DITCH YOUR ISP's ROUTER NOW!
Get faster Wi-Fi and banish _all_ dead spots **p20**

8 ROUTERS TESTED

WebUser

Issue 388

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YOUR PC WILL BE HACKED

And so will your router!

>>> **Unless you fix these hidden security flaws**
Page 38

PLUS

Can Your PC Run New Software? Test it – p57

USE GOOGLE OFFLINE
Maps, Drive, Gmail & more

Which Sites Are Spying On You? p44

Beware of the enemy within

You'd be forgiven for seeing the cover of this issue and thinking: "No way, *Web User* – I've got the best security software known to man, I can spot a dodgy download link with my eyes closed and I eat hackers for breakfast!". Well, that may be so but, as we reveal in our cover feature this issue, there may be nasty threats lurking on your PC that have been there since the day you bought it, put there by the manufacturers themselves, which could lead to you being hacked and having your data stolen. If that sounds melodramatic, I implore you to turn to page 38 to read the terrifying truth, discover the scandalous details and consider the chilling consequences if you don't follow our advice (now, *that's* melodramatic!).

On a separate note, I'd like to thank everyone who bought our 2014 Back Issues Disc and gave it such glowing reviews on Amazon. I'm pleased to confirm that we'll be doing another for our 2015 issues, so watch this space for details!

Robert Irvine
robert_irvine@dennis.co.uk
#webuser

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5 Things you'll learn this issue

1 How to uninstall pre-installed Windows 10 apps you don't want   **page 27**

2 How to make Chrome automatically correct any words that you misspell   **page 30**

3 How to play your favourite Android games on your Windows Desktop   **page 52**

4 How to fix a problem in Firefox that prevents you from making online purchases   **page 66**

5 How to save money and time by creating your own passport photos for free   **Page 68**

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What's New Online

Celebrate 500 years of the Royal Mail

Did you know that the Royal Mail once tested rockets to see if they could be used to deliver post, but abandoned the idea when they exploded en route? Or that it designed stamps in 1978 to commemorate Scotland winning the World Cup should it happen (it didn't – they were knocked out in the group stage)?

These and hundreds of other facts are documented on the Royal Mail's superb site to celebrate its 500th anniversary. The highlight is the gallery, which contains 500 items that bring to life the story of how the postal service has grown. You can read historically important letters, see examples of how the mail was delivered (from coach to donkey), and admire the impressive uniform of London's 'letter carriers' from 1793 (see image, far right). It's one of the best collections of artefacts we've ever seen online.

The gallery also contains some of the most significant stamps to have been published, including the first, the Penny Black, in 1840. It took another 124 years for a 'commoner' to appear on a stamp, when Shakespeare appeared next to the balcony scene from *Romeo and Juliet* (see image, top right).
500years.royalmailgroup.com

See how Microsoft 'empowers' the world

news.microsoft.com/empowerment
Despite much evidence to the contrary, Microsoft's mission isn't to pester everyone on the planet until they upgrade to Windows 10. It is, in fact, "to empower every person and every organization on the planet to achieve more". That's what Microsoft's boss Satya Nadella says on this website, which promotes how his company is using technology to improve people's lives around the world. Ignore the self-important tone and you'll find interesting reports and videos on projects such as programming 3D printers to build prosthetic arms for children and astronauts on the International Space Station using HoloLens, Microsoft's holographic headset.

Turn your phone into a Star Wars lightsaber

lightsaber .withgoogle.com
Unless you've been living in a galaxy far, far away, you'll have noticed that there's a new *Star Wars* film out. Google has certainly done its best to make you aware of the event by releasing several tools that add the Force to your browser. Its latest is a game called Lightsaber Escape that turns your phone into every Jedi Knight's favourite weapon.

Open Chrome on your PC and go to the link above – you'll see a URL that you need to type into your phone. When you do this, you'll be told to "calibrate your phone", which means holding it vertically, like you would a lightsaber. Then, on your PC, you'll see a bunch of unruly Stormtroopers on an Imperial Star Destroyer. Deflect their blasters by waving your phone around, which in turn controls the lightsaber on your PC.

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

Discover the age of your home

bit.ly/agemap388
Like many of the most interesting internet maps, this one reveals information about your local area. It illustrates the age of buildings across the UK in different colours, with grey at one end of the spectrum indicating pre-1900, and red at the other representing post-2010. Just enter your postcode in the box, then click Go.

See your street as a self-driving car would

bit.ly/drive388
The photo on the left of this screengrab shows Oxford Street. The image on the right, looking rather like an abstract painting, is how a self-driving car would 'see' the same view, representing types of objects – including roads and pedestrians – in different colours. It's all explained on SegNet, a website built by researchers at Cambridge University, which illustrates how self-driving cars classify different elements of the world. Upload a photo of where you live to see how it would look to cars of the future.

Walk the Three Peaks Challenge in Street View

With the help of Google's Street View, we can offer our own version of the Three Peaks Challenge, in which you have to climb the highest mountains in England, Scotland and Wales in 24 hours. It's called the Three Clicks Challenge, and can be accomplished in around 24 seconds. Just click bit.ly/pike388, bit.ly/nevis388 and bit.ly/snow388 to see images of Scafell Pike, Ben Nevis and Snowdonia, all captured by mountaineers wearing Google's Trekker camera backpack.

+ Use VLC Media Player on a Chromebook
bit.ly/vlc388
VLC is already hugely popular with Windows users, and it's now available for Chromebooks. Click the green 'download it now!' link under 'VLC for ChromeOS'.

Import Rdio playlists to Spotify
import.spotify.com/rdio
Before Rdio closed last year, it created a tool to export playlists to another music-streaming service: www.rdio.com/farewell. Spotify has now released an equivalent tool for importing your Rdio data.

Access Gmail in Yahoo Mail
mail.yahoo.com
Yahoo Mail now lets you add your Gmail account. In the former, click the top-right cog icon, Settings, then Accounts in the left-hand menu. Click 'add another mailbox' to add Gmail. Read more on Yahoo's blog: bit.ly/yahoo388.

Share your albums in Google Photos

photos.google.com
One of Google's best launches in 2015 was Photos, which lets you share images by sending links in emails, texts and messaging apps. Now you can create shared photo albums that other people can add their own pictures and videos to. They can't yet write comments, though hopefully this will come soon. There's more info on Google's blog: bit.ly/photos388.

📖 Need to Know

AVG angers Google with unsafe security extension

What happened?

AVG has been forced to update its Web TuneUp security tool after Google not only found vulnerabilities in the software, but also suggested that it may be breaking the terms and conditions of Google's Chrome browser.

AVG Web TuneUp (www.avg.com/web-tuneup) is a browser add-on offered by the security firm to defend users from "hidden threats" such as malware sites, which it does by checking them against AVG's own database. The browser extension can be installed separately from the Chrome Web Store, but is also included with AVG's AntiVirus software.

Back in December, Google's security team noticed that Web TuneUp was ignoring data-protection features in Chrome that led to users' personal info, including their internet history, being leaked online. Google researcher Tavis Ormandy said the security tool could even leave users open to being spied on by hackers, by revealing the contents of their email and web habits.

Google's security researchers also noted that installing the Web TuneUp extension wasn't optional, making it impossible for users to avoid it if they used AVG AntiVirus.

Google alerted AVG in mid-December, with Ormandy sending a "harsh" letter that called the Web TuneUp extension "trash". He suggested AVG overrode Chrome's security settings in order to "hijack search settings and the new tab page", adding that fixing the problem should be "your highest priority".

"This extension is so badly broken that I'm not sure whether I should be reporting it as a vulnerability, or asking the extension abuse team to investigate if it's a PUP [potentially unwanted program]," Ormandy said in his email.

AVG's first attempt to patch the leak failed, but a further update at the end of the year was more successful.

AVG Web TuneUp can be installed from the Chrome Web Store or alongside the antivirus software

How will it affect you?

If you use the AVG Web TuneUp tool, make sure you're on the most recent version. AVG said the update has automatically been sent to all users, but it's worth double-checking.

If you're looking to install AVG's Web TuneUp, the updated version of the extension is still available from the Chrome Web Store (bit.ly/tuneup388), but Google has banned AVG from automatically installing Web TuneUp through its AntiVirus software.

Even if you're not using Web TuneUp, don't assume you're safe: AVG is a well-respected firm, so it's alarming to find that its software put users at risk. That shows how hard it is to write perfect code, so be wary of extensions you install in your browser. Make sure add-ons are from trusted sources, keep them updated and remove any if you stop using them regularly. Your browser sits between you and the web and is a key piece of security. Vulnerabilities could put your data at risk.

What do we think?

This case highlights how hard it is for us to stay secure online: if we can't trust security firms, who can we trust? Errors do slip through, and AVG should be credited for not only fixing the flaw quickly, but bearing Ormandy's "harsh" words with no ill will.

On the other hand, it's not the first security problem AVG has faced. Last March, its anti-virus software was shown to have a bug that allowed hackers to meddle with built-in Windows security features. Additionally, as Ormandy noted, it appears AVG was working around Chrome's own security settings to take control of search and new tab pages – something that's surplus to providing the protection promised by Web TuneUp, but was presumably put in for data collection and marketing.

Making money from software – especially free software – isn't easy these days, but AVG would be wiser to avoid the potential security flaws of such activities and simply charge for Web TuneUp rather than risk inserting precarious holes in its own extension.

Either way, well done to Google for helping to protect its users by keeping an eye on other companies' code.

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

Microsoft will alert users to state spying

What happened?

Microsoft will start warning users if their email is being targeted by governments via hacking. The company said it will tell us if services such as Outlook email and OneDrive cloud storage are being hacked by state-level attackers, following the lead of Twitter and Google.

Previously, Microsoft alerted users if their account had been hacked, but didn't point the finger at government attackers. The company now says its customers need to be informed of such intrusions because nation-state attacks can be "more sophisticated or more sustained" than those from bog-standard criminals. Targeted users won't be told why Microsoft believes governments are behind such attacks, but simply receive a notice that evidence "reasonably" suggests it.

How will it affect you?

It's unlikely that most of us will ever receive such a message, from Microsoft or otherwise, or be told to do anything other than keep up the usual security best practices such as using up-to-date anti-virus software. However, it does show that tech firms are willing to push back against government interference.

Indeed, the Investigatory Powers Bill, currently working its way toward Parliament, includes measures that allow the government to hack individuals or require companies to offer access to someone's data – without alerting the person being targeted. Microsoft's warnings would appear to fly in the face of such plans, which will surely be welcomed by digital-rights activists who are battling to stop the bill from becoming law in its current form.

What do we think?

Microsoft is hardly the first company to warn users about state-sponsored attacks, but such a move from a well-respected and well-known firm is good news. Most of us are more likely to be hit by hackers after our banking details and the like, but that's no reason for tech firms to tolerate government interference. We look forward to the impending schism between such promises from tech firms and the government's attempts to pass surveillance laws.

Government cheats on broadband target

What happened?

The government has met its own broadband speed goal of a 2Mbps minimum across the country by offering subsidised satellite connections to anyone who can't access that speed.

It started offering the subsidies at the end of last year – its own deadline for reaching that minimum standard. According to the government, 300,000 properties did not have access to such speeds by December 2015, so it will pay for some of the cost of supplying satellite broadband – meaning it will sort of hit its target.

How will it affect you?

If you suffer from broadband slower than 2Mbps, you can apply for the subsidy, which will reduce the cost of satellite by £350. Use the government's online tool at bit.ly/check388 to check if the subsidy is available in your area. You'll have to pay the remaining installation costs and the monthly subscription fee.

If you qualify, your local authority will supply a discount code that lets you receive the subsidised satellite service from a selection of providers, which the government says will include a free dish and installation "in most cases". However, many satellite providers charge more: Europasat charges £300 for the hardware, £125 for installation and £30 for a connection fee.

What do we think?

Once again, the government has failed to meet its broadband speed target and has responded by moving the goal posts. Those living in areas with slow or non-existent broadband have always been able to get satellite connections – the new subsidies make it cheaper, which is welcome, but it isn't extending connectivity in any way. It has failed to reach its 2Mbps minimum target, and is using satellite to fill in the gap.

This isn't the first time: the government's superfast plan was supposed to reach 90% of homes by 2015. When it became clear that wouldn't be reached, the target was changed to 95% and the deadline extended to 2017.

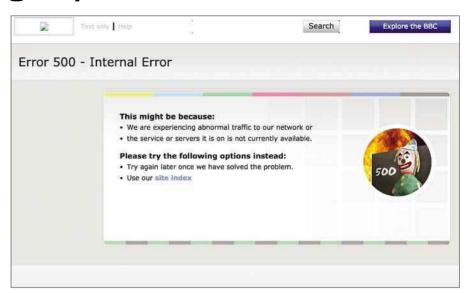# Anti-IS hacking group attacks BBC websites

What happened?

You may have noticed that BBC websites and iPlayer weren't working on the morning of New Year's Eve. Although it was first chalked up by the BBC as a technical problem, it later emerged that the outage was due to a major Distributed Denial of Service (DDoS) attack. The culprits of the hack were an anti-IS organisation going by the name of New World Hacking. A representative for New World Hacking, named Ownz, told the BBC that the group consists of 12 people who joined forces in 2012, and have since been involved in online campaigns against the Ku Klux Klan and for the #OpParis operation against IS, which aimed to report IS social media accounts following the November attacks in Paris.

Why would an anti-IS organisation want to attack the BBC? Apparently, the group intended to test the capabilities of its servers. "The reason we really targeted [the] BBC is because we wanted to see our actual server power," the group told the BBC via Twitter.

The group told the BBC that the disruption was a test run: "we didn't exactly plan to take it down for multiple hours. Our servers are quite strong".

How will it affect you?

If you were trying to access the main BBC website from around 7am on New Year's Eve, or wanted to watch a show on BBC iPlayer or tune into iPlayer Radio, you'll have been greeted by a test card error message (pictured) instead of the desired content. This may have proved highly annoying if you wanted to catch up with the *Doctor Who* Christmas special, but fortunately the sites and services were up and running again by 10.30am, although some pages and indexes took longer than normal to load.

What do we think?

We appreciate that the members of New World Hacking and similar activist groups are helpfully using their online skills in the battle against terrorism, but we hope they don't make a habit of targeting the Beeb. Clearly the popular and high-profile nature of BBC websites and services make them an obvious choice for a test of the group's server power, but the brief inconvenience caused by the outage wasn't very fair on us TV licence payers nor on the Beeb itself. We imagine that many staff at the corporation were left scratching their heads and dreading the inevitable flood of complaints from viewers!

👁 **FIRST LOOK**

Motorola Moto X Force
bit.ly/moto388

Ask people what they want most in a smartphone and two priorities inevitably come to the fore – longer battery life and a shatterproof screen. While the Moto X Force doesn't promise a revolution in battery technology, it does have what Motorola claims is a screen "guaranteed not to crack or shatter". Given the number of cracked smartphones screens we see, that's one hell of a claim. We are pleased to report that the Force's 5.4in screen survived several drops onto both wooden decking and concrete pavement when we tested it, and it even emerged unscathed after being hammered with a cricket bat! The rest of the phone feels robust, too; its aluminium frame and the nylon weave material covering the back give it a tough, military feel. It's also water-resistant, though it doesn't claim to survive complete immersion, and it had no trouble when dropped in a puddle or taken out for use in the rain.

There's no need to worry about storage, either. Available in 32GB (from £499) and 64GB (from £534) varieties, you can add more storage via microSD cards. We were initially concerned to see the Snapdragon 810 eight-core processor in the Moto X Force, because this chip is known to have caused overheating in other smartphones. However, we saw no such problems with the Moto X Force and the phone's massive 3740mAh battery managed to deliver an impressive 15 hours and 12 minutes in our video-playback test.

You'd be forgiven for thinking that the phone's robust materials would increase its size and weight. Although it certainly feels quite chunky when held, its dimensions are almost exactly the same as those of the Moto X Style and it's actually 10g lighter, weighing just 169g. All in all, whether you're interested in its shatterproof screen or not, this is a very impressive Android phone.

WHAT'S THE RUMOUR

Could pictures replace passwords on websites?

Researchers at Plymouth University have developed a numerical-based security system that could replace traditional passwords and multi-factor authentication.

GOTPass is a system developed by the Centre for Security Communication and Network Research (CSCAN) that doesn't depend on hardware or software to work. It can prevent hackers from accessing confidential information, but is easier for users to remember than traditional passwords.

To set up a GOTPass account, you create a username and draw a pattern in a 4x4 grid, similar to using an unlock pattern on a smartphone. You then choose one image from each of four different themes presented to you. When you log into a website that uses the GOTPass system, you'll be asked to enter your unique pattern and choose two images that match those you selected earlier. When this is performed correctly, you'll be given an eight-digit, randomly generated code to enter into the login screen when directed.

"In order for online security to be strong it needs to be difficult to hack, and we have demonstrated that using a combination of graphics and one-time password can achieve that," said Dr Maria Papadaki, lecturer in Network Security at Plymouth University and director of the PhD research study.

The researchers revealed that the new solution stopped 97% of hacks getting through, out of 690 attempts, showing it to be a highly effective method for preventing attacks.

One Time Password: •••••••• 53078219 Submit

LIKELIHOOD RATING
✓✓✓✓✓
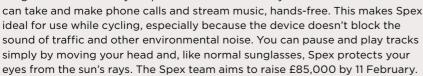
GOTPass certainly sounds like an interesting idea and it's potentially simpler and more secure than the two-factor authentication currently being used by many online services. However, its success will depend on how many websites are prepared to switch to a completely different system.

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

Spex
bit.ly/spex388 | From £75

Smartwatches are so 2015 – if you really want to look trendy this year, you need Spex. These innovative sunglasses connect to your phone via Bluetooth so you can take and make phone calls and stream music, hands-free. This makes Spex ideal for use while cycling, especially because the device doesn't block the sound of traffic and other environmental noise. You can pause and play tracks simply by moving your head and, like normal sunglasses, Spex protects your eyes from the sun's rays. The Spex team aims to raise £85,000 by 11 February.

WEBOMETER

WE LIKE...

⬆ **Twitter to ban abusive accounts**
The social network has clarified that it prohibits users from "inciting harm towards others" and that those who publish any kind of "hateful" abuse will be banned from using the site.

⬆ **LastPass adds emergency access for loved ones**
The popular password manager has introduced a new feature that lets you nominate trusted people who can request access to your account "in case something unexpected happens".

WE DON'T LIKE...

⬇ **Facebook sabotaged its own Android app**
Facebook has been accused of crashing its Android app for weeks at a time in an attempt to test its users' loyalty and patience.

⬇ **iPhone 7 to drop headphone jack**
Rumours that the new iPhone will have no 3.5mm headphone jack have strengthened following fresh leaks from the supply chain. However, the device will reportedly be sold with free wireless earbuds.

Stay Safe Online

News about the latest threats and advice from security experts

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

First JavaScript ransomware discovered

Cybercriminals have created Ransom32, a new type of 'ransomware as a service' (RAAS) that makes it possible for anyone with a Bitcoin account to download and distribute ransomware, according to a blog post on Bleeping Computer (bleepingcomputer.com). The RaaS, which is hosted on an underground Tor website, was first reported by infected users of the Bleeping Computer forums and is the first known ransomware to be written in the Javascript web language. Ransom 32's developers take 25% of all ransomware payments while the remaining 75% is sent to those who join the affiliate program via their Bitcoin account.

bit.ly/ransom388

BLEEPINGCOMPUTER

Google patches 5 critical Nexus flaws

In its January security update for Android, Google patched 12 security flaws including five that have the highest rating of 'critical'. One of the five critical bugs is a remote code-execution flaw that could allow attackers to install malware on an Android phone or tablet, while the remaining four are 'elevation of privilege' bugs that can be exploited to give hackers root access to your device. The bugs exist in versions of Android from 4.4 (KitKat) up to 6 (Marshmallow) and the fixes will be delivered to all Nexus devices by over-the-air updates. If you have another type of Android device, you'll have to wait until the updates are offered by your manufacturer or network carrier.

bit.ly/nexus388

DDoS attacks rise 180%

The frequency of distributed denial of service (DDoS) attacks in 2015 increased by 180% according to security firm Akamai. A DDoS attack is an attempt to make a website or other network service unavailable to its intended users, often by flooding it with more traffic that it can handle. Despite there being as many as 1500 DDoS attacks last year, however, the average volume and duration of attacks was reportedly down compared to 2014. Along with the attack by an 'Anti-IS Group' on the BBC website on New Year's Eve (see our news story on page 10), other major targets last year included Hacked.com, GitHub and the Sony PlayStation and Xbox Live Networks. Because IP spoofing tools are often used to make requests come from multiple sources, DDoS attacks are difficult to prevent and it can prove impossible to identify the perpetrators.

bit.ly/ddos388

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT: Cian McKenna-Charley, marketing director at Hide My Ass (www.hidemyass.com)

Q Should we be worried about smart devices spying on us?
Louis Gardner, via Twitter

A Yes, the rules around what privacy means are being rewritten in this age of smart products. The VTech hack before Christmas was just the most recent of a string of worrying cases where the security of smart tech was all too easily compromised. We've recently seen smart TVs listen to families' conversations and track their viewing habits; children's dolls hacked to say swearwords or exposed for recording children's voices; internet-connected cars being recalled after their vulnerabilities to hackers were laid bare; and even smart baby monitors hacked to play terrifying noises to infants.
    Despite the numerous

" Anything that is continuously connected to the internet is vulnerable to hacking or snooping "

benefits that the so-called 'Internet of Things' can bring to our everyday lives, anything that is continuously connected to the internet could also be vulnerable to hacking or snooping. Families need to be aware of the potential dangers that come with an increasingly connected home so they can make informed choices about the products they bring into their domestic environment.
    Over and above

encouraging families to better understand the issues, we would urge homeowners to install a VPN on their routers or purchase a VPN-enabled router. This one simple step can provide robust protection for multiple smart products and keep families safe from the prying eyes of third parties and the malicious intentions of cybercriminals.

