

Make Your PC RUN LIKE

The 17 most important things you should do p50

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PLUS POLICE DE

CONTROL YOUR PC WITH YOUR VOICE p60

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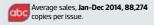
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A DENNIS PUBLICATION

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From the Editor

I was thinking the other day about how many things in my house still work as well as they did on the day I bought them. My five-year-old kettle still makes a lovely cup of tea. My toaster, a couple of years older, still springs into life every morning. Even my digital radio, bought in 2004, works fine.

But my six-year-old PC? You've got to be joking. Sure, it was sprightly for the first few years. But then, last summer, it started to deteriorate. It booted reluctantly, crashed frequently, and made the strangest grinding noises. It seems to have aged 60 years in the 60 days since Christmas.

If your PC is showing similar signs of decrepitude, you could search online for



help - but you'll find hundreds of confusing, jargon-spewing 'tips' urging you to buy rip-off software or overpriced hardware. Well, forget about those and read our Cover Feature instead. We've chosen the 17 most important things you need to do. Follow our guide and your PC will feel young again.

Daniel Booth editor@computeractive.co.uk



THIS ISSUE IN NUMBERS

£107m

Money wasted by the Government on IT projects - p7



152Mbps

Speed Virgin Media has pledged to deliver to 4 million **UK** homes and businesses - p8



£119

Price of Devolo's new HomePlug adapters the fastest we've ever tested p22

20 million

Number of Facebook accounts owned by people who have died - p58



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News

The top stories in the world of technology

Switched your phone off? Hackers can still spy on you

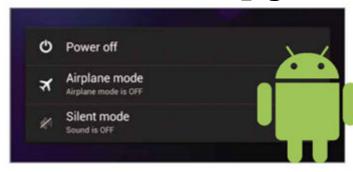
cecurity experts have detected new Android malware that tricks people into thinking they have turned off their phone.

When you press the 'Power off' button on your phone (see image), the malware shows a fake box designed to look like the real Android 'Power off' menu.

The phone then displays a black screen, and looks like it's switched off. You won't hear any sound alerts or see any notification lights.

However, the phone is actually still switched on. The malware has inserted a line of code into Android's shutting-down process that lets hackers access the device remotely, theoretically allowing them to do anything they like.

They could, for example, make calls and send text



messages to expensive premium-rate numbers, costing you a small fortune. In effect, your phone becomes a device hackers can use to spy on you.

The malware, which has yet to be given a name, was discovered by security researchers at AVG. In a blog post (www.snipca.com/15578) they said that it originated in unofficial Android app stores in China, infecting devices when users download

malicious apps. AVG says the malware has already infected 10,000 devices worldwide, all of them running Android KitKat (4.4) or earlier, but didn't reveal which apps contain it.

To stay safe, make sure you only install apps from the Google Play Store (play.google.com).

AVG says that its free 'Antivirus for Android' app (www.snipca.com/15580) will find and remove the malware.

COMMENT

Unlike the criminals behind ransomware, these devious hackers don't want you to know your device is infected. The longer you remain oblivious, the more money they can steal from you. But it's relatively easy to stay safe. Rather than removing your battery at the end of each day, simply restrict yourself to apps on the Google Play Store. Hackers are finding it much harder to smuggle malicious apps past Google's security barriers. Unofficial app stores based in China are never going to be as safe.

Other security experts have said the only way to be completely sure your phone is off is to remove its battery.

Log into Windows 10 with your finger

Microsoft has said that Windows 10 will support technology that lets users log into their accounts using their fingerprint instead of passwords.

The technology also recognises a user's face, voice and eyes.

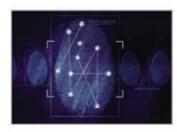
These physical characteristics are called biometrics. Because they are unique to each person, computers can use them to identify individuals.

Security experts regard them as far safer than passwords because they can't be stolen by hackers. They also make signing in much easier because you don't have to remember long and complex passwords.

Microsoft announced the news by saying that Windows 10 will support FIDO (Fast Identity Online), a standard that enables people to sign into accounts without using a password.

Dustin Ingalls, Microsoft's Windows security and identity programme manager, said that moving beyond passwords "is one of the most important priorities for the upcoming Windows 10 release".

He wrote on the Windows for Your Business blog (www.snipca.com/15555): "Transitioning away from passwords and to a stronger form of identity is one of the great challenges that we face



in online computing". Other companies that support FIDO include Samsung, Visa, PayPal, MasterCard and Google.

You'll like this... Microsoft will give you 100GB of free storage if you switch from Dropbox to OneDrive (www.snipca.com/15554)

... **but not this** A Norton Internet Security update caused Internet Explorer to crash repeatedly (www.snipca.com/15563)

Beware fake version of AdwCleaner software

Scammers have created a fake version of the popular adware-removal software AdwCleaner. It tries to con you into spending \$59.99 to remove adware from vour PC. The real version of AdwCleaner is free to use.

The scam begins with a message that pops up on your PC saying 'Important! Adware Detected!'. If you click OK, you'll see a message urging you to download AdwCleaner (see screenshot). Clicking this link downloads the fake version of AdwCleaner, which looks genuine. It then pretends to scan your PC, before highlighting "infections" it claims to have found. It recommends that you pay \$59.99 through PayPal.



This kind of scam is known as scareware because it tries to frighten you into thinking your PC is infected with malware. To stop the fake version launching when you start your PC, press Windows key+R to open the Run dialogue box, type msconfig and press Enter. In the System Configuration box that appears, click the Startup tab then look for the fake program, which should be called 'AdwareBooC', and untick it. Click OK then restart your PC.

However, wiping the phony version of the program won't remove the malware that generated the 'Important! Adware Detected!' message in the first place. To do that, you should use the real version of

AdwCleaner or Malwarebytes Anti-Malware Free (www. malwarebytes.org). AdwCleaner was Computeractive readers' most downloaded software in 2014, according to clicks on our Snipca links. We recommend it because it's one of the best ways to remove adware from your PC.

To stay safe, only ever install AdwCleaner from a reputable download website such as ToolsLib (www.snipca.com/ 15477) or Bleeping Computer (www.snipca.com/15478).

IN BRIEF

NEW SITE FOR UK WAR MEMORIALS

A new Government-run website aims to gather information about all the war memorials in the UK. Organisations throughout the country will spend the next four years working on the UK War Memorials site (http://ukwarmemorials. org), building a searchable database of memorials. It will also provide information on how best to look after war memorials. The site is being funded by the Department for Culture, Media and Sport using proceeds from Government fines imposed on banks.

REVENGE PORN NOW ILLEGAL

It is now illegal in England and Wales to share or post online sexually explicit photos and videos of people without their consent, after so-called 'revenge porn' was included as an amendment in the Criminal Justice and Courts Bill. People found guilty face up to two years in prison. Recent police figures showed that revenge porn has been used against victims as young as 11.

Government wastes £27m of your money on aborted benefits website

The Department for Work and Pensions threw away a staggering £27 million on the aborted My Benefits Online (MyBOL) project, which would have allowed welfare claimants to make claims online.

MyBOL was abandoned when the Universal Credit Online access plan was rolled out. The figure comes from the Taxpayers' Alliance report revealing "departmental losses" for 2013-2014 (read it at www.snipca.com/15483). In total, the Alliance said the government wasted more than £107 million of taxpayers' money on failed or cancelled IT projects over a 12-month period. The sum includes £1.5 million spent by Ministry of Defence on a software-



integration tool later found to be faulty during testing. But the biggest loss was the £56.3m spent by the Ministry of Justice (MoJ) on an IT system designed to cut costs on administrative tasks such as HR and payroll. However, after spending the money, the MoJ decided to outsource the duties to IT company Steria. This was the company paid by the MoJ to set up the system within the department in the first place.

Jonathan Isaby, CEO of the



Taxpayers' Alliance, said: "It is clear there remains far too much waste in the system. With an ever-growing debt burden, we must make government more efficient and ensure taxpayers are getting real value for money". A spokesperson for the Government said it "has clamped down on wasteful spend and last year saved £14.3 billion for the taxpayer".



Is it morally wrong to kick a robot dog? That was the improbable question being asked by some people after robotics company Boston Dynamics, owned by Google, posted a video online (www. snipca.com/15499) showing its new robo-dog, called Spot, withstanding a mighty kick in the side. You may not want to take Spot for a walk, but it would prove an effective guard dog.

IN BRIEF

FIREFOX LOOKS TO KILL OFF FLASH

Firefox is developing a way to let you play Flash videos without having to install the pluq-in, which is a common target for hackers. Adobe, which makes Flash, has released three security updates already this year (see Protect Your Tech, Issue 443). Called Shumway, the project is being tested in the Nightly version of Firefox (https://nightly.mozilla. org), which is updated every day with experimental new features. Only advanced users should download it.

NEW CAMPAIGN TO GET PEOPLE ONLINE

A new campaign is under way to encourage people to do more online and improve their digital skills. Run by not-for-profit organisation Tinder Foundation, Be Online comprises more than 1,000 events around the UK, which you can search for at www. snipca.com/15560. You can also ring 0800 77 1234 for info. It runs until 8 March.

Are you due a Plusnet refund? ISP says sorry for incorrect bills

Plusnet has said it will refund customers who were charged extra after the ISP incorrectly claimed they had gone over their data allowance.

In mid-February customers started complaining to Plusnet about emails they were receiving telling them they were being billed extra for exceeding their allowance.

Plusnet responded by saying its engineers were investigating the cause of the problem. A day later it confirmed there had been a glitch that resulted in some customers receiving "email notifications advising of incorrect additional usage charges".

The company said on its support pages (www.snipca. com/15535): "We'd like to assure you that we'll be removing or crediting any incorrect charges due to this issue from customers' accounts".

Some Plusnet customers contacted the BBC to highlight the problem. Steve Rogers



said: "At 22 minutes past midnight this morning I received an email, and it said you are approaching your usage allowance, and once you've used your 40GB we'll charge you an extra £5 for every 5GB".

Mr Rogers said that the following morning he received another email from Plusnet saying that it had added more gigabytes to his account.

He told the BBC: "I thought I haven't been doing anything

out of the ordinary... I wonder if my wife has been downloading loads of stuff".

Using Plusnet's View My Usage tool (www.plus.net/ usage), Mr Rogers discovered that Plusnet had added 42.2GB of data. This was far more than he'd actually used.

Plusnet said the problem has now been 'resolved'. If you have billing queries, or think you're due a refund, phone Plusnet on 0800 432 0200. You can also contact Plusnet on Twitter: @plusnet

Rural areas won't get Virgin's new 152Mbps broadband

Countryside campaigners have accused Virgin Media of neglecting rural communities after the company announced a £3bn plan to provide super-fast broadband to urban areas.

Its five-year 'Project Lightning' scheme will create 6,000 jobs (including 1,000 apprenticeships) and offer speeds of up to 152Mbps. Virgin hopes to increase the number of premises receiving its broadband from 12.6 million to 17 million.

It claimed the expansion



will add £8 billion of value to the UK economy, but it confirmed it had no plans to extend the network into rural areas, focusing solely on towns and cities.

Virgin Media Business MD Peter Kelly said that while the company wouldn't ignore rural areas "where they fit the economic rules", the investment is about "building on our urban footprint".

The Country and Land Association (CLA) said Virgin's decision could "exacerbate the ruralurban digital divide".

A spokesman said: "What is clear is that rural areas will not be able to access speeds in excess of 30Mbps or 50Mbps for some time to come. All this does is show the rural economy is being neglected once again".

What's new from Google 8

One of the most loved toys of the 20th century, the View-Master, is being resurrected by Google and Mattel as a virtualreality headset. Once the device is paired with Google Cardboard (see our review, Issue 435), the wearer sees 360-degree "photospheres". It goes on sale in the US in the autumn priced \$29.99, and should be available here next year. Visit the official site for more information: www. view-master.com.

Google to add medical information to search results

Google is introducing fact-checked medical information to its search results, which will appear in response to a medical-related search query.

The information panel (see screenshot) will only appear in the US for the moment. though Google says it plans to extend the service globally.

Google hopes the information provided will answer your query, and negate the need to click website links.

In a blog post (www.snipca. com/15458), Prem Ramaswami, a product manager at Google, said: "We'll show you typical symptoms and treatments, as well as details on how common the condition is whether it's critical, if it's contagious, what ages it affects, and more".

He said that demand is high for medical information, with



one in 20 searches being health-related.

Initially, around 400 relatively common medical conditions - ranging from tonsillitis to measles - will be added.

Google stressed that the information will be reliable, saying it has worked with medical experts "to carefully compile, curate and review" what is shown.

But the company also said that the results should be used only to "empower" you when

deciding what to do next. They should not be viewed as an alternative to seeking treatment.

UK-based Medical professionals cautiously welcomed the news. Dr Richard Vautrey, deputy chair of the British Medical Association's GP committee, told the BBC that it could

encourage people to treat minor ailments themselves, easing the pressure on family doctors.

But he raised concerns about whether Google would tailor the information to make sure it meets UK standards of health care.

He said the results "must be underpinned by clinical guidance from UK-based health professionals, as there are stark differences between the UK and US health systems and culture".

IN BRIEF

FREE WI-FI ON TRAINS FROM 2017

The Government has announced that free Wi-Fi will be available across much of the UK's train network from 2017. It has released a fund of £50m to ensure free Wi-Fi on Southeastern, Chiltern, Arriva Trains Wales and TSGN (Thameslink. Southern and Great Northern). The money has been raised from the massive fines paid by rail companies for delays on their services. All future rail franchise bids must now include the offer of free Wi-Fi, the Government said.

PAY FOR PETROL USING PAYPAL

Drivers will soon be able to pay for petrol without leaving their car. From April, members of the Shell Drivers' Club (www.shelldriversclub. co.uk) will be able to pay from their smartphone using the PayPal app and the Shell Motorist app (www.snipca. com/15454). It will be made available to all customers later this year. The PayPal app is already accepted in more than 8,000 UK shops and restaurants.

HACKERS ATTACK ISIS ACCOUNTS

The hacking group Anonymous has removed more than 1500 Facebook and Twitter accounts affiliated with Isis, saying it will "hunt down and expose" the Islamist group online. Its actions come after it "declared war" on Isisrelated websites following the murders at the Charlie Hebdo offices in January. In a video posted on YouTube (www.snipca.com/15457) Anonymous directly addressed Isis, saying: "You will be treated like a virus, and we are the cure".

Don't go to court, use eBay-style justice

Some British legal cases could soon be settled in an online court, similar to the system used to settle disputes on eBay, if proposals suggested by the Civil Justice Council are implemented.

A new report from the Council suggests virtual courtrooms should be used to settle civil claims of up to £25,000. Online legal workers will first try to settle a dispute, before handing it over to a judge if they can't resolve it.

The Council insisted this would speed up proceedings because courts don't need to be booked and nobody needs to give evidence in person. It cited a number of companies that already resolve disputes

online, chiefly eBay, which settles 60 million disagreements a vear.

"When a conflict is handled using ODR [online dispute resolution], a traditional courtroom or hearing room is not employed," the report states. "Instead, the process of settling a dispute is entirely or largely conducted across the internet. In other words, dispute-resolution services are made available as a type of online service".

The report's author, Professor Richard Susskind, said the system could be up and running by 2017.



Speaking on BBC Radio 4's Today programme, he described eBay's disputeresolution system as "remarkable" and said a legal equivalent should be used to replace parts of the civil courts, which are "too costly, too complex and too slow".

You can read the Council's report at www.snipca. com/15450.

News ned & Sha

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

WARNING - Junk ahead

Junk offender: IObit

Here's a suggestion if IObit needs a new company slogan: 'Great software, shame about the dodgy extras'. You can have that one for free, IObit.

When I'm recommending programs in Computeractive I tend to exclude anything with a PUP (potentially unwanted program) in its installer. I'll make an occasional exception if I think a program is worth the hassle, and if I've got room to spell out my misgivings. An example would be any software by IObit.

IObit programs are good, once you've got them safely into your system. IObit Uninstaller (www.snipca.com/15570), Advanced SystemCare 8 (www.snipca. com/15569), Driver Booster 2 (www. snipca.com/15571) and the new Malware Fighter 3 (www.snipca.com/15572) are all efficient and easy to use. However, their installers are, at best, a pain in the neck.

How to survive an IObit installer

Let's try installing Malware Fighter. Click Free Download and you're taken to a mirror site, Softonic, where you'll need to click Free Download again. Make sure your advert-blocker is

enabled because Softonic is full of adverts that look like, yep, Free Download buttons.

The fun really starts when you click the setup file. There's a welcome page (click Next) and a licence (click Accept) - and then you're slapped with a PUP called MyPCBackup. If you're in any kind of hurry, you won't notice it's there. There are no tick boxes, Custom options or other clues. All you have is a 'No, thanks' option. If you click Continue instead, the



You couldn't make it up... IObit Malware Fighter tries to install a PUP

PUP will download.

Even if you do escape MyPCBackup, there's another PUP lurking on the Finish page. Untick 'Install...' to avoid it.

The second PUP is not malicious, just uninvited (almost as bad). But MyPCBackup

is a real troublemaker. According to security firm Symantec it infects your PC with adverts and pop-ups (www.snipca.com/ 15574) and you'll need to run an adwareremoval tool such as AdwCleaner (www. snipca.com/15477) to get rid of it. But please, don't let it get into your PC in the first place - it will ruin your day.

To think, all this junk from a program called 'Malware Fighter'. Someone at IObit has a sick sense of humour.

What are they talking about?

What they say Virgin Media (www. snipca.com/15579): "We are not going to ignore those areas where they fit the economic rules and we can get the right density, but at the same time we're not positioning this investment at the rural broadband position".

What they mean

After reading that sentence eight times, I think I've got it: Virgin is expanding its broadband coverage. Mostly in towns and cities, where nearly all people live. So if you're out in the middle of the country, you might have to wait a bit longer.

Jane's villain of the fortnight

Lenovo

Oh dear, Lenovo. Bundling "horrifically dangerous" adware in the laptops people got for Christmas just isn't nice.

The tech giant has been selling laptops pre-installed with Superfish. According to Lenovo, Superfish is a search tool. According to security experts and everyone other than Lenovo, Superfish litters your browsers with adverts, breaks through encrypted ('https') connections and steals your passwords (www.snipca.com/15568).

Lenovo first denied it, then said sorry (the word 'apologize' is buried in the middle of this statement: www.snipca. com/15566) and it's now released a Superfish-removal tool (www.snipca. com/15565). Experts have pointed out



that the best Superfish-removal tool is a whole new computer.

You know what really annoys me about this? People might confuse the word 'Superfish' with 'Snapfish', which is a lovely, safe, UK-based photo-printing site (www.snapfish.co.uk). Go there now and treat yourself. Here are some vouchers from HotUKDeals (which is also safe): www.snipca.com/15567.

Would you like to nominate a villain of the fortnight? Email us at editor@ computeractive.co.uk



Will your photos survive the digital dark age?

'Bit rot' will make our photos and videos inaccessible to future generations

hen teenagers take selfie photos at parties, they're far too busy having a good time to worry about whether their great-grandchildren will be able to open them. But as we get older, making sure our precious digital content outlives us becomes more urgent. We don't want our photos and videos trapped in time.

It's not a new problem, as anyone with piles of unplayable VHS cassettes and unreadable floppy discs will know. Nobody is more worried about this digital decay than Vint Cerf, a vice president at Google and the company's Chief Internet Evangelist.

In February, he told the American Association for the Advancement of Science that we face a "forgotten generation, or even a forgotten century". He used the phrase "bit rot" to describe the process of existing content becoming unreadable by devices in the future.

Cerf said: "We don't want



last longer than physical objects because they don't require a specific device to play. You may need a Betamax video recorder to play Betamax cassettes, but you don't need a particular type of PC to open JPEG files.

The file formats most likely to survive are those that have adopted 'open' standards -

documents will be stuck in an obsolete format.

Perhaps the most important question is how long we should expect our photos and videos to last. We wouldn't be happy if they became inaccessible within our lifetime, but should we reasonably expect people in 2115 to have the technology to watch a video we shot yesterday on our phone?

Cerf is more concerned about preserving culturally significant artefacts than photos of your grandchildren. He is advocating a process called 'digital vellum', which takes a 'digital snapshot' of software and hardware that can be recreated in the future.

That's a long-term, hi-tech solution for academic institutions and museums. But Cerf also has a more low-tech solution for the general public: "If there are photos you really care about, print them out".

It's impossible to know whether your descendents will be able to open your files. There will always be money to

THE FACTS

- Google's Vint Cerf warned that future generations may not be able to open today's digital content, such as photos and emails
- He advocates a process called 'digital vellum' to preserve digital content
- Open file formats are more likely to remain playable than proprietary formats

f If there are photos you really care about, print them out ""

our digital lives to fade away. If we want to preserve them, we need to make sure that the digital objects we create today can still be rendered far into the future".

Often called the father of the internet, Cerf is one of the most respected figures in the world of technology (see also 'Question of the Fortnight', Issue 443). His warning made headlines around the world.

But is he exaggerating the danger? Digital files actually that is, they can be used and customised freely by the public and software developers. Most photo and video format fit this description.

By contrast, proprietary file formats - those owned by companies - are in greater danger. It may be hard to imagine a time when computers won't be able to read Microsoft's .doc format to open Word documents. But if Microsoft stops supporting the format, then all those

be made in selling software and devices that rescue old formats, but not all technology can be easily resurrected. The answer, for now, remains frustratingly vague. Make sure you save your most cherished content in as many forms as possible, both physical and digital. You should also do your best to stay informed about the impending death of certain formats. The earlier you read the tech obituaries, the sooner you can transfer your content to a more durable format.

Letters

Tell us what's on your mind

Email: letters@computeractive.co.uk **Facebook:** www.facebook.com/computeractive



I'm a Windows 10 early bird, not a guinea pig

I found Thomas Clarke's letter in Issue 443 very patronising. He said that people planning to upgrade to Windows 10 from Windows 8 are guinea pigs, by which I assume he means that we'll be first in line to suffer the problems in the new operating system.

Well, I don't see myself like that. I'm an early bird, not a guinea pig. I'm already using Windows 10, and I love it. There may be the occasional bug, but that's to be expected. And as an early bird, I can soar above them! It also means that I've got a head start over everyone else. Come

the autumn, I'll be a Windows 10 expert, able to teach others how to use it. That doesn't sound like a guinea pig to me.



Simon Shaw

I was amused by Thomas Clarke's letter panning Windows 10 (Issue 443) because I'm sure I saw him in the slow lane on the motorway. For Thomas the Tortoise's information. Windows 10 is a fantastic operating system, as is Windows 8.1. If the Windows 7 users of the world are happy to make a cup of tea while they are waiting for their PC to boot, or going round the shops while waiting for it to shut down, so be it. I prefer to whizz along with 8.1 and, as a Windows 10 Insider, I know what life is like in the fast lane. Don't be frightened of experimentation; after all, what would the science of plastic surgery have been without Dr McIndoe's WW2 Guinea Pigs (www.snipca.com/15423).

Brian Hargrave

22 miles from London, but no broadband

Like Mr Parker (Letters, Issue 442), we live near Stansted Airport, but across the border in rural Hertfordshire. I say rural, but we're not exactly in the Outer Hebrides. Our farm is 200 metres from the A10 trunk road, one of the busiest roads in Europe, and only 22 miles from London – the greatest city in

the world. And yet, we can't receive any broadband!

