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Computer

**active**

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# DON'T UPDATE TO NEW SOFTWARE

Keep your favourite programs running safely FOREVER

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- Run old Windows versions risk-free
- Hidden settings to tweak
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Some features require Windows 10. Update available through Windows Store. Internet access required; fees may apply. Microsoft, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.



# WELCOME



## From the Editor

When developers update software, it can feel like that cynical supermarket tactic of regularly moving items so you walk around the store for longer, inevitably spending more money.

But while software companies also want your cash, there's little psychological trickery in their tweaking. Instead, they're addicted to change for the sake of it, adding more and more features until a program implodes under the weight of toolbars, tabs and dropdown menus (see the Outlook story on page 7). 'I tweak, therefore I am', seems to be their ethos.

I know that many of you are happy sticking with old programs that have always served you well, but find it hard to run them in modern operating systems. So in this issue's Cover Feature we've explained the best ways to keep them alive, and tested the methods using much-loved favourites including Microsoft's Money, Publisher and Works. Please let me know if you're having trouble getting ageing software to work – we'll do our best to help.

**Daniel Booth**  
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## HOW TO USE SNIPCA URLS

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren't websites themselves, which means they won't be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.



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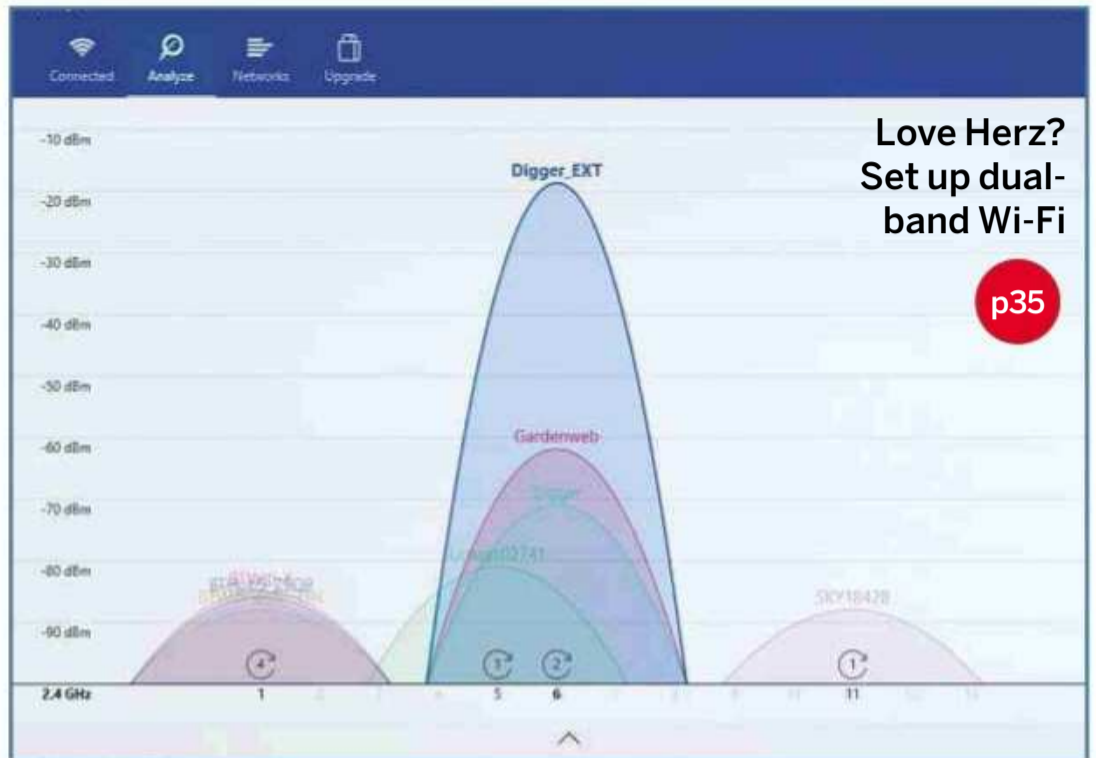
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# DON'T UPDATE TO NEW SOFTWARE

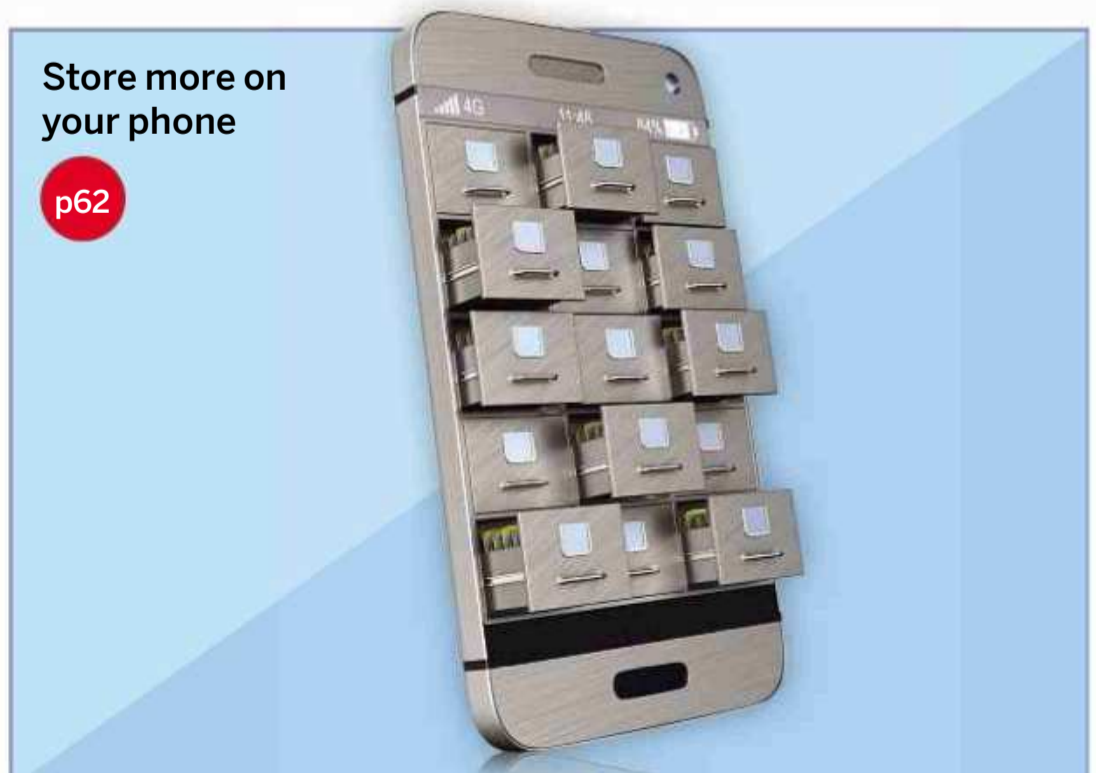
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Keep your favourite programs running safely FOREVER



Store more on your phone

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# News

The top stories in the world of technology

## Let all patients 'Skype' GPs says Health Secretary

All NHS patients should be able to have video chats on their phone with their GP, the Health Secretary has said, despite scepticism from some doctors.

Matt Hancock, who replaced Jeremy Hunt in July, is a fan of the app 'GP at Hand'

([www.gpathand.nhs.uk](http://www.gpathand.nhs.uk)), made by UK company Babylon. It offers free video consultations with doctors, and provides automated responses to symptoms, using an algorithm to judge the urgency of your condition before advising you what to do next.

If your symptoms are serious enough, you can book a next-day appointment at a surgery that is signed up to the app.

At the moment, only five surgeries (all in London) offer the app. Its plan to launch in Birmingham was blocked in August by NHS England, which is worried that because you have to de-register with your current surgery to use the app, you may miss out on vital appointments such as screenings for cancer.

Senior doctors are also concerned that it's harder to diagnose symptoms by video

than face to face.

But Mr Hancock, Conservative MP for West Suffolk, accused the NHS of delaying a healthcare revolution, saying the app – which he uses – “works brilliantly for so many patients and goes with the grain of how people access modern services”.

He wants the service to be available to every patient, not based on where they live, adding: “Where a new service challenges the system, the right response isn't to reject the new service but to change the system. The current postcode lottery cannot continue”.

Dr Richard Vautrey, chair of the British Medical Association's GP Committee, acknowledged that most GPs want to offer video



consultations, but said more “funding, resources and training need to be made available to make this happen”.

He added: “Patients don't want their local GP practice replaced by a remote anonymous call centre”.

Would you feel comfortable video-chatting to your GP?  
Please let us know: [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)

### WHAT WE THINK

Over 44,000 people have signed up to 'GP at Hand' in London, but it's a self-selecting group of (mostly younger) people who have been using phones since they were old enough to swipe. Many others feel less at ease discussing personal matters over the phone. We want Matt Hancock to do more to reassure the pre-digital generation, and guarantee that not a single local surgery will close as a result of video consultations.

## 'Sexist' iPhones too small for women

Feminist campaigners have called Apple sexist for making phones that are too big for women's hands, claiming they can cause repetitive strain injury (RSI).

Caroline Criado-Perez, who fought for Jane Austen to be added to the £10 note, is angry that Apple has decided to cease production of the iPhone SE (pictured), which



has a four-inch screen. She told *The Telegraph* that

she stopped suffering from RSI as soon as she switched from an iPhone 6 (with a 4.7in screen) to an iPhone SE.

Campaigners say that because the average female hand is an inch narrower than the average male's, women need the option to buy smaller devices.

Apple announced the end of the iPhone SE at an event on

12 September that saw it unveil its new iPhone X range, which have screens from 5.8in to 6.5in.

Other feminist figures agreed, including Sophie Walker, leader of the Women's Equality Party. She said: “The boys at Apple are obviously obsessed with size but sometimes performance matters too”.



You'll like this...

A new NHS site checks if you can get free prescriptions ([www.snipca.com/29135](http://www.snipca.com/29135))



but not this...

A ransomware attack took down screens at Bristol Airport ([www.snipca.com/29155](http://www.snipca.com/29155))



# Microsoft cuts the ribbon as Outlook is made easier



Microsoft is simplifying the ribbon in its email program Outlook as part of a redesign to make the Office tool easier to use.

The ribbon is a set of toolbars on several tabs at the top of the program window. Microsoft added it to Word, Excel and PowerPoint as part of Office 2007, and to Outlook in Office 2010.

Microsoft has always hoped the ribbon would make it easier for users to perform common tasks within Office tools. In Outlook, you can compose an email, add a contact and send messages to junk via the ribbon.

However, over the years



more features have been added, some of which many users never use. To address this, Microsoft is cutting the ribbon to a single row of commands (see screenshot), which you can adapt to your own needs. If you don't like it, you'll be able to switch back to the old three-row ribbon.

The new design and tools, currently being tested by

people signed up to the Office Insider programme, will be available only in the Office 365 version of Outlook, which is the subscription edition of Office (from £5.99 a month). Users who have paid outright for Office will have to stick with the old ribbon.

Microsoft is also adding 'smart replies' to Outlook, suggesting pre-written replies by scanning emails for specific keywords. For example, when you receive an email asking you a question, you might see the clickable options to reply 'Yes, that's fine' or 'No, I can't do that', saving you the hassle of typing it.

## USE OFFICE 365 ON MORE DEVICES

Users with Office 365 Personal and Home subscriptions will be able to use the software on unlimited devices from 2 October. Currently, Personal users are limited to one PC and one tablet, while Home subscribers are limited to 10 devices across five users.

# BBC scraps websites to focus on iPlayer

The BBC will reportedly scrap huge sections of its website to focus more on the iPlayer, in order to fight fierce competition from TV-streaming services like Netflix and Amazon Prime Video.

Sources told the *Daily Telegraph* that the corporation will close its Earth and Arts pages, as well as cut the amount of celebrity gossip.

The BBC Earth website ([www.bbc.com/earth/uk](http://www.bbc.com/earth/uk), pictured) contains wildlife and conservation news, plus clips from the corporation's nature programmes, including *Blue Planet*. BBC Arts ([www.bbc.co.uk/arts](http://www.bbc.co.uk/arts)) features news, opinion and videos on festivals and events

relating to the arts.

BBC director general Tony Hall told staff that it needs to "concentrate on a smaller number of services that deliver our best content online".

A BBC insider added: "We are already evolving BBC iPlayer to reflect changing patterns of consumption. iPlayer set the standard that others have followed. We need to leap ahead once more".

The iPlayer had a record-breaking month in July, boosted by coverage of the World Cup and Wimbledon, with 281 million requests to watch content.

As well as the iPlayer, the BBC will prioritise seven other areas, the report says: news, music and spoken



word, weather, sport, children's content, BBC Bitesize (a homework resource for school pupils) and the BBC home page.

The BBC dismissed the claims as "speculation", but separately confirmed to *The Sun* that over time it will remove content that's less popular with the public.

• 'The BBC doesn't have an inalienable right to exist' - Letters, page 12

## IN BRIEF

### WANNACRY HACK: NORTH KOREAN CHARGED

A North Korean man has been charged by the FBI for the WannaCry ransomware attack that took down NHS computers

last year. Prosecutors said Park Jin Hyok



(pictured) is believed to be living in North Korea, and works for the country's Reconnaissance General Bureau, a major intelligence agency. He is also suspected of hacking Sony Pictures and a Bangladeshi bank.

### TV-LICENCE SITE IN SECURITY ALERT

The TV Licensing organisation has urged customers to check their bank statements for suspicious activity following a security alert. It said anyone logging into the site between 29 August and 5 September may be at risk because some personal details submitted between those dates weren't encrypted, including email addresses, sort codes and account numbers. A spokesperson apologised, adding there's "no evidence that anyone's data has been compromised".

## TOMORROW'S WORLD

No, this woman isn't having an affair with her Hoover. She's



cradling the Somnox Sleep Robot, which plays soothing music and matches your breathing to help you "sleep faster, longer and wake up refreshed". This cure for insomniacs of the future costs a mere £500.



## IN BRIEF

**SKY OFFERS FAST BROADBAND TO MORE**

Sky has said it will sell superfast (76Mbps) and ultrafast (330Mbps) broadband to 84 per cent of its customers – three million premises – within five years, after agreeing a deal with network operator Openreach. The 330Mbps speeds will use G.fast technology, which runs on existing copper cables, while 76Mbps broadband will be supplied on full-fibre cables.

**'MISLEADING' VODAFONE ADVERTS BANNED**

Several Vodafone TV and radio adverts have been banned after appearing to guarantee faster broadband than most customers would get. The Advertising Standards Agency ruled that the ads, featuring actor Martin Freeman losing a signal while playing a game online, wrongly suggested all customers who experienced connection problems would get money off their bill. It added that Vodafone should have used **throughput** speeds, not syncing speeds, to measure whether customers would receive refunds.

**THE WORLD'S GONE MAD!**

What is it about technology that makes people so often overreact? TV presenter Kirstie Allsopp tweeted that she had smashed her kids' iPads after catching them using it outside their allotted time. That was met with mass abuse as people called her "privileged" and "absurd". She then closed her Twitter account. A sorry tale all round.

## Microsoft: dump old Disk Cleanup, use new Storage Sense

Microsoft has said people should stop using Windows' Disk Cleanup to remove old files, urging them instead to use Storage Sense, which removes junk automatically.

It has officially "deprecated" Disk Cleanup, which means it has been superseded by more powerful tools, is unlikely to be improved, and may soon be removed from Windows.

Debuting in Windows 98, Disk Cleanup lets you wipe temporary and downloaded program files from your hard drives. But over time non-Microsoft software such as CCleaner became better at these tasks.

Storage Sense, which was introduced in 2017's Spring Creators Update (version 1703), removes files in the background without you having to do anything. In a recent blog post ([www.snipca.com/29154](http://www.snipca.com/29154)), Microsoft



described it as a "silent assistant that works on your behalf without the need to configure it".

Starting in the next Feature update (1809), due in October, Storage Sense will free up PC space by removing files from your OneDrive account that are **cached** on your hard drive. You'll still be able to access them by clicking 'placeholder' files.

You can set Storage Sense to remove these files every day, week or month, or when you're running low on disk space. The new version also turns itself on when it detects your computer is low on space.

To turn on Storage Sense go to Settings, System, Storage, then click the blue slider under 'Storage sense' (see screenshot).

Microsoft didn't say if – or when – it would be removing Disk Cleanup, but did confirm it will remain part of Windows for "compatibility reasons".

It added: "There's no need to worry since Storage Sense's functionality is a superset of what the legacy Disk Cleanup provides!"

• **Read our next issue – out Weds 10 Oct – for more info on the forthcoming Windows 10 update**

## BA sued for £475m following hack

British Airways customers who had personal data stolen by hackers could get up to £1,250 each in compensation, after a legal firm announced it would sue the company.

The breach is thought to have taken place between 21 August and 5 September when hackers accessed the payment and personal details of over 380,000 of BA's customers via its website and app.

BA apologised, and offered to compensate customers for any direct financial loss as a result of the attack. However, SPG Law says this doesn't go far enough, and has launched a group-action lawsuit under the Data Protection Act 2018,



insisting customers should receive compensation for "inconvenience, distress and annoyance associated with the data leak".

SPG Law has invited people to sign up to the lawsuit at <https://badatabreach.com>. You'll have to pay the firm a fee – up to 35 per cent of the settlement – but only if it wins the case.

In total, BA may have to pay £475m to passengers, as well as a £897m fine if it's found to have breached General Data Protection Regulation (GDPR) laws, which came into effect in May.

The company said the breach has now been resolved and services are "working normally", adding that the stolen data did not include travel or passport details.

It said it will contact customers who made bookings between 10:58pm on 21 August and 9:45pm on 5 September, and advised them to follow their bank's advice.



# CCleaner privacy row: tick new box to stop it gathering data

Avast has released a new version of CCleaner (5.46) that makes it easier to prevent it from collecting data about how you use the program.

To do this, you need to untick the 'Help improve CCleaner by sending anonymous usage data' box in the Privacy section (see screenshot).

It follows a furious backlash from users who complained about the previous version (5.45, released in July) removing privacy options in the free edition of the software. These have been added to the latest version.

Avast, which bought CCleaner's developers Piriform in 2017, has also addressed the controversy surrounding the Active Monitoring tool. This runs in the background performing certain tasks, such as

automatically cleaning your system when junk reaches a set level.

Users were upset that when you disabled Active Monitoring in 5.45, it was turned back on when you next restarted your computer.

Some of this anger was probably triggered by users misunderstanding what the tool does, assuming from its name that it monitors how they use CCleaner. This wasn't helped by the fact that to stop CCleaner collecting data, you had to tick the same box that turned off Active Monitoring.

In an attempt to end the confusion, Avast has changed the tool's name to Smart Cleaning in version 5.46. It has also published a 'Data Factsheet' ([www.snipca.com/29080](http://www.snipca.com/29080)) clarifying what data it collects.



com/29080) clarifying what data it collects.

This claims the information gathered is "non-personal" (ie, anonymous) and "necessary", such as which operating system you use. Avast says this data "helps us to build a better product".

However, it also detects whether you have an antivirus installed, so it can show you adverts for Avast Antivirus if you're using a rival product. These don't appear in the Slim version of CCleaner, available from [www.ccleaner.com/ccleaner/builds](http://www.ccleaner.com/ccleaner/builds).

## IN BRIEF

### BAN PHONES IN SCHOOL LIKE FRANCE

A majority of people think the UK should copy France and ban mobile phones in schools. French pupils under 15 haven't been able to use the devices since the new school year began in September, though exceptions are made for disabled children and emergencies. It's part of a government drive to improve focus in the classroom, and prevent online bullying. In a poll of UK parents for the non-profit organisation Internet Matters, 59 per cent said phones should be banned in schools.

### GOOGLE RESTRICTS TECH-SUPPORT ADS

Google is restricting adverts in its search results that promote tech-support services after a big rise in scams that falsely claim your PC is infected. It's introducing a verification system that it claims will ensure only "legitimate providers of third-party tech support" will be able to advertise. Read more on Google's blog: [www.snipca.com/29074](http://www.snipca.com/29074).

### NEW AMAZON FIRE TABLET HAS ALEXA

Amazon is launching a new version of its popular Fire HD 8 tablet (pictured) that comes with hands-free Alexa support, letting you activate the voice assistant by speaking rather than touching the screen. Its **microSD card** slot can now take 400GB of content, up from 256GB. Priced £79.99, it's available for pre-order from Amazon ([www.snipca.com/29075](http://www.snipca.com/29075)), before being released on 4 October.



## West Midlands to test UK's first 5G

The West Midlands has been chosen as the testing ground for the UK's 5G network, before it's rolled out nationally.

Birmingham, Coventry and Wolverhampton will receive up to £75m from the Government to develop 5G projects that ministers say will "transform" daily life.

The schemes, due to begin next year, will focus on the health, construction and automotive sectors. These include video links in ambulances, so paramedics can receive specialist advice from doctors.

There are also plans for video consultations for hospital outpatients, and for driverless cars to communicate with



traffic-management systems.

The technology might also be used by the police to watch CCTV footage streamed live from buses so they can react more quickly to anti-social behaviour.

West Midlands Metropolitan Mayor Andy Street said 5G's potential is "endless", adding that it will be "the backbone of our future economy and society".

These projects will begin before 5G networks are made

available to the public to use on phones. Vodafone, EE, O2 and Three, who were allocated 5G bandwidth at an auction in April, aren't expected to provide services until 2020.

When they arrive, 5G networks could deliver download speeds up to 1Gbps (1,000Mbps), over 20 times faster than 4G's 45Mbps, letting you download films in under a minute. It should also mean wider coverage and more stable connections, making video calls less jerky, for example.

To use 5G, you'll need to buy a new phone. Industry analysts expect new devices to switch seamlessly between 4G and 5G to ensure a reliable service.



# Question of the Fortnight

## What will make tech giants stop child abuse online?

The Home Secretary demands action as online sexual exploitation increases

**F**aster streaming has brought many benefits to everyday life, from uninterrupted downloads to online TV. But it's also fuelled the sickening rise of child exploitation online, allowing paedophiles to broadcast sexual abuse live.

Anyone with a half-decent internet connection can watch this abuse for as little as £12. In some cases, they can even select the age, hair colour and gender of the child.

Home Secretary Sajid Javid recently drew attention to this "growing problem" in a speech calling on tech companies to do more to tackle abuse online (transcript: [www.snipca.com/29117](http://www.snipca.com/29117)). Describing the fight against abuse as his "personal mission", he warned firms he would "not be afraid to take action" against them if they don't rise to the challenge.

**“Tech companies will not take action until and unless they are forced to do so”**

He acknowledged the "progress" Google, Facebook, Microsoft, Twitter and Apple have made on removing extremist material online, adding: "Now I want to see the same level of commitment from these companies and others for child sexual exploitation".

One statistic captures the scale of the problem: the number of child-abuse cases referred to the National Crime Agency (NCA) surged by 700



per cent in the past five years, totalling 82,109. The NCA estimates that about 80,000 people in the UK present some kind of sexual threat to children online.

Figures show that police in England and Wales recorded about 23 child sexual offences

involving the internet every day throughout 2017-18, an increase from 15 a day in the previous 12 months.

The Home Secretary's response is to set five demands to the tech industry. He wants firms to block child-abuse material as soon as it appears; stop online grooming; prevent live-streaming of abuse; work better with the police; and to share abuse-blocking technology with other companies.

These measures may form part of new laws being worked on by the Government to "make sure that the UK is the safest place in the world to be online". In his speech Mr Javid said the detail of new legislation will be determined "by the action and attitude that industry takes".

But campaigners insist the Government should take the lead, rather than wait for companies to regulate themselves. Peter Wanless, head of the NSPCC, said "tech companies will not take action until and unless they are forced to do so".

He called for social networks to be overseen by a regulator that imposes "a minimum set of safety standards", and for sites to publish "transparency reports" revealing the scale of abuse. These will "shame underperforming sites into action", he added.

Tech companies haven't ignored the dangers of child abuse. Police in the US have

### THE FACTS

- Home Secretary Sajid Javid has demanded tech companies do more to tackle child abuse online
- Cases of child abuse online have risen by 700 per cent in the past five years
- The Government is planning to introduce laws that make the UK "the safest place in the world to be online"

used Microsoft's photo-matching software PhotoDNA to find images of abuse, while Google recently announced "cutting-edge" artificial intelligence to help detect illegal images. Both companies have also changed algorithms in search results to make it harder to find abuse online.

But it may require the threat of fines for sites to take child abuse more seriously. Social networks in Germany now have to pay €50m if they don't remove "obviously illegal" content within 24 hours. This reportedly led to Facebook and Twitter hiring hundreds more staff to remove harmful content.

Although the German law was introduced primarily to tackle hate speech, similar legislation in the UK might motivate companies to fight child abuse more aggressively. They'll be aware of this expensive possibility as they weigh up their responses to the Home Secretary's demands.



# Protect your tech

Scams and threats to avoid, plus new security tools

**WATCH OUT FOR...**

## One-ring-then-cancel 'Wangiri' scams

### What's the threat?

Fraudsters are phoning people then immediately hanging up, hoping their intended victim will make a note of the number and call back to find out who was ringing them. This number is an expensive international phone line, leaving the victim with a hefty bill, some of which goes to the criminals. The fee just for connecting is high, and increases when the person on the other end puts you on hold.

The scam originated in Japan, where it's known as 'Wangiri' (meaning 'one ring and cut'), and has spread around the world. Criminals use software to make automated calls, mostly to mobile phones, that end after just one or two rings.

### How can you stay safe?

The same common-sense advice applies here as with other scams: always think



twice about phoning numbers you don't recognise. Curiosity doesn't just kill cats, it also empties your bank account.

For further protection, consider

switching to Vodafone. It announced in August that "where possible" it was adding Wangiri scams to the list of calls it blocks automatically (so you never even know you've been called). This happens by default - you don't need to turn on any settings.

However, fraudsters constantly change their numbers, so networks will never be able to block every scam call. Vodafone says people who receive a call should report them by texting CALL to 7726 (this is free). Someone from Vodafone will text back asking for the scammer's number, so they can update their database. If you lose money,

Vodafone has pledged to refund it.

The network claims that in 2016 it became the first to block nuisance calls by UK-based diallers, and has thwarted more than 500 million since.

## New tools | HackNotice

[www.hacknotice.com](http://www.hacknotice.com)

Imagine as you browse the web a little voice whispering in your ear: 'This site was hacked last month'. Now imagine a browser **extension** doing the same with pop-up warnings. That's HackNotice, created by Texas-based security expert Steve Thomas.

Clicking the warnings, which appear at the bottom-right of your screen, takes you to HackNotice's site, where another click directs you to a third-

party site for more details. As you can see in our screenshot, it warned us that Plusnet had been "hacked recently", though it was actually a small data breach (as explained on uSwitch: [www.snipca.com/29067](http://www.snipca.com/29067)).

You can install the extension (plus Android and iOS apps) from the URL above. Once it's installed, click the 'H' icon in your browser toolbar, then 'Sign Up' and create your account with a 14-character password. Click the icon again, then 'Activate' to see settings on the left.

We tested it by visiting sites we knew had been hacked recently (Butlin's, Superdrug, etc), and it warned us about every one. For more protection, add sites you want it to monitor by clicking 'Hack Watchlist' under 'Your Watchlists'.



## ScamWatch

Readers warn readers

### Fake Costa Coffee offer on WhatsApp

I visit Costa Coffee once or twice a week (to read *Computeractive*), so was interested in a WhatsApp message promising me a £75 voucher to celebrate the store's 50th birthday. All I had to do was hand over my personal details. This 'offer' seemed very generous to me, so I checked with my local Costa, and they confirmed it was a scam. Several people had already asked them about it that day, apparently. I hadn't realised that scammers could use WhatsApp, so I'm extra vigilant now. Since then, I've seen scams for Sainsbury's, Morrisons and even Walkers Crisps!

**Edward Petworth**




Warn your fellow readers about scams at [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)



# Letters

Tell us what's on your mind

## Yahoo Mail shows me adverts? So what!

 When I first read your news story about Yahoo Mail showing 'targeted' adverts (Issue 536, page 9), I was so angry I made a mental note to switch to another webmail provider. But an hour later, after a cup of tea, I thought 'can I really be bothered?'. A week later, I have my answer: no, I can't be bothered.

Call it apathy or cynicism, but I've given up caring about little invasions of privacy like this. One thing you realise when you live into your seventies is that everything in life is a trade-off, and there is always a cost, somewhere, somehow, for things promoted as 'free'. In this case, the cost is adverts showing me things I might be interested in. Does this feel weird and annoying? Yes. Is it weird and annoying enough to make me switch to another email, with all the hassle that involves, after 12 years using Yahoo Mail? No.

What's the worst that can happen with these adverts? If I book a flight to Tenerife, then see adverts for hotels in Tenerife, so what? Life is all about priorities, and my main worry online is scams, not targeted adverts. I'll cope with this minor intrusion into my personal life.


Edward Allott



need to treat investigative journalism as a subsidised industry, like the NHS. It's not there to make a profit, but to ensure government accountability and a well-informed public. Taxing Google may well be the least-worst method of doing this.

Alan Foster

## ...but the BBC doesn't have an 'inalienable right' to exist

 Taxing Google and other websites to fund the BBC is both ridiculous and insulting. It assumes the BBC has an inalienable right to exist. But as technology changes, leading to irreversible changes in viewing habits, it becomes harder to justify the existence of a publically funded broadcaster.


Twenty years ago, I reckon about 80 per cent of what I watched on TV was on the BBC. These days, with Netflix, Sky and BT as options, it's a rare day where I watch more than one programme on the Beeb. In fact, take away *Question Time* and *University Challenge*, and I doubt I'd ever switch channel to the BBC. Many of my friends feel the same way.

As you said at the end of the article, the debate over the licence fee has only just begun. I resent having to pay £150 a year for a service I barely use. It should be

chopped up, and be forced to charge smaller amounts for specific channels, or types of programme – maybe £10 a year for news, for example.

Andrew Woodman

## I love my light laptop


 In Issue 536 reader Ron Hagley asks whether he's alone in thinking that modern laptops are too small and thin. I can't speak for the rest of the UK, but I don't share his dismay. My new Windows 10 laptop is so light I carry it around the home gripped between two fingers and my thumb. It's like polystyrene compared to the breeze block that was my previous laptop! It doesn't feel flimsy, as I had feared. It's a great combination of sturdiness and portability.

I understand Ron's frustration that many modern laptops don't have optical drives, but that's a price worth paying for computers that don't weigh more than an average family car.

Ian McDonald

**CA SAYS** It's an interesting debate: what matters more – the size and weight of a laptop, or its ability to play CDs and DVDs? Are you putting off buying a new laptop because your existing one has an optical drive? Please let us know.

## Yes, tax Google – we need to protect journalism...

 Issue 536's 'Question of the Fortnight' ('Should we tax Google to fund the BBC?') examines a timely issue: how to ensure quality journalism survives in an age when many people seem to prefer badly researched scribbling (I won't call it 'journalism') online.

I accept that Jeremy Corbyn's definition of 'public interest journalism' might differ from mine, but I agree that we need reporters who are motivated by in-depth research that uncovers scandals, not insubstantial stories with sensationalist headlines.

The question is where you find the money to pay for this research. Fewer people are buying newspapers, so it won't come from them. Instead we



## Digital wellbeing? 'iWife' does the same job

 I would like to advertise my services to Google, Facebook, Apple and all the other companies wasting money adding 'digital wellbeing' tools to their products ('What's All the Fuss About?', Issue 536). I've invented a new way of being reminded that you're spending too much time on your phone, and the technology comes in three versions: the iWife, iDaughter and iSon.

Whenever I dare to

devote 10 minutes to my phone, playing Scrabble or reading local forums, the iWife/Daughter/Son springs into life, telling me to put it down and do something more useful instead. They are updated daily with tasks for me to perform: fix the shelves, unblock the sink, paint the bedroom.

These devices come with the 'Nag' function switched on by default. You can't turn it off, no matter how hard you try. Their Wi-Fi has an impressive range,



reaching over different floors. If you're upstairs minding your own business, you'll be loudly reminded that you're spending too much time on your phone.

They really are ground-breaking devices. I intend to patent them, as soon as I'm allowed back online.

Laurence Horne



## Apple's 'bullying' made me switch to 'superior' Android

 I feel it's past time when individuals such as myself protested at the bullying tactics of the likes of Microsoft and Apple. Microsoft's decision to remove user choice in updates for Windows 10 was bad enough, but it has been followed by a cynical move by Apple. I have a perfectly serviceable iPad Mini that has served me well for several years.




However, recently I began losing the functionality of some of my apps. This was preceded by a message telling me the apps had been updated and were now compatible only with iOS 10 or later. As my iPad has iOS 9, and Apple stopped issuing updates for this some time ago, I can no longer use apps that I needed. I view this as a deliberate attempt by Apple to force users to buy new equipment.

I therefore decided to buy a new Samsung Galaxy Active tablet. To my delight, I found it far superior to the iPad, and Android is light years ahead of iOS - so thanks Apple, you did me a favour.

John Walker

## Want broadband speed estimates? Go direct to BT

 It was interesting to read the letter from Sarah E Birkin (Issue 535) about Rightmove's inaccurate broadband speed estimates, as you also published my (similar) letter a few months ago.

I'm now working in tech support for an internet provider and we use the BT Broadband Availability Checkers data to supply our prospective customers with speed estimates. The site ([www.snipca.com/29087](http://www.snipca.com/29087)) - gives estimates of the minimum and maximum speeds possible, based on the property's phone number, and also the 'handback threshold' speed - which is what BT "guarantees". If it doesn't reach this, they will send engineers free of charge to investigate.

Every copper line from a fibre-enabled cabinet has its own 'sync' speed, ie its maximum usable **bandwidth** based on the length of the copper line and its average **noise margin**. It doesn't matter which ISP supplies the connection; the sync speed is the sync speed.

Why use any other source of data when you can use BT's? They aren't going to exaggerate the speeds, because they have to support the speeds they quote.

Andy Fazackerley

## STAR LETTER

### Stop knocking Windows - it lets me run anything

 There has been much grumbling about Microsoft, but where would we be without Windows? I'm still able to run some programs which I first installed on Windows 95. Now I have Windows 7 Home and Ultimate, and I can even run Lotus SmartSuite (pictured) and Paint Shop Pro 7. I still find Publisher 2000 useful, and the many programs I have had over the years from Serif. ClipMate works so well, and programs from Magix still give superb service. I am told that even Windows 10 will run Lotus!

What do we find from Android? I wanted to load GoPro Quik, recommended in Issue 535, but it doesn't work on my Samsung tablet because it has an old version of the operating system. The same is true of Adobe Photoshop Express. My tablet was bought in 2014, and cost me twice the amount I paid for Windows 95 22 years ago, and yet it's now almost redundant.

In spite of the warnings I still use Word 2007 on my XP laptop (with the internet disabled), without any problems. Picasa 3, Snagit 3, VisiTrax Recording Librarian - the list of 'old' software



goes on. Why on earth do so many programs written for Android have restrictions? Money, of course - the Apple method, where new devices have to be bought with every version of the operating system. Surely it's easy enough to make them fully compatible with Android, in the same way that all those programs I mentioned above can work on any version of Windows.


There are some wonderful apps on Android that are truly amazing, and the innovations in Wi-Fi and syncing and particularly portability make Android very useful, but without Windows and its adaptability I would be lost. And so would many professional people, especially in the media industry. Thank goodness for Windows!

Jack Woods



The **Star Letter** writer wins a **Computeractive** mug!

## Type tracking number to speed up Amazon refund

 In Issue 534's Consumeractive you published the results of a complaint about a late refund from Amazon. Recently, I had to return goods to the value of £200. I notified Amazon about this, and they emailed me a returns label. I posted them back to Amazon from my local post office.

I kept a check on the returns via my



Amazon account for two weeks, and always received the message that the goods were 'In Transit'.

I became dissatisfied with this. Luckily, I had kept the returns label Amazon had emailed me. I printed this and asked my postmaster what my options were. He pointed out that the returns label had a barcode and a tracking number. He told me to type this into the Post Office website ([www.postoffice.co.uk/track-trace](http://www.postoffice.co.uk/track-trace), pictured left) which showed me that Amazon had received the item within two days of my posting it.

I emailed Amazon pointing this out. They replied saying the refund would be in my bank account within the next two days. To my surprise it was in my account the next day. I hope readers find this useful.

