **1** You'll see a new VPN section. **2** This explains what the tool does. **3** Tick the Enable VPN box. **4**
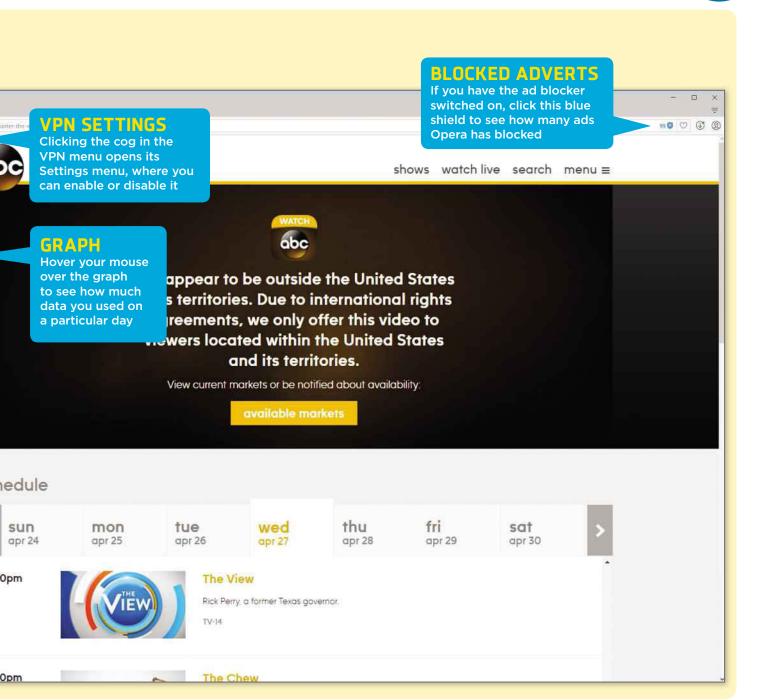
3 Browse the web as you would normally. The only difference you'll see is a blue VPN button **1** to the left of the address bar. Try to access a site that's usually blocked and you should find that it loads. If you go back into the 'Privacy & security' section of Settings and untick Enable VPN, the button vanishes.

4 Clicking the blue VPN button opens a small window that lets you toggle the service off and on more easily, **1** so you don't need to go into Settings every time you want to use the VPN. It also shows you how much data you've used in the current month. **2**
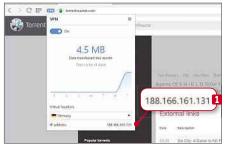
5 VPNs let you change the location you appear to be browsing from, which is useful if you want to access websites that are restricted to a particular country. To change the location in Opera, click the blue VPN button and use the drop-down menu to pick a new country from the list of available options. **1**

BLOCKED ADVERTS
If you have the ad blocker switched on, click this blue shield to see how many ads Opera has blocked

VPN SETTINGS
Clicking the cog in the VPN menu opens its Settings menu, where you can enable or disable it

GRAPH
Hover your mouse over the graph to see how much data you used on a particular day

shows   watch live   search   menu ☰
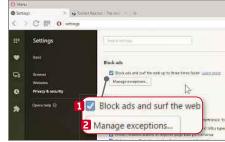
6 Opera only offers US, Canada and Germany **1** at the moment, and you have no control over where in those countries you appear to be, but further locations will have been added by the time the VPN reaches the stable build. Hit the refresh button **2** on the page you're on to reroute via the new location.

7 Switching between countries takes a few seconds as the VPN routes your traffic through a new server. The IP address **1** shows where websites think you are. There are only three variations. If browsing seems slow in one location, try another, but bear in mind that it might affect sites that use geographical blocks.

8 As well as a built-in VPN, Opera comes with its own ad blocker, which removes adverts from pages. Opera says this can speed up browsing by up to three times. Turn it on in the Settings menu by ticking the box to 'Block ads'. **1** You can allow some sites to show ads by clicking 'Manage exceptions'. **2**

Delete your browsing data using Kaspersky Cleaner

Kaspersky Cleaner: bit.ly/ktools397 | 🕐 10 mins | 🪟 XP, Vista, 7, 8, 10

Whenever you use your computer to go online, you leave traces of your activity in the form of web history, cached data and other logs and temporary files. Kaspersky Cleaner is a new tool from the developers of our favourite antivirus software (Kaspersky Internet Security 2016, £16.95 from bit.ly/kasper397) that helps to protect your privacy by deleting these files.

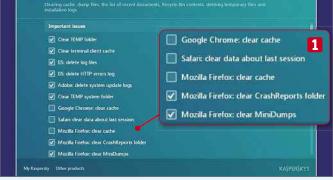In this Workshop, we show you how to customise its settings to clear all this sensitive information from your browser. The tool also automatically clears out Windows' temporary files and can be set to delete your search history and recent documents list, as well as other files that reveal how you use your PC. Microsoft was criticised for gathering information about users in Windows 10, but Kaspersky Cleaner automatically disables those features that are most likely to compromise your privacy. By clearing unnecessary files, it also frees up hard-drive space and makes your PC run faster.
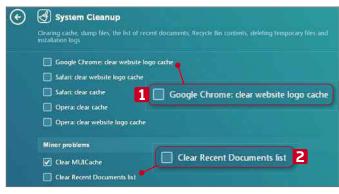
1 Download, install and run Kaspersky Cleaner. Click the System Cleanup button **1** to display a list of actions you can perform with this part of the scanner. Under 'Important issues', the 'Clear terminal client cache' and 'Clear TEMP folder' options are ticked by default.

2 If you use Chrome or Firefox, tick the appropriate boxes **1** so that Kaspersky Cleaner deletes your cached files. Under 'Medium-severity issues' you can set the scanner to delete Internet Explorer's cache and also to empty the Recycle Bin.

3 Further down the list, there's an option to clear Chrome's website logo cache. **1** Scroll down further to find an option that sets Kaspersky Cleaner to delete your Recent Documents list. **2** Click the back arrow, then select Remove Activity Traces for another list of options.

4 Kaspersky Cleaner is still in beta, so you might notice some entries in this list that were also in the previous menu. To ensure that traces of your browser activity are not left on the PC, tick all the appropriate boxes for your web browser on the list. **1**
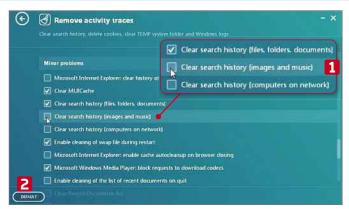
5 If you use Internet Explorer or Edge, tick 'Clear browser history' in the 'Important issues' section. There are options to delete the browser's cookies, **1** cache **2** and list of trusted domains **3** in the 'Medium-severity' section and a further option to delete its typed URLs in 'Minor issues'.

6 Also in the 'Important issues' list is the option to 'Clear search requests log'. You can set Kaspersky Cleaner to delete your Java cache by ticking the appropriate box **1** under 'Medium severity' and, if you use eMule, there are also options to delete your search history and download log. **2**

7 In the 'Minor problems' section, it's a good idea to tick the boxes that clear your search history. **1** You can restore the application's default options for each list at any time by ticking the Default button. **2** Once you're happy with the configuration, click Back and select Private Browsing.

8 The Important Issues in this menu relate to different aspects of Windows logging. By default, Kaspersky Cleaner disables services that share information with Microsoft including the Application Impact Telemetry Agent **1** and the Customer Experience Improvement Program. **2**

9 If you have concerns about your privacy when using Cortana, you can disable it by ticking the appropriate box. **1** Scroll down and you can also enable an option that cleans up Internet Explorer's cache when you close the browser. **2**

10 Click Back once more and select Start Scan. When it's done, the number of problems detected for each section is shown. **1** Click Fix **2** to repair them automatically or click the individual sections to make refinements. Once fixed, click Reboot Now to restart your PC.