We would like to see the Government make it compulsory for broadband suppliers to upgrade and supply all rural locations in England by 2020, because as farming communities we're losing out – and therefore the country as a whole is losing out. I'm sending this letter via a painfully erratic EE dongle. Am I going to lose this facility if BT buys EE?

Gary Atkins



through this callous lottery. The thought of my mother's future care being decided by faceless software is too depressing for words

Eric Whitlock

It's 'cruel' to auction care of elderly

Hear, hear *Computeractive*! In News, Issue 443 you said that selling the care of the elderly on online auctions is "inhuman and cynical". I would add "unbelievable" and "cruel" to that.

I'm currently going through the trauma of putting my 87-year-old mother into care, and it's one of the most heartbreaking things I've ever had to do. But fortunately, she's got enough money to ensure a good standard of care. We are lucky. Others in less privileged positions will have to go

Reporting crime online will damage police-public relations

I dare say Theresa May is right when she says that reporting crimes online will save money (News, Issue 443), but I'm concerned about the impact on police-public relations. When I was young (back when everything was in black and white), people had regular contact with the local bobbies. I still remember my local policeman's name – PC Thompson. He was friendly but firm, and was always approachable.

Microsoft's priorities are all wrong

Your 'What's All the Fuss About?' in Issue 443 should have been renamed 'Who Gives a S*** About?'. That's because I confidently predict Microsoft's HoloLens will vanish in a puff of indifference. Sorry Microsoft, nobody is

going to want to walk around their living room wearing a daft headset waving their hands at imaginary objects. I'm old enough to have lived through many failed tech gimmicks, from 3D cinema (first time around) to Google Glass, and I see HoloLens suffering the same fate.

It makes me fear for Windows 10 too. Microsoft's developers have a habit of getting carried away with projects they



think are cutting-edge and futuristic, but which in reality nobody will ever want to use. I'm concerned that their best brains are working on HoloLens, because they probably think it'll be a huge success and will replace Desktop PCs (it won't). That leaves the lesser talents to work on Windows 10, which will become less of a priority and receive mediocre updates. We shall see.

Richard Gates



I believe this interaction helped to make Britain a nicer place than it has since become. This isn't rose-tinted nostalgia. I wouldn't want to go back to the 1940s. But I'd like to see some aspects of life from those times injected into modern life.

Talking to the police doesn't just reassure you - it's also much easier to report a crime when you're conversing with someone. They can ask relevant questions that may extract more information from you. They would know which details are important to document. It's also cathartic to know that somebody has listened to your trauma. All this will be lost if reporting a crime becomes as automated and impersonal as filling out a web form.

Martin Washington

Porn-blocking: Sky is 'acting like Big Brother'

I disagree completely with Raymond Palmer, who praised Sky Broadband for blocking adult content by default (Letters, Issue 443). He said Sky is being "responsible". I say Sky is acting like Big Brother. Who are Sky to tell me what constitutes adult content? Does it include the trailer for Fifty Shades of Grey? What if I wanted to buy something from Ann Summers - would Sky allow me to do

that? To me, this smacks of censorship.

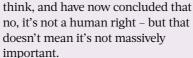
I don't watch porn myself, but if I ever had the urge to, I would find it insulting to have to disable Sky's adult filters. Mr



STAR LETTER

Web access 'not a human right', but still 'massively important'

I enjoyed reading your 'Question of the Fortnight' in Issue 443 ('Should internet access be a human right?'), and found my opinion wavering between 'yes, absolutely' to 'probably not'. I've thought about it since, asked a few friends what they



I feel it's inappropriate to compare internet access to the sort of human rights that people have lost their lives fighting for. Life wouldn't be much fun without the internet, but it would be unbearable without freedom of speech, freedom of movement, universal suffrage and so on. I saw Selma at the cinema recently, the film about Martin Luther King leading a civil-rights march. It was inspiring and powerful. Somehow I doubt that in 50 years Hollywood will make a film depicting a Cumbrian village's campaign to



persuade BT to install super-fast broadband.

However, there are certain services that we have a right to expect electricity, gas, water and phone lines. These are crucial for maintaining a good quality of life, and internet access belongs in this bracket. But does the Government take it as seriously as it does these other utilities? It's shameful that so many people in the UK can only get super-slow broadband. Allegedly, we're a first-world country with a proud history of technological innovation, especially in computing. I hope one day soon we have the broadband speeds we deserve.

Phil Ritchie

The Star Letter writer wins a Computeractive mug!

Palmer said that he's now considering switching to Sky. Well, I'm not a Sky customer, and now never will be.

Harold James

Beware killer taps

I have a cautionary tale that Computeractive readers should hear. It concerns the watery fate of an expensive phone that somebody (me) bought someone (my wife) for Christmas.

Please have your hankie to hand.

To celebrate New Year's Eve we treated ourselves to a dinner and dance at a local swanky hotel. Now, these kind of swanky hotels have taps that turn on automatically (posh people don't like to touch taps

- too many oikish germs).

Just after midnight, once the celebrations subsided, my wife decided to "powder her nose". She had just texted "happy new year" to everyone on her phone, so it was at the top of the handbag. She looked in the mirror, placing her handbag in the sink. Big mistake. The handbag triggered the automatic tap, which drenched the phone. It was ruined. That "happy new year" message was the last my wife would ever send from that phone - and that phone will be the last expensive present I will ever buy her.

I would like to state for legal reasons that my wife hadn't touched a drop all evening, and was stone-cold sober. And if you believe that, I'm a baboon called Bertie.

Tony Davies

Consumeractive

Can I ask what tests were run on my faulty PC?

I bought a refurbished HP Compaq dc7900 PC from Aria Technology in September 2014, but I think the motherboard is faulty. I upgraded the RAM, but the power supply and case fans aren't working properly. Aria sent it back to HP for repair, and HP tested the PC. I was told the tests showed there was nothing wrong with the PC. Can I demand a breakdown of the tests HP ran and get a replacement PC?

Kevin McAndie

Yes, Kevin is entitled to know what tests were run. Aria must get this information from HP. But it may be harder to get a replacement. Ordinarily, because he's owned the PC for less than six months, Kevin wouldn't need to prove his PC is inherently faulty. However, by upgrading the PC he broke the warranty's terms and conditions, and therefore would have to prove the fault has existed from when the PC was made.

Documentation from HP about tests carried out may help, but Kevin may need to get the PC examined independently. This will cost money though, so Kevin should do this only if he's confident the fault is inherent. We've asked Aria to send the test results to Kevin.

Why won't Carphone Warehouse replace my iPhone 5?

In 2013, I bought an iPhone 5 on an 02 contract from Carphone Warehouse. A little while ago Apple said on its website that it had identified a problem with some of these iPhones that caused the battery to run down very quickly. I entered my phone's serial number on the website, and Apple confirmed that mine needed replacing. I rang the phone number provided and was told that it would take up to four months to replace the phone, which is far too long. But Carphone Warehouse has refused to help me. Can you?

Marc Towey

Yes, we certainly can. Apple has identified this as an inherent fault, which means that, as the retailer in this case, Carphone Warehouse has to repair or replace the phone under the Sale of Goods Act (SOGA). Carphone Warehouse can't make you wait four months as Apple stated, even if it sends the phone to Apple to repair. SOGA

get the chance to repair an item after one month has passed from the date of purchase, its repair "must not inconvenience" the customer.

We contacted Carphone
Warehouse and it agreed to
contact Marc, which it did.
But the company told him that
because Apple had identified the
problem, it had to deal with it. This is
nonsense, so we contacted Carphone
Warehouse again. A representative
told us it was having trouble getting
hold of Marc.

It was clear we weren't having much luck with the company, but happily Apple came to the rescue. When Marc first emailed us, we contacted Apple because, while we knew it isn't responsible for fixing the phone, we thought it might still help. And so it has. It sent Marc a new iPhone 6.

To see if your iPhone 5 is inherently faulty, visit Apple's 'iPhone 5 Battery Replacement Program' webpage (www. snipca.com/15360) and type your phone's serial number in the box.

Who's responsible for fixing a faulty monitor?

On 14 November 2012, I bought a BenQ monitor from Ebuyer. Early in July 2014 the monitor stopped working. Ebuyer told me I had to contact BenQ and use the warranty.



BenQ replaced the monitor, but less than six months later it failed again, and my warranty has now expired. Who is now responsible for fixing the monitor?

Derek Peters

Since writing this, Derek emailed us to say the monitor is working again, but we've included his case because it raises some valid points.

The answer to Derek's question is that both companies are responsible, but under different laws. Under the Supply of Goods and Services Act a replacement must be "fit for purpose" and should last longer than six months. So, although Derek's warranty didn't restart with the replacement and has now run out, he can argue the replacement supplied by BenQ wasn't fit for purpose. Under this law BenQ is responsible.

But Derek could also approach Ebuyer because he has a contract with the website. Under the Sale of Goods Act if goods are inherently faulty (as the monitor may have been), you don't have to use the warranty to get a replacement.



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.

We stand up for your legal rights

Can I demand a replacement after a failed repair?

In October last year, I upgraded my phone to a Sony Xperia Z3 on a contract with Vodafone. In January, the camera started to malfunction. Vodafone repaired it, but it's now worse than ever. I want a replacement not another repair, but a Vodafone employee said I couldn't have this because consumer law didn't apply to the company. Can you help?

Gordon Thrower

After one failed repair Gordon has strong legal grounds to demand a replacement. This right will be clearly spelled out when the Consumer Rights Bill becomes law later this year. But of course even if that was already law, he'd

probably have the same problems with this rather ill-informed employee.

Vodafone's policies and terms and conditions don't override UK law.

Vodafone's more experienced employees will know this. We think the company should spend more time educating its employees in the basics of consumer rights, especially with a new law due to come into effect this year. We've told Vodafone what this employee said to Gordon. We stressed that repairs have to be "fit for purpose" and that Gordon has a right to a replacement. We've asked Gordon to let us CASE know how his case is now dealt with.



CASE UPDATE



Saga of the broken TV finally ends

Failed repairs is a theme of this issue's Consumeractive. Another reader who has suffered such a fate is Simon Sims, whose Samsung TV, bought from Currys in March last year, appeared to have a small insect stuck

behind the screen. We're still waiting for Samsung to tell us how this may have happened, but Currys has finally refunded Simon the full amount, after its attempted repair failed to fix the problem.

However, Simon had to fight to get this refund. First, Currys tried to fob Simon off by saying it wouldn't carry out a second repair, and fixing the TV was now Samsung's responsibility. Currys was wrong to say this because a repair has to be "fit for purpose" (we wish companies would realise this because we're beginning to sound like a broken record!).

The store then offered Simon vouchers to spend in store. He didn't have to accept these, but vouchers can sometimes work in a customer's favour, especially if they are only entitled to a partial refund, calculated according to the amount of time they have already used the product. Simon found himself in this position, having used the TV for over six months. He accepted the vouchers, and bought a new, better TV. But when he got

home, the screen was broken! In the end, he went back to Currys and demanded a full refund on the original TV set. Thankfully, Currys agreed and so ended this epic saga.



THIS WILL COME IN USEFUL

Consumer watchdogs

Advertising Standards Authority 020 7492 2222

Complaint form: www.snipca.com/15365 Twitter: @ASA_UK

BBC Watchdog

Email: watchdog@bbc.co.uk Contact form:

www.snipca.com/15353 Twitter: @BBCWatchdog

Citizens Advice Bureau

England:

03444 111 444

03444772020

Twitter: @CitizensAdvice

Citizens Advice Northern Ireland

Contact form:

www.snipca.com/15363 Twitter: @CABNIRELAND

Citizens Advice Scotland 03454 04 05 06

Twitter: @CitAdviceScot

Financial Conduct Authority 0800 111 6768

Email: consumer.queries@ fca.org.uk

Twitter: @TheFCA

UK European Consumer Centre

(buying from abroad) 01268 886 690

Email: ecc@tsi.org.uk

Which? 01992 822800

Contact form:

www.snipca.com/15364 Twitter: @WhichUK





Protect Your Tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

41 Internet Explorer security flaws

What happened?

On 10 February, in its second 'Patch Tuesday' of the year, Microsoft released a whopping 41 fixes for Internet Explorer (versions 6 to 11) in an update rated 'critical' - the highest threat level. A critical flaw is one that hackers can exploit without having to trick the victim into clicking or downloading anything. Instead, victims' PCs are infected simply by visiting a website or opening an email. You can learn more about this update, called MS15-009, in Microsoft's Security TechCenter: www. snipca.com/15390.

In total, Microsoft released 56 fixes in this Patch Tuesday. Most of the others addressed vulnerabilities in Windows and Office. Read more on the 'Microsoft Security Bulletin Summary for February 2015' web page: www.snipca.com/15389.

What should you do?

First, make sure you have set Internet Explorer to update automatically. In IE click the top-right cog icon, then About Internet Explorer (in some versions of IE, you'll need to click Help in the Menu bar). In the box that appears tick 'Install new versions automatically'.

Below the IE logo you'll see which version you currently have (see screenshot). This is important because it tells you whether you're using the most up-to-date (and therefore the safest) version for your operating system. For more information read Microsoft's 'Which version of Internet Explorer am I using?' web page: www.snipca.com/15391.



To make sure Windows Update is turned on, click the Start button, type update, click Windows Update, then 'Change settings' in the left-hand menu. Under 'Important updates' select the option 'Install updates automatically (recommended)' then click OK. You'll need to reboot your PC for the updates to take effect.

New tools

Ghostery for Internet Explorer www.ghostery.com/download

Despite Internet Explorer's impending demise and many security problems (see above), companies are still updating tools that boost your security as you use it. One of these is version 4.0 of Ghostery, which blocks website trackers as you browse, preventing advertising and marketing companies from seeing what you do online. If you're sticking with IE during its final days, you should definitely install this version of Ghostery, which now blocks

more trackers than ever.

Once you've installed Ghostery, you'll see a light-blue ghost icon at the top right of IE. The number within the icon indicates how many trackers Ghostery has found on the website you're currently viewing. Click the icon to find out what they are. To block them, move the slider so the blue circles change to red (see screenshot). If you ever need help, contact Ghostery at support@ghostery.com.





Email from BT? Don't think so

I recently received an email from 'BT Service' with 'New Version' as the subject line. The email says: "The version of your email account will be exchange by our new server version today 14th January 2014". It's clearly a scam because the date is a whole year out, it's addressed to 'Recipents', and it's badly written - "exchange" is missing a "d" at the end, and a comma is incorrectly followed by a capital letter ("When you upgrade your BT Email Account, Your email..."). What I find quite funny is the name of the sender - "amoyoral" (surely "amoral"!). This is followed by "cucba.udx.mx".

Alan Ashton



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

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 Ouad Core APU
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- · R7 Series Integrated Graphics
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from

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NOTES

OneNote 2013

www.onenote.com/download

What you need: Windows 7 or 8/8.1

Microsoft's note-making program has been around for 12 vears and has always been a worthy rival to Evernote (https:// evernote.com). But, unlike Evernote, the full version of OneNote cost money – either £60 (www.snipca.com/15538) or, if you subscribed to Office 365, £7.99 a month (www. snipca.com/15536).

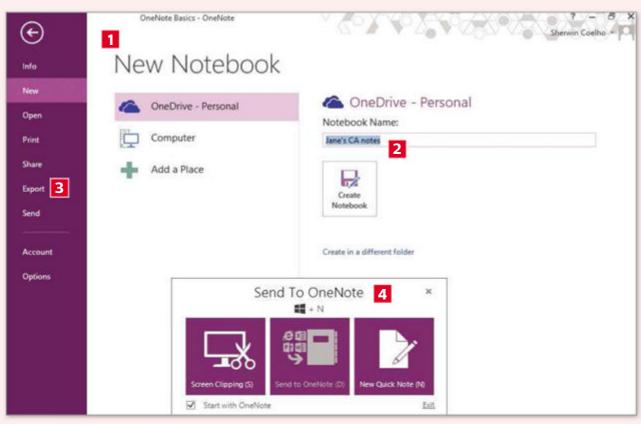
Now OneNote is fully free, too. If you like your Microsoft tools, you'll find it a better choice than the relatively gimmicky Evernote. Don't worry about the '2013' tag; this is a bang-upto-date program that's had a full makeover for its free release. You can also now get OneNote apps for Android, iOS, Windows Phone and Windows 8 (download from the same page).

OneNote 2013 is fast, good-looking and easy to use, and you



can set it to sync automatically across your devices and with OneDrive (15GB free, www.snipca.com/15537) so you always have a backup. Besides typing notes, you can hand-write them (touchscreen only), record them with your voice, incorporate Office documents (you can embed a mini Excel spreadsheet into a note, for example) and add web clips, such as news pages or recipes, using the free OneNote Clipper extension (Chrome or IE, www.snipca.com/15534).

To install OneNote 2013, click the purple Free Download button, run the installer and then wait a few minutes while it 'is getting things ready'. You may see a notification that says 'Office is installing in the background' - this is fine because OneNote is part of Microsoft Office.



- OneNote opens automatically on the New Notebook page. Once you start creating notes, you can come back to this page by clicking Home.
- 2 Type a name for your first notebook in the Notebook Name box. Click Create Notebook to save it, then click it again to open the File (document) page.
- Click Export to convert a copy of a note or notebook to PDF. Word document or even web page. Click Send to email it to someone or post it online.
- The Send To OneNote pluq-in is installed safely along with OneNote. Use it to take a screenshot, embed a document or start a new note.



BROWSER

Maxthon Cloud Browser 4.4.4

www.maxthon.com

What you need: Windows XP, Vista, 7 or 8/8.1

Another fortnight, another new browser to rival crash-prone Chrome and tired Internet Explorer. Like Vivaldi (see Issue 443), Maxthon is packed with tools you'd normally have to add as extensions - but unlike Vivaldi (which is a beta), Maxthon is the finished article. It's fast, secure and has Adblock Plus (https:// adblockplus.org) built in. It also has mobile apps; the Android version (www.snipca.com/15539) is particularly good.



ONLINE OFFICE TOOLS

iCloud Beta

https://beta.icloud.com

What you need: Windows 7 or 8/8.1 and an up-to-date browser (see www.snipca.com/15543 for details)

This new web-based tool lets you use Apple's office suite, iWork - previously available for Mac only - on your Windows computer, for free. You don't even have to download anything. Just sign in with an existing Apple ID (which you'll have already if you use an iPad or iPhone) or create one, then click the icons to open programs including Pages, Numbers and Keynote (equivalent to Word, Excel and PowerPoint) in your browser, as well as the iCloud Drive storage service (1GB free).

GOOGLE EARTH PRO: FREE OR NOT?

'What's the catch?' we wondered, after Google Earth Pro (www.snipca. com/15544) dropped from £200 to free (Best Free Software, Issue 443). The catch happened a week or so later, when the page with the licence key on it vanished. Without that key, you couldn't install the program.



Try using the same licence key we did: GEPFREE. Other users have found it works for them, too (www.snipca.com/15547). Once you've installed the program using this key, and assuming the key still works, you won't have to enter the licence again.

So, why was the key there one day and gone the next? No one outside Google seems to know. The freebie was well documented online, not least by Google Earth Pro's Stafford Marquardt (www.snipca.com/15548), and we have no idea why it disappeared. If you have any theories, let us know!

WHAT SHOULD I DOWNLOAD?

We tell you what software to use

How can I make my laptop sound like a typewriter?

I used to love the "clack" and "ding" sounds my old typewriter made. Is there a program that simulates these noises on a laptop keyboard? I'm running Windows 7 on a Sony Vaio.

Mike Burton

Have we got a tool for you. Qwertick (www.snipca. com/15559) is a free typewriter-sound simulator for Windows XP to 7, and it's quick and easy to download and use. Click 'as a portable application', save the EXE file and run it as administrator. Then, assuming your speakers are switched on, you'll hear clacks and dings as you type. It's wonderful.

Apple users, by the way, are spoiled for choice. Mac program Noisy Typer (www.snipca.com/15549) and iOS app Hanx Writer (www.snipca. com/15550) are both free and verv good. Be aware that there's no Hanx Writer for Android, despite the unofficial stuff you may find - it's only safe to install Android apps from the Google Play Store.



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

LAPTOP | £650 from www.snipca.com/15430

Doro EasyPC

An easy-to-use laptop aimed at the elderly

Doro is a Swedish company best known for its range of mobile phones aimed at the elderly. It's therefore no surprise to see the company launch the EasyPC, a laptop designed for older novices who are somewhat intimidated by computers.

While Doro's basic, no-frills phones have been reliably good, the company's Android-based smartphones have so far been virtually unusable. We were therefore pleasantly surprised by the overall high quality EasyPC, but it still has its fair share of flaws.

No windows

What sets the EasyPC apart from all other laptops is its heavily customised user interface. Similar to the interface on Doro's Android phones, it displays large icons and text, which are designed for those whose eyesight isn't what it was. The heavily simplified home screen is divided into four hard-to-miss tabs (Start, World, Leisure and More), which give you access to all your programs and tools.

ff Its quirks and flaws would be easier to swallow if it wasn't so overpriced ""

It's a breeze to grasp especially because - unlike Windows or Mac OS X - there are no overlapping windows or menus, while toolbars contain a small number of essential, large, and clearly labelled buttons. You can't run multiple programs simultaneously, which will deter moderately advanced users, but will appeal to first-timers who are less confident.

The processes involved in carrying out fairly common tasks have been simplified (and often lengthened) for the sake of



clarity. To copy files to or from a USB stick, for example, you have to use a wizard-style interface to 'export' or 'import' files. Open the email program

and instead of immediately seeing the contents of your inbox, you'll see big icons for 'read' and 'write'.

This design philosophy also extends to pre-installed apps, such as the heavily modified versions of Firefox and OpenOffice, which have been stripped down, but work well enough for novices. The word processor based on OpenOffice Writer, for example, has more in common with WordPad than Word, but is all you need if you want to write letters. The bare-bones video and music players can play DVDs and CDs, along with MP4 and MP3 files.

There are some design choices that left us scratching our heads, such as the spreadsheet program. Aside from the basic option to calculate the values of your selected cells, the only other feature is the complicated Function Wizard, which only veteran Excel users will be comfortable using. A handful of extra apps, mostly simple games, are available to download for free from the Doro Selection app store.

If you're buying the EasyPC for a

relative or friend, then you'll appreciate the handy remote-assistance feature, which is based on the TeamViewer program. This lets you control the laptop remotely and help fix a problem or demonstrate how to do something. All the user has to do is send you an invitation via email.

Despite these useful features, the EasyPC doesn't have its own distinct operating system. The entire interface is a program that runs on top of Windows (you'll even fleetingly see the Windows Desktop when turning the laptop on). For the interface to work well, Windows will need to run smoothly. And that means ensuring Windows updates are installed and that an antivirus program is in place and kept up to date. This added complexity is fine if you're buying the EasyPC for someone else and can manage such things, but not ideal if you're a novice buying the laptop for yourself.

A bigger problem is the version of Firefox built into the EasyPC's interface. At the time of writing this is version 26, which came out in December 2013 and has long since been superseded by newer versions that contain important security fixes (number 35 is the latest). Version 26 is especially problematic



because it contains an outdated built-in version of Adobe Flash Player, which is riddled with security holes.