John Roberts



# Consumeractive



We stand up for your legal rights

## Can I get refund for credit-card purchase under £100?

**Q** I ordered some LED bulbs from Leds4Less ([www.leds4less.co.uk](http://www.leds4less.co.uk)), which haven't been delivered. I paid with my Visa credit card, but the cost was below £100 so isn't eligible for a refund. This company doesn't give a business address, so is there any way I can get my money back?

Ken Warren

**A** Ken shouldn't give up trying to get a refund from Leds4Less just yet. Although he feels powerless, there's more than one way of seeking redress. He's right that he can't use Section 75 of the Consumer Credit Act for a refund because the cost was less than £100.01. However, he can approach his card issuer about getting a chargeback, through which it will ask the seller's bank to refund the money. It isn't always successful, but certainly worth a try. Ken can call or check his provider's website for information on its schemes for 'disputed transactions'.

He can also consider taking Leds4Less to the small claims court, which would cost him £25 if he filed it online (via Gov.uk: [www.snipca.com/29013](http://www.snipca.com/29013)). He can ask for expenses, such as travel and loss of earnings, plus interest (currently eight per cent), to be added to his claim if he wins.

However, he should first send a registered letter to Leds4Less explaining if his money isn't received within seven working days he will sue. This may spur the company into action. Ken said that Leds4Less doesn't give a business address but we found one in Coventry ([www.snipca.com/29014](http://www.snipca.com/29014)), which we've sent him. The company is still listed as active and trading on the Companies House website. He added that he's seen other complaints about the company, so he should report it to Trading Standards via Citizens Advice's website ([www.citizensadvice.org.uk](http://www.citizensadvice.org.uk)).



## Are pre-ticked boxes illegal?

**Q** What are my rights if I'm making an online purchase and the trader pre-ticks a box for additional charges, such as extended warranty or insurance, or allowing it to contact me?

Dean Smithers

**A** It's been illegal for sellers to use pre-ticked boxes for additional products or services since June 2014, when the Consumer Contract Regulations (CCRs) replaced the Distance Selling Regulations. Since then, retailers have had to refund you if they added goods or services to your purchase without your consent.

However, if you've used these goods or services, the retailer could argue that you've actively accepted them as part of your purchase. If they refuse a refund, you'll have to go to the small claims court and say you believed the items were free.


The new General Data Protection Regulations (GDPR) also ban pre-ticked boxes. In the weeks before GDPR became law on 25 May, companies bombarded existing customers with information about GDPR. If you believe a company's breaching this rule you should contact the Information Commissioner's Office (<https://ico.org.uk/make-a-complaint>).

CASE ONGOING

CASE CLOSED

### CASE UPDATE

## Rejecting an item? You have to accept delivery first

 If you've bought something online but then - before they've been sent - realise you don't want the items, should you refuse delivery? The question arose when we investigated Alan Edge's case (Issue 535), when we advised him to refuse delivery should air coolers he bought two months earlier ever turn up.

DealBoom (<http://dealboom.net>), the Estonian company that sold Alan the coolers, had breached its contract with him by taking



more than 30 days to deliver the goods. Fed up, Alan made a claim through PayPal. For this to be successful, he would have had to

turn away the coolers.

But the situation is different if you plan to reject items yet to arrive (you have 14 days to do this). Trading Standards told us that you *don't* have the right to refuse delivery if the company hasn't breached its contract with you. In other words, you must accept the package, and then send it back, claiming a refund for the cost of the item *and* delivery.

As for Alan's elusive coolers, they never did make it across Europe from Estonia, and PayPal has now refunded him.



Contact us so we can investigate your case

✉ **Email:** [consumeractive@computeractive.co.uk](mailto:consumeractive@computeractive.co.uk)  
Please include your name, phone number and address.

## Has Bling Software gone bust?

**Q** I can't reactivate my copy of 123 Copy DVD from Bling Software after reformatting my hard drive. The support function on the website is not working, so can you tell me whether the company has gone bust?

Michael Topping

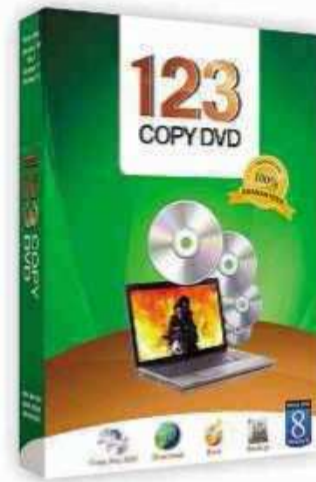
**A** Yes, we're afraid Bling Software is no more. It became a dormant company in September 2016 and was finally dissolved in July this year.

Because there's no inherent fault with the software, Michael has no legal claim against the company. Even if he did, he

may struggle to get a refund because companies Bling owed money to would be paid first.

The liquidators may be able to retrieve Michael's registration code, but it's a long shot. He thanked us for the information and because he's had the software a long time has decided to bin it.

We'd advise anyone worried that their old software may stop working to check whether the developer is still in business. Don't assume the



company still exists just because you see its software being sold online - we found a retailer on Amazon selling a 2013 copy of 123 Copy DVD for £24.99. Many retailers legally buy and sell older stock, but there's often a catch: a developer may no longer support the software, or as with Bling, may have gone bust. You can still ask for a refund if the product is faulty, but you're unlikely to receive any technical support.

**CASE CLOSED**

## Do I have to use Apple's warranty?

**Q** Having just bought an iPad from Argos, the assistant told me if anything went wrong within 30 days, I'd get a full refund. But after this I'd have to use the 12-month warranty and deal with Apple. Is this correct?

Ken Morris

**A** No, the advice is misleading. The sales assistant is correct to say that if an inherent fault is found within 30 days of



purchase, Ken is entitled to a full refund from Argos. But the rest of the advice is wrong. At no time does Ken have to deal with Apple if the iPad has inherent faults.

Under the Consumer Rights Act (CRA), his contract is with Argos.

In fact, unless it's for problems that aren't inherent but are covered by the warranty, we always advise going to the retailer, rather than using the manufacturer's warranty. It can save a lot of time and heartache.

After 30 days a retailer is

allowed to send away a device for repair. But if this iPad can't be fixed or the repair fails, Ken's automatically entitled to a refund from Argos (a full refund within the first six months and pro rata thereafter).

But if Ken uses Apple's warranty first and the repair fails, he's liable to find himself stuck in a cycle of repeat repairs. Apple is allowed to try repeated repairs because it didn't sell the iPad to Ken directly, and therefore isn't covered by the CRA. If an Apple repair fails and he then approaches Argos, it can argue it's still allowed to carry out its one repair under the CRA.

**CASE ONGOING**

### CREDIT WHERE IT'S DUE

## Stinkyink sent me free cartridges

**✓** I buy my Canon inks from Stinkyink ([www.stinkyinkshop.co.uk](http://www.stinkyinkshop.co.uk)). Recently, I needed two new replacements for cyan and black. I ordered them online and the package was delivered within two days.

When I opened the package, I found a small box containing a cyan cartridge and a large box containing a complete set of inks for my Canon printer. Thinking they had probably sent me someone else's order by mistake, I took the black cartridge from the

box, leaving the remaining cartridges to be returned to them. I emailed them explaining what I had received.

They replied to apologise, and explained the single black cartridges were out of stock. Rather than keep me waiting for one, they sent me a full set. They said that I could keep the extra cartridges for when I needed them.

Colin Baker

✉ Has a company impressed you with its customer service? Please let us know: [editor@computeractive.co.uk](mailto:editor@computeractive.co.uk)



Contact:  
Stinkyink

• **Email:** [helpdesk@stinkyink.com](mailto:helpdesk@stinkyink.com)  
• **Phone:** 01746 781 020



# Grow Your Family Tree



As the centenary of the end of World War One approaches, **Nick Peers** explains how to...

## Find military ancestors online

**W**ith just over a month until the centenary of the end of World War One, it's a fitting time to review your ancestors' military past. There are many records available online spanning several conflicts, but here we're going to focus on the war that was meant to end all wars (tragically, it didn't work out that way).

You may know ancestors who fought in the war, but if not use the free tool FTAnalyzer (<http://ftanalyzer.com>) to narrow your search. Export your research file from your main program in the universal GEDCOM format, then open it in FTAnalyzer. Click the World Wars tab (see screenshot below), which lists male ancestors of probable fighting age in either war. Use the filters to restrict

Individual ID	Surname	Given	Gender	Birth Date	Birth Place
1821	George Richard	Wesley	M	13 MAR 1871	Warrington, Lancashire, England
1822	George	Wesley	M	13 MAR 1871	Warrington, Lancashire, England
1823	George	Wesley	M	13 MAR 1871	Warrington, Lancashire, England
1824	John Walter	Leach	M	1871	Warrington, Lancashire, England
1825	John	Leach	M	1871	Warrington, Lancashire, England
1826	John	Leach	M	1871	Warrington, Lancashire, England
1827	John	Leach	M	1871	Warrington, Lancashire, England
1828	John	Leach	M	1871	Warrington, Lancashire, England
1829	John	Leach	M	1871	Warrington, Lancashire, England
1830	John	Leach	M	1871	Warrington, Lancashire, England
1831	John	Leach	M	1871	Warrington, Lancashire, England
1832	John	Leach	M	1871	Warrington, Lancashire, England
1833	John	Leach	M	1871	Warrington, Lancashire, England
1834	John	Leach	M	1871	Warrington, Lancashire, England
1835	John	Leach	M	1871	Warrington, Lancashire, England
1836	John	Leach	M	1871	Warrington, Lancashire, England
1837	John	Leach	M	1871	Warrington, Lancashire, England
1838	John	Leach	M	1871	Warrington, Lancashire, England
1839	John	Leach	M	1871	Warrington, Lancashire, England
1840	John	Leach	M	1871	Warrington, Lancashire, England

Click the World Wars tab in FTAnalyzer to see ancestors who fought in either conflict

matches to direct ancestors or specific surnames, then, armed with this list of names, go hunting elsewhere online.

### Find where they are buried

As always, the more you know about your ancestor, the better. Try to find something specific about their military record to differentiate them from others with the same name. Date of birth helps (although your ancestor – like my great-grandfather Percival Pink in WWI – may have lied about his age when enlisting). Their address will also help if they signed up to a local regiment.

Ask around the family – someone may have access to medals or photos that could add those extra details you need (Percival had helpfully written his regiment's name on the back of a photo from 1916). Check Issue 536's Grow Your Family Tree column for tips on tracking down living relatives to see if any of them may have vital details.

If you're not successful, consider widening your search. If your ancestor died (or disappeared from the records after the war), visit the Commonwealth War Graves Commission's site ([www.cwgc.org](http://www.cwgc.org)) for free resources that may locate where they are buried. I found my great-great-uncle Frederick Leach here,



The Imperial War Museum catalogues soldiers from World War One, including Nick's great-grandfather Percival Pink

complete with service number and regiment.

Also try the Imperial War Museums' online project 'Lives of the First World War' (<https://livesofthefirstworldwar.org>). A complete list of people who served has been made available for family historians to examine, and contribute photos, documents and other information to. If you're lucky, your ancestor may be here (I stumbled upon the aforementioned Private Pink – see screenshot above), complete with lots of the work already done for you.

### Check medals and pensions

Once you have the core details, where next? Try looking through FamilySearch's extensive index of military records ([www.snipca.com/29019](http://www.snipca.com/29019)). Scroll down to see what's available, in chronological order, on each site (the earliest records, dating from 1407, are 'Regimental Births' on TheGenealogist). Most records cost money, but if you sign up to a site, you may find they offer occasional free access over holidays such as bank holidays.

When it comes to WWI, the most useful resources are the medal, pension and service records. Each site offers dozens of military sets – including many local ones not listed at FamilySearch – but don't start too narrowly. Instead, begin with a wider search across all military records before using the filters.

## Your Genealogy Problems Solved

**My great-great-grandfather died in 1872 and there was an inquest. Is there anywhere I could read the findings of the inquest? I have his death certificate.**

Anne Donovan

There's an excellent summation of coroners' inquests at the National Archives' site ([www.snipca.com/29020](http://www.snipca.com/29020)). If that doesn't help, visit The British Newspaper Archive

([www.snipca.com/29061](http://www.snipca.com/29061)) and use its search tools to track down local papers in the area your ancestor died. If a surname search isn't successful, try browsing papers published in the days following the inquest (recorded on the death certificate) to see if his story made the paper.



Have a genealogy question for Nick? Email [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk) with 'Grow Your Family Tree' in the subject line.



# BEND YOUR REALITY



G2 Rocket League Player  
Cameron 'Kronovi' Bills likes the  
immersive gaming experience  
on the **AG322QC4**

## AG322QC4

**144HZ**



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# Best Free Software

Will Stapley recommends new programs that won't cost you anything

## IMAGE EDITOR

# Paint.NET 4.1

[www.getpaint.net](http://www.getpaint.net)

**What you need:** Windows 7, 8.1, 10

Paint.NET is a free image editor with an uncomplicated interface. Version 4.1 focuses on improving performance. In previous versions, *all* effects were handled by the computer's processor. In this version, some of the more complex effects are managed by your **graphics card**. This should make it faster to apply effects.

To test this, we applied the Gaussian Blur effect (often used to reduce **image noise** by softening sharp edges) to a large photo. In the previous release (version 4.0.19), it took 18 seconds to apply the effect. In 4.1 it took just one second – a truly impressive improvement.

Two new effects are included: Morphology elongates pixels (it worked well on night-time cityscapes – see our photo of New York below), while Turbulence is aimed at

graphics professionals and adds texture to computer-generated images. Other improvements include more nuanced control of the Magic Wand selection tool (see below), an increase in the maximum zoom level, and several bug fixes. It's also worth noting that although the standard version of Paint.NET is free (click the 'Free download' link at the URL above), there's also a Microsoft Store app alternative, which costs £5.89 but doesn't offer many extra features.

While it can't match the tools or customisation options of the **open-source** GIMP ([www.gimp.org](http://www.gimp.org)), Paint.NET includes all the basics you'll ever need, along with some interesting effects and advanced tools – and it's now far quicker than before.



**1** To apply effects, simply click the Effects menu, then choose from the available options. More effects can be downloaded as **plug-ins** from [www.snipca.com/29116](http://www.snipca.com/29116).

**2** The Magic Wand tool selects areas in an image for you. You can now fine-tune the Tolerance level using the '+' and '-' buttons, which lets you select the area you want with greater precision.

**3** The new Morphology effect stretches pixels in your image, creating an arty blurred effect (as applied in our screenshot). You can change the intensity of the effect by adjusting the width and height of the pixels.

**4** The maximum zoom level has been doubled to 6,400 per cent, making it easier to edit the finer details of your images. Use this slider or Ctrl and your mouse's scroll wheel to zoom.





## NETWORK TOOL



## Wi-Fi Network Monitor 5

[www.snipca.com/29123](http://www.snipca.com/29123)

**What you need:** Windows 7, 8.1, 10

Your wireless router can tell you what devices are connected to your home network, but this usually involves logging into your router's setup page, then working through a series of menus. Wi-Fi Network Monitor is a simple tool that shows all connected devices with a single click. It detects the range of your home network and shows the **IP address** assigned to each device, along with its name and **MAC address**. If you spot a device you don't recognise, someone could be leeching off your network, and you should consider changing your Wi-Fi password via your router. Version 5 improves scanning performance, which is useful, but we'd like notifications when new devices connect in the next release.

## PASSWORD MANAGER



## KeePass 2.4

[www.snipca.com/29124](http://www.snipca.com/29124)

**What you need:** Windows 7, 8.1, 10

Unlike the popular Dashlane password manager (Best Free Software, Issue 534), KeePass is **open-source**, meaning it's free and won't pester you to upgrade to a paid-for version. After creating a master password (KeePass helps you create a secure one), you can start adding passwords for your online accounts. This version makes everything faster with automatic completion for the User Name and URL fields based on your existing passwords. The stuttering performance of previous releases has also been fixed. All passwords are stored on your PC in an encrypted database, which will appeal to those who don't like keeping sensitive data online. However, it also means there's no easy way to sync your passwords across multiple computers.

## WHAT SHOULD I DOWNLOAD?

We tell you what software & apps to use

### How can I make a record of my cycle rides?

**Q**

Is there an app for my Samsung Galaxy S3 Mini phone that will record details of my bike rides?

Ron White

**A**

There are many apps that will record your bike rides (as well as runs, hikes and any other outdoor pursuits). Our favourite is Strava Tracker ([www.strava.com/mobile](http://www.strava.com/mobile)), which has an excellent free version and works with devices running iOS 10 and Android 4 onwards, so your Galaxy S3 Mini should be fine.

Download the app by searching for **strava tracker** in the Play Store on your phone. You'll need to link the app to your Google account when running it for the first time. You get one month's access to premium features (including setting training plans, creating goals and viewing detailed analysis of your rides), after which prices start at £1.59 per month. But if you just want to record your rides, the free version will be perfectly adequate. To start recording, tap the red Start button at the bottom of the screen (if you don't see this, tap the menu button, then Record Activity). Strava will start capturing the route and duration of your ride, along with the distance travelled and your average speed. Tap Stop to pause the recording when you take a break, then tap Resume when you set off again. Finally, tap Finish to end the ride. Your route will be shown in red – some have turned this into an artform (see screenshot).



In the screen that follows, give your ride a name, write a brief description and add any photos you took. To review your ride, or view past rides, tap the menu button at the top left, then tap your name. Bear in mind that GPS is a significant drain on your phone's battery, so be sure to have a full charge before you set off each time.



Do you need our advice on what software to use? Just email us at [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)



# Best Free Software

## HOW I USE...

# Audacity

It's loaded with advanced audio-editing tools, but **Will Stapley** likes to keep things simple

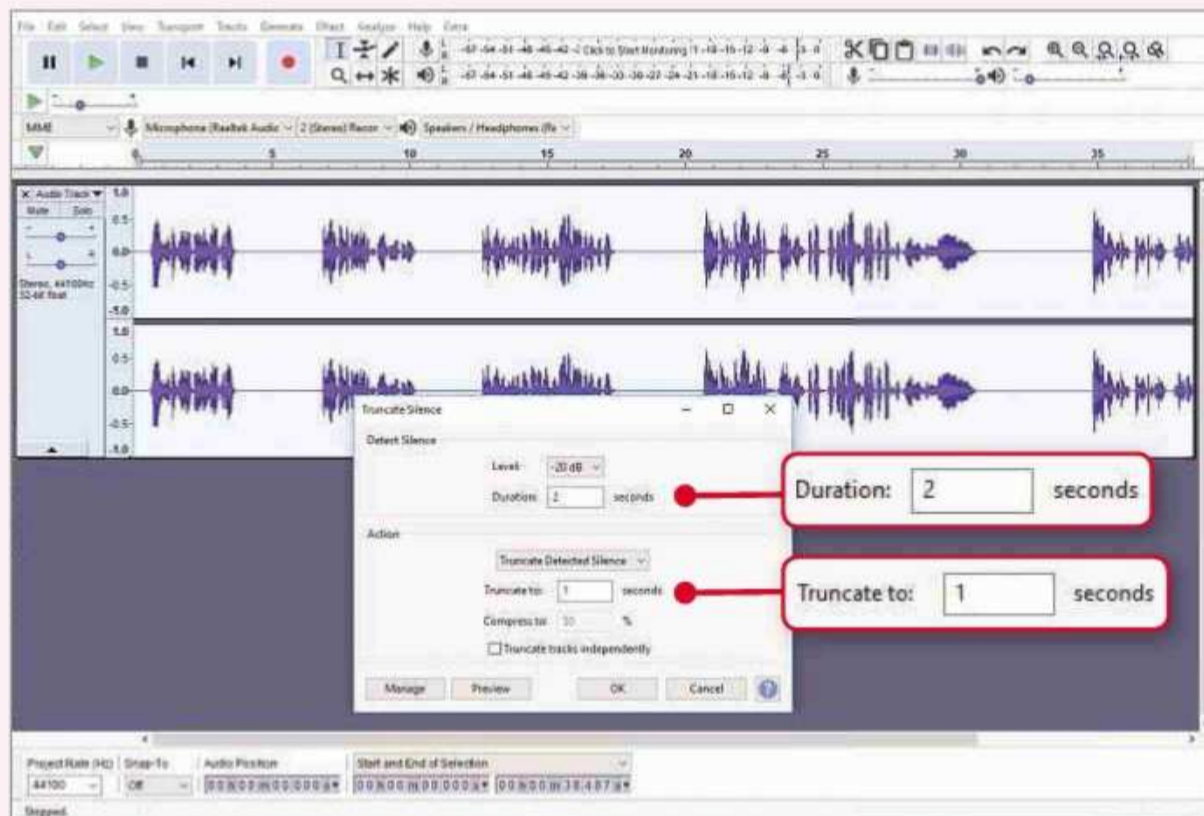


If I ever need to convince someone of my musical ability, I point them to my Piano Grade 2 (merit) certificate. Okay, I'm no expert musician. Not even close. But I often carry out a spot of basic audio editing - whether it's trimming a voicemail I've downloaded from my phone or combining several audio clips into a single file. And while Audacity ([www.audacityteam.org](http://www.audacityteam.org)) has far more ambitious types than me in its sights, it's great for more basic tasks.

In look and feel, it's very similar to the media player VLC ([www.videolan.org](http://www.videolan.org)) - a little rough around the edges and prone to confusing controls, but also hugely powerful. Some prefer the more polished look of alternatives such as Ocenaudio ([www.ocenaudio.com](http://www.ocenaudio.com)), but I always return to Audacity for my audio editing. The installer is under 20MB, it doesn't slow my computer to a crawl and it's **open-source**, so it's constantly being updated by dedicated volunteers.

Often, I'll use it to record the audio playing on my PC - perhaps some music track from YouTube (for my own personal use, you understand). Yes, I know there are plenty of tools that will do this with just a single click (such as '4K YouTube to MP3', [www.snipca.com/29127](http://www.snipca.com/29127)), but I prefer to use open source software whenever possible.

By recording audio with Audacity, I can quickly apply edits, such as trimming the clip and adjusting the volume, there and then. True, it's not



Quickly remove silences between a combined series of clips in Audacity

as straightforward as using a dedicated online tool, but full instructions are available in Audacity's comprehensive help files at [www.snipca.com/29128](http://www.snipca.com/29128).

Audacity also comes in handy when I've captured a lengthy audio clip that's plagued by periods of silence (often when I've combined a series of clips into one). Audacity has the tool to resolve this. I select the entire clip (Ctrl+A), then click Effects followed by Truncate Silence. From here, it's simply a case of telling Audacity to replace any gaps longer than two seconds (set this in the Duration field) with a pause of just one second (set the 'Truncate to'

field to '1' - see screenshot).

Audacity's interface hasn't changed much over the years, and now that I've got used to it, I've no desire to see it revamped. Even small changes annoy me. One update last year changed the way the Record button works. Instead of creating a new track each time you press the button, Audacity will now add the recording to the existing track - essentially turning it into a Pause Record button. I prefer the previous method, and Audacity lets you revert to this (click Edit, Preferences, Recording, then tick the 'Always record a new track' option).

Being a big fan of keyboard shortcuts (see page 60), I also love that I can control almost all aspects of Audacity without having to reach for the mouse. Check out Audacity's shortcuts at [www.snipca.com/29130](http://www.snipca.com/29130) (click Edit, Preferences, Keyboard to reassign or create your own).

Audacity does exactly what I want it to do - and, in my book, that's the definition of good software.

## WHAT I'D LIKE TO SEE IN AUDACITY

I'd love to be able to apply all of Audacity's effects in real time, so when playing an audio clip I can hear what impact each has without having to stop playback first. Click the Effects menu during playback and you'll see only a handful of real-time effects,

including Distortion and Phaser. You can preview an effect in Audacity, but that still means stopping playback. Looking at the user suggestions on Audacity's Feature Requests page ([www.snipca.com/29129](http://www.snipca.com/29129)), it seems I'm not the only one hoping to see this in a future release.



# Named & Shamed



Jonathan Parkyn puts the boot into tech villains, jargon-spouting companies and software stuffed with junk

## WARNING: JUNK AHEAD

### Junk offender: Lenovo

**D**espite big PC manufacturers being hauled over hot coals for pre-installing junk without users' consent, it's still happening. Last year, the US Federal Trade Commission fined Lenovo a cool \$3.5million (£2.7million) for selling PCs preloaded with a tool (called Superfish) that stole users' data and injected ads into their PCs. But Lenovo, HP, Acer and others continue to sell computers stuffed with third-party tools that take up space and consume valuable system resources.



Not only that, but junk you thought you'd got rid of can come back to haunt you. I discovered this recently when I decided to reset my Lenovo laptop using Windows 10's Recovery options, only to find that all the crud it came with (and that I had meticulously uninstalled) had been reinstalled in the process (see main screenshot).

But I've subsequently discovered what could be the ultimate weapon in the war on junk. A Windows 10 tool added in 2017's Spring Creators Update lets you install a fresh copy of the latest version of

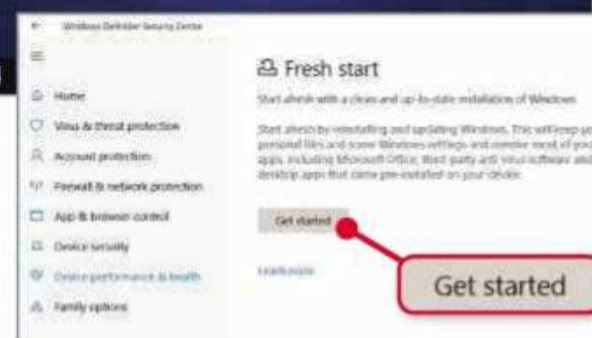


**Lenovo re-installed these unwanted tools when Jonathan restarted his computer**

the OS without reinstalling any of the manufacturer's rubbish.

For reasons known only to Microsoft, you won't find this in Windows' Recovery options. Instead, it's hidden in Windows Defender Security Centre.

Click 'Device performance & health', then 'Additional information' under 'Fresh start'. Click 'Get started' (see screenshot above right) and follow the remaining prompts. The process is



**Use 'Fresh start' to reinstall Windows 10 without Lenovo's junk**

reasonably quick (it took about an hour on my PC) and keeps all your files intact. Bear in mind that the tool will remove programs you've chosen to install, as well as the unwelcome intruders.

### WHAT ARE THEY TALKING ABOUT?

#### WHAT THEY SAY

**Government's 'code of conduct for data-driven health and care technology' ([www.snipca.com/29115](http://www.snipca.com/29115))**

"Utilise and build into your product or innovation, current data and interoperability standards to ensure you can communicate easily with existing national systems. Programmatically build data quality evaluation into AI development so that harm does not occur if poor data quality creeps in."

#### WHAT THEY MEAN

Make sure the products actually work.

### JONATHAN'S VILLAIN OF THE FORTNIGHT

## George Duke-Cohan

Most teenagers are content to cause virtual havoc in Fortnite and other violent video games. But not George Duke-Cohan. This British 19-year-old caused real chaos by emailing hoax bomb threats to schools and airlines.

The self-confessed hacker from Watford was tracked down by the UK's National Crime Agency and the FBI in the US, after his fake threats led to hundreds of schools in both countries



being evacuated. George pleaded guilty at Luton Magistrates Court to three counts of making false threats and faces up to seven years in prison.

George does play video games, though. According to Sky News ([www.snipca.com/29121](http://www.snipca.com/29121)), his hoax emails were faked to look like they came from the Minecraft gaming network VeltPvP, as part of a "feud" against it. Kids these days, eh?



# Reviews

New products tested by our experts

PC | £600 from Overclockers UK [www.snipca.com/29068](http://www.snipca.com/29068)

## Overclockers UK Kinetic H1M

### Graphic content

The last year or so has been pretty exciting for PCs. Previously, we'd got used to both main processors (CPUs) and graphics processors (GPUs) showing only small speed increases whenever new chips came out. Then suddenly everything had more **cores** and ran programs visibly faster and games visibly smoother. You might expect the big spenders to see the benefit first before the innovations trickle down to the rest of us, but in fact some of the biggest improvements have been to PCs available on a limited budget.

“Perfectly adequate for everyday tasks and 3D games, but video editors will struggle”

This 600-quid system is a case in point. Its Intel i3 processor may be lower down the scale than a mid-range i5 or top-end i7, but it now has four cores and, as our tests confirmed, it's perfectly adequate for general Windows tasks. Nor will it keep you waiting too long when multitasking or tackling more demanding work like photo editing. And it's accompanied by a GTX 1060 **graphics card** that shows the value for money of



Nvidia's latest range. This is the 3GB version, which has slightly less power as well as only half the video memory of the 6GB option, but it's still capable of doing full justice to any 3D game at Full HD resolution, only requiring compromises if you have a 4K screen and feel the urge to make full use of it. For those with a virtual-reality headset to use, a **SteamVR** score of 7.5 is at least adequate. This is a very good GPU to find at this price.

You can see how they've managed it. The Kinetic H1M comes in a bulbous but far from spacious case, with little upgrade potential and scant **USB 2.0** and **3.0** connections – and nothing faster for high-speed storage. There's room for three 2.5in **SSDs**, partly because none are included. Windows comes on a 1TB hard drive, which we found relatively speedy as standard drives go, but well off the pace of even a basic SSD. That means more slight delays while the system shuffles data around.

If you're looking for a reasonably priced PC that's fully capable of playing the latest 3D games, this could fit the bill. It's those with more exacting graphics needs who might think twice. A lot of us are now shooting 4K videos, and if you want to do any serious editing on that kind of media you'll need a solid combination of CPU and GPU performance. Traditionally it's the former that takes most of the strain, while the graphics card just helps out with certain operations, and here the i3 chip is going to struggle.

Some video-editing programs – notably Blackmagic's DaVinci Resolve 15 ([www.snipca.com/29069](http://www.snipca.com/29069)), which is free to individual users – now make smarter use of the graphics card. But here the 3GB

#### SPECIFICATIONS

3.6GHz Intel i3-8100 quad-core processor • 8GB memory • 1TB hard drive • 3GB GeForce GTX 1060 graphics card • 3x USB 3.0 ports • 3x USB 2.0 ports • Gigabit Ethernet port • HDMI, DisplayPort and DVI monitor outputs • Windows 10 Home • 435x200x380xmm (HxWxD) • Three-year warranty [www.snipca.com/29068](http://www.snipca.com/29068)



GTX 1060 would be the weak link, lacking the large amounts of onboard memory required for advanced tasks. If your creative needs are more modest, you'd be better off choosing an even cheaper graphics card and spending the money you save on an i5. And if all you're concerned about is Windows not slowing down when you're running multiple programs and flicking between them, you should be investing in an SSD, not a GPU.

As a result, it's hard to recommend this system to anyone except its everyday-basics-plus-fancy-games target market. While the price is competitive, you could find you've got a PC that's nearly fast enough in all respects, but not quite fast enough in any.

**VERDICT** This is a great, affordable option for everyday tasks, but consider your priorities before deciding



**ALTERNATIVE** Mesh Ryzen Gaming PC CS £649 The lesser graphics card is offset by a six-core processor and an SSD





**LAPTOP-TABLET** | £600 from Amazon [www.snipca.com/29108](http://www.snipca.com/29108)

# Microsoft Surface Go

## Light touch

Starting at just £379 – compared with £749 for the Surface Pro (see our review, Issue 508) – this is Microsoft's cheapest laptop-tablet ever. You'll also need the Type Cover keyboard, though, which adds £99 for the basic black version or £125 for the Signature options, in a soft Alcantara (**microfibre**) finish. That's still only around £500 for a highly portable PC.

For around £600 you get a configuration that doubles the meagre 4GB of memory and replaces the 64GB of slow **eMMC** storage to a much faster 128GB **SSD**, though the low-end Pentium processor stays the same. Even with the SSD it's no speed merchant. In the Geekbench 4 **benchmarking** test ([www.geekbench.com](http://www.geekbench.com)), the Surface Go ranks well behind the £319 iPad and comparable Android devices, let alone PCs. In our own Windows 10 benchmarks, it managed only a fraction of the score we'd expect from a basic Intel i3 laptop.

Yet in use, we had few complaints. Loading web pages, editing Word documents and tweaking the occasional photo, it felt responsive enough not to irritate. We'd be wary of the slower model, but as a budget machine for simple tasks, it shows Windows has come a long way since its most bloated and power-hungry days.

Windows does feel cramped on the 10.1in screen, and although switching to Tablet mode helps, you still find yourself constantly trying to poke tiny icons and



read tiny labels. The touchscreen is sharp and has decent colour, covering 90 per cent of the **sRGB** range. Brightness is average for a tablet but good for a laptop, and clear speakers are built in too.

Windows 10 S comes installed, limiting you to Microsoft's Edge browser and Microsoft Store apps, but you can switch to Windows Home if flexibility appeals more than the promise of simplicity and security.

“The easiest way to take Windows with you wherever you go”

As you'd expect, the Surface Go is well made, and there's little more to say about its plain design, except that it's a shame it can't be charged via **USB Type-C** rather than with Microsoft's supplied mains adapter. The battery lasted just under seven hours in our video-playback test, which isn't great. Both the backlit keyboard and the trackpad on the Type Cover feel excellent, and the Go's kickstand keeps it propped comfortably whether on knees or a table (pictured left). Overall, it's the easiest way to take Windows with you wherever you go.

### SPECIFICATIONS

1.6GHz Intel Pentium Gold 4415Y dual-core processor • 8GB memory • 128GB SSD • 10.1in 1800x1200-pixel touchscreen • 8-megapixel rear camera • 5-megapixel front camera • MicroSD slot • USB Type-C port • 802.11ac Wi-Fi • Bluetooth 4.1 • Windows 10 S • 245x175x8.3mm (HxWxD) • 522g (without Type Cover) • One-year warranty [www.snipca.com/29114](http://www.snipca.com/29114)

### HOW WE TEST

*Computeractive* is owned by Dennis Publishing, which employs a team of specialist technical reviewers. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every phone and tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Dennis Publishing also owns the magazines *PC Pro*, *Computer Shopper* and *Web User* and the websites Expert Reviews ([www.expertreviews.co.uk](http://www.expertreviews.co.uk)) and Alphr ([www.alphr.com](http://www.alphr.com)). This means we can test thousands of products before choosing the most relevant for *Computeractive*.

### FAIR AND IMPARTIAL

Our writers follow strict guidelines to ensure the reviews are fair and impartial. The manufacturer has no involvement in our tests.

### OUR AWARDS



We award every product that gets five stars our Buy It! stamp of approval. It means we were

extremely impressed by the product, and we think you will be too.



Every product that gets a four-star review is given the Great Pick award. We highly recommend these

products, although they just fail to meet the high standard of our Buy It! winners.

### PRICES

Our reviews contain a link to the best price we found online at the time of press.

**VERDICT** As a PC that will go anywhere and doubles as a tablet, this is well worth considering, but performance is limited



**ALTERNATIVE** Linx 12X64 £200

With a larger but duller screen and slower processor, this includes a keyboard and is quite usable





# Reviews

**LAPTOP-TABLET** | £250 from Amazon [www.snipca.com/29055](http://www.snipca.com/29055)

## Asus Chromebook Flip C101PA

### Flipping marvellous

Fancy a laptop with a touchscreen that you can fold around and use like a tablet? You could choose Asus' ZenBook Flip S (£1,200 from Amazon [www.snipca.com/28917](http://www.snipca.com/28917), see our review, Issue 536). Alternatively, here's one from the same company for less than a quarter of the price.

Of course, the only way to make a computer for this money is to go back to basics, have a look at the menu outside basics, check your wallet, then go to the kiosk behind basics and order their cheapest option.

So, for a start, this is a Chromebook, meaning that instead of Windows 10 it just runs a glorified web browser. There are some Chrome apps you can install, and many Android apps will run, but with only 16GB of storage you won't have room for much. The idea is that you keep your work 'in the cloud' (that is, online), starting with 100GB of Google Drive space, which is free for the first two years but costs £1.59 a month after that. You can add a **microSD card**, though, if you need more space on board.

Finished in brushed aluminium and plastic, the Flip doesn't look as cheap as it is. The small size and light weight make it highly portable, but the keyboard is squeezed in, making accurate typing tricky. The 10.1in screen isn't very bright or colourful and feels cramped for work, with coarse resolution that can make text hard to read unless you zoom in.

The screen needs a firmer touch than a phone or tablet, but works fine once you get used to that, and the trackpad is responsive in laptop mode. Fast Wi-Fi is built in, and there's a standard **USB 2.0** port as well as two **USB Type-C** ports which also serve for charging and output to a monitor or TV.