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

⭐ Best New Websites

EVENTS

NEW

Amazon

tickets.amazon.co.uk

One of the main criticisms of ticket-selling services is that they add hidden booking fees at the end of a transaction. Amazon Tickets aims to be different by showing the total cost of a booking with the fees displayed upfront (events with no booking fee are highlighted). Browsing and buying tickets is easy, and the search engine is fast, showing the event you want, the lowest price and its location. You can also search for discounts via the calendar and pay with your Amazon account. There are niggles such as being unable to see all events in a set period, but the range of shows and the site's ease-of-use make up for them.

Our rating ★★★★★

VENUES
As well as venues in London, you can view and book tickets at regional theatres and arenas

SEATS
You can view seat maps and see the current availability of tickets for any given event

TECHNOLOGY

RELAUNCH

The Keyboard Company

keyboardco.com

A keyboard is essential to any computer setup yet most of us simply stick with the one that came with our PCs. Although yours may work fine, you're sure to want something better after you visit the relaunched website for The Keyboard Company and realise the wealth of options at your fingertips (literally!). The site neatly breaks down its huge range of keyboards according to their intended use, such as gaming or writing, and provides some very useful information about mechanical keyboards, complete with a glossary. A key part of the site is the blog, which is packed with news, reviews, competitions and videos to help inform your buying choice.

Our rating ★★★★★

CHARITY

RELAUNCH

40acts

www.40acts.org.uk

Christmas may be well behind us but it's never too late to help a good cause. For the past six years, 40acts – created by the Christian charity Stewardship – has been encouraging people to take up 40 challenges during Lent. The revamped website is packed with goodies to help you make the most of your commitments with downloadable posters, flyers and videos to spread the word. The challenges range from letting someone into a queue to giving a street cleaner a chocolate bar, and are categorised by how long they'll take or how much they'll cost. It's a lovely, altruistic idea.

Our rating ★★★★☆

Reviews by David Crookes

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

SEARCH
The search results display almost instantly, letting you speedily see if an event is listed

INFO
You can see precisely where an event is taking place and view directions to the venue

NEWS

RELAUNCH

The Yorkshire Post
www.yorkshirepost.co.uk

Ey up! The *Yorkshire Post* may have been around since 1866 but it's certainly keeping up with the times. As well as a cleaner layout, its refreshed site offers four new sections, which cover local heritage, rural living, ideas for going out and technology. There's also a champion food and drink section that's filled to the brim with appetising treats and restaurant reviews. It's strongly reminiscent of the recent revamp of *The Scotsman* (owned by the same company and which we reviewed in Issue 378), showcasing a modern Yorkshire that's well worth checking out.

Our rating ★★★★☆

SHOPPING

RELAUNCH

Habitat
www.habitat.co.uk

The designers of Habitat's spruced-up online home have paid a lot of attention to presentation and on improving the navigation, so you can now breeze through the sections to find categories of furniture. The attractive product pages feature clear descriptions and delivery details, and high-quality photos and videos. There are also care instructions and fabric samples available for some items. We adore the Inspiration section for ideas you can implement in your own home, and enjoyed reading the blog, which thoughtfully explains how the classic designs were created.

Our rating ★★★★☆

TECHNOLOGY

RELAUNCH

Apple ID
appleid.apple.com

There's never going to be anything that exciting about a site that simply lets you manage your identification settings, but this redesign for Apple ID is still welcome. You can now see all the information Apple holds about you and easily edit your ID, password, security questions and payment details. You can also view details about your devices including the IMEI and serial numbers. It's definitely worth taking the opportunity to set up two-factor verification to add an extra security level to your account, and to consider changing your password to stay one step ahead of hackers.

Our rating ★★★☆☆ ➔

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

★ Best New Websites

RELAUNCH

ACTIVITIES

Toad
www.toad.uk.com

If you're looking for a way to shake off those Christmas excesses, check out TOAD (The Online Activity Directory) to browse hundreds of ideas for things to do, from stag parties to family days out and team-building exercises for businesses. You can't book directly through the site, but there are lots of interesting suggestions ranging from archery to hovercraft racing, and the entries include detailed contact info and maps. We found searching by location to be frustrating, with some vague results (we didn't feel an adventure playground was worth the 197-mile road trip!), but for inspiration, it's worth a look.

Our rating	★★★☆☆

RELAUNCH

TELEVISION

BBC America
www.bbcamerica.com

BBC iPlayer never made it to America because US pay-TV operators objected. But this relaunched website goes some way to bridging the gap, by doing a sterling job of promoting the Beeb's best and most popular programmes, including *Luther, Doctor Who, The Last Kingdom* and *Top Gear*, while offering trailers and catch-up services. You need an account with a US cable or satellite-TV provider to watch full episodes, and the site has dropped other elements that proved popular with UK visitors, such as quizzes and star interviews, but there are still some programme blogs and videos to keep you entertained.

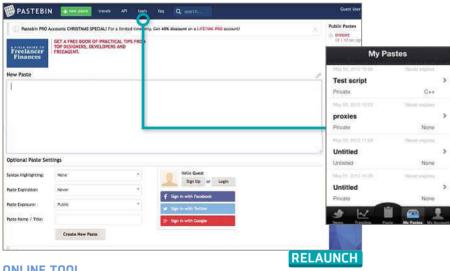| Our rating	★★★☆☆

RELAUNCH

DEATH

Once I've Gone
onceivegone.com

Most of us, understandably, try not to think about our own death, but this site sets out to provide some solace for your loved ones by letting you upload videos and write messages that can then be kept securely locked in a digital vault and watched or read after you die. You can nominate an executor for your will, write a bucket list, store notes and use any of the services provided by the site's partners, from will writing to equity release. It's not a new idea by any means but it's well implemented. Just remember that you may outlive the website so make sure you have backups of your information elsewhere.

Our rating	★★★★☆

RELAUNCH

ONLINE TOOL

Pastebin
pastebin.com

Pastebin allows you to store text online for easy sharing but it wasn't previously much good on mobile devices, particularly for computer programmers and web designers looking to share long strings of code. That's now changed. This overhaul may not look substantial – the site still has a large input box, a few editing options and couple of adverts – but it now looks and works better on mobile devices. Just as before, you can highlight text and set an expiration date for your pasted text, from 10 minutes to a month. Text is made public by default but if you become a member, you can opt for 'private pasting'. If you're sharing huge amounts of text, Pastebin is pretty unbeatable.

Our rating	★★★★☆

RELAUNCH

FILM

War of 1996
www.warof1996.com

Remember when actor Will Smith punched an alien in the face and uttered the immortal line, "Welcome to Earth". It happened in the supremely silly but very watchable *Independence Day* – a staggering 20 years ago. Smith doesn't appear in this summer's sequel to the film, but the aliens have returned and this official website gives you a glimpse of the carnage to come. As slick as it is, the site – which is soundtracked by the trailer's haunting tune and dramatic voiceover – only contains the film's first trailer, a few social media links and a chance to sign up for updates, but it's a tantalising taste of what's to come.

Our rating	★★★☆☆

Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Text editor for bloggers

Most blogging tools let you write straight into their software, but if you like to carefully craft your writing offline before you're ready to upload, Open Live Writer (openlivewriter.org) is a great tool for the job. It's a free, open-source text editor that's been developed from Microsoft's Windows Live Writer. It's compatible with WordPress, Blogger, TypePad, Moveable Type and more. See Best Free Software on page 28 for more about this tool.

Check your site with 1&1

Web host 1&1 has a handy automated site-checking tool available at www.1and1.co.uk/website-checker. Simply type your site's address into the box and click the 'Check website' button. The service will check your site for problems and offer 1&1 services that can help you fix them, though

you can also use the information to find your own solutions. The potential problems are split into four categories ('Be present online', 'Get found', 'Be secure' and 'Be fast') with each given a score out of 100, so you can see which areas of your site need the most immediate attention.

Deal of the Fortnight

Web hosting service Neolo (www.neolo.com) is offering its Plan 0 web-hosting package, aimed at those creating static sites, for just 90p per month.

Web-building Helpdesk

THIS ISSUE'S EXPERT: Dan Baker, Webmaster, Xara (www.xara.com)

Q Should I make my website more secure by converting to https? Will external links from other sites still work if I do this?
Matthew Bayliss, via email

A The short answer to the first question is 'yes'. Making your website secure is seen as a good thing by many sources, including search engines, and Google announced last year that it would be boosting rankings for websites served over https (bit.ly/secure388).

External links from other sites may be affected if your web server isn't correctly configured to redirect links from the old http website to the new https site, but your hosting provider should be able to help make sure this doesn't become a problem.

MINI WORKSHOP | Batch-compress images to keep your website fast
JPEGmicro: bit.ly/micro388 | 🕐 5 mins | 🪟 Windows 7, 8, 10

It's important to compress your images to make sure your website loads quickly. This JPEG batch-compression tool can shrink lots of files in just a few clicks.
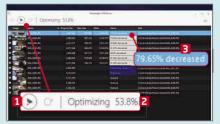
1 Click the '+' button **1** to select the photos you want to compress, or drag and drop them from an Explorer window. If you want your files to display thumbnails, **2** click the menu button in the top-right corner and tick the option for Show Thumbnail. **3**

2 To make sure you're not overwriting your originals, click the drop-down menu next to Save To and choose Select Directory. **1** You can also give the file names a new Prefix or Suffix **2** if you wish. Tick Lossy Compression Mode **3** to make the best file-size savings. Leave the slider at 75. **4** You can adjust this later if your files need to be compressed further.

3 Click the Optimize button **1** to queue up the images for optimising. The progress is displayed **2** and you can see how much each file has been compressed. **3** Check your photos and make sure you're happy with the level of compression. You can always do it again, changing the slider to make your files smaller or improve the quality, as required.

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

Ditch your ISP router

Your ISP may provide you with a free router but it's unlikely to be a top-of-the-range model. **Andy Shaw** reviews eight routers that offer faster speeds and extra tools

The router you got with your broadband connection may have seemed like a brilliant freebie when you were getting your Wi-Fi network up and running, but if you want the fastest speeds and useful extra tools, you're going to have to upgrade it.

Here, we've tested eight routers that improve on the speeds and tools available from the latest ISP models.

HOW WE TESTED

We tested each of the routers at close and long range on both 802.11ac and 802.11n networks, using both 2.4GHz and 5GHz channels. The long-range test involved a brick wall separating the test PC from the router. Files were transferred from a PC with an SSD drive, to avoid bottlenecks, and we used a top-of-the-range network adapter to push the routers to their limits.

Netgear Nighthawk X4S | £259.99 | www.currys.co.uk

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

VERDICT
★★★★★

The Netgear Nighthawk X4S is pushing the boundaries of what an advanced broadband modem/router can do. It has a range of cutting-edge features with jargon-heavy names such as MU-MIMO (multi-user multiple-input and multiple-output) and dual-band quad-stream.

Some of the benefits you'll get from this aren't even available yet – there isn't a Wi-Fi adapter on sale that can fully utilise all its state-of-the-art features. However, they'll appear soon and, when they do, you'll know you've got a router capable of using them. We tested the device with an AC1900, 3x3 stream Wi-Fi card, which is one of the fastest currently available. It can't test the X4S to its limits but it gives a good idea of what it's capable of.

Close-range speeds on 5GHz 802.11ac were fast but there were six models in this test that were faster. It was better on the 2.4GHz network, where it came third and fourth. Long-range results on 802.11ac were only average, but switching to 802.11n put it into second place.

It has four Gigabit Ethernet ports and an Ethernet WAN port, and it's one of

the few models available with a built-in ADSL and VDSL modem. This is why it wins our Gold Award – because it will work with any type of internet connection (unless your ISP insists that only its own hardware can be connected to your phone socket).

The web interface hasn't changed since the first Nighthawk was launched, which is unfortunate because it's starting to look clunky next to Linksys' and Synology's more polished interfaces. It still has all the settings you'd expect, it's just not as easy to tweak them as it is with some of the other models.

There's no doubt that the Nighthawk is expensive, but the cost covers a whole range of tools and capabilities that will benefit you now and in the future. If you change to another type of internet connection or you accumulate devices with advanced 802.11ac technologies, this router should be a safe bet for a few years to come.

WebUser GOLD AWARD

No matter what type of internet connection you have, now or in the future, the Netgear Nighthawk X4S will be able to boost your network. It's the most expensive router in this Group Test but, if you're prepared to pay for its superior technology, you'll find it's built to last. You won't have to fork out for any further upgrades to your network, either, at least until the next 802.11 standards are launched.

Synology RT1900ac | £115.62
www.morecomputers.com

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

WebUser SILVER AWARD

Synology produces some of the best NAS drives around, but the RT1900ac is the company's first wireless router. There's little to separate its specifications from the other router-only models we've reviewed here, but its wonderful user interface stands head and shoulders above the competition. It works like an operating system, showing separate windows for different functions and shortcuts to useful options. Even the setup wizard is the best we've seen. The system's apparent simplicity hides a lot of power and includes additional app-like downloads that provide extra tools.

Wireless performance was very good at close range, coming third overall in our 802.11ac test. At a distance, it was best over 802.11n on the 2.4GHz network, coming fourth, which is good news if you own older devices that don't yet have 802.11ac connections.

VERDICT ★★★★★
This comes a very close second to the Nighthawk. There's no broadband modem but this is balanced by ease and quality of use, and value for money. It performed well and its brilliant user interface is second to none.

Asus RT-AC3200 | £229
www.currys.co.uk

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

WebUser BRONZE AWARD

The RT-AC3200 is built for speed. It has six movable antennae and can run two concurrent 5GHz 802.11ac networks. It also has a Smart Connect tool that automatically steers devices to one of its three networks, depending on which one is offering the best throughput (you have to set them all to the same SSID to benefit from this, though).

Finding and configuring its tools is a breeze thanks to the simple web interface, which has a straightforward layout that uses graphs and widgets to inform you of its status.

It performed brilliantly in our tests. At close range, the Asus RT came top of our tables for the 802.11ac 5GHz and 802.11n 2.4GHz tests. It also performed well at long range, proving to be joint fastest in our 802.11n 2.4GHz test and third in the 802.11ac 5GHz test.

VERDICT ★★★★☆
The Asus RT-AC3200 is a fast router with an easy-to-use interface. It performed better than the Synology model, but it's twice as expensive. However, if you want one of the fastest models in our test, it's worth the extra money.

TP-Link Archer C2600 | £144.99
www.box.co.uk | ★★★★☆

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

TP-Link's Archer C2600 is sleek and compact. Like the Netgear Nighthawk, it can handle four streams at a time. However, there's no built-in broadband modem so you may need to connect it to your existing router. It came second only to the Asus in our 5GHz 802.11ac and 2.4GHz 802.11n tests. At longer range, it came fourth in the tests for 802.11ac and 802.11n at 5GHz.

VERDICT
A cost-effective choice with impressive speeds but no built-in modem.

Linksys WRT1900ACS | £229.99
www.currys.co.uk | ★★★☆☆

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

The Linksys WRT1900ACS has the same colour scheme and design as Linksys's classic WRT54G router. Its modern user interface is almost (but not quite) as good as Synology's.

Its speeds didn't match the fastest routers on test, though. It struggled into second from last place in our close-range 802.11ac test, but was better with 802.11n. Results were slightly better at long range.

VERDICT
This Linksys router is easy to set up and use but we found its performance disappointing, particularly on the 802.11ac network.

BEST OF THE REST

D-Link DIR-890L | £249.98
www.dabs.com | ★★★☆☆

D-Link has done some work on its user interface and it's now much better than it was on previous D-Link models we've tested, though it's still not up to Synology's standard. It produced a couple of impressive speed results in our long-range tests but its performance was disappointing overall at close range.
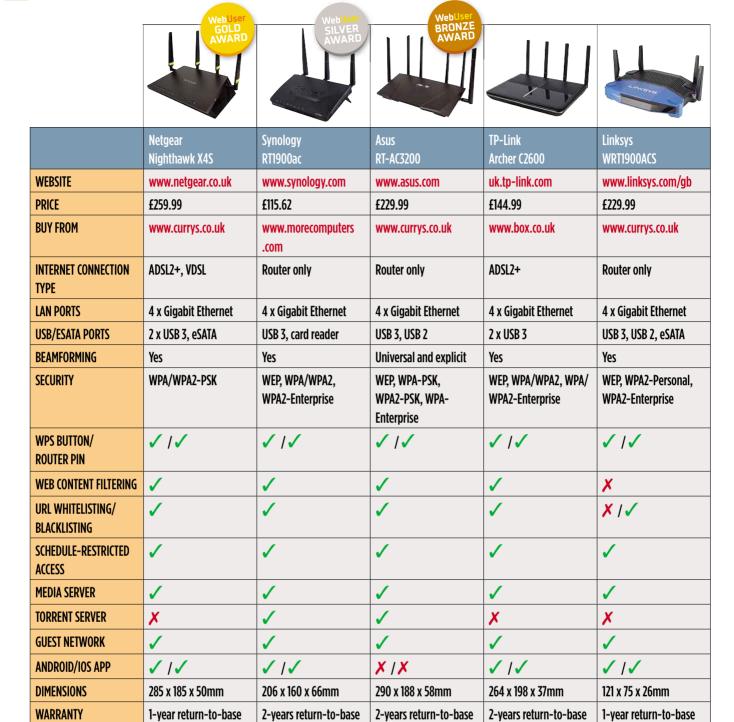
Draytek Vigor 2860ac | £249.98
www.dabs.com | ★★★☆☆

Although this is one of the few routers to come with an integrated DSL modem, its tools are aimed at business rather than home users. Its results in our tests were disappointing, frequently coming last, and none of its results were faster than average. For the money, the Netgear Nighthawk is a better buy.

ZyXEL Armor Z1 | £164.73
www.dabs.com | ★★☆☆☆

ZyXEL's Armor Z1 has an attractive price but it doesn't provide enough performance or ease of use to make it good value for money. It performed at below average levels in our speed tests and we found some important settings inconveniently hidden away in an advanced menu. We think Synology's router is much better value for money.

	Netgear Nighthawk X4S	Synology RT1900ac	Asus RT-AC3200	TP-Link Archer C2600	Linksys WRT1900ACS
WEBSITE	www.netgear.co.uk	www.synology.com	www.asus.com	uk.tp-link.com	www.linksys.com/gb
PRICE	£259.99	£115.62	£229.99	£144.99	£229.99
BUY FROM	www.currys.co.uk	www.morecomputers.com	www.currys.co.uk	www.box.co.uk	www.currys.co.uk
INTERNET CONNECTION TYPE	ADSL2+, VDSL	Router only	Router only	ADSL2+	Router only
LAN PORTS	4 x Gigabit Ethernet	4 x Gigabit Ethernet	4 x Gigabit Ethernet	4 x Gigabit Ethernet	4 x Gigabit Ethernet
USB/ESATA PORTS	2 x USB 3, eSATA	USB 3, card reader	USB 3, USB 2	2 x USB 3	USB 3, USB 2, eSATA
BEAMFORMING	Yes	Yes	Universal and explicit	Yes	Yes
SECURITY	WPA/WPA2-PSK	WEP, WPA/WPA2, WPA2-Enterprise	WEP, WPA-PSK, WPA2-PSK, WPA-Enterprise	WEP, WPA/WPA2, WPA/WPA2-Enterprise	WEP, WPA2-Personal, WPA2-Enterprise
WPS BUTTON/ ROUTER PIN	✓ / ✓	✓ / ✓	✓ / ✓	✓ / ✓	✓ / ✓
WEB CONTENT FILTERING	✓	✓	✓	✓	✗
URL WHITELISTING/ BLACKLISTING	✓	✓	✓	✓	✗ / ✓
SCHEDULE-RESTRICTED ACCESS	✓	✓	✓	✓	✓
MEDIA SERVER	✓	✓	✓	✓	✓
TORRENT SERVER	✗	✓	✓	✗	✗
GUEST NETWORK	✓	✓	✓	✓	✓
ANDROID/IOS APP	✓ / ✓	✓ / ✓	✗ / ✗	✓ / ✓	✓ / ✓
DIMENSIONS	285 x 185 x 50mm	206 x 160 x 66mm	290 x 188 x 58mm	264 x 198 x 37mm	121 x 75 x 26mm
WARRANTY	1-year return-to-base	2-years return-to-base	2-years return-to-base	2-years return-to-base	1-year return-to-base

OUR VERDICT

Our Gold Award goes to the Netgear Nighthawk X4S. It's the most expensive in our test, but it has lots of features to justify its price, including a broadband modem for connecting to any type of internet service. It even outdoes the specs for current Wi-fi adapters, making it truly future-proof.

If you don't want to spend as much and are happy to pass your existing connection through your ISP's router, Synology's debut is wonderful and wins our Silver Award. The RT1900ac has a fantastic user interface and good performance, too.

We gave our Bronze Award to the Asus RT-AC3200. If it's pure performance you're after, this router topped more of our speed tests than any other. It's expensive, particularly compared to the Synology model, but is worth it if you want a superfast Wi-fi network. ■

NEXT ISSUE: Give your network another boost with our top tips for HomePlugs

Web User's Best Buys

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

HARDWARE

WIRELESS ROUTER

Netgear Nighthawk X4S

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

NEW!

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 10/100/1000Mbps Gigabit Ethernet ports ■ Dual-core 1.4GHz processor ■ 285 x 185 x 50mm ■ One-year return-to-base warranty

BUDGET TABLET

Apple iPad Mini 2

£219 from **www.apple.com/uk**
Date tested: November 2015

The iPad Mini 2 has a superb, slim-but-solid design and a good-quality screen. Its performance keeps up with the latest tablets, and the battery life is also impressive.

KEY SPECS
7.9in screen ■ 2,048 x 1,536 pixels resolution ■ 1.3GHz Apple A7 processor ■ 16GB storage ■ 5-megapixel rear camera, 1.2-megapixel front camera ■ 802.11n dual-band Wi-Fi ■ iOS 9 ■ 200 x 135 x 7.5mm ■ 331g

WINDOWS 10 LAPTOP

Asus EeeBook X205TA

£201 from **www.tesco.com**
Date tested: October 2015

The Asus EeeBook X205TA is a netbook-style laptop with a great build quality and battery life. The price is terrific, too, but you might find it a bit small and cramped because it's been squeezed into such a tiny case.