According to Doro, updates to fix such problems will be automatically downloaded and installed whenever the EasyPC is shut down - similar to the way Windows Updates work. We've yet to see one in action though, and preinstalling such out-of-date software on a new laptop is worryingly bad practice.

Toshiba inside

While Doro makes the heavily customised user interface, the hardware is actually a Toshiba Satellite L50t laptop. This partnership also extends to support. Technical support over the phone is provided by Toshiba staff apparently trained by Doro.

As touch typists, we weren't fond of the keyboard, which lacks both feedback and travel, and has narrow, hard-to-hit number-pad keys. The keyboard is good enough for hunt-and-peck typists though. One useful feature is the Doro-designed rubber keyboard overlay (see image above), which sits on the Toshiba keyboard, and is paired with a customised Windows keyboard profile. Dedicated keys for common functions - such as Copy, Paste and Zoom - are welcome, as is the large, high-contrast lettering. The lack of function and modifier keys means there's little chance of accidentally triggering a keyboard shortcut - a common and confusing occurrence for PC novices.

The EasyPC is a hefty laptop weighing 2.3kg, rising to 2.6kg with its charger. This is due, in part, to its large 15in screen and its built-in DVD writer. This bulk isn't a significant drawback because the laptop is aimed at those who are more

SPECIFICATIONS

2.16GHz Intel Celeron N2840 dual-core processor • 4GB memory • 500GB hard drive • 15.6in 1366x768pixel touchscreen • Intel integrated graphics chip • Windows 8.1 • 2.3kg (2.6kg with charger) • 25x380x260mm (HxWxD) • One-year warranty www.snipca.com/15429

likely to use it at home than when travelling. If you need to use it on the go, battery life is certainly up to it - it lasted just under nine hours in our light-usage test.

The 15.6in screen has a modest resolution of 1366x768 pixels, so there's not much in the way of working space. Colour accuracy and contrast are average, so the EasyPC shouldn't be used for photo-editing. The screen is touch sensitive so it can be used as an alternative to the touchpad, which can be fiddly to use if you have limited dexterity in your fingers.

The EasyPC's Intel Celeron N2840 processor is one of the slowest available. It's fast enough to cope with Doro's interface and its range of basic built-in apps, but it will struggle with Windows and other, more demanding programs should you ever want to advance beyond the confines of Doro's interface.

Conclusion

The few previous attempts at making a laptop specifically for the elderly have sunk without a trace. We do hope Doro's EasyPC won't suffer the same fate. After all, it has some nice touches, such as the keyboard overlay. But it's far from perfect. Its software has some rough edges, especially in terms of security. Its distinct interface means you'll have to start from scratch if you ever want to graduate from the EasyPC to a fully fledged Windows or Mac OS X computer.

These quirks and flaws would be easier to swallow if the EasyPC wasn't so overpriced. At £650, it costs around £300 more than a similarly specified Windows 8.1 version of the same Toshiba laptop. Even if you're willing to pay this much for a computer that's user-friendly for the elderly, we'd carefully consider other pared-down, easy-to-use computers, such as a Chromebook, before plumping for the EasyPC.

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

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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: Many rough edges, including a lax approach to security and a daunting price make this only fair value



simple, inexpensive

laptop

ALTERNATIVE: Dell Chromebook 11 £215 Not designed for the elderly, but if you can use a web browser then you can use this



Reviews

HOMEPLUGS | £119 from www.snipca.com/15369

Devolo dLAN 1200+ Starter Kit

The fastest HomePlug adapters we've ever seen

Devolo's dLAN 650 Triple+ Starter Kit has been our favourite HomePlug kit since we awarded it five stars back in Issue 433, mainly due to its rapid data-transfer speeds. Devolo is now launching its successor - the dLAN 1200+ Starter Kit, which has a theoretical top speed of 1200Mbps (almost twice that of the 650 Triple+). Impressive, indeed.

It's a shame, therefore, that each adapter in the dLAN 1200+ only has one Gigabit Ethernet port rather than the three on each 650 Triple+ adapter, making them less useful if you have lots of devices to connect to your network. Both adapters in the dLAN 1200+ Starter Kit have pass-through power sockets, so you won't lose any wall sockets when you

SPECIFICATIONS

1200Mbps theoretical maximum speed • 1x Gigabit Ethernet port t • 130x66x42mm (HxWxD) • Threeyear warranty www.snipca.com/15373

plug them in. The adapters also stretch up from the socket rather than down, so they won't catch on skirting boards. The Ethernet ports are located on top of the units for the same reason.

The dLAN 1200+ adapters are easily the fastest HomePlug adapters we've tested. When they were plugged into adjacent sockets, files were copied at an astonishing 419.4Mbps. At a distance of one metre, data was copied at 372.8Mbps. The data-transfer speed between adapters diminishes the further apart you place them, and at 10m the dLAN 1200+ transferred data at 74.1Mbps. This might not sound particularly impressive, but it's more than twice as fast as most 500Mbps adapters and around a third faster than the 650 Triple+ over the same distance.

If you need the fastest networking performance possible, then the Devolo dLAN 1200+ Starter Kit is a great buy. If you need to connect multiple devices to your network, then the convenience of the Devolo dLAN 650 Triple+ Starter Kit more than makes up for its slower performance.

VERDICT: Super-fast HomePlug networking adapters, but we'd like more Ethernet ports



ALTERNATIVE: Devolo dLAN 650 Triple+ Starter Kit £96 Not nearly as fast, but you can connect multiple devices to your network thanks to the three Ethernet ports



SCANNER | £72 from www.snipca.com/15376

Epson Perfection V37

It's Epson's cheapest stand-alone scanner, but not quite cheap enough

Epson's Perfection V37 is an A4 generalpurpose scanner with a top resolution of 4,800 dots per inch (dpi). To put that into some kind of perspective, it can scan a postage stamp and produce an image that has more detail than the new 4K Ultra High Definition television standard. It also scans documents of course, but lacks the backlight necessary to scan slides or negatives - for that you need the Perfection V370, which costs about £20 more.

Epson's software makes this scanner a delight to use. The main interface has several modes, from fully automatic for novices through to a comprehensive

SPECIFICATIONS

A4 flatbed • 4800x4800dpi maximum scan resolution • USB; 41x280x430mm (HxWxD) • 2.2kg One-year warranty www.snipca.com/15377

range of Professional options. The Home mode strikes an ideal balance. We particularly like its thumbnail feature, which automatically crops and separates multiple small documents scanned simultaneously - a great way to capture batches of photos, business cards and receipts. Usefully, accurate optical character recognition (OCR) software is included too.

Scanning took no time in our tests, and the scans' quality was excellent, with great colour accuracy and no loss of detail in either very light or very dark areas. The only niggle is that photos scanned at the very highest resolution suffered from a little soft focus.

The V37 is a very good scanner, but it's not far and away better than the scanner you'd find in a good Epson or Canon

multifunction printer (MFP), such as the similarly priced Canon Pixma MG5650

(see our review, Issue 436). Given that, we'd only recommend it if you never scan slides or negatives, and are dead set against an MFP. If you fall into that bracket, then it's a great buy.

VERDICT: A high-quality scanner with niche appeal - costing marginally less than the best mid-range MFPs yet it scans only slightly better



ALTERNATIVE: Canon Pixma MG5650 £75 A MFP with a built-in scanner that's almost as good as the V37



PC | £170 from www.snipca.com/15387

Hannspree MicroPC

A tiny Windows 8.1 PC the size of a USB stick

We've seen plenty of mini PCs, but the Hannspree MicroPC is by far the smallest to date. It's around the size of a large USB stick and is designed to plug directly into your monitor's HDMI port so it stays hidden out of sight. It's powered using a USB wall plug adapter (included).

At first glance, a 'desktop PC' at this size costing less than £200 seems pretty unbelievable, until you realise that it uses the same processor, memory and storage as many cheap Windows 8.1 tablets. In those devices, the screen and battery account for most of the bulk, so the MicroPC (unburdened by such things) isn't quite the marvel of miniaturisation it first appears.

The MicroPC's Intel Atom Z3735F quad-core processor limits the MicroPC's performance. It's just about fast enough for basic web browsing and word

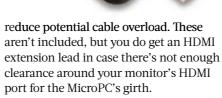
For those with basic needs and all the required peripherals

processing, but attempting even moderately complex tasks, such as running multiple programs or web apps, brought the PC's responsiveness to a virtual standstill. This is due to both the slow processor and meagre 2GB of memory, which simply isn't enough for a Windows PC. It does at least run silently.

Unsurprisingly, given its size, the number and range of ports is limited. In fact there's a single USB 2.0 port for connecting peripherals, such as a printer. You can of course use a USB hub to expand your options, and using a Bluetooth keyboard and mouse would

SPECIFICATIONS

1.33GHz Intel Atom Z3735F quad-core processor
• 2GB memory • 32GB storage • Intel integrated
graphics chip • Windows 8.1• 38g • 10x38x111mm
(HxWxD) • One-year warranty • Part code SNNPDI1B
www.snipca.com/15388



Half of the built-in 32GB of storage is taken up by Windows 8.1 so you'll almost certainly need to add more storage via the microSD slot. Wi-Fi is built in, but there aren't any Ethernet or audio ports. You'll therefore have to use Bluetooth headphones or speakers, or rely on the speakers built into your monitor.

The Hannspree MicroPC is worth buying if you have very basic computing needs and already have all or most of the required peripherals. If not, then we'd suggest you think very carefully about it – a MicroPC, a basic HDMI monitor and a Bluetooth keyboard and mouse cost around £290, which is more than most Chromebooks and almost as much as a budget Windows laptop with far faster performance.

VERDICT: Its miniscule size is appealing, but its slow performance limits its usefulness



ALTERNATIVE: Asus Chromebook C200 £190 As long you don't mind using Chrome OS and web apps, this laptop doesn't cost

much more and is a far better-value budget computer



The best... Touchscreen gloves

North Face Apex+ Etip Gloves

£40 from www.snipca.

com/15443

These gloves let you use your smartphone with all five fingers on each hand, plus they're less bulky than the others here. Available in different sizes for men and women.



SealSkinz All Season Gloves

£40 from www.snipca.com/15445

You can only use your thumbs and index fingers when tapping and swiping a touchscreen with these gloves, but they provide almost as much warmth as the Denali Thermals (below), and are less bulky.



North Face Denali Thermal Etip Gloves

£26 from www.snipca.com/15444

Marketed for women, these

gloves have five-finger touch like the Apex+, but with noticeably

warmer insulation – though this adds more bulk.



£35 from www. snipca.com/15446 Easily the warmest gloves here, although also the chunkiest. Touchscreen use is limited to your thumbs and index fingers.



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- . 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.





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- Intel® Pentium® G3240 processor
- 8GB Corsair DDR3 1600MHz memory
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- Windows 8.1

£519 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
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- . 1TB SATA 6Gb/sec hard drive
- · Windows 8.1

£685 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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- Intel® Core™ i5 4460
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 960 SSC ACX
- . 1TB SATA 6Gb/sec hard drive
- · Windows 8.1
- 3 Year Premium Warranty

£679 Inc VAT

The Scan 3XS Gamer GT is an affordably-priced gaming rig that includes a quad-core Intel Core i5 4460. Also included is a 2GB NVIDIA GeForce GTX 960 graphics card, 8GB of 1600MHz Corsair DDR3, an H81 motherboard and 1TB hard disk.





Scan 3XS Gamer 20i Gaming PC

- Intel® Core™ i7 4790 processor
- · 8GB Corsair DDR3 2133MHz memory
- · 4GB NVIDIA GeForce GTX 970 SC ACX
- 1TB Seagate HDD
- Windows 8.1
- · 3 Year Premium Warranty

£1039 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.





3XS Graphite LG156 Gaming Laptop

- Intel® Core™ i5 4210M processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 860M
- 15.6in 1,920 x 1,080 screen
- . 1TB SATA 6Gb/sec hard drive
- Windows 8.1



3XS Graphite LG1720 Gaming Laptop

- Intell[®] Core™ i7 472 0HQ 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

£829 Inc VAT

The LG156 is 15.6" mid-range gaming laptop that includes a NVIDIA GeForce GTX 860M graphics card. The LG156 has won multiple awards in the press for its performance and value for money. The LG156 is ready for next-day delivery and has a 2 Year Warranty.



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.

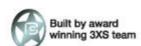


Scan Computers recommends Windows.

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.









Reviews

PRINTER | £150 from www.snipca.com/15385

Epson Expression Photo XP-760

An inkjet multifunction printer for keen photographers

The new Expression Photo XP-760 is one of Epson's more pricey home inkjet multifunction printers (MFPs). As its name suggests, it's aimed at budding photographers. In a bid to deliver great photos it prints with six ink cartridges rather than the usual four. The two extra (lighter shades of cyan and magenta) are intended to produce less grain in lighter areas of photo prints, such as the sky.

The XP-760, which has a squat glossy appearance that's reminiscent of a VHS recorder, has a couple of neat tricks. Turn it on and the large, touch-sensitive control panel glides upwards on a motorised hinge. Start printing and the paperoutput tray slides out with a gentle purr. You can connect this MFP to your router so that every wireless device in your home, from computers to smartphones, can use it. It supports Google Cloud Print and direct printing via email, so you can print from anywhere you've got an internet connection. You can also print photos directly from an SD card, which is the most common type of storage card used in digital cameras.

ff It produces sensational images as good as anything from a professional photo lab 55

While the XP-760 can't send faxes, it can print on both sides of a sheet of paper (duplex printing). It has two paper trays (for A4 and photo paper up to 5x7in respectively). You can leave both loaded and the printer will select the correct type for the job. It can also print directly on to CDs and other optical discs you may have burned yourself, provided you buy blanks with the suitable coating – these are widely available.

As you might expect, the print quality



on plain paper was unimpressive in our tests. While it's good enough for printing the odd letter, text isn't dark enough and colour graphics lack impact compared with a good office inkjet. Load up some photo paper, however, and it's a completely different story. The six inks produced sensationally good images that look as good as anything from a professional photo lab. Colours are stunningly accurate, details are sharp, and there's no tell-tale inkjet grain.

While it's not the quickest printer, it still managed five pages of text in 42 seconds and five of colour graphics in 53 seconds, which isn't bad. Waiting 84 seconds for a 6x4in photo or two minutes 45 seconds for an A4 borderless print is no hardship when the results look this good.

Moreover, Epson scores bonus points with a great scanner. First off, it's fast, taking a mere 20 seconds to capture a 6x4in photo at a reasonably detailed resolution of 600 dpi (dots per inch). Secondly, the results are excellent. The scanner faithfully reproduced the full

SPECIFICATIONS

5760x1400dpi maximum print resolution • 9.9ppm colour/9.5ppm mono quoted speeds • 4800x1200dpi maximum scan resolution • USB • Wi-Fi • One-year warranty www.snipca.com/15384 range of shades and colours from our test images.

Epson sells ink for this MFP in two sizes, and as usual the larger cartridges are better value. Using these XL cartridges, A4 pages of mixed text and graphics should cost around 9.4p each, which is acceptable though not especially cheap. If you're looking for an MFP that's a good all-rounder and offers lower running costs, we'd recommend you opt for Canon's Pixma MG5650 (see our review, Issue 436). However, if you're happy to sacrifice a little quality on your plain-paper prints in return for unbeatable photo prints, this printer is second to none.

VERDICT: With an excellent scanner and peerless photo prints, this MFP is perfect for photographers. We wouldn't recommend it for office work, though



ALTERNATIVE: Canon Pixma MG5650 £80 Photo prints aren't as outstanding,

but this good allrounder MFP is cheaper to buy and to run



LAPTOP | £270 from www.snipca.com/15432

Toshiba Chromebook 2 CB30-B-104

Toshiba's latest stab at a Chrome OS laptop is a mixed bag

The idea of a non-Windows laptop that relies on web apps may still seem radically new, but laptops using Google's Chrome OS have been around for a while now. In fact, almost all the major laptop manufacturers are already on to their second- or third-generation Chromebooks. Toshiba is no exception, and the Chromebook 2 is its latest attempt at a budget Chrome OS laptop.

As with Toshiba's original Chromebook (see our review, Issue 422), this has a plastic construction, though the dimpled lid provides an additional touch of class. It's noticeably less chunky, having been slimmed down to 1.3kg from the original's 1.5kg. While the casing flexes under pressure more than we'd like, it's still reasonably sturdy especially when compared to many laptops in this price range.

Its lightweight design makes it ideal for use while out and about. Its battery lasted a reasonable seven hours 15 minutes

SPECIFICATIONS

2.16GHz Intel Celeron N2840 dual-core processor • 4GB memory • 16GB SSD • Intel integrated graphics •13.3in 1920x1080-pixel screen •802.11a/b/g/n/ ac • Chrome OS • 1.4kg (1.6kg with charger) • 19x320x214mm (HxWxD) • One-year warranty • Part code PLM02E-00D003EN www.snipca.com/15433

when handling undemanding apps such as Google Drive and WordPress, though other Chromebooks can last as long as 13 hours.

Most Chromebooks have comparatively low-resolution 1366x768-pixel 11in screens. The Chromebook 2, on the other hand, has a 13in screen with an impressive 1920x1080 resolution. This means there's easily enough room to work on two documents side by side. The downside of combining a high resolution with a small screen is that text can become hard to read - especially for those with less than perfect eyesight. Increasing the zoom level isn't always an option because some web apps struggle with zoomed text.

The screen is dazzlingly bright, with wide viewing angles, and colour accuracy and contrast that's surprisingly good for a budget laptop. We suspect the high quality of the Chromebook 2's screen is why it costs around £70 more than most other Chromebooks.

Although we've been unimpressed by the performance of the Intel Celeron N2840 dual-core processor in Windows laptops, it's fast enough for the lightweight Chrome OS and the vast majority of web apps. Starting up and

waking from sleep is almost instantaneous thanks to the built-in SSD.

While the keyboard doesn't have sufficient feedback or travel, we could still type quickly and comfortably after a little practice. The touchpad is large and accurate, but gestures such as swiping two fingers up or down to scroll through web pages often felt juddery.

The Toshiba Chromebook 2 is by no means a bad budget laptop, but its screen, touchpad and keyboard won't suit everyone, and rival Chrome OS laptops have longer battery life. If you're still tempted, you should try it in a store first or buy it from a retailer with a generous returns policy.

VERDICT: A few design niggles leave this Chromebook trailing the competition



ALTERNATIVE: Dell Chromebook 11 £215 A smaller, lower-resolution screen, but has a better designed keyboard and far longer battery life



Which SSD should I get for my laptop?

I have an HP G62-b25SA laptop and would like to replace its 500GB hard drive with an SSD. Which SSD would you recommend? Or should I go for a hybrid drive instead?

John Bragg

Your four-year old laptop was part of HP's business range, so accessing your hard drive and replacing it should be straightforward. Replacing your hard drive with a

similarly sized SSD will be more expensive than replacing it with a traditional drive or hybrid drive, so you should carefully gauge how much storage space you need.

If you're on a budget, consider the Seagate 1TB Laptop SSHD hybrid drive, which costs £68, or 7p per gigabyte (www.snipca.com/15488). Once it learns which files you use most often, it will cache them, thereby speeding up some functions, such as your start-up times.

If you can afford it though, we'd suggest a fully fledged SSD. The 512GB



Crucial MX100 costs £155 (or 30p per gigabyte, www.snipca.com/15489). While the Seagate SSHD is only around one-third faster than a standard laptop hard drive at copying large and small files, the MX100 is more than four times faster copying large files and twice as fast with small files. It will significantly reduce start-up and wake times, and open programs quicker.

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

Reviews

THERMOSTAT | £199 (excluding £50 installation and £80 Extension Kit) from www.snipca.com/15382

Tado Smart Thermostat (second generation)

A smart thermostat that's not quite as clever as it thinks it is

The latest smart thermostat from the German company Tado aims to make vour home heating system easier to control by tying it to your iOS. Android or Windows Phone device. This is Tado's second-generation model, and unlike the first, it has a display as well as a pair of up and down buttons, so you can adjust the temperature without using your mobile device.

Also new to this latest model is an extension kit. This costs £80 extra and lets you connect the Tado to a wider choice of boilers. You'll need this kit if you are replacing a wireless thermostat or you want to control your hot water as well as your heating.

As we were already using a wired thermostat (connected to our boiler) in our test home, installation was a simple case of replacing this old thermostat with the Tado. It's a fairly straightforward DIY job, but if you're less confident of your abilities you can pay £50 to get an engineer to install it for you; we recommend this if you're also planning to install the extension kit because this can be tricky.

Included with the Tado is the "bridge", which is a device that plugs into your router. This provides a wireless connection between your Tado Smart Thermostat and the internet. If your router is some distance from the Smart Thermostat, you can use the extension kit to extend the wireless range of your bridge.

Once the Tado is installed and running, you adjust the thermostat using the mobile app (you can also use a web app on your laptop or PC). You can set minimum night-time and daytime temperatures (see screenshot above right), but the idea is that Tado will automatically set the temperature itself once it learns

SPECIFICATIONS

Requires iOS, Android or Windows Phone device • Bridge device requires Ethernet connection to your router • 104x104x19mm (HxWxD) • 132g www.snipca.com/15382



your behaviour and preferences.

That's the theory, anyway. In practice, we found it needed constant readjustment (using the app or buttons) to get the temperature just right. It did eventually get the message after a few months, but it wasn't nearly as seamless and perceptive as Nest's smart thermostat (see our review, Issue 430), which nailed our routine after a few weeks and set the temperature exactly as we liked it.

One clever feature that did work well was the proximity detector. This uses the app and the GPS on your smartphone to detect whether you're at home or not. When you're away, the heating is automatically turned down to five degrees centigrade. It then comes back on when you get nearer to home.

The Tado Smart Thermostat is by no means a poor product, and its clever proximity detector is especially useful, but you'll find a similar feature on the Nest Thermostat. Moreover, Nest is better at learning your habits in order to automatically adjust the temperature, and it doesn't need a clunky bridge to connect to the internet. For now it remains our favourite smart thermostat.

VERDICT: Not a bad smart thermostat, but it's outsmarted by the competition



ALTERNATIVES:

Heatmiser Neo £265 (without installation)

Smartphone-controlled thermostat that also controls hot water and has clever seasonal features, but lacks learning capabilities

Nest Thermostat £179 (without installation)

A sleek and easy-to-use smart thermostat with lots of useful features





LAPTOP-TABLET | £335 from www.snipca.com/15397

Toshiba Satellite Radius 11

This Windows 8.1 laptop-tablet is no jack of all trades

Toshiba makes some great Windows 8.1 laptops, but these tend to be the company's more expensive models. Of late, we've been far less impressed by its cheaper laptops. The Satellite Radius 11 is Toshiba's latest budget laptop, but it also functions as a tablet when you fold back its screen until it lies flat against the back of the keyboard.

Unfortunately, the Radius 11 isn't an easy sell as a tablet. It's chunky and heavy, weighing 1.3kg (light for a laptop, not for a tablet). You're more likely to angle the touchscreen so that the keyboard acts as a stand (see image), making it more comfortable to use for watching videos

66 A non-starter as a tablet, and flawed as a laptop ""

and swiping through photos.

