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Computer active
ISSUE 449 | 13 – 26 MAY 2015
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From the Editor

Superfish may sound like the world's worst superhero (great in water, less so on land), but it's actually a shocking piece of adware that Lenovo pre-installed on some laptops it made between September 2014 and January 2015. Its trick was to force adverts into your Google search results that Lenovo wanted you to see. A nice little earner for Lenovo (up to $250,000 apparently), but a right pain in the hard drive for you. The adverts were bad enough, but Superfish also left you vulnerable to being hacked.

After dragging its feet, Lenovo eventually released a tool to remove Superfish (see our Cover Feature), but the depressing affair highlighted just how much junk gets added to computers before you buy them. Most aren't as damaging as Superfish, but many are useless, and will slow your PC. Phones and tablets also come swamped with pre-installed apps you don't need. Turn to page 50 to see how you can obliterate all this rubbish.

Daniel Booth
editor@computeractive.co.uk

THIS ISSUE IN NUMBERS

35,640
Number of Metropolitan Police computers still running XP – *p8*

22 hours
Astonishing battery life of the new Apple MacBook Pro – *p21*

£40
How much you could get selling old graphics cards on eBay – *p57*

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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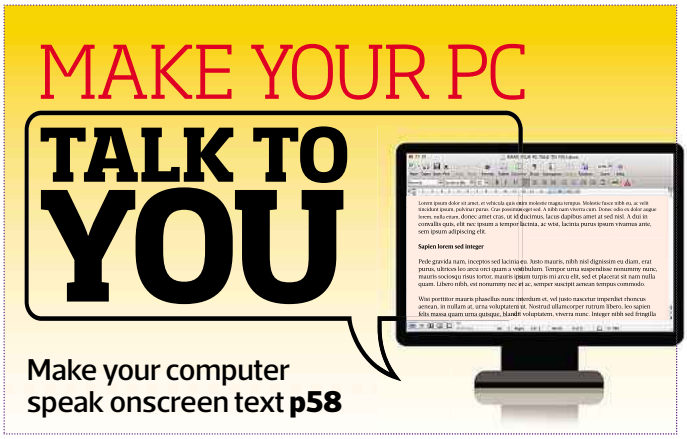

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Computeractive offer of the fortnight

Kaspersky Internet Security 2015 page 68

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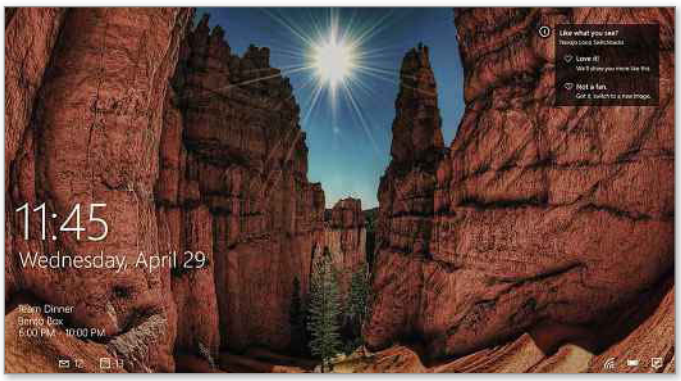
Microsoft names new browser as Windows 10 'edges' closer

The browser that Microsoft will include as the default in Windows 10 to replace Internet Explorer (IE) now has a name, Edge, and a logo (see image below). It was announced at the company's Build Developer Conference in San Francisco in late April.

Until now Edge has been codenamed Project Spartan, and first appeared on 30 March in Build 10049 of the Windows 10 Technical Preview. It has a minimalist design that Microsoft hopes will attract people who favour the simplicity of Google's Chrome and Mozilla's Firefox.

Edge contains tools that Chrome and Firefox lack, including Reading View which declutters web pages by removing adverts and links. It also lets you draw on web pages using your mouse cursor. We explained how to use Edge in a Workshop in Issue 448.



Android and iOS apps on Windows

Microsoft also announced that it's making it easier for software developers to build versions of their Android and iOS apps to run on any device with Windows 10, including PCs, phones, tablets, TVs and the Xbox One games console. Developers are also being encouraged to build apps and add-ons that work within the company's products, such as Word and Excel.

Terry Myerson, Microsoft's executive vice president of operating systems, said that these landmark decisions will help Microsoft hit its target of getting Windows 10 on 1 billion devices "within the next two to three years". To do that, Microsoft needs to make Windows 10 a more universal operating system, appealing to people who prefer apps and software tools that run online and on mobile devices.

Adverts on the lock screen?

The news that developers will face less obstacles when building apps for Windows 10 was well received by tech experts. Less enthusiastic was the response that greeted Microsoft's unveiling of its new lock screen, called Spotlight. It will suggest Windows apps you may be interested in based on how you use your computer – recommendations that some users will interpret as irritating adverts.

As shown in the screenshot above, Spotlight will display a full-screen photo - echoing Microsoft's search engine Bing - along with an app suggestion top right. If you don't like Spotlight, you can turn it off.

Finally, Microsoft will delight millions of users by bringing back Solitaire as a built-in game in Windows 10. It had been included in every version of the operating system between Windows 3.0 in 1990 and Windows 7. Its absence from Windows 8 angered many people, although a version of the game can be downloaded from the Windows Store. It's not yet known whether Minesweeper and Hearts, which were also absent from Windows 8, will return in Windows 10.

Microsoft has yet to announce Windows 10's final release date, though in April Lisa Su, the CEO of US processor manufacturer AMD, said it would arrive in "late July". This was significant because AMD works with Microsoft on developing new hardware. Microsoft's official stance remains that Windows 10 will be released "this summer".

Discover how to download the latest version of Windows 10 on page 35.

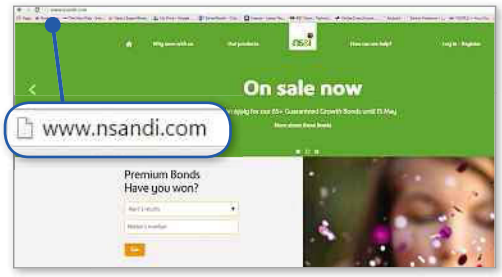
COMMENT

Microsoft will be happy that its decision to make apps easier to build for Windows grabbed the headlines, and that's certainly welcome news. But we raised a bigger cheer when Solitaire's return was revealed. We know many of you were left flabbergasted by its absence in Windows 8. Yes, you can still download it from the Windows Store, but Microsoft's assumption that people didn't want it built in was a mistake. We're less excited by Spotlight. Don't we get enough personal recommendations already?

☺ ***You'll like this...*** Download Nasa's free ebook to mark Hubble's 25th birthday (www.snipca.com/16393)

☹ ***... but not this*** Problems at Tesco Broadband left thousands of people offline (www.snipca.com/16392)

Look out for fake NS&I website, pensioners warned



Online scammers are trying to con pensioners out of money using a fake website that claims to be the official National Savings & Investments (NS&I) site and offer the opportunity to apply for a 65+ Bond.

Action Fraud said that some Google searches for the NS&I website are producing fake results. If a person clicks one and submits their personal information, the scammers will follow up with an email and/or phone call asking for proof of ID and their bank details.

Many of the emails seen by Action Fraud are addressed "To whom it may concern" and signed "Best Regards, Kevin Archer".

You can see what the fake website looks like on the official NS&I site at www.snipca.com/16384, although its appearance is likely to change as people become wise to the scam. The NS&I site also shows a typical email that fraudsters are currently sending. Pensioners have until 15 May to open a 65+ Bond, which pays between 2.8 and 4 per cent taxed interest.

The warning came a month after Steve Webb, pensions minister in the previous Government, predicted a "plague" of pension-related scams, as fraudsters exploit the confusion about the new regulations that kicked in on 6 April.

He said at the time: "If you are promised a really eye-catching interest rate above what you'd expect, it's almost always too good to be true".

To stay safe, only visit the NS&I website by typing www.nsandi.com into your browser bar (see screenshot above). NS&I will never try to sell you a service over the phone.

To report a scam email to NS&I, forward it to **phishing@nsandi.com**. If you think you've fallen victim to a scam, phone NS&I on 0500 007 007.

For more advice on how to avoid pension scams, visit the Government's Pension Wise website: www.pensionwise.gov.uk/scams. It reveals tactics that fraudsters commonly use.

Amazon doubles free-delivery minimum to £20 – except for books

Amazon has doubled the minimum amount you typically need to spend in order to qualify for free delivery. You now have to spend £20 to receive your purchase by Amazon's Free Super Saver Delivery service. However, any order under £20 that includes a book will still be eligible for free delivery.

The website explained the reasons behind the increase in an online statement (www.snipca.com/16395).

Amazon hopes the move will encourage more customers to pay £79 a year for its Prime service (www.amazon.co.uk/prime), which includes free next-day delivery on thousands of items.

Prime members also get access to Prime Instant Video streaming services (which will soon start streaming in 4K), cloud storage, the Kindle lending library and other Amazon-related services.

This isn't the first time Amazon has increased its delivery prices. Originally Super Saver Delivery was completely free, and it took three to five working days for your item to be delivered. However, Amazon introduced a £10 minimum spend in July 2013, meaning many DVD, CD, Blu-ray and game purchases no longer qualified for free delivery.

Regular Amazon customers would probably save money by upgrading to Prime, but it would depend on how many purchases they make every year. For example, someone making 19 separate orders under £20 in a 12-month period will save money using Prime.

For full details of Amazon's delivery options, visit www.snipca.com/16396.

Will this make you less likely to shop at Amazon? Let us know at letters@computeractive.co.uk

IN BRIEF

UPDATE WORDPRESS WITH CRITICAL FIX

WordPress has issued a "critical" security update to fix a vulnerability that let hackers take over websites simply by leaving a comment. Finnish security researcher Jouko Pynnönen went public with the flaw in a blog post (www.snipca.com/16379) after, he claims, trying to contact WordPress about it since November 2014. WordPress responded two days later by releasing the fix, which you can install at www.snipca.com/16378.

FREE VIDEO CALLS ON FACEBOOK

Facebook has added video-calling to its Messenger app, providing another alternative to services such as Skype and Apple's FaceTime. You can start a free video call simply by pressing the video-camera icon while chatting online. The two people talking don't need to be using the same mobile platform, so an iPhone user can talk to an Android user. Download Messenger for iOS at www.snipca.com/16381 and for Android at www.snipca.com/16382.

Tomorrow's world

Solar panels and digital cameras both contain photodiodes, which convert light into an electric current. Scientists at New York's Columbia University realised this meant they could build a camera powered only by the light it uses to take photos. The results so far are very grainy (watch the video at www.snipca.com/16272), but it's a step towards a camera that never requires charging.

IN BRIEF

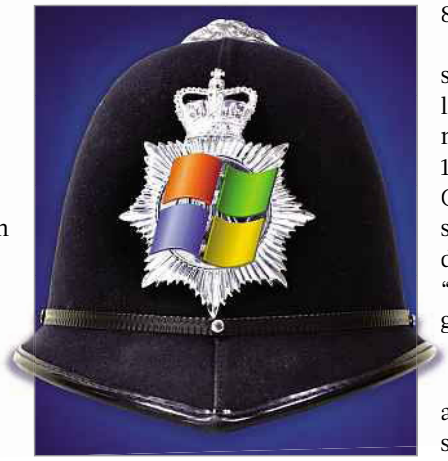
SEARCH FOR NESSIE IN STREET VIEW

Google has joined the search for the Loch Ness Monster by photographing the famous lake for Street View. You can see a Nessie's-eye-view of nearby landmarks, including Urquhart Castle and Fort Augustus Abbey, plus some stunning images of the sun shining on the Loch. To see the photos visit www.snipca.com/16323.

DOWNLOAD NEW VERSION OF UBUNTU

Ubuntu 15.04, also called Vivid Vervet after the East African monkey, is now available to download from http://releases.ubuntu.com/15.04. The developers of the open-source operating system said that the focus of the release was to fix bugs and make "incremental" improvements, rather than add significant new features. You can read what's new at www.snipca.com/16290.

35,000 Met Police computers still use XP – a *year* after support ended



Over 35,000 computers used by the Metropolitan Police are still running Windows XP, despite Microsoft ending public support for the operating system last year.

The force signed a Custom Support Agreement (CSA) with Microsoft last year. This is a paid-for service that lets organisations continue receiving security patches and other crucial updates.

A deal to renew this agreement for a further 12 months is being negotiated, the Met confirmed, even though the machines running XP are likely to be less secure than those running Windows 7 or 8.

The figures came from news website Motherboard (www.snipca.com/16324), after it submitted a Freedom of Information request.

The response to the request read: "We have currently got 35,640 Desktop and Laptop computers running windows XP across all departments within the MET [Metropolitan Police]".

Officials within the Met said they couldn't provide a breakdown of XP usage by department because "many systems are shared and do not necessarily belong to an individual".

A spokesperson for the force said it "has an active upgrade programme to move users on to the latest released Windows 8.1 operating system".

The Government also signed a CSA with Microsoft last year, paying £5.5 million for an additional 12 months' XP support. A Cabinet Office spokesperson said at the time that the deal would provide "continuity for all eligible government and public sector organisations while they migrate on to alternative operating systems".

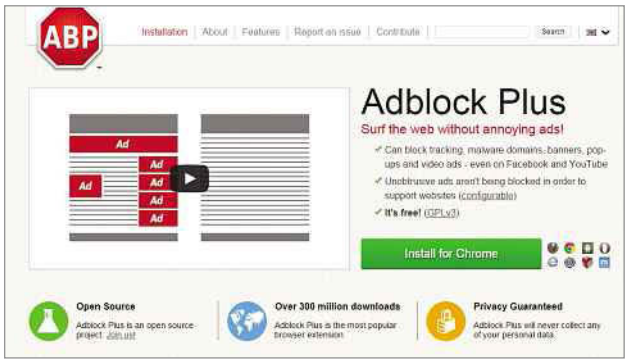
That deal expired on 8 April 2015, but neither the Government nor Microsoft has revealed how much it would cost to extend support for another 12 months.

Despite the security risks of running XP, it is still used by millions of people worldwide. Statistics released in March showed that XP was still running on 19.15 per cent of computers after it grew in popularity by 0.22 per cent between January and February this year.

It *is* legal to block web adverts, rules German court

Adblock Plus has won a court case in Germany against two news-publishing companies who insisted that its advert-blocking extension should be made illegal.

The publishers of German newspapers *Die Zeit* and *Handelsblatt* sued the Cologne-based company Eyeo, which owns Adblock Plus. Their claim that the extension is anti-competitive and limits their ability to make money was dismissed by a Hamburg court following a four-month legal case.



In a blog post (www.snipca.com/16310) Adblock Plus's project manager Ben Williams hailed the decision as "a victory for every single internet user".

He wrote that it "sets a precedent that may help us avoid additional lawsuits and expenses defending what we feel is an obvious consumer right: giving people the ability to control their own screens by letting them block annoying ads and protect their privacy".

Eyeo said it will now talk to other publishers and advertisers to encourage them to develop new forms of "non-intrusive adverts" that don't interrupt people's web-browsing experience. The company makes money by charging some of the biggest tech firms, including Google and Microsoft, to allow their adverts to be shown.

However, the publishers of the German newspapers indicated that they may continue the legal fight, saying in a joint statement that Adblock Plus "infringes the freedom of the press".

They said: "We will await the written reasons for the judgment, analyse them and examine the prospects of an appeals procedure".

You can download Adblock Plus for free from https://adblockplus.org. It works on Chrome, Firefox, Internet Explorer, Opera, Safari and Android.

Question of the Fortnight

Will you soon be swallowing passwords?

A PayPal 'evangelist' says that pills could be powered by stomach acid to log you into your favourite websites. Gulp!

It's an idea wacky enough to give you indigestion. A leading executive at PayPal has said you could soon be swallowing pills containing tiny batteries that are powered by the acid in your stomach. Jonathan LeBlanc (pictured below), PayPal's global head of developer evangelism, said that the capsules would detect internal chemical features unique to your body, such as your glucose level, letting you sign into a computer or website.

> "Capsules would detect internal chemical features unique to each person's body, such as their glucose level"

At this point you may want to check that this issue of *Computeractive* isn't dated 1 April. After all, you've probably only just got your head around the idea of computers being able to read your fingerprints, eyes and face (see 'What's All the Fuss About?', Issue 448). These forms of biometric technology may seem cutting edge, but LeBlanc already calls them "antiquated".

As well as swallowing pills to gain access to PCs, LeBlanc says users could have thin silicon chips implanted under the skin. These would contain sensors that monitor the person's unique heart electrical activity, which would be read by a computer. Another new technology is vein recognition, in which devices recognise the unique pattern of veins in a person's finger - a system that Barclays Bank is already developing (www.snipca.com/16339).

You'd be right in thinking that LeBlanc must really hate typing passwords to have suggested such a bizarre idea. The title of the presentation he gives at security conferences is 'Kill all Passwords'. But there's more to his proposals than merely despair at those millions of people who still sign in using '123456'. A clue to his vision lies in the final word of his job title: 'evangelism'. He's part of a new breed of 'futurists' at tech companies whose role is to suggest new, seemingly far-fetched ways in which technology could be used.

In a recent interview with the *Wall Street Journal* LeBlanc admitted that things "get a little strange" towards the end of his presentations. Some would go further and say things get very unsettling, especially when he talks of technology attaining "true integration with the human body".

Perhaps all too aware that LeBlanc's ideas might be hard to swallow (both literally and figuratively), PayPal said in a statement that it has "no plans to develop injectable or edible verification systems". However, it also said that "it's clear that passwords as we know them will evolve and we aim to be at the forefront of those developments".

In other words, PayPal is implying that you shouldn't rule anything out. Beneath the company's reticence, it's clear that PayPal wants to be a pioneer in security technology. LeBlanc says the company is working on a fingerprint scanner, and is in talks with partners about building devices that recognise vein patterns and heart activity.

PayPal will certainly want to stay ahead of other companies making progress in this field, including leading security firm Kaspersky. In February, Kaspersky announced plans to work with BioNyfiken, a self-styled 'bio-hacking community' based in Sweden that makes chips that can be implanted in the body. Groups of people are experimenting with these to make payments, unlock devices and gain access to restricted buildings.

But widespread use of these implants seems a long way off, as does the development of pills that computers can 'read' and thereby identify people. For the time being, most people will continue to rely on the humble typed password, however risky it is.

THE FACTS

- A PayPal 'evangelist' says that passwords may eventually be replaced by pills that recognise your glucose levels
- Other cutting-edge technology includes devices that recognise heart activity and vein patterns
- Kaspersky is working on implants containing sensors that can be embedded into the skin

Letters

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PC brigade 'want to be offended'

Stuart Andrews is right to say that the epicentre of political correctness has moved to the internet (The Final Straw, Issue 448). Twenty years ago it was rife in councils and schools, where workers tried to out-do each other inventing stupid rules to keep people in check. Now we have a PC brigade (mostly people under 30) who patrol the internet ready to shout down voices they don't agree with. The whole 'feeling fat' non-controversy is a case in point. I often 'feel' fat, and I certainly look it (as you would if you weighed 17 stone). Last night I had a huge steak dinner, followed by double helpings of my wife's delicious apple crumble. I certainly felt fat as I wobbled off to bed.

The cause of much political correctness is a desire to be offended. People seek out comments they don't agree with, but instead of saying to that person 'you are wrong', they say 'I am offended'. And instead of just forgetting about it, they target the person who caused the apparent offence. You may be offended by this letter, but frankly - so what? Will it change how much food I eat? Fat chance!

Malcolm Blackwell

Every time I feel like I should give this Facebook and Twitter thing a go, I read something that puts me off. The latest message of doom came from Stuart Andrews in Issue 448, where he attacked the politically correct hordes who use social media. I don't use these sites so I don't know if Stuart is right, but his track record has been impeccable, so I believe him. I'm put off by the idea that anything I say could be attacked by a bunch of self-important do-gooders. I suspect that the anonymity of the internet gives many people the confidence to be far ruder and more confrontational than they would be in real life. These are the sort of people who would run a mile from a proper argument in a pub. So I shall be steering clear of Facebook and Twitter and leave it to those who want to create phony controversies.

Alistair Waterson

Politics gone mad

To answer Maurice Hardwicke – who asked in Issue 448 when the Monster Raving Loony Party was elected to power – I think it was 1979. They've been in power ever since, but keep changing their name to confuse us all.

David G Tubby

Using XP 'is like refusing vaccinations'

I'm sure Google thinks it's doing the right thing by extending support for XP (News, Issue 448), but I predict terrible consequences. Their actions remind me of the parents who refuse to give their kids the MMR jab because they're worried (irrationally) about it causing autism. The result? A huge surge in cases of measles around the world, which wouldn't have happened without the ignorance of selfish parents. Similarly, by encouraging people to keep using XP, Google is helping to create an environment where malware can easily spread. I know many people felt let down by Microsoft when they ended XP support, but it really was for their own good. Google's decision to continue support is irresponsible in the extreme.

Alvin Wrigglesworth

Censorship is a 'bliddy' awful idea

With reference to Clean Reader censoring e-books (see News, Issue 447), the app's makers are only wasting their own time and money. Self-censorship has produced worse results. I once reviewed a mainstream novel co-authored by a mother and daughter, where a choice had been made not to use swear words. This would have been no problem, except the authors had replaced a range of swear words with idiotic made-up alternatives, such as 'bliddy' instead of bloody. This was nonsensical, insulting to the intelligence of readers and grossly immature. The same book featured a black character who was often referred to as a 'brown boy', as if 'black' were a dirty word. The most worrying thing was that an editor associated with a big-name publisher had backed this rubbish, all the way to print.

Nicholas Kersov

Grumpy and depressed about Windows 10 update

I was seriously depressed to read in Issue 448 your news story about the leak of Windows 10.1 details. It said that Microsoft are planning updates called Redstone, due to arrive 18 months from now for software they have not even launched yet. I cannot believe they have a committee that sits down to discuss what they are putting in next year's updates, and what they can save for even further down the line.

I'm fed up of switching on my PC and seeing the message: "Now you have switched on please sit there twiddling your thumbs while I waste your time by adding even more software which

may or may not improve your computer experience" (I paraphrase). Maybe Microsoft should change the name "Redstone" to "Strategy to Annoy Our Customers in the Years to Come". Or maybe I am just becoming a grumpy old man well into his retirement.

Tom Waugh

Age restriction for porn 'sends out right message'

In Issue 448's Question of the Fortnight you ask whether age restrictions for online porn could work. Like many tech experts, I have my doubts. Tech-savvy teenagers won't find it difficult to get round the age-related barriers, and then share those tips in the classroom. I may be getting on, but I'm not so old that I've forgotten how resourceful teenage boys can be. But the effectiveness of age restrictions is only part of the point. Just as important is the message it sends out, which is to make watching web porn feel more like an adult-only activity.

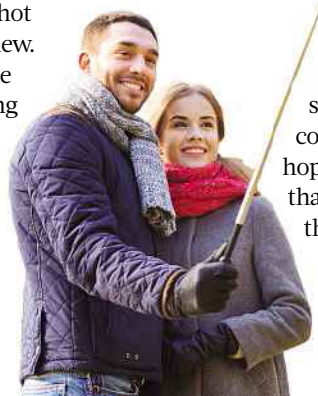
The newsagent's equivalent of this is to place magazines on the top shelf. But where is the internet's top shelf? Under-18s don't need to stand on tiptoes to access porn online. So are we going to stop every teenager watching porn? Of course not. But should we be implementing measures that at least make it harder for them to do so? Yes. I strongly believe that the more difficult we make it, the greater the stigma attached to it. Teens can be very idealistic, so we might have more success by shaming them into avoiding porn until they're adults - or at least making them feel uneasy about watching it.

Graham Foster

Selfie sticks should be 'tolerated'

Stuart Andrews had another rant against selfie sticks in Issue 447. It seems to be a popular bandwagon at the moment. I fully appreciate why museums, sporting events and concert halls might want to ban the use of these devices, but the vitriol against them is getting a little over the top.

My partner and I have travelled to some far-flung places, at times remote and memorable. Sadly, we appear singly in many of our photos because one of us is taking the shot. As a result we have fewer 'together' momentos than we would have liked. It isn't always possible to find a camera perch for a timed shot that captures the desired view. Even in populated areas one needs to be careful. Handing your camera or phone to someone who then 'legs it' is behaviour that's unlikely to find sympathy with an insurance firm.



Used sensibly, with due consideration for others, I think the selfie stick should be tolerated more. The fact is, it isn't the device but the person using it that's often the problem; in that respect I concede the term 'selfish stick' is accurate. The same problem occurs with smartphone 'zombies' shuffling around, oblivious to their surroundings, and with wearers of bluetooth ear-wigs holding loud one-sided conversations in public areas. So on our next trip we will be packing a selfie stick, we will use it with consideration for others, and hopefully return with photos that prove we were there at the same time.

Mike Lewis

STAR LETTER

Skype puts barriers between patient and doctor

I've been very interested in all the recent articles about the threat posed to humanity by the rise of robots. However, it feels like a distant threat, one that future generations will have to face (I'm 83 now, and really have more important things to worry about!). Besides, how can we build robots with enough intelligence to enslave us when we can't even make phones that last more than a day on a single battery charge?

A more immediate danger to our wellbeing is the increase in communicating by email and on video. A couple of months ago you featured a news story about reporting crime online, and in Issue 448 the Lib Dems said that more people should talk to their doctor by Skype. I can't see how either the police or GPs can provide a better service when they aren't talking face to face to the public. I don't doubt the need for the NHS to undergo a technological revolution, but building a Skype barrier between patient and doctor shouldn't be part of it. Doctors may deny it, but subconsciously they will treat a Skype appointment differently to one in person.

It's not that I'm against Skype. Without it I wouldn't be able to talk to my sister in Australia, my granddaughter in Canada and my son in Dubai! But they are my family. I don't seek medical advice from them – though that doesn't stop them giving it. But I will never talk to my GP via Skype because I wouldn't feel satisfied that he was giving me his full attention. If I'm trusting someone to give me a medical diagnosis, I want that person to look me in the eyes, not stare into a webcam.

Harold Rigden

The Star Letter writer wins a *Computeractive* mug!

Wanted: 2012 Back Issue CD

I was out of the country when your 2012 Back Issue CD came out. I've checked on eBay, but can't find it on sale there. Would any *Computeractive* reader who doesn't need it anymore be prepared to part with it? I have all the other CDs, so want to complete the set.

Elspeth Christie

CA says If any readers no longer need their 2012 Back Issue CD, please get in touch with us (letters@computeractive.co.uk) and we can arrange delivery to Elspeth.

By the way, you can still buy the 2013 and 2014 CDs on Amazon, at www.snipca.com/16010 and www.snipca.com/14981 respectively (though they are selling fast).

Consumeractive

Is your advice about refunds correct?

Q I was surprised to hear your advice to Chris Newbon in Issue 447, when you said he's not entitled to a full refund for his faulty motherboard. Are you sure? I thought there was some sort of EU directive that states you can demand a full refund if the item is not fit for purpose.

James Mellitas

A Yes, we're sure about this. You're only legally entitled to a full refund for a faulty item within a "reasonable" time – usually considered to be within the first 30 days. This will be made law when the new Consumer Rights Act comes into force in October. After 30 days, the Sale of Goods Act (SOGA) says retailers and manufacturers are legally allowed to try to repair a faulty good, or replace it if that's not possible. You're only entitled to a refund if they can't do either.

If you do receive a refund, how large it will be depends on how long you've owned the goods. The company can deduct a proportion of what you paid based on the amount of use you got from the item.

The EU directive James mentions has been misreported in the press. It became UK law in 2003, giving you additional rights under SOGA, including making the terms of warranties legally binding.

Why is Sports Direct only giving a credit note for returned online purchases?

Q My daughter frequently buys items online for her sons from Sports Direct (www.sportsdirect.com). If a purchase doesn't fit, she returns it to our local store, but the shop will only give her a credit note (minus delivery cost). Is this contrary to the Distance Selling Regulations (DSRs)?

Gordon Crossman

A This is an interesting question, though first we need to make clear that the DSRs were replaced last June by the Consumer Contracts Regulations. But the right to return an item bought online (ie, 'from a distance') for any reason still applies. The retailer must refund the customer, including the delivery cost.

However, to get a refund Gordon's daughter must email Sports Direct within 14 days of receiving the goods to say she's rejecting them. Instead, she chooses to take them to a store, which means Sports Direct is within its rights to offer only a credit note. Also, she needs to fulfil Sports Direct's online returns policy by filling in the requisite returns form so it knows that goods bought online are being returned (www.snipca.com/16113). Unless she does this, Sports Direct will probably continue to treat her items as though they were bought in store, and therefore not refund her. Legally, high-street shops are obliged to issue a refund only if the returned item is faulty. This is because the customer has enough time to examine the goods to decide whether they will like them. In fact, high-street shops don't even need to offer a credit note, though most do as a goodwill gesture.

It would be interesting to clarify Sports Direct's policy on returns, so we've emailed the company to ask.

Is eBay seller right to deny responsibility for failed delivery?

Q I ordered a CD from eBay, paying for seven-day delivery, in September 2014. It finally arrived at the end of March this year. The seller's denying any responsibility saying it has no control over what Royal Mail does. I'm not pursuing the case because the sum is less than £2, but I just wanted to know what you thought of the seller's response.

Francis Sotter

A Having read the emails the seller sent to Francis, we're not impressed by their customer service. In one email the seller writes: "Looking at the order, the disc was delivered by us the the [sic] delivery office in October 2014! In our case, we've fulfilled the order".

Any eBay seller (individual or company), should know that they must ensure the buyer receives the goods. Therefore the order wasn't "fulfilled", as the seller's email states, just because the goods were with Royal Mail. Fulfilment happens only when the goods are delivered to the paying customer. If they don't arrive, the seller must refund the customer's money or send another order immediately.

Also, many sellers wrongly try to make the buyer find out what's happened to goods that are lost in the post when the buyer has no contract with the courier or delivery firm – only the seller does.

We stand up for your legal rights

Contact us so we can investigate your case
Email: consumeractive@computeractive.co.uk
Write: Consumeractive, Computeractive, 30 Cleveland Street, London W1T 4JD
Please include both your phone number and address.
Unfortunately, we can't reply to all your letters.

Can I force Sony to support apps on a TV?

Q I've been advised by YouTube that my Sony Bravia TV bought in 2011 will not support the YouTube app after 20 April 2015. I specifically bought this TV for watching YouTube. Can I force Sony to develop a software upgrade or the retailer to replace the TV?

Tom Wilson

A We understand Tom's frustration, but he'll only be able to do this if he can prove that Sony guaranteed to support the app for a specific length of time – and that seems unlikely. Manufacturers aren't legally responsible for ensuring their devices work with third-party apps, over which they have no control. This is an unavoidable risk of buying devices that work with apps and programs. There will always come a time when the manufacturer will stop supporting a device, leaving it unable to work with apps that have been updated.

Tom can't say the TV isn't "fit for purpose" because it's not a device specifically and solely designed for use with YouTube – even though that was Tom's reason for buying the TV. There is a glimmer of hope though in the shape of this advice from Sony: "If you have a web browser on your Smart TV that supports flash and/or html5, you may be able to continue using YouTube by visiting www.youtube.com in your browser".