#### SPECIFICATIONS

1.6GHz Rockchip OP1 processor • 4GB memory • 16GB flash storage • 10.1in 1280x800-pixel screen • Webcam • microSD card slot • USB 2.0 port • 2x USB Type-C ports • 802.11ac Wi-Fi • Chrome OS • 15.6x263x182mm (HxWxD) • 0.9kg • One-year warranty [www.snipca.com/29056](http://www.snipca.com/29056)



“As a glorified web browser or second portable PC, it has much going for it”

The absence of Windows means you can't compare the Chromebook Flip to a proper PC. It's more like an Android tablet, but less appealing for gamers. As a secondary machine, it could make sense. Your choice of serious software is very limited, but you can use the free online versions of Microsoft Office or the full Office 365 for Chrome, with the usual subscription (£80 a year for up to five users on any number of devices). With a basic webcam and all the usual social-media platforms available, you can keep in touch too.

**VERDICT** This is a laptop that consists entirely of compromises. But it's light, flexible, cheap, and for basic jobs it works fine

★★★★★

**ALTERNATIVE** Acer Chromebook 14 £250 If you don't need touch, this has a faster Celeron N3160 processor, Full HD screen and 32GB storage



### DO I REALLY NEED...

## a robot dog?

#### What does it do?

Aibo is Sony's series of robot dogs, discontinued in 2006. When spares and repairs were withdrawn in 2014, Japan saw a spate of Aibo funerals as grieving owners said farewell to their faux-canine companions. Last year, however, the company launched a new model (pictured), and it's now going on sale in the US. If it came to the UK, its \$2,899 price would translate to around £3,000, allowing for exchange rates, VAT and distribution costs. Don't get too excited, though, because Sony says it's a limited edition.



#### Why would I want it?

As the whole funeral phenomenon shows, Aibo has proved very popular with its owners. The new 'First Litter Edition' has even more advanced sensors, motors and artificial intelligence so that it can recognise people and develop its 'personality' over time as it interacts with them. It's also cuter. Oh, and there's an app.

#### So can I do without it?

That may depend on whether you're Japanese. The country's tech companies have led the way in designing digital products that interact realistically with humans, and it's been suggested that this reflects a cultural openness to an idea rooted in the Shinto religion, which draws less of a distinction between living and inanimate objects. That could explain why robot pets haven't really caught on anywhere else. But when sociologists claim a group of people has a completely different way of looking at things from the rest of us, it usually turns out to be nonsense, so don't be surprised if we're all shelling out the price of a used car for a battery-powered pet in five years' time.



**LAPTOP** | £1,701 from Lenovo [www.snipca.com/29060](http://www.snipca.com/29060)

## Lenovo ThinkPad X1 Carbon (6th Gen)

### Think different

Back in the days when ‘nobody ever got fired for buying an IBM’ (as the industry cliché went), the default laptop for the aspiring executive was the ThinkPad. These chiselled black slabs weren’t the prettiest, but they’d survive years of office abuse. Their keyboards in particular demonstrated legendary sturdiness – something you can’t always rely on even with the biggest brands (see our MacBook Pro review, Issue 536).

IBM long ago sold its hardware business to Lenovo, which is based in Beijing and has a logo so bland it makes IBM’s old stripy blue capital-lettered logo look almost psychedelic. But the ThinkPad lives on, and the X1 Carbon is the classic edition. It’s still black; it still has the funny little rubber joystick in the middle of the keyboard that you can use to move the cursor if you don’t like trackpads; and it’s still made for users who want a solid laptop for the price of an exciting one.

“A sturdy laptop that will breeze through everyday tasks”

What’s very modern is its construction, which combines magnesium alloy (similar to aluminium) and plastics with the eponymous carbon fibre to make its slim frame sturdier than its weight would imply. At just 1.13kg, this is one of the lightest 14in laptops around, and just thick enough to fit in two full-size **USB 3.0** ports and an **HDMI** socket, avoiding the need to juggle adapters.

There are also two **Type-C** ports, one of which doubles for charging while the other supports the fastest **Thunderbolt 3** devices. Ethernet, less handily, uses a mini socket and a dongle which, when plugged in, obscures the Thunderbolt 3 port.

We found other niggles too. The trackpad worked fine except just after booting up, when it suffered bouts of unresponsiveness. On waking from sleep, however, there was no problem. This kind



of thing might disappear with a future software update, but it’s annoying. Less fixable is the X1 Carbon’s tendency to get uncomfortably warm in use, noticeable not only on our knees but even when pressing certain keys. On the plus side, we appreciated the ThinkShutter, a bit of plastic that you can slide over the webcam to make sure it isn’t watching you. And Amazon Alexa is built in – a nice touch.

Business class has its privileges. A fingerprint reader is incorporated to log you in, and you get Windows 10 Pro, with its extra networking, security and BitLocker encryption. Lenovo includes a three-year onsite warranty, so if anything goes wrong with your ThinkPad that can’t be resolved over the phone, they’ll send out an engineer free of charge.

The Dolby Vision WQHD screen (a custom option to the base Full HD spec that adds £120 and a 2-3 week delay) looked more than sharp enough. Brightness and contrast were excellent, and it covered 99 per cent of **sRGB**. Being

#### SPECIFICATIONS

1.8Hz Intel i7-8550U quad-core processor • 8GB memory • 256GB SSD • 14in 2560x1440-pixel screen • Webcam • 2x USB 3.0 • 1x USB Type-C • 1x USB Type-C with Thunderbolt 3 • SD card reader • Nano SIM slot • 802.11ac Wi-Fi • Bluetooth 4.2 • Windows 10 Pro • 15.95x324x217mm (HxWxD) • 1.13kg • Three-year warranty [www.snipca.com/29060](http://www.snipca.com/29060)

perfectionists, though, we tested the accuracy as well as the range of colours and found a **Delta E** score of over 4 – not good for serious photo or video editing. For anything else it’s great, but it’s a shame they couldn’t quite nail it.

Processing speed is a similar story. Our test model had a top-end Intel i7-8550U chip, but couldn’t match the scores of a Dell XPS 13 with the same chip, instead ranking with cheaper machines. We’d be tempted to save the money and get the version with i5-8250U, starting at £1,489.

Either way, there’s enough power here, with the **SSD**, to keep everyday tasks cantering along. It’s just not the PC for heavy creative tasks or gaming. At just over seven hours in our video-playback test, battery life was decent, and you might get a bit more with the i5 version.

**VERDICT** A very well made laptop that lives up to its pedigree, but not quite worth all that money

★★★★★

**ALTERNATIVE** Dell XPS 13 (2018)

£1,499 At a lower price for a similar spec, this **4K** 13in model goes faster thanks to better cooling





# Reviews

PC MONITOR | £166 from BT Shop [www.snipca.com/29086](http://www.snipca.com/29086)

## AOC I1601FWUX

### Carry on screening

This appears at first sight to be a large tablet. As such, it's a surprisingly sleek one. If you scaled up an iPad Pro to the same 15.6in screen size, it would be bigger and heavier. The I1601FWUX is as thin as most mobile phones, which feels incredibly slim given its laptop-like width, and is light enough to slip in a bag without you really noticing. The metal case, with its almost featureless design, looks strikingly classy.

“Great for everyday tasks on the move, but nothing beyond that”

It's not a tablet, though, as you'll realise if you turn it on (nothing happens) and swipe the screen (nothing happens). This is actually a monitor. It connects to your PC with a **USB Type-C** cable, and that's all it needs – no mains adapter or battery. Something it does share with a tablet is the ability to detect which way up it is, so you can use it landscape or portrait and

#### SPECIFICATIONS

15.6in IPS LCD • 1920x1080-pixel resolution • 1x USB Type-C port • Requires Windows 7 or later • 376x235x8.5mm (HxWxD) • Three-year warranty [www.snipca.com/29084](http://www.snipca.com/29084)



the display rotates to match, assuming you've installed AOC's i-Menu program on your PC.

As you've probably gathered, this is a screen that's exclusively for Windows computers with USB Type-C ports. That might sound a bit niche, but most of the laptops and a lot of the desktop PCs we've been seeing for the last few months have Type-C. The simple plug and slim cable certainly make for a hassle-free connection.

Also tablet-like is the supplied 'smart cover', which folds into a stand. This grips the back panel with a magnet that you can slide up and down to adjust the angle, though we'd have liked it to go much flatter. All in all, the I1601FWUX is a breeze to use, but does it deserve our 'Buy It!' award? Not quite. It's pointless to recite the technical results – suffice to say it's basic, and no good at all for photo or video work, or serious gaming. It also lacks a speaker. But the Full HD resolution is decent, there are no

problems with flicker or viewing angles, the matt finish helps ensure everything is legible despite fairly low brightness, and in general use we had no complaints.

**VERDICT** It's not a main monitor, nor a perfect one, but as a second screen with the benefit of full portability this is worth the money



**ALTERNATIVE** Asus MB169C+ £213 This is a similar product, but with a less flexible stand and no obvious advantages, at a higher price



### WHAT SHOULD I BUY

We solve your buying dilemmas

## How do I make my wireless mouse work with new laptop?

**Q** With my new Dell XPS 13 laptop, my Logitech wireless mouse works erratically when its dongle is connected via my USB Type-C hub. It works fine when plugged directly into my laptop. I didn't have this problem using a **USB 3.0** hub with my previous XPS. Is there a wireless mouse that will work better?

Gerry Chance



**A** With USB 3.0 and higher, you'll often get interference when a 2.4GHz wireless receiver is plugged in close to another peripheral. The fix is to use an extension, moving it away. Your hub should do the job, but plugging other devices into the hub could recreate the problem, which may not have happened with your previous XPS due to different port locations. Try the mouse alone on the hub. If that helps, try an extension to distance the dongle from

the hub. At the laptop end, use the Type-C port furthest from other ports.

Alternatively, consider a mouse that connects to the XPS 13's built-in Bluetooth rather than a dongle. If you stick with Logitech, click Filter By on their website ([www.snipca.com/29078](http://www.snipca.com/29078)) and tick 'Wireless: Bluetooth' (not 2.4GHz) to find suitable models, such as the pictured M720 Triathlon.

Do you need advice on what you should buy? Email us at [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)



# WIN an RSI-beating UNIMOUSE

Enter our free prize draw to win 1 of 10 ergonomic mice.

Visit <https://contour-design.co.uk/competition> and enter your details for a chance to win an award winning Unimouse worth £89.99!



DESIGNED WITH YOU IN MIND.

If you experience **discomfort** or **pain** when you use a computer, your mouse could be the cause. To combat this, Contour Unimouse is designed to fit you, not the other way around.

Mouse pain is caused by a combination of reaching and twisting your arm to keep your hand flat on your mouse.

Contour Unimouse allows you to adopt a more vertical hand position, to switch postures and to engage different muscles and tendons, providing **unmatched adjustability** and **maximum comfort**.

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contour 



# Reviews

**PRINTER** | £259 from Insight [www.snipca.com/29088](http://www.snipca.com/29088)

## Epson WorkForce Pro WF-C5790DWF

Lowering the toner

This is pricey for an inkjet, but competes on speed with mid-range office laser printers. Compared with colour lasers, it also gives you much smaller bills. Epson's inks come in 3,000 or 5,000-page packs, looking more like astronaut food than printer supplies, and you can also get the black in a 10,000-page unit. If you buy the biggest, costs currently work out at around 4.8p per colour page, or just over a penny for black, which is very reasonable. The only catch is that the supplied 'starter' cartridges are much smaller, so you'll need to budget for refills straight away.

### SPECIFICATIONS

4800x1200dpi maximum print resolution • 1200x2400dpi maximum scan resolution • 250-sheet paper tray • 80-sheet multi-purpose tray • 50-sheet ADF • USB 2.0 • Gigabit Ethernet • 802.11n Wi-Fi • Fax • 357x425x535mm (HxWxD) • 18.7kg • One-year warranty [www.snipca.com/29091](http://www.snipca.com/29091)

We didn't find the WF-C5790DWF much quieter than the average laser, but it did reach the quoted 24 pages per minute on black text, or 15 with colour graphics, and 8.7 sides per minute duplex (double sided).

Scanning, which can also handle duplex, was ridiculously fast, at five seconds for a 300dpi A4 page or seven for a 600dpi postcard-sized photo, and 14 seconds for 1200dpi. Ten pages took just 43 seconds to copy in black and white, or 46 in colour. We were very happy with quality, too, except that colour copies were a bit dull and duplex pages weren't as vivid, presumably to avoid smudging.

This is an excellent printer, and although we prefer the HP PageWide Pro 447dw (£320 from Ebuyer [www.snipca.com/29090](http://www.snipca.com/29090), see our review, Issue 478), it is more expensive.



**VERDICT** Not everyone will need the speed, but it's great to see inkjets beating laser printers at their own game with lower running costs

★★★★★

**ALTERNATIVE** HP PageWide Pro 447dw £320 Even faster and impressively futuristic, this is better but currently costs significantly more to buy



**ROUTER** | £137 from Amazon [www.snipca.com/29092](http://www.snipca.com/29092)

## DrayTek Vigor 2762ac

Broad minded

Today's routers are often fancy boxes with up to eight aerials. This one has just two, but is still a versatile ADSL/VDSL Wi-Fi modem router, for copper and fibre broadband lines, with comprehensive features.

Its quoted maximum speed of 866Mbps on the 5GHz band is among the slowest around, but our tests showed that in practice it kept up with rivals both at close range and further away in the house. If you have a lot of devices trying to connect at once, it's not the best performer, and if you have a big house you'd still need to

### SPECIFICATIONS

802.11ac Wi-Fi router • 2x2 SU-MIMO • 4x Gigabit Ethernet ports • Gigabit Ethernet WAN port • 2x USB 2.0 ports • Supports 3G/4G USB modem (optional) • 39x207x131mm (HxWxD) • Two-year warranty [www.snipca.com/29093](http://www.snipca.com/29093)

consider a mesh Wi-Fi solution – our favourite, BT's Whole Home WiFi (£170 from Amazon [www.snipca.com/28603](http://www.snipca.com/28603)), requires a separate router, but any reasonably modern one should be fine.

The Vigor has comprehensive controls built in so you can choose which users can access what and when, and two USB ports let you attach a printer or drive to share and/or a 3G/4G SIM dongle, so you can connect to mobile data (at extra cost) if your broadband goes down. For many home users, though, the range of options is unnecessarily daunting, and there's no media streaming for shared storage.

If you have cable broadband with a separate modem box, consider the D-Link DIR-882 EXO AC2600 (£83 from Amazon [www.snipca.com/28601](http://www.snipca.com/28601), see our review, Issue 534).



**VERDICT** It's a good choice if you need advanced controls over who can access what, but it's not the easiest router to use

★★★★★

**ALTERNATIVE** D-Link DIR-882 EXO AC2600 £83 For use with an ISP's modem, this has fewer features but is fast and good value





**ACTION CAMERA** | £199 from Amazon [www.snipca.com/29119](http://www.snipca.com/29119)

## GoPro Hero (2018)

### Action Hero

GoPro has been making action cameras for so long that its product names were getting a bit convoluted: 'Hero5 Session' could as easily have been a real ale as a video gadget. This latest edition is not only 50 quid cheaper than that one, but is simply called the GoPro Hero, marking a new start for the budget model.

Rather than a tiny and conspicuously basic unit with no built-in preview, this now looks almost identical to the 400-quid Hero6 Black, with a sharp two-inch touchscreen on the back as well as an LCD status display on the front. It's rated for immersion in up to 10 metres of water without needing a separate case (diving accessories are available for the more ambitious), and when fully charged via the USB Type-C port the battery should last between 1 hour 20 minutes and 2 hours 30 minutes, depending on your settings.

The main compromises are that rather than going up to 4K, the resolution is limited to 1920x1440 pixels (like Full HD, but taller). You can knock this down to a standard widescreen (1920x1080) at 30 or 60 frames per second (fps) at 30-45 megabits per second using the H.264 codec. The Hero6 Black uses the superior H.265 to achieve higher quality at the



#### SPECIFICATIONS

1920x1440 or 1920x1080-pixel video at 30 or 60fps  
 • 10-megapixel photos • Stereo audio • MicroSD card slot • MicroHDMI output • USB Type-C port • 45x62x33mm (HxWxD) • 117g • iOS and Android apps available • One-year warranty [www.snipca.com/29120](http://www.snipca.com/29120)



same bit rate, while rivals like the Yi 4K+ (see our review, Issue 518) use higher bit rates for finer quality. GPS isn't included, there's no input for an external microphone, and Wi-Fi is 2.4GHz only, limiting the speed of uploads.

We found the Hero shot very good footage, with convincing colour and exposure, which deteriorated in low light. You don't get the ProTune adjustment options of pricier GoPros, and when you play back videos on a big screen you'll notice some lack of detail. But the digital stabilisation did a good job of smoothing out shake, and – thanks to the same built-in triple microphone as the Hero6 – audio quality is excellent.

Still photos weren't anything special, but that won't be most people's priority. Voice control handily lets you yell 'GoPro, start recording' at the appropriate moment. The touchscreen controls work well too, and of course you can also control the Hero from an app.

**VERDICT** Though the specs aren't the highest around, GoPro's quality design makes this hard to knock for the money

★★★★★

**ALTERNATIVE** Yi 4K+ £266

Supplied with a 40m waterproof case, this 4K touchscreen camera is worth the extra cash for higher specs, but it's not as polished as the Hero



### THAT WAS THEN...

## This is now!

How technology has changed

### Nvidia Riva 128 What was it?

Released in 1997, the Riva 128 (pictured) was one of the first examples of a modern graphics card, a standard PC component featuring 2D and 3D acceleration. Nvidia had previously focused on a different type of graphics technology, but switched to support Microsoft's new Direct3D, a decision that propelled the obscure component maker to the top of the market, where it would vie with rival ATI (later bought by AMD) for the next two decades and beyond.



### How have things changed?

The density of features on the silicon wafers that make up processors is known as process size. Riva was made on a 350-nanometre (nm) process; Nvidia is now down to 16nm, meaning nearly 500 times more elements can be packed into a square millimetre. The Riva had 3.5 million transistors; today's equivalents have around 7.2 billion, over two thousand times more. Today's 3D games can be played at resolutions up to 3840x2160 pixels compared with 800x600 in 1997.

### NEXT ISSUE

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## LAPTOP

**Asus ZenBook UX410UA**  
**£590** from [www.snipca.com/26789](http://www.snipca.com/26789)  
**Tested** Issue 518



With a dual-core Intel i3 processor, 4GB of memory and 128GB SSD, this slim aluminium 14in has just enough power to make Windows 10 feel smooth – and unlike Asus's cheaper models it has a very good Full HD screen.

### ALTERNATIVE Dell XPS 13

This premium laptop starts at £1,149, but the best deal is with the brand new quad-core i7-8550 and QHD touchscreen. £1,350 from [www.snipca.com/26796](http://www.snipca.com/26796)

## DESKTOP PC

**Mesh Ryzen Gaming PC CS**  
**£650** from [www.snipca.com/27705](http://www.snipca.com/27705)  
**Tested** Issue 528



With a six-core Ryzen 5 1600 processor and 4GB GeForce GTX 1050 Ti graphics card, this is a brilliant all-round desktop PC for the money, completed by 8GB of memory, 120GB SSD and 1TB hard drive.

**ALTERNATIVE Lenovo IdeaCentre 620s**  
A laptop i5 CPU plus GTX 1050 Ti make this discounted compact PC a sleek silver bargain. £500 from [www.snipca.com/27672](http://www.snipca.com/27672)

## APPLE IPAD

**Apple iPad 9.7in (2018)**  
**£319** from [www.snipca.com/27670](http://www.snipca.com/27670)  
**Tested** Issue 527



Now with a faster processor and supporting Apple's Pencil stylus (£89), this is a brilliant full-size tablet at an unbeatable price. Has 32GB and no microSD slot, so also consider the 128GB version at a still reasonable £409.

### ALTERNATIVE iPad Mini 4

At much the same price for 128GB (the only version), the smaller and slower Mini lacks Pencil support. £399 from [www.snipca.com/27671](http://www.snipca.com/27671)

## ANDROID TABLET

**Samsung Galaxy Tab S3 9.7**  
**£470** from [www.snipca.com/27058](http://www.snipca.com/27058)  
**Tested** Issue 501



Samsung's new mid-sized tablet has a wonderful HDR screen and comes with a pen, unlike Apple's iPad Pro. But its processor isn't the fastest and it's disappointingly expensive, especially compared to the £339 iPad 9.7in.

### ALTERNATIVE Asus ZenPad 3S 10

With eight-hour battery life and 4GB of memory for fast multitasking, this iPad-like 9.7in tablet is great value. £300 from [www.snipca.com/24858](http://www.snipca.com/24858)

## APPLE IPHONE

**Apple iPhone SE**  
**£349** from [www.snipca.com/24854](http://www.snipca.com/24854)  
**Tested** Issue 474



Hanging on for a third year, Apple's smaller phone is deservedly popular, challenging Android rivals with decent processing power, a great screen and camera, fingerprint recognition and Apple Pay. 32GB of storage should suffice, but there's no microSD slot.

### ALTERNATIVE iPhone 8

Expensive and a bit fragile, but superbly equipped. If you can manage with 32GB, consider the iPhone 7 at £150 less. £699 from [www.snipca.com/25789](http://www.snipca.com/25789)

## ANDROID PHONE

**Motorola Moto G6**  
**£200** from [www.snipca.com/27965](http://www.snipca.com/27965)  
**Tested** Issue 530



The Moto G line returns to form with this distinctive Gorilla Glass-backed 5.7in phone. Screen quality and processing power may not be top end, but the dual camera is excellent and it feels like a lot of phone for the money.

### ALTERNATIVE Samsung Galaxy S8

The wraparound screen looks stunning and this top-end phone has no real flaws. Now that it's getting discounted a bit, even the price might not put us off. £400 from [www.snipca.com/24857](http://www.snipca.com/24857)





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Our pick of products that have won the **Buy It** award

## EBOOK READER

### Amazon Kindle (2016)

£60 from [www.snipca.com/21901](http://www.snipca.com/21901)

**Tested** Issue 483



Amazon's basic ebook reader is now good enough to be our first choice. It's plasticky, but slim and lightweight, with a decent 4GB storage and good battery life. Consider the £110 Paperwhite if you want backlighting or (for £60 extra) 3G.

#### **ALTERNATIVE** Kobo Aura H2O (2017)

This premium waterproof reader from Amazon's main rival can't load Kindle books, but it's very pleasant to use. £150 from [www.snipca.com/24473](http://www.snipca.com/24473)

## SECURITY SOFTWARE

### Kaspersky Internet Security 2019

£17.99 from [www.snipca.com/21532](http://www.snipca.com/21532)

**Tested** Issue 516



Kaspersky Internet Security has won our past nine antivirus tests and the 2019 version is now available at an exclusive reader discount on our Software Store. Go to the link above for a one-year, one-device licence or buy a two-year, three-device licence for just £34.99.

#### **ALTERNATIVE** Norton Security Deluxe

Almost as good as Kaspersky, but blocks more legitimate software. £21.99 from [www.snipca.com/25004](http://www.snipca.com/25004)

## PHOTO EDITING

### Serif Affinity Photo

£49 from [www.snipca.com/23739](http://www.snipca.com/23739)

**Tested** Issue 498



Designed for both full-time professional image retouchers and the rest of us keen amateurs, this is a beautifully designed and comprehensive program for both Windows and Mac users, although so far it performs better on Macs.

#### **ALTERNATIVE** Xara Photo & Graphic Designer

For all-round design and drawing plus photo filters, this affordable app has a lot to offer. £35 from [www.snipca.com/26514](http://www.snipca.com/26514)

## PC MONITOR

### AOC Q2778VQE

£209 from [www.snipca.com/25508](http://www.snipca.com/25508)

**Tested** Issue 468



It comes with no extras, such as built-in speakers or a USB hub, but this 2560x1440 panel gives you a full 27in screen with excellent contrast and colour accuracy at a very reasonable price. It's a little laggy for gamers, but there's no ghosting on motion.

#### **ALTERNATIVE** Philips Brilliance

241B7QPJKEB With a great picture, stylish design, speakers and webcam, this 24in Full HD IPS is an excellent smaller screen. £194 from [www.snipca.com/26850](http://www.snipca.com/26850)

## ROUTER

### TP-Link Archer C3200

£190 from [www.snipca.com/26568](http://www.snipca.com/26568)

**Tested** Issue 503



Simply the best router you can buy for under £150. It's a tri-band device, giving you one 2.4GHz band and two on 5GHz, minimising Wi-Fi congestion on your network. It is fastest at close range on 2.4GHz, peaking at 124Mbps. There's no MU-MIMO though.

#### **ALTERNATIVE** Synology RT2600ac

Synology's Router Manager software make this easy to set up and control. Advanced parental controls let you restrict how long a device can go online. £220 from [www.snipca.com/26570](http://www.snipca.com/26570)

## PRINTER

### Canon Pixma TS6150

£80 from [www.snipca.com/28430](http://www.snipca.com/28430)

**Tested** Issue 533



Modest speeds, no ADF and higher than average running costs are among its flaws, but crisp scans and excellent print quality on all types of documents – photos, plain text and solid-colour graphics – make this a great choice as a do-it-all home printer at a fair price.

#### **ALTERNATIVE** HP OfficeJet Pro 6960

Decent speeds, plenty of features (including automatic document feed) and reasonable running costs make this a solid buy. £100 from [www.snipca.com/28483](http://www.snipca.com/28483)

PRICE DROP



## COMPETITION

# Win 1 of 3 D-Link DIR-882 EXO AC2600 router

Winner of a Great Pick award in Issue 534, D-Link's DIR-882 EXO AC2600 is an excellent router for boosting your home Wi-Fi, delivering speeds you'd normally have to pay twice the price for.

It's a dual-band 802.11ac router, with four Gigabit Ethernet ports, and one Gigabit WAN port, plus a port each for for USB 2.0 and USB 3.0. These let you connect storage drives across your network, and stream to media players that you can connect to a TV.

Best of all, it supports MU-MIMO

## D-Link

technology, which increases the number of Wi-Fi antennas that can be used. It means multiple devices can get high-bandwidth Wi-Fi signals simultaneously. You'll be able to stream HD videos faster, transfer large files in seconds and enjoy buffer-free gaming.

To enter, email your address to [cacomp@dennis.co.uk](mailto:cacomp@dennis.co.uk) with 'D-Link' in



the subject line by midnight 9 October.

You can buy the **D-Link DIR-882 EXO AC2600** for £82 from Amazon ([www.snipca.com/28601](http://www.snipca.com/28601)). For more information on D-Link products visit <https://eu.dlink.com/uk>, follow [@DLink\\_UK](https://twitter.com/DLink_UK) on Twitter, and 'like' [www.facebook.com/DLinkEU](https://www.facebook.com/DLinkEU)

### MESH ROUTER

**BT Whole Home Wi-Fi**  
**£170** from [www.snipca.com/26990](http://www.snipca.com/26990)  
**Tested** Issue 496



BT's set of three discs, managed from an Apple or Android app, connects to your broadband and spreads high-speed Wi-Fi all around the house. Reception is far better than a single router, and the price is lower than any rival.

#### ALTERNATIVE Google Wifi

It's technically less powerful, and two dishes cost more than BT's three, but this system works well and has a great app. £229 from [www.snipca.com/26989](http://www.snipca.com/26989)

### SOLID-STATE DRIVE

**Samsung 960 Pro 512GB**  
**£260** from [www.snipca.com/23389](http://www.snipca.com/23389)  
**Tested** Issue 491



Made for the fast M.2 interface that's increasingly common inside PCs, this is not a cheap option, but if you want an SSD you want speed, and this has it in spades. Samsung's 850 Evo (£150 for 500GB) is a good budget choice.

#### ALTERNATIVE Kingston SSD

Now UV400 480GB Much slower, but still faster than a hard drive, this gives you more GB per pound. £115 from [www.snipca.com/22127](http://www.snipca.com/22127)

### WEB DESIGN

**Xara Web Designer Premium**  
**£70** from [www.snipca.com/28127](http://www.snipca.com/28127)  
**Tested** Issue 453



This visual program makes creating sites more like laying out a document than writing HTML code, and sites can be responsive, meaning they look good on big and small screens. A cheaper, basic version is also available for £35.

**ALTERNATIVE Incomedia WebSite X5 v13 Evolution** It may feel basic, but this program outputs efficient HTML code and responsive pages. £60 from [www.snipca.com/19440](http://www.snipca.com/19440)



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# HOW TO...

## Set up dual-band Wi-Fi on your home network

by Nik Rawlinson

**What you need:** Broadband router **Time required:** 60 mins

**H**ow often have you blamed your broadband provider when YouTube videos buffer or Skype drops a call? Probably more than you should.

With the exception of cable services provided by Virgin Media, almost all of the UK's broadband is managed by a subsidiary of BT (Openreach), regardless of who you actually pay each month. So, unless your neighbours are having the same problems, it's more likely the fault

lies within your own home. Frequently, it's down to interference.

As we all connect ever more devices to a growing number of wireless networks, the Wi-Fi radio spectrum is getting busier. This means our routers, PCs, tablets and phones are having to work harder to determine exactly which signals are meant for them and, where necessary, correct any errors in the incoming stream.

It's frustrating, but there's no reason to put up with substandard Wi-Fi performance when a few simple tweaks will greatly improve things. By isolating your most demanding hardware, and avoiding the parts of the Wi-Fi spectrum that your neighbours' networks are already saturating, you can step away from the wireless bunfight and enjoy a smoother, faster and altogether less frustrating experience.

1

### Understand how Wi-Fi works

The beauty of Wi-Fi is that it 'just works'. Picking a network and entering a password is usually all you need to do – but understanding what goes on behind the scenes means that these instructions will make more sense.

Domestic Wi-Fi networks use one of two wavebands: 2.4GHz and 5GHz. Think of these as you would the AM and FM bands on a regular radio. Like AM, the 2.4GHz waveband is more prone to interference because it's also used by microwave ovens, cordless phones and Bluetooth devices connected by dongles (pictured right), such as keyboards and mice. It is also slower.

Not so for the 5GHz band, which isn't

shared with anything apart from other data-focused devices. As a result, it



As well as routers, Bluetooth devices and dongles use the 2.4GHz waveband

suffers less interference and is capable of transmitting data more quickly. Think of it as FM.

Each waveband hosts several channels which, if we return to our AM and FM analogy, are the equivalent of licensed radio frequencies. If stations broadcast on frequencies too close to one another, their signals can overlap, causing interference. The same will happen on a Wi-Fi waveband when two networks occupy channels close to each other.

The secret to optimising your home Wi-Fi, then, is to intelligently separate your devices across the various wavebands, and to make sure your own Wi-Fi router or hub is broadcasting on the least cluttered channel in your area.



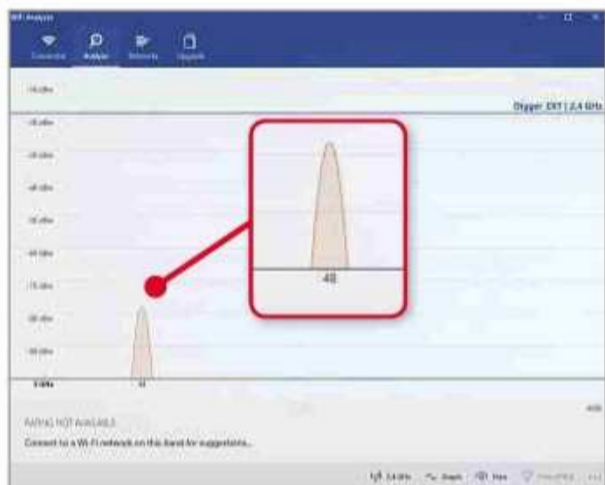
2

## Find the best channel

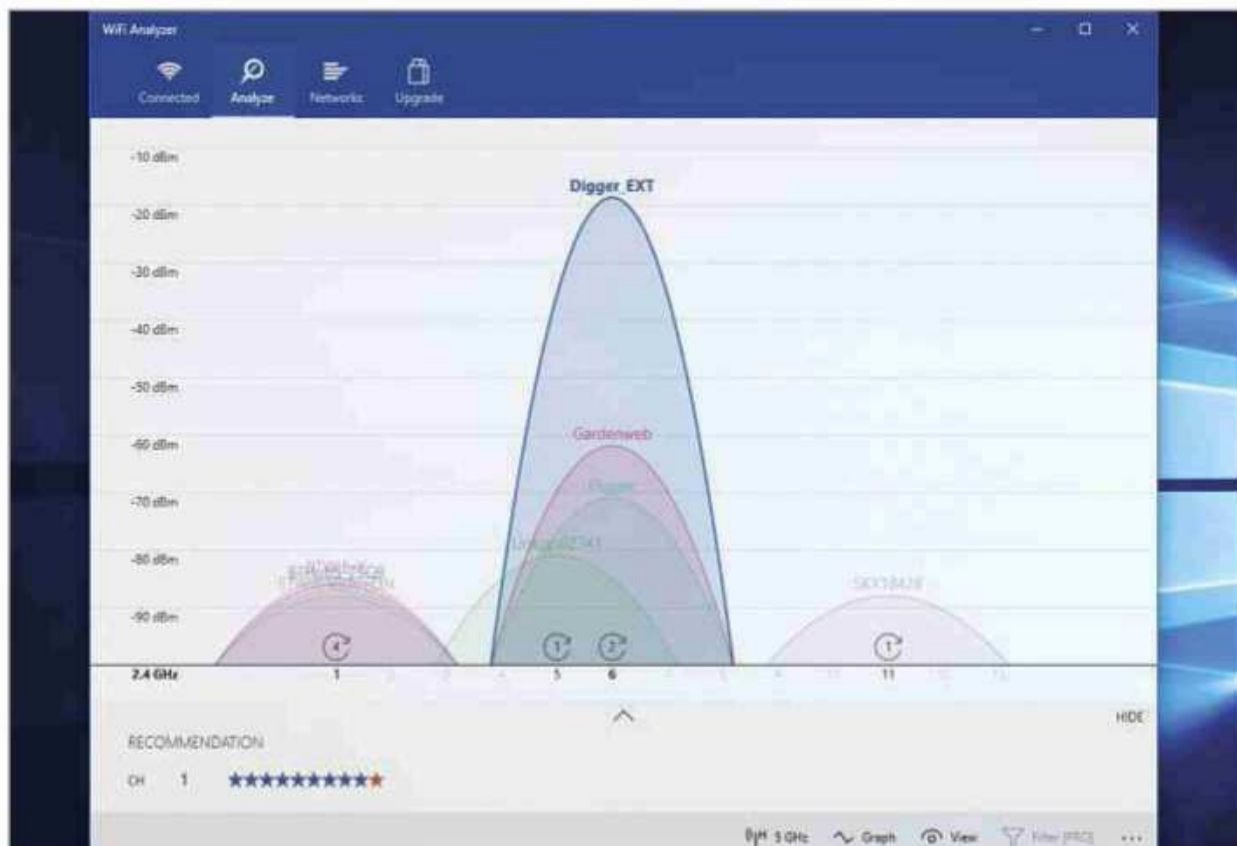
With Wi-Fi installed in almost every home, you'll need to live a long way from your neighbours for their networks not to encroach on your own. If you live in a city, terrace house or block of flats, you'll know this already from the number of different network names that pop up when you select your own on a computer, tablet or phone.

Technically, these are known as **SSIDs** – or Service Set Identifiers – and without knowing which channels or wavebands each SSID is using, it's impossible to know which parts of the spectrum we ought to avoid. Happily, free apps and software can help.

WiFiAnalyzer for Android ([www.snipca.com/29065](http://www.snipca.com/29065)), and the similarly named (notice the space) WiFi Analyzer for Windows ([www.snipca.com/29066](http://www.snipca.com/29066)) detect networks near your home and reveal the wavebands and channels on



It's not surprising there's only one 5GHz network in our house because they sacrifice range for speed



Channel 6 is very busy in Nik's immediate neighbourhood, so he could switch to channel 11, which is hosting only one network, to minimise interference.

## How I use my dual-band Wi-Fi

Living in an eco-house with well-insulated walls means network coverage has always been a problem for me – particularly on the 5GHz waveband, which doesn't travel as far as 2.4GHz.

However, I've set up a series of powerline networking plugs, which extend the network over the electrical ring main, and connected them to old routers that I've repurposed to act as access points.



One of these hosts a dedicated 5GHz network in my lounge, so I have a robust signal for streaming TV (I have no cable, aerial or satellite dish). Now, the only showstoppers that happen when I'm watching TV take place in the *Great British Bake Off* tent – not on the screen itself.