The glossy white-gold casing and black plastic construction is robust and looks classy, making it almost identical to the Satellite CL10 (see our review, Issue 439). This similarity in looks initially had us concerned because the CL10 is far from Toshiba's best. And while the Radius' keyboard isn't quite as shambolic as the one on the CL10, it's still pretty substandard. Some of the keys, notably the tab, @ and #, are narrower than others, making them harder to hit when touch-typing. All keys suffer from a lack of feedback and travel, so typing is an uncomfortable experience and it's easy to make typing mistakes. The touchpad is smooth and accurate, but its buttons barely give any feedback.

SPECIFICATIONS

2.16GHz Intel Pentium N3540 quad-core processor • 4GB memory • 500GB hard drive • 11.6in 1366x768pixel touchscreen • Intel integrated graphics chip • Windows 8.1 • 1.3kg (1.6kg with charger) • 22x289x199mm (HxWxD) • One-year warranty • Part code PSKVUE-00200MEN www.snipca.com/15399



Although the quad-core Intel Pentium N3540 processor sounds powerful on paper, it's actually one of Intel's slowest. Paired with 4GB of memory, it's barely fast enough for web browsing and basic office work, and too slow for video- and photo-editing. Although the N3540 is a power-efficient processor, the Radius' small battery meant it ran out of juice after only six hours 45 minutes in our light-usage battery test, which is below average.

The touchscreen does at least respond well, and the display itself bright, with reasonably good colour accuracy, making up somewhat for its mediocre contrast and low 1366x768-pixel resolution.

The Satellite Radius 11 is a non-starter as a tablet. It could've been a cheap and cheerful laptop, if it weren't let down by its poorly designed keyboard and so-so battery life. Unless you absolutely can't give up Windows, a Chromebook would be a far better choice at this price.

VERDICT: A sturdily made budget computer undermined by a poor keyboard and unimpressive battery life



ALTERNATIVE: Asus Chromebook C200 £190 Longer battery life and a more comfortable

kevboard make this Chrome OS computer a far better budget laptop



COMING SOON

MARCH/APRIL 2015

Acer has announced the Revo One RL85, a striking mini PC that will come with up to 6TB of hard-drive space and a remote control featuring a mini keyboard. The 2TB model will cost £284.



MARCH/APRIL 2015

The Panasonic Lumix GF7 is the successor to one of our favourite CSC cameras. This new model will have a hinged touchscreen and an improved sensor.



APRIL/MAY 2015

The Samsung Galaxy S6 will reportedly have a new all-metal design and a curved screen - similar to the one on the Galaxy Note Edge

phablet (see image). It will also come with Microsoft apps, such as Office, pre-installed.

SUMMER 2015

Sony has announced that all but one

model in its 2015 range of smart TVs will use Google's Android TV interface and have YouView built in.





Buy It

Find out what other products we liked in 2014. Buy our Back Issue CD now: www.snipca.com/14981



Our pick of products that have won the Buy It award

LAPTOP

Asus Zenbook UX303LA £683 from www.snipca.com/15113 Tested: Issue 442



Asus' thin and light laptop is the only Windows laptop we've seen to rival Apple's MacBook Air for price, weight, battery life and style. On top of that, it has a very comfortable keyboard and a high-resolution screen that's easy on the eyes.

ALTERNATIVE Asus Chromebook C200

A cheap ChromeOS ultra portable laptop with a bright screen, lengthy battery life and a great keyboard. £190 from www.snipca.com/15269

DESKTOP PC

Palicomp AMD Kaveri Evolution

£500 from www.snipca.com/11804 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. £899 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 this year's 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 £150 (without contract) from www.snipca.com/14162

Tested: Issue 432



Motorola's budget Android smartphone is an absolute steal. It's very responsive, well made, fast and has a good screen. Plus, it's now been updated with 4G and a microSD card slot.

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

£300 from www.snipca.com/12607 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: Fujifilm XF1 If you don't need the flexibility of removable lenses, this slim compact is a great choice. £130 from www.snipca.com/13701

E-READER

Kobo Aura H20

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



A waterproof e-reader with an easy-toread, 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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* Required: broadband Internet connection, router and active power sockets within one property







More information: www.devolo.co.uk/wi-fi Tel.: +44 (0)1865 784344 Fmail: sales@devolo.co.uk



The Network Innovation



SECURITY SOFTWARE

Kaspersky Internet Security 2015

£17.99 from www.snipca.com/14212 Tested: Issue 427



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 £99 from www.snipca.com/14348 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/14731

COMPETITION

Win a Raspberry Pi FUZE-T2-R

Winner of a five-star Buy It award when we reviewed it in Issue 440, the FUZE is one of the best



educational PCs we've ever seen. Its sturdy metal case contains a Raspberry Pi B+ hooked up to a built-in keyboard. It comes with a robot arm that you can program to perform fun tasks. It's guaranteed to encourage budding programmers to learn more about computing. To enter, email your address to cacomp@dennis.co.uk by midnight 17 March.

The FUZE T2-R costs £229. For more info visit www.fuze.co.uk, 'like' FUZE's Facebook page (www.snipca. com/15425) and follow FUZE on Twitter: @FUZE_Binary

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PC MONITOR

Dell UltraSharp U2412M £200 from www.snipca.com/14610 Tested: Issue 378



An exquisite monitor with superb image quality, an adjustable stand, a high resolution and even a built-in USB hub. It costs a little more than other monitors, but it's money well spent. It's easily the best value monitor we've seen and is the one by which all others are judged.

ALTERNATIVE: AOC i2360PHU A good quality budget 23in monitor that's easily adjustable and has a built-in USB 2.0 hub too. £157 from www.snipca.com/15274

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 Dav & Night Camera A good-value security camera with excellent night vision. £85 from www.snipca.com/15275

ROUTER

Trendnet TEW-812DRU £140 from www.snipca.com/15492 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



Chillblast

POWER TO PLAY



Fusion RAPTOR Gaming PC

- · Phanteks Enthoo Evolv Micro ATX Case
- Intel® Core™ 17-4790K Processor at 4.4GHz
- · Asus 297M-Plus Motherboard
- 16GB 1600MHz DDR3 Memory
- · NVIDIA GeForce GTX 960 2GB GPU
- . 120GB Solid State Drive
- 2000GB 7200rpm Hard Disk
- Microsoft Windows 8.1

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Yes, we've finally got a PC intelligent enough to test the fences for weaknesses. Hidden inside the ultra-slick Phanteks Enthoo Evolv case is Nvidia's newest GTX 960 2GB graphics card with more than enough gaming grunt to learn to open doors by itself. An overclocked i7 4790K is on processor duties, while a Corsair H75 liquid cooler keeps everything as cool as its gun metal aluminium exterior. An Asus Z97M Plus motherboard and 16GB of RAM keep the Raptor running smoothly and a 120GB Samsung SSD for your operating system sees loading times becoming extinct. Add in a 2TB HDD and Corsair CX600 low noise power supply and this is gaming power at its deadliest.

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Fusion Nano Gaming PC



- Intel® Core™ i5-4690K Processor
- · Asus Z97I-PLUS WIFI Motherboard
- · 16GB 1600MHz DDR3 Memory
- · GeForce GTX 970 4GB Mini GPU
- · 250GB Solid State Drive
- 1000GB 2.5" Seagate SSHD
- · Microsoft Windows 8.1

From £1099.00 inc VAT

Stingray 15" Gaming Laptop



- Intel® Core™ i7-4720HQ Processor
- 15.6" Full HD Display
- · 8GB 1600MHz DDR3 Memory
- · GeForce GTX 965M 2GB GPU
- 500GB 2.5" Seagate Hybrid SSHD
- Microsoft Windows 8.1
- 385mm x 271mm x 25mm

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Fusion Mantis Gaming PC



- Intel® Core™ i5-4690K Processor
- Corsair H55 Liquid Cooler
- Gigabyte Z97-HD3 Motherboard
- · 8GB 1600MHz DDR3 Memory
- · GeForce GTX 960 2GB GPU
- 1000GB Seagate Hybrid SSHD
- Microsoft Windows 8.1

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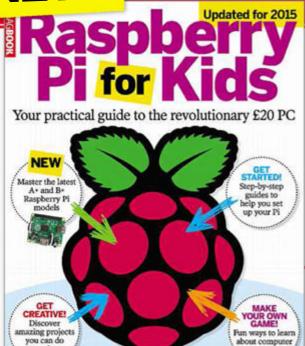


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NEW!



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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THE DEFINITIVE GUIDE TO GOOGLE HIDDEN TOOLS

Inside the 164-page
The Definitive Guide to
Google Hidden Tools, we
lift the lid on Google's
most popular tools to
reveal more than 430
ways to make them even
more efficient, useful and



tailored to your needs. These include clever new add-ons for Chrome, amazing free apps for Android and stunning sights in Google Maps.

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THE DEFINITIVE GUIDE TO ANDROID

Inside this 148-page book you'll find all the free apps, expert tips and easy-to-follow Workshops you need to get the most out of your phone or tablet. You'll find buying advice, including



reviews of the latest tablets and phones, and everything you need to know about taking your first steps with your new device.

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Workshops & Tips





14 pages of easy-to-follow workshops and expert tips

- **35** Dual-boot Windows 10 with Windows 7 or 8.1 **38** Use Outlook on your tablet
- 40 Convert any file without software42 Send money by email safely

PLUS

- 43 Readers' Tips
- 44 Phone & Tablet Tips
- 46 Make Windows Better
- **47** Make Office Better **48** Secret Tips For...
 - BBC News app

Dual-boot Windows 10 with Windows 7 or 8.1

What you need: USB stick (min 4GB); Windows USB/DVD Download Tool; Windows 7, 8 or 8.1 **Time required:** 2 hours

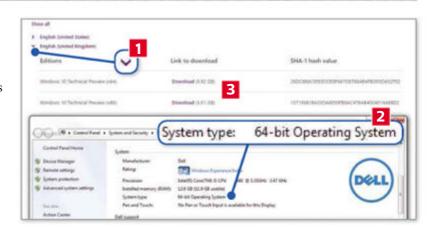
In our last issue, we showed you how to download and install Windows 10 using a virtual drive (see our lead Workshop, page 35). Some readers encountered compatibility problems with VirtualBox. To avoid these, you

could instead try dual-booting Windows 10 alongside Windows 7 or 8.1, so you can decide which operating system you want to use at startup. This involves creating a new partition on which to install Windows 10 (via a USB stick).



First, download the Windows 10 Technical Preview file (if you already have it, skip to Step 2). Go to www.snipca.com/15342,

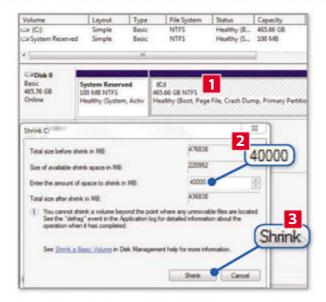
scroll down and click the English (United Kingdom) dropdown menu 11. You'll see two download options – x64 (for 64bit PCs) and x86 (for 32bit PCs). To find out what your PC type is, right-click Computer on your Desktop (or in the Start menu), then click Properties and look next to 'System type' 22 in the System section. Click the Download link 33 on the file that corresponds to your PC.





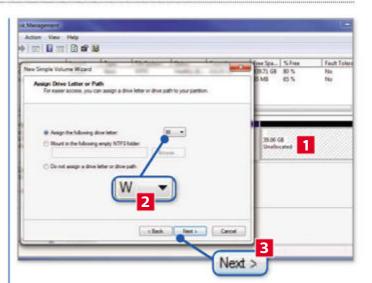
While the file is downloading (it can take a while), we'll show you how to create a new partition on your PC using Windows' Disk Management tool. Press the Windows key+R to bring up the Run dialogue box, type diskmgmt.msc 1 and press Enter. You'll see all the drives on your PC. In the Free Space column beside your C Drive 2, make sure you have enough free space (you'll need 20-30GB for Windows 10). If you don't have enough space, delete unwanted files from your C drive or move them to an external hard drive.

Workshops



You now need to shrink your C Drive to create space STEP for the new partition. In the Disk 0 section below your list of drives, right-click C Drive 11, then click Shrink Volume. You'll see the maximum amount you can safely shrink your drive to in the 'Enter the amount of space to shrink in MB' field. Type the amount of space you need for the new partition. If you plan to install and use Windows 10 apps and/or programs, then we recommend 30000 MB (30GB) or even 40000 (40GB).

Type your amount 2, then click Shrink 3.

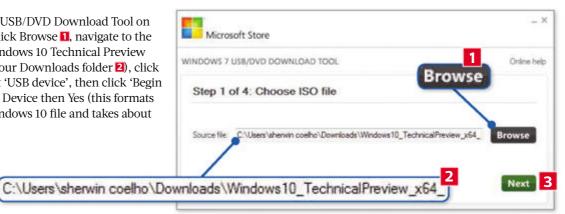


Now you'll see a new 'Unallocated' section ■, which STEP will be more or less the size (in GBs) you just specified. Next, right-click Unallocated, then click New Simple Volume. Click Next in the New Volume Simple Wizard, then Next again (to confirm your volume size). Click the 'Assign the following drive letter' dropdown menu 2, select the letter you want to use, click Next 3 (twice), then click Finish. Restart your PC to see your new partition.

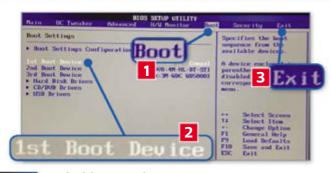


You now need to download the Windows USB/ STEP DVD Download Tool. This is a free program that lets you create a bootable USB drive that you can use to install Windows 10 on any PC. Go to http:// wudt.codeplex.com and click the purple 'download' button 1. Click the downloaded setup file, then Next 2 in the download wizard, Install, then Finish. Now insert a blank USB stick (min 4GB) into your PC.

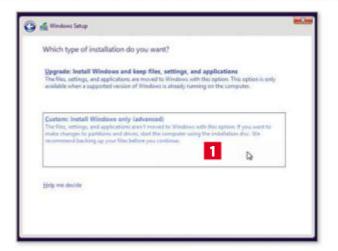
Open Windows USB/DVD Download Tool on STEP your Desktop, click Browse 1, navigate to the downloaded Windows 10 Technical Preview file (which should be in your Downloads folder 2), click Open, then Next 3. Select 'USB device', then click 'Begin copying'. Click Erase USB Device then Yes (this formats your USB stick for the Windows 10 file and takes about 10 minutes).



Dual-boot Windows 10 with Windows 7 or 8.1



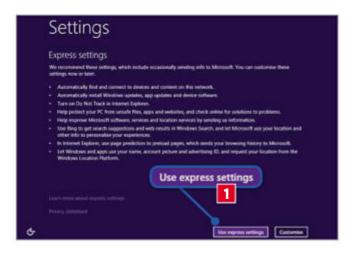
To dual-boot Windows 10 to your PC using your USB stick, you first need to access your PC's Boot Menu in your BIOS. Restart your PC. Before you reach the login screen in Windows 7, you'll see a fleeting message telling you which key to press to access the Boot Menu (F2 on most PCs). Restart your PC again and keep pressing that key as your PC boots. In Windows 8, click the power button at the top right of the Modern tile interface, press the Shift key on your keyboard, then click Restart. When your PC restarts, click 'Use a device' and select EFI USB Device. If your PC doesn't boot from your USB stick, click OK, then Enter Setup to access your Boot Menu. Once in your Boot Menu, in either 7 or 8, navigate to the Boot section and change your 1st Boot device from Hard Disk to USB. The exact way you do this differs depending on your PC, and whether you're using 7 or 8, but you should see instructions on your screen telling you how to navigate through the menus and select options. Navigate to the Exit section █, then click OK.



Now, when your PC boots, you should see the STEP Windows 10 logo. Ensure your language, time and keyboard is set to English (United Kingdom), then click Next and 'Install now'. Tick the T&C box at the bottom left, then click Next again. Select 'Custom: Install Windows only (advanced)' 1. You now need to select where you want to install Windows 10. Select the partition you just created (identifiable from the amount of space you assigned to it) and click Next. It's very important you select the correct partition. Windows 10 will now begin installing (your PC may reboot several times).

After the installation, you should see a screen STEP prompting you to choose your operating system (from Windows Technical Preview 11 and Windows 7 2). Now, remove your USB stick, restart your PC, and enter your Boot Menu. Navigate to the Boot section, change your 1st Boot Device from USB back to Hard Drive, then click Exit and reboot your PC (see Step 7). From now on, you'll see the screen (see screenshot right) every time you start your PC (displaying Windows 7 or 8).





Select Windows Technical Preview, then click 'Use express settings' 11 and log in with your Microsoft account. You should now see a screen telling you your Windows 10 apps are installing, after which you'll see the new Windows 10 Start screen. Refer to the lead Workshop in our last issue to find out how to use Windows 10's new features, including Microsoft's voice-activated personal assistant Cortana. We'll also feature tips on Windows 10 in Make Windows Better in upcoming issues.

 Also see next issue's cover feature – Windows 10: All your questions answered. Out Wednesday 18 March

Workshops

Use Outlook on your tablet

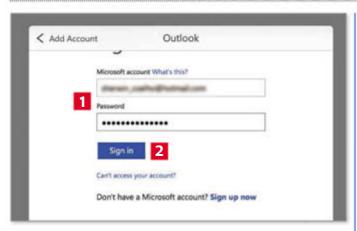
What you need: Android or iOS (phone or tablet) Time required: 30 minutes

he new, free Microsoft Outlook app makes managing email on your device a breeze. Using swipe gestures, you can archive your emails and schedule reminders so that you don't forget to respond. It even lets you batch-select and move emails to a folder of your choice.

Unlike many other email apps, it

has a Calendar, while the Files section lets you manage all your attachments from one place. You can add multiple email accounts, including Gmail and Yahoo. The Android (www.snipca. com/15402) and iOS (www.snipca. com/15404) apps work pretty much the same, but we'll be using an iPad for this Workshop.





Open the app, swipe through the introductory screens, then tap Get Started. We'll add a Hotmail account first. Tap Outlook.com, enter your Microsoft login details 11, tap 'Sign in' 2, then Yes. While the app imports your inbox, contacts, calendar and so on, tap 'Take a Quick Tour', swipe through the screens to see some useful tips, then tap 'Go to Inbox'. Tap OK when prompted to see notifications whenever a new email arrives.



You'll see your inbox in the left-hand panel, and email messages on the right. The new Focused inbox 11 lists priority emails - for example, from people you email often. Tap Other (to the right of Focused) to go to your full inbox. The Quick Filter gives you options to sort your emails into Unread, Flagged or Files (emails with attachments). To search for a specific email, tap the search icon 2 and enter your search term. Tap the three lines at the top left to open a panel containing your other email folders (Sent, Archive, Trash, Drafts and so on). To write a new email, tap the Compose icon 3.

We'll now show you how to add a STEP second email account. Tap Settings 1, then tap '+ Add Account' 2. Select the email account you want to add, enter your login details, then tap 'Sign in' and Accept (to grant Outlook access to that account). Now tap Mail 3 to see a unified inbox containing emails from both accounts. To see emails from one account only, tap the three lines at the top left, then tap the relevant account. Repeat this step to add as many accounts as you want.





To move an email to your Archive folder, swipe left STEP across it in your inbox. To schedule a notification that reminds you about an email you've received, swipe right to see the Schedule menu 1 with options for the timing of your reminder 2. To specify a time, tap 'Choose a time', select the date and time using the sliders, then tap Schedule. You can also schedule an email notification by tapping the arrow at the top **3**, then Schedule.

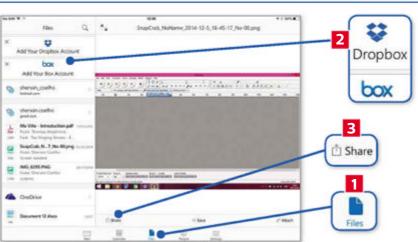


The Outlook app also makes it easy to batch-select STEP emails and – using the five icons ■ at the top of your inbox - flag them, mark them as important, move them to a folder of your choice, delete them and archive them. Long-press any email until you see circles next to all your emails. Tap the circles beside the relevant emails to select them **2**, then tap the appropriate icon. Long-press any email to to remove the circles.



To add an event to your calendar, tap Calendar at the STEP bottom, then tap the '+' symbol 1. Next, name your event and select its start and end times by tapping it, then moving the sliders. Tap the Alert option to be reminded about the event via a notification (options range from '1 week before' to 'At the time of event'). Tap Location to enter the postcode or address of your event. To send others an invite, tap Invitees and enter their email addresses. Tap Done 2 to email your invites and save the event in your calendar. Use the options at the top 1 to change your calendar view.

The Files section 11 lets you manage STEP your email attachments, including those already saved to your cloudstorage account (OneDrive, Dropbox, Google Drive and Box). If you've logged into your Microsoft and Gmail accounts, you'll automatically have logged into OneDrive and Google Drive. To add your Dropbox and Box accounts, tap the relevant option 2 and log into that account. Tap Share 3 to share an attachment using compatible third-party apps on your device (for example, Photos in iOS or Evernote). Tap Save (beside Share) to save it to another account, or Attach to attach it to a new email.



Workshops

Convert any file without software

What you need: Web browser Time required: 25 minutes

loudConvert is a new website (currently in beta) that lets you convert over 200 file formats (including all popular ones for videos, photos, text and audio). This is more convenient than having to install conversion software on your PC because you can convert your files from any PC

with an internet connection.

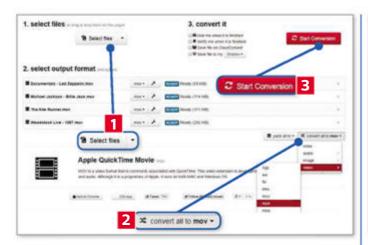
Although the free version has a few limitations (see below), it has lots of useful features. For example, you can save your converted files to a zipped folder and set CloudConvert to display Desktop notifications when your conversions finish.



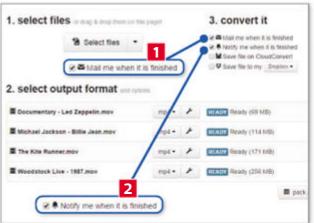
With a free CloudConvert account you can convert STEP files for up to 25 minutes a day and batch-upload a maximum of five files at a time. This should be enough for your needs because the website is easy to use and it converts files very quickly. To create a CloudConvert account, go to www. cloudconvert.com, click Sign Up at the top right, complete the registration form, and click Register 11.



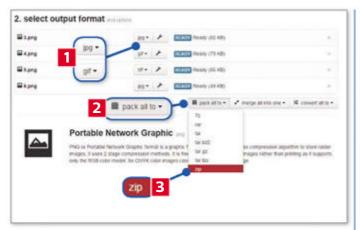
Sign Up it's free!



We'll show you how to add and convert video files using CloudConvert, but the process is the same for all file types. There are two ways to add files. Click 'Select files' II, navigate to your files and click Open, or simply drag and drop files directly into your browser (this is faster). Click the 'convert all to' dropdown menu 2, move your cursor to 'video' and select the format you want (.3gp, .mp4, .avi and so on). Next, click Start Conversion 3. Upon completion, you'll see green Download buttons beside your files. Click these to download your converted files.