CASE UPDATES

Ebuyer issues full refund after reader stands his ground

We're happy to report that Ebuyer has decided to fully refund reader John Shorter, who had problems with a faulty graphics card (Issue 446).

Initially, Ebuyer said it wouldn't refund the full price, which was £238. Instead, it was prepared to give him a credit note for that amount, or a pro-rata refund of £189, reduced because John had used the graphics card for two years. Ebuyer also said it would refund John the £30 he spent to get the graphics card independently examined, to prove it was faulty.

John was unhappy with these offers because he felt Ebuyer had messed him around too much. We sympathised and suggested he should email Ebuyer to tell them what he was prepared to accept. He told the company he wanted the choice of a new graphics card worth £290, which took into account what he originally paid, and all the costs subsequently incurred. Happily, after we contacted Ebuyer to argue his case, the company agreed to his request. John's success demonstrates that you don't have to accept a company's first offer. If you stand your ground, and present your case reasonably and eloquently, without asking for too much, you can often get what you want.

THIS WILL COME IN USEFUL

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Findmypast
Facebook: www.facebook.com/findmypast
Twitter: @findmypast

TheGenealogist
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01722 716121
Email: www.thegenealogist.co.uk/contact
Twitter: @Thegenealogist

Genes Reunited
Contact form: www.snipca.com/16086
Email: support@genesreunited.co.uk

National Archives
0208 876 3444
Contact form: www.snipca.com/16054
Twitter: @UkNatArchives

Society of Genealogists
0207 251 8799
Email: genealogy@sog.org.uk
Twitter: @SoGGenealogist

Your Family Tree magazine
01225 442244
Twitter: @YourFamTreemag

Protect Your Tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

The rising threat of ransomware

What happened?

Antivirus company F-Secure warned that the threat posed by 'extortion malware' is growing. Through these attacks, hackers try to get money from people by infecting their computers, phones and tablets.

The most common form of extortion malware is ransomware. In its Threat Report for the second half of 2014 (www.snipca.com/16280), which was published in late April, F-Secure said that ransomware is the "most prominent" danger people face today, and it shows no sign of diminishing.

The report said that criminals are increasingly finding ransomware to be the most profitable and efficient mode of attack, partly because the rise of virtual currencies such as Bitcoin have made it easier for them to extort money.

Hackers are also targeting devices other than PCs. The SynoLocker family of ransomware infects NAS drives (see screenshot), while the Koler and Slocker strains are used to lock Android phones and tablets.

Other dangers highlighted in the report include the rise of SmsSend mobile malware, which criminals use to make victims' phones send messages to expensive premium-rate numbers. Malicious browser extensions are also becoming more common. The Kilim family of dodgy extensions posts content on Facebook without your consent, and steals personal information.

What should you do?

Regardless of the type of ransomware threat, the most effective way to protect yourself is to regularly back up your files. By doing so, you won't need to pay a ransom to these callous criminals should they lock your PC. Add an extra level of security by backing up to an online service as well as a physical device (see Issue 448 for tips on how to back up your phone and tablet). With this protection in place, you'll be able to reinstall Windows and restore your data if ransomware hackers strike.

ScamWatch READERS WARN READERS

Don't ring fake Kaspersky number

I was having trouble renewing Kaspersky, so searched on Google for a sales number. I found one beginning 0020. I rang it, and they took control of my laptop with my permission. He said Kaspersky had let dangerous files on to my computer. I was increasingly suspicious, but when challenged he said I had phoned him not the other way round. When he wanted to charge me £65 to 'fix' some problems, I asked him to stop accessing my laptop. He told me to switch off the computer, but when I switched it on again the remote access was still live, so I ran a Kaspersky scan. By the way, the correct Kaspersky number is 0871 789 1631.

H Mulgray

£50 from Amazon? Sadly not

Having previously received legitimate emails from Amazon offering me a promotional credit of £1, I decided to look very closely indeed when I received one telling me I had £50 to spend. It contained the subject line 'You received £50 Amazon bonus credit' and appeared to come from 'support@amazon.co.uk'. It began with 'Thank you for purchasing from Amazon UK', and said that your recent order "entitles you to a promotional credit which we will add to your account". The offer 'ends' at 11.59pm the following day. It looked very much like the official Amazon emails, so you can see how people might be taken in by scammers and end up being conned.

Rachel Henderson

Almost fell for Virgin scam

I feel rather daft for almost falling for a phishing scam recently. I'm a Virgin Media customer, so felt safe opening an email that I thought was from them. It said that my billing details were incomplete and my last bill hadn't been processed, which seemed like a genuine cause to contact me. It told me to click a link in the email, which I did. It then asked for my email and password – fair enough, I thought. The alarm bells only rang when it asked for my bank details. It suddenly dawned on me that I was sleepwalking into a scam. So I deleted the email and warned my friends, most of whom are on Virgin.

Bernard Trentham

Warn your fellow readers about scams at letters@computeractive.co.uk

New tools

Google's Password Alert extension for Chrome

www.snipca.com/16342

You've often told us over the past year or so that phishing emails are looking more realistic. ScamWatch has included several emails from readers who were almost fooled by how legitimate an email appeared to be. Here at *Computeractive* HQ we're also seeing a rise in the number of phishing emails that contain fewer spelling mistakes (sometimes none at all) and better grammar, and look like they've been professionally designed. Increasingly these scams pretend to be from PayPal and Amazon.

As phishing threats become more sophisticated, it's reassuring to know that you can count on the help of Google to thwart the scammers. The company already includes many features in Chrome to prevent malware being installed on your PC (see Protect Your Tech, Issue 435), and has now released a Chrome extension called Password Alert that warns you when you're about to type your Gmail password into a non-Google site. When this happens, the extension shows you the message: "Your Gmail password was just exposed to a non-Gmail login page" (see screenshot). Pay heed to this warning and you should avoid giving your precious password to criminals who have built fake sites that look like official Google web pages.

A side benefit of the extension is that it serves as a persistent (and possibly annoying) reminder of how many websites you use the same password for. Google hopes this will nudge you into using more varied passwords, which will help keep you safer online because a hacker wouldn't be able to access all your accounts using just one. Read Google's FAQ on Password Alert for more information: www.snipca.com/16344.

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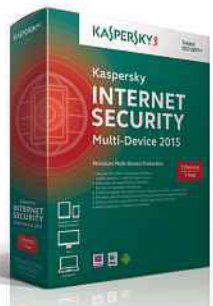

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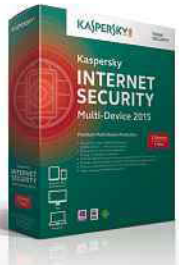

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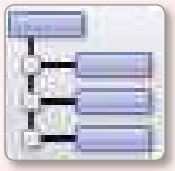
Best Free Software

Brilliant new programs that won't cost you anything

DESKTOP LAUNCHER

LaunchBar Commander



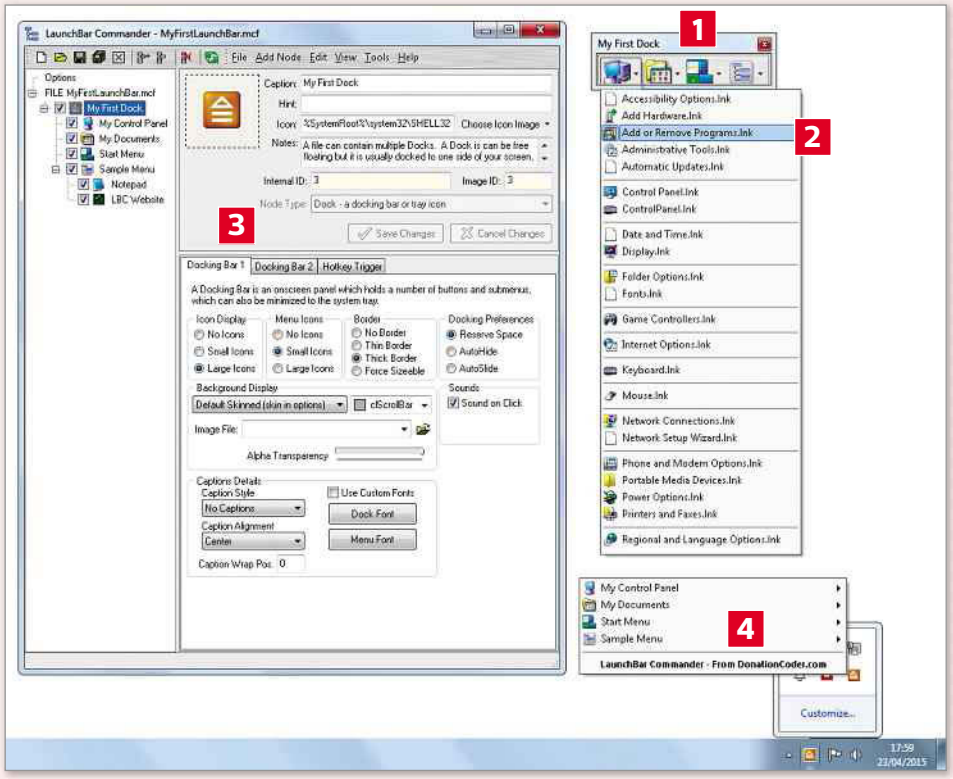
www.snipca.com/16282
What you need: Windows XP, Vista, 7 or 8

De-clutter your Desktop by moving your shortcuts and documents to this 'launcher'. At first glance, it looks like the world's smallest program window, but it's actually a customisable dock (called My First Dock by default) and a powerful gateway to whatever files, folders, programs, Windows settings and other PC links you want it to contain.

Click one of the little arrows in the dock, and a dropdown menu of items will unfurl before your eyes. To make the menu disappear again, click your Desktop. You can either stick with the default menus, which include My Control Panel and My Documents, or configure the menus to better suit your needs. You could create a menu of most-used programs, for example, and one for those Windows settings that always seem to take the longest to find.

Dig even deeper into the program's options to build 'tree' menus embedded inside other menus, create your own program icons and drop files on to menu buttons to automatically open that file in that particular program. All this, from a tiny box in the corner of your screen.

LaunchBar Commander is available in portable and installable versions. If you have a PC running Windows Vista, XP or 2000, download the portable version on a Windows 7 or 8/8.1 PC and run it on the older PC from a USB stick. The first time you run either version of LaunchBar Commander you'll see a window inviting you to enter a licence key; click Dismiss to close it and launch the program.

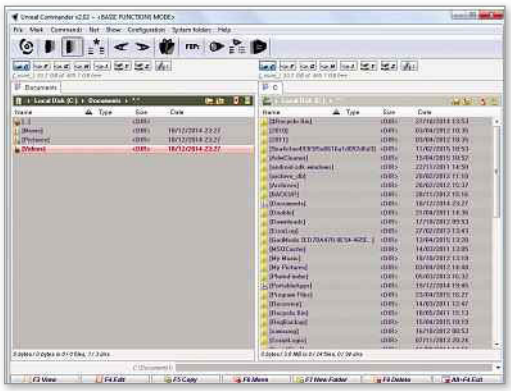


1 Run LaunchBar Commander to open My First Dock, a tiny box of four Windows Explorer-style icons. Click an icon's arrow to open its menu.

2 The first default menu is My Control Panel, which contains items like 'Add or Remove Programs'. Other defaults are My Documents, Start Menu and Sample Menu.

3 Right-click the dock and click 'LaunchBar Commander – Configure' to open the MyFirstLaunchBar window, where you can customise menus and create new docks.

4 When you close the dock, LaunchBar Commander runs in your system tray. Click the icon to access your menus, or right-click, then click Restore to open the dock.



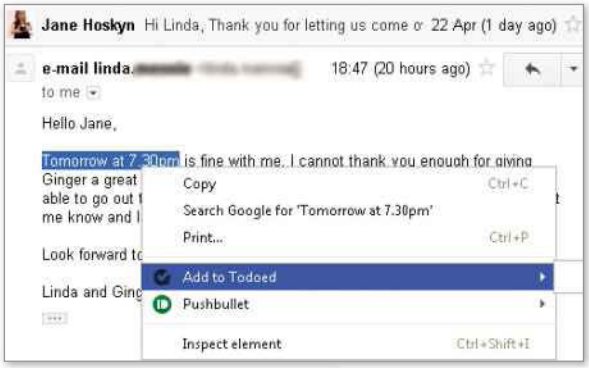
FILE MANAGER

Unreal Commander 2.02

www.snipca.com/16284

What you need: Windows XP, Vista, 7 or 8

Unreal Commander has all the advanced functions we'd been hoping for in File Explorer, Microsoft's replacement for Windows Explorer. Among other things, it lets you sync the contents of one folder with another, batch-rename files, open dozens of types of archive file, view folders as tabs and set background photos for drives. This new version lets you see free space in any selected source and save batch-renaming profiles to use again later. The catch, and it's a big one, is that it's not as easy to use as File Explorer. We're so used to clicking a folder to see its contents, it's disconcerting when that doesn't happen. Give it a try if your PC is stuffed with files and needs a serious management tool, but be aware that it takes time to master.



TO-DO LISTS

Todoed

www.snipca.com/16285

What you need: Chrome or Opera

This brilliant new browser extension lets you create to-do lists by right-clicking any text, such as shopping ideas on websites. Highlight the text, right-click and click 'Add to Todoed' (see screenshot), then 'Assign to Myself' to add it to your list. Check or edit your list by clicking the Todoed bookmarklet. Here you can also create shared lists, mark certain items as important and reports bugs, if you encounter any (we didn't). Find out more on the Todoed website (www.todoed.co).

SYSTEM TOOL

Tweaking.com Windows Repair 3.1.3

www.snipca.com/16283

What you need: Windows XP, Vista, 7 or 8

Do you really need another optimising program? After all, many of the best PC-boosting tools are built into Windows or available online (see our Cover Feature, Issue 448). But Windows Repair is worth a look, because it's much smaller, faster and easier to install than most PC-optimisers. Despite that, it can do quite a lot, including checking your system and software for errors, fixing problems and backing up your Registry.

The program window looks a bit rough and ready, which hardly instils confidence. But the tool has undergone a number of improvements and bug fixes, and this new version adds new pre-repair scan tools that reveals any system errors before attempting to fix them.

Click the orange Download button that says Direct Download.

WHAT SHOULD I DOWNLOAD?

We tell you what software to use

How can I get my lost photos back?

Q **I – or my laptop – has managed to lose hundreds of digital photos belonging to me and my partner. The laptop still works, but the photos we stored on it have disappeared. Is it possible to retrieve them? If so, what software would you recommend?**

Rik East

A We don't envy you – but we hope we can help. Free program Recuva (www.piriform.com/recuva) can retrieve many types of lost file and has a clear, easy-to-use wizard, plus a 'Scan for deleted files' right-click tool. If your laptop's operating system is older than Windows 7, download the portable version of Recuva (www.snipca.com/16286) using a newer PC, then run it on the laptop from a USB stick. Unlike many "free" recovery tools, Recuva doesn't charge you to restore any files it finds. If Recuva can't bring back your photos, try TestDisk & PhotoRec (www.snipca.com/16287). It's not as easy to use than Recuva, but it's powerful and works on PCs going right back to MS DOS.

Do you need our advice on what software to use?
Just email us at letters@computeractive.co.uk

Reviews

New products tested by our experts

MINI PC | **£350** from www.snipca.com/16325

Acer Revo One RL85

A small, attractive and upgradeable mini PC

Computer active GREAT PICK ★★★★☆

Most PCs are large, hefty beasts wrapped in plain black casings, but the Acer Revo One RL85 is the polar opposite. This mini Windows 8.1 PC is about the size of a large mug. It could easily sit unobtrusively beside your TV or on a bookshelf because it comes in a striking, minimalist, white curvy casing.

Performance

The RL85 is available in several configurations. The model we reviewed is fitted with 4GB of memory, a 2.1GHz Intel Core i3 dual-core processor and a 2TB hard drive. This processor is much faster than the Intel Celeron 2957U, which comes in the cheapest version of the Revo One (£230), and makes the £350 configuration quick enough for use as your main computer – although the integrated graphics chip isn't made for 3D gaming. It's a shame the Revo One comes with only 4GB of memory – and you can't upgrade this easily. 4GB is enough for now, but it'll prove limiting because forthcoming software will inevitably make greater demands on your memory. The noise it generated wasn't excessive, even when it grappled with our demanding benchmark tests. It emitted a slight whirring sound, which we could only really hear when pressing our ears against its casing.

Expansion

Unusually for a mini PC, it's easy to upgrade the Revo One's storage. Press and hold the small latch on the back using a small pen or screwdriver and the casing slides off to reveal the interior.

The 2TB hard drive (originally designed for laptops) is fixed in place, but there's space for another two laptop hard drives or SSDs. Simply screw your drives into the trays and slide them into place. Laptop hard drives are currently available in sizes up to 3TB, so you could have as much as 8TB of storage which is very impressive in such a small PC.

Although you can theoretically fit up to 8GB of memory, you have to literally disassemble the entire PC to get to the memory slot, which is a very tricky procedure. Also, because there's only one slot, you'd have to dispose of the 4GB chip already in there. Oddly, accessing the combined 802.11n and Bluetooth card, which sits behind a panel held in place by a single screw, is far easier, though replacing it yourself would void your warranty. You could even swap it for a faster 802.11ac wireless card to get a theoretical maximum speed of 900Mbps.

> "A modest price tag, quiet performance and attractive design make it a cracking little PC"

Connections and accessories

Upgrading the RL85's internal hard drives is very straightforward, but there are plenty of external connections if all that sounds too intimidating. There are four USB ports (two each for USB 3.0 and USB 2.0) for keyboards, mice, printers, external hard drives and USB sticks. If you want a DVD writer, then you'll have to use a USB model because, you won't be surprised to hear, there isn't space for one in this PC. Alongside the Gigabit Ethernet connector are two video ports, HDMI and Mini DisplayPort, so you can connect up

WHAT YOU NEED FOR A MEDIA-CENTRE PC

The Revo One RL85 is perfect for use as a media-centre PC connected to your TV, but you'll need these extras to make it all work...

MEDIA-CENTRE SOFTWARE

Media-centre software is designed for use on a TV screen, so everything can be seen from a distance. It has an interface that's customised for browsing and playing your media files. Microsoft's Windows Media Center is available as an add-on for Windows 8.1 (£7 from www.snipca.com/16326) and works with TV tuners. Free alternatives such as Plex are available, but don't work with TV tuners.

REMOTE CONTROL

Various Windows-compatible remotes are available. This cheap and cheerful Maplin model (pictured left) costs just £20 (from www.snipca.com/16328). Partner it with a wireless keyboard with a built-in touchpad, such as the Logitech K400 (£28 from www.snipca.com/16332), and you're all set to go.

TV TUNER

The Hauppauge PCTV Systems DVB-T2 292e nanoStick is a tiny TV tuner that works with Freeview, but not Freesat. If you want to record one channel while watching another, just buy another tuner (£55 from www.snipca.com/16330).

to two monitors. All these connections are located at the back except for the SD card slot, which is up top – making it easy to pop cards in and out.

The configuration we tested comes with a basic keyboard and mouse. Disappointingly, it doesn't come with the combined remote control and mini keyboard that you get with the £230 version. Clearly designed for use in your living room, the remote has a miniature keyboard on one side and playback controls and a touchpad on the other. The small rubbery keys aren't designed for typing over long periods, but are more than sufficient for tapping out search terms and other snippets of text.

There's no danger of accidentally moving the cursor while typing because you have to press a button on the side of the remote to activate the touchpad, which is large and accurate. The remote can also be used to put the RL85 to sleep and wake it. Annoyingly, the remote doesn't connect via Bluetooth but instead relies on its own dedicated USB dongle. This not only occupies a valuable USB port, but the jutting dongle also adds more depth to the RL85, which could be a drag if you're trying to fit it into a tight space. Still, it's a shame this remote can't be bought separately (for an alternative, see the box above).

As seems to be the fashion, the RL85 comes with a lot of junk software pre-installed, including Acer's own online storage and basic office programs, none of which are better than popular alternatives like Dropbox and LibreOffice. Media-centre software would've been a better choice, given that the RL85's compact size and quiet operation make it an ideal choice for a media-centre PC (see the box above for more information on the extras you'll need to use the RL85 as a media centre PC).

SPECIFICATIONS

2.1GHz Intel Core i3 5010U dual-core processor • 8GB memory • 2TB hard drive • Intel HD5500 integrated graphics chip • 155x107x107mm (HxWxD) • One-year warranty

Conclusion

The Acer Revo One RL85 is a cracking little PC. Despite its modest price tag, it's quiet, attractive, and – for such a small PC – it's surprisingly simple to add lots of internal storage. If only it was as easy to add more memory however, and there are problems with the remote. As a result, it just misses out on our Buy It! award.

HOW WE TEST

Computeractive is owned by Dennis Publishing, which owns a hi-tech facility for testing the latest technology. 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 tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Dennis Publishing also owns the magazines *PC Pro*, *Computer Shopper*, *Web User*, *Micro Mart* and *MacUser*, and the website Expert Reviews (www.expertreviews.co.uk). 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: There are a few niggles, but this is still one of the best mini PCs available

★★★★☆

ALTERNATIVE: Intel NUC D54250WYK £290 A faster, even smaller mini-PC DIY kit that can accept up to 16GB memory, but can only use a single SSD for internal storage

CAMERA | **£279** from www.snipca.com/16178

Nikon Coolpix S9900

A pocket-sized camera with a big zoom

Computer active GREAT PICK ★★★★☆

We like slim cameras that fit into coat or trouser pockets. We also like cameras that take clear, detailed photos, and that have big zooms for shooting distant subjects. Sadly, you usually can't have everything. Squeezing two of these qualities into a single camera is a tough technical challenge, and no manufacturer has successfully combined all three.

There's no mistaking where the Nikon S9900's strengths lie. It has a huge 30x optical zoom. At 40mm deep and weighing 289g, it's no featherweight but it's just about compact enough to fit into your pocket.

> "Its hinged screen, large zoom and compact size make it an excellent choice"

The S9900 is extremely easy to use. The rubber-textured handgrip makes it comfortable to hold, and the pop-up flash is sensibly positioned so there's no risk of it being obscured by your finger. Best of all is the hinged screen, which flips out to the side and can rotate up, down and right around for self-portraits. This lets you shoot while holding the camera at waist height, which is much more comfortable than using outstretched arms, and puts the lens at the ideal height for taking photos of children.

There's a mode dial with Auto mode, scene-preset and manual-exposure options, plus a command dial and rear wheel for quickly adjusting settings. A dedicated button launches the Wi-Fi functions, including wireless transfers to – and remote control from – Android and iOS devices. Another button reveals your current location on an impressively detailed world map. The built-in GPS also tags your photos with your location. The controls are generally well laid-out, but we would like to have seen dedicated buttons for key settings such as white balance and ISO.

A large zoom is perfect for sports and wildlife photography, but only if the camera is quick enough to keep up with the action. The S9900 ran at six frames per second (fps) in Continuous mode, but only lasted for five seconds and then kept us waiting for five more seconds while it saved them. That's not ideal for unpredictable, fast-moving subject matter. Autofocus was at least very responsive, and it's great that you can position the focus point anywhere within the frame – some rival cameras only offer a choice of focusing on the centre of the frame.

Video quality was generally excellent with life-like colours and sharp focus, although there are other cameras that capture fine details more faithfully. The optical stabilisation did an excellent job of steadying handheld shots.

Photo quality was, sadly, a little underwhelming. This is because the camera's lens doesn't capture significantly more light than a smartphone or cheap compact camera. We found that details looked a little blocky and subtle textures were lost, but this was only noticeable when we zoomed into the 16-megapixel photos – they looked perfectly adequate at typical viewing sizes. These problems were accentuated in photos taken in low light, but the camera still produced respectable indoor snapshots. The main problem in photos taken in poor light were blurred subjects. We had to set the shutter speed manually to capture moving subjects clearly. Focus was impressively sharp when taking photos at the full 30x zoom.

The Coolpix S9900 isn't the only compact camera with a 30x zoom, but it's the best we've seen for lens sharpness and we love the hinged screen. If a compact size and large zoom are priorities, and you're willing to adjust settings manually for best results in low light, it's an excellent choice.

SPECIFICATIONS

16-megapixel sensor • 30x zoom (25-750mm) • 3in hinged screen • No eyepiece • Accepts SD, SDHC and SDXC storage cards • 289g • 66x112x40mm (HxWxD) • Two-year warranty www.snipca.com/16179

VERDICT: It doesn't excel at everything, but you'd be hard-pressed to find a better camera with a 30x zoom for under £300

★★★★☆

ALTERNATIVE: Canon PowerShot SX700 HS £189 This 30x zoom camera can't match the S9900 for features or sharpness but it's a good, cheaper alternative

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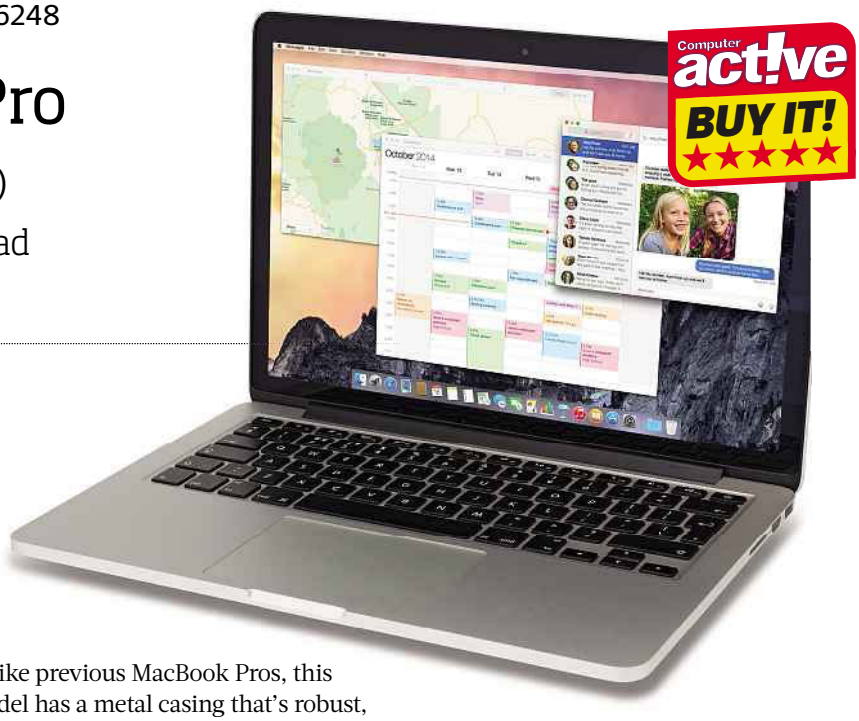
LAPTOP | **£999** from www.snipca.com/16248

Apple MacBook Pro Retina 13in (early 2015)

A laptop with an unusual touchpad and incredible battery life



Apple's iPhones and iPads may get all the attention, but the company also makes a great range of laptops. Even if you love Windows and have never contemplated switching to a Mac, it's hard to ignore the influence of Apple's MacBooks – other manufacturers usually follow the lead set by Apple's superb laptops.

This laptop is the first MacBook to have Apple's new Force Touch touchpad. It's pressure-sensitive, meaning it will do different things depending on how hard you press it. For example, pressing down hard when a word is highlighted in Safari (Apple's web browser) will show you a definition. You can adjust how much pressure is required in the settings.

However, none of the pressure-sensitive actions are compelling. Most of them duplicate options accessible through right-clicking. There are, though, third-party apps that highlight the potential of this feature. For example, Inklet lets you use the touchpad as a basic graphics tablet for drawing and painting. The touchpad can also provide tactile feedback by vibrating gently (it feels more like a gentle tap against your fingers) when you use certain tools or commands in apps that support it, such as the pre-installed iMovie video-editing program.

Even putting these special features to one side, the touchpad is still one of the best we've tested. It's large, accurate and very responsive – even when using gestures, which often produce a juddery response on the touchpads of Windows laptops. The keyboard isn't quite as outstanding. We'd prefer the keys to have more travel, but they're large, comfortable to type on, and give plenty of feedback when pressed.

The 13in screen is super-high-resolution (2560x1600 pixels). It's dazzlingly bright, looks glorious and produces razor-sharp text. Graphics are detailed with impressive colour accuracy and contrast. Viewing angles are more restricted than we expected, but this is a minor niggle.

Like previous MacBook Pros, this model has a metal casing that's robust, good-looking and has lots of attractive design touches. Our favourite is the magnetic charging lead that falls away harmlessly if anyone trips over it, rather than bringing the laptop crashing to the floor. The casing did warm up when the processor was handling our demanding benchmark tests, but not to an uncomfortable degree.

The 2.7GHz Intel Core i5 dual-core processor is paired with 8GB of memory,

> "It's sturdy, fast and comfortable, with a great screen and battery"

making this laptop powerful enough to use as your main computer. It can accommodate up 16GB, but you need to specify this when ordering from Apple. As is increasingly common, you can't upgrade the memory yourself later. Although in theory you can upgrade the 128GB SSD yourself, larger replacement SSDs are as yet hard to find and – because it uses a non-standard connector – expensive. It's therefore easier to specify a larger SSD when ordering if you're likely to need more internal storage. The cramped SSD is annoying and it's baffling that Apple continues to be so stingy with storage capacity.

This laptop is ideal for working on the go and not just because it weighs only 1.6kg. The battery lasted almost 22 hours in our light-usage test, which is so impressive we had to devise a new, more demanding battery-life test. When connected to a 802.11n Wi-Fi network and playing a YouTube video on a loop, it lasted 10 hours 21 minutes – almost twice that of the longest-lasting Windows laptop.

The 13in MacBook Pro Retina may not be cheap and it has some niggles, but it's still one of the best laptops we've tested. It's sturdy, comfortable to use, fast, has a good quality screen and exceptional battery life. It thoroughly deserves our Buy It! award.

SPECIFICATIONS

2.7GHz Intel Core i5 5257U dual-core processor • 8GB memory • 128GB SSD • Intel Iris 6100 integrated graphics • 13.3in 2560x1600-pixel screen • 802.11a/b/g/n/ac • MacOS X 10.10 Yosemite • 1.6kg (1.8kg with charger) • 18x314x219mm (HxWxD) • One-year warranty www.snipca.com/16249

VERDICT: An exceedingly well designed laptop in almost every way

★★★★★

ALTERNATIVE: Toshiba Kira 107 £1,300
A Windows ultra-portable laptop that's 300g lighter, with a similarly high-resolution screen and comfortable keyboard, but shorter battery life

iPAD STYLUS & RULER | **£110** from www.snipca.com/16313

Adobe Ink and Slide

A stylus and ruler for your iPad from the makers of Photoshop

Software company Adobe is best known for programs such as Photoshop, Acrobat and Flash. With no track record of making hardware, it therefore comes as a surprise to see Adobe releasing a Bluetooth stylus and ruler for the iPad, called the Ink and the Slide respectively. They're compatible with iPads going back to the iPad 4 and the original iPad Mini.