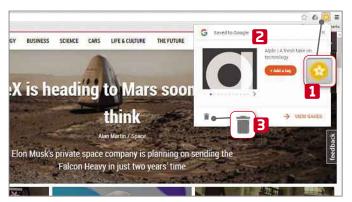**➕** Get more practical advice at forum.webuser.co.uk

Save your favourite sites and access them anywhere

Save to Google is a new bookmarking add-on for Chrome, which lets you save sites you like so you can come back to them later. Unlike regular browser bookmarks, the sites you save are stored, organised and displayed on a simple Google website that's accessible from any browser. You can organise your saved sites using tags and choose from the images available on the site you're saving to help you remember it.

Save to Google: bit.ly/stg397 | 🕐 **10 mins** | 🌐 **Chrome**
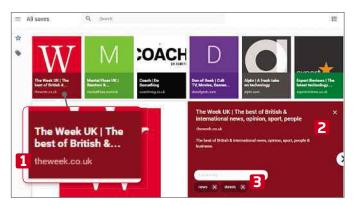
1 Install the Chrome extension to add the Save to Google icon to the browser. **1** When you're visiting a site you want to save, click the icon and a window pops out to show it's been done. **2** If you change your mind, ditch it by clicking the bin icon. **3**
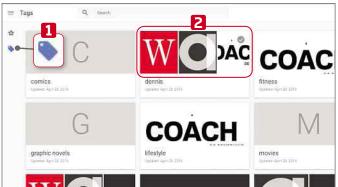
2 Use the arrows **1** to select an image from the page to represent it in your bookmarks. **2** The last one is a letter, based on the first letter of the site's name. Click the 'Add a tag' button and start typing. **3** This categorises the site to make it easier to find later.
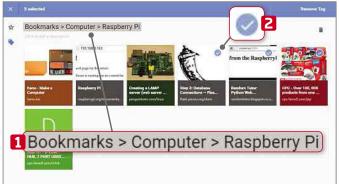
3 Click the View Saves link or go to www.google.com/save to see your saved sites. To go straight to a site, click its address. **1** Clicking anywhere else in the box will bring up its info card, **2** which shows the site's tags and lets you add more. **3**

4 Click the tag icon **1** to show a list of all the tags you've created, with previews of the site icons that are included in each tag. **2** Clicking one of these boxes takes you to the full list of tagged sites, where you can add a description to help you find the site again when searching.

5 You can import any bookmarks you already have in Chrome by clicking the menu button in the top-left corner. Scroll down and click 'Import Chrome bookmarks'. **1** If you have a lot of bookmarks, this could take a few minutes. Refresh the page when it's finished to view them all.

6 Imported bookmarks are given the 'bookmarks' tag. If the bookmarks were in folders, the tags will transfer as a breadcrumb trail. **1** Click this to change it to a standard tag style. You can select groups of bookmarks, to edit or remove them, by hovering over each one and clicking the tick. **2**

Remove unwanted background from any photo

Background Burner is a free web app that removes the background from images. You can replace cluttered backgrounds with white space, a pattern or even a transparent layer, which is handy if you want to enhance a profile picture or a snap of something you're selling on eBay. Before you can use Background Burner, you must set up a free account at bit.ly/account397.

Background Burner: burner.bonanza.com | ⏱ **10 mins** | **Any browser**

1 Visit burner.bonanza.com and drag and drop the image you want to cut out, or click 'Choose a Photo'. The app removes the background automatically and displays up to three versions for you to choose from. **1** Click Select **2** to save an image or choose 'Touch up' **3** to edit it.

2 Choosing 'Touch up' opens Background Burner's basic tools tab. Use the Mark Background tool **1** to indicate areas you'd like the app to refine, by clicking and dragging the cursor to fill them in. You can change the brush size from the drop-down menu **2** and zoom in and out. **3**

3 Any changes you make appear in the preview immediately. **1** If you make a mistake, use the Undo button (or Ctrl+Z) to go back a step. **2** If the tool has excluded too much of the background, click the plus button **3** or press the R key to use the Mark Foreground tool.

4 If you prefer to cut out your image manually, you can use the Pixel Tools **1** to indicate which areas of your image are foreground and background. Use various sizes of brush to highlight precisely the pixels you want to change **2** or use the Polygon tools **3** to select specific areas.
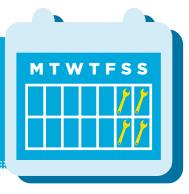
5 To use the Polygon Mask Eraser **1** or Mask Restorer, **2** click your mouse once to start the selection, then move the cursor to draw a line. Clicking the mouse again confirms a line and starts the next one. Your selection is processed when one of your lines rejoins the starting point. **3**

6 When you're happy with the results, click Finish and Background Burner will display the image with and without its background. Click a button to save it as a JPEG (white background) **1** or a PNG (transparent background), **2** or with another image in the background. **3**

How to...

How to connect to your home network from anywhere

You don't need to be at home to access devices on your home network. **Wayne Williams** explains how to set up remote access

The beauty of a home network is that it lets you share files easily across all your devices. If you have photos on your PC's hard drive, for example, you can view them on an iOS or Android device, or even on your TV using a device such as Amazon's Fire TV stick. And it's not only photos you can share. You can also stream music and video from one device to another, and copy important documents.

Most people already do this within their own homes but you don't have to be in the same building as your network to access your devices – it's possible to connect to your home network over the internet. This isn't always easy, because your ISP may periodically change your router's IP address. Fortunately, Dynamic DNS (DDNS) providers make it easy to connect remotely to your network from anywhere.
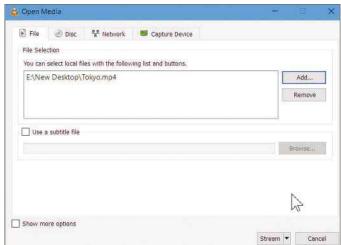
What is DNS?

The DNS (Domain Name System) translates website names into IP addresses that web servers and internet routers can understand. When you type www.facebook.com into your browser, for example, a DNS server (probably one assigned by your ISP, unless you've changed it) translates your request into an IP address, such as 31.13.90.36. Your computer then connects to the remote server and the website loads. This usually happens very quickly, although sometimes you may encounter DNS problems that stop you reaching a website by typing its web address, even though typing in the IP address still works. In theory, you can get to any website by typing its IP address into a web browser instead of its URL – but people don't tend to do this because IP addresses are much harder to remember.

You can find out a site's IP address by clicking Start, typing `cmd` and launching a Command Prompt. Type `ping www.webaddress.com`, replacing 'webaddress' with the site's name (try `ping www.facebook.com` for example). Press Enter and you'll see the IP address for that site. Type this into your browser's address bar and the site should load as usual. Next time your internet connection stops working for

Dynu converts your router's IP address to a more memorable name

You can stream files over the internet with ease using VLC

whatever reason, you can use this method to check for DNS problems.

This system works because websites are assigned static IP addresses that don't change from one day to the next. It would be great if you could assign a memorable name to your home network and access it from anywhere as you can a website, but there's a problem. There are only so many IP addresses to go round and your ISP dishes out its addresses as users need them. So instead of a static IP address you'll have a dynamically assigned one that changes periodically.

You may think this would make it impossible to assign a friendly name to your home network, but it's not. You simply need to use a Dynamic DNS (DDNS) provider such as Dynu (www.dynu.com), which will give your network a memorable domain name that always works even if your ISP regularly changes your IP address. Best of all, it's entirely free. Our Mini Workshop below will help you get started with the service,
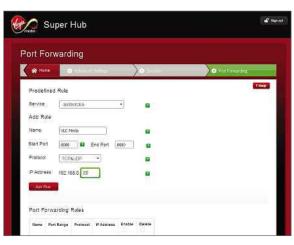
while the Mini Workshop on page 61 shows how to set it up to adapt when your IP address changes.