Converting large file types such as videos can take a STEP while. Usefully, CloudConvert can notify you when a conversion is finished, letting you get on with other things while the conversion takes place. Tick 'Mail me when it is finished' 11 to receive a notification email (with a link you click to download your converted files). Alternatively, tick 'Notify me when it is finished' 2 to display a notification (near your PC's Notification Area). Click this to return to CloudConvert and download your converted files.

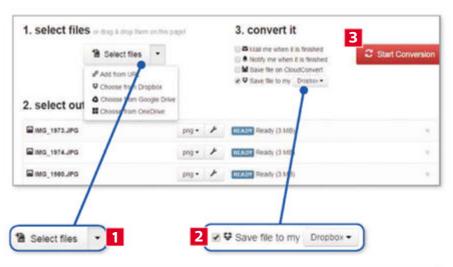




You can also convert each file to a different format. STEP This means, for example, you can convert one photo file to a JPG format, another to GIF, and so on. After adding your files, click the dropdown menu beside each file, move your cursor to 'image', then select the output format 1. To save these converted files to a zipped folder, click the 'pack all to' dropdown menu 2, select 'zip' 3, then click Start Conversion. Download the converted files and/or zipped folder to your PC by clicking the Download buttons.

We'll now show you how to merge several documents and/or spreadsheets into a single PDF. First add your Word and/or Excel documents to CloudConvert. Now order them according to how you want them to appear in the PDF by clicking and dragging files up or down. To delete a file you've accidentally added, click the small 'x' beside it **1**. Next, click the 'merge all into one' dropdown menu 2, select 'pdf' 3, then click Start Conversion. You'll see a download link to your PDF when that's done.

You can easily add files from and save STEP converted files to your cloud storage (we'll use Dropbox here, but there are options for Google Drive and OneDrive). Click the dropdown menu beside 'Select files' 11 and click 'Choose from Dropbox'. Enter your Dropbox login details and click 'Sign in'. Navigate to the relevant folder, tick the files you want to convert, then click Choose. To save these files to Dropbox once converted, tick 'Save file to my' 2, select your cloud storage in the dropdown menu beside it (Dropbox is the default option) and click Allow (this lets CloudConvert create a folder in Dropbox where it saves your converted files). Select your ouput format, then click Start Conversion 3.





Alternatively, you can save your converted STEP files to CloudConvert. You can then download these files to any PC by signing into your account (in the free account you have to do this within 12 hours of converting). Add the files you want, tick 'Save file on CloudConvert' 11, select your output format, then click Start Conversion. To access your converted files at a later time (within 12 hours), click your account dropdown menu at the top right 2, then click Files 3. To see how much of the 25-minute daily allowance you have left, click Dashboard in the same menu.

Workshops

Send money by email safely

What you need: Gmail Time required: 10 minutes

mail now lets you send money by email to anyone in the UK via your PC. Google insists that any transactions you make are "safely encrypted on secure servers" and "monitored 24/7 for fraudulent or unauthorised activity".

To use this service, you'll first need to set yourself up with Google Wallet - the company's secure payment service. We'll show you how to do this and add your payment details so you can send money by email quickly and safely.



STEP Go to www.google.co.uk/wallet, click 'Sign in' at the top right and log in with your Gmail account. If you already use Google Wallet (for example, to buy paid-for apps, videos and music from Google Play), you'll see a list of all your purchases. If you've never used Google Wallet before, you need to add your payment details. Click 'Payment methods' II, the Add A Payment Method dropdown menu II, choose 'Add a credit or debit card' or 'Link a bank account' and follow the steps to set up your account.





Now, open Gmail in your browser and click Compose. Enter the recipient's email address, a subject (optional) and an explanatory message. Next, click the new 'Send and request money' icon (a '£' sign) ■. Type the amount you want to send 2, ensure the correct payment method is listed 3, then click Review. You now need to enter your billing address. Click Continue. Next, click Attach (this attaches a note at the bottom of your email containing the amount), then click Send.

The first time you send

money, you'll see the option to create a PIN for your Google Wallet account (vou will be prompted to enter this whenever vou make a transaction). Click Create PIN, enter and confirm a fourdigit PIN of your choice **1**, tick the box below 2, click



Create PIN 3 again, then click Continue. Next, you need to verify your identity. Click 'Verify my identity', enter your name, home address, and click Continue. Enter your date of birth, click 'Verify your identity', then 'I agree'. After that's done, the money will be sent. The recipient will need to sign up for Google Wallet and verify their identity before they can access it. They'll see options to transfer the money to their bank account or use it to shop for content on Google Play.

NEXT ISSUE

- Use Google's £200 Earth Pro for free
- Try Apple's free office software on your PC
- Hack Windows Explorer to make it better
- Send WhatsApp messages from your PC

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Readers' Tips

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TIP OF THE FORTNIGHT

Help the police track your lost phone

Last month, I lost my brand new Sony Xperia Z3 (Android) phone while I was on holiday in the Isle of Skye. I immediately informed the local police in the hope that they might either find and return my phone, or block it to prevent others misusing it.

They told me in order to do this, they would need my phone's IMEI number. I didn't have a clue what this was at the

time, but have since learned that the IMEI (International Mobile Equipment Identity) number is a unique number (between 14 to 18 digits) that identifies your phone and the network it uses. If your phone is lost, the police (or your network operator) can use this number to track your phone or lock it remotely.

It's worth finding out and noting

down your phone's IMEI number, so you have it handy should you lose it or have it stolen. To find yours, dial *#06#.

Alternatively, you can still find out this number even after your (Android) phone is lost. You do this using your Google Dashboard, which lets you control all your Google-based accounts (such as Android, Chrome, Play Store and so on) from one place.

Go to www.google.com/settings/dashboard, log in with the Gmail account you use to buy apps on the Play Store, then click the dropdown menu beside Android on the left. You'll see your device name, along with its IMEI, model name, manufacturer and network operator.

Brian Carlisle



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

EMAIL

Automatically move Yahoo emails into specific folders

I was intrigued by your tip on how to set up Outlook so it automatically moves specified emails into certain folders (see Make Office Better, Issue 432). I use Yahoo Mail and wondered if I could set this up to do the same thing because I constantly receive emails from an unknown company in the Philippines that somehow bypass my junk filter. After tinkering around, I realised that not only is it possible, but the process is even easier than in Outlook.

Sign into Yahoo Mail, click the cog icon at the top right, then Settings. Click Filters on the left-hand panel, then Add and name your filter. You'll see four 'conditions' (From, To/CC, Subject and Body) with dropdown menus. Each dropdown menu has four options ('contains', 'does not contain', 'ends with' and 'begins with').



Select the option/or combination of options you want using the dropdown menus (see screenshot) and type any relevant terminology (keywords, names, addresses and so on) in the text fields to the right. Now choose the folder you want to move your emails to by clicking the dropdown menu at the bottom, then click Save.

Pat Kilcline

BROWSERS Create a YouTube playlist in Firefox

I have a large collection of CDs, but when I'm using my PC I find it more convenient to play songs using YouTube. Obviously, it's time-consuming having to select new videos to play after each one finishes. You can create playlists within YouTube, but the process can be fiddly.

Thankfully, I've discovered a brilliant, free Firefox extension called Y++ that lets you create YouTube playlists easily. First, go to www.snipca.com/15440 in Firefox, click the green '+ Add to Firefox' button, then Install Now. Next, click the red TV icon that's added to your browser toolbar (at the top right). Type the name of the track or artist you want to search for in the search box on the right. Now move your cursor to the thumbnail of the video

you want to add to your playlist and click the '+' symbol. Keep adding videos this way.

All the videos you add appear as thumbnails in a section at the top. Move your cursor to any thumbnail for options to play the video or move it within the playlist. To remove a video from the playlist, click 'X'.

Dean Staples

MOVIE STREAMING Enlarge Netflix subtitles

Last year, my son bought me a Netflix subscription (£5.99 a month) for Christmas. I have a problem hearing and so rely on subtitles. While Netflix provides subtitles for its content, I find them too small to see clearly. Luckily, it's easy to make them bigger.

Log into your Netflix account (www. netflix.com), click your account dropdown menu at the top right, then click Your Account. In the My Account section, click the 'Subtitle appearance' link (in the My Profile section). You'll see options to change the font type and size using dropdown menus. Clicking Save will apply these changes to all the devices you watch Netflix on – such as your PC, TV (via Chromecast), tablet and so on.

Ellie Turner

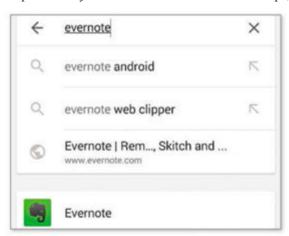
Phone and Tablet Tips Brilliant things to do on your device

ANDROID

Search for apps and identify songs

Google Now (the app with the blue 'g' icon) has been updated with many new features. You can now use it to search for and open any app that's on your device. Type the app's name in Google Now. You'll see the app at the bottom of your search results (see screenshot below). Tap to open it.

Another new feature is the ability to identify a song that's playing near you, which you can then buy from Google Play. To do this, tap the microphone icon at the top right of Google Now. If there's music playing, a small blue musical note icon will appear; tap it. After a few seconds, you'll see the song info (name of the song, with its artist and price – usually 99p). Tap this to buy the track.



ANDROID

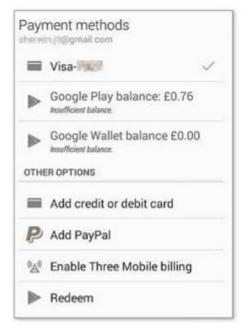
Use a different account to pay for apps you buy

You probably know how to install paid-for apps from the Play Store using your Gmail account in conjunction with the bank account you've added to it. However, there are other ways that you can pay for apps. These include using your PayPal account, adding a second bank account, redeeming a Google Play gift card voucher code and even using your Google Wallet (see the Workshop on page 42 to learn how to set up and use this).

To add one of these payment methods, open the paid-for app you want to install, tap the app price, then Accept (to accept its permissions – if any). Now tap the dropdown menu at the top (beside the price). You'll see

two options - 'Payments methods' and Redeem.
Tap the latter if you want to redeem a code using a Google Play gift card.

Tap 'Payment methods' to see options to add money from your Google Wallet, add another credit or debit card or add your PayPal account (see screenshot above right). Select the option you want and follow the instructions to set up that account, which you can then use for future purchases.



ANDROID & iOS

Quickly find photos sent by WhatsApp



The popular and free app WhatsApp Messenger lets you

send and receive messages and media files (including photos, videos and voice notes) to individuals as well as groups. A little-known secret is that you can find any media file that you've sent or received within seconds because WhatsApp automatically saves them in a different section.

In Android (www.snipca.com/15505),

Best New Apps

What you should install this fortnight

Timeline

Free

iOS: www.snipca.com/15511

This app gives context to popular news stories by presenting them in chronological sections, with relevant background information. Tap the blue



Timeline button at the bottom to see headings of each section, which you can then tap to read. You can choose from different news topics (Business, Sports, Culture) and bookmark content to read later.

Gallery Doctor – Phone Cleaner Free

Android: www.snipca.com/15512

Dark and blurry photos take up unnecessary space on your device. Gallery Doctor scans your device for

these photos and then lets you retain or delete them by tapping the green thumbs up or the red thumbs down icons. It also finds all your duplicate photos, which you can then delete in one go.



WPS Office + PDF

Free

Android: www.snipca.com/15513 iOS: www.snipca.com/15514

The Android version of this app (previously Kingsoft Office) has new features letting you record and add audio files to your presentations. You could previously save files to Dropbox, Google Drive and OneDrive, but you can now also save them to Evernote.



tap the person (or the group) you exchanged a media file with, tap the three dots at the top right, then tap Media (or 'Group media'). You'll see all your files arranged in sections, such as Last Month, Last Week and Recent.

In iOS (www.snipca.com/15506), tap the person (or the group) you exchanged a media file with, tap their name at the top, then tap View All Media to see your files in sections.

ANDROID & iOS

Make free video calls using Viber



The clarity of the call depends on your internet connection, so ensure you're on Wi Fi.

It works the same on Android (www.snipca.com/15507) and iOS (www.snipca.com/15508). Open the app, tap the Contacts icon (second from top left), then tap the contact you want to call. Now tap Free Call to begin a voice call. After they answer, you'll see six options on your screen. Tap Video to begin a video call. Your device's front camera will display your profile in a small section at the top, while you'll be able to see the person you called via their front camera. To end the call, tap the screen,

iOS

Save your iOS files to Dropbox

then tap the red button at the bottom.

You can now save any file to Dropbox directly from within some of your iOS apps (such as Photos, Notes or Photo Booth). We'll show you how to do this by saving a photo from the Photos app.

First install the free Dropbox app (www.snipca.com/15509) and log into your account (if you haven't already). Now open the Photos app and tap the photo you want to save. Tap the Share icon at the bottom left, More at the bottom right (three horizontal dots), then the 'Save to Dropbox' slider and Done at the top.

Next, tap the 'Save to Dropbox' icon, then 'Choose a Different Folder'. Navigate to the Dropbox folder you want to save the photo to, tap Choose, then Save at the top right.



Hide or disable predictive text

One of iOS 8's new features is predictive text, which makes it faster to write sentences by selecting words that appear in a bar above your keyboard as you type. However, there may be instances where you don't want this feature. Perhaps you type faster without it or you find it distracting.

You can hide the predictive text bar or disable it. To do the former, swipe down from the top edge of the predictive text bar. It will disappear but you'll see a small white line above your keyboard (see screenshot, above the letter Y). Drag this line

upwards to see the bar again.

The fastest way to disable predictive text is to tap and hold the globe/emoji icon (second icon from the bottom left). Now tap the Predictive slider to turn it off. Repeat the step and tap the slider if you want to turn it back on.

Games With Kids

What to play together on your phone and tablet

AGES 0-5

Charlie the Chocolate Chihuahua

Free www.snipca.com/15515 (Android) 79p www.snipca.com/15516 (iOS)

The different features in this game will keep your children entertained for hours. They can choose to listen to or read the story of Charlie the Chihuahua. After each chapter, they need to complete fun activities, such as drawing and colouring. It also has puzzles and a memory game.



AGES 6-10

Dr Panda's Restaurant 2

£1.99 www.snipca.com/15517 (Android) Free www.snipca.com/15518 (iOS) This beautifully designed game will unleash your child's culinary skills. They

need to follow on-screen instructions, mix ingredients in the right quantities (or experiment) and present their dish to animals, who will rate it.



AGES 11-16

Trivia Crack

Free www.snipca.com/15519 (Android) Free www.snipca.com/15520 (iOS)

In this trivia game (topics include Sports, Art and History) both players are presented with one question from each topic in turn. You collect special character stickers when you get three correct answers in a row. The first player to collect six stickers wins.



Make Windows Better

Clever tips for every version

WINDOWS 7, 8, 8.1 **Burn the Windows 10 Technical** Preview to a DVD



Our lead Workshops in the last issue and this one show you how to

install and dual-boot the latest Windows 10 Technical Preview. This Technical Preview file is large (between 3-4GB) and it can take a while to download (anything from 40 minutes to a few hours, depending on your internet connection). If you want to try Windows 10 on a second PC, you should burn the downloaded file to a DVD. You can then install and use the operating system directly from the disc without having to download the file all over again.

To download the correct version of the Windows 10 Technical Preview for your operating system, see Step 1 of the lead Workshop on page 35 ('Dual-boot Windows 10 with Windows 7').

To burn Windows 10 to a DVD, right-click the downloaded file (in your Downloads folder), click 'Burn disc image', then Burn. You can now install Windows 10 on to your second PC by inserting your DVD and clicking the setup file. If you're asked for a product key, enter NKJFK-GPHP7-G8C3J-P6JXR-HQRJR, which is the product key given by Microsoft. From the next issue, we'll feature Windows 10 tips in this section.

WINDOWS 7, 8, 8.1

Change the percentage at which low-battery warnings appear



If you use a Windows laptop, you'll see two

notifications warning you when your battery level is running low (shortly before your PC switches to hibernation mode). When the battery charge drops to 10 per cent, a notification prompts you to plug in your charger, while the battery icon in your notification area will display a 'low-battery' warning (a yellow exclamation mark). When your battery charge reaches 'critical level' (5 per cent), you'll see another notification telling you your PC will hibernate if you don't plug in your charger immediately and a red cross appears on your battery icon.

You can change the default percentages that trigger these notifications, which is especially useful if you have an older laptop because their batteries tend to drain quicker. Click the Start button, Control Panel, 'System and Security', then Power Options. Next, click 'Change plan settings' beside your current power



plan, then the 'Change advanced power settings' link at the bottom.

You'll see a number of options with expandable menus. Scroll down and click the Battery menu. You'll see a further list of options with menus. Expand 'Low battery level' and increase its 'On battery (%)' to whatever you want (see screenshot). Do the same for the 'Critical battery level' below that. Now click Apply, then OK.

WINDOWS 7, 8, 8,1 Calculate the length of time between two dates





The default calculator on your PC can be used for more than just basic

calculations. One setting lets you calculate exactly how long it is (in years, months, weeks and days) between two dates.

Open the calculator by clicking the Start button, typing calculator, then pressing Enter. Next, click View at the top left, then click 'Date calculation' at the bottom. You'll see a section added to your basic calculator with From and To dropdown menus (both will be set to the current date). To calculate how many



days you've lived, for example, click the From dropdown menu, set it to the date of your birth, then click Calculate (see screenshot below left).

You can also calculate how many days there are to an upcoming event for example, to calculate the number of days there are to Christmas. Set the From dropdown menu to today's date, the To dropdown menu to December 25, then click Calculate.

WINDOWS 7, 8, 8.1 **Delete old Windows files** hogging space on your PC



When you upgrade your operating system (for example, from Windows

7 or 8 to Windows 8.1), Windows saves your old installation files. Unless you want to use your old operating system again, you should delete these files because they take up storage space on your PC.

In Windows 7, type disk cleanup in the Start menu and press Enter. In Windows 8, go to the Modern tile interface, type disk cleanup, then click 'Clear disk space by deleting unnecessary files'.

Windows will now calculate how much drive space you can free up (this can take up to a few minutes). After that's done, click the 'Clean up system files' button at the bottom left. You'll see ticked boxes and the total amount of space you can free up by deleting those files (see screenshot below). Click OK, then Delete Files. If no boxes are ticked, it means your installation files have already been cleaned up.



MICROSOFT SWAY

Embed a map into Microsoft Sway



Sway is the latest addition to the Office suite, which works online as well as via mobile

apps. Using it, you can create scrolling presentations, which Microsoft calls 'sways' (see the 'Make presentations using Microsoft Sway' Workshop in Issue 442).

Since our Workshop, Sway has been updated with new features. You can now embed online content (such as videos, audio and maps) into your sways. We'll show you how to embed a map of your chosen location using Google Maps.

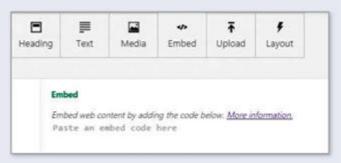
First, go to www.sway.com, click 'Sign in' at the top right and log in with your Microsoft (Outlook or Hotmail) account. Click My Sways at the top right and

select the sway you want to add the map to. Alternatively, click the three dots at the top right and click Create New.

To add a new Embed field (where vou will place the map), click the '+' symbol at the

bottom left of any section, then click Embed. A section will appear containing the text 'Paste an embed code here' (see screenshot).

Now open Google Maps (www.google. co.uk/maps) and type the address you want in the top-left search field. Click the cog icon at the bottom right, then



'Share or embed map'. Next, click the 'Embed map' tab and copy the link at the top (which is the embed code) by clicking it, then pressing Ctrl+C.

Open your sway, click the 'Paste an embed code here' text, then press Ctrl+V to paste the code. Click anywhere on the right-hand pane to preview how the map looks in your sway.

OFFICE **Export your Office** dictionary to a new PC

If you've used Microsoft Office for some time, you've probably added the rare and foreign words you use often to its dictionary. To do this, right-click any (correctly spelled) word with a red underline, then click 'Add to Dictionary'.

Any version of Office that comes with a new PC obviously won't contain these words. Instead of adding them all over again, you can export your Office dictionary from your old PC to the new one. All you need is a USB stick.

First, open any Office program (such as Word) on your old PC, click File at the top left, Options, Proofing on the left, then the Custom Dictionaries button on the right. You'll see the 'CUSTOM.DIC (Default)' file ticked and the file path you need to follow (see screenshot).

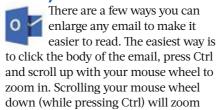
But first you need to make all hidden

folders on your PC visible. Click the Start button, Control Panel, 'Appearance and Personalization', then Folder Options. Next, click the View tab, select 'Show hidden files, folders, and drives', then click Apply and OK. Now navigate through the file path

on your PC, copy the CUSTOM file in the UProof folder and paste it to your USB stick. Insert this USB into your new PC, navigate to the same UProof folder and paste the CUSTOM file there. Your Office dictionary will automatically be updated with the words you previously added.

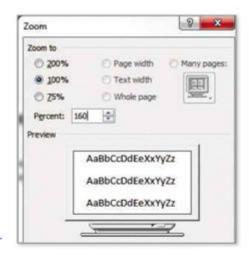
OUTLOOK

Make your emails easier to read



out of the email.

If you don't use a mouse, double-click the email in your inbox to open it in a separate window. Next, click Zoom at the top right, increase the zoom percentage in the Percent box (see screenshot above right) and click OK.



If you're using Outlook 2007, open the email in a separate window, click Other Actions at the top, select Zoom from the menu, choose your desired zoom level, then click OK.

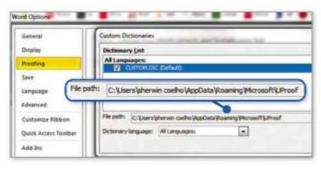
POWERPOINT

Hide your cursor while carrying out a presentation



Having your cursor on screen while you're making a presentation can be very

distracting. However, there's an easy keyboard shortcut that hides it. After you begin your presentation, simply press Ctrl+H on your keyboard. Press the A key if you want to make the cursor reappear. You can of course move from one slide to another using your arrow keys.



Secret Tips For...



3BC News app

Create a personalised news feed from thousands of topics, share favourite stories and watch BBC News live on your tablet or phone

Customise the news

If you've updated the BBC News app on your Android (www.snipca.com/15393) or iPad or iPhone (www.snipca.com/ 15394) in recent weeks, you'll have noticed it's had a makeover. Instead of the old thumbnail grid, you'll see a big red 'OK, let's get started' button (don't worry, it only appears the first time you open the new app).

Tap the screen to see a list of topics that you can choose from to create your personalised news feed (My News). Local News appears first. If you've allowed the app to access your location, you'll see the name of the town/city you're in with a '+' symbol next to it; tap the '+' to add it to My News. Next, scroll down the list of categories (for example, Technology and Health) and their topics (such as Space Exploration and NHS) and tap the '+' next to any you want to add, up to 25 in total.

You can reach My News and the topic list ('+ Add Topics') from the app's black navigation bar.

Find unlisted topics

Tapping '+ Add Topics' shows just a fraction of the 65,000 topics available. You can use the search tool to find others, or browse 'Related topics' at the bottom of any news story. For example, one story about a rocket launch led us to topics including 'Nasa', '3D Printing' and Magazine (based on the excellent BBC News Magazine website, www.snipca.com/15420).