Crafted out of aluminium, both are sturdy and stylish. The Ink's triangular design makes it comfortable to hold, and weighing 20g it isn't much heavier than a traditional pen. The Ink has a rechargable battery, which is topped up using the included charging cradle.

> "The stylus is no worse than others on sale, but the ruler makes it all too pricey"

Although you can use the Ink and Slide with any graphics app on your iPad, they're primarily designed to work with Adobe's own Line, Sketch and Draw apps. Only these apps feature pressure-sensitivity and Adobe's palm-rejection technology (more on this later). You don't need an Adobe Creative Cloud membership to use these apps, but you'll get more out of them if you are a member (prices start from £9 a month). For example, you'll be able to create and then access your own customised colour palettes from your iPad or computer. You can also transfer any works in progress from your iPad to your PC and continue working there.

Palm-rejection technology lets you rest your hand on the screen for a more natural drawing experience. The apps offer a number of palm presets for how people typically hold a pen. You can choose the one that most closely matches how you hold yours.

However, actually drawing with the Ink was tricky because it just couldn't accurately capture our slight, delicate pen strokes. We suspect part of the problem lies in the need to set a specific pen-holding style, because we found our grip tended to shift positions depending on what we were drawing. Switching palm presets did help, but having to constantly swap is a hassle and hardly makes for an easy drawing experience. The palm-rejection technology was also a little hit and miss.

As a result, it constantly felt like we were wrestling our drawings into shape rather than effortlessly composing them. To be fair, this is a problem we've encountered with other iPad styluses as well. They're fine for broad brush strokes, but struggle with smaller, more precise details.

Place the Slide ruler on the screen and two guide lines automatically appear either side of it, letting you draw perfectly straight lines with the Ink. Tapping the Slide's button brings up different shaped stamps, including circles, triangles and squares, which you can then stencil round with the Ink. You can alter the shape of each stamp with your fingers by holding and pinching certain sides – transforming a circle into an oval or a square into a rectangle, for example.

Like the Ink, though, the Slide was a little fiddly to use. Sometimes the apps failed to recognise the ruler at all, while at other times it thought it was a stylus, so we had to keep erasing lines it had drawn inadvertently. At least erasing was easy to do using the powerful 'undo' feature.

Adobe's Ink is no worse than other iPad styluses out there, but the addition of the Slide makes it around 40 per cent more expensive, and the Slide is only really useful if you want to produce a lot of diagrams or geometric artwork. It's all very disappointing because we were hoping the Ink would finally provide the same kind of easy, intuitive drawing experience on the iPad as a dedicated PC-connected drawing tablet, such as the Wacom Intuos Pen & Touch. Sadly, this remains an unfulfilled dream.

SPECIFICATIONS
Requires iPad 4 or iPad Mini or later • Ink: 144x12x12mm (LxWxD) • 20g; Slide: 100x23x10mm(LxWxD) • 20g
www.snipca.com/16314

VERDICT: Both the stylus and ruler have clever features, but they are expensive and can be fiddly to use

★★★☆☆

ALTERNATIVE: Wacom Intuos Pen & Touch medium £130
An affordable graphics tablet for your PC

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TV STREAMING SET-TOP BOX | **£35** from www.snipca.com/16311

Amazon Fire TV Stick

Amazon's cheap and compact streaming stick has limited appeal

The Fire TV Stick is the smaller, cheaper version of Amazon's Fire TV streaming set-top box (see our review, Issue 439). Although its compact stick shape draws comparisons to Google's Chromecast (see our review, Issue 421), it actually has more in common with the Roku Stick (see Issue 426). Like the Roku, the Fire TV Stick has a full-on TV interface of its own and is controlled using a remote control (included).

> "It lacks its rivals' range of video and audio apps"

Its diminuitive size means it can't accommodate certain features found on its set-top counterpart - Ethernet and optical audio ports, and the option of using Bluetooth headphones so you can enjoy videos or music without disturbing anyone else. Plus, the Stick has a slower processor, although this would only be a problem if you intend to play games, which are available from Amazon's store (a mixture of free and paid-for titles).

The Fire TV Stick has the same straightforward interface found in the full-size Fire TV. It's not as easy to use as it could be because, unlike the Fire TV, its remote control doesn't have a built-in microphone, meaning you can't instantly use Amazon's excellent voice search. You can get around this by using Amazon's Fire TV Remote app (www.snipca.com/16334).

As well as replicating the physical remote control, the apps let you search using your voice, but we found they weren't quite as accurate at recognising our voice requests as the full-size Fire TV's physical remote. Amazon's search system isn't as clever as the one built into Google's Android TV (see our review, Issue 448). It struggled to work out descriptions. So that searching for 'Roman Polanski film noir' came up empty-handed, whereas searching for 'Chinatown' found the 1970s classic.

As in the set-top box, searching (using either your voice or the fiddly on-screen keyboard) only shows results from Amazon's video and music services. It doesn't offer results in the third-party apps, which include iPlayer, Netflix, Spotify and Demand 5 (ITV Player and All4, the new name for 4oD, still aren't available). In any case, you'll get the most from the Stick if you subscribe to Amazon's Prime Instant Video service. For £79 a year, you get access to a huge range of TV programmes and films.

Amazon's Fire TV Stick is by no means bad, but it's very much a cut-down version of the Fire TV set-top box, with all the same limitations. Unless you're keen to subscribe to Amazon's video service, the similarly priced Roku Stick is better value because it has access to a wider selection of popular video and audio apps.

VERDICT: A cheap and cheerful streaming dongle, but with limitations

★★★☆☆

ALTERNATIVE:
Roku Stick
£40 A similarly priced stick-shaped streaming player with apps for all the terrestrial TV catchup services, plus Netflix and Now TV

SPECIFICATIONS
• 1x HDMI • 802.11a/b/g/n • 12x25x85mm (HxWxD) • 25g • One-year warranty www.snipca.com/16312

Accessories

Proporta Kindle Paperwhite Leather-style Cover

£20 from www.snipca.com/16352
A clever and smart-looking leather-effect pouch for Kindle e-readers. The clasp doubles up as a pull-string - tug it gently and your Kindle pops out for easy removal.

SanDisk iXpand 16GB

£42 from www.snipca.com/16349
This USB stick also has a Lightning connector, so you can share files between your iOS device and your computer. It's not overly fast, copying large files at 12MB/s and small ones at 5.7MB/s, but it's sturdy and comes with a well-designed file-manager app.

Nomad ChargeCard

£13 from www.snipca.com/16350
A compact cable the size and shape of a credit card with a fold-out USB connector for charging your smartphone while on the go. It comes in Lightning and micro USB versions.

Griffin Wired Keyboard for iOS

£42 from www.snipca.com/16351
The only non-wireless keyboard for iOS devices is also a good one. This Lightning-equipped keyboard has large keys with plenty of feedback and travel for fast, comfortable typing.

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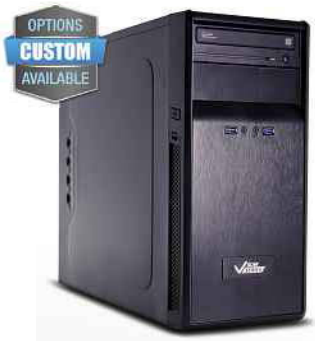
- 4GB Corsair DDR3 1333MHz memory
- 500GB SATA 6Gb/sec hard drive
- Windows 8.1

£299 Inc VAT

The V1 is a very capable entry-level system perfect from basic home/office tasks. It's based around the dual-core Intel® Pentium® G3240 processor, 4GB of RAM plus a 500GB hard disk.



Scan V15 Value System Home / Office PC

- Intel® Core™ i5 4460 processor
- 8GB Corsair DDR3 1600MHz memory
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£489 Inc VAT

The V15 ups the ante by including a quad-core Intel® Core™ i5 4460 processor, so it makes light work of office and multimedia applications.

Scan G20 Value System Gaming PC

- Intel® Pentium® G3240 processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 750 Ti SSC
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£499 Inc VAT

Thanks to its dual-core Intel® Pentium® G3240 processor and NVIDIA GTX 750 Ti SSC graphics card the G20i is our most affordable gaming PC. It even includes surround sound!

Scan G30i Value System Gaming PC

- Intel® Core™ i5 4460 processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 960 SSC ACX
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£699 Inc VAT

The combination of quad-core Intel® Core™ i5 4460 processor and NVIDIA GeForce GTX 960 SSC ACX graphics card ensures that the G30i can play any game you throw at it.

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Finance Available on PCs above £300

Built by award winning 3XS team

Fully soak tested

Fully 3XS compatible

Ready to ship

2 Year Warranty Part + Labour

Some features require Windows 8.1. Update available through Windows Store. Internet access required; fees may apply. Some apps sold separately; vary by market.

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- 8GB Corsair DDR3 2133MHz memory
- 4GB NVIDIA GeForce GTX 970 SC ACX
- 1TB Seagate HDD
- Windows 8.1
- 3 Year Premium Warranty

£1049 Inc VAT

The 3XS Gamer 20i is a super-fast gaming PC thanks to its combination of quad-core Intel Core i7 4790 CPU running at 3.6GHz with added Hyper-Threading plus a 4GB NVIDIA GeForce GTX 970 graphics card. These components are installed in an Asus Z97-K motherboard along with a 1TB hard disk.

Scan 3XS Z97 Vengeance Gaming PC

- Intel® Core™ i7 4790K processor overclocked up to 4.7GHz
- 8GB Corsair DDR3 2133MHz memory
- 4GB NVIDIA GeForce GTX 980 SC
- 250GB Samsung 850 SSD & 2TB HDD
- Windows 8.1
- 3 Year Premium Warranty

£1549 Inc VAT

This high-end gaming system includes a water-cooled Intel Core i7 4790K CPU overclocked up to 4.7GHz plus a 4GB NVIDIA GeForce GTX 980 graphics card, 8GB of 2133MHz Corsair Vengeance Pro DDR3, 250GB SSD for lightning quick gaming loading and a 2TB hard disk.

3XS Graphite LG157 Gaming Laptop

- Intel® Core™ i7 4720HQ processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 960M
- 15.6in 1,920 x 1,080 screen
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£939 Inc VAT

The LG157 is a 15.6" mid-range gaming laptop that includes a NVIDIA GeForce GTX 960M graphics card plus an Intel Core i7 4720HQ CPU, up to 16GB of RAM and multiple hard disks and SSDs. The LG157 is ready for next-day delivery and is protected by a 2 Year Premium Warranty.

3XS Graphite LG1720 Gaming Laptop

- Intel® Core™ i7 4720HQ processor
- 8GB Corsair DDR3 1600MHz memory
- 3GB NVIDIA GeForce GTX 970M
- 17.3in 1,920 x 1,080 screen
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£1149 Inc VAT

The LG1720 is a 17.3" high-end gaming laptop that includes a choice of powerful NVIDIA GeForce GTX 970M or 980M graphics card, ensuring silky smooth frame rates in all games. The LG1720 is ready for next-day delivery and has a 2 Year Warranty.

Scan Computers recommends Windows.

3XS Custom Series

Our 3XS Custom Series is a range of computers designed to offer the best performance for a variety of applications, with a particular focus on games. We build Custom Series PCs to order, so we can configure and tailor make an individual PC just the way you want it. We can also overclock the processor, so you get a faster PC without a substantial increase in price. All 3XS Custom Series PCs are covered by a three year warranty as standard with the first year on-site.

Scan 3XS Overclocked

Built by award winning 3XS team

3 YEARS STANDARD 3 Year Warranty

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Some features require Windows 8.1. Update available through Windows Store. Internet access required; fees may apply. Some apps sold separately; vary by market.
Prices correct at time of print and are subject to change.

TABLET | £125 on Vodafone pay as you go from www.snipca.com/16345

Vodafone Smart Tab 4G

The cheapest 4G Android tablet ever

Almost all of the mobile networks have their own-brand smartphones and tablets and Vodafone is no different. The Smart Tab 4G is Vodafone's budget 8in 4G-connected Android tablet. As well as the pay-as-you-go price listed above, it's also available on contract where its total cost of ownership (around £500 on a two-year contract) is almost the same as EE's Eagle (also known as the Huawei MediaPad M1, see our review in Issue 429).

The Smart Tab 4G may be cheap, but the plain grey plastic casing feels sturdy. However, despite the soft-touch rubbery back, we had difficulty getting a firm grip on it. This was due to the thin borders on the left- and right-hand sides of the screen (when held in portrait orientation), which also made it a little too easy to inadvertently touch on-screen controls.

The Smart Tab 4G has 1GB of memory and a quad-core processor, so its performance was in line with other tablets around this price. It's not very fast, but it's quick enough for running most apps. More annoying was the flawed responsiveness of its touchscreen. There was sometimes a noticeable delay as the screen struggled to catch up with our prods and swipes, although it wasn't nearly as bad as on other cheap Android devices we've tested. Battery life was only middling at just over nine hours when playing videos on a loop.

The biggest area of cost-cutting is the screen. Text looks fuzzy due to the relatively low resolution of 1280x800 pixels. Although the screen is bright, contrast was mediocre at best while colours looked washed out. There was a noticeable shift in colour accuracy at the top of the screen which looked more yellow-ish than the bottom half.

Only 4GB of storage is built in, so you'll almost certainly need to add more using the micro SD card slot. We weren't expecting much from the tablet's cameras, but we were still surprised by how bad they were. Both the rear- and front-facing cameras suffered from noise, dismal colour accuracy and blotchy areas of yellow appearing randomly throughout the image. The front camera struggled to capture a clear image in even slightly dim lighting conditions, which ruined Skype video calls.

Although it's not without its charms, the Smart Tab 4G is a mediocre tablet. It's only worth buying if you really want a 4G tablet for as little money as possible. Even then, you're better off with the EE Eagle which, while also far from perfect, has more bearable flaws. However, it's not available on pay-as-you-go and some areas of the UK will have better Vodafone coverage than EE.

SPECIFICATIONS

8in 1280x800 pixel touchscreen • 1.4GHz Qualcomm Snapdragon 410 quad-core processor • 1GB memory • 4GB storage • micro SIM • micro SD • Android 4.4 (KitKat) • 330g • 209x123x8mm (HxWxD) • One-year warranty www.snipca.com/16346

VERDICT: One of the cheapest Android 4G tablets around, but you'll have to put up with a poor screen and battery life

★★★☆☆

ALTERNATIVE: EE Eagle £150 on a £15-a-month, two-year EE contract Performance and responsiveness are poor on this 8in Android 4G tablet, but battery life is longer

WHAT SHOULD I BUY? We solve your buying dilemmas

How can I improve my living-room Wi-Fi?

Q I've bought a Sony smart TV and a Samsung PVR, but I'm having trouble getting a reliable Wi-Fi signal on both in my living room. I'm certain the problem is with my rickety old router because my laptop, which gets a strong enough signal in other rooms, also struggles to connect in my living room. What should I buy to solve this?

Petra Tonge

A Assuming that your existing router really is at fault, there are two ways to improve the reliability of the internet connection in your living room. The first is to replace your router. If you have an ADSL connection, we'd recommend the TP-Link TD-W8980 (£55 from www.snipca.com/16347). If you have a cable or fibre connection, we'd recommend the Asus RT-AC52U (£55 from www.snipca.com/16348). Both generally performed well in our performance and range tests, so either would be an improvement over your current router.

An alternative would be to buy a HomePlug adapter, which lets you use your home's electrical wiring to carry data. The Devolo dLAN 650 Triple+ Starter Kit (£77 from www.snipca.com/16019) is one of the fastest. It's not Wi-Fi-equipped, though, so you'd have to plug in your devices using Ethernet.

Do you need advice on what you should buy? Email us at letters@computeractive.co.uk

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SMARTPHONE | **£799 (without contract)** from www.snipca.com/16246

Panasonic Lumix CM1

The best smartphone camera ever – but it comes at a cost

Virtually every mobile phone includes a camera, but few can match even a basic dedicated digital camera for quality and features. The Panasonic CM1 changes all that – it comes with a camera to rival premium compact cameras costing hundreds of pounds. Its sensor is nine times larger than those found in most phones. Sensor size is crucial for great-quality images, so the CM1 is off to a cracking start with this feature.

However, given its astronomical price, which far exceeds any iPhone or Samsung Galaxy, the CM1 needs to be excellent as both a phone and a camera. It certainly looks the part, with its brushed aluminium sides and leather-effect body. It's heavier than your average smartphone, but this makes it satisfyingly weighty rather than a chore to carry. And we can live with its chunky design (about three times thicker than the slender iPhone 6).

> "You pay a high price for the convenience of a single device"

With a quad-core processor and 2GB memory, the CM1 is up to scratch as an Android phone. The iPhone 6 (see our review, Issue 436) was significantly faster in our performance benchmark tests, but the CM1 was still respectably pacy for an Android phone. There's 16GB of included storage, plus a micro SDXC slot to add up to 128GB more. It comes with Android 4.4 (KitKat) pre-installed, with Android 5 promised in May 2015. We're happy to report that Panasonic has made minimal changes Android, save for a couple of photography apps. Battery life in our video-playback test was lengthy at just over 11 and a half hours.

It works well as a camera too. There's a dedicated switch to launch the camera app and a physical button for taking photos. We were able to go from standby mode to snapping photos in two seconds. You can assign different camera functions to the ring around the lens and the phone's volume controls. The camera app is clearly laid out with access to all the settings you could hope for, including manual exposure and focus. Videos are recorded at 1080p and 4K resolutions. Although the latter is only at 15 frames per second, we do like the ability to extract 8-megapixel photos from 4K video files.

The 4.7in 1080p screen is larger than and has a higher resolution than any screen you'll see on a digital camera, but we found it more susceptible to reflections than most when shooting in strong sunlight. The inability to tilt the screen is another black mark compared to other premium compact cameras, and the lack of an ergonomic handgrip makes it harder to hold steady.

Image quality in bright conditions was fantastic, though, with 20-megapixel photos jam-packed with clean, sharp details. Meanwhile, the ability to shoot in RAW mode and process photos in Adobe Lightroom lets you apply colour correction beyond what is possible with JPEG files.

Image quality in low light was excellent compared with other smartphones, but it pales when compared with dedicated cameras with the same large sensor, such as the Canon G7 X. This comes with optical stabilisation, a wider-aperture lens to capture more light and is easier to hold. In short, low-light image quality is significantly better on the Lumix CM1 than in most smartphones, but still way behind that of a £400 camera.

There's a lot to be said for the convenience of a high-quality camera and phone in a single device, but at £800 this is hard to justify – especially when buying a comparable phone (the Motorola Moto X – see our review, Issue 440) and a superior camera (the Canon G7 X) would cost you about the same amount. Keep an eye on the CM1's price, though. If it fell to £600 it would be harder to resist.

VERDICT: A great camera and a good phone, but you pay a high price for having both in a single device

★★★☆☆

ALTERNATIVE: Apple iPhone 6 Plus £619 (16GB) A great phone with a very good all-round camera that has optical stabilisation, which goes some way to compensating for the smaller sensor

SPECIFICATIONS

4.7in 1920x1080-pixel touchscreen • 2.3GHz Qualcomm Snapdragon 801 quad-core processor • Adreno 330 graphics chip • 2GB memory • 16GB storage • 4G • Micro SIM • Micro SDXC slot • Android 4.4 Kit Kat • 204g • 135x68x21mm (HxWxD) • One-year warranty www.snipca.com/16247

NAS | **£143** from www.snipca.com/16187

Synology DiskStation DS215j

A superb NAS that has almost everything you could ever want

Computer active BUY IT! ★★★★★

The DiskStation DS215j might be one of Synology's cheapest NAS devices, but this two-drive model isn't lacking in either features or flexibility. Like its predecessor the DS213j (see our review, Issue 404), it has room for two desktop hard drives for a maximum capacity of 12TB (if you use a pair of 6TB drives which are the largest available) and will also accept SSDs too.

Installing hard drives takes slightly more effort than in other, admittedly more expensive NAS devices. You have to slide open the casing and screw the drives into a cage. Although this might sound intimidating, it's very straightforward to do.

All NAS devices are effectively small computers, but dedicated to network storage rather than for general use, and thus have their own operating systems. The DS215j is no different and its DSM operating system is based on Linux and needs to be installed before you can use it. Installing DSM has always been very straightforward, much more so than installing Windows on a PC, but Synology has made it even easier. Although it's still possible to use the old Synology Assistant program on your PC to install DSM on your NAS, you can now instead go to find.synology.com from any computer on the same network. The web-based wizard will find your DS215j and walk you through the installation and setup process.

You configure DSM through your web browser. Its interface looks very similar to both Windows and OS X, so customising its settings is easy. Extra features include the ability to share USB printers and the contents of USB drives with all the computers on your network by plugging them into the DS215j. You can also set the DS215j to automatically back up its contents to a USB drive. All these USB features worked flawlessly in our tests.

There are plenty of other features, such as the option to use the DS215j as a media server. We had no trouble streaming any video-file formats to an Android phone, even when outside, once we'd completed a simple set-up process. You can add even more features using DSM's built-in app store, such as email servers and the ability to control home-security cameras.

We tested the DS215j using two 4TB Western Digital Red hard drives configured in RAID 1 mode. This is where identical copies of your data are automatically stored on each drive, ensuring you don't lose any data should one drive stop working. This halves the total amount of available storage, though. You can, of course, choose RAID 0, which combines the total capacity of both drives together, but if one drive fails you will lose all your data.

The DS215j excelled at copying large files, largely due to its dual-core processor which is faster than the single-core processors used in older Synology models. The overall speed of 94.3MB/s is very quick. It had more trouble copying our small files, but it was still reasonably quick, managing 18MB/s. This is still faster than older Synology NAS devices.

We've always been impressed with Synology NAS devices and the DS215j is no different. It's reasonably priced, fast, easy to set up and has almost any feature you could ever want. If you don't mind the minor hassle of having to install your own hard drives, the DS215j is the obvious choice for quality network storage.

SPECIFICATIONS

Accepts 2x SATA3 hard drives or SSDs • 1x Gigabit Ethernet port • 1x USB2 port • 1x USB3 port • UPnP media, iTunes, print, USB disk, web and FTP servers • 165x100x226mm (HxWxD) • One-year warranty

www.snipca.com/16188

VERDICT: Impressive speeds and superb features make this excellent value

★★★★★

ALTERNATIVE: Synology DiskStation DS414j £250 If you need even more network storage, this NAS can accept up to four drives yet is still just as easy to set up and use

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REMOTE ACCESS DEVICE | **£95** from www.snipca.com/16253

NZXT Doko

A box that provides remote access to your PC – but only within your home

Remotely accessing your PC using software such as TeamViewer is nothing new, but NZXT takes a curiously different approach. The company, better known for its range of PC cases, uses hardware rather than software to provide remote access to your Windows 8 computer.

Plug the small Doko box into a TV or monitor via HDMI, connect it to the same network as your computer, then install NZXT's software on your PC. This lets you control a PC that's in your study, say, using the Doko connected to the TV in your living room. The box has four USB 2.0 ports at the back, so you can connect keyboards, mice, USB sticks and other peripherals that are instantly recognised by your PC.

One of the Doko box's main limitations is that it only has a Gigabit Ethernet port with no built-in Wi-Fi. While this ensures great responsiveness when controlling your PC, it's also limiting to those who prefer the freedom of movement Wi-Fi provides. You could try using HomePlug adapters, but this tends to produce juddery graphics and delayed responsiveness, unless your home has high-quality wiring.

> "Too many limitations make it a niche option"

The Doko box only works with 1080p monitors and TVs. The experience is also a little buggy. For example, some dialogue boxes – such as Windows User Account Control alerts – only appear on the PC, and not on the Doko-connected TV.

Because the Doko only works when it's connected to the same network as your PC, you can't use it to remotely control your PC while you're away on holiday, for example. This seriously restricts the Doko's usefulness (free software such as TeamViewer has no such limitation). The Doko has better responsiveness and performance than TeamViewer, so you can watch videos and play games (though the latter only worked when we connected our PC to our router using Ethernet). Connecting over Wi-Fi resulted in choppy graphics. However, we struggle to see why people would want to play PC games without sitting in front of their PC.

The Doko is very odd with too many limitations, which means it would only be useful in very niche situations. Most people will be better off with alternative remote-access solutions. TeamViewer is a better choice if you mostly want remote access outside the home, while if you spend most of your time at home and have no interest in games you should use the Windows built-in Remote Desktop feature.

VERDICT: An odd remote-access solution dragged down by its limitations

★★★☆☆

ALTERNATIVE: TeamViewer Free

Although its responsiveness isn't as good, this free PC remote-access software works well

SPECIFICATIONS

1x Gigabit Ethernet port • 4x USB 2.0 ports • 1x analogue audio output • Requires Windows 8 PC with minimum 512MB memory and 1GHz processor • Requires 1080p TV with HDMI • 29x108x121mm (HxWxD) • 320g www.doko.nzxt.com

COMING SOON

SUMMER 2015

The Asus Chromebit is a Chrome OS PC the size of a USB stick that plugs into your monitor's HDMI port. It will cost $100 in the US with UK pricing still to be confirmed.

AUTUMN 2015

The Dell Venue 10 7000 is the 10in version of the Venue 8 7000 Android tablet (see our review, Issue 447). Its 'barrel edge' will house a bigger battery and a magnetic connection for its optional Bluetooth keyboard.

AUTUMN 2015

The iPhone 6s is rumoured to have an improved camera, waterproofing and the Force Touch pressure-sensitive screen technology, first seen in the Apple Watch.

AUTUMN/WINTER 2015

The next generation of Windows Phones running Windows 10 will be able to act as full-blown PCs when connected to a monitor or TV.

NEXT ISSUE

ON SALE 27 May

Samsung Galaxy S6 Edge An Android phone with a screen curved on both sides

Microsoft Surface 3 The latest Windows 8.1 laptop-tablet hybrid

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Our pick of products that have won the Buy It award

LAPTOP

Asus X555LA-XX290H

£300 from www.snipca.com/16158
Tested: Issue 446

Asus has made all the right choices with this budget Windows 8.1 laptop. Its comfortable keyboard, fast performance, respectably lengthy battery life and bright screen are all the more impressive given its low price.

ALTERNATIVE Asus Chromebook C200 A cheap Chrome OS ultra-portable laptop with a bright screen, lengthy battery life and a great keyboard. £200 from www.snipca.com/16353

DESKTOP PC

Palicomp AMD Kaveri Evolution

£500 from www.snipca.com/16354
Tested: Issue 422

A budget PC with a fast overclocked processor. It also has good upgrade potential and comes with a surprisingly good 24in monitor, as well as a quality USB keyboard and mouse.

ALTERNATIVE: Chillblast Fusion Rhino A very powerful and compact PC sold without a keyboard, mouse or monitor. £929 from www.snipca.com/15252

TABLET

Apple iPad Mini 2

£239 from www.snipca.com/14467
Tested: Issue 416

Apple's mini tablet from 2013 is now available at an even lower price. The only thing it lacks compared with the Mini 3 is a fingerprint sensor and the option of lots of built-in storage. Otherwise, it's an absolute bargain.

ALTERNATIVE: Apple iPad Air 2 A thin and lightweight 10in tablet with a fingerprint reader, an excellent screen and peerless selection of apps. £399 from www.snipca.com/14309

PHONE

Motorola Moto G 4G (second generation)

£150 (without contract) from www.snipca.com/16160
Tested: Issue 436

Moto G 4G has been updated with a 5in screen, 4G and a microSD card slot. The 3G version has dual SIM slots.

ALTERNATIVE: Apple iPhone 5s An excellent smartphone with a great camera and performance. £459 without a contract from www.snipca.com/10171

DIGITAL CAMERA

Panasonic Lumix DMC-GF6

£279 from www.snipca.com/16355
Tested: Issue 405

This compact interchangeable-lens camera is small and reasonably priced, yet it has well-designed controls, a wide range of available lenses and shoots excellent quality photos. The GF6 really is unbeatable value.

ALTERNATIVE: Sony A5000 A rival CSC with better low-light performance, although its controls and range of available lenses aren't quite as good. £251 from www.snipca.com/15854

E-READER

Kobo Aura H2O

£140 from www.snipca.com/15490
Tested: Issue 435

A waterproof e-reader with an easy-to-read, high-resolution touchscreen that's easy on the eyes and great for reading in the bath. There's no 3G version, but, unlike the Amazon Kindle, you can buy ebooks from independent retailers that use the ePub format.

ALTERNATIVE: Amazon Kindle Voyage The best Kindle yet, with a sharp, extremely responsive touchscreen and easy-grip design. £169 from www.snipca.com/14451

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pcspecialist

PC Specialist recommends Windows 8.1

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SECURITY SOFTWARE

Kaspersky Internet Security 2015

£17.99 from www.snipca.com/14212
Tested: Issue 437

Kaspersky Internet Security 2015 has won our past four antivirus tests – an unprecedented set of results. The 2015 edition is available at an exclusive reader discount on our Software Store. Click the link above for a one-device licence, or buy a three-device licence for just £39.99 at www.snipca.com/14221.

ALTERNATIVE: Norton Internet Security 2014 An affordable program, but sometimes blocked legitimate software. £30 from www.snipca.com/15115

PHOTO EDITING

Adobe Photoshop Lightroom 5

£110 from www.snipca.com/16356
Tested: Issue 402

Lightroom is a consistently elegant, powerful and fast photo-management program packed with sophisticated features. If you want to keep on top of your photos and make them look great, there's no better software to do it with.

ALTERNATIVE: Adobe Photoshop Elements 13 A fast and polished photo-editing program with excellent advanced editing tools. £64 from www.snipca.com/16357

COMPETITION

Win 1 of 4 **Asus RT-AC52U routers**

The Asus RT-AC52U, which won a Great Pick award in Issue 446, is one the cheapest routers we've ever tested that's 802.11ac compatible. It even comes with an 802.11ac adapter for your PC. In 802.11n mode the router is dual-band capable, reaching fast speeds on both the 2.4GHz and 5.0GHz bands. It also lets you remotely access files when you're away from your PC. To enter, email your address to cacomp@dennis.co.uk by midnight 26 May 2015.

The **Asus RT-AC52U** router is available now priced £58 from www.snipca.com/16242. For more info visit www.snipca.com/15711. You can also follow Asus on Twitter (@ASUS_ROGUK).

SECURITY CAMERA

Y-cam HomeMonitor HD

£147 from www.snipca.com/11646
Tested: Issue 420

A home-security camera that's well priced and easy to set up. Plus, it has great picture quality, useful apps and there's no need to subscribe to any extra services. It's a worthy successor to the original HomeMonitor, our previous favourite security camera.

ALTERNATIVE: D-Link Wireless N Day & Night Camera A good-value security camera with excellent night vision. £74 from www.snipca.com/15275

ROUTER

Trendnet TEW-812DRU

£112 from www.snipca.com/15855
Tested: Issue 427

An incredibly fast 802.11ac router that's also one of the cheapest we've seen. It's superb and it's the router to buy if you're ready to make the jump to 802.11ac.