Nik Rawlinson



What tips have you got for better Wi-Fi performance? Let us know: [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)

which they're operating. Frustratingly, there's no equivalent app for Apple iOS.

In WiFiAnalyzer for Android, open the menu by tapping the top-left horizontal lines, then selecting Channel Graph. On WiFi Analyzer for Windows, click Analyze in the top menu, then Graph at the bottom. Each tool shows you the relative strengths of the encroaching networks. As you can see from our screenshot below, a lot of nearby routers on the 2.4GHz waveband are clustered around channel 6 in my home, but channel 11 is very quiet. Setting my router to use channel 11 would therefore reduce the level of interference both my router and PCs have to compensate for.

Clicking 5GHz at the bottom of either tool switches to the 5GHz waveband

where (as our screenshot left shows) there's only one network currently in operation. Networks using 5GHz are usually faster, but achieve this by sacrificing range. It's not surprising therefore that there's only one network visible on the 5GHz waveband in our house.

By now you should have a good understanding of the various ways the Wi-Fi spectrum is used around your home. With this knowledge in the bank, it's time to start planning how you'll put it to best use.

3

## Segregate your devices

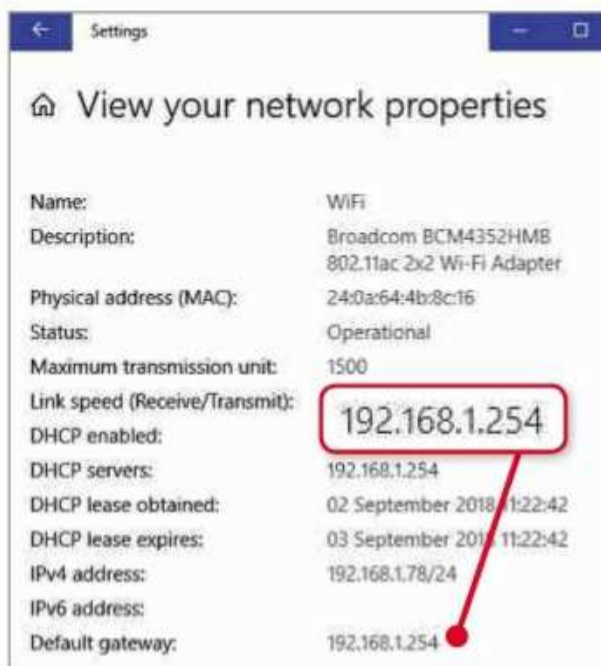
Over the next couple of steps we'll show you how to set up two networks using a common broadband router, with one using the 2.4GHz waveband, and the other broadcasting on the faster 5GHz waveband.

We'll be doing this because different devices have different needs. If you regularly stream to a smart TV or PC, you want to guarantee these have the fastest and most robust signal, which you can do by connecting them to a 5GHz network. Less demanding devices, like voice assistants, smart light bulbs and so on, can be relegated to less advanced networking protocols, and will run well on the 2.4GHz waveband, where they won't interfere with your 5GHz devices.

With this in mind, make a list of all the Wi-Fi-enabled devices in your home, and separate them according to how demanding they are. PCs and smart TVs should go on your 5GHz list; smart-home devices, tablets and phones can be relegated to 2.4GHz.



## Set up dual-band Wi-Fi on your home network



Your router's address comprises the four sets of digits beside 'Default gateway'

### 4 Set up dual networks

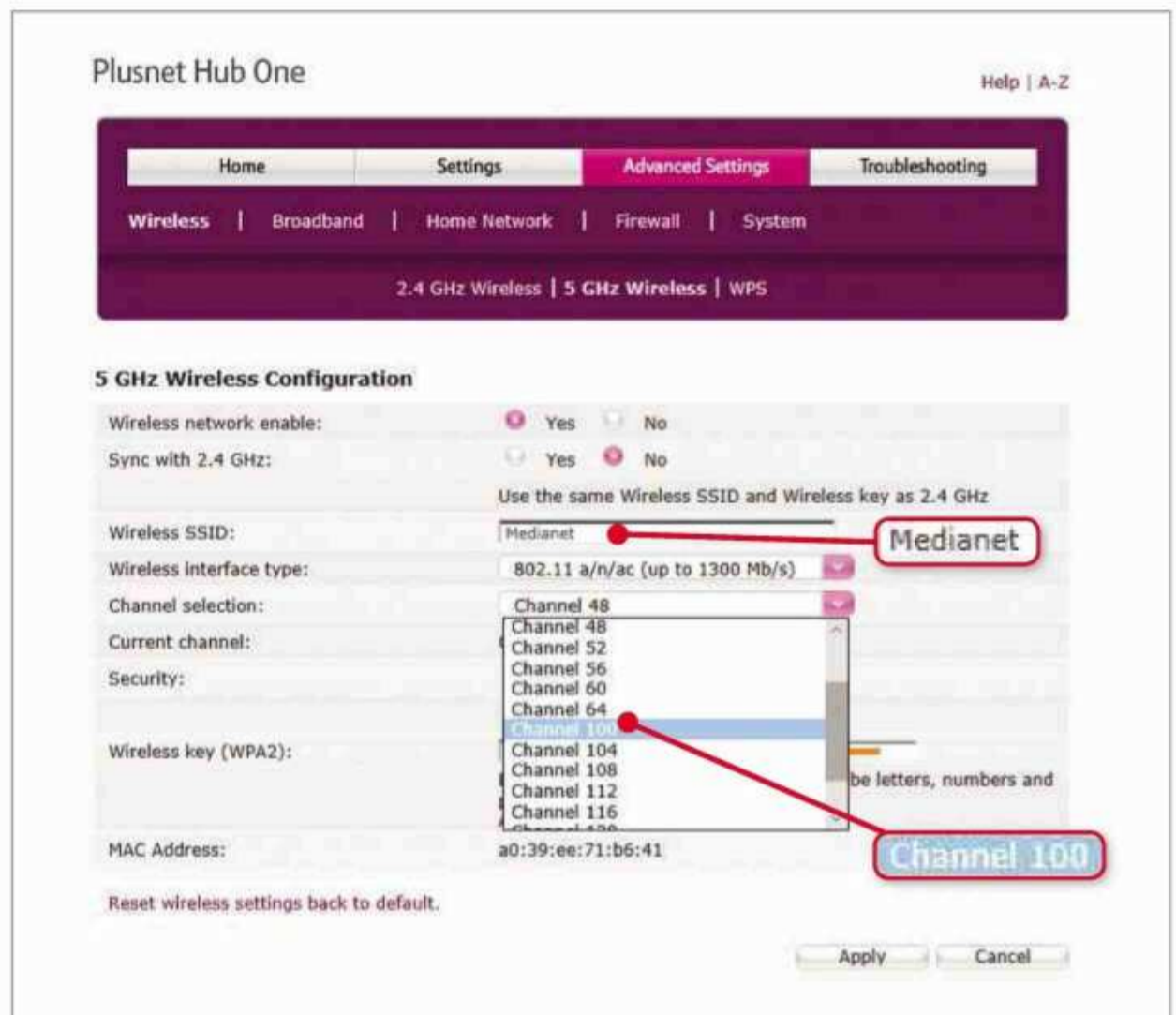
Right-click the Wi-Fi symbol on the Windows taskbar then select 'Open Network & Internet settings'. Click the 'View your network properties' link, then scroll down to the WiFi section and copy the four sets of numbers beside 'Default gateway'. These are your router's address on your network. In our case, as the screenshot above shows, it's 192.168.1.254. Type this into a new browser window to open your router's settings pages.

From this point, the exact steps you follow will depend on your router, but the principles involved apply to all models. We're using a Plusnet Hub One, but if you have a BT Home Hub you should find the steps are the same.

On the Plusnet and BT Hub, click Advanced Settings, then enter the administrator password (found on the back of the hub). Click the 'Continue to Advanced Settings' button, then click Wireless.

By default, the Plusnet and BT hubs broadcast both 2.4GHz and 5GHz networks using the same name. Although this is perfect for most users because it means they can leave their devices to pick and choose which network technology they prefer, it makes it very difficult to manually select which waveband your devices opt for. Your smart lightbulbs might latch on to 5GHz, while your TV settles for 2.4GHz. To regain some control, you'll need to change the name of one of the various wavebands so that it looks and behaves like a completely separate network.

Click the '5GHz Wireless' link at the top of the screen, then select No



Change the name of your 5GHz network so you can distinguish it from its 2.4GHz counterpart, and set the channel to an unused part of the spectrum.

on the line 'Sync with 2.4 GHz'. Now type a unique name into the Wireless SSID. We've called ours Medianet (see screenshot above) as we're primarily going to use it for media streaming. Below this, use the Channel selection menu to pick one of the channels that you know (from Step 2) is unpopulated. In our case, only one nearby network was using the 5GHz waveband. It was on channel 48, so we're going to use channel 100 for our new network.

The Wireless key (WPA2) field will be pre-populated using the password you already use to access your existing network. Only change this if you want to restrict who can use the 5GHz waveband. Leaving it as it is means that anyone who has access to your existing 2.4GHz network will be able to use the same password to manually connect to the faster 5GHz network.

Click Apply to save the settings. Plusnet Hub One and BT Home Hub will both ask you to confirm that you want to make the change. Click Yes.

### 5 Switch your devices

As far as your devices are concerned, nothing will have changed. They'll still be able to see a network with the same name as they

have always connected to, and without a password they won't know how to connect to your new 5GHz network. Any devices that previously connected to your 5GHz stream, under its old name, will think it's disappeared, but should spot there's a 2.4GHz network with the same name and password, and automatically switch to it.

Now, visit each of the devices you added to your 5GHz list in Step 3, and switch them to the new network. To do this in Windows, click the Wi-Fi icon on the taskbar, click the new network name in the list, and then click the Connect button. On both iOS and Android, open Settings, tap Wi-Fi, then select the network from the list.

In each instance you'll need to provide the wireless password (sometimes called a wireless key). Assuming you didn't change this in Step 4, this will be the same as the password you previously used to access your existing network (this is most likely not the same as the one you used to access the router setup pages).

With your most demanding devices now running on a dedicated fast network, in a relatively empty part of the Wi-Fi radio spectrum, you should notice fewer stumbles and a more responsive experience overall.



# Workshop 1

## Hack Windows 10 to make it better

**What you need:** Winaero Tweaker; Windows 7, 8.1 or 10

**Time required:** 30 minutes

**W**inaero Tweaker is a brilliant free program that lets you change over 100 settings on your Windows PC, saving you the hassle of navigating complex menus or tweaking your registry. Most changes are applied instantly, so you can

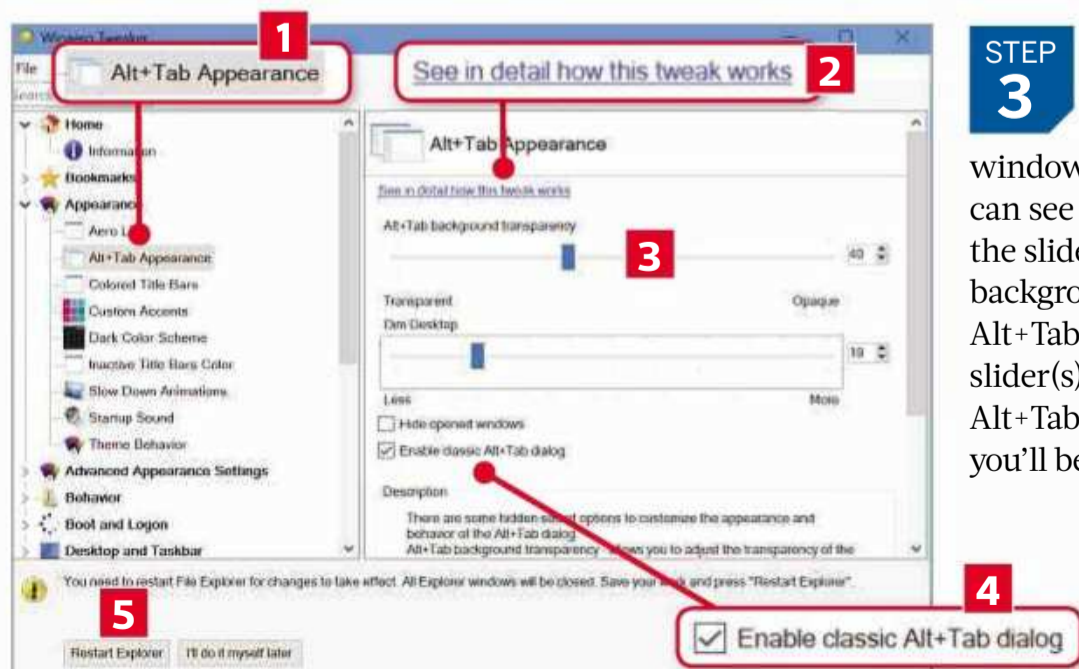
see what works for you, then revert to the default setting if you prefer. You can also resurrect Windows 7 programs and games on Windows 10 with just a few clicks. We'll show you how to use the program and explain its best new features.



**STEP 1** To download Winaero Tweaker, go to [www.snipca.com/29057](http://www.snipca.com/29057), then click the Download Winaero Tweaker link (just above the Donate button). Open the downloaded (zipped) setup file, click 'Extract all' at the top right, then Extract. Now open the downloaded setup file **1**, click Yes, then Next. Choose whether you want to install the standard or portable version **2**, click Next **3**, then follow the onscreen prompts to install it. When it opens, you'll see information about your PC's Windows version, operating system, processor, **RAM** and screen resolution.



**STEP 2** The program has 18 settings categories (displayed as dropdown menus) **1**. The Winaero website ([www.snipca.com/29062](http://www.snipca.com/29062)) provides brief descriptions of what each tweak does. Clicking any category **2** displays its options in the right-hand panel (use the icons at the top **3** to change how these are displayed). Alternatively, you can simply select the relevant setting in the left-hand panel **4**. Use the search bar **5** to find settings that relate to certain PC areas (for example, folder, taskbar, desktop, and so on).



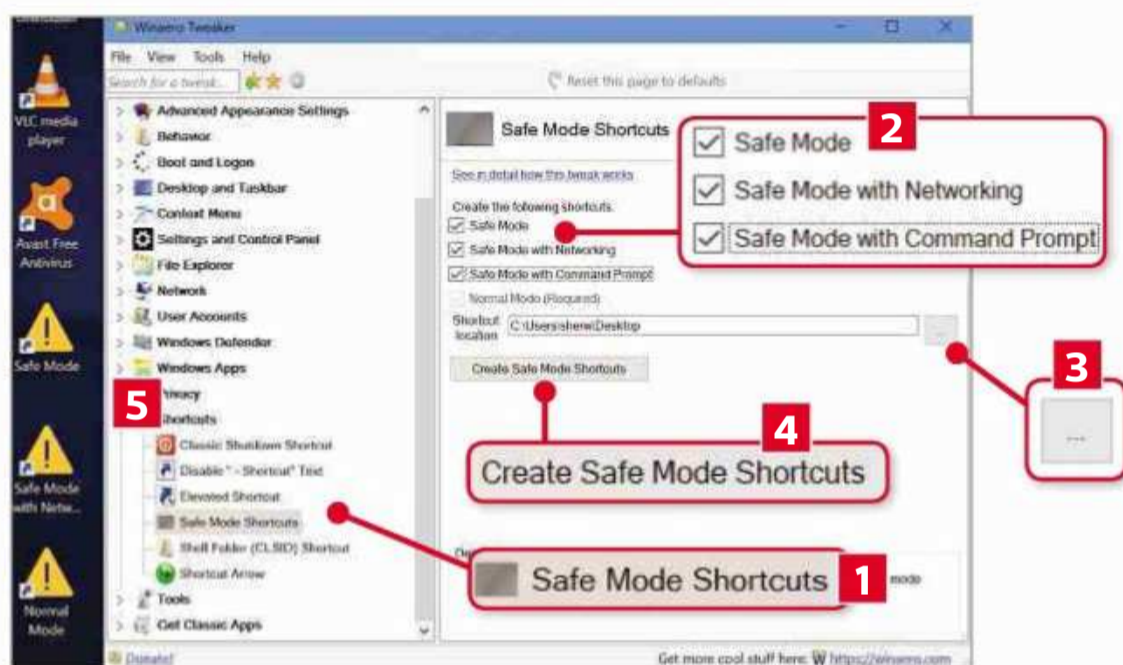
**STEP 3** We'll explain how the program works by showing you how to change Windows' Alt+Tab display (this is the keyboard shortcut that shows thumbnails of all open windows). Click Alt+Tab Appearance **1** under Appearance. You can see what this does by clicking the explanatory link **2**. Using the sliders **3**, you can now change your Alt+Tab-thumbnail background transparency and desktop transparency. Press Alt+Tab to see the effects of your changes, then adjust the slider(s) until you're happy. You can also enable the 'classic' Alt+Tab box **4** found in Windows 7 – if you choose to do this, you'll be prompted to restart File Explorer **5** to apply the changes.



**STEP 4** A new feature in this version of Winaero Tweaker is the option to back up and restore your Start menu layout - useful if other users tend to make changes to your PC. First, customise your Start menu to how you want it. Next, open the 'Desktop and Taskbar' section **1**, then click Backup/Restore Start Menu Layout **2**. Now click Export Start Menu Layout **3**, choose your save location and name the file. In future, if you notice any changes to your Start Menu, click Restore Start Menu Layout **4**, then navigate to and select the file you exported to revert back.



**STEP 5** One of the best ways to resolve problems with your PC is to boot it in Safe Mode (read Microsoft's explanation at [www.snipca.com/29063](http://www.snipca.com/29063)). Microsoft describes three ways to boot into this mode, but each one involves several steps. This version of Winaero Tweaker lets you create desktop shortcuts that let you reboot your PC in Safe Mode. Open the Shortcuts section, then click the new Safe Mode Shortcuts option **1**. Here, you'll see three options **2**, save your shortcuts to your desktop **3**, then create them **4**. You can then relaunch your PC in Safe Mode by double-clicking the relevant shortcut **5**.



**STEP 6** We'll now show you how to use Winaero to restore features that Microsoft discontinued after Windows 7 - namely Windows Photo Viewer, Calculator, Sticky Notes and Classic Games. Expand the Get Classic Apps dropdown menu **1**. Select the Windows 7 item you want **2**, then click the link **3** to open the website where you can download and install the item(s) you want.



**STEP 7** If you find there are certain settings you change often, select that option in the dropdown menu **1** and click the 'Bookmark this tweak' icon **2**. You can find all your bookmarked tweaks in the Bookmarks section **3**. You can see all changes you have made and revert any you don't want with one click. To do this, click the File tab **4**, then click the new 'Reset all tweaks' option. You'll see all the tweaks you've made using the program. Untick any you want to retain, then click 'Reset selected tweaks' **5**.



# Workshop 2

## Set up a 'virtual' printer for specific jobs

**What you need:** printer; Windows 7, 8.1 or 10

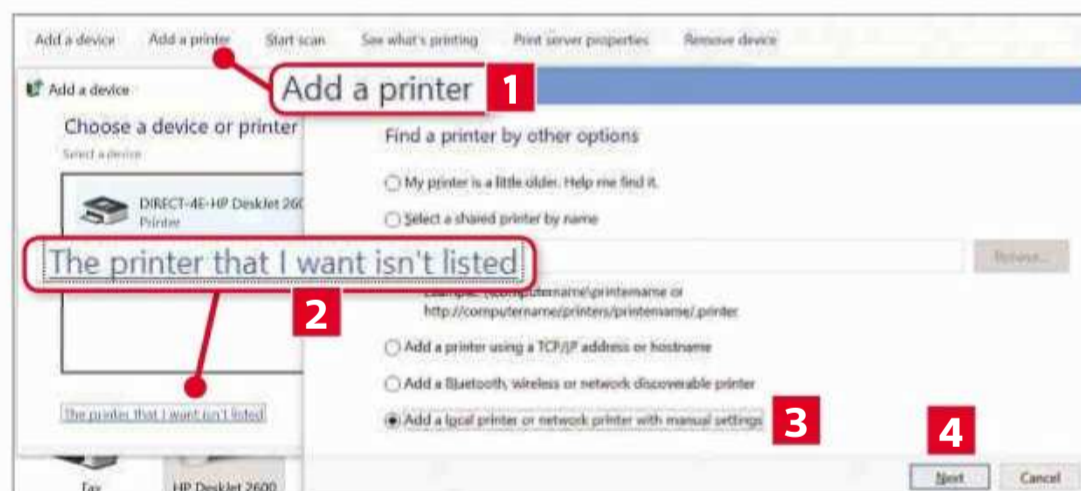
**Time required:** 20 mins

**W**indows gives you the option to clone your printer's settings then use these to create a second 'virtual' printer for different types of print tasks. So, for example, you could set your actual printer to print on

both sides of normal paper in black and white (ideal for documents); and the 'virtual' printer to print on one side of glossy paper in colour (great for photos). We'll show you how to set this up.



**STEP 1** Before you do anything, you need to find out which port and driver your printer uses. Press the Windows key, type **control panel**, press Enter, then click 'View devices and printers' below 'Hardware and Sound'. Here, right-click your printer **1**, then click Printer Properties. In the window that opens, click the Ports tab **2** and make a note of the connected port. Next, click the Advanced tab **3** and make a note of the driver name **4**. Close this window when you've finished.

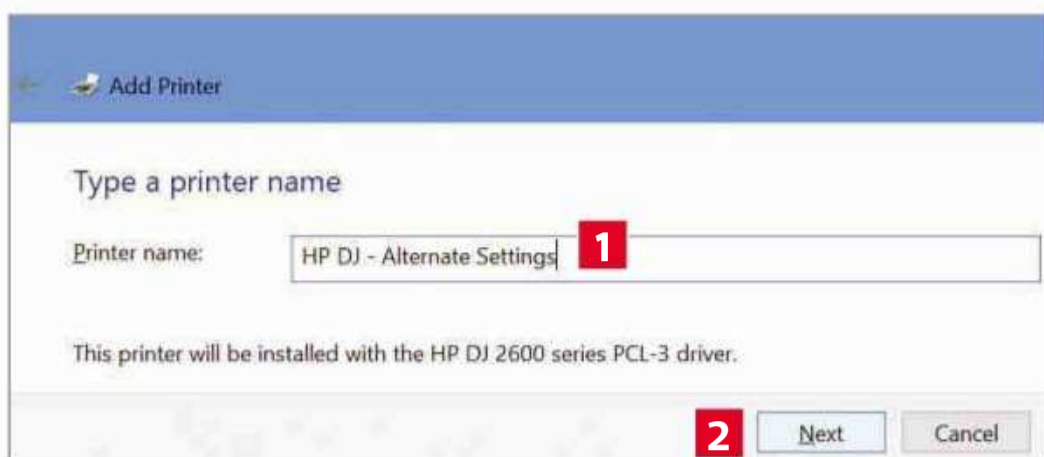


**STEP 2** You can now create your virtual printer, which will print on your physical printer, but which has separate settings you can customise. First, click 'Add a printer' **1** at the top left of the 'Devices and Printers' window. In the window that opens, click 'The printer that I want isn't listed' **2**. On the next screen, select 'Add a local printer or network printer with manual settings' **3**, then click Next **4**.

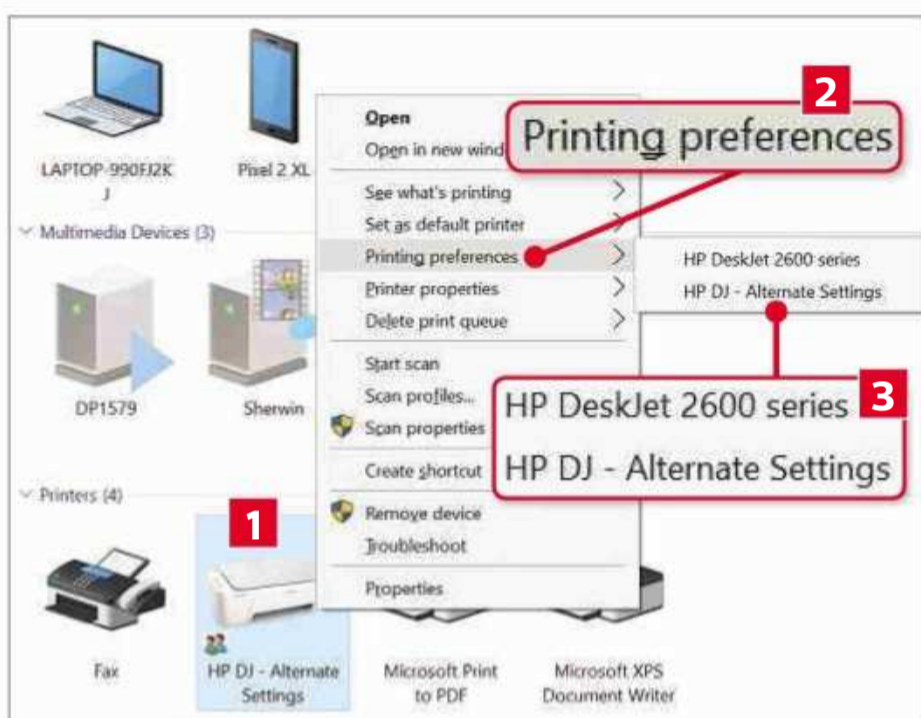
**STEP 3** Now click the 'Use an existing port' dropdown menu and select the printer port you currently use (the Port tab you identified in Step 1), then click Next. On the 'Install the printer driver' screen, select your printer's manufacturer name on the left **1**, then scroll down the list and select the printer driver name on the right (the driver you identified in Step 1) **2**. After doing this, click Next **3** twice.



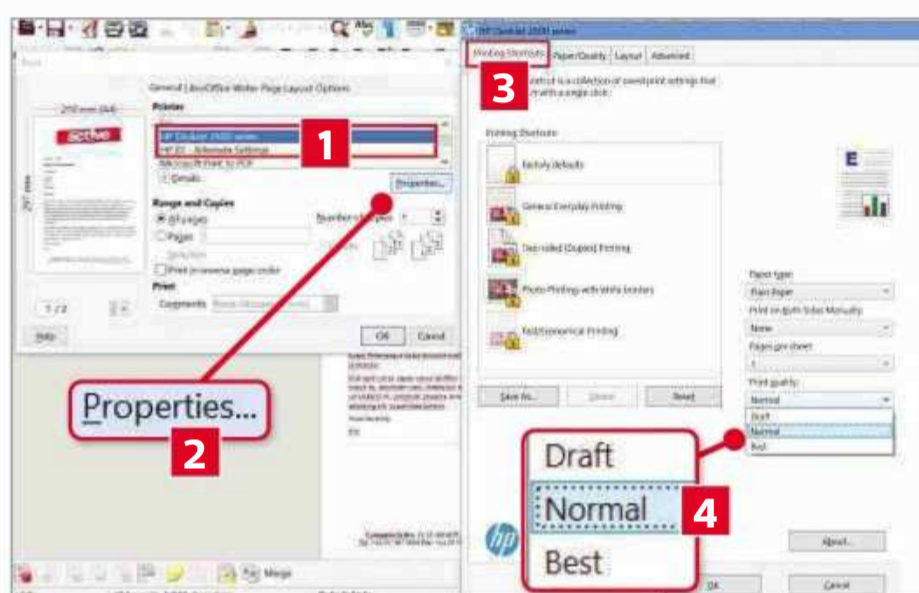




**STEP 4** By default, this virtual printer will appear with the same name as your actual printer. Change its name **1** so you can easily identify it as your virtual printer, click Next **2** and wait for it to install. You now need to choose whether to share your printer across your home network. Make your selection, then click Next. Finally, you'll see the option to print a test page to check your virtual printer works. Click Finish when you're happy with it.

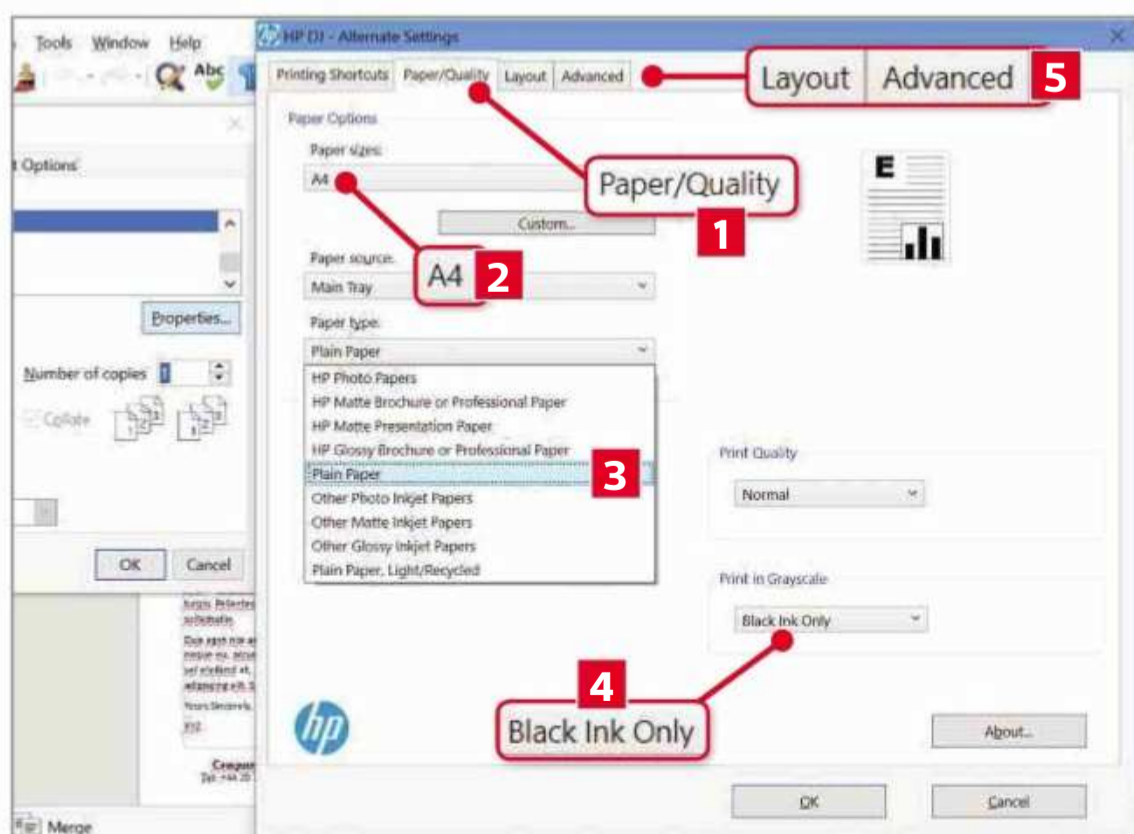


**STEP 5** To check whether you've installed this printer correctly, return to the 'Devices and Printers' section in Control Panel. You'll see only one printer listed **1**. Right-click this, then move your cursor to 'Printing preferences' **2**. You'll now see both (original and virtual) printers listed **3**, which means both devices are ready for use. We'll now show you how to change the default setting for each of these printers.



**STEP 6** Open any document, then press Ctrl+P to bring up the Print box. You'll see both printers listed **1**. Select either, then click Properties **2** to see your specific printer's settings (we're using an HP Deskjet 2600 series printer). The Printing Shortcuts tab **3** lets you change your paper type, opt to print on one or both sides, determine the number of pages per sheet and set your print quality **4**.

**STEP 7** Click the Paper/Quality tab **1**. Here, you can change the paper size from the default A4 **2**. You can also change the paper source and paper type (same setting as Step 6) **3**. The 'Print in Grayscale' dropdown menu lets you choose to print in black only or in colour **4**. More options are available in the Layout and Advanced tabs **5**. Click OK to confirm your changes. Now select the second printer in the Print box, click Properties and change its default settings in the same way.





# Readers' Tips

## TIP OF THE FORTNIGHT

### Rename multiple files in Windows

You've recommended file renamers several times in the past, and again in Issue 536's Best Free Software (page 19) with ReNamer 6.9 ([www.snipca.com/28891](http://www.snipca.com/28891)). Having tried it I was pretty impressed, but not enough to ditch my favourite tool Bulk Rename Utility ([www.bulkrenameutility.co.uk](http://www.bulkrenameutility.co.uk)), which I've been using since Methuselah was a lad. It just seems to have more of what you need right in front of you and not tidied away into menus, so you can see the effects of your proposed filename changes instantly.

But did you know you can rename multiple files using Windows' built-in tool? To say it's pretty basic is

something of an understatement, but if all you want to do is change your holiday photos from 'DSCxxxx' (or some other meaningless code) to Fleetwood 2018 (no expense spared in the Gledhill household), then it's a great little tool.

Highlight the files you want to rename, right-click the first one, choose 'Rename' (see screenshot), type the new name, then press Return. Your files will be renamed and have a number added. It does nothing else. It doesn't even add any padding, so if you have more than 10 files the first nine won't have a leading zero added. But if all you want is more meaningful filenames, it works a treat.

John Gledhill



John wins a copy of our 2017 Back Issue CD

Buy it on Amazon [www.snipca.com/26848](http://www.snipca.com/26848)



### WIRELESS PRINTING Print from iPad via laptop

✓ I enjoyed Will Stapley's article on wireless printing in Issue 536 (page 62). I think I can add to the methods he outlined. I have our HP Photosmart 2575 printer connected to the router (BT Smart Hub) by a network cable, allowing the printer to be accessed wirelessly from my laptop.



Because the printer does not support Apple AirPrint, I installed the Printer Pro app (£6.99 from <https://readdle.com/printerpro>) on my laptop and iPad. It's now possible to print from my iPad via the laptop (see screenshot). I have found that I can print directly from the iPad because Printer Pro sees the printer as a 'Bonjour Printer', even though I'm not sure what that is!

John Brook

### LAPTOP UPGRADE Replace optical drive with hard drive

✓ One of the best upgrades I've done to my laptop is to replace the hard drive with an SSD, but keep the hard drive, put it in a cheap caddy (around £8), then place it where the optical drive was.

Not only does this give me much more data storage and an easy location for backups, it also means I can buy a smaller, cheaper SSD - 64GB does the job, though 128GB would obviously be better. If you change your mine, refitting the optical drive takes a matter of seconds.

Roy Houghton

### Why I stopped using...

#### CamStudio

✓ There was a time when I used CamStudio (<https://camstudio.org>) nearly every day to record what I did on my screen. My friends used to swap problems and solutions using it. I particularly liked how you could add explanatory text to your videos. But I started having doubts in 2013 when VirusTotal said it contained malware, and then it stopped releasing updates. By around 2016 it had become buggy and very hard to use.



#### And what I use instead...

Looking for a good alternative took ages, but I stumbled upon OBS Studio (<https://obsproject.com>). I realised immediately that editing videos with OBS is easier than it ever was with CamStudio. You can also talk over the video, and there don't seem to be any hidden costs. What's really helpful, especially when recording convoluted activity, is being able to switch between scenes (see screenshot).

William Caulder

✉ Tell us why you stopped using a website, app or program: [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)

### HARD DRIVES Convert an old internal drive to external storage

✓ With the threat of ransomware, it's more important than ever to back up your vital files externally. There are





## Handy hints and tips from your fellow readers

✉ Email us your tips: [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)

many online ('cloud') services out there, but what if you want to keep your data physically available? The answer lies in hard-drive enclosures.

Most of us (or maybe just me!) has a spare hard drive or two lying around, but for less than a tenner you can buy from Amazon an enclosure for 2.5in and 3.5in drives (such as this model: [www.snipca.com/29131](http://www.snipca.com/29131), pictured below left).

These enclosures convert a redundant internal hard drive into a fully functional external drive ready to go in less than two minutes. Enclose your spare drive, connect it via USB, fire it up and you've got instant physical backups you can keep control of. Just make sure you buy the correct size enclosure and the correct connection method, ie **SATA** or **IDE**.