Set up a media streamer

Once you've assigned your network's IP address a memorable name, you can access it from outside. Next you need something on your network that you can connect to – otherwise you'll just see an error message when you point your browser to it. A good first option is to set up VLC Media Player (www.videolan.org) to stream music or video. For alternative ideas, see page 61.

To set up media streaming, install VLC on the PC where all your media is stored and also on the remote computer you're using to view or listen to it. On the host

Set port forwarding to make sure streaming requests reach the correct device on your network

PC, go to Media, Stream, select a video and click the Stream button. Click Next, then choose HTTP in the 'New destination' drop-down box and click Add. Click Next again (and maybe once more if necessary), then click Stream.

⚙ MINI WORKSHOP | Get started with Dynu

1 Go to Dynu's UK sign-up page (bit.ly/dynu397) and create an account by entering your details or signing in with your Google account. The Control Panel appears. This offers various options, but to get started just click on DDNS Services. **1**

2 The Dynamic DNS Service page will be empty. To fix that, click the blue Add button. Enter the hostname **1** and domain name **2** you want to use. Click Add **3** to add the entry to your account. If you have your own domain name, you can use that instead. **4**

3 The next screen shows your IP address. **1** If it's wrong for any reason, you can edit it. Click on Save. **2** Access your home network by opening a web browser on a remote computer and going to the address listed next to Dynamic DNS Service. **3**

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NEW & UPDATED FOR 2016 »

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PROTECT YOUR DEVICE
From 2016's deadly new malware

ESSENTIAL NEW APPS
For Lollipop & Marshmallow

NEVER RUN OUT OF BATTERY
Unlock hidden power and lost speed

BEST APPS & TIPS FOR EVERY DEVICE
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THE DEFINITIVE GUIDE TO FREE SOFTWARE

Free software can be a worry. Is it as good as a paid-for package? Will it sneak junk on to your PC? Does it nag you to update to a premium version? In our new 148-page book *The Definitive Guide to Free Software*, we recommend only the best free programs that deliver high-quality features and no nasty surprises.

BUY IT NOW FROM AMAZON
at bit.ly/guidetosoftware
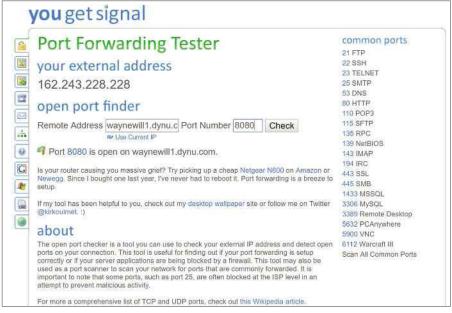
RASPBERRY PI FOR KIDS

The Raspberry Pi is the incredible £20 British computer that's taking the world by storm. It's ideal for children of all ages to experiment with, play games and learn valuable skills. We've updated this 148-page book to include instructions on mastering the new Pi models (A+ and B+).

BUY IT NOW FROM AMAZON
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Check that your port forwarding is working with You Get Signal's free tools

On the other PC, go to Media, 'Open network stream' and type `http://domainaddress:8080`, replacing 'domainaddress' with your Dynu address (such as `fredsmith.dynu.com:8080`). You need to make sure the Windows firewall on either PC won't block the stream. To configure this, click Start, type `firewall` and launch the configuration tool. You'll find plenty of help available if you're not sure what to do.

You may also need to set up port forwarding for each service you want to access remotely. This process tells the router which device on your network an external request is for. Without it, the router won't know what to do with the request. If you store your videos and music on a particular PC, for example, you need your requests from the remote VLC to connect to that device rather than another one on the network. The port used for this is 8080, so that's the one you need to configure to get the stream to work. Different services, such as those mentioned in the box above, use different ports, so check the instructions for each to find out which port to configure.

Port forwarding isn't as complicated as it might sound. Go into your router's settings (the process will vary depending on the router's make and model) and look for its port forwarding settings. They may be located in the Advanced section.
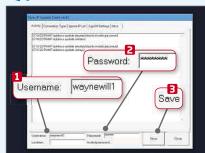
Once you've found it, simply enter the name of the application or service you're setting up, and the incoming port (or ports) it uses. Choose a protocol type (TCP&UDP, for example) and the IP address to which it should route the request. Remember, this is the IP address of a particular device inside your network. You can find this information elsewhere in your router's settings.

Once you've made and saved your changes, check a port's status by going to bit.ly/signal397 and entering the remote address and port. ◼
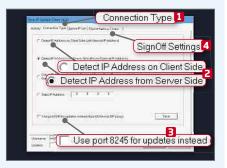
MINI WORKSHOP | Set up an IP update client

1 Your IP address changes from time to time, so you need the DDNS server to check for this. Go to Dynu's downloads page (bit.ly/dydl397) and download and launch the Dynu IP Update Client for your operating system. Enter your username **1** and password **2** and then click the Save button. **3**

2 The software connects and checks to make sure the IP address hasn't changed. **1** If it has, it will update Dynu with the new details. The software will continue to run in the background, checking periodically for changes to your IP address. You don't need to do anything else and can minimise it by clicking Close. **2**

3 There are advanced settings to tinker with if you wish. Connection Type **1** lets you choose whether to detect server-side or client-side IP address (or both), **2** and use a different port. **3** SignOff settings **4** lets you specify where your domain name should point when the updater isn't running.

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Web User's Top Tips

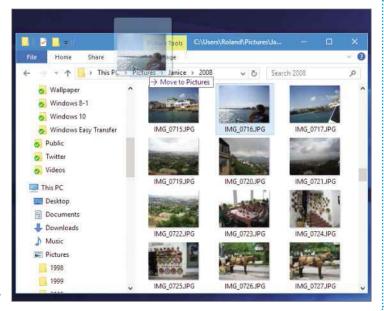Become a File Explorer maestro with our guide to this essential component of Windows 10

TOP TIPS FOR WINDOWS 10'S FILE EXPLORER

Follow the breadcrumbs

At the top of the File Explorer window, you can see the path to the current folder: for example, This PC > Windows (C:) > Users > YourName > Documents > MyFolder. This is a breadcrumb navigation trail that shows where you are in the folder tree. You can jump to any folder in the trail by clicking it. Each folder is followed by a '>' symbol. Click that, and the subfolders it contains are displayed in a menu. Click one to jump straight to it.

A surprising feature is that you can click a file or folder in the Explorer window and drag it to a folder in the breadcrumb trail to move it. As you hover the dragged item over a folder, the caption under the icon changes to 'Move to [folder name]'. Drop it and Explorer moves the item to the named folder.

Move files by dragging them to folders in the breadcrumb trail

Customise 'Quick access'

The 'Quick access' list at the top of the left panel lets you go to commonly used folders in one click. Drag any folder on the hard drive to the 'Quick access' list and drop it to add it. Once you've added your favourites, click and drag the folders to move them up or down in the list. Right-click folders and select 'Unpin from Quick access' to remove them from the list.
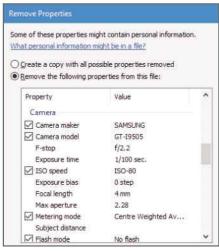
Strip files of their properties

Files contain extra information that isn't part of the file but tells you something about its contents. The obvious examples are music files, such as MP3s, which store the name of the artist and album; and photos taken on a phone or digital camera, which contain information such as shutter speed, aperture and metering modes.

This extra information can be stripped out, and it's sometimes useful to do this when sharing files on the internet. For example, you might want to remove GPS information that reveals where you live if you share a photo taken at home. Be careful with this tip, though, because the information you remove from the file is erased irreversibly.
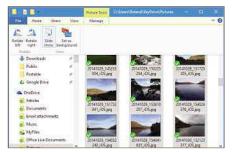
Strip information from files before sharing them on the internet

Select a file in Explorer and click the Home tab. Click the arrow under the Properties icon and select 'Remove properties'. In the window that opens, select 'Remove the following properties from this file'. Use the Select All button to remove all the information, or tick the box next to each item you want to remove, such as a photo's GPS coordinates.