With room for only 25 topics in My News, you'll soon have to do some housekeeping. Tap the pencil icon, then Manage, and tap 'X' next to a topic to remove it. Drag a topic's three-line icon to the top of the list to see it first when you open My News.

Watch videos full-screen

Many news stories are accompanied by video clips, and you can even watch a live stream of the BBC News Channel (tap LIVE at the far left of the black bar).

Videos play in a small player by default, which is fine if you want to see the article and related links at the same time. But if vou're using a smaller screen, switch to full-screen for easier viewing and fewer distractions. First turn your tablet or phone round so it's in landscape mode, then tap the video and tap the full-screen icon at the bottom-right of the player (see screenshot below).



Tap the full-screen icon to watch BBC News video without distractions

Post BBC News stories on Facebook

Every article, video and even topic in the new BBC News app has a Share button (a 'V' shape with dots, or a rectangle with an arrow) so you can post it instantly to Facebook (if you have the Facebook app installed), send it by email or use any other sharing service your device supports. Android supports much more cross-app sharing than iOS, and also includes a 'Copy to clipboard' option in its Share menu. This copies a link to the story, not the entire article.

Make stories easier to read

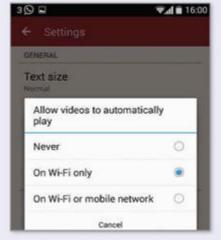
The app's default text size is pretty small, even for those of us who still take our glasses off to read rather than put them on. To make the text bigger without messing up the app's layout, tap the three dots at the top right, then tap 'Change text size', and choose Large or Huge. The change takes effect instantly.

You can also configure the app's video and audio content to work with your hearing aid by tapping the three dots, then Settings and ticking Accessibility.

Play video automatically without going over your data limit

Videos don't play automatically in the BBC News app (unlike in Facebook), which is good news if you're on limited mobile data. But it means you're always having to press Play, which makes the app fiddly - unnecessarily so if you only ever connect using your home Wi-Fi.

Change the settings to make video play automatically, but only on Wi-Fi. Tap the three dots at the top right, Settings, then 'Allow videos to automatically...' and then tap 'On Wi-Fi only'. If you have unlimited mobile data (and you're absolutely sure it's unlimited), tap 'On Wi-Fi or mobile network' so you never have to press Play, whatever connection you're on.



Set the BBC News app to play video automatically when you're on Wi-Fi

What's All the Fuss About...



White space broadband

It's been a long time coming, but the gaps in TV frequencies are finally set to provide internet access

What is it?

White space is the term used to describe the gaps between TV and radio frequencies. Large portions of the spectrum are left unused to maintain buffers between each frequency, thereby preventing interference. But it's possible to use these spaces to provide Wi-Fi signals, and to allow devices to communicate with each other.

Hasn't this been talked about for ages?

Yes, and we've written about it many times. In September 2011, Ofcom said white-space frequencies between 470 and 790MHz would be available for new wireless technologies by the end of 2013. By early 2013, the launch was put back to 2014, but this failed to materialise.

So has anything new happened?

Yes. At long last, and better late than never, Ofcom has approved white space, and it hopes companies will start using it to provide services to the public by the end of 2015. Ofcom will set rules that limit where and when white space can be used, and at what frequencies, in order to prevent interference with TV and radio signals.

To give Ofcom credit, the UK was the first country in Europe to look at utilising white space. But the US is ahead of the UK, having approved white space in 2013. And countries less advanced than the UK, such as Kenya, Namibia and South Africa, are already running trials.

What are the benefits of white space?

It can travel longer distances than Bluetooth and Wi-Fi, and more easily penetrate obstacles such as walls and trees. This makes it a great option in places where conventional broadband isn't viable.



But it's not just a niche technology for remote areas. It could also be used to provide better Wi-Fi in densely populated cities, helping the rapidly growing number of phone and tablet users worldwide get access to the web.

Have there been trials in the UK?

Several. Late last year London Zoo used

white space to stream live video of its meerkats, otters and giant Galapagos tortoises to YouTube (www.snipca. com/15447). Conservationists hope to use the technology to monitor endangered species in the wild.

White space is also being used by the Oxford Flood Network to send early flood warnings, and to provide internet access to ships in the Orkney Islands that previously couldn't access Wi-Fi.

What will it be used for next?

Ofcom thinks white space will help improve "machine-tomachine" communications (sometimes shortened to M2M). Ofcom envisages a future where someone can wear a health monitor around their wrist that uses white space to 'talk' to that person's local hospital. While on farms, sensors buried in fields will tell irrigation machines when the crops need to be watered. These devices are often grouped under the umbrella term 'Internet of Things', which encompasses web-connected devices that aren't PCs, phones or tablets. It's a clumsy term, but now ubiquitous, so you'll probably have to get used to it.

But what if I'm healthy, and don't own a farm?

That doesn't mean you won't benefit from M2M, though you

may have to be patient. Ofcom says that within "10-30 years" we may be travelling in driverless cars with sensors that share data about traffic jams. Using this information, the cars will plot the fastest route to avoid congestion. So in years to come you may have white space to thank for avoiding all those motorway tailbacks.



Last year London Zoo used white space to stream live footage of otters on YouTube

Make Your PC RUNLIKE

You don't have to put up with a slow PC or replace it with a new one. Jonathan Parkyn reveals 17 ways to get your computer working like new again - and 13 are free

omputers are always fast and smooth when you first buy them, but (like all of us) have a knack of slowing down, getting gradually less responsive and increasingly cranky. Even PCs that are completely free of malware or other unwanted extras get sluggish over the years (sometimes not that many years) – often to the point where even the simplest of tasks can be an incredibly frustrating experience.

A 'new' PC for nothing

Your first thought may be to dump your sluggish machine and buy a new one. But there's usually no need, unless your PC really is falling apart around you. In fact,

if you bought your computer within the past five years, you may not even have to buy a single new component to get it running like new again.

In this feature we'll explain 17 of the best ways to turn back the clock so that your existing PC works just like it did the day you unboxed it. Depending on the age and specifications of your PC, some of our suggestions will prove more effective than others, so it's a good idea to have your PC's manual handy. If you've misplaced this, check the database at UsersManualGuide.com (www.users manualguide.com) for a free online version, and use the free tool Speccy (www.piriform.com/speccy) to check

KEY POINTS

- Restore your PC to its factory settings
- Reinstall Windows from scratch or switch to a new OS for free
- Get rid of old software, adware and hidden junk
- Update your PC's drivers and firmware
- Find out which two hardware upgrades are worth paying for

your Windows version and your PC's specifications.

Some of the tips we offer here are quick and easy, while others will require a little more planning and care, but the vast majority – 13, in fact – are free.

WIPE AND RESTORE YOUR PC

Restore your PC to factory settings

Cost: free

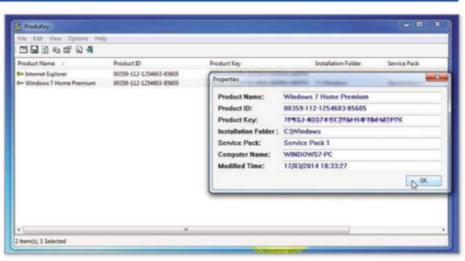
We'll start with one of the most effective (free) ways to get your PC working like a spring chicken - and that's by restoring it to its original factory state.

These days, most PC manufacturers include something called a recovery partition - a hidden section of your hard drive that includes everything you need to restore your PC to its factory state. Bear in mind, of course, that the restoration process will wipe all current data from your PC. That means all your personal files, settings, installed programs, updates and customisations will be completely erased. Therefore it's vital you back up everything first (see box below).

If you're still happy to proceed, then the next steps depend on the make and model of your PC. Most Windows 8/8.1 computers, for example, have the option



Most PC manufacturers include a recovery partition and software for using it - such as HP's Recovery Manager



Check your Windows 7 product key using free tool ProduKey

to restore from within the operating system (OS) itself (see page 53).

In most other cases, accessing the recovery tools will involve tapping a particular key or key combination while Windows is booting, and then working your way through a few straightforward on-screen instructions. We can't offer specific advice for this, as different manufacturers use different procedures, so refer to your PC's manual.

Be aware that your computer may restart several times. Don't interrupt it until you see a message telling you the reset has completed, or until you're prompted to set up Windows. The entire process is likely to take up a significant

amount of time, so you may need to clear your diary for the day.

Reinstall Windows Cost: free

Reinstalling your current OS is similar to restoring your PC, except that it involves installing a clean copy of Windows from the CD or DVD it came on. This requires the disc itself, as well as the unique 25-character product key that came with it. If your PC didn't come with a Windows disc, then it's likely that the manufacturer provided a recovery partition instead (see previous tip).

If the Windows disc that originally came with your PC has been lost or damaged, then contact your PC's manufacturer to obtain a replacement. If you bought a copy of Windows yourself, you can re-download it from Microsoft directly. The process is slightly different for Windows 8/8.1 (see below), but Windows 7 users should visit www. snipca.com/15396 and fill in the form, then download the disk image (ISO) file. You'll need the Windows product key for this. If you can't find the product key anywhere, download the free portable tool ProduKey (www.snipca.com/ 15400). Unzip and run the program, and it will tell you what your Windows product key is.

Once you've downloaded the Windows 7 ISO file, you'll need to create a bootable DVD (using a blank disc) or USB stick from the file. Use Microsoft's free Windows USB/DVD Download Tool (www.snipca.com/15431) to do this. To find out what to do with your bootable disc or USB, see the box on page 53.

If you're planning to restore or reinstall Windows, we strongly recommend making not only a backup of all your personal files, but also a separate disk image (ISO) of your entire PC before starting the process. That way, you can always

restore your computer back to exactly how it was should anything go wrong.

Windows has a decent built-in tool for making a disk image. Click Start, type backup and click either 'Backup and Restore' (Windows 7) or 'Save backup copies of your files with File History' (Windows 8/8.1). You should see a system image option on the left; click this



Back up your files using free tool EaseUs Todo Backup

and follow the steps. You'll need a large external hard drive.

For file and folder backup, it's usually better to use a third-party backup tool, such as EaseUS Todo Backup Free (www.snipca. com/15424), particularly if you're switching from

one OS to another. We also recommend gathering together all the device drivers and software you'll need after you've restored Windows.

Once you've reinstalled/restored Windows, use the relevant backup tool to restore the files for all users, and reinstall programs and drivers. You'll also need to run Windows Update at this point.









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HOW TO DO A CLEAN INSTALL OF WINDOWS 7

INSERT DISC

After you've created your bootable DVD or USB of Windows 7 using the steps outlined on the previous page, insert the disc or USB into your PC and restart. If Windows starts as normal, then you may need to change the BIOS boot settings. This is usually done by tapping a key (often F2 or Del) during startup. In the BIOS settings, look for a Boot or Boot Priority section and ensure that the 'CD/DVD-ROM' or 'USB/Removable devices' option is top of the list. Save, exit and restart.



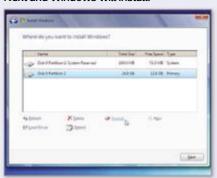
You may need to change your PC's BIOS boot settings before reinstalling Windows



Click the Custom option in the Install Windows box

LAUNCH WINDOWS INSTALLER
If you see a message telling you to
'Press any key to boot from CD or DVD', do
so. Once the Install Windows box launches,
follow the on-screen options, choosing
your language and other options, then click
Install Now. Enter the Windows product key
if prompted and accept the license terms.
When you see the message asking you
'Which type of installation do you want?',
click the Custom option.

SELECT THE RIGHT LOCATION
You'll be asked where you want to install Windows. You'll need to select the correct option very carefully here, particularly if your PC has multiple drives and partitions. In most cases, it will be the largest partition of 'Disk O' – it may be labelled with your current OS too. Click to highlight the drive, then click 'Disk options' (or 'Drive options'), Format, then OK. Click Next and Windows will install.



Choose the largest partition of 'Disk O' as your location for installing Windows

3 Upgrade to Windows 8.1 Cost: £73+

Windows 7 (or earlier) users may want to consider upgrading to a newer version of the OS instead of reinstalling the old one. Windows 8.1 didn't exactly receive the warmest of welcomes, but it's a massive improvement on the original Windows 8 release. It's also a lean, economical OS that's likely to make your PC feel faster and more responsive than ever.

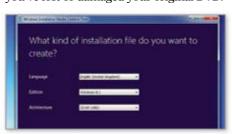
A copy of the standard edition of Windows 8.1 currently costs around £73 from Dabs.com (www.snipca. com/15481), or £99.99 if you download it from the Microsoft Store (www.snipca. com/15405). Be sure to buy the correct version; Windows 8.1 comes in 32bit and 64bit varieties. To check which you need, click Start, then right-click Computer and select Properties. Look under System Type to see whether 32bit or 64bit is listed.



Check whether you're running 32bit or 64bit Windows before you upgrade

The steps required for the upgrade process vary slightly, depending on whether you bought a physical Windows 8.1 disc or a downloadable copy. Downloads need to be converted into a bootable installation DVD or USB drive first. Click the 'Creating media' button on Microsoft's installation media help page (www.snipca.com/ 15405) to

run the free Windows Installation Media Creation Tool, which will download a Windows 8.1 disc image (ISO) file and create a bootable DVD or USB flash drive for you. This method also works if you want to reinstall Windows 8/8.1 and you've lost or damaged your original DVD.

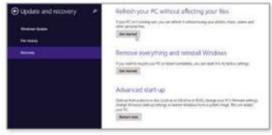


Create a Windows 8.1 ISO file using the free Windows Installation Media Creation Tool

Restore your PC from within Windows 8.1

Cost: free

Windows 8.1 has built-in tools for



Reinstall Windows 8.1 without deleting your files using the built-in Recovery tool

restoring your PC to factory settings from within the OS itself. Press Win+C, click Settings, 'Change PC settings', 'Update and recovery', then Recovery.

The first option you then see ('Refresh your PC without affecting your files') will reinstall Windows leaving all your personal files intact – though we strongly recommend backing up everything beforehand for extra peace of mind. You'll need to reinstall programs and apps after the process is complete. The second choice, 'Remove everything and reinstall Windows', wipes everything and returns your PC to its original condition.

In both cases, if you updated from Windows 8 to Windows 8.1, then you'll find that Windows 8 will be back once the process is complete. You'll need to update to 8.1 manually (this is also free), using the steps outlined by Microsoft (www.snipca.com/15434).

5 Switch to a non-Windows operating system

Cost: free

If you're installing an entire system from scratch, who says you need to stick with Windows 7 or 8/8.1? Why not jump ship to another OS entirely?

Those looking for maximum speed should consider switching to a free, lightweight Linux installation, such as Lubuntu (http://lubuntu.net), an XP-like OS that's great for getting the most from older PCs.

Try it first without affecting Windows by downloading the ISO from the link



Lift the load on your PC's resources by running the free, light, XP-style OS Lubuntu

above, burning it to a DVD and booting from the disc. If you do decide to make the switch, we recommend installing version 14.04.01, the latest edition with

long-term support.

If your main aim is to make your PC faster and more stable, don't be tempted to install Windows 10 – at least not just yet. Windows 10 Technical Preview (www.snipca.com/15418) is pre-release software – it comes with no warranties and is likely to keep evolving between now and its final release, which is scheduled for later this year. As we explained in our lead Workshop in Issue 443, Windows 10 is currently best installed using virtual PC software such as VirtualBox, and not as your main OS.

REMOVE OUTDATED SOFTWARE AND HIDDEN JUNK

6 Uninstall programs you don't use

Cost: free

Uninstalling unwanted software is a good way to keep your computer lean and mean. Open the Control Panel, click 'Uninstall a program' and scroll through the list. Be ruthless. You can always



Get rid of unwanted programs and their Registry leftovers using Revo Uninstaller

reinstall something if you miss it.

There are plenty of free third-party software uninstallers, too, and we looked at them in detail in our cover feature in Issue 427. If you only choose one it should be Revo Uninstaller (www.revouninstaller.com), which has an easy-to-use design and four levels of thoroughness: Safe and 'Built-in', which use Windows' uninstaller; Moderate, which removes any associated Registry entries along with the program; and Advanced, which is the ultimate solution for stubborn, troublesome programs that litter your system with all kinds of leftovers.

7Remove bloatware and hidden junk

Cost: free

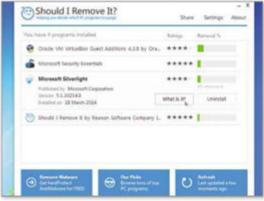
PC manufacturers sell their systems pre-loaded with unnecessary programs and tools (often called 'bloatware'), many

of which can be uninstalled via the Control Panel. One side effect of restoring your PC from a recovery partition is that all the pre-installed software will also be restored. So after carrying out the restore procedures we described earlier, comb your PC for bloatware and remove anything you don't want. If you're unsure what to uninstall, use a free tool called SlimComputer (http:// slimcomputer.com) to help you identify and remove resourcehungry programs, adware and more besides.

Not all the items that slow your computer are easy to find, but purging vour PC of hidden junk files will have a beneficial effect. Our long-time favourite tool for this task is CCleaner (www. piriform.com/ccleaner), which analyses your hard drive and quickly relieves it of thousands of hidden temporary and unused files. In last issue's cover feature, we showed you how to get even more cleaning power from CCleaner by installing the free plug-in CCEnhancer (www.snipca.com/15435), which adds dozens more cleaning options to CCleaner's Applications list. Also have a look at our Secret Tips for CCleaner in Issue 443 (page 48).



Remove hidden junk and uninstall software using SlimComputer



Find out what's safe to remove from your startup list using free online tool Should I Remove It?

Disable startup items

Programs or processes that are set to run automatically every time Windows starts are the biggest culprits when it comes to slow boot times. Disable anything you don't need. In Windows 7, click Start, type msconfig.exe and press Enter. Click the Startup tab and untick any items you don't want.

In Windows 8 and 8.1, right-click the taskbar and select Task Manager. Click 'More details' to expand the list if necessary (it's usually expanded by default), then click the 'Start-up' tab. Right-click an item you don't want to run at startup, then select Disable.

For help deciding which startup items you can safely disable, use the free online tool Should I Remove It? (www.should iremoveit.com). The 'What is it?' button next to each item takes you to an online database with information that can help you establish whether or not you need it. Alternatively, you could search for the item online. Windows 8/8.1's Task Manager even offers a handy 'Search online' option when you right-click a startup item.

Update programs you use regularly

Cost: free

When software is released, it usually still needs refining with subsequent updates and security patches. So keeping your programs and applications up to date can help improve your PC's performance.

We're assuming you've already set Windows to update automatically (if not, open the Control Panel and click 'System and Security', Windows Update, 'Change settings'). Keeping all your other software up to date can be time- consuming, but thanks to a free tool called SUMo (short for Software Updates Monitor, www. snipca.com/ 15437) vou don't have to. The program automatically detects all the software on your PC, sends you a notification when updates are required and lets you get them with the click of a button.

We'd recommend downloading the tool's portable version, to avoid any junk in the installer. Under SUMo, click the small ZIP folder icon under the blue

SUMs (Software Updates Monitor) vI.4.8.183 He Jook Options ! Software Updates Monito

Update all your software at once with SUMo

Download button. Save and extract the file ('sumo.zip'), then run the file 'SUMo.exe' to instantly run the program.

Use older programs or free online alternatives

Cost: free

Newer programs tend to make more demands on your system, while older ones are often less resource-hungry.

One easy way to make your PC feel more responsive is to revert to an older version of a program. But there are drawbacks to this approach. Obviously, older programs may not have all the features found in the latest editions. Some, like Office 2003, may no longer

be supported by the manufacturer (read Microsoft's confirmation at www. snipca.com/15438). Others may suffer compatibility problems with newer versions of Windows.

Another alternative is to use up-to-date

free programs, which are often less demanding than their paid-for equivalents - especially if they work entirely online, like Google Docs (www.snipca. com/15439). It not only uses less memory and no hard-drive space but also, if you use it instead of Microsoft 365, you'll save £80 a vear.

Remove adware and spyware

Cost: free

Adware, spyware and similar miscreants can drag your PC's



Save memory, space and money by switching to free online tools such as Google Docs

performance right down, and are often hard to identify and remove. Your security software will hopefully catch anything that attempts to invade your computer but if you really want to breathe new life into your PC, you should definitely run a dedicated scanner to root out hidden malware. There are several great free scanners to choose from, including Malwarebytes Anti-Malware Free (www.malwarebytes. org), AdwCleaner (www.snipca. com/15441 - though be careful: see News, page 7) and SuperAntiSpyware Free Edition (www.superantispyware.com).



Find and remove adware and spyware using the free version of SuperAntiSpyware

PGRADE YOUR PC'S HARDWARE

Get the latest drivers Cost: free

As with other software, hardware drivers are usually updated multiple times following the initial release, providing performance boosts, compatibility fixes and more. Using older drivers could result in unnecessary speed drops, bottlenecks, crashes and other problems. Manually keeping all your drivers up to date would be a full-time job. Instead, install SlimDrivers Free (www.snipca.com/15419). It scans your system and informs you of any out-ofdate drivers. And, unlike many of the other free driver scanners available, SlimDrivers Free also lets you download the latest updates with a click.

Discover which drivers are out of date by running SlimDrivers Free



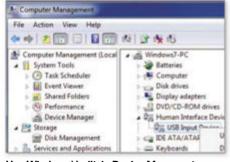
Update your PC's firmware Cost: free

In Issue 443 (Best Free Software) we highlighted the free new tool Firmware Tables View (www.snipca. com/15442), which instantly lists all your PC's installed firmware - that is, the software embedded in your various components (hard drive, video card) and accessories (external drives, digital cameras) to make them work.

Firmware Tables View can't find and apply firmware updates for you. In fact, there's no easy, automated solution to this problem, so you'll have to visit the manufacturers' product pages on a device-by-device basis. Updating ('flashing') firmware can be a tricky process and can even damage the device if carried out incorrectly, so only do it if a manufacturer specifically recommends it.

Remove old PC devices Cost: free

Eventually, manufacturers stop supporting older devices. You may, for example, find there's no Windows 7 driver for that old flatbed scanner you bought in 2005. In some cases, you may be able to find a driver that makes your



Use Windows' built-in Device Manager to uninstall old PC accessories

old gadget work with your newer OS, but this can often come at the expense of functionality or performance.

If you suspect any of your older devices or components might be hampering your PC, remove them via the Device Manager (in Windows 7: click Start, right-click Computer then select Manage. In Windows 8/8.1: go to Start, type device

and select Device Manager in the results). Locate the device in question, then rightclick it and select Uninstall. Then physically unplug the device and restart your PC to see if this makes any difference.

Add more memory

Cost: from £30

If you're happy to spend a bit of cash to reinvigorate vour PC. then there are few better investments than adding

memory. To give you an idea of cost, 4GB of RAM should set you back about £30 online.

To find out how much memory you have, what type your PC uses and how much more you can add, run Speccy (see page 50). You should also run the free online hardware-analysis tool from Crucial (http://uk.crucial.com) and click the 'scan your system' button. This will automatically install and run a special free tool that will analyse your PC and tell you what you need to know about its memory and other specifications. You don't necessarily have to buy your memory from Crucial, so shop around and compare prices.