KEY SPECS
Quad-core 1.33GHz Intel Atom Z3735F processor ■ 2GB of memory ■ 32GB eMMC storage ■ 11.6in non-touchscreen ■ 1,366 x 768 pixels resolution ■ 2 x USB 2 ports ■ 802.11n Wi-Fi ■ 286 x 193 x 18mm ■ 980g ■ One-year collect and return

WINDOWS 10 PC

Chillblast Fusion Centurion

£699 from **www.chillblast.com**
Date tested: September 2015

The Chillblast Fusion Centurion provides the latest, most powerful components for a reasonable price. It was the fastest PC we tested and can be easily upgraded.

KEY SPECS
Quad-core 3.5GHz i5-6600K processor ■ 8GB of memory ■ 1TB hard drive ■ 120GB SSD ■ 1 x USB 3.1, 1 x USB 3 Type-C, 3 x USB 4, 4 x USB 2 ■ Gigabit Ethernet ■ 465 x 430 x 192mm ■ Three-year collect-and-return warranty inc 2-years parts

SMARTWATCH

LG Watch Urbane

£224 from **www.amazon.co.uk**
Date tested: November 2015

The LG Watch Urbane looks good, is simple to operate and has a great screen (if you stay out of direct sunlight). It doesn't have the full range of fitness tools, but it's ideal as a smartphone companion. It won't pair with an iPhone, though.

KEY SPECS
Android Wear 5.1 ■ Gorilla Glass 3 ■ 1.3in circular display ■ 320 x 320 pixels resolution ■ 512MB memory ■ 4GB storage ■ Bluetooth ■ 52 x 46 x 11mm ■ 67g ■ One-year return-to-base warranty

MULTI-DEVICE CHARGER

Griffin PowerDock 5

£79.95 from **www.johnlewis.com**
Date tested: September 2015

Griffin's PowerDock 5 lets you charge a whole household's worth of mobile devices at one time, supplying plenty of power across all five of its USB ports. It doesn't matter whether you've got five tablets or five phones, they'll all sit nicely in this dock, although you'll need to make sure that the cables don't get tangled.

KEY SPECS
Supports five USB devices ■ 2.1A output on each port ■ 200 x 130 x 80mm ■ 340g

🛒 Web User's Best Buys

WI-FI EXTENDER

Netgear Nighthawk AC1900 Extender

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

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

KEY SPECS

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

NETWORK CAMERA

Y-cam HomeMonitor HD

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

Although the HomeMonitor HD isn't the cheapest camera, it'll save you money in the long run if you want to save captured motion-detected footage online. It offers a unique online-storage option and supports a wide range of devices.

KEY SPECS

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

MULTIROOM SPEAKER

Sonos Play:1

£169 from **www.currys.co.uk**
Date tested: March 2015

The Sonos Play:1 offers impressive audio quality and comes with excellent software and great apps that provide seamless integration with music services. If you want a speaker to use as a starting point for a home entertainment system, the Play:1 comes highly recommended.

KEY SPECS

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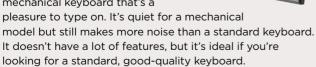
SSD

Samsung 850 Pro 256GB

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

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

KEY SPECS

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

KEYBOARD

Cherry MX-Board 3.0

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

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

KEY SPECS

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

NAS DRIVE

Asustor AS-202TE

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

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

KEY SPECS

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

SOFTWARE & SERVICES

WEB DESIGN

Xara Web Designer 11 Premium

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

Xara Web Designer 11 is a great tool for anyone who wants a good-looking website without having to use HTML or CSS code. The interface is easy to use and the software includes all the tools you need to create flexible sites that change depending on the size of the screen.

KEY FEATURES

90+ templates ■ WYSIWYG design ■ Create responsive websites ■ Embed codes ■ Add HTML ■ Online editing ■ FTP uploader ■ Hosting (requires registration) ■ Browser preview (Chrome, Firefox, IE, Opera)

INTERNET SECURITY

Kaspersky Internet Security 2016

£19.99 from **bit.ly/kaspoffer2016**
Date tested: June 2015

Kaspersky Internet Security performed near-perfectly throughout our tests last year, with only one unwanted program slipping through. Our sister title *Computeractive* is selling it at the reader-offer price of £19.99 (full price £39.99). Click the link above.
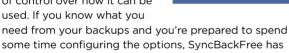
KEY FEATURES

Anti-virus and firewall tools ■ Protects online shopping and banking ■ Identity and privacy tools ■ Dangerous-website alerts ■ Advanced parental control ■ Licences for one, three and five PCs; for one or two years, or pay monthly ■ Multi-Device version ■ Compatible with Windows 10

BACKUP AND SYNC

SyncBackFree

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

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

KEY FEATURES

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

PHOTO EDITING

Adobe Photoshop Elements 13

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

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

KEY FEATURES

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

VIDEO EDITING

Adobe Premiere Elements 13

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

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

KEY FEATURES

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

ONLINE STORAGE

Google Drive

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

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

KEY FEATURES

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

Best Free Software

MEDIA PLAYER
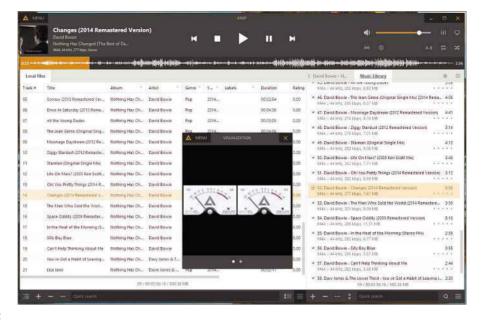
AIMP 4

www.aimp.ru

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

File size: 8.2MB

Most media players can handle both audio and video, but AIMP focuses purely on the former. It can open all the common music formats, including AAC, APE, FLAC, MIDI, MP3, OGG, WAV and WMA, and plenty of others you've probably never heard of.

With version 4, the developers have completely redesigned the interface to make the software look much more modern, which means it fits right in with Windows 10. Right-click anywhere in the program to bring up a context menu that looks very similar to the one found in Microsoft's new operating system. This overhauled design has menus popping up in multiple locations, so it takes a while to master, but the main features are all placed front and centre so it's easy to get started.

Your music libraries appear directly in the program and you can add files and folders simply by dragging and dropping them to the interface. New folders appear in tabs, so you can easily switch between them. Support for files stored on networked drives has been improved, and it's easier to find misplaced files and delete references to non-existent ones. Additionally, if you have a large music library, you can now scroll through it faster by holding down Ctrl.

The plug-in side of AIMP has always been very good, and this has also been updated, with a selection of plug-ins now included by default. These include a simple scheduler that lets you set a sleep timer.

Among the most useful built-in features you'll find is a Tag Editor for keeping your tracks correctly labelled and an audio converter. Playlist support has been enhanced in this new version, too.

MINI WORKSHOP | Manage and play music in AIMP 4

1 To get started in AIMP, drag and drop some tracks or a folder of music to the program window. Your selection will appear in a tab **1** on the right-hand side of the interface. Hit Play **2** to begin listening to the first song. Artwork (if found) will appear in the top-left corner along with track details. **3**

2 Add some more music folders and they will appear in other tabs alongside the first. **1** Drag tracks from the right-hand panel to the centre to build up a playlist. **2** When a song you particularly like starts playing, click the star icon **3** to add it to your favourites. **4**

3 Clicking the Menu button **1** brings up options to open files and folders **2** and access the Scheduler **3** (including the sleep timer). You'll find the Tag Editor and Audio Converter under Utilities. **4** You can configure various program settings under Preferences. **5** There are a lot of options available to tweak.

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

DISC-AUTHORING TOOL
Ashampoo Burning Studio 2016
bit.ly/ashampoo388
Min requirements: Windows Vista/7/8+/10 **File size:** 66.7MB

This cut-down version of the paid-for Burning Studio 16 is a capable disc-authoring tool that can write data to CDs, DVDs and Blu-rays; create (and rip) audio discs; make and burn disc images; and print covers and labels. The new version offers better compatibility with Windows 10; quick access to features via jump lists; and support for the OPE and APE audio formats. The interface now works better on high-resolution screens, too.

APP UNINSTALLER
Windows X App Remover
www.f-tools.eu
Min requirements: Windows 8+/10
File size: 163KB

The newest versions of Windows come with a large selection of apps pre-installed, some of which you might never use. This tiny tool lets you quickly remove any unwanted apps (including ones you've installed yourself) to free up space. All you need to do is click the Get Apps button to scan your system, select the apps you don't require and click Remove.

IMAGE EDITOR
ImageMagick 7
www.imagemagick.org
Min requirements: Windows XP/ Vista/7/8+/10, Mac OS X or Linux
File size: 18.7MB

The open-source ImageMagick lets you create, edit, and convert images. It recognises more than 200 different formats and can transform photos in various ways, including cropping, chopping, flipping, flopping and rotating. Changes in the latest version include improvements to the design and numerous tweaks throughout to boost performance.

New Windows Apps

Action Note
bit.ly/actionnote388
Min requirements: Windows 8+/10
File size: 3.7MB
This app is a note-taking tool with a difference. It integrates with the Windows 10 Action Center to make it easier to access saved notes. You can attach images and sync content.

Toon Clash Chess
bit.ly/toonclash388
Min requirements: Windows 8+/10
File size: 28.8MB
This attractive chess game has a 3D fantasy setting and three different boards to play on. The free version only lets you play against the computer, but you can upgrade to Pro to play against human opponents.

Figure
bit.ly/figure388
Min requirements: Windows 8+/10
File size: 37MB
The popular iOS music-making app is now available for Windows 8+ and 10. It lets you create songs in seconds and share, remix and collaborate with other users around the world.

PARTITION MANAGER
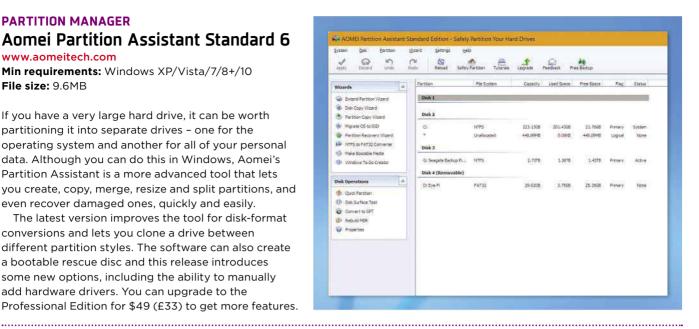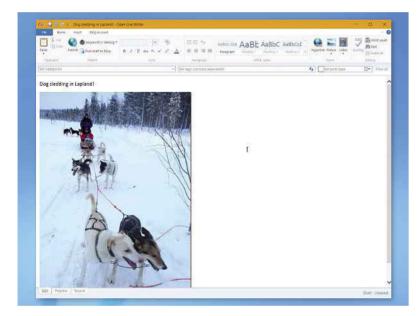# Aomei Partition Assistant Standard 6
www.aomeitech.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 9.6MB

If you have a very large hard drive, it can be worth partitioning it into separate drives – one for the operating system and another for all of your personal data. Although you can do this in Windows, Aomei's Partition Assistant is a more advanced tool that lets you create, copy, merge, resize and split partitions, and even recover damaged ones, quickly and easily.

The latest version improves the tool for disk-format conversions and lets you clone a drive between different partition styles. The software can also create a bootable rescue disc and this release introduces some new options, including the ability to manually add hardware drivers. You can upgrade to the Professional Edition for $49 (£33) to get more features.

BLOGGING TOOL
Open Live Writer
openlivewriter.org
Min requirements: Windows XP/Vista/7/8+/10
File size: 4.6MB

Windows Live Writer is a blog-publishing tool from Microsoft that was originally released as part of the Windows Live range of products. The program hasn't been updated in years, but Open Live Writer has been created to revive it, so you can blog from your Desktop. It's an open-source branch of Live Writer that offers many of the same features, including the ability to create posts and add videos, maps and so on, then publish them to your own blog. It supports all the major platforms including WordPress, SharePoint, Blogger and TypePad. Due to licensing issues, some of the features found in Windows Live Writer aren't currently available, but it's still a useful tool.
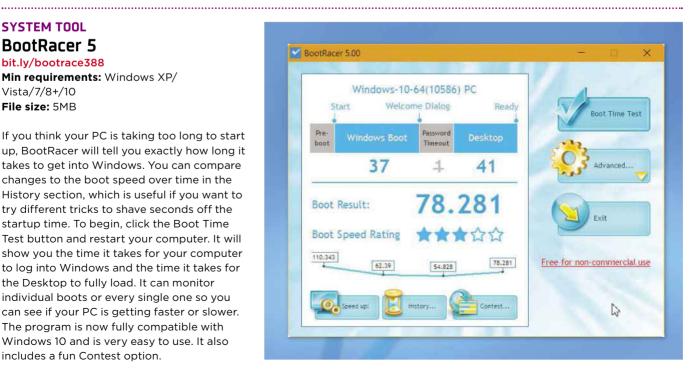
SYSTEM TOOL
BootRacer 5
bit.ly/bootrace388
Min requirements: Windows XP/Vista/7/8+/10
File size: 5MB

If you think your PC is taking too long to start up, BootRacer will tell you exactly how long it takes to get into Windows. You can compare changes to the boot speed over time in the History section, which is useful if you want to try different tricks to shave seconds off the startup time. To begin, click the Boot Time Test button and restart your computer. It will show you the time it takes for your computer to log into Windows and the time it takes for the Desktop to fully load. It can monitor individual boots or every single one so you can see if your PC is getting faster or slower. The program is now fully compatible with Windows 10 and is very easy to use. It also includes a fun Contest option.

GAME
Raik
bit.ly/raik388
Min requirements: Windows XP/
Vista/7/8+/10 **File size:** 2MB

This text adventure has been written in both English and Scots. You can switch between languages (there's a link to Scots word translations) and navigate through the story by clicking the links. The publisher says the tale features "kelpies, lost keys, mysteriously lit underground caverns, boring work, panic attacks and red hair". The game runs in your browser.

❌ **Don't install...**

Boom
perkele.cc
Min requirements:
Windows 7/8+/10
File size:

We're all for simple software, especially when it's a light alternative to the bloated likes of iTunes, but Boom is so basic that it feels half-baked. In fairness, it's designed for "casual computer users who do not wish to spend time figuring out more sophisticated software", but the lack of features – including support for audio CDs – is frustrating.

...Install this instead ✅

MusicBee
getmusicbee.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 15.6MB

There's nothing revolutionary about MusicBee but it has a refined interface that does its job well. It comes with a great range of skins, so you can get the software looking just how you like it. You can add, remove or rearrange its various windows and choose between two compact players: one shows a picture and info on the music you're listening to; the other is a locked-down jukebox version. There's also a graphic equaliser that you can fiddle with to produce the best sound for the music you're playing. MusicBee is easy to use and doesn't hog system resources.

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

VIDEO DOWNLOADER
Freemake Video Downloader 3.8
www.freemake.com
Min requirements:
Windows XP/Vista/7/8+
File size: 1.2MB

Freemake's app lets you download clips from most video-sharing sites, such as YouTube, Facebook, Vimeo, Veoh and Dailymotion. The latest version adds an option to download original YouTube audio in M4A format without requiring conversion.

SYSTEM CLEANER
Wise Disk Cleaner Free 8.86
www.wisecleaner.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 4.4MB

Wise Disk Cleaner deletes junk files; cleans up after Windows and internet use; and can remove unwanted Windows features. The latest update adds the ability to clean some third-party programs; fixes configuration errors; and makes minor interface changes.

IMAGE MANAGER
ImBatch 4.5
www.highmotionsoftware.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 14.2MB

ImBatch can make multiple changes to whole batches of photos, including renaming and resizing them, and adding frames, filters and more. The latest version beefs up PDF conversion, fixing problems and adding functionality. It also fixes various bugs in the interface.

SYSTEM TOOL
W10Privacy 1.8.0.2
bit.ly/w10priv388
Min requirements:
Windows 10
File size: 1.5MB

If you're worried about Windows 10 spying on you (as we've reported on several occasions), this free program can help by displaying on a single screen all the important privacy options you need to change. The update adds more privacy settings and fixes a few bugs. ◾

Best New Browser Tools

View stunning satellite images on new tabs

Back in Issue 357, we raved about the amazing extension Earth View (bit.ly/earthview357), which displays satellite images of beautiful landscapes from Google Earth every time you open a new tab. It's now been updated to make it even more impressive, adding 500 new aerial views to its existing collection and letting you explore all 1,500 in an online gallery, which can be played as a slideshow. You can now share any shots you find particularly stunning on Facebook, Twitter and Google+; copy their links to your clipboard to paste into an email; and download them to use as Desktop wallpaper. There's also a handy option to look up a location in an image on Google Maps, and you can skip back and forth between the last 10 views displayed on your New Tab page. You'll be hard pushed to find a more attractive add-on.

Discover how much data you're deleting

Regularly clearing data from Chrome helps to keep it running smoothly and also protects your privacy but, until now, the browser has never revealed exactly how many cached items you'll lose by doing this. A small but welcome change in the latest version prevents you from blindly obliterating data by giving you a better idea of what you're clearing. Click the Menu button and choose 'More tools', 'Clear browsing data' (or just press Ctrl+Shift+Del on your keyboard) and select a few options to delete, such as 'Browsing history', 'Cached images and files' and 'Autofill form data'. You should now see details of the number and size of cached items displayed to the right of each option. These figures will automatically adjust when you select a different time span from the drop-down 'obliterate' menu.

Remember that the data will be deleted from Chrome on every synced device, not just the one you're currently using, so think carefully before you click 'Clear browsing data'!

Make Chrome correct your spelling automatically

Chrome's built-in spellchecker is invaluable for avoiding embarrassment in emails, forum posts and social-media comments when you mistype and misspell words. If you trust the tool to actually correct your spelling – rather than just highlighting mistakes and suggesting changes – you can activate its auto-correction feature. To do this, type `chrome:flags` into the address bar, press Enter and find the entry Enable Automatic Spelling Correction. Click Enable and restart Chrome to have all your misspelt words corrected automatically.

You can also enable the Multilingual Spellchecker option on the 'chrome:flags' page, to avoid spelling errors in different languages.

Move Twitter's Moments to the right

Evidently, Twitter doesn't understand the notion "if it ain't broke, don't fix it". No sooner has it upset users by replacing 'favorite' stars with 'likes', than it inserts its new Moments feature at the top of the page, shunting Notifications to the right. This has caused many users to accidentally click Moments – a rather pointless feed of topical, curated tweets – instead of checking their notifications about new followers and tweets. If the change bothers you, the Chrome extension Moments <> Notifications (bit.ly/moments388) switches Notifications back to its original position, so you can carry on as before.

BEFORE

AFTER

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

FIREFOX

Search the web using an image

Reverse-image search tools are a useful means of learning more about photos on the web, such as where they were taken, who by and what's in them. You can also use them to find similar images and different sizes and angles of a particular shot. The handy new Firefox add-on Search Image By Image (bit.ly/image388) lets you look up a picture using four reverse-image search engines – Google, Yandex, TinEye and Baidu. Just right-click a photo on a web page, choose 'Search image with' and select the tool you want to use. The results will be displayed in a new tab by the relevant search engine, so you can try all four options until you get the information you need.

Block more hidden trackers in websites
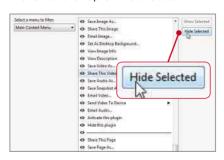
Last issue, we explained how to activate Firefox's Tracking Protection feature outside of Private Browsing mode. Since then, version 43 of the browser has been released, which boosts your privacy further by offering a second layer of protection that blocks even more trackers hidden in websites. However, because this stricter blocking list may also prevent certain websites from functioning properly, Mozilla has made it optional, which means you'll need to activate it manually. To do so, either type `about:preferences #privacy` into your address bar and press Enter; or go to Tools, Options, Privacy. Click the Change Block List button next to the option 'Use Tracking Protection in Private Windows', select 'Disconnect.me strict protection' and click Save Changes.

You can easily switch back to the 'basic protection' list if you encounter problems when viewing a site.

Remove unwanted options from menus

Menus in Firefox can become unwieldy over time, and bogged down with options that you probably never use. You can fix this problem by using Menu Filter (bit.ly/menu388), which lets you decide exactly which items are included and excluded in every Firefox menu, including the right-click menus and the toolbar menus at the top of the browser.

Once you've installed the add-on, go to Tools, Add-ons and click the Options button next to Menu Filter. Select a menu to filter from the drop-down menu, then choose items in the list and click either the Show Selected or Hide Selected buttons on the right. Any changes you make will be applied instantly, and will make your menus much tidier and easier to navigate.

OTHER BROWSERS

Calculate your BMI in your browser

If you're worried that festive indulgence has made you pile on too much weight for your height, you can use BMI Score Calculator (bit.ly/bmi388) to assess the damage. Just enter how tall and heavy you are (in either imperial or metric units) and click the Calculate button to discover your BMI (body mass index) and whether it's normal or otherwise. The extension also tells you what the average weight is for your height. We're not sure how regularly you're likely to use this add-on, unless your weight fluctuates wildly, but you could always use it while on social media to enlighten friends about their BMI!

Get Adblock Plus for Edge (soon!)

The biggest complaint about Microsoft's new Edge browser is that it doesn't yet support extensions, although this looks set to change in the next Windows 10 update. The good news is that Adblock Plus, one of the most popular add-ons for all browsers, has confirmed that a version for Edge is "coming soon" (see adblockplus.org/edge for details), and will presumably be one of the first Edge extensions available. As on Chrome, Firefox, IE and others, the Adblock Plus add-on will block trackers, malware domains, banners, pop-ups and video ads (including on Facebook and Twitter), while allowing unobtrusive ads.

Best Free Apps
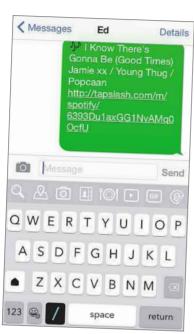
KEYBOARD

UPDATED

Slash Keyboard

bit.ly/slash388

Min requirements:
iOS 8
Size: 35MB

Slash is a ground-breaking keyboard that makes it easier to share things from your iPhone and iPad. The app looks and feels much like the stock iOS keyboard, except that the prediction bar is sometimes replaced by a row of shortcut icons. You can use these (or tap the slash icon next to the spacebar) to share various things, such as your location, a phone number or photos from your camera roll, all without having to open another app. Other slashes provide shortcuts to help you share your favourite songs on Spotify, videos on YouTube and Wikipedia pages, among others.