ALTERNATIVE: Linksys WRT1900AC More expensive, but even faster and with loads of features too. £200 from www.snipca.com/14950

NAS

NEW ENTRY

Synology DiskStation DS215j

£143 from www.snipca.com/16187
Tested: Issue 449

This two-drive NAS enclosure has it all – fast performance, easy configuration and plenty of extra features. Its only flaw is that installation is a little fiddly – but if you want quality network storage, then this is the obvious choice.

ALTERNATIVE: Synology DS414j A four-drive NAS that's generally fast, easy to set up and use. £250 from www.snipca.com/15493

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- Microsoft Windows 8.1

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** World`s fastest PC as tested by PC Pro Magazine http://www.pcpro.co.uk/reviews/desktops/371152/chillblast-fusion-photo-oc-iv

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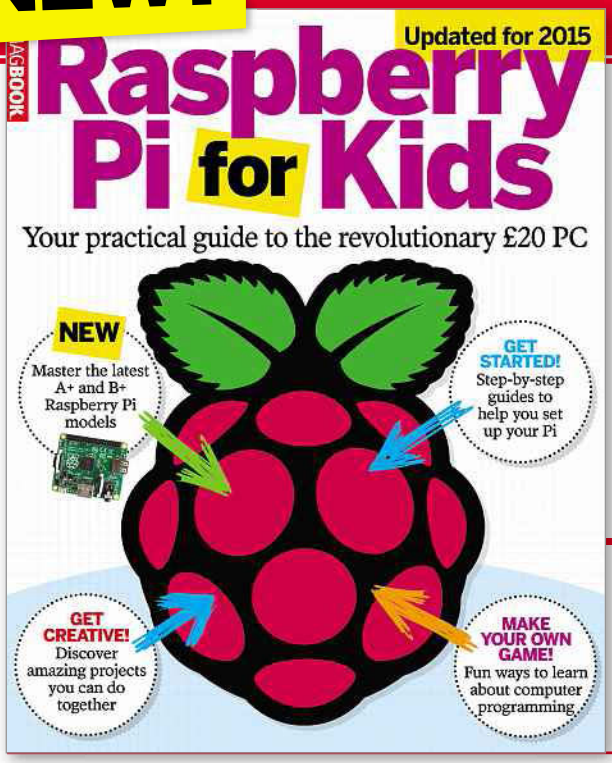

RASPBERRY PI FOR KIDS

The Raspberry Pi is the incredible £20 British computer that's taking the world by storm. It's ideal for children of all ages to experiment, play games and learn valuable skills. We've updated this 148-page book for 2015 to include instructions on mastering the new Pi models (A+ and B+), helping children learn the coding skills needed to excel at the new school curriculum. We take you step by step through the basics of setting up and configuring the Pi and introduce many fun projects for families.

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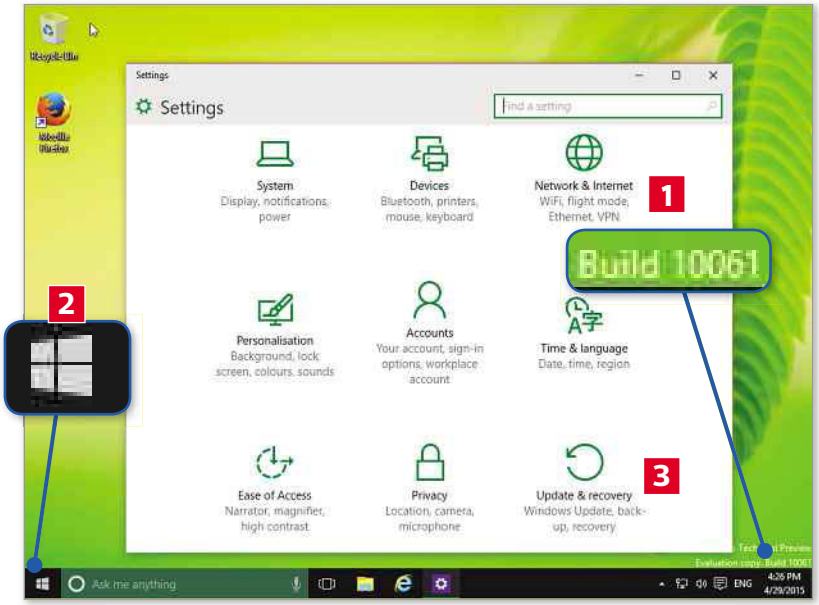
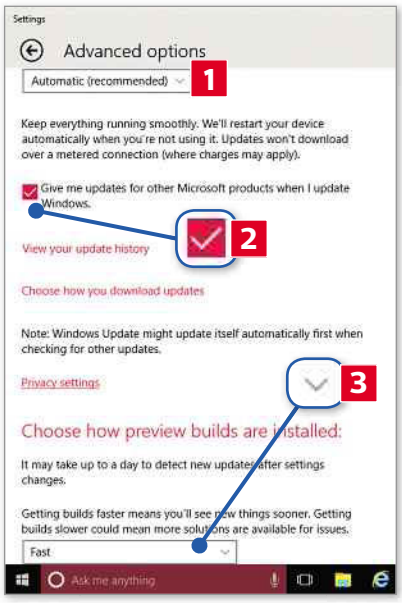
Use Outlook in Windows 10

What you need: Windows 10 Technical Preview **Time required:** 1 hour

With the launch of Windows 10 only a few months away, Microsoft is pushing out regular updates for the Technical Preview. The latest version contains new Outlook Mail and Calendar apps, which have bigger tabs that make them easier to use on a PC. We'll show you how to set them up to send and receive emails and add event reminders. This version also includes changes to the Start menu and an easier way to manage your virtual desktops.

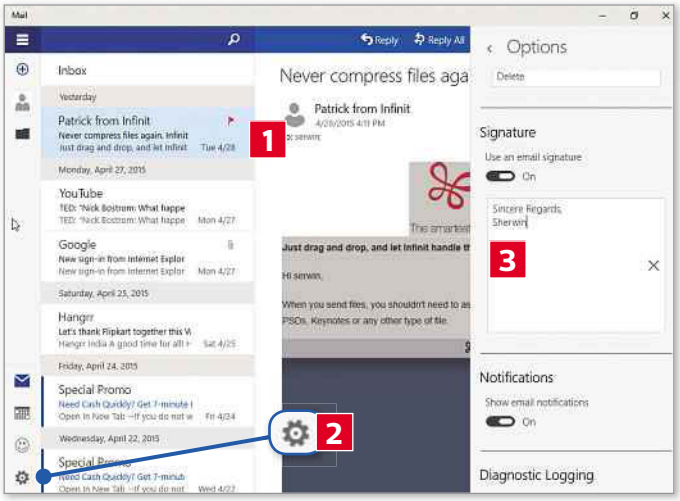


STEP 1 Refer to our lead Workshops in Issue 443 and 444 if you have yet to install the Windows 10 Technical Preview. They show you how to install Windows 10 safely using VirtualBox and by dual-booting your PC. To use the new Outlook Mail and Calendar apps, you need to update to the latest version of the Windows 10 Technical Preview (Build 10061). Your Build number is displayed at the bottom right of your screen 1. To update your version of Windows 10, click the Start button 2, Settings, 'Update & recovery' 3, then click the 'Advanced options' link.

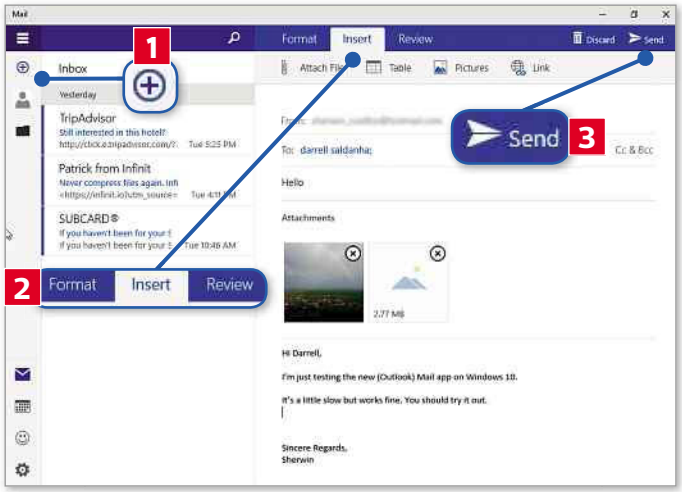


STEP 2 Now choose 'Automatic (recommended)' 1 from the dropdown menu at the top, tick the box below 2, then select Fast 3 from the dropdown menu at the bottom. Next, click the Back button at the top left, then 'Check for updates'. Windows will download and install the latest version of the Technical Preview, which can take a while. When that's finished, Windows will restart several times, then automatically reboot to the latest version.

STEP 3 To open the new Outlook Mail app, click the search bar at the bottom, type mail, click the app, then click 'Get started'. By default, it'll add the Outlook email address you use to log into Windows 1. If you want to add another account, click 'Add account' 2, select the type of account 3, enter your login details, click 'Sign in', then Accept and Yes. Finally, click Done. Your emails will now begin syncing in the background.

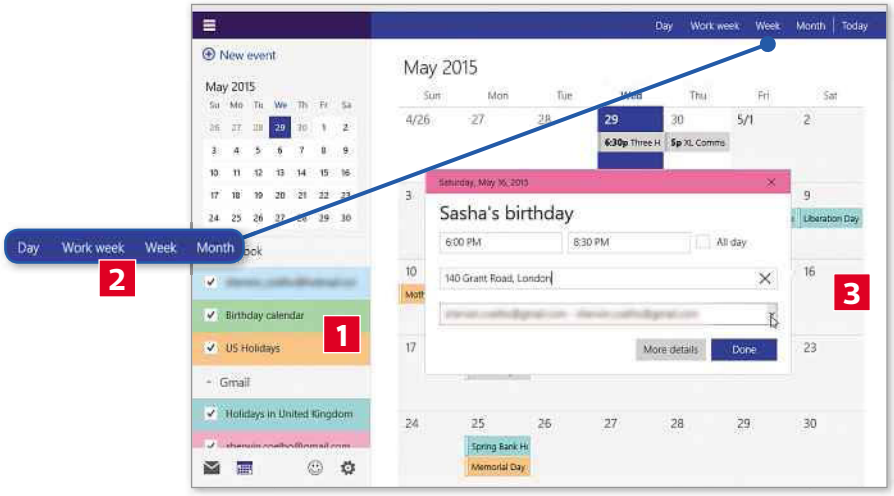


STEP 4 Maximise the app to see it in full-screen mode. Move your cursor to any email in your inbox 1 to reveal a bin and flag icon (to delete or flag it up). These options are also available at the top right of the preview pane when you click an email. To personalise your email signature, click Settings 2, Options, then scroll to the Signature field and type what you want 3.



STEP 5 To compose a new email, click the '+' symbol 1. You'll see three main tabs 2 at the top. By default, the Outlook dictionary is set to US English. To change it, click the Review tab, move your cursor to 'English (United States)', click the dropdown menu that appears, then click 'English (United Kingdom)'. To attach files, click the Insert tab, Attach File, navigate to the file you want, then click Open. Click Send 3 to do that.

STEP 6 To use the new Calendar app, click the calendar icon at the bottom right of Outlook, then click 'Get started'. You can choose to sync only your Outlook Calendar or add another one (the process is similar to adding a new account in Step 3). Each event category will be marked on the calendar in a different colour. Untick the categories 1 you don't want to see. You can display a monthly, weekly or daily view using the options at the top 2. Click any event to see more details about it. To add an event, click on the day of the event 3, enter the details in the fields provided, then click Done.



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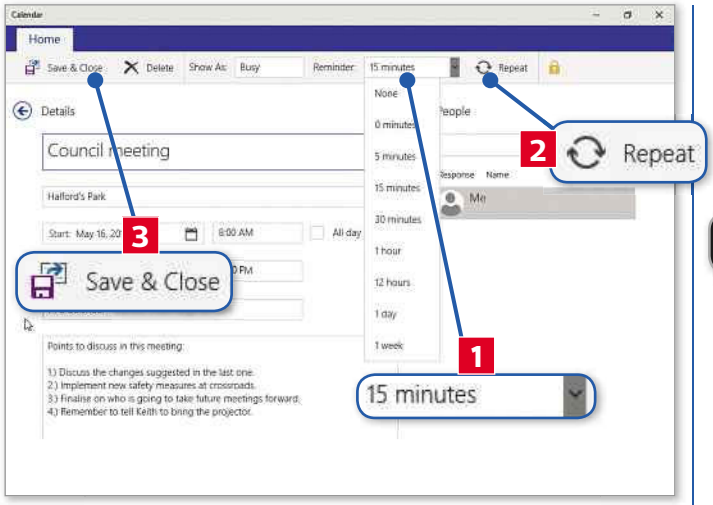
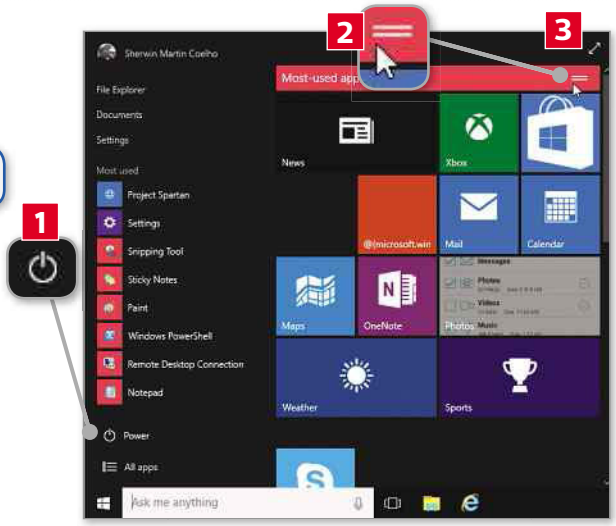
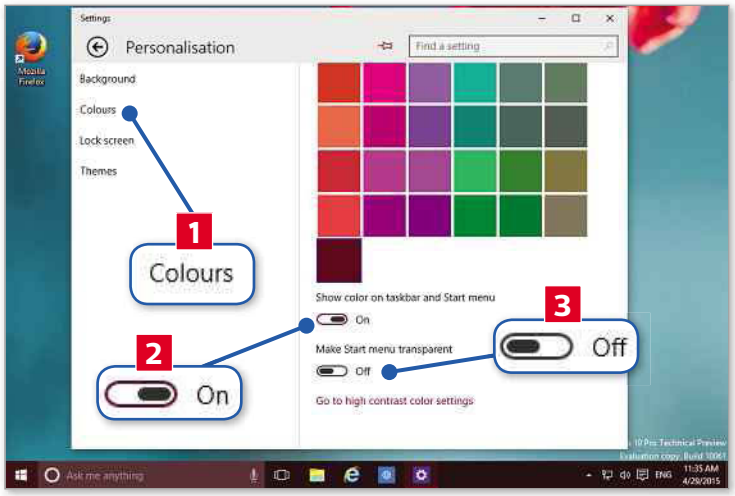


STEP 7 There are two ways to add an event with more details and reminders. You can click a specific date, then click the 'More details' button or '+ New event' at the top left. Add details in the fields provided. To receive a reminder of this event beforehand (via email), click the Reminder dropdown menu 1 and set how long before it starts you want to be notified. If this is a recurring event, click Repeat 2 and set the frequency (options include every day, every week and every month). Finally, click 'Save & Close' 3.



STEP 8 We'll now show you some other new features in the latest version of Windows. Press the Windows button on your keyboard to open the Start menu. Microsoft has moved the Power button 1 from the top right of the Start menu to the bottom left. To move app groups within the Start menu, drag up or down the two parallel lines 2 beside the group name. You can also resize the Start menu by clicking and dragging its top or right edges 3.



STEP 9 By default, the Start menu and Taskbar have black backgrounds, but it's easy to add a splash of colour. Open the Start menu, click Settings, Personalisation, then Colours 1. Now click the 'Automatically pick a color from my background' slider to see coloured tiles, then select the colour you want. Next, click the 'Show colour on taskbar and Start menu' slider 2 to see the colour you selected applied to both. You can also make your Start menu transparent by clicking the 'Make Start menu transparent' slider 3.

STEP 10 You'll also notice that the Recycle Bin icon 1 has been redesigned. Microsoft's new browser Edge (previously codenamed Spartan) is no longer accessible from the Taskbar (see 'Use Microsoft's new Spartan browser' Workshop in the last issue). To pin it there, click the search box at the bottom, type project spartan, right-click it 2, then click 'Pin to taskbar'. The redesigned 'Task view' icon 3 lets you add virtual desktops, which are useful for opening different sets of programs on separate workspaces. Now you can open as many virtual desktops as you want, then navigate between them using the new right and left arrows at either end.

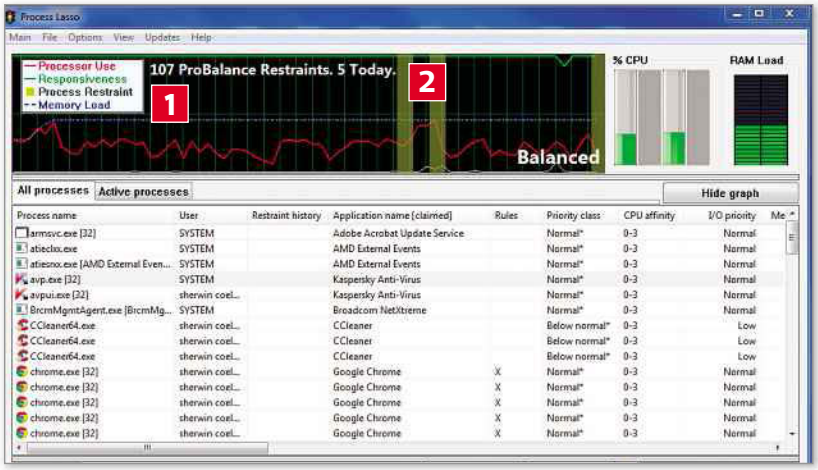
Identify programs that crash your PC

What you need: Process Lasso; Windows XP, Vista, 7 or 8
Time required: 30 minutes

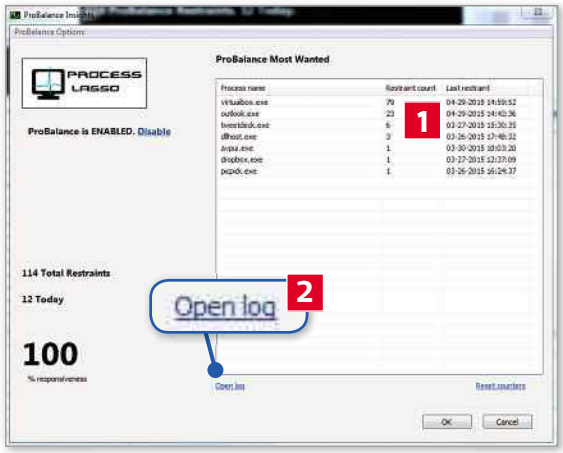
If your PC crashes or freezes frequently, it could be down to a faulty program. To find out, use Process Lasso, a free and more advanced alternative to Windows' built-in Task Manager. It monitors all the programs and processes running on your PC.

The latest version has a useful feature called ProBalance that lets you identify programs that hog a lot of your PC's resources. It also has a new SmartTrim feature that better manages the background processes running on your PC. We'll show you how to get the most out of these two features.

STEP 1 To download the free version of Process Lasso, go to https://bitsum.com/processlasso and click the dark blue Download Now button. Click the downloaded setup file, Run, Yes, select English from the language dropdown menu, then click OK, I Agree, Next, then Install. When the program launches you'll see three sections. The top section contains a live graph 1 that monitors your PC's performance. Yellow bars 2 indicate spikes (resource surges) in your PC's performance. Occasional spikes are normal but if they appear frequently, then move your cursor to the bar to see which program is causing this. If one program is responsible for a number of bars, then you should close it.



STEP 2 The middle section contains two tabs – 'All processes' 1 (which displays all the programs and background processes in use since you started Process Lasso) and 'Active processes' 2 (which only shows the programs currently running on your PC). The 'Actions log' section 3 is a record of what's taking place behind the scenes on your PC, including every program you open and close. Use your PC as you normally would and let Process Lasso run for about 10 or 15 minutes to monitor your background processes.



STEP 3 The latest version of Process Lasso has a feature called ProBalance, which is switched on by default. This keeps a record of which programs are putting the most strain on your PC's resources, helping you identify problem programs. It also tries to restrict those programs by stopping them from using more of your PC's resources than they need to. To see these programs, click the Insights button in the 'Actions log' section. The worst offender will have the highest 'Restraint count' 1. For more information on these culprits, click the 'Open log' link 2.

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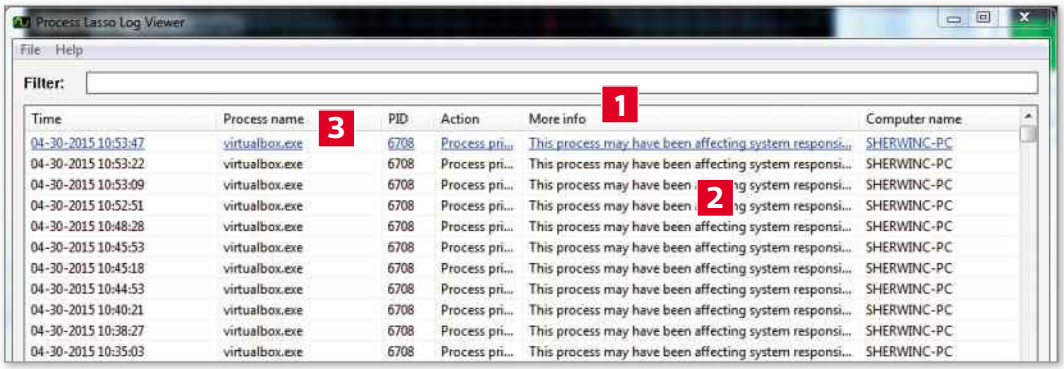
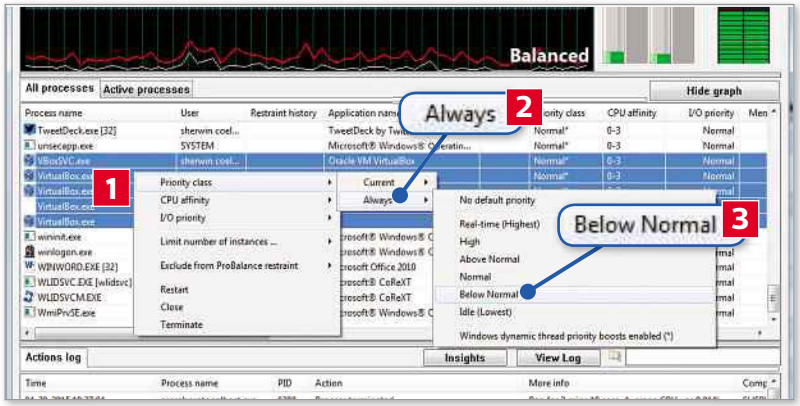
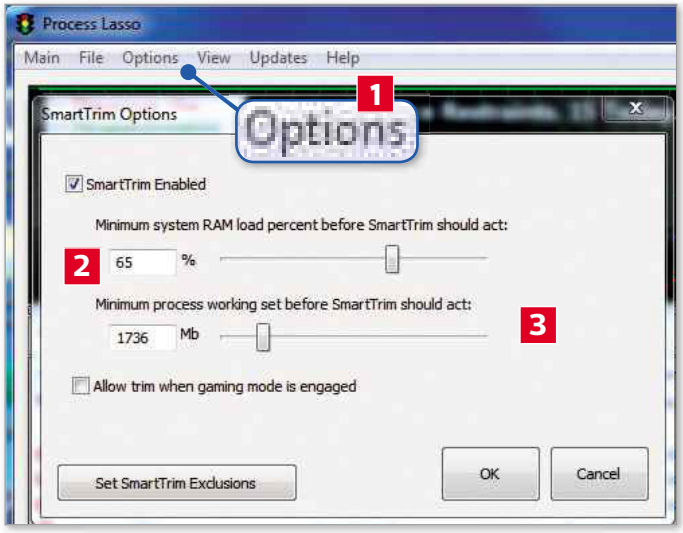
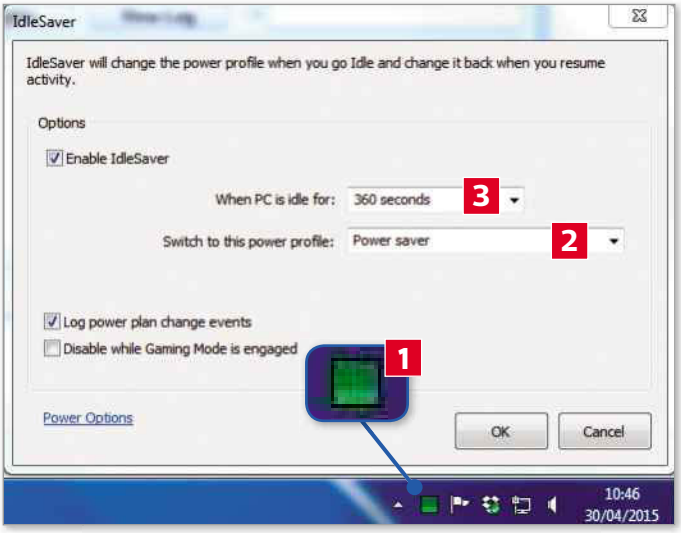
STEP 4 Now click the 'More info' column 1. If you see a 'This process may have been affecting system responsiveness...' warning 2, check which program is causing this under 'Process name' 3, then close that program. If the program is running as a background process, you can close it using Process Lasso. To do that, go to the main Process Lasso screen, click the 'All processes' tab, click 'Process name' at the top left, then navigate to the problem process. If it has more than one entry, press Shift on your keyboard, click all its entries, right-click the selection, click Terminate, then click Yes. Uninstall the program if you don't use it.





STEP 5 Now restart your PC and check if the problem persists. If you want to use a program you suspect may crash or freeze your PC, then you should lower its 'priority' rating within Process Lasso – this limits the amount of your PC's resources the program can use. It may slow the program down slightly, but it should prevent any crashes. To do this, open and run the program on your PC. Next, look for that program's 'Process name' in Process Lasso. Pressing the Shift key, click all the program's entries 1, move your cursor to Priority class, then to Always 2, then click Below Normal 3.





STEP 6 Another new feature in Process Lasso is SmartTrim. This mode automatically manages your PC's RAM if there are a lot of processes running in the background, which can help prevent crashes. SmartTrim is switched on by default, but you should change its settings. To access it, click Options at the top 1, move your cursor to 'SmartTrim settings', then click 'Advanced configuration'. Ensure SmartTrim Enabled is ticked. Set the first slider to about 65 per cent 2 and the second slider to anywhere up to a third of the way across 3, then click OK.

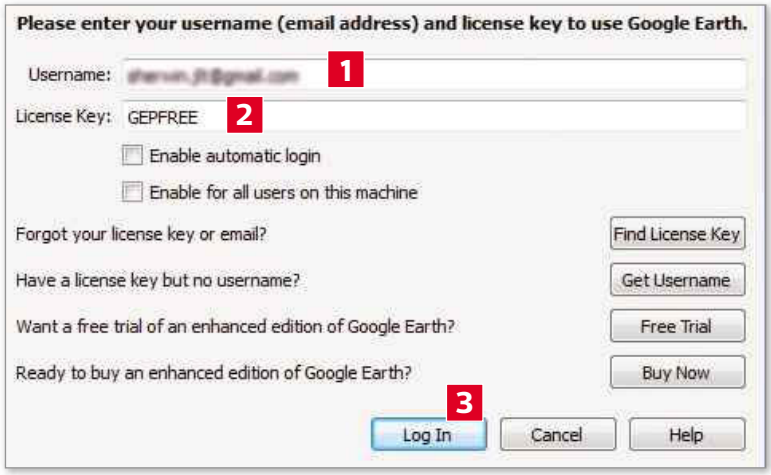
STEP 7 IdleSaver, another mode in Process Lasso, is especially useful if you use a laptop because it helps you save battery power. To enable it, right-click the Process Lasso icon in your PC's notification area 1, then click 'IdleSaver enabled'. Now click the 'Switch to this power profile' dropdown menu and select 'Power saver' 2. Next, click the 'When PC is idle for' dropdown menu, select the time (in seconds) after which you want to activate this mode 3, then click OK.

Explore space using Google Earth Pro

What you need: Google Earth Pro; Windows XP, Vista, 7 or 8 **Time required:** 40 minutes

A little-known feature of Google Earth lets you explore space, including the Moon and Mars. We'll show you how to navigate to constellations, view the biggest known volcano in the Solar System and see where each of the Apollo missions landed. In the last step, we'll tell you how to print high-resolution images from your interplanetary explorations using the 'Pro' version of Google Earth, which was made free earlier this year.

STEP 1 To download and install Google Earth Pro for free (it was £260 until recently) go to www.snipca.com/15715 and click the blue 'Agree and Download' button. Click the setup file that downloads to your PC, Run, Yes, then wait for the program to install. If you're downloading it for the first time, you'll see a login window. Enter your Gmail address in the Username field 1, type GEPFREE 2 in the License Key field, then click Log In 3. Next, close the Start-up Tips window, click 'Sign in' at the top right and log into your Google account using the same email address.



STEP 2 When Google Earth opens, you'll see a globe view of Earth. To start travelling through space, click the planet dropdown menu 1, then click Sky. Now click the expandable menu beside Sky Database 2, then tick 'Welcome to Sky' 3. You'll automatically zoom into the Andromeda Galaxy – (the nearest galaxy to the Milky Way – see screenshot). Click any celestial object on your screen to read more about it. Click the 'Welcome to Sky' icon 4. From here you can navigate to a specific area of space by clicking the links. For example, click the Hubble Ultra Deep Field link to see an image containing 10,000 galaxies from approximately 13 billion years ago. You can read more about this famous image at www.snipca.com/16385.

STEP 3 The easiest way to navigate to a particular star or constellation is to type its name in the search box, then press Enter. For example, to see the Pole Star, type pole star, then press Enter. Use the scroll wheel on your mouse or the zoom slider at the top right to zoom in and out. Similarly, you can search for constellations 1, then click any of the stars to read more about them. Some even link to relevant YouTube videos 2. Click History 3 to see your search History and revisit favourite locations.

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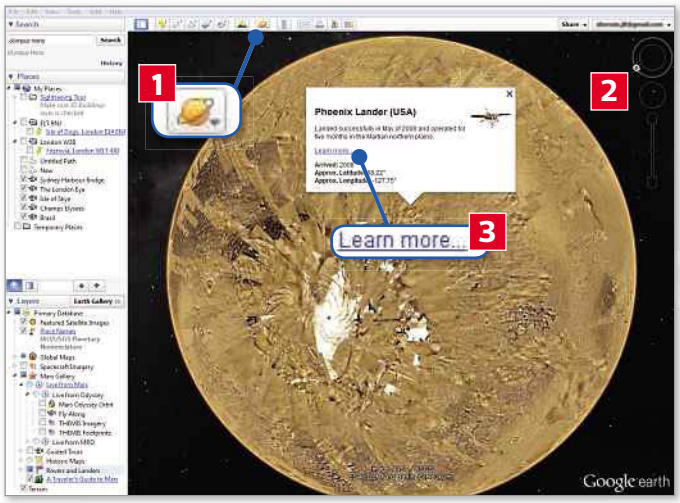


STEP 4 We'll now navigate around Mars. Click the planet dropdown menu again **1**, then Mars to see a close-up view of the red planet. Using your mouse or Google Earth's controls **2**, navigate around the planet. You'll see small coloured dots, which you can click to read more about that particular area. Look carefully and you'll also see a few small flags of countries. Click one, then the 'Learn more' link **3** to read about the landers that specific country sent to Mars. Type olympus mons in the search field, click Search, then zoom out to see the largest known volcano in the Solar System (it's almost three times the size of Mount Everest).