Alternatively, if you prefer to keep this information and want to make it easier to find, read our 'Optimise folders for content' tip (opposite).

Control your photos

Select one or more photos and a new Manage tab appears at the top of the Explorer window. Select a photo, click Manage and then 'Set as background' to make it the Desktop background image. There are also buttons to rotate images left and right, which you can use to rotate more than one image at a time. If you've just transferred photos from your camera, open the folder, hold down the Ctrl key while you click any images you want to rotate to portrait orientation, and then rotate them all in one go.

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 one or more photos and then use the tools on the Manage tab

To show off your photos to friends, open Explorer and open the folder containing the images. Use your mouse to select the ones you want (or press Ctrl+A to select them all), then click Manage, 'Slide show'. Each image is displayed full-screen for five seconds.

Use the expanded 'Send to'

If you right-click a file in Explorer and select 'Send to' from the menu, you can send the file to the Desktop, the Documents folder, a compressed Zip file and a few other places. Now hold down the Shift key, right-click a file and select 'Send to'. The menu now offers many more places to send the file, including Music, Videos, Downloads and so on.

Hide recent activity

When you open Explorer, you may see a list of recently used files and folders in the Quick access area. You might not like the idea that anyone nearby can glance at the screen and see what you've been doing, but you can easily hide this recent history. From the File menu, click 'Change folder and search options' and select the General tab. In the privacy section near the bottom, you can choose between convenience or privacy. For privacy, clear the ticks against 'Show recently used files...' and 'Show frequently used folders...'

Go to Folder options and clear the ticks in the Privacy section
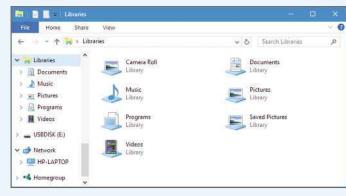
Exit Explorer

If you're having problems with Explorer, Windows, the Desktop, menus and other things, it can help to quit Explorer and restart it. Explorer runs in the background, not just in a File Explorer window, and the Desktop is really just an Explorer view. Hold down Shift+Ctrl and right-click an empty part of the taskbar. Select Exit Explorer.

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

Bring back libraries

Libraries were introduced with Windows 7 and allowed Explorer to display the contents of two or more folders as if they were one. If you had three folders of photos, for example, you could add them to a library and then view all your photos by opening the library. Some people liked it, others didn't, but libraries seemed to disappear in Windows 10.

Bring libraries back to Windows by enabling them in Folder options

If you found them useful, you'll be pleased to hear that you can bring them back. Click File in any Explorer window and select 'Change folder and search options'. Select the View tab and scroll down to the bottom of the list of settings. Tick 'Show libraries'. There are now more libraries than there used to be, because Camera Roll and Saved Pictures have been added to the usual choice of Documents, Pictures, Music and Videos libraries.

Pin libraries to 'Quick access'

When libraries are enabled in Explorer, they appear at the bottom of the left-hand pane. For easier access, right-click Libraries and select 'Pin to Quick access'. The library is added to the bottom of the 'Quick access' list at top of the left panel. Click and drag it to the top, just under the 'Quick access' heading. Not only is it easier to find here, but it appears in the top-left corner in Explorer.

Keep libraries at the top

If you really love libraries and want to make them the default view in Explorer, right-click Libraries and select 'Send to', then 'Desktop (create shortcut)'. This places an Explorer icon on the Desktop. Right-click it, select Rename and delete the word 'shortcut', leaving the name as Libraries. Now you can open Explorer with your libraries as the default view by clicking the Desktop icon. Select your favourite view, such as Tiles or 'Large icons' in the View menu and Windows will remember your choice.

You can use the same technique to make any folder the default when Explorer is opened. Just right-click the folder and choose 'Send to' to create a Desktop icon.

Build up libraries

To add a folder to a library, right-click it in Explorer and select 'Include in library'. A list of libraries will appear, as well as the option to create a new library.

Search speed vs thoroughness

The search box in the top-right corner of the Explorer windows is useful for finding files, and you can choose between speed or thoroughness. Go to File, click 'Change folder and search options' and select the Search tab. Remove the tick from every box for faster searches, or tick them all for more thorough but slower searches.

Optimise folders for content

If you prefer to see the extra information we mentioned in the 'Strip files of their properties' tip (opposite), you can tell Explorer which type of files you're keeping in a particular folder, and it will optimise the display to present the relevant information for that file type.

Right-click a folder, select Properties and click the Customise tab. Under 'Optimise this folder for', select Documents, Pictures, Music or Videos. This determines which information appears in the Details view for that folder. To refine this, open the folder and select Details on the View tab. Right-click the Name heading in the first column to see which information can be displayed, and tick the items you want.

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

Bring back a disappearing drive

Q After backing up all my music as FLAC files to a USB hard drive, I discovered that if I plugged it into my router I could access my music from any device on my home network. This worked for my three desktop PCs, a laptop, smart TV and Android phones.

The albums appeared in the Network section of Windows Explorer, and I used Helium Music Manager 11 (www .helium-music-manager.com) to play the FLAC files at CD quality. Then along came Windows 10. I eagerly upgraded the laptop and one of the desktop PCs, but I found that the drive was no longer visible in Network.

As a workaround, I tried adding the router's IP address (192.168.1.1) to Explorer. This let me access the files, but only in Explorer. In Helium the files were no longer visible in the Network section. What was once an excellent method of playing music around my house, particularly from the laptop (which I routed through a DAC into my hi-fi) is now useless. I have spent hours trying to solve the problem and taken advice from local experts, to no avail.
Eugene Birchall, via email

Set up drives on the network with their own drive letter to make access easier

A The fact that you can access your hard drive by entering the IP address 192.168.1.1 means it's working fine. You simply need to create a drive letter to make accessing it easier, both in Windows and through other software.

Open an Explorer window and select This PC on the left. Click the Computer tab to open the ribbon toolbar and click 'Map network drive'. In the next window, select an unused drive letter and click the Browse button. You should be able to find the drive and select it. If you can't, just use the IP address like this:
`\\192.168.1.1`
There's also an option to connect to the drive automatically when Windows starts, which is useful. Click Finish and the new drive will appear in Explorer and other programs.

Get better protection than Defender

Q Does Windows 10 Defender provide sufficient malware protection for my PC? The reason I'm asking is that if I run other programs – whether free or paid for – they always find several issues and state that they are potentially (and sometimes actually) serious enough to cause major problems.

I can't see how Defender can be sufficient if other scans tell me my PC has problems. On the other hand, are the other scanning programs I've tried wrong or being used to scare PC users into buying extra security they don't need?

To my mind, the only way both programs can be correct is if they are looking at different problems, in which case Defender can't provide sufficient cover for all issues.
Ian E Mitchell, via email

Windows Defender is good, but alternatives such as Avira are better

A Windows Defender used to be fairly poor at detecting malware but it has improved steadily over time and is now much better. In AV Comparatives' (www.av-comparatives.org) March 2016 file detection test it detected 98.1% of all malware samples. That sounds good but it was only eighth among the group tested, with some of the other antivirus programs detecting 99.8% to 99.9% of the malware thrown at them.

AV Comparatives also ran a March 2016 Real World Protection test, during which Windows Defender detected more than 95% of the malware. Again, some security programs detected 100% or close to it. False positives – when security software mistakes safe files for malware – are also a factor in these scores. Windows Defender reports more false positives than most rivals.

To sum up, Windows Defender does a good job of protecting the PC against malware but most alternatives are even better. If you want that extra bit of protection, check out Kaspersky (www .kaspersky.co.uk), Norton (uk.norton .com), Avira (www.avira.com) or AVG (www.avg.com). The first two perform brilliantly in tests and offer the best protection, while the second two are superior free options for those who would rather not pay for security tools.