'Install an SSD Cost: from £50

Upgrading your hard drive doesn't just give you more storage. Opt for an SSD (solid-state drive) instead of a traditional disk-based hard drive and you can give your PC a significant speed boost.

As we explained in last issue's feature on SSDs (page 56), these drives are a little

SSDs like this Samsung model are more robust than traditional hard drives





Click 'scan your system' on the Crucial website to discover your PC's hardware specifications

pricier than standard hard drives (about £50 for 120GB, if you buy online), but they don't have any mechanical parts, which makes them able to read and write data much faster than traditional drives. The result is shorter boot times and snappier overall performance. Refer back to our feature to find out how to install an SSD in your desktop PC or laptop.

Give your PC a physical spring clean

Cost: a couple of pounds

One thing's for sure – your PC was a lot shinier when you first bought it. So to really make it feel like new, you'll need to give it a good clean.

Wipe the screen with a microfibre cloth or duster. Turn your keyboard upside down and shake out the crumbs, and give it a going over with an antibacterial wipe while you're at it. Clean any dust that's collected on the underside of your mouse with a moist cotton bud.

Desktop PC owners should consider opening the case and, armed with a can of compressed air (about £4 online), blow away the dust that has collected inside.

Make sure your PC is switched off and unplugged if you're going to do this - and be careful not to damage any of the internal components.

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Build your perfect

Windows 8 Start screen

In the final part of her series on Windows 8, Jane Hoskyn reveals the 15 best tiles to pin to your Start screen

omputeractive reader Derek Turner has kindly done all the ■ hard work for me this issue by sending in a screenshot of his beautifully customised Windows 8.1 Start screen (right). His tiles include some of the must-haves I list here, but I'll throw in some of my favourites, too.

1. Libraries

Clicking or tapping the Libraries tile instantly reveals your Documents, Music, Pictures and Videos folders. It's not rocket science, but it's a whole lot quicker than opening them in Windows XP or 7.

Libraries isn't in the Apps list that springs up when you hover at the bottom-left of the Start screen and click the arrow. Instead, type libraries, select it and click 'Pin to Start'.

Liven things up and display a slideshow of photos on your Libraries tile by turning it into a 'live tile'. I'd tell you how, but the exact process varies from PC to PC and



Open Libraries, programs, PC Settings, your Desktop and more from your Start screen

Windows update to Windows update, just to make things difficult for those of us who try to explain or understand these things.

2. PC Settings

This one's buried way over at the far right of Derek's screen so you can't even see it in the image above, but I prefer my PC Settings tile to be as big and upfront as possible. Add it by right-clicking it in your Apps list and clicking 'Pin to Start'.

GO ON, THEN: 8 GREAT WINDOWS 8 APPS

I'm not a big fan of Windows 8 Apps on desktop PCs. If traditional programs were paintbrushes, apps would be fingerpaints - big and sloppy. But they make sense on a touchscreen, and they're much quicker to open if you've added their tiles to Start. So which tiles do you need? First,

Windows Store. Easy, given that it's already there. When you open it, you see a hideous blizzard of paid-for games. Click 'Top charts', then 'Top free apps' to see two more must-have tiles, Skype (www. snipca.com/15407) and Netflix (www. snipca.com/15409) - and not much else. It took a while to find my next two recommendations, 'Hyper for YouTube' (www.snipca.com/15411), a YouTube viewer and downloader, and a preview of

the **Skype Translator** app (www.snipca. com/15410). To help sort the wheat from the chaff more quickly, add the excellent Windows Store App Review (www.snipca. com/15412).

OK, how many is that? Two more tiles left. Wikipedia Search (www.snipca. com/15414) is one of my most-clicked tiles. I can find Wikipedia pages from my Start screen, with no need to open my browser (...and then open Wikipedia, and then type my search, and then click a result). On the downside, it's so compelling it keeps me up past my bedtime - much like the brilliant Sudoku! (www.snipca.com/15416). Maybe I should turn them into a Start screen tile group called 'Sleep deprivation'.

3. Camera

This one isn't on Derek's Start screen at all, possibly because his PC doesn't have a built-in webcam. If yours does, you'll find Camera listed in Apps. Add the tile, click it and see what happens (hint: get ready for your close-up). Then go to www.snipca. com/15401 to find out what to do next.

4. Shut down

Windows 8 is already quicker to start up, close and navigate than its clunky predecessors, but a one-click 'Shut down' tile makes things even faster.

You'll need to create a Desktop shortcut first. Right-click your Desktop, select New, then Shortcut, type shutdown /s /t 0 and name it 'Shut down'. Right-click your new shortcut, select Properties, click Change Icon, select the big power button and pin it to Start.

5. Desktop

Why would you need a Desktop tile when you can just as easily press the Windows key? So you can toggle between Start and Desktop using a touchscreen, that's why. I'd be doing that right now if I'd not inflicted grievous bodily Windows 10 on my Acer laptop-tablet hybrid.

6. CCleaner

You can add any installed program or Windows tool to your Start screen. I've singled out CCleaner because the office Windows 8 laptop is so full of junk that it burps.

7. Start Screen Unlimited

This is cheating. And, you know what? I don't care. Start Screen Unlimited (www.snipca.com/15403) is a third-party widget that adds optional extras, including a Google search box, a Recycle Bin and even your Desktop taskbar. It's not a tile, it's a super-tile.

Pass on your accounts

What happens to your online accounts after you die? Jane Hoskyn explains how to bequeath your photos, emails and other digital data to your loved ones

ruce Willis fights to leave his iPod tunes to his family!' screamed newspaper headlines in 2012, when the Die Hard star reportedly planned to sue Apple for the right to bequeath his iTunes library to his daughters. Experts saluted Bruce's stand (www.snipca.com/15497) and lawyers analysed the case (www. snipca.com/15504).

A fictitious case, as it turned out. The story was an urban myth. But like all the best myths, it contained one big truth: what will happen to our digital possessions after we die?

We're living in an age of invisible assets. We write emails instead of letters, keep photos in online albums instead of physical ones, and protect our bank statements with passwords not padlocked filing cabinets. In most cases, only you can access any of it. According to security firm McAfee, 55 per cent of us have important digital data that'll be impossible for anyone else to access after we're gone (www.snipca.com/15510).

That's fine if you want your data to die

with you, but not if you want any control over your digital legacy - or, like Bruce Willis in the iTunes myth, leave your invisible treasures to your loved ones.

Pass on your passwords securely

Web companies like Google, Facebook and Amazon store all kinds of information about you and your online activity in their servers. You may not like it, but they do. However, your sensitive personal information (usernames, passwords, password hints) is encrypted, which means no human can read it, ever. Not the Amazon help desk, not a hacker, and not your family after you die.

Encryption is essential, of course. If your passwords are visible to anyone, you might as well scribble them on a sheet of A4 and pin it to your front door.

Last year, the Law Society urged people not to include their passwords in any

> written will (www.snipca. com/15496). The Society, which represents solicitors in England and Wales, also said you should 'leave clear instructions' about what to do with your online accounts. But how can you leave instructions without leaving your passwords?

The free tool PasswordBox (www.passwordbox.com) is the answer. Previously a standard password manager like LastPass, PasswordBox now incorporates its old rival Legacy Locker, 'the world's first digital life

manager'. It still works as a password manager, but it also now lets you share your logins with another person, securely and confidentially. Only you can edit your logins, and any changes you do make are synced instantly to your beneficiary. All the data is encrypted, so it won't be visible to hackers - even if they manage to break into your contact's laptop.

You can also set up rules to determine what will happen to your online accounts, photos, emails and other digital data when you're gone. This service is explained in detail on the site's Legacy page (www.snipca.com/15521).

PasswordBox works entirely in your browser. Click the Download button to add the extension to whatever browser you're using (Chrome, Firefox and Internet Explorer are all supported), then choose a master password. Click the bookmarklet to set up and use the Share and Legacy services (see screenshot left). To extend the service to your tablet or phone, install the free app (Android and iOS, www.snipca.com/15502).

Pass on your Google accounts

Google's Inactive Account Manager (IAM) was launched a couple of years ago to help you 'plan your digital afterlife' (see Google's blog: www.snipca.com/ 15522). It's like a digital will for sections of your Google account (Gmail, Picasa, Drive, YouTube and more), letting you specify what should happen if you haven't logged in for a certain amount of time.

For example, you can set your Gmail archive or Picasa photos to be passed securely to a 'trusted contact' (see



Bequeath your logins to your loved ones using the Share and Legacy tools in PasswordBox

ARCHIVE YOUR DIGITAL ASSETS

Whether you want to take your accounts to the grave or preserve everything for posterity, you should download and archive your data. Even if it's just your Facebook photos and a few key Gmail contacts, this information will be invaluable to your family and fascinating for your descendants.

Google's free Takeout tool (https://google.com/takeout) lets you (and only you) download some or all of your data from Gmail, Picasa and so on. Find out more in Google's 'Download your data FAQ' (www.snipca.com/15524).

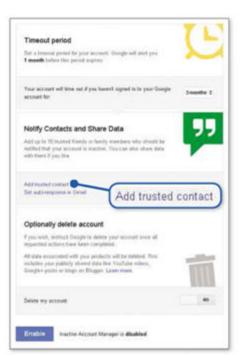
Facebook has a built-in tool

for downloading all your photos, videos, messages, contacts and posts, all in one go. Go to Settings, click 'Download a copy' and then click Start My Archive. If you've got photos on Flickr, download them all at once using free program Bulkr (www.snipca.com/15527).

Oh, and get your printer out. As Google's vice president Vint Cerf warned recently, digital photos and other files may not be supported by future technology (see 'Question of the Fortnight', page 11). So if you want to ensure your descendants can gaze in wonder at your photos, turn those JPEGs into paper.



Back up your photos using Bulkr - but print them if you want them to outlive you



Choose a loved one to inherit your Google data using Inactive Account Manager

screenshot above) after your account has been inactive for a certain number of months (three, six, nine or 12). Alternatively, you can choose for everything to be deleted.

Before your wishes are carried out, Google sends a text to your mobile number and an email to your secondary (non-Gmail) address. This is just in case vou're actually still around - maybe travelling the world, for example.

To set up IAM, go to your Google account settings, scroll down and click Inactive Account Manager, then click Setup (here's a direct link: www.snipca. com/15523). Scroll down the page

choosing your 'Timeout period', 'trusted contact' and optional Gmail auto-response

We'd caution against the Delete option. Deleting all your Google data wipes all your photos, emails and contacts - and it's irreversible, so it'll leave your loved ones with precious little when you're gone. It'll also make it harder for them to settle your accounts and notify your friends of your passing. If you want to do it, at least archive your data first (see box above).

Pass on your Facebook account

Facebook's importance to families and friends cannot be overstated. Whatever you think of Facebook, it has become the main form of contact for millions of people who use it to keep in touch with far-flung family members and watch new generations grow. And when a Facebook user dies, their account is part of their legacy.

Roughly 20 million Facebook accounts are owned by people who have passed away (www.snipca.com/15531), and most have taken their passwords with

them. That means no one can log in to update their page and - we've all pondered it - remove the embarrassing stuff.

It's about time Facebook did something to address this, but in the UK we're still waiting. The company has just launched a 'legacy contact' service for US users, who can now bequeath control of their account to a trustee. It will launch here

but 'not yet', according to Facebook (www.snipca.com/15484).

Meanwhile if something happens to you, your loved ones can ask Facebook to 'memorialize' (horrible word) your page. First, they have to submit a request (www.snipca.com/15529), including proof that you've passed away. Bizarrely, Facebook suggests 'an obituary or news story', but surely a death certificate would be more appropriate. Either way, once Facebook approves the request, it adds the word 'Remembering' above your name and prevents your page appearing in public searches. It may even agree to close your account.

Unfortunately, this 'memorialization' process doesn't always run smoothly. Bereaved family members have complained of six-month delays and a lack of response from Facebook (www.snipca.com/15530). A company that owes its entire existence to friends and family should be more respectful. Until they sort it out, we'll stick with sharing our Facebook logins securely using PasswordBox.



'Memorialized' Facebook pages include the word 'Remembering' and don't appear in public searches

Control vour PC with vour voice

Throw away your keyboard and mouse - now you can control your PC by talking to it. Jane Hoskyn reveals the best free tools for taking control with your voice

he good old British public haven't exactly embraced talking computers. Robotic self-checkouts are so reviled that engineers are racing to create alternatives (www.snipca.com/15455), and scientists have written papers about the irritating qualities of talking tech ('Why GPS voices are so condescending', www.snipca.com/15463). But you don't need some science bod to tell you why you hate saying "one... ONE!" to multichoice phone menus.

It was no real surprise that Apple's 'personal assistant' Siri was met with derision when it arrived on iPhones three years ago. The idea of conversing with your phone, rather than using it to converse with someone, seemed ridiculous.

But the hard truth is: Siri is still going strong and voice controls are here to stay. They're already integral to Android, Google and Windows 8.1, as we'll explain. Windows 10 includes a PC voice assistant called Cortana, and Amazon's new Echo device is a smart microphone that answers back (www.snipca.com/15469).

As for self-checkouts, we predict they'll be around for ages they'll just evolve into something that listens as well as speaks.

The benefits are enormous. Responsive voice tools effectively cut out the middleman. No more fiddling about with keyboards, mice, buttons and touchscreens. Now you can search the web,

type text and much more just by talking.



If you use Android you may be familiar with OK Google, the search giant's equivalent to Siri. You can enable OK Google via the settings in Android's built-in Google app (www.snipca. com/15461), and it's now also included in Google for iOS (www.snipca.com/15462).

It's a piece of cake to use. Say "OK Google" to your device, then tell it what to do ("call Robert", "open Camera", "play Bohemian Rhapsody" or anything else



Click the microphone symbol in Google and say "OK Google" to search by voice

the device is capable of doing). You only feel a berk the first few times, we promise.

A limited version of OK Google is now on your PC, at least if you're using Chrome. Go to Google, sign in and look for a microphone icon at the right of the search box (see screenshot above). If the icon has an empty '0', you need to switch on your microphone (see box, below left), then click the icon. The '0' will fill in and it'll be ready to use. Say "OK Google" then whatever you're looking for, such as "pancake recipe" or "directions to Hull". There's a great infographic of Google voice commands, including Easter eggs (see box, opposite), at www.snipca.com/15479.

The Chrome version is a search tool, rather than a device-controller as on Android, but it does have a couple of extra tricks. For example, it lets you set a timer or reminder by voice - useful if you're making pancakes and your hands are dirty.

The 'Voice Actions for Chrome' extension (www.snipca.com/15467) adds a microphone icon to your browser bar so you can search with your voice from any site. Firesay adds similar functions to Firefox (www.snipca.com/15470). Both these extensions are free and in beta.

TALK TO YOUR PC WITH A MIC

Most new laptops have microphones and speakers built in, but for desktop PCs and older laptops you'll have to spend a couple of pounds. You can get headsets, USB microphones and speakers, and analogue ('line in/ line out') devices from Amazon for under £10 (microphones www. snipca.com/15464, speakers

www.snipca.com/15471). For a fiver more, add a touch of radio glamour with Trust's Elvii Desktop Microphone (£14.99, www.snipca. com/15466). See Microsoft's website for tips on setting up your microphone (www.snipca. com/15465).

Command your PC in style with Trust's Elvii Desktop Microphone





Enter the IP address below and connect.

Connect

192.168.0.100

R TUV

0+

9 WXYZ

63

Windows 8.1's Speech Recognition learns your voice for faster, better responses

Dictate to your Windows 8.1 computer

If you're running Windows 8.1, you've already got voice control built in. Windows Speech Recognition is powerful enough to rival Android and iOS voice controls, and it's particularly good at taking text dictation.

To get the best out of Speech
Recognition, get it familiarised
with your voice. Type speech
into Start and click Speech
Recognition (with microphone
icon). Then, click 'Train your computer to
better understand you', click Next, then
read out loud the bold text in the box.

You'll need to have your microphone enabled, and you may want to make sure you're the only person in the room (because you'll feel a bit foolish). It's all for the greater good, though – the better Windows gets to know your voice, the faster and more accurate its responses.

Microsoft's 'How to use Speech Recognition' page (www.snipca.com/ 15472) has loads of useful commands.

These include: say "start" to open the Start screen; say "change to Celsius in the Weather app" to open the Weather app and change the temperature format; and say "What can I say?" to open a list of commands. Moreover, its speech-to-text function works with online forms and word-processing programs such as Word.

Hack Cortana to use it in the UK

Windows 10 comes with an even more powerful



The latest Windows 10 Preview includes Microsoft's voice assistant Cortana

voice assistant, called Cortana. It's currently only available in the US, unless you try a little hack in the Windows 10 Preview (see lead Workshop, Issue 443).

Type time into Start, click 'Time & language', then click 'Region & language'. Change the region to United States, then click 'Add a language' and add 'English (United States)'. This fools Windows into thinking you're in the US, letting you open and run Cortana.

If you want to try Cortana without all that hassle, buy or borrow a Windows Phone (www.snipca.com/15474). Cortana

launched on Microsoft's mobile platform in the UK in September (www. snipca.com/15476).

Open programs with your voice

When Windows 10 and Cortana get their proper UK launch, we expect loads of third-party alternatives to launch in their wake. Currently, the only serious contender is the brilliant Braina

Connect Braina's app to your Wi-Fi to command your PC by voice from your phone

VOICE CONTROL EASTER EGGS

Ask Cortana:

"Do you like Clippy?"

Cortana says: "Definitely. He taught me how important it is to listen" – and its icon turns into a picture of Microsoft's old paperclip irritant.

Ask Google:

"What's the answer to life, the universe and everything?"

Google says: "42"

Tell Google:

"Beam me up, Scotty!"

Google says: "I cannot do it Captain, I don't have the power."

Ask Google:

"How much wood would a woodchuck chuck if a woodchuck could chuck wood?"

Google says: "The same, but *much* longer."

Tell Siri:

"Open the pod bay doors"

Siri says: "We intelligent agents will never live that down..."



Clippy lives on in Cortana

(download for XP, Vista, 7 or 8 from www.snipca.com/15473).

Braina's free version lets you create voice commands for opening programs, finding web pages, opening files, dictating notes, searching your PC files, setting alarms and reminders, checking the weather, doing sums, playing music and videos stored on your computer... actually it's quicker to list what it doesn't do. It doesn't let you teach your PC to reply to you in customised ways, or dictate text in any program – for that you'd need Braina Pro (\$39/£25 per year).

The free Braina app for Android (www.snipca.com/15475) adds similar functions. Even better, it lets you operate your PC by voice from your phone, anywhere on the same Wi-Fi network.

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Choose whether to create an optional Zinio account

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Problems Solved

PROBLEM OF THE FORTNIGHT

How do I stop 'Text-to-Speech' on Kindle Fire HD?

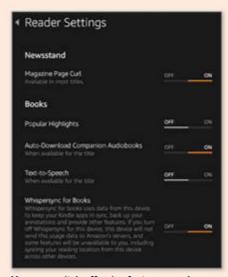
I bought a Kindle Fire HD tablet in December 2012. which has worked well until recently. Overnight it has slowed right down when opening books and turning pages. Do you have any idea what might have happened to cause this? As well, by mistake, I somehow turned on some voice feature, so it now disturbs me while reading - and I cannot work out how to stop it. I'd like to perform a factory reset of my device but the Settings screen doesn't show completely, so I can't access the option. I have tried to contact Amazon with no luck, so I'm hoping you can help. I have all my data backed up so wiping the device wouldn't bother me.

Dr A Gordhandas

Amazon has the ability to send updates to its Kindle Fire devices 'over the air' (OTA), so it's very likely that your tablet has been updated to a new version of the Kindle operating system (which is a version of Android customised by Amazon). We can't say for sure why particular operations have slowed down but, sadly, it's not at all unusual for operating system updates to cause problems. They might eventually be fixed in a future OTA update but that's really down to Amazon.

Unfortunately, short of rooting which is always an extreme step, and particularly so for Kindle users because you'll lose access to various Amazon services - there's not much you can do to stop Amazon pushing OTA devices on to your tablet. Disabling Wi-Fi would stop them, but you'll want to go online sooner or later, so there's really no escaping the inevitability.

We can help you with the other points, though. The Kindle Fire has several settings that cause it to speak.



You can switch off voice features, such as Text-to-Speech, in your Kindle's settings

One setting reads aloud any text that's on screen ('Text-to-Speech'). Another provides a voiced guide when the device is in the process of doing something less obvious to the visually impaired, such as launching an app ('Screen Reader', previously called 'Voice Guide'). A third setting called 'Explore by Touch' works in conjunction with Voice Guide to provide narrated navigation with special multi-finger gestures.

You can disable any of these. First, swipe down from the top of the screen to open the menu and tap Settings. Next, tap Accessibility followed by Screen Reader, then tap the switches to turn off both Screen Reader and 'Explore by Touch'. To disable Text-to-Speech, launch any book, tap the screen to open the menu then tap the View icon. Now tap More Settings and slide the Text-to-Speech switch to off.

Finally, we're not entirely sure why you can't reach the option to perform a factory reset, but performing a 'hard reset' might help. It's not difficult but you do need a little patience. Press and hold the device's physical power button for 20 seconds, ignoring any messages displayed on the screen. When the screen goes black you can release your finger. Now press the power to switch it back on.

How do I stop CCleaner wiping saved passwords?

I find CCleaner a wonderful tool, but I use it sparingly. The reason is that after running a scan I have to re-enter passwords for all my favourite sites, such as Facebook, Twitter and so on. Worse, I order all of mine and my wife's medication online, which is a sizable undertaking. After using CCleaner all of our saved information is wiped off and I have to retrieve paper records and start all over again. So, is there a way of protecting cookies selectively to save all this hassle?

Cliff Lowton

Yes, this is possible, though it will take a little detective work to figure out which cookies to preserve. The method is the same for all major browsers. So for Internet Explorer, for example, select the CCleaner's Cleaner tab, then right-click the Cookies entry under Internet Explorer and choose Analyze from the pop-up menu. Next, in the right-hand results pane, double-click the 'Internet Explorer - Cookies' entry to drill down to view the full list of cookies.

At this stage you'll probably want to double-click the divider bar to the right of the Description header so you can view the full path and name of the cookies. Scroll through the list, find one you want to keep, right-click it and select 'Add to Exclude list'. If you later need to remove items from this list, click Options followed by Exclude, then select the item and click Remove.



Exclude certain websites from a CCleaner scan within the program's Cleaner tab

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How do I stop this random zooming?

I have a new HP laptop running Windows 8.1, which I have found to be surprisingly easy to get to grips with. My only real difficulty is that every now and then the display suddenly zooms in, often leaving the display too large or too small. Oddly, it can just as suddenly return to normal. It seems to have something to to with the mouse pointer. What could be causing this, and how do I stop it?

Fred Spurrier

You didn't tell us too much about your setup, but there are a few things that could be causing this behaviour.

Our prime suspect is your laptop's touchpad, which we think might be what you mean by the term 'mouse pointer'. When used with Windows 8/8.1 almost all modern touchpads accept the kinds of gestures you can perform on a smartphone or tablet screen, so zooming



Avoid accidental zooms on your PC by unticking Enable Pinch Zoom in your settings

in and out can be achieved by pinching or pulling apart your thumb and forefinger across the touchpad's surface.