STEP 5 We'll now come closer to home by exploring the Moon. Click the planet dropdown menu again, then select Moon. Zoom in and – as with Mars – click the dots and flags for more information. There's an easy way to explore in magnificent detail all six Apollo missions that landed on the moon. Click the menu arrow beside Apollo Missions **1**, then the Apollo mission link you want to learn about. Click the first image thumbnail **2** to zoom into the specific landing area of that mission. You can also click any of the photo thumbnails **3** to zoom into the exact spot where that photo was taken. Click the video thumbnails to watch videos about those missions.

STEP 6 Another brilliant lunar feature is Guided Tours, which are 10-minute videos detailing the challenges and successes of Apollo 11 and Apollo 17, the first and last manned missions. To watch these videos, click the menu arrow beside Guided Tours **1**. Next, click the mission you want to watch **2**, then click 'Play this tour'. At certains points you can pause the video **3** and explore that area of the Moon in 3D to see the lunar module or the astronauts from another angle.

STEP 7 You can now print images in high resolution for free (previously you had to pay for Google Earth Pro). To do that, first navigate to the image, then click the Print icon **1**. You'll see two sections – at the top left and right. Click the top-left section to name and describe your image. The top-right section contains a key to all the items that appear in your image. If you don't want to include these sections in your printed image, click the Map Options dropdown menu **2** and untick all the boxes. Now click Print **3**, select your printer, then click the Print button.

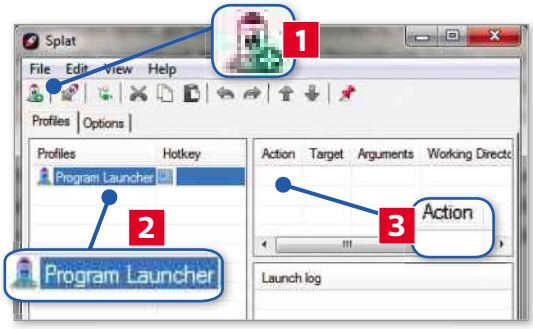
Launch multiple programs with one keyboard shortcut

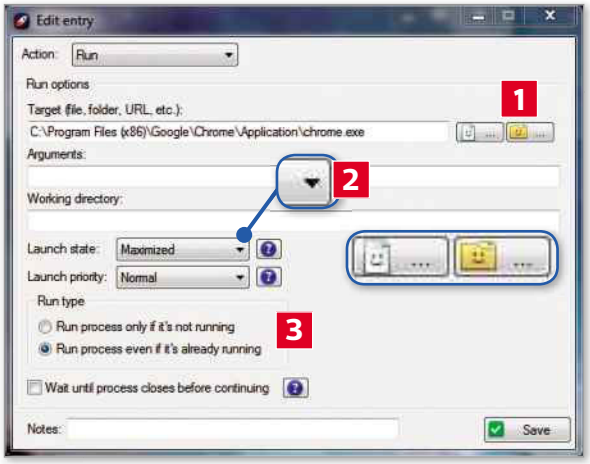
What you need: Splat; Windows 7 or 8 **Time required:** 10 minutes

Splat (short for Simple Program Launching and Termination) is a brilliant, free portable program that lets you open groups of programs, files, folders and websites using a keyboard shortcut.

For example, you might be creating a family tree and want to open your genealogy program, an Excel spreadsheet, Chrome browser and a folder containing photos. Splat lets you open all these with the press of a key. In this Workshop, we'll show you how to use the software.

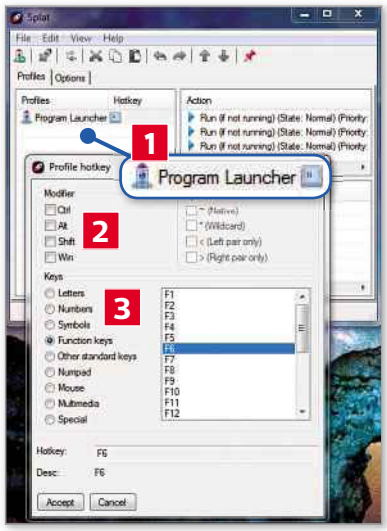
STEP 1 To download Splat, go to www.snipca.com/16343, then click the orange Splat.zip link beside Download (halfway down the page). Now go to your Downloads folder, right-click the zipped Splat file, then click 'Extract to Desktop' or 'Extract here', select Desktop, then click OK (the exact method may vary based on the file-compression program you use). Next, click the Splat icon on your Desktop, then click Run. You'll see a small window with three sections. Click the 'Create new profile' icon 1, name it 2, then click OK. Now click the profile you created on the left, then double-click the box below Action 3 to open the 'Add entry' field.





STEP 2 In the 'Add entry' field you need to add the first item you want to launch using your keyboard shortcut. Ensure the Action dropdown menu at the top is set to Run. You'll see two icons 1 beside the Target field. The white icon lets you add a program or file, while the orange one lets you add a folder. For example, if you want to open Chrome, click the white icon, then double-click the Chrome shortcut on your Desktop. You can also add a website's web address in the Target field to open that site in your chosen browser. Use the 'Launch state' dropdown menu 2 to select the size of window it opens in (maximised or minimised). The 'Run type' section 3 lets you select whether or not you want to open an item if it's already running on your PC. Click Save when you're done.

STEP 3 Now double-click the next box down in the Action field and repeat Step 2 as many times as you want to add the other items you want to launch. To set your keyboard shortcut, right-click the profile you created 1, then click 'Edit launch hotkey'. Tick a Modifier key 2 (optional), then select a main key (such as Letters, Numbers or 'Function keys') 3. Click the key you want to use in the box on the right, then click Accept. Now, as long as Splat is open on your PC, simply click any blank area on your Desktop, then press the keyboard shortcut you created to launch all those items in one go.



NEXT ISSUE

ON SALE 27 May

- Fix Office programs with Microsoft's new tool
- Turn your phone into a scanner
- Tweak every part of Windows in one click
- Instantly transfer files from a USB stick

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TIP OF THE FORTNIGHT

Add search options to your browser's right-click menus

I mainly browse the internet using Chrome, but sometimes switch to Firefox if Chrome acts up. Recently, I realised that if you highlight a word or phrase in any of the browsers, then right-click it, you see an option to search Google for it.

That got me wondering if there was any way I could add other search options. For example, searching on Bing or Wikipedia because I like using Bing's image search, while Wikipedia is great for learning more about people and places. This, it turns out, is relatively easy to do in both browsers with the help of free extensions (Firefox calls them 'add-ons'). Both Chrome and Firefox have extensions which add more search options to their right-click menus. Each extension adds similar options.

The Chrome extension is called Context Menu Search. To install it, go to www.snipca.com/16255, click the blue 'Add to Chrome' button, then Add. Now highlight the text you want to search, right-click it and move your cursor to Context Menu Search. You'll see a list of search options (see screenshot).

To add the Firefox add-on (called Search This On), open the browser, go to www.snipca.com/16256, click the 'Add to Firefox' button, then Install Now. Now highlight a term you want to search, move your cursor to 'Search this on' and select one of the search options, which include Bing, Yahoo, Wikipedia, Ask Jeeves and DuckDuckGo.

Grant Baines

The winner of every Tip of the Fortnight wins this exclusive Computeractive mug!

AUDIO EDITING

Preview sound effects before adding them

A few months ago, you featured Audacity, a brilliant, free audio-editing program, in one of your Workshops (See 'Turn your life story into an audiobook', Issue 440).

While it was easy to add customisable effects to your audio file, in many cases you couldn't preview how your audio would sound with the effects added. This meant that the process of adding an effect, then un-doing it if you didn't like it was very time consuming. Even more so, if you were working with a large file.

Thankfully, the latest version now lets you preview all your effects before adding them. To download this version of Audacity, go to www.snipca.com/16257, click the green Download button at the top and follow the steps to install it. To add a track, click File at the top left of Audacity, Open, navigate to the file you want, then click Open again.

To add and preview an effect, click Effect at the top, then the effect of your choice (such as 'Bass and Treble'). Move the sliders to modify your effect, then click the new Preview button at the bottom left to hear how your file will sound. When you're happy with your sound effect, click OK to add it.

Anthony Falls

SOCIAL MEDIA

Customise Facebook's 'Trending' news

I don't use Facebook often, but when I was browsing the site the other day, I stumbled across a small but very useful new feature. Earlier this year, Facebook introduced a new Trending section in the right-hand column, which lets you know which news stories are provoking the most Facebook posts.

While the section previously listed a few top stories that by and large I had no interest in, it now lets you choose from five different categories – All News, Politics, 'Science and Technology', Sport and Entertainment, which I find are much more useful.

If a particular story doesn't interest you, then click the 'x' symbol next to it to hide it (see screenshot below left). Next, select from the options the reason why you want to hide it – these include 'I don't care about this' and 'I want to see something else'. Facebook then remembers your selection to customise content to your tastes. I've noticed that since I started doing this, the stories in the Trending section are much more relevant to my interests.

Chris Menzies

EMAIL

Instantly hide your Yahoo emails and change your theme

Did you know that Yahoo Mail has a handy icon that lets you instantly hide your inbox (and therefore your emails) from prying eyes? If you suddenly need to hide your inbox while viewing it, click the small icon at the bottom left (it looks like a mountain within a frame) or simply press the Esc key.

Your inbox will immediately disappear from view and in its place you'll see a list of Flickr image thumbnails at the bottom that you can select. Its more practical purpose is to let you change your inbox theme. Click any of the thumbnails you want, then click the nine dots at the bottom left to see how your inbox will look with it. Click anywhere on the screen to return to your inbox, replete with the new theme.

Val Harwood

Phone and Tablet Tips Brilliant things to do on your device

ANDROID

Disable annoying app notifications

Some apps – in particular those that come preinstalled with your device – have an annoying habit of bombarding you with notifications. While you can turn these off within the app's setting, the method is different for each one.

A faster way to permanently turn off notifications for a particular app is to tap and hold a notification the next time it appears in your notification screen. What you do next depends on which version of Android you use.

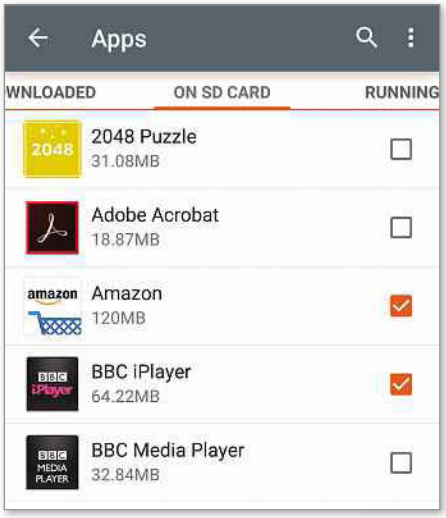
If you're using the latest version (5.0, also called Lollipop), tap the 'i' symbol on the notification, then tap the Block slider beside 'Never show notifications from this app'. If you're using an older version of Android, tap 'App info', then untick 'Show notifications'.

ANDROID

Move apps to your phone's memory card

Android phones can have as little as 8GB storage space, but most come with card slots that let you expand the phone's storage capacity. Memory cards (from 4GB to 64GB) let you store more files, including documents, videos and photos.

If your phone has a memory card and runs the latest version of Android (5.0, also called Lollipop) then you can move



apps to your memory card to free up space on your device. While apps may not take up much space when you first download them from the Play Store, they increase in size when you add more content to them (such as your login information, favourites, photos and notes).

To check which Android version you have and update your device to Lollipop, open Settings, tap 'About phone', then tap Update. If you see a pending update, tap the screen and follow the instructions to download and install it. To see which apps are taking up most space and move them to your memory card, open Settings, tap Apps (in the Device section), then swipe to the right to see a new section – On SD Card.

You'll see a list of all the apps on your device in alphabetical order. You'll also see how much space each apps takes up and tickboxes (see screenshot left). Tap an app you want to move to your memory card, then tap the 'Move to SD Card' button on the next screen. The process may take a few seconds. When that's done, tap the top-left Back icon to see it ticked. Repeat this to move other apps to your memory card.

ANDROID

Write text with your finger

The new, free Google Handwriting Input app replaces your device's onscreen keyboard with a blank field into which you can write text using your finger. Google then recognises whatever you've written and converts it into text.

Install the app from www.snipca.com/16291, then open it. Tap Enable Handwriting Input at the top, then the slider beside Google Handwriting Input – English (United Kingdom) to turn it on, then tap OK. Next, tap Select Google Handwriting Input, then select English (United Kingdom).

Now, when you open any app that offers the option to type (such as an email or note-taking app), you'll notice your keyboard has been replaced by a grey, blank field. Using your finger, start writing whatever you want and it'll automatically appear as text in your message (see screenshot above right). On completion of each word, the field

Best New Apps What you should install this fortnight

NightCap Pro
£1.49
iOS: www.snipca.com/16294

Smartphone cameras are still poor at taking photos in the dark, but the four modes in this app should help. The Long Exposure mode takes clear photos even in low-lit conditions, while the Light Trails mode lets you capture lights from moving vehicles as coloured lines (see image).

Any.Do
Free
Android: www.snipca.com/16295
iOS: www.snipca.com/16296

The new version of this popular list-writing app has a plethora of exciting features and a completely redesigned interface. You can now set a default format (numbers, bullet points, and so on), share your lists with others and sort them by date or priority. It also includes new themes for your lists.

Adobe Slate
Free
iOS: www.snipca.com/16297

Adobe Slate is a stunning new iPad app that lets you merge text and images to create beautiful scrolling stories, ideal for creating personalised invitations. Add text fields and images, then choose from a range of layouts. You can customise your fonts, add image effects and share your creations by email.

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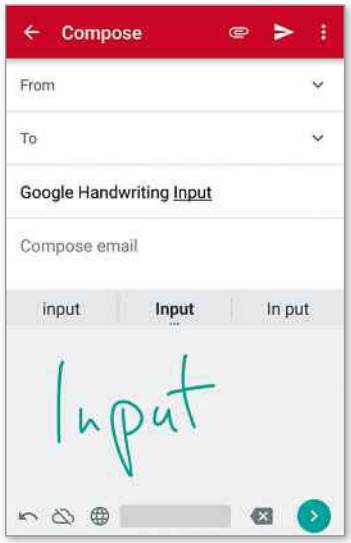
slides out of view to the left, letting you write the next word, and so on. If it fails to recognise your writing correctly, then click one of the autosuggest options or use the backspace icon at the bottom to delete, then rewrite it. Even though our onscreen handwriting was illegible (to say the least), the app correctly recognised everything we wrote without the need to use autosuggest.



For security reasons, you should use your onscreen keyboard to enter sensitive information, such as passwords. To toggle between the keyboard and handwriting mode, tap the globe icon at the bottom.

ANDROID & iOS

Use Adobe's new PDF app

Adobe Reader is the best free app for managing PDF files on your device. It has now been rebranded as 'Adobe Acrobat DC – PDF Reader', with a new interface and loads of new functions.

Download the app from www.snipca.com/16292 (Android) or www.snipca.com/16293 (iOS). If you already have Adobe Reader, you should update it to the latest version. To do this on Android, open Play Store, tap the three lines at the top left, 'My apps', then 'Update All'. To update it on iOS, open the App Store, tap Updates at the bottom right, then Update All. We're using an Android device for this tip, but it works the same on iOS.

Open the app, swipe through the introductory screens, then tap Continue at the bottom. You'll see three sections – Recent, Local and Document Cloud. Tap Local to see all the PDF files stored on your device, then tap any file to open it.

The slider at the bottom lets you navigate between pages in your PDF (see screenshot above). Tap the screen with two fingers and use the expand/pinch gestures to zoom in and out of your PDF. To find a particular word in the file, tap the search icon at the top and type the word to see all instances of it highlighted in green.

The app also comes with a new Night Mode option, which converts your file to white text on a black background, ideal if you want to read PDFs in the dark. To use this, tap the three dots at the top right, View Modes, then tap Turn Night Mode On.

iOS

Filter text messages from non-contacts

The latest version of iOS (8.3) lets you sort your text messages into two separate columns – Contacts & SMS (people in your contacts list) and Unknown Senders (non-contacts).

To update your device, tap Settings, General, Software Update, then tap Install and Agree. The new update will now be installed and your device will restart once that's done.

The option to sort your text messages into columns is not on by default. To activate it, tap Settings, Messages, then tap the slider beside Filter Unknown Senders. Now, whenever you open the Messages app, you'll see the two columns.

Games With Kids

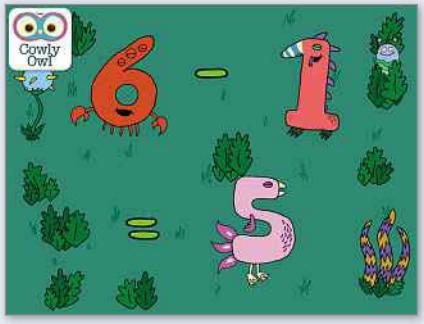
What to play together on your phone and tablet

AGES 0-5

Little Digits – Finger Counting

£2.29 www.snipca.com/16299 (iOS)

Your child will love this app, which makes optimum use of the iPad's touchscreen. When they place their fingertips on the iPad the app will display (and tell them) how many fingers. They then need to correctly answer simple maths problems using the correct number of fingers.



AGES 6-10

Escargot Escape Artistes

Free www.snipca.com/16300 (Android)
Free www.snipca.com/16301 (iOS)

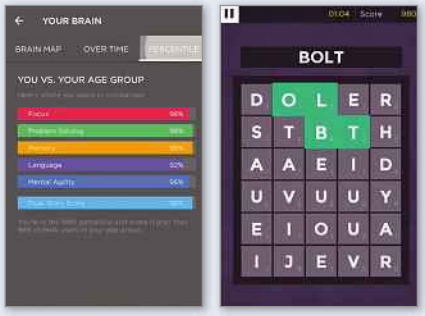
This game was designed by the winner of the CBBC Appsolute Genius competition. Your kids need to help 'Escargot' the snail escape the chef by climbing up the Eiffel Tower. They have to tap the screen at the right time to avoid obstacles and collect green coins to get additional lives.

AGES 11-16

Peak – Brain Training

Free www.snipca.com/16302 (Android)
Free www.snipca.com/16303 (iOS)

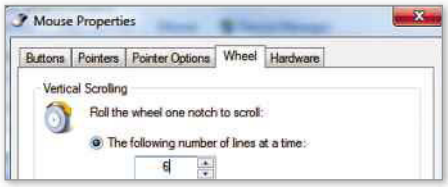
This app contains a compendium of 17 games aimed at improving your child's memory and problem-solving skills. The games (which are all time-based) include puzzles, matching pairs and joining adjoining words in a grid. Players can compare their scores with others in the same age group.



WINDOWS VISTA, 7, 8, 10

Change the sensitivity of your mouse's scroll wheel

If you find that moving your mouse's scroll wheel takes you up and down a page too quickly for your liking, you can easily tweak its sensitivity. Before doing this, you should open a Word document (ideally one with multiple pages) so you can test the mouse-wheel sensitivity that works best for you.



Now open Control Panel, click 'Hardware and Sound', Mouse (in the 'Devices and Printers' section), then click the Wheel tab in the Mouse Properties window (see screenshot). By default, the Vertical Scrolling option is set to 4, meaning scrolling your mouse wheel once moves the document by around four lines. If you find this is too much, then decrease the number to 2. Conversely, if you'd like to make your document scroll faster, then increase the number to 6 or 8.

Now click Apply, open the document and use the scroll wheel to try your new settings. If you want it faster or slower, open the Mouse Properties window, change the number and click Apply again. Click OK when you've finished.

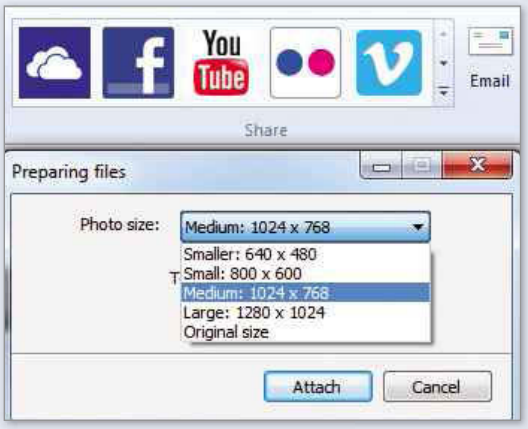
WINDOWS VISTA, 7, 8

Shrink photos before emailing them

Whenever you attach photos to emails, they are uploaded in their original resolution. This means that if the photos are quite large, they may take a while to deliver, and subsequently they may be slow to download to the recipent's PC. One option would be to shrink photos before sending them, but email programs don't provide this option.

The best solution is to use Photo Gallery, which is part of the free Windows Essentials pack. To download it, go to www.snipca.com/16281, click the purple 'Get it now' button, then the downloaded setup file, and then click 'Choose the programs you want to install'. Untick all the programs except 'Photo Gallery and Movie Maker', click Install and follow the instructions.

When it launches, Photo Gallery should automatically begin importing all the photos and videos on your PC. If it doesn't, click Import at the top left. Now, tick the box at the top left of each photo you want to attach to an email. Finally, click Email at the top right (see screenshot).



By default, the 'Photo size' dropdown menu is set to Medium, but you can click and change it to whatever you want. The Smaller option shrinks the files which may result in a slight loss in image quality, but they will be sent faster. The Large option sends bigger and better files, but the transfer can take a while. Select the option you want to see the 'Total estimate size', then click Attach to add the photos to your default email program.

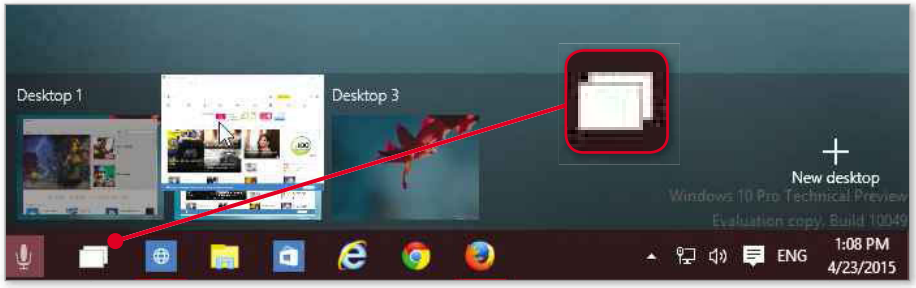
WINDOWS 10

Move programs between virtual desktops

The Windows 10 Technical Preview introduced a new feature called virtual desktops. This is useful for creating separate workspaces, meaning you can open a browser and email program on one virtual desktop, for example, then open a different set of programs in a second one (creating as many of these desktops as you want).

The latest version of the Technical Preview has now made it easier to move programs between virtual desktops.

To open multiple virtual desktops, first open any two programs on your Desktop, then click the 'Task view' button on the Taskbar (see screenshot). Now, click the '+ New desktop' option at the bottom right, click Desktop 2, then open any two programs there. Repeat this to create a third virtual desktop and open two more programs. Now click the 'Task view' button again, then drag any program to one of the other virtual desktops at the bottom. You can also drag a program and drop it to '+ New Desktop' to open it in a fourth virtual desktop.



WINDOWS VISTA, 7, 8, 10

See similar Taskbar programs as different icons

If you open multiple instances of the same program, such as a number of Word documents, you'll see a stacked group of Word icons on your Taskbar. To open a specific document, you need to move your cursor over this stacked preview, to reveal all of them, then click the one you want. If you want to see each document as a separate Taskbar icon, then right-click any blank area on the Taskbar and click Properties. Now click the 'Taskbar buttons' dropdown menu and change it from 'Always combine, hide labels' (which is the default setting) to 'Never combine'. Click Apply, then OK.

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Make Office Better

Expert tips for every program

MICROSOFT SWAY

Compare two images using a slider

Microsoft is adding features to Sway all the time. Sway is the latest member of the Office family that works online. It's great for creating scrolling presentations, which Microsoft calls 'sways' (see our 'Make presentations using Microsoft Sway' Workshop in Issue 442).

The latest feature is the ability to compare two images by dragging a slider across a composite image of the two (see screenshot). This is useful if you need to evaluate the respective merits of two similar images or make a before-and-after comparison.

For convenience, you should first save both the images you want to compare to your Desktop. Now go to www.sway.com, click 'Sign in' at the top right and log in with your Microsoft (Outlook or Hotmail) account. Next, click My Sways at the top right, then select the sway you want to add the image-comparison slider to.

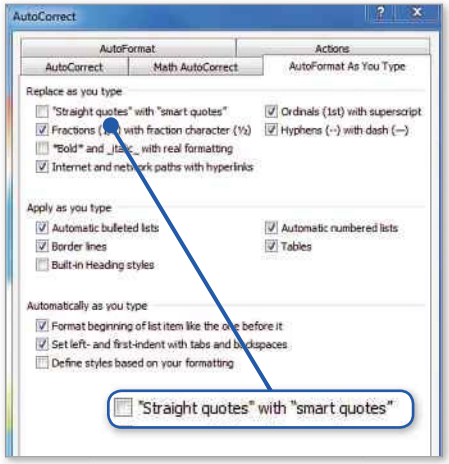
Now, click the Comparison option on the left. You'll see a new section with two empty 'Add a picture' thumbnails. Click the first one, then click the Suggested dropdown menu at the top left. Next, click Upload at the bottom, navigate to the first image on your Desktop and click Open. Now click the second 'Add a picture' thumbnail and add the second image in the same way. Click Preview at the top right to see the composite image, and drag the slider across to compare the two.

You can share your sway using the new social-media icons at the top or by clicking the chain icon (top right in screenshot), then copying the link and pasting it into an email.

WORD

Insert 'straight' quotation marks in documents

Whenever you insert a quotation mark in a Word document, it appears in its default 'smart' (curly) form. To use 'straight' quotation marks (similar to the ones typewriters produce), you need to change a setting within Word.



Click the top-left File tab, then Options at the bottom, Proofing on the left, then the Autocorrect Options buttons on the right. Next, click the AutoFormat As You Type tab and untick the first box in the 'Replace as you type' section (see screenshot above). Now click OK (twice).

ONENOTE

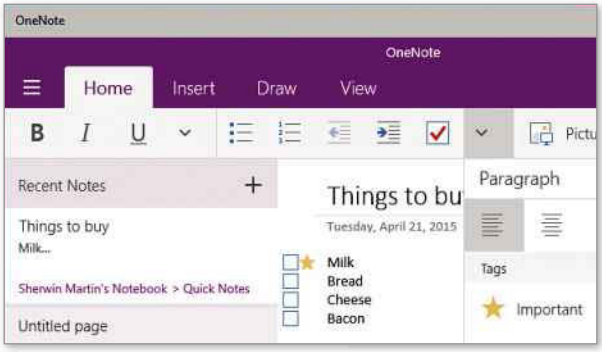
Use OneNote in Windows 10

In Issue 446, our lead Workshop showed you how to use the new Word and Excel Previews in the Windows 10 Technical Preview. Microsoft also included a new free version of OneNote (called OneNote Preview). Like its Word and Excel counterparts, it offers bigger tabs that make it easier to use.

To use it, click the search field at the bottom of the Desktop, type onenote, then click its icon to open the program. Click 'Let's get started', then OK. OneNote will automatically import any notes from your Microsoft account.

We'll show you how to create a list with tick boxes. First, click the '+' symbol beside Recent Notes at the top left, then click the top of your note (above the date and time) and name it. Now click below the date and time, then click the red tick icon at the top to add a tick box. Type your first item, press Enter and repeat the process to add more items.

To flag up an item as important, add a star symbol next to the tick box. To do that, place your cursor on the item you want to mark as important, click the dropdown menu beside the red tick icon, then click Important (see screenshot below left). Any changes you make will automatically be saved and synced across all your devices.



EXCEL

Keep your spreadsheet's top row in view as you scroll down

Your Excel data can sometimes spread over dozens of rows. It can be very useful to keep the top row – which may contain your Headings or Titles – constantly visible as you scroll down the sheet. It's easy to do this using Excel's Freeze Pane feature.

First, highlight the top row by moving your cursor to cell 1 on the top left, then clicking it. Now click the View tab, the Free Panes dropdown menu (in the Windows section), and then select Freeze Top Row. That row will now remain static when you scroll down.

FlightGear

Download extra planes, join multiplayer mode and get help from other users

Preview planes in 3D

Open-source flight simulator FlightGear (www.flightgear.org) is a huge program ('At least 1,782.5MB of free disk space is required' says the setup wizard, ominously), but it only takes a few minutes to install. Ignore the safe and unnecessary instruction to disable your antivirus.

There's another setup wizard waiting to meet you when you run FlightGear. It's variously called the FlightGear Wizard, FlightGear Launch Control and FGRun (www.snipca.com/16259). Whatever it's called, it looks confusing at first glance, but you can whiz through it quickly by clicking an aircraft in the first list and a take-off airport in the second list, then clicking Run to launch the simulator.

We recommend lingering for a few minutes while you choose an aircraft. Click a plane to load it (eventually) in the 3D Preview window, where you can hover your mouse to spin the plane for a closer look.

Download better planes for free

The 'FlightGear base package' (www.snipca.com/16262), which includes the program installer, contains all the FlightGear Wizard's default aircraft.

But if you really want to fly in style, download more planes.

Extra planes for the latest version of FlightGear (v3.4, released in February) include a Boeing 707, Spitfire and the very handsome Alphajet (www.snipca.com/16263), plus helicopters, gliders and even a toy plane. Click the number under a thumbnail to download a ZIP, then extract and save the contents in a new folder inside your main FlightGear folder. Find full instructions on the FlightGear wiki site (www.snipca.com/16264).

Find out how to use Concorde's cockpit controls on your PC by visiting the FlightGear wiki site

Master the controls of any plane

FlightGear cockpits are very realistic – not least because the first time you sit in one, you won't have a clue what to push or press.

Every aircraft's controls are different. Most involve clicking a combination of options from the menus at the top of the program window. Some planes can be started by pressing 's' and keeping it pressed 'for sufficient time, even 10 seconds', or by pressing Shift+#, according to the wiki (www.snipca.com/16265) – but 'these instructions may not work for jet aircraft, helicopters or other aircraft'.

Thankfully, there's a separate wiki section for every aircraft, and here's where you'll find your flying instructions. They're all linked from the 'Table of models' (www.snipca.com/16266), which goes all the way from A-6E Intruder to 'ZF Navy free balloon', via the Wright Flyer and even UFO. Some aircraft wiki pages are better than others. Concorde's cockpit controls are explained in particularly helpful detail (www.snipca.com/16269, see screenshot above).