Update software for Windows 10

Q Ever since updating to Windows 10, PMBVolume Watcher.exe has been sending me a System Error warning, which says "MSVCR100.dll missing". It asks me to try reinstalling the program to fix the problem. I already have eight versions of Microsoft Visual C++ loaded and it's still not working properly. Looking on the web, it appears to be a fairly common problem and I have tried one or two fixes, but they don't help.

I don't really know what Visual C++ does or which version I should have. It seemed to work OK before I upgraded to Windows 10. It's not causing me any serious problems as far as I can tell.
Richard, via email

A Visual C++ is used by programmers to create software. There are many different versions, and the right one is always provided with any software that needs it. There's no way to tell which program needs which version, but as the error message says, reinstalling the software will put the appropriate files on the hard drive.

PMBVolume Watcher.exe is a file that is associated with Sony software for digital cameras and camcorders. The software was originally called Picture Motion Browser but was replaced by PlayMemories Home. The website is at bit.ly/playmem397 and you can download the latest version of the software from there for free. It's compatible with Windows 10, but make sure you uninstall the old version first.

Brackets is a great HTML editor that shows previews in Chrome

System. Right-click Command Prompt and select More, then 'Run as administrator'. In the command prompt window, type `sfc /scannow`.

If you want to continue using Dreamweaver, it's best to subscribe to the latest version, although it costs £17 a month. Serif says WebPlus X8 works with Windows 7 and 8, and an update is available at bit.ly/serif397 that makes it more compatible with Windows 10.

There are also free website editors, such as RocketCake (bit.ly/rc397) and WebDwarf (bit.ly/webd397), that might be sufficient for your needs and are well worth trying. Brackets (brackets.io) is a great HTML editor that displays pages live in Chrome as you type, which makes it a bit like Dreamweaver's split design and code modes.

WEB BUILDING
Web building options for Windows 10

Q I've been using Adobe Dreamweaver (bit.ly/dream397) since an early version that was given away free with a computer magazine a long time ago. Since then I have upgraded to Dreamweaver CS5 Version 11, but it doesn't work with Windows 10.
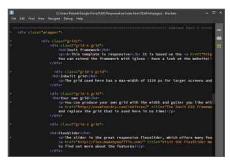
I lost the use of an A3 scanner and a Nikon 35mm scanner when I moved from XP to Windows 7, so I'm apprehensive and have ignored Microsoft's pleas to use Windows 10. Fortunately, I've heard that Photoshop CS6 (which I also use) works in Windows 10. Can you confirm this?

I bought Serif WebPlus X7 in the hope that I could use that instead of Dreamweaver CS5 but it doesn't work in the same way. I use Dreamweaver in split design and code modes, which lets me tweak the HTML code when Design mode doesn't get everything quite right.

I don't particularly like Adobe's monthly subscription charges, so is it possible to buy the latest version of Dreamweaver outright, as I did with Photoshop? If not, could you recommend a web design package I can use instead of Dreamweaver, so I can avoid incurring Adobe's exorbitant monthly fees?
Graham Davies, via email

A Dreamweaver 5 is an old program, and people have had problems using it in Windows 10. Some report that it can be fixed, although we can't confirm this. Make sure you're running the latest version by downloading and installing the 11.0.3 update (from bit.ly/update397). Then go to the Start menu and choose 'All apps' then Windows

WINDOWS 10
Fix Windows 10's update problem

Q Windows 10 won't update, and gives error code 0x800706d9, which tells me that its firewall is switched off. I have the latest version of Norton Internet Security on my laptop, which has a built-in firewall that claims to be switched on.

In previous versions of Windows, Norton would turn off Windows Firewall, as I suspect it's doing here. To get the updates to install, however, I have to switch it back on, which means I have two firewalls active. What's causing this, and is it a problem to have two firewalls running?
Robert44, via email

A It's not clear why, but some PCs won't update while Windows Firewall is off, so anyone experiencing this problem should try turning it on in the Control Panel. Most PCs have no trouble updating with other

GENERAL PC
Remove Wise System Monitor

Q I installed Wise System Monitor but I didn't like it, so I uninstalled it again. However, my computer now regularly suffers from the blue screen of death, which mentions 'wiseTDIFW64.sys' as the cause. How do I stop this happening?
Paul Grant, via email

A When you install Wise System Monitor, it adds two files to the C:\Windows folder: WiseHDInfo64.dll and WiseTDIFw64.sys. When you uninstall it, however, these files are left behind, and this can cause problems for some people. The solution is to remove the files manually.

Open Explorer, go to the C:\Windows folder and delete the two files. Although it's not essential, it may help if you also delete the Registry entries that run these files automatically on startup. They won't run if they have been deleted, but there's no point in Windows wasting time looking for them.

To do this, download Autoruns from bit.ly/runs397. Extract the files from the zip. Right-click Autoruns and select 'Run as administrator'. Find these two files on the Drivers tab, right-click them and select Delete.
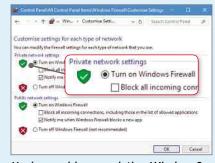

Having problems updating Windows? Try turning off the firewall

security software active, including a firewall, so it's probably a bug. It's impossible to say whether this is a problem with Windows or Norton.

People who run two firewalls, either accidentally or on purpose, don't appear to have problems, but it's best avoided. Two firewalls are not better than one, and the extra memory and processing power they use could affect your PC's performance. When you need to update Windows, turn off Norton's firewall and turn on Windows Firewall so that only one is active. You can switch them back afterwards.

This fortnight Roland has been exploring the great new features in the latest beta of Windows 10

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
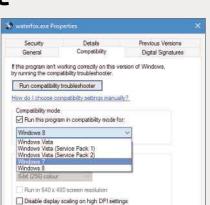
TOP TIP

GENERAL PC

Get old software working in compatibility mode

Anyone who recently upgraded from Windows XP to 7 or from Windows 7 to 10 will probably have discovered one or two old programs that no longer work with their new operating system. There are a few tricks you can try to get them running again. Find the program on the hard drive using Explorer, then right-click it and select Properties. Go to the Compatibility tab and tick 'Run this program in compatibility mode for', then choose the version of Windows the software was originally designed to run in. Also tick 'Run this program as an administrator'.

I've had mixed results with this and it doesn't always work, but when it does, it means you can run old software in your new version of Windows. If it doesn't work first time, it's worth trying

Compatibility modes can sometimes get old software working in a newer OS

again with the other versions of Windows in the menu to see if it works with any of those.

James Moloney, via email

WEBSITES
Find good free software

AlternativeTo (alternativeto.net) is a very useful site for finding software recommendations, whether you're looking for a new browser, a backup program or any other kind of software. It offers suggestions for all platforms, including Windows, Linux, Mac, iOS and Android, and you can search for an application you want to replace or browse by categories that include Videos & Movies, Security & Privacy and Office & Productivity. Other users vote for the

AlternativeTo ranks software according to popularity

applications, so you can usually be confident that its top suggestions are reliable and safe.

spiraleye and Dave_1, Web User Forums

GENERAL PC
Start your PC with Num Lock activated

When my Windows 10 PC loads, I have to type in my PIN number, but before I can do this, I have to press the Num Lock key to activate the keypad. Obviously, I could use the numbers at the top of the keyboard, but I'm in the habit of using the numerical pad.
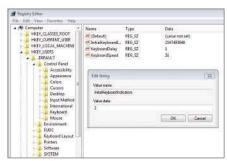
Fortunately, I've discovered a Registry tweak that starts the PC with Num Lock activated. Press Windows+R, type `regedit` into the box, then press Enter to open the Registry Editor. Navigate to the following key:

HKEY_USERS\.DEFAULT\Control Panel\Keyboard

Change the InitialKeyboardIndicators string value to '2' to activate Num Lock. It's '0' if you want all the options turned off or '1' to turn Caps Lock on. As usual, make sure you back up your Registry before making any changes in case anything does go wrong.