Simon Mellor

### BLUE LIGHT

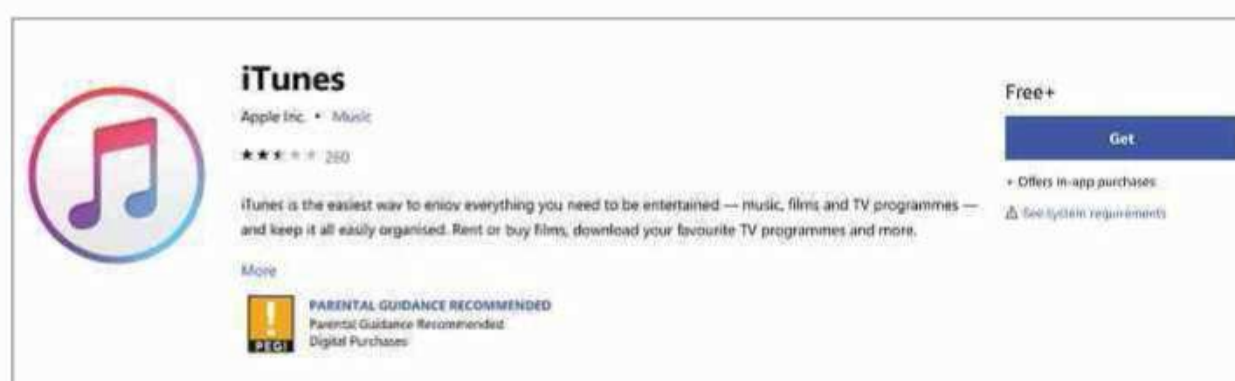
#### Reduce harmful screen glare using f.lux app

✓ It was interesting to read in Issue 535 (News, page 8) about the negative effects of **blue light**. I thought you might like to know about a really cool phone and tablet app called f.lux (<https://justgetflux.com>) I recently found online.



It alters your device's display according to the average time you wake up (to replicate the rising and setting of the sun). So, in the evening, it has more of an orange hue (see screenshot above). There are also plenty of settings that let you tailor it to your liking, and it's available for Windows, Macs, Linux, Android and iOS.

John Turner



## Reader recommends...

### Motorola Moto G6

£199 from Amazon  
[www.snipca.com/27965](http://www.snipca.com/27965)

✓ For the past few years I've been looking for what I thought was impossible: a good phone cheaper than the zillions Apple expects you to pay for its iRip-offs.

I found it a few weeks ago - the Motorola Moto G6 (pictured) - taking a cue from your review in Issue 530 (page 25) where you gave it a five-star 'Buy It!' award. What I need most in a phone is a bright screen, because my eyes aren't as sharp as they were. The phone's 'Vibrant' mode makes everything vivid and colourful.

You mentioned in the review that a 10-hour battery life "isn't anything to shout about", but it's more than enough for me. It has never run out on me, though admittedly I use it more for



reading news than watching videos.

I'm so glad I resisted buying an iPhone. I was tempted because I thought it was the only way to guarantee quality, but the Moto G6 is truly superb.

David Sutton

✉ Want to recommend hardware or software to fellow readers?  
Email [letters@computeractive.co.uk](mailto:letters@computeractive.co.uk)

### PRINTING

#### Consider laser printer to stop ink drying up

✓ In Issue 535 (page 26), RA Harris is concerned about ink drying up if the printer is used only occasionally, especially as he only uses it for black-and-white printing. While mono laser printers are a little more expensive, a quick search online reveals a couple around the £70 mark, namely the Brother DCP-1512 ([www.snipca.com/29133](http://www.snipca.com/29133), pictured right) and the HP Laserjet Pro M102a ([www.snipca.com/29134](http://www.snipca.com/29134)).

The advantage of these is that they will not play up with dried-out ink jets, and even with just the small cartridge supplied will last a long time. And at about £40 for a 2,000-page cartridge, the running costs are half HP's charge for 50 sheets a month (£1.99). He should at least investigate a



laser printer, even if he decides that an inkjet would suit him better.

Anthony Youngman

### SOFTWARE

#### Use Microsoft Store version of iTunes

✓ In Issue 535's Readers' Tips, Harry Lockwood gave us his replacement to iTunes. While MusicBee (<https://getmusicbee.com>) is a good alternative, as he suggested, if you want to rent a film, iTunes is the only real option.

A few months ago, Apple released iTunes on the Microsoft Store ([www.snipca.com/29132](http://www.snipca.com/29132), see screenshot left). As a desktop app, rather than program, it updates quietly without the constant nagging of the software updater. If you uninstall your standard version and replace it with the Microsoft Store app, it'll back everything up for you.


Lewis Spring



# Phone and Tablet Tips

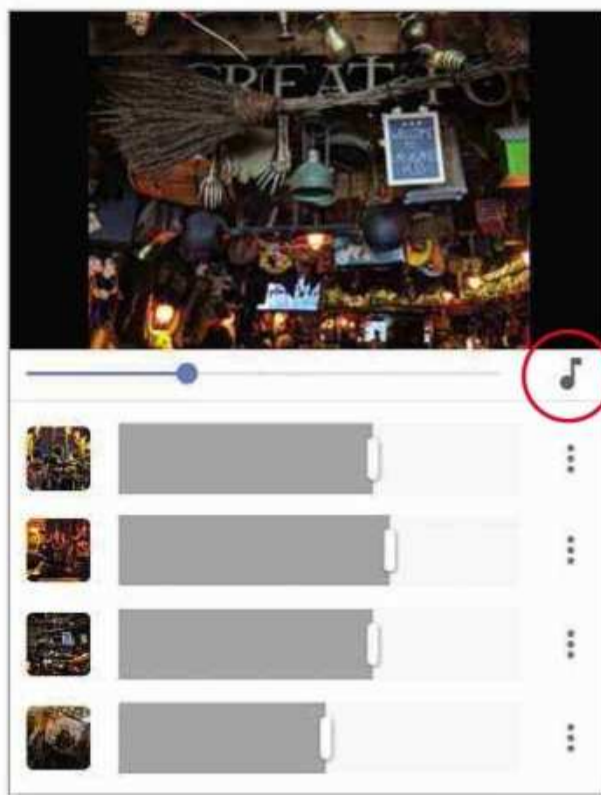
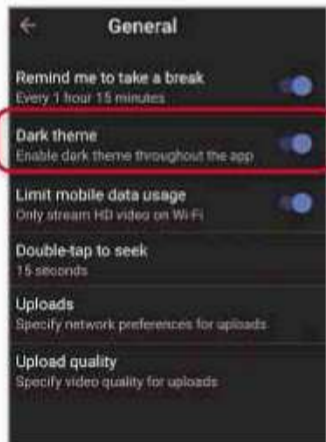
## ANDROID & iOS

### Use dark mode in YouTube & Android Messages

 Google has added a dark-mode (also known as dark theme) option to two of its most popular apps – YouTube and Android Messages. Using dark mode is less of a strain on your eyes, especially at night.

To turn on dark mode in the YouTube Android app, tap your profile picture at the top right, Settings, General, then switch on the 'Dark theme' slider (see screenshot below). On YouTube's iOS app ([www.snipca.com/29136](http://www.snipca.com/29136)), this slider can be found in the Settings menu.

To enable dark mode in Android Messages ([www.snipca.com/29137](http://www.snipca.com/29137)), tap the three dots at the top right, then tap 'Enable dark mode'. Unless you own a phone made by Google (Nexus or Pixel), this won't be your default messaging app. To set it as your default, open Settings, tap 'Apps/Apps & notifications', 'Default apps', Messaging, select Messages, then tap OK.



iOS ([www.snipca.com/29139](http://www.snipca.com/29139)) has made it easier to create and edit home-made videos. Open the app, then tap and hold the first media file (photo or video) you want to include in your video. Next, tap to select the other media files you want, followed by the '+' icon at the top right, then tap Movie.


You'll now see all the media files you added with sliders next to them (see screenshot above). You can edit how long each media file plays for by moving its slider to the left (shorter) or right (longer). You can also re-order the files by tapping and holding the three dots on the right, then moving the file up or down.

To change the background music, tap

the music-note icon below your video. You'll then see options to use music stored on your device or any of the 40 free tunes available. Tap Save at the top right when you're happy with your changes.

## ANDROID & iOS

### Identify works of art that resemble you

 Google's free app Art & Culture has added a new feature that identifies portraits that resemble you. Open the app (Android [www.snipca.com/29140](http://www.snipca.com/29140); iOS [www.snipca.com/29141](http://www.snipca.com/29141)), scroll down, then tap 'Get started' below Art Selfie (see screenshot below). Tap 'Get started' again, then Allow to grant the app access to your device's camera, then take a photo of yourself.

After a few seconds, you'll see a row of artwork thumbnails along the top. At the bottom, you'll see your photo beside the portrait that looks most like you. Tap the portrait, then tap 'View artwork' to see an enlarged version and get information about it. You can also tap any of the thumbnails at the top to read about other portraits that resemble you.



## ANDROID & iOS

### Edit your videos in Google Photos

 Google Photos (Android [www.snipca.com/29138](http://www.snipca.com/29138);

## BEST NEW APPS

## What you should install this fortnight

### Google Fit

Free

Android [www.snipca.com/29145](http://www.snipca.com/29145)

Google has worked with the World Health Organisation to add handy features to its pedometer app. Two new incentive goals have been added – Move Minutes for activity-based tasks like using the stairs; and 'Heart Points' for moderate or intensive activity.



### Inware

Free

Android [www.snipca.com/29146](http://www.snipca.com/29146)

Inware provides detailed information about your phone and tablet – similar to what the free program CPU-Z does for PCs. It is broken down into seven useful tabs covering all your settings. You can find out which Android version you're on, when your device was last updated, and its memory and camera specs.

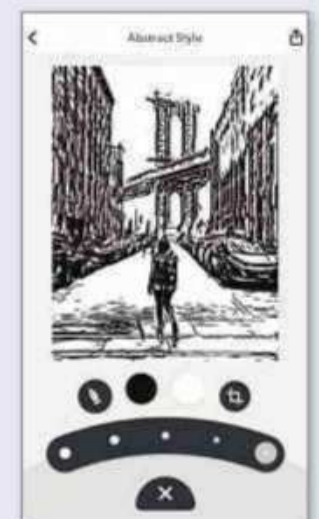


### Inkwork

£2.99

iOS [www.snipca.com/29147](http://www.snipca.com/29147)

This app instantly turns your photos into artistic sketches. Even better, you can customise the look and feel using a selection of brushes and drawing tools. You can also have your artwork printed and posted straight to you – ideal as a gift for someone close.





## Brilliant things to do on your device

### ANDROID

#### Lock apps with a password

If you have children or sometimes lend your device to other people, it's a good idea to lock certain apps that you don't want them to access. AppLock ([www.snipca.com/29142](http://www.snipca.com/29142)) is one of our favourites.

After opening the app, you'll be prompted to swipe an unlock pattern using a nine-dot grid, confirm it, then provide your email address. You'll now see lock icons beside all your apps. The first time you tap a lock icon, you'll be directed to your device's settings. Here, tap 'Usage access', AppLock, then switch on the 'Allow usage access' slider. Now return to the app, then tap the padlock icons beside the apps you want to lock (see screenshot below).

You can also lock other features like Settings, Bluetooth, Wi-Fi, etc. From now, whenever you try to open any of the apps or features you've locked, you'll need to draw the pattern you created.



Alternatively, if your device has a fingerprint sensor, you can opt to unlock apps using your fingerprint. To set this up, tap the Protect tab, then tap the Fingerprint Lock slider. From now on, you can unlock any apps by placing your finger on the sensor.

### ANDROID & iOS

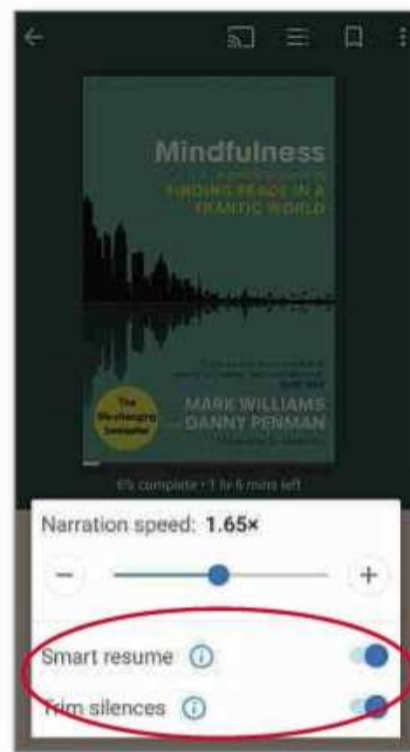
#### Modify playback speed when listening to audiobooks

Google has updated its Play Books app to let you change audiobook playback speed, trim silences and set the app to automatically resume playback where you left off. You can also bookmark the favourite parts of your audiobook.

Open the app (Android [www.snipca.com/29143](http://www.snipca.com/29143); iOS [www.snipca.com/29144](http://www.snipca.com/29144)), then tap the Audiobook tab at the top right. You'll see the multiple

available titles. Search for free audiobooks to see those titles, then tap the Free button to download one. Tap any title you've downloaded to see all its chapters, then tap one to start listening to it.

Tap the top-left back button to return to the main menu. Here, tap the '1x' button at the bottom right. You'll see options to modify playback speed and sliders to enable 'Smart resume' (to ensure



you return to where you left off each time) and 'Trim silences' to remove any pauses (see screenshot left).

To bookmark favourite parts of your audiobook, tap the bookmark icon at the top right. You'll see a pop-up message saying 'Bookmark added at 03:11'. To see all your bookmarks in a list, tap the three lines at the top right, then tap the Bookmarks tab.

### BEST APPS FOR...

### Stargazing

#### Night Sky\*

Free

iOS [www.snipca.com/29148](http://www.snipca.com/29148)

Night Sky can transform your living room into a planetarium with its 3D constellation models, showing planets and satellites in their orbits. It also gives you detailed information about every celestial body.

**Best for** Turning any room in your home into a virtual planetarium



#### Star Walk 2\*

Free

Android [www.snipca.com/29149](http://www.snipca.com/29149)

£2.99 iOS [www.snipca.com/29150](http://www.snipca.com/29150)

Star Walk 2 has many of the same features as Night Sky (above) with a few added bonuses. For example, you can use the app's sliders to show the night sky on any date in the past or in the future. The Android version is free, though you need to pay £2.29 to remove adverts.

**Best for** Seeing the constellations through history



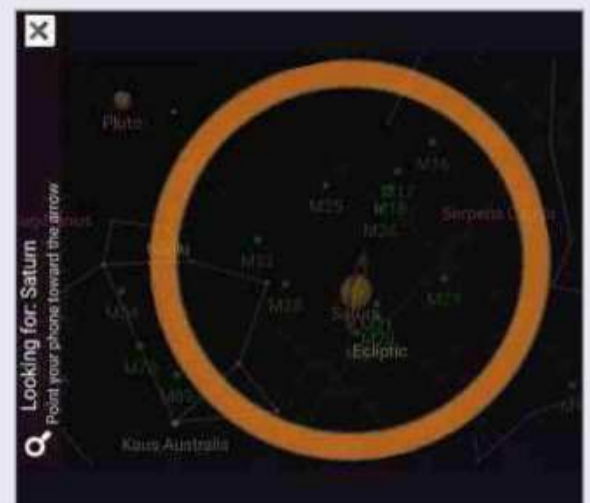
#### Sky Map

Free

Android [www.snipca.com/29151](http://www.snipca.com/29151)

Previously owned by Google, this app has now become **open source**. You can use it to identify stars, planets and nebulae, as well as browse an array of eye-catching images. One of its best features is the option to search for celestial bodies above your location – follow the arrow onscreen, then stop when an object is inside the circle.

**Best for** Locating planets and stars directly above you



\*Contains in-app purchases



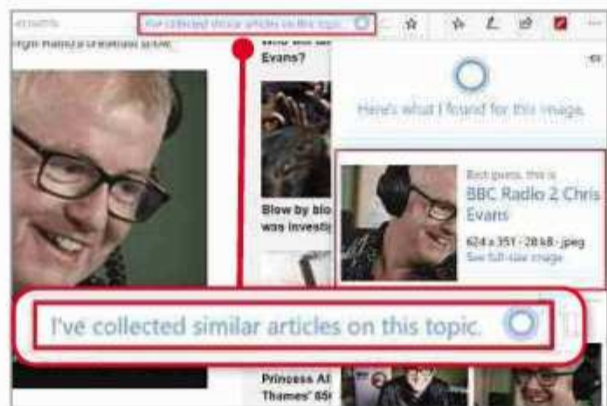
# Make Windows Better

## Expert tips for every version

### WINDOWS 10

#### Get information and related articles on web-based photos

Windows 10's voice assistant Cortana has two great new features that work within Microsoft's Edge browser. One identifies people and objects in your photos, while the other displays news articles related to your browsing activity.



Open any web page in Edge, right-click any photo on the page, then click 'Ask Cortana about this picture'. Cortana will try to identify what's in the image, then display any information it finds on the right, with an option to see the full size image (see screenshot above). At the bottom, you'll see any related images. If Cortana can't identify anything in your image, you'll see an 'I couldn't find much on that image' message on the right instead, with any similar images.

Another Cortana feature lets you find similar content to online articles you're interested in. If you see 'I've collected similar articles on this topic' in your URL bar (see top of screenshot above), click the link to see a list of related articles from other news sources in your right-hand panel.

### WINDOWS 7, 8.1, 10

#### Put an end to constant Administrator prompts

Use a PC for long enough and you're bound to see pop-ups in some programs requiring an Admin password whenever you try to make changes to them. One easy way to do this is to right-click the program's desktop icon, then click 'Run as administrator'. However, there's a way to always run specific programs as Administrator, which is useful for programs that constantly nag you with prompts.

To do this, open your Start Menu, scroll down until you find the program you want, right-click it, move your cursor to More, then click 'Open file location'. This

### WINDOWS 7, 8.1, 10

#### Schedule your PC to shut down at a specific time

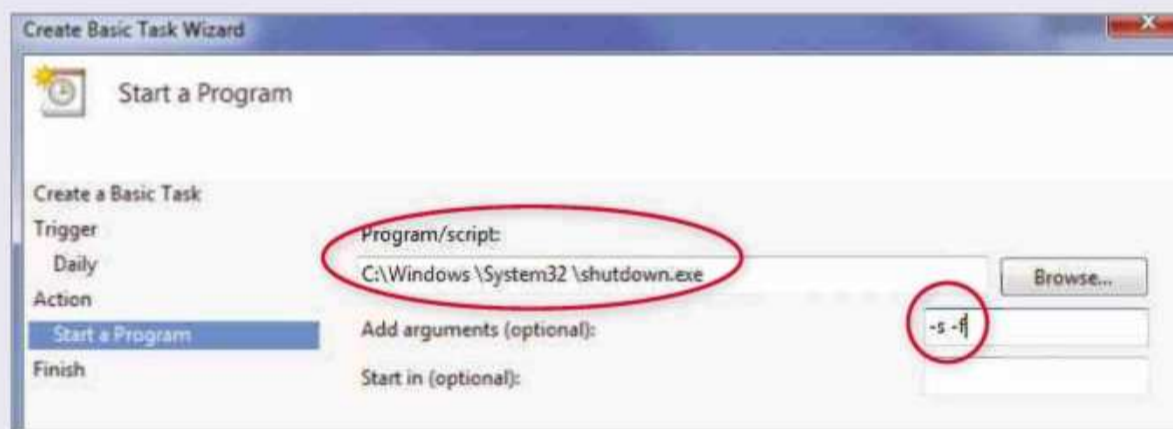
There are occasions when it's handy to set your PC to shut down later without having to wait around and do it yourself – for example, following an extensive antivirus scan or after downloading a huge file. Windows doesn't have a feature that lets you schedule your PC to shut down at a specific time, but it's easy to create a scheduled task to do this.

Press the Windows key, type **task scheduler**, then click that option. Next, click Create Basic Task in the right-hand panel, name the task (PC Shutdown, for example), give it a brief description (optional), then click Next. Now set a task frequency. For example,

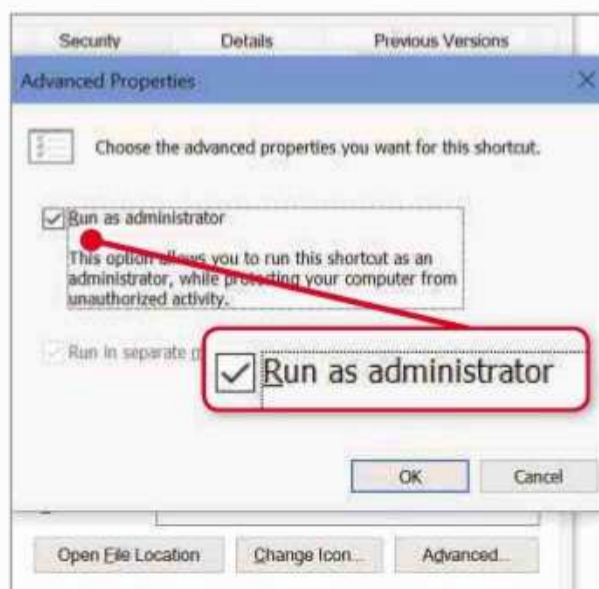
if you want your PC to automatically shut down at the same time every day, select Daily, otherwise select 'One time', then click Next.

Now set the date and time you want to shut down your PC and click Next. On the following screen, select 'Start a program' and click Next again. Now type **C:\Windows\System32\shutdown.exe** into the 'Program/script' field (see screenshot below). In the 'Add arguments' field, type **-s -f**. (here '-s' initiates the 'shut down' command and '-f' will close any background programs).

Finally, click Next, then Finish. Your PC will now automatically shut down at the time you set.



will open a File Explorer window, where you'll see the program's setup file selected. Right-click this setup file, click Properties, then click Shortcut. Here, click the Advanced tab at the bottom right, tick 'Run as administrator' (see screenshot below), click OK, Apply, Continue, then OK again.

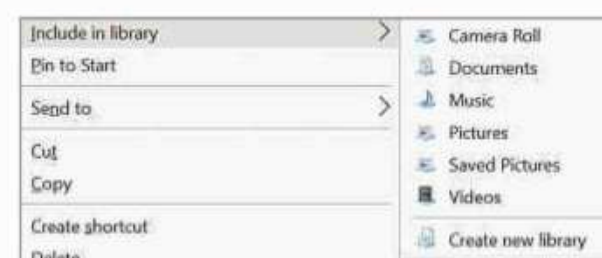


### WINDOWS 7, 8.1, 10

#### Get instant access to folders you use all the time

Sick of having to navigate to those folders (often within other folders) that you use often? Well, there's an easy way to make them more accessible.

This involves adding them to one of your Quick Access Libraries (Camera Roll, Documents, etc). First, navigate to the folder you want, right-click it and move your cursor to 'Include in library'. Here you'll see the option to add it to one of the default libraries or create a new one (see screenshot below).





# Make Office Better Top tips for MS Office & LibreOffice

## LIBREOFFICE IMPRESS

### Make your presentation more interesting



Why not make your LibreOffice Impress presentation more interesting by adding transition effects between your slides?

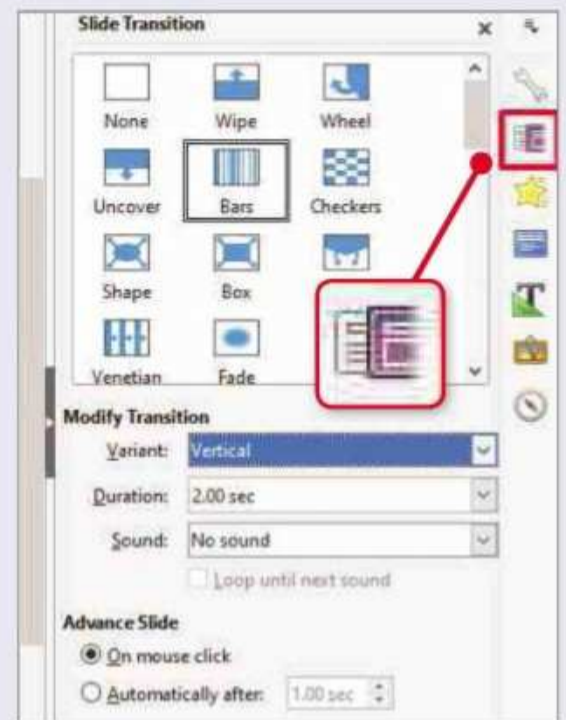
There are several ways to do this. First, click the Slide Transition button at the top right of your Impress window (see screenshot). You'll now see several transition options in the panel that slides in from the left. Select one to see a preview of how it will look.

The Modify Transition section at the bottom lets you tweak your chosen transition. For example, if you chose the Bars option, you can decide to have

the bars appear vertically or horizontally. You can also change the transition duration (from the default two seconds) and choose to play audio with the transition (there's none by default).

At the bottom, you'll see options to move the slide using a click of your mouse or set it to automatically move after a time of your choosing.

Click 'Apply Transition to All Slides' if you want to use this effect throughout your presentation. Click the Play button at the bottom to preview your changes then confirm once you're happy with them.



## WORD

### Convert units of measurement in Word documents



Word has a little-known tool that lets you convert units of measurement within your document (for example, kilometres to miles, grams to kilograms, centimetres to inches, and more). To make sure this option is enabled, right-click any measurement in your document (for example, 5.9 miles in our screenshot below), then check whether Additional Actions appears at the bottom of the right-click menu. If you don't see this option, you need to enable it.

Click the File tab at the top left, then Options below that, followed by Proofing on the left. Here, click the AutoCorrect Options button at the top right, then the Actions tab. Tick the Measurement Converter options, then click OK.

Now simply right-click any unit of measurement in your document, then move your cursor to Additional Actions at the bottom of the pop-up menu to see the conversion options for the data you right-clicked. Select any option to use that in your document.

	A	B	C	D
1	January	Monday	Winter	5
2	February	Tuesday	Spring	10
3	March	Wednesday	Summer	15
4	April	Thursday	Autumn	
5	May	Friday	Winter	
6	June	Saturday	Spring	
7	July	Sunday	Summer	
8	August	Monday	Autumn	
9	September	Tuesday	Winter	
10	October	Wednesday		
11	November	Thursday		
12	December	Friday		

## EXCEL & LIBREOFFICE CALC

### Complete a sequence of values without typing



This time-saving tip for both Microsoft Excel and LibreOffice Calc lets you complete a sequence of values in a column without having to enter them individually – as long as the sequence follows a recognisable pattern.

For example, type 5, 10, 15 vertically in a column. Now highlight all three cells, move your cursor to the bottom right of the bottom cell (D3 in our example screenshot above), then drag your cursor down. Both programs will then automatically fill in the values (20, 25, 30, 35, and so on) based on the pattern of the sequence you typed earlier.

This method also works for other sequential values – for example, days of the week and months of the year. You can also use this to repeat groups of values (like months, days and seasons) in succession (see columns A-C in our screenshot).

## OUTLOOK

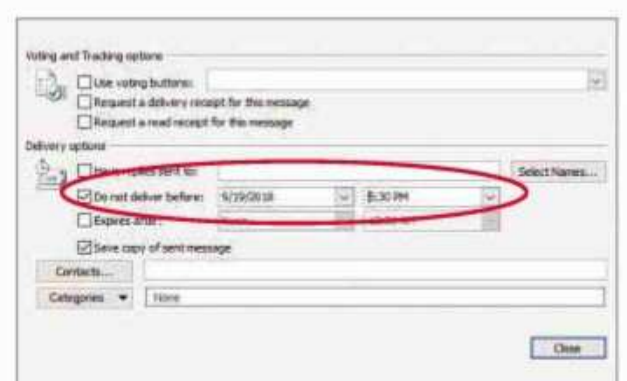
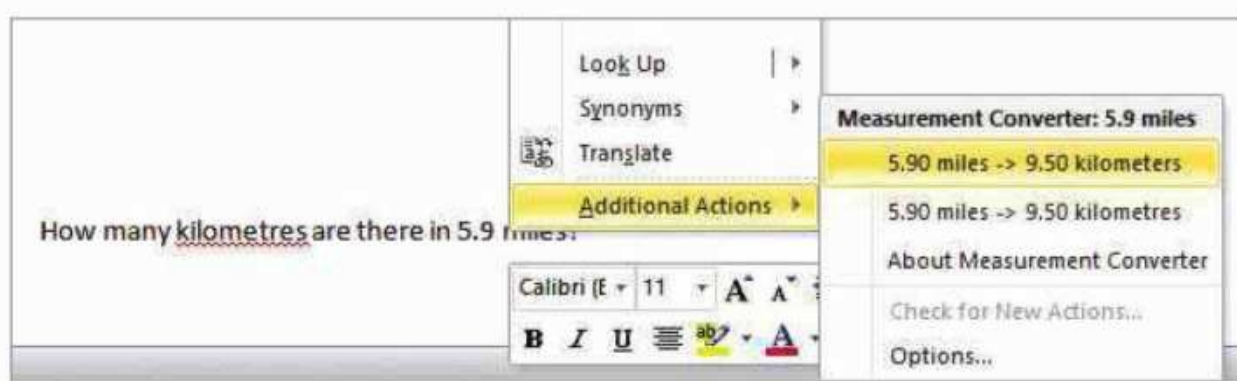
### Delay sending emails in Outlook



You may have prepared an email to someone but would prefer to delay sending it to a more appropriate time. Outlook's PC program lets you do just that.

Click 'New E-mail' at the top left, then write your email. Next, click the Options tab, then click Delay Delivery at the top right. Under 'Delivery options', tick 'Do not deliver before' then set the date and time you want to send your email (see screenshot below).

In this section you'll also see options to send your email to several contacts, set the email to expire after a specific date and time, and to save a copy of your sent message. Select the options you want, click Close, then send your email as you would normally. It will then be delivered on the date and time that you set.







# In The Club

Run a club or society? Here's how your tech can make it easier

## Create a letterhead for free

A letterhead is a heading that sits at the top of a page and usually contains your club's logo, name, address, contact details and website. This may also include information at the bottom of your letter (footer) as well as a background design or theme that's consistent with your club branding.

### Using templates

Designing a letterhead can seem daunting at first, but they are actually quite easy once you have a rough idea of how you want it to look. The easiest way is to find free templates online, then customise them to suit your requirements.

Our favourite design website Canva has hundreds of free letterhead templates ([www.snipca.com/29111](http://www.snipca.com/29111)), which are sorted into helpful categories (on the left-hand side of the web page). Microsoft and LibreOffice don't provide these for their own tools (Word and Writer, respectively), but you'll find some good templates on third-party sites (Word: [www.snipca.com/29113](http://www.snipca.com/29113); Writer: [www.snipca.com/29112](http://www.snipca.com/29112)).



### Creating your design

Letterheads have no set format, so it's easy to get carried away when creating one, but it's a good idea to keep things simple, especially if you're a novice.

You'll notice how all three template links consist of very simple letterheads – mostly with the company logo at the top and the address at the bottom. However, it's more subtle touches that can make a difference. Canva lets you use colours to convey a theme. To select your theme colour, simply click an element on the template, then choose

one in the palette at the top (see screenshot left).

To add new coloured elements, first insert a shape of your choice, then follow the same procedure. LibreOffice Writer and Microsoft Word let you add shapes using the Insert tab.

The other option to make your letterhead stand out is to add an image to it, but we don't recommend doing this because they can overpower other elements of your letterhead.

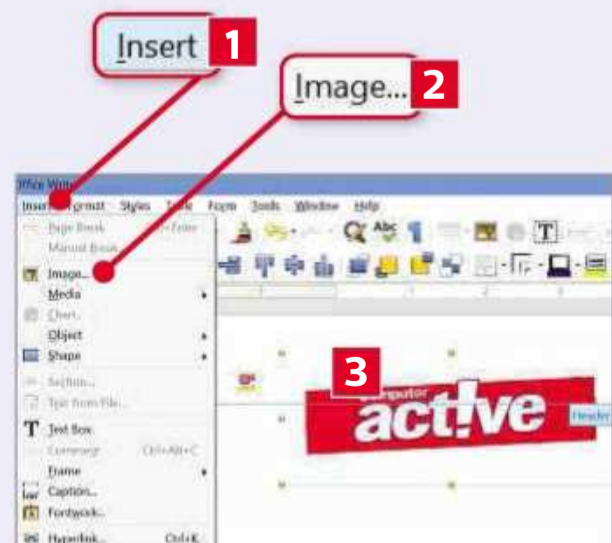
### Designing from scratch

Instead of customising these templates, you can use them for inspiration to create your own from scratch. This approach means you're not restricted by existing elements on the templates and have more design freedom.

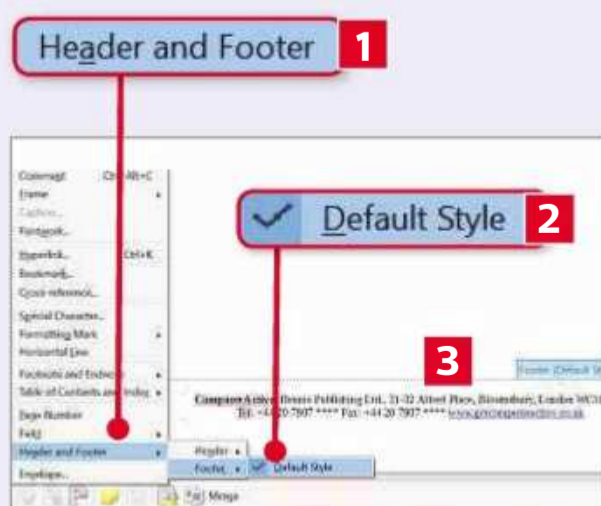
To do this, follow our Workshop below, which explains how to create a simple letterhead template with your club's logo at the top and contact details at the bottom. We're using LibreOffice Writer, but similar instructions work in Microsoft Word.

## Mini Workshop: Create a letterhead for free using LibreOffice Writer

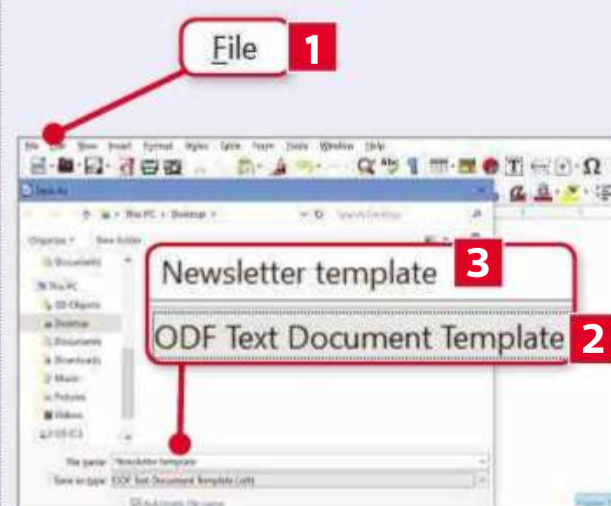
**STEP 1** Click the Insert tab **1**, move your cursor to 'Header and Footer' at the bottom, Header, then select Default Style. Next, click the Insert tab, select Image **2**, then navigate to and select your logo to add it. You can now resize and reposition it **3**.



**STEP 2** To add personal details to your footer, click the Insert tab again, move your cursor to 'Header and Footer' **1**, select Footer, then Default Style **2**. Click inside the Footer area, then type your club's details as you want them to appear **3**. You can then adjust its font size and alignment.



**STEP 3** To save this template, click the File tab **1**, then 'Save as'. In the 'Save as type' dropdown menu, select ODF Text Document Template **2**, name your template **3**, then click Save. To open this in future, click the File tab, move your cursor to Templates, click Open Template, select it, then click Open.





# What's All the Fuss About...

## Street Manager

You may never get stuck at roadworks again, thanks to open data

### What is it?

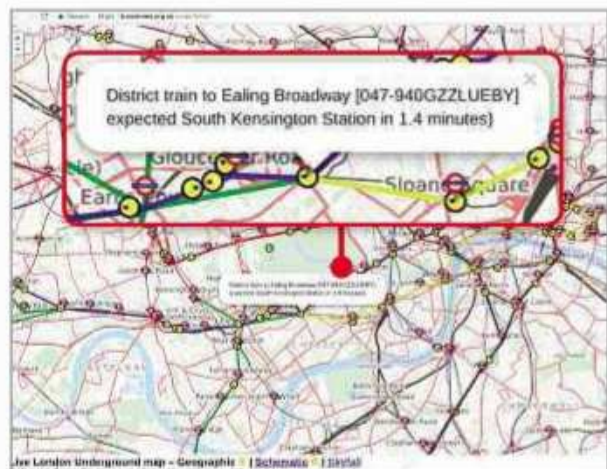
The Government's hi-tech solution to traffic jams. It's a new computer system that sends data about roadworks to tech companies, letting them present details about delays on digital maps. These are urgently needed because the 2.5 million roadworks that occur every year result in drivers spending an average 32 hours a year trapped in congestion. Conservative MP Jesse Norman says these can be "frustrating" for drivers, suggesting he'd be perfect as Minister for Understatement should he ever quit as Roads Minister.