Slash also lets you create your own shortcuts to speed up text entry. For example, you might use '/omw' as a shortcut to have Slash automatically type 'on my way'. It's a simple and clever idea, and the keyboard is compatible with a range of popular social and messaging apps including Messages, Email, WhatsApp, Twitter and Facebook Messenger.

As with any third-party keyboard, you'll need to grant Slash access to see everything you type (as well as your location, contacts and photos if you want to use these app's shortcuts), but its developers promise to only store anonymous data about how you engage with the app and never details of your keystrokes.

MINI WORKSHOP
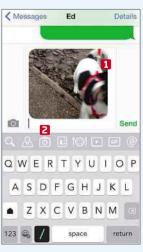
Share photos with Slash Keyboard

1 Download Slash, open it and tap the Install Slash button. A keyboard settings page loads. Tap Add New Keyboard and select Slash **1** from the Third-Party Keyboards list. Next, select 'Slash - Slash', tap the switch next to Allow Full Access and select Allow.

2 Open Messages and complete Slash's onscreen demo. Next, select the Slash button, scroll down to '/photos' and tap it. The keyboard asks your permission to access the Photos app. Tap Allow, then select an image from the onscreen preview. **1**

3 Long-press the text box, select Paste and the photo will be pasted into your message. **1** When you're happy with the results, tap Send. Be aware, though, that media messages are charged at your normal network rate. To add photos even more quickly, use Slash's built-in photo button. **2**

Our rating ★★★★★

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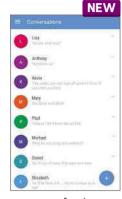
SOCIAL
NEW

AwSMS Beta
bit.ly/awsms388
Min requirements: Android 4.1
Size: 4.3MB

If you prefer traditional SMS messages to services such as WhatsApp, this excellent app offers a range of unique features and customisation options. When you first launch AwSMS, it asks you to choose a theme colour before introducing you to its best feature – pop-up notifications that let you reply from any screen. You can tweak the theme in the Settings menu, and the app's other standout features include its Night Mode and the option to snooze notifications. Most of the important features are free, but to unlock all of them you need to upgrade for 79p.

Our rating ★★★★☆

SOCIAL
NEW

Listomatic
bit.ly/listomatic388
Min requirements: iOS 8.1
Size: 8.4MB

Lists lets you group similar users together on Twitter, providing a handy way of organising your interests; however, creating one can be time-consuming. Listomatic fixes this problem by creating lists automatically from the users you already follow. Simply log in with your Twitter account and the app will create groups for subjects including News, Technology, Music, Sports and Health, among others. Listomatic's way of sorting accounts by subject isn't always accurate, but it acts as a good starting point and you can tweak the lists manually afterwards.

Our rating ★★★☆☆

SOFTWARE
NEW

Microsoft Apps
bit.ly/microsoftapps388
Min Requirements: Android 4.3
Size: 3.2MB

Microsoft Apps does exactly what it says on the tin by offering a complete catalogue of all the Microsoft Apps available to Android users. You can browse by categories including Productivity, Education, Entertainment and Communication, and although you'll find instantly recognisable favourites including OneDrive, Word and Skype, there are also less well-known (but highly rated) apps to discover such as Tossup (which uses polls to help you make plans with friends). All the apps link directly to their respective Google Play Store listings and Microsoft Apps also tells you if an app is already installed on your device.
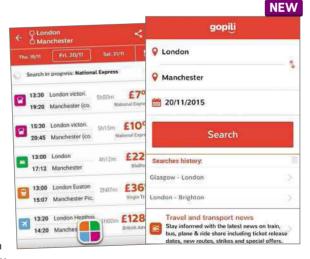
Our rating ★★★☆☆

TRAVEL
NEW

GoPili
bit.ly/gopili388
Min requirements: Android 4.0.3, iOS 7.1
Size: 4.6MB

GoPili helps you find the best travel fares in the UK and Europe for train, coach, plane and car share. When you first launch the app, it asks you to confirm the UK as your country of residence. You can then start searching based on where you're travelling from and to, and the date that you want to leave. GoPili works with a number of travel websites including National Express and BlaBlacCar to offer results that can easily be sorted by departure time, duration and price (and filtered by mode of transport). If you find nothing suitable, there are also built-in shortcuts that let you quickly search the days either side of your planned departure date. We found some great value options (mainly car shares) using GoPili, but we couldn't search for return journeys, which often provide the best value on public transport.

Our rating ★★★★☆

GET THE DEFINITIVE GUIDE TO ANDROID

Our new updated Android MagBook is packed with 148 pages of apps, workshops and advice to unlock the full potential of your tablet and phone.

Discover how to:
- Master new tools in Lollipop and Marshmallow
- Stop apps leaking your personal data
- Record anything on your phone and tablet
- Prevent updates from wrecking your device
- Remove hidden junk so it never comes back
- Switch from iOS without losing data

Order it now from Amazon at bit.ly/defguidetoandroid

📱 Best Free Apps

MUSIC

NEW

Noise 5D
bit.ly/noise388
Min requirements: iOS 9
Size: 142MB

Modelled on an award-winning musical keyboard, Noise 5D transforms your iPad or iPhone into a powerful multi-dimensional instrument. The app lets you create a range of sounds (from acoustic strings to synths) by striking, gliding right and left, and swiping your fingers up and down on its 'keywaves'. If you're fortunate enough to own an iPhone 6S, you can also control the sounds you make by pressing the keys with varying amounts of pressure (thanks to Apple's 3D Touch technology). The expressive capabilities of the app are endless and its Fundamentals Noise pack (which contains more than 25 sounds) will keep you entertained for hours. Should you wish to explore more sounds, additional Noise packs are available from £2.99.

Our rating ★★★★☆

WI-FI TOOL

NEW

Avast Wi-Fi Finder
bit.ly/avast388
Min requirements: Android 4.0.3
Size: 7.6MB

Whether you have a modest data allowance or can rarely find a 4G signal, it's often best to connect to a Wi-Fi network when you want to access the internet on the move. Avast's new app uses your location to find free, fast, reliable and secure Wi-Fi hotspots. All the listings are quality hotspots verified by real people and you can use the app to check how fast each network is before you connect to it. Wi-Fi is notorious for its intrinsic lack of security, but Avast Wi-Fi finder lets you check the security ratings of all networks and also warns you of any privacy and security problems after scanning the network you decide to connect to.

Our rating ★★★★☆

5 NEW APPS WORTH PAYING FOR

MOTORING
Jerrycan
bit.ly/jerrycan388
Min requirements: iOS 8
Size: 16.3MB
Price: £2.29
This handy app lets you track your car's fuel consumption, mileage and MPG in one place and also offers tips to help you become a more economical driver.

PHOTOS
Waterlogue
bit.ly/waterlogue388
Min requirements: iOS 7
Size: 50.1MB
Price: £2.29
Waterlogue turns your photos into beautiful watercolours. The latest version introduces a number of refinements including a new auto-exposure button.

PHOTOS
Pixelmator
bit.ly/pixelmator388
Min requirements: iOS 9.0
Size: 94.3MB
Price: £3.99
This excellent, full-featured photo editor has been updated so that thirty more of its brushes support the Apple Pencil's tilt feature (which lets you add shading by simply tilting it like a charcoal pencil).

EDUCATION
Curiosity by Tamper
bit.ly/curiosity388
Min requirements: iOS 9.0
Size: 18.1MB
Price: £1.49
Curiosity helps you learn about the world around you by using your location to show you relevant and interesting articles on Wikipedia. You can also use the app to see which entries are trending worldwide.

MEDIA
Playcast
bit.ly/playcast388
Min requirements: Windows Phone
Size: 3.99MB
Price: £3.09
This handy app lets you open videos, pictures and audio files on your windows phone or cast them to your TV, Chromecast, Apple TV or Xbox.

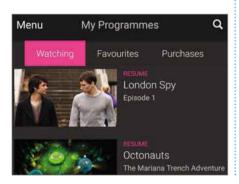| Jerrycan | Waterlogue | Pixelmator | Curiosity by Tamper | Playcast |

Best New TV Apps

TV
BBC iPlayer
bit.ly/iplayerandroid386
bit.ly/iplayerios386
Min requirements: Android (varies with device), iOS 7
Size: Varies with device

No-one could accuse the BBC of neglecting its iPlayer mobile app, which is frequently updated to fix bugs and add new features (except on Windows Phone, where it's been pretty much forgotten). The latest improvement to the app integrates it with the BBC Store, so you can watch programmes you've purchased and downloaded from the Beeb's archives on your phone or tablet. You can also stream shows to your TV using a Chromecast or similar device. Just tap Menu, select My Programmes and choose Purchases to browse and play everything you've bought from the BBC Store.

TV & FILM
Netflix for BT TV
www.bt.com/tv
Min requirements: BT TV
Size: N/A

Netflix may be available on virtually every streaming platform you can think of, but BT has scored something of a coup by becoming the first TV service in the UK to offer Netflix shows and films in 'ultra HD'. This means that you can enjoy popular series such as *Marco Polo*, *House of Cards* and *Better Call Saul* at the incredible 4K resolution of 3,840 pixels x 2,160 lines. Naturally, this superior picture quality doesn't come for free: you'll need BT's new Ultra HD YouView+ set-top box, which you can get by signing up to its Total Entertainment package for £15. You also need to subscribe to Netflix's Ultra HD plan, which costs £8.99 a month. Oh, and you'll need an Ultra HD 4K TV!

TV
ITV Hub
www.itv.com/mobile
Min requirements: Android 4.1, iOS 7, Windows Phone   **Size:** 29MB

So, six weeks after it launched, is ITV Hub more popular than its much-maligned predecessor, ITV Player? It's already been updated with options that let you get notifications about your favourite shows and watch programmes in landscape mode, but what do Android users think? "This just doesn't work at all. A rather embarrassing and inept app", says one disgruntled viewer on the Play store. "Still no Chromecast support!" grumbles another. And iOS? "Rubbish. The old version was much better". What about Windows Phone? "Great app, well done ITV. Much better than iPlayer". Hooray!

✗ Don't install...

Permission Manager
bit.ly/manager388
Min requirements: Android 4.3
Size: 578KB

This app promises to open a "hidden permission screen" in Android that lets you revoke specific permissions for other apps. This would be great if it were true, but unless you're lucky enough to have been upgraded to Marshmallow, it isn't possible and there is no such screen. So, although Permission Manager helpfully tells you which apps have particularly risky permissions, you can't actually do anything about it, which makes installing the ap a waste of time.

...Install this instead ✓

MyPermissions
mypermissions.com
Min requirements: Android 2.3, iOS 7
Size: 5.5MB/7.4MB

It's easy to ignore the list of permissions when you install an app, but by doing so you could be handing over more personal information than you realise. MyPermissions scans your phone or tablet to find out which apps you're running, then summarises potential privacy concerns. These include apps knowing your location; reading your messages and contacts; and using your photos and files. It also alerts you when new apps gain access to your info. Any apps that sound suspicious can be instantly uninstalled, and safe ones can be marked as 'trusted'. MyPermissions is very simple to use and is speedy at presenting its findings. ■

Bitwalking

Have you resolved to get fit in 2016? **David Crookes** looks at an app that will encourage you to get walking by earning you money for every step you take

Is Bitwalking when you walk for a bit, then sit down?

No. Bitwalking (www.bitwalking.com) is a new digital 'crypto-currency' that allows you to generate money based on the number of miles you walk. Created by entrepreneurs Nissan Bahar and Franky Imbesi, it makes a direct, motivational link between health and wealth, and encourages people to be active by offering a financial incentive.

Is it a bit like Bitcoin?

Yes – it has the prefix "bit" in the name, after all. Put simply, it's like a mash-up between fitness wristbands and Bitcoin

Bitwalking is a new digital currency that lets you generate money by taking a stroll

(bitcoin.org), the digital currency that was created in 2008 and went open-source the following year, proving very successful. With Bitwalking, instead of mining for money on your computer, the legwork is done by your feet pounding the streets. It has been attracting a lot of attention, including a slot on the BBC's *Click* programme.

How does it work?

You download an iOS, Android or Windows Phone app called Go, which tracks your every movement and works out exactly how far you have walked. The app stores the number of steps made before translating them into what are called Bitwalking dollars, or BW$ for short. The project's founders stress that users are not actually being paid for walking but are instead generating their own money.

What's to stop me cheating the system?

You mean by shaking your phone wildly in the hope that it will register lots of steps and so earn you money more quickly? Shame on you! That won't work because the app relies on GPS and Wi-Fi to work out the distance you've moved, so standing still will do nothing for your Bitwalking wealth, no matter how much you exercise your arm.

What is the earning potential?

At the moment, roughly 1 BW$ is earned for every 10,000 steps you take, which is the equivalent of about five miles. For those wishing to trade their earnings, each BW$ is currently worth exactly one US dollar although, just like any currency, the value has the potential to go up and down. There will also be an initial cap of 3 BW$ each day.

Can I use it in the UK?

The startup is based in London so, when it officially launches, it will be available to use across the UK. It has also launched in Kenya and Malawi, as well as Japan where the main investors are based. The Japanese business community has pumped around £6.6m into the project so far to create the platform and the verification algorithm (the precise details of which are kept secret).

Why has it launched in Kenya and Malawi?

Bitwalking is experimenting in these markets for altruistic reasons. Just as Bitwalking says it hopes to get people

The Bitwalking app tracks how far you've walked and how much money you've made

In November, BBC Click reported on how Bitwalking is currently being used in Malawi

out of cars and on their feet to cut pollution and help the environment, so it wants to make a difference to those living in developing countries. It is said that rural workers in these countries earn around £1 a day but walk for many miles. By signing up to a Bitwalking account, these people's earning potential will be boosted. That said, it does raise questions over whether a rural worker in Malawi or Kenya can afford a phone in the first place to generate their BW$. However, a Japanese company called Murata is working on a cheap Bitwalking wristband that will also measure steps and show earnings.

Can you trade BW$ for cash?
You can exchange Bitwalking dollars for cash (in Malawi, for example, local people will be able to trade BW$ for US$ or the local Malawi Kwacha currency) or you can use them to buy goods and services, some of which will be available from the in-app marketplace on a first-come, first-served basis. The company is looking to foster relations with third-party partners and says it will send out an announcement every time the market is open. The founders also say that BW$ can be traded with other users which, we assume, means you could work together with friends to buy items that one person alone couldn't afford.

What can I buy?
It's still early days and deals continue to be done. There are plans to include health insurance companies, and sportswear and shoe brands (after all, lots of walking will increase the need for replacement footwear). However, the number of partners coming on board will depend on how well Bitwalking does. Walking five miles for 66p or so in the UK may not be that enticing, particularly in these cold, winter months. The miles do accumulate, though.

Bitwalking is currently invite-only, so you may need to wait a while to start earning

Could it benefit charities?
Potentially. Lots of people could, for example, decide to go on a fundraising walk and donate their accumulated BW$ to a charity or simply chalk up the dollars by walking to work. UK Fundraising (www.fundraising.co.uk) has already spotted the potential and says that it has contacted Bitwalking to discuss the scope for fundraising, although it hasn't yet received a response.

How do I sign up to Bitwalking?
The project is currenty operating on an invite-only basis, but you can request an invite at www.bitwalking.com. A restricted number of people are being allowed into the scheme each week so you may have to wait before you're accepted. Countries with the most requests are prioritised by the system.

Is it all safe and secure, though?
Bitwalking says so. It claims you can "enjoy security features from both the crypto-currency world and centralised management". It stresses that it will not be passing on information about an individual's movements to anyone, and that all transactions go through a verification process using the 'block chain' method – a distributed database which maintains a growing list of encrypted data that cannot be tampered with or revised.

What does Bitwalking get out of it?
Your personal information. It says on its privacy page that it will use this to send messages regarding "among other things, new products, features, enhancements, special offers, upgrade opportunities, contests and events of interest". Fortunately, it's possible to opt out of these at any time.

Could the cashflow dry up?
Yes, it could. The whole scheme is dependent on investment in the initial stages. But once it is properly up and running, and becomes widely accepted, it should become self-sustaining, just like Bitcoin has become.

MAKE MONEY WHILE KEEPING FIT

Here are three other ways you can improve your health and your wealth at the same time

Pact
www.pactapp.com
Pact, whose slogan is 'Earn Cash for Exercise, Healthy Living, and Eating Right', allows you to set weekly goals and reap financial rewards for meeting them. But there's a twist: you have to tell the app how much you will pay out if you fail. Pact's carrot-and-stick incentive works on the basis that a good number of users will not reach their targets and so will fund those who do.

Charity Miles
www.charitymiles.org
By choosing a charity, users of this app can select an activity and have one of the corporate sponsors affiliated with the a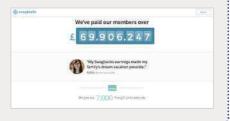pp pay them for every completed mile. You are shown an advert from the donating company and, although you aren't likely to earn megabucks, every little helps in the long run.

Swagbucks
www.swagbucks.com
Okay, exercising your fingers may not constitute actually keeping fit but with Swagbucks you can earn money by searching, watching videos, playing games, answering surveys and shopping. You'll earn roughly six or seven swagbucks per pound spent: it costs 849SB for a typical £5 gift card.

YOUR PC WILL BE HACKED

COVER FEATURE

Not every security threat comes from the web. **Wayne Williams** reveals how your hardware may already have built-in flaws and explains how to fix them before it's too late

The last 12 months have been particularly bad for PC manufacturers – not only are sales down, but some companies have been exposed for pre-installing potentially dangerous and invasive software on their devices. This means that even if you're very careful about what you download from the web, and where you get it from, your system could still be under threat from the 'enemy within' – built-in security flaws that leave it vulnerable to hackers and malware infection. In this feature, we highlight the worst of these hidden holes and explain how to fix them.

Over the following six pages, we explain how to check for (and remove) Lenovo's Superfish adware, and secure the highly vulnerable Lenovo Solution Center. We also look at problems found on Dell and Toshiba PCs; explain how the Raspberry Pi isn't as secure it should be; and look at problems that affect popular routers from companies including Netgear, TP-Link and D-Link. Additionally, on page 44, we reveal how to find out if something on your PC is spying on you – and how to stop it.

FIND & FIX FLAWS ON YOUR PC

Lenovo

Superfish

Many manufacturers bundle additional software with their PCs. This often includes free third-party programs and trial versions of commercial offerings, such as anti-virus software. Although this 'bloatware' is annoying, you can usually remove it without any problems. However, last February it was discovered that the latest laptops from Chinese computer manufacturer Lenovo contained a nasty piece of adware called Superfish, which made it possible to sneak ads into secure HTTPS web pages in a way that posed a serious threat to users' security.

Lenovo was found to have pre-installed adware called Superfish on its laptops

The Electronic Frontier Foundation (EFF, www.eff.org), which defends consumer privacy rights, said of the discovery: "Lenovo has not just injected ads in a wildly inappropriate manner, but engineered a massive security catastrophe for its users. The use of a single certificate for all of the MITM [man in the middle] attacks means that all HTTPS security for at least Internet Explorer, Chrome and Safari for Windows, on all of these Lenovo laptops, is now broken. If you access your webmail from such a laptop, any network attacker can read your mail as well or steal your password. If you log into your online banking account, any network attacker can pilfer your credentials. All an attacker needs in order to perform these attacks is a copy of the Superfish MITM private key. There is (apparently) a copy of that key inside every Superfish install on every affected

LastPass's Superfish Checker tells you whether your PC is infected by the adware

Lenovo laptop, which has now been extracted and posted online."

To help you find out if you've been affected by Superfish, password specialist LastPass has created an online Superfish Checker, which can be accessed at lastpass.com/superfish. Visit the link and it will tell you if you are safe, and what actions to take if you aren't.

Lenovo stopped preloading the 'badware' after the flaw was discovered and promised never to preload Superfish on its laptops again. The company also completely disabled server side interactions, which effectively stopped Superfish from working.

Finally, the firm released a Superfish Removal Tool, which you can download from bit.ly/superfish388.

Lenovo Solution Center

The most recent scandal to rock Lenovo concerns the company's own Lenovo Solution Center (LSC) – a preinstalled piece of software designed to "allow users to perform diagnostic functions and quickly identify the status of PC system hardware and software health, network connections and the presence of security features such as firewalls or antivirus programs."

In December, Carnegie Mellon's Computer Emergency Readiness Team (CERT) discovered that the bloatware suffered from multiple vulnerabilities, which meant that certain Lenovo

Lenovo created its own tool to detect and remove Superfish from its laptops

computers could be hijacked by malicious websites. According to the vulnerability note (bit.ly/cert388): "By convincing a user who has launched the Lenovo Solution Center to view a specially crafted HTML document (such as a web page or an HTML email message or attachment), an attacker may be able to execute arbitrary code with SYSTEM privileges. Additionally, a local user can execute arbitrary code with SYSTEM privileges."

For your PC to be affected, you need to have actually launched the LSC at least once. Closing it won't stop the problem, and CERT recommends uninstalling the program. Lenovo responded to the problem by telling users to remove the software and then issued two updates covering the different versions. These updates are now offered automatically if you open LSC, but you can also download and install the relevant updated package directly from bit.ly/lsc388.