Simon Mellor, via email

You can change the Registry so your PC starts with Num Lock or Caps Lock on

GENERAL PC
Drag and drop maxed-out windows

Did you know that maximised windows can still be dragged and dropped? Open a window and hit the maximise button. If you then click and drag the title bar down the screen, it switches back to its original size and you can move and drop it anywhere.

Dave Bass, via email

WINDOWS 10
Use Windows 10's multiple desktops

My laptop's screen isn't very big, so it's not always possible to run two programs without the windows overlapping. This becomes a problem when you have four or five programs or windows open, as most are hidden under each other, creating a mess on the screen.

In Windows 7 I used a free utility called Desktops (bit.ly/desk397), which provided up to four virtual desktops and allowed me to spread out my apps, one to a screen, with no distractions. Since

upgrading to Windows 10, I no longer need it because the operating system has support for multiple Desktops built in. Click the Task View button, which is just to the right of the Cortana search box in the taskbar, and click the plus ('New Desktop') button in the bottom-right corner of the screen. This adds a new Desktop, and you can click a Desktop's thumbnail to switch.

Using the keyboard shortcut to switch between Desktops is even faster. Press Ctrl+Win+right arrow to switch to the next Desktop to the right, or Ctrl+Win+left arrow to switch to the desktop on the left.

Paul Moore, via email

BROWSERS
Download music and video with Firefox

In your recent cover feature about downloading anything from the web, you forgot to mention one of the easiest ways of downloading both audio and video files in Firefox, which is to use the NetVideoHunter add-on (bit.ly/netvh397). I've used the tool for many years and it even works with websites such as YouTube.
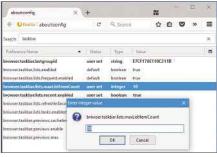
Don Harrison, via email

BROWSERS
More jumps for Firefox

I use the Firefox jump list a lot because it's useful for opening new tabs, recent pages and so on. If you pin Firefox to the taskbar (by right-clicking its icon while it's running and selecting that option), you can access the jump list simply by right-clicking the Firefox icon in the taskbar, even when it's not running.

The menu contains your seven most visited websites, but you can increase or decrease this. Open Firefox, type `about:config` into the address box and press Enter. Type `taskbar` into the search box, double-click browser.taskbar.lists.maxListItemCount and enter the number you want. If you try to make the list too big – by entering 15, for example – it stops working completely. A value of 10 works fine.

Alan Kirby, via email

Enter the number of items to show on the Firefox jump list

IOS
Stop iPhone update errors

I was trying to install the latest software update on my iPhone yesterday but each time I tried it failed, showing only a general 'software update failed' error message. I was close to pulling my hair out when it finally occurred to me that there might not be enough storage space on the phone. I deleted a lot of apps I no longer use, restarted the device and, hey presto, the update worked first time.

Check your iPhone's free space in the Storage & iCloud Usage settings

Roger, via email

TV
Stop people stealing your Netflix account

I recently read a great tip on Alphr (www.alphr.com) explaining how to remove your Netflix account from someone else's device remotely if you're worried they're using it without your permission (or because you accidentally left it logged in). The method only works from the Netflix website (www.netflix .com), so you'll need to log in from your web browser, even if you usually use the service on a tablet or Smart TV. Once you've logged in, move your cursor to your profile image and select My Account from the drop-down menu. Scroll down to Settings and select 'Sign out of all devices' before clicking Sign Out to confirm your choice. If you're worried that someone has your password, you'll need to change that too by clicking 'Change password' under Membership & Billing. Obviously, you'll have to sign back in to your account on your own devices but it's worth the trouble if you want to make sure no one else has access to your account.

Caroline, via email

ANDROID
Share photos quickly between devices

Last week, a friend asked me to send them a picture I'd taken on my phone. I was wondering what the fastest way of sharing a file between two devices that are right next to each other might be when I noticed something called Android Beam in the Share menu. Both devices

must have near-field communication (NFC) for this to work, but you can simply hold the devices next to one another when prompted, and the file is transferred instantly from one to the other. It's much easier to use than Bluetooth because you don't need to mess around with scanning for devices or approving the transfer – it only works when the two phones are in direct contact. Unlike using WhatsApp or other messenger apps, the photos are transferred at their original quality.

Alan Farmer, via email

APPS
Protect WhatsApp messages

I enjoyed reading your feature about hidden WhatsApp tools and thought I would share a tip of my own that helps you lock the app so that it's safe from prying eyes. AppLock (bit.ly/applock397) is an excellent free tool that you can use to lock a number of well-known Android apps, including WhatsApp, Gallery, Facebook and Gmail. You can even use it to hide private images and videos in a locked vault. I've used AppLock for some time and couldn't live without it now. Since upgrading to Marshmallow, AppLock also works with my phone's fingerprint-unlocking feature, which makes unlocking apps quicker and easier.
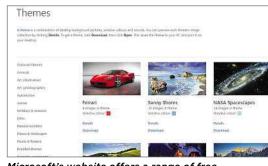
Ed Wright, via email

GENERAL PC
Get free Desktop wallpapers

Windows 10 comes with a fairly poor selection of images for Desktop backgrounds. However, a visit to Microsoft's online collection at bit.ly/ wallpapers397 offers plenty of alternatives, and if you're struggling to pick just one, you can use the Themes link to download an entire collection of images and have them appear on the Desktop as a slideshow. Once you've downloaded a wallpaper, right-click it and select 'Set as background' to make it your background image. With Themes, you double-click the .themepack file to install it. These should work with all versions of Windows from 7 onwards.

FratPark, Web User Forums

Microsoft's website offers a range of free wallpapers and themes

✚ Send your tips to webuser@dennis.co.uk — win a Web User mug!

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Readers' Helpdesk

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

APPS

Do iPad ad-blockers work?

Q Has anyone tried Kaspersky AdCleaner (bit.ly/kasp397) on an iPad? I'd like to know if it works well and how big the app is. Every day seems to bring more and more online threats, and ads that download malware are becoming increasingly common. It's a nightmare and is taking the pleasure out of browsing the web.

nutchoc, Web User Forums

Kaspersky AdCleaner blocks ads on the iPad

A I have installed Kaspersky AdCleaner and find that it works as well as most PC ad blockers. The app is only 12MB and it gives full instructions on how to enable it in Safari.

Sneakybeaky, Web User Forums

SECURITY

How safe is mobile banking?

Q How secure is banking online from my Android phone? Do I need to install an antivirus app?

sjw, Web User Forums

A If you want to do online banking from your Android phone, I'd recommend downloading the appropriate app from your bank (such as the Lloyds app at bit.ly/lloyds397) rather than doing it through the bank's website. The app will probably have fewer features but it will be better optimised for the small screen, so you're less likely to make mistakes.

If you decide to use the website on your phone, make sure you adhere to the usual precautions, such as not clicking links you've received in an email, keeping

WINDOWS 10

How do I access the BIOS from Windows 10?

Q With my old Windows 7 laptop, I used to be able to access the BIOS as it was starting up and choose to boot from a USB memory stick. Now I have a new Windows 10 laptop but I can't seem to do this any more because it starts up without giving me the option. Can anyone help?

Davje, Web User Forums

A To achieve faster boot times, many new PCs use UEFI firmware instead of the traditional BIOS. Some PCs still let you access the UEFI settings as your PC starts up but you have less time to tap the appropriate key, and you may need to look up which key to press if it isn't displayed on the screen. It's usually F1, F2, F12 or Del, but this can vary.

If you can't access the UEFI settings as your PC starts, you can still get to it from Windows. Boot into Windows 10, then press and hold the Shift key while clicking Restart from the Start menu. When your PC restarts, choose Troubleshoot, 'Advanced options', UEFI Firmware Settings and Restart.