### Is it just a 21st-century version of John Major's cones hotline?

Well, it's a bit more advanced than that. Crucially, it provides *live* (or 'real time') data, replacing the old system that, the Department of Transport (DoT) says, is "often out of date and incomplete". Before you set off, you'll see live details of where delays are, helping you to avoid them.

### Where will I see this info?

On any website, app or sat-nav that chooses to receive and interpret the data. The DoT said it could be used by Google Maps, which currently relies on data from mobile-phone locations in cars to calculate traffic flow. It also mentioned the Waze app ([www.waze.com](http://www.waze.com)), owned by Google, which informs motorists of delays based on reports of incidents submitted by other drivers.



Thanks to open data, we know this yellow blob is a District Line train to Ealing Broadway



The £10m project, due to launch next year, is part of a trend towards 'open data', which is the idea that some data should be freely available for everyone to publish as they like, for the greater good.

### Why is that important?

Because it encourages innovation, and increases government transparency. Launched in 2010, the UK government's open-data hub (<https://data.gov.uk>) now contains 40,000 datasets that developers can turn into public information. It covers anything that affects society, including crime, education, public spending, town planning and the performance of hospitals.

### Can you give me some examples?

Yes, from NHS England, which says open data can "improve the quality of care, lower healthcare costs, and facilitate patient choice". It estimates that deaths have been cut by up to 1,000 because doctors have access to a free tool containing surgery data.

Companies and organisations don't have to pay for this data, so can build new software and apps relatively cheaply. As Street Manager shows, its potential is

particularly significant for transport. Bodies like Network Rail and Transport for London already supply data such as timetables and live departures.

Using this, developer Matthew Somerville has created live maps of national trains, London buses, and trains on the London Underground. To see his Underground map visit <https://traintimes.org.uk/map/tube> - each moving yellow dot is a train, such as this District Line service to Ealing Broadway (see screenshot left). To see his other maps, click 'More information' at the top right. This data is the same used by transport apps like Citymapper (<https://citymapper.com>), and by Google for its live travel info on Maps.

### Are other countries as keen?

Yes, as are multinational bodies. The United Nations has a website (<http://data.un.org>) that publishes statistics from its member states and agencies, while the World Bank provides data on developing countries (<https://data.worldbank.org>). The European Union has similar datasets too ([www.snipca.com/29073](http://www.snipca.com/29073)). But though these are all worthwhile, they won't benefit your life as palpably as dodging five-hour delays on the M25.



# DON'T UPDATE TO NEW SOFTWARE

Keep your favourite programs  
running safely FOREVER

Don't buy expensive new software when you don't need it. **Will Stapley** explains how to make Windows run your favourite programs from yesteryear

**A**nyone who insists on using old software is a pain. At least, that's how some software developers will see it. Worse still for the developers, these refuseniks probably haven't spent any

money since they first bought the software decades ago.

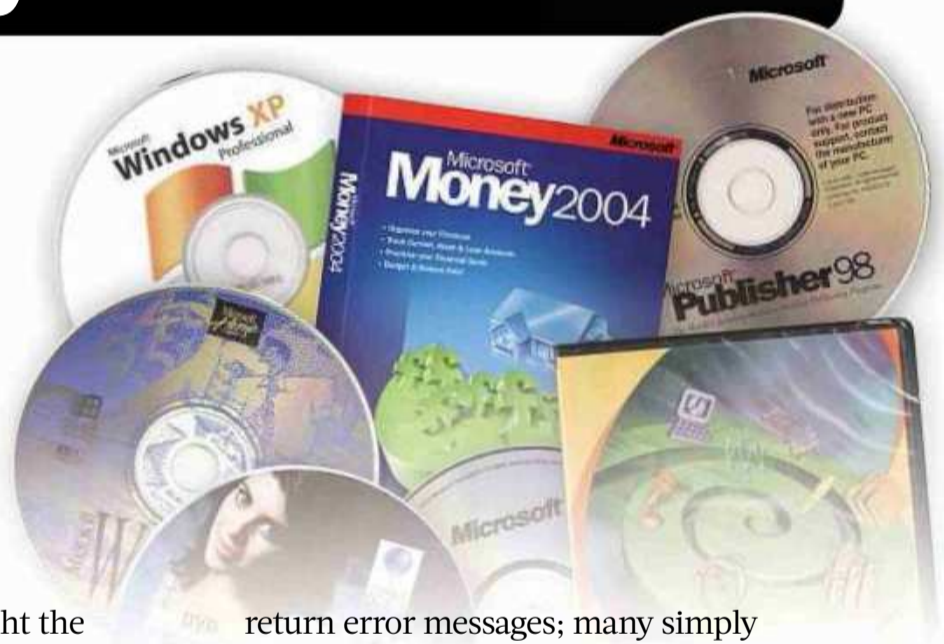
Let's face it, software updates are occasionally revelatory, sometimes revolutionary, but more often than not they're infuriating. Not only are you forced to learn how new menus and buttons work, but you often find yourselves having to navigate your way around new features that you probably never wanted or needed. Add to that the cost of updating, and the whole process often doesn't seem worth the hassle.

We know that many of you still enjoy using software from years gone by (see this issue's Star Letter, page 13). But while some old programs defy the ages and continue to work flawlessly, others are less comfortable with Windows 10. Some

return error messages; many simply refuse to install at all.

The good news is that there's almost always something you can do to cajole your old software into action, no matter how ancient it is. As you'll discover in this feature, Windows has a troubleshooter that can help, but you can also tweak crucial compatibility settings to fix specific problems. And if that doesn't work, we show you how to create a free virtual PC running a version of Windows more familiar to your old programs.

So from Microsoft Works to Lotus SmartSuite, dust off those installation discs and breathe new life into your favourite software, no matter what version of Windows you're running.



## WHAT YOU CAN DO

- Run old software using the compatibility troubleshooter
- Tweak compatibility settings to optimise performance
- Run older versions of Windows in virtual machines
- Use 16bit programs on a 64bit operating system





## RUN OLD SOFTWARE IN COMPATIBILITY MODE

Windows is surprisingly good at getting old programs to run, but it sometimes needs a helping hand. If you run into problems either installing or running a program, the compatibility mode settings that were introduced in Windows XP may get it working.

The easiest way to give this a try is by using the Program Compatibility Troubleshooter. This tool analyses software on your PC, works out which compatibility settings are most likely to get it working, then applies them. Find out how to use the troubleshooter in our Mini Workshop on page 52.

### Compatibility options

The troubleshooter works well in most cases, but certain older programs may need you to tweak the compatibility settings yourself.

To do this, right-click the program's shortcut icon (or its **EXE** file), select Properties, then click the Compatibility tab. Under the 'Run compatibility troubleshooter' button, you'll see several options (numbered in the screenshot right). These will vary depending on your version of Windows and the type of program you're trying to run.

Any changes you make can be reversed simply by unticking options, so it's easy to experiment with these. Here, we explain what some of these settings do...

#### Compatibility mode **1**

This option is the most powerful, letting you specify which Windows version the program's compatibility settings should be based on. Exactly which versions are

available will depend on the program itself, but some will stretch back as far as Windows 95.

Choosing an older version of Windows here won't mean that the program will work exactly as it did on that OS. Instead, Windows uses it as a basis for adjusting certain settings. In general, you're best choosing the version of Windows that was current when the software was released, or one that you successfully ran the software on. It's worth trying other versions if you continue to have problems.

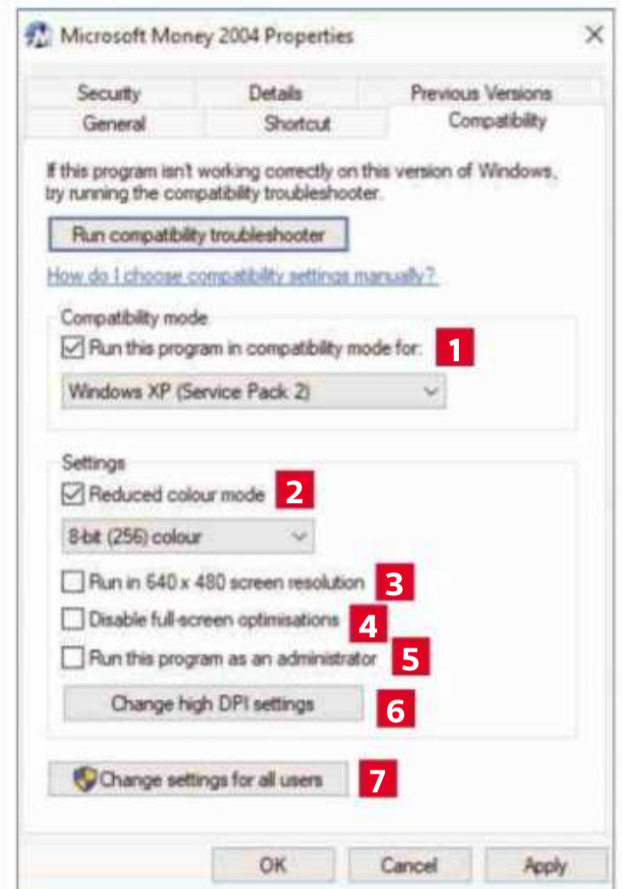
#### Reduced colour mode **2**

Too much choice can sometimes be a bad thing. And the greater choice of colours available within current Windows versions can cause older software with basic graphics to struggle.

If you do encounter graphics problems with an old program, try switching on 'Reduced colour mode'. As its name suggests, this restricts the selection of colours available to the program. You can choose between 16bit and 8bit colour modes (try the latter even if the program itself isn't 8bit).

#### Run in 640x480 screen resolution **3**

Older programs simply weren't designed for the high-resolution screens of today. In some cases, this can result in program interfaces that are difficult read, with smaller menus, buttons and text. By ticking this box and reducing the screen resolution to 640x480, you can force programs to run in a resolution that's easier on the eye.



In an older program's Properties, you can tweak settings in the Compatibility tab

Windows may continue running in the 640x480 resolution after you close the program. If so, you'll need to reset your screen manually by right-clicking an empty section of the desktop, clicking 'Display settings', then clicking the Resolution box and choosing a higher display resolution.

#### Disable full-screen optimisations **4**

Windows 10 attempts to improve the performance levels of programs (especially games) when they are running in full-screen mode. However, this can use up a lot of system resources and do more harm than good when using an older program and if you're suffering from stuttering graphics, tick the 'Disable full-screen optimisation' box.

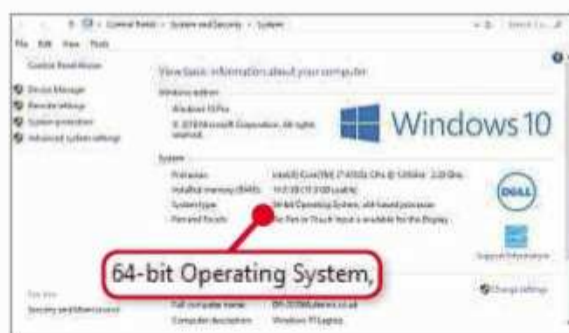
#### Run this program as an administrator **5**

Programs written for Windows XP and earlier will assume they have free reign over your computer, but will fail if they try to make changes to settings such as the registry. Selecting this option will keep them happy by enabling administrator privileges.

Don't use it lightly, though. It will allow the program to make changes to all aspects of your computer, including system settings. While it's highly unlikely programs from reputable companies will do anything malicious, it does increase the risk of them inadvertently causing problems.

## HOW TO RUN 16BIT SOFTWARE

If you're struggling to get a particularly old program to install – before 1995, say – the problem could be that it's 16bit software. While 32bit versions of Windows will usually happily run 16bit programs, 64bit Windows will simply refuse (64bit Windows will, however, run 32bit programs). Needless to say, if you have a 64bit version of Windows, it's unlikely you'll want to downgrade your entire operating system just to get one program running. Thankfully, there's a solution in the form of creating a 32bit **virtual PC**, which we explain on page 53. To find out which version of Windows you're running,

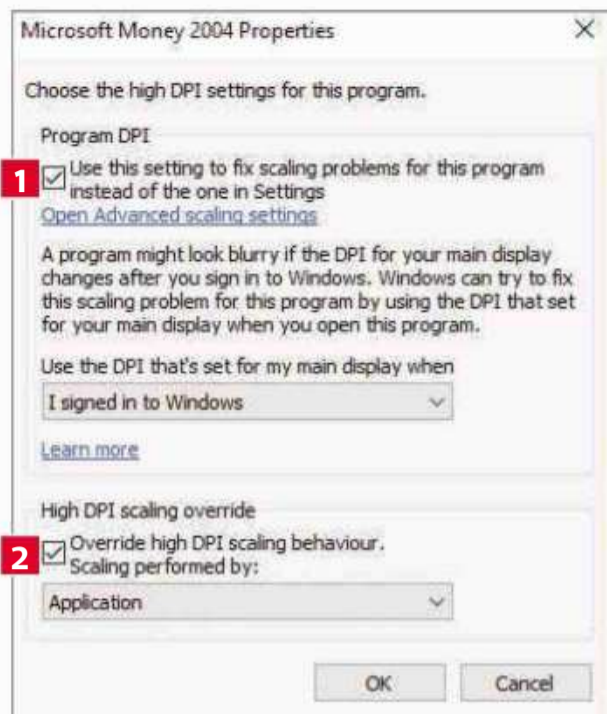


A 64bit version of Windows won't run 16bit software unless you use a virtual PC

open File Explorer, right-click This PC (or Computer in Windows 7 and 8.1), select Properties, then look for the 'System type' section (see screenshot).



## ON THE COVER



Windows can make old programs look blurry, – fix this by ticking the Program DPI box

### Change high DPI settings **6**

If the interface of the program you're running appears blurry (most noticeable with text in older programs), it's because Windows is trying to overcompensate for your high-resolution screen.

To fix this problem, click the 'Change high DPI settings' button, then in the window that appears tick the 'Program DPI' box (1 in screenshot above). If the program is still difficult to read, turn on the 'High DPI-scaling override' option (2 in screenshot above) and experiment with the various settings to see which works best for your particular program.

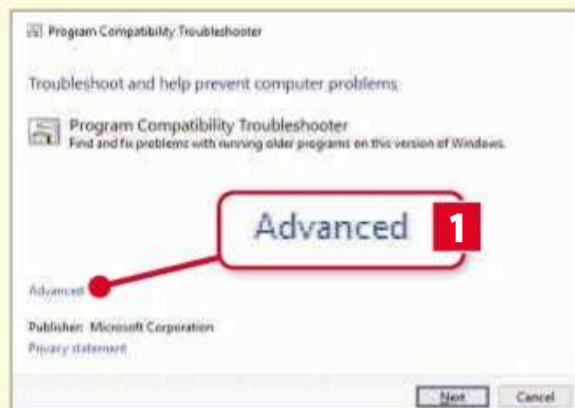
### Change settings for all users **7**

By default, any changes you make will affect the program only when run using *your* Windows user account. The compatibility settings won't be activated if you (or someone else) logs into a different user account and runs the same program. Click the 'Change settings for all users' button to apply the compatibility settings across *all* user accounts. A new window with the same compatibility options (but for all users) will now appear.

### Review your compatibility settings

While Windows makes it easy to change compatibility settings, it's not great at showing you an overview of them. For that you need NirSoft's AppCompatibilityView ([www.snipca.com/29107](http://www.snipca.com/29107) - scroll to the bottom and select the 32bit or 64bit download link), which shows what settings you've applied to each program. Right-clicking a program lets you change the settings with just a few clicks (see screenshot right).

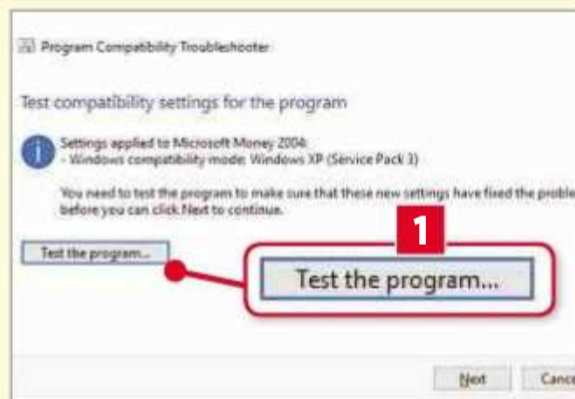
## USE PROGRAM COMPATIBILITY TROUBLESHOOTER



1 Click Start, type **compatibility**, then select the 'Run programs made for previous versions...' option. The troubleshooter has the best chance of success if it's running in administrator mode. To do this, click the blue **Advanced** link at the bottom **1**, then click 'Troubleshooting with administrator privileges...'. You'll need to be logged in as an administrator to change this option.



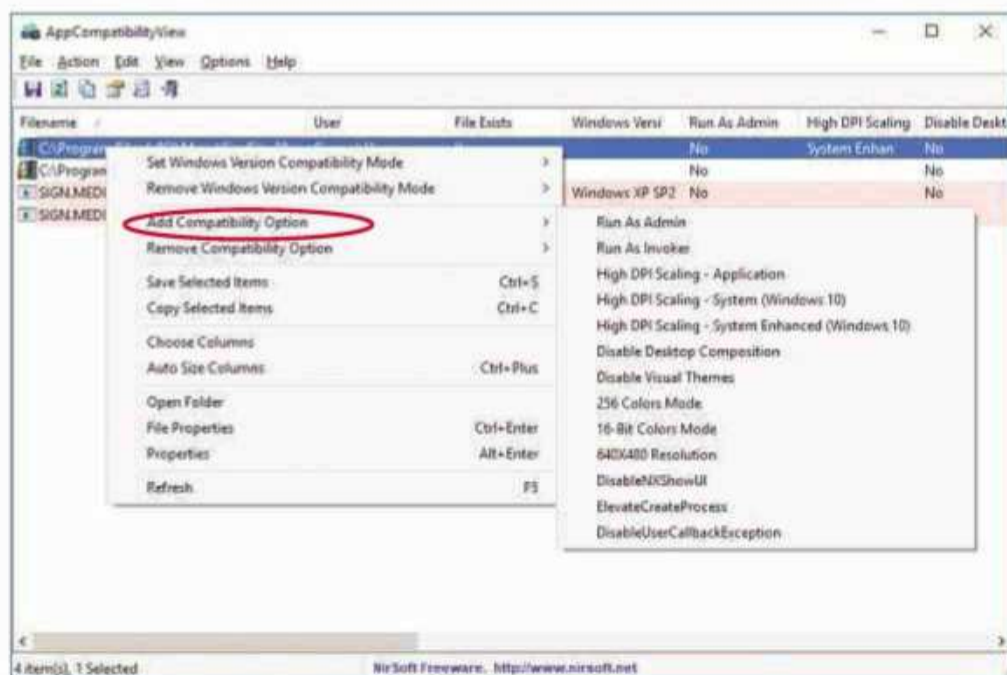
2 The troubleshooter will now show a list of programs on your PC. Scroll through the list and select the one you're having trouble with. If you can't see it, select **Not Listed** (at the top of the list), click the **Browse** button, then locate your program's exe file and click **Open**.



3 To let the troubleshooter try to fix the problem, click 'Try recommended settings'. You'll now see the troubleshooter's recommended compatibility settings. Click 'Test the program...' **1** to run the program and check whether the problems have been fixed, then return to the troubleshooter and click **Next**.



4 If your settings failed to improve the program's performance, choose 'No, try again...', then use the boxes to indicate what's wrong. The troubleshooter will then ask you a series of questions, before applying new settings and prompting you to test the program again.



View and change compatibility settings with the free App Compatibility View tool





## RUN OLD SOFTWARE ON A VIRTUAL PC

If compatibility mode doesn't get your old program running smoothly or it simply won't install, you may need to run it on an older operating system. The easiest way to do this is to use a virtual PC. These run directly within your existing operating system, but are effectively an entirely separate PC - essentially a computer within a computer.

Virtual PCs let you install any operating system you like, and setting one up is surprisingly easy (see our Mini Workshop on page 55).

### Install Windows on a virtual PC

How you install Windows on a virtual PC depends on which edition you want to use. If you have the original Windows installation CD, you can use this along with the **product key**. If you upgraded from Windows 7 or 8.1 to Windows 10, your original key will have been transferred to Windows 10, so you won't be able to re-use it.

If you don't have the original CD, you can download Windows 7, 8.1 and 10 **ISO files** using Microsoft's Media Creation

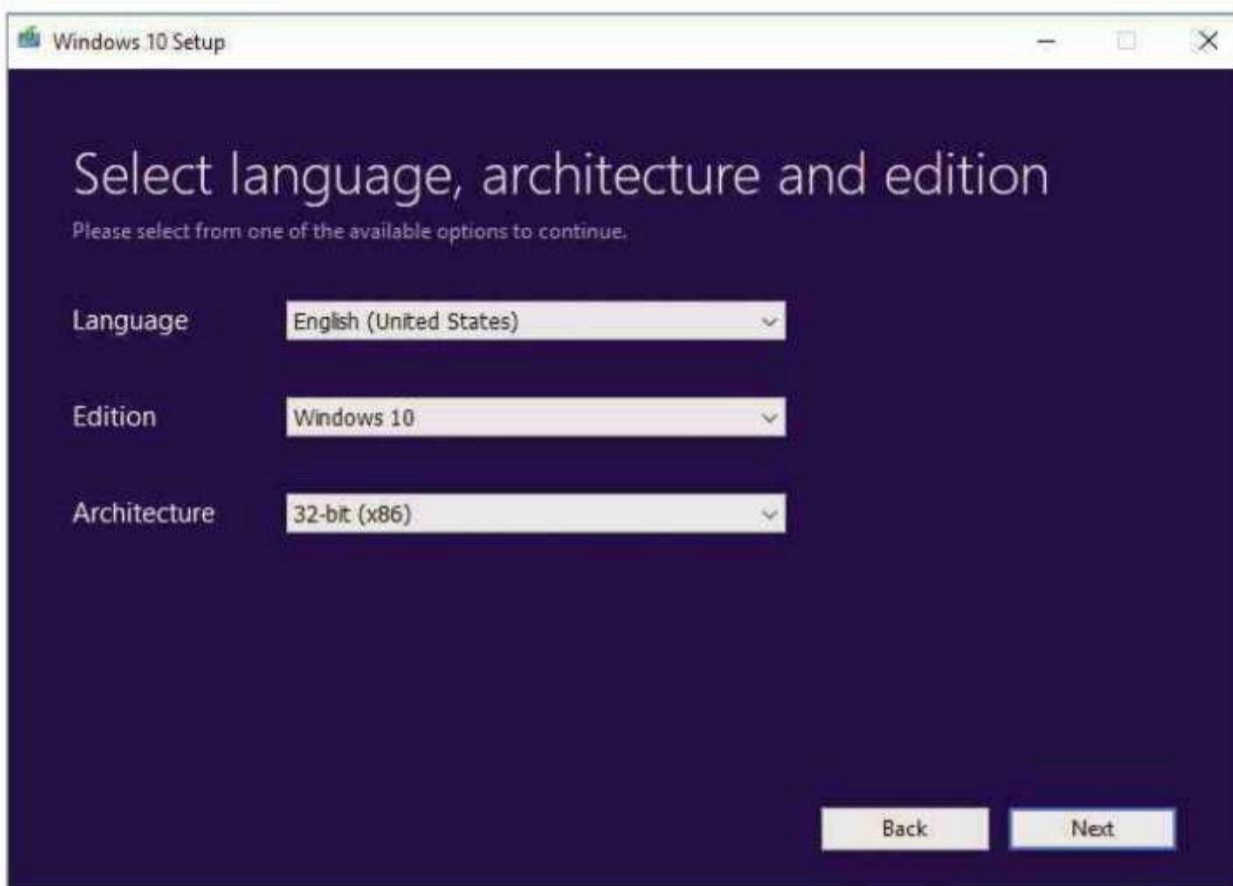
Tool at [www.microsoft.com/en-gb/software-download](http://www.microsoft.com/en-gb/software-download). For Windows 7, you'll need to provide a product key before you can download the ISO, while Windows 8.1 will require it during the installation process. In contrast, Windows 10 lets you skip the product key during installation. You'll be continually asked to activate Windows once it's installed, but you can still use it without providing the key, letting you create a temporary 32bit Windows 10 virtual PC, for example, to run older programs.

Be warned that sites such as eBay are awash with product keys for all versions of Windows, often for just a few pounds. While tempting, we advise steering clear. The keys could be stolen and blacklisted by Microsoft (if not now, at some point in the future), or may simply not work at all.

### Back up your virtual files

Since they are entirely software-based, it's very easy to delete a virtual PC along with any data created within it. To keep your data safe, it's best to regularly back up vital files stored on your virtual PC. If you use VirtualBox, the easiest way to transfer files between your virtual PC and its host (your full Windows installation) is to install VirtualBox Guest Additions.

To do this, run the virtual PC you want to back up, click the Device menu, then select 'Insert Guest Additions CD image' (see screenshot on page 55). This



You can download 32bit and 64bit Windows 10 ISO files from Microsoft

## WHAT ARE THE RISKS OF OLD SOFTWARE?

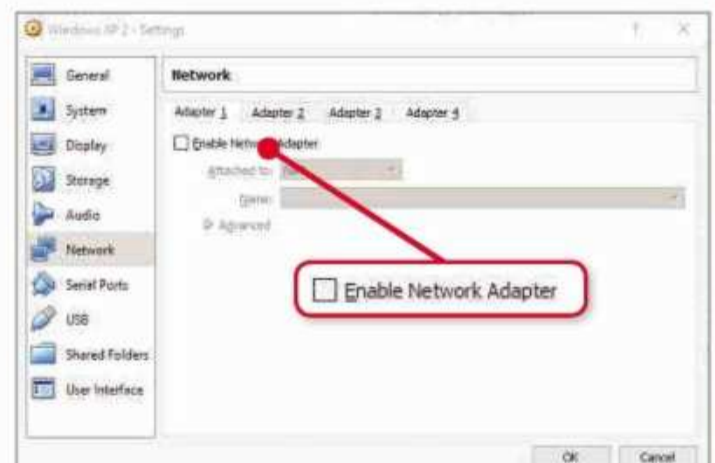
Running old, out-of-date software isn't without risk. If the company that created the software has stopped supporting it, you won't receive any more security updates to protect you from new online threats. You only have to consider the raft of security patches Microsoft releases for Windows and Office to realise how frequently threats are detected. While not all updates are critical, having no updates will leave you at risk. Up-to-date security software will protect you to an extent, but it's unlikely to spot a flaw in an old operating system or program.

Microsoft currently provides security updates for three major versions of Windows: 10, 8.1 and 7. Anything older than Windows 7 (with Service Pack 1 installed) no longer receives updates

(security or otherwise). This doesn't stop some people running older operating systems (such as Windows XP), but if you do so, don't use it to connect to the internet. These versions of Windows present significant risks - even if they're run within a virtual PC as described here.

You should also install antivirus on your virtual PC (this won't clash with the security software on your host PC). Additionally, if the program you're running doesn't need to be connected to the web (many older programs weren't created with the internet in mind), it's a good idea to disable the network adapter in your virtual PC.

To do this in VirtualBox, right-click your



Removing network access from a virtual PC running unsupported software can help keep you safe from online threats

virtual PC, select Settings, click Network from the list on the left, untick the Enable Network Adapter option (see screenshot), then click OK.



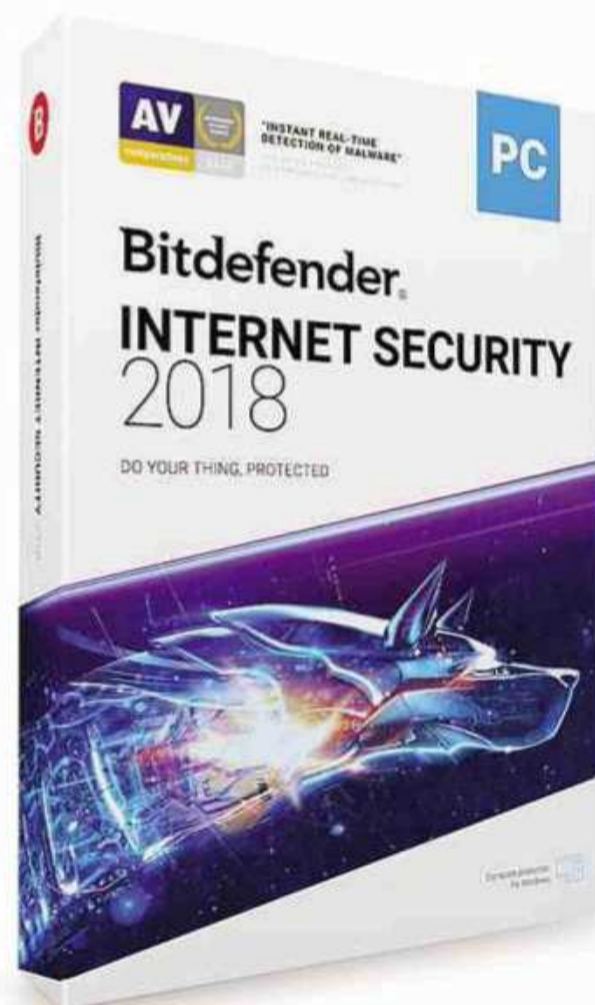
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**COMPATIBLE WITH WINDOWS 7, 8 & 10**



# DON'T UPDATE TO NEW SOFTWARE



Use Guest Additions in VirtualBox to easily move files between your virtual and host PC

loads a virtual CD, which you can run by opening File Explorer, then double-clicking the appropriate CD drive. Follow the onscreen instructions, then restart the virtual PC. Next, click the Devices menu, 'Drag and Drop', then Bidirectional. You'll now be able to quickly back up files by dragging them from your virtual PC to a folder on your host Windows PC.

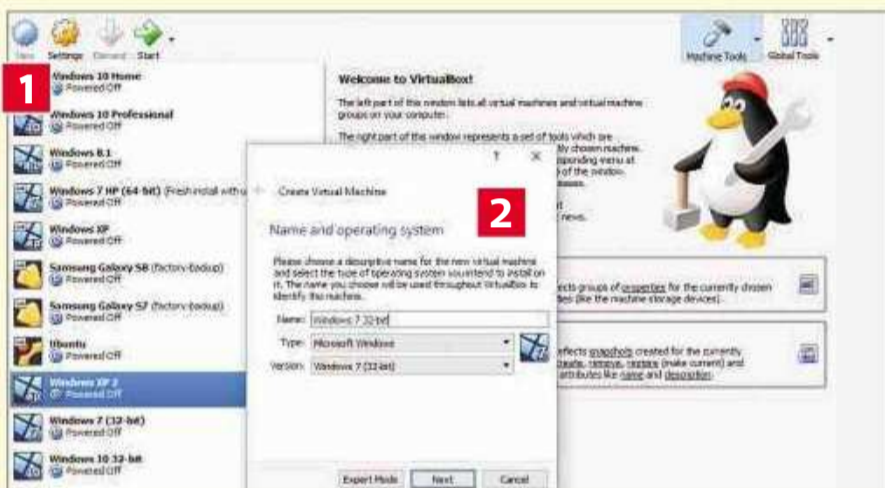
## Downsides of virtual PCs

Using virtual PCs to run older programs can be a great solution, but there are

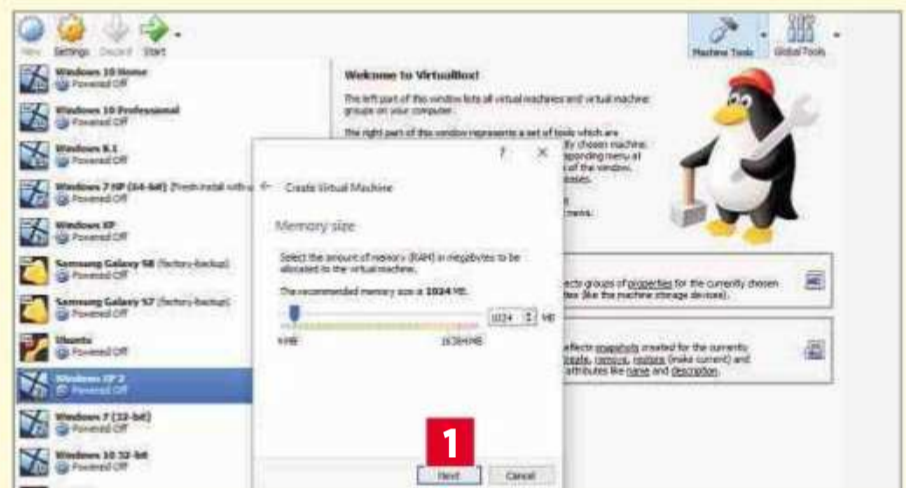
some disadvantages. Most notable is the effect on your PC's performance, which you'll notice as soon as your virtual PC loads for the first time.

These will materialise as small, but noticeable delays when opening menus and clicking options, while Windows will run more slowly overall. Just how much impact it makes will depend on two factors: the speed of your host computer and the amount of memory and disk space you assign to your virtual PC (see Step 2 in the Mini Workshop below).

## CREATE A VIRTUAL PC WITH VIRTUALBOX



**1** Download and install VirtualBox from [www.virtualbox.org](http://www.virtualbox.org). At the top left of the screen, click the New button **1** and the Create Virtual Machine window will appear **2**. Here, give your virtual PC a name, then select the edition and version of Windows in the Type and Version boxes below (including whether it's 32bit or 64bit). Based on the name you give your virtual PC, VirtualBox will try to guess the edition of Windows you're going to use. However, it doesn't always get it right, so be sure to check these settings before clicking Next.



**2** Next, you need to choose how much memory to give your virtual PC. VirtualBox will make a suggestion based on your chosen version of Windows. You can always change this later, so go with VirtualBox's suggestion, then click Next **1**. You then need to create a virtual hard drive. Again, use the suggested settings (including using VirtualBox's VDI drive type). The virtual drive will only use space from your actual hard drive as and when it's needed, so the drive size you choose here is effectively just a maximum limit. Once you've done that, click Create.



**3** You now need to install an operating system on your virtual PC. If you have a Windows CD, insert it into your disc drive, run the virtual PC by double-clicking it, then choose the relevant drive in the 'Select start-up disk' box that appears. Alternatively, you can use an ISO file. You can download ISO files for Windows 7, 8.1 and 10 direct from Microsoft (see page 53). Once you have the appropriate ISO file, right-click your virtual PC, select Settings, then Storage. Highlight the CD icon **1** under Storage Devices, then click the CD icon **2** on the right under Attributes. Locate your ISO file, click OK then run your virtual PC.



**4** The Windows setup program should now load within your virtual PC. Follow the onscreen setup process. Once Windows has installed, you'll be able to use the virtual PC as you would a normal PC. If you can't move your mouse from the virtual PC's window to your main Windows desktop, try pressing the right Ctrl key. If you're running Windows Vista or earlier, you may want to consider disabling internet access to limit security risks (see box on page 53).



## OLD PROGRAMS PUT TO THE TEST

### If at first you don't succeed...

Getting older programs to work can simply be a case of trial and error. While the methods we've outlined so far should get the majority of programs running, there's no guarantee that a solution on one PC will work on another.

The version of Windows you're running will be a factor, but your hardware and any related software **drivers** can also affect compatibility. Updating drivers (or, in some cases, rolling back to previous versions), can help. This is certainly true when trying to deal with **graphics card** problems.

Be sure to only download drivers from official sources - you can find older versions of Nvidia drivers from its support website ([www.snipca.com/29096](http://www.snipca.com/29096)), while AMD drivers can be found at [www.amd.com/en/support](http://www.amd.com/en/support).

As we mentioned previously, Windows updates can stop old programs from working. If neither the compatibility mode nor a virtual PC resolves this, try uninstalling the program, restarting your PC, then reinstalling it. And while some updates can stop a program working, they can also fix compatibility problems - so regularly checking for new Windows updates is a good idea.

To test how Windows handles some truly ancient programs, we dusted off a selection of old installation CDs and attempted to use them on a 64bit computer running Windows 10. Here are the results...



### Microsoft Works 7

Released: 2002

Installation got off to a good start, but we soon hit a hurdle. An error message relating to Internet Explorer 6 popped up, along with a message stating that the program isn't compatible with 64bit Windows (see screenshot above right).

Because Works 7 uses 16bit code, nothing will make it run on a 64bit system. Undeterred, we launched a 32bit Windows 7 virtual PC and tried installing again. Within seconds, we had Works 7 up and running, and fully functional. Somewhat surprisingly, we managed the same result in a 32bit Windows 10 virtual PC. Clearly Works has no idea what the latest DOCX file formats are, but you can always convert these online using services such as Zamzar ([www.snipca.com/29097](http://www.snipca.com/29097)).