Install updates to patch vulnerabilities in Lenovo's Solution Center software
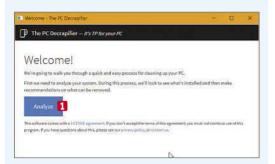
Dell

eDellRoot

Dell recently decided to take advantage of rival PC manufacturer Lenovo's Superfish problems by presenting itself as a more secure alternative. Promoting its new XPS 15 laptop in November, the company declared "Dell is serious about

your privacy" and then went on to say: "Worried about Superfish? Dell limits its pre-loaded software to a small number of high-value applications on all of our computers. Each application we pre-load undergoes security, privacy and usability testing to ensure that our customers experience the best possible computing performance, faster set-up and reduced privacy and security concerns."
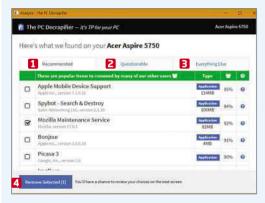
So imagine Dell's horror and embarrassment when, shortly afterwards, it was hit by not one but two security shockers that were just

Remove bloatware from a new PC

1 If your PC comes bundled with a lot of junk you don't want, the best approach is to format the hard drive and install a clean copy of Windows. However, if you feel that's too much hassle, you can use a program such as PC Decrapifier (www.pcdecrapifier.com) instead. Launch the program, then click Analyze. **1**

2 The software will scan your system looking for bundled junk to remove, then present its findings. Items are sorted into Recommended, **1** Questionable, **2** and Everything Else. **3** Tick the boxes for items you don't want on your PC and click the Remove Selected button. **4**

3 Another excellent free program you could try is Should I Remove It? (www.shouldiremoveit.com). This scans your PC and lists all the programs on it, colour coding them so you can see at a glance which software other users have removed. Click an item to find out what it is. **1** You can uninstall it from here, too. **2**

Dell's PCs and laptops proved not to be as secure as the company claimed

as bad as Superfish. Some of the company's laptops shipped with an HTTPS root certificate that could allow malicious software or a hacker to impersonate any website and install malicious code. The eDellRoot certificate was issued by Dell and therefore had a valid signature, which meant it wasn't picked up by Windows' built-in security controls. While hackers would need a private key created by Dell to create an apparently valid HTTPS certificate, Dell (like Lenovo) included this key on the affected laptops. Whoops!

Once the story broke, Dell issued an apology (bit.ly/dellapology388) and provided a removal tool on the same page (as well as manual removal instructions) so that users could banish the root certificate.

Dell issued an apology and a removal tool to address the eDellRoot scare

Dell tried to downplay the incident, stressing that "the certificate is not malware or adware. Rather, it was intended to provide the system service tag to Dell online support allowing us to quickly identify the

Security software such as McAfee LiveSafe managed to identify eDellRoot as a PUP

computer model, making it easier and faster to service our customers. This certificate is not being used to collect personal customer information. It's also important to note that the certificate will not reinstall itself once it is properly removed using the recommended Dell process." But malware or not, it still put users at risk.

Dell System Detect

Two days after Dell issued its eDellRoot apology, the company found itself in hot water once again. As part of the investigation into the eDellRoot certificate, the firm ordered a review of all its bundled software. Remember Dell's claim that everything it pre-loads has been tested to ensure complete safety (see page 39)? It turns out that this wasn't the case after all.

An older version of Dell System Detect posed a security risk

The investigation found that the Dell System Detect application (which interacts with the Dell Support website to offer more personalised support) and its DSDTestProvider root certificate did much the same as eDellRoot.

You can use the same removal tool that Dell has set up for eDellRoot to also fix the System Detect problem. There's also an update for the application available at bit.ly/dellsd388 that addresses the security vulnerability, if you don't want to completely remove System Detect.

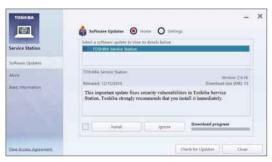Security companies such as Malwarebytes classify Dell System Detect as a Potentially Unwanted Program (PUP) and can remove it for you. Additionally, Microsoft now recognises the eDellRoot and DSDTestProvider certificates as "non-trusted", which means that bad guys can no longer take advantage of them.

COVER FEATURE

Toshiba Service Station

Toshiba has had a troubled time of late. It was embroiled in a $1.3bn accounting scandal and there were rumours circulating that the company had plans to spin off its PC division – which is no longer particularly lucrative – and potentially merge it with another PC manufacturer as part of a wide-ranging restructuring process.
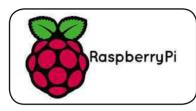
At the beginning of December 2014, it was found that the pre-installed Toshiba Service Station (which "allows your computer to automatically search for Toshiba software updates or other alerts from Toshiba that are specific to your computer system and its programs") could be exploited to "bypass any read-deny permissions on the Registry for lower-privileged users." Or, to put it another way, it could give an attacker the ability to read most of the Registry

with system privileges.

To fix this problem, users are advised to completely remove the Toshiba Service Station software. You should be able to do this through the 'Uninstall a program' list in the Control Panel. If not, try a dedicated uninstaller such as Revo Uninstaller (www.revouninstaller.com) or IObit Uninstaller (bit.ly/uninst378).

Weak SSH Keys

Raspberry Pi microcomputers come with quite a lot of programs bundled in their operating systems, but this software serves a useful purpose and couldn't be described as bloatware. However, while that aspect of the device gets a clean bill of health, the most popular Pi operating system isn't without vulnerabilities.

SSH Keys are used to identify a system to an SSH (Secure Shell) server, and are more secure than using a password. SSH can, for example, be used to gain access to a Raspberry Pi's command line from another computer on the same network. However, due

A Pi developer found that predictable SSH host keys could pose a security threat

to an incorrect boot sequence in the Raspbian operating system, the Raspberry Pi was found to generate a weak and predictable SSH key on its first boot by failing to enable the hardware random number generator by default. The problem is explained by a developer called oittaa at bit.ly/pi-ssh388 and is something that will hopefully be addressed in a future security patch.

The Raspberry Pi is safer than most Windows PCs, but isn't without its vulnerabilities

Toshiba Service Station has been found to compromise the security of your PC

REMOVE SECURITY FLAWS FROM YOUR ROUTER

SOAP vulnerability

In February last year, a security researcher called Peter Adkins found a

flaw in the SOAP service embedded in some Netgear routers. SOAP (Simple Object Access Protocol) is used by the Netgear Genie Desktop app and allows users to change their router settings. The flaw could have allowed attackers to steal passwords and wireless keys. It also potentially allows a snooper to discover your router's serial number and details of connected devices.

To bypass the problem, make sure you have the latest Netgear firmware installed, and disable remote management if you have previously enabled it.

DNS vulnerability

In October, two security companies, Compass Security and Shellshock Labs,

A flaw in Netgear routers could have allowed hackers to steal your passwords

Netgear has released a fix for a security vulnerability in some of its routers

discovered an exploit that allows hackers to gain "full remote unauthenticated root access" of affected Netgear routers. Compass Security claimed that over 10,000 routers have been exploited by the flaw,

Check your router for vulnerabilities

1 Avast (www.avast.com) added router security to the 2015 edition of its free anti-virus software and has beefed this up further in the 2016 release. Open the program, click the Scan button **1** and click 'Scan for network threats'. **2** It will check your PC, router and other connected devices for vulnerabilities.

2 You can stop the network scan at any time. **1** Provided your home network is properly secured, you'll see a message next to each item reporting that there were 'No problems found on this device'. **2** Pay special attention to the router entry. You can rescan your system at any time. **3**

3 If your router is incorrectly configured or there are other problems with it, you'll be able to take action to fix the problems. Clicking the router information will reveal more details about it, including its name **1** and vendor. **2** The software can't always detect every router's make and model, but covers most major brands.

while Netgear, speaking to the BBC, said the number was less than 5,000. The BBC report (bit.ly/netgear-bbc388) focused on a security researcher in the US whose Netgear router had its admin settings altered, resulting in browsing data being directed to a malicious internet address.

Following the BBC report, Netgear released a fix for affected routers which you can download from bit.ly/netgearfix388.

NetUSB
Last May, SEC Consult Vulnerability Lab (bit.ly/seccvl388) discovered that millions of routers (and other internet-connected devices) were at risk from remote hacking, thanks to a vulnerability found in a piece of proprietary software called NetUSB. Created by Taiwanese company KCodes, NetUSB is intended to provide "USB over IP" functionality – that is, provide network access between USB devices and certain routers and other access points. However, there was a major vulnerability in the authentication check that occurs before establishing a connection between devices.

According to company researcher Stefan Viehbock: "As part of the connection initiation, the client sends his computer name. This is where it gets interesting: the client can specify the length of the computer name. By specifying a name longer than 64 characters, the

stack buffer overflows when the computer name is received from the socket. All the server code runs in kernel mode, so this is a 'rare' remote kernel stack buffer overflow."

Among the infected routers found by SEC Consult Vulnerability Lab were devices from TP-Link, D-Link, and Netgear. According to the security firm's advisory on the flaw (bit.ly/netusbtxt388), NetUSB can sometimes be disabled via the web interface, but this may not mitigate the vulnerability. Updating your router's firmware may fix the problem. TP-Link was among the first of the manufacturers to issue a patch for the flaw.
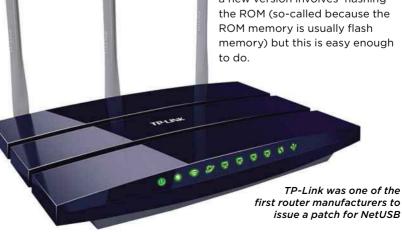

Widespread vulnerabilities
In November, the Eurecom research centre in France and Ruhr University Bochum in Germany performed an analysis on hundreds of routers and DSL modems and found that nearly 10% had high-risk vulnerabilities. Most were potentially very easy to fix, which suggested that the manufacturers were failing to perform adequate security tests on the equipment. The full report is available in PDF format from bit.ly/routersecuritypdf388.

There's no easy way to find out if your router is at risk from these vulnerabilities (running Avast's network check – see our Mini Workshop on the left – might spot some of them) but you can safeguard your system by ensuring your router is running the very latest firmware. Check the support page on the manufacturer's website. Installing a new version involves 'flashing' the ROM (so-called because the ROM memory is usually flash memory) but this is easy enough to do.

TP-Link was one of the first router manufacturers to issue a patch for NetUSB
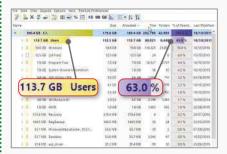
10 SIGNS THAT YOUR SYSTEM IS UNSAFE

Just because your antivirus program hasn't reported anything strange doesn't mean your system is safe. Here are 10 clues that could indicate an infection, and advice on how to tackle each problem

PC is running slowly
If your PC is no longer as speedy as it once was, it could be a sign that you're running out of hard drive space, but it could also be down to a malware infection. Run a good 'second opinion' scanner such as Reason Core Security (www.reasoncoresecurity.com).

Loss of hard-drive space
Some malware can eat into your disk space. Check to see where your storage has gone using TreeSize Free (www.jam-software.com).

Pop-up windows
Random windows popping up may indicate that your PC is infected. Make

sure you don't click any of these windows, and scan your system using Malwarebytes Anti-Malware (www.malwarebytes.org).

Antivirus software is disabled
A popular trick by malware is to disable your security software (and prevent updates) so it can run unhindered. If you can't restart a security scanner, try a different free program to check for malware.

Browser changes
Malware can change your browser settings, including altering your default search engine and homepage. Use a program such as AdwCleaner (bit.ly/adwcleaner388) to fix this.

Strange program activity
If programs open or close unexpectedly, or behave oddly, this could be a sign of malware. Run a thorough anti-malware scan.

Excessive hard drive activity
If you're not using your hard drive, but it seems to be working in overdrive all the time, you should check to see what's keeping it so busy. Right-click the taskbar, select Task Manager and see what's using the most resources. This activity could also be caused by impending hard-drive failure.

Busier than normal network load
If downloads or uploads seem slower than normal, even though you aren't downloading anything (such as a large Windows update), then it's worth checking to see if there is any unusual network activity going on. GlassWire (glasswire.com) can help.

Crashes
Crashes are usually caused by buggy or clashing software, but it could also be the result of a malware infection. Run a thorough scan to check.

Your friends receive odd messages from you
Change your passwords immediately, and set up and use two-factor authentication (2fa) where possible on your various services. This uses a password and a code from your mobile phone. To set this up in Google, visit bit.ly/2step388.

Are you being SPIED ON?

Is something nasty lurking on your system and watching your every move? **Robert Irvine** reveals how to expose hidden spies and remove them before it's too late

Detect hidden processes that monitor you

Even the best anti-malware tools, such as Malwarebytes Anti-Malware (www.malwarebytes.org), tend to keep you waiting before they give you the information you want: namely, is something dodgy lurking on your PC or not? It can take more than an hour to complete a full scan of your hard drive (depending on when you last ran one), only to learn that everything's fine and you needn't have bothered. If you don't have time to hang about, try a new tool called SpyDetectFree (bit.ly/ spydetect388), which provides you with the answers to two simple questions: 'Am I being spied on?' and 'Am I being monitored?'.
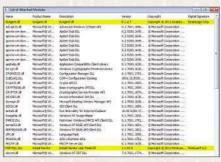
The first question is answered immediately and reveals whether unknown processes have installed 'hooks' on your system, which could be used to record your keystrokes and steal your logins, passwords and bank details. The second question takes 60 seconds to answer and looks for processes on your PC that might be monitoring the titles of windows you open. This might not sound scary in itself but,

SpyDetectFree tells you whether you're being monitored by hidden processes

when combined with data stolen by keyloggers, it will tell cybercriminals exactly which sites you visit and how you log into them.

SpyDetectFree couldn't be easier to use: just run the program and click Check Now to perform the two tests. Don't be too alarmed if you receive affirmative answers, because the processes uncovered by SpyDetectFree may have legitimate reasons for monitoring your keystrokes and windows. Click Details to view the results and then look up any unknown processes on Google to find out what they are. On our work PC, SpyDetectFree merely highlighted the software that logs us into our office network, so we weren't overly concerned. If it finds something that worries you, you can use your anti-malware program to remove the threat.

Suspicious modules are highlighted in yellow but may actually be harmless

Scan for rootkits using Malwarebytes Anti-Malware

Useful though it is, SpyDetectFree is no substitute for a proper scan with Malwarebytes Anti-Malware, even if it does take a while. We're sure you're already familiar with this powerful free program, but it's worth tweaking its settings to ensure it works as thoroughly as possible in detecting possible threats on your system. For example, by default Malwarebytes isn't set to look for rootkits, which can be used to conceal malware such as keyloggers and viruses. This is because the low-level and thorough nature of rootkit scans significantly increases the total scan time, and may not always be necessary.
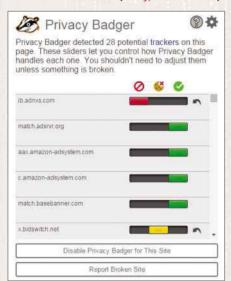
If you're worried about secret spies on your system, click the Settings tab in Malwarebytes Anti-Malware, choose 'Detection and Protection' and select the option 'Scan for rootkits'. However, on the MalwareBytes website, the developers warn that although most rootkit detections can be removed in the usual manner, others shouldn't be quarantined because "some rootkit infections may have unexpected results when removed" (bit.ly/malware388). Instead, they recommend that if you see the threat 'Unknown.Rootkit' in your scan results, you contact the Malwarebytes support team via support .malwarebytes.org for further advice.

Turn on rootkit scanning in Malwarebytes to uncover threats that are concealed
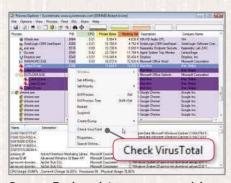
Expose and block trackers on web pages

Over the years, we've recommended lots of tools that protect your privacy online by blocking snooping ads and invisible trackers embedded in web pages. However, few of them actually tell you which spies they're blocking (other than providing a total figure), and their all-or-nothing approach sometimes filters elements that might actually prove useful. That's why we were instantly smitten with Privacy Badger (bit.ly/badger388), which was launched last year by the Electronic Frontier Foundation and scooped our Gold Award in a comparison of privacy add-ons in Issue 381 (bit.ly/webuser381).

Privacy Badger blocks intrusive tracking cookies while allowing essential ones

This excellent tool, which is available for Chrome and Firefox, automatically detects and blocks the worst tracking cookies on web pages. Click its toolbar button to view details of the spies, accompanied by colour-coded sliders. A green 'allowed' slider indicates that the domain responsible for the cookie is harmless and unobtrusive, while a yellow one shows that the domain needs to track you to display content correctly. A red slider implies the domain is invasive and has therefore been "completely disallowed". If you disagree with any of Privacy Badger's conclusions – that is, you want to block an allowed domain or unblock a prohibited one – just drag the slider to the relevant position. The add-on also filters annoying social-media widgets, replacing them with markers (you can hide these, too, if you prefer), and can be disabled altogether on specific websites and white-listed domains. We love the badger logo, too!

Process Explorer lets you scan suspicious processes for malware using VirusTotal

Find out what's connecting to the internet in the background using TCPView

Find out what's running in the background

There's lots of stuff going on in the background on your PC, most of which is essential for keeping your software and hardware working smoothly. But if malware does get onto your system, there's a chance that it could be connecting to the internet without your knowledge, leaving you open to hacks, further infections and even your computer being used in a botnet attack. You can check there's nothing dodgy running in the background using Microsoft's brilliant free Process Explorer (bit.ly/process388), which tells you exactly which programs and processes are running on your PC, so you can close anything suspicious. Particularly useful is the option to right-click a process and select Check VirusTotal. This analyses the file using more than 50 anti-malware scanners to check if it contains anything nasty. If it does, right-click the process again and choose Kill Process, then scan your system with your anti-malware software.

If you only want to know what's connecting to the internet in the background, you may find TCPView (bit.ly/tcp388) simpler. It lists all processes that are using network ports on your PC; tells you their local and remote addresses; and details the data they're sending and receiving. If you notice any unusual entries or behaviour that implies there may be a spy in your midst, right-click the process and choose End Process or Close Connection. ■
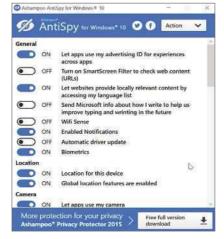
STOP WINDOWS 10 SPYING ON YOU FROM WITHIN

We've already devoted plenty of coverage to the ways in which Windows 10 spies on you (and Microsoft's insistence that it's for your own good), so we won't waste space here by repeating ourselves other than to say: *you don't need to put up with it!* Since the nosey OS was released last July, plenty of free tools have been created to prevent Windows 10 from monitoring everything you do. These programs save you having to adjust your privacy settings manually and allow you to easily switch them on and off as required – for example, if you decide that you quite like Cortana after all. Our favourite Windows 10 privacy-boosting software includes O&O ShutUp10 (bit.ly/shut388) and Ashampoo AntiSpy for Windows 10 (bit.ly/antispy388), both of which offer nearly 50 privacy tweaks

Ashampoo AntiSpy lets you switch on and off Windows 10's privacy settings

organised into clear categories such as Security, Location and Camera. You'll certainly feel less paranoid after running one of these tools.

Best free iOS browsers

Switching from Safari can bring better features and performance, but which alternative should you choose? **Rob Beattie** tests the best browsers for your iPad and iPhone

GOLD

SILVER

BRONZE

Google Chrome | bit.ly/chrome388 | ★★★★★

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

WebUser GOLD AWARD

What we liked
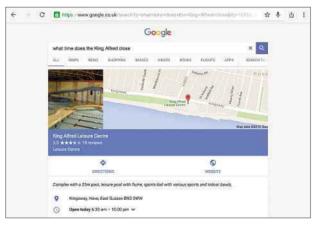
Android may be Google's favoured mobile OS but that doesn't mean Chrome on iOS is in any way an afterthought. It's a useful, mobile-friendly browser with solid syncing features that cover tabs, history, passwords and bookmarks. There are plenty of embellishing touches; for example, just open the menu and tap 'Recent tabs', and Chrome will display all your most recently visited sites from every machine linked to your Google account. Meanwhile, browsing privately in Incognito mode is effective and easy to do.

Like Opera Mini (but unlike Firefox) Chrome lets you search for text on a web page. Voice searching is built-in, so

you can just tap the microphone icon and say what you're searching for – "BBC News", for example – and it will display the site in the search results. It's also intelligent enough to recognise 'natural language' queries, so if you have location services turned on and you live in Hove, saying, "What time does the King Alfred close?" will tell you when the local swimming pool closes today. Neither Firefox nor Opera Mini support voice recognition.

Swipe support is well-implemented and the last release added 3D Touch support for the 6S and 6S Plus. It can be used to open a new tab, an Incognito tab or start a voice search. Both Chrome

and Opera Mini have settings that are supposed to load pages a bit faster when not on Wi-Fi, and we like that you can request for a website to display full size, as if it were on a larger screen.

How it can be improved

There's still no built-in 'reader mode' to remove web clutter and, if you've got a lot of tabs open at once, scrolling is so quick that it's easy to swipe past the one you're looking for. We wish the interface was left to settle down for a while instead of important functions (such as left- and right-swipe) changing with every major release.

> **OUR VERDICT**
> It was a close call between Chrome and Opera Mini, but Chrome wins because it integrates brilliantly with the rest of Google. Its mobile browser has almost all the same tools as the Desktop version, so it will be very familiar.

Best free iOS browsers
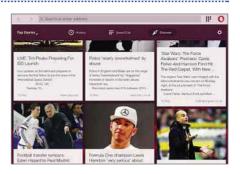
Opera Mini | bit.ly/opmini388 | ★★★★☆
FEATURES ★★★★☆ PERFORMANCE ★★★★★ EASE OF USE ★★★★☆

WebUser SILVER AWARD

What we liked
Opera Mini's name implies that it's smaller and lighter than the norm, but it has a couple of functions that you don't get in Chrome and Firefox, such as built-in themes and a cleverly designed homepage that's swipeable between your history, favourites (what Opera calls 'Speed Dial') and 'Discover'. The latter is a useful wall of national news stories covering 14 different subjects, from the arts to travel.

Opera Mini's History function is also better implemented than our other two award-winners and we particularly like how it neatly nests sub-pages within a site's homepage, such as individual stories on the BBC news site. Adding favourites to the Speed Dial page is easy and Opera has a good (though non-standard) way of highlighting URLs for editing via the keyboard. It performs very smoothly, especially when swiping between tabs and pages, and we prefer how it does this to Chrome's fussy between-page animations. Like Firefox and Chrome, creating an account allows

you to synchronise all your bookmarks, tabs and history across devices.

How it can be improved
For something that focuses on performance, the pseudo-Windows Vista 3D view seems a waste of resources. Built-in voice support would be a welcome addition.

> **OUR VERDICT**
> Opera Mini is fast and gestures are smoothly implemented. It brilliantly organises sites into History, Speed Dial and Discover, and has a very effective 'night mode'.