See FlightGear multiplayer pilots in action

The live multiplayer map (www.snipca.com/16245) gives you a bird's-eye (well, space station's-eye) view of FlightGear players as they pilot virtual planes over a customised Google Map of the world. The map opens by default on a satellite view of San Francisco airport, but you can zoom instantly to any player by ticking their nickname in the box.

To join in the fun, tick Multiplayer in the third step of the FlightGear Wizard and type mpserver04.flightgear.org in the Hostname box (the '04' connects you to a UK-based FlightGear server). Next, type 5000 in the 'in' and 'out' boxes and enter a nickname in the Callsign box. You may notice that loads of FlightGear pilots use the callsign 'Maverick'. This is a reference to Tom Cruise's character in *Top Gun*. Can you do better?

FlightGear users to the rescue

FlightGear is a vast, volunteer-run project that takes some getting used to. Every plane works differently, and many functions require certain PC configurations (a modern graphics card and processor will help). Be prepared – there will be times when you'll want to put your foot through the screen.

To get though this forest of controls (and occasional bugs) without ruining your screen, turn to the amazing 'FlightGear wiki' (http://wiki.flightgear.org). It's second only to Wikipedia as the most impressive user-maintained site we've ever seen. Browse the menu, or go straight to the most linked-to pages to find out what everyone else is reading (www.snipca.com/16273).

If you're an experienced FlightGear user and want to get involved with writing and editing the site, create an account at the 'wiki editing portal' (www.snipca.com/16271).

As if the wiki weren't enough, there's also a Forum (http://forum.flightgear.org) and a very readable FlightGear Manual (www.snipca.com/16268).

Next issue Secret Tips For... Google Maps

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Amazon Dash

What sounds like a new range of washing powder is actually a clever way of buying some

What is it?

A collection of Amazon services and devices that the company hopes will make it easier for you to order items through the site. The Amazon Dash itself (https://fresh.amazon.com/dash) is a 'scanning wand' that reads barcodes, letting you add grocery items to an online shopping list. You can also speak the items you'd like to add. Amazon then delivers those items to your door using its AmazonFresh service, though this is currently available only in Seattle, New York and some parts of California.

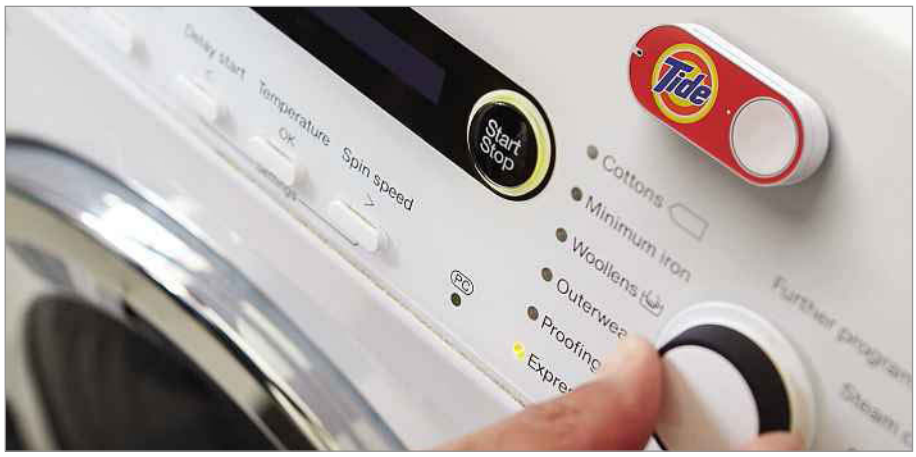
It's an intriguing part of Amazon's plan for world domination. But since launching last year Amazon Dash had fallen out of the headlines – that was until the company announced the Dash Buttons (www.amazon.com/oc/dash-button) in late March.

What are they?

Small buttons that you stick around your home. They are connected to the web, so once pressed they order new items through your Amazon account. As the company suggests in this video (www.snipca.com/16140), you could stick them on a washing machine to order more powder, or a coffee machine to order new capsules (set as many items as you want per press). But in theory you could order anything you would normally pick up from your local supermarket. We imagine people will stick them to cupboards and fridges, mostly.

There's a different button for each product – in the photo above it is for Tide

You can add items to your shopping list by scanning their barcode using the Amazon Dash



washing powder, a popular brand in the US. There's no UK release date yet for the buttons.

Hang on – weren't the Dash buttons an April Fool's hoax?

Many people thought so because they were announced on 31 March, and they did seem like the sort of quirky hoax tech companies like to indulge in. But it was actually clever marketing by Amazon. By launching something that appeared far fetched, Amazon prompted people to ask whether the buttons were real or not, thereby generating more online hype than any of the actual April Fool's pranks (such as Google's brilliant Pac-Maps: www.snipca.com/16142).

Ultimately, Amazon wants to automate your shopping, so you spend money without even realising. It is encouraging companies to build internet-enabled devices, such as printers, pet-food dispensers and coffee makers, that contain sensors that detect when they need to be refilled. These will automatically send orders through Amazon's Dash Replenishment Service (www.snipca.com/16148), no button-pressing required.

What happens if my pet cat presses the button 10 times?

Don't worry – you *won't* get 10 packets of washing powder. Unless you set it up otherwise, the Dash Button only responds to the first press until your item is delivered. You also have up to 30 minutes to cancel. Amazon then delivers the order within two days.

Two days! But what if I need an item straight away?

Well, quite. That's the biggest drawback. But Amazon has a cunning plan.

What's that?

Drones. Forget vans dropping off groceries – Amazon wants to fly them to your doorstep. In April, the Federal Aviation Administration in the US approved Amazon's plans to test its drone-delivery service, called Prime Air. The buttons have greater appeal if you could receive items within minutes of ordering. But there is another catch.

Thought there might be. What is it?

You have to be an Amazon Prime member to use Dash. This costs £79 a year, though you do get other services for this price. So Amazon wants you to pay for the privilege of being able to order washing powder, coffee capsules or kitchen towels with the press of a button. To use Dash you'll need plenty of cash.

Remove BUILT-IN JUNK

Your hard drive was full before it even left the shop. **Jane Hoskyn** shows you how to remove the rubbish that came pre-installed on your PC, laptop, phone and tablet

The best way to declutter your junk-filled old PC is to replace it with a new one, you'd think. After years of fighting a losing battle against that growing landfill of software, updates and program files, you deserve a fast, new, empty machine.

You won't get that, though. You may get a new machine that's deliciously fast, but it won't be empty. In fact, unless you construct the PC yourself or pay someone through the nose to custom-build it for you, you'll get a shiny new PC that's stuffed to the gills with pre-installed junk.

WHAT YOU CAN DO

- Remove manufacturers' junk from a new PC or laptop
- Speed up your old PC by wiping built-in rubbish that's been there for years
- Uninstall Windows tools you didn't think you could remove
- Disable pre-installed apps on your phone and tablet

New PC, old problem

Fire up your new (or nearly-new) laptop, open the All Programs list (or click Apps in Windows 8/8.1) and behold the clutter. Where did all those programs come from? You didn't put them there, that's for sure.

Many built-in programs on a Windows PC are Microsoft tools, and some are useful, but they're not all necessary. Other pre-installed tools were put there by the PC's manufacturer (the likes of Dell Update and 'Face Recognition for HP'). Most do little other than fill up that hard drive you paid good money for. Then there's a dishonourable wealth of third-party rubbish such as Ask Toolbar and Savings Bull, whose creators struck partnership deals with the manufacturer to get their products on to your PC.

At best, this built-in junk is annoying; at worst, it's dangerous. I recently took aim at PC maker Lenovo for bundling malicious search adware, Superfish, in people's new laptops (see Named & Shamed, Issue 444). Lenovo has now released an official Superfish Removal Tool and published full instructions for removing it manually (www.snipca.com/16375).

Not all pre-installed programs are malicious, of course, but these incidents prove that just because something was put on your PC by an official authority, it doesn't mean it's good or even safe. In this feature we'll show you how to remove all kinds of pointless pre-installed junk from new PCs, tablets, phones and even that old computer you've been using for years.

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REMOVE BUILT-IN JUNK FROM YOUR NEW PC OR LAPTOP

Ditch Bing and IE on a new computer

If you recently bought a new Windows laptop, it's almost certainly running Windows 8/8.1 and its pre-installed browser will be Microsoft's Internet Explorer (IE). You can find IE by tapping or clicking Apps at the bottom-left of your Start screen. Pin the IE logo to Start, then tap or click it to open the browser.

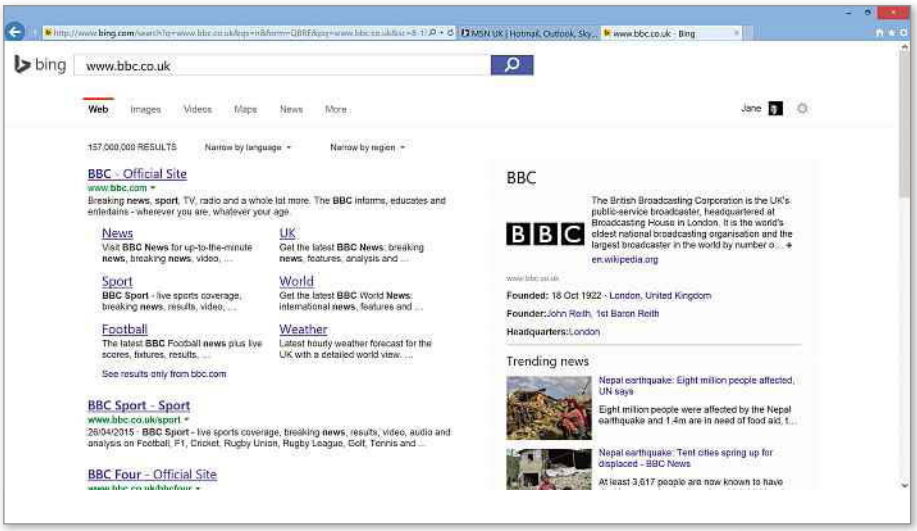
Here's where the trouble starts. IE has its own built-in search tool, Bing, which is also owned by Microsoft. The browser's default homepage is dominated by a Bing search box, which is easy to mistake for the much smaller URL address bar. At first glance you may not see the address bar at all. You'd be forgiven for typing a URL into the Bing bar, then wondering why it opens a list of Bing search results instead of a web page (see the large screenshot below). If you type one of our 'snipca' shortened URLs into the Bing box, it won't know what on earth to do. Bing makes IE so confusing it's probably put some new PC users off the internet for life.

Still, it gives us a fitting start to this feature. Bing is a prime instance of built-in junk. The fact that it's bundled with IE doesn't make it OK. You never asked for it, and you're better off without it. It's easy to switch to a different browser with a clear, easy-to-use address bar, such as Firefox or Chrome. We'll use Chrome as an example.

Go to www.google.co.uk/chrome (or type chrome into Bing, then click 'Chrome Browser – Google'), click the blue Download Chrome button and then click 'Accept and Install'. At this point you may be hit with a blizzard of pop-ups from your PC manufacturer (such as the Dell Digital Delivery box in the small screenshot below). Close these by clicking the little cross at the top-right. The only box that matters is the one with 'Application Run – Security Warning' across the top. Click Run, then Yes in the next box. Chrome will then take a minute or so to download.

Once that's done you'll see a 'Welcome to Chrome' box. Click Next, then click Google Chrome when asked 'How do you want to open this type of link (http)?'. Finally, Chrome will open, with a big, clear address bar across the top and no third-party programs cluttering up the homepage. Type any URL (including 'snipca' links) into the bar and press Enter to go straight to that website. You can also type search terms into the address bar to run a Google search. The Firefox address bar works in the same way.

Dell's built-in tool got in the way when we tried to install Chrome on a new laptop



Microsoft's search tool, Bing, is built into Internet Explorer – which is built into Windows

See all your new PC's built-in junk

Installing Chrome or Firefox doesn't automatically remove IE or Bing from your new PC or laptop. In fact, it doesn't remove anything at all – just adds to your tally of installed programs, which may already be enormous. To see some of the stuff that was already installed before your new computer left the shop, tap Apps at the bottom left of your Start screen in Windows 8/8.1 or go to the All Programs list in Windows 7. But to see all of it, you'll need to run PC Decrapifier (www.snipca.com/16331).

This free, easy-to-use tool is specially designed to sniff out junk programs that come pre-installed in Windows 7 and 8/8.1 PCs and laptops.

PC Decrapifier is portable software, so it's very quick to run. Click the big blue Download Now button, click the program file ('pc-decrapifier-3.0.0.exe'), then click Yes to confirm you want to run it. In the program window that opens, click Analyze to scan your PC or laptop for installed software, including pre-installed junk that doesn't appear under 'Uninstall a program' in the Control Panel. ▶

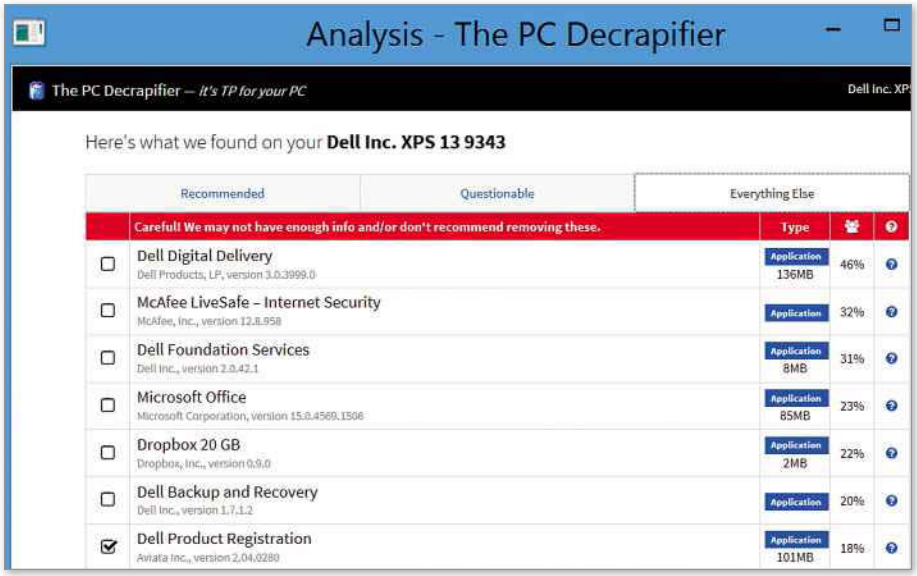
TOP 20 BUILT-IN JUNK PROGRAMS

It's not just you. Here are the 20 programs most commonly removed from PCs by users of the free program PC Decrapifier. As you can see, most are unnecessary 'utilities' pre-installed by PC manufacturers, with HP being the biggest offender. For the full top 50, which also includes WinZip and Spotify, go to www.pcdecrapifier.com/removes.

1 Drive Encryption (with HP ProtectTools)
2 Face Recognition (with HP ProtectTools)
3 MyWinLocker Suite
4 PDF Complete
5 HP Device Access Manager
6 Lenovo Solution Center
7 Babylon Toolbar (with IE)
8 HP Device Access Manager
9 Free Ride Games Player
10 Conduit Search Protect
11 HP Device Access Manager
12 System Optimizer Pro
13 Savings Bull
14 HP Device Access Manager
15 HP Drive Encryption
16 WildTangent Games
17 Xobni
18 Lenovo SimpleTap
19 Message Center Plus
20 HP Power Assistant

Even on a brand new laptop, such as the HP Envy model we used in a recent Workshop to run a previous version of PC Decrapifier (Issue 434), the analysis may take a few minutes. This goes to show the sheer volume of junk already installed in your "new" hard drive.

When the scan finishes, click the Everything Else tab to see all the programs installed on your new PC. Some are innocuous (the browser you've just installed, for example), but there will also be several pointless tools installed by the PC's manufacturer. And, as we've seen from the recent stories about Lenovo and Superfish, there may even be malicious junk on the list.



Click the Everything Else tab in PC Decrapifier to see all the junk installed on a new PC

Remove all built-in junk in one go

The Everything Else tab in PC Decrapifier lists all your PC's software and lets you remove every last shred of it in one go – if you really want to. Tick everything in the list (or, more likely, just the items you want to remove), click Remove Selected, then click Begin Removal Now to uninstall all selected items automatically, one by one. The program saves a system restore point automatically so you can roll back your changes if anything goes wrong.

Next, run the free adware-remover AdwCleaner (www.snipca.com/16337) to wipe out any pre-installed nasties that PC Decrapifier missed. Like PC Decrapifier, AdwCleaner is free and doesn't need installing. Just download and run it, then click Scan to check for malicious files in any area of your PC, including the Registry. When the scan has finished, click Cleaning to automatically remove all the files found. You'll have to restart your PC to complete the process.

Note that portable programs like PC Decrapifier and AdwCleaner aren't updated automatically in Windows. You should download the latest versions every time you run them, because they're constantly being updated to fight newly discovered junk.

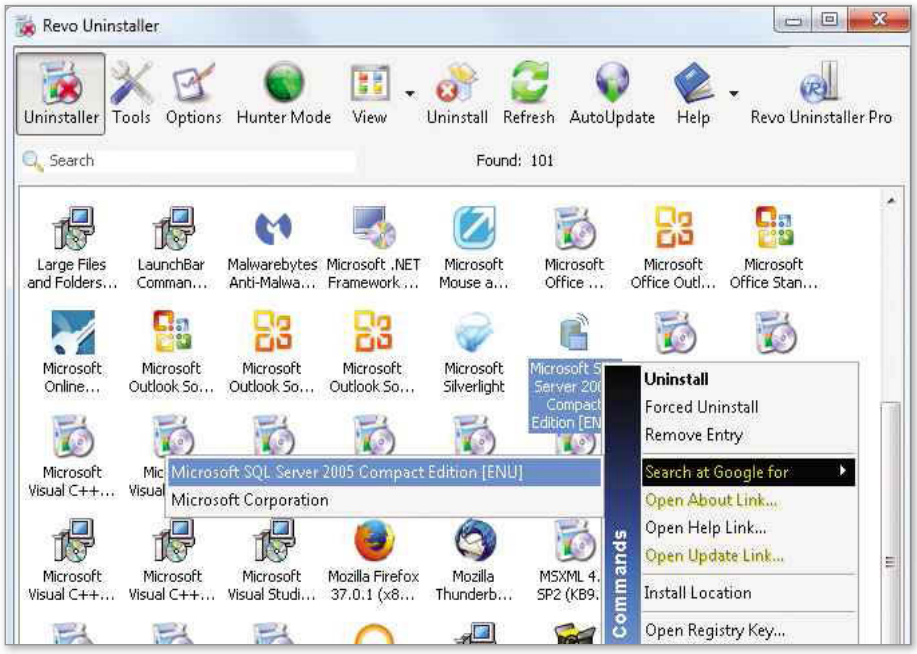
Remove selected built-in junk

Stripping out every piece of software bundled with a new PC may be satisfying, but it's not always wise. Built-in software is rarely malicious, and some of it may even be useful. For example, the Dell laptop we used for our PC Decrapifier screenshot (above) came bundled with Microsoft Office for free – and we'll hang on to that, thank you very much. Other built-in programs, such as manufacturer's backup tools, are potentially useful too.

PC Decrapifier offers very limited guidance on what to keep and what to ditch. You can click the Questionable tab to see what's 'popular to remove' among other users, and click the Recommended tab to see what's 'removed by many' users. But when we tried this on our new laptop, there was nothing listed under Questionable or Recommended – despite the fact that it contains oodles of built-in junk.

To get a better idea of what's worth keeping, use the free portable version of Revo Uninstaller (www.snipca.com/16341). Scroll down the page and click the second-to-bottom Download button, extract the contents of the ZIP file ('revouninstaller.zip') and click the EXE file ('Revouninstaller.exe') to run it. Wait a few seconds while the window fills with icons for all your installed software, including system plug-ins, updaters and other built-in components.

Right-click any item you're unsure about, then click 'Search at Google for' and select a search term (usually the program name or its publisher). This runs a Google search in your default browser – which is no longer IE, if you've followed our advice from the previous page. Revo's right-click menu also lets you check where the program or component is installed, and uninstall it quickly and completely.



Search Google for information about your PC's built-in tools using Revo Uninstaller

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REMOVE BUILT-IN JUNK: MAKE YOUR PC FASTER AND SAFER

Weed out the junk that's always been on your PC

Youngsters don't have a monopoly on problems, and young PCs are not alone in suffering a plague of pre-installed rubbish. Your trusty old computer may not be cursed with Superfish or what have you, but it still contains pre-installed software – and much of it has been hiding in that dusty hard drive for years, clogging it up and slowing it down.

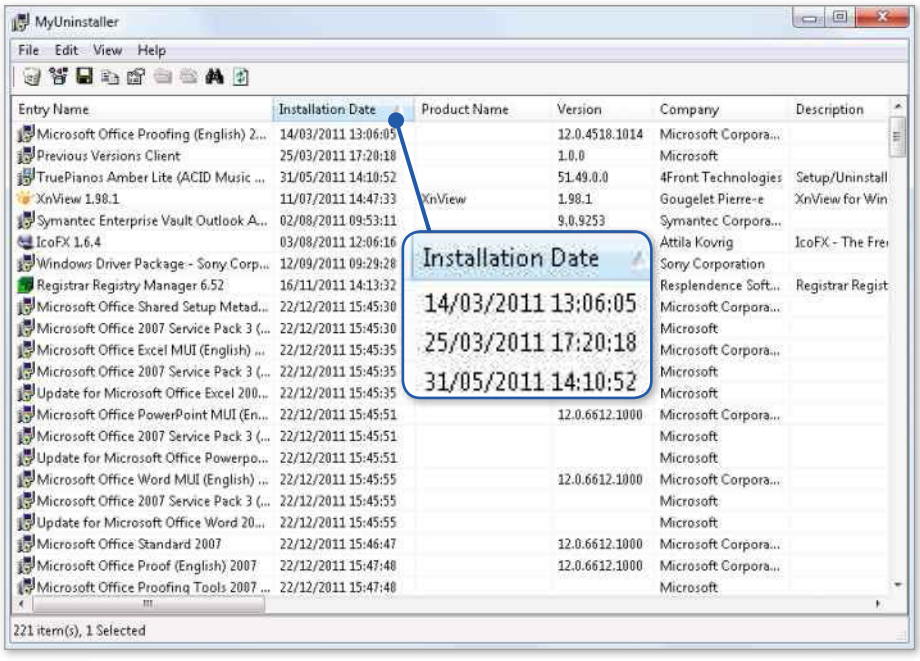
With an older PC it's harder to spot which programs came built in, because there are so many other programs installed. The Control Panel's 'Uninstall a program' list (formerly 'Add/Remove Programs') offers precious little information, and doesn't even list all the software on your PC. Instead, use NirSoft's free tool MyUninstaller (www.snipca.com/16320), which works on all versions of Windows from 98 to 7.

Despite its tiny size (a mere 35KB), this portable program reveals a huge wealth of technical detail about every single piece of software installed on your PC or laptop, including unexplained plug-ins and Microsoft clutter. Among this information is the exact installation date of all software, so you can see what came bundled with the PC. You can also see which website its installer was downloaded from, where its Registry files are kept and which software was used to install it (ideal for rooting out adware).

To get MyUninstaller, scroll right down the page and click 'Download MyUninstaller - Add/Remove Alternative'. You should download the program ZIP using a Windows 7 or 8/8.1 PC for safety reasons, then copy it to a USB stick to run on your older PC. Extract the contents of the ZIP and click the EXE file ('myuninst.exe') to run it. Wait a moment until the software list appears.

Scroll to the right of the window and click the Installation Date header to re-order all the programs, so you can see at a glance what software was installed when you started using your PC, or even before you bought it. To make the Installation Date column easier to see, click and drag it to the left, then drop it next to the Entry Name column (as in our screenshot left).

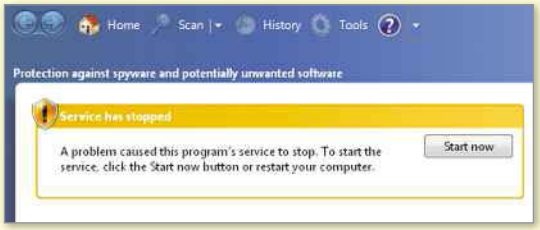
You can uninstall several programs at once by highlighting them in the list (press Ctrl while clicking them, or press Ctrl+A to select them all) then right-clicking and choosing Uninstall Selected Software. There's also a Quiet Uninstall option which completes the process unobtrusively, without any Confirm buttons to click along the way. To export a copy of the entire table and save it to your PC, right-click any program and click 'HTML Report – All Items'. ▶



The Installation Date column in MyUninstaller can reveal which programs were installed before you bought your PC

THE DANGERS OF BUILT-IN ANTIVIRUS

Your PC may have come with an antivirus suite built in. McAfee Internet Security, for example, is built into many Asus Notebook PCs (www.snipca.com/16363) and normally costs £28.99. Windows Defender (www.snipca.com/16364, see screenshot) is made by Microsoft and included with Windows. Great, right?



Actually these tools can do more harm than good, especially if you don't realise they're there. If you go ahead and install your own choice of antivirus, it will conflict with the pre-installed antivirus. They'll effectively cancel each other out.

Choose just one antivirus

Use the tools we've described in this feature to research your PC's built-in programs and check whether they're antivirus suites. If you do have more than one antivirus installed, make sure only one is enabled. Disable Windows Defender (here's how: www.snipca.com/16365) – it's not powerful enough to protect you.

Good antivirus is worth paying for. Kaspersky Internet Security or Norton Security consistently take first and second place respectively in tests by our security partners, Dennis Technology Labs (see www.snipca.com/16340 for the latest quarterly results in detail). You can buy the current test winner, Kaspersky, for the special price of £17.99 (normally £39.99) from www.snipca.com/14212. Microsoft's free downloadable antivirus, Microsoft Security Essentials (www.snipca.com/16368), consistently comes bottom in our tests and should be avoided.

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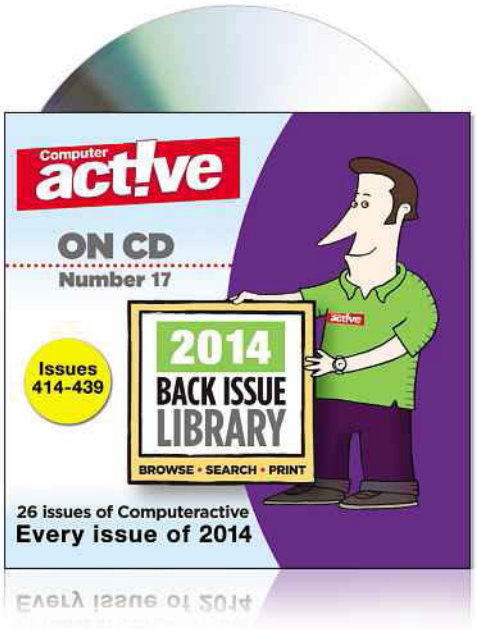

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Nephron8 ★★★★★

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We've ordered a new batch of the 2013 Back Issue CD, which you can now buy on Amazon at www.snipca.com/16010, or search for 'computeractive cd'

All quotes taken from reviews left by customers on Amazon.
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Remove years of Microsoft junk

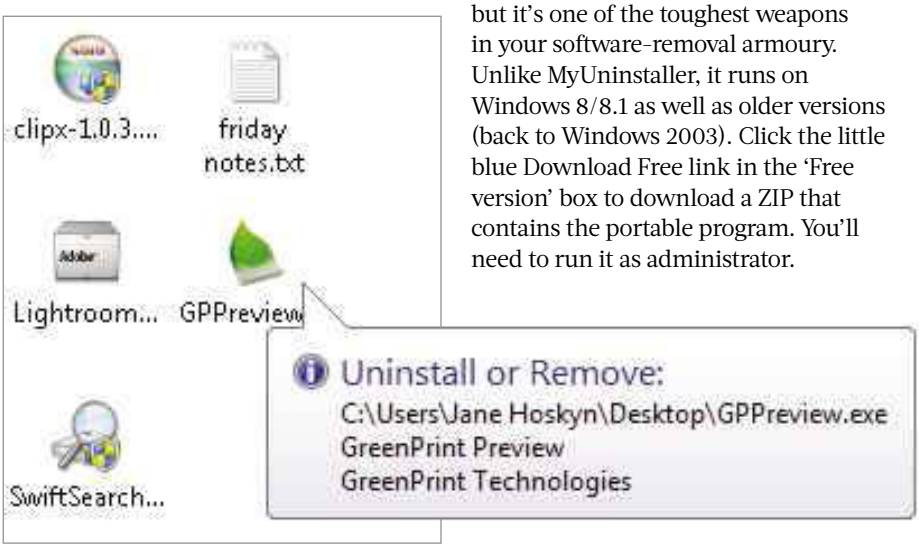
Among its other talents, MyUninstaller is great for zooming in on your PC's built-in Microsoft junk. Click the Company column header and scroll down to 'Microsoft' to see how many Microsoft programs, plug-ins and system components are installed. There may be dozens, including many that have been there since the first time you switched on the computer.

The fact that a program is made by Microsoft doesn't necessarily mean it's important or even worth having (Windows Defender, for example – see box, page 53). However, we still advise caution when removing Microsoft tools. Some are vital Windows components that your PC won't work without.

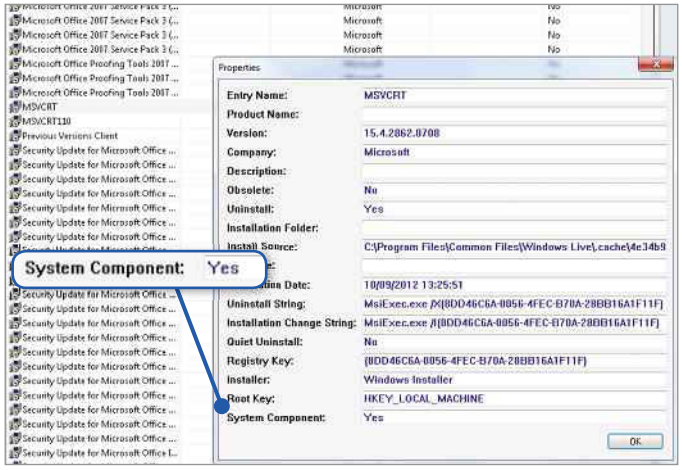
To check whether any item is needed by Windows, right-click it in MyUninstaller, click Properties and check the System Component field. If it says Yes, leave the item alone. If it says No, and the Uninstall field (a little further up) says Yes, you can remove it from your PC.

'Can' doesn't mean 'should', though. Look up any mystery item in Google before you get rid of it. Revo Uninstaller has a handy Hunter Mode tool for identifying programs that you're considering uninstalling. Click the Hunter Mode icon on Revo's menu bar to open a target practice icon, then drag it on to a program shortcut or Microsoft tool to find out what it is. Let go of your mouse to open the usual Revo right-click menu, which includes 'Search at Google' and Uninstall.

Remember you can disable any unwanted Microsoft tools instead of removing them. Many Windows components can easily be disabled using the (useful) built-in tool MSConfig (see our Cover Feature in Issue 448), then re-enabled whenever you want.