**VERDICT Works in 32bit Windows 10**



**Microsoft Works 7 requires a 32bit operating system, but works fine in Windows 10**



### Microsoft Works 9

Released: 2007

Unlike Works 7, this version is a 32bit program, which means it should be possible to run it on a 64bit operating system. To test this, we ran it on a Windows 10 64bit computer with all the latest Microsoft updates. This time, there were no error messages about a lack of Internet Explorer 6, and the installation completed flawlessly.

Online forums suggest some people have had problems printing documents, but this wasn't the case for us. Works functioned perfectly, with no need for a virtual PC nor any tweaking of Windows 10's compatibility settings.

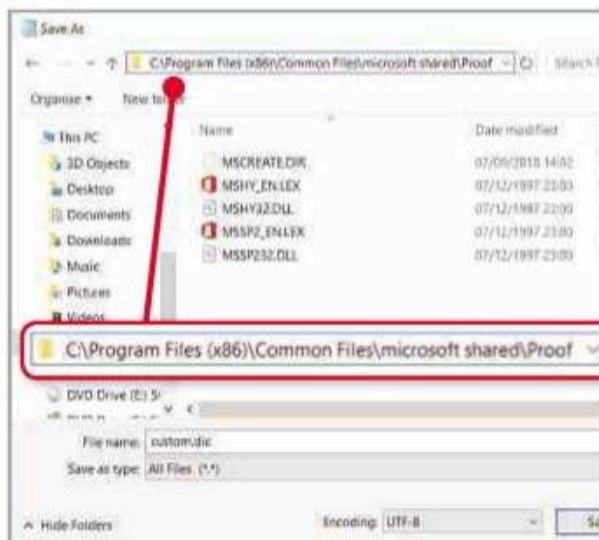
**VERDICT Works in 64bit Windows 10**



### Microsoft Publisher 98

Released: 1998

Despite its age, installation was smooth. However, when running the program we constantly saw a message about the custom dictionary not being available. Thankfully, there's a simple fix for this - you need to create an empty 'custom.dic' file. To do this, open Notepad, click File, Save As, then type **custom.dic**. Click the



**In Notepad save a .dic file to this location to restore the custom dictionary to Publisher 98**

'Save as type' box and select All Files. Finally, in the folder address bar at the top, type **C:\Program Files (x86)\Common Files\microsoft shared\Proof** (see screenshot below left).

**VERDICT Works in 64bit Windows 10, but requires dictionary fix**



### Lotus SmartSuite 9.8

Released: 2002

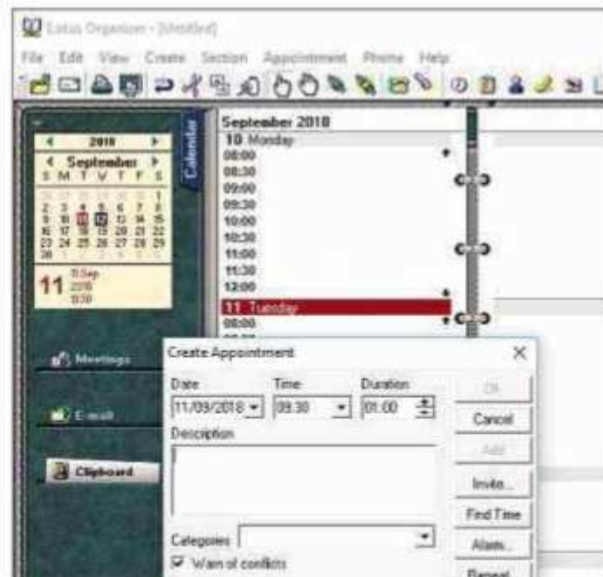
The SmartSuite installation process on our Windows 10 PC went smoothly enough. Once installed, the only aspect of the suite that didn't work was the Help section, which directs to help files on the web that have long since disappeared.

However, it seems others have had difficulties installing SmartSuite, with curious error messages referring to 'negative disk space'. The problem only occurs on computers with large, multi-terabyte hard drives (which were nothing but a pipe dream back in 2002). If your drive is more than 1TB, you'll need to shrink it to install SmartSuite.

To do this, open a File Explorer window, right-click This PC (or Computer in Windows 7), then select Manage. In the window that opens, select Disk Management, then right-click your operating system's drive (usually C) and select Shrink Volume. In the 'Enter the amount of space' box, change the value until the box below it ('Total size after shrink') is under 1,000,000 (1TB), then click Shrink.

You can then use the leftover space as a separate drive. Right-click the new 'Unallocated' space, select New Simple Volume, then follow the onscreen instructions and apply a drive letter to it.

**VERDICT Works in 64bit Windows 10 with partitions under 1TB**



**SmartSuite installed fine for us, including the iconic filofax-style Organizer, but disk partitions over 1TB will need to be shrunk first**



# DON'T UPDATE TO NEW SOFTWARE



## DOWNLOAD OLD PROGRAMS FOR FREE

If all this talk of old software has got you feeling nostalgic, there are resources online to download programs dating back decades. The Software Library of the Internet Archive (<https://archive.org/details/softwarelibrary>) is a good place to start. Here you'll find the installation and ISO files for a wide range of programs.

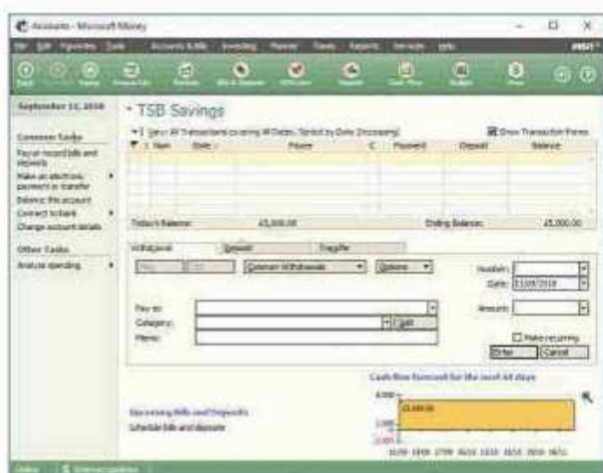
Many of these aren't free (you'll find popular paid-for Microsoft titles, such as old versions of Office), and their legality in relation to copyright has often been

questioned. However, given the age of the software on the site and the fact that most haven't been available to buy for many years, it's unlikely anyone downloading programs will find themselves in trouble.

If you do choose to download software from here, we recommend scanning it using VirusTotal ([www.virustotal.com](http://www.virustotal.com)). Anyone can create a free account and upload content, so you may not always get what you're expecting, though none of the programs we downloaded caused us problems.



You'll find plenty of old software to download at the Internet Archive



It won't link up with online services any more, but Money 2004 still works in Windows 10



### Microsoft Money 2004 Released: 2003

Once the financial-management software of choice for home and business users, Microsoft Money was shelved in 2009. Despite this, many still rely on it to keep track of their money and perhaps balk at having to learn a new program to do the same thing. Curiously, the setup program failed three times in Windows 10 64bit without any error messages. However, on our fourth attempt (and following a restart), it worked flawlessly.

It's difficult to pin down why our initial attempts failed, but it could be due to background processes that may have caused conflicts. We then managed to create accounts, record transactions and print reports. Less welcome were the

frequent audio tips - even back in 2004, it's hard to believe this seemed like a good idea.

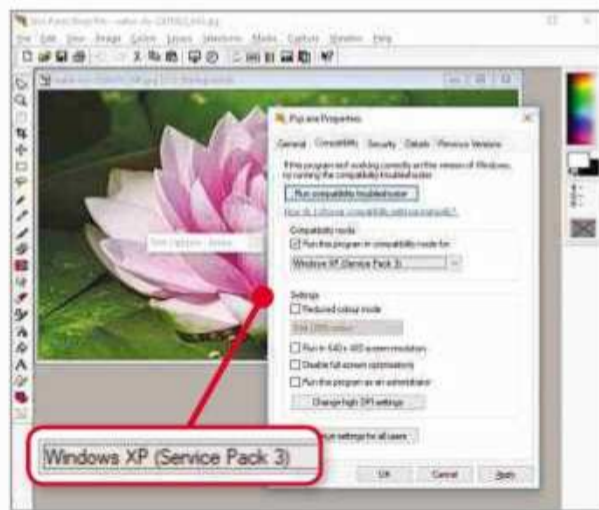
**VERDICT Works in 64bit Windows 10, despite initial installation problems**



### PaintShop Pro 6 Released: 1999

PaintShop Pro (PSP) is still going strong, with Corel releasing the latest 2019 version just last month. Although PSP 6 installed without hitches on our Windows 10 PC, constant error messages relating to the registry appeared when we tried to run the program.

Undeterred, we ran the Program Compatibility Troubleshooter, which advised running the program in Windows XP Service Pack 3 compatibility mode



PSP 6 worked well once we set it up to run in XP SP3 compatibility mode

(see screenshot below). Once applied, PSP 6 worked like a charm.

**VERDICT Works in 64bit Windows 10 with XP SP3 compatibility mode**



### SimCity 2000 Released: 1993

It may not have the advanced features of today's **simulators**, but we couldn't resist giving an old copy of city-building game Simcity 2000 a go. Our 64bit Windows 10 PC instantly threw in the towel, however, due to SimCity being a 16bit program. Installation on 32bit Windows 10 resulted in an error message about running the program in full-screen mode, which none of the compatibility settings could resolve.

Although the installer launched in 32bit Windows 7 (with Windows XP SP3 compatibility mode and the 640x480 resolution option enabled), it proved incredibly unstable and we couldn't get past the first few installation steps. We tried one final time using Windows XP within VirtualBox, but couldn't even get the installer to run.

If you suffer similar problems, and are willing to spend a small amount of money, GOG.com sells modified games that will work with all versions of Windows, with SimCity 2000 available for £4.69 ([www.snipca.com/29125](http://www.snipca.com/29125)).

**VERDICT Doesn't work in Windows without additional purchase**

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# 20 Keyboard Shortcuts You Must Create

Fed up with reaching for the mouse or repeatedly performing a series of key presses? **Will Stapley** explains how to create your own keyboard shortcuts and lists those you need to use

## Windows

### 1 Load any program

To create a keyboard shortcut to launch any program in Windows, right-click its desktop icon, select Properties, then click the Shortcut tab. In the 'Shortcut key' field, you can type your key combination (for example, **Ctrl+Alt+P**) or tap a single key and have Windows create a keyboard shortcut for you.

### 2 Open any website

Using a Windows shortcut to Chrome, you can quickly view any website. Load your chosen website, then click Chrome's Menu button (three vertical dots), More Tools, 'Create shortcut', then OK. Right-click the new icon on your desktop, then enter your chosen shortcut key(s) as described in Tip 1.

### 3 Shut down your PC

Right-click an empty section of your desktop, select New, then Shortcut. Type **C:\Windows\System32\shutdown.exe**, then click Next and give your shortcut a name. Finally, right-click the shortcut to assign a key combination (as above).

### 4 Customise your PC shutdown

The shutdown command above can be tweaked, letting you choose precisely how your computer switches off. For example, typing **C:\Windows\System32\shutdown.exe /f** will force any open programs to close, while adding **/p** removes the shutdown warning message

and timer. You can even create a shortcut that aborts the shutdown process by using **/a** instead of **/f**.

### 5 Take quick screenshots

Windows+S will take a screenshot and save it to your Screenshots folder, but you can create a keyboard shortcut to quickly load the Snipping Tool instead. Right-click your desktop, select New, then Shortcut. In the Location box, type **snippingtool** (one word). Click Next, give the shortcut a name, then right-click the new icon on your desktop and apply a keyboard shortcut to it as above.

## Office programs

### 6 Create shortcuts in Word

In Office 2007 and later, click File, Options, then Customize Ribbon (or Customize in Word 2007), then click the Customize button next to 'Keyboard shortcuts' (if you're using Word 2003, click the Tools menu, Customize, then Keyboard). In the Commands list on the right, find the action you want to create a shortcut for (you can sort these using the Categories list). Finally, create your keyboard shortcut in the 'Press new shortcut key' section.

Word also helps you keep track of all the shortcuts you've created. To print them, press **Ctrl+P** in Word to open the Print window. Click the first option in the Settings section (this should be Print All Pages), select Key Assignments, then click Print.



Add this in the Target field in Word's Shortcut Properties to open the most recent document

### 7 Paste plain text in Word

For a quick way to paste unformatted text, go to Word's 'Keyboard shortcuts' section (see previous tip). In Categories, select All Commands, then in Commands select PasteTextOnly.

### 8 Insert oft-used text into Word and LibreOffice Writer

Do you find yourself constantly typing the same text – your name, email address or home address, for example – into Word? Why not insert it by pressing a couple of keys instead? Highlight the relevant text, then on the Insert toolbar click Quick Parts, AutoText, then 'Save selection...' at the bottom. Give it a recognisable name, then assign your keyboard shortcut as in Tip 6 (this will be listed in the Building Blocks category should you forget it).

To create the same shortcut in LibreOffice Writer, select the text, click



Tools, AutoText, then name your shortcut. Writer will assign a shortcut command in the Shortcut section (you can change this later). Click the AutoText button, New, then Close. To paste the text, type your shortcut command, then press F3.

## 9 Open your most recent Word doc

To set up this shortcut, right-click the Word icon, open its Properties box and create your keyboard shortcut (as Tip 1). Next, add `/mfile1` to the end of the filename in the Target field, so that it reads `'.../winword.exe' /mfile1` (see screenshot on previous page). Pressing your chosen key combination will now open the Word document you most recently worked on.

## 10 Insert rows in Calc

Insert new rows in LibreOffice Calc by clicking Tools, Customise, then selecting the Keyboard tab. Highlight the shortcut key(s) you want to use in the Shortcut Keys section (we chose Shift+Insert, see screenshot above right), then type **Insert rows** in the Function search box, select Insert Rows Above, and click the Modify button.

## Use AutoHotKey shortcuts

If you're willing to invest a little time in learning to use a dedicated tool, you can create more powerful keyboard shortcuts with AutoHotKey (AHK, <https://autohotkey.com/download>). Creating your own takes some practice, but there are plenty of default **scripts** that you can use and then tweak. We include some of our favourite AutoHotKey shortcuts below, but you can find more, as well as instructions on how to make your own, at <https://autohotkey.com/docs/Tutorial>.

To create each of the following scripts, install the program, then right-click your desktop, select New, AutoHotKey Script, then give the file a name. Next, right-click the file, select Edit Script and you'll see four lines of code in Notepad. Copy the script text using the Snipca links to our Pastebin account, then paste it below the header text (see screenshot top right) and save the file.

You now need to activate the shortcut – do this by double-clicking the file. You can run each individually, or combine multiple scripts into one file. To cancel an AHK script, locate it in the system tray, right-click then select Exit.

## 11 Empty your recycle bin

Use this script ([www.snipca.com/29098](http://www.snipca.com/29098)), to empty your recycle bin by pressing Alt+Del:



Choose a shortcut command in Calc, then select which action to assign to it

```
!Del::
FileRecycleEmpty
return
```

## 12 Google your clipboard contents

Use this script ([www.snipca.com/29099](http://www.snipca.com/29099)) to run a Google search of your clipboard's contents by pressing Alt+Up Arrow:

```
!Up::
Send, ^c
Sleep 50
Run, https://www.google.co.uk/
search?q=%clipboard%
Return
```

## 13 Quickly translate text

By tweaking the script above, you can make Google translate the text in your clipboard. Simply change the URL in the script to <https://www.google.co.uk/search?q=translate+%clipboard%> ([www.snipca.com/29100](http://www.snipca.com/29100))

## 14 Adjust your volume

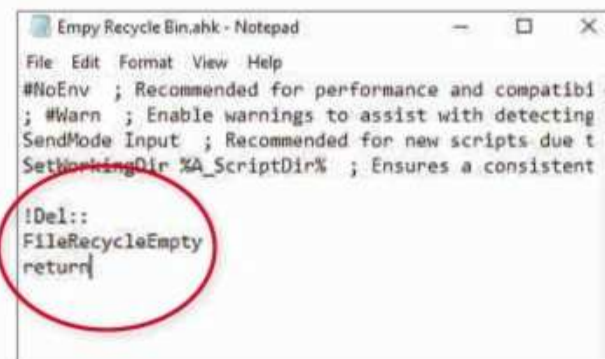
Adjust your volume using the Shift and the plus (+) and minus (-) keys on your numeric keypad with this script:

```
+NumpadAdd:: Send {Volume_Up}
+NumpadSub:: Send {Volume_Down}
return
(www.snipca.com/29101)
```

## 15 Insert any text in any program

To paste text into any program (for example, your email address), tweak this script ([www.snipca.com/29102](http://www.snipca.com/29102), replacing 'email@gmail.com'), then press Windows key+Home:

```
#Home::
Send, email@gmail.com
return
```



Paste your script into a Notepad file to create a shortcut using AutoHotKey

## 16 Insert today's date

Similar to the previous shortcut, this inserts the current date when you press F12:

```
f12::
FormatTime, CurrentDateTime,, dd/
MM/yyyy
SendInput %CurrentDateTime%
return (www.snipca.com/29103)
```

## 17 Keep NumLock on

Accidentally turning NumLock off can be annoying. This script ([www.snipca.com/29104](http://www.snipca.com/29104)) lets you use the Alt+NumLock shortcut to keep it switched on:

```
!NumLock::
SetNumlockState, AlwaysOn
return
```

## 18 Pause music playback

Need a moment of silence to concentrate? This script ([www.snipca.com/29105](http://www.snipca.com/29105)) will pause any music you're playing for five minutes. Press Alt+Down Arrow to activate it (adjust the 'sleep' number to change the pause duration – 60000 is equivalent to one minute):

```
!Down::
sendinput {Media_Play_Pause}
sleep 300000
sendinput {Media_Play_Pause}
return
```


## 19 Turn AHK on/off

For the option to temporarily disable an AHK command, add this to the end of any script and use Windows+Scroll Lock to run it:

```
#ScrollLock::
Suspend
return (www.snipca.com/29106)
```

## Create shortcuts for system tasks

**20** NirSoft's free NirCmd tool ([www.snipca.com/29071](http://www.snipca.com/29071) – scroll to the bottom to download) automates many system tasks, including muting the volume and opening optical drives. To create a keyboard shortcut, use the same method

as the 'Open most recent Word doc' shortcut (see Tip 9), adding the relevant NirCmd option to the end of the Target field in the shortcut. For example, add **monitor off** to create a shortcut for turning your screen off. 



# Expand Your PHONE'S STORAGE



No room for videos and photos on your phone? Don't buy a new one. Instead, remove unwanted apps and data, then upgrade its storage. **Nik Rawlinson** shows you how

**T**here's no point spending money if you don't need to, so before investing in memory cards for your phone, delete any data you no longer need. Start with your apps - you might be surprised how much space some of them hog.

On an iPhone, press down on any app icon until they all start to wobble, then tap the 'x' on the corner of the one you want to remove. You can delete as many apps as you like in sequence, but need to confirm each one. When you've

finished, press your phone's physical Home button to stop the icons shaking.

Some versions of Android have a similar removal process, instigated by holding down an icon; others expect you to drag apps to a particular part of the screen, showing 'Remove' or 'Uninstall'. There's one method that's universal, though. Open Settings and tap either 'Apps' or 'Apps & notifications', depending on which appears on your phone. Now tap the name of the app you want to delete

and, on the screen that follows, tap Uninstall. If the button instead says Disable, tap it anyway. The app won't be deleted because it's one of Android's defaults, but it will be hidden from your menus.

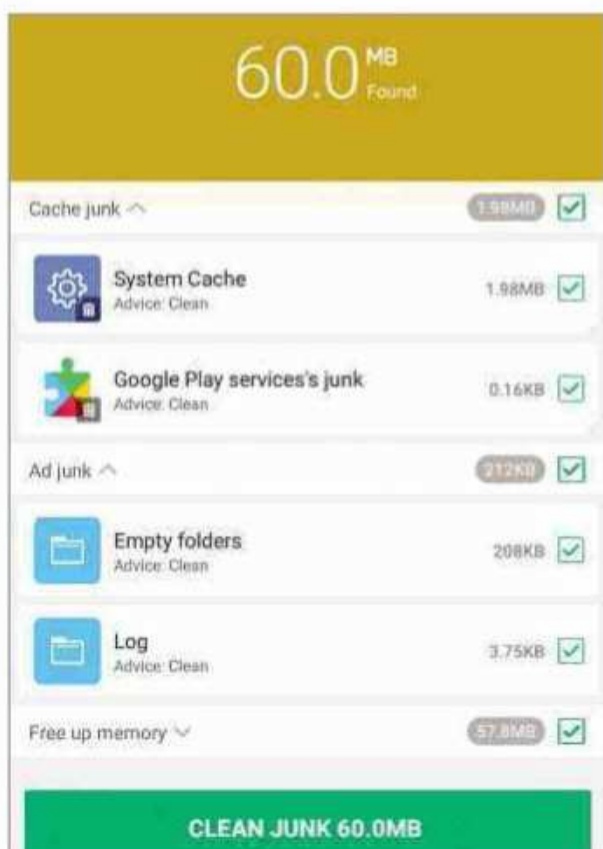
iOS also has a number of pre-installed apps that can't be removed, but following the process outlined above for deleting them will at least hide them from the home screen. Although it reduces clutter, this won't actually help you recover lost space.

## Remove unused content

It's not only unwanted apps that take up space: their documents and data do as well. Most apps have built-in tools for managing the files you create with them, and you can quickly delete duff photos and videos via Gallery on Android or Photos on iOS. This is a good start, but it's really just scratching the surface.

If you're using Android, install Google Files Go from the Play Store ([www.snipca.com/29082](http://www.snipca.com/29082)), which audits your device and suggests ways you can reclaim lost space. Alternatively, check out Clean Master ([www.snipca.com/29079](http://www.snipca.com/29079), see screenshot far left), which identifies junk files and lets you remove them with one tap.

iOS has a built-in tool (see screenshot left) for managing your internal storage, removing app data and 'offloading' apps



Clean Master helps you reclaim space by deleting junk, log files and caches



We managed to reclaim over 45GB of iPhone storage by 'optimising' our photos





Add a memory card and set it as your default storage location on Android phones

you rarely use. Open Settings, tap General, then 'iPhone Storage' to open a dashboard of space-saving options.

As you can see from the coloured graph at the top of our screenshot (below left), more than half our iPhone's used space is occupied by photos (over 45GB, represented in yellow). Tapping Enable beside 'Optimise Photos' will move all photos to your Apple iCloud account, immediately freeing up space on your device. Lower-resolution versions will be retained on your device, and the full versions retrieved automatically if you ever want to edit, embed or share them.

If this option isn't available on your phone, check that iCloud photo storage is enabled by tapping General, then Settings, both at the top of the display, then tapping your name at the top of the Settings home screen. Tap iCloud, followed by Photos and make sure the switch beside iCloud Photo Library is green.

Return to your iPhone Storage settings and tap Enable beside Offload Unused Apps to automatically delete ones you rarely use when storage starts to run low. They'll still be tied to your account, so you can reinstall them when needed without having to pay again. However, bear in mind that apps larger than 100MB can only be downloaded when you're connected to Wi-Fi - if you're away from home, you'll need to find a wireless **hotspot**.

For more precise control, tap an individual app further down the list. As well as revealing precisely how much space the app and its data are using, this offers two additional options: Offload App, which removes it immediately but leaves your documents and data in place, and Delete App, which removes the app and all associated data,

## WHAT DO CARD SPEED RATINGS MEAN?

When buying a memory card, pay close attention to its speed rating. At the very least, aim for a card bearing a Class 10 or C10 logo (around £6 for 16GB). This is fast enough to handle high-definition video (1080p) for both recording and playback, and can save photos quickly. You'll also be able to take more sequential shots within a given time frame, so will be less likely to miss any action.

Cards marked Class U1 or Class V10 are equivalent to Class 10, meaning they

have **read** and **write speeds** of at least 10MB of data (equivalent to around three smartphone photos) every second.

If your budget allows, consider Class U2 and U3 cards (around £9 for 16GB), which can read and write up to 20MB and 30MB of data per second respectively, while V30, V60 and V90 peak at 30MB, 60MB and 90MB per second. These may be overkill for a mobile phone, but they'll last for many years should you want to re-use them in a PC or camera later on.

including your original work. There's no recovery process if you opt for the latter, so be sure to back up or export any documents you don't want to lose.

### Expand your Android storage

Many Android phones include a **microSD card** slot. Check your phone's instructions or look for a flap on the side of your device to locate it. Be careful not to remove the **SIM** - this connects you to your phone network and is usually housed in a removable tray, while the microSD card more often simply clicks into place. MicroSD cards are asymmetrical to stop them being incorrectly inserted, so if you're having trouble installing one, take it out and flip it around rather than force it in.

If you're re-using a card that you've previously used in a digital camera, back it up before transferring it to your phone, then format it. Do this on the phone itself rather than on your PC so you don't unintentionally transfer any hidden files or use a format the phone can't read.

Open Settings, tap 'Advanced settings', then 'Memory & storage'. You'll see entries for your internal storage and the memory card, which may be called SD Card or Portable Storage. Tap the card, then tap the Format button to wipe it.

Return to the 'Memory & storage' screen and you'll see an option to set the 'Default location' for installing apps and saving data. If you haven't changed anything since first setting up your phone, this will be set to 'Internal storage', but if space is starting to get tight, tap it and select SD Card from the menu (see screenshot above left).

Keep in mind that slower cards will degrade your phone's

performance if set as the default storage location. See the box above for an explanation of different card ratings.

### External iPhone storage

If you assumed the lack of a microSD card slot on iPhones meant Apple users couldn't expand their storage, think again. There's no slot for a memory card, but there is the Lightning port, which works with a range of external memory devices.

The SanDisk iXpand (pictured below) is a double-ended USB device that pairs a regular USB connection for your PC or Mac with a Lightning interface for your iPhone and iPad. It's unlikely you'll want it connected all the time, but it lets you free up internal space by moving photos, videos and other files off your phone. You can also watch videos straight from it without first copying them across.

Available in five capacities of between 16GB and 256GB, and starting at £30 on Amazon ([www.snipca.com/29081](http://www.snipca.com/29081)), iXpand has the potential to double your phone's available capacity for a fraction of the price of a new device. As always, cheaper, unbranded versions are available - search Amazon for 'lightning storage' and you'll find similar products starting at around £12. **ca**



The iXpand plugs into an iPhone's Lightning port, letting you quickly free up space by downloading files



# Problems Solved

Our experts solve all your tech problems

## PROBLEM OF THE FORTNIGHT

### Where are the Windows 10 webcams?

**Q** I use a desktop PC so I need an external webcam for Skype video chat. However, I've found it impossible to find a plug-in webcam for Windows 10. It seems the webcam makers have had little reason to update these ageing desktop gadgets, such that I can't find any reasonably priced model that will run anything newer than Windows 8 or even 7.

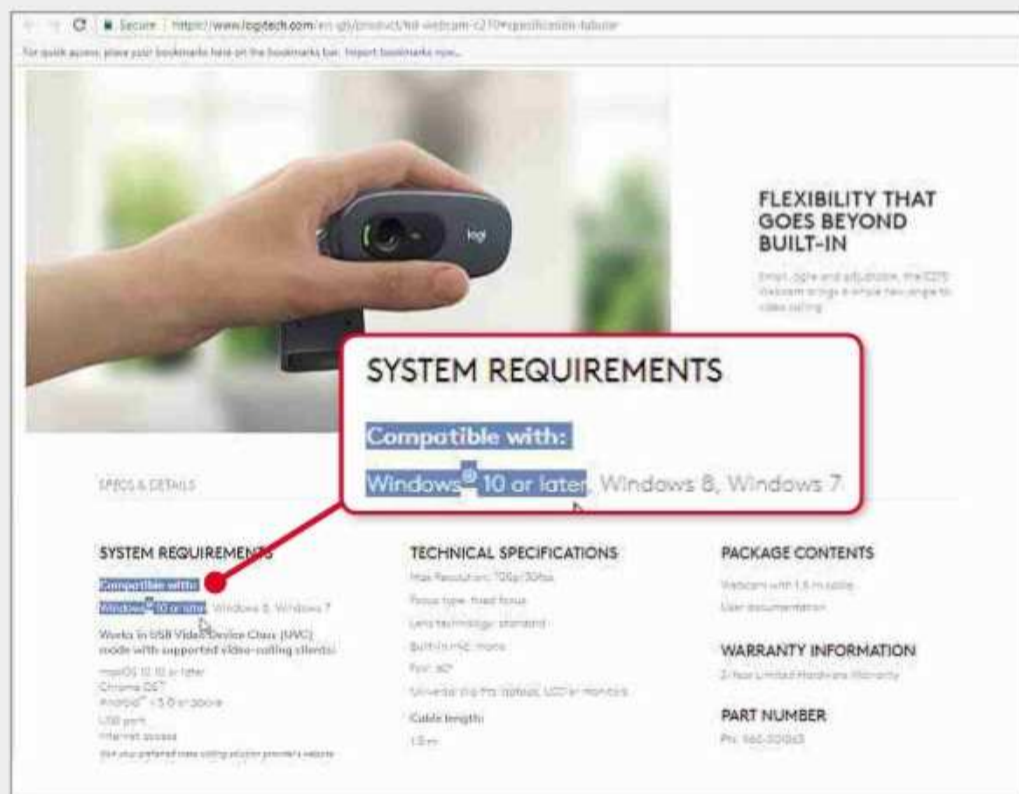
I was drawn into this by having bought a Microsoft LifeCam HD-5000 online, only to find that it wouldn't work properly in Windows 10 (I could see my daughter but she couldn't see me). I found many people on Microsoft's forums complaining that the company hasn't updated the software for its own webcam product, so what's a poor user to do?

Ralph Mynn

**A** There are lots of webcams that'll run perfectly well with Windows 10 but perhaps not so many that have up-to-date **drivers** made by the manufacturers. That's because most models released in the past few years support a standard known as USB Video Class (or UVC), meaning they can just be plugged in and Windows 10 will detect and set them up automatically. Any compatible programs (like Skype) will then work with them, no specialist drivers required.

This actually includes Microsoft LifeCam HD-5000, though this fact is not necessarily obvious if you dive into the first few search results on the relevant support forums. It's true that Microsoft's own product-specific drivers and associated utility software are officially compatible only up to Windows 7. It's also true that, while some people have had limited success getting them working in Windows 10, many others have experienced problems.

However, that's to miss the bigger



Logitech's website confirms that the C270 works with later Windows versions

point – that no specific drivers are actually required. To reiterate: the LifeCam HD-5000 is compatible with UVC so you can just plug it in and let Windows 10 get on with it. Installation of Microsoft's outmoded drivers and software is actually the cause of problems that wouldn't exist if the device was simply plugged in. That's why you experienced the problems that you did.

We assume you managed to pick up a new or used HD-5000 from the likes of eBay because the product itself is now getting on for a decade old, and Microsoft no longer actually makes it. With that in mind it's perhaps not unreasonable that Microsoft is no longer updating the related software.

If you haven't already, uninstall the LifeCam software. Click Start, followed by the Settings cog, and then Apps. Now scroll down to find the entry for Microsoft LifeCam, click to select it then click Uninstall, then confirm by clicking Uninstall again. Simply restart your PC, plug in your HD-5000 and let

Windows 10 do the rest.

If you still can't get it to work there are numerous affordable and newer models that certainly will. For example, Logitech's C270 is around £15 ([www.snipca.com/28781](http://www.snipca.com/28781), pictured). While the Amazon listing states it's compatible only up to Windows 7, Logitech's own website makes it clear that Windows 10 is supported ([www.snipca.com/28782](http://www.snipca.com/28782), see screenshot above) – and there's no need to rely on outdated drivers!



The Logitech C270 webcam is compatible with Windows 10



✉ Email us your problem and we'll try to help:  
 noprobem@computeractive.co.uk

## Why can't I download this Kindle book?

**Q** I have an iPad upon which I've installed the Amazon Kindle app, with about 50 books available to read. I recently visited the Amazon UK website to buy a Kindle book. However, upon clicking the 'Buy now' button I was told that I didn't have a Kindle app registered. If I follow Amazon's advice and try to download the app, I'm referred to the app that I already have installed. Help!

Paul W Hunt

**A** We assume you've previously registered your iPad's Kindle app, and successfully downloaded books to it – otherwise you wouldn't have 50 books available to read. So, in the first instance, visit the Amazon 'Manage Your Content and Devices' (MYCD) page, at [www.amazon.co.uk/mycd](http://www.amazon.co.uk/mycd). Now click or tap the Devices tab to see what's there. If you see your iPad listed, click its entry and then click Deregister (see screenshot), then confirm



**Deregister, then reregister your device on Amazon's website to access missing ebooks**

by clicking Deregister again. Now fire up the Kindle app on your iPad and you'll be prompted to log in again, effectively registering your iPad afresh.

If your iPad isn't listed on your MYCD page then – while certainly strange – this is very likely to be the root cause of your problem. This means the connection between your Kindle device and app and Amazon's servers has somehow been broken.

If this is the case, you can try deregistering the device from within the iPad app itself. Launch the app as normal

then, at the bottom, tap the More button. Now tap Settings and, under the Registration heading, tap your username. Next, tap 'Deregister this Kindle', then confirm by tapping OK. After a moment you'll be presented with the Kindle app's initial login screen. Log in with your Amazon account details then, once you're successfully connected, return to the Amazon MYCD web page to see if your device and app are now registered with Amazon's servers.

If it still hasn't worked, try uninstalling and reinstalling the Kindle app. From your iPad's home page, tap and hold any app icon until all the icons begin wobbling. Now tap the cross to the top left of the Kindle icon, then confirm by tapping Delete. Now download the app afresh from the Apple App Store, and log in.

If after all this it's still not working then contact Amazon's dedicated Kindle support line on 0800 279 7245 – in our experience they're a very helpful bunch.

## Why can't I recover my iPhone note?

**Q** Recently, I accidentally deleted an entire note from my iPhone's Notes app. I did this somehow by tapping the Backspace key (to delete a couple of letters). Just to be clear, I'd not been anywhere near the waste-bin icon. I tried to recover the file but, after a couple of days, I had to give up because I could find nothing. Normally, when I delete using the bin icon a Recently Deleted tab appears in iCloud and there is no problem, but not this time. Any ideas please?

William Allen

**A** We suspect that this problem was caused by the iPhone's 'Shake to Undo' feature. This is enabled by default and even a small shake – such as successive taps on the Backspace key – will result in an Undo box appearing.

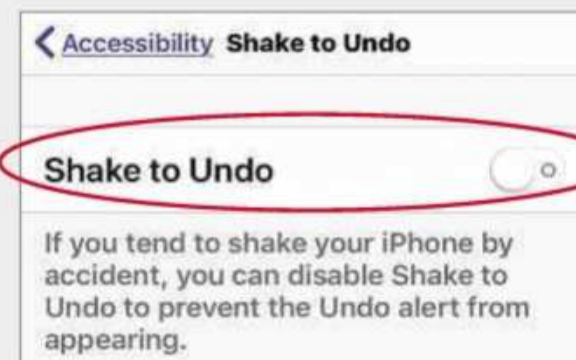
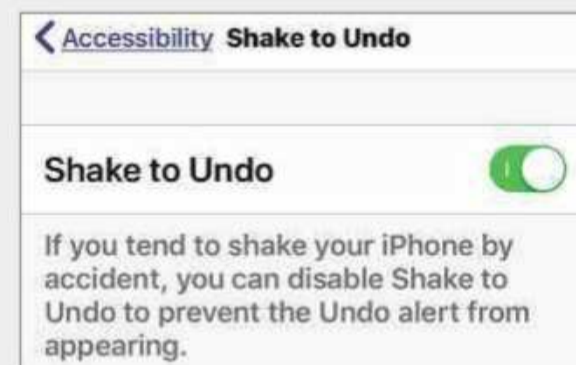
So, we think an Undo Typing box appeared (see screenshot above right) and you tapped Undo. All this can



**A slight shake of your iPhone can bring up this Undo Typing message**

happen very quickly and, because it's unexpected, you may not even have noticed. Moreover, the Undo function isn't the same as the waste-bin's delete action, so iCloud won't have backed up the 'undone' typing. That's why the note didn't appear in Recently Deleted.