Firefox | bit.ly/ff388 | ★★★☆☆
FEATURES ★★★☆☆ PERFORMANCE ★★★★☆ EASE OF USE ★★★☆☆

WebUser BRONZE AWARD

What we liked
It's early days for Firefox on iOS, but it's made a promising start and the syncing tools (browser, tabs, history, passwords) are immediately impressive. Users of the PC browser will feel at home with its tabs, because they actually look like tabs. It also displays multiple open tabs as little cards, which is intuitive and more effective than the stacking technique used by Chrome, and more modern than Opera's 3D version.

Firefox performs as well and as fast as both Chrome and Opera Mini – in fact, all three browsers feel snappier than Safari. It's dead easy to set a default search engine and to block pop-ups, and it has a Reader Mode that removes web-page clutter so you can concentrate on the content. This latter tool also lets you control text type, and set the background to Light, Dark or Sepia. It's much more effective than Opera Mini's version, and Chrome doesn't have anything like it at all.

How it can be improved
There's no voice control and accessing the settings is convoluted, as is setting up syncing. Its interface also isn't as clear when compared with Chrome and Opera Mini.

> **OUR VERDICT**
> There's little to dislike about Firefox but it's so late to the party that most people will have already committed to a different browser. Nevertheless, it's an excellent choice for anyone already using other versions of Firefox.

BEST OF THE REST

Opera Coast
bit.ly/coast388
Coast's claim that it's a "completely new way to browse the web on iPhone and iPad" is both a blessing and a curse. We like that it delivers such an impressively different mobile browsing experience but, on the other hand, if we wanted a funky Metro-style interface, we'd have bought a Windows device. Still, if tiles are your thing, it's free to use so you've got nothing to lose.

Mercury
bit.ly/merc388
Mercury has plenty of built-in features for power users, including integration with Instapaper, Pocket and LastPass, as well as cloud-storage services such as Dropbox, OneDrive and Google Drive. It has sophisticated accessibility features; a range of themes; and can take, annotate and share screenshots. It also provides support for gesture and shake. This makes Mercury worth investigating but watch out for previously free features that are now in-app purchases.

Dolphin
bit.ly/dolphin388
If you love gestures and hate onscreen keyboards, Dolphin is the iOS browser for you. Not only does it support the usual left and right swipes but it also allows you to create your own gestures to carry out functions such as opening a specific URL in a new tab. For an extra 79p you can add Dolphin Sonar, which activates the voice-recognition and navigation features.

Use the web offline

The trouble with online services is that you need an internet connection to use them – or do you? **Jonathan Parkyn** explains how to use your favourite web tools without going online

Google Play Music

What you can do offline:
The Google Play Music app for Android (bit.ly/googleand388) and iOS (bit.ly/iplaymusic388) lets you cache songs from your online collection for free, so you can listen to them offline. If you're a paying subscriber, you can also download tracks from Google's music-streaming service to enjoy when you don't have an internet connection.

What you can't do offline:
You can only play songs that you downloaded before you lost your internet connection. You can't search the Play store for more tracks until you're back online.

How to use it offline:
Tap the three-line menu button, then Settings. On an iPhone or iPad, tap 'Cache during playback' to switch on the option. On an Android device, switch on 'Cache music while streaming' and 'Auto-offline'. You may wish to switch on 'Download only on Wi-Fi' to prevent the app downloading music over your mobile connection and eating into your monthly allowance.

On your PC, open the Google Play Music web player (play.google.com/music), click the Menu button and select 'Free and purchased'. Hover over the song you want to download, click the three-dot menu button and choose Download.

Spotify

What you can do offline:
On both the Desktop version of Spotify (bit.ly/spotifywin388) and the iOS (bit.ly/spotifyios388) and Android (bit.ly/spotifydroid388) apps, you can save songs to listen to when you're offline.

What you can't do offline:
Offline playback is currently only available for Spotify's paying subscribers. You can save up to 3,333 songs offline on three difference devices, and you need to reconnect online at least once every 30 days to prevent your offline music from being deleted.

How to use it offline:
In the Desktop player, click the playlist you want to save on the left, then click the Available Offline switch on the right. From a mobile device, tap the three-line menu button,
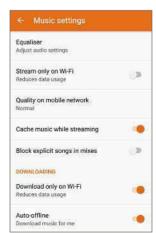
then Your Music and choose any of the playlists, songs or albums listed. Tap the Available Offline switch to on. Spotify will automatically switch to offline mode when there's no available internet connection.

Gmail

What you can do offline:
Using the Gmail Offline desktop app, you can read and manage messages you've received while online and compose new messages to send when you reconnect to the internet.

What you can't do offline:
You can't send or receive new messages. Also, Gmail Offline only works with Chrome.
How to use it offline:
Go to bit.ly/gmailoffline388 in Chrome to install the app. There's also an optional Chrome extension available at bit.ly/gmailext388, which can help improve performance. When you first install the app, choose 'Allow offline mail' when prompted.
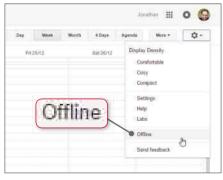
Google Calendar
What you can do offline:
Even without an internet connection, Google Calendar lets you view events, make new appointments and respond to existing invitations – these are sent when you're back online.
What you can't do offline:
You can't sync your calendar or view anything more than the last two months' worth of events. On PCs, offline access only works via Chrome.
How to use it offline:
If you're using a mobile device, you don't need to do anything – just open the Calendar app. On a PC, go to calendar.google.com in Chrome and sign in if necessary. Then click the Options (cog) icon and select Offline. Click Install from Webs Store, then Add to Chrome, then Add. Once this is set up, go back to calendar.google.com and click Options, Settings, then Offline. Choose the calendars you want to access offline, then click Save.

Google Maps
What you can do offline:
A recent update to the Google Maps app for Android means you can now download area maps, allowing you to carry on navigating and receiving turn-by-turn connections, even when there's no available data connection – such as when you're in a tunnel or a 3G/4G dead zone.
What you can't do offline:
Owners of iOS devices currently still need an active data connection to use Google Maps, although Google is working on a version of the offline mode for Apple devices.

How to use it offline:
While you still have an active connection, open the app and search for a destination. Once it loads, swipe up from the bottom of the screen – you should see a Download option. Tap this, then pinch and drag to zoom and select the area you want to download. Tap Download once you're done.

Google Drive
What you can do offline:
You can access and edit Google Docs, Sheets, Slides and Drawings files from your PC or mobile device.
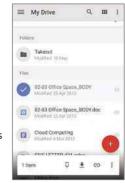**What you can't do offline:**
You can't sync the changes you make to files until you're online again. Some file types that are stored in your Google Drive (including Microsoft Office DOC and XLS files, images and PDFs) can't be accessed when offline. PC users can only access files offline via Chrome.
How to use it offline:
You'll need to activate offline access first. On a PC, sign in at drive.google.com and click the Options (cog) icon, then Settings, then tick the box next to 'Sync Google Docs, Sheets, Slides, & Drawings files to this computer so that you can edit offline'. Now you can edit your files by going to docs.google.com via Chrome, even when you're offline. On a mobile device, open the Drive, Docs, Sheets or Slides app. In Android, long tap the name of the file you want to save offline, then tap the pin icon that appears below. In iOS, tap the 'i' icon next to the file you want and switch 'Keep offline' to On.

Kindle Cloud Reader
What you can do offline:
You can access and read titles in your ebook collection via your PC, even without a web connection – just as you can with a physical Kindle e-reader or the Kindle mobile app.
What you can't do offline:
You can't buy new books, or sync your progress through a book until you're back online.

ALMOST OFFLINE

In some cases, offline access is only available for a fee. Subscribe to Evernote (from £20 per year, evernote.com), for example, and you'll unlock offline access to your notes from mobile devices. Similarly, it's possible to enable offline access to your Outlook.com email and calendar, but only if you have an Office 365 account for business or another Microsoft Exchange-based account (see bit.ly/outlookoffline388). Other services impose an expiry date on offline content. For example, you can download programmes from the BBC iPlayer to watch offline but you only have 30 days in which to watch them.

Some online-only web services may soon offer offline access. YouTube now provides offline viewing via its mobile apps but only for US users who pay for a YouTube Red subscription, which costs $10 (£6) per month. YouTube Red should hopefully launch in the UK soon.

How to use it offline:
The instructions for enabling offline reading vary depending on the web browser you're using. In Chrome, for example, go to read.amazon.com, sign in with your Kindle/Amazon account, then click the Downloaded button at the top of the page and, when prompted, select Enable Offline. You can also access your ebooks offline using the Chrome web app, Kindle Cloud Reader (bit.ly/kindle388). In Firefox and Internet Explorer, you'll need to enable website caching to enjoy this feature. Visit bit.ly/kindleoff388 for instructions on how to set this up in both cases.

Broadband Deals

	Provider	Package name	Monthly price	Contract length	Broadband speed	Allowance	First-year cost*
1	EE	EE: Broadband & Calls	£9.95 (£1 for 12 months)	12 months	17Mbps max speed	∞ unlimited **	**CHEAPEST** £12.00
2	plusnet	Plusnet: Broadband	£9.99 (£2.50 for 12 months)	18 months	17Mbps max speed	∞ unlimited	£30.00
3	TalkTalk	TalkTalk: Broadband	£7.50 (HALF PRICE for 18 months)	18 months	17Mbps max speed	∞ unlimited	£45.00
4	sky	Sky: Broadband	£10.00 (per month)	12 months	17Mbps max speed	∞ unlimited	£120.00

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 5 January 2016.

Ofcom

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

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Take a Screen Break

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

WEB USER WORD SEARCH

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

AIRBNB
BOOKING
CHEAPFLIGHTS
EXPEDIA
HOTELS
KAYAK
LASTMINUTE
SKYSCANNER
TRIPADVISOR
TRIVAGO

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

CAN YOU IDENTIFY THESE FILM TITLES FROM THE EMOJI?

1. 🐑 🎀
2. 🐔 🏃
3. 🔊 🎵
4. ⚰️ 👭💗

Get the answers online at www.webuser.co.uk/quiz388

Run Android apps on your PC with BlueStacks | www.bluestacks.com

The popular Android emulator BlueStacks has been updated and now lets you run multiple apps in tabs. Here's what you need to know

If you've ever fancied playing your favourite Android games on a big screen, then BlueStacks can make this happen. The emulator lets you run apps directly on your PC, and the latest version improves the experience by introducing true multitasking. You can now open multiple apps in tabs and switch between them with a mouse click.

It comes with some apps pre-installed, such as Google Photos, Facebook and Instagram, and you can download any others directly from the built-in store.
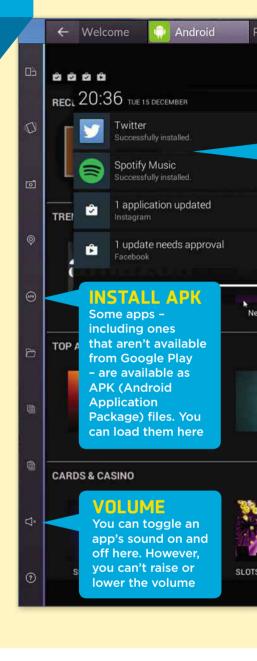
A new sidebar on the left gives easy access to all the popular tools and settings, and you now get 32GB of storage for apps – double the space offered before. To keep using the free version, you will need to occasionally download its recommended apps.

INSTALL APK
Some apps – including ones that aren't available from Google Play – are available as APK (Android Application Package) files. You can load them here

VOLUME
You can toggle an app's sound on and off here. However, you can't raise or lower the volume

1 Install the program and complete the one-time setup to get started. You need to enable the AppStore, set up a BlueStacks Account and activate App Sync. The Welcome screen **1** displays some promotional app choices. You can install any of these, click the Android tab **2** to browse more choices **3** or search for an app by name. **4**

2 The Android screen shows recently played apps (linked to your Google account); trending and top apps; and categories including Tools & Productivity, Kids & Creativity, Books & News, Audio & Video and Action & Adventure. Click the More button **1** next to a group to see all the apps on offer. You can navigate using either your mouse or keyboard.
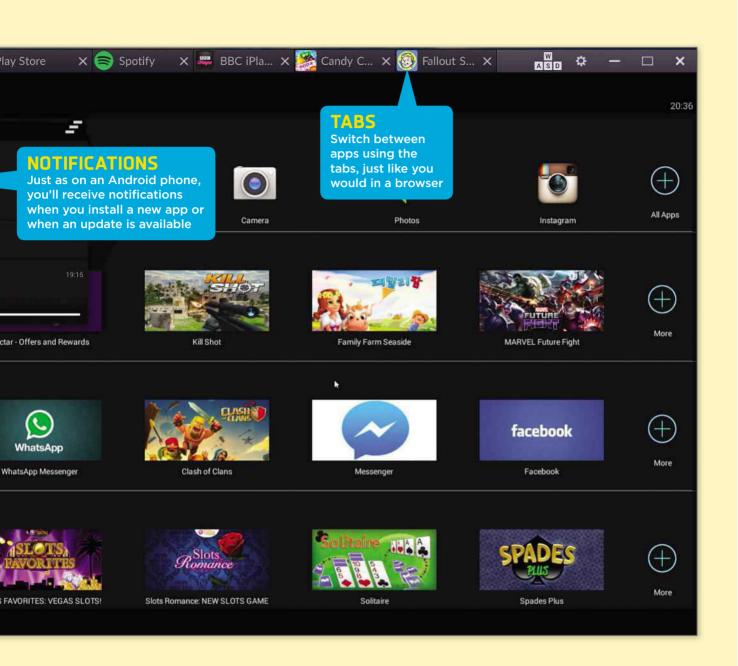
3 Click an app to open the Play Store tab. **1** You can read about the app, and view its ratings and reviews, just as you can on your Android device. If the app is compatible with your device (not all of them will be), you can click the Install button **2** to get it.

4 Accept the list of permissions that the app requires (such as allowing in-app purchases and access to your contacts and identity) and it will download and install. When that's done, click the Open button **1** to launch it in a new tab. **2** You can also uninstall the app or game from this screen. **3**

5 Select the app's tab and you can start using it. You can quit at any time by clicking the 'X'. **1** Jump back to Play Store **2** if you want to install and open more apps. Everything you add will appear under Recently Played in the Android tab.

NOTIFICATIONS
Just as on an Android phone, you'll receive notifications when you install a new app or when an update is available

TABS
Switch between apps using the tabs, just like you would in a browser

6 The sidebar gives you quick access to useful settings. You can switch between portrait and landscape mode, **1** shake the screen **2** (some apps require this action), take a screenshot **3** and set your location. **4** This last option will open a map in a new tab and you can move the pin anywhere. **5**

7 Most apps and games should work fine in BlueStacks, but the program supports key mapping in case you experience problems. Click the WASD button **1** to configure settings for taps, D-pad, swipes, tilts and zoom. **2** You can delete a key map, **3** save it, **4** and turn it on or off. **5**

8 To configure the program, click the cog button **1** and select Settings. You'll be presented with an Android settings page. You can adjust the storage settings, and view and uninstall apps. **2** You can also change your account details **3** and change the date and time. **4**

Personalise the Start menu in Windows 10

Windows 10: www.microsoft.com/windows10 | ⏱ **10 mins** | 🪟 **Windows 10**

One of the biggest complaints about Windows 8 concerned its clunky, tiled Start screen. Thankfully, Microsoft has reinstated a more familiar Start menu in Windows 10 and provided customisation options so you can make it even better.

In this Workshop, we show you how to set up the Start menu to remove unnecessary clutter, group your favourite apps, deactivate those infuriating animated tiles and customise its folders. We also show you how to revert to the full-screen Start menu of Windows 8 (if you preferred it) and revive a more classic Windows look by getting rid of the tiles section altogether.

Last but not least, we explore some handy customisation options for changing the Start menu's colours, coordinating it with the taskbar and Action Centre, and activating a high-contrast theme so you can see the options more clearly.

1 Click the Start button to open the menu, then drag the edges to adjust the size to your preference. **1** If you want to make the Start menu full screen, you need to use Windows 10's Personalisation settings (which we'll cover in Step 7).

2 By default, the Start menu's tiled section is sorted into two distinct groups: 'Life at a glance' **1** and 'Play and explore'. **2** Select a group's title to rename it **3** (or delete the name completely). You can click a group's two-bar button **4** to drag and drop it to a new position.

3 Tiles can be rearranged within a group by dragging and dropping them individually, or you can create a new group by dragging a tile away from the other icons until a 'Name group' bar appears. **1**

4 To remove a tile from the Start menu, right-click it and select 'Unpin from Start'. **1** Some applications also have an Uninstall button **2** that can be used to quickly remove them from your PC. Alternatively, select the Resize button **3** to choose from a range of sizing options.
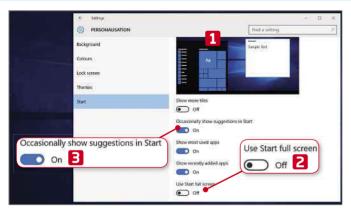
EXPERT TIP

Edward Munn says:
If you want a minimal Start menu like the one in Windows 7, why not get rid of Windows 10's tiles altogether? Unfortunately, there's no quick fix for this – you have to simply unpin each tile one by one and then resize the menu accordingly. However, it's well worth the effort if you want a faster, smoother experience.
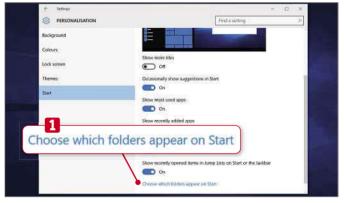
5 If you don't like having animated tiles on the Start menu, you can disable the animation while retaining the shortcut to the app. To do this, right-click the tile, select More **1** and click 'Turn live tile off'. **2** This menu also gives you the option to 'Pin to taskbar'. **3**

6 To add new apps to the tiled area, right-click them in the 'Most used', 'Recently added' or 'All apps' sections and choose 'Pin to Start' **1** (or drag and drop them to this section). For more advanced Start menu options, right-click the Desktop, select Personalise and Start.

7 Here, you can choose to show more tiles across the width of each of the Start menu's columns. **1** There's also an option to 'Use Start full screen'. **2** To stop Microsoft from showing app suggestions, turn off 'Occasionally show suggestions in Start'. **3**

8 Windows shows File Explorer and Settings on the left of the Start menu but you can add more folders, including Documents, Downloads and Pictures, by selecting 'Choose which folders appear on Start'. **1**

9 Go back to the Personalisation screen and click Colours **1** to choose an accent colour **2** for the Start menu. Turn on 'Show colour on Start, taskbar, action centre and title bar' **3** if you want to coordinate these elements by making them all the same colour.

10 By default, Windows 10 makes your Start menu, taskbar and Action Centre transparent, but you can turn this off using the appropriate switch. **1** If you find the colours difficult to see, click 'High contrast settings' **2** to try one of Windows 10's High Contrast colour options.
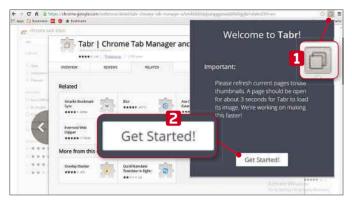
Stop Chrome tabs hogging memory

It's easy to open a Chrome tab and then leave it, thinking you'll go back to it later, but if you keep too many tabs open in the browser, your PC can slow to a crawl. Tabr fixes this problem by letting you manage your tabs more easily. It closes tabs that have been inactive for long periods, and lets you archive them to maximise your PC's available memory.
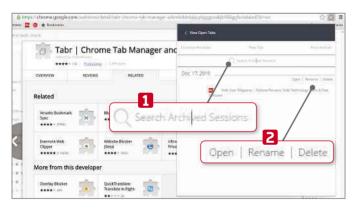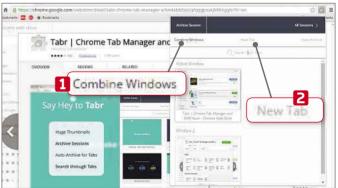
Tabr: bit.ly/tabr388 | 🕐 **5 mins** | 🌐 **Chrome**

1 Install Tabr and click its icon **1** (or press Alt+Shift+E) to open it. Click the Get Started **2** button and Tabr will display a visual summary of all the tabs you have open. Some thumbnails will not load correctly until you refresh their tabs.

2 When you have more than one window open in Chrome, your open tabs are grouped accordingly. **1** Hover your mouse over a thumbnail and you can click the buttons to open a new window, **2** close the tab **3** or archive it.

3 Archived tabs are closed to save memory. Tabs that you've archived are arranged by date and can be found in All Sessions by scrolling down or using the extension's search bar. **1** There are buttons to open, rename and delete **2** your archived sessions.

4 Click View Open Tabs to return to Tabr's main screen. You can use the search bar to search your current tabs; or click Combine Windows **1** to amalgamate all your tabs in one window. Click New Tab **2** to open a new tab in Chrome.

5 Clicking Archive Session **1** archives the tabs in your current window but does not close them, meaning you have to do this manually. When you archive a session, all your current tabs are saved under one name in All Sessions.

6 Tabr can be set to archive and close tabs you haven't used for a while. To use this feature, click Auto-Archive, **1** enter the amount of time that tabs must remain inactive before they're closed **2** and click Save. **3**
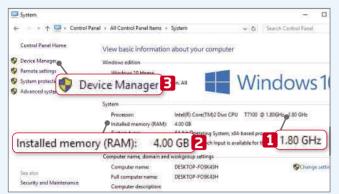
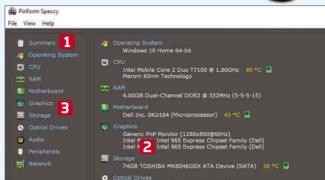# Check your PC can run new software

Before you rush out and buy a new program, or pay to download new software, you need to check that your PC is powerful enough to run it. However, the technical requirements of many programs can look like gibberish, unless you know how to find your PC's hidden specs. In this Workshop, we show you how and where to look for your PC's specifications.
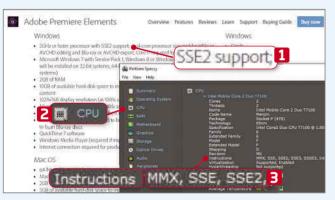
Speccy: bit.ly/speccy388 | ⏱ **10 mins** | 🪟 **XP, Vista, 7, 8, 10**

1 Open the Control Panel and choose 'Large icons' or 'Small icons' from the 'View by' menu, then select System. It lists the processor type and speed **1** and how much memory you have. **2** Click Device Manager **3** to find components' names if you want to research them further.