Use Revo Uninstaller's Hunter Mode to investigate mystery programs



Forcibly uninstall stubborn and corrupted programs using Geek Uninstaller (above)

Check whether any Microsoft item is a system component using MyUninstaller

Obliterate stubborn built-in junk

Built-in tools often refuse to go without a fight. They were there before you, and they're jolly well going to stay to the bitter end of your PC's life – or so they think.

Geek Uninstaller (www.snipca.com/16360) may have a nerdy name, but it's one of the toughest weapons in your software-removal armoury. Unlike MyUninstaller, it runs on Windows 8/8.1 as well as older versions (back to Windows 2003). Click the little blue Download Free link in the 'Free version' box to download a ZIP that contains the portable program. You'll need to run it as administrator.

The program doesn't offer much information about your installed programs or even let you batch-remove them (in the free version, anyway), so it's not ideal as a first port of call. But it will help you remove a built-in program that you couldn't manage to uninstall using the other tools we've mentioned, perhaps because the program was corrupted or partially installed. Right-click the program in Geek Uninstaller's list, then click Force Removal.

If the item still won't go, run AdwCleaner and the free version of Malwarebytes Anti-Malware (www.snipca.com/16376) to check it's not malicious. If they don't identify it as adware or malware and you can't uninstall it, leave it alone. There may be dozens or even hundreds of pre-installed bits and bobs on your PC, but they may not be taking up much space – certainly not as much space as the software you've downloaded willingly over the years. ▶

REMOVE BUILT-IN PHONE AND TABLET JUNK

Disable pre-installed Android apps

Smartphones and tablets are small computers, and like Windows PCs they come stuffed with pre-installed software.

Android is owned by Google, so Android devices are pre-loaded with Google apps such as Chrome (www.snipca.com/16372) and Google Play Books (www.snipca.com/16373). They also contain manufacturers' apps such as Motorola Migrate (www.snipca.com/16371) and Samsung's S Health (www.snipca.com/16380).

These apps can be useful, but we'd rather decide that for ourselves. They take up far more space relative to the device's hard drive than built-in programs do on a PC. This is a particular problem for devices without expandable storage, such as Motorola's first-generation Moto G (www.snipca.com/16374).

What's worse, you can't uninstall them. Go to Settings on your phone or tablet and tap Apps, then tap a pre-installed app. There's no Uninstall button, as there would be for any app you've installed yourself. Instead, it says 'Uninstall updates' – which does little other than make the app less stable.

Even if you've never opened the app, it may have generated many megabytes of useless data simply by existing. Tap 'Clear data' and 'Clear cache' to clear this data. If you never use the app, tap 'Force stop' and then Disable. To stop multiple Android apps at once, use the free app Advanced Task Killer (www.snipca.com/16377). Tick all the running apps you want to stop, then tap 'Kill selected apps'.

Also remove pre-installed app icons from your device's screen. Tap any icon and hold it until 'X Remove' appears, then swipe the icon to the top of the screen.

You *can* remove pre-installed apps by 'rooting' your device, but we wouldn't advise it. Rooting means breaking into the Android OS, which voids your warranty and leaves a big hole for hackers to exploit.

Tap 'Clear data' to remove junk created by built-in Android apps you never even use

Remove Apple rubbish from your iOS screen

You can't remove built-in iOS apps unless you root ('jailbreak') the iPad or iPhone they're on. Apple guards its software tightly, and it's not about to let you ride a wrecking ball through its slick mobile OS.

But at least you can delete the icons, right? Actually you can't. Deleting an iOS app icon (tap and hold, then tap the cross) deletes the app itself, and you can only do that with apps you've installed yourself.

You can, however, use a simple trick to hide Newsstand, iTunes Store, Stocks, Game Center and other pointless Apple rubbish from your screen. Tap and hold one junk app's icon and drag it on to another junk app's icon. They automatically merge to create a folder. Tap the folder to open it, enter a folder name (such as Extras or 'Apple rubbish'), then tap your home button to save it. Now you can drag all your useless Apple app icons on to the folder icon. The apps and their icons will still be there, but at least they won't stare you in the face every time you switch on your device. Then make your own choice of free third-party apps from the App Store (www.snipca.com/16386) – and delete them when you want. ca

Clear useless built-in Apple app icons to a special folder on your iPad or iPhone

YOU STILL CAN'T REMOVE SAMSUNG APPS

Rumours of the death of pre-installed Samsung apps are exaggerated. In March, tech websites reported that Samsung's new Galaxy S6 Edge phone would let its users delete pre-installed apps.

Unfortunately the stories had to be corrected a day later (here, for example: www.snipca.com/16383). As it turns out, you'll merely be able to 'hide' apps – which you can do already, by removing their icons and ignoring them.

We can't blame the websites for getting excited. The fact that you still can't remove pre-installed apps without breaking your phone or tablet is, frankly, ludicrous.

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Things to do with an old XP PC

FINAL PART

Gut it for spare parts

This issue, **Jonathan Parkyn** explains how to make use of (or cash from) your old computer's components

Turn internal drives into external drives

Your old XP PC may have given up the ghost, but give it a closer look before you drive it down to the dump – you may be able to rescue useful components, including the hard drive.

Your old PC's hard drive and DVD drive can both be removed and reused, either by installing them in another computer or by converting them into handy external devices.

In either case you'll need to make a note of the connection they use. If the cable that attaches the drives to your motherboard is a wide, flat ribbon type, then this is an older IDE connection. A thinner flat type cable means it's a SATA connection (www.snipca.com/16219). You can reuse the cables themselves while you're at it.

Installing the drives in another PC basically involves screwing them into a spare drive bay and connecting the power and data cables as you found them in the old computer.

To turn your drive into an external hard drive or DVD drive, you'll need an enclosure. These are usually quite cheap – from about a fiver on Amazon (www.snipca.com/16146) – and easy to fit, though you'll need to make sure you get one that's the right size and which has the same data connection (Sata or IDE) as your drive. Laptop hard drives and DVD drives can be removed and converted into external devices, too.

Check the memory from your old PC to see if it'll work with your new one

Check if you can reuse memory

In an ideal world you'd be able to whip the memory out of your old PC and pop it into your new one for an instant speed boost. But computer memory tends to age badly, and modules used in older PCs often don't work in newer ones. Check before you throw the old memory away, though.

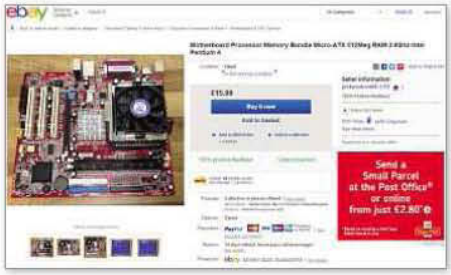
To find out what type of memory your new computer uses, run the free online Crucial System Scanner (http://uk.crucial.com; click 'scan your system'). Make a note of the results, then look at the memory modules (or 'chips') slotted into your old PC's motherboard (like the one pictured left). The modules should have basic specifications printed on them. If they match the memory type in your new PC, then you're in luck.

All is not lost if your old and new memory don't match. You could still consider selling the memory modules from your XP PC, either separately or as part of a motherboard/processor 'bundle', as explained below.

If you can't reuse it, sell it

Not all of your old XP PC's innards are worth rescuing. The motherboard will probably be too old to have any resale value. Equally, an older processor is unlikely to have much appeal. CPUs are difficult to remove and repurpose. And there's not much point in doing so, as an XP-era processor (such as a Pentium 4 or Pentium D) isn't going to be terribly fast.

One thing you could consider doing, however, is to remove the motherboard, CPU and memory, clean them up a little (a can of compressed air is good for this) and sell them as a package on eBay. When we looked, we found several sellers offering older Micro-ATX motherboard, memory and Pentium 4 processor bundles for around £16–25. Even if you no longer have any use for components like these, someone else might.

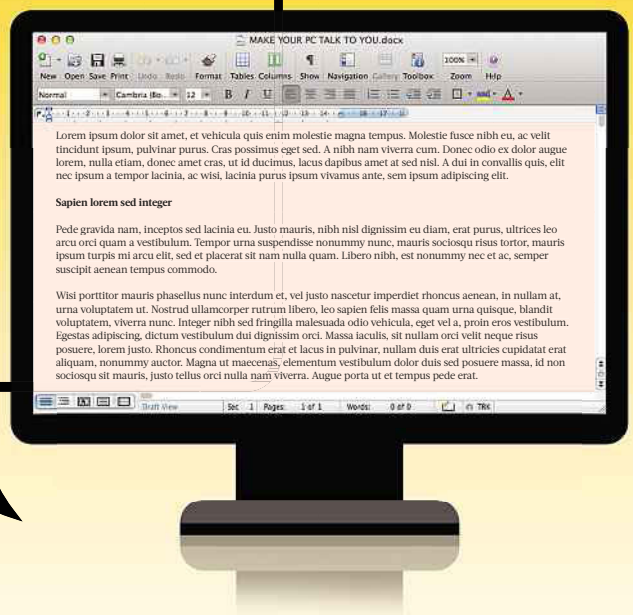


Consider selling your motherboard, processor and memory as a bundle on eBay

If you used your XP computer to play games, it may have a decent graphics card. It may not be compatible with a brand new PC, but if you have another older computer, you could transplant the graphics card into that. Or you could sell it online – we found ageing AGP graphics cards selling for up to £40 on eBay. Other potentially valuable parts include TV tuners and sound cards.

Once you've emptied everything from inside, don't forget about the case itself. A PC case won't fetch much money if you try to sell it but, depending on its shape and condition, it could be a great starting point if you're considering building your own PC. ca

MAKE YOUR PC TALK TO YOU



Stop squinting at tiny words on your screen – make your PC read them out loud instead. **Jonathan Parkyn** reveals the best free text-to-speech tools

In almost any science-fiction film or TV show you care to mention – from *2001* to *Star Trek* – the computers of the future are able to talk back to their users. What you might not know is that the computer sitting on your desk or lap right now can do this too. It's not a feature that costs hundreds of pounds, either.

Free text-to-speech (TTS) tools are already built into Windows, and there are many excellent third-party alternatives that can dictate documents and emails, convert text into audio files, read web pages to you and more. Here's how to let your computer do the talking.

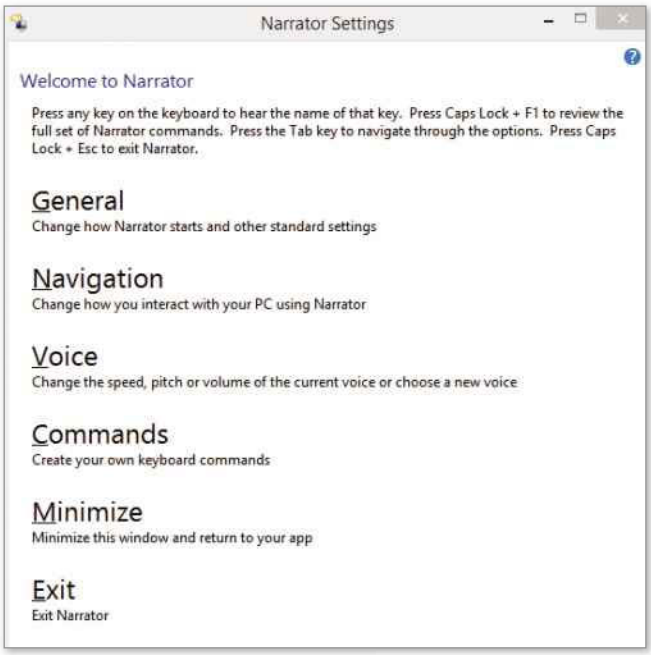
Make Windows speak to you

Windows has a built-in tool called Narrator (www.snipca.com/16237), which can read text and more. It's designed for people with visual impairments, so it can describe everything you do with your PC as well as everything happening on screen. It can say out loud every keystroke you type, for example, or read out the text in an error message.

You can try out Narrator by getting it to dictate a document. First open the document, then open Narrator by pressing the Windows key, typing narrator and pressing Enter. Click at the beginning of the block of text you want read (Windows 7 should start reading the text immediately). In Windows 8.1, you'll see a blue box appear around part of the text; press Caps Lock+M and Narrator will begin reading back the document. Press Ctrl to stop the dictation.

In the tool's main window (which is automatically minimised to the Taskbar in Windows 8.1), you'll find other options to try out. In Windows 7, click Help, then Documentation to see a list of all the commands you can use as well as their keyboard shortcuts. In Windows 8.1, press Caps Lock+F1 for a similar list. You can also open and close Narrator in Windows 8.1 by pressing Win+Enter.

For many people, the big drawback with Windows Narrator will be Microsoft's default TTS voice, which you may want to tweak or replace altogether. See the box opposite for more on this.



Narrator is built into Windows and can read documents and describe on-screen events

Make your PC read the content of web pages out loud

There are lots of free browser extensions that do something Narrator isn't very good at: reading web pages out loud. Chrome extension SpeakIt (www.snipca.com/16153) places a loudspeaker icon on your browser's toolbar. If you want a section of a web page read to you – for example, a news article or a Wikipedia entry – highlight the relevant text, then click the icon.

To get the best out of SpeakIt, right-click the loudspeaker icon and select Options to make a few tweaks. Under the 'Text to Speech engine' settings, we recommend choosing the SpeakIt option or selecting iSpeech and then opting for a UK Male or Female voice for the most natural-sounding speech. We found that selecting the Google UK English options from the 'Text to Speech engine'

Get your browser to read web pages to you with an extension such as SpeakIt for Chrome

settings resulted in SpeakIt cutting out after a few sentences.

There's no equivalent extension for Internet Explorer, but for Firefox we recommend 'Text to Voice' (www.snipca.com/16239).

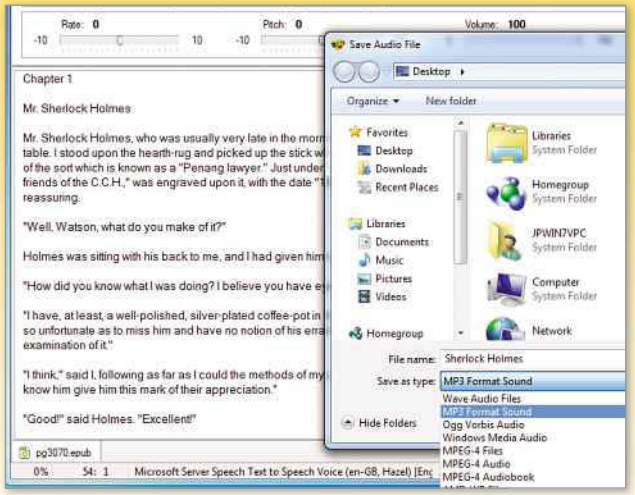
Get dictated text in any program

'Free NaturalReader' (www.snipca.com/16180) is a PC program that can read your Word documents, emails, web pages, PDFs and more out loud. As the name suggests, it doesn't cost anything, though there are paid-for versions that add extra features, such as built-in OCR (optical character recognition) that can convert any scanned document into an audio file.

You can open documents from the NaturalReader window, then click Play to start reading the document from the beginning. You can also highlight specific passages, too. Alternatively, move your mouse over My Documents in the top-left corner to access a library of free ebooks, which NaturalReader will read out loud to you. You can't convert these to MP3 in the free version (though we'll show you a workaround using free program Balabolka below).

The best feature of Free NaturalReader is its 'Floating bar' mini-player that sits in the corner of your Desktop. Open a document, email, PDF or web page in the program or browser of your choice, select text, then click Play in the mini-player to hear it read aloud.

By default, Free NaturalReader uses Microsoft's built-in TTS voices. Other voices are available (click the voice options in the top-right section of the main window), but they're only free on a trial basis. After reading 5,000 characters, it will prompt you to upgrade to the £50 Personal version of NaturalReader – but you can use our hacks (see box below left) to get better Microsoft voices for free.



Create your own homemade audiobooks for free with Balabolka's text-to-MP3 tool

HACK YOUR PC'S VOICE

Windows 8.1 comes with a selection of TTS voices, including a female voice with a UK accent, called Hazel. You can switch from the default to the more natural-sounding Hazel by going to 'Ease of Access' in the Control Panel and clicking Speech Recognition, then 'Text to Speech' and choosing Hazel from the 'Voice selection' dropdown menu.

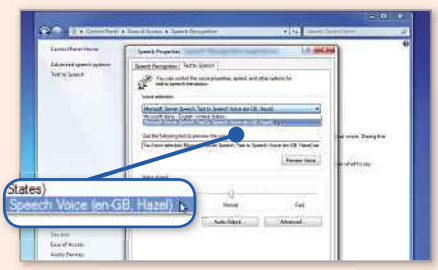
If you're using Windows 7, you'll find you're stuck with the dreaded Microsoft Anna unless you buy extra voices – or employ a trick to get less grating voices (including Hazel) for free.

First, download the Microsoft Speech Platform Runtime (www.snipca.com/16171). Click Download, then tick the x86 box or, if you're running a 64bit version of Windows 7, tick x64. Click Next and download the installer.

Next, download Runtime Language (www.snipca.com/16172). After clicking Download, scroll down the list that appears, tick 'MSSpeech_TTS_en-GB_Hazel.msi' and click Next to download the UK voice. Download the installer.

Run both installers, then open the 'Text to Speech' options as described above. Hazel should now appear in the dropdown menu.

If you still can't select Hazel you'll need to hack the Windows Registry. Type regedit into Start and press Enter. Navigate to **HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Speech Server\v11.0\Voices**, then right-click the Tokens folder and choose Export. Save the folder to your Desktop and name it 'Hazel.reg'. Then open Notepad and drag the Hazel.reg file on to an empty page. Press Ctrl+H, then type Speech Server\v11.0\ under Find What, and \Speech\ under Replace With, then click Replace All. Save the file, then double-click it to add it back to the Registry. This adds Hazel to Windows and to other TTS programs you've installed.



Hack Windows 7 to add Windows 8.1's less irritating voice, Hazel

Turn ebooks into audiobooks

Audiobooks can be expensive, but you can avoid the outlay by using a free TTS tool to convert text into an audio file. Free program Balabolka (www.snipca.com/16154), for example, lets you convert text to MP3, WAV or WMA (Windows Media Player) audio files that you can play on your PC or transfer to your tablet, smartphone or portable player to listen to wherever you want.

Balabolka supports a wide range of ebook and document file types, including DOC, EPUB, HTML, LIT, MOBI, ODT, PDF and RTF. You'll find more than 46,000 free ebooks to download and convert, including many classics, at Project Gutenberg (www.gutenberg.org).

To install Balabolka, click the blue Download Balabolka link and extract the contents of the ZIP, then run the installer ('setup.exe'). It doesn't contain any unwanted extras. Launch the program, click File, then Open and browse for an ebook file. Once it's open, select the voice you want from the dropdown menu at the top of the program window, then click Save Audio File on the upper toolbar. In the dialogue box that opens, select MP3 Format Sound (or your preferred audio format) from the 'Save as type' menu, type a name for your audiobook then click Save.

NEVER PAY roaming charges again

You can now call relatives abroad and send photos home from holiday without paying a penny. **Barry Collins** reveals how to stay in touch for free

Mobile phones have certainly made it easier to keep in touch with family or friends around the world, but not necessarily less expensive. Likewise, phoning home from abroad can be a very pricey business, with roaming charges and mobile-data fees landing you huge unexpected bills.

That's all changing now, thanks to free calling and messaging apps that use Wi-Fi, rather than gobble into your mobile contract or pay-as-you-go SIM card. Using Wi-Fi on a phone or tablet is no more expensive than using it on your PC – you simply connect your device to your home broadband, or public Wi-Fi if you're travelling.

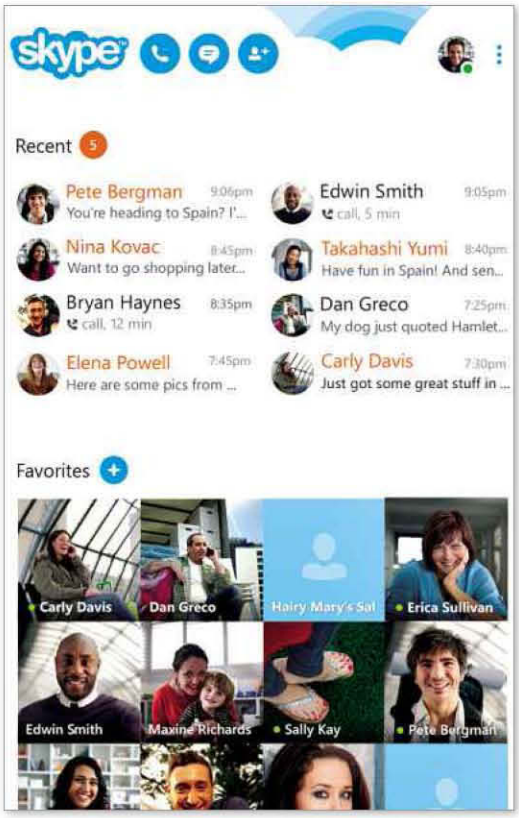
Phone anywhere in the world for free

'Skype for Mobile' (www.snipca.com/16212) is the best tool for making free audio and video calls from your phone or tablet, just like the PC version. It has apps for Android, iOS and Windows Phone. You can use it to call anyone in the world for free, as long as they have Skype installed (PC or mobile).

The Skype app also lets you call phone numbers, but this isn't free. Rates vary, but are usually lower than landline rates and certainly lower than roaming mobile rates (www.skype.com/en/rates).

The main problem with Skype is that many hotels block it on their Wi-Fi network in an attempt to force you to use their expensive phone service instead. So it may not work if you or the person you're calling is on holiday.

As an alternative, try the new calls function in WhatsApp Messenger (Android www.snipca.com/16223; iOS www.snipca.com/16224). Like Skype, WhatsApp works via the internet, so it won't eat into your call allowance. Calls are completely free as long as your access to the internet is free. You and your contact will both need to have the app installed. Once you've added each other as contacts, you call them by tapping their name, then the handset icon (see the Workshop in Issue 448 for more information).



Make free audio and video calls around the world using 'Skype for Mobile'

At present, WhatsApp's calling function seems to be suffering a few teething troubles. When we tried it, our own voice echoed back to us, and at times only one of us could hear the other. This needs fixing before it can be a serious alternative to Skype. Also note that while WhatsApp is free for your first year, it costs 69p per year after that (though this is a tiny amount for such a potentially great service).

There's already an excellent free calls tool on iOS, FaceTime (www.snipca.com/16214). Like Skype, FaceTime lets you make video calls as well as voice calls. Bear in mind, video calls use far more bandwidth than voice calls, so if one of you is on holiday and using a hotel's weak Wi-Fi network, you may want to stick with audio-only (tap the phone icon) rather than video (tap the camera icon). Both users will need to be using an iOS device and have FaceTime enabled.

Send text messages for free

Most mobile-phone contracts include hundreds of free SMS text messages, using your provider's own messaging

BEWARE THE HIDDEN COST OF MOBILE DATA

Mobile data, such as 3G and 4G, is very useful when you're away from home, because it lets you stay connected to the internet when you can't get access to Wi-Fi. Most mobile contracts include a free data allowance – but this allowance can run out in no time, after which it quickly gets very expensive indeed.

So if you're travelling or sending photos and videos to someone abroad, don't use mobile data. To be on the safe side, switch it off in your device settings. With mobile data switched off, your phone or tablet will only use Wi-Fi, which is often free, even when you're far from home.

If you have an Android device, go to the main Settings menu and look for a mobile data setting (usually called something like Mobile Data or 'Wireless & Networks'). Untick or switch off settings for both mobile data and roaming data. If you have an iPad or iPhone, tap Settings, then Mobile, and move the Mobile Data slider to Off.

To make sure your device isn't using mobile data, download the free app My Data Manager (www.mydatamanagerapp.com, Android or iOS – see screenshot). The app alerts you if your device downloads just 1MB of data via 3G or 4G, or incurs any roaming charges.

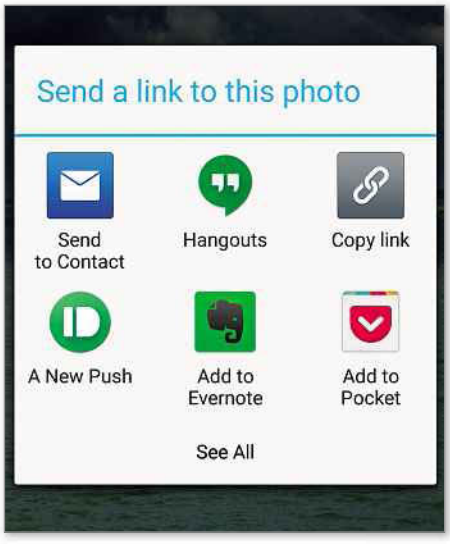
service. But as soon as those texts start crossing borders, they cost a lot more to send – and even to receive.

Happily, there's no reason to pay for these if you've got a Wi-Fi connection. WhatsApp lets you send unlimited text messages to individuals or groups, and it handily places two little blue ticks alongside sent messages to indicate when they've been read.

Apple's Messages app (www.snipca.com/16225) lets you send text messages to other iPhone users for free over Wi-Fi, but will fall back on traditional SMS when you're out of Wi-Fi range, or if the person you're messaging isn't on iOS. The text-message bubble will go blue if the other user's on iMessage (free) or green if it's going via SMS (paid for), so you can see which messages will cost you.

Send photos and videos for free

WhatsApp may need to knock its calling function into shape, but it's brilliant for quickly sharing photos and videos.



Share a link to a full-size photo or video using the free Dropbox app

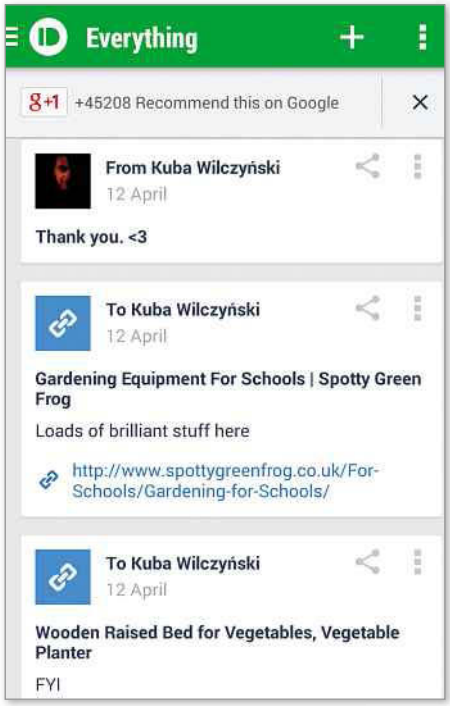
Simply start or open a conversation with a contact (or a group of them), then tap the paper clip icon at the top of the screen and choose a photo or video from your device. You can add captions to photos and trim videos before sending. All photos and videos are compressed so they shoot off quickly and don't take up much bandwidth or mobile data. To scroll through all the photos and videos you've sent and received in a conversation, tap the three dots at the top-right, then tap Media.

Skype lets you share uncompressed (full-size) photos and videos, but it's more of a hassle than with WhatsApp. It's better to send a link to the full-size photo or video that you've stored online, using a secure storage app such as Dropbox (Android www.snipca.com/16228; iOS www.snipca.com/16229). The app is free and gives you 2GB of free storage space.

Dropbox has a Camera Upload option that automatically uploads to Dropbox any photos or videos you take using that device whenever you're in Wi-Fi range (unless your battery is at less than 30 per cent). Turn on Camera Upload in the app's settings. To send ('share') a photo or video from Dropbox, tap the relevant item, then the Share icon below it and choose how to share it (for example, by copying the link and then pasting it into a message).

Send documents and birthday cards

Free app Pushbullet (Android www.snipca.com/16233; iOS www.snipca.com/16234) is also great for sending photos – and much more besides. It lets you instantly send documents (urgent travel documents, for example), messages and links to web pages to anyone who also has a free Pushbullet account. Creating



Send documents, web links, photos and more for free using Pushbullet

an account is easy, and you can even do this using your Google or Facebook account. The app lets you access all your sent and received files securely online (www.pushbullet.com).

If you'd rather send a physical postcard or greetings card to or from overseas, have a look at Touchnote (Android www.snipca.com/16235; iOS www.snipca.com/16236). The app is free but the cards aren't: they cost a reasonable £1.99, including postage. You can use your own photos to create the cards, and add a personal message. The app even has a built-in secure address book, so you can store all your friends' and family members' contact details and access them instantly when you need to send them a birthday card. ca

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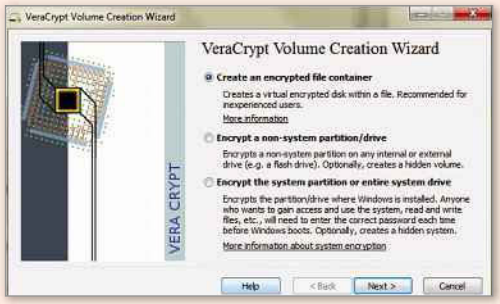
Problems Solved

PROBLEM OF THE FORTNIGHT

How do I secure my Windows files?

Q I was just catching up with the Problems Solved pages in Issue 442. The Problem of the Fortnight revealed how to log into a Windows 7 account without knowing the password. Now that you've revealed this how do you suggest people protect their data in case, for example, their PC is stolen?

Michael Puetter



Protect files on your PC with third-party encryption tools such as VeraCrypt

A The very limited security provided by Windows 7's password is not a new problem. We didn't create the tools that enable people to break in. Indeed, Windows' user-account passwords aren't intended to protect personal files or folders so much as your digital persona: the idea is to stop someone logging into your account to pose as you on email, instant-messaging or social media.

The Windows password has never provided any meaningful security for personal files and folders, because any other user with an administrator-level account is able to access all data stored on the computer – including all other users' files. So, if you have a PC shared by you and your partner, say, and both have administrator user accounts, you already effectively have no security for your personal files. Setting up your partner with a standard user account would prevent them seeing your files, but they might not be too thrilled that you can still see theirs.

To combat this evident problem some versions of Windows do include a built-in tool called Encrypting File System (EFS) that scrambles personal data so that even administrator-level users are unable to read the contents (though the files themselves may still be visible). However, this feature is available only in the Professional and Ultimate editions of Windows 7, not the Home Premium edition that most users own.

If you do happen to own either of these then using EFS is easy. First right-click a file or folder, then select the General tab and click the Advanced button to open the Advanced Attributes dialogue box. Tick the 'Encrypt contents to secure data' box, then click OK. In the unlikely event that you want to encrypt a single file and you're prompted to encrypt its parent folder, click the 'Encrypt the file only' button and then OK. That's it. Windows will now automatically encrypt the files and you'll be able to read them only when logged in with your user account. Other administrators will not now be able to view the contents of EFS-encrypted files and folders (unless you give them specific permission – click the Details button on the Advanced Attributes dialogue box).

Alternatively, there are loads of free third-party encryption tools available, such as VeraCrypt (https://veracrypt.codeplex.com). VeraCrypt is pretty easy to master and is used to create encrypted volumes that can be 'container' files or entire drives/partitions. For example, you can create an encrypted container file that, when mounted, appears to Windows as a drive with its own drive letter. However, to anyone without the password, it'll appear merely as one large, encrypted file. The simple tutorial at www.snipca.com/15815 explains how to do this.