We can't bring your note back, but disabling 'Shake to Undo' will prevent a repeat occurrence. From your iPhone's



**Switch off 'Shake to Undo' to avoid losing something you've typed**

home screen tap Settings, followed by General and then Accessibility, then slide the 'Shake to Undo' switch to its Off position (see screenshot above).



# Problems **Solved**

## Which Intel graphics do I have?

**Q** I don't play games often but there was one I fancied trying on my four-year-old HP laptop. The game's website gave minimum requirements, all of which my PC met bar the graphics. Or rather, I'm just not sure. I know that my laptop has Intel HD Graphics, but I don't know which level. The game specifications say it needs 'Intel HD Graphics 5000 or later'.

Unfortunately, I can't find anywhere on my system that tells me what 'level' my Intel HD Graphics are. I followed advice and looked in Device Manager, but this just says 'Intel HD Graphics Family'.

Ian Christiansen



Identify your graphics level via Intel's built-in Control Panel

**A** This information is hidden in an Intel tool that should be pre-installed on your PC. First, right-click a blank part of your Windows desktop, then click Graphics Properties. This opens the Intel HD Graphics Control Panel. Now click 'Options and Support' (see top screenshot above), followed by Information Center. The model of your graphics card will be shown in the right-hand pane (see bottom screenshot above).

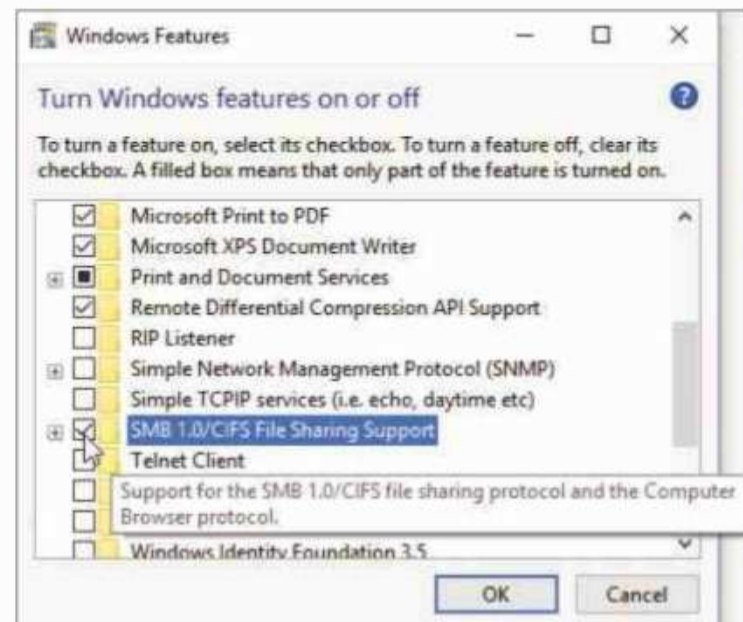
## Why won't my BT Smart Hub run my external hard drive?

**Q** For years, I've been using an external hard drive that I connect to my PC system via my BT Smart Hub's USB port router. Recently, following a Windows 10 update, it stopped working. Instead, all I see is an error message about SMB being deprecated – whatever that means. What's going on here?

Tom Carpenter

**A** SMB stands for Server Message Block, which is a network-sharing protocol. In short, the version employed by your Smart Hub is no longer considered secure. Microsoft has disabled default support for it in Windows 10.

You'd have to ask BT if or when it intends to update the firmware (and thus the SMB version used) for your specific Smart Hub model. It's possible to re-enable SMB 1.0 in Windows 10 but doing so increases the risk of attack to your computer (and any other networked devices). The SMB flaw is how the WannaCry ransomware infection spread in 2017, for example. Microsoft has now



...then tick this box, but be aware of the increased risk of attacks

patched this particular flaw, but there's no way of knowing if another flaw is lurking, just waiting to be exploited.

If you do re-enable SMB 1.0 make sure you have reliable security software and a firewall in place. Then, click Start, type Control Panel and press Enter. Now click Programs and then, under 'Programs and Features', click 'Turn Windows features on or off' (see screenshot below). Now scroll through the list to find and then tick 'SMB 1.0/CIFS File Sharing Support' (see screenshot above), then click OK.



To re-enable the SMB network-sharing protocol, click this option in your Control Panel...

**Q:** How do I set my SD card as internal storage?

**A:** Issue 500, page 69 - find it on our 2017 Back Issue CD

Buy it from  
[www.snipca.com/26848](http://www.snipca.com/26848)





## How do I open my open Works documents?

**Q** I have many old Microsoft Works (WPS) files that I can no longer open in Word 2013. I can access my files and print paper copies with Word Viewer, so all is not lost, but I can't do anything else with them. When I try to edit them I get a most unhelpful error message that says "something went wrong", along with a suggestion to try reinstalling Word. I've tried that but it doesn't work. I'm using Windows 10 on my laptop. I have found software online that claims to convert these files but I'm reluctant to try it without advice. So what do you say?

Morris Mansfield

**A** One popular online tool is Zamzar ([www.zamzar.com](http://www.zamzar.com)), which has been around for years (see David Bevan's question on page 71). This will do the job of converting WPS to DOC or DOCX. It's safe to use but does require your email address for each conversion. The website's privacy policy promises not

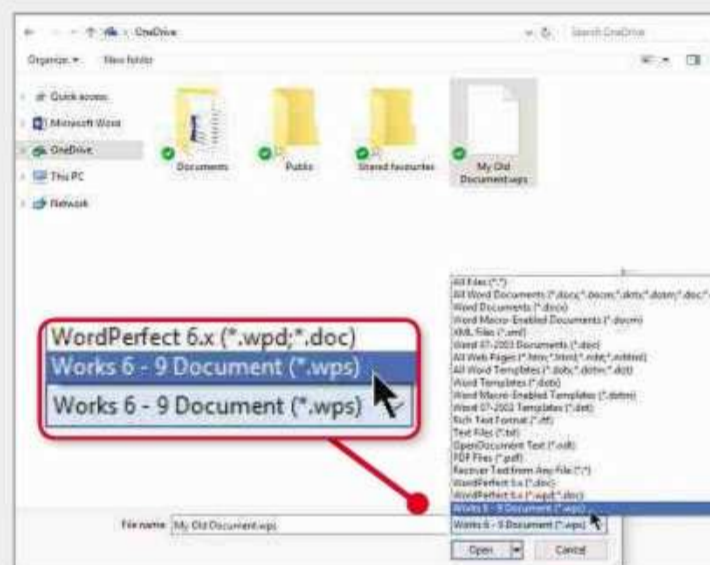
to use this for marketing unless you consent to this, and in our experience it's not proved a source of spam – so we think it keeps to its word.

However, there's really no need to use this or any other non-Microsoft software, because Microsoft makes its own tool – called Microsoft Works 6–9 File Converter. This has in the past – for reasons unknown – disappeared from Microsoft's servers but it's back, free to download and works just fine, even with Word 2016. So, download the executable file (.exe) file from [www.snipca.com/28606](http://www.snipca.com/28606) (see screenshot above right), then double-click to install it. Tick the box to accept Microsoft's licence, then click Next. Now launch Word and click Open, followed by Browse.

To sort by WPS files, select that option in the dropdown menu to the right of the 'File name' box (see screenshot right).



Download Microsoft Works 6–9 File Converter from this site



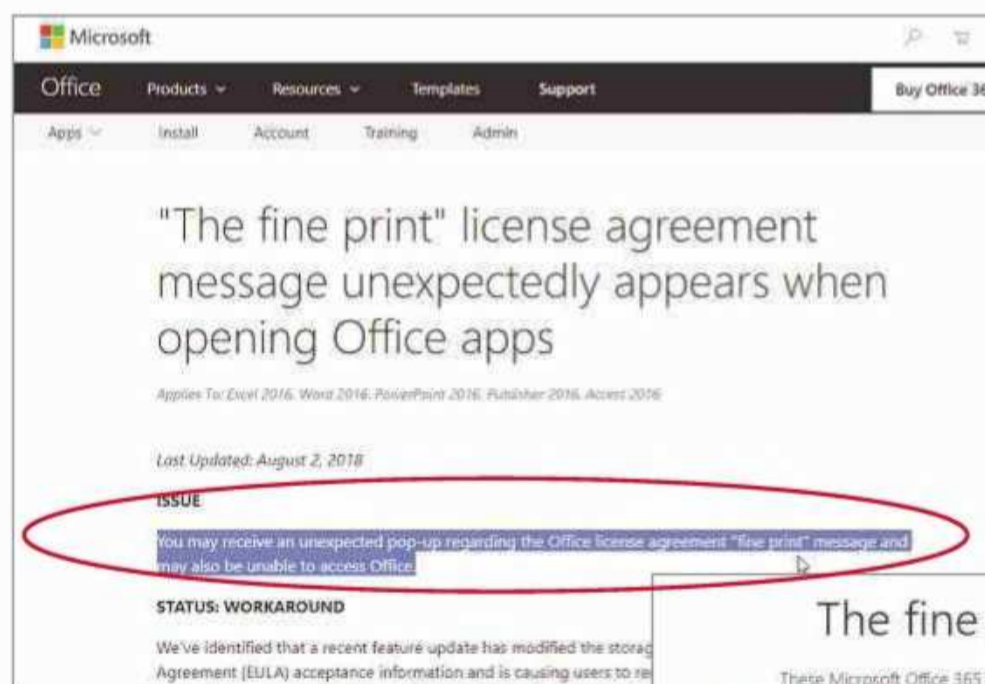
To find your WPS files in Word, choose this option in the 'File name' dropdown menu

## Is this this 'fine print' Microsoft message legitimate?

**Q** My company has not one but two subscriptions to your excellent magazine, not least because your practical information has rescued me and my business on more than one occasion. I would be grateful if you could advise me on whether or not I should click and accept a window headed 'Fine Print' and purporting to be from Microsoft, which is stopping me from accessing Word, Outlook, Excel and PowerPoint. It appears to be forcing me to accept the fine print, and is blocking me from receiving or sending emails. I would be grateful for your thoughts.

Malcolm Dickinson

**A** This is a legitimate Microsoft message, but it's also one that's caused by a bug in an update rolled out by the company – and one that it's since reverted, so it won't affect others in the future. The Fine Print box is meant



Microsoft is aware of the bug causing the "fine print" pop-up (left), but it is safe to accept the licence agreement (below)

to appear only when Office is first installed but, because of this bug, it has begun popping up randomly for some users.

You'll find Microsoft's brief explanation for the situation at [www.snipca.com/28915](http://www.snipca.com/28915) (see screenshot above). However, while it's certainly very wise to be cautious about interacting with random pop-ups, as long as this one appears only when you launch an Office program, all you really need to know is that it's almost certainly the real deal. As



such, it's safe to click the 'Accept and start...' button (see screenshot above). Then, you'll be able to use your Office programs as normal.



# Problems **Solved**

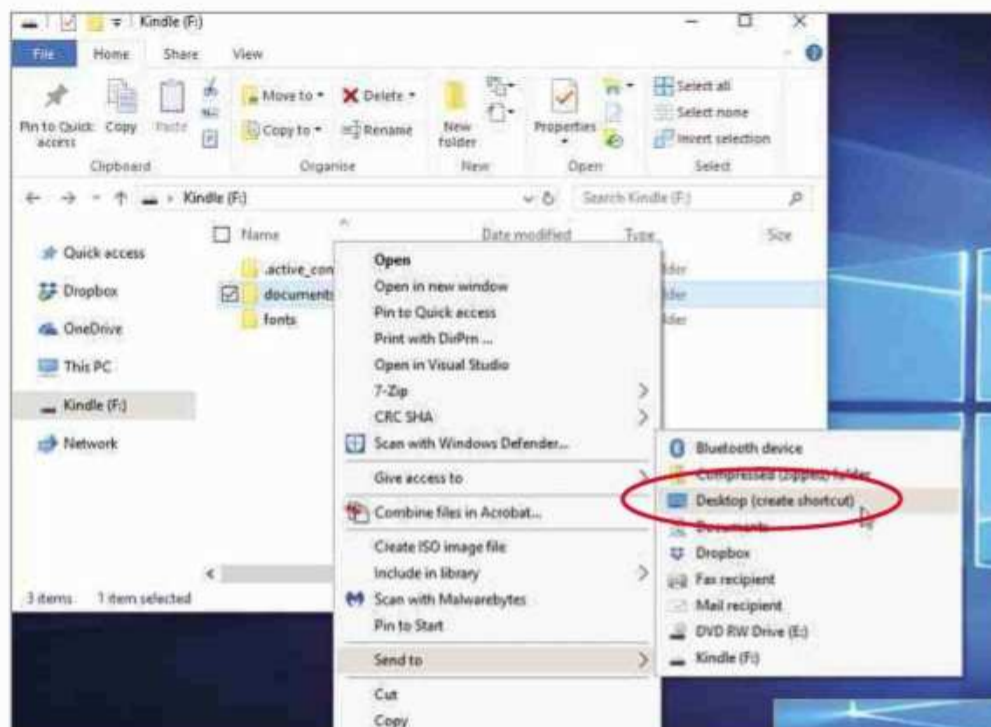
## How do I create a Kindle shortcut?

**Q** In Issue 533 you said that Peter C Inglis might previously have had a shortcut set up to the Documents folder on his Kindle tablet. This sounds like just what I need for my Kindle Paperwhite ebook reader. Could you tell me if it's still possible to do this with a Windows 10 PC, and if so how? Thanks.

Phillipa Stern

**A** Yes, it's still possible – and the process is no different to creating any other shortcut for the Windows Desktop. In fact, the only requirement is that your Kindle (Paperwhite or any other model) needs to be connected to your PC – both to make the shortcut in the first place and then to make use of it.

So, first connect your Paperwhite to your PC using a **microUSB** cable, then wait for its screen to change to display the message 'USB Drive Mode'. Now, on your



Create a shortcut on your PC to your Kindle's documents folder (left), then rename it (below)

PC, press Windows key+E to launch File Explorer. Navigate to your Paperwhite (under This PC) and then find the folder to which you want to create a shortcut – which is most likely to be 'documents' (that's Amazon's lowercase styling, not ours). Now right-click 'documents', then point to 'Sent to' and click 'Desktop (create shortcut)' (see screenshot above).

That's the job done. However, if you

want to give the shortcut a more meaningful name, first right-click the icon and choose Rename. Now just type the new name (see screenshot above) and press Enter.

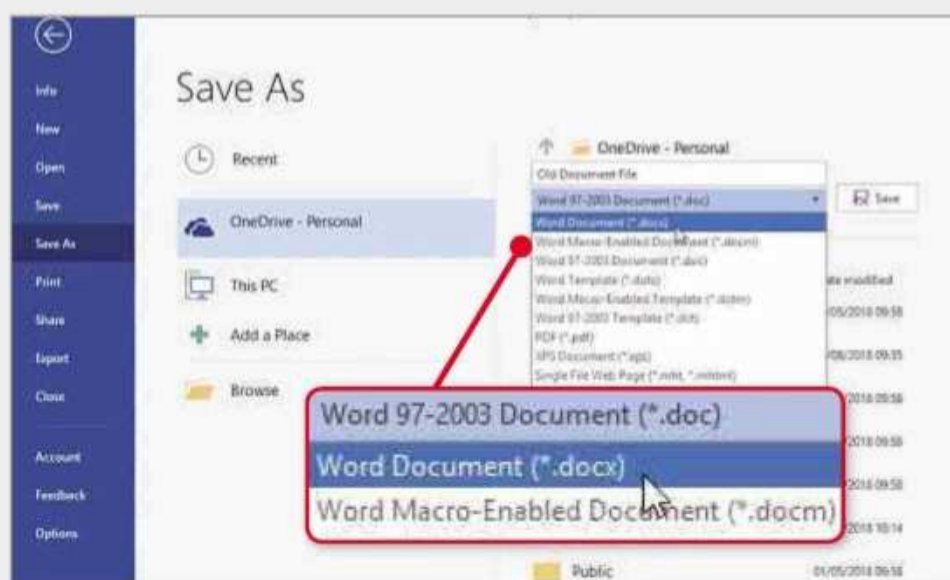
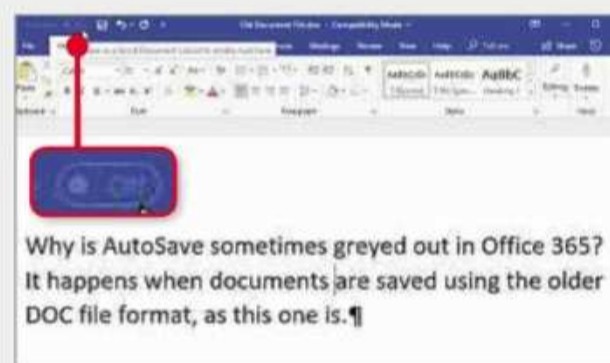


## Why is my AutoSave switch intermittent?

**Q** I've taken onboard some of your security advice and upgraded from Office 2003 to Office 365 – mainly using Word. However, I'm confused as to why the AutoSave switch at the top left only sometimes works (see screenshot right)? What I mean is that on some documents I can use it but on others it remains steadfastly off (see screenshot far right), no matter how much I click it. Do you know why? Brian Hartley

**A** Yes. This is because the AutoSave function works only on documents saved using Microsoft's newer DOCX file format, not the older DOC format. Many of your existing documents were probably created in this older format – the AutoSave switch will be automatically disabled when you open one of these.

If you want the reassurance of being able to use the AutoSave function then re-save the documents



To make use of the Autosave switch in Word (above) make sure you save your older documents in the DOCX file format (left)

as DOCX formats. First, click File followed by Save As. Now click to open the dropdown menu to the left of the

Save button, choose 'Word Document (\*.docx)' (see screenshot above), then click Save.





## WHAT'S THE DIFFERENCE BETWEEN...

### Mice?

**Q** I went looking for a new mouse because my trusty old Microsoft model that I've been using since the year dot has started playing up. Not a difficult purchase you'd think – but the choice is nothing short of overwhelming. I know I want a wireless mouse and there were plenty of cheapo ones on offer, even from big-name brands I know and trust.

However, while looking at the boxes in PC World I saw that some mice are described as 'optical', others as 'LED' and a few more besides as 'laser'. Some wireless adapters were described as 2.4GHz, while others were Bluetooth. Then there's all the dpi numbers, which vary wildly. I saw statements like "up to 2000dpi" and claims of "16,400dpi". What, if any of it, actually matters?

Rodney Spooner

**A** We're tempted to say that, for the average Windows 10 user, none of it really matters. Put another way, even a budget wireless

mouse – like the pictured £11 AmazonBasics model ([www.snipca.com/28884](http://www.snipca.com/28884)) – will satisfy day-to-day navigational needs.

Where some of these specification options do count is for particular niches, like gaming or graphic design. However, forget about the differing descriptions of the wireless connection, because in the context of mice '2.4GHz' and Bluetooth are one and the same. It's just that some manufacturers flit interchangeably between the technology's brand name (Bluetooth) and the part of the radio spectrum it uses (2.4GHz).

The key component is the sensor. These days that means an optical eye that projects its gaze using either LED or laser technology. The former is cheaper and generally works brilliantly, but mice built with lasers tend to offer much higher 'tracking' accuracy. This



AmazonBasics mice are good enough for most Windows users' everyday needs

relates to those 'dpi' numbers, which determines how many dots (or points on your mousepad or desk) your mouse will detect for every inch it's moved.

For gamers and designers, where the tiniest movements can mean the difference between life and death or a fine or flawed brush stroke, a higher dpi can matter. For the rest of us, a cheaper mouse will do just fine.

✉ What to know the difference between technical terms? Email [noproblem@computeractive.co.uk](mailto:noproblem@computeractive.co.uk)

## Where's my 3D option in Google Maps?

**Q** For some reason the 3D button has vanished from my Google Maps. One day it was there, right above the zoom controls, in the satellite view – the next day it was gone. I then tried the service in Microsoft Edge (which I don't like) and the button was there. Do you know if this is something Google has removed from Chrome for some reason?

Gary Morrison

**A** Google hasn't removed this mode from Chrome. However, we wonder if you followed our answer to George Ward, in Issue 535's Problems Solved section (page 69)? We ask because the cause of your problem is almost certainly a switch that we mentioned in our reply to Mr Ward.

He was having problems with a disappearing status bar, which is the result of a long-standing Chrome bug.



Use Google Maps' 3D mode in Chrome by enabling hardware acceleration in the browser

Flipping the 'Use hardware acceleration when available' switch to its Off position fixes that particular problem, albeit sometimes temporarily if then switched back to On. As the vanishing status bar is a common problem we suppose you may have followed our advice to solve or head off this problem yourself.

However, if this switch is not re-enabled afterwards then precisely this quirk can result – because the 3D feature of Google Maps requires Chrome's hardware acceleration to be enabled. The solution,

then, is to do just that. Open the Chrome menu (by clicking the three dots, at the top right). Next, scroll down the Advanced heading, and click it. Now, scroll down to the System section, then click 'Use hardware acceleration when available' back to its On position. Finally, click the Relaunch button.

## Next Issue

ON SALE  
Weds  
10 Oct

- Will uninstalling EasyMail delete my Gmail account?
- How do I make PDFs?
- How do I stop iTunes launching?
- ...And many more

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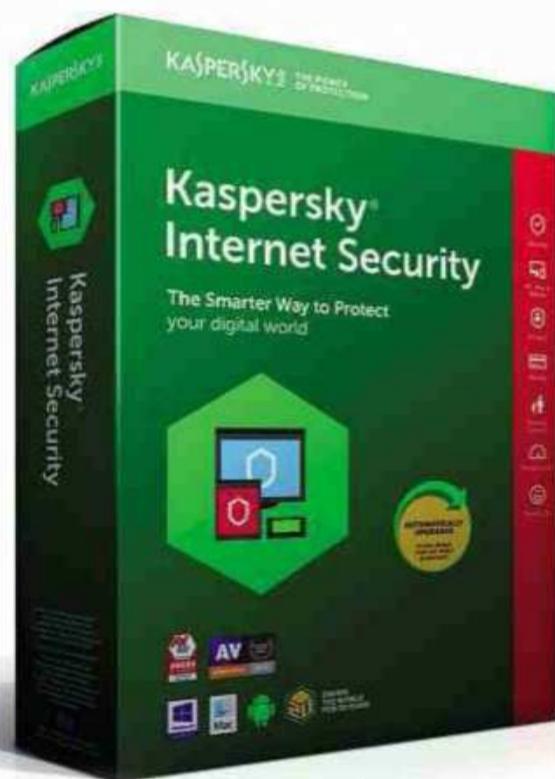
## OFFER OF THE FORTNIGHT

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# Problems **Solved**

## Reader Support

Having a problem with our recommended software or expert tips? Email [editor@computeractive.co.uk](mailto:editor@computeractive.co.uk) and we'll do our best to help

### Why can't I edit PDFs?

**Q** I've been trying to use the tip by reader Lyle Waters (Issue 535, page 42). He says that PDFs can be edited in Microsoft Word. Well, not for me they can't! Following his instructions, after File, then Open I get a File Conversion box, which is not mentioned by Lyle. After this, all I see is lines of code – not a meaningful document. Not only that, the page count shows that a single PDF is now over 200 pages of code. I'm clearly missing something here? I'm using Word 2010, incidentally.

David Bevan

**A** What you're missing is a later version of Word, because this trick works only with Word 2013 and later. Lyle must be using a later version of Word, and therefore had no way of knowing that his tip wouldn't work in older versions.

Therefore there's no fix as such, but there are other ways to turn PDFs into Word documents. Perhaps the easiest way is to visit file-conversion website Zamzar, at [www.zamzar.com](http://www.zamzar.com). Click the Convert Files tab, then Choose Files. Now, under the Step 2 heading, open the dropdown menu, then choose the desired file format (DOCX in your case). Next, under Step 3, type your email address then click Convert (see screenshot below).



Use Zamzar's online service to convert PDFs to Word documents

Shortly after this, you'll receive an email with a download link for your converted document.

### Why is the Dropbox add-in unavailable to me?

**Q** I followed the instructions in Issue 535's Cover Feature for installing the Dropbox add-in in Outlook (page 53). However, when I create a new email the Dropbox icon is greyed out and there's no link to the Dropbox files. I have made sure I have the latest version of Dropbox installed. What's going on?

Ron Raine

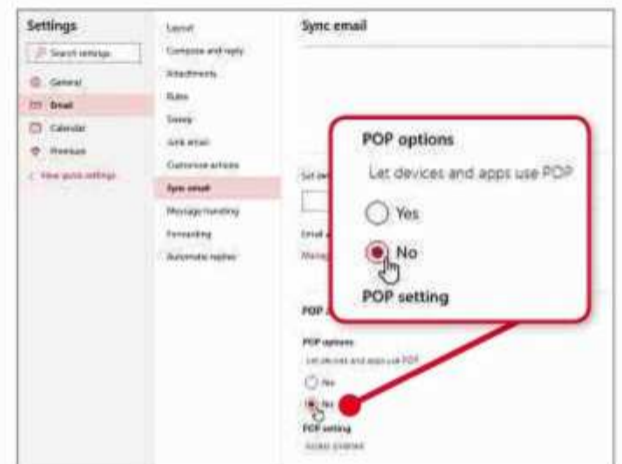
**A** This and a few other add-ins work only with particular types of email accounts. The Dropbox add-in requires an email account that synchronises using Microsoft Exchange. In simple terms, that typically means a Microsoft email address ending in 'outlook.com' or 'hotmail.com'.

If you are using a Microsoft email address and you still can't use this feature it's likely that, for whatever reason, you are synchronising your inbox using the older POP3 system. While Microsoft still allows this for hotmail.com (and even outlook.com) addresses, it's no good if you want to keep up with the times.

In Outlook (the desktop program) you can't convert an existing POP3 account to an Exchange one. So, if you really want to use this Dropbox add-in, you'll need to set up your account afresh.

First, log on to the webmail version of your Microsoft email account, at [www.outlook.com](http://www.outlook.com). Click the Settings cog at the top right, followed by 'View all Outlook settings'. Now, in the middle pane, click 'Sync email' then, in the right-hand pane, scroll down to 'POP options' and make sure No is selected (see screenshot above right). Click Save.

Back in the Outlook PC program, click File followed by Account Settings, then Account Settings again. Now click New,



To ensure the Dropbox add-in for Outlook works, first disable your account's POP setting

type your Microsoft email address followed by Connect, then follow the prompts.

### How do I alter my mouse's speed?

**Q** I have an ancient Windows XP PC that I use only offline, for a bit of writing with WordPad, because I know it's no longer safe for me to use it online. As I've gotten more ancient myself I find using the mouse more difficult, so I was interested in the program you recommended in Issue 535's Best Free Software pages for slowing down the cursor. I can't download KeepMouseSpeedOK ([www.snipca.com/28837](http://www.snipca.com/28837)) because, as I say, my computer isn't online (I use an iPad for online stuff). However, when I click Start then type **mouse speed** nothing happens. What am I doing wrong?

Norman Barker





**A** Nothing, but that particular method works only in more recent versions of Windows. We should have realised that there would be a few XP-using readers who may want to try it, but no matter because you can still get to the feature in another way.

First, press Windows key+R to open the Run box. Now type **main.cpl** then press Enter. Finally, click to select the Pointer Options tab and then, under the Motion heading, click and drag the slider to the left, then click OK.



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# Jargon **Buster**

**16 bit/32bit/64bit** A measure of how much information a computer can process at once. Most older computers are 32bit, more modern ones are 64bit. Windows 1.0, launched in 1985, was 16bit.

**4K** Video with a resolution of at least 3840x2160 pixels.

**Add-in** Microsoft's name for tools that can be added to Office software.

**ADSL** Asymmetric Digital Subscriber Line. A technology that converts a standard phone line into a broadband internet connection.

**Bandwidth** A measure of how much information can be transferred through a connection at one time.

**Benchmarking** Comparing software and products with an accepted standard.

**Blue light** Light given off by PC and phone screens. Can disrupt sleep patterns.

**Cache** A temporary space for storing information. Can be memory used on a computer processor, or space on a hard drive used by a web browser.

**Core** Units on a processor that carry out program instructions.

**Delta E** A measurement that shows how the human eye perceives different colours.

**Digital stabilisation** A technique that can attempt to remove blur from a photo or video by digitally processing the result. Not as effective as optical stabilisation.

**Direct3D** Part of Windows that renders three-dimensional graphics.

**dpi** Dots per inch. A measure of printed image quality, or the size an object will be shown on screen.

**Driver** A file that tells Windows how to work with an external device.

**eMMC** Flash storage commonly found in cheap laptops and tablets. It's slower than a solid-state drive.

**Executable (EXE) file** A program file designed to run in Windows.

**Extension** A program that adds extra features to your browser.

**Firmware** Basic software stored on hardware, such as a processor, to control its operation.

**GEDCOM** Short for Genealogical Data Communication. A file format used by genealogy programs to share data.

**GHz** Gigahertz. A measure of how many instructions a chip can process per second. 1GHz is equal to 1,000MHz.

**Graphics card** A component in a computer that produces the image shown on the monitor.

**H.264** A type of MPEG4 video that is used on Blu-ray discs and recorded by many cameras and camcorders.

**HDMI** High-definition media interface. A type of connection that transmits high-definition video and audio signals.

**Hotspot** A public area covered by a Wi-Fi network that allows you to access the internet, either free or for a fee.

**IDE** Integrated Drive Electronics. An interface used to connect some hard drives and optical disc drives. Often called ATA.

**Image noise** Visible dust-like speckles that appear in some camera and TV images.

**IP address** Internet Protocol address. A unique set of numbers used to identify computers and websites on the internet.

**LCD** Liquid-crystal display. The technology used to create almost all flatscreen monitors.

**LED** Light-emitting diode. An electronic device that emits light.

**MAC address** Media Access Control. A unique code that identifies any router. A laptop might have one MAC for its wired network socket and another for wireless.

**Mesh Wi-Fi** Wireless network solution that uses multiple, connected routers to stretch Wi-Fi further than a traditional router.

**Microfibre** Synthetic fibre with a diameter less than 10 micrometres (smaller than silk).

**MicroSD card** A small type of memory card. Can be converted to SD size using an adapter.

**MicroUSB** A miniature version of USB, often found on smartphones, tablets and portable hard drives.

**Noise margin** The amount by which a signal exceeds the minimum to work properly.

**Open source** Software that can be modified by anyone, rather than just by the employees of the company that created it.

**Plug-in** A small program that adds extra features to software or to your web browser.

**POP3** Post Office Protocol 3. A system for remotely accessing and retrieving email from an ISP.

**Product key** A unique serial number issued by software companies that must be typed by the user before a program will launch for the first time.

**Protune** Advanced tools for editing GoPro footage.

**RAM** Random-access memory. The computer's working area, used for data storage.

**Ransomware** Malware run by hackers who lock files on your PC and demand a payment to release them.

**Read speed** How long it takes a hard drive to 'read' data, and respond to it.

**SATA** Serial ATA. An interface for connecting modern hard drives and optical discs to a computer.

**Script** A short program that is stored on a web server to control part of a website. For example, a script could check that a date you have entered is valid, or move words across the screen.

**Server** A computer on a network, such as the internet, that distributes information to other PCs.

**SIM** Subscriber Identity Module. The smart card used by all digital mobile phones. The SIM card carries the user's identity and phone number for accessing the network.

**Simulator** A video game that simulates real-world activities.

**sRGB** A standard RGB colour space for use on monitors, printers and the internet.

**SSD** Solid-state drive. Storage that, unlike a hard drive, uses no moving parts. Faster but more expensive than conventional hard drives.

**SSID** Service Set Identifier. A name used to identify a wireless network.

**SteamVR** The operating system that runs on some virtual-reality gaming headsets.

**Throughput** Broadband speed that takes into account limitations such as how many others are using the service.

**Thunderbolt 3** A very fast port for connecting external storage to a PC.

**USB 2.0/3.0/3.1** Faster successors to USB.

**USB Type-C** A new connector that's reversible, letting you plug it in upside down.

**VDSL/VDSL2** Very-high-bit-rate digital subscriber line 2. Broadband data-transmission technology capable of simultaneous upload and download rates in excess of 100Mbps.

**Virtual PC** A Windows tool that enables you to run a second 'virtual' operating system on a PC, such as running a version of XP in a Windows 7 computer to use older programs.

**Write speed** How long it takes a hard drive to save data.

**ZIP file** A file that contains compressed documents or files.



# Easy when you **Know How**



Tired of bashing her keys into a pulp with two fingers **Jane Hoskyn** decides it's high time she learned to...

## Touch-type

**W**hat type of typist are you? Are you a poised touch-typist, never needing to look at the keyboard? Or do you frown blindly into your keys as you beat them senseless with a pair of index fingers that could flatten tarmac?

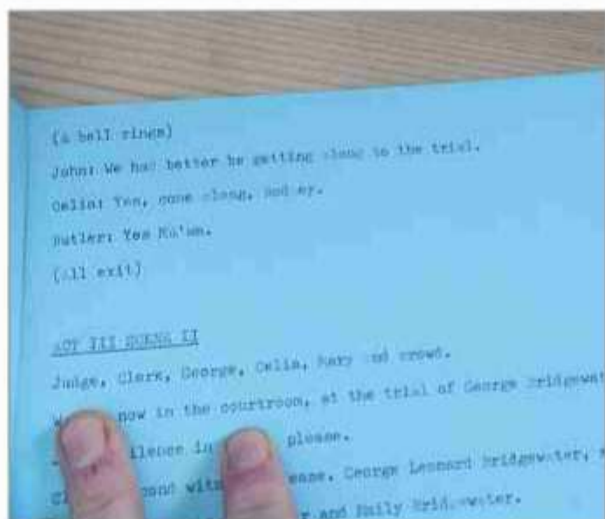
“

Because I was self-taught, I never bothered to touch-type. Temps and secretaries touch-typed. Lois Lane didn't

”

I am the latter, and I'm going to guess you are too. Like me, you were a child of the BC era (Before Computers). The luckiest among us had access to manual typewriters that demanded a heavy hand, and old typing habits die hard.

When I was nine, my parents gave me a typewriter for my birthday. Nowadays you see these poor machines propping up menus in trendy bistros, but back then they were the latest in dignified typing



My young self didn't throw parties to annoy the neighbours – she stayed up typing plays



'Try not to bang the keys' admonished the KeyBlaze touch-typing test

tech. I spent hours hammering those keys (writing plays – see image below) with a passion and fury that reverberated through the walls of our council house.

Because I was self-taught, I never bothered to touch-type. Temps and secretaries touch-typed. Lois Lane didn't. Indulging my inner Lois, I looked down at the keys and jabbed them with two index fingers. Very, very fast.

But the world has changed. Today's corporate offices are staffed by dazzling millennial execs who touch-type in near-silence, eyes fixed on their screens and ears plugged into Spotify. These kids grew up doing their homework on laptops, and they seem as naturally adept at touchscreen thumb-typing (I can't do that, either). I've tried working among them and always felt like the galumphing ape at the beginning of *2001: A Space Odyssey*, hitting my keyboard and grunting.

The web is full of free typing tuition, but quality varies somewhat. The TakeNote Audio Test ([www.snipca.com/28951](http://www.snipca.com/28951)) really puts the “er?” into QWERTY. It's supposed to test your typing speed, but it mainly tests how well you can understand a tinny recording of a posh gal. I lasted seven seconds.

YouTube video 'Learn the basics of touch-typing with KeyBlaze' inspired me to install the free program KeyBlaze Typing Tutor ([www.snipca.com/28950](http://www.snipca.com/28950)), which launches with another speed test. This one's screen-based, so you have to read and type at the same time (the essence of touch-typing). I didn't fare badly, but my 54 words-per-minute 'net' score (after mistakes) came with the admonishment: “Try not to bang the keys” (see screenshot above). Thanks, I know.

Finally, I found genuinely useful tips from Key Hero ([www.snipca.com/28952](http://www.snipca.com/28952)). Don't worry about your speed for now, goes the advice. Aim for accuracy, then speed will come with practice. The site offers free lessons and tests ([www.keyhero.com/typing-practice](http://www.keyhero.com/typing-practice)). If I were to commit to learning to touch-type, I'd use Key Hero. But there's the rub. I already like the way I type. It's me. It works.

Once you start analysing your actions, you stop acting naturally. I type as fast as I speak, often much more fluently – and I believe that's partly down to not reading my words as I write them. You touch-type if you want to. On this tech topic at least, the lady's not for learning.

Need help getting your typing skills up to speed? Let us know: [noproblem@computeractive.co.uk](mailto:noproblem@computeractive.co.uk)





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