2 If you need more detailed information, download and install Speccy (bit.ly/speccy388). The Summary tab **1** has a bit more in-depth information than the System window and lists more components. **2** Click a tab **3** to get more detail on a specific component in that category.

3 A program may have system requirements that you're unfamiliar with, and these are often listed in Speccy. For example, video-editing software Adobe Premiere Elements needs your processor to have SSE2 support. **1** Speccy lists this in the CPU tab **2** next to Instructions. **3**

4 Speccy doesn't tell you the version of DirectX installed on your PC. To find this out, press Windows+R, type `dxdiag` and press Enter. The DirectX version currently running is listed at the bottom. **1** More up-to-date versions should appear as Windows updates, if they are available.

5 Games specs can be difficult to interpret, but Can You Run It (bit.ly/cyri388) lets you simply type the name of a game in the search box **1** and select it from the list that appears. Select the Desktop App option and click Start. **2** Run the Detection.exe app that's downloaded.

6 The results are posted in your web browser and show an overview of whether the game will run at the top of the page. Scroll down to see it broken down into specifics – you might be able to perform a simple component upgrade **1** to get a game running.

How to...

Build your own multi-room sound system

A wireless sound system lets you play music all around your home. **Wayne Williams** shows you how to set one up for just a few quid

Wireless sound systems such as Sonos (**www .sonos.com**) let you stream music around your house, positioning speakers so you can enjoy uninterrupted audio as you move from room to room. The main downside to this is cost – the Sonos Play:1 costs £169, and larger Sonos speakers are even more expensive.

However, it's possible to create a multi-room sound system without breaking the bank. In fact, if you already have the required hardware (a PC, mobile device and some speakers, for example), then you can put something together for just a few pounds.

Use SoundSeeder to build a multi-room sound system

SoundSeeder (soundseeder.com) is a free Android app that turns your tablet or smartphone into a wireless multi-speaker audio system. Your phone stores the music and you then connect wireless speakers to it. Start some music playing and it will be streamed through all the connected speakers at the same time, and in perfect sync.

Although the app is free, it's rather limited. You're restricted to outputting sound through only two speakers at the same time. That may not be a deal breaker, because listening to audio in two rooms may be enough for you, but the app also imposes a connection-time limit, which disconnects every 15 minutes. You can reconnect immediately, but it's a bit of a pain if you're hosting a party or listening to web radio. If this restriction gets annoying, or you want to expand your sound system to other rooms, you can upgrade to the premium version via an in-app purchase. This costs just £3.89 (way cheaper than buying a Sonos system) and will also remove the annoying banner advertisements that appear at the bottom of the app. The full version lets you connect 16 speakers to SoundSeeder, provided your wireless network connection is up to the task.

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This 148-page book is the only guide you need to Microsoft's fantastic new operating system. You'll learn how to master all the new tools and software, and how to upgrade without losing anything. It has been updated to include fixes for problems that have appeared since Windows 10 launched.

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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.

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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 for 2015 to include instructions on mastering the new Pi models (A+ and B+).

BUY IT NOW FROM AMAZON
at bit.ly/raspbook

(up to 96KHz/24bit lossless audio playback), which is superior to CD quality.

The most impressive thing is that you can use Chromecast Audio to play your music simultaneously throughout the house using the multi-room function. This works in a similar way to SoundSeeder, although it's more expensive because you'll need a Chromecast Audio device connected to each set of speakers you want to pipe music through. So if you have four sets of speakers, you'll need four Chromecast Audios, which will set you back £120. But that's still cheaper than a single Sonos Play:1, provided you already have enough compatible speakers. You can even choose where to send your music to – a single speaker in a particular room or a group of speakers in different locations.

A clever touch is that friends will be able to cast audio from their phones to your setup, so DJ duties won't fall entirely on your shoulders.

The expensive option

Multi-room speakers for the home were pioneered by Sonos but there are now a lot more companies making speakers that let you stream high-quality audio around your home. These aren't cheap, of course, but if you want a professional setup with guaranteed compatibility, then it might be worth going down this route.

While there are plenty of options to choose from, our box on the right shows some of the better multi-room systems worth investigating.

MULTI-ROOM SPEAKER SYSTEMS

Sonos System
www.sonos.com
With the best-known multi-room system, you can choose from the Play:1 (£169), Play:3 (£259) and Play:5 (£429). The Play:3 and Play:5 speakers promise "deeper, richer and more powerful sound" and are aimed at audiophiles.

Samsung M5
bit.ly/samsungm5-388
More expensive than the Sonos Play:1 but cheaper than all the other speakers mentioned here, the £230 M5 Medium Wireless Audio Multiroom Speaker from Samsung delivers meaty, high-quality sound and can be positioned horizontally or vertically. The app to control music streaming is available for both iOS and Android.

Bluesound Generation 2
www.bluesound.com
If money is no object, this is the system to choose, but it's very expensive and you'll need to buy several different components, including the Node 2 streamer (£429), the Powernode 2 streamer/amplifier (£699) and Pulse speakers (£599). There are apps for Android, iOS, Windows and Mac.

MINI WORKSHOP | Play music through SoundSeeder

1 Once you've connected all your speakers, you're ready to start using SoundSeeder. Tap the Menu button top left to access the app settings. Tap My Music **1** to play some songs. Tap the Add Tracks button **2** to select Local, Network, URL or Google Music as the source.

2 Alternatively, you can choose to listen to Online Radio. **1** Tap the Online Radio button to select a station. You can browse the list of available choices by country, genre or alphabetically. Selecting a station will let you start playing it or you can add it to your favourites so it can be easily accessed later.

3 The Mic/AUX option **1** lets you stream music from external sources, such as a non-Wi-Fi stereo system. The app also offers a built-in equaliser **2** that you can toggle on or off, and a sleep timer. **3** Settings **4** lets you change the audio mode, manage the buffer size and configure the speaker mode.

NEXT ISSUE   How To... Upgrade Windows 10 with SSD

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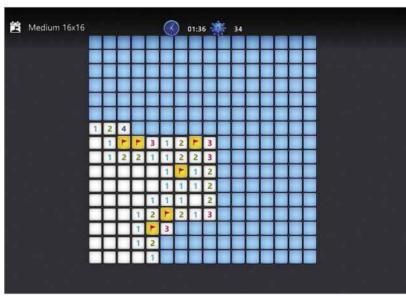## Subscribe to *Web user* today and save on the single issue price

TOP TIPS FOR REINSTALLING WINDOWS 10'S MISSING TOOLS

Bring back lost games in Windows 10

Microsoft Solitaire Collection, which is bundled with Windows 10, replaces the card games that were in previous versions of Windows. It includes Klondike, Spider, Freecell, Pyramid and TriPeaks. None of the other games in Windows 7 are included, but the Windows Store makes it easy to replace the missing apps and add many more.

Minesweeper is no longer in Windows 10 but there is a new Microsoft Minesweeper app, which includes an adventure mode with weapons, monsters and traps. Microsoft Mahjong is a great new version of Windows 7's Mahjong Titans and is one of the top five free games available through the Windows Store. Microsoft has abandoned Chess, Backgammon and Checkers (Draughts), but searching in the store for these turns up dozens of alternatives, such as Backgammon Deluxe, Checkers Live and 3D Chess Game.

Old favourites such as Minesweeper are still available from the Windows Store

Play DVDs

Windows 10 can't play DVDs, much to the annoyance of many people. If you want to play movies and you have upgraded from a previous version of Windows that had Media Center and the ability to play DVDs, Microsoft has been giving away copies of Windows DVD Player for free, but only for a limited time. It's in the Windows Store and costs £11.59 for anyone that performed a clean install of Windows 10, bought a new PC with Windows 10 or didn't have Media Center before. It has quite a low rating from users,

Use VLC media player to watch your DVD library in Windows 10

though, and the one-star reviews outnumber all the others combined.

A better way to play DVDs – and just about any digital video file – in Windows 10 is to use VLC Media Player (www.videolan.org). Much more than just a DVD player, VLC supports a wide range of media including music, videos, photos, DVDs and Video CDs. It will play almost any type of media file you can download from the internet.

Playing files is easy. From the View menu, select Playlist to display a file-selection window on the left. Select My Videos, My Music, My Pictures or Discs to show the files available or the disc that's in your DVD drive. Just double-click to play them. With a DVD, for example, select the View menu, then choose Minimal Interface to hide the controls. Right-click inside the video window and select Video, then Fullscreen. You can now sit back and watch the movie.

Replace Windows Media Center

Around 10 years ago, Windows Media Center was a popular program on Windows for playing videos, photo slideshows, music and DVDs. You could even record and play back digital TV if your PC had a tuner installed. Not many PCs have TV tuners anymore, and DVDs are dying

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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.**

Plex is a replacement for Windows Media Center. It plays music, movies and photos

out, so Media Center was dropped from Windows 10. There are several alternatives that can be used to replace it, though, such as Media Portal (www .team-mediaportal.com) and Kodi (kodi .tv). They do everything that Media Center did and more. However, neither of them worked on our test PC, despite saying they were compatible with Windows 10. Other people have had success with them, so it may just have been our PC. Try them, because you might have better luck than we did.

Plex (plex.tv) is another alternative, which worked perfectly on our test PC, although it's not as straightforward to use as Media Center. It installs a server application which can then be accessed by other software and apps that run on other devices, such as phones and tablets. It can also be accessed on the PC running the server via a web browser.

To set it up, go to the Downloads section of the Plex website and download Plex Media Server for Computer (not NAS). Run it and it will add an icon in the notification area of the taskbar. It also opens a browser and prompts you to create an account and sign in. This is only necessary if you want to access your media files from outside your home network, otherwise you can ignore it. If you have problems getting started (and, as we've said, the process is less obvious than with Media Center), go to the Support section of the website and read the guides on how to get Plex up and running.

Right-click the notification area icon and select Media Manager. A browser window opens that accesses the Plex server running on the PC. On the homepage, click the Plus button to add a new library and select the type you want, such as music, movies, TV shows, photos or home videos. Click Next, click 'Browse for media folder' and select your Videos, Pictures, Music or other folder. Click Add Library and all your media files will be added to Plex. It might take several minutes to add them, but once it has finished, you can browse and play them.

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

Resurrect Desktop gadgets
Gadgets were introduced in Windows Vista and continued to be supported in Windows 7. There were clocks, calendars, performance and status monitors, weather forecasts and more. They were very popular with some users and you may miss them if you've upgraded from 7 to 10.

Although gadgets are no longer supported by Microsoft, the free tool 8GadgetPack (8gadgetpack.net) lets you get gadgets back on the Desktop.

Desktop gadgets are back thanks to 8GadgetPack

Download, install and run the application. It comes with an excellent collection of some of the best gadgets, but you can get more once the software is installed.

After installing 8GadgetPack, run 8GadgetPack Tools on the Start menu. This opens a window containing a list of functions. Click 'Add gadget' to open the gadget browser. There are four screens of gadgets and you simply drag them to the Desktop to install them. Run 8GadgetPack Tools and click Disable/ Enable Autorun to set the auto-start with Windows option.

There is a whole website full of Desktop gadgets at Win7Gadgets (win7gadgets.com). They are designed for Windows 7 but they work in Windows 10 if you have 8GadgetPack installed. To add a gadget, right-click the downloaded Zip file and extract the contents. Explore the files and folders and double-click the .gadget file to install it.

Revive Windows Live Essentials
Windows Live Essentials (now called Windows Essentials) is a collection of useful programs that includes OneDrive, Movie Maker, Windows Live Mail, Windows Live Writer and Photo Gallery. However, it's less useful in Windows 10 where the new Photos app replaces Photo Gallery, the Mail app replaces Windows Live Mail and OneDrive is already built-in.

Movie Maker is the one application you might miss, but there are good alternatives in the Windows Store, such as Power Director Mobile Video Editor. This is designed for tablets and supports touch, but it also works with a keyboard and mouse. You can add its thumbnails of clips to a timeline in the lower half of the screen. Special effects can be applied to the clips, music and titles can be added, and the resulting video can be saved to the hard drive or shared on Facebook or YouTube. There are also great Desktop applications such as the free Serif Movie Plus Starter Edition (bit.ly/ serif388).

Take control of Windows Update
Windows updates are compulsory in Windows 10 and you are no longer free to decide whether to to enable or disable them. To get back some control, press Windows+i to open Settings, select 'Update & security', then Windows Update. Click the 'Advanced options' link. Some versions of Windows let you put off updates for weeks or months. You will have to install them eventually but not right now.

Tick the box 'Defer upgrades'. If you can't see this option, go to Settings, 'Network & internet', then Wi-Fi. Click 'Advanced options' and turn on 'Set as metered connection'. This limits Windows Update's activities.

If you want even more control over your updates, take a look at the free Windows Update MiniTool (bit.ly/ mini388), which we covered in a step-by-step workshop in our last issue (bit.ly/webuser387).

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

BROWSERS

Stop Firefox blocking purchases

Q I use Firefox 42 on Windows 10. In recent weeks, I've had a problem on some sites. It may be that my security is set too high but I'm not sure. I'm using Avast (www.avast.com) and Malwarebytes Anti-Exploit (bit.ly/mae388). I don't think they clash.

On the Dunelm Bedding website (www.dunelm.com), I can't put anything in the basket. I've spoken to their customer support and they can't work out why. I have had the same problem on another site.

Last Friday, I tried to order a Chinese meal from Bigfoodie (www.bigfoodie.co.uk) but I couldn't get to the payment stage. I called them and they asked me what was appearing in my address bar, which was their site but without the 'https', so that might have been the problem. I reluctantly tried it using Edge and the 'https' part appeared and I got my food.

Last week, when I tried Just Eat (www.just-eat.co.uk), it kept asking for a Recaptcha that wasn't there, and I've had the same problem today. I called them and they advised me to use Internet Explorer, which worked fine. Is my computer being over-protective?

Martin Fletcher, via email

Security software and tracking blockers can stop websites working properly

A This is a security problem that is preventing certain functions in the websites from operating normally. We had no problems using Firefox but when we switched to Private Browsing, we had the same experience and the basket and checkout would not work. In Private Browsing, Tracking Protection is turned on, so parts of the page that track your browsing activity are blocked. If you turn off Tracking Protection, the sites work fine.

Although you are using a normal browsing window, it seems that Firefox's security software or settings must be performing a similar function to the Tracking Protection tool in Private Browsing. We don't think Avast and Malwarebytes Anti-Exploit are the cause, so check whether you have any other security software running. Resetting Firefox might help. Type `about:support` into the address box and click Refresh Firefox.

PRIVACY
Use a VPN on an Openzone hotspot

Q I have had problems connecting to some Wi-Fi networks using a VPN. I've been using both a Galaxy S5 and a Galaxy Note 10 with the full version of CyberGhost (www.cyberghostvpn.com), but I've never been able to connect to a BT Openzone network. I can connect to The Cloud and O2 Wi-Fi networks, and I can also connect through my phone's data connection and my home network via my router.

I have also tried Betternet (www.betternet.co) but that won't connect to Openzone, either. I don't know if this is relevant but in the coffee shop I use, two BT Openzone Wi-Fi signals show up – one naming the coffee shop and the other just as BT Openzone. Is there a setting that needs to be adjusted?

Bruce Baker, via email

A In coffee shops and other public Wi-Fi hotspots, you often find a mixture of open and closed wireless networks. One is usually for the public to use and another private network will be for the shop's equipment and staff.

Make sure you connect to the public network and not the private one.

CyberGhost should be disabled when connecting to a Wi-Fi hotspot and then enabled once you have logged in. It will then encrypt all your internet activity. When you've finished with the Wi-Fi, disable CyberGhost first, then log off from the hotspot.

You can encrypt your PC or mobile internet connection with CyberGhost

VIDEO
Record your PC screen

Q I would like to know how to record a film or other video that is running on my PC to a DVD in my D: drive. I've been told that it can be done.

Edward Williams, via email

A This is a two-step process: first, you have to capture what's showing on the screen as a video file on your hard drive; then you can save the recording to a DVD. It's possible to create a DVD that can be played on a computer or in a DVD player connected to a television.

To capture the screen in Windows 10, hold down the Windows key and press G to open the Game Bar. Clicking the red button starts recording. This method is designed for recording games, but it works with other content, including YouTube videos and so on. The Game Bar hides, but leaves a little button in the top-right corner of the screen, which you click to stop recording. To see the video, open Explorer, expand This PC on the left, select Videos and open Captures.

The recording settings are found in the Xbox app. Run it from the Start menu, click the gear icon in the bottom-left corner, select Game DVR at the top and you'll find the audio and video

Use HyperCam to record the PC's screen and save it to the hard drive as a video file

settings at the bottom. The resolution, for example, offers standard and high settings.

If you have an older version of Windows, you could use a tool such as HyperCam (hyperionics.com) or CamStudio (camstudio.org). They are a bit more complicated but with HyperCam, for example, you select the 'Screen area' tab and enter the coordinates for the area you want to capture, such as 0, 0 (top left corner) and 1024, 768 (the screen width and height). Click Start Rec and the video will be saved to the Documents folder.

Once a video has been created, it needs to be converted to the correct format for a DVD and then burned to a DVD disc. Many commercial video editors can do this but, if you want a free solution, try DVD Flick (dvdflick.net) or DVDStyler (www.dvdstyler.org).

BROWSERS
Stop pop-up noises

Q Almost every time I browse the web on my all-in-one Windows 8.1 Lenovo PC, I get annoying music or sound from adverts popping up when I least expect it. Does anyone know how to stop this? I know I can turn down the volume but sometimes, when I'm on YouTube, I want to hear what is being said. These annoying pop-ups seem to overlap the normal sounds. Is there a setting I can use to disable sounds from pop-ups without interfering with normal sound?
Michael Hastie, via email

A If ads are popping up when you use the internet, you may have adware installed on your computer. You can get full details on how to remove adware, toolbars and other irritations from web browsers in Issue 387 of *Web User* (bit.ly/webuser387), or try using AdwCleaner (bit.ly/adwclean388), Avast Browser Cleanup (bit.ly/avastbc388) or Browser Cleaner (www.browsercleaner.com) for a quick solution.

HARDWARE
Printer problems

Q I have just upgraded from an HP PC running Windows Vista to a new Lenovo with Windows 8.1, but now my HP 2510 all-in-one printer won't work. I managed to get the PC to recognise it, but it still won't print. None of the extensive but useless information I've found via Google has been of any help and I even fruitlessly downloaded, installed and ran HP Print and Scan Doctor, which took two hours that I'll never get back!

This is such a significant and, if my Google results are any indication, widespread problem that it seems odd that neither Microsoft or HP have bothered to offer a solution. Since a significant proportion of my computer work involves my scanner, I am now officially desperate.

On another point, I would advise

WINDOWS 10
Update and make a back up

Q I am in the process of updating two computers to Windows 10. The first PC is an Asus laptop, which is about a year old. The second is a Chillblast desktop PC with an SSD and a 2TB hard drive, which is connected to a four-drive Drobo 3TB NAS.

Having updated the laptop, which went well, I don't feel confident creating a clean install drive as a back-up in case it goes on to wipe my PC. Also, when I start the update on my Chillblast PC, I intend to disconnect the Drobo, which contains all my photos and data. Will that be OK?
Brian Jones, via email

A A USB flash drive with the Windows 10 installer can be used to upgrade an existing Windows installation or it can be used to format the hard drive, wiping it clean so it can then install a fresh copy. The default is to upgrade, which keeps all your files. You have to go out of your way to select the option to erase the hard drive and perform a clean install. It is not easy to do this accidentally.

On your Chillblast PC, if the Drobo NAS only contains data files, videos, photos and music, then disconnecting it is fine. It isn't necessary but it won't do any harm. If you have moved the

anyone who buys a PC with a trial version of McAfee LiveSafe installed not to use it. On my old Vista PC, I ran Avast Free and had no problems. When I installed the same freeware programs on the new Windows 8.1 PC, I was inundated with malware that took almost a day to find and eradicate, which LiveSafe had simply ignored.
John Lockett, via email

A Ignore the software that came with the printer. If it is installed, go to 'Programs and Features' in the Control Panel and uninstall it. There may be several programs, so make sure everything is removed. Go to bit.ly/hp388 and click the 'Software and Drivers' button, followed by the Go button. Download the software and install it. This was updated in December, so it is bang up to date and should work fine with Windows 8.1.

Back up your hard drive in case of disaster

system folders for Pictures, Documents, Videos and Music to it, then leave it switched on and connected when you upgrade or they might not work properly.

A USB flash drive could be used to reinstall Windows 10 in the event of a hard-drive failure, but it would be a clean install and you would lose all your files. You have several terabytes of hard-drive space, so why not use a backup tool to store a complete image of your C: drive elsewhere? If your hard drive ever malfunctions, you can then restore the latest back-up and carry on where you left off.

Back up before you upgrade, just in case. Then either update or replace the backup afterwards. Free back up tools include EaseUS Todo Backup Free (www.easeus.com), Backup & Recovery Free (bit.ly/para388) and AOMEI Backuppper Standard (www.backup-utility.com). They create a CD or USB flash drive to boot the PC and restore the backup from an internal or external drive.

This fortnight Roland has been streaming music but can't decide between Google Play Music and Microsoft Groove

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

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TOP TIP

Mug winner

WebUser

WEBSITE
Print your own passport photos

I hate paying for a passport photo because you end up paying £8 for four photos when you often only need one. I have a perfectly good camera and printer, but found it difficult to print my own photographs at passport size. So I was pleased to discover the website PassportPhoto4You (www .idphoto4you.com), which helps you to create your own passport photo sheet. It's completely free to use and has the required templates for plenty of countries, including the UK. Once you've uploaded your image, there are built-in tools (with

PassportPhoto4You uses templates to help you create your own free passport photos

instructions) to crop it according to the regulations.