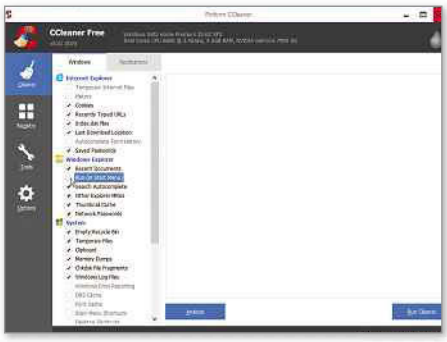
How do I stop Run's history being erased?

Q I frequently work through *Computeractive*'s Workshops and hints where the Run dialogue box is used for executing commands like 'regedit' an so on. These typed instructions used to be remembered by Run, so I could save time later by calling up previous commands. However, it seems this history has been erased, perhaps after I've used CCleaner or some other clean-up tool. It keeps happening, so I no longer have a Run history – and I'd like it back. I guess it amounts to me knowing what box *not* to click when initiating the clean-up procedure, if you know what I mean!

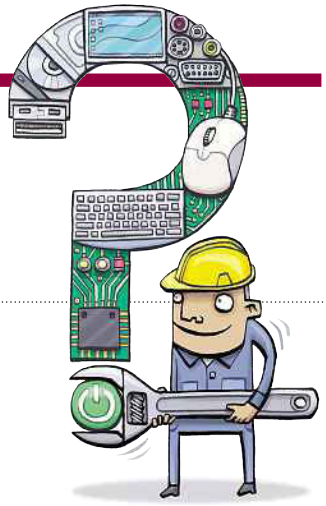
Sid Denney

A Yes, we do know what you mean. CCleaner does indeed have a box that if left ticked will result in Run's history being erased. To disable this feature, click the Windows tab in the Cleaner pane and then clear the tick from the 'Run (in Start Menu)' box in the Windows Explorer section.

Another possibility is that you (or one of your cleaning tools) has disabled the Run dialogue's own ability to store its history. To re-enable this, first click Start, Control Panel, then 'Appearance and Personalization' followed by 'Taskbar and Start Menu'. Now select the Start Menu tab and then, in the Privacy section, tick the 'Store and display a list of recently opened programs' box. Click OK to finish.



Untick the 'Run (in Start Menu)' box in CCleaner to retain your Run's history



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How do I make my printer scan to email?

Q I have bought a Brother DCP-4180DW multifunction printer because it can scan straight to email. But when I try to do this I see a message telling me that there's no email to send to. I'm using Windows 7 and Sky Yahoo for email. How do I sort this?

Mike Crawley

To enable scanning direct to email, make sure your email program is set as your default via the Control Panel

A We couldn't find any mention of your printer model online, so we're not sure of your exact device. Even so, we can suggest a couple of possible causes.

The first is that the scanner is attempting to send scanned pages over USB or Wi-Fi to your PC's default email program, which in Windows 8/8.1 is the Modern-tile Mail app. However, Windows 7 doesn't include an email program so the scanner's attempt to summon one would fail. So our first guess is that you're using the webmail version of Sky Yahoo, in a web browser. Your printer is not able to 'see' a web-based service like this, so instead tries to launch the operating system's default email program – which Windows 7 doesn't have.

In this case the solution is to download a desktop email program, such as Microsoft's free Windows Live Mail (WLM) from www.snipca.com/15795. WLM 'lives' outside the web browser, meaning your printer will recognise it. You'll need to set it up to synchronise email with Sky Yahoo's email servers. This isn't difficult, but you will need to enter the sending and receiving email-server addresses. Sky Yahoo's details are at www.snipca.com/15796.

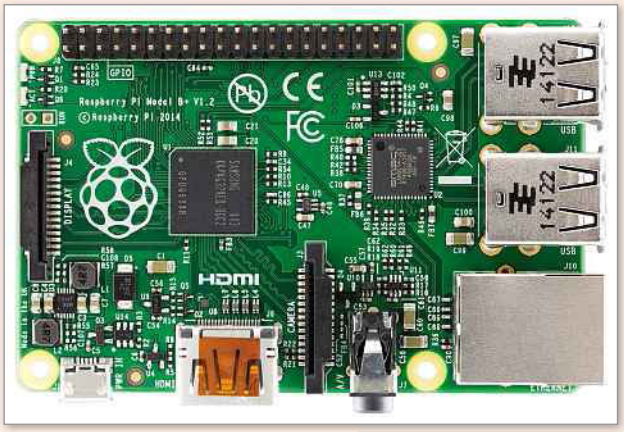
Incidentally, if you do already have an email program installed then make sure it's set as Windows 7's default. In Control Panel, click Programs followed by Default Programs, then 'Set your default programs', choose the email program then click 'Set this program as default'.

The second possibility is that you're using a Brother printer that's able to communicate directly with an email server, thus cutting out the PC-based email program as the middleman. If that's the case then you'll need to look through your printer's menu system for the option to configure the email services. You'll require the same POP/IMAP server details as above. We would be amazed if your printer's manual didn't have specific instructions on doing this but for a generic guide, see Brother's own explanation at www.snipca.com/15798.

What's wrong with my Raspberry Pi?

Q I bought a Raspberry Pi last year ago, which worked fine to begin with. It's been sitting in a box until a recent house move, but having rediscovered it I decided to take another stab at learning how to use the thing properly. Unfortunately, while it switches on it sometimes cuts out. I've noticed that the red light sometimes blinks. Do you have any idea what's wrong, and how to fix it?

Hugh Jones



If your Raspberry Pi power indicator light is blinking, check the Pi's connector pins

A You didn't tell us which Raspberry Pi model you have or the nature of the blinking, which would help us to narrow down the problem. The red light is the power indicator, and with models A and B (the first models released) flashing suggests that the power supply is cutting out, as the light is directly wired to the incoming power line.

So, this could indicate either a faulty power supply or a loose power cable or connector. Try a different power supply and cable. If this doesn't work, look at the reverse side of your Pi to check the soldering: it's possible that the connector's pins have lost contact. If you're handy with a soldering iron, you might be able to fill any gaps.

Models A+ and B+ actively monitor power supply and will flash the red light rhythmically if it drops below 5V. If this is happening, try a different power socket (or source, if you're powering from a computer's USB port, for example).

Problems Solved

How do I change brightness in Windows 8.1?

Q I bought a cheap Windows 8.1 tablet, which given the price I'm pretty happy with. One thing I can't work out though is how to change the brightness level of the display. On my wife's iPad she swipes up to reach a control panel that has a brightness control, but this doesn't work on my tablet (I get a screen of apps instead). What am I doing wrong? Is there a special trick on Windows tablets to pull up this control panel, or one like it?

Chris Turner

A Modern tablets and smartphones do share numerous common gestures, including swipe to scroll and pinch to zoom. But beyond those, things are more varied. By swiping up on your wife's iPad you open the Command Center controls, but this is unique to iOS devices – so it won't work on your Windows tablet. Swiping up on a Windows tablet's Start screen opens the Apps page, as you've discovered.

To access the brightness control on your Windows 8.1 device, first swipe left from the right-hand side of the screen to open the charms bar. Now tap Settings followed by Screen. You'll now see a slider control: just swipe up or down on this to adjust your screen's illumination.

Swipe left on a Windows tablet to access the Charms bar and brightness setting

Will installing Windows 10 affect Windows 8.1?

Q My PC runs Windows 8.1, but I've read about Windows 10 in your magazine several times and want to give it a go. However, I have some doubts. If I load Windows 10 into VirtualBox, as you've previously recommended, will my original version of 8.1 remain on my machine? Then, if I decide I don't want to continue with 10, can I switch back to 8.1 without any complications?

B A Dartnell

Remove Windows 10 from within VirtualBox by right-clicking its entry and clicking Remove

A Yes, Windows 8.1 will remain on your machine. The whole point of using VirtualBox (or any another virtualisation program) is to create a 'virtual PC' that lives 'inside' your current setup.

If it helps, think of VirtualBox as a physical container in your home, like a fish tank or hamster cage. Any creatures you put inside will remain inside, along with any mess they create. Nothing kept inside the container is able to escape into your home. If or when the mess gets too much, you can simply clean out the container and start again.

So, you install Windows 10 into VirtualBox, which creates a virtual PC (a container) on your actual PC. This is totally safe and will not affect your Windows 8.1 setup. If or when you've had enough of Windows 10 you don't have to do anything (the virtual PC container file won't ever change or harm your PC), or you can delete it by right-clicking its entry in VirtualBox choosing Remove.

How do I delete the Apple Watch app?

Q I recently carried out an update to the latest version of iOS on my iPhone 5. It works fine, but it has added a new app for which I have no need called Apple Watch. I've tried deleting this by tapping and holding the app's icon but no deletion cross appears on it. I won't ever need this app because I have no interest in smartwatches, so I'd really like to get shot of it. What should I do?

Matt Fallon

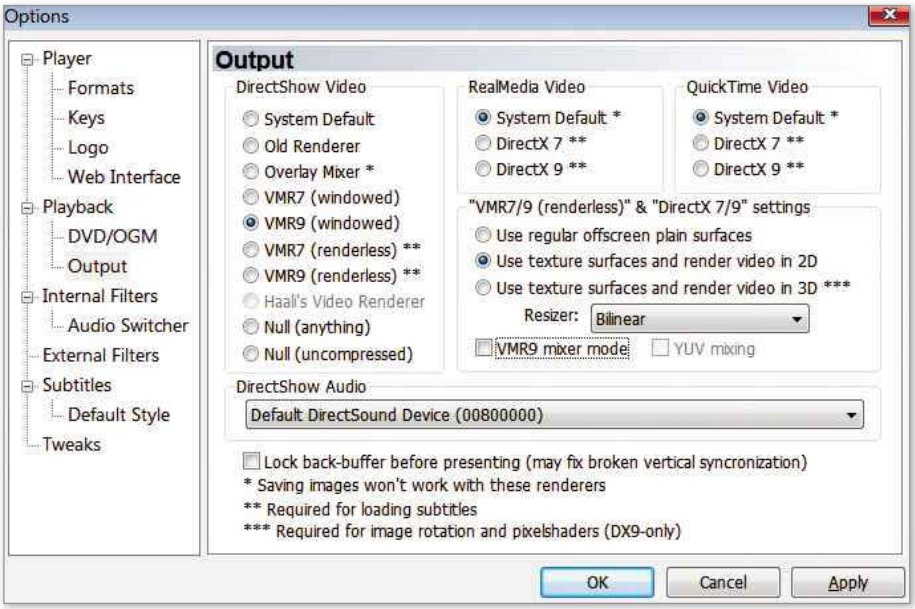
A We're afraid there's very little you can do. The Apple Watch app is now 'hardwired' into iOS, like many other Apple apps. The best we can offer is to suggest hiding the Apple Watch app by moving it – along with any other non-removable Apple apps that you don't use – into a folder on your last app page. To create folders, long-press one app icon until it starts wobbling and drag it on top of another. Repeat until you're done.

Hide unwanted Apple app icons in a single folder on your homescreen

How do I capture screenshots from my DVDs?

Q I want to save some still images from a film on to my PC from my DVDs, but can't find the right settings. I have Windows XP (Service Pack 3) and I'm using Media Player Classic (MPC). In MPC, when I pause the film and try to save an image the following message appears: "The Save Image and Save Thumbnails functions do not work with the Overlay Mixer video renderer. Change the video renderer in Media Player Classic's output options and reopen the file". I tried doing this and changing various settings, but it still won't work. Any advice?

Jane Corey



Capture DVD stills by changing your output settings in Media Player

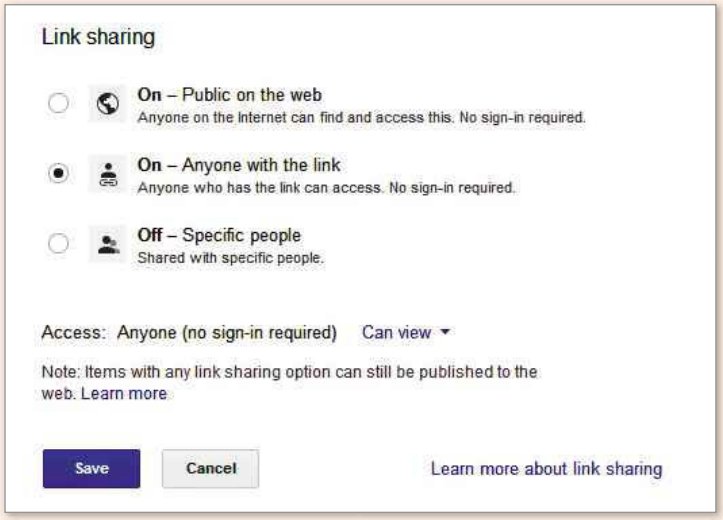
A You were close to fixing this – you just hadn't found the right combination of settings. In MPC, open the View menu and choose Options. Next, click Output in the Playback section. Any number of permutations will fix this problem but you must avoid the renderers marked with an asterisk. For a fast solution, select the 'VRM9 (windowed)' button (see screenshot above) and remove the tick from the 'VRM9 mixer mode' box. The Save Image option on the File menu should now work.

If not, try disabling your graphics card's hardware acceleration. In XP, right-click your Desktop and choose Properties. Now select the Settings tab, then click the Advanced button. Select the Troubleshoot tab and move the 'Hardware acceleration' slider all the way to the left. Click OK twice.

How do I share Google Drive files with non-Google users?

Q I use Google Drive to back up my files online, and also sometimes to work on documents and spreadsheets in my browser. I regularly share these files with my business partner, who also uses Google Drive, and it's always worked well. Recently I had reason to share a file with a new business contact, so I clicked the Share option, typed his email address and sent the invite. He received the invite but couldn't access the file because he was presented with some kind of login page. I tried again but the same thing happened. When I send the same invite to myself or my business partner we can both access the file. I don't have any security on this file (so far as I can tell), so what's the problem?

Kevin Blake



Share Google Drive files with non-Google users by changing your file's sharing permissions

A The problem is the type of sharing permissions you have set for the file. Google Drive's default is to share only with specific people, and those people will need to log into Google Drive with their own Google account credentials. So, if your business contact has a Gmail address, using that would solve the problem. This is also the secure way to share Google Drive files.

If not, then the alternative is to change the permission so that anyone with the link is able to access the file. This is obviously less secure, but it removes the need for the recipient to have a Google account.

To do this, right-click the file, choose Share, type the recipient's email address then click Advanced. Next, under 'Who has access', click Change alongside Private and then select the 'On – Anyone with the link' button (see screenshot). Click Save, then Done.

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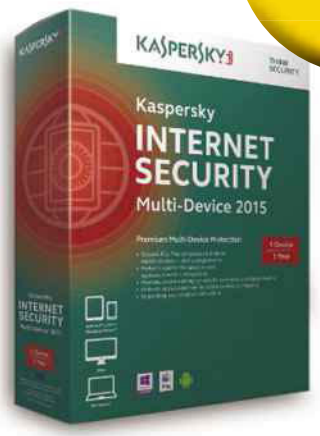

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Why have my Windows Gadgets stopped working?

Q **Can you help me to get the Windows Weather and Currency Gadgets working again? Both of these Gadgets are on my Windows Desktop, but both display the message 'Cannot connect to server'. This is the case on both my laptop (running Windows 7 Home Premium) and my desktop PC (running Windows 7 Professional). My friend said he has the same problem on his laptop. I have tried reinstalling these Gadgets but still have the same problem. What's happened?**

Mike Davis

Find safe alternatives to Windows Gadgets online

A Were you aware that a couple of years ago Microsoft issued a security warning regarding the Windows Gadgets feature? The company has declared that it considers Windows Gadgets to have "serious vulnerabilities" and at that time advised all users to download an automated fix to disable them permanently. That fix is a free download (www.snipca.com/15872) and Microsoft's advice has not changed in the meantime: the Windows Gadgets feature is not considered safe, and this is unlikely to ever change.

It is possible to continue using existing Windows Gadgets (at your own risk), which is obviously what you've been doing (unwittingly or otherwise). However, as Microsoft no longer supports the Windows Gadgets platform or individual Gadgets, it was only a matter of time before some or all of them stopped working – and that's what's happened here. Both the Weather and Currency Gadgets rely on backend servers to supply up-to-date information, and it seems Microsoft has switched them off.

If you want to stick with the Windows Gadgets platform then there is a solution. The Windows Live Gadgets website (http://windowslivegadgets.com) hosts free alternatives for both Weather and Currency, but we can't make specific recommendations because of the platform's aforementioned insecurity. Search the site and then use what you find at your own risk.

Otherwise, consider an alternative widgets platform, such as Rainmeter (http://rainmeter.net). It's similar to Windows Gadgets but is a current and actively supported project.

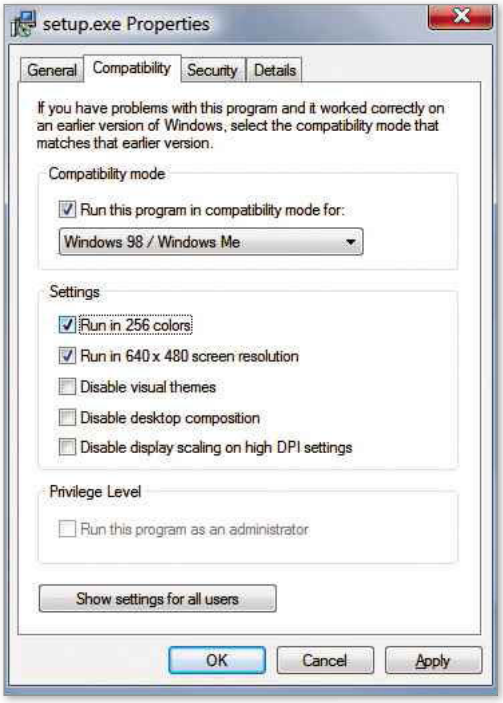
How do I rescue my old genealogy records?

Q **For some years I have been using Sierra's Generations Family Tree (GFT) software on Windows XP, so I have a very comprehensive and detailed record. I now have Windows 7, which doesn't seem to support the software. Is there anything I can do to continue using the detailed records I have built up?**

Gerald Becke

A From what we can work out GFT was designed for Windows 95/98, so it really is ancient by technology standards – but you might be able to get it to work using Windows 7's Compatibility Mode.

Press Windows key+E to launch Windows Explorer, insert the GFT disc and double-click the relevant drive. Next, right-click the program's setup file (probably 'setup.exe') and choose Properties. Click the Compatibility tab and then tick 'Run this program in compatibility mode for'. Choose Windows 98 from the dropdown menu then click OK. Now double-click the setup file to see what happens. If it doesn't work, repeat these instructions but try enabling some of the constrictions in the Settings section of the Compatibility tab, such as forcing GFT to run in a lower resolution or with fewer colours.



Run older programs in Windows 7 by tweaking the Compatibility Mode settings

If your efforts fail then all may not be lost. If you still have access to your XP computer, try exporting the data from GFT as a GEDCOM-format file (with a .ged extension), and then import that file into a more recent genealogy program. We can't make specific recommendations for commercial products, but something free that's likely to work is Family Tree Maker 2005 Starter Edition. It's actually designed to transition older Family Tree Maker files to newer editions but it should work with any GEDCOM file, so it's a no-risk way to experiment. Download it from www.snipca.com/15887.

NEXT ISSUE ON SALE 27 May

- How do I make Windows fit my HDTV?
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Adobe Flash Player

Fix jerky videos and games, make webcams and audio work and speed up your internet

Whatever's going wrong...

For any Flash problem, the first thing to do is check that you've got the latest version installed by visiting the plug-in's home page (www.snipca.com/15769). Look in the Version Information box to find out your installed version, then check the table underneath it to see if it's up to date. If it's not, click the Player Download Center link and follow the prompts.

Video or audio aren't working

Missing video or weird audio can be caused by lots of things. Start by clearing your browser's cache. In Internet Explorer 11 (IE11) click the cog icon, point to Safety, then click 'Delete browsing history'. In Chrome, click the menu button (three lines) then click History followed by 'Clear browsing data'. In Firefox, click Tools then Clear Recent History.

Next, check that JavaScript is enabled (this is not the same as the browser plug-in Java). In IE11, click the cog followed by 'Internet options'. Now choose the Security tab and click 'Custom level'. In the Scripting section, select the Enable button. In Chrome, open the menu and choose Settings followed by 'Show advanced settings', then 'Content settings' in the Privacy section and choose the 'Allow all sites to run JavaScript (recommended)' button. In Firefox, type about:config into the address bar and press Enter. Click 'I'll be careful, I promise!', then type javascript into the Search bar. If the entry in the 'javascript.enabled' Value column reads 'false', then right-click and choose Toggle to change it to 'true'.

Videos and games are jerky or slow

These problems are often caused by out-of-date graphics card drivers. To check, first right-click the Flash video window and choose Settings; a small dialogue box will appear. Now click the Display tab (first from the left) and untick 'Enable hardware acceleration'. Click Close and try playing the video. If playback is smoother, try updating your graphics card drivers before re-enabling this feature.

Disable hardware acceleration to fix jerky video or games

Flash content doesn't fit

Did you accidentally twiddle your mouse wheel while holding down Control (Ctrl)? Regardless, try that first. Another possibility is that you've inadvertently activated Flash's own zoom function, which can render Flash content unusable. To sort the magnification, right-click in the Flash pane and choose Zoom In or Zoom Out, as appropriate.

Webcam or microphone aren't working

Some Flash apps and games make use of your PC's webcam and microphone, if attached. The related permissions can be managed by individual websites or globally (the same setting for all sites). To enable these devices for a particular website, first right-click the Flash pane and choose Settings. Click the second-from-left tab (a monitor with an eye) then click the Allow button. To make this setting permanent for the current website, tick the Remember box. To make this (and other changes) globally, read the next tip.

Internet connection slows down

Flash has a little-known feature called Peer Assisted Networking that allows some Flash components to 'borrow' bandwidth from your internet connection, which can slow everything down. To stop this, visit Flash Player's Global Settings page by right-clicking any Flash pane and choosing Global Settings, or by visiting www.snipca.com/15836.

If your internet is slow, disable Flash Player's Peer Assisted Networking feature

Click the Peer Assisted Networking Settings tab (the icon with two heads) and then tick 'Disable P2P uplink for all'. Alternatively, scroll through the list to selectively allow or deny this feature.

Using Internet Explorer's ActiveX Filtering option can cause Flash errors, so switch it off

Fix ActiveX errors

ActiveX is a Microsoft technology that allows interactive content on some websites but, because it can be a security risk, recent versions of IE let you disable it. This can make some Flash apps fail. The answer is to temporarily disable IE's ActiveX Filtering feature, by opening the tools menu and clicking ActiveX Filtering to remove its tick.

Next issue Fast Fixes for... CCleaner

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3	plusnet	Plusnet: Broadband & Calls	£9.99 (£2.50 for 12 months)	12 months	17Mbps max speed	∞ unlimited	£30.00
4	sky	Sky: Broadband & Calls	£7.50 (HALF PRICE for 12 months)	12 months	17Mbps max speed	∞ unlimited	£45.00
5	plusnet	Plusnet: Fibre Broadband & Calls	£14.99 (FREE for 6 months)	18 months	38Mbps max speed	∞ unlimited	£89.94
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7	Virgin media	Virgin: Broadband & Calls	£17.50 (HALF PRICE for 12 months)	18 months	50Mbps max speed	∞ unlimited **	£105.00
8	EE	EE: Fibre Broadband & Calls	£19.95 (£9.95 for 6 months)	18 months	38Mbps max speed	∞ unlimited	£179.40
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Jargon Buster

1080p Of the common types of high-definition video, this is the best quality: 1920x1080 pixels.

4K Video with a resolution of at least 3840x2160 pixels

64bit A technology that processes information in larger chunks. Most modern computers are 64bit.

802.11ac A standard for wireless networks that allows for higher transfer speeds than 802.11n.

802.11n A standard for wireless networks that allows for high transfer speeds.

ADSL Asymmetric Digital Subscriber Line. A technology that converts a standard phone line into a broadband internet connection.

Aperture An opening that controls the amount of light entering a camera lens.

Backend server See Server

Bandwidth A measure of how much information can be transferred through a connection at one time.

Bookmarklet A small, very simple program stored as a bookmark in your web browser.

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.

CPU Central Processing Unit. Another term for a computer processor.

Driver A file that tells Windows how to work with a peripheral device.

Dual boot To set up a PC with two operating systems, so that one must be chosen each time it starts.

Dual core When two processors are combined into a single chip.

Ethernet A standard used for almost all wired PC networks.

Exposure The amount of light collected by a digital camera's sensor.

Extension The letters after the full stop in a computer file name. These denote what kind of file it is.

Feedback The tactile response that the keys on a keyboard give when they've been pressed.

Gigabit Ethernet A very fast networking standard that can transfer data at up to 1,000Mbps.

Hardware acceleration Using a graphics card to radically improve video and games performance.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

IMAP Internet Message Access Protocol. A method for email that lets the user manage messages stored on a remote server.

Integrated graphics chip A device that has a chip for processing graphics data built on to its motherboard, rather than having a separate graphics card.

ISO The light sensitivity of a camera. Higher ISO numbers allow you to shoot without flash in darker situations.

MB/s Megabytes per second.

Megapixel A measure of the amount of detail that can be recorded by a digital image.

MicroSD A small type of memory card. Can be converted to SD size using an adapter.

Micro SDXC Secure Digital eXtended Capacity. A memory card format with a maximum capacity of 2TB, compared with a limit of 32GB for SDHC cards.

Motherboard The main circuit board inside every PC into which all other parts connect.

NAS Network-attached storage. A hard drive attached to a network that can be shared by other PCs.

Noise Visible dust-like speckles that appear in some camera and TV images. In photos, they are caused by the camera's own sensor.

Open source Software that can be modified by anyone, rather than just by the employees of the company that created it.

Optical audio A socket that provides a high-quality sound signal between computers, amplifiers, CD and DVD players and more.

Optical stabilisation A mechanism built into digital cameras that compensates for any shaking or vibrations that occur during shooting.

Optical zoom A system of magnifying the size of an image by physically adjusting the camera's lens elements.

Partition A large hard drive can be split into two or more partitions or 'virtual' drives.

Plug-in A small program that adds extra features to your web browser or to other applications, and is loaded only when it's needed.

POP Post Office Protocol. A system for remotely accessing email from an ISP.

Processor The processor – or central processing unit – is the brain of a PC. Processors now are tiny and capable of carrying out millions of calculations every second.

PUP Potentially Unwanted Program. A program that may not be desired, despite the user consenting to it being downloaded.

PVR Personal video recorder. Also known as DVR (digital video recorder). These set-top boxes let you pause and record digital TV.

Quad core A computer that has four processors on a single chip, which allows it to operate faster than standard (single-core) computers.

RAID A system for storing data efficiently and automatically backing up PC hard drives, but it can be more trouble than it's worth.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on.

Raw A format for digital photos that stores the image exactly as the camera captured it.

Roaming charge Fee incurred for using your phone to receive data through overseas mobile networks.

SATA Serial ATA. An interface for connecting modern hard drives and optical discs to a computer.

Sensor The part of the camera that captures each image.

Server A PC on a network, such as the internet, that distributes information to other PCs.

Shutter speed A way of measuring how much light is captured by a camera's sensor.

SIM Subscriber Identity Module. The smart card used by all mobile phones.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts.

System Restore Point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

Travel The distance the keys of a keyboard have to be pressed before the keystroke is recognised.

USB 2.0 Faster successor to USB that's used by devices such as external hard drives.

USB 3.0 An even faster version of the USB standard used to connect devices to a computer.

Virtual desktop A desktop environment that you can expand beyond the physical confines of your PC's screen.

WAV file Also known as a Wave file and saved with a .wav extension. An audio file, used for recording music and other sounds to disk.

White balance Adjusts the balance of colours in the image to produce natural-looking images.

Wiki site A collaborative website that users can easily edit.

Bust more jargon on our Back Issue CD: www.snipca.com/14981

The Final Straw

STUART ANDREWS is *Computeractive*'s Mr Angry

This issue Stuart Andrews won't be taking any...

Bad advice in PC stores

You may have read recently that one of our readers was dismayed that a salesman working at a major electronics store thought the Raspberry Pi was a dessert (Letters, Issue 447). This doesn't surprise me. You'd think that with so many young people interested in technology, our retail outlets would be packed with smart employees, bursting with knowledge and determined to share it with the world. Instead there are still plenty of dimwits who'd struggle to remember their name if it wasn't printed on a tag. Or worse, sharp-dressed sales-fiends with their minds on targets, not satisfied customers.

In the past few years I've heard many sorry tales. Some are just regular idiocy, like punters being told to buy one laptop over another because it had a solid-state drive, which would somehow make the internet "load faster". I've heard of people steered away from PCs with AMD processors because they might not be compatible with Windows software, or told not to buy a Windows tablet because it wouldn't work with their email.

The salespeople who really drive me batty are the ones who only care about their commission. They get customers to take out an extended warranty on products that already have two years as standard, or tell them that they have to buy a certain security package because the free ones let through viruses that might destroy your CPU. Sure, viruses are bad, but do they really ravage hardware? No.

It's not just the computer stores, either. Last year I wanted to upgrade my phone. I visited five or six stores and never once met anyone with the merest semblance of a clue. Some tried to sell me expensive, top-of-the-range models when I was simply after a decent mid-range phone. Others tried to sell me last year's mid-range no-hopers even when I suggested something better at the same price. Infuriating stuff.

> There are plenty of dimwits who'd struggle to remember their name if it wasn't printed on a tag, and sales-fiends with their minds on targets, not customers

Most of the sales-goons I talked to hadn't got a clue about Windows phones or about any Android phones that weren't made by Samsung. The best advice I received was to not buy anything, and wait until the new iPhone launched.

Not bad advice, except I was in the market for an Android or Windows phone on a monthly contract of £20 to £25.

You can't move in these places without getting pounced on, yet all the training budget seems to have gone on aggressive sales techniques, rather than on learning the specifications, virtues and vices of the products being sold. Is it too much to hope to get some good advice?

Sadly, it was ever thus. In the mid-Nineties, when I used to work at *Computeractive*'s sister magazine *PC Pro*, we used to laugh despairingly about the advice being dished out to hapless punters looking to buy their first PC. The sales guys didn't know the difference between variants of Windows, and would regularly mix up RAM, processor speed and hard-drive space – all three allowed you to store more programs, apparently. People looking for a basic word-processing box would be pushed towards the latest, all-singing, all-dancing (and expensive) Pentium PC.

In those days, though, there was an alternative. For every big-name store jammed with clueless clots, there was a smart independent PC shop where the salesmen understood the differences between one product and another, and could tell you what was coming down the line. Some of these places still exist – we should all shop there to keep them going – but not half as many as I'd like. Most have been driven out of the market, caught between the cut-price tactics of the big online retailers and the omnipresence of the bigger stores. We didn't use them, so we lost them. All we're left with is a lot of bad advice.

Do you agree with Stuart?
Let us know at letters@computeractive.co.uk

Next issue Stuart doesn't know which boxes to tick

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