Your PC will restart a second time, and you can then use the UEFI settings

You can access the UEFI Settings from Windows 10's Advanced Startup Options

menu to change your boot configuration, much as you did in your Windows 7 PC's BIOS. Depending on the manufacturer, your laptop may also give you the option to set up a Boot Menu that appears on startup.

Some versions of Linux won't work with Secure Boot enabled, so if you're still having problems, try disabling this from the UEFI settings menu. Secure Boot lets Windows control the boot process and is meant to prevent unwanted changes, hacking attacks and malware, so it's better to leave it active if you can. A helpful article at How-To Geek (bit.ly/bios397) provides further information on the differences between BIOS and UEFI.

Helmut and Dave_1, Web User Forums

Web User **says**: For a quicker way to boot from a USB drive (without changing your PC's UEFI settings), try selecting 'Use a device' instead of Troubleshoot after holding Shift and restarting your PC as described above.

Lloyds has mobile banking apps for iOS and Android

your browser up to date and checking that it makes a secure connection to the website (indicated by 'https' and a padlock in the address bar). Wi-Fi is notoriously

insecure no matter which device you're using, so it's best to avoid free public Wi-Fi networks. If you notice anything unusual in your bank statement, be sure to report it to the bank immediately. Some banking apps recommend that you download an antivirus app, but those usually look for malicious apps on your device, which shouldn't be a problem if you only download from the Google Play Store. If you're sensible and take the necessary precautions, there's no reason why it should be less safe than any other kind of online banking.

Techexp7 and jak, Web User Forums

Inbox

Star Email

We didn't win the spam wars to ditch email

Once again, Barry Collins has hit the nail in the head with his column in Issue 396 (bit.ly/webuser396) – 'Email isn't dead, you muppets'. I have three email addresses – with Outlook.com, Gmail and Yahoo Mail – and I check them all frequently. Yes, sometimes the only new messages are to tell me about Amazon's Deals of the Day or the latest money-saving tips from Martin Lewis at MoneySavingExpert.com, rather than personal communication of interest. But the fact is that all my email accounts provide me with an instant connection to both the online and outside worlds. And, unlike text messages, phone calls or letters, they're completely free to use.

The advantages of email are myriad. For one, you have a permanent record not only of what you've said and when you said it, but also of the reply you received. Email also gives you time to carefully compose what you say, and continue to edit and refine your words right up until you click Send – so different to the pressure to say the right thing when you're speaking on the phone. You can also decide if and when you reply to other people's messages, rather than feeling obliged to do so immediately.

Some people say that email has been ruined forever by the scourge of spam, but that simply isn't true. All the email services I use have excellent spam filters, and it is only very rarely that a spam message gets through. Yes, spam was once a problem, but we fought it, we won the war and now email is ours to use unhindered.

So, well done Barry for standing up for email and ignoring the rash fools who would have us ditch it for inferior means of communication.

Colin Howell, via email

Trouble-free installing and uninstalling

I was quite surprised to read the letter from Rodney Coleman in Issue 395 detailing his problems with Windows 10. I have installed it on five computers and they are all running correctly. I certainly don't agree with his statement not to upgrade to Windows 10 from 7 or 8 and I expect many more readers will take this advice with a large pinch of salt.

I would advise that, before downloading and installing Windows 10, you run Driver Booster (free from www.iobit.com) and perform any required updates to drivers. Also, you should go into Windows Update and install any available updates.

Another section in the magazine mentioned uninstalling apps. To do this, I use Advanced System Care (also free from www.iobit.com) and go to Tools, IObit Uninstaller, then highlight the required app (program) and select Uninstall. When this is done, choose Powerful Scan, then Delete Files.

Trevor Bunce, Middlesbrough

Get a grip about Windows 10

Having ditched another technology magazine because of the constant anti-Microsoft, anti-Windows 10 onslaught and its crazy letter writers, I sought refuge in *Web User*.

Everything was going well, with interesting articles and advice, until page 72 when Rodney Coleman upgraded two Windows 7 PCs to Windows 10 and didn't like it, so he went back to Windows 7, which then had loads of errors. Rodney's fix, unbelievably, was to buy two new PCs with Windows 10 already installed on them. Everybody knows that the way to perform a trouble-free install, whether for Windows XP, 7, 8.1 or 10, is to format the drive and do a clean install. But to buy two new PCs is mad. I've installed and upgraded PCs and laptops to Windows 10 with no problems, only very minor ones that are easily fixed.

The following letter in your Inbox page

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

section was from John Lockett who wants to pursue Microsoft under the Computer Misuse Act 1990. Get a grip, people.

Kevin Scholey, via email

Apple's support for older computers
Not everyone at Apple thinks it's sad to own a computer that's more than five years old (Page 404, Issue 395).

I was just on the phone to Apple support, when my problem was escalated to a higher mortal and we got talking about Apple products. He asked if I owned an Apple computer as well as my iPad and I mentioned that I had a MacBook Pro, but that it's broken and I can't afford to replace it at today's Apple prices. He told me he had recently purchased a refurbished MacBook for a little over £300 and went on to say: "Okay, so it's a good five or six years old but it's still going strong and runs all the software I need".

Ron O'Brien, via email

I can't get the files off my Apple iPod
I couldn't agree more with Barry's Page 404 column in Issue 395, 'No, Apple, an old PC is not a sad PC'. Why can't Apple be proud of an excellent product?

I've got an 80GB iPod with lots of music stored on it. It's beautiful, chrome and plays MP4s, but my PC doesn't recognise it, which means I can't access the files that are stored on it.

Yet it works fine. I wish I could access everything, but Windows and Apple seem to have thrown away the key! How can I access it? I rang Apple support, but they were no use whatsoever. Do any readers have any ideas about the solution please?

Roger Hammond, via email

What happens to our files when sites close?
In your excellent article 'Download Anything' in Issue 395, you mention doubts about the future of Flickr and suggest that it might be a good time to download any photos we have stored on the site. This raises the question not only of the inconvenience in having to shift images to another location but also brings into focus the reliability or longevity of well-known websites.

I use Flickr, OneDrive, Google Drive and, for my main image repository, Shoebox, where I have more than 30,000 original-size family photos stored. I pay $48 (£33) a year for the service and find it extremely useful for sharing links to albums. Should Shoebox decide to fold, then how do I shift all these images? Not so much 'how' but where to?
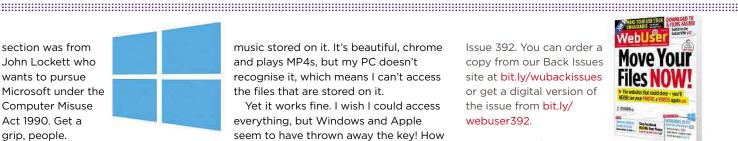
Fortunately, I also back up all my photos to a large external drive, but this does not afford the convenience of sharing that cloud-based sites provide. As they say, nothing is forever so you should use it and enjoy while you can!

Eric Page, via email

Web User **says**: We covered this very topic in our 'Move Your Files Now!' cover feature in Issue 392. You can order a copy from our Back Issues site at bit.ly/wubackissues or get a digital version of the issue from bit.ly/webuser392.

You can't beat Spotify for music choice
I thoroughly agree with all the letters in Issue 395 defending Spotify against Martin Fletcher's criticisms. I admit that I was sceptical about it myself to begin with, failing to see how streaming music could replace buying it to keep. But, be honest – how many CDs do you have that you have listened to all the way through on more than a couple of occasions? There are always a few duff tracks that you skip every time.

Spotify makes life much easier because you can cherry-pick the good stuff and ignore the songs you don't like. It's true that you miss the benefits of having a physical object to own, with cover art, sleeve notes and whatnot, but the upsides are that you save lots of space and can enjoy your favourite music wherever you go.