However, these are specific gestures that would be tricky to execute by accident (certainly on a regular basis and without you noticing). More likely is that you - or something on your desk - is occasionally holding down one of the Control (Ctrl) keys on the keyboard. If you do this while swiping the right-hand side of the touchpad or, as likely, twiddling with your mouse's scroll wheel, then the screen will instantly zoom in or out, according to the direction of your action.



To explore how your laptop's touchpad gestures work and disable those that annoy you, press Windows key+X then click Control Panel, followed by 'Hardware and Sound', then Mouse under 'Devices and Printers'. Click the Device Settings (or similar) tab, select the touchpad from the list and then click Settings. Click the items in the left-hand pane to explore your options. To disable pinch zoom, for example, click Pinch Zoom and then clear the tick from Enable Pinch Zoom.

Another possibility is that you're executing the Windows key+Plus key ('+'), as this launches the Windows Magnifier tool, instantly zooming in by 200 per cent. Windows key+Escape (Esc) switches it off. But this is unlikely as, again, these combinations are difficult to perform by accident - and because Magnifier makes its presence known with a small on-screen window.

Does an on-screen keyboard thwart keyloggers?

Some years ago I read somewhere - perhaps in Computeractive - that by using a 'virtual' keyboard when entering sensitive information such as passwords, it's possible to thwart keyloggers. I've never seen this claim since but have always used this method. Have I been wasting my time all these years or does it still offer protection? If so, why?

Richard Peters

There are many different types of keylogger. A traditional keylogging device is a small gadget surreptitiously attached between the computer and keyboard. A cybercriminal could fit one of these in an internet café, for example, or at your work desk during your lunch break, or on your home PC. The device would record every button pressed on your keyboard and, upon later retrieval, the perpetrator would be able to read them.

These devices have evolved into wireless versions so, once fitted, the culprit could gather information remotely. However, the chances of one being attached to your home PC are very slim. You can simply look at the connections to check. It's true that using an on-screen (virtual) keyboard would defeat this kind of key-logger, because they record the electric pulses from the physical keyboard.

However, there are also very many

software variants - malware, basically - that will do the same, and any number of these target virtual keyboards. So, while there is some merit in your method, the best bet is to keep your security software up to date. We recommend Kaspersky - see special discounted price for readers on page 32.



Problems Solved

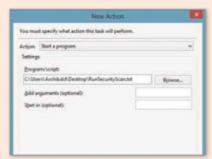
Why won't Task Scheduler work?

I followed Issue 439's Secret Tips page about Task Scheduler. I was particularly interested in the section on scheduling reminders and thought I'd try to schedule a reminder for me to run a program at a set time every Monday. I followed the instructions and everything seemed OK until the end. At this point I got the following error message: "An error has occurred for task PC Maintenance. The following error was reported: The task definition uses a deprecated feature". Can you offer any advice please?

We should've pointed out that in Windows 8/8.1 Microsoft 'deprecated' (stopped) Task Scheduler's ability to display messages or send emails. We don't know why it did this but the only task type you can schedule in the latest operating system is the launching of programs.

Steve Harrison

One workaround is to set up a task that launches the Windows Notepad utility to open a text file containing your reminder. To do this, launch Notepad, type your reminder and save it as a text file. Then, on Task Scheduler's Action tab, select 'Start a program', then click Browse and select that text file and click Open. Its full path will now appear in the 'Program/script' box. Click OK, finish the rest of the task as per our Workshop, and Notepad will appear on schedule, with the selected text file open.



Schedule reminders in Windows 8/8.1 by setting Notepad to open at a particular time with a pre-written message

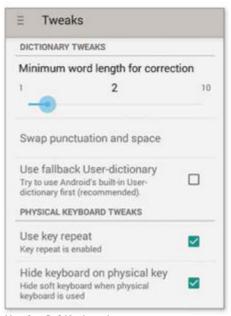
How do I make the Android keyboard disappear?

I have recently acquired an Android tablet and bought a keyboard to go with it. I have paired these two devices and they work fine together, but I cannot find a way to make the on-screen keyboard disappear while I'm typing on the physical keyboard. Can you advise?

Audrey Dawes

The precise behaviour of the onscreen keyboard will depend on the version of Android you're running and how the keyboard is set up. Tapping the on-screen keyboard's down arrow will hide it, and it's possible that on your device this will be sufficient to keep it hidden. Alternatively, the virtual keyboard might reappear as soon as you tap a key on your physical keyboard - and we think that's what's happening here.

If so, then it's easily fixed using free software, either by using an alternative keyboard or installing a utility that suppresses the standard on-screen keyboard. If you fancy the former then try AnySoftKeyboard (www.snipca.com/ 15125). Once it's installed, go to Settings, then 'Language & input' and then tap the cog icon next to AnySoftKeyboard. Tap the app's menu button (three horizontal lines) then tap 'Even more' under



Use AnySoftKeyboard to ensure your on-screen keyboard stays hidden

LANGUAGES. Now tap Tweaks and tick 'Hide keyboard on physical key' (see screenshot above).

Alternatively, try Null Keyboard, from www.snipca.com/15124. Visit Settings to enable it with a tick and stop your on-screen keyboard from popping up. It's a lot simpler, but not as flexible as AnySoftKeyboard.

Why is my Startup folder empty?

I tried to follow your Make Windows Better tip in Issue 439 ('Disable startup items to boot Windows faster'). However, when I navigated to the Startup folder, as instructed, I found it was empty! Why is this so, and what should I do?

Dave Kerridge

The Startup folder does not have to contain anything, though it

would typically contain a few items - unless your PC is brand new.

Either way, there's absolutely nothing to worry about here. You're one of the lucky few that owns a PC that hasn't yet been slowed down by programs deciding to throw themselves into this folder.



Monitor your Startup folder for unwanted additions

However, it will happen soon enough, either with your permission or by a program that simply wants to worm its way into the Startup folder without your knowledge. So, check it regularly for interlopers and if you spot something you don't like, you know what to do.

How do I get my old laser printer to work with Windows 7?

My HP Presario CO56 laptop runs the 64bit edition of Windows 7 Home Premium. I want to use it with my Epson EPL 5700L mono laser printer, which worked fine with my old Windows XP PC. The Epson website does not offer the relevant drivers. I considered Windows Virtual PC but, if I understand correctly, it doesn't work with my Windows 7 version and also requires Windows XP. which I don't have. Can you advise how I can continue to use my laser?

Robert Monk

You're right that the Epson website doesn't host Windows 7 drivers for your old printer, but it does explain that they are available via Windows Update.



Update your printer's driver after upgrading your operating system via Windows Update

To get them, first connect your printer and then, in Windows 7, click Start followed by 'Devices and Printers'. Right-click your printer ('Epson ESC/P2') and then select Properties from the pop-up menu. In the Preferences box, click 'Update to Latest Version' and then click OK to allow the internet connection.

Windows will now search for the driver: click Yes to download it. followed by OK to install it. When the installation wizard appears check that the correct printer model is selected and then click OK. Click Accept on the License Agreement screen, and then just follow the prompts to complete the installation. You might need to restart your PC before you can use your printer.

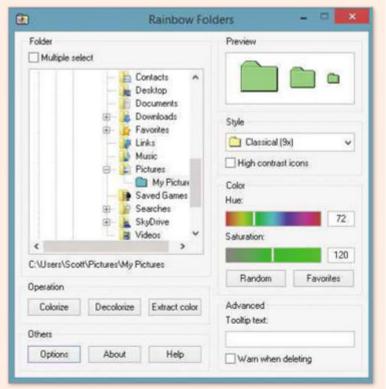
What's happened to my coloured folders?

I have my photos stored on an external hard drive. Each folder is represented by a different coloured icon. For some reason, all the folders are now the same colour. Can you please tell me how I can revert to my coloured icons? I'm using Windows 8.1. Malcolm Woods

Windows doesn't as such offer the ability for users to change the colours of folder icons. It's possible to apply different icons entirely, which in turn may have different colours (and/or shapes), but we don't think that's what you've done here.

Instead, we think that at some point in the past you've made use of a free tool such as Rainbow Folders (www.snipca.com/15060) to customise the colours. You say you're using a Windows 8.1 PC and that your photo folders are stored on an external drive: this makes us wonder whether you've recently upgraded to a new PC? If so, while the new PC will of course open your external drive and display its contents, without a utility such as Rainbow Folders installed, it will show them only in your standard Windows colour scheme.

Alternatively, perhaps you've upgraded an older PC to run with Windows 8.1 and your folder-colourisation tool (it needn't be Rainbow Folders) is incompatible with the new operating system? Or, perhaps you've inadvertently disabled or uninstalled your old tool during a spring clean (it's easy to forget the purpose of every last tool you've installed over the years).



Install a free tool such as Rainbow Folders to customise and colour-code vour folders

Whatever has happened, the solution is to use Rainbow Folders or something similar. When installing, keep the 'Shell integration' option enabled and then simply right-click a photo folder, choose Rainbow Folders from the pop-up menu, choose a colour and then click the Colorize button.

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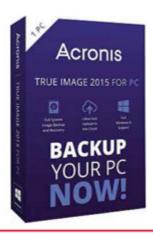
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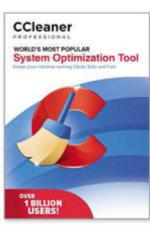
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Problems Solved

How do I install my Windows programs on my Surface tablet?

I bought an original Microsoft Surface RT tablet at a car-boot sale, and it seems to work well. However, I'm experiencing some problems installing software on it. In particular, I have a few Windows games that I'd like to install on it from a DVD, and I also wanted to install Windows Live Mail (WLM), because I'm familiar with that program from my Windows desktop PC. However, I can't figure out a way to install the games. Is there an external drive I can buy or is there some way I can network the Surface so that it can make use of the drive in my PC? And when I tried to download WLM from the Microsoft website it just wouldn't install. What am I doing wrong?

Charlie Ford

Unfortunately, you won't be able to do either of the things you want. The tablet you've bought

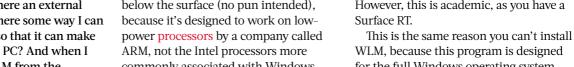
The Microsoft Surface RT tablet won't run manv programs designed for the full Windows 8/8.1 operating system

runs a version of Windows called Windows RT. This looks and feels a lot like Windows 8/8.1. but is actually quite different below the surface (no pun intended), because it's designed to work on low-ARM, not the Intel processors more commonly associated with Windows PCs. They're simply not compatible.

Microsoft also produces the Surface Pro tablet range, and these devices do run the 'real' Windows 8/8.1. In theory, it would be possible to get your DVD games installed on one of those devices, but playing them might prove tricky without

attaching a keyboard and mouse. However, this is academic, as you have a Surface RT

WLM, because this program is designed for the full Windows operating system, not the lookalike that runs on your Surface RT. To add new software, you'll need to launch the Windows Store app (from your tablet's Start screen) and then sign in with (or sign up for) a Microsoft account. But be warned, the Windows RT app selection isn't exactly overwhelming.



How do I change the colours of visited links?

When I'm browsing the internet, whenever I finish viewing a page, its entry in the browser list changes colour. However, the change is too slight for my eyesight, so I find myself going to the same page more than once. Is there any way to make this colour change more distinct, or apply some other highlight that makes it obvious which pages I have and have not visited? I mainly use the Google Chrome browser, and sometimes Firefox.

John Harrold

We're pretty sure you mean the colours of links visited in a Google search, which are usually blue, changing to purple once visited.

This is easy to tweak in Firefox, so we'll start with that. Click the Firefox menu (three horizontal lines), choose Options, then Content. Click the Colours button then click the Visited Links colour grid to choose a new shade.

The process is trickier in Chrome because it requires manual editing of a 'style sheet' file called custom.css.

> Change the colour of visited links in Google search via your browser's settings menu

However, it can be made easier by installing the free Stylist extension from www.snipca.com/15072. Click the Chrome menu (three horizontal lines), Extensions, scroll down to find Stylist and click Options. On the Basics tab, select Always.

Now open a new tab, carry out a Google search, then click the Stylist icon that appears in the address bar. Type a suitable name for the new style (such as 'Visited links colours'), then add this code to the Stylesheet Text field:

A:visited { color: red! important }

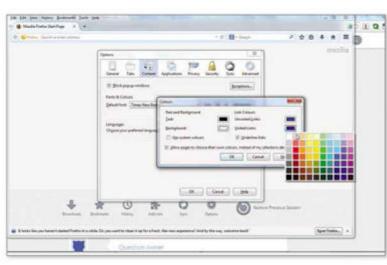
You can substitute 'red' for any other obvious colour name, or for a hex colour code (visit www.snipca.com/15074 to discover these). Click Save and your visited links will now change colour.

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ON SALE 18 March

- Should I re-partition my drive?
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Android Lollipop



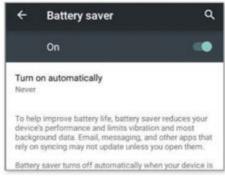
Restore lost mobile data, make your battery last longer, and fix unreliable Wi-Fi

Mobile data doesn't work

The first update to Android Lollipop (version 5.0.1) fixed the most severe signal losses suffered by 5.0 users, but it didn't completely solve the problem. Lack of data connection has become something of a recurring theme with Lollipop. Unfortunately, you'll probably have to wait for versions 5.0.2 or 5.0.3 for an all-conquering fix, but in the meantime you can make your smartphone reconnect by switching data off and on again. Tap Settings, then tap More, then 'Mobile networks' (or 'Cellular networks'). Untick 'Data enabled', wait for a few seconds, then tick it again.

Battery runs out too quickly

The 5.0.1 update was also supposed to deal with Android's battery-drain problems, but if your device is still running out of juice quicker than you'd like then there a couple of things you can try. First, head to Settings and tap Battery to see which apps are using the most power. Tap an app's entry to see more information. The 'Force stop' button here will instantly stop the app from running, but it's safer to tap the Recents button (a square icon) in the dock and then swipe the app from the screen. Also try Lollipop's new 'Battery saver' option. After tapping Battery, tap the menu button (three dots) then 'Battery saver' and turn the 'Battery saver' switch to On.



Switch on Lollipop's 'Battery saver' feature to minimise battery drain

Wi-Fi won't connect or is unreliable

Unreliable Wi-Fi is one of the more common problems noticed by Android 5.0.1 users, and at the moment there's no single, failsafe fix. Deleting and re-establishing the connection sometimes helps. Tap Settings, Wi-Fi, then tap and hold your network name and then 'Forget network'. Now tap the network name again to reconnect, typing the password when prompted.

If that doesn't work, consider limiting your router's speed. In your router



Switching to 802.11b could fix Android Wi-Fi problems, but it will slow down your PC's

settings, look for an 802.11n or 802.11acoption and choose 802.11g or even 802.11b instead. Bear in mind, this will slow down the Wi-Fi connection of other wireless devices on your home network.

Device performs slower and apps crash frequently

Some Android 5.0.1 users (particularly those with Nexus 5 phones) have found their device has become increasingly slower and apps are more prone to crashing since the update. These problems are caused by a 'memory leak' bug (as acknowledged by Google), which means the 5.0.1 version fails to release unused memory for use by other apps. As a result, the longer the device is switched on, the worse the problem gets. Until Google fixes it with a Lollipop update, you can restore the 'lost' memory by

switching off and restarting the device. Some users have also reported that clearing the Google Search app's cache helps (see next tip).

Apps don't work properly

There might be any number of reasons why this happens, but often clearing the app's cache will fix the problem. To do this, launch Settings then tap Apps, swipe to All and then tap the relevant app's entry. Now tap the Clear Cache button. Alternatively, try restarting your device. The precise method varies, but typically holding down a smartphone or tablet's power button for 10-20 seconds will do the job.

Some apps won't launch

This is an unavoidable consequence of grabbing Android updates as soon as they are available, because not all app developers will have updated their software in readiness. In the first instance, look for an update. Tap Play Store, followed by the menu icon (three stacked lines), then 'My apps'. If no update is available, uninstalling and reinstalling the app might help. Tap your device's All Apps button (six dots in the middle of Android's main icon dock), then tap and hold the offending app's icon, and drag and drop it onto Uninstall. Now download it again from Play Store.

You can't update to version 5.0.2

Not all Android devices are equal, and the update may simply not be available for yours yet. Google's Nexus tablets are typically the first to receive the latest updates and (as we write) 5.0.2 has just been released - but only for Nexus 7 and 10. So if you're stuck on 5.0.1 (or even 5.0), you're not alone. There's no set schedule for releases, but you can force your device to check by tapping Settings followed by 'About phone' and then 'System updates'.



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Jargon Buster

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

32bit A measure of how much information a computer can process at once. Most older computers are 32bit, more modern ones are 64bit.

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

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

720p A common resolution of high-definition video: 1280x720 pixels.

AMOLED Active-Matrix Organic Light-Emitting Diode. An alternative technology to LCD for creating flat-panel displays. Most commonly used in smartphones, tablets and smartwatches.

Beta A version of software that's being tested. Beta versions are often released so problems can be ironed out

BIOS Basic Input-Output System. Essential software built into every PC that connects the vital components. It's visible for a few seconds when the PC starts.

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

Browser hijackers Programs that change your default browser, plus its homepage and search engine, without prior warning, when you install them.

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.

Cookie A small text file stored on your computer by a website. Used to store browsing preferences, website log-in details and so on.

CSC Compact system cameras. A camera that uses interchangeable lenses, but doesn't have a viewfinder that uses a mirror. Offers many of the benefits of a DSLR without the size and cost.

Dpi Dots per inch. A measure of printed image quality, or the size an object will be shown on screen.

Driver A file that tells Windows how to work with 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.

Easter eggs Hidden messages or functions in software and on websites. Usually found by accident or word of mouth.

Executable code Instructions for a computer in a form the computer can directly use (ie, which it can execute). Derived from source code by compiling and linking.

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

False positive When an antivirus program incorrectly identifies safe software as malware.

Firmware Basic software stored on a device, such as a music player, to control its operation. Can sometimes be upgraded in a process often called flashing.

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

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals. It is found on many new TVs, media PCs and highdefinition products such as Blu-ray disc players and the PlayStation 3 and Xbox 360 games consoles.

HomePlug The name for various power line communications that support networking over existing home electrical wiring

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

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

Mirror site A website that contains the same downloadable software as others, so it's available from more than on place.

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

MP4 A type of digital movie file often used for portable players.

OCR Optical character recognition. The process by which printed text is scanned and converted into documents that can be edited

Partition A large hard drive can be split into two or more partitions or 'virtual' drives. Once partitioned, each section is treated by Windows as though it were a completely separate, smaller hard drive.

Phablet A smartphone with a screen size that is midway between that of a typical smartphone and a tablet.

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.

Processor The processor – or central processing unit - is the brain of a computer. Processors now are tiny and are 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. Examples include unnecessary plug-ins, toolbars and browser hijackers.

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

RAM Random-access memory. The PC's working area, used for data storage while the PC is switched on. Its capacity is measured in megabytes (MB). Any information in RAM will be lost when the power is switched off.

Ransomware Malware run by hackers who take over your PC and demand a payment to release it.

Resolution The amount of detail shown in an image, whether on screen or printed.

Reverse-engineering The act of breaking down a software or hardware bit by bit in the reverse order in which it was assembled.

Root To perform tasks on Android devices that aren't permitted by the manufacturer

SD card Secure Digital card. A popular type of memory card.

SIM Subscriber Identity Module. The smart card used by all digital mobile phones. The SIM card carries the user's identity and phone number for accessing the network.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts. Faster but more expensive than conventional hard drives.

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

USB Universal Serial Bus. A standard that allows quick and easy connection of external peripherals such as storage devices to your PC. Devices can be added or removed while your PC is switched on.

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

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

VGA Video Graphics Array. A standard socket for connecting a monitor to a computer.

Virtual drive A set of files seen by Windows as a separate hard disk.

Web apps Programs that aren't stored on your computer, but on a web server instead and run through your web browser.

Whitelist A list of allowed websites, email addresses and applications used by security software to ensure you only visit safe websites and download safe programs.

The Final Straw



STUART ANDREWS is Computeractive's Mr Angry

This issue Stuart Andrews bids good riddance to the...

Charms bar

o dreams do come true: the Charms bar won't appear in Windows 10. No longer will we have to mouse around hopefully in a corner, wait for the elusive Charms bar to appear, then rush for the icon before it disappears just to search for a file or put our PC to sleep. It won't be missed. I hated a lot of things about Windows 8, but the Charms bar was a really, really bad idea.

Sure, it was a really, really great idea if you used a tablet. Swipe in from the right-hand edge, tap Search, Share or Settings, and you were away. But during testing did nobody at Microsoft notice

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Microsoft, let the Charms bar debacle be a lesson – look at how people actually use their PCs



that the Charms bar was a nightmare for desktop PC and laptop users?

I'd spent years on Windows 7, happily launching programs and tracking down files using the Start button's Search bar. Then Microsoft ditched the Start button, putting a stop to all that, and the Charms bar crashed the party. The only time you could guarantee its appearance on your computer screen was when it wasn't really needed.

And the less said about the effect of touchpads on the Charms bar the better. But I'll say something anyway. Enable edge-swipe gestures on your touchpad, and the Charms bar would show up at

the least convenient moments like some unwelcome guest. Inadvertently brush the edge of the touchpad, and there it was, ready to go to work. Disable the

edge-swipe gestures, and you faced the same problems as mouse users. The Charms bar was a nightmare for nearly all concerned.

For me, the Charms bar embodied everything that was dumb about Windows 8. Instead of an interface designed for the needs of all those millions of people that used a mouse and keyboard to handle Windows, Microsoft optimised everything for touchscreens, in the hope of reaching out to some vast, untapped market of prospective Windows tablet users. The Charms bar was manna from heaven for this group of people. The problem was, they didn't actually exist.

So far I like what I see in Windows 10. Microsoft finally seems to have cottoned on to the fact that PC users and tablet users have very different needs, and that what works for an 11-inch touchscreen doesn't work on a computer. Most importantly, Microsoft seems to have worked out that PC users make up the majority of Windows users. We can be a conservative bunch, not inclined to embrace change, but we're prepared to jump on board with innovation when it makes it easier to get things done. Too much of Windows 8 didn't, and the Charms bar was a case in point.

But while I'm optimistic, I still see cause for concern. The revised Start menu and the ability to run Windows 8-style apps in Windows shows that Microsoft wants to combine the best of Windows 7 with Windows 8. Yet I'm worried that Microsoft might be replacing its obsession with one interface fad (touchscreen) with another. I'm talking, of course, about Cortana, Microsoft's voice-controlled personal assistant.

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settings

GO aWay

DON'T

I might be worrying unduly. It's still early days, and much of Windows 10 remains unfinished. Yet it seems to me the way Cortana integrates with Windows 10's search features makes the process of searching your PC much harder. I know Cortana can do so much more, and I'm fully prepared to be wowed, but I still can't see myself using Cortana every hour of every day on a desktop PC.

So, please, Microsoft, let the Charms bar debacle be a lesson. Look at how people actually use their PCs, and not at how you can encourage them to use all that cool, shiny stuff you're adding. We love that cool, shiny stuff – we really do – but not when it stops us working the way we like to work.

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



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