John Johnson, via email

OFFICE SOFTWARE
Stop pasted text formatting incorrectly

Instead of using a word processor on my PC, I use Google Docs (docs.google.com) in a browser because I don't write that much and a subscription to Microsoft Office would be a waste of money. Docs is good enough for what I need.

Here's a quick tip for using Google Docs. When you paste in text from elsewhere, such as a web page, an email or another document, the original formatting is kept. It's a bit annoying having to restyle it to the font, size and colour of the rest of the text.

One method that saves a bit of time and effort is placing the cursor in the document text, clicking the 'Normal text' button in the toolbar, clicking the arrow to the right of 'Normal text' and selecting 'Update Normal text to match'. It defines the current text format as 'Normal text'. Now, when you paste in new text, you can quickly select it and click 'Normal text', then 'Normal text' again. Two mouse clicks and the pasted text is exactly how you want it.

Neil Baker, via email

MUSIC
Sing along with YouTube

YouTube is probably the website I use most to listen to music and follow my favourite artists. I recently came across an excellent Chrome add-on that makes YouTube music even better. It's called Musixmatch Lyrics for YouTube (bit.ly/musix388). Click the button in the Chrome Web Store to install the extension, then go to YouTube. Find your favourite artist and play a video. The lyrics are overlaid on top of the video in time to the music. This is brilliant for parties – hook your computer up to the TV and you can sing along karaoke-style!

Helen Graham, via email

See the lyrics to YouTube music videos with the Musixmatch add-on for Chrome

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GENERAL PC
Create Desktop slideshows

Here's a quick way to view your photos as a Desktop slideshow in Windows 7. Right-click the Desktop and select Personalise. Click Desktop Background and, in the 'Picture location' gadget at the top, select Pictures Library. Click the menu under 'Change picture every' and select a time interval, such as every 10 seconds. Click Save Changes and close the window. The Desktop background will now change to a new photo on the selected schedule.

You can customise the slideshow using further options. Next to 'Change picture every' is a Shuffle box. Tick the box and the photos are shown in a random order, so you don't see the same ones every time you switch on your computer. Next to 'Picture location' is a Browse button. This lets you select a specific folder of photos instead of showing the entire contents of your Pictures library.

Rob Phillips, via email

Use the photos in your Pictures folder as background images on your Desktop

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IOS
Find places that accept Apple Pay

In the future, we may no longer need to carry wallets and purses, but I think that's still a year or three away, because some stores accept mobile payments but others do not. If you use the Maps app on an iPhone, you can find out if a store,

cafe or other business will accept Apple Pay. Just open Maps, search for something, such as a café, in the search box at the top. A list of nearby places is shown and you can tap them to view the details. If a place accepts Apple Pay, the logo is included in the information.

Adam Bowen, via email

PRIVACY
Protect your privacy online

For anyone interested in shielding their internet usage from prying eyes, I have come across a great site at www .privacytools.io. It lists all kinds of secure tools and programs that can be used to keep your data private. The same company offers a privacy-respecting search engine at www.privatesearch.io.

TheTechGuy, Web User Forums

WINDOWS 10
Create PDF files in Windows 10

Turning files into PDFs can be a handy way of making them compatible with mobile devices. If, for example, you are sending a Word document to someone who doesn't have the app to open it, you can send it as a PDF file, instead. Previously, if you wanted to make PDF files, you needed to buy an expensive professional PDF-creation program or install an inferior free third-party tool that may well come with adware. I was pleased to learn that Windows 10 has its own in-built PDF printer that lets you create (or convert to) a PDF from almost any program or app. For example, you can save a route in the Maps app; save an entire web page; or save a Word document.

To do this, simply press Ctrl+P to open the print dialogue box, click the drop-down menu under Printer and select the option 'Microsoft Print to PDF'. Next click Print, which saves the PDF to your Documents folder, or you can navigate to another directory if you want to save it elsewhere. It works for web pages, Office

Windows 10 has a built-in Print to PDF option

documents and any other program that lets you print.

Tornado, Web User Forums

BROWSER
Control where new tabs open in Chrome

If you don't like Google Chrome's default behaviour when you open a new tab, there's a handy add-on you can use that lets you customise where new tabs appear. It's called Tab Position Options (bit.ly/tabposition388) and, once you've installed it, a setting page opens letting you choose the position for new tabs (always first, always last, right of current tab and left of current tab) as well as the tab that's activated when you close your current tab (which has even more options). Tab Position Options also has a couple of handy built-in keyboard shortcuts: press Alt+T, for example, to sort all your current tabs by title; or press Alt+C to switch back to your last active tab. It's an excellent add-on that lets you personalise Chrome according to your needs. Understandably, it's received mostly five star reviews.

Ed Wright, via email

Tab Position Options lets you control where new tabs appear in Chrome

SOFTWARE
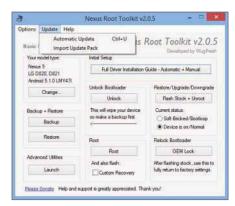## Let someone fix your PC via remote access

I recently needed to let my son remotely access my laptop to sort a problem, and the free program TeamViewer (www .teamviewer.com) was perfect for the job. You can download the full version, but often the QuickSupport (portable) version is all that's needed, particularly as there are very few options required from the person being remotely accessed. There's a helpful YouTube video for guidance at bit.ly/teamviewer388 or you can also download the manual from bit .ly/manual388, should you need it.

Moonshine and Cantrel, Web User Forums

SOFTWARE
Fix a bricked Nexus device

I was sorry to read about the problems Shaun Smith has had with his 'bricked' Nexus 7 in Issue 385 (bit.ly/webuser385). Instead of trying to get Asus or Google to do anything, he could try downloading

Nexus Root Toolkit can unlock, root, relock and unroot your Nexus device

the Nexus Root Toolkit from www .wugfresh.com. It's the best tool for people who want to unlock, root, relock or unroot any Nexus, and it can help to fix bricked devices. The website provides full instructions as well as videos to help.

Install Nexus Root Kit on your PC, run it and connect your Nexus to the computer via a USB cable. If the program can't find the tablet, Nexus Root Toolkit should help getting the necessary drivers set up. It should then show your tablet, or let you select it from a list. If it is not in Normal mode, then select the 'bricked' option and the program will attempt to fix it while showing everything that it's doing. You really cannot go wrong with this program – it has never failed me.

Mr Yorkshireman, via email

WINDOWS 10
Check your Windows 10 build easily

There's a much easier way to check which version of Windows 10 is installed on your PC than the method given in Workshop 2 of Issue 386 (bit.ly/ webuser386). There's no need to use the Registry Editor. Instead, simply click Settings, System and About, and all the information is right there: Edition, Version and OS Build. The upgraded version (November 2015) is 1511 and, right now, the current Build is 10586.29 on my laptop. It also tells you if you have the 32-bit OS or the 64-bit OS installed.

Maurice Durbin, via email

You can check your Windows 10 build via the operating system's Settings menu

Readers' Helpdesk

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

WINDOWS 10
Can I upgrade to Windows 10 without the correct display drivers?

Q I want to upgrade to Windows 10 from Windows 7 but a message appears saying that my display is not compatible because of something to do with the Express Chipset Family. There's no driver update available from Dell, so is there any easy way around this, because my PC otherwise works fine and I don't want to buy another!

mickthefish, Web User Forums

A Google is full of links to Express Chipset compatibility problems. Before you do anything, create a full external system image.

It's worth running the Intel Driver Update Utility (bit.ly/intel388) to see if there's a compatible driver available directly from Intel.

If not, and your PC is a desktop model, you can upgrade your graphics hardware relatively cheaply. New adapters are available from Amazon or Novatech for around £20, but be sure you do a bit of research to make sure that the model you buy is supported by Windows 10. When you buy a plug-in graphics card, the 'on board' chipset is automatically disabled and the new graphics card will be used by default, meaning all you need to do is plug your monitor into the port on the new card.

If you manage to perform the upgrade but still have problems with the drivers, you may be able to solve the problem by carrying out a clean installation of the operating system over the top of the upgrade.

Cantrel, calimanco, gesail and TheTechGuy, Web User Forums

GENERAL PC
Why doesn't my netbook receive Microsoft updates?

Q I own a Windows 7 desktop PC and a Windows 7 netbook. The desktop PC came with Microsoft Office 2010 and a

GENERAL PC
How can I remove traces of software no longer installed on my PC?

Q I've recently noticed several files left over from software I no longer have (for example, TomTom files that I uninstalled at least four years ago, and AVG which I uninstalled last year). This is despite the fact that the software they originated from doesn't appear in Iobit Uninstaller or Revo Uninstaller. Is there any way to find all these files and remove them? Can you recommend a free program that would do this for me?

IRM072005, Web User Forums

CCleaner's Registry Cleaner tool lets you remove traces of redundant software

A They are probably only orphan files and won't be taking up much drive space, so I wouldn't worry too much. However, if you still want to remove them, you can try the Obsolete Software option in CCleaner's Registry Cleaner tool (bit.ly/cclean388).

To do this, select Registry in the application's sidebar, right-click Obsolete Software and choose Scan Obsolete Software. If it finds something, you can right-click the entry and select 'Open in RegEdit' to see exactly what it is and where it's located in the Registry. To get rid of the AVG files you've found, I'd try running the AVG uninstaller tool first (bit.ly/avgrem388).

Stewart40, Web User Forums

licence to install it on up to three computers, so I installed it on the netbook as well.

I find I get lots of updates on the desktop PC but the netbook hardly receives any. Is it possible that most of the updates are for Office and that the netbook somehow doesn't realise that it's installed?

ERICG, Web User Forums

A On the netbook, open Windows Update via the Start Menu. Next to 'You receive updates', check whether it says 'For Windows only' or 'For Windows and other products from Microsoft Update'. If it's the first option, click 'Find out more' next to 'Get updates for other

Microsoft products'. This will load a web page where you can opt in to receive Microsoft updates for all your Microsoft software, including Office.

TheTechGuy, Web User Forums

Check that your PC is receiving updates for Microsoft software as well as for the operating system

Star Email

In defence of Dell computers

In Issue 386 of the magazine (bit.ly/webuser386), you published 'What you say' comments from four readers regarding the recent Dell security scare, which responded to the question: 'Does the security flaw put you off buying a computer from the company?'. As all four published responses were in the negative, and I didn't see the original question until now, perhaps I may be allowed a belated ten-penn'orth concerning buying Dell computers.

In my limited years of computing, I've bought four computers: three desktops and the latest, a laptop. The first was a Time computer, made by a company that's now extinct and had a poor reputation. Then a friend of our eldest came along, a director of a private company that does a lot of work for Dell in hotels and other business premises. He recommended that I try a Dell, saying: "After 10 years I can count on one hand the times it's Dell at fault when following up a complaint".

Since then, I've never had cause to disagree with that comment. He is now my regular Dell mentor because, in my experience, Dell comes with reliability as its number one priority. Okay, this eDellRoot business was a frightener, but fair do's: Dell did not hide from it and quickly went to work to resolve the situation. They made a mistake, does *Web User* not make any?

I checked my laptop and followed Dell's Support advice (bit.ly/dell388) to download a fix, but opening it there was no trace of the flaw. If the four negative comments were the total who responded then let me assure them: go and buy Dell. I certainly will continue to do so.
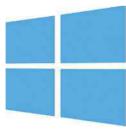
Just for the record, Dell kindly provided me with the full version of the superb Cyberlink Media Suite Essentials free of charge, which I assume compensated for the loss of Windows Media Suite in Windows 10.

George, Web User Forums

I wish I hadn't upgraded to Windows 10

As Noel Lafone related about his error problems with Windows 10 in Issue 386, I have had the same problems about 10 times, on each occasion having to reboot six or seven times. I unfortunately had passed the 30-day period or I would have reverted to Windows 8.1, which – despite the criticisms – I felt was not too bad. Yes, it had a few problems with its setup, but I never had any errors or crashes.

As for Windows 10, after all the so-called testing pre-release, you would have thought a basic problem like this would have been sorted out. I have a desktop PC running Windows 7 that I will not upgrade to Windows 10. In my opinion, Windows 7 is a far superior operating system than any OS since. You'd have expected Microsoft to realise that they had a Rolls Royce of an OS and developed it as they intend to do with Windows 10.

I for one am not impressed with Windows 10. In fact, if it's possible, I will return my two-year-old laptop to factory settings so I can revert to using Windows 8.1.

John Bellmore, via email

Windows 10 update causes more problems

I found your Workshop in Issue 386 about reclaiming your privacy in Windows 10 to be a very helpful article. I turned 70 just 18 days ago and I do not need a shock to the system when I turn on my PC at eight in the morning! Lo and behold, a message: "We were not able to complete an update. So here is an update". On my screen was the dreaded 10586 update that you mention in your Workshop. Once installed, it said that all my files could be found in the same place. Yes, they were, but I noticed some Microsoft files I'd removed had come back. I also noticed a little box that said: "How do you want to open this file?".

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

Your Shout
On Webuser.co.uk this fortnight we asked...

Would you ever order a delivery by drone?

- 23% Yes, it sounds amazing
- 36% No, I don't trust drones
- 17% No, I don't trust my neighbours
- 24% Depends what I was ordering

NEXT FORTNIGHT What are you most worried about online? Vote online at www.webuser.co.uk

I thought I had got rid of that.

I also checked my Google account after reading your feature 'Stop sharing so much personal info'. I am fed up with these companies. Google asks for a mobile number to verify you for extra security. What if you do not have an active mobile number? A lot of companies have started doing this and I give them short shrift.

Martin Fletcher, via email

Eager to learn more about virtual reality

I've just heard about Google Cardboard (bit.ly/cardboard388) and how it is now possible to experience virtual reality at a very low cost. So I have just sent off via eBay for one of those cardboard boxes that you put together yourself and hopefully will receive it very shortly.

Some time ago, I purchased the 3D red-and-blue glasses, and found a couple of amazing YouTube videos by 3DN3D (www.youtube.com/user/3dn3d), but not much else. I'm hoping that when this little cardboard box arrives, it will provide a similar experience, but without the colour distortion.

Virtual reality, or VR as it's called for short, seems to be the next big thing,

especially for gamers, but what else is available? I've been looking on the internet but, as usual, it's difficult to sort the wheat from the chaff, so I'm hoping *Web User* and its readers will come to the rescue. For instance:

- Can Google Cardboard be used on all types of phone?
- I wear glasses, so will Google Cardboard work for me or do I need contact lenses?
- YouTube has a selection of VR videos, but where else can I watch them online?
- Assuming I'm impressed with my Cardboard kit and want something better, what would you recommend for the iPhone 6 Plus and other phones?
- I understand there are two types of VR headset – one for PCs and laptops, and one for mobile phones. Is there one that can be used on both?
- What apps or attachments are there that let you take your own photos and videos in VR?

I can't remember you covering VR headsets in the past. Perhaps you think they are a waste of time, but I would be interested to read your views and those of *Web User* readers.

M Woolley, via email

Companies have a duty to respect our data

In Barry's column in Issue 386 ('You can't trust anyone with your data'), he basically says that we should stop whining about companies being hacked because it's our own fault for

sharing our personal information online. Well, sorry Barry, but no it isn't our fault – how are you supposed to book a holiday or buy things online without handing over your details to a website? Why do we bother having passwords and using secure servers if our details are just going to be stolen anyway because of lax security measures?

No, Barry, it is up to the companies such as TalkTalk and Sony to protect our data if they want us to trust them with our custom. If the Royal Mail loses a package you've posted, it doesn't say: "well, it's your own fault for posting it standard class, what do you expect?". It's the same with websites – they have a duty to their users not to put our data at risk, or we'll go elsewhere.

Laura Golding, via email

It shouldn't be illegal to rip your own CDs

All this flip-flopping over whether it's legal or illegal to rip music from your own CDs (Need to Know, Issue 386) is ridiculous. If you've paid for them in the first place, then whatever music is on them is yours to do with as you wish, as far as I'm concerned. Even Amazon – which is never one to miss a trick when encouraging you to spend more money – recognises this by giving you free rips

of MP3s of every CD you've bought from it. So why shouldn't you be able to do the same with CDs in your own collection? In a few years time, CDs will probably go the same way that cassettes did, so you should be able to preserve the music you've paid for in another format without needing to pay for it all over again!

Brandon Herbert, via email

The internet is not as free as we think

Contrary to popular belief, the internet is not open or free. In fact, it will be more monitored than ever before and the blocks will become our lord and masters. Our politicians say that they are guarding us, but are they just guarding their own backs?

When the net was first launched, it was crude, rough around the edges and not many of us could use it, but over the years it has become more accessible to the average person and companies can now use it in business. It's opened up new friendships (and caused many rows in families!) and, like all tools, can be used for all kinds of purposes – but what greater cause is there than government secrets?

Look at Windows 10: how many programs does it not run, and how much of its system power is used to run it for you, and how much for other organisations? Our government has passed new laws that give it more power to police the net, and Microsoft is not updating Windows 7 or 8 because the world power wants only one system it can control and run telephones, TVs, smartwatches – anything that can be accessed by a computer will be at any government's mercy.

Our lives are not our own, because we are the puppets now, not the politicians.

Terry Bradley, Milton Keynes

What you say...

DO YOU APPROVE OF PLANS TO INTRODUCE FREE WI-FI IN HOSPITALS?

Good idea, although free car parking would be my priority.

Nick Daws

Excellent news. I recently paid £4.99 for access in A&E.

Martin Philip

A very good idea! At the moment you have to pay to watch TV in hospital (which I think is a disgrace) and make phone calls.

Si Mellor

It would be better to spend the money on hospital staff, cleaning and patients' food.

Sue Malin

DO YOU AGREE WITH CITIZENS ADVICE THAT BROADBAND ADVERTS MISLEAD CUSTOMERS (bit.ly/advice388)?

Yes. They promise 20Mbps but in reality you get 2Mbps.

Jack @imthegoldmaster

It's very confusing. Glad I am not changing providers soon.

George Hill

Of course they do. Saying one is faster than another one, when really it depends on where you live.

Michael Bradbrook

Only if you have no idea what you are looking at. I work out what it will cost me over the average 18-month contract, then each year after. Cost is not the only thing to consider.

Adrian C Symonds

THE GOVERNMENT WANTS YOUR IDEAS FOR ITS DIGITAL STRATEGY (bit.ly/govt388). DO YOU HAVE ANY?

Scrap the Snooper's Charter for a start.

Chris Cole

Tighten up their data security and stop losing laptops, memory sticks and other data.

Dryden Cooper

Since they're destroying our libraries, they should compensate by giving every household free internet and a tablet or laptop. And then resign.

Stuart Williams

The internet is so essential that it should be easily available to everyone without charge.

Jim Vasey

THE GOVERNMENT SAYS THAT EVERYONE CAN NOW GET 2MBPS BROADBAND. WHAT'S YOUR SPEED?

4.5Mbps living in the countryside, with BT (for now). All the villages near us are in a "superfast broadband" area, though BT says that my home isn't applicable, even though we are less than two miles from the exchange.

Peter Fitzsimmons

Not everyone can get 2Mbps, that's for sure. I have family living on a farm in Shropshire, six miles from the exchange. They get about 1Mbps, unless it is raining, when it drops off completely!

Chris Armstrong

It was advertised as 50Mbps, but I get 54Mbps on average! With Virgin Media.

Dave McAlister @dpmcalister

I am with BT and usually get around 7Mbps. It was advertised as 20Mbps but, when I ordered it, BT said I could only get 10Mbps because I live over a mile from the exchange.

Paul Emsley

⚠ Page 404

Barry Collins is riled by apps that automatically 'update' themselves into obsolescence

Automatic updates are anything but convenient

There are three weasel words in the tech world that are abused more than any others: "for your convenience". It's "for your convenience" that anti-virus vendors automatically scrape £40 from your bank account every year, ensuring you don't go to the bother of investigating how much cheaper their superior rivals are (which is £40 cheaper, by the way). It's "for your convenience" that Microsoft automatically updates Windows, always timing those "installing 1 of 3,465 updates" messages for when you're already 10 minutes late leaving the house. And it's "for your convenience" that the mobile app stores automatically upgrade your apps in the background, ensuring you always have the latest, most secure version.

Yet, sometimes those app updates are about as convenient as a bout of raging diarrhoea on a long-haul flight. Far from adding new features or the latest security updates, they're used as a ransom note, forcing you to hand over money to release tools that you previously enjoyed for free.

Such was the case recently with one of my favourite Android apps, Agent. This brilliant, free tool automatically switches your phone into different modes depending on what you're doing. So, for example, if the app detects you're driving (by monitoring your movements via GPS), it automatically silences the phone and replies to calls and texts with a templated text message explaining that you're behind the wheel and will get back to the caller soon. If it spots an appointment in your calendar, it again silences the phone so your meeting isn't interrupted by constant bleeps and trings.

This wasn't a free trial or "lite" version of an app. I'd been using it for two years, and it was absolutely free. That was until the app was updated in November. Now, I was informed, "to support ongoing development costs" the app was changing to a paid-for model. There were no new features whatsoever to tempt me to pay – instead, all the tools I'd previously enjoyed were now on a 30-day trial. Sure enough, the app effectively

> **"** Some app updates are about as convenient as a bout of raging diarrhoea on a long-haul flight **"**

stopped working at the beginning of December, even though Agent's Google Play Store blurb insists the app is "free for users that already had the app in September 2015". Well yes, technically it is free – it's just that none of the features work until you cough up.

A similar thing is underway with another of my favourite Android freebies, Pushbullet, which has been rightly feted in this magazine many times. In November, the company introduced Pushbullet Pro, a $40-per-year service that includes many of the features you previously got for free, such as the ability to send unlimited text messages and a universal copy-and-paste tool that lets you, say, copy a chunk of text on your phone and paste it to your PC. From free to $40 per year? That's quite an update.

I understand that developers need to put food on the table. And, in the case of Pushbullet in particular, I recognise that there are ongoing costs to providing some of their features. But charging people for stuff that was previously free is a terrible business model, especially if it's sneaked in via a background app update that you never consented to. Give people an incentive to upgrade, don't pull the rug from under them. If you abuse automatic updates, expect to be uninstalled. Permanently.

FOR YOUR CONVENIENCE

Update in progress

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