Also, as the other letters say, the choice of artists on Spotify is phenomenal. The high-street music megastores of old (which have all closed down) couldn't have stored a fraction of the songs and albums that Spotify puts at your fingertips (and eardrums). You're never short of something to listen to, whether it's tracks you already know or something completely new.

So my advice to Martin Fletcher, in the words of Baloo from Jungle Book, is "come on, Baggy, get with the beat!".

Moira Sanders, via email

Handicapped by slow broadband

I read with interest your article in Issue 395 about average download speeds and was flabbergasted at the speeds people are getting.

I am the steward of a golf club in Dorset, in what is admittedly a rural location between Dorchester and Weymouth on the Jurassic coast. Our telephone exchange is approximately 2.5 miles away, and is served with high-speed fibre broadband from TalkTalk. In the past 10 years, we have *never* had speeds in excess of 1.2Mbps.

TalkTalk blames BT, and BT has no plans to do anything about it. As a very busy sports club, we depend more and more on connectivity but, sadly, in our case it is just not happening. So much for government promises! Alternative options we have tried have either been unreliable or, because we need unlimited access, totally outside the realms of financial sense.

Kevin Beardsley, via email

How dare Google grab my photos!

I have just been catching up with back issues of *Web User* and found an interesting article about Google Photos (photos.google.com). Being a bit behind the times, I decided to check it out. I entered the username and password for my Gmail account as instructed and once I'd logged in, I found all my photos from my Samsung phone! I didn't ask Google to reach out and grab my pictures. How jolly dare they! Do other Gmail users have their photos uploaded without their permission? I was shocked.

Sylvie Orp, via email

Web User **says**: This sounds to us as if you have the auto-backup feature turned on for the Google Photos app, which comes pre-installed on Android phones. To fix this, go to Settings, Google, Google Photos Backup and switch Backup to Off.

What you say...

ARE YOU ANGRY ABOUT BT'S MASSIVE PRICE RISES (bit.ly/bt397)?

That hike is £1 on landline, 55p on my call package, and £2.05 on my broadband – a total of £43.20 per year. Extortionate. So yes, I'll be looking at an alternative.

Picaso

I'm not with BT but I think we are being ripped off by these companies. Broadband is now unaffordable for those of us living on a state pension.

Joe_London

Given that inflation is currently running at less than 1%, these increases are nothing short of profiteering by BT. The same applies to Sky and Virgin.

Martin James

I ditched BT seven years ago when they couldn't give me more than 1.2Mbps in Nottingham. I'm now on Virgin Media, getting 70Mbps.

Dave McAlister @dpmcalister

WHY DO YOU THINK SALES OF THE iPHONE HAVE FALLEN?

Negative stories, such as the update that 'bricked' phones. Maybe they were slightly behind the curve for introducing larger-screen phones.

Chris Armstrong

Maybe Apple has lost market share because people are holding on to phones for longer.

Leon Brown @_LeonBrown

The continuous upgrades. There's never a good enough reason to keep upgrading your phone, unless you're a mug with too much money.

Bhupindra Sard

The market is probably saturated. Apple will have to make drastic changes with iPhone 7 to stay ahead.

David P-Smith @david_p_s

A NEW SURVEY SAYS HOMEBUYERS WOULD PAY 11% EXTRA (AN AVERAGE OF £23,000) FOR A HOUSE WITH SUPER-FAST BROADBAND. WOULD YOU?

No chance. I've more sense than to waste £23K just so I can stream an HD movie or whatever.

Peter Fitzsimmons

Yes, I would never buy a house in an area of low broadband speeds. Even on holiday, I like to have Wi-Fi on tap.

Lynn Sharpe

Where did they get that figure from? I wouldn't pay anything near that just to be in an area with faster broadband.

Colin Wallace

I don't know if I'd pay that much extra, but it would be a serious consideration because I work from home and faster broadband means I can take conference calls without everything going to pot.

Lee Dodgson

WHAT'S THE 4G RECEPTION LIKE WHERE YOU LIVE?

Pretty good here on Three in the Southside of Glasgow. Top-floor flat helps when I'm at home.

Ewan Mc @sprucemooseco

I live in Caerphilly, South Wales, and I can get 4G almost anywhere.

Jason 'Boz' Bowyer

Even 3G would be nice! I'm stuck in a terrible area – East Anglia. Tin cans and some string is quicker.

Marty Alderton

I live out in the sticks in Northamptonshire, yet I get 4G, but only with EE.

Gary Olsen @Gary_Olsen

⚠️ Page 404

Barry Collins observes that customers are now paying for Amazon's dominance

Now Amazon is milking us customers

No business has done more to cultivate a cuddly, consumer-friendly reputation than Amazon. The company is the Ant and Dec of online retail: almost nobody has a bad word to say about it. Prices are low, deliveries are fast and when something does go wrong, Amazon usually resolves the problem without any fuss.

Amazon's customer service is so exemplary that we've even been convinced to turn a blind eye to some of its dodgier practices, such as tax avoidance, or forcing its warehouse staff to work such long hours that they make junior doctors look like part-timers.
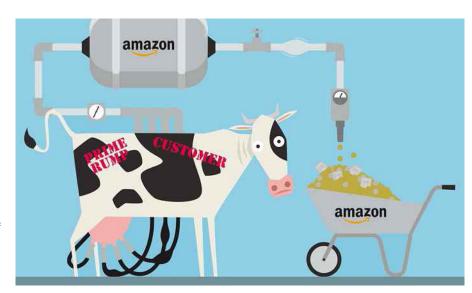
Now, however, we're seeing the first signs of Amazon turning the thumbscrews on customers, too. A few weeks ago, Amazon released the Kindle Oasis. Visit the handy Kindle comparison page on the Amazon website and it's hard to tell the difference between the Oasis and the Paperwhite, which has been on the market for some time: both have a 6in screen, both share a resolution of 300ppi, both have the same connectivity options and hold "thousands of books". Yes, the Oasis brings back physical buttons to turn pages and has a sleeker design that comes with a natty leather cover, but the main difference is the price: the cheapest Paperwhite costs £110 while the Oasis starts from £270.

I should stress that I've not yet had the chance to evaluate the Oasis first-hand, but the thick end of £300 for a single-purpose ebook reader that

> ❝ Like those shady shops you used to get on Oxford Street, we've been lulled in by the cheap goods and the doors have closed behind us ❞

shares a near identical spec to models less than half its price seems more than a bit rich. But then, where else are you going to go for an ebook reader? Most of the competition has wilted away, largely because Amazon makes it nigh-on impossible to transfer books from its store to other devices, and it kills everyone else for range and price. You'd be mad to buy anything other than a Kindle, and Amazon knows it, which is why I suspect we're going to see the cost of Kindles climb now that Amazon has an unassailable monopoly.

Kindles aren't the only product that Amazon is using to milk customers. The retailer has been aggressively pushing its Prime subscription service for the past couple of years, adding features such as music streaming and vastly expanding its range of video streams, on top of the unlimited next-day delivery that Prime originally offered. Now, it's beginning to sell certain products only to those with a Prime subscription.

Currently, the Prime-only products amount to little more than selected versions of a couple of video games and the Blu-ray version of the Oscar-winning film *Birdman*. But this is Amazon dipping its toe in the water. I'm convinced it won't be long before premium products are only offered to £79-per-year subscribers – indeed, many of the special offers on the site, such as the discounted Xbox One console I bought last year, are already Prime exclusives.

Amazon makes notoriously slim profits, if it even makes a profit at all. But now that it's got a stranglehold on ebooks and suckered millions of us into becoming paying subscribers, the time has come to plump up those profit margins. Like those shady shops you used to get on Oxford Street, we've been lulled in by the cheap goods and the doors have closed behind us. Now we're about to find out how much we're really going to pay.

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